

VISIT ONLINE
OXFORD
QUICK
REFERENCE



WINNER OF THE AMERICAN LIBRARY
ASSOCIATION 'OUTSTANDING REFERENCE
SOURCE' AWARD

Oxford



DICTIONARY OF Psychology



ANDREW M. COLMAN

How to search for terms in *A Dictionary of Psychology*

To find an entry in this e-book you can:

- Browse the [Alphabetical List of Entries](#) and select the entry you would like to view
- or
- Use your Search function to be taken to a complete list of references to your search term in the *Dictionary*
 - If your search term has its own entry, it will usually be listed at the top of your results
 - In cases where your search term appears in more than one entry heading, the results will be listed alphabetically

A note on special characters

While most e-readers can display special characters (such as é and â), many cannot search for words containing them, unless the special characters themselves are typed into the search box. If you are unable to type these characters, please browse for your term using the [Alphabetical List of Entries](#).

Alphabetical List of Entries

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

abaissement du niveau mental

abasia

abbreviated reaction time

ABC

abderite

abducens nerve

aberration

ability

ability test

abiogenesis

abiosis

ablation

ablation experiment

ableism

Abney effect

Abney's law

abnormal

abnormality

*****ebook converter DEMO Watermarks*****

abnormal psychology

abortion

ABO system

aboulia

Abraham Lincoln effect

abreaction

absence

absent-mindedness

absolute acuity

absolute error

absolute judgement method

absolute limen

absolute pitch

absolute reflex

absolute refractory period

absolute scale

absolute thinking

absolute threshold

absorbance

abstinence

abstinence rule

abstinence syndrome

abstract attitude

abstraction

abstract measurement theory

absurdity test

abulia

abuse (alcohol, child, elder, spouse, substance)

ABX paradigm

academic problem

academic skills disorders

acalculia

acatamathesia

accent

acceptance and commitment therapy

acceptor

access consciousness

accessibility

accessory cell

accessory nerve

*****ebook converter DEMO Watermarks*****

accidence

accidental sample

accommodation

accommodation reflex

acculturation

acculturation difficulty

accumbens nucleus

accuracy test

acephalous

acetaldehyde

acetic acid

acetyl

acetylcholine

acetylcholinesterase

acetylsalicylic acid

achievement motivation

achievement test

Achilles tendon reflex

achromatic

achromatic interval

*****ebook converter DEMO Watermarks*****

achromatic system

achromatopsia

acid

acid odour

A consciousness

acoustic

acoustic coding

acoustic confusion

acoustic cue

acoustic feature

acoustic generalization

acoustic–mnestic aphasia

acoustic nerve

acoustic reflex

acoustic similarity effect

acoustic store

acquaintanceship knowledge

acquiescence response set

acquired distinctiveness

acquired dyslexia

*****ebook converter DEMO Watermarks*****

acquired similarity

acrasia

acrolect

acromegaly

acronym method

acroparaesthesia

acrotomophilia

ACT

ACT*

actigraphy

actin

acting in

acting out

action

action, drug

action potential

action research

action slip

activated gene

activating event

activator gene

active analysis

active avoidance conditioning

active imagination

active sleep

active technique

active transport

active vocabulary

activity monitor

activity wheel

actomyosin

actor–observer difference

act psychology

actualization

actual neurosis

actuarial prediction

actus reus

acuity

acuity grating

acupuncture

acute

acute confusional state

acute pain

acute stress disorder

acute stress reaction

Adam

adaptation

adaptation level

adaptation-level theory

adaptation syndrome

adaptive control of thought

adaptive radiation

adaptive testing

adaptor

addiction

additive alleles

additive colour mixture

additive model

additive primary

additivity

addressed phonology

adelphogamy

adenine

adenohypophysis

adenosine

adenosine diphosphate

adenosine monophosphate

adenosine triphosphate

adenylate cyclase

adenylic acid

adequate stimulus

adiadochokinesia

adipose

adipose tissue

adipsia

adjacency pair

Adjective Check List

adjustment

adjustment disorders

adjustment method

*****ebook converter DEMO Watermarks*****

Adlerian

admissible alternative/strategy

adolescence

adolescent

Adonis complex

adoption study

ADP

adrenal cortex

adrenal gland

adrenalin

adrenalin rush

adrenal medulla

adrenergic

adrenergic receptor

adrenocorticotrophic hormone

adultomorphic fallacy

advantage by illness

adverse (drug) reaction

adynamia

aerial perspective

*****ebook converter DEMO Watermarks*****

aerobic

aerophagia

aesthesiometer

aetiology

affect

affect display

affectional bond

affective disorder

affective flattening

afferent

affiliation need

affirming the antecedent

affirming the consequent

affordance

affricate

aftereffect

afterimage

after sensation

aftertaste

agape

agapic love

age-equivalent score

ageing male syndrome

ageism

agenesis of the corpus callosum

age of acquisition

age regression

age-related cognitive decline

age-related memory impairment

age scale

age score

ageusia

agglomerative hierarchical clustering

agglutinative language

aggression

aggression, displaced

aggression, instinctual

agitated depression

agitation

agnosia

agnosticism

agonist

agoraphobia

agrammatism

agraphia

agraphic acalculia

agreeableness

agrypnia

aha experience

ahedonia

ahylognosia

AIDS

AIDS dementia complex

AIDS-related complex

aim-inhibition

aim of instinct

air crib

air encephalogram

air theory

akatamathesia

*****ebook converter DEMO Watermarks*****

akathisia

akinaesthesia

akinesia

akinetiC apraxia

akinetopsia

akrasia

alarm call

alarm pheromone

alarm reaction

alarm signal

albedo

alcohol

alcohol abuse

alcohol amnestic disorder

alcohol dependence

alcohol hallucinosis

alcohol-related disorders

aldehyde dehydrogenase

aldosterone

alethia

*****ebook converter DEMO Watermarks*****

Alexander technique

alexia

alexia acalculia

alexithymia

algaesthesia

algnesia

algometer

algolagnia

algorithm

algorithmic

aliasing

alienation

alien hand sign

alienist

alimentary

alimentary canal

alimentation

aliphatic

alkali

alkaloid

allaesthesia

Allais paradox

allegro speech

allele

allergen

allergy

allesthesia

alliaceous

allochiria

allocortex

allo-erotism

allomone

allomorph

allopathy

allophone

alloplastic

all-or-none law

Allport–Vernon–Lindzey Study of Values

alogia

alpha-adrenergic receptor

*****ebook converter DEMO Watermarks*****

alpha blocking

alpha element

alpha fibre

alpha-foetoprotein

alpha function

alpha male

alpha-methylparatyrosine

alpha motor neuron

alpha movement

alphanumeric

alpha personality factor

alpha receptor

alpha reliability coefficient

alpha wave

alprazolam

altered state of consciousness

alternating personality

alternating perspective

alternative forms

alternative hypothesis

*****ebook converter DEMO Watermarks*****

altricial

altruism

altruistic suicide

alveolar

Alzheimer's disease

amacrine

amafufunyane

Amanita muscaria

amantadine

amaurosis

amaurotic familial idiocy

ambient system

ambiguity aversion

ambiguity tolerance

ambiguous figure

ambilingual

ambivalence

amblyacusia

amblyaphia

amblygeusia

amblyopia

amblyopia ex anopsia

amenorrhoea

amentia

American College Testing Program

American Sign Language

Ameslan

Ames room

Ames window

ametropia

amfetamine

amimia

amine

amino acid

Amitril

amitriptyline

Ammon's horn

amnesia

amnesic syndrome

amnestic disorder

amniocentesis

amobarbital

amodal completion

amok

amorphognosia

AMP

amphetamine

amphetamine psychosis

amphetamine-related disorders

amphiboly

amphipathic

amplification

amplitude

ampulla

amputee

amuck

amurakh

amusia

amygdala

amygdalohippocampectomy

amyl nitrite

amylobarbitone

amyloid plaque

amyotrophic lateral sclerosis

Amytal

anabolic androgenic steroid

anabolic steroid

anabolism

anaclitic

anaclitic depression

anaclitic object-choice

anacoluthon

anacusia

anaerobic

anaesthesia

anaesthetic

Anafranil

anaglyph

anaglyptoscope

anagogic interpretation

*****ebook converter DEMO Watermarks*****

anal character

analeptic

anal erotism

anal-expulsive phase

analgesia

analgesic

analogies test

analogue

anal-retentive phase

anal sadistic stage

anal stage

anal triad

analysand

analysis

analysis by synthesis

analysis of covariance

analysis of covariance structures

analysis of variance

analyst

analytical psychology

*****ebook converter DEMO Watermarks*****

analytic language

analytic statement

anamnesis

anamorphic

anandamide

anankastic neurosis

anankastic personality disorder

anaphase

anaphia

anaphora

anaphrodisiac

anaphylactic shock

anaphylaxis

anarchic hand

anarthria

anchoring and adjustment

anchor test

ancient mariner effect

androgen

androgen decline in the ageing male

*****ebook converter DEMO Watermarks*****

androgenization

androgenous

androgynous

andromania

andropause

androsterone

anecdotal evidence

anechoic room

anergasia

anergia

anesthesia

aneurysm

angel dust

angina

angiogram

angiotensin II

angst

angstrom

angular gyrus

angular size

*****ebook converter DEMO Watermarks*****

anhedonia

aniconia

anima

animal magnetism

animal psychology

animism

animus

anion

anion channel

anisotropic

ankle reflex

Anna O

annealing

anniversary reaction

anoesia

anomaloscope

anomalous dichromacy

anomalous myopia

anomalous sentence

anomalous trichromacy

*****ebook converter DEMO Watermarks*****

anomia

anomic aphasia

anomic suicide

anomie

anoopsia

anopia

anopsia

anorexia

anorexia nervosa

anorgasmia

anorthopia

anorthoscope

anorthoscopic

anosmia

anosognosia

Antabuse

antagonist

antecedent

antedating of consciousness

anterior

anterior cingulate cortex

anterior commissure

anterior funiculus

anterior horn

anterior pituitary

anterior prefrontal cortex

anterograde amnesia

anterograde degeneration

anterograde transport

anthrax

anthropic principle

anthropobiology

anthropocentrism

anthropogenic

anthropography

anthropoid

Anthropoidea

anthropology

anthropomorphism

anthroponomastics

*****ebook converter DEMO Watermarks*****

anthropophagus

anthropophonics

anthroposophy

anti-anxiety drug

antibody

anticathexis

anticholinergic

anticholinesterase

anticipation method

anticipatory socialization

anticonformity

anticonvulsant

antidepressant

antidiuretic hormone

antidromic

antigen

antigen–antibody response

antihistamine

anti-intraception

antimanic

antimorph

anti-Müllerian hormone

antinomy

antiparkinsonian

antipsychiatry

antipsychotic

anti-Semitism scale

antisocial personality disorder

Anton's syndrome

antonym

antonym test

anvil

anxiety

anxiety disorders

anxiety hysteria

anxiety neurosis

anxiolytic

anxious personality disorder

apathy

Apgar score

*****ebook converter DEMO Watermarks*****

aphagia

aphakia

aphanisis

aphasia

aphemia

aphonia

aphorism

aphrasia

aphrodisiac

Aplysia

apnoea

apocrine

Apollonian

apomorphine

apoplexy

apoptosis

apostatic selection

a posteriori

a posteriori test

apostrophe

*****ebook converter DEMO Watermarks*****

apotemnophilia

apparent movement

appeasement behaviour

apperception

apperceptive agnosia

apperceptive mass

appestat

appetite

appetitive behaviour

appetitive phase

apples

applied behaviour analysis

applied psychology

applied research

apprehension span

approach–approach conflict

approach–avoidance conflict

approximant

approximate answers

approximation to language

*****ebook converter DEMO Watermarks*****

appurtenance

apraxia

a priori

a priori probability

a priori test

a priori validity

aprosexia

aprosodia

aptitude

aptitude test

aptronym

aqueduct of Sylvius

aqueous humour

arachnoid membrane

arachnoid space

Arago phenomenon

arboreal

arborization

archaecortex

archetypal form

*****ebook converter DEMO Watermarks*****

archetype

Archimedes spiral

arctic hysteria

arcuate fasciculus

arcuate nucleus

area postrema

Areas V1, V2, V3, V4, V5, V6, V7, V8

argot

Argyll Robertson pupil

ARIMA

Aristotle's illusion

arithmetic mean

armchair experiment

arms race

Army Alpha and Beta tests

Army General Classification Test

aromatic

arousal

arousal phase

arrangement problem

*****ebook converter DEMO Watermarks*****

Arrow's impossibility theorem

artefact

arteriogram

arteriosclerosis

articulation

articulation disorder

articulatory coding

articulatory loop

articulatory store

artifact

artificial insemination

artificial intelligence

artificial language

artificial neural network

artificial pupil

artificial scotoma

art therapy

ascending reticular activating system

Asch experiment

ascorbic acid

*****ebook converter DEMO Watermarks*****

asemia

asexual reproduction

askable parent

asonia

aspartame

aspartate

aspartic acid

Asperger's disorder

aspiration

aspirin

A/S ratio

A–S Reaction Study

A–S scale

assembled phonology

assertiveness training

assimilation

assimilation–contrast theory

association area

association fibre

association, free

*****ebook converter DEMO Watermarks*****

associationism

association/sensation ratio

association test

association value

associative illusion

associative interference

associative laws

associative learning

associative memory

associative priming

assortative mating

astereognosis

asthenia

asthenic body type

astigmatism

astonishing hypothesis

astrocyte

astrocytoma

asymbolia

asyndeton

*****ebook converter DEMO Watermarks*****

ataque de nervios

ataraxia

ataxia

ateleiosis

atheism

atherosclerosis

athetosis

athletic body type

Ativan

atmosphere effect

atmosphere hypothesis

atmosphere perspective

atomoxetine

atonia

ATP

ATPase

atrophy

atropine

attachment disorder

attachment theory

*****ebook converter DEMO Watermarks*****

attensity

attention

attentional dyslexia

attention-deficit/hyperactivity disorder

attention operating characteristic

attention span

attenuation

attenuation theory

attitude

attitude change

attitude scale

attitude similarity hypothesis

attribute

attribution

attributional bias

attribution error

attribution theory

attributive

attuition

atypical antipsychotic

*****ebook converter DEMO Watermarks*****

Aubert effect

Aubert–Fleischl paradox

Aubert–Förster law

Aubert–Förster phenomenon

auction game

audibility function

audibility range

audible thought

audience effect

audile

audioanalgesia

audiogenic seizure

audiogram

audiogravic illusion

audiogyral illusion

audiokinetic response

audiometer

audiometric zero

audiometry

audio-oculogyric reflex

*****ebook converter DEMO Watermarks*****

audition
auditory
auditory acuity
auditory adaptation
auditory agnosia
auditory aphasia
auditory association cortex
auditory beat
auditory canal
auditory cortex
auditory egocentre
auditory fatigue
auditory flutter
auditory flutter fusion
auditory fusion
auditory hallucination
auditory illusion
auditory localization
auditory masking
auditory meatus

auditory nerve

auditory receptive field

auditory receptor

auditory space perception

auditory spectrum

auditory staircase illusion

auditory suffix effect

auditory system

auditory tube

Aufgabe

aura

aural

aural harmonic

auricle

australopithecine

authoritarianism

autism

autism spectrum disorder

autistic disorder

autobiographical memory

*****ebook converter DEMO Watermarks*****

autochthonous

autocorrelation

auto-erotic

auto-erotism

autogenic training

autogynephilia

autohypnosis

autointoxication

autokinetic effect

autological

automatic anxiety

automaticity

automatic priming

automatic processing

automatism

automaton

automnesia

automorphic perception

autonoetic

autonomic

*****ebook converter DEMO Watermarks*****

autonomic arousal disorder

autonomic nervous system

autonomous speech

autonomy, functional

autonomy versus shame and doubt

autopagnosia

autoplastic

autopsy, psychological

autoradiograph

autoradiography

autoreceptor

autoregression

autoregressive integrated moving average model

autosopic phenomena

autoshaping

autosomal disorder

autosome

autotopagnosia

availability

availability heuristic

*****ebook converter DEMO Watermarks*****

available memory

average

average error method

average evoked potential

average heterozygosity

average linkage between groups method

average linkage within groups method

aversion therapy

aversive

avoidance—avoidance conflict

avoidance conditioning

avoidant personality disorder

avoidant/restrictive food intake disorder

avolition

axiom

axiomatic measurement theory

axoaxonic

axodendritic

axolemma

axon

*****ebook converter DEMO Watermarks*****

axonal transport

axon hillock

axon reflex

axosomatic

azimuth

babbling

Babinski reflex

baby talk

back cross

back formation

back mutation

backprop

back-propagation algorithm

back slang

back vowel

backward association

backward conditioning

backward masking

backward propagation

backward referral of sensation

*****ebook converter DEMO Watermarks*****

backward span

bacteria

bad breast

bad faith

bad object

bah tschi

balanced bilingual

balanced polymorphism

balanced scale

balance theory

Baldwin illusion

Bálint's syndrome

ballism

ballistic movement

band-pass filter

bandwagon effect

bandwidth

baraesthesia

baragnosis

Bárány nystagmus

*****ebook converter DEMO Watermarks*****

Bárány test

barber's paradox

barber's pole effect

barbiturate

barbiturism

barbs

bar chart

Bard–Cannon theory

bar detector

Barnum effect

barognosis

baroreceptor

Bartholin's gland

Bartlett–Box F test

basal forebrain

basal ganglia

basal metabolic rate

base

basement effect

base pairing

*****ebook converter DEMO Watermarks*****

base rate

base-rate fallacy

base sequence

BASIC-ID

basic-level category

basic mistrust

Basic Orthographic Syllabic Structure

basic period of information processing

basic research

basic rest–activity cycle

basic rule of psychoanalysis

basic trust versus basic mistrust

basilar

basilar artery

basilar membrane

basilect

Baskerville effect

basket cell

basulca

Bateman's principles

*****ebook converter DEMO Watermarks*****

Batesian mimicry

bathyaesthesia

bathyanaesthesia

battered baby syndrome

battered child syndrome

battered wife syndrome

battery

baud

Bayesian inference

Bayes' rule

Bayes' theorem

Bayley Scales of Infant Development

B cell

beat, auditory

Beck Depression Inventory

bed-wetting

bee dance

behaviour

behavioural cardiology

behavioural contagion

*****ebook converter DEMO Watermarks*****

behavioural decision theory

behavioural ecology

behavioural oscillation

behavioural pharmacology

behavioural science

behaviour contrast

behaviour control

behaviour genetics

behaviourism

behaviour modification

behaviour therapy

bel

belief

belief-bias effect

belladonna

bell curve

belle indifférence, la

Bellevue–Wechsler scales

Bell–Magendie law

Bell's palsy

*****ebook converter DEMO Watermarks*****

Bem Sex Role Inventory

Bender Gestalt Test

benefit–cost analysis

benefit–cost ratio

Benham's top

bennies

Benzedrine

benzilic acid

benzodiazepine

benzos

benztropine

bereavement

Bereitschaftspotential

Bernoulli trial

Bernreuter Personality Inventory

Bertrand's box paradox

bestiality

beta-adrenergic receptor

beta-blocker

beta coefficient

*****ebook converter DEMO Watermarks*****

beta element

beta-endorphin

beta-lipotropin

beta movement

beta personality factor

beta receptor

beta wave

betel

between-groups variance

between-subjects design

Betz cell

Bezold–Brücke phenomenon

bhang

bibliotherapy

biceps reflex

biconditional

bidialectal

Bidwell's ghost

big-fish-little-pond effect

Big Five

*****ebook converter DEMO Watermarks*****

Big One

bigorexia

bilabial

bilateral transfer

bile

bilingual

bilis

bimodal distribution

binary code

binary colour

binaural

binaural beat

binaural cue

binaural disparity

binaural fusion

binaural intensity difference

binaural ratio

binaural shift

binaural sound localization

binaural summation

*****ebook converter DEMO Watermarks*****

binaural time difference

binaural unmasking

binding

binding problem

Binet–Simon scale

binge-eating disorder

binocular

binocular cell

binocular cue

binocular disparity

binocular fusion

binocular interaction

binocular parallax

binocular rivalry

binocular summation

binocular suppression

binomial test

bioacoustics

bioavailability

biodata

*****ebook converter DEMO Watermarks*****

biodemography

bioenergetics

bioengineering

biofeedback

bioflavonoids

biogenesis

biogenic amine

bioinformatics

biological clock

biological engineering

biological motion

biological rhythm

biology

bioluminescence

biomechanical motion

Bio-Medical Data Package

biometry

bionics

biophilia

biophysics

*****ebook converter DEMO Watermarks*****

biopsychology

biorhythm

biosonar

biostatics

biotechnology

biotin

biotope

BIP

biperiden

bipolar

bipolar affective disorder

bipolar cell

bipolar disorders

bipolar rating scale

birth trauma

bisection method

bisexual

bit

bite bar

bitter

bivariate statistics

black bile

blackboard memory

Black English Vernacular

blacking out

Blacky pictures

blaming the victim

blastocyst

blend

blending inheritance

blindness

blindness denial

blindsight

blind spot

blind study

blind watchmaker

blink reflex

blivet

blob

Bloch's law

*****ebook converter DEMO Watermarks*****

block design test

block diagram

blocking memory

block portrait

blood

blood alcohol concentration

blood alcohol level

blood–brain barrier

blood-flow receptor

blood group

blue–yellow cell

blunted affect

B lymphocyte

BMDP

boarding school syndrome

body adjustment test

body cell

body dysmorphic disorder

body image

body language

*****ebook converter DEMO Watermarks*****

body ownership illusion

body therapies

Bogardus social distance scale

bogus pipeline

bondage

bonding

bone conduction

bone conduction threshold

Bonferroni correction

bong

Bonnet syndrome

bony labyrinth

Boolean

boomerang effect

bootstrapping

borderline intelligence

borderline personality disorder

Boring figure

Borna disease virus

BOSS

*****ebook converter DEMO Watermarks*****

bottleneck, evolutionary

bottleneck theory

bottom-up processing

bouffée délirante

boulimia

bounded rationality

bound energy

bound form

bouton

bovine spongiform encephalopathy

bow-wow theory

box-and-whisker plot

boxcar design

Box–Jenkins model

box plot

brachygraphy

brachymetropia

bracketing

bradycardia

bradykinesia

*****ebook converter DEMO Watermarks*****

bradykinin

Braille

brain

brain fag

brain imaging

brainstem

brainstem reticular formation

brainstorming

brain tissue transplantation

brainwashing

Brazelton assessment

breakage and reunion

breathing-related sleep disorders

breeding size

bregma

bricolage

bridge of Varolius

brief psychotherapy

brief psychotic disorder

bright light therapy

*****ebook converter DEMO Watermarks*****

brightness

brightness constancy

brightness contrast

brightness enhancement

brightness masking

bril

Briquet's syndrome

British Ability Scales

British Sign Language

broad heritability

Broca's aphasia

Broca's area

Brodmann area

bromocriptine

Bruce effect

brujería

Brunswik faces

Brunswikian

Brunswik ratio

brute force algorithm

*****ebook converter DEMO Watermarks*****

bruxism

BSE

buccal

buffer store

bufotenin

bulbar

bulimia

bulimia nervosa

bundle hypothesis

Bunsen–Roscoe law

buprenorphine

Buridan's ass

burnout

burnt odour

buspirone

butyrophenone

bystander effect

byte

BZ gas

cachexia

*****ebook converter DEMO Watermarks*****

cachinnation

cacogeusia

cacography

cacology

cacophony

cacosmia

cafard

cafeteria feeding

cafe wall illusion

caffeine

caffeine-related disorders

CAGE

Calabar bean

calcarine sulcus

calcitonin

calcium

calcium channel

California F scale

California Psychological Inventory

callosal apraxia

*****ebook converter DEMO Watermarks*****

caloric nystagmus

caloric test

Calorie

calpain

calque

canalizing selection

cancellation heuristic

cancellation method

cancer-prone behaviour

candela

candlepower

candy

cannabis

cannabis-related disorders

cannibal

cannibalistic stage

Cannon–Bard theory

canonical correlation

canonical sequence

cant

cantharides

capacity

Capgras syndrome

caprylic odour

capsaicin

carbachol

carbamate

carbamazepine

carcinogen

carcinoma

cardiac muscle

cardiac psychology

cardinal humour

cardinal vowels

caretaker speech

caricature advantage

carnivore

carpentered world

carrier

carrier protein

*****ebook converter DEMO Watermarks*****

carrying capacity

Cartesian

Cartesian dualism

cascade processing

case grammar

case study

castrate

castration complex

catabolism

catachresis

catalepsy

catalexia

catamnesis

cataphora

cataplexy

cataract

catastrophe theory

catastrophism

catathymia

catathymic amnesia

*****ebook converter DEMO Watermarks*****

catatonia

catatonic disorder due to another medical condition

catatonic schizophrenia

catch trial

catecholamine

catechol-o-methyl-transferase

Catego

categorical attitude

categorical imperative

categorical perception

categorical syllogism

categorical variable

category mistake

catharsis

cathexis

cation

cation channel

catnip

Cattell Culture-Fair Test

Cattell 16-PF

*****ebook converter DEMO Watermarks*****

caudal

caudate

caudate nucleus

caudatolenticular

causal

causal effect

causalgia

causal inference

causal schema

causal texture

causal variable

cautious shift

CCC trigram

ceiling effect

celestial illusion

cell

cell assembly

cell body

cell division

cell membrane

cellular automaton

censored variable

censorship

centile

centipede effect

central alveolar hypoventilation syndrome

central auditory processing disorder

central canal

central deafness

central dogma

central dyslexias

central executive

central fissure

central grey matter

centralized communication network

central limit theorem

central masking

central nervous system

central nystagmus

central processing unit

*****ebook converter DEMO Watermarks*****

central processor

central reaction time

central sleep apnoea

central sulcus

central tendency

central trait

central vision

central vowel

centration

centre-surround receptive field

centring

centroid method

centromere

cephalic

cephalic index

cephalocaudal

cerea flexibilitas

cerebellar developmental delay

cerebellar peduncle

cerebellar syndrome

cerebellospinal tract
cerebellum
cerebral
cerebral angiogram
cerebral angiography
cerebral aqueduct
cerebral arteriogram
cerebral arteriography
cerebral arteriosclerosis
cerebral blood flow
cerebral cortex
cerebral dominance
cerebral gigantism
cerebral hemisphere
cerebral palsy
cerebral peduncle
cerebral ventricle
cerebrospinal
cerebrospinal fluid
cerebrovascular

cerebrovascular accident

cerebrum

certainty effect

ceruminous deafness

cerveau isolé

C fibre

chained reinforcement schedule

chain ganglia

chairwork

chandelier cell

change blindness

change of life

channel of communication

character

character convergence

character disorders

character displacement

characteristic features

characteristic frequency

character neurosis

*****ebook converter DEMO Watermarks*****

Charcot–Marie–Tooth syndrome

Charles Bonnet syndrome

Charlie

Charpentier bands

Charpentier's illusion

cheating husbands problem

checker–shadow illusion

cheese effect

chemically gated ion channel

chemical sense

chemoaffinity hypothesis

chemoreceptor

chemorepellant

chemotaxis

chequer–shadow illusion

cherology

Cheshire Cat effect

Chevreur pendulum

chiaroscuro

chiasm

chiasmus

Chicken game

child abuse

child-directed speech

childhood amnesia

childhood autism

childhood disintegrative disorder

childhood-onset fluency disorder

Children's Apperception Test

child sexual abuse

chimera

chimeric face

China white

Chinese room

chi-square distribution

chi-square test

chloral hydrate

chlordiazepoxide

chloride

chloroacetophenone

chlorpromazine

choice of neurosis

choice reaction time

choice shift

cholecystokinin

cholesterol

choline

cholinergic

cholinesterase

cholinoceptor

cholinomimetic

Chomskyan

chorda tympani

chorea

chorea minor

choreiform

chorionic gonadotrophin

choroid

choroid plexus

chroma

chromaesthesia

chromaffin cell

chromatic

chromatic aberration

chromatic adaptation

chromatic audition

chromaticity

chromaticness

chromatic system

chromatic threshold

chromatic vision

chromatid

chromatin

chromatopsia

chromesthesia

chromophore

chromosomal aberration

chromosome

chronic

chronic fatigue syndrome

*****ebook converter DEMO Watermarks*****

chronic motor

chronic pain

chronobiology

chronological age

chunking

CIE colour system

cilia

ciliaris

ciliary body

ciliary muscle

ciliary reflex

ciliary zonule

cingulate gyrus

cingulum

circadian rhythm

circadian rhythm sleep–wake disorders

circannual rhythm

circaseptan rhythm

circling dance

circular pitch illusion

*****ebook converter DEMO Watermarks*****

circumstantiality

circumvallate papilla

circumventricular organ

Cirpam(il)

cisterna

cis–trans complementation test

cistron

citalopram

citation form

citric acid cycle

clairaudience

clairvoyance

clamon

clang association

clasp-knife rigidity

class

classical conditioning

classical receptive field

classical test theory

claustrum

Clérambault's syndrome

Clever Hans

client

client-centred therapy

climacteric

climbing fibre

Clinical History Schedule

clinical prediction

clinical psychology

clinical trial

clipping

clique

clitic

clitoridectomy

clitoris

cloacal theory

Clock Drawing Test

clomipramine

clone

clonic convulsion

closed head injury
closed-loop control
closed node
closed question
close-ended question
close vowel
closure grouping law
clouding of consciousness
Cloud nine
clozapine
cloze procedure
cluster analysis
clustering
cluster sample
cluster suicides
clysmaphilia
CN gas
coaching psychology
coaction effect
coactor

cocaine

cocaine bug

cocaine-related disorders

coccygeal nerve

cochlea

cochlear canal

cochlear duct

cochlear emissions

cochlear implant

cochlear microphonic

cochlear nerve

cochlear nucleus

cochlear window

cochleogram

cochleotopic map

Cochrane review

Cochran's C

Cochran's Q

cockney

cocktail party phenomenon

*****ebook converter DEMO Watermarks*****

co-counselling

coda

codeine

co-dependency

coding test

codon

codon family

coefficient alpha

coefficient of consanguinity

coefficient of determination

coefficient of kinship

coefficient of relationship

coefficient of reliability

coefficient of validity

coenaesthesia

co-evolution

co-facilitator

cognate languages

cognition

cognitive

cognitive ability
cognitive-analytic therapy
cognitive-appraisal theory
cognitive balance
cognitive behaviour modification
cognitive behaviour therapy
cognitive consistency theory
cognitive derailment
cognitive development
cognitive disorders
cognitive dissonance
cognitive economy
cognitive enhancer
cognitive-evaluation theory
Cognitive Failures Questionnaire
cognitive heuristic
cognitive illusion
cognitive impairment
cognitive impairment no dementia
cognitive interview

cognitive invention

cognitive map

cognitive miser

cognitive neuropsychology

cognitive penetrability

cognitive psychology

cognitive restructuring

cognitive schema

cognitive science

cognitive set

cognitive slippage

cognitive style

cognitive therapy

cognitivism

cogwheel rigidity

Cohen's d

Cohen's kappa coefficient

cohesive self

cohoba

cohort

coitus

coitus interruptus

coitus reservatus

coke

cold pressor pain

cold spot

cold turkey

colera

collective unconscious

colliculus

colorimeter

colour

colour adaptation

colour anomaly

colour assimilation

colour audition

colour-blindness

colour circle

colour constancy

colour contrast

*****ebook converter DEMO Watermarks*****

colour deficiency

colour dysnomia

coloured noise

colour equation

colour flight

colour hearing

colour induction

colour mixing

colour solid

colour spindle

colour surface

colour triangle

colour weakness

colour wheel

colour zone

coma

combat fatigue

combination tone

combined parent-figure

comcon

*****ebook converter DEMO Watermarks*****

commensal

commissure

commissurotomy

common chemical sense

common fate

common knowledge

common language effect size statistic

common ratio effect

common region

commons dilemma

communality

communication channel

communication disorders

communication network

communication skills training

community psychiatry

community psychology

companionate love

comparable forms

comparative judgement

*****ebook converter DEMO Watermarks*****

comparative psychology
comparative reference group
comparison level
comparison stimulus
compensation
compensation neurosis
compensatory eye movement
competence
competency test
competitive antagonist
competitive exclusion principle
competitive reaction time paradigm
complemental series
complementarity hypothesis
complementary afterimage
complementary base pairing
complementary colours
complementary DNA
complementation
complementation test

complete linkage clustering

complete Oedipus complex

completion test

complex

complex cell

complex indicator

complexion

complex reaction time

complex receptive field

complex tone

compliance

compliance, somatic

componential theory

component instinct

composite light

compound eye

compound reaction time

compound reinforcement schedule

compromise formation

compulsion

*****ebook converter DEMO Watermarks*****

compulsion to repeat
compulsive personality
compulsive sexual behaviour
computational theory
computed (axial) tomography
computer vision
conation
concept
concept formation
concept identification
concept learning
conceptual dependency theory
conceptually driven processing
conceptual map
conceptual tempo
concomitant variable
concordance
Concorde fallacy
concrete operations
concurrent validity

concussion

condensation

conditional probability

conditional reasoning

conditional response

conditional stimulus

conditioned avoidance learning

conditioned emotional response

conditioned food aversion

conditioned reflex

conditioned response

conditioned stimulus

conditioned suppression

conditioned taste aversion

conditioning

Condorcet's paradox

conduct disorder

conduction aphasia

conductive deafness

cone

*****ebook converter DEMO Watermarks*****

cone of confusion

cone pigment

confabulation

confederate

confidence interval

confidence limits

configural scoring rule

configural superiority effect

configuration law

confirmation bias

confirmation paradox

confirmatory factor analysis

conflict, psychological

conformity

confounding

confusion matrix

congener

congenital central hypoventilation syndrome

congenital facial diplegia

congenital oculofacial paralysis

*****ebook converter DEMO Watermarks*****

congruent validity
congruity theory
conjoint measurement theory
conjoint therapy
conjugate movement
conjunction
conjunction fallacy
conjunction search
conjunctive concept
conjunctive eye movement
connectedness grouping law
connectionism
connectionist model
connotation
consanguinity, coefficient of
consanguinity study
conscience
conscientiousness
conscious
consciousness

consensual pupillary reflex

consensual validity

consensus sequence

consequent

conservation

conservation of energy law

consistency theory

consolidation

consonant

consonant trigram

consonant–vowel–consonant trigram

conspecific

constancy

constancy, principle of

constant error

constant stimuli method

constituent

constitutional psychology

construct

constructional apraxia

*****ebook converter DEMO Watermarks*****

construction in analysis

constructive memory

constructivism

construct validity

consumer psychology

consummate love

contact hypothesis

contact receptor

contagion, behavioural/social

content-addressable memory

content analysis

content domain

contentive

content psychology

content validity

content word

context-dependent grammar

context-dependent memory

context effect

context-free grammar

*****ebook converter DEMO Watermarks*****

context-sensitive grammar

contiguity law

contiguity theory

contingency coefficient

contingency management

contingency table

contingency theory of leadership effectiveness

contingent aftereffect

contingent negative variation

continuant

continuation problem

continuity (Gestalt)

continuity theory

continuous reinforcement

continuous variable

continuum

contour

contrafreeloading

contralateral

contrast

*****ebook converter DEMO Watermarks*****

contrast ratio

contrast sensitivity function

contrast threshold

contrient interdependence

control analysis

control, delusion of

control group

controlled association

controlled experiment

controlled processing

control variable

convenience sample

conventional fighting

conventional morality

convergence

convergence–divergence

convergence insufficiency

convergent validity

conversational maxims

conversation analysis

*****ebook converter DEMO Watermarks*****

conversion

conversion disorder

conversion hypothesis

conversion hysteria

conversion symptom

convolution

convulsant

convulsion

convulsive disorders

convulsive therapy

cooing

Cook's D

Coolidge effect

Coombs unfolding technique

cooperative principle

Coopersmith Self-Esteem Inventories

coprolagnia

coprolalia

coprophagia

coprophilia

*****ebook converter DEMO Watermarks*****

copropraxia

copulation

core self-evaluation

corium

cornea

corneal reflex

Cornsweet illusion

cornu ammonis

coronal plane

coronal section

coronal suture

coronary-prone

corpora cavernosa

corpora quadrigemina

corpus callosum

corpus luteum

corpus spongiosum

corpus striatum

correction for attenuation

correct rejection

*****ebook converter DEMO Watermarks*****

correlation

correlational study

correlation centre

correlation coefficient

correlation ratio

correlogram

correspondence analysis

correspondence problem

correspondent inference

corresponding retinal points

corridor illusion

Corsi blocks

cortex

cortical blindness

cortical deafness

cortical spreading depression

corticobulbar pathway

corticopontine

corticospinal tract

corticosteroid

corticosterone

corticotrophin

corticotrophin-releasing hormone

Corti's membrane

cortisol

cortisone

Corti's organ

cost-benefit analysis

Cotard's syndrome

co-therapist

counselling

counselling psychology

counteracting selection

counterbalancing

countercathexis

counterexample set

counterfactual conditional

counterfactual reasoning

counter-rotating circles illusion

counter-transference

*****ebook converter DEMO Watermarks*****

couples therapy

courtship

couvade

covariance

covariance structures, analysis of

covariate

covariation principle

cover memory

crack

Craik–O’Brien effect

Cramér’s C

cranial accessory nerve

cranial index

cranial nerve

cranium

crank

creak

creatine

creatine phosphate

creationism

creativity

CREB

credibility

creole

creolization

Crespi effect

cretinism

Creutzfeldt–Jakob disease

crib, air

cri du chat

criminal profiling

criminological psychology

crisis intervention

crista

crista acoustica

criterion-referenced test

criterion validity

criterion variable

critical band

critical flicker frequency

*****ebook converter DEMO Watermarks*****

critical period
critical theory
Crocker–Henderson system
Cronbach’s alpha
cross-adaptation
cross-cultural survey
cross-dependence
cross-dressing
crossing over
cross-modal matching
cross-modal transfer
cross-sectional study
cross-tabulation
cross-tolerance
cross-validation
crowd psychology
cryptaesthesia
cryptomnesia
cryptophasia
crystalline lens

crystallized intelligence

crystal meth

CS gas

CSI effect

CT scan

cue

cued recall

cultural anthropology

cultural truism

culture

culture-bound syndromes

culture-fair

culture-free

culture shock

culture-specific disorders

cumulative record

cuneate nucleus

cunnilingus

cupula

curare

*****ebook converter DEMO Watermarks*****

curvature illusion

cutaneous rabbit illusion

cutaneous sense

cut score

CVC

CVC trigram

CV digram

cyanocabala~~min~~

cybernetics

cybersex

cyberspace

cyclic AMP

cyclic GMP

cyclic guanosine monophosphate

cyclic majority

cyclic model of perception

cyclic preferences

Cyclopean eye

Cyclopean perception

Cyclopean stimulus

*****ebook converter DEMO Watermarks*****

cyclophoria

cycloplegia

cyclothymia

cyclothymic disorder

cyproterone

cyranoïd

cytoarchitectonic map

cytology

cytoplasm

cytosine

cytoskeleton

cytotoxic

dactylology

Dale's law

daltonism

dance of the bees

dance therapy

dancing mania

dantrolene

dark adaptation

*****ebook converter DEMO Watermarks*****

dark focus

dark light

Darvon

Darwinian evolution

Darwinian fitness

Darwinian reflex

Darwinism

Dasein

Daseinsanalyse

data

data-driven processing

dataholic

data mining

data set

data snooping

date rape

date rape drug

day blindness

daydream

daylight vision

*****ebook converter DEMO Watermarks*****

deadly nightshade

deaf mute

deafness

death instinct

debriefing

décalage

decathexis

decay theory

decentralized communication network

decentration

decerebrate rigidity

decibel

decile

decision analysis

decision frame

decision making

decision rule

decision theory

declarative knowledge

declarative memory

*****ebook converter DEMO Watermarks*****

de Clérambault's syndrome

deconstruction

decreolization

decussation

deduction

deductive reasoning

deep dyslexia

deep structure

deep tendon reflex

Deese–Roediger–McDermott paradigm

default mode network

default reasoning

defence, ego

defence hysteria

defence mechanism

defence, perceptual

defensive identification

defensive technique

deferred action

deferred gratification

*****ebook converter DEMO Watermarks*****

deficit

defining properties

definitional theory

defusion of instincts

degraded stimulus

degrees of freedom

dehoaxing

dehydroepiandrosterone

deimatic

deindividuation

deism

Deiters' cell

Deiters' nucleus

deixis

déjà vu

de la Tourette's syndrome

delay conditioning

delayed auditory feedback

delayed conditioning

delayed ejaculation

*****ebook converter DEMO Watermarks*****

delayed gratification

delayed matching to sample

delayed-response task

delayed sleep-phase syndrome

delay-line timing circuit

Delboeuf illusion

deletion

Delilah syndrome

deliriant

delirium

delirium tremens

Delphi method

delta fibre

delta movement

delta-9-tetrahydrocannabinol

delta rule

delta sleep-inducing peptide

delta wave

delusion

delusional disorder

delusional jealousy

delusional misidentification

delusion, nihilistic

delusion of control

delusion of depersonalization

delusion of grandeur

delusion of influence

delusion of persecution

delusion of reference

demand characteristics

deme

dementia

dementia infantilis

dementia praecox

Demerol

demography

dendrite

dendrodendritic

dendrogram

dendron

denial

denotation

density, tonal

dental

dentate gyrus

dentate nucleus

denying the antecedent

denying the consequent

deontic

deontic logic

deontic reasoning

deontology

deoxyribonucleic acid

deoxyribose

dependability

dependence

dependent personality disorder

dependent variable

depersonalization

depersonalization/derealization disorder

*****ebook converter DEMO Watermarks*****

depersonalization disorder

depolarization

deprenyl

depressant drug

depressed mood

depression

depression, anaclitic

depression scale

depressive disorders

depressive episode

depressive neurosis

depressive position

depressive realism

deprivation, maternal

depth cue

depth from motion

depth interview

depth of field

depth of processing

depth perception

*****ebook converter DEMO Watermarks*****

depth psychology

derailment

derealization

de-reflection

dereism

derived score

dermal sense

dermis

dermo-optical perception

descending reticular formation

descriptive research

descriptive statistics

descriptive theory

desensitization

designer drug

desipramine

destructive instinct

destrudo

desynchronized EEG

desynchronized sleep

*****ebook converter DEMO Watermarks*****

desynchronized sleep rhythm

detection task

determinant

determination, coefficient of

determiner

determinism, psychic

deterministic

detour problem

detoxification

detrended normal plot

detumescence

deuteranomaly

deuteranopia

developmental age

developmental coordination disorder

developmental crises

developmental disorder

developmental dyslexia

developmental psychology

developmental quotient

*****ebook converter DEMO Watermarks*****

deviance

deviant

deviate

deviation IQ

deviation score

devotee

dexamethasone

dexamethasone suppression test

dextroamphetamine

DF extremes analysis

dhat

DHEA

diabetes

diagnosis

Diagnostic and Statistical Manual of Mental Disorders

diagnostic checking

dialect

dialectical behaviour therapy

dialectical montage

dialinguistics

*****ebook converter DEMO Watermarks*****

dialysis

Diana complex

diary study

diaschisis

diathesis

diathesis-stress hypothesis

diatonic

diazepam

dibenzodiazepine

dichhaptic technique

dichoptic

dichoptic masking

dichotic

dichromacy

dictyosome

diencephalic amnesia

diencephalon

diethylstilboestrol

difference limen

difference threshold

*****ebook converter DEMO Watermarks*****

difference tone

differential acuity

Differential Aptitude Tests

differential diagnosis

differential inversion effect

differential reinforcement

differential reinforcement of high response rates

differential reinforcement of low response rates

differential reinforcement of other responses

differential reinforcement of paced responses

difficulty effect

diffraction grating

diffuse fibres

diffusion of responsibility

digestive tract

digital

digitalis

digital signature

digit ratio

digit span

*****ebook converter DEMO Watermarks*****

digit–symbol test

digram

digraph

dihybrid

dilator pupillae

dimension-abstracted oddity

dimethyltryptamine

dimorphic

ding-dong theory

Dionysian

dioptre

dioptric aberration

diotic

diphthong

diplacusis

diplaesthesia

diplegia

diploid

diplopia

dipsomania

Dircks's ghost

direct analysis

directed association

directed thinking

directional selection

directional test

direction-sensitive neuron

directory plus one sampling

direct perception

direct scaling

dirhinic

disabling agent

disassortative mating

disaster counselling

disavowal

disconnection syndrome

discontinuity theory

discordance

discourse

discourse analysis

*****ebook converter DEMO Watermarks*****

discrepancy effects

discrete processing

discrete variable

discriminability

discriminability effect

discriminanda

discriminant function analysis

discriminant validity

discriminating power

discrimination

discrimination function

discrimination learning

discrimination reaction time

discrimination threshold

discriminative response

dishabituation

disinhibited social engagement disorder

disinhibition

disintegrative disorder

disjunction

*****ebook converter DEMO Watermarks*****

disjunction search
disjunctive concept
disjunctive eye movement
dis legomenon
disorder of excessive somnolence
disorder of initiating and maintaining sleep
disorder of written expression
disorganized crime
disorganized schizophrenia
disorganized speech
disorganized thinking
disorientation
disparate retinal points
disparity, binocular
disparity, retinal
disparity-selective cell
dispersion
displaced aggression
displacement
displacement activity

display

display rule

dispositionist bias

disruptive behaviour disorders

disruptive, impulse-control, and conduct disorders

disruptive mood dysregulation disorder

disruptive selection

dissocial personality disorder

dissociation

dissociation theory

dissociative amnesia

dissociative convulsions

dissociative disorders

dissociative fugue

dissociative identity disorder

dissociative movement disorders

dissociative stupor

dissociative trance disorder

dissonance theory

distal

distal criterion

distal stimulus

distance receptor

distance sense

distinctive feature

distorted-room illusion

distractibility

distractor

distressed personality type

distress relief quotient

distributed cognition

distributed network model

distributed practice

distributed representation

distribution-free test

distribution, probability

disulfiram

diurnal

diurnal rhythm

divergence

divergent thinking

divided visual field

divisive hierarchical clustering

dizygotic

dizygotic twins

DMT

DNA

DNA cloning

DNA fingerprinting

DNA hybridization

DNA ligase

DNA polymerase

DNA profiling

DNA recombination

DNA replication

DNA sequence

DNA splicing

dodo bird conjecture

doing gender

Dollar Auction game

*****ebook converter DEMO Watermarks*****

Dollo's law

dolls

Dolophine

dolorimeter

dolorology

domain-referenced test

domain sampling

domains of processing theory

dominance

dominance, eye

dominance (genetic)

dominance hierarchy

dominant alternative/strategy

dominant gene

dominator

Donders' law

Donders' method

Don Juanism

door-in-the-face technique

dopa

*****ebook converter DEMO Watermarks*****

dopamine

dopamine antagonist

dopaminergic

dopaminomimetic

dope

Doppelgänger

Doppler effect

Dora

Doriden

dorsal

dorsal attention network

dorsal column

dorsal root

dorsal root ganglion

dorsolateral prefrontal cortex

dorsomedial thalamus

dose–response curve

Dostoevsky syndrome

double-aspect theory

double bind

*****ebook converter DEMO Watermarks*****

double-blind study

double helix

double-opponent receptive field

double recessive

double vision

Dover's powder

doves

downers

Down's syndrome

d prime

Dracula hormone

drama therapy

drapetomania

Dravet syndrome

Draw-a-Man test

Draw-a-Person test

dream

dream analysis

dream interpretation

dreamwork

*****ebook converter DEMO Watermarks*****

dressings apraxia

drink-driving

drive

drive strength

drive theory of social facilitation

droperidol

drosophila

drostanalone

drowning

Dr Strangelove syndrome

drug

drug abuse

drug action

drug addiction

drug-dependent memory

drug effect

DSM

dual-code theory

dualism

dual personality

*****ebook converter DEMO Watermarks*****

dual-process model

dual-task performance

Duchenne muscular dystrophy

Duchenne smile

duck-rabbit

ductless gland

duetting

dulosis

Duncan's multiple range test

duodenum

duplexity function

duplexity theory

duplicity function

duplicity theory

dura mater

duration estimation paradox

Dutch book

dyad

dynamic

dynamic aphasia

*****ebook converter DEMO Watermarks*****

dynamic assessment
dynamic labyrinth
dynamic memory span
dynamic psychology
dynamic testing
dynamic touch
dynamic visual acuity
dynamometer
dynorphin
dysacusia
dysaesthesia
dysaesthesia aethiopis
dysarthria
dysbasia
dysbulia
dyscalculia
dyschiria
dyschromatopsia
dysdiadochokinesia
dysesthesia

dysexecutive syndrome

dysfunction

dysgenic

dysgeusia

dysgraphia

dyskinesia

dyskinesia, tardive

dyslalia

dyslexia

dysmelodia

dysmenorrhoea

dysmetria

dysmnesia

dysmorphophobia

dysmusia

dysorexia

dysosmia

dyspareunia

dysphagia

dysphasia

dysphemia

dysphemism

dysphonia

dysphoria

dysphoric mood

dysplastic body type

dyspnoea

dyspraxia

dysprosody

dyssocial personality

dyssomnias

dysstasia

dyssymbiosis

dyssynergia

dystaxia

dysthymia

dysthymic disorder

dystonia

dystopia

dystrophy

dysuria

ear

eardrum

early oral phase

ear-minded

eating disorders

Ebbinghaus curve

Ebbinghaus illusion

Ebonics

eccentric

eccentric chessboard figure

eccentric projection

echoic store

echolalia

echolocation

echopraxia

eclipse scotoma

ecmnesia

ecological criterion

ecological fallacy

*****ebook converter DEMO Watermarks*****

ecological niche

ecological validity

ecology

economic

ecosystem

e-counselling

écouteur

ecphoric

ecstasy

ectoderm

ectomorph

ectopic

ectopic pregnancy

ectoplasm

ectotherm

edge detector

edge effect

educable mentally retarded

educationally subnormal

educational psychology

*****ebook converter DEMO Watermarks*****

educational psychotherapy

Edwards Personal Preference Schedule

EEG

EEG spindle

effective dosage

effective dosage 50

effector

effect size

efferent

ego

ego-alien

egocentre

egocentric

egocentric localization

egocentrism

ego defence mechanism

ego-dystonic

ego-dystonic sexual orientation

ego ideal

ego identity

*****ebook converter DEMO Watermarks*****

ego instinct

ego integrity versus despair

ego interest

ego involvement

egoistic suicide

ego libido

egomania

ego psychology

ego regression

ego-splitting

ego strength

ego-syntonic

Ehrenstein's brightness illusion

Ehrenstein's square illusion

eidetic image

eidetiker

Eigengrau

eigenvalue

Eigenwelt

eight-month anxiety

*****ebook converter DEMO Watermarks*****

Einführung

Einsteins

Einstellung

ejaculation

ejaculatio praecox

ejaculatio retardata

ejaculatory incompetence

elaborated code

elaboration

elaboration likelihood model

elaboration, secondary

elaborative rehearsal

elation effect

Elavil

Elberfeld horses

elder abuse

elective mutism

Electra complex

electrical brain stimulation

electrical self-stimulation of the brain

*****ebook converter DEMO Watermarks*****

electrical synapse
electric organ
electric receptor
electroconvulsive therapy
electrocorticogram
electrodermal response
electroencephalogram
electrokymograph
electrolaryngograph
electrolyte
electromagnetic sense
electromyogram
electromyograph
electro-oculogram
electropalatograph
electrophoresis
electroreceptor
electroretinogram
electroshock therapy
element movement

elevated mood

elevation in the visual field

elimination by aspects

elimination disorders

elision

Ellen West

Ellsberg paradox

Elopram

elusion

emasculatation

embedded-figures test

emblem

embrace reflex

embryo

embryology

emergence

emic

emitted behaviour

Emmert's law

emmetropia

*****ebook converter DEMO Watermarks*****

emotion

emotional intelligence

emotional quotient

empathogen

empathy

empirical

empirical induction

empiricism

empty-chair technique

enantiodromia

enantiomorph

encéphale isolé

encephalic

encephalitis

encephalitis lethargica

encephalization

encephalization quotient

encephalogram

encephalomalacia

encephalomyelitis

*****ebook converter DEMO Watermarks*****

encephalon

encephalopathy

enclitic

enclosure grouping law

encoding

encoding specificity

encopresis

encounter group

endbrain

end bulb

end effect

endemic

Endep

end foot

endocannabinoid

endocrine disorder

endocrine gland

endocrine system

endocrinology

endoderm

endogamy

endogenous depression

endogenous opioid

endolymph

endomorph

endoplasmic reticulum

endopsychic

end organ

endorphin

endothelium

endotherm

endowment effect

end plate

end-plate potential

end-stopped receptive field

engineering psychology

engram

enkephalin

entactogen

entelechy

*****ebook converter DEMO Watermarks*****

entopic

entorhinal cortex

entrainment

entropy

enuresis

environment

environmentability

environmentality

environmental psychology

envy, penis

enzyme

enzyme induction

eonism

epencephalon

ependyma

ependymal cell

ephebophilia

ephedrine

epicene

epicritic

*****ebook converter DEMO Watermarks*****

epidemic

epidemiology

epidermis

epidural

epidural anaesthetic

epigenesis

epigenetics

epigenotype

epilepsy

epinephrine

epinosic gain

epiphenomenalism

epiphenomenon

epiphysis

episcotister

episodic amnesia

episodic buffer

episodic memory

episodic paroxysmal anxiety

epistasis

*****ebook converter DEMO Watermarks*****

epistemic

epistemic reasoning

epistemology

epithalamus

epithelium

epoche

equal and unequal cases

equal-appearing intervals

equality grouping law

equal-loudness contour

equated forms

equilibration

equilibrium hypothesis

equilibrium point (in game theory)

equilibrium potential

equiluminant

equipotentiality

equity theory

equivalent-form reliability

equivalent forms

*****ebook converter DEMO Watermarks*****

equivocal sign

erectile disorder

erectile dysfunction

erectile impotence

ergonomics

ergot

ergotism

Erhard Seminars Training

Eriksen flanker task

Eriksonian

Erklärung

erogenous zone

Eros

erotic

erotic love

erotism

erotogenic zone

erotomania

erotomanic delusional disorder

error bar

*****ebook converter DEMO Watermarks*****

error variable

error variance

erythrocyte

erythropoietin

erythroptosis

escalated fighting

E scale

escape conditioning

escape learning

Escher figure

eserine

esophagus

esotropia

espanto

ESP cards

essential amino acid

essentialism

est

ester

esterase

*****ebook converter DEMO Watermarks*****

esthesiometer

estimation

estradiol

estrogen

estrone

estrous cycle

estrus

eta coefficient

ethanol

e-therapy

ethereal odour

ethnic

ethnic marker

ethnocentrism

ethnography

ethnology

ethnomethodology

ethology

ethyl alcohol

etic

etiology

etymological fallacy

etymology

eudaimonic well-being

eugenic

eugenics

eukaryote

eukaryotic cell

Euler diagram

euphemism

euphoria

euphoriant

eureka moment

eusocial

Eustachian tube

eustress

euthymic mood

evaluation apprehension

evaluation research

evaluative conditioning

*****ebook converter DEMO Watermarks*****

Eve

event-related potential

evil eye

eviration

evoked potential

evolution

evolutionarily stable strategy

evolutionary bottleneck

evolutionary clock

evolutionary psychology

examination anxiety

excitation

excitatory

excitatory postsynaptic potential

excluded middle law

exclusive disjunction

excoriation disorder

executive

exemplar

exhaustion stage

*****ebook converter DEMO Watermarks*****

exhibitionism

exhibitionistic disorder

existential analysis

existentialism

existential quantifier

existential therapy

exocrine gland

exogamy

exogenous depression

exon

exophoria

expansive mood

expectancy-value theory

expectation-dependent priming

expected utility

expected utility theory

expected value

experience sampling

experiential therapy

experiment

*****ebook converter DEMO Watermarks*****

experimental analysis of behaviour

experimental design

experimental group

experimental hypothesis

experimentally induced false memory

experimental neurosis

experimental psychology

experimental variable

experimenter bias

experimenter effect

experimenter expectancy effect

expert system

explicit memory

exploitative orientation

exploratory data analysis

exploratory factor analysis

exploratory research

explosive disorder

exposure therapy

expression

*****ebook converter DEMO Watermarks*****

expressive aphasia

expressive behaviour

expressive dysprosody

expressive language disorder

expressivity

extended family

extended phenotype

extension/intension

extension theorem

external auditory canal

external control of reinforcement

external ear

external eye muscle

externalization

external meatus

external rectus

external validity

exteroception

exteroceptor

extinction

extracellular

extracellular fluid

extracellular thirst

extradite

extrafusar

extramission

extraneous variable

extra-ocular muscle

extrapyramidal

extrapyramidal syndrome

extra-sensory perception

extra-spectral colour

extrastriate cortex

extraversion

extrinsic eye muscle

eye

eye contact

eye dialect

eye dominance

eye-dominance column

*****ebook converter DEMO Watermarks*****

eye–head movement system

eye-movement desensitization and reprocessing

eye-movement potential

eye-placement principle

eye rhyme

eye-tracking

eye–voice span

eyewitness misinformation effect

eyewitness testimony

Eysenck Personality Inventory

Eysenck Personality Questionnaire

F1

face–goblet illusion

face recognition

face validity

facial expression

facial feedback hypothesis

facial nerve

facial vision

facilitated communication

*****ebook converter DEMO Watermarks*****

facilitation

facilitative priming

factitious disorder

factitious disorder by proxy

factitious disorder imposed on another

factor

factor analysis

factorial analysis of variance

factorial design

factorial validity

faculty psychology

failure neurosis

Fairbairn's revised psychopathology

falling out

false alarm

false anorexia

false-consensus effect

false friends

false memory

false memory syndrome

*****ebook converter DEMO Watermarks*****

false negative

false neurotransmitter

false positive

false pregnancy

falsifiability

family

family neurosis

family study

family therapy

famous names test

fan effect

fantasize

fantasticant

fantasy

fantasy thinking

far point

far sense

far-sighted

far vision

fascicle

fasciculus

fasciculus cuneatus

fasciculus gracilis

FAST

fast glycolytic fibre

fast oxidative glycolytic fibre

fast-twitch fibre

fatal familial insomnia

fate control

fate neurosis

father complex

fatigue

fatigue syndrome

fattism

fatuous love

fear of success

feature

feature abstraction theory

feature comparison model

feature contrast

*****ebook converter DEMO Watermarks*****

feature detection theory

feature detector

feature integration theory

feature list theory

feature negative learning

feature positive learning

feature search

feature theory

Fechner–Benham colours

Fechner's law

Fechner's paradox

feeble-mindedness

feedback

feedforward

feeding and eating disorders

feeding centre

feeling type

fellatio

female genital mutilation

female orgasmic disorder

*****ebook converter DEMO Watermarks*****

female sexual interest/arousal disorder

fenestra

fenestra ovalis

fenestra rotunda

fentanyl

feral

feral child

Ferberize

Ferry–Porter law

fertility

fertilization

festination

fetal alcohol syndrome

fetal brain transplantation

fetish

fetishism

fetishistic disorder

fetishistic transvestism

fetus

fibril

fibrillation

fictional finalism

fiction, guiding

field

field adaptation

field dependence–independence

field effect

field experiment

field of vision

field study

field theory

fight-or-flight response

figural aftereffect

figure–ground reversal

figure of speech

filament

file drawer problem

filial generation

filial imprinting

filial regression

filled-duration illusion

filled pause

filled-space illusion

fillet

filling-in

filling-in illusion

film colour

filiform papilla

filter

filter theory

fimbria

finger agnosia

fingerprint, genetic

finger spelling

finite-state grammar

fire-setting, pathological

FIRO–B

first censorship

first-order approximation to language

fishberry

*****ebook converter DEMO Watermarks*****

Fisher's exact test

Fisher's r to z transformation

Fisher–Yates test

fis phenomenon

fission

fissure

fissure of Rolando

fissure of Sylvius

fitness

Fitts' law

five-factor model

5-hydroxyindoleacetic acid

5-hydroxytryptamine

5-hydroxytryptophan

five-number summary

5 per cent trim

fixate

fixation

fixed-action pattern

fixed idea

*****ebook converter DEMO Watermarks*****

fixed image

fixed-interval schedule

fixedness, functional

fixed-ratio schedule

fixed-role therapy

flanker compatibility effect

flashback

flashbulb memory

flash-lag effect

flattening of affect

flavour

flavour aversion learning/conditioning

Flesch indices

Fletcher–Munson contour

flexibilitas cerea

flexion reflex

flicker

flicker fusion frequency

flight into health

flight into history

*****ebook converter DEMO Watermarks*****

flight into illness

flight of colours

flight of ideas

floater

floating-finger illusion

flocculonodular lobe

flooding

floor effect

floral odour

flow chart

flowery odour

fluent aphasia

fluid intelligence

flunitrazepam

fluoxetine

fluphenazine

flutter, auditory

fluvoxamine

fly agaric

Flynn effect

F max

focal colour

focal epilepsy

focal length

focal point

focal system

focal therapy

focus

focus group

foetal alcohol syndrome

foetal brain transplantation

foetus

foil

foliate papilla

folie à deux

folium

folk etymology

folk psychology

follicle

follicle-stimulating hormone

*****ebook converter DEMO Watermarks*****

follicular phase

following behaviour

Folstein Mini-Mental State Examination

F1

fontanelle

food aversion learning

food chain

footbridge problem

foot-candle

foot-in-the-door technique

foot-lambert

foramen magnum

foramen of Monro

forced-choice

forced compliance

forebrain

foreclosure

foreign accent syndrome

forensic linguistics

forensic psychiatry

*****ebook converter DEMO Watermarks*****

forensic psychology

foreplay

forgetting

forgetting law

formal operations

formal universals

formant

form constancy

formication

fornix

Förster phenomenon

fortis

Fortral

40-hertz oscillations

forward association

forward conditioning

forward masking

founded content

founder effect

four-card problem

*****ebook converter DEMO Watermarks*****

Fourier analysis

Fourier series

Fourier theorem

Fourier transform

fourth ventricle

fovea

fractionation

fragile X syndrome

fragrant odour

frame

frame problem

frameshift mutation

frameshift suppression

framing effect

Frankfurt school

Fraser illusion

Fraser spiral

fraternal twins

fraud syndrome

free association

freebasing

free energy

free-floating anxiety

Freemish crate

free morpheme

free nerve ending

free operant avoidance conditioning

free radical

free recall

free response

free-rider problem

Frégoli syndrome

frequency

frequency-dependent

frequency-dependent selection

frequency distribution

frequency law

frequency polygon

frequency theory

frequency threshold curve

*****ebook converter DEMO Watermarks*****

frequency tuning curve

Freudian

Freudian slip

fricative

Friedman two-way analysis of variance

fright

frigidity

frog-pond effect

Fromm's typology

frontal eye field

frontal leucotomy

frontal lobe

frontal lobe syndrome

frontal lobotomy

frontal plane

frontal section

frontopolar cortex

frontotemporal neurocognitive disorder

front vowel

frotteurism

frotteuristic disorder

frozen noise

frustration

frustration–aggression hypothesis

F scale

F statistic

fugue

Fullerton–Cattell law

full primal sketch

functional

functional analysis of behaviour

functional autonomy

functional equivalence hypothesis

functional fixedness

functionalism

functionalist

functional MRI

functional neurological symptom disorder

function type

function word

*****ebook converter DEMO Watermarks*****

fundamental attribution error

fundamental colour

fundamental frequency

fundamental rule of psychoanalysis

fungiform papilla

funiculus

furthest neighbour method

fusiform cell

fusiform gyrus

fusion

fusional language

fusion of instincts

fuzzy logic

fuzzy set

g

GABA

GABAergic

GABA receptor complex

gag reflex

gain from illness

*****ebook converter DEMO Watermarks*****

gain–loss effect

gain, primary/secondary

gain score

gait apraxia

gait ataxia

Galatea effect

gall bladder

Galton bar

Galton's law of filial regression

Galton whistle

galvanic skin response

gambler's fallacy

gambling disorder

gambling, pathological

game

gamete

game theory

gamma-aminobutyric acid

gamma fibre

Gamma-hydroxybutyrate

gamma motor neuron

gamma movement

gamma-OH

gamma statistic

gamma wave

gamodeme

ganglion

ganglion cell

ganja

Ganser syndrome

Ganzfeld

gap junction

Garcia effect

gargoylism

gastric gland

gastrointestinal

gastrointestinal tract

gate-control theory

gateway drug

gating

*****ebook converter DEMO Watermarks*****

Gause's principle

Gaussian distribution

gay

gaze

gaze aversion

GBH

gear

Gedankenexperiment

Gelb effect

gel electrophoresis

gender

gender dysphoria

gender identity

gender identity disorder

gender role

gene

gene activator

gene amplification

gene cloning

gene complex

*****ebook converter DEMO Watermarks*****

gene expression

gene frequency

gene locus

gene mapping

gene operator

gene pool

genera

general ability

general adaptation syndrome

general factor of personality

General Health Questionnaire

generalizability theory

generalization, acoustic

generalization gradient

generalization, semantic

generalized anxiety disorder

generalized cone

generalized habit strength

generalized matching to sample

generalized oddity problem

*****ebook converter DEMO Watermarks*****

generalized reaction potential

general medical condition

general paralysis (paresis) of the insane

General Problem Solver

general systems theory

generative grammar

generativity versus stagnation

generator potential

gene regulator

gene repressor

generic knowledge

gene splicing

gene therapy

genetic activation

genetically modified

genetic code

genetic counselling

genetic dominance

genetic drift

genetic engineering

*****ebook converter DEMO Watermarks*****

genetic epistemology

genetic equilibrium

genetic fingerprint

genetic fingerprinting

genetic fitness

genetic genealogy

genetic imprinting

genetic mapping

genetic polymorphism

genetic recombination

genetic repression

genetics

genetic sexual attraction

genetic variance

genetic variation

genital character

genital love

genital stage

genito-pelvic pain/penetration disorder

genius

*****ebook converter DEMO Watermarks*****

genodeme

genogram

genome

genotropism

genotype

genotypic variance

genu

genus

geometric illusion

geometric mean

geon

geophagia

geriatrics

germ cell

germ line

germ plasm

gerontology

gerontophilia

geropsychology

Gerstmann–Sträussler–Scheinker syndrome

*****ebook converter DEMO Watermarks*****

Gerstmann syndrome

Gesell Developmental Schedules

Gestalt

Gestalt psychology

Gestaltqualität

Gestalt therapy

gesture

geusis

GHB

ghost in the machine

ghost sickness

ghrelin

Gibsonian

giftedness

gift of tongues

Gilles de la Tourette's syndrome

ginkgo

ginseng

gland

glaucoma

*****ebook converter DEMO Watermarks*****

glia

glide

glioblastoma

glioma

gliosis

global amnesia

global feature

global processing

global psychophysics

globus hystericus

globus pallidus

glomerulus

glossa

glossogenetics

glossograph

glossographia

glossolalia

glossopalatine nerve

glossopharyngeal nerve

glossosynthesis

glottal

glottal fry

glottis

glottochronology

glove anaesthesia

glucagon

glucocorticoid

glucose

glucostatic theory

glue-sniffing

glutamate

glutamic acid

glutamic acid decarboxylase

glutethimide

glycine

glycogen

glycol

glycolysis

GnRH

goal-gradient hypothesis

*****ebook converter DEMO Watermarks*****

Gödel's theorem

God-image

Goldilocks effect

Goldstein–Scheerer tests

Golem effect

Golgi apparatus

Golgi cell

Golgi stain

Golgi tendon organ

gonad

gonadotrophin

gonadotrophin-releasing hormone

good breast

good continuation

Goodenough Draw-a-Man test

good-enough mother

good figure

good Gestalt

Goodman–Kruskal gamma

Goodman–Kruskal lambda

*****ebook converter DEMO Watermarks*****

Goodman's paradox

goodness of fit

good object

good shape

goofers

goose pimples

Gottschaldt figures test

Gough Adjective Check List

government and binding

Graafian follicle

graceful degradation

gracile nucleus

gradation method

graded potential

grade-equivalent score

gradient descent

gradient of texture

Graduate Records Examination

Gräfenberg spot

gram calorie

*****ebook converter DEMO Watermarks*****

grammar

grandeur, delusion of

grandiose delusion

grandiose delusional disorder

grandiose ideas

grandiose self

grand mal

grandmother cell

granule cell

granulocyte

grapheme

graphic rating scale

graphology

graphomania

graphorrhoea

grasp reflex

grass

Grassmann's law (linguistics)

Grassmann's laws (perception)

grating

*****ebook converter DEMO Watermarks*****

gray matter

Great Vowel Shift

Greenspoon effect

Grelling's paradox

grey matter

Gricean maxims

grid analysis

grid test

grief reaction

Grimm's law

grooming

grounded theory

group dynamics

group factor

grouping law

group inhibition of helping

group movement

group polarization

group selection

group stereotype

*****ebook converter DEMO Watermarks*****

group test

group therapy

groupthink

growth hormone

growth hormone releasing hormone

Grüblersucht

grue paradox

G spot

guanine

guided discovery

guiding fiction

Guilford's cube

Gulf War Syndrome

guppy effect

gustation

gustatory acuity

gustatory hallucination

gustatory receptor

Guttman scale

gyrus

*****ebook converter DEMO Watermarks*****

H

Haab's pupillary reflex

habenula

habenular nucleus

habit

habitat

habit disorders

habit reversal

habit strength

habituation

haemoglobin

hair cell

hair-pulling, pathological

Halcion

Haldol

half-second delay in consciousness

halfway house

hallucination

hallucinogen

hallucinogen-related disorders

hallucinosiſ

halo effect

haloperidol

Hamilton Depression Rating Scale

hammer

handedness

handicapped

Hanoi, Tower of

Hans, Little

hapax legomenon

haphalgesia

haplodiploid

haplography

haploid

haplology

happiness

haptic

haptic agnosia

haptic touch

harassment

*****ebook converter DEMO Watermarks*****

hard AI

hard drug

hard–easy effect

hard of hearing

hard sign

hard-wired

Hardy–Weinberg equilibrium

Hardy–Weinberg law

Hare Psychopathy Checklist

harmine

harmonic

harmonic mean

harp theory

Hartley’s F max

hashish

Hawk–Dove game

Hawk–Dove–Retaliator game

Hawthorne effect

heading vector

head rotation illusion

*****ebook converter DEMO Watermarks*****

health anxiety disorder

health psychology

hearing

hearing impairment

hearing loss

heat grill

Hebbian rule

Hebb synapse

hebephrenia

hebephrenic schizophrenia

hebetude

hedonic treadmill

hedonic well-being

height in the visual field

Heimdallr sensitivity

Heisenberg uncertainty principle

helicotrema

Heller's syndrome

Helmholtz illusion

helper T cell

*****ebook converter DEMO Watermarks*****

helplessness, learned

hemeralopia

hemianopia

hemiballism

hemifield

hemineglect

hemiopia

hemiparesis

hemiplegia

hemisity

hemisphere

hemispherectomy

hemispheric encoding/retrieval asymmetry

hemisphericity

hemizygous

hemoglobin

Hempel's paradox

henbane

hendiadys

Henning's prism

*****ebook converter DEMO Watermarks*****

Henning's tetrahedron

hepatic portal vein

herbal ecstasy

herbivore

hereditarianism

heredity

Hering grey

Hering illusion

Hering image

heritability

Hermann grid

hermaphrodite

hermeneutics

heroin

herpes

herpes simplex encephalitis

herstory

hertz

Heschl's gyrus

Hess image

*****ebook converter DEMO Watermarks*****

heteroduplex DNA

heterogeneity of variance

heterographs

heterological

heteronyms

heterophoria

heteroscedasticity

heterosexism

heterosexual

heterosis

heterotropia

heterozygote

heterozygous

heuristic

HEXACO

hibernate

Hick's law

hidden figure

hidden observer

higher-order conditioning

*****ebook converter DEMO Watermarks*****

higher-order reinforcement schedule

high-pass filter

high rising intonation

high vowel

hikikomori

hill climbing

hindbrain

hindsight bias

hippocampal commissure

hippocampal formation

hippocampus

hiragana

Hiskey–Nebraska Test of Learning Aptitude

histamine

histocompatibility antigen

histogram

histrionic personality disorder

hit

HIV

HIV dementia

*****ebook converter DEMO Watermarks*****

hoarding disorder

hoarding orientation

hodological space

Höfdding step

hog

holandric

hold-out sample

hole-in-the-hand illusion

Holland codes

hollow-face illusion

hollow squares illusion

Holmgren test

holocrine

hologynic

holophrase

Holtzman Inkblot Technique

homeopathy

homeostasis

homeothermic

hominid

hominoid

Homo

homoeopathy

homogeneity of variance

homogeneous subset

homographs

homoiothermic

homologous

homologous chromosomes

homologue

homonymous hemianopia

homonyms

homonym symptom

homophones

homoscedasticity

homosexual

homothermic

homozygote

homozygous

homunculus

honestly significant difference test

honey-bee dance

Honi phenomenon

hook order

Hopfield rule

horizon

horizontal cell

horizontal décalage

horizontal icicle plot

horizontal plane

horizontal section

horizontal–vertical illusion

horme

hormesis

hormonagogue

hormone

Horner's law

Horner's syndrome

horologagnosia

horopter

*****ebook converter DEMO Watermarks*****

horse

hospice

hospital hopper syndrome

hospitalism

hot sauce task

hot spot

HOUND

House–Tree–Person technique

HPA axis

hue

hug drug

Hullian learning theory

human factors psychology

human immunodeficiency virus

human interest score

humanistic psychology

human performance

human relations group

Hume's fork

Hume's problem

*****ebook converter DEMO Watermarks*****

humour

Humphrey's law

hunger

Huntington's disease

Hunt–Minnesota test

Hurler's syndrome

hwa-byung

hyalophagia

hybrid

hybrid image

hybridization

hybridize

hybrid sterility

hybrid vigour

hydraulic theory

hydrazine

hydrocephalus

hydrocortisone

hydrolysis

hydromorphone

*****ebook converter DEMO Watermarks*****

hyoscine

hyoscyamine

hypacusia

hypoesthesia

hypalgesia

hyperactivity

hyperacusis

hyperaesthesia

hyperalgesia

hypercathexis

hypercolumn

hypercomplex cell

hypercomplex receptive field

hypercorrection

hypercreolization

hypergasia

hypergeusia

hyperglycaemia

hypericum

hyperkinaesthesia

*****ebook converter DEMO Watermarks*****

hyperkinesis

hyperkinetic disorders

hyperlexia

hypermania

hypermetamorphosis

hypermetropia

hypermnesia

hypermotility

hyperopia

hyperorexia

hyperosmia

hyperphagia

hyperphoria

hyperphrasia

hyperphrenia

hyperpnoea

hyperpolarization

hyperprosexia

hyper-reflection

hyper-reflexia

*****ebook converter DEMO Watermarks*****

hypersomnia

hypersomnolence disorder

hyperthymesia

hyperthymia

hyperthyroidism

hypertonia

hypertonic

hypertrophy

hypertropia

hyperventilation

hypesthesia

hypnagogic image

hypnoanalysis

hypnodermatology

hypnogenic

hypnoid hysteria

hypnoid state

hypnopompic image

hypnosis

hypnotherapy

*****ebook converter DEMO Watermarks*****

hypnotic

hypnotic age regression

hypnotic amnesia

hypnotic analgesia

hypnotic susceptibility

hypnotism

hypnotist

hypnotizability

hypnotize

hypoactive sexual desire disorder

hypoesthesia

hypochondria

hypochondriasis

hypochondriasis scale

hypoergastia

hypoesthesia

hypogeusia

hypoglossal nerve

hypoglycaemia

hypohedonia

*****ebook converter DEMO Watermarks*****

hypokinaesthesia

hypokinesis

hypolexia

hypologia

hypomania

hypomania scale

hypomanic episode

hypomnesia

hypophoria

hypophrasia

hypophrenia

hypophysis

hypopnoea

hypoprosopia

hyposmia

hyposthenia

hypothalamic hyperphagia

hypothalamic–hypophyseal portal system

hypothalamic–pituitary–adrenal axis

hypothalamic syndromes

hypothalamus

hypothesis

hypothetical construct

hypothetico-deductive method

hypothymia

hypothyroidism

hypotonia

hypotonic

hypoventilation

hypovolaemic thirst

hypoxyphilia

hysteria

hysteria scale

hysterical convulsion

hysterical epilepsy

hysterical paralysis

hysterical personality

hysterical seizure

hysterical technique

hysterogenic zone

*****ebook converter DEMO Watermarks*****

Ia fibre

IAPS

iatrogenic

Ib fibre

ibotenic acid

ICD

ice

icicle plot

iconic memory

iconic store

ICSI

ictal

id

idea

idea, guiding

idealization

ideal observer

ideal self

ideas of reference

ideation

ideational apraxia

idée fixe

identical twins

identification

identification task

identification with the aggressor

identity crisis

identity disorder

identity theory

identity versus role confusion

ideograph

ideokinetic apraxia

ideomotor aphasia

ideomotor apraxia

idioglossia

idiographic

idiolect

idiopathic

idioretinal light

idiot

idiot savant

IE scale

iff

iich'aa

II fibre

ikota

ill-defined problem

Illinois Test of Psycholinguistic Abilities

illness anxiety disorder

illocutionary act

illuminance

illumination

illusion

illusion of circular pitch

illusion of control

illusion of doubles

illusory conjunction

illusory contour

illusory correlation

illustrator

image

imageless thought

imagen

image–retinal system

imagery

imaginary companion

imaginary contour

imagination

imago

imbecile

imidazoleamine

imipramine

imitation game

immediate memory

immune response

immune system

immunoglobulin

immunology

impairment

implicational universals

*****ebook converter DEMO Watermarks*****

implicit association test

implicit attitude

implicit learning

implicit memory

implicit personality theory

implosion therapy

impossible figure

impossible triangle

impossible trident

imposter phenomenon

impotence

impoverished stimulus

impression formation

impression management

imprinting

impulse-control disorders

impulsivity

imu

inadequate personality

inadequate stimulus

*****ebook converter DEMO Watermarks*****

inadmissible alternative/strategy

inappropriate affect

inattentional blindness

inbred strain

inbreeding

inbreeding depression

incapacitant

incentive motivation

incentive–sensitization theory

incest

incest taboo

incidence

incidental learning

incident light

inclusive disjunction

inclusive fitness

incoherence

incomplete-pictures test

incomplete-sentences test

incongruity of affect

*****ebook converter DEMO Watermarks*****

incorporation

incremental validity

incubation

incus

independent assortment

independent samples t test

independent variable

indeterminacy principle

index case

indicator variable

indifference interval

indifference, principle of

indirect scaling

indirect speech act

indissociation

individual differences

individual differences scaling

individual psychology

individual test

individuation

*****ebook converter DEMO Watermarks*****

Indo-European

indole

indole alkaloids

indoleamine

indoleamine hypothesis

INDSCAL

induced colour

induced delusional disorder

induced motion

induction

inductive reasoning

inductive statistics

industrial/organizational psychology

industry versus inferiority

infantile amnesia

infantile autism

infantile sexuality

infarct

infatuation

inference

inferential statistics

inferior

inferior colliculus

inferiority complex

inferior longitudinal fasciculus

inferior oblique muscle

inferior olivary nucleus

inferior rectus

inferior temporal cortex

inferior temporal gyrus

infinite regress

inflation of consciousness

inflecting language

influence, delusion of

information

information processing

information technology

information theory

informed consent

infradian rhythm

*****ebook converter DEMO Watermarks*****

infra-red

infra-red vision

infrasound

infundibulum

ingratiation

inhalant

inhalant-related disorders

inhibited orgasm

inhibited sexual desire

inhibition

inhibition of inhibition

inhibition, proactive

inhibition, retroactive

inhibitor

inhibitory

inhibitory postsynaptic potential

inhibitory priming

initial insomnia

initial letter priming

Initial Teaching Alphabet

*****ebook converter DEMO Watermarks*****

initial values law

initiation codon

initiative versus guilt

injury feigning

inkblot test

innate

innate idea

innate releasing mechanism

inner ear

inner hair cell

inner nuclear layer

inner plexiform layer

inner speech

innervate

innervation ratio

inoculation theory

inositol

insanity

insanity of negation

insight

*****ebook converter DEMO Watermarks*****

insomnia

insomnia disorder

inspection time

instinct

instinct, component

instinct, death

instinct, life

instinctive drowning response

instinctual aim

instinctual component

instinctual drive

instinctual energy

instinctual object

instinctual source

instrumental conditioning

insufficient reason

insula

insulin

insulin shock

integral attribute

*****ebook converter DEMO Watermarks*****

integral stimulus dimension

integrative agnosia

intellect

intellectual developmental disorder

intellectual disability

intellectualization

intelligence

intelligence quotient

intelligence test

intension

intentional forgetting

intentionality

intention tremor

interaction effect

interaction graph

interactionism

interaction process analysis

interaural intensity difference

interaural time difference

interblob

*****ebook converter DEMO Watermarks*****

intercorrelations

interdependence theory

interest inventory

interference theory

interhemispheric fissure

interictal syndrome

interleukin

intermediary neuron

intermetamorphosis

intermittent explosive disorder

intermittent reinforcement

internal auditory canal

internal capsule

internal consistency

internal ear

internal–external control of reinforcement

internal–external scale

internalization

internal meatus

internal rectus

*****ebook converter DEMO Watermarks*****

internal reliability

internal sense

internal validity

International Affective Picture System

International Classification of Diseases

international personality item pool

International Phonetic Alphabet

internet addiction syndrome

internet gaming disorder

interneuron

internuncial

interoception

interoceptor

interpersonal trust scale

interplexiform cell

interposition

interpretation

interquartile range

inter-rater reliability

interrupted time-series design

*****ebook converter DEMO Watermarks*****

intersex condition

intersexuality

interspecific competition

interstimulus interval

interstitial-cell-stimulating hormone

intertectal commissure

interval of uncertainty

interval scale

intervening region

intervening variable

interview

intestine

intimacy versus isolation

intolerance of ambiguity

intonation

intoxication

intracellular

intracellular fluid

intracellular thirst

intraception

intracortical

intracranial

intracytoplasmic sperm injection

intrafusar

intragenic region

intralaminar nucleus

intransitive preferences

intraspecific competition

intrinsic light

intrinsic neuron

intrinsic nucleus

intrinsic validity

introjection

intron

introspection

introspectionism

introversion

intrusion

intuition

intuitive physics

*****ebook converter DEMO Watermarks*****

intuitive type

invariable hue

inventory

inverse square law

invertebrate

inverted Oedipus complex

inverted qualia

inverting spectacles

investigative psychology

in vitro

in vitro fertilization

in vivo

in vivo desensitization

involuntary muscle

involutional depression

involutional psychosis

iodopsin

ion

ion channel

ionizing radiation

*****ebook converter DEMO Watermarks*****

ionophore

Iowa gambling task

Iowa Manifest Anxiety Scale

IPIP

iproniazid

ipsative

ipsilateral

IQ

IQ test

iris

irkunii

irradiation

irradiation illusion

irrational type

irritable bowel syndrome

irritable male syndrome

irritable mood

Isakower phenomenon

ischaemia

ischaemic pain

*****ebook converter DEMO Watermarks*****

I-self

Ishihara test

island of Reil

islets of Langerhans

isocarboxazid

isocortex

isogenic

isogloss

isolate

isolating language

isolating mechanism

isolation

isolation effect

isolation of affect

isoluminant

isomorphism

isophonic contour

isoquinoline

isotonia

isotonic

*****ebook converter DEMO Watermarks*****

isotropic

is–ought question

Issawi's law of social motion

item analysis

item bias

item characteristic curve

item discrimination index

Item Group Checklist

item response curve

item response theory

I–thou relation

Jacksonian epilepsy

Jackson's principle

Jacobson's organ

Jacobson's progressive relaxation

jactation

jamais vu

James–Lange theory

Japanese writing

jargon

*****ebook converter DEMO Watermarks*****

jargon aphasia

Jastrow illusion

jealous delusional disorder

jealousy, morbid

Jerusalem syndrome

jet lag

jigsaw classroom

Jimmy

jinjina bema

jiryan

job analysis

Job Descriptive Index

job satisfaction

Jocasta complex

John Henry effect

joint

joint sense

Jost's law

Julesz stereogram

jumping gene

*****ebook converter DEMO Watermarks*****

Jungian

Jungian analysis

junk

junk DNA

junkie

just noticeable difference

just world hypothesis

Just World Scale

kainic acid

kairomone

kakosmia

Kamin blocking

Kamin effect

kana

Kanizsa triangle

kanji

Kanner's syndrome

kappa effect

kappa statistic

Kardos effect

*****ebook converter DEMO Watermarks*****

karyotype

Kaspar Hauser experiment

kat

katakana

katasexualism

kava

K complex

Keeler polygraph

Kelley's cube

Kendall coefficient of concordance

Kendall correlation coefficient

Kendall's tau

Kent–Rosanoff Free Association Test

kernel

ketamine

ketone

keyword mnemonic

khat

khyâl cap

Kiddie Mach

*****ebook converter DEMO Watermarks*****

killer T cell

kilocalorie

kinaesthesia

kinaesthetic method

kindling

kineme

kinemorph

kinephantom

kinesics

kinetic depth effect

kingdom

kinin

kinocilium

kin selection

kinship, coefficient of

kinship study

Kleine–Levin syndrome

Kleinian

kleptolagnia

kleptomania

K-line

Klinefelter's syndrome

klinokinesis

Klüver–Bucy syndrome

klysmaphilia

knee-jerk reflex

Knobe effect

knobs-and-dials psychology

knowing how

knowing that

knowledge

knowledge representation

Koffka–Korte laws

Kohlberg stage

Kohnstamm effect

Kohs Block Design Test

Kohutian

Kolmogorov's axioms

Kolmogorov–Smirnov test

König bars

*****ebook converter DEMO Watermarks*****

koro

Korsakoff's psychosis

Korte's laws

Krebs cycle

Kretschmer constitutional type

Kruskal–Wallis 1-way analysis of variance

K-selection

Kuder Preference Record

Kuder–Richardson coefficient

kufungisisa

Kuhnian

kula ring

Kuleshov experiment

Kundt's rules

kurtosis

kuru

kymograph

la belle indifférence

labelling theory

labia majora

*****ebook converter DEMO Watermarks*****

labia minora

labile affect (mood)

labiodental

labiovelar

labyrinth

labyrinthine nystagmus

Lacanian

lacrimator

lacunar amnesia

Ladd-Franklin theory

Lake Wobegon effect

lallation

laloplegia

lalorrhoea

Lamarckism

lambda statistic

lambert

Land effect

Landmark Forum

Landolt circle

*****ebook converter DEMO Watermarks*****

langage

language

language acquisition device

language disorder

Language Personality Sphere

langue

lanugo

lapsus calami

lapsus linguae

lapsus memoriae

Largactil

large intestine

Laroxyl

larynx

Lashley jumping stand

latah

late luteal phase dysphoric disorder

latency

latency period

latent content

*****ebook converter DEMO Watermarks*****

latent homosexuality

latent inhibition

latent learning

latent time

latent trait theory

latent variable

lateral

lateral dominance

lateral eye movement

lateral fissure

lateral frontal cortex

lateral funiculus

lateral geniculate nucleus

lateral hypothalamic feeding centre

lateral hypothalamic syndrome

lateral inhibition

laterality

lateral lemniscus

lateral sulcus

lateral surface

lateral thinking

lateral ventricle

late selection

Latin square

lattah

laudanum

laughing gas

lavatory wall illusion

law of comparative judgement

law of effect

law of exercise

law of forgetting

law of independent assortment

law of segregation

law of social impact

law of the excluded middle

lay personality theory

L-dopa

leaning tower illusion

learned food/flavour/taste aversion

*****ebook converter DEMO Watermarks*****

learned helplessness

learning

learning curve

learning difficulties

learning disability

Learning Potential Assessment Device

least-effort principle

least-significant difference test

least-squares method

lect

Lee–Boot effect

left–sided apraxia

legasthenia

legend, urban

lek

lemma

lemniscus

lenis

lens

lens illusion

lens model

lenticular nucleus

lento speech

leptin

leptokurtic

Lerntest

lesbian

Lesch–Nyhan syndrome

lesion

lesion experiment

less-is-more effect

lethal dosage

lethargy

letter-by-letter reading

leucocyte

leucotomy

leu-enkephalin

leukocyte

levelling

level of aspiration

*****ebook converter DEMO Watermarks*****

level of measurement

levels of processing

levodopa

Lewinian

Lewy body

Lewy body dementia

lexeme

lexical access

lexical access time

lexical ambiguity

lexical decision task

lexical word

lexicographic

lexicographic choice

lexicographic semiorder

lexicology

lexicon

lexicostatistics

liar paradox

liberation psychology

*****ebook converter DEMO Watermarks*****

liberty cap

Libet's delay

libidinal regression

libidinal stage

libido

Librium

lie detector

lie scale

life instincts

life lie

life space

life table

ligand

light adaptation

lightness

lightness constancy

lightness contrast

light reflex

likelihood function

likelihood principle

*****ebook converter DEMO Watermarks*****

likelihood ratio

likelihood ratio chi-square test

Likert scale

liking scale

l'illusion de sosies

limbic system

limen

limits, method of

Linda problem

linear model

linear perspective

linear regression

line bisection test

line graph

lingam

linguistic competence

linguistic determinism

linguistic performance

linguistic relativity

linguistics

linguistic universals

linkage

linking r

lipid

lipid bilayer

lipogram

lipostatic theory

liquid

Lissajous figure

lithium

lithium carbonate

Little Hans

little thirty

Lloyd Morgan's canon

loan translation

lobe

lobectomy

lobotomy

local feature

localization

*****ebook converter DEMO Watermarks*****

localization of function

local processing

local sign

loci, method of

lock-and-key theory

locked-in syndrome

locomotor ataxia

locura

locus

locus coeruleus

locus of control

locutionary act

logagnosia

logic

logical analysis

logical empiricism

logical positivism

log-interval scale

log-linear analysis

logogen

*****ebook converter DEMO Watermarks*****

logograph

logography

logorrhoea

logotherapy

Lomotil

longitudinal fissure

longitudinal study

long-sightedness

long-term memory

long-term potentiation

long-term store

look-and-say method

looming

loosening of associations

lorazepam

lordosis

lordosis quotient

loss aversion

lost-letter technique

loudness

loudness level

loudness matching

loudness recruitment

Lou Gehrig's disease

love

love, genital

love scale

lowball technique

lower threshold

low-pass filter

low vowel

LSD

lucid dream

luciferase

luciferin

Luckiesh illusion

ludic love

lumen

Luminal

luminance

luminosity

luminosity coefficient

luminosity curve

luminous efficiency function

luminous flux

luminous intensity

lunacy

lunatic asylum

lunatic fringe

luteal phase

luteinizing hormone

luteinizing hormone releasing hormone

luteotrophic hormone

Luvox

lux

lycanthropy

lymph

lymphocyte

Lysenkoism

lysergic acid diethylamide

*****ebook converter DEMO Watermarks*****

lysosome

mace

Mace

Mach band

Machiavellianism

Mach illusion

machine intelligence

Machover Draw-a-Person Test

Mach scale

macrocephaly

macroevolution

macroglia

macromania

macrophage

macropsia

macula

macula lutea

Madame Butterfly fantasy

mad cow disease

magazine training

*****ebook converter DEMO Watermarks*****

Magendie's foramen

Maggie illusion

magical number seven

magical thinking

magic mushroom

Magnan sign

magnetic resonance imaging

magnetic sense

magnetoencephalography

magnitude estimation

magnitude matching

magnitude production

magnocellular nucleus

magnocellular system

main effect

mainline

maintenance behaviour

maintenance rehearsal

major affective disorders

major depressive disorder

*****ebook converter DEMO Watermarks*****

major depressive episode

major epilepsy

majority preference cycle

major solution

major tranquillizer

Makaton

Make-a-Picture-Story Test

maladi moun

maladjustment

malapropism

mal de ojo

mal de pelea

male hypoactive sexual desire disorder

male menopause

male mouse effect

male orgasmic disorder

mali-mali

malingering

malleus

mal puesto

*****ebook converter DEMO Watermarks*****

mamillary body

mammary gland

mammillary body

mammillothalamic tract

mana

mand

mandala

mania

manic–depressive psychosis

manic episode

manic love

Manifest Anxiety Scale

manifest content

manner of articulation

Mann–Whitney U test

Mantel–Haenszel chi-square

map distance

Marbe's law

Margaret Thatcher illusion

marginal consciousness

*****ebook converter DEMO Watermarks*****

marginals

margin of attention

margin of consciousness

marijuana

marital therapy

marketing orientation

marketing research

market research

Marplan

marriage counselling

Marr's computational theory of vision

marshmallow test

Marsilid

Martha Mitchell effect

masculine protest

masculinity–femininity scale

masculinizing hormone

masked depression

masking

masochism

masochistic personality

mass action

massage therapy

massa intermedia

massed practice

mast cell

masturbation

matched guise

matching bias

Matching Familiar Figures Test

matching to sample

materialism

maternal deprivation

maternal inheritance

mathematical induction

mathematics disorder

matriarchy

matrilineal

matrist

matrix

maturation

Maudsley Personality Inventory

maximin

maximum likelihood

Maxwell disc

maze

McCarthy Scales of Children's Abilities

McCollough effect

M cell

McGurk effect

McNaghten rules

McNemar test

MDA

MDMA

mean

mean error method

mean length of utterance

mean lethal dosage

means-end analysis

mean square

*****ebook converter DEMO Watermarks*****

measurement

measurement level

measurement model

mechanism of defence

mechanoreceptor

Mecholyl

MED-50

medial

medial forebrain bundle

medial geniculate nucleus

medial lemniscus

medial rectus

medial surface

medial temporal lobe

median

median effective dosage

median eminence

median lethal dosage

median plane

median section

*****ebook converter DEMO Watermarks*****

median temporal gyrus

median test

median toxic dosage

mediating variable

medical psychology

medical student syndrome

meditation

medulla

medulla oblongata

medulloblastoma

megalomania

megavitamin therapy

meiosis

Meissner's corpuscle

mel

melancholia

melanocyte-stimulating hormone

melatonin

Mellaril

melodic constancy

*****ebook converter DEMO Watermarks*****

melodic paradox

member

membership character

membrana tympani

membrane

membrane potential

membranous labyrinth

meme

MEM 1414

memory

memory drum

memory operating characteristic

memory organization packet

memory span

memory trace

menarche

Mendelian

Mendel's laws

meninges

meningioma

*****ebook converter DEMO Watermarks*****

meningitis

meninx

menkeiti

menopause

menses

mens rea

menstrual cycle

menstrual phase

menstrual synchrony

menstruation

mental age

mental chemistry

mental defective

mental deficiency

mental disorder

mental handicap

mental illness

mental image

mental imagery

mental lexicon

*****ebook converter DEMO Watermarks*****

mental map

mental model

mental operation

mental retardation

mental rotation

mental set

mental status examination

Mental Status Examination Report

mental subnormality

mental test

mental time travel

meow meow

meperidine

mephedrone

meprobamate

mere exposure effect

Merkel cell

Merkel's law

merocrine

Merrill-Palmer scale

*****ebook converter DEMO Watermarks*****

mescaline

Me-self

mesencephalic locomotor region

mesencephalon

mesmerism

mesocortex

mesocortical system

mesoderm

mesokurtic

mesolect

mesolimbic system

mesomorph

mesopic

mesotelencephalic pathway

messenger RNA

meta-analysis

metabolism

metachrosis

metacognition

metacontrast

*****ebook converter DEMO Watermarks*****

metalanguage

metamemory

metamer

metameric match

metametric pair

metanalysis

metaphase

metaphor

metapsychology

metathetic stimulus dimension

metatrait

metencephalon

met-enkephalin

meth

methacholine

methadone

methamphetamine

methaqualone

method of absolute judgement

method of adjustment

*****ebook converter DEMO Watermarks*****

method of average error

method of bisection

method of comparative judgement

method of constant stimuli

method of equal and unequal cases

method of equal-appearing intervals

method of gradation

method of limits

method of loci

method of mean error

method of paired comparisons

method of reproduction

method of savings

method of single stimuli

methyl atropine

methylphenidate

methylphenylpyridine

methylphenyltetrahydropyridine

methyl scopolamine

methylxanthine

*****ebook converter DEMO Watermarks*****

metonymy

Metrazol

MHPG

mianserin

miaow miaow

Michelangelo phenomenon

microcephaly

microelectrode

microevolution

microfilament

microglia

micropsia

microsaccade

microsleep

microsome

microspecies

microtome

microtubule

midbrain

middle commissure

*****ebook converter DEMO Watermarks*****

middle ear

middle insomnia

middle temporal gyrus

midget cell

midsagittal plane

midsagittal section

mid vowel

Mignon delusion

migraine

migration

mild cognitive impairment

mild mental retardation

Milgram experiment

milieu therapy

Miller Analogies Test

Mill Hill Vocabulary scale

millimicron

Miltown

mimesis

mimicry

*****ebook converter DEMO Watermarks*****

mind-blindness

mind–body problem

mindfulness

mindfulness-based cognitive therapy

mindlessness

mind-reading

mineralocorticoid

miniature end-plate potential

minimal audible angle

minimal audible field

minimal audible pressure

minimal brain dysfunction

minimal group situation

minimal pair

minimal social situation

minimax

minimax theorem

Mini-Mental State Examination

minimum audible angle

minimum audible field

*****ebook converter DEMO Watermarks*****

minimum audible pressure

minimum effective dosage

minimum lethal dosage

minimum separable

minimum toxic dosage

minimum visible

Minnesota Multiphasic Personality Inventory

minor depressive disorder

minor epilepsy

minority social influence

minor tranquillizer

miracle berry

miraculin

mirror drawing

mirror focus

mirror neuron

mirror phase

mirror reversal problem

mirror writing

misandry

misidentification disorders

misinformation effect

mismatch

miss

missing fundamental illusion

mitochondrial DNA

mitochondrion

mitosis

mitral cell

Mitwelt

mixed episode

mixed-motive game

mixed strategy

mixed transcortical aphasia

mixture suppression

MMPI

mneme

mnemic symbol

mnemon

mnemonic

*****ebook converter DEMO Watermarks*****

mnemonist

mobbing

Möbius syndrome

modafinil

modal completion

modality

modality effect

modal logic

modal verb

mode

model

modelling

moderate mental retardation

modern racism

modified Ellsberg paradox

modified LSD test

modifier gene

modularity of mind

modulation transfer function

modulator

*****ebook converter DEMO Watermarks*****

modus ponens

modus tollens

molecular biology

molecular genetics

molecular imprinting

Molyneux's question

momentum, representational

monad

Mona Lisa smile

monaural

money pump

mongolism

monism

monoamine

monoamine oxidase

monoamine oxidase inhibitor

monoblepsis

monochromatic

monochromatism

monoclonal antibody

*****ebook converter DEMO Watermarks*****

monocular

monocular cue

monocular parallax

monocyte

monogamy

monogenic inheritance

monomania

monopede mania

monopedophilia

monophthong

monoplegia

monopolar neuron

monoptic

monosemy

monosodium glutamate

monosomy X

monosynaptic reflex

monotonic

monotonicity

monozygotic

*****ebook converter DEMO Watermarks*****

monozygotic twins

Monte Carlo method

Monty Hall problem

mood

mood-congruent

mood-dependent memory

mood disorders

mood episodes

mood-incongruent

mood stabilizer

moon illusion

moral development

morbid jealousy

Morgan–Murray Thematic Apperception Test

Morgan's canon

Morinaga misalignment illusion

Morita therapy

morning glory

moron

Moro reflex

*****ebook converter DEMO Watermarks*****

morpheme

morphine

morphology

mortality table

mortido

morula

mosaic

Moses illusion

Moses test of extreme reaction

mossy fibre

mother complex

motherese

mother, phallic

motile

motion aftereffect

motion capture

motion detector

motion-induced blindness

motion parallax

motion perspective

*****ebook converter DEMO Watermarks*****

motion sickness

motivated error

motivation

motivational research

motoneuron

motor aphasia

motor apraxia

motor area

motor cortex

motor disorders

motor dissociative disorders

motor end plate

motor nerve

motor neuron

motor neuron disease

motor set

motor skills disorder

motor unit

movement aftereffect

movement detector

*****ebook converter DEMO Watermarks*****

movement disorders

movement illusion

movement parallax

movement perception

movement tremor

moving average

Mozart effect

MPP+

MPPP

MPTP

MRI

MT

mucous membrane

MUD

muddy children problem

muina

Müllerian duct

Müllerian inhibiting substance

Müllerian mimicry

Müller-Lyer illusion

*****ebook converter DEMO Watermarks*****

multi-attribute decision making
multidimensional scaling
multifactorial analysis
multifactorial inheritance
multiframe task
multi-infarct dementia
multimodal therapy
multiple-choice
multiple comparisons
multiple correlation coefficient R
multiple determination
multiple intelligences
multiple linear regression analysis
multiple line graph
multiple personality disorder
multiple range test
multiple regression
multiple sclerosis
multiplicative model
multipolar neuron

multi-rater feedback

multistage cluster sampling

multitrait–multimethod matrix

multi-user dungeon

multivariate analysis of variance

multivariate statistics

multiway frequency analysis

Munchausen by proxy syndrome

Munchausen syndrome

Munsell colour system

Münsterberg illusion

muscarine

muscarinic receptor

muscimol

muscle

muscle dysmorphia

muscle relaxant

muscle sense

muscle spindle

muscular dystrophy

*****ebook converter DEMO Watermarks*****

mush

music therapy

mutagen

mutant

mutation

mutism

mutual gaze

mu wave

myalgic encephalomyelitis

myasthenia gravis

myelencephalon

myelin

Myers–Briggs Type Indicator

myoclonic

myofibril

myopia

myosin

myostatic reflex

myotonia

myriachit

*****ebook converter DEMO Watermarks*****

myristin

mystery customer research

myth, urban

naive participant

naive physics

naive realism

naive subject

nalorphine

naloxone

naltrexone

name–letter effect

NANC

nandrolone

nanometre

narcissism

narcissistic libido

narcissistic neurosis

narcissistic object-choice

narcissistic personality disorder

narcoanalysis

*****ebook converter DEMO Watermarks*****

narcolepsy

narcosis

narcosynthesis

narcotherapy

narcotic

narcotic analgesic

narcotic antagonist

narrative psychology

narrative psychotherapy

narrow heritability

nasal

nasal epithelium

nasal hemianopia

nasal retina

Nash equilibrium

National Intelligence Test

nativism

NATO phonetic alphabet

natural category

naturalistic fallacy

*****ebook converter DEMO Watermarks*****

naturalistic observation

natural language

natural-level category

natural selection

nature–nurture controversy

Navane

Navon figure

near-death experience

nearest neighbour method

near point

near sense

near-sightedness

near vision

nebbies

Necker cube

necromania

necrophilia

need

need complementarity hypothesis

need for achievement

need for affiliation

need-hierarchy theory

need-press

neencephalon

negation

negative adaptation

negative afterimage

negative capability

negative feedback

negative induction

negative Oedipus complex

negative practice

negative priming

negative reference group

negative reinforcement

negative symptoms

negative therapeutic reaction

negative transfer

negative transference

negativism

negativistic personality disorder

neglect dyslexia

Nembutal

nemesism

NEO

neobehaviourism

neo-catastrophism

neocerebellum

neocortex

neo-Darwinism

neodissociation theory

neo-Freudian

neo-Lamarckism

neologism

Neonatal Behavioral Assessment Scale

neonate

neopallium

neostriatum

neoteny

neothalamus

*****ebook converter DEMO Watermarks*****

nepetalactone

nephron

nerfiza

Nernst heat theorem

nerve

nerve cell

nerve conduction velocity

nerve deafness

nerve ending

nerve fibre

nerve gas

nerve growth factor

nerve impulse

nervios

nervous

nervous breakdown

nervous system

net benefit index

net reaction potential

network model

*****ebook converter DEMO Watermarks*****

neural

neural adaptation

neural computer

neural Darwinism

neuralgia

neural network

neurasthenia

neurilemma

neurite

neurobiology

neuroblast

neurochip

neurocognitive disorder due to HIV infection

neurocognitive disorder due to Huntington's disease

neurocognitive disorder due to Parkinson's disease

neurocognitive disorder due to prion disease

neurocognitive disorder due to traumatic brain injury

neurocognitive disorders

neurocognitive disorder with Lewy bodies

neurocomputer

*****ebook converter DEMO Watermarks*****

neurodevelopmental disorders

neuroeconomics

neuroendocrine

neuroendocrine cell

neuroendocrine system

neuroendocrinology

neuroergonomics

neurofibril

neurofibrillary tangle

neurofilament

neurogenesis

neuroglia

neurogram

neurohormone

neurohumour

neurohypophysis

neuroimaging

neurolemma

neuroleptic

neuroleptic-induced

*****ebook converter DEMO Watermarks*****

neuro-linguistic programming

neurolinguistics

neurology

neurolymph

neurometrics

neuromodulation

neuromodulator

neuromuscular junction

neuron

neuronal oscillator

neuronal transplantation

neuron receptor site

neuropathic

neuropathology

neuropathy

neuropeptide

neurophysiology

neuropil

neuropsychiatry

neuropsychanalysis

*****ebook converter DEMO Watermarks*****

neuropsychology

neuropsychosis

neuroreceptor

neuroregulator

neuroscience

neurosis

neurosis, actual

neurosurgery

neurotic

neurotic anxiety

neurotic character

neurotic depression

neurotic fiction

neuroticism

neurotic paradox

neurotic solution

neurotoxin

neurotransmitter

neurotropic virus

neutral colour

*****ebook converter DEMO Watermarks*****

neutral grey

neutralization

neutralization of libido

neutral monism

neutral mutation

nevra

Newcomb's problem

Newman–Keuls test

new-variant Creutzfeldt–Jakob disease

next-in-line effect

N400

nibble

nicotine

nicotine-related disorders

nicotinic receptor

nictitating membrane

night blindness

nightmare

nightmare disorder

nightshade

*****ebook converter DEMO Watermarks*****

night terrors

night vision

nigrostriatal bundle

nihilism

nihilistic delusion

nine-dot problem

nirvana principle

Nissl body

Nissl granule

Nissl stain

nitric oxide

nitrite inhalant

nitrogenous base

nitrous oxide

nocebo effect

nociceptive

nociceptor

noctambulation

Noctec

nocturia

*****ebook converter DEMO Watermarks*****

nocturnal

nocturnal myoclonus

node

node expansion

node of Ranvier

nodulus

noesis

noise

nominal aphasia

nominalism

nominal scale

nominative determinism

nomological network

nomological validity

nomothetic

non-adaptive

non-additivity

non-classical receptive field

non-competitive antagonist

non compos mentis

*****ebook converter DEMO Watermarks*****

non-Darwinian evolution

non-declarative knowledge

non-declarative memory

non-directional test

non-directive therapy

non-discrimination point

non-disjunction

N140

non-epileptic seizure

non-equivalent groups design

non-essential amino acids

non-fluent aphasia

non-identical twins

non-Mendelian gene

non-metric analysis

non-monotonic reasoning

Nonne's syndrome

non-opponent cell

non-paralytic strabismus

non-parametric statistics

*****ebook converter DEMO Watermarks*****

non-probability sample

non-rapid eye movement sleep arousal disorder

non-reactive measure

non-regressiveness bias

non-REM sleep

non-reversal shift

nonsense codon

nonsense mutation

nonsense syllable

nonsense syndrome

non-spectral colour

non-taster

non-verbal communication

non-verbal test

non-zero-sum game

nootropic

noradrenalin

noradrenalin reuptake inhibitor

noradrenergic

norepinephrine

*****ebook converter DEMO Watermarks*****

norm

normal distribution

normal probability plot

normal science

normative

normative reference group

norm-referenced test

nose

nose-picking mania

nosology

N-person Prisoner's Dilemma

NREM sleep

nuclear agenesis

nuclear family

nuclear magnetic resonance

nuclear self

nuclear spindle

nucleic acid

nucleoplasm

nucleotide

*****ebook converter DEMO Watermarks*****

nucleotide sequence

nucleus

nucleus accumbens

nucleus basalis of Meynert

nucleus cuneatus

nucleus gigantocellularis

nucleus gracilis

NUD*IST

nuisance variable

null hypothesis

null hypothesis significance testing

number-completion test

number sequence

numerical rating scale

numeric variable

numinosum

Numorphan

nurture

nutmeg

nybble

*****ebook converter DEMO Watermarks*****

nyctalopia

nymphomania

nystagmus

obedience

obesity hypoventilation syndrome

ob gene

object assembly test

object blindness

object-cathexis

object-choice

object constancy

object instinct

objective psyche

object language

object libido

object loss

object of instinct

object, part

object permanence

object recognition

object relations

object-relationship

object-relations theory

object superiority effect

object theory

object, transitional

oblique décalage

oblique effect

oblique muscle

obliviscence

observational study

obsession

obsessional neurosis

obsessional technique

obsessive–compulsive disorder

obsessive–compulsive personality disorder

obstacle sense

obstructive sleep apnoea hypopnoea

obstruent

Occam's razor

*****ebook converter DEMO Watermarks*****

occipital

occipital bone

occipital lobe

occupational health psychology

occupational interest inventory

Occupational Personality Questionnaire

occupational psychology

occupational therapy

oceanic feeling

Ockham's razor

ocnophil

octave

ocular apraxia

ocular convergence

ocular divergence

ocular dominance

ocular-dominance column

ocular drift

ocular nystagmus

ocular pursuit movement

*****ebook converter DEMO Watermarks*****

ocular tremor

oculogyral illusion

oculomotor apraxia

oculomotor cue

oculomotor nerve

oddity problem

odd-one-out test

odor

odorimetry

odour

odour adaptation

odour constancy

odour hallucination

odour prism

odour square

Oedipal phase

Oedipus complex

Oedipus effect

oesophagus

oestradiol

oestrogen

oestrone

oestrous cycle

oestrus

off-centre cell

offender counselling

Ohm's acoustic law

olan

olanzapine

old woman/young girl figure

olfactie

olfaction

olfactology

olfactometry

olfactory acuity

olfactory bulb

olfactory cortex

olfactory epithelium

olfactory lobe

olfactory nerve

olfactory receptor

olfactory tract

oligodendrocyte

oligophrenia

olivary nucleus

ololuiqui

omega process

ommatidium

omnivore

onanism

on-centre cell

Ondine's curse

one-group pretest–posttest design

oneiric

oneirophrenia

one-sample t test

1-tailed probability

1-tailed test

one-way analysis of variance

one-way screen

*****ebook converter DEMO Watermarks*****

ongoing time disparity

online counselling

online therapy

onomastics

onomatopoeic theory

ontogeny

ontology

onychophagia

open-ended question

open-field test

open-loop control

openness to experience

open node

open study

open vowel

operant

operant conditioning

operating characteristic

operation

operational definition

*****ebook converter DEMO Watermarks*****

operationalism

operational research

operational stage

operator

operatory stage

operculum

operon

ophthalmic

ophthalmoplegia

opiate

opinion

opinion leader

opioid

opioid antagonist

opioid-related disorders

opium

Oppel illusion

Oppel–Kundt illusion

opponent cell

opponent-process theory

*****ebook converter DEMO Watermarks*****

opportunity sample

opposites test

oppositional defiant disorder

opsin

optacon

optic agnosia

optical character recognition

optical flow

optical illusion

optic apraxia

optic ataxia

optic chiasm

optic disc

optic nerve

optic radiation

optic tectum

optic tract

optimal foraging

optimal movement

optimism, unrealistic

*****ebook converter DEMO Watermarks*****

optional stopping

optogram

optohapt

optokinetic nystagmus

oral

oral–aggressive character

oral apraxia

oral character

oral dependence

oral erotism

oral–incorporative phase

oral–passive character

oral primacy

oral sadistic phase

oral stage

Orbison illusion

orbitofrontal cortex

order

ordered recall

order effect

*****ebook converter DEMO Watermarks*****

ordinal scale

orectic

Orestes complex

organelle

organ erotism

organic affective disorders

organic brain syndrome

organic disorders

organic hallucinosis

organic mental disorders

organism

organizational psychology

organization, Gestalt principle of

organized crime

organ libido

organ neurosis

organ of Corti

organ of Golgi

organophosphate

organophosphate poisoning

*****ebook converter DEMO Watermarks*****

organum vasculosum lamina terminalis

orgasm

orgasmatron

orgasmic dysfunction device

orgasmic dysfunctions

orgasmic impotence

orgone therapy

orientation column

orientation-specific cell

orienting response

orphan drug

orthodromic

orthographic agraphia

orthography

orthomolecular therapy

orthopsychiatry

oscillating figure

oscillopsia

osmometric thirst

osmoreceptor

*****ebook converter DEMO Watermarks*****

osmosis

osmotic pressure

osmotic thirst

osphresiolagnia

osphresis

osseous labyrinth

ossicle

Othello syndrome

other, significant

otic

otitis

otoconium

otogenic tone

otolith

otology

otosclerosis

ototoxic

Ouchi illusion

Ouija board

outbreeding

*****ebook converter DEMO Watermarks*****

outer ear

outer hair cell

outer nuclear layer

outer plexiform layer

outlier

out-of-body experience

out-of-level testing

outplacement counselling

oval window

ovarian follicle

ovary

overanxious disorder

overattribution bias

overconfidence effect

overcorrection

overdetermination

overdominance

overextension

overflow response

overgeneralization

*****ebook converter DEMO Watermarks*****

overinclusiveness

overinterpretation

overjustification

overlearning

overregularization

overshadowing

oversufficient justification

overtone

overtraining

overtraining extinction effect

overtraining reversal effect

overvalued idea

ovulate

ovum

oxidative metabolism

oxidative phosphorylation

oxycodone

oxymethalone

oxymoron

oxymorphone

*****ebook converter DEMO Watermarks*****

oxytocin

pacemaker neuron

pachymeninx

Pacinian corpuscle

Pac-Man

paedophilia

paedophilic disorder

pagophagia

pain

pain asymbolia

pain disorder

pain principle

pain receptor

paired-associate learning

paired comparisons

paired samples t test

palaeocortex

palaeostriatum

palatal

palato-alveolar

*****ebook converter DEMO Watermarks*****

paleencephalon

pa-leng

paleocortex

paleostriatum

palilalia

palinacousis

palingenesis

palingraphia

pallaesthesia

pallanaesthesia

pallidum

palmaesthesia

palpitation

palsy

pancreas

pandemic

Pandemonium

panel study

pangram

panic attack

*****ebook converter DEMO Watermarks*****

panic disorder

pansexualism

pantheism

panting centre

Panum phenomenon

Panum's fusion area

Panum's limiting case

Papez circuit

papilla

paracentral vision

parachlorophenylalanine

parachromatopsia

paracontrast

paracusia

paradigm

paradigm shift

paradox

paradoxical cold

paradoxical heat

paradoxical injunction

*****ebook converter DEMO Watermarks*****

paradoxical intention

paradoxical sleep

paradoxical therapy

paradoxical warmth

paradox of voting

paraesthesia

parafovea

parageusia

paragraphia

parahippocampal gyrus

paralanguage

paraldehyde

paralexia

paralinguistics

parallax

parallel distributed processing

parallel fibre

parallel-form reliability

parallel forms

parallelism

*****ebook converter DEMO Watermarks*****

parallelogram illusion

parallel processing

paralysis

paralysis agitans

paralytic strabismus

paramecium

parameter

parametric statistics

paramimia

paramnesia

paramnesia, reduplicative

paranoia

paranoia querulans

paranoia scale

paranoid

paranoid disorder

paranoid disorder, shared

paranoid ideation

paranoid personality disorder

paranoid–schizoid position

*****ebook converter DEMO Watermarks*****

paranoid schizophrenia

paranoid technique

paranormal

paranosic gain

paraphasia

paraphemia

paraphilias

paraphilic disorders

paraphobia

paraphrenia

paraplegia

parapraxis

parapsychology

parasitosis

parasol cell

parasomnias

parasuicide

parasympathetic nervous system

parasympatholytic

parasympathomimetic

*****ebook converter DEMO Watermarks*****

parathyroid gland

parathyroid hormone

paraventricular nucleus

paregoric

parental investment

parenteral

parent-figure, combined

paresis

paresthesia

Pareto-optimal

parietal lobe

parietal operculum

parieto-occipital sulcus

parkinsonism

Parkinson's disease

Parlodel

Parlyaree

parole

paronomasia

parosmia

parotid gland

paroxetine

parsimony principle

parthenogenesis

partial correlation

partial instinct

partial movement

partial reinforcement

partial reinforcement effect

partial tone

participant observation

participant (research or experimental)

participation mystique

participatory action research

particular complex

particulate inheritance

partile

part instinct

part object

parvocellular system

Pascal's wager

passing stranger effect

passive–aggressive personality disorder

passive analysis

passive avoidance conditioning

passive-dependent personality disorder

passive learning

passive movement

passive tremor

passive vocabulary

pastoral counselling

patellar reflex

paternity uncertainty

path analysis

path diagram

pathergasia

pathetic fallacy

pathetic nerve

pathogenesis

pathognomonic

*****ebook converter DEMO Watermarks*****

pathological fire-setting

pathological gambling

pathological hair-pulling

pathological stealing

pathomimicry

patient

patriarchy

patrilineal

patrist

pattern discrimination

pattern-induced flicker colour

patterning

pattern masking

pattern recognition

Pavlovian conditioning

Pavlov strategy

pavor diurnus

pavor nocturnus

Paxil

payoff

*****ebook converter DEMO Watermarks*****

P cell

P consciousness

Pcpt–Cs process

Peabody Picture Vocabulary Test

peace pill

peak clipping

peak experience

peak shift

Pearson chi-square test

Pearson's correlation coefficient

pecking order

PEC scale

pederasty

pedophilia

peduncle

peeping Tom

pegboard test

peg-word mnemonic

pellagra

penetrability, cognitive

*****ebook converter DEMO Watermarks*****

penetrance

penile plethysmograph

penis

penis dentata

penis envy

Penrose staircase

Penrose triangle

pentazocine

pentobarbital

pentobarbitone

Pentothal

pentylene tetrazol

Pepper's ghost

pepper spray

pepsin

peptide

peptide hormone

perceive

percentile

percept

*****ebook converter DEMO Watermarks*****

perception

perception–consciousness system

perceptron

perceptual completion

perceptual constancy

perceptual cycle

perceptual defence

perceptual differentiation

perceptual field

perceptual illusion

perceptual memory

perceptual–motor skill

perceptual schema

perceptual sensitization

perceptual set

perceptual speed

perceptual vigilance

percipient

Percodan

perdeviation effect

*****ebook converter DEMO Watermarks*****

perdida del alma

peregrinating patient

perfect pitch

perforant pathway

performance

performance anxiety

performance enhancer

performance, human

performance operating characteristic

performance test

periaqueductal grey matter

periglomerular cell

perikaryon

perilymph

perimetry

perineal

perineural

peripheral dyslexia

peripheral nerve

peripheral nervous system

*****ebook converter DEMO Watermarks*****

peripheral vision

peristalsis

Perky phenomenon

perlocutionary act

perphenazine

persecution complex

persecution, delusion of

persecutory delusion

persecutory delusional disorder

perseveration

persistent (chronic) motor or vocal tic disorder

persistent depressive disorder

persistent sexual arousal syndrome

persistent vegetative state

persona

personal construct theory

personal construct therapy

Personal Data Sheet

personal equation

personality

*****ebook converter DEMO Watermarks*****

personality disorders

personality inventory

personality, multiple

personal space

personal unconscious

person-centred therapy

person constancy

personification

personnel psychology

personology

person perception

perspective

perspective illusion

perspective reversal

persuasion

pervasive developmental disorder

perversion

Pervitin

pethidine

petit mal seizure

*****ebook converter DEMO Watermarks*****

PET scan

peyote

P50

PGO spike

pH

Phaedra complex

phagocyte

phallic character

phallic erotism

phallic stage

phallic symbol

phallic woman

phallocentric

phallocrat

phallus

phantasm

phantasmagoria

phantasticant

phantasy

phantom grating

*****ebook converter DEMO Watermarks*****

phantom limb

phantom phoneme effect

phantom pregnancy

pharmacodynamics

pharmacokinetics

pharmacology

pharyngeal reflex

pharynx

phase

phase delay

phase-locking

phase sequence

phenazocine

phencyclidine

phencyclidine-related disorders

phenelzine

phenmetrazine

phennies

phenobarbital

phenobarbitone

phenome

phenomenal

phenomenal consciousness

phenomenal field

phenomenal motion

phenomenal regression

phenomenal self

phenomenistic causality

phenomenistic thought

phenomenological field

phenomenology

phenomenon

phenothiazine

phenotype

phenylalanine

phenylalkylamines

phenylethanolamine-N-methyltransferase

phenylethylamine

phenylketonuria

phenylpyruvic oligophrenia

*****ebook converter DEMO Watermarks*****

phenylquinine writhing test

phenylthiocarbamide

phenytoin

pheromone

phi coefficient

philobat

philosophy

phi movement

phi phenomenon

phlegm

phobia

phobic stimulus

phobic technique

phon

phonagnosia

phone

phoneme

phonemic restoration

phonemics

phonetics

*****ebook converter DEMO Watermarks*****

phonics

phonogram

phonography

phonological buffer store

phonological disorder

phonological dyslexia

phonological loop

phonological priming

phonological reading

phonology

phonoreceptor

phosphate

phosphene

phosphocreatine

phosphodiesterase type 5

phot

photism

photochemical

photochromatic interval

photographic memory

*****ebook converter DEMO Watermarks*****

photoma

photometer

photon

photopic

photopic luminosity curve

photopigment

photoreceptor

photosensitive epilepsy

phototherapy

phrase marker

phrase-structure grammar

phrase-structure rule

phrenology

phylogeny

phylum

physical anthropology

physiognomy

physiological arousal

physiological nystagmus

physiological psychology

*****ebook converter DEMO Watermarks*****

physiological time

physiological zero

physiology

physostigmine

Piagetian

Piaget kidnapping memory

pia mater

piano theory

pibloktoq

pica

Pick's disease

Pickwickian syndrome

picrotoxin

pictogram

pictograph

pictorial depth

picture-arrangement test

picture-completion test

picture-frustration test

picture–picture technique

*****ebook converter DEMO Watermarks*****

pidgin

pie chart

pigment

pigment epithelium

piloerection

pilot study

pineal gland

pink lady

pink noise

pinna

Pinna–Brelstaff illusion

Piper's law

piriform cortex

pitch

pitch perception

pituitary gland

pivot grammar

placebo

placebo effect

place of articulation

*****ebook converter DEMO Watermarks*****

place theory

planned behaviour, theory of

planned comparison

plantar response

planum temporale

plaque

plasma

plasmagene

plasma membrane

plasmid

plateau

Plateau spiral

platelets

platoon-volley theory

platykurtic

player

play therapy

pleasantness

pleasure centre

pleasure-ego

*****ebook converter DEMO Watermarks*****

pleasure–pain principle

pleasure principle

pleasure–unpleasure principle

pleiotropic

plethysmograph

plexiform layer

plexus

plosive

pneumoencephalogram

pneumograph

pneumotachograph

PNMT

Poetzl phenomenon

Poggendorff illusion

poikilitic function

poikilothermic

point-light display

point mutation

point of non-discrimination

point of subjective equality

*****ebook converter DEMO Watermarks*****

point source

point subtraction aggression paradigm

Poisson distribution

Polari

political correctness

Pollyanna effect

polyandry

polydipsia

polyethism

polygamy

polygenic inheritance

polygraph

polygyny

polymerase chain reaction

polymorphic gene

polymorphism

polymorphous perversity

polyonymy

polypeptide

polyphagia

*****ebook converter DEMO Watermarks*****

polysemy

polysomnography

polysubstance dependence

polysynaptic reflex

POMC

pons

PONS

pontogeniculo-occipital

Ponzo illusion

pooled variance estimate

poppers

pop-type

population

population genetics

population stereotype

pornographomania

pornolagnia

porphyria

Porter's law

Porteus Maze Test

*****ebook converter DEMO Watermarks*****

portfolio theory

portmanteau word

portrait illusion

position constancy

position preference

positive afterimage

positive feedback

positive induction

positive Oedipus complex

positive psychology

positive reference group

positive symptoms

positive theory

positive transfer

positive transference

positivism

positivity bias

positron emission tomography

possession trance

possible world

*****ebook converter DEMO Watermarks*****

post-alveolar
postcategorical acoustic store
postcentral gyrus
postconcussional disorder
postconventional morality
postencephalitic syndrome
posterior
posterior cerebral commissure
posterior funiculus
posterior horn
posterior pituitary
posterior probability
post-Freudian
postganglionic
posthallucinogen perception disorder
post hoc test
posthypnotic amnesia
postnatal blues
postnatal depression
post-operative cognitive dysfunction

postpartum blues

postpartum depression

postpartum psychosis

postrolandic gyrus

post-rotational nystagmus

postsynaptic

postsynaptic potential

postsynaptic receptor

post-traumatic growth

post-traumatic stress disorder

postulate

postural aftereffect

postural tremor

posturography

post-viral fatigue syndrome

pot

potassium

potlatch

Pötzl phenomenon

poverty of content

*****ebook converter DEMO Watermarks*****

poverty of speech

power law

power, statistical

power test

POX triad

practice curve

Prader–Willi syndrome

pragmatic love

pragmatics

Prägnanz

prandial drinking

pre-attentive processing

precategorical acoustic store

precedence effect

precentral gyrus

precision law

precocial

precognition

preconcept

preconscious

*****ebook converter DEMO Watermarks*****

preconscious processing

preconventional morality

precursor

predator

predicate calculus

predicate thinking

predicative

prediction paradox

predictive validity

predictor variable

prednisolone

prednisone

preference-feedback hypothesis

preference reversal

preformationism

pre-fortis clipping

prefrontal cortex

prefrontal leucotomy

prefrontal lobotomy

preganglionic

pregenital

pregnance

pregnancy blockage

prehensile

prejudice

Preludin

premature (early) ejaculation

premenstrual dysphoric disorder

premenstrual syndrome

premise

premonition

premotor cortex

pre-occipital notch

pre-Oedipal

pre-operational stage

preoptic nucleus

presbyacosis

presbyopia

prescriptive theory

presenile dementia

Present State Examination

press

press-need

pressured speech

pressure receptor

pressure-sensitive spot

prestige suggestion

prestriate cortex

presynaptic

presynaptic facilitation

presynaptic inhibition

pretectal pathway

prevalence

prey

priapism

primacy effect

primacy, law of

primacy, oral

primal anxiety

primal fantasy

primal father

primal horde

primal repression

primal scene

primal sketch

primal therapy

primary abilities

primary anxiety

primary auditory cortex

primary colour

primary drive

primary emotions

primary gain

primary hypersomnia

primary identification

primary immune response

primary impotence

primary integration

primary memory

primary mental abilities

primary motor cortex

primary narcissism

primary object

primary odour

primary prevention

primary process

primary projection area

primary quality

primary repression

primary sexual characteristic

primary sleep disorders

primary somatosensory cortex

primary taste

primary visual cortex

primary zone

primate

prime

priming

primordial image

principal colour

*****ebook converter DEMO Watermarks*****

principal-components analysis

principal sulcus

principle of constancy

principle of equipotentiality

principle of least effort

principle of mass action

principle of psychological determinism

principle of reinstatement of stimulating conditions

principle of restricted choice

principle of the excluded middle

prion

prion disease

prion protein

prior entry law

prior probability

prism

prism adaptation

Prisoner's Dilemma game

prison psychosis

proactive interference

*****ebook converter DEMO Watermarks*****

pro-ana

probabilistic functionalism

probability

probability distribution

probability learning

probability matching

probability sample

probable error

proband

probe

problem solving

problem-solving cycle

problem-solving stages

problem space

procedural knowledge

procedural memory

proceptive behaviour

process

processing speed

process, primary

*****ebook converter DEMO Watermarks*****

process, secondary

proclitic

procyclidine

prodrome

production method

production rule

production system

productive orientation

product–moment correlation coefficient

profile

profile of non-verbal sensitivity

profiling

profound mental retardation

progeria

progesterone

prognosis

prognostic test

programmed strategy

progression index

Progressive Matrices test

*****ebook converter DEMO Watermarks*****

progressive relaxation

progressive supranuclear palsy

projection

projection area

projective identification

projective test

prokaryote

prokaryotic cell

prolactin

proliferative phase

Prolixin

prolonged duress stress disorder

pro-mia

promnesia

prompt

pronation

proof-reader's illusion

pro-opiomelanocortin

propanediol

prophase

*****ebook converter DEMO Watermarks*****

proposition

propositional calculus

propositional representation

propositus

propoxyphene

propranolol

proprioception

proprioceptor

propylthiouracil

prosencephalon

prosimian

prosocial behaviour

prosody

prosopagnosia

prospective study

prospect theory

prostaglandin

prostitute pupil

protanomaly

protanopia

*****ebook converter DEMO Watermarks*****

protein

protein binding

protein kinase C

protensity

proteome

protest, masculine

prothetic stimulus dimension

protocol analysis

Proto-Indo-European

protoplasm

prototype

prototype matching

prototype theory

proverbs test

Provigil

provisional tic disorder

proxemics

proximal

proximal stimulus

proximity grouping law

*****ebook converter DEMO Watermarks*****

proximodistal

proximoreceptor

Prozac

PrP

pruning

Psammetichus experiment

pseudaesthesia

pseudoangina

pseudoanorexia

pseudoataxia

pseudo-attack

pseudobulbar palsy

pseudocoma

pseudocyesis

pseudodementia

pseudodepression

pseudohallucination

pseudohermaphrodite

pseudoinomnia

pseudo-isochromatic

*****ebook converter DEMO Watermarks*****

pseudolalia

pseudolinguistic

pseudologia fantastica

pseudology

pseudomemory

pseudomnesia

pseudomorpheme

pseudomutuality

pseudophone

pseudopregnancy

pseudoscope

pseudoseizure

psi

psilocybin

psi-missing

psittacism

P600

psychasthenia scale

psyche

psychedelic

*****ebook converter DEMO Watermarks*****

psychiatry

psychic

psychical apparatus

psychical conflict

psychical determinism

psychical reality

psychical research

psychic apparatus

psychic conflict

psychic determinism

psychic reality

psychoacoustics

psychoactive

psychoanaleptic

psychoanalysis

psychoanalyst

psychoanalytic construction

psychoanalytic psychotherapy

psychobabble

psychobiology

*****ebook converter DEMO Watermarks*****

psychocardiology

psychodermatology

psychodrama

psychodynamic

psychodysleptic

psychoendocrinology

psychoenergizer

psychogalvanic response

psychogenesis

psychogenic amnesia

psychogenic attack

psychogeriatrics

psychoid

psychoimmunology

psychokinesis

psycholinguistics

psychological autopsy

psychological decision theory

psychological differentiation

psychological essentialism

*****ebook converter DEMO Watermarks*****

psychological primary

psychological refractory period

psychologism

psychology

psycholytic

psychometric function

psychometrics

psychomotor

psychomotor agitation

psychomotor depressant

psychomotor epilepsy

psychomotor retardation

psychomotor seizure

psychomotor stimulant

psychoneuroimmunology

psychoneurosis

psychopathic deviate scale

psychopathic personality

psychopathology

psychopathy

*****ebook converter DEMO Watermarks*****

Psychopathy Checklist–Revised

psychopharmacology

psychophysical function

psychophysical parallelism

psychophysical scale

psychophysics

psychophysiology

psychoplegic

psychopomp

psychopraxia

psychoprophylaxis

psychose passionelle

psychosexual development

psychosexual dysfunctions

psychosexual stage

psychosis

psychosocial moratorium

psychosocial stressor

psychosomatic

psychosomatic disorder

*****ebook converter DEMO Watermarks*****

psychosomatic medicine

psychostimulant

psychosurgery

psychotherapy

psychotic

psychotic depression

psychotic disorder

psychotic disorder due to another medical condition

psychoticism

psychotogen

psychotomimetic

psychotropic

PTC

P300

ptosis

P200

puberty

public goods dilemma

puer aeternus

puerperal psychosis

*****ebook converter DEMO Watermarks*****

Pulfrich effect

pulvinar

pumphead

punch-drunk

punctuated equilibrium

punctuationist

punishment

pupil

pupillary light reflex

pure erotomania

pure hue

pure light

pure phi

pure tone

purine

Purkinje cell

Purkinje figure

Purkinje image

Purkinje–Sanson image

Purkinje shift

*****ebook converter DEMO Watermarks*****

purple hearts

pursuit movement

pursuit rotor

push-down stack

pusher

putamen

putrid odour

p value

Pygmalion effect

Pygmalionism

pyknic body type

pyramidal cell

pyramidal decussation

pyramidal tract

pyramid of numbers

pyridoxine

pyriform cortex

pyrimidine

pyromania

qi-gong psychotic reaction

*****ebook converter DEMO Watermarks*****

Q-methodology

Q-sort

Quaalude

quadrantic hemianopsia

quadratic model

quadriceps reflex

quadriplegia

qualia

qualitative inheritance

qualitative research

quantifier

quantitative inheritance

quantized image

quartile

quasi-experiment

queen bee syndrome

Querulantenwahn

questionnaire

quiet-biting attack

quiet sleep

*****ebook converter DEMO Watermarks*****

quinalbarbitone

quinine

quinone

quota of affect

quota sample

rabbit syndrome

race

racialism

racial memory

racism

radical

radical constructivism

radioisotope scan

railway illusion

ramp movement

random digit dialling

random-dot kinematogram

random-dot stereogram

random drift

randomization

*****ebook converter DEMO Watermarks*****

randomization test

randomized blocks design

randomized controlled trial

randomized double-blind experiment

randomized response

random lottery incentive system

random sample

range

range of accommodation

rank

rank correlation

Rankian

Ranschburg inhibition

Ranvier's node

raphe nuclei

rapid eye movement

rapid eye movement sleep behaviour disorder

rapidly adapting

rapport

Rasch scale

*****ebook converter DEMO Watermarks*****

rate-dependency effect

rating scale

ratio IQ

ratimorphic

rational

rational choice theory

rational emotive behaviour therapy

rational emotive therapy

rationalism

rationality, bounded

rationalization

rational type

ratio scale

Rat Man

rausch

Rauwolfia

raven paradox

Raven's Progressive Matrices

raw primal sketch

raw score

*****ebook converter DEMO Watermarks*****

Rayleigh equation

reactance

reaction formation

reaction latency

reaction threshold

reaction time

reactive attachment disorder

reactive depression

reactive synaptogenesis

reactivity

readability formulas

readiness potential

reading by sound

reading disorder

reading ease score

reading span

reafference

realistic anxiety

realistic group conflict theory

reality-ego

*****ebook converter DEMO Watermarks*****

reality monitoring

reality principle

reality, psychical

reality testing

reason

reasoned action, theory of

reasoning

rebirthing

rebound effect

rebound REM

rebus

recall

recapitulationism

Received Pronunciation

receiver operating characteristic

recency effect

recency law

receptive aphasia

receptive field

receptive orientation

*****ebook converter DEMO Watermarks*****

receptor
receptor blocker
receptor potential
receptor site
recessive gene
reciprocal altruism
reciprocal inhibition
recoding test
recognition
recognition heuristic
recombinant DNA
recombination
reconstructive memory
recovered memory
recruitment
rectus muscle
red blood cell
red devils
red-green cell
red-green colour-blindness

redintegration

red nucleus

Red Queen hypothesis

reduced reaction time

reductional division

reductionism

reduction screen

reductive interpretation

reduplicative paramnesia

reefer

re-evaluation counselling

reference, delusion (ideas) of

reference group

referred pain

reflectance

reflected appraisal

reflecting back

reflection–impulsivity

reflex

reflex arc

reflexology

refraction

refractive index

refractory period

regeneration

regenerative sprouting

regional cerebral blood flow

register

regression

regression analysis

regression fallacy

regression in the service of the ego

regression towards the mean

regulator

regulator gene

rehabilitation

rehearsal buffer

rehearse

Reichian therapy

reify

*****ebook converter DEMO Watermarks*****

reinforcement

reinforcement schedule

reinforcing selection

Reissner's membrane

Reiz

Reiz limen

rejection-then-retreat technique

related scores t test

relationship, coefficient of

relative deprivation

relative error

relative pitch

relative refractory period

relative size

relaxation technique

relaxation therapy

relaxin

relay cell

releaser

releasing hormone

reliability

reliability coefficient

REM atonia

REM behaviour disorder

remember

reminiscence

remote viewing

REM rebound

REM sleep

renifleur

renin

Renshaw cell

reparation

repeated-measures analysis of variance

repeated reproduction

Repertory Grid Test

repetition compulsion

repetition effect

repetitive DNA

replication

representability

representation

representational momentum

representativeness heuristic

repressed gene

repression

repression–sensitization scale

repressor gene

reproducibility

reproduction method

reproductive interference

reproductive memory

Rep test

resampling statistics

research hypothesis

reserpine

residual

residual schizophrenia

resinous odour

resistance

resistance stage

resolution phase

resonance theory

resource dilemma

resource-holding potential

respiration

respondent conditioning

response

response amplitude

response bias

response category

response competition

response latency

response set

response style

rest–activity cycle

resting potential

resting tremor

restless legs syndrome

Restorff effect

Restoril

restricted affect

restricted choice principle

restricted code

restriction analysis

restriction enzyme

restriction mapping

retardation, mental

retardation, psychomotor

retarded depression

rete mirabile

retention hysteria

reticular activating system

reticular formation

reticular nucleus

reticular nucleus of the thalamus

retina

retinal

retinal cone

retinal disparity

*****ebook converter DEMO Watermarks*****

retinal expansion
retinal ganglion cell
retinal image
retinal painting
retinal rivalry
retinene
retinex theory
retinitis pigmentosa
retinol
retinotopic map
retrieval
retrieval-based learning
retrieval-induced forgetting
retroactive association
retroactive facilitation
retroactive inhibition
retroactive interference
retroflex
retrograde amnesia
retrograde transport

retrospective falsification

retrospective study

retrovirus

Rett's disorder

return of the repressed

reuptake

revealed preference

reverberating circuit

reversal

reversal error

reversal into the opposite

reversal learning

reverse anorexia nervosa

reverse tolerance

reverse transcriptase

reversible figure

reversible goblet

reversible perspective

reversion

rewrite rule

*****ebook converter DEMO Watermarks*****

rhathymia

rhetoric

rhetorical question

rheumatic chorea

rhinencephalon

rhinotillexomania

rhodopsin

rhombencephalon

rho, Spearman's

rhotic

rhyming method

rhyming slang

rhythm

riboflavin

ribonucleic acid

ribose

ribosome

Ribot's law

Ricco's law

Ringelmann effect

*****ebook converter DEMO Watermarks*****

risk

risk aversion

risk seeking

risky shift

risperidone

risus sardonicus

Ritalin

ritualized fighting

r–K continuum

R-methodology

RNA

RNA polymerase

RNA transcriptase

road rage

Robbers Cave experiment

rocks

rod

rod-and-frame test

rod pigment

Rogerian

*****ebook converter DEMO Watermarks*****

Rohypnol

roid rage

rok-joo

Rolandic fissure

Role Construct Repertory Test

rolfing

romantic love

romantic love scale

Romberg's sign

roofies

rooting reflex

root language

rootwork

Rorschach test

Rosencrantz and Guildenstern effect

Rosenthal effect

Rosenzweig Picture-Frustration Study

Ross–Jones test

rostral

rostrum

*****ebook converter DEMO Watermarks*****

rotating circles illusion

rotating head illusion

rotation

rotation, mental

rote learning

rote memory

Rotter Incomplete Sentences Blank

rough endoplasmic reticulum

round dance

round window

r-selection

R squared

rubber hand phenomenon

Rubin's figure

rubrospinal tract

Ruffini corpuscle

rule of abstinence

rumination disorder

rumour

rumour intensity formula

*****ebook converter DEMO Watermarks*****

Rumpelstiltskin phenomenon

run

runs test

Russell's paradox

saccade

saccadic suppression

saccule

sad horse disease

sadism

sadistic–anal stage

sadistic–oral phase

sadomasochism

sagittal plane

sagittal section

sagittal suture

Saint John's wort

Saint Vitus' dance

saka

salience

salivary gland

*****ebook converter DEMO Watermarks*****

saltation

salty

sample

sample size fallacy

sampling frame

Sander parallelogram

sangue dormido

Sanson image

sapid

Sapir–Whorf hypothesis

sapphism

sarcomere

sarin

Saroten

SAS

satellite cell

satiety centre

satisficing

saturation

satyriasis

*****ebook converter DEMO Watermarks*****

savant

savings, method of

saxitoxin

Sayre's law

scala

scala media

scala tympani

scala vestibuli

scale

scalogram analysis

SCAN

scanning speech

scatter

scatterplot

schedule of reinforcement

Scheffé test

schema

scheme

schizoaffective disorder

schizoid personality

*****ebook converter DEMO Watermarks*****

schizoid personality disorder

schizophrenia

schizophrenia scale

schizophrenia spectrum and other psychotic disorders

schizophreniform disorder

schizophrenogenic

schizotypal (personality) disorder

schizotypy

Scholastic Aptitude Test

Scholastic Assessment Test

school psychology

Schreber case

Schröder staircase

schwa

Schwann cell

scientific method

scientific revolution

sclera

sclerosis

scopolamine

*****ebook converter DEMO Watermarks*****

scopophilia

scoring formula

scotoma

scotopic

scotopic luminosity curve

scream therapy

screening test

screen memory

script

Scripture's blocks

SDAT

Seashore Measures of Musical Talent

seasonal affective disorder

secobarbital

Seconal

secondary advantage

secondary colour

secondary drive

secondary elaboration

secondary gain

*****ebook converter DEMO Watermarks*****

secondary identification

secondary immune response

secondary impotence

secondary memory

secondary narcissism

secondary prevention

secondary process

secondary projection area

secondary quality

secondary reinforcement

secondary repression

secondary revision

secondary sexual characteristic

secondary somatosensory area

second censorship

second messenger

second-order approximation to language

secretory phase

sedative

sedative–hypnotic

sedative-, hypnotic-, or anxiolytic-related disorders

seduction theory

segregation of alleles

seizure

selection

selection pressure

selection test

selective advantage

selective attention

selective breeding

selective exposure

selective mutism

selective serotonin reuptake inhibitor

self

self-actualization

self-analysis

self-confidence

self-defeating personality disorder

self-defeating prophecy

self-determination theory

*****ebook converter DEMO Watermarks*****

Self-Directed Search test

self-efficacy

self-esteem

self-estrangement

self-evaluation

self-fulfilling prophecy

self-handicapping

self-hypnosis

self-image

selfish

selfish gene

self-monitoring

Self-Monitoring Scale

self-object

self-perception theory

self-presentation

self-preservation instinct

self-psychology

self-report

self-schema

self-selected sample

self-serving bias

sella turcica

semantic

semantic coding

semantic component

semantic confusion

semantic differential

semantic encoding

semantic feature

semantic-feature hypothesis

semantic generalization

semantic memory

semantic priming

semantics

semantic satiation

semicircular canal

semi-interquartile range

semiology

semiorder

*****ebook converter DEMO Watermarks*****

semiotics

semipermeable membrane

semitone

semitone paradox

semivowel

senescence

senile dementia

senile plaque

sensate focus

sensation

sensation level

sensation seeking

sensation type

sense

sense data

sense modality

sense organ

sense ratio method

sensibilia

sensing type

*****ebook converter DEMO Watermarks*****

sensitivity training group

sensitization

sensitization–repression scale

sensorimotor

sensorimotor cortex

sensorimotor rhythm

sensorimotor stage

sensorineural deafness

sensorium

sensory

sensory acuity

sensory adaptation

sensory aphasia

sensory apraxia

sensory ataxia

sensory conflict theory

sensory cortex

sensory decision theory

sensory deprivation

sensory homunculus

*****ebook converter DEMO Watermarks*****

sensory information store

sensory memory

sensory modality

sensory-motor

sensory neglect

sensory nerve

sensory neuron

sensory preconditioning

sensory projection area

sensory receptor

sensory register

sensory relay nucleus

sensory saltation

sensory store

sensory summation

sensory suppression

sensory transduction

sentence completion test

sentence functor

sentient

*****ebook converter DEMO Watermarks*****

separable attribute

separable stimulus dimension

separate variance estimates

separation anxiety

separation anxiety disorder

septal

septal rage

septum pellucidum

sequence completion

serial anticipation method

serial learning

serial position effect

serial processing

serial recall

serial reproduction

series completion

Serlect

Seropram

serotonergic

serotonin

Seroxat

sertindole

sertraline

set

set point

set theory

severe mental retardation

severe myoclonic epilepsy of infancy

sex

sex cell

sex chromosome

sex difference

sex hormone

sex-influenced trait

sexism

sex-limited trait

sex-linked

sex pheromone

sexsomnia

sex therapy

*****ebook converter DEMO Watermarks*****

sexual abuse
sexual anomaly
sexual arousal disorder
sexual aversion disorder
sexual desire disorder
sexual deviation
sexual dimorphism
sexual disorder
sexual dysfunctions
sexual harassment
sexual instinct
sexual involution
sexual latency
sexual masochism
sexual masochism disorder
sexual orientation
sexual pain disorder
sexual perversion
sexual preference
sexual preference disorder

sexual reproduction

sexual response cycle

sexual sadism

sexual sadism disorder

sexual selection

sexual therapy

sfumato

shading

shadow

shadowing

shaking palsy

shallow living

sham rage

shape constancy

shape–slant invariance

shaping

shared psychotic disorder

sharpening

Sheldon's constitutional psychology

shell shock

shenjing shuairuo

shen-k'uei

shifted checkerboard figure

shin-byung

shinkei-shitsu

shock

shock therapy

shoe anaesthesia

shook yong

shorthand

short-sightedness

short-term memory

short-term store

SHRDLU

shrink

sibling

sibling rivalry

sibling rivalry disorder

side-effect

Sidman avoidance conditioning

*****ebook converter DEMO Watermarks*****

sight method

sight vocabulary

sigma score

sigmatism

sign

signal

signal anxiety

signal detection theory

signal-to-noise ratio

significance

significance test

significant other

sign language

sign stimulus

sign test

sildenafil citrate

silent mutation

silent receptors

silhouette illusion

silok

similarities test

similarity-attraction hypothesis

similarity grouping law

similarity law

similarity paradox

simile

Simon effect

simple cell

simple deteriorative disorder

simple line graph

simple phobia

simple random sample

simple reaction time

simple receptive field

simple reinforcement schedule

simple schizophrenia

simple structure

simple tone

simplicity principle

Simpson's paradox

*****ebook converter DEMO Watermarks*****

simulation heuristic

simultanagnosia

simultaneous contrast

simultaneous masking

simultaneous matching to sample

single-blind study

single-case design

single-frame task

single-linkage clustering

single photon emission computed tomography

single stimuli method

single-synapse reflex

sinusoidal

sinusoidal grating

sitology

situationist critique

six degrees of separation

6-hydroxydopamine

16PF

size constancy

*****ebook converter DEMO Watermarks*****

size–distance invariance

size–weight illusion

skag

Skaggs–Robinson paradox

skeletal muscle

sketchpad, visuospatial

skewness

skill

skin

skin conductance response

Skinner box

Skinner crib

Skinnerian conditioning

skin-picking disorder

skin-pop

skin sense

skin shrink

skunk

slang

sleep

*****ebook converter DEMO Watermarks*****

sleep apnoea
sleep disorders
sleeper effect
sleeping beauty syndrome
sleep-onset insomnia
sleep paralysis
sleep-related hypoventilation
sleep spindle
sleep terrors
sleep–wake cycle
sleep–wake disorders
sleep–wake schedule disorders
sleepwalking
sleepy sickness
slimmers’ disease
slip of action
slip of memory
slip of the pen
slip of the tongue
slowly adapting

slow oxidative fibre

slow-twitch fibre

slow-wave sleep

smack

small calorie

small intestine

small-sample fallacy

small world phenomenon

smart drug

smell

smell prism

smell square

smile

smooth endoplasmic reticulum

smooth eye movement

smooth following movement

smooth movement

smooth muscle

Snellen fraction

snow

*****ebook converter DEMO Watermarks*****

snowball sample

snurp

sociabilizer

social age

social anthropology

social anxiety disorder

social categorization

social class

social cognition

social cognitive neuroscience

social cognitive theory

social comparison

social compliance

social constructionist psychology

social constructivism

social contagion

social desirability response set

social dilemma

social distance scale

social exchange theory

*****ebook converter DEMO Watermarks*****

social facilitation
social identity theory
social impact
social influence
social insect
social intelligence
social introversion scale
socialization
socialize
social learning
social learning theory
social loafing
social neuroscience
social perception
social phobia
social (pragmatic) communication disorder
social psychology
social psychophysiology
social quotient
social skill

social skills training

sociobiology

sociodrama

socio-economic class

sociogram

sociolinguistics

sociology

sociology of knowledge

sociometry

sociopathy

sociosexuality

sodium

sodium channel

sodium current

sodium glutamate

sodium inactivation

Sodium Pentothal

sodium–potassium pump

sodium pump

soft drug

*****ebook converter DEMO Watermarks*****

softening of the brain

soft sign

solar retinopathy

solecism

soluble RNA

solvent

solvent abuse

soma

somaesthesia

somaesthetic association area

somaesthetic cortex

somatic

somatic cell

somatic compliance

somatic delusion

somatic delusional disorder

somatic hallucination

somatic marker hypothesis

somatic nervous system

somatic receptor

*****ebook converter DEMO Watermarks*****

somatic sensory cortex

somatic symptom disorder

somatization disorder

somatoform disorders

somatosensory association area

somatosensory cortex

somatosensory homunculus

somatostatin

somatotrophin

somatotrophin-releasing hormone

somatotrophin release inhibiting factor

somatotype

Somers' D

somesthesia

somesthetic

somnambulism

sonar

sone

sonic shadow

sorites

*****ebook converter DEMO Watermarks*****

sorites paradox

Sotos syndrome

soul talk

sound localization

sound pressure level

sound shadow

sound spectrogram

sound spectrograph

sound spectrum

sour

source amnesia

source memory

source of instinct

space–time illusion

Spanish fly

span of apprehension

spasm

spasmodic torticollis

spasmophemia

spastic

*****ebook converter DEMO Watermarks*****

spastic paralysis

spastic speech

spatial ability

spatial frequency

spatial neglect

spatial summation

speaking in tongues

Spearman rank correlation coefficient

Spearman's rho

Special K

speciation

species

speciesism

species-specific

specific anosmia

specific developmental disorder

specific developmental disorder of language

specific developmental dyslexia

specific disorder of arithmetic skills

specific hunger

*****ebook converter DEMO Watermarks*****

specific language disability

specific learning disability

specific learning disorder

specific nerve energies

specific phobia

specific spelling disorder

spectral colour

spectrogram

spectrum

SPECT scan

speech act

speech apraxia

speech sound disorder

speech spectrogram

speech stretcher

speech synthesizer

speed

speed-accuracy trade-off

speedball

speed test

*****ebook converter DEMO Watermarks*****

spell

spelling disorder

spelling dyslexia

spermatozoon

SPET scan

spherical aberration

sphincter pupillae

spicy odour

spinal accessory nerve

spinal canal

spinal cord

spinal nerve

spinal reflex

spinal root

spindle

spindle cell

spinning dancer illusion

spinocerebellar tract

spinocerebellum

spinoreticulothalamic system

*****ebook converter DEMO Watermarks*****

spinothalamic tract

spiny I

spiral aftereffect

spiral ganglion cell

spiral test

spiroperidol

spite

splenum

splicing, gene

spliff

split brain

split-brain preparation

split-half reliability

split personality

split-plot design

split-span

splitting of the ego

splitting of the object

spontaneous remission

sports psychology

*****ebook converter DEMO Watermarks*****

spouse abuse

spreading activation

spreading depression

SPSS

squeeze technique

SQUID

squiggle game

squint

stability

stabilized retinal image

stabilizing selection

stage fright

stage, libidinal

stages of problem solving

staircase illusion

staircase method

stalking

stammering

standard deviation

standard error

*****ebook converter DEMO Watermarks*****

standardize

standardized regression coefficient

standardized test

standard score

standard stimulus

Stanford–Binet intelligence scale

Stanford marshmallow test

Stanford prison experiment

stanine score

stanozolol

stapedius

stapes

star illusion

start codon

startle reflex

state anxiety

state-dependent memory

State-Trait Anxiety Inventory

static assessment environment

static labyrinth

*****ebook converter DEMO Watermarks*****

static sense

statistic

Statistical Analysis System

statistical inference

Statistical Package for the Social Sciences

statistical power

statistical prediction

Statistical Product and Service Solutions

statistical significance

statistical test

statistics

statocyst

statolith

status epilepticus

status quo bias

stealing, pathological

Steele–Richardson–Olszewski syndrome

steepest descent

Stelazine

stellate cell

*****ebook converter DEMO Watermarks*****

stem-and-leaf display

stem cell

stem completion task

Stendhal syndrome

Stenger test

stenography

Stenotype

sten score

Stent–Singer rule

stereoacuity

stereoblindness

stereochemical theory

stereocilium

stereognosis

stereogram

stereopsis

stereoscope

stereoscopic acuity

stereoscopic illusion

stereoscopic vision

*****ebook converter DEMO Watermarks*****

stereotactic

stereotactic instruments

stereotype

stereotyped movements

stereotype threat

stereotypic movement disorder

Sternberg task

steroid

steroid hormone

steroid receptor

steroid-regulated gene

sterol

Stevens's law

stigma

stigmatize

stilboestrol

Stiles–Crawford effect

Stilling test

stimulant drug

stimulant-related disorders

stimulus

stimulus generalization

stimulus intensity dynamism

stimulus onset asynchrony

stimulus set

stirrup

St John's wort

stochastic

Stockholm syndrome

stocking anaesthesia

stomach

stoned

stooge

stop codon

stopped image

storage

storge

storgic love

STP

St Petersburg paradox

*****ebook converter DEMO Watermarks*****

strabismus

stranger anxiety

strategic dominance

strategic game

strategic priming

strategy

stratified random sample

Strattera

Stratton experiment

stream of consciousness

street drug

street name

streptosymbolia

stress

stress interview

stressor

stretch receptor

stretch reflex

striate cortex

striated muscle

*****ebook converter DEMO Watermarks*****

striatum

strictly competitive game

string length

string variable

striped muscle

stroboscope

stroboscopic movement

stroke

strong AI

Strong–Campbell Interest Inventory

Strong Interest Inventory

Strong Vocational Interest Blank

Stroop effect

structural equation

structural equation modelling

structural gene

structuralism

structure from motion

structure-of-intellect model

strychnine

*****ebook converter DEMO Watermarks*****

Student–Newman–Keuls procedure

Student's t test

Study of Values

stupor

stuttering

stylometrics

stylostistics

stylostixis

subarachnoid

subarachnoid haemorrhage

subception

subcoerulear nucleus

subconscious

subcortical

subdural

subdural haematoma

subfornical organ

subiculum

subitize

subjective colour

*****ebook converter DEMO Watermarks*****

subjective contour
subjective equality
subjective expected utility
subjective expected utility theory
subjective probability
subjective utility
subjective well-being
subject (research or experimental)
subjunctive conditional
sublimation
subliminal
subliminal perception
sublingual gland
submaxillary gland
submissive behaviour
Suboxone
subspecies
substance abuse
substance dependence
substance-induced disorders

substance-induced persisting amnesic disorder
substance intoxication
substance intoxication delirium
substance/medication-induced disorder
substance/medication-induced psychotic disorder
substance P
substance-related and addictive disorders
substance use disorders
substance withdrawal
substance withdrawal delirium
substantia alba
substantia gelatinosa
substantia grisea
substantia nigra
substantive
substantive universals
substitute formation
substitution
substitution test
subthalamic fasciculus

subthalamic nucleus

subthreshold

subtraction method

subtractive colour mixture

subtractive primary

Subutex

subvocal rehearsal loop

successive contrast

successive reproduction

success neurosis

sudorific

suffix effect

suggestibility

suicide

sukra prameha

suk yeong

sulcus

sulcus principalis

sum

summated ratings

*****ebook converter DEMO Watermarks*****

summation tone

sum of squares

sunk cost fallacy

superaesthesia

superdominance

superego

superego lacuna

supergene

superior

superior colliculus

superiority complex

superior longitudinal fasciculus

superior oblique muscle

superior olivary nucleus

superior rectus

superior temporal gyrus

superior temporal sulcus

supernormal stimulus

supertaster

supertentorial

supervised analysis

supination

supplementary motor area

supplementary sensory area

suppression

suppression amblyopia

suprachiasmatic nucleus

supraliminal

supranuclear palsy

supraoptic nucleus

sure-thing principle

surface colour

surface dyslexia

surface structure

surgency

surprise examination paradox

survey research

survival of the fittest

survivor guilt

survivor syndrome

*****ebook converter DEMO Watermarks*****

sustained responder

susto

sweat gland

sweet

SWOT analysis

Sydenham's chorea

syllogism

Sylvian aqueduct

Sylvian fissure

symbiosis

symbol-digit test

symbolic interactionism

symbolic racism

symbolic representation

symbolization

symbol-substitution test

Symmetrel

symmetry law

sympathetic apraxia

sympathetic ganglionic chain

*****ebook converter DEMO Watermarks*****

sympathetic nervous system

sympathetic pregnancy

sympathetic trunk

sympathin

sympatholytic

sympathomimetic

symptom

symptom formation

synaesthesia

synapse

synaptic bouton

synaptic cleft

synaptic potential

synaptic receptor

synaptic terminal

synaptic transmission

synaptic vesicle

synchronicity

synchronized sleep

synchronizer

*****ebook converter DEMO Watermarks*****

syncope

syndrome

synecdoche

synergist

synonym

synonym test

syntactic aphasia

syntactic positive shift

syntactics

syntax

synthetic language

synthetic statement

SYSTAT

systematic desensitization

systematic review

systematized delusion

System for Statistics

System 1 thinking

systems analysis

systems theory

*****ebook converter DEMO Watermarks*****

syzygy

Szondi test

tabes dorsalis

tabletop illusion

tabula rasa

tachistoscope

tachycardia

tachygraphy

tachylalia

tachyphasia

tachyphrenia

tachyphylaxis

tact

tactile

tactile acuity

tactile agnosia

tactile aphasia

tactile corpuscle

tactile disc

tactile egocentre

*****ebook converter DEMO Watermarks*****

tactile hallucination

tactile illusion

tactile receptor

tactoagnosia

tactor

tactual

Tadoma method

taijin kyofusho

Talbot–Plateau law

Talbot–Plateau spiral

Talbot’s law

Talwin

tandem gait

tandem reinforcement schedule

tangentiality

tantrum

tanyphonia

tapetum

tarantism

tardive dyskinesia

*****ebook converter DEMO Watermarks*****

target item

task-negative network

task-positive network

taste

taste aversion learning/conditioning

taste blindness

taste bud

taste cell

taster

taste receptor

taster(PCT)

taster(PROP)

taste tetrahedron

TAT

TATA box

tau effect

tau, Kendall's

taxicab problem

taxon

taxonomy

*****ebook converter DEMO Watermarks*****

Taylor aggression paradigm

Taylor Manifest Anxiety Scale

Taylor–Woodhouse illusion

Tay–Sachs disease

T cell

teacher unit

teacup illusion

tear gas

technique, active

technique, defensive

tectal pathway

tectorial membrane

tectum

tegmentum

Tegretol

telaesthesia

telalgia

teledildonics

telegnosis

telegraphic speech

*****ebook converter DEMO Watermarks*****

telekinesis

telencephalon

teleonomy

teleopsia

telepathy

telephone scatologia

telephone theory

telereceptor

telesthesia

teletactor

telomerase

telomere

telophase

temazepam

temperament

temperament theory

temperature receptor

temperature sense

temperature spot

temper tantrum

*****ebook converter DEMO Watermarks*****

template matching

tempo

temporal bone

temporal lobe

temporal lobe epilepsy

temporal lobe seizure

temporal operculum

temporal plane

temporal retina

temporal summation

temporary threshold shift

tendon organ

tendon reflex

tendon sense

tension headache

tensor tympani

ten thousand hour rule

tentorium

teonanactyl

teratogen

*****ebook converter DEMO Watermarks*****

terminal bouton

terminal insomnia

terminal threshold

termination codon

Ternus phenomenon

territoriality

tertiary prevention

tertiary projection area

test age

test anxiety

test battery

test bias

testee

testing effect

testis

test item

Test-Operate-Test-Exit

testosterone

testosterone replacement therapy

test–retest reliability

*****ebook converter DEMO Watermarks*****

test sophistication

test wiseness

tetanus toxin

tetrachromatic theory

tetracyclic antidepressant

tetrahydrocannabinol

tetrahydrogestrinone

tetraplegia

tetrodotoxin

texture gradient

T-group

thalamencephalon

thalamic syndrome

thalamus

thanatomania

thanatophobia

Thanatos

Thatcher illusion

theism

Thematic Apperception Test

*****ebook converter DEMO Watermarks*****

theobromine

theophylline

theoretical research

theory

theory of games

theory of mind

theory of planned behaviour

theory of reasoned action

therapeutic

therapeutic alliance

therapeutic community

therapeutic index

therapeutic ratio

therapist

therapy

thermaesthesia

thermal adaptation

thermalgesia

thermalgia

thermal grill illusion

thermal sense

thermoanaesthesia

thermoanalgesia

thermodynamics

thermoform

thermoreceptor

thermoregulation

theta wave

thiamine

thigmohyperaesthesia

thigmotaxis

thigmotropism

thing-presentation

thinking

thinking type

thinspiration

thiopental

thiopentone

thioridazine

thiothixene

thioxanthene

third ear

third eyelid

third ventricle

thirst

Thorazine

thought broadcasting delusion

thought disorder

thought experiment

thought insertion delusion

thought stopping

Thouless ratio

three-colour theory

3-D model description

360-degree feedback

3-hydroxytyramine

three Ps

three–seven effect

threshold

Thurstone scale

*****ebook converter DEMO Watermarks*****

thwasa

thymine

thymoleptic

thymus

thyroid gland

thyroid-stimulating hormone

thyrotrophin-releasing hormone

thyroxine

tic

tic disorders

tic douloureux

tickle

tilt aftereffect

tilting-room test

timbre

time delay in consciousness

time sampling diary

time-saving bias

time series

time-series analysis

*****ebook converter DEMO Watermarks*****

tinnitus

tip-of-the-tongue phenomenon

Titchener circles

tit for tat strategy

T lymphocyte

T-maze

tobacco-related disorders

tocopherol

Tofranil

token

token distractor

token economy

Tolansky's curvature illusion

tolerance

tolerance of ambiguity

tomoxetine

tonal density

tone

tone deafness

tongue

*****ebook converter DEMO Watermarks*****

tonic–clonic

tonic convulsion

tonoclonic

tonotopic map

tonus

topagnosia

top-down processing

top hat illusion

topographagnosia

topographic map

topography

topological psychology

torticollis

total quality management

TOTE

totem

touch

touch acuity

touch receptor

tough-mindedness

*****ebook converter DEMO Watermarks*****

Tourette's disorder

Tower of Hanoi

toxic

toxic dosage

toxicosis

toxin

trace conditioning

trace, memory

trachea

tragedy of the commons

trainable mentally retarded

training analysis

trait

trait anxiety

trait centrality

trait negativity bias

trait validity

trance

trance disorder, dissociative

trance logic

*****ebook converter DEMO Watermarks*****

tranq

tranquillizer

trans

transactional analysis

transactionalism

transcendental meditation

transcortical aphasia

transcortical magnetic stimulation

transcranial magnetic stimulation

transcriptase

transcription

transducer

transducin

transduction

transductive reasoning

transfer-appropriate processing

transference

transference neurosis

transfer of training

transfer RNA

*****ebook converter DEMO Watermarks*****

transformation

transformational grammar

transgendered

transgenic

transient disparity

transient global amnesia

transient ischaemic attack

transient polymorphism

transient responder

transient tic disorder

transient tritanopia

transitional object

transitive preferences

transliminality

transmission deafness

transmittance

transmitter

transplantation of brain tissue

transposon

transsexual

*****ebook converter DEMO Watermarks*****

transsexualism

transverse plane

transverse section

transvestic disorder

transvestic fetishism

transvestism

tranylcypromine

trapezoidal window

trapezoid body

trauma

trauma- and stressor-related disorders

trauma, birth

traumatic brain injury

traumatic neurosis

traumatic psychosis

traumatic shock

travel agent

travelling salesman problem

travelling wave

treadmill

*****ebook converter DEMO Watermarks*****

treatment condition

tremor

triad, anal

triangular theory

triarchic theory of intelligence

triazolam

tribade

tribar

tricarboxylic acid cycle

triceps reflex

trichotillomania

trichromacy

trichromatic theory

tricyclic antidepressant

trifluoperazine

trigeminal chemoreception

trigeminal lemniscus

trigeminal nerve

trigeminal neuralgia

trigram

*****ebook converter DEMO Watermarks*****

trigraph
trihexyphenidyl
Trilafon
trimmed mean
trip
tripa ida
triphthong
triplegia
triplet code
Triptafen
trisomy
tristimulus values
tritanomaly
tritanopia
tritone
tritone paradox
trochlear nerve
troilism
Troland
trolley problem

trompe l'oeil

trophic hormone

Troxler effect

true self

trust versus mistrust

truth drug

truth functor

truth table

tryptamine

tryptophan

tryptophan hydroxylase

T score

t test

tufted cell

Tukey-HSD test

tumescence

tuning curve

tunnel vision

Turing machine

Turing test

*****ebook converter DEMO Watermarks*****

Turkish saddle

Turner's syndrome

turning the tables illusion

twilight vision

twin study

twisted-cord illusion

two-alternative forced-choice task

2½-D sketch

2-deoxyglucose

2-4-6 problem

two-point threshold

two-sample t test

two-step flow

2-tailed probability

2-tailed test

two-way avoidance conditioning

Tycho's illusion

tympanic membrane

tympanic reflex

Type A

Type B

Type C

Type D

type distractor

type fallacy

Type I error

Type II error

Type III error

type–token ratio

tyramine

tyrosine

tyrosine hydroxylase

ufufunyane

ugly sister effect

Ultimatum game

ultradian rhythm

ultrasound

ultraviolet

Ulysses contract

umami

Umweg problem

Umwelt

unbalanced bilingual

uncertainty

uncertainty principle

uncinate fasciculus

unconditional response

unconditional stimulus

unconditioned reflex

unconditioned response

unconditioned stimulus

unconscious

uncus

undecidable figure

underextension

undifferentiated schizophrenia

undifferentiated somatoform disorder

Undine's curse

undinism

undoing

*****ebook converter DEMO Watermarks*****

unexpected hanging paradox

unfaithful wives problem

unfinished business

unfolding technique

unidimensionality

unilateral limb apraxia

unilateral neglect

uniocular

unipedophilia

unipolar depression

unipolar neuron

unique colour

univariate statistics

universal grammar

universal quantifier

universals, linguistic

universal Turing machine

unobtrusive measure

unrealistic optimism

unweighted pair-group method using arithmetic averages

*****ebook converter DEMO Watermarks*****

up-and-down method

uppers

upper threshold

uptalk

upward feedback

uqamairineq

uracil

Urbach–Wiethe disorder

urban legend

urethral character

urethral erotism

urinary erotism

uroboros

urolagnia

urophilia

utility

utility function

utility theory

utricle

uvula

*****ebook converter DEMO Watermarks*****

uvular

vacuum activity

vagina

vagina dentata

vaginismus

vagus nerve

Vagusstoff

validation

validity

validity coefficient

validity generalization

Valium

value (of a variable)

vanishing point

vapours

variability

variable

variable error

variable-interval schedule

variable-ratio schedule

*****ebook converter DEMO Watermarks*****

variable stimulus

variable-sum game

variance

variate

variety

vascular dementia

vascular neurocognitive disorder

vascular tunic

vasoconstrictor

vasodilator

vasomotor

vasopressin

Vater–Pacini corpuscle

vault

vection

vegetative state

velar

velocity constancy

Venn diagram

ventral

ventral anterior nucleus

ventral lateral nucleus

ventral posterior nucleus

ventral root

ventral tegmental area

ventricle

ventriloquism effect

ventromedial cortex

ventromedial hypothalamic syndrome

ventromedial hypothalamus

ventromedial tract

verbal ability

verbal intelligence

verbal overshadowing

verbal rating scale

verbal transformation effect

vergence

veridical

vermis

vernacular

vernier acuity

Verstehen

vertebrate

vertical décalage

vertical icicle plot

vertical thinking

vertigo

vesicle

vestibular nerve

vestibular nystagmus

vestibular sense

vestibular system

vestibule

vestibulitis

vestibulocerebellum

vestibulocochlear nerve

vestibulo-ocular reflex

Viagra

vibration receptor

vibratory sense

*****ebook converter DEMO Watermarks*****

Vierordt's law

vigilance

vignette

Vigotsky blocks

Vineland Social Maturity Scale

virtual reality

virtual self

virus

viscera

visceral afferent fibres

visceral efferent fibres

visceroreceptor

visible spectrum

vision

visual accommodation

visual acuity

visual adaptation

visual aftereffect

visual angle

visual aphasia

visual area

visual association cortex

visual cliff

visual cortex

visual disparity

visual dominance

visual egocentre

visual evoked potential

visual field

visual fixation

visual hallucination

visual illusion

visual image

visual impairment

visual induction

visualizer

visual masking

Visual–Motor Gestalt Test

visual pigment

visual purple

*****ebook converter DEMO Watermarks*****

visual receptor

visual search

visual suppression

visual system

visual violet

visual word-form dyslexia

visuospatial sketchpad

vitamin

vitamin therapy

vitreous humour

VNTR

vocal cords

vocal folds

vocal fry

vocal register

vocal tic disorder

vocal tract

vocational aptitude test

voice box

voiceprint

*****ebook converter DEMO Watermarks*****

void mode

volaemic thirst

volley theory

voltage-gated ion channel

volume

volume colour

volumetric thirst

voluntary involuntary treatment

voluntary muscle

volunteer (research or experimental)

vomeronasal organ

von Osten's horse

von Restorff effect

voodoo death

voting paradox

vowel

voyeurism

voyeuristic disorder

vulva

VX

Vygotsky blocks

Wada test

waggle dance

Wagner–Meissner corpuscle

wagon wheel illusion

Wald–Wolfowitz runs test

Wallerian degeneration

Ward's method

warm/cold effect

warm spot

warmth contrast

War of the Ghosts

Wason selection task

Wason's 2-4-6 problem

waterfall illusion

water intoxication

water-jar problem

water on the brain

wavelength

W cell

*****ebook converter DEMO Watermarks*****

weak AI

weal response

weapon focus

Weber–Fechner law

Weber fraction

Weber’s law

Wechsler Adult Intelligence Scale

Wechsler Intelligence Scale for Children

Wechsler Preschool and Primary Scale of Intelligence

Wechsler scales

weed

Weigl–Goldstein–Scheerer tests

Weismannism

well-defined problem

Wells effect

well-structured problem

Weltanschauung

wendigo

Wernicke–Korsakoff syndrome

Wernicke’s aphasia

*****ebook converter DEMO Watermarks*****

Wernicke's area

Wernicke's encephalopathy

Wertherism

Werther syndrome

Wheatstone–Panum limiting case

whistled speech

white blood cell

white coat syndrome

white matter

whiteness constancy

white noise

whitigo

Whitten effect

whole object

whole tone

whole-word method

Whorfian hypothesis

wicket rhythm

Widrow–Hoff rule

wife/mother-in-law figure

*****ebook converter DEMO Watermarks*****

Wilcoxon matched-pairs test

Wilcoxon rank-sum test

Wild Boy of Aveyron

wild psychoanalysis

Williams syndrome

will therapy

will to power

windigo

windmill illusion

windpipe

winner's curse

Winnicottian

win–stay, lose–shift strategy

Wisconsin Card Sorting test

Wisconsin General Test Apparatus

wish fulfilment

withdrawal

withdrawal of cathexis

within-subjects design

Witzelsucht

Wolffian duct

Wolf Man

woman, phallic

woolsorter's disease

word-association test

word blindness

word-building test

word completion task

word constancy

word deafness

word-form dyslexia

word-length mnemonic

word-presentation

word salad

word-stem completion task

word superiority effect

working memory

working through

work psychology

W process

*****ebook converter DEMO Watermarks*****

writing disorder

written expression, disorder of

wryneck

wug test

Wundt illusion

Würzburg school

Xanax

xanthine

xanthopsia

X cell

X chromosome

xenoglossia

xenomelia

X-linked

XTC

XXX syndrome

XXY syndrome

XYY syndrome

yaba

yagé

*****ebook converter DEMO Watermarks*****

yang

Yates' correction for continuity

YAVIS

yawn

Y cell

Y chromosome

yellow bile

yellow bullets

yellow-sighted

yellow spot

Yerkes–Dodson law

Yerkish

yin and yang

yips

Y-linked

yohimbine

yoked control

yolk phenomenon

young girl/old woman figure

Young–Helmholtz theory

*****ebook converter DEMO Watermarks*****

YRMODA

Zanforlin illusion

zar

Z-disc

Zeigarnik effect

Zeitgeber

Zener cards

zenith distance

zero-crossing

zero-order approximation to language

zero-sum game

Zipf's laws

Zöllner illusion

Zoloft

zombie

zona fasciculata

zona glomerulosa

zona granulosa

zona incerta

zona reticularis

*****ebook converter DEMO Watermarks*****

zone of proximal development

zonule of Zinn

zoerasty

zoophilia

zoösemiotics

z score

z test

Zwaardemaker olfactometer

Zwaardemaker smell system

zygote

Zyprexa

Contents

Preface

Advisory Editors

Illustration Acknowledgements

General Acknowledgements

Layout of Entries

Greek Alphabet

A Dictionary of Psychology

A B C D E F G H I J K L M N O P Q R S
T U V W X Y Z

Appendix I: Phobias and phobic stimuli

Appendix II: Abbreviations and symbols

Appendix III: Web links

Principal sources

A Dictionary of **Psychology**

FOURTH EDITION

ANDREW M. COLMAN

Andrew M. Colman is Professor of Psychology at the University of Leicester and is a Fellow of the British Psychological Society. He has authored numerous journal articles and several books, including *Facts, Fallacies and Frauds in Psychology* (1987), *What is Psychology?* (3rd edn, 1994), and *Game Theory and its Applications in the Social and Biological Sciences* (2nd edn, 1995). He edited the two-volume *Companion Encyclopedia of Psychology* (1994) and the 12-volume *Longman Essential Psychology* series (1995).



Many entries in this dictionary have recommended web links. A complete list of links for this title can be found at
www.oxfordreference.com/page/psych



Great Clarendon Street, Oxford, OX2 6DP, United Kingdom

Oxford University Press is a department of the University of Oxford. It furthers the University's objective of excellence in research, scholarship, and education by publishing worldwide. Oxford is a registered trade mark of Oxford University Press in the UK and in certain other countries

© Andrew M. Colman 2001, 2002, 2003, 2006, 2009, 2015

The moral rights of the authors have been asserted

First published 2001

First published as an Oxford University Press paperback 2002

Reissued with corrections and new cover 2003

Second edition 2006

Third edition 2009

Fourth edition 2015

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, without the prior permission in writing of Oxford University Press, or as expressly permitted by law, by licence or under terms agreed with the appropriate reprographics rights organization. Enquiries concerning reproduction outside the scope of the above should be sent to the Rights Department, Oxford University Press, at the address above

You must not circulate this work in any other form and you must impose this same condition on any acquirer

Published in the United States of America by Oxford University Press 198 Madison Avenue, New York, NY 10016, United States of America

British Library Cataloguing in Publication

Data Data available

Library of Congress Control Number: 2014947484

ISBN 978-0-19-965768-1

ebook ISBN 978-0-19-174435-8

Links to third party websites are provided by Oxford in good faith and for information only. Oxford disclaims any responsibility for the materials contained in any third party website referenced in this work.

*****ebook converter DEMO Watermarks*****

Preface

The Red Queen shook her head. ‘You may call it “nonsense” if you like,’ she said, ‘but *I’ve* heard nonsense, compared with which that would be as sensible as a dictionary!’

Lewis Carroll: *Through the Looking-Glass*

The aim of this dictionary is to provide sensible and informative definitions of the most important and difficult words that a reader is likely to encounter in books and articles on psychology. Other dictionaries of psychology are available, but they do not generally seek to provide detailed coverage of the more technical terminology of neuroanatomy, neurophysiology, psychopharmacology, and statistics, and most of them make no systematic attempt to cover the specialized vocabulary of psychoanalysis. This dictionary provides systematic coverage of these areas, in addition to the basic terminology of psychology and psychiatry, and the definitions contain more explicit factual information and explanation than is available in other dictionaries.

This fourth edition incorporates a large number of improvements and additions. The publication in 2013 of the American Psychiatric Association’s latest diagnostic and statistical manual DSM-5 necessitated a radical revision of many of the entries relating to mental disorders—every mental disorder specifically named in DSM-5 is included in this edition and clearly identified as a DSM-5 disorder. Many other entries required amendment or updating, for sundry reasons. In this new edition, more than 750 of the entries carried over from the third edition have been revised. To bring the dictionary fully up to date, Oxford University Press have permitted me to add more than 200 completely new entries (**boarding school syndrome**, **eudaimonic well-being**, **hemisity**, **hybrid image**, **Knobe effect**, **leaning tower illusion**, **retrieval-based learning**, **System 1 thinking**, **ten thousand hour rule**,

vocal fry, and many others), over 40 new abbreviations, and 12 new illustrations. Finally, I have revised all three appendices.

The definitions are as simple as possible, but no simpler than that. Many of the concepts of psychology are inherently difficult and, if they are to be treated seriously, they ought not to be oversimplified or trivialized. In recognition of this, the definitions attempt to provide enough information to enable the serious reader to grasp the fundamental meaning and significance of even the more difficult concepts. Thus, for example, the entry under the headword **blood-brain barrier** avoids defining it in the usual, but misleading, way as a membrane and instead provides a detailed description of this remarkable but complex mechanism. In the same vein, the **peg-word mnemonic** is explained in enough detail to enable the reader to use it in practice; the **lateral geniculate nucleus** is not dismissed in a single sentence as a type of nerve cell, as in other dictionaries, but is described more accurately in terms of its structure and functions; and the **visual cortex** is not merely identified with vision and located at the back of the head but is given a full and detailed description. The entries under **information theory**, **prospect theory**, and **signal detection theory** provide enough information for the reader to grasp the fundamental ideas behind the theories and to understand how they actually work, and the same approach is adopted with other difficult terms. The aim is always to respect genuine difficulties and complexities but to provide the clearest possible definitions using the simplest possible language relative to the ideas being discussed.

Two unusual features of this dictionary deserve mention here. First, in many cases important terms and concepts are attributed to their originators or discoverers and, at the request of the publisher, when individuals are mentioned by name, their birth and death dates are usually supplied, although some dates, especially death dates, have been impossible to discover—people sometimes make significant contributions and then fade away into obscurity. Second, the entries are far more extensively cross-referenced than has been customary in earlier dictionaries. For example, the entry under **visual illusion** includes cross-references to every particular visual illusion described (and often illustrated) elsewhere in the dictionary, and the entry under **cranial nerve** is cross-referenced to all twelve of the human cranial nerves, each of which has its own separate entry. The purpose of the cross-references is to enable a reader who has looked up a word to obtain additional information that is either directly or indirectly relevant to it, and in general to encourage

the use of the dictionary as an aid to serious scholarship.

The selection of headwords for this dictionary was not an easy task. I had to discard many words that could have gone in, and hard choices had to be made. Dilemmas were resolved by asking the following two questions: Is the word used in psychological books and articles? Are readers likely to want to look it up? Speaking on BBC radio in September 1999, the England football coach, Kevin Keegan, commented memorably: 'Picking the team isn't difficult; what's difficult is deciding which players to leave out.' I faced the same problem picking headwords for this dictionary; the difficult part was deciding which words to leave out.

The headwords that were finally selected include the core terminology of psychology, together with technical words that originate from other disciplines but are often used by psychologists. Psychology is a uniquely diverse discipline, ranging from biological aspects of behaviour to social psychology, and from basic research to various applied professional fields, such as clinical and counselling psychology, educational and school psychology, industrial/organizational and occupational psychology, and forensic and criminological psychology. Many of the technical terms of psychiatry, psychoanalysis, neuroanatomy, neurophysiology, pharmacology, computing, optometry, ethology, genetics, statistics, philosophy, linguistics, sociology, and anthropology have migrated into psychology and become partly naturalized there, and the most important ones are included in this dictionary.

Mental disorders are covered systematically and comprehensively, and definitions in this area are based on the widely accepted criteria of the American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders* (DSM-5) and the World Health Organization's *Diagnostic Criteria for Research* (ICD-10).

The basic vocabulary of psychoanalysis is included in this dictionary, although—in fact, partly because—other dictionaries of psychology omit most psychoanalytic terms and concepts altogether and treat the ones that are included only superficially. In this dictionary, terms introduced by Sigmund Freud are defined in sufficient detail to convey their meanings without trivialization, and key terms coined by subsequent psychoanalysts, including Jung, Adler, Erikson, Klein, Fairbairn, Winnicott, Kohut, Lacan, and Reich, are also included. Citations of Freud's writings are given by reference to *The Standard Edition of the Complete Psychological Works of Sigmund Freud*,

*****ebook converter DEMO Watermarks*****

translated and edited by James Strachey, using the usual convention in Freud scholarship of roman numerals for volume numbers and arabic numerals for page numbers, and citations of Jung's writings are referenced to *The Collected Works of C. G. Jung*, edited by Read, Fordham, and Adler, using arabic volume and paragraph numbers, as is conventional in Jungian literature.

Appendix I, at the back of the dictionary, contains a list of phobias and phobic stimuli, with etymologies, that is, as far as I am aware, the most comprehensive available. Appendix II contains an extensive list of over 800 abbreviations and symbols commonly used in psychology, cross-referenced to corresponding entries in the main body of the dictionary. Appendix III contains the list of web links mentioned earlier. They were selected with great care and will be useful to any serious student of psychological concepts and terminology.

The definitions in the main body of the dictionary include occasional comments about careful usage: see, for example, **adrenalin rush** (based on a misconception), **anorexia** (not the same as **anorexia nervosa**), **basal ganglia** (best reserved for ganglia involved in voluntary movement), **innate** (not the same as **hereditary**), **monosynaptic reflex** (a physical impossibility), **narcotic** (not just an addictive drug), **paradox** (more than something merely surprising), **phi phenomenon** (not just any form of apparent movement), and so on. Occasional suggestions are made for renaming concepts that seem to be misnamed. For example, this dictionary suggests the term **Dircks's ghost** instead of the misnomer **Pepper's ghost**, **Luckiesh illusion** instead of **Sander parallelogram**, and **Merkel's law** instead of **Hick's law**, for reasons that are explained in the relevant entries, though it seems too late to change **TAT** back to its original name.

Scattered throughout the dictionary are suggestions for practical demonstrations of dramatic or interesting psychological phenomena that can be observed under home conditions. The following entries, among others, include easy demonstrations, some trivial and others illustrating profound ideas: **afterimage**, **Aristotle's illusion**, **Aubert effect**, **Bidwell's ghost**, **blind spot**, **chequer-shadow illusion**, **Cheshire Cat effect**, **conservation**, **Craik-O'Brien effect**, **Dollar Auction game**, **Emmert's law**, **experimentally induced false memory**, **filling-in illusion**, **flight of colours**, **floating-finger illusion**, **Gelb effect**, **hole-in-the-hand illusion**, **hollow-face illusion**, **Kohnstamm effect**, **lightness**, **Moses illusion**, **nine-dot problem**, **phi**

movement, Pulfrich effect, Purkinje figure, Purkinje shift, randomization, rubber hand phenomenon, sensory saltation, size–weight illusion, Stroop effect, successive contrast, teacup illusion, thermal grill illusion, three–seven effect, tilt aftereffect, visual search, winner's curse, wug test.

Friends, relatives, and colleagues have asked me where I found the headwords and the information used to define them. The answer is—everywhere. In some cases I managed to access the required information close to home in my own long-term memory store; more often, I looked in journal articles, textbooks, and reference works; in many cases I asked leading authorities in the relevant research areas for help; and increasingly often I have used the internet. I wrote this dictionary in circumstances that were difficult for me at work, and I am lucky to have had a lot of support and advice. Acknowledgements to people who helped me are provided elsewhere in these preliminary pages, though I take responsibility for errors that have no doubt remained. A list of the textbooks and reference works that I found most useful is provided at the back of the dictionary.

Andrew M. Colman

Advisory Editors

The following acted as advisory editors for the first edition:

Biological aspects of psychology: Daniel P. Kimble, University of Oregon

Cognitive psychology: Robert J. Sternberg, Yale University

Mental disorders: Robert L. Spitzer, Columbia University

Neurology and cognitive neuropsychology: Andrew Mayes, University of Manchester

Psychoanalysis: Richard Stevens, The Open University

Psychopharmacology: Leonard W. Hamilton, Rutgers University

Sensation and perception: Harvey R. Schiffman, Rutgers University

Illustration Acknowledgements

The author and publisher wish to thank Market House Books Ltd for the use of the following illustrations from *A Dictionary of Biology*, 4th ed., and *A Dictionary of Science*, 4th ed. (both Oxford University Press).

A Dictionary of Biology

- Autonomic nervous system: The parasympathetic and sympathetic systems
- Ear: Main structures of the mammalian ear
- Genetic code
- Lipid bilayer
- Meiosis: Stages in a cell containing two pairs of homologous chromosomes
- Mitosis: The stages of mitosis in a cell containing two pairs of homologous chromosomes
- Pyramid of numbers: A woodland food chain
- Retina: Basic structure (light enters from the bottom of the diagram)
- Skin: Structure of mammalian skin
- Synapse: Basic structure

A Dictionary of Science

- DNA: Molecular structure
- Eye: Main structures of the vertebrate eye
- Harmonic: Fundamental and two overtones
- Motor neuron
- RNA: Molecular structure
- Sensory neuron

General Acknowledgements

Thanks are due to Rob Hemmings, Kathy Smith, Phil Duke, Philip W. Lee, and Angela Chorley for help with the preparation of the figures, most of which were created from scratch, and to Janice Smith for further technical assistance. Kathy Smith and Caroline Salinger also provided other forms of help and support for which I am especially grateful.

In addition to the Advisory Editors, who corrected errors, pointed out gaps or omissions, and made numerous other useful suggestions for improvement, and the copy-editor Linda Antoniow, who was also responsible for many substantive improvements, the following deserve thanks for helping with specific definitions or obscure factual information: Lyn Abramson (University of Wisconsin), Sally Blount (University of Chicago), Tamsin Carlisle (Dow Jones Canada/The Wall Street Journal), Rachel Charnock (University of Aberdeen), Edward Crossman (University of California, Berkeley), David Crystal (University of Wales, Bangor), Roy Davies (University of Leicester), Joanne Dunham (University of Leicester Medical Sciences Library), Susan Dye (Sun Bank), Walter Ehrenstein (Institut für Arbeitsphysiologie, Dortmund), Elaine Engst (Cornell University), Nigel Foreman (University of Middlesex), Pumla Gobodo-Madikizela (University of the Transkei), Gabriele Griffin (Kingston University), Horst Gundlach (Institut für Geschichte der Psychologie, Universität Passau), Michel Jouvett (Université Claude Bernard), Bob Lockhart (University of Toronto), George Loewenstein (Carnegie-Mellon University), Geoff Lowe (University of Hull), Helmut Lück (FernUniversität Hagen), Howard Margolis (University of Chicago), Jack Mayer (University of New Hampshire), Michael Molnar (Freud Museum), Serge Moscovici (University of Paris), Kazuo Ohya (Nagoya University), John Palmer (University of Washington), Stephen Palmer (University of California, Berkeley), Angus Phillips (Oxford University Press), Ian Pountney (Oracle Corporation UK Ltd), Briony

Pulford (University of Wolverhampton), Richard Rawles (University College London), Roddy Roediger (Washington University), Lee Ross (Stanford University), Karl Rumelhart (Stanford University), Sverker Runeson (University of Uppsala), Peter Salovey (Yale University), Dan Schacter (Harvard University), Francine Shapiro (EMDR Institute, Pacific Grove, California), Ann Silver (University of Cambridge), John Simpson (Oxford University Press), Peter Smith (Stanford University), Gerhard Stemberger (Österreichische Arbeitsgemeinschaft für Gestalttheoretische Psychotherapie, Vienna), David Stretch (University of Leicester), Susan Sutcliffe (Greenhill College), Stephen Taylor (Vision Consultants), Peter Thompson (York University), Anne Treisman (Princeton University), John Vandenberg (North Carolina State University), Neil Weinstein (Rutgers University), Gary Wells (Iowa State University), Wes Whitten (Australian National University), Margaret Woodhouse (University of Wales, Cardiff), and Marisa Zavalloni (Université de Montréal).

For the second edition, additional thanks are due to the following: Ted Adelson (Massachusetts Institute of Technology), Joshua Aronson (New York University), Elisha Babad (Hebrew University of Jerusalem), Yoram Bonne (Smith-Kettlewell Eye Research Institute, San Francisco), Hermann Brandstätter (Johannes Kepler University, Linz), Gavin Brelstaff (Center for Advanced Studies, Research and Development, Sardinia), Dennis Cook (University of Minnesota), Clare Davies (University of Leicester), Lüder Deecke (University of Vienna), Sergio Della Sala (University of Aberdeen), Peter DeScioli (University of Pennsylvania), Donald A. Dewsbury (University of Florida), Mark R. Edwards (TEAMS International and Arizona State University), Henrik Ehrsson (University College London), Tom Erickson (IBM), Jennifer Freyd (University of Oregon), Tim Grant (University of Leicester), R. John Irwin (University of Auckland), Tim Jackins (International Re-evaluation Counseling Communities), Siegfried Jaeger (Freie Universität Berlin), Archie Levey (formerly Medical Research Council Applied Psychology Unit, Cambridge, UK), Matthew Lieberman (University of California, Los Angeles), David Lykken (University of Minnesota), Herb Marsh (University of Western Sydney), Mark Mattson (Fordham University), T. Stuart Meloy (Piedmont Anesthesia & Pain Consultants), John Nelson (Williams Syndrome Foundation), Klaus-Jürgen Neumärker (DRK Kliniken, Berlin), David E. Nichols (Purdue University), Kevin Ochsner (Stanford University), David P. Phillips (University of

California, San Diego), Baingio Pinna (University of Sassari, Italy), Harrison G. Pope, Jr (Harvard University), Lars S. Rasmussen (Copenhagen University Hospital, Denmark), Pat Rentowl (University of Leicester), Russell Revlin (University of California, Santa Barbara), Tamaki Saito (Sofukai Sasakibyoin, Japan), Viktor Sarris (Johann Wolfgang Goethe-Universität, Frankfurt), Graham L. Staines (National Development and Research Institutes, Inc., New York), Claude Steele (Stanford University), Lydia Temoshok (University of Maryland, Baltimore), John Tooby (University of California, Santa Barbara), Margaret Walker (Makaton Vocabulary Development Project), Marc Wilkins (Bioinformatics, Proteome Systems Ltd), and S. P. Wong (Memphis State University).

For the third and fourth editions, additional thanks are due to Michael C. Anderson (MRC Cognition and Brain Sciences Unit, Cambridge), Antoine Bechara (University of Southern California), Thomas Brothen (University of Minnesota), Trygve Danielsen (University of Bergen), Eddy de Waal (independent researcher, The Hague), Paul Eling (Radboud University), Chris French (Goldsmiths, University of London), Julia Gibbs (consulting educational psychologist), Simon Grant (Maidstone Hypnosis and Hypnotherapy Practice), Peter Jones (Centre for Orgonomic Research and Education), Jeff Karpicke (Purdue University), Nobuyuki Kayahara (Media-Pulsar Co., Ltd, Tokyo), Pat Keating (UCLA), Fred Kingdom (McGill University), Kenton Kroker (York University, Toronto), Kibeom Lee (University of Calgary), Aude Oliva (Massachusetts Institute of Technology), Bruce Overmier (University of Minnesota), Diana Pinto (University of Leicester), Briony Pulford (University of Leicester), Robert Rosenthal (University of California, Riverside), Steve Savons (University of Essex), Philippe G. Schyns (University of Glasgow), Mike Scott (private consulting psychologist), Mary Sissons Joshi (Oxford Brookes University), Jonathan Stirk (University of Nottingham), Fritz Strack (University of Würzburg), Steve Stradling (Napier University), Michael Thalbourne (University of Adelaide), Sarah White (University of Leicester).

Layout of Entries

1. Every headword is printed in boldface type. Alphabetization is strictly letter by letter, ignoring spaces between words and punctuation marks. Numbers are listed as if they were spelt out in words: for example, **16PF** is positioned as if it were written ‘sixteen PF’, between **situationist critique** and **size constancy**. In Appendix II, however, symbols and numbers are listed first.

2. The headword is followed by an abbreviation in italic type indicating the part of speech and occasionally (when there is likely to be confusion) whether it is singular or plural. The abbreviations are *abbrev.* (abbreviation), *adj.* (adjective), *adv.* (adverb), *conj.* (conjunction), *n.* (noun), *pl.* (plural), *sing.* (singular), and *vb.* (verb).

3. If the headword has two or more sharply distinct senses, then they are separated and labelled with boldface numerals (**1**, **2**, and so on), but closely related meanings are defined together without numbering. When two or more senses are defined, the one that is most common in the literature of psychology is generally defined first.

4. Within a definition, an asterisk attached to a word or phrase indicates a cross-reference, directing readers to a separate entry that will help them to understand the definition or provide more information about the term or concept. Only cross-references that are thought to be especially helpful are asterisked, and terms are often used in the definitions without asterisks although they are included as headwords elsewhere in the dictionary. A degree of cross-referential integrity has been maintained: obscure or technical words that are used in the definitions are usually asterisked and included elsewhere as headwords with their own definitions, to ensure that the dictionary is reasonably self-contained.

5. In some cases, synonyms or alternative names for the concept and alternative or variant spellings are given after the definition, in italic type.

6. After the definition and its synonyms and alternative spellings, additional entries that should be consulted for further information are introduced with one of the following directions in italic type: *See*, *See also*, or *Compare*.

7. Next, derivative or subsidiary forms are occasionally listed in boldface type, usually in alphabetical order. For example, under the headword **mesomorph** are listed the derivative forms **mesomorphic** and **mesomorphy**, and under **meme** are listed **memeplex**, **meme pool**, **memetic**, **memetic engineering**, and **memetics**. As a general rule, the most common form of the word appears as the headword and the less common forms as derivatives or subsidiaries: thus, **diploid** appears as a headword, although it is an adjective, and the noun **diploidy** is listed under it as a subsidiary form, because the adjectival form is far more common in psychological usage. If the term has a common abbreviation, it is shown in boldface type and marked *abbrev*.

8. A partial or full etymology is provided at the end of an entry, in square brackets, if it illuminates or clarifies the headword. The study of etymologies is often helpful in fixing the meaning of a word such as **migraine** and helping with spelling by, for example, insulating against the surprisingly common misspelling of a word such as **autotopagnosia**. Etymologies are omitted where the word is familiar or its derivation is obvious or implicit in the definition, or has not been determined with confidence.

Greek Alphabet

<i>Letter name</i>	<i>Greek letter</i>	<i>English equivalent</i>
alpha	A α	A a
beta	B β	B b
gamma	Γ γ	G g
delta	Δ δ	D d
epsilon	E ε	E e
zeta	Z ζ	Z z
eta	H η	E e
theta	Θ θ	TH th
iota	I ι	I i
kappa	K κ	K k
lambda	Λ λ	L l
mu	M μ	M m
nu	N ν	N n
xi	Ξ ξ	X x
omicron	O ο	O o
pi	Π π	P p
rho	P ρ	R r
sigma	Σ σ	S s
tau	T τ	T t
upsilon	Υ υ	U u
phi	Φ φ	PH ph
chi	X χ	CH ch
psi	Ψ ψ	PS ps
omega	Ω ω	O o



abaissement du niveau mental *n.* In **analytical psychology*, a reduced state of concentration and attention, accompanied by a loosening of inhibitions and relaxation of restraints, in which unexpected contents may emerge from the **unconscious* (2). It usually occurs spontaneously but can be deliberately encouraged in preparation for **active imagination*. Carl Gustav Jung (1875–1961) borrowed the term from his teacher, the French psychologist and neurologist Pierre Janet (1859–1947). [French: literally reduction of mental level]

abasia *n.* Inability to walk. Compare *DYSBASIA*. [From Greek *a-* without + *basis* a step, from *bainein* to step or go + *-ia* indicating a condition or quality]

abbreviated reaction time *n.* Another name for **central reaction time*.

ABC *abbrev.* 1. A model used in ** rational emotive behaviour therapy* (REBT) for analysing a client's problems systematically into: *A*, the **activating event*; *B*, the mediating evaluative **beliefs*; and *C*, behavioural and emotional consequences. It is sometimes extended to *ABCDE*, with the addition of: *D*, disputing; and *E*, effect of practising rational thinking. 2. Shorthand for the sequence of effects in **behaviour therapy*: antecedent, behaviour, consequence.

abderite *n.* A simpleton. [Named after Abdera, a town in the ancient country of Thrace whose inhabitants were reputed to be stupid]

abducens nerve *n.* Either of the sixth pair of **cranial nerves* controlling

the lateral ***rectus muscles** of the eyes, turning the eye outwards for a sidelong direction of gaze. Paralysis of this nerve causes convergent squint of the affected eye. Also called the *pathetic nerve* . [From Latin *abducere* to lead away, from *ab* away + *ducere* to lead or carry]

aberration *n.* 1. A deviation from what is normal, usual, or right. *See also* CHROMOSOMAL ABERRATION. 2. A temporary lapse of behaviour or mental function. 3. A defect of the ***crystalline lens** of the eye, or of any other lens or mirror, also called *astigmatism* or *dioptric aberration* , in which rays of light do not all converge on to a single focal point. In *chromatic aberration*, different wavelengths of light are refracted through different angles and focused at different distances, leading to blurred images with coloured fringes—*see also* ACHROMATIC (2), refraction. In *spherical aberration* light passing through the lens near its edge is focused at a different point from light passing near the lens's centre, resulting in a distorted visual image, the defect arising from the surface of the lens being spherical. [From Latin *aberrare* to wander away, from *ab* away + *errare* to wander + *-ation* indicating a process or condition]

ability *n.* Developed skill, competence, or power to do something, especially (in psychology) existing capacity to perform some function, whether physical, mental, or a combination of the two, without further education or training, contrasted with ***capacity**, which is latent ability. *See also* COGNITIVE ABILITY. *Compare* APTITUDE. [From Latin *habilitas* ability, from *habilis* able, from *habere* to have or to hold]

ability test *n.* A test that measures a person's current level of performance or that estimates future performance. The term sometimes denotes an ***achievement test**, sometimes an ***aptitude test**, and sometimes an ***intelligence test**.

abiogenesis *n.* The generation of living from non-living matter. *Compare* BIOGENESIS. [Coined in 1870 by the English biologist Thomas Henry Huxley (1825–95), from Greek *a-* without + English *biogenesis*]

abiosis *n.* Absence of life. **abiotic** *adj.* Lifeless or inanimate. [From Greek *a-* without + *bios* life + *-osis* indicating a process or state]

*****ebook converter DEMO Watermarks*****

ablation *n.* Surgical removal of a structure or part of the brain or other organ of the body. **ablate** *vb.* [From Latin *ab* from + *latum* taken + *-ion* indicating an action, process, or state]

ablation experiment *n.* A basic research method of physiological psychology based on ***ablation**, especially during the first three-quarters of the 20th century, in which an attempt is made to determine the functions of a specific region of the nervous system by examining the behavioural effects of its surgical removal. It was pioneered in 1824 by the French physiologist Marie Jean Pierre Flourens (1794–1867) and is also called a *lesion experiment*.

ableism *n.* Discrimination against people who are not able-bodied, or an assumption that it is necessary to cater only for able-bodied people. The term was coined by US feminists in the 1980s and was later used by the Council of the London Borough of Haringey in a press release in 1986. Also spelt *ablism*. Compare **AGEISM**, **ETHNOCENTRISM**, **FATTISM**, **HETEROSEXISM**, **RACISM**, **SEXISM**, **SPECIESISM**. **ableist** or **ablist** *n.* 1. One who practises or advocates ableism. *adj.* 2. Of or relating to ableism. [From *able* + Greek *-ismos* indicating a state or condition, on the model of words such as *ageism*]

Abney effect *n.* 1. The slight change in the ***hue** of ***monochromatic** light when its ***lightness** changes as a result of white light being added to it. 2. A perceptual phenomenon whereby a large surface that is suddenly illuminated appears to brighten first near its centre and then near its edges, and if the illumination is suddenly extinguished it appears to darken first near its edges and then near its centre. [Named after the English chemist and physicist Sir William de Wiveleslie Abney (1843–1920)]

Abney's law *n.* The principle according to which the total luminance of light composed of several wavelengths is equal to the sum of the luminances of its ***monochromatic** components. [Named after the English chemist and physicist Sir William de Wiveleslie Abney (1843–1920)]

abnormal *adj.* Departing from what is usual or what is the rule or ***norm** (1, 2). [From Latin *ab* from + *norma* a rule + *-alis* of or relating to]

abnormality *n.* Anything that is **abnormal*. A psychological abnormality is a manifestation of **cognition*, **emotion*, or **behaviour* that deviates from an accepted norm or is a **sign (1)* or **symptom* of a **mental disorder*. See also ABNORMAL PSYCHOLOGY.

abnormal psychology *n.* A branch of psychology devoted to the study of the classification, aetiology, diagnosis, treatment, and prevention of **mental disorders* and disabilities. Also called *psychopathology*. Compare CLINICAL PSYCHOLOGY.

abortion *n.* An operation to terminate a pregnancy prematurely (also called an *induced abortion*), or a premature expulsion of an embryo or foetus occurring naturally (also called a *spontaneous abortion*). **abort** *vb.* [From Latin *ab-* badly or wrongly + *oriri* to appear or arise + *-ion* indicating an action, process, or state]

ABO system See BLOOD GROUP.

aboulia *n.* A variant spelling of **abulia*.

Abraham Lincoln effect *n.* The tendency for a **block portrait* to be difficult to recognize as a meaningful image when viewed close up but to become more recognizable when viewed from a distance or when blurred by half closing the eyes, for example, loss of information paradoxically increasing the recognizability of the image. See BLOCK PORTRAIT (and accompanying illustration). [Named by the US biomedical engineer Leon D(avid) Harmon (1922–82) after Abraham Lincoln (1809–65), the 16th US president, whose image he used to construct the first block portrait, published in a technical report in 1971 and in an article in *Scientific American* magazine in 1973]

abreaction *n.* In **psychoanalysis*, a release or discharge of emotional energy following the recollection of a painful memory that has been repressed. It can occur spontaneously or during psychotherapy, especially under **hypnosis*, and may lead to **catharsis*. As a therapeutic procedure, it was discovered in 1880–82 by the Austrian physician Josef Breuer (1842–

1925), and during the infancy of psychoanalysis it was believed to be therapeutic in itself. *See also* [PRINCIPLE OF CONSTANCY](#). [From German *abreagieren* to abreact or (metaphorically) let off steam, from Latin *ab* from + German *reagieren* to respond, coined in 1893 by Breuer and Sigmund Freud (1856–1939) in an article ‘On the Psychical Mechanism of Hysterical Phenomena: Preliminary Communication’ (*Standard Edition*, II, pp. 3–17)]

absence *n.* The state or condition of being away from a place. In abnormal psychology and neurology, a brief period of loss of attention or consciousness, often followed by **amnesia* for the period of absence, characteristic of minor (formerly called *petit mal*) **epilepsy*. *Compare* [TONIC–CLONIC](#).

absent-mindedness *n.* Preoccupation to the point of being inattentive to one's own behaviour and surroundings, often characterized by **action slips* arising from **open-loop control* of actions that demand **closed-loop control* for accurate implementation. *See also* [COGNITIVE FAILURES QUESTIONNAIRE](#).

absolute acuity *n.* The maximum keenness or sharpness of a sense organ to detect weak stimuli, usually expressed in terms of the **absolute threshold*. *See also* [ACUITY](#). *Compare* [DIFFERENTIAL ACUITY](#).

absolute error *n.* In **psychophysics*, the difference between the judged value of a stimulus and its true value, ignoring the direction of the difference. *Compare* [RELATIVE ERROR](#). [Alluding to the mathematical sense of *absolute*, referring to a magnitude disregarding its positive or negative sign]

absolute judgement method *See* [METHOD OF ABSOLUTE JUDGEMENT](#).

absolute limen *n.* Another name for the **absolute threshold*. [From Latin *limen* a threshold]

absolute pitch *n.* The ability to identify the **pitch* of a musical tone, or to produce a specified tone at its correct pitch, without reference to another tone. *See also* [PERFECT PITCH](#). *Compare* [RELATIVE PITCH](#).

absolute reflex *n.* The name given on occasions by the Russian physiologist Ivan Petrovich Pavlov (1849–1936) to what is usually called the *unconditioned response.

absolute refractory period *n.* A *refractory period (2), lasting up to 2 milliseconds after the onset of an *action potential, during which no *stimulus (5) can initiate another nerve impulse in the neuron. *Compare* RELATIVE REFRACTORY PERIOD.

absolute scale *n.* In statistics and measurement theory, a *ratio scale in which the unit of measurement is fixed. In practice, values on an absolute scale are usually if not always obtained by counting. *See also* MEASUREMENT LEVEL, SCALE (1). *Compare* INTERVAL SCALE, LOG-INTERVAL SCALE, NOMINAL SCALE, ORDINAL SCALE, RATIO SCALE.

absolute thinking *n.* Interpreting personal fears and desires in absolutes (for example, describing oneself as being absolutely devastated by a setback); regarded in some branches of *counselling as a cognitive error that limits *insight (3).

absolute threshold *n.* In *psychophysics, the smallest intensity of a sensory stimulus that can be detected or can reliably evoke a sensation, a typical example being the average human absolute threshold for sound intensity at 1,000 hertz (about two octaves above Middle C), which is an intensity of about 6.5 dB SPL (see DECIBEL). The original concept of a sharply defined limit below which nothing can be perceived was discredited and largely abandoned after the development of *signal detection theory, the absolute threshold being redefined as the magnitude that can be detected on a specified proportion of presentations (often 50 or 75 per cent, though other percentages are sometimes used). Also called the *absolute limen* or *Reiz limen* (RL). *See also* ACUITY, AUDIBILITY FUNCTION, AUDIOGRAM, BONE CONDUCTION THRESHOLD, CONTRAST SENSITIVITY FUNCTION, CONTRAST THRESHOLD, DARK ADAPTATION, DECIBEL, HEIMDALLR SENSITIVITY, LIGHT ADAPTATION, PIPER'S LAW, PSYCHOPHYSICS, RICCO'S LAW, SUBLIMINAL. *Compare* DIFFERENCE THRESHOLD.

absorbance *See* REFLECTANCE.

abstinence *n.* **1.** Avoidance of alcohol or some other drug of dependence, or more generally self-restraint from some indulgence. *See also* [ABSTINENCE SYNDROME](#), [WITHDRAWAL](#). **2.** In psychodynamic counselling and therapy, the practice of the counsellor or therapist of holding back from uninhibited interaction and conversation with the client or patient. [From Latin *abstinere* to abstain]

abstinence rule *n.* In **psychoanalysis*, the organization of treatment to minimize the substitutive satisfaction of needs related to symptoms that the patient finds outside the analytic situation, in spite of the frustration and suffering that can result. Sigmund Freud (1856–1939) introduced the rule in an article on ‘Observations on Transference-Love’ (1915): ‘I shall state it as a fundamental principle that the patient's need and longing should be allowed to persist in her, in order that they may serve as forces impelling her to do work and to make changes, and that we must beware of appeasing these forces by means of surrogates’ (*Standard Edition*, XII, pp. 159–71, at p. 165).

abstinence syndrome *n.* A pattern of signs and symptoms associated with **withdrawal* in a drug-dependent person who is suddenly deprived of a regular supply of the drug and is forced to practise **abstinence* (1).

abstract attitude *n.* A term introduced by the German psychiatrist Kurt Goldstein (1878–1965) to denote the ability to use conceptual categories in order to classify things according to their attributes and to think symbolically rather than concretely. This ability is impaired in many forms of brain damage and mental disorder. Also called *categorical attitude* .

abstraction *n.* **1.** The act or process of formulating a general concept by identifying common **features* (1) from specific instances or examples, or a concept formed in this way. **2.** A state of **absent-mindedness* or preoccupation. **3.** In general, the act of withdrawing or removing something. [From Latin *abstractus* drawn off, from *ab* away from + *trahere*, *tractum* to draw + *-ion* indicating an action, process, or state]

abstract measurement theory *n.* Another name for **axiomatic measurement theory*.

absurdity test *n.* Any psychological test in which the respondent attempts to identify what is wrong or illogical about a verbal or a pictorial stimulus, such as a missing leg in a drawing of a spider or a missing numeral in a drawing of a clock face. It is often included as an item or subtest of an **IQ test*.

abulia *n.* A deficit of will or motivation, often leading to an inability to make decisions or plans. [From Greek *a-* without + *boule* will + *-ia* indicating a condition or quality]

abuse (alcohol, child, elder, spouse, substance) *See* ALCOHOL ABUSE, CHILD ABUSE, ELDER ABUSE, SPOUSE ABUSE, SUBSTANCE ABUSE.

ABX paradigm *n.* In **psychophysics*, a method of determining a **difference threshold* by presenting two stimuli (A and B) and a third (X) that is the same as one of the others, the observer's task being to decide whether it matches A or B.

academic problem *n.* A **learning difficulty*, usually in a schoolchild, that does not amount to a **learning disability*.

academic skills disorders *n.* An alternative name for **learning disabilities*.

acalculia *n.* Impairment of ability to do arithmetic. *See also* AGRAPHIA, ALEXIA, SPECIFIC DISORDER OF ARITHMETIC SKILLS, SPECIFIC LEARNING DISORDER. *Compare* DYSCALCULIA. [From Greek *a-* without + Latin *calcularē* to count, from *calculus* a stone, diminutive of *calx* limestone + *-ia* indicating a condition or quality]

acatamathesia *n.* An obscure synonym for **agnosia*; an inability to comprehend sensory information. Also spelt *akatamathesia*. *Compare* AGNOSIA. [From Greek *a-* without + *katamanthanein* to observe or understand, from *kata* thoroughly + *manthanein* to learn + *-ia* indicating a condition or quality]

accent *n.* 1. A characteristic pronunciation of a language, especially one associated with a geographical region or social group, to be distinguished from a **dialect*. 2. The **stress* (2) or prominence given to a spoken syllable, usually through a rise in pitch, loudness, or sound quality, or a written mark to indicate this. [From Latin *ad* to + *cantus* a song]

acceptance and commitment therapy *n.* A technique of **psychotherapy* based on **mindfulness* and acceptance in which clients are encouraged to acquiesce in or assent to the reality of situations in which they find themselves, including those that are unpleasant or uncomfortable, without attempting to change them, to protest against them, or to exit from them. Originally called *comprehensive distancing*, the technique was developed in the late 1980s by the US psychologists Steven C. Hayes (born 1948), Kelly G. Wilson (born 1954), and Kirk D. Strosahl (born 1950), and practitioners consider it an advanced form of **cognitive behaviour therapy*. Hayes claimed controversially in 2006 that acceptance implies that 'happiness isn't normal'. The technique is frequently referred to by its initials, pronounced like the word *act*. Compare DIALECTICAL BEHAVIOUR THERAPY. **ACT** *abbrev.*

acceptor *n.* A chemical substance that receives and combines with another substance, as in an oxidation-reduction reaction where the oxygen is the acceptor of the substance that is oxidized and hydrogen is the acceptor of the substance that is reduced.

access consciousness *n.* According to a distinction introduced by the US philosopher Ned J(oel) Block (born 1942) in a co-edited book entitled *The Nature of Consciousness* (1997), a non-**phenomenal* category of consciousness involving **cognitions* and **representations* that are poised or ready for use in **controlled processing*. A state is A-conscious if it is not experienced directly but is poised for the control of thought and action, as might occur if a thirsty person with **blindsight* responded spontaneously (without prompting) by reaching for a drink perceived without conscious visual experience. Representations that would be available for use if re-activated are not necessarily access-conscious unless they are poised and ready to control behaviour. Also called *A consciousness*. Compare PHENOMENAL CONSCIOUSNESS. **access-conscious** or **A-conscious** *adj.* [From

*****ebook converter DEMO Watermarks*****

Latin *accessus* an approach, from *accedere* to agree, from *ad* to + *cedere* to yield + English *consciousness*]

accessibility *n.* **1.** In cognitive psychology, the ease with which information in long-term memory can be retrieved. An *accessible memory* is one that can be retrieved without **cues* (3) or **prompts*. Compare *AVAILABILITY*. **2.** In **modal logic*, the property of a **possible world* of being open to scrutiny from some other world in such a way that the truth value of **propositions* (1) about it can be known. **3.** In general, the ease with which something can be approached, reached, or obtained. **accessible** *adj.* [From Latin *accessus* an approach + *-ibilitas* capacity, from *habilis* able]

accessory cell *n.* Any of a number of cells in the nervous system that contribute to the support, maintenance, and repair of **neurons*. See *ASTROCYTE*, *EPENDYMAL CELL*, *MICROGLIA*, *OLIGODENDROCYTE*, *SCHWANN CELL*.

accessory nerve *n.* Either of two pairs of eleventh **cranial nerves*, the motor nerves arising partly from the lateral walls of the medulla oblongata and partly from the cervical (neck) region of the spinal cord, divided into the cranial accessory nerves, distributed by the **vagus nerve* to the muscles of the larynx and pharynx, and the spinal accessory nerves, supplying muscles in the neck, shoulder, and upper back.

accidence *n.* Inflections of words or changes in the forms of words to indicate different grammatical functions, as in *write*, *wrote*, *writing*. [From Latin *accidentia* accidental matters]

accidental sample *n.* A **non-probability sample* drawn haphazardly from a population by a procedure such as stopping the first hundred passers-by on a particular street corner. See also *CONVENIENCE SAMPLE*, *OPPORTUNITY SAMPLE*, *QUOTA SAMPLE*, *SELF-SELECTED SAMPLE*, *SNOWBALL SAMPLE*. Compare *CLUSTER SAMPLE*, *PROBABILITY SAMPLE*, *RANDOM DIGIT DIALLING*, *SIMPLE RANDOM SAMPLE*, *STRATIFIED RANDOM SAMPLE*.

accommodation *n.* **1.** The voluntary or involuntary adjustment of the curvature of the **crystalline lens* of the eye to keep an image focused on the fovea with changes in the distance of the object being viewed; more
*****ebook converter DEMO Watermarks*****

specifically, one of the monocular cues of visual **depth perception*, the degree of curvature of the lenses providing information about the distances of objects focused on the retinas. Also called *visual accommodation*. *See also* ACCOMMODATION REFLEX, DARK FOCUS, FAR POINT, NEAR POINT, PURKINJE–SANSON IMAGE, RANGE OF ACCOMMODATION. **2.** In the writings of the Swiss psychologist Jean Piaget (1896–1980) and his followers, a form of **adaptation* (3) in which psychological structures or processes are modified to fit the changing demands of the environment, as when an infant adapts its perceptual processes and behavioural repertoire to a new toy that is introduced into its milieu. *See also* EQUILIBRATION. *Compare* ASSIMILATION (2). **3.** A decrease in a neuron's propensity to produce an **action potential*, the reduced responsiveness being caused by repeated stimulation. **accommodate** *vb.* **accommodative** *adj.* *Compare* ASSIMILATION (2). [From Latin *accommodare* to accommodate, from *ad* to + *commodus* fitting + *-ation* indicating a process or condition]

accommodation reflex *n.* A reflex adjustment of the eyes for **near vision* that occurs in response to an object appearing suddenly in front of the face and that consists of pupillary constriction, ocular convergence, and increased convexity of the lenses. *See also* ACCOMMODATION (1), CILIARY REFLEX.

acculturation *n.* The process of assimilating the ideas, beliefs, customs, values, and knowledge of another culture through direct contact with it, usually after migration from one place to another.

acculturation difficulty *n.* Any problem of **acculturation* that falls short of being an **adjustment disorder*.

accumbens nucleus *n.* Another name for the **nucleus accumbens*.

accuracy test *n.* Any test in which the correctness of responses, rather than the speed of performance, is measured. *Compare* POWER TEST.

acephalous *adj.* Headless, or having only an indistinct or degenerate head, like certain insect larvae. Figuratively, without a ruler or leader. [From Greek *a-* without + *kephale* a head + *-ous* having or characterized by]

*****ebook converter DEMO Watermarks*****

acetaldehyde *n.* A colourless volatile noxious liquid that accumulates in the body of a person who drinks alcohol while taking the drug **Antabuse*, resulting in nausea, vomiting, pounding of the heart, shortness of breath, and other unpleasant symptoms. Formula CH_3CHO . *See also* *PARALDEHYDE*. [From Latin *acet(um)* vinegar + *al(cohol)* *dehy-d(rog)e(natum)* dehydrogenated alcohol]

acetic acid *n.* A colourless pungent-tasting liquid that occurs in the fermentation of alcohol, and as a **metabolite* of **acetylcholine* and **serotonin*. It can be diluted with water to form vinegar and is widely used in the manufacture of vinyl acetates, plastics, and pharmaceuticals. *See also* *ACETYL*. [From Latin *acetum* vinegar]

acetyl *n.* The **radical* (2) group —COCH_3 formed by removing —OH from **acetic acid*. [From *acet(ic) acid* + *-yl* indicating a chemical group or radical, from Greek *hyle* wood]

acetylcholine *n.* A **neurotransmitter* substance secreted from the ends of many neurons and functioning as the main chemical messenger for **motor neurons* in the **peripheral nervous system*, including the **autonomic nervous system*, and as a significant neurotransmitter in the **central nervous system*, functioning to excite **skeletal muscles* and to inhibit **cardiac muscle*, remaining in existence only long enough for the impulse to cross from one cell to another before being broken down by **acetylcholinesterase* into acetic acid and choline. *See also* *ALZHEIMER'S DISEASE*, *CARBACHOL*, *CHOLINERGIC*, *CHOLINOMIMETIC*, *MUSCARINE*, *MUSCARINIC RECEPTOR*, *NICOTINIC RECEPTOR*, *VAGUSSTOFF*. **ACh** *abbrev.* [From Latin *acetum* vinegar + Greek *hyle* wood or material + *chole* bile + *-ine* indicating an organic compound]

acetylcholinesterase *n.* An enzyme that hydrolyses **acetylcholine* to acetic acid and choline. By destroying acetylcholine after its release from the terminal **boutons* of **presynaptic* neurons and from **postsynaptic receptors* after a nerve impulse has been triggered, it stops further postsynaptic nerve impulses. Also called *cholinesterase*. *See also* *NERVE GAS*, *PHYSOSTIGMINE*. **AChE** *abbrev.* [From *acetylcholine* + *ester* + *-ase* denoting an enzyme, from Greek *diastasis* separation]

acetylsalicylic acid *n.* The chemical name for **aspirin*.

achievement motivation *n.* Another name for **need for achievement*.

achievement test *n.* Any test of acquired ability or skill, a typical example being a test of scholastic attainment. *See also* *COMPETENCY TEST*. *Compare* *ABILITY TEST*, *APTITUDE TEST*.

Achilles tendon reflex *n.* A **deep tendon reflex* occurring in response to a tap on the Achilles tendon at the back of the ankle. It is often absent in people with diabetes, diseases of the peripheral nervous system, pyramidal tract disease, or hyperthyroidism. Also called the *ankle reflex*.

achromatic *adj.* 1. Without **hue*, or represented in black, white, and grey. An *achromatic colour*, also called a *neutral grey* or *neutral colour*, is a mixture of black and white without any **chroma* and is the **lightness* component of any colour. *See also* *HERING GREY*, *SATURATION (1)*. 2. Capable of refracting or reflecting light without chromatic **aberration (3)*. [From Greek *a-* without + *chroma* colour]

achromatic interval *n.* For light of a particular **hue*, the range of light intensities from its **absolute threshold* to the lowest intensity at which its hue can be detected; analogously, for a **pure tone* of a particular frequency, the range of **amplitudes* from its absolute threshold to the lowest intensity at which its pitch can be detected.

achromatic system *n.* In the **opponent-process theory* of colour vision, the pathway that carries information about an object's lightness. *Compare* *CHROMATIC SYSTEM*.

achromatopsia *n.* Total **colour-blindness* resulting from lesions, usually in areas V2 and V4 of the **visual cortex*, resulting in an inability to see colours, with an intact ability to see shapes and movement. People who acquire this condition usually lose the ability even to imagine colours. *See also* *AGNOSIA (COLOUR)*, *DYSCHROMATOPSIA*, *MONOCHROMATISM*, *PARACHROMATOPSIA*. *Compare* *CHROMATOPSIA*. **achromatopsic** *adj.* [From Greek

a- without + *chroma* colour + *ops* an eye + *-ia* indicating a condition or quality]

acid *n.* **1.** Any substance that when dissolved in water releases positively charged hydrogen **ions* and produces a corrosive solution having a **pH* of less than 7. *Compare* *ALKALI*. **2.** A common street name for **LSD*. **acidic** *adj.* Of, relating to, or consisting of an acid (1). **acidity** *n.* The degree to which a solution is acidic. [From Latin *acidus* sharp or sour]

acid odour *n.* One of the primary odours in the **Crocker–Henderson system*. US *acid odor*.

A consciousness *See* *ACCESS CONSCIOUSNESS*.

acoustic *adj.* Of or relating to sound. Also called *acoustical*. **acoustics** *n.* The study of sound. [From Greek *akoustikos* of or relating to sound, from *akouein* to hear + *-ikos* of, relating to, or resembling]

acoustic coding *n.* Remembering something by storing the sound of its verbal expression rather than its meaning or the physical movements required to articulate it. *Compare* *ARTICULATORY CODING*, *SEMANTIC CODING*.

acoustic confusion *n.* Erroneous perception or memory resulting from the substitution of an incorrect but similar-sounding word, as when someone mishears or misremembers *it's my turn to cook* when in fact it is that person's turn to *book* theatre tickets. *Compare* *SEMANTIC CONFUSION*.

acoustic cue *n.* **1.** An acoustic property of a speech sound, such as a **formant*, used to identify the sound and to distinguish it from other speech sounds. *See also* *DISTINCTIVE FEATURE*, *MINIMAL PAIR*, *NEUTRALIZATION*. **2.** A **cue* (3) that prompts recall of a remembered word by evoking its sound.

acoustic feature *n.* Any physical property or **feature* (1) of a sound, such as its **fundamental frequency* or its **amplitude*. *Compare* *ACOUSTIC CUE* (1), *DISTINCTIVE FEATURE*.

acoustic generalization *n.* *Stimulus generalization of auditory stimuli, as when a response to a sound (such as a word or a tune) that has been learned, is evoked by a similar sound.

acoustic-mnestic aphasia *See* APHASIA.

acoustic nerve *n.* Another name for the *vestibulocochlear nerve.

acoustic reflex *n.* An involuntary contraction of the *tensor tympani and *stapedius muscles within the middle ears, occurring simultaneously in both ears in response to intense noise presented to either ear, stiffening the eardrum and restricting movements of the *ossicles, causing a *temporary threshold shift and protecting against damage to the organs of hearing. It is similar to the pupillary light reflex in response to bright light. Also called the *tympanic reflex*.

acoustic similarity effect *n.* The tendency for lists of similar-sounding words to be more difficult to remember than lists of dissimilar-sounding words.

acoustic store *n.* A general term for the *postcategorical acoustic store and the *precategorical acoustic store, though there is some doubt about their existence. More generally, a hypothetical repository of memories produced by *acoustic coding. *Compare* SUBVOCAL REHEARSAL LOOP.

acquaintanceship knowledge *n.* A category of *knowledge that is distinct from both *declarative knowledge (knowing that) and *procedural knowledge (knowing how). It consists of knowledge of people, places, and things, and although it may include declarative knowledge it need not necessarily do so, as when one knows a colour, or a smell, or a face, but cannot state any facts about it. This class of knowledge was discussed by the Welsh philosopher Bertrand (Arthur William) Russell (1872–1970) in *The Problems of Philosophy* (1912) and is poorly understood in psychology.

acquiescence response set *n.* In psychometrics, a consistent tendency to respond to yes/no questionnaire items by answering Yes,

irrespective of the content of the questions. Properly constructed questionnaires generally control for this response set by **counterbalancing* (2). Also called *acquiescence response style*. See also *BALANCED SCALE*, *COUNTERBALANCING* (2), *RESPONSE SET* (2).

acquired distinctiveness *n.* A learnt differentiation or discrimination between items that were previously indistinguishable, as when a person attends a wine-tasting course and acquires the ability to discriminate wines that previously tasted the same. Compare *ACQUIRED SIMILARITY*.

acquired dyslexia *n.* One of the two major categories of **dyslexia*, this form of the disorder resulting directly from brain damage, usually to the left cerebral hemisphere. See also *COGNITIVE NEUROPSYCHOLOGY*, *DEEP DYSLEXIA*, *SURFACE DYSLEXIA*. Compare *DEVELOPMENTAL DYSLEXIA*. [From Greek *dys-* bad or abnormal + *lexis* a word + *-ia* indicating a condition or quality]

acquired similarity *n.* A tendency for items that were previously perceived as dissimilar to be perceived as the same as a result of learning to use them for the same purpose or to classify them in the same category or with the same label. For example, in Japanese, /r/ and /l/ are **allophones* that do not give distinct meanings to different words, and as a result Japanese speakers often lack the ability to distinguish between them, but this causes problems for native Japanese speakers of English, because in English /r/ and /l/ distinguish **minimal pairs* such as *right* and *light* and are therefore different **phonemes*. Compare *ACQUIRED DISTINCTIVENESS*.

acrasia See *AKRASIA*.

acrolect *n.* The most prestigious variety of a language within a speech community, such as **Received Pronunciation* in Britain. See also *DIALECT*, *IDIOLECT*, *LECT*. Compare *BASILECT*, *MESOLECT*. [From Greek *akros* highest + *legein* to speak]

acromegaly *n.* Enlargement of the bones in the head, hands, and feet, caused by an excessive secretion of growth hormone by the pituitary gland, sometimes associated with **cerebral gigantism*. **acromegalic** *adj.* [From Greek *akros* highest + *megas* big]

*****ebook converter DEMO Watermarks*****

acronym method *n.* A memory aid based on acronyms. See **MNEMONIC**.
[From Greek *akros* topmost + *onoma* a name]

acroparaesthesia *n.* A persistent sensation of numbness, tingling, or pins and needles in the extremities (hands or feet), sometimes caused by compression or inflammation of nerves in the affected area. US *acroparesthesia*. See also **PARAESTHESIA**. [From Greek *akron* extreme, alluding to the hands and feet (extremities) + *para* beside or beyond + *aisthesis* sensation + *-ia* indicating a condition or quality]

acrotomophilia *n.* A ***paraphilia** characterized by recurrent sexually arousing fantasies, sexual urges, or behaviour associated with having a partner with an amputated leg. It is found among both heterosexual and homosexual men and women and should be carefully distinguished from ***apotemnophilia**. People with acrotomophilia often refer to themselves as *devotees*. Also called *monopede mania*, *monopedophilia*, or *unipedophilia*, but the latter two forms are liable to cause confusion with *paedophilia*. [From Greek *akron* a tip + *tome* a cut + *morphe* a form or shape + *philos* loving, from *philein* to love + *-ia* indicating a condition or quality]

ACT See **ACCEPTANCE AND COMMITMENT THERAPY**.

ACT* *abbrev.* (pronounced act-star). Adaptive Control of Thought, an advanced version of a ***network model** of ***information** processing first put forward in 1976 by the Canadian-born US psychologist John R(obert) Anderson (born 1947). It includes two distinct ***long-term memory** stores: (a) a ***declarative memory**, modelled by a semantic network of interconnected ***concepts** represented by ***nodes** (2), containing ***declarative knowledge**, the active part of the declarative memory system constituting ***working memory**; and (b) a ***procedural memory**, modelled by a ***production system**, containing the system's procedural knowledge. See also **FAN EFFECT**.

actigraphy *n.* A technique for monitoring human activity through an *actigraph* or activity monitor that measures gross motor activity by continually recording gross movements of a bodily area such as the hip or wrist. It is useful for determining a person's level of potentially calorie-

burning activity and for studying **dyssomnias*, **eating disorders*, and **chronic fatigue syndrome*. Software applications are available for using phones as actigraphs. [From Latin *actus* an act + Greek *graphein* to write]

actin *n.* A protein that interacts with **myosin* to form the contractile protein **actomyosin* in muscles and is also involved in other physiological processes. [From *act* + Latin *-in(a)* indicating an organic compound]

acting in *n.* A term sometimes used in **psychoanalysis* to denote **acting out* (1, 2) when it occurs within an analytic session rather than in ordinary life.

acting out *n.* 1. In **psychoanalysis*, the enactment rather than recollection of past events, especially enactments relating to the **transference* during therapy. It is often impulsive and aggressive, and it is usually uncharacteristic of the patient's normal behaviour. The concept was introduced by Sigmund Freud (1856–1939) in *An Outline of Psycho-Analysis* (1938/40): the patient ‘acts it [the past event] before us, as it were, rather than reporting it to us’ (*Standard Edition*, XXIII, pp. 144–207, at p. 176). *See also* **ACTING IN**. 2. A **defence mechanism* in which unconscious emotional conflicts or impulses are dealt with by actions, including **parapraxes*, rather than thought or contemplation. **act out** *vb.*

action *n.* In social psychology and the social sciences generally, any **behaviour* that is characterized by **intentionality* (2) and is therefore subjectively understandable, according to a distinction introduced by the German economist and sociologist Max Weber (1864–1920) in the first chapter of his book *Wirtschaft und Gesellschaft* (Economy and Society), published posthumously in 1922. For example, burping involuntarily at a dinner party is behaviour, whereas apologizing afterwards is action. *See also* **VERSTEHEN**. More generally, the process of doing something, or an instance of something done. [From Latin *actio* action, from *agere* to do or to act + *-ion* indicating a process]

action, drug *See* **DRUG ACTION**.

action potential *n.* The momentary change in the voltage difference
*****ebook converter DEMO Watermarks*****

across the membrane of a ***neuron**, usually triggered by nerve impulses from several other neurons at ***synapses (1)**, characterized by an influx of positively charged sodium ions through the cell membrane, resulting in an impulse being propagated along the neuron's ***axon**, reversing its ***resting potential** of approximately -70 millivolts (mV), the inner surface being negative relative to the outer surface and the membrane more permeable to potassium ions than to sodium ions, and changing it to approximately $+40$ mV, increasing the permeability of the membrane to sodium ions and resulting in the influx of positively charged ions, thereby propagating the potential from the ***axon hillock** down the axon at a speed ranging from about 0.1 to 10 metres per second. Also called a *nerve impulse*. See also ALL-OR-NONE LAW, DEPOLARIZATION, EXCITATORY POSTSYNAPTIC POTENTIAL, INHIBITORY POSTSYNAPTIC POTENTIAL, REFRACTORY PERIOD (2), SALTATION (1), SODIUM PUMP. Compare GRADED POTENTIAL.

action research *n.* A term coined in the 1940s by the German–US psychologist Kurt Lewin (1890–1947) for a form of ***applied research** in which experimental techniques are combined with programmes of social action to bring about desired social changes. See also PARTICIPATORY ACTION RESEARCH. Compare BASIC RESEARCH, DESCRIPTIVE RESEARCH, EVALUATION RESEARCH, EXPLORATORY RESEARCH.

action slip *n.* An unintended action or behavioural sequence, often resulting from failure of attention in ***absent-mindedness**, and generally involving ***open-loop control** of an action that requires ***closed-loop control** for its correct implementation. See also PARAPRAXIS.

activated gene *n.* A gene whose expression has been enhanced by a ***gene activator**.

activating event *n.* In ***rational emotive behaviour therapy (REBT)**, something that is believed to happen, to have happened, or to be about to happen, and that triggers irrational beliefs leading to emotional problems. See also ABC (1).

activator gene *n.* A ***regulator gene** that synthesizes a ***gene activator** capable of binding to a ***gene operator** and enhancing the expression of a
*****ebook converter DEMO Watermarks*****

***structural gene** by increasing the synthesis of its protein product. *Compare* REPRESSOR GENE.

active analysis *n.* A style of ***psychoanalysis** in which the analyst offers frequent ***interpretations** (2). *Compare* PASSIVE ANALYSIS.

active avoidance conditioning *n.* Learning to respond in a way that results in the avoidance of a punishing or aversive stimulus, as when a rat is trained to jump over a barrier whenever a light comes on in order to avoid electric shock that follows shortly after. Also called *active avoidance learning*. *Compare* ESCAPE CONDITIONING, PASSIVE AVOIDANCE CONDITIONING. *See also* AVOIDANCE CONDITIONING.

active imagination *n.* In ***analytical psychology**, a term introduced by Carl Gustav Jung (1875–1961) in the Tavistock lectures, delivered in London in 1935, to denote a process of allowing ***fantasies** (2) to run free, as if dreaming with open eyes. He had expounded the concept (though not the terminology) earlier (*Collected Works*, 6, paragraphs 712–14, 723*n*). *See also* ABAISSEMENT DU NIVEAU MENTAL.

active sleep *n.* Another name for ***REM sleep**.

active technique *n.* In ***psychoanalysis**, a set of technical procedures presented by the Hungarian psychoanalyst Sandor Ferenczi (1873–1933) to the 1920 Psychoanalytic Congress in The Hague, with the approval of Sigmund Freud (1856–1939), in which the analyst is encouraged to go beyond ***interpretation** (2) and on occasions to issue instructions and prohibitions to patients.

active transport *n.* The movement of particles up an electrochemical potential gradient, such as the movement of sodium ions across a ***cell membrane** from a region where they are in a low concentration to a region of high concentration. This process requires metabolic energy and is assisted by ***enzymes**, often called pumps when they serve this function. *See* CARRIER PROTEIN, IONOPHORE, SODIUM PUMP.

active vocabulary *n.* The set of words that a person uses in speech and writing. *Compare* [PASSIVE VOCABULARY](#).

activity monitor *See* [ACTIGRAPHY](#).

activity wheel *n.* A drum, suspended horizontally and free to rotate, into which an animal may be placed to measure arousal or activity.

actomyosin *n.* A protein synthesized from [*actin](#) and [*myosin](#) in skeletal muscles that, when stimulated, shrinks and causes muscle contraction, the energy being supplied by [*ATP](#).

actor–observer difference *n.* An [*attributional bias](#) tending to cause people to attribute their own actions to situational factors and observers to attribute those same actions to internal personality dispositions. It is explained partly by the greater amount of information available to actors than observers, partly by differences between actors and observers in perceptual focus, and partly by motivational factors that might induce actors to emphasize external causes and observers internal causes. The phenomenon was first reported in 1972 by the US psychologists Edward Ellsworth Jones (1926–93) and Richard E. Nisbett (born 1941). *See also* [ATTRIBUTION](#), [ATTRIBUTION THEORY](#).

act psychology *n.* A doctrine, first propounded by the German psychologist and philosopher Franz Brentano (1838–1917), according to which psychology should study not merely the elements of consciousness as in [*structuralism \(2\)](#) but also mental acts and the way they are directed towards entities other than themselves. Brentano published his ideas in 1874 in his book *Psychologie vom empirischen Standpunkt* (Psychology from an Empirical Standpoint), and was an important forerunner of [*phenomenology](#). *See also* [INTENTIONALITY \(1\)](#). *Compare* [CONTENT PSYCHOLOGY](#).

actualization *n.* The realization of latent potential. *Compare* [SELF-ACTUALIZATION](#). **actualize** *vb.* [From Latin *actualis* of or relating to acts, from *actus* an act + Greek *-izein* cause to become or to resemble]

actual neurosis *n.* In **psychoanalysis*, a form of **neurosis* that does not have its origin in infantile conflicts but in the present, the **symptoms* resulting directly from the absence or inadequacy of sexual satisfaction and not appearing as symbolic forms of expression. Sigmund Freud (1856–1939), who introduced the concept in 1898 in an article on ‘Sexuality in the Aetiology of the Neuroses’ (*Standard Edition*, III, pp. 263–85, at p. 279), originally identified anxiety neurosis (**generalized anxiety disorder*) and **neurasthenia* as the actual neuroses, and he later added **hypochondria*. Compare *PSYCHONEUROSIS*. [From German *aktual* present-day]

actuarial prediction *n.* Any prediction of behaviour based on purely statistical information and not subjective judgement. It is characterized by mechanical processing of information, leading to probabilities representing empirically determined relative frequencies, as when psychometric test scores are compared with tables of **normative (2)* data to make a prediction that the probability is p that an individual will succeed on a training programme, reoffend when released from prison, develop a certain mental disorder, or commit suicide, the prediction being based on the relative frequencies of such outcomes among people with similar test scores. It was first systematically analysed and compared with **clinical prediction* by the US psychologist Paul Everett Meehl (1920–2003) in his book *Clinical Versus Statistical Prediction: A Theoretical Analysis and a Review of the Evidence* (1954). Meehl was the first to point out that it is almost always more accurate than clinical prediction. Also called *statistical prediction*. See also *BOOTSTRAPPING*. [From Latin *actuarius* a keeper of records, from *acta* chronicles or records]

actus reus *n.* A legal term denoting a criminal act in contradistinction to a criminal intent and knowledge of the wrongness of the criminal act, which in turn is called **mens rea*. For a defendant to be convicted of a crime, both an actus reus and a mens rea must normally be proved. [From Latin *actus* act + *reus* guilty]

acuity *n.* Keeness or sharpness, especially of sensation. See also *ABSOLUTE ACUITY*, *ABSOLUTE THRESHOLD*, *ACUITY GRATING*, *AUDIOGRAM*, *DIFFERENCE THRESHOLD*, *DIFFERENTIAL ACUITY*, *DYNAMIC VISUAL ACUITY*, *KÖNIG BARS*, *LANDOLT CIRCLE*, *MINIMUM AUDIBLE ANGLE*, *MINIMUM AUDIBLE FIELD*, *MINIMUM SEPARABLE*, *MINIMUM VISIBLE*, *RECEIVER OPERATING CHARACTERISTIC*, *SIGNAL DETECTION THEORY*,
*****ebook converter DEMO Watermarks*****

SNELLEN FRACTION, STEREOSCOPIC ACUITY, TWO-POINT THRESHOLD, VERNIER ACUITY, VISUAL ACUITY. [From Latin *acutus* sharp, from *acus* a needle]

acuity grating *n.* A device for measuring **visual acuity* by displaying a light background with a set of evenly spaced dark bars whose width and distance apart can be reduced simultaneously until the **minimum separable* is reached. *See also* GRATING, KÖNIG BARS, VERNIER ACUITY.

acupuncture *n.* A technique of Chinese origin for inducing anaesthesia or treating various disorders by inserting needles into the skin at carefully specified points to stimulate nerve impulses. Also called *stylostixis*. *See also* GATE-CONTROL THEORY. [From Latin *acus* a needle + English *puncture*]

acute *adj.* Sharp or pointed; penetrating or piercing; important or critical; of or relating to sensation or perception that is finely discriminating; of or relating to a disorder or symptom that begins abruptly and subsides quickly. *Compare* CHRONIC. [From Latin *acutus* sharpened, from *acuere* to sharpen]

acute confusional state *n.* 1. A form of **delirium* characterized by **amnesia*, **clouding of consciousness*, and problems of orientation. 2. An **acute stress disorder*, especially during adolescence, resulting from a sudden change in circumstances or the environment.

acute pain *n.* Severe short-term **pain* often following injury, surgery, dental problems, or heart attack (myocardial infarction). *Compare* CHRONIC PAIN.

acute stress disorder *n.* In **DSM-5*, a **trauma- and stressor-related disorder* following exposure to a traumatic event, with a similar pattern of symptoms to **post-traumatic stress disorder*, including **dissociation* (such as **dissociative amnesia*, **depersonalization*, **derealization*), but occurring within four weeks of the traumatic event. If the symptoms persist beyond four weeks, then a diagnosis of post-traumatic stress disorder may be considered. To meet the diagnostic criteria of DSM-5, the traumatic event must be persistently re-experienced either in recurrent images, thoughts, dreams, illusions, flashback episodes, or sensations of reliving the experience; or as distress when reminded of the event. There must also be evidence of marked
*****ebook converter DEMO Watermarks*****

avoidance of reminders of the trauma, and the disturbance must have persisted for at least two days. *See also* [TRAUMA- AND STRESSOR-RELATED DISORDERS](#). **ASD** *abbrev.* [From Latin *acutus* sharpened, from *acuere* to sharpen, from *acus* a needle]

acute stress reaction *n.* A form of [*acute stress disorder](#) in which exposure to the [*psychosocial stressor](#) is followed immediately (within one hour) by the onset of the symptoms, which begin to subside after no more than eight hours.

Adam *n.* A common street name of [*ecstasy \(2\)](#). [A near-anagram of [*MDMA](#)]

adaptation *n.* **1.** In the theory of [*evolution](#), a feature of an organism's structure, physiology, or behaviour that solves a problem in its life or helps it to pass its genes on to the next generation. **2.** In physiology and sensation, a temporary reduction in the responsiveness of a [*sensory receptor](#) other than a [*pain receptor](#) as a result of repeated or continuous stimulation. Also called *sensory adaptation*. *See also* [AUDITORY ADAPTATION](#), [CHROMATIC ADAPTATION](#), [CROSS-ADAPTATION](#), [DARK ADAPTATION](#), [LIGHT ADAPTATION](#), [ODOUR ADAPTATION](#), [PRISM ADAPTATION](#), [THERMAL ADAPTATION](#), [TRANSIENT TRITANOPIA](#), [VISUAL ADAPTATION](#). **3.** In the writings of the Swiss psychologist Jean Piaget (1896–1980), the modification of an organism's psychological structures or processes in response to environmental demands, comprising [*accommodation \(2\)](#) and [*assimilation \(2\)](#). *See also* [EQUILIBRATION](#). **4.** A general term for any process whereby behaviour or subjective experience alters to fit in with a changed environment or circumstances or in response to social pressure. Often mistakenly written or pronounced as *adaption*. *See also* [ALLOPLASTIC](#), [AUTOPLASTIC](#). **adaptive** *adj.* [From Latin *adaptare* to adjust or to fit, from *ad* to + *aptus* fitting + *-ion* indicating an action, process, or state]

adaptation level *n.* A hypothesized neutral position or region in a bipolar stimulus dimension, functioning as a reference point for subjective judgements, stimuli above the adaptation level being judged to have a particular [*attribute](#) (such as large, heavy, or loud), stimuli below it being judged to have the opposite or complementary attribute (small, light, or soft), and stimuli in its vicinity being judged to be neutral with respect to the

*****ebook converter DEMO Watermarks*****

attribute. *See also* [ADAPTATION-LEVEL THEORY](#). **AL** *abbrev.*

adaptation-level theory *n.* A theory proposed by the US psychologist Harry Helson (1898–1977) in an article in the *American Journal of Psychology* in 1947, according to which the [*adaptation level](#) is determined for a class of stimuli by members of the class already sampled or attended to, by stimuli having a background or contextual influence, and by recollections of past judgements of similar stimuli, the adaptation level being the logarithm of the mean of the relevant stimuli, weighted according to their effectiveness in terms of nearness, recency, salience, and so on. According to the theory, subjective judgements are necessarily relative to the prevailing norm or adaptation level, so that a 4 ounce (113 gram) pen is heavy, but a baseball bat must weigh over 40 ounces (1.13 kilograms) to be judged heavy. The phenomenon is a type of [*context effect](#). Also called *AL theory*. *See also* [HEDONIC TREADMILL](#), [PROSPECT THEORY](#). *Compare* [ASSIMILATION–CONTRAST THEORY](#).

adaptation syndrome *See* [GENERAL ADAPTATION SYNDROME](#).

adaptive control of thought *See* [ACT*](#).

adaptive radiation *n.* The evolutionary process whereby species that are descended from a common ancestor diverge to exploit different [*ecological niches](#).

adaptive testing *n.* A sequential testing procedure in which successive test items are selected for administration to a respondent on the basis of that person's responses to earlier items.

adaptor *n.* Something or someone that adapts or adjusts to a changed situation or helps a person or other organism to adjust, especially (in social psychology) a [*gesture \(1\)](#), usually involving self-touching, that helps one to cope with an emotional reaction, typical examples being self-grooming behaviour, covering the eyes for fear, or putting a hand over the mouth for surprise. *See also* [DISPLACEMENT ACTIVITY](#), [KINESICS](#).

addiction *n.* A state of dependency on a chemical substance, especially on a drug such as **alcohol*, **nicotine*, or **caffeine*, or a narcotic such as **morphine* or **heroin*, characterized by a strong physiological and/or psychological need and a compulsive inability to resist taking the drug despite anticipation of probable adverse consequences, **withdrawal*, if there is an abrupt deprivation of the substance, and in some cases drug **tolerance* (3). *See also* [DEPENDENCE \(2\)](#), [INCENTIVE–SENSITIZATION THEORY](#), [NUCLEUS ACCUMBENS](#), [SUBSTANCE DEPENDENCE](#), [SUBSTANCE-RELATED AND ADDICTIVE DISORDERS](#). **addictive** *adj.* [From Latin *addictus* given over, from *addicere* to assign to, from *ad* to + *dicere* to say + *-ion* indicating an action, process, or state]

additive alleles *n.* A pair of **alleles* combining to produce a **heterozygote* that is phenotypically the average of the two corresponding **homozygotes*.

additive colour mixture *n.* A colour formed by the combination of **additive primaries*, or the process of forming such a colour. US *additive color mixture*. *See also* [COLOUR MIXING](#). *Compare* [SUBTRACTIVE COLOUR MIXTURE](#).

additive model *n.* Any statistical or mathematical model in which an effect can be expressed as a weighted sum of **independent variables*, so that the portion of the effect contributed by one independent variable does not depend on the value of any other independent variable. A classic example of a linear additive model is **multiple regression*. *See also* [ADDITIVITY](#). *Compare* [MULTIPLICATIVE MODEL](#).

additive primary *n.* Any of the shades of red, green, or blue that can be mixed to form white and to match all other **spectral colours* and also certain **non-spectral colours* such as purple. Primary red, green, and blue are often defined as light with wavelengths of 670, 535, and 470 nanometres respectively, but any three shades may be used, provided that none is equivalent to a combination of the other two. Also called a *primary colour*, though that term is ambiguous. *See also* [CIE COLOUR SYSTEM](#), [CHROMATICITY](#), [COLOUR EQUATION](#), [GRASSMANN'S LAWS \(PERCEPTION\)](#), [PRIMARY COLOUR \(1\)](#), [RAYLEIGH EQUATION](#), [TRISTIMULUS VALUES](#). *Compare* [PSYCHOLOGICAL PRIMARY](#),
*****ebook converter DEMO Watermarks*****

SECONDARY COLOUR, SUBTRACTIVE PRIMARY.

additivity *n.* In * [analysis of variance \(ANOVA\)](#), the property of having only *[main effects](#) and no *[interaction effects](#) and thus being represented by an *[additive model](#) without multiplicative terms. In *[axiomatic measurement theory](#), a property of a quantitative *[attribute](#) such that for any two levels of the attribute, a third always exists such that the greatest of the three levels is the sum of the other two. The absence of this property is called *non-additivity*. **additive** *adj.*

addressed phonology *n.* The sound of a word or verbal expression as it is stored in memory. *Compare* [ASSEMBLED PHONOLOGY](#).

adelphogamy *n.* 1. A form of *[polyandry](#) in which two or more brothers share the same wife or wives. 2. Marriage between brothers and sisters, as occurred in royal families in ancient Egypt, or mating between brothers and sisters, as occurs in some ants. [From Greek *adelphos* a brother + *gamos* marriage]

adenine *n.* One of the constituent *[bases \(1\)](#) of ATP and the nucleic acids, having an affinity for thymine in DNA and uracil in RNA. **A** *abbrev.* [From Greek *aden* a gland + *-ine* indicating an organic compound]

adenohypophysis *n.* The anterior lobe of the hypophysis (pituitary gland), usually called the *[anterior pituitary](#). *Compare* [NEUROHYPOPHYSIS](#). [From Greek *aden* a gland + *hypophysis* an attachment underneath, from *hypo* under + *phyein* to grow]

adenosine *n.* A compound of *[adenine](#) and *[ribose](#), present in all cells in a combining form and functioning in the nervous system as a *[neurotransmitter](#). *See also* [ADP](#), [AMP](#), [ATP](#). [A blend of *adenine* and *ribose* + Greek *-ine* indicating an organic compound]

adenosine diphosphate *See* [ADP](#).

adenosine monophosphate *See* [AMP](#).

adenosine triphosphate See [ATP](#).

adenylate cyclase *n.* An enzyme in a cell membrane that responds to a hormone by initiating the conversion of [*ATP](#) to [*cyclic AMP](#) as a [*second messenger](#). [From *aden-yl(ic acid)* + *-ate* indicating a salt or ester of an acid + *cycl(ic AMP)* + Greek *-ase* denoting an enzyme, from *diastasis* separation]

adenylic acid *n.* Another name for [*AMP](#).

adequate stimulus *n.* The type of [*stimulus \(1\)](#) to which a specified sensory receptor is adapted to respond, such as visible light for the photoreceptors or audible sound for the auditory receptors in the organ of Corti. Compare [INADEQUATE STIMULUS](#).

adiadochokinesia *n.* An inability, sometimes classified as a form of [*apraxia](#), to perform rapid rhythmic movements such as finger tapping, often indicative of damage to the [*cerebellum](#). Compare [DYSADIADOCHOKINESIA](#). [From Greek *a-* without + *diadochos* a successor + *kinesis* movement + *-ia* indicating a condition or quality]

adipose *adj.* Of, relating to, or consisting of fat. [From Latin *adiposus* fatty, from *adeps* fat]

adipose tissue *n.* Structures in a human or animal body composed of fat cells.

adipsia *n.* Absence of thirst or abstention from drinking. Compare [POLYDIPSIA](#). [From Greek *a-* without + *dipsa* thirst + *-ia* indicating a condition or quality]

adjacency pair *n.* Any sequence of a single stimulus utterance followed by a single response utterance, as in a question and answer.

Adjective Check List *n.* In psychometrics, any list of adjectives that can be marked as applicable or not applicable to oneself, to one's ideal self, to another person, or to some other entity or concept. When written with initial

uppercase letters, the term denotes more specifically a measure consisting of a list of 300 adjectives, from *absent-minded* to *zany*, selected by the US psychologist Harrison G. Gough (1921–2014) and introduced as a commercial test in 1952. The test yields 24 scores, including measures of personal adjustment, self-confidence, self-control, lability, counselling readiness, some **response styles*, and 15 personality needs, such as achievement, dominance, and endurance. Gough discussed its psychometric properties in an article in the journal *Psychological Reports* in 1960. Also called the *Gough Adjective Check List* . **ACL** abbrev.

adjustment *n.* Adaptation, (in psychology) especially behavioural adaptation to a particular environment or set of circumstances.

adjustment disorders *n.* A class of **trauma- and stressor-related disorders* in **DSM-5*, the essential feature of which is the development of clinically significant emotional or behavioural symptoms as a reaction to an identifiable **psychosocial stressor* (such as termination of a romantic relationship, marked business problems, marital difficulties, a natural disaster, failing to attain an important goal, or becoming unemployed), involving greater distress than would normally be expected from the stressor and significant impairment in social, occupational, or academic functioning. *See also* CULTURE SHOCK, GRIEF REACTION, TRAUMA- AND STRESSOR-RELATED DISORDERS.

adjustment method *n.* Another name for the **method of average error*.

Adlerian *adj.* Of or relating to the school of **psychoanalysis*, called **individual psychology*, founded in 1911 by the Austrian psychiatrist Alfred Adler (1870–1937). *See* COMPENSATION, DIANA COMPLEX, FICTIONAL FINALISM, GUIDING FICTION, INFERIORITY COMPLEX, LIFE LIE, MASCULINE PROTEST, NEUROTIC CHARACTER, WILL TO POWER.

admissible alternative/strategy *n.* In decision theory and game theory, an alternative or **strategy* (2) that is not dominated by a **dominant alternative/strategy*.

adolescence *n.* The period of development from the onset of **puberty* to
*****ebook converter DEMO Watermarks*****

the attainment of adulthood, beginning with the appearance of ***secondary sexual characteristics**, usually between 11 and 13 years of age, continuing through the teenage years, and terminating legally at the age of majority, usually 18 years of age. [From Latin *adolescentia* adolescence, from *adolescere* to grow up, from *ad* to + *alescere* to grow, from *alere* to feed or nourish]

adolescent *n.* 1. A person in a period of ***adolescence**. *adj.* 2. Of, relating to, or peculiar to ***adolescence**, or in a state or period of adolescence.

Adonis complex *n.* Anxiety and insecurity experienced by boys and men about their appearance or ***body images**. In extreme cases, the complex can meet the criteria of ***body dysmorphic disorder**. The term was introduced in 2000 by the US psychiatrist Harrison G. Pope, Jr (born 1947) in the title of his book, *The Adonis Complex: The Secret Crisis of Male Body Obsession*. See also **MUSCLE DYSMORPHIA**, **SOMATIC DELUSION**. [Named after Adonis in Greek mythology, an incomparably handsome young man, from Phoenician *adoni* my lord]

adoption study *n.* In behaviour genetics, an investigation of the correlations between adopted children and either their natural parents or their adoptive parents (or both) on a measurable ***trait** in order to estimate the ***heritability** of that trait, the assumption being that the higher the heritability of the trait, the greater will be the correlation with natural parents, and the lower the heritability the greater will be the correlation with adoptive parents. Since the late 1970s some adoption studies have examined correlations between natural and adoptive siblings within the same households, the assumption being that if the heritability of the trait is high, then the natural children's scores will correlate more highly with those of other natural children, who share half their genes, than with the scores of the adoptive children to whom they are not genetically related, whereas if heritability is low, the reverse should hold. Compare **KINSHIP STUDY**, **TWIN STUDY**.

ADP *abbrev.* Adenosine diphosphate, a (nucleotide) compound formed when stored energy is released from ***ATP** by ***ATPase** in the performance of muscular contractions or the transmission of nerve impulses.

adrenal cortex *n.* The outermost layer of the ***adrenal gland**, which releases ***corticosteroid** hormones such as ***cortisol** (hydrocortisone) into the bloodstream in response to ***stress** (1). *See also* ADRENOCORTICOTROPHIC HORMONE (ACTH), DHEA, ZONA FASCICULATA, ZONA GLOMERULOSA, ZONA RETICULARIS. [From the Latin *ad* at + *renes* kidneys + *cortex* bark or outer layer]

adrenal gland *n.* An ***endocrine gland** situated just above each kidney, secreting ***adrenalin** (epinephrine), ***noradrenalin** (norepinephrine), and other ***hormones** into the bloodstream. *See also* ADRENAL CORTEX, ADRENAL MEDULLA.

adrenalin *n.* A ***biogenic amine** and ***hormone** belonging to the group of ***catecholamines**, also functioning as a ***neurotransmitter**, synthesized from tyrosine in the presence of the cofactor vitamin C and secreted by the ***chromaffin cells** of the ***adrenal medulla** and by nerve fibres in the ***sympathetic nervous system**, causing an increase in blood pressure, accelerated heart rate, deepened respiration, sweating, dilation of the pupils, release of sugar from stores in the liver, diversion of blood from the intestines to the skeletal muscles, closure of the sphincter of the bladder leading to retention of urine, and other physiological reactions typical of ***fear**, ***anxiety**, or ***stress** (1). Formula: $(\text{HO})_2\text{C}_6\text{H}_3\text{CH}(\text{OH})\text{CH}_2\text{NHCH}_3$. Also spelt *adrenaline*. Also called *epinephrine*, especially in the US. *See also* ADRENERGIC, FIGHT-OR-FLIGHT RESPONSE, SYMPATHIN. *Compare* NORADRENALIN. [From the Latin *ad* at + *renes* kidneys + *-in(a)* indicating an organic or chemical substance]

adrenalin rush *n.* A sudden increase in competitive drive displayed by an athlete or sports competitor, supposedly associated with the release of ***adrenalin** into the bloodstream. This expression is based on a misunderstanding of the effects of adrenalin and is avoided in careful usage: *noradrenalin rush* or even *serotonin rush* would be marginally more apt.

adrenal medulla *n.* The inner part of the ***adrenal gland**, containing ***chromaffin cells** that release ***adrenalin** (epinephrine) and ***noradrenalin** (norepinephrine) into the bloodstream in response to fear or stress.

adrenergic *adj.* Releasing ***adrenalin** (epinephrine) or a similar substance; also activated by or responding to adrenalin or a similar substance, this extended usage being widespread but consistently rejected by the English physiologist Sir Henry Hallet Dale (1875–1968), who coined the suffix *-ergic*, and by many other authorities. *Compare* **CHOLINERGIC**, **DOPAMINERGIC**, **GABAERGIC**, **NORADRENERGIC**, **SEROTONERGIC**. [From *adrenalin* + Greek *ergon* work + *-ikos* of, relating to, or resembling]

adrenergic receptor *n.* Either of two types of ***neuroreceptor** for ***adrenalin** (epinephrine) and ***noradrenalin** (norepinephrine) situated on a neuron, muscle, or gland. Alpha-adrenergic (or α -adrenergic) receptors, which are found in smooth muscles that line blood vessels, can raise blood pressure by constricting them, and beta-adrenergic (or β -adrenergic) receptors, which are found in membranes surrounding the heart muscle and the smooth muscles of the lungs and intestines, function by activating slightly different ***second messenger** pathways. In most cases, alpha receptors are associated with excitation of the smooth muscles, and beta receptors with inhibition, but the muscles of the heart have beta receptors that are excitatory and some of the alpha receptors in the intestines are inhibitory.

adrenocorticotrophic hormone *n.* A ***hormone** secreted by the ***anterior pituitary** that stimulates the ***adrenal cortex** to secrete ***steroid hormones** such as ***cortisol** (hydrocortisone) into the bloodstream, especially in response to ***stress (1)** or injury. Also spelt *adrenocorticotropic hormone*. Also called *adrenocorticotrop (h)in* or *corticotrop (h)in*. *See also* **DEXAMETHASONE**, **POMC**. **ACTH** *abbrev.*

adultomorphic fallacy *n.* The error of attributing to infants and children the thoughts and feelings of adults. [From *adult* + Greek *morphe* a form or shape + *-ikos* of, relating to, or resembling]

advantage by illness *n.* Another name for ***secondary gain**.

adverse (drug) reaction *n.* Another name for a ***side-effect**.

adynamia *n.* Flaccid paralysis resulting from muscular weakness.

adynamic *adj.* [From Greek *a-* without + *dynamis* strength + *-ia* indicating a condition or quality]

aerial perspective *n.* One of the monocular cues of visual ***depth perception**, a form of ***perspective** closely related to ***linear perspective** and ***texture gradient**, great distances being suggested by a haziness of outline and surface detail (***sfumato**) coupled with diminution of colour intensity or a bluish haze, effects that are caused by the scattering of light by dust and vapour particles in the atmosphere. Also called *atmosphere perspective*. See also **AUBERT–FÖRSTER PHENOMENON**. [From Greek *aerios* of or relating to air, from *aer* air]

aerobic *adj.* Of or relating to the generation of energy by a form of metabolism requiring oxygen or air. See also **GLYCOLYSIS**, **KREBS CYCLE**. Compare **ANAEROBIC**. [From Greek *aer* air + *bios* life + *-ikos* of, relating to, or resembling]

aerophagia *n.* Spasmodic swallowing of air, a nervous habit resulting in stomach pains and belching. [From Greek *aer* air + *phagein* to consume + *-ia* indicating a condition or quality]

aesthesiometer *n.* A device for measuring sensory discrimination, especially a device for determining the ***two-point threshold**. US *esthesiometer*. [From Greek *aisthesis* sensation, from *aisthanesthai* to feel + *metron* a measure]

aetiology *n.* The cause of a particular disorder, or the study of the causes of disorders in general. US *etiology*. **aetiological** *adj.* US *etiological*. [From Greek *aitia* cause + *logos* word, discourse, or reason]

affect *n.* Emotion or subjectively experienced feeling, such as happiness, sadness, fear, or anger. *Blunted affect* is emotional expression that is significantly reduced in intensity; *flat affect* is absence or near absence of emotional expression and is also called *flattening of affect* or *affective flattening*; *inappropriate affect* or *incongruity of affect* is a mismatch between emotional expression and what one is speaking or thinking about; *labile affect* is instability or fluctuation of emotions; and *restricted affect* or *****ebook converter DEMO Watermarks*****

constricted affect is diminution in the range of emotional expression. See also EMOTION, PRIMARY EMOTIONS. Compare MOOD. **affective** *adj.* [From Latin *affectus* past participle of *afficere* to influence, from *ad* to + *facere* to do]

affect display *n.* A form of *non-verbal communication in which an *emotion or *affect is communicated, chiefly in humans by a *facial expression. See also DISPLAY RULE, EXPRESSIVE BEHAVIOUR, KINESICS, PRIMARY EMOTIONS.

affectional bond *n.* The emotional tie between an infant and its mother or carer, forming the basis of the relationship with which *attachment theory is concerned.

affective disorder *n.* Another name for a *mood disorder.

affective flattening *n.* Reduced or absent expression of *affect, associated with certain mental disorders, notably some forms of *schizophrenia, indicated by unchanging and unresponsive facial expression, *aprosodia, avoidance of eye contact, and diminished body language.

afferent *adj.* Towards the centre; of or relating to a nerve impulse from a *sense organ to the *central nervous system, or to a neuron or nerve that transmits such impulses. See also SENSORY NERVE. Compare EFFERENT. [From Latin *afferre* to carry to, from *ad* to + *ferre* to carry]

affiliation need *n.* Another name for *need for affiliation.

affirming the antecedent *n.* In *conditional reasoning, arguing validly from a hypothetical proposition of the form *If p then q* that, because *p* therefore *q*. For example, given the proposition *If the burglars entered by the front door, then they forced the lock*, it is valid to deduce from the fact that the burglars entered by the front door that they must have forced the lock. Also called *modus ponens*. Compare AFFIRMING THE CONSEQUENT, DENYING THE ANTECEDENT, DENYING THE CONSEQUENT.

affirming the consequent *n.* In *conditional reasoning, arguing

invalidly from a hypothetical proposition of the form *If p then q* that, because *q* therefore *p*. For example, given the proposition *If the burglars entered by the front door, then they forced the lock*, it is invalid to conclude from the fact that the burglars forced the lock that they must have entered by the front door. Compare [AFFIRMING THE ANTECEDENT](#), [DENYING THE ANTECEDENT](#), [DENYING THE CONSEQUENT](#).

affordance *n.* A term coined in 1977 by the US psychologist James Jerome Gibson (1904–79), to refer to a resource or support provided by the environment to an organism, furnishing or affording the organism with an opportunity to act in a particular way. Examples of affordances include a surface that affords physical support, an edible substance that affords an opportunity to eat, and the positioning of an outstretched hand that affords the prospect of shaking hands. See also [DIRECT PERCEPTION](#).

affricate *n.* A complex [*consonant](#) speech sound the [*articulation](#) of which involves a [*plosive](#) followed immediately by a [*fricative](#) at the same place of articulation. English has two affricate [*phonemes](#), the first and last sounds in *church*, which is the unvoiced affricate, and the first and last phonemes in *judge*, which is the voiced affricate. See also [MANNER OF ARTICULATION](#). [From Latin *affricare* to rub against, from *fricare* to rub]

aftereffect *n.* Any phenomenon occurring some time after its cause, especially (in psychology) a delayed sensory or perceptual experience. See also [AFTERIMAGE](#), [AUBERT EFFECT](#), [CONTINGENT AFTEREFFECT](#), [FIGURAL AFTEREFFECT](#), [MCCOLLOUGH EFFECT](#), [MOTION AFTEREFFECT](#), [POSTURAL AFTEREFFECT](#), [SPIRAL AFTEREFFECT](#), [SUCCESSIVE CONTRAST](#), [TILT AFTEREFFECT](#), [VISUAL AFTEREFFECT](#), [WATERFALL ILLUSION](#).

afterimage *n.* A sensory experience, especially a visual image, that persists after the stimulus has ceased, also called a *primary afterimage*, or one that appears after a primary afterimage. The first in the sequence of visual afterimages following brief exposure to a bright stimulus is called a [*Hering image](#) and is normally a [*positive afterimage](#), dark areas of the original image appearing dark, and light areas appearing light, usually appearing in the same colours as the original stimulus but sometimes colourless, and persisting for only a fraction of a second. The subsequent

*****ebook converter DEMO Watermarks*****

***Purkinje image** is a ***complementary afterimage**, colours of the original stimulus appearing in approximate complementary colours in the image, and it is more persistent than the Hering image but also tends to disappear if the gaze is shifted, though it can often be briefly restored by blinking. The third afterimage is positive and is called a ***Hess image**. These effects can be demonstrated by adapting one's eyes to darkness for at least 15 minutes and then setting off a camera's electronic flash, which for safety reasons should not be looked at directly with dark-adapted eyes, or by briefly switching on a bright light. *See also* **AFTERSENSATION**, **AUBERT EFFECT**, **BIDWELL'S GHOST**, **EMMERT'S LAW**, **FLIGHT OF COLOURS**, **ICONIC STORE**, **McCOLLOUGH EFFECT**, **VISUAL ILLUSION**. *Compare* **EIDETIC IMAGE**.

aftersensation *n.* Any ***sensation** persisting after the cessation of the ***stimulus** (1, 3), especially an ***afterimage** or an ***aftertaste**.

aftertaste *n.* A sensation of ***taste** or ***flavour** that lingers after a sapid (tastable) food or drink has been in the mouth. The term is also used metaphorically for any lingering impression, especially a nasty one.

agape *n.* Brotherly or Christian ***love**. [From Greek *agape* brotherly love]

agapic love *n.* A secondary type of brotherly love that is altruistic and selfless and is a combination of ***erotic love** and ***storgic love**. *Compare* **LUDIC LOVE**, **MANIC LOVE**, **PRAGMATIC LOVE**.

age-equivalent score *n.* A measure of a person's ability, skill, or knowledge, expressed in terms of the age at which the average person attains that level of performance. Also called an *age score*. *Compare* **GRADE-EQUIVALENT SCORE**.

ageing male syndrome *n.* Another name for ***irritable male syndrome**. US *aging*. **AMS** *abbrev.*

ageism *n.* The belief in the intrinsic superiority of people within a certain age range, often accompanied by ***prejudice**, ***stereotyping**, and discrimination on the basis of age, usually against old people. Also spelt

agism , especially in the US. Compare [ABLEISM](#), [ETHNOCENTRISM](#), [FATTISM](#), [HETEROSEXISM](#), [RACISM](#), [SEXISM](#), [SPECIESISM](#). **ageist** or **agist** *n.* 1. One who practises or advocates ageism. *adj.* 2. Of or relating to ageism. [Coined in 1969 by the US gerontologist Robert N(eil) Butler (1927–2010) from *age* on the model of *racism*]

agenesis of the corpus callosum *n.* A rare [*neurological](#) disorder, easily diagnosed by [*brain imaging](#), with reported incidence somewhere between 0.5 and 70 in 10,000 births, in which the [*corpus callosum](#) is either partially or entirely absent at birth. In the absence of other abnormalities, the associated [*disconnection syndrome](#) may be mild, but when other brain abnormalities are present, the condition may be accompanied by [*mental retardation](#), [*seizures](#), [*spasms](#), and [*hydrocephalus](#). The [*savant](#) Kim Peek (1951–2009), played by Dustin Hoffman (born 1937) in the 1988 film *Rain Man*, had agenesis of the corpus callosum, together with other brain disorders. **AgCC** or **ACC** *abbrev.* [From Greek *a-* without + *genesis* birth or origin + Latin *corpus* a body + *callosus* callous]

age of acquisition *n.* The age at which something is first learned. The *age of acquisition effect* is the tendency for words and other items of information learned early in life to be better retained than those learned later. **AoA** *abbrev.*

age regression *n.* The adoption of a pattern of behaviour characteristic of an earlier stage of development, observed occasionally in certain forms of mental disorder. In *hypnotic age regression* this occurs as a direct response to suggestions from the hypnotist. [From *age* + Latin *regressus* a retreat, from *regradi* to go back, from *re-* again + *gradi* to go + *-ion* indicating an action, process, or state]

age-related cognitive decline *n.* Diminution in cognitive functions occurring naturally as part of the ageing process. See also [AGE-RELATED MEMORY IMPAIRMENT](#).

age-related memory impairment *n.* A form of age-related cognitive decline, the predominant symptom of which is a decline in memory occurring naturally as part of the ageing process.

*****ebook converter DEMO Watermarks*****

age scale *n.* In psychometrics, any measuring scale that yields **age-equivalent* scores.

age score *n.* In psychometrics, another name for an **age-equivalent* score.

ageusia *n.* Absence of the sense of taste. *Compare* CACOGEUSIA, DYSGEUSIA, HYPERGEUSIA, HYPOGEUSIA, PARAGEUSIA, TASTE BLINDNESS. **ageusic** *adj.* [From Greek *a-* without + *geusis* taste + *-ia* indicating a condition or quality]

agglomerative hierarchical clustering *n.* In statistics, any technique of **cluster analysis* in which each individual or case starts out as a cluster, and at each step of the analysis clusters are combined until all cases belong to a single cluster. Once formed, a cluster cannot be split but can be combined with other clusters.

agglutinative language *n.* A language such as Finnish, Japanese, Turkish, or Swahili in which grammatical relationships are indicated by building up words out of long sequences of units, each of which indicates a particular grammatical meaning. Also called an *agglutinating language* . *Compare* INFLECTING LANGUAGE, ISOLATING LANGUAGE. [From Latin *agglutinare* to glue together, from *ad* to + *gluten* glue]

aggression *n.* Behaviour whose primary or sole purpose or function is to injure another person or organism, whether physically or psychologically. *See also* DISPLACED AGGRESSION, ESCALATED FIGHTING, FRUSTRATION-AGGRESSION HYPOTHESIS, HOT SAUCE TASK, IRRITABLE MALE SYNDROME, POINT SUBTRACTION AGGRESSION PARADIGM, QUIET-BITING ATTACK, ROAD RAGE, ROID RAGE, ROSENZWEIG PICTURE-FRUSTRATION STUDY, SHAM RAGE, SUBLIMATION, TAYLOR AGGRESSION PARADIGM, TESTOSTERONE, THANATOS, TYPE A, VENTROMEDIAL HYPOTHALAMUS. [From Latin *aggre**di*, *aggressus* to attack, from *ad* to + *gradi* to step + *-ion* indicating an action, process, or state]

aggression, displaced *See* DISPLACED AGGRESSION.

aggression, instinctual *See* THANATOS.

agitated depression *n.* A form of *[depression](#) accompanied by *[psychomotor agitation](#).

agitation *See* [PSYCHOMOTOR AGITATION](#).

agnosia *n.* A term introduced in 1891 by the Austrian neurologist and founder of psychoanalysis Sigmund Freud (1856–1939), nowadays denoting an *[impairment](#) of ability to recognize or identify familiar objects, entities, or people, usually as a result of a *[neurological](#) deficit or disorder. The major forms are: *ahylognosia* (impaired ability to discriminate by touch such physical properties of objects as their weight, density, or texture; *compare* [AMORPHOGNOSIA](#), [TACTILE AGNOSIA](#)); *amorphognosia* (impaired ability to recognize by touch the size and shape of objects; *compare* [AHYLOGNOSIA](#), [TACTILE AGNOSIA](#)); *anosognosia* (impaired ability or refusal to recognize that one has a sensory or motor impairment or, in some cases following a massive *[stroke](#) and *[hemiplegia](#), even to recognize part of one's body as one's own); *apperceptive agnosia* (impaired ability to identify and discriminate between objects, usually associated with right hemisphere brain damage, also called *visual shape agnosia* , in contrast to associative agnosia); *asomatagnosia* (impaired ability to recognize one's own body or part of it; *compare* [ANOSOGNOSIA](#), [AUTOTOPAGNOSIA](#)); *associative agnosia* (impaired ability to interpret or give meaning to objects, as in failing to understand that a 4-inch-long hollow cylinder, closed at one end, with a loop attached to the outside, is a mug, in contrast to apperceptive agnosia); *auditory agnosia* (impaired ability to recognize or identify familiar sounds or spoken words); *autotopagnosia* (see also separate entry; impaired ability to identify parts of one's own body, often indicative of lesions in the pathway between the thalamus and the parietal lobes; *compare* [ASOMATAGNOSIA](#), [FINGER AGNOSIA](#), [TOPAGNOSIA](#)); *colour agnosia* (impaired ability to recognize or identify colours in spite of intact colour discrimination and adequate language skills; *compare* [ACHROMATOPSIA](#)); *finger agnosia* (see also separate entry; impaired ability to recognize, identify, differentiate, name, select, or indicate individual fingers of either hand, hence a form of autotopagnosia); *gustatory agnosia* (impaired ability to recognize or identify tastes); *haptic agnosia* (another name for *[tactile agnosia](#)); *horologagnosia* (impaired ability to tell the time); *integrative agnosia* (intact ability to recognize elements of perceptual forms with impaired ability to integrate the elements into perceptual wholes);

*****ebook converter DEMO Watermarks*****

logagnosia (another name for Wernicke's [*aphasia](#)); *object blindness* (impaired ability to identify objects that are clearly perceived); *olfactory agnosia* (impaired ability to recognize or identify smells); *optic agnosia* (impaired ability to identify objects by sight, with intact ability to identify them by touch); *phonagnosia* (see also separate entry; impaired ability to identify people by their voices); *prosopagnosia* (see also separate entry; impaired ability to recognize or identify previously familiar faces, sometimes even those of close relatives, such faces being identified as faces but not as belonging to particular known people, this form of agnosia usually being associated with damage to the posterior right hemisphere); *simultanagnosia* (see also separate entry; impaired ability to perceive more than one object at the same time, often occurring as a symptom of [*Bálint's syndrome](#)); *tactile agnosia* (see also separate entry; impaired ability to recognize or identify objects by touch alone, also called *haptic agnosia*, *tactoagnosia*, *compare* *ahylognosia*, *amorphognosia*); *topagnosia* (impaired ability to identify which part of one's body has been touched, *compare* [AUTOTOPAGNOSIA](#)); *topographagnosia* (see also separate entry; impaired ability to find one's way around, read maps, draw plans, and perform similar tasks, often associated with damage to the right hemisphere parietal lobe, comparable to [*visuospatial](#) agnosia); *transformational agnosia* (impaired ability to recognize objects viewed from unusual angles, such as a tennis racket seen from its side, based on the assumption that the impairment derives from a deficit in the ability to transform the major or minor axis—length or width—when it appears foreshortened, often associated with damage to the right parietal lobe, also called *apperceptive agnosia*); *visual agnosia* (impaired ability to recognize or identify visual images or stimuli); *visual shape agnosia* (impaired ability to identify and discriminate between objects, usually associated with right hemisphere brain damage, also called *visual apperceptive agnosia* , in contrast to [*associative](#) agnosia); *visuospatial agnosia* (impaired ability to count a small number of scattered objects, coupled with peculiar alignment of handwriting, such as confining the words to only one half of a page, impairment in reading ability, impaired ability to copy simple drawings, often associated with damage to the right hemisphere at the junction of the occipital and parietal lobes, *compare* [TOPOGRAPHAGNOSIA](#)). Also called *acatamathesia* . [From Greek *a-* without + *gnosis* knowledge + *-ia* indicating a condition or quality]

agnosticism *n.* A belief that nothing is or can be known about God. More loosely, a belief that the existence of God cannot be known with certainty, but this sense is avoided in careful usage. **agnostic** *adj. n.* (Of or pertaining to) one who espouses agnosticism. *Compare* ATHEISM, DEISM, PANTHEISM, THEISM. [Coined in 1869 by the English biologist Thomas Henry Huxley (1825–95), from Greek *a-* without + *gnostos* known + *-ismos* indicating a state or condition]

agonist *n.* 1. A person or animal engaged in a struggle. *Compare* ANTAGONIST (1). 2. A muscle that contracts in the same direction as another. *Compare* ANTAGONIST (2). 3. A substance that binds to **neuroreceptors* and has the same effects in exciting or inhibiting the **postsynaptic* cells as the **neurotransmitter* that would otherwise bind to those sites. *See also* SYNERGIST. *Compare* ANTAGONIST (3). [From Greek *agon* a festival of competitions, from *agein* to lead]

agoraphobia *n.* An **anxiety disorder* in **DSM-5* associated with **anxiety* or fear of leaving home, being in a crowd, visiting public places such as shopping areas, travelling alone in buses, trains, or aircraft, or being in other situations from which escape might be awkward or where a **panic attack* would be difficult to handle. It is sometimes regarded as a **specific phobia*, but some classifications (such as **ICD-10*) assign it to a subcategory on its own. *See also* HIKIKOMORI. [From Greek *agora* a marketplace + *phobos* fear + *-ia* indicating a condition or quality]

agrammatism *n.* A form of **aphasia* in which there is an impairment in ability to arrange words in their correct order, to use **function words* properly, and/or to use **accidence* appropriately in an **inflecting language*. There is evidence to suggest that these deficits can occur separately.

agraphia *n.* An impairment in the ability to write, resulting from neurological damage to the language centres in the brain. The major forms are: *apraxic agraphia* (impaired ability to write in spite of an ability to spell words orally); *agraphia for numbers* (impaired ability to write numbers, also called *agraphic acalculia*); *ideational agraphia* (impaired ability to select appropriate letter forms in spite of an ability to copy written text); *orthographical agraphia* (impaired ability to translate spoken sounds into
*****ebook converter DEMO Watermarks*****

appropriate written forms, also called *lexical agraphia*); *phonological agraphia* (impaired ability to spell by sound, coupled with over-reliance on established spelling vocabulary); *spatial agraphia* (impaired ability to arrange and orient writing appropriately on a page); *surface agraphia* (spelling by sound coupled with an impaired ability to spell irregular words). See also [DYSGRAPHIA](#). [From Greek *a-* without + *graphein* to write + *-ia* indicating a condition or quality]

agraphic acalculia See [AGRAPHIA](#).

agreeableness *n.* The quality of being pleasant. Also, one of the **Big Five* personality factors, characterized by **traits* such as kindness, generosity, warmth, unselfishness, and trust. Also called *pleasantness* . See also [ALPHA PERSONALITY FACTOR](#), [GENERAL FACTOR OF PERSONALITY](#). **agreeable** *adj.*

agrypnia *n.* An unusual name for **insomnia*. [From Greek *agrypnos* wakeful, from *agrein* to pursue + *hypnos* sleep + *-ia* indicating a condition or quality]

aha experience *n.* The feeling that accompanies sudden **insight* (2). Also called an *aha reaction* or a *eureka moment* .

ahedonia *n.* A variant form of **anhedonia*.

ahylognosia *n.* Impaired ability to discriminate by touch such physical properties as weight, density, or texture, with intact ability to recognize size and shape. Also spelt *ahylagnosia* . See also [AGNOSIA](#). Compare [AMORPHOGNOSIA](#), [TACTILE AGNOSIA](#). [From Greek *a-* without + *hyle* matter + *gnosis* knowledge + *-ia* indicating a condition or quality]

AIDS *abbrev.* Acquired immune (or immuno-) deficiency syndrome, a disorder believed to be caused by the **HIV* retrovirus and transmitted by infected blood entering the body, especially through transfusion or the sharing of needles by injecting drug users, by sexual intercourse, or from a mother to her unborn child via the placenta. It is characterized by destruction of **T lymphocytes* and consequent loss of immunity to opportunistic

infections. Almost half of all AIDS patients develop ***HIV dementia**. Also written as *Aids* .

AIDS dementia complex *n.* Another name for ***HIV dementia**. **ADC** *abbrev.*

AIDS-related complex *n.* A cluster of flu-like symptoms that are often premonitory of full-blown ***AIDS**: inflammation of lymph nodes, night sweats, persistent fevers, coughs, throat infection, and prolonged diarrhoea. **ARC** *abbrev.*

aim-inhibition *n.* In ***psychoanalysis**, the quality of an ***instinct (3)** that fails to achieve its direct mode of satisfaction or ***instinctual aim** but that obtains partial satisfaction from remote approximations of the behaviour or activity that would satisfy it. Sigmund Freud (1856–1939) introduced the concept in 1921 in his book *Group Psychology and the Analysis of the Ego* (*Standard Edition*, XVIII, pp. 69–143, at pp. 138–9) to explain the origin of sociable feelings of affection, the assumption being that if friendships and affection between relatives were not subject to aim-inhibition, then they would be overtly sexual. **aim-inhibited** *adj.*

aim of instinct *See* **INSTINCTUAL AIM**.

air crib *n.* A closed, electrically heated, sound-insulated compartment, about the size of an ordinary crib, in which a baby can be kept without clothing or blankets, one wall containing a panel of safety glass that can be opened like a window and across which a curtain can be drawn to darken the compartment, the floor consisting of tightly stretched moveable canvas operated like a roller towel, stored on a spool outside the compartment on one side and passing into a wire hamper on the other. Toys, including musical boxes, can be placed in the compartment, within which the baby is protected from airborne infections, dust, and allergens, and an advantage claimed for the air crib is that, because the baby's crying is almost inaudible from the outside and there are no hazards within it, ***reinforcement (1)** of crying is unlikely to occur. The device was invented by the US psychologist B(urrhus) F(rederic) Skinner (1904–90), who raised his second daughter Deborah in it and described the results in an article in the *Ladies Home Journal* in October

*****ebook converter DEMO Watermarks*****

1945. The device attracted a great deal of controversy, but a study of 50 former air-crib babies and their parents, published in 1995, reported wholly positive results. Also called a *Skinner crib* .

air encephalogram *n.* Another name for a [*pneumoencephalogram](#).

air theory *n.* A term used by the US psychologist James Jerome Gibson (1904–79) to refer to any theory of perception that explains perceptual phenomena such as object and space perception without reference to the surrounding context in which perceptions are embedded. *See also* [DIRECT PERCEPTION](#). [Alluding to something suspended in mid air without support]

akatamathesia *See* [ACATAMATHESIA](#).

akathisia *n.* Restless [*psychomotor agitation](#), indicated by fidgeting, inability to sit or stand still, pacing up and down, or rocking from foot to foot when standing, usually as a side-effect of [*neuroleptic \(1\)](#) medication. [From Greek *a-* not + *kathizein* to sit still + *-ia* indicating a condition or quality]

akinaesthesia *n.* Absence of [*kinaesthesia](#) or muscle sense, usually resulting from damage to the central nervous system. Also called *akinaesthesia* . US *akinesesthesia*, *akinesesthesia* . [From Greek *a-* without + *kineein* to move + *aisthesis* sensation, from *aisthanesthai* to feel + *-ia* indicating a condition or quality]

akinesia *n.* A decrease in spontaneous motor activity and a reduction in normal gestures, sometimes caused by a lesion in the supplementary motor area (see [MOTOR CORTEX](#)). *See also* [NEUROLEPTIC-INDUCED](#), [PARKINSONISM](#). *Compare* [BRADYKINESIA](#). [From Greek *a-* not + *kinesis* movement + *-ia* indicating a condition or quality]

akinetic apraxia *See* [APRAXIA](#).

akinetopsia *n.* A perceptual defect characterized by an inability to perceive motion, objects being visible while at rest but movement causing them to disappear, invariably associated with a lesion in Area V5 (also called

MT) of the ***visual cortex**, towards the back of the ***middle temporal gyrus**. **akinetopsic** *adj.* [From Greek *a-* without + *kinetikos* of or relating to motion, from *kinein* to move + *opsis* sight, from *ops* an eye + *-ia* indicating a condition or quality]

akrasia *n.* Weakness of will, or acting against one's better judgement. The concept was discussed at length by the Greek philosopher Aristotle (384–322 BC) in *Nicomachean Ethics* (Book 7), where he contrasted *akrasia* and its corresponding virtue, self-control, with self-indulgence and its corresponding virtue, temperance. Aristotle illustrated the distinction with an example of eating sweet foods: 'The one [the self-indulgent person] is led on in accordance with his own choice, thinking that he ought always to pursue the present pleasure; while the other [the *akrates*] does not think so but yet pursues it' (Bekker edition, p. 1146b). Also spelt *acrasia*. **akratic** *adj.* Acting against one's better judgement. **akrates** or **akratic** *n.* An akratic person. [From Greek *a-* without + *kratos* power + *-ia* indicating a condition or quality]

alarm call *n.* A vocal ***alarm signal**.

alarm pheromone *n.* A ***pheromone** that is released by an animal as an ***alarm signal** and that induces a fear or fright response in members of the same species.

alarm reaction *n.* The first stage of the ***general adaptation syndrome** to ***stress** (1), characterized by an initial fall in body temperature and blood pressure, followed by a countershock phase during which hormones such as ***cortisol** (hydrocortisone), ***adrenalin** (epinephrine), and ***noradrenalin** (norepinephrine) are secreted into the bloodstream and a biological defensive reaction begins. *See also* EXHAUSTION STAGE, RESISTANCE STAGE.

alarm signal *n.* A sound or other communication that is emitted by a bird or an animal in response to a danger or threat and that is recognized by other members of the same species as a signal to take evasive action. It is sometimes classified as a type of ***altruism**, because it draws attention to the individual giving the alarm signal and sometimes exposes it to added danger. *See also* ALARM CALL, ALARM PHEROMONE.

*****ebook converter DEMO Watermarks*****

albedo *n.* Reflectivity, indexed by the proportion of incident light that an object reflects. [From Latin *albedo* whiteness, from *albus* white]

alcohol *n.* Ethyl alcohol, a colourless volatile liquid and central nervous system **depressant drug* that is produced by fermentation of sugar and is the psychoactive constituent of intoxicating beverages. Its pharmacological action, though not fully understood, is in part at least through the facilitation of the inhibitory neurotransmitter **GABA*, probably through stimulation of the GABA receptor complex. Although the absorption and **bioavailability* of alcohol depends on body weight, sex, how recently one has eaten, plus several other factors, roughly one unit of alcohol (one half pint of beer, one glass of wine, or one measure of spirits) taken by an average 150 lb (68 kg) person generally leads to a ** blood alcohol concentration (BAC)* of about 20 mg/dl and produces measurable deterioration in performance on complex hand–eye coordination tasks; two units taken in quick succession (alcohol normally being metabolized at about one unit per hour) leads to a BAC of 40 mg/dl and produces in addition a deterioration in visual acuity; three units leads to BAC 60 mg/dl and a loss of coordination; seven units leads to 140 mg/dl and confusion, slurred speech, and **ataxia*; 12 units leads to BAC 240 mg/dl and coma; and 14 units leads to 280 mg/dl and death. When a person drinks alcohol, inhibitory processes decline first, resulting in an exaggeration of spinal reflexes and the appearance of forms of behaviour (talkative, boisterous, aggressive) that are normally under the influence of social inhibition—this accounts for the mistaken notion that it is a central nervous system stimulant. Also called *ethanol*. Formula C_2H_5OH . **alcoholic** *adj.* **1.** Of or relating to alcohol. *n.* **2.** A person addicted to alcohol. **alcoholism** *n.* Addiction to alcohol. *See also* ALCOHOL-RELATED DISORDERS, DRINK-DRIVING. [From Arabic *al-koh'l*, antimony sulphide, a powder used in the Middle East as a cosmetic to darken the eyelids, from *al* the + *koh'l* finely divided, alluding to the fine vapour given off by liquids containing alcohol]

alcohol abuse *n.* A form of **substance abuse* associated specifically with drinking alcohol, leading to serious problems of functioning at home, school, or work. When there is evidence of **tolerance (3)*, **withdrawal*, or compulsive drinking, **alcohol dependence* rather than alcohol abuse may be diagnosed. Preferred usage *alcohol misuse*.

alcohol amnestic disorder *n.* Another name for ***Korsakoff's psychosis**. Also called *alcohol amnesic syndrome* .

alcohol dependence *n.* A form of ***substance dependence** in which physiological ***dependence (2)** on alcohol is manifested by ***tolerance (3)** and ***withdrawal** symptoms. Also called *alcoholism* . Compare **DIPSOMANIA**.

alcohol hallucinosis *n.* An organic disorder characterized by auditory ***hallucinations** without ***clouding of consciousness**, usually during the first few days of ***withdrawal** from alcohol following prolonged alcohol misuse. Compare **DELIRIUM TREMENS**, **HALLUCINOSIS**, **ORGANIC HALLUCINOSIS**.

alcohol-related disorders *n.* ***Substance-related and addictive disorders** in ***DSM-5** associated specifically with drinking alcohol, including ***alcohol abuse**, ***alcohol dependence**, ***Korsakoff's psychosis**, and a range of alcohol-induced disorders. DSM-5 distinguished alcohol use disorder, alcohol intoxication, and alcohol withdrawal as separate disorders. See also **SUBSTANCE-INDUCED DISORDERS**.

aldehyde dehydrogenase *n.* An enzyme that is involved in the metabolism of ***alcohol** and is blocked by the drug ***Antabuse** (disulfiram), leading to the accumulation of ***acetaldehyde** in the body.

aldosterone *n.* A ***corticosteroid** hormone belonging to the ***mineralocorticoid** group, secreted by the adrenal cortex in response to the kidney hormone ***angiotensin II**, involved in the regulation of mineral and water balance by its reciprocal action in causing the kidneys to retain sodium and excrete potassium while forming urine from venous blood. [From *ald(ehyde)* + *ster(ol)* + *(ket)one*]

alethia *n.* Inability to forget. [From Greek *a-* without + *lethe* forgetfulness + *-ia* indicating a condition or quality]

Alexander technique *n.* A technique for improving posture, bodily movements, and breathing, thereby reducing stress and increasing confidence, popular especially with actors, musicians, and other performing

artists. *See also* [BODY THERAPIES](#). [Named after the Australian actor and physiotherapist Frederick Mathias Alexander (1869–1955) who developed and promoted it in the 1930s]

alexia *n.* An inability to read written or printed words, usually called **dyslexia*, also called *visual aphasia* or (non-technically) *word blindness* . *See also* [DYSLEXIA](#). [From Greek *a-* without + *lexis* a word + *-ia* indicating a condition or quality]

alexia acalculia *n.* Selective impairment in ability to read numbers, also called *alexia for numbers* .

alexithymia *n.* A disturbance of affect and cognition indicated by difficulty in describing or recognizing one's own emotions, and a reduced affective and fantasy life. [From Greek *a-* without + *lexis* a word + *thymos* spirit + *-ia* indicating a condition or quality]

algaesthesia *n.* Sensitivity to pain. Also written *algaesthesia* . US *algesthesia* , *algesthesis* . [From Greek *algesis* the sense of pain, from *algos* pain + *aisthesis* feeling + *-ia* indicating a condition or quality]

algesia *n.* The pain sense. [From Greek *algesis* the sense of pain, from *algos* pain + *-ia* indicating a condition or quality]

algometer *n.* An instrument for measuring the acuteness of **pain* sensations, usually by means of a needle that can be inserted into the skin to varying measured depths until a specified pain response is evoked. *See also* [COLD PRESSOR PAIN](#), [DOLORIMETER](#), [ISCHAEMIC PAIN](#). [From Greek *algesis* the sense of pain, from *algos* pain + *metron* a measure]

algolagnia *n.* Another name for **somasochism*. Also called *algophilia* . [From Greek *algos* pain + *lagneia* lust + *-ia* indicating a condition or quality]

algorithm *n.* Any well-defined computational procedure that takes a value or set of values as input and, after a finite sequence of computational steps, produces a value or set of values as output. Computer programs are the most

familiar examples of algorithms, and another useful definition of an algorithm is any operation that can be carried out by a [*Turing machine](#). Also, more generally and informally, any step-by-step procedure for finding the unique solution to a problem. *Compare* [HEURISTIC](#). [From Arabic *al-Khwārazmī* a native of Khwārazm (Khiva), the name by which the ninth-century Arab mathematician Abu Ja'far Mohommed ben Musa came to be known]

algorithmic *adj.* Of or relating to an [*algorithm](#), or more generally having a definite path to a solution.

aliasing *n.* In a visual or auditory signal or any periodic or oscillating variable or time series, a distortion resulting from insufficiently high resolution when the variable is sampled at a frequency that is too low in relation to the signal's frequency, a familiar cinematographic example being the [*wagon wheel illusion](#) in which the wheels of a stagecoach appear to turn slowly one way, then slowly the other way as it gathers speed. A sine wave of 1,000 hertz would appear stationary if it were sampled exactly once per millisecond (thousandth of a second) or once every two milliseconds, and so on, and it would appear to be cycling very slowly if sampled at a frequency very close to once per millisecond. *See also* [STROBOSCOPE](#). [Coined by the US statistician John Wilder Tukey (1915–2000) from Latin *alias* at another time, from *alius* other]

alienation *n.* **1.** Turning away; inducing someone to become indifferent or hostile or causing their affections to be diverted. **2.** The state of being an outsider or feeling detached from society. **3.** A state in which one's emotions are experienced as foreign so that the self and the outside world appear unreal. *See also* [DEPERSONALIZATION](#), [DEREALIZATION](#). [From Latin *alienus* foreign, from *alius* other + *-ation* indicating a process or condition]

alien hand sign *n.* A form of [*apraxia](#), usually resulting from a lesion in the [*corpus callosum](#), in which a hand (usually the left) is experienced as not belonging to its owner and performs actions independent of, though not against, its owner's will. It is a sign of [*disconnection syndrome](#) associated with lesions in the posterior corpus callosum and [*parietal lobe](#) and is a form of [*agnosia](#). *Compare* [ANARCHIC HAND](#), [RUBBER HAND PHENOMENON](#).

*****ebook converter DEMO Watermarks*****

alienist *n.* An old-fashioned word for a **psychiatrist*.

alimentary *adj.* Pertaining to nutrition or providing nourishment. [From Latin *alimentum* food or nourishment, from *alere* to nourish]

alimentary canal *n.* The tubular passage from the mouth to the anus through which food passes and within which digestion takes place, comprising the **pharynx*, **oesophagus*, **stomach*, **small intestine*, and **large intestine*. Also called the *digestive tract* or *gastrointestinal tract*.

alimentation *n.* Nourishment, sustenance, or support.

aliphatic *adj.* Fatty, belonging to the class of non-aromatic methane derivatives or open-chain organic compounds. Aliphatic and **aromatic* hydrocarbons in petrol or gasoline, glue, paint thinners, and some aerosol propellants are **psychotropic* when inhaled. *See also* *INHALANT*, *INHALANT-RELATED DISORDERS*, *SOLVENT ABUSE*. [From Greek *aleiphar*, *aleiphatos* oil + *-ikos* of, relating to, or resembling]

alkali *n.* Any substance that when dissolved in water accepts positively charged hydrogen **ions* and produces a corrosive solution having a **pH* value more than 7. *See also* *BASE (1)*. *Compare* *ACID*. **alkaline** *adj.* **alkalinity** *n.* The degree to which a solution is alkaline. [From Arabic *al-qili* the ashes]

alkaloid *n.* Any of a group of physiologically active and often **psychotropic* nitrogenous **bases (1)* occurring naturally in plants, being usually colourless, crystalline in structure, and bitter-tasting, including **apomorphine*, **atropine*, **belladonna*, **bromocriptine*, **capsaicin*, **cocaine*, **codeine*, **crack*, **ergot*, **hyoscyamine*, the **indole alkaloids* (psilocybin and DMT), **mescaline*, **morphine*, **muscarine*, **nicotine*, **physostigmine*, **quinine*, **reserpine*, **scopolamine*, **strychnine*, and the **xanthine* derivatives (caffeine, theobromine, and theophylline). [From *alkali* + *-oid* indicating likeness or resemblance, from Greek *eidos* shape or form]

allaesthesia *n.* A disturbance of body **schema* in which tactile stimulation on one side of the body is perceived on the other, usually as a

result of a lesion in the cerebral cortex, brainstem, or spinal cord. Also spelt *allesthesia*. Also called *allochiria*. [From Greek *allos* other + *aisthesis* sensation, from *aisthanesthai* to feel + *-ia* indicating a condition or quality]

Allais paradox *n.* A **paradox* of decision making that usually elicits responses inconsistent with **expected utility theory*. First, a choice is made between

A \$500,000 with probability 1 (certainty)

B \$2,500,000, \$500,000, or \$0 with probabilities 10 per cent, 89 per cent, and 1 per cent respectively.

Second, a choice is made between

C \$500,000 or \$0 with probabilities 11 per cent and 89 per cent

D \$2,500,000 or \$0 with probabilities 10 per cent and 90 per cent respectively.

Most people prefer A to B, because they prefer the certainty of winning a large amount to the small probability of winning an even larger amount coupled with a risk of winning nothing at all. But most of the same people prefer D to C, because the chances of winning are nearly the same in both cases but the prize is much larger in D than in C. Writing $u(2,500,000)$, $u(500,000)$, and $u(0)$ for the utilities that a person attaches to the corresponding amounts of money, the first preference implies that

$$.11u(500,000) > .10u(2,500,000) + .01u(0),$$

and the second implies that

$$.11u(500,000) < .10u(2,500,000) + .01u(0),$$

a contradiction, showing that expected utility theory does not accurately describe human choice behaviour. See also [REVEALED PREFERENCE](#), [RISK AVERSION](#). Compare [COMMON RATIO EFFECT](#), [ELLSBERG PARADOX](#), [MODIFIED ELLSBERG PARADOX](#), [ST PETERSBURG PARADOX](#). [Named after the French economist Maurice (Félix Charles) Allais (1911–2010) who formulated it in 1953]

allegro speech *n.* Rapid speaking exhibiting features typical of fluent, casual, connected speech, such as *strue* for *it's true*. See also [ELISION](#),

*****ebook converter DEMO Watermarks*****

HAPLOLOGY, INTRUSION. Compare LENTO SPEECH. [From Italian *allegro* rapid, from Latin *alacer* brisk]

allele *n.* Short for allelomorph, one of two or more alternative versions of a *gene that can occupy a particular locus on a chromosome, each responsible for a different characteristic or *phenotype, such as a different eye colour. A pair of alleles are often represented by upper-case and lower-case forms of the same roman letter, such as *A* and *a*. See also ADDITIVE ALLELES, ANTIMORPH, BALANCED POLYMORPHISM, COMPLEMENTATION, DOMINANT GENE, EPISTASIS, GENETIC POLYMORPHISM, HARDY–WEINBERG LAW, HETEROZYGOUS, HOMOZYGOUS, RECESSIVE GENE, SEGREGATION OF ALLELES. [From Greek *allel* one another]

allergen *n.* Any substance, usually a foreign protein, that functions as an *antigen and causes an allergic reaction. See ALLERGY. [From Greek *allos* other + *ergon* activity or work]

allergy *n.* An acquired hypersensitivity of the body to certain *antigens or *allergens. A typical example is hay fever, which is an allergy to certain types of pollen. Also, colloquially, any aversion or dislike. **allergic** *adj.* [From Greek *allos* other + *ergon* activity or work]

allesthesia See ALLAESTHESIA.

alliaceous *adj.* Of or relating to the taste or smell of garlic or onion. [From Latin *allium* garlic + *-aceus* of a certain kind, related to, or resembling]

allochiria *n.* Another name for *allaesthesia. [From Greek *allos* other + *cheir* a hand + *-ia* indicating a condition or quality]

allocortex *n.* All parts of the *cerebral cortex that do not belong to the six-layered *neocortex. See ARCHAEOCORTEX, MESOCORTEX, PALAEOCORTEX. [From Greek *allos* other + Latin *cortex* bark or outer layer]

allo-erotism *n.* In *psychoanalysis, sexual satisfaction through an external *instinctual object, in contrast to *auto-erotism. Also called *allo-*

eroticism . [From Greek *allos* other + *eros* love or sexual desire + *-ismos* indicating a state or condition]

allomone *n.* Any of a number of chemical substances with communicative functions, secreted externally by an organism and affecting the behaviour or physiology of members of one or more other species. *See also* [KAIROMONE](#). *Compare* [PHEROMONE](#). [From Greek *allos* other + *horman* to stimulate]

allomorph *n.* One of the variant forms assumed by a single [*morpheme](#) in different circumstances, such as each of the forms of the negating prefix *in-* in the words *indirect*, *irreducible*, *improbable*, and *ignoble*. **allomorphic** *adj.* [From Greek *allos* other + *morphe* form]

allopathy *n.* Orthodox pharmacological therapy for physical and mental disorders, using drugs having effects that are opposite to those of the disorder, in contradistinction to [*homeopathy](#). [From Greek *allos* other + *pathos* suffering]

allophone *n.* One of the variant forms of a single [*phoneme](#), such as the voiced non-fricative form of the phoneme /r/ in the word *row* or the voiceless fricative form of the same phoneme in the word *tree*. Further examples are the allophones of the phoneme /t/ in *tip* (aspirated), *stay* (unaspirated), *button* (nasalized), and *bottle* (laterally articulated). *See also* [PHONE](#). **allophonic** *adj.* [From Greek *allos* other + *phone* a sound]

alloplastic *adj.* Of or relating to [*adaptation \(1\)](#) through alteration of the external environment. *Compare* [AUTOPLASTIC](#). [From Greek *allos* other + *plastikos* mouldable, from *plassein* to form + *-ikos* of, relating to, or resembling]

all-or-none law *n.* A fundamental proposition about nerve impulses according to which the strength or intensity of a [*stimulus \(1\)](#) does not affect the properties of an [*action potential](#) that it initiates, although it may affect the frequency with which action potentials occur. Also called the *all-or-none principle* or the *all-or-nothing law* or *principle* . *See also* [RELATIVE REFRACTORY PERIOD](#).

Allport–Vernon–Lindzey Study of Values *n.* A test designed to measure the relative strengths of the six basic values identified by the German psychologist and educator Eduard Spranger (1882–1963) in his book *Lebensformen* (1914, English translation *Types of Men*, 1928), namely theoretical, economic, aesthetic, social, political, and religious. It consists of a series of multiple-choice questions referring to alternative activities or occupations from which the respondent chooses the ones that are most appealing. It is often interpreted as essentially an **interest inventory*. Also called the *Study of Values* . [Named after the US psychologist Gordon W(illard) Allport (1897–1967), the English psychologist Philip E(wart) Vernon (1905–87), and the US psychologist Gardner Lindzey (1920–2008) who published it jointly in its revised version in 1951, a preliminary version having been published by Allport and Vernon in 1931]

alogia *n.* Literally wordless, but usually (in relation to one of the **negative symptoms* of schizophrenia, for example) taken to mean impoverishment of thought inferred from **poverty of speech* or **poverty of content*. [From Greek *a-* without + *logia* words, from *logos* word + *-ia* indicating a condition or quality]

alpha-adrenergic receptor *See* ADRENERGIC RECEPTOR.

alpha blocking *n.* Suppression of the **alpha wave* in an **EEG* trace of a person who pays **attention* to or concentrates on something.

alpha element *n.* In **psychoanalysis*, a term introduced by the Indian-born British psychoanalyst Wilfred R(uprecht) Bion (1897–1979) to denote any mental element that is available for transformation by the **alpha function* into a **beta element*.

alpha fibre *n.* A large-diameter, thickly myelinated type of **efferent* somatic nerve fibre, such as the fibre supplying a **skeletal muscle*, composed of alpha motor neurons and having high conduction velocity. US *alpha fiber*. Also written *α fibre* . *Compare* C FIBRE, GAMMA FIBRE, IA FIBRE, IB FIBRE, II FIBRE. [From *alpha* (α) the first letter of the Greek alphabet]

alpha-foetoprotein *n.* A protein produced in the liver of a human foetus. Unusually low levels in the amniotic fluid or blood of an expectant mother may indicate **Down's syndrome* in the foetus, and unusually high levels of spina bifida. *See also* AMNIOCENTESIS. Also spelt *alpha-fetoprotein* . **afp** *abbrev.*

alpha function *n.* In **psychoanalysis*, a term introduced by the Indian-born British psychoanalyst Wilfred R(uprecht) Bion (1897–1979) to denote the process whereby the raw material of sensory experience, namely **beta elements*, are transformed into elements suitable for mental 'digestion' in the form of **alpha elements*.

alpha male *n.* The highest-ranked male member of a **dominance hierarchy*, **hook order*, or **pecking order*. Also written *α male* .

alpha-methylparatyrosine *n.* A chemical closely related to **tyrosine* that attaches to the enzyme **tyrosine hydroxylase*, preventing the enzyme from metabolizing tyrosine into **dopa*, causing a decrease in the synthesis of dopa, and therefore also of the **catecholamines* dopamine, adrenalin (epinephrine), and noradrenalin (norepinephrine). **AMPT** *abbrev.*

alpha motor neuron *n.* The largest type of spinal **motor neuron*, supplying **skeletal muscles* and forming **alpha fibres*. Also called an *alpha motoneuron* . *Compare* GAMMA MOTOR NEURON, RENSCHAW CELL.

alpha movement *n.* A form of **apparent movement* that is produced when stimuli of different sizes, such as bars of different lengths, are presented in an alternating pattern with an interstimulus interval of about 60 milliseconds, the visual illusion being created of a single object increasing and decreasing in size. Also called *alpha motion* . *See also* KORTE'S LAWS. *Compare* BETA MOVEMENT, DELTA MOVEMENT, GAMMA MOVEMENT.

alphanumeric *adj.* Of or relating to a character set, data set, or variable, consisting of letters of the alphabet, numerals, and usually a few other symbols such as punctuation marks and basic mathematical symbols. *See also* BYTE. [From *alphabet* + *numeric*]

alpha personality factor *n.* A higher-order factor, arising from the *Big Five personality factors, suggested by the US psychologist John Digman (1923–98) in an article in the *Journal of Personality and Social Psychology* in 1997. It combines *agreeableness, *conscientiousness, and (with negative weighting) *neuroticism. Digman suggested that it may represent social desirability or communion with other people. The US psychologist Colin G. DeYoung (born 1976) and others have suggested that it represents stability. *See also* BETA PERSONALITY FACTOR.

alpha receptor *n.* Another name for an alpha *adrenergic receptor.

alpha reliability coefficient *n.* Another name for *Cronbach's alpha.

alpha wave *n.* A high-amplitude *EEG wave with a frequency of 8–12 hertz, characteristic of relaxed wakefulness, usually in a person whose eyes are closed. Also called an *alpha rhythm*. *See also* ALPHA BLOCKING.

alprazolam *n.* A member of the *benzodiazepine group of drugs, used as a sedative and anxiolytic. Also called *Xanax* (trademark). *See also* SEDATIVE-, HYPNOTIC-, OR ANXIOLYTIC-RELATED DISORDERS.

altered state of consciousness *n.* Any abnormal form of *consciousness, including *derealization, *depersonalization, *hypnosis, *oceanic feeling, *peak experience, or intoxication with a *hallucinogen or *euphoriant drug. **ASC** *abbrev.*

alternating personality *n.* Another name for *multiple personality disorder. *See* DISSOCIATIVE IDENTITY DISORDER.

alternating perspective *n.* A *perspective reversal, or change in the apparent angle from which something is being viewed, that occurs while viewing certain *ambiguous figures such as the *Necker cube, *Schröder staircase, or *Scripture's blocks.

alternative forms *n.* In psychometrics, two or more similar versions of a psychometric test. If they are similar in content but have not been shown to

have similar psychometric properties, then they are also called *comparable forms*; if they have similar **means*, **standard deviations*, and **correlations* with other tests, then they are also called *parallel forms*; and if they are similar in all important psychometric properties, then they are also called *equivalent forms*. Also, especially in the US, called *alternate forms*.

alternative hypothesis *n.* In statistics, a hypothesis that functions as an alternative to the **null hypothesis* and typically asserts that the **independent variable* has an effect on the **dependent variable* that cannot be explained by chance alone. Also called an *experimental hypothesis*.

altricial *adj.* Of or relating to species of birds whose young are hatched naked, blind, and dependent on their parents for feeding in the nest. *Compare* *PRECOCIAL*. **altrices** *n.* Altricial birds. [From Latin *altrices* nurses, from *altrix* a nurse, from *alere* to nourish]

altruism *n.* In social psychology and sociobiology, behaviour that benefits another individual or other individuals in terms of direct advantages or chances of survival and reproduction at some cost to the benefactor. *See also* *ALARM SIGNAL*, *PROSOCIAL BEHAVIOUR*, *RECIPROCAL ALTRUISM*. **altruist** *n.* One who acts with altruism. **altruistic** *adj.* *Compare* *SELFISH*. [French *altruisme*, from Italian *altrui* others, from Latin *alteri huic* to this other]

altruistic suicide *See* *SUICIDE*.

alveolar *adj.* Pertaining to the alveolar ridge, the hard, bony part of the palate immediately behind the upper front teeth, and descriptive of speech sounds articulated with the tongue tip against the alveolar ridge, such as the initial sounds in the words *date*, *late*, *name*, *say*, *tea*, and *zoo*. *See also* *PLACE OF ARTICULATION*. **alveolus** *n.* [From Latin *alveolus* a small depression, referring to the tooth sockets]

Alzheimer's disease *n.* A degenerative brain disease, classified by **DSM-5* as a **neurocognitive disorder*, with insidious onset beginning before 65 years of age, followed by slow development over several years, characterized by **dementia* called *dementia of the Alzheimer type (DAT)*, loss of memory, and emotional instability, accompanied by postmortem evidence
*****ebook converter DEMO Watermarks*****

of **amyloid plaques*, **neurofibrillary tangles*, and other brain pathology, usually leading to death between four and twelve years after the onset of the disease. Some authorities believe that the amyloid plaques are responsible for the symptoms and that the neurofibrillary tangles are secondary; others believe that the neurofibrillary tangles are primary and the amyloid plaques are secondary. The disorder is associated with a deficit of the neurotransmitter **acetylcholine* and may be caused by **mutations* in **mitochondrial DNA*, by a defect in **chromosome* 14, 19, or 21, or by a **prion*. *See also* CLOCK DRAWING TEST, DOWN'S SYNDROME, MILD COGNITIVE IMPAIRMENT, MINI-MENTAL STATE EXAMINATION, NEUROGENESIS, NUCLEUS BASALIS OF MEYNERT. *Compare* PICK'S DISEASE, SDAT. **AD** *abbrev.* [Named after the German neurologist Alois Alzheimer (1864–1915) who first described the brain lesions associated with it in 1907]

amacrine *adj.* Lacking a conspicuous **axon*, referring especially to neurons in the middle layer of the **retina* that link **bipolar cells* and retinal **ganglion cells* and that make only lateral connections, their cell bodies lying in the **inner nuclear layer* and connecting with other cells in the **inner plexiform layer*. There are many different kinds, the functions of which are not well understood. *Compare* HORIZONTAL CELL. [From Greek *ama* as soon as + *krinein* to separate]

amafufunyane *n.* The plural form of the word **ufufunyane* in Nguni languages; a **culture-bound syndrome* found mainly among young women in Xhosa-speaking communities of southern Africa, exhibiting the same signs and symptoms as *ufufunyane*, and distinguished locally from *thwasa* (*see* SPELL). [From Xhosa *amafufunyane* characters or voices that have entered and taken control of a person, from *ukufuya* to possess (such things as herds of cattle) or to treat a person as a possession]

Amanita muscaria *n.* The **fly agaric* mushroom, sometimes eaten for its **psychedelic* effects. *See also* HALLUCINOGEN, MAGIC MUSHROOM, TEONANACTYL. *Compare* COHOBA. [Latin]

amantadine *n.* Amantadine hydrochloride, an antiviral drug that blocks the uptake of **dopamine* in the brain, increasing the amount that remains available, and is used in the treatment of **Parkinson's disease* and

*****ebook converter DEMO Watermarks*****

***neuroleptic-induced** conditions. Also called *Symmetrel* (trademark). See also **ANTIPARKINSONIAN**, **BORNA DISEASE VIRUS**. [An anagram of *adamantine* impregnable, impenetrable, or unbreakable]

amaurosis *n.* ***Blindness** without damage to the eyes, usually associated with lesions in the optic nerves. Compare **AMBLYOPIA**, **ANOPIA**. **amaurotic** *adj.* [From Greek *amauros* dark]

amaurotic familial idiocy *n.* Another name for ***Tay–Sachs disease**.

ambient system *n.* The aspect of vision that governs spatial orientation, using information from both ***central vision** and ***peripheral vision**. Compare **FOCAL SYSTEM**. [From Latin *ambiens* going around, from *ambi-* round or about + *ire* to go]

ambiguity aversion *n.* In decisions involving risk or uncertainty, a tendency to choose options for which the probabilities associated with the possible outcomes are known in preference to options for which the probabilities are unknown. The classic demonstration of this phenomenon is the ***Ellsberg paradox**. Also called *ambiguity avoidance* or the *ambiguity effect*. [From Latin *ambigere* to waver, from *ambi-* both ways + *agere* to drive]

ambiguity tolerance See **INTOLERANCE OF AMBIGUITY**.

ambiguous figure *n.* An image such as the ***duck-rabbit**, ***Mach illusion**, ***Necker cube**, ***reversible goblet**, ***Schröder staircase**, ***Scripture's blocks**, or ***young girl/old woman figure**, the perception of which appears to oscillate or flip involuntarily between (usually) two alternatives, one perception or interpretation completely excluding the other while it persists. Although such figures are not strictly illusory, they are almost invariably included in discussions of visual illusions. Also called an *oscillating figure* or a *reversible figure*. See also **FIGURE–GROUND REVERSAL**, **PERSPECTIVE REVERSAL**, **SPINNING DANCER ILLUSION**, **TOP-DOWN PROCESSING**, **VISUAL ILLUSION**. Compare **HYBRID IMAGE**, **IMPOSSIBLE FIGURE**.

ambilingual *adj.* **1.** Able to speak two languages equally fluently. *n.* **2.** A person who can speak two languages with equal facility. Also called a *balanced bilingual*. Compare **UNBALANCED BILINGUAL**. [From Latin *ambi-* both + *lingua* tongue + *-alis* of or relating to]

ambivalence *n.* The coexistence in one person of two opposing emotions, desires, beliefs, or behavioural tendencies directed towards the same ***instinctual object**, especially love and hate. The term was coined in 1910 by the Swiss psychiatrist Eugen Bleuler (1857–1939), who considered ambivalence to be a major sign of ***schizophrenia**, and Sigmund Freud (1856–1939) introduced it into ***psychoanalysis** in an article in 1912 on ‘The Dynamics of Transference’ (*Standard Edition*, XII, pp. 98–108). See also **DEFUSION OF INSTINCTS**, **DEPRESSIVE POSITION**, **PARANOID–SCHIZOID POSITION**. **ambivalent** *adj.* [From Latin *ambi-* both + *valens* being strong, from *valere* to be strong]

amblyacusia *n.* Any impairment of the sense of hearing. Also spelt *amblyacousia*. Also called *amblyacosis* or *amblyacousis*. **amblyacusic** *adj.* [From Greek *amblys* dull + *akousis* hearing, from *akouein* to hear + *-ia* indicating a condition or quality]

amblyaphia *n.* Any impairment of the sense of touch. [From Greek *amblys* dull + *haphe* touch + *-ia* indicating a condition or quality]

amblygeusia *n.* Any impairment of the sense of taste. [From Greek *amblys* dull + *geusis* taste + *-ia* indicating a condition or quality]

amblyopia *n.* Impaired vision without any apparent damage to the eye or the optic nerve. Compare **AMAUROSIS**, **ANOPIA**. [From Greek *amblys* dull + *ops* an eye + *-ia* indicating a condition or quality]

amblyopia ex anopsia *n.* ***Amblyopia** caused by disuse of an eye, especially monocular blindness associated with ***strabismus** and consequent suppression of the image from one eye through ***binocular rivalry**, the most common cause of amblyopia and of ***blindness** in general. Also spelt *amblyopia ex anoopsia*. Also called *suppression amblyopia*. [From Greek,

literally dull vision from sightlessness]

amenorrhoea *n.* Pathological absence of menstruation. US *amenorrhea*. [From Greek *a-* without + *men* month + *rhoia* a flow, from *rhein* to flow]

amentia *n.* Severe **intellectual disability*. Compare **DEMENTIA**. [From Latin *a-* without + *mens, mentis* a mind + *-ia* indicating a condition or quality]

American College Testing Program *n.* An **achievement test*, designed to measure academic ability, used to select candidates for admission to some colleges and universities in the US. It comprises four subtests in English, mathematics, natural sciences, and social sciences. Compare **SCHOLASTIC ASSESSMENT TEST**. **ACTP** *abbrev.*

American Sign Language *n.* A communication system for deaf people in the US in which meaning is conveyed by hand signals and the positions of the hands relative to the upper part of the body. See also **SIGN LANGUAGE**. Compare **BRITISH SIGN LANGUAGE**. Also called *Ameslan*. **ASL** *abbrev.*

Ameslan *n.* Another name for **American Sign Language*.

Ames room *n.* A distorted room that appears almost normal when viewed with one eye through a peephole in one of its walls, but the floor, ceiling, and side walls of which are actually trapezium-shaped (US *trapezoidal*) rather than rectangular, resulting in visual illusions relating to the sizes of objects or people within the room. Some viewers experience an ineffable strangeness that is believed to result from trying to accommodate the focal length of the eye to the far corners of the room that appear to be the same distance from the peephole but are not. Also called the *Ames illusion* or the *distorted-room illusion*. See also **HONI PHENOMENON**, **TRANSACTIONALISM**. Compare **TRAPEZOIDAL WINDOW**. [Named after the US painter and psychologist Adelbert Ames, Jr (1880–1955) who constructed the first such room in 1946, although the idea had been conceived in the late 19th century by the German physiologist, physicist, and mathematician Hermann Ludwig Ferdinand von Helmholtz (1821–94)]

Ames window *n.* Another name for the ***trapezoidal window**.

ametropia *n.* An imperfection in the refractive properties of the ***crystalline lens** of the eye, resulting in an inability to focus images on the retina and causing partial blindness. [From Greek *ametros* unmeasured, from *a-* without + *metron* a measure + *ops* an eye + *-ia* indicating a condition or quality]

amfetamine *See* AMPHETAMINE.

amimia *n.* Inability to make meaningful ***gestures (1)** or to understand the gestures of others. *See also* KINESICS. [From Greek *a-* without + *mimos* mime + *-ia* indicating a condition or quality]

amine *n.* An organic compound formed from ammonia by replacing one or more of the hydrogen atoms with one or more hydrocarbon ***radicals (2)**. Amines such as ***adrenalin** (epinephrine), ***noradrenalin** (norepinephrine), ***dopamine**, ***histamine**, ***serotonin**, and ***tryptamine** are of special importance in neurobiology because of their function as ***neurotransmitters**. *See also* BIOGENIC AMINE, CATECHOLAMINE, IMIDAZOLEAMINE, INDOLEAMINE, MONOAMINE. [From *am(monia)* + *-ine* indicating an organic compound]

amino acid *n.* Any of a group of organic compounds containing at least one amino group (NH₂) and one carboxyl group (COOH), just 20 of which from among more than 100 that occur in nature forming the component molecules of all ***peptides**, ***polypeptides**, and ***proteins** of which living cells are composed. They include non-essential amino acids, which can be synthesized in the body, and essential amino acids, which cannot be synthesized in the body and must therefore be supplied in the diet. *See* ASPARTIC ACID, CREATINE, DOPA, GLUTAMIC ACID, GLYCINE, PHENYLALANINE, TRYPTOPHAN, TYROSINE. *See also* CODON, GENETIC CODE.

Amitril *n.* A proprietary name for the tri-cyclic antidepressant drug ***amitriptyline**. [Trademark]

amitriptyline *n.* Amitriptyline hydrochloride, one of the most commonly

*****ebook converter DEMO Watermarks*****

prescribed of the ***tricyclic antidepressant** drugs, used in the treatment of depression, and of anorexia nervosa and bulimia nervosa when accompanied by depression, and as an adjunctive treatment of neurogenic pain. It acts by blocking the reuptake mechanism of amine ***neurotransmitters**, allowing them to accumulate at ***synapses (1)** in the central nervous system. Also called *Amitril*, *Elavil*, *Endep*, *Laroxyl*, *Saroten*, and *Triptafen* (trademarks). Formula: C₂₀H₂₃N.

Ammon's horn *n.* Another name for the main part of the ***hippocampus**. The entire hippocampal formation includes not only Ammon's horn but also the subiculum and the dentate gyrus. Also called *cornu ammonis*. [Named after the Egyptian deity Ammon, often depicted with a ram's head, somewhat resembling the shape of the hippocampus]

amnesia *n.* Loss of memory, the most common forms generally affecting ***declarative memory** rather than ***procedural memory**. See also ANTEROGRADE AMNESIA, CONFABULATION, GLOBAL AMNESIA, INFANTILE AMNESIA, MNEMONIC, RETROGRADE AMNESIA, SOURCE AMNESIA, TRANSIENT GLOBAL AMNESIA. Compare HYPERMNESIA. [From Greek *amnesia* oblivion, from *a-* without + *mnasthai* to remember + *-ia* indicating a condition or quality]

amnesic syndrome See AMNESTIC DISORDER.

amnesic disorder *n.* A ***mental disorder** characterized by a significant decline in the capacity to learn and recall new information, and often also a decline in the recall of previously learnt information or experiences, leading to impairment in social or occupational functioning, the symptoms not occurring exclusively during delirium or dementia. The disorder may result from a ***general medical condition**, including head injury, medication, or exposure to a toxin, and there is a variant form of substance-induced persisting amnesic disorder often caused by a deficiency of vitamins (especially thiamine) following prolonged alcohol misuse. Also called *amnesic syndrome*. See also COGNITIVE DISORDERS. [From Greek *amnestos* forgetting, from *a-* not + *mnasthai* to remember]

amniocentesis *n.* Extraction of a small amount of amniotic fluid through

a hollow needle from the uterus of a pregnant woman to detect foetal abnormalities such as **Down's syndrome*. See also *ALPHA-FOETOPROTEIN*. [From Greek *amnion* the innermost membrane enveloping an embryo + *kentesis* a puncture, from *kentein* to prick]

amobarbital *n.* Amylobarbitol sodium, a short-acting **barbiturate* drug and central nervous system **depressant*, used as a sedative and hypnotic drug, and sometimes taken as a street drug. Also called *amylobarbitone*. *Amytal* (trademark). Formula $C_{11}H_{18}N_2O_3Na$. [From *amyl*, from Greek *amylon* starch + *hyle* matter, *amyl* having been originally synthesized from starch + *barbit(uric) (acid)* + *-al* indicating a pharmaceutical product]

amodal completion *n.* Perceptual **filling-in* of an occluded region of an object or image. Compare *MODAL COMPLETION*, *PHONEMIC RESTORATION*. [From Latin *a* from or away from + *modus* a measure or manner + *-alis* of or relating to]

amok *n.* A **culture-bound syndrome* originally reported in Malaysia but later also in Indonesia, Laos, the Philippines, Papua New Guinea, Polynesia, Puerto Rico, and among the Navajo in North America, characterized by a period of hostile brooding, often precipitated by a perceived insult or affront, followed by an outburst of uncontrolled aggression directed at people and objects in the vicinity (*running amok*) with **paranoid ideation* and **automatism*, followed by exhaustion and **amnesia* for the violent behaviour. It is often interpreted in Western cultures as a **dissociative disorder*. Also called *amuck*. See also *CAFARD*, *IICH'AA*, *MAL DE PELEA*. [From Malay *amok* a furious assault]

amorphognosia *n.* Impaired ability to recognize by touch the size and shape of objects. Also called *amorphognosis*. See also *AGNOSIA*. Compare *AHYLOGNOSIA*, *TACTILE AGNOSIA*. [From Greek *a-* without + *morphe* form + *gnosis* knowledge + *-ia* indicating a condition or quality]

AMP *abbrev.* Adenosine monophosphate, a constituent **nucleotide* of **DNA* and **RNA* consisting of **adenine*, **deoxyribose*, and a **phosphate* group. Also called *adenylic acid*. See also *CYCLIC AMP*.

amphetamine *n.* A synthetic **sympathomimetic* drug that is often used as a street drug and as a medication to control the symptoms of narcolepsy in adults and attention-deficit/hyperactivity disorder and hyperkinetic disorders in children, and that acts as a central nervous system **stimulant*, causing the release of **noradrenalin* (norepinephrine) and **dopamine* from noradrenergic and dopaminergic neurons and blocking the reuptake of dopamine, leading to feelings of euphoria that can last for several hours, with occasional unpleasant side-effects such as panic, anxiety, paranoia, and insomnia. Also called *Benzedrine* (trademark) or *speed* (street name). Formula: C₉H₁₃N. See also AMPHETAMINE-RELATED DISORDERS, DEXTROAMPHETAMINE, METHAMPHETAMINE, METHYLPHENIDATE. Compare COCAINE, ECSTASY (2), MEPHEDRONE. [From its chemical composition *a*(lpha) + *m*(ethyl) + *ph*(enyl) + *et*(hyl) + *amine*]

amphetamine psychosis *n.* A condition resembling **schizophrenia* caused by an overdose of **amphetamine*.

amphetamine-related disorders *n.* **Substance-related* and **addictive disorders* associated specifically with **amphetamine* and amphetamine-like substances such as **dextroamphetamine* and **methamphetamine* (speed). Included among these disorders are amphetamine misuse, amphetamine dependence, and a range of amphetamine-induced disorders. See also SUBSTANCE-INDUCED DISORDERS.

amphiboly *n.* Ambiguity arising from alternative ways of parsing a sentence or interpreting its structure. For example, a sentence such as *Ann is married, and Bob is single, or Charles is divorced* may mean that Ann is married and either Bob is single or Charles is divorced; or it may mean that either both Ann is married and Bob is single, or else Charles is divorced. Amphiboly cannot arise in formal **logic*, a provable result that is sometimes called ‘unique readability’. Also called *amphibology*. **amphibolies** or **amphibologies** *pl.* **amphibolic**, **amphibological**, or **amphibolous** *adj.* [From Greek *amphibolos* ambiguous, from *amphi* both ways + *ballein* to throw]

amphipathic *adj.* Pertaining to a molecule that has one hydrophilic end (attracted to water) and one hydrophobic end (repulsed by water), such as are found in the **lipid* components of **cell membranes* and in detergents. See

also [LIPID BILAYER](#). [From Greek *amphi* both + *pathos* feeling + *-ikos* of, relating to, or resembling]

amplification *n.* Enlargement: expressing an idea more expansively, or increasing the [*amplitude](#) of a sound. In [*analytical psychology](#), [*interpretation](#) (2) of a dream-image through [*directed association](#) and exploration of mythology, mysticism, folklore, and cultural symbols. [From Latin *amplificare* to make more copious]

amplitude *n.* Size, extent, or magnitude, especially of a vibratory movement or the displacement of a periodic oscillation or wave, its *instantaneous amplitude* being its displacement at a specific moment from the zero or mean position and its *peak amplitude* being the maximum displacement that it attains, peak amplitude usually being implied when the term is unqualified. It is the physical counterpart of the psychological sensations of loudness in a sound wave and of lightness or brightness in a light wave. See also [DECIBEL](#). [From Latin *amplitudo* breadth, from *amplus* spacious]

ampulla *n.* A small vessel such as a miniature two-handled ancient Roman flask; also any membranous [*vesicle](#), especially the bulge in each [*semicircular canal](#) with its crest-shaped inner surface or crista containing [*hair cells](#). It is part of the [*vestibular system](#) and plays a part in sensations of body orientation. [From Latin *ampulla* a small flagon, irregular diminutive of *amphora* a flagon]

amputee See [ACROTOMORPHILIA](#), [APOTEMNOPHILIA](#).

amuck See [AMOK](#).

amurakh See [LATAH](#).

amusia *n.* Inability to recognize or reproduce tunes. Congenital amusia affects between 4 and 5 per cent of people and is believed to arise from a genetic defect in the ability to perceive the pitch structure of music. Famous people with this handicap include the Argentine-born Latin American

revolutionary Ernesto (Che) Guevara (1928–67) and the US economist and Nobel laureate Milton Friedman (1912–2006). Compare [ASONIA](#), [DYSMELODIA](#), [DYSMUSIA](#). [From Greek *a-* without + *mousika* (*teckne*) musical art, from *mousa* a muse]

amygdala *n.* An almond-shaped brain structure in the [*limbic system](#) at the base of the inside of each [*temporal lobe](#), contiguous with the olfactory cortex, controlling the experience and expression of emotion and involved in motivation, aggression, feeding, and (through its links with the hippocampus) long-term memory. Electrical stimulation of this area usually produces an intense emotion of fear. Ablation of the amygdala has been used to treat [*intermittent explosive disorder](#) or other forms of [*impulse-control disorder](#). Also called the *amygdaloid body* or *amygdaloid complex*. See also [KINDLING](#). **amygdalae** *pl.* [From Latin *amygdala* an almond, from Greek *amygdale* an almond]

amygdalohippocampectomy *n.* A neurosurgical procedure that is used for the treatment of certain forms of [*temporal lobe epilepsy](#) and that involves the removal of most of the [*amygdala](#) and the [*anterior](#) part of the [*hippocampus](#), the brain structures where the focus of the epilepsy is located.

amyl nitrite *n.* The best known of the [*nitrite inhalants](#), an amber-coloured, fruity-smelling liquid that acts as a peripheral [*vasodilator](#), functioning for some users as an [*aphrodisiac](#), and that also causes a decrease in oxygen in the brain. A common street name for amyl nitrite capsules is *poppers*. [From Greek *amylon* starch + *hyle* matter, amyl having been originally synthesized from starch + *nitrite* a salt or ester of nitrous acid]

amylbarbitone *n.* See [AMOBARBITAL](#).

amyloid plaque *n.* A deposit of insoluble beta-amyloid protein ([BAP](#)) occurring in the brains of most people over 70 years old, causing degeneration of neurons, and found abundantly in people with [*Alzheimer's disease](#), especially in the cerebral cortex, hippocampus, amygdala, and entorhinal cortex. The protein is made up of approximately 40 amino acids and is an abnormal breakdown product of a larger precursor protein that is encoded by a gene on chromosome 21 and is present in healthy brains,

*****ebook converter DEMO Watermarks*****

though with an unknown function. Also called a *senile plaque*. See also [NEUROFIBRILLARY TANGLE](#), [PROGRESSIVE SUPRANUCLEAR PALSY](#). [Named in 1853 by the German pathologist Rudolf Ludwig Karl Virchow (1821–1902) from Greek *amylon* starch + *-oeides* denoting resemblance of form, from *eidos* shape or form, based on the false assumption that it consists of a starchy substance]

amyotrophic lateral sclerosis *n.* A type of [*motor neuron disease](#) beginning in middle age and progressing rapidly, causing death within five years, characterized by weakness and [*atrophy](#) of the muscles initially of the hands, forearms, and legs, but spreading to most of the body and face, with [*dysarthria](#) and [*dysphagia](#). Also called *Lou Gehrig's disease*. **ALS** abbrev. [From Greek *a-* without + *mys* muscle + *trophe* nourishment]

Amytal *n.* A proprietary name for the short-acting barbiturate drug [*amobarbital](#) (amylobarbitone). [Trademark]

anabolic androgenic steroid See [ANABOLIC STEROID](#). **AAS** abbrev.

anabolic steroid *n.* Any of several synthetic [*steroid hormones](#) used clinically and by athletes to promote muscle tissue growth, with side-effects including [*mood](#) (1) swings, [*hallucinations](#), [*paranoia](#), liver damage, and elevated blood pressure. They sometimes induce a sense of euphoria and exaggerated self-importance, but after repeated use this may give way to listlessness, irritability, and general dysphoria. Among the most common are [*nandrolone](#) (injectable, slow-acting), [*drostanalone](#) (taken orally, fast-acting), [*oxymethalone](#) (taken orally), and [*stanozolol](#) (taken orally and popular with women because of its relatively low [*androgenic](#) potency). Also called an *anabolic androgenic steroid*. See also [PERFORMANCE ENHANCER](#), [ROID RAGE](#), [SUBSTANCE ABUSE](#), [SUBSTANCE-RELATED AND ADDICTIVE DISORDERS](#). Compare [STEROID](#). [From Greek *anabole* a heaping up, from *ana* up + *bole* a throw + *sterol* + *-oeides* denoting resemblance of form, from *eidos* shape]

anabolism *n.* A constructive form of [*metabolism](#) involving the synthesis of proteins and storage of energy. Compare [CATABOLISM](#). **anabolic** *adj.* [From Greek *anabole* a heaping up, from *ana* up + *bole* a throw + *-ismos* indicating a state or condition]

*****ebook converter DEMO Watermarks*****

anaclitic *adj.* In **psychoanalysis*, of, relating to, or characterized by strong emotional dependence on another person, exemplified by the behaviour of an infant at the mother's breast. Sigmund Freud (1856–1939) introduced the concept in 1905 in his book *Three Essays on the Theory of Sexuality* (*Standard Edition*, VII, pp. 130–243, at pp. 181–5). *See also* *ANACLITIC DEPRESSION*, *ANACLITIC OBJECT-CHOICE*. **anaclisis** *n.* The state or condition of being anaclitic. [From Greek *anaklitos* leaning up against, from *ana* up + *klinein* to lean + *-ikos* of or relating to]

anaclitic depression *n.* A form of **depression* manifested by infants, usually triggered by sudden separation from a parent after having had a normal relationship for at least six months, characterized by crying, apprehension, withdrawal, **anorexia*, and **dyssomnias*. The disorder was introduced and named in 1946 by the Austrian psychoanalyst René A(rpad) Spitz (1887–1974). *See also* *ANACLITIC*, *ATTACHMENT THEORY*, *HOSPITALISM*, *MATERNAL DEPRIVATION*, *SEPARATION ANXIETY*, *SEPARATION ANXIETY DISORDER*.

anaclitic object-choice *n.* In **psychoanalysis*, a form of **object-choice* in which one chooses a love-object to resemble a parental figure, being attracted to people who have the ability to feed, care, and protect one. It is usually explained by the fact that the sexual instinct initially develops **anaclitically* on the instinct of self-preservation. The concept was introduced in 1914 by Sigmund Freud (1856–1939) in an article ‘On Narcissism: An Introduction’ (*Standard Edition*, XIV, pp. 73–102, at pp. 87–90). *See also* *ANACLITIC*. *Compare* *NARCISSISTIC OBJECT-CHOICE*.

anacoluthon *n.* A sentence showing a lack of grammatical sequence, or a grammatical construction in which one part of a sentence does not fit grammatically with another, such as the following utterance: *The main reason for my feeling of guilt—and I'm not the sort of person given to wallowing in guilt, although I have had periods in my life when I felt depressed, probably because both my parents tended to be depressives.* **anacolutha** *pl.* **anacoluthic** *adj.* [From Greek *an-* not + *akolouthos* following]

anacusia *n.* Total **deafness*. Also spelt *anacousia*. Also called *anacusis* or *anacousis*. **anacusic** *adj.* [From Greek *an-* without + *akousis* hearing, from
*****ebook converter DEMO Watermarks*****]

akouein to hear + *-ia* indicating a condition or quality]

anaerobic *adj.* Of or relating to the generation of energy by a form of **metabolism* not requiring oxygen or air. *See also* [FAST GLYCOLYTIC FIBRE](#), [GLYCOLYSIS](#). *Compare* [AEROBIC](#). [From Greek *an-* without + *aer* air + *bios* life + *-ikos* of, relating to, or resembling]

anaesthesia *n.* Absence of sensation or feeling, often resulting from a disorder or induced by **anaesthetic* (1) drugs or **hypnosis*, called *general anaesthesia* when it involves loss of consciousness and *local anaesthesia* when it affects only a restricted area of the body. US *anesthesia*. *See also* [ACUPUNCTURE](#), [BATHYANAESTHESIA](#), [CONVERSION SYMPTOM](#), [EPIDURAL ANAESTHETIC](#), [GATE-CONTROL THEORY](#), [GLOVE ANAESTHESIA](#), [NARCOTIC](#), [PALLANAESTHESIA](#), [RAUSCH](#), [SHOE ANAESTHESIA](#), [STOCKING ANAESTHESIA](#). *Compare* [ANALGESIA](#). [Coined in 1846 by the US anatomist and writer Oliver Wendell Holmes (1809–94) from Greek *anaesthesia* absence of sensation, from *an-* without + *aisthesis* feeling + *-ia* indicating a condition or quality]

anaesthetic *n.* 1. Any drug or substance that induces **anaesthesia*. *adj.* 2. Inducing or characterized by **anaesthesia*. US *anesthetic*.

Anafranil *n.* A proprietary name for the drug **clomipramine*. [Trademark]

anaglyph *n.* A stereoscopic image composed of two separate images of the same object or scene, taken from slightly different positions, represented in two different colours, usually red and green or cyan (blue–green) that, when viewed through spectacles having one lens of each colour, merge to produce a three-dimensional effect. The term is also applied to any artwork such as a cameo that is designed to stand out in low relief. *See also* [CYCLOPEAN PERCEPTION](#), [RANDOM-DOT STEREOGRAM](#), [STEREOPSIS](#), [VISUAL ILLUSION](#). **anaglyphic**, **anaglyphical**, **anaglyptic**, or **anaglyptical** *adj.* [From Greek *anaglyphe* carved in low relief, from *ana-* backwards or up + *glyphe* an engraving or carving, from *glyphein* to engrave or carve]

anaglyptoscope *n.* An instrument that alters the angle of incident light on a three-dimensional object, reversing the areas of light and shadow, used in research into **chiaroscuro*. [From *anaglyph* + Greek *skopeein* to view]

*****ebook converter DEMO Watermarks*****

anagogic interpretation *n.* In **psychoanalysis*, a mode of **interpretation* of dreams, myths, and other symbolic representations in order to reveal their higher allegorical or spiritual meaning. It is considered to be the opposite of ordinary analytic interpretation, which on the contrary reduces such material to its basic and often sexual content. Carl Gustav Jung (1875–1961) incorporated anagogic interpretation into his **analytical psychology*, but Sigmund Freud (1856–1939) rejected it as merely a reversion to pre-analytic notions ('Dreams and Telepathy', 1922, *Standard Edition*, XVIII, pp. 197–220, at p. 216). [From Greek *anagoge* a lifting up, from *ana* up + *agein* to lead]

anal character *n.* In **psychoanalysis*, a personality pattern determined by **fixation* (2) at the **anal stage* and characterized by the adult personality traits of orderliness, frugality, and obstinacy, sometimes called the three *Ps*: pedantry, parsimony, and petulance. Also called the *anal personality*. See *ANAL TRIAD*. See also *OBSESSIVE–COMPULSIVE PERSONALITY DISORDER*.

analeptic *adj.* 1. Restorative or invigorating. *n.* 2. A restorative or invigorating drug, especially one that helps to restore consciousness after a general anaesthetic. See also *PSYCHOANALEPTIC*. [From Greek *analeptikos* restorative, from *analambanein* to take up, from *ana* up + *lambanein* to take + *-itikos* resembling or marked by]

anal erotism *n.* In **psychoanalysis*, sensuous pleasure derived from stimulation of the anus, and focusing of **libido* on the anus during the **anal stage*. Also called *anal eroticism*. **anal-erotic** *adj.*

anal-expulsive phase *n.* A subdivision of the **anal stage* suggested in 1924 by the German psychoanalyst Karl Abraham (1877–1925) in his book *Versuch einer Entwicklungsgeschichte der Libido* (A Study of the Developmental History of the Libido). In this first phase, **anal erotism* is linked to evacuation of the bowels, and the sadistic instinct is satisfied through destruction of faeces; whereas in the second **anal-retentive phase*, anal erotism is associated with retention of faeces, and the sadistic instinct is linked to possessive control. Abraham believed that the progression from the first to the second of these two phases is crucial for the later development of the ability to form loving relationships. Also called the *anal-expulsive stage*.

*****ebook converter DEMO Watermarks*****

analgesia *n.* Absence or diminution of **pain* sensation, often induced by **analgesic* drugs or **hypnosis*. See also AUDIOANALGESIA, HIDDEN OBSERVER, NEODISSOCIATION THEORY, THERMOANALGESIA. Compare ANAESTHESIA. [From Greek *an-* without + *algesis* sense of pain, from *algos* pain + *-ia* indicating a condition or quality]

analgesic *n.* 1. Any drug or substance that induces **analgesia*. See ASPIRIN, BETA-ENDORPHIN, CARBAMAZEPINE, CODEINE, NARCOTIC ANALGESIC, QUININE. See also PHENYLQUININE WRITHING TEST. *adj.* 2. Inducing or characterized by **analgesia*.

analogies test *n.* A type of **intelligence test* item requiring logical thinking, usually presented in the form *A is to B as C is to...*, sometimes followed by a number of alternatives from which a selection must be made, the right answer in this example being *D*. Another easy example is *Bird is to air as fish is to...*, the right answer being *water*. A typical hard example with response alternatives is: *C is to X as F is to...(M, U, L, V, or H)*. Although arguments could be developed to justify various answers, the ‘right’ answer to this item is *U*, because *C* and *X* are three letters from either end of the alphabet, and *F* and *U* are six letters from either end.

analogue *n.* 1. Something that is seen as comparable to another; specifically, a physical representation, such as a pointer on a dial, of a quantity being measured; an organ or body part resembling another; an organic compound related to another by the replacement of hydrogen atoms by alkyl groups. *adj. n.* 2. (Of or pertaining to) a form of **knowledge representation* in which continuously varying dimensions or relations between elements of the thing being represented correspond to continuously varying dimensions or relations between parts of the representation, so that the representations resemble the things that they represent. Also spelt *analog*, especially in the US, where it is a variant form, and in computing terminology. Compare DIGITAL, SYMBOLIC REPRESENTATION. **analogical** or **analogic** *adj.* [From Greek *analogos* proportionate, from *ana* up + *logos* word, discourse, or reason]

anal-retentive phase *n.* The second phase of the **anal stage* according

*****ebook converter DEMO Watermarks*****

to a suggestion made in 1924 by the German psychoanalyst Karl Abraham (1877–1925) in his book *Versuch einer Entwicklungsgeschichte der Libido* (A Study of the Developmental History of the Libido). In the first ***anal-expulsive phase**, ***anal erotism** is linked to evacuation of the bowels and the sadistic instinct is satisfied by destruction of faeces, whereas in this second anal-retentive phase, anal erotism is associated with retention of faeces, and the sadistic instinct is satisfied by possessive control. Also called the *anal-retentive stage*.

anal sadistic stage *n.* Another name for the ***anal stage**.

anal stage *n.* According to the theory of ***psychoanalysis** of Sigmund Freud (1856–1939), the second ***libidinal stage** of ***psychosexual development**, from about 2 to 3 years of age, characterized by a focusing of ***libido** on the anal ***erotogenic zone**, an investment of ***object-relationships** with meanings associated with faeces and defecation, and a strengthening of ***sadomasochistic tendencies**. In an article entitled ‘The Disposition to Obsessional Neurosis’ (1913), Freud mentioned it for the first time: ‘And now we see the need for yet another stage to be inserted before the final shape is reached—a stage in which the component instincts have already come together for the choice of an object and that object is already something extraneous in contrast to the subject's own self, but in which the primacy of the genital zones has not yet been established’ (*Standard Edition*, XII, pp. 317–26, at p. 321). When in 1915 Freud revised his book *Three Essays on the Theory of Sexuality* (1905, *Standard Edition*, VII, pp. 130–243), he placed the anal stage between the ***oral stage** and the ***phallic stage**. In his 1917 article ‘On Transformations of Instinct as Exemplified in Anal Erotism’ (*Standard Edition*, XVII, pp. 127–33), he famously interpreted the symbolic meaning of giving and withholding: faeces = gifts (to parents or carers), and gifts = money, hence such phrases as *filthy lucre*. Also called the *anal-sadistic stage* or *phase*. See **ANAL-EXPULSIVE PHASE**, **ANAL-RETENTIVE PHASE**. See also **ANAL CHARACTER**, **GENITAL STAGE**, **LATENCY PERIOD**.

anal triad *n.* In ***psychoanalysis**, the three personality ***traits** of orderliness, parsimony (or meanness), and obstinacy, first identified by Sigmund Freud (1856–1939) as the distinctive adult traits associated with imperfect negotiation of the ***anal stage** of development (‘Character and Anal

*****ebook converter DEMO Watermarks*****

Erotism', 1908, *Standard Edition*, IX, pp. 169–75). The traits are sometimes called the three *Ps*: pedantry, parsimony, and petulance. See also ANAL CHARACTER, FIXATION (2), OBSESSIVE–COMPULSIVE PERSONALITY DISORDER.

analysand *n.* A person undergoing *psychoanalysis. [From *analysis* + *-and*, following the model of *multiplicand*, a number that is to be multiplied]

analysis *n.* The action or process of analysing; also, an abbreviated name for *psychoanalysis.

analysis by synthesis *n.* A recognition process in which hypotheses are formulated and compared with input data until one of the hypotheses produces a match. This is how experienced crossword-puzzle solvers often identify words with missing letters, for example, if the clue is *Via the middle route in South America*, a solver who knows that the answer is a four-letter word with the form — E — U may be unable to work out the logic of the clue but may guess that the answer is the name of a South American city or country and may test various hypotheses until finding one that fits, namely *PERU*. It involves both *bottom-up processing and *top-down processing.

analysis of covariance *n.* In statistics, a technique of data analysis based on *analysis of variance (ANOVA) that uses statistical control to remove the effect of an *extraneous variable, known or assumed to be correlated with the *dependent variable, and analyses the portion of the variance in the dependent variable explained by one or more *independent variables excluding the extraneous variable. In psychology, it is often used to suppress extraneous subject variables such as intelligence or age that cannot be controlled by *randomization. See also ANALYSIS OF COVARIANCE STRUCTURES, COVARIATE. ANCOVA *abbrev.*

analysis of covariance structures *n.* A statistical method, combining techniques of *factor analysis and *multiple regression, for analysing *causal models derived from *correlational studies. It generally involves *structural equation modelling and sometimes *path diagrams. See also ANALYSIS OF COVARIANCE (ANCOVA).

analysis of variance *n.* A statistical procedure for testing the
*****ebook converter DEMO Watermarks*****

significance of differences among several group means by partitioning the total variance in the **dependent variable* into effects due to the **independent variable* (in *one-way ANOVA*) or each of the two or more independent variables (in *multifactorial ANOVA*) plus error variance. In multifactorial designs the proportion of the total variance due to **interaction effects* involving two or more independent variables is also estimated. The term was introduced by the English statistician and geneticist Ronald Aylmer Fisher (1890–1962) in an article in the journal *Eugenics Review* in 1918. *See also* *A POSTERIORI TEST*, *MULTIPLE COMPARISONS*, *PLANNED COMPARISON*, *REPEATED-MEASURES ANALYSIS OF VARIANCE*. *Compare* *ANALYSIS OF COVARIANCE (ANCOVA)*, *MULTIVARIATE ANALYSIS OF VARIANCE (MANOVA)*. **ANOVA** *abbrev.*

analyst *n.* One who analyses. In **psychoanalysis*, another name for a **psychoanalyst*.

analytical psychology *n.* A term introduced by Carl Gustav Jung (1875–1961) in 1913, the year he left the **psychoanalytic* movement, to denote the new approach that he saw as having evolved out of psychoanalysis under his leadership. Also called *Jungian analysis*. *See* *ABAISSEMENT DU NIVEAU MENTAL*, *ACTIVE IMAGINATION*, *AMPLIFICATION*, *ANAGOGIC INTERPRETATION*, *ANIMA*, *ANIMUS* (3), *ARCHETYPAL FORM*, *ARCHETYPE* (2), *COLLECTIVE UNCONSCIOUS*, *COMPLEX INDICATOR*, *DIRECTED ASSOCIATION*, *DIRECTED THINKING*, *ELECTRA COMPLEX*, *ENANTIODROMIA*, *EXTRAVERSION*, *FANTASY THINKING*, *FUNCTION TYPE*, *GOD-IMAGE*, *HORME*, *IMAGO* (1), *INDIVIDUATION*, *INFLATION OF CONSCIOUSNESS*, *INTROVERSION*, *MANA*, *MANDALA*, *NUMINOSUM*, *OBJECTIVE PSYCHE*, *PARTICIPATION MYSTIQUE*, *PERSONA* (1), *PERSONAL UNCONSCIOUS*, *PRIMORDIAL IMAGE*, *PSYCHOID*, *PSYCHOPOMP*, *PUER AETERNUS*, *REDUCTIVE INTERPRETATION*, *SHADOW* (2), *SYNCHRONICITY*, *SYZYGY*, *UROBOROS*, *WORD-ASSOCIATION TEST*.

analytic language *n.* Another name for an **isolating language*.

analytic statement *n.* In **logic*, a declarative statement in which the predicate is contained in the subject. Such a statement cannot be confirmed or refuted by observation or experience, and its negation is either directly or implicitly self-contradictory. One example is the statement *All bachelors are unmarried*; another is *God is omnipotent*, provided that omnipotence is part

*****ebook converter DEMO Watermarks*****

of the definition of God. The truth or falsity of an analytic statement or proposition is ***a priori**. Also called an *analytic proposition*. Compare **SYNTHETIC STATEMENT**. [From Greek *analytikos*, analytic, from *analyzein* to break down or dissolve, from *ana-* down + *lyein* to loosen]

anamnesis *n.* 1. ***Reminiscence**, or the ability to recall past experiences. 2. The account of a patient or client of the antecedents and course of a disorder. Compare **CATAMNESIS**. **anamneses** *pl.* **anamnestic** *adj.* Easily recalled. [From Greek *anamimneskein* to recall, from *ana* up + *mimneskein* to remind]

anamorphic *adj.* Of, relating to, or consisting of a distorted image that regains its correct proportions when viewed from a particular angle or in a curved mirror. An anamorphic picture or image is usually so distorted that it is difficult or impossible to interpret with normal viewing, but when examined with an *anamorphoscope* (usually a polished cylinder or cone), or when viewed at a steep slant, the distortion is corrected and the normal proportions of the image are restored, the most famous example in fine art being *The Ambassadors* painted in 1533 by the German artist Hans Holbein the Younger (1497–1543), which contains an elongated human skull that becomes recognizable only when the painting is viewed from its edge at a downward angle of 27 degrees. [From Greek *ana* back or again + *morphe* a shape or form + *-ikos* of, relating to, or resembling]

anandamide *n.* A naturally occurring substance in the brain that stimulates the same receptors as the psychotropic substances in ***cannabis**. [From Sanskrit *ananda* perfect bliss, from *a-* intensive prefix + *nandi* joy + *amide* an organic compound containing the group —CONH₂, from *am(monia)* + *-ide* indicating membership of a particular group of chemical compounds]

anankastic neurosis See **OBSESSIVE—COMPULSIVE DISORDER**. [From Greek *ananke* necessity]

anankastic personality disorder *n.* Another name for ***obsessive—compulsive personality disorder**.

anaphase *n.* The third phase of cell division by [*mitosis](#), when the paired chromosomes move apart to the poles of the spindle, or either of the two phases when this occurs during [*meiosis \(1\)](#). [From Greek *ana* up + *phasis* an aspect, from *phainein* to show]

anaphia *n.* Absence of the sense of touch. [From Greek *a-* without + *haphe* touch + *-ia* indicating a condition or quality]

anaphora *n.* In speaking or writing, the use of a pronoun or other word to refer back to something already mentioned in the sentence. In the sentence *When Wundt founded the world's first psychological laboratory in 1879, he did it in Leipzig*, the words *he*, *did*, and *it* all exemplify anaphora, because they refer back to *Wundt*, *founded*, and *founded the world's first psychological laboratory*, respectively. See also [DEIXIS](#). Compare [CATAPHORA](#).
anaphoric *adj.* [From Greek *ana-* backwards + *pherein* to carry]

anaphrodisiac *adj. n.* (Of or relating to) any substance that diminishes sexual desire. Many therapeutic drugs, including the [*selective serotonin reuptake inhibitors](#) such as Prozac, have anaphrodisiac side-effects. Compare [APHRODISIAC](#). [From Greek *an-* without + *aphrodisiakos* aphrodisiac, from *Aphrodite* the Greek goddess of love]

anaphylactic shock *n.* A form of [*traumatic shock](#) caused by [*anaphylaxis](#).

anaphylaxis *n.* Heightened sensitivity to a foreign substance, such as penicillin or bee sting, often but not necessarily a [*protein](#), resulting from earlier exposure to it. [From Greek *ana* back + *phylaxis* protection]

anarchic hand *n.* A rare [*neurological](#) condition, leading to complex, goal-directed actions performed by a person's hand involuntarily and against its owner's will. It is associated with lesions in the anterior [*corpus callosum](#) and the [*supplementary motor area](#) in the opposite cerebral hemisphere to the anarchic hand and is a symptom of [*disconnection syndrome](#). It was first reported by the German psychiatrist Kurt Goldstein (1878–1965) in the journal *Neurologische Centralblatt* in 1909 and named by the Italian

neurologist Sergio Della Sala (born 1955) and two colleagues in an article in the journal *Neuropsychologia* in 1991. Also called *Dr Strangelove syndrome*, after the eponymous rocket scientist played by Peter Sellers in Stanley Kubrick's 1964 film, *Dr Strangelove or: How I Learned to Stop Worrying and Love the Bomb*, who struggles constantly to prevent his right hand from giving Nazi salutes. Compare [ALIEN HAND SIGN](#), [RUBBER HAND PHENOMENON](#). **AH** abbrev. [From Greek *anarchia* lawlessness or leaderlessness, from *an-* not + *arche* government + *-ikos* of, relating to, or resembling]

anarthria *n.* Inability to speak coherently. [From Greek *an-* without + *arthron* articulation + *-ia* indicating a condition or quality]

anchoring and adjustment *n.* A judgemental [*heuristic](#) through which a person makes an estimate by starting from an initial value and then adjusting it to yield a final estimate, the adjustment typically being insufficient and the estimate therefore biased towards the initial value. The initial value may be suggested by the formulation of the problem, as in a classic experiment in which people were asked to estimate the number of African countries in the United Nations by first indicating whether a number suggested by the experimenter was too high or too low and then estimating the actual number; those who began from a suggested number of 10 gave a median estimate of 25 (too low), and those who began from 65 gave a median estimate of 45 (too high). Alternatively, the initial value may result from partial computation, as in another classic experiment in which high school students who were given five seconds to estimate the value of the product $1 \times 2 \times 3 \times 4 \times 5 \times 6 \times 7 \times 8$ produced a median estimate of 512 (too low), whereas those asked to estimate the product $8 \times 7 \times 6 \times 5 \times 4 \times 3 \times 2 \times 1$ produced a median estimate of 2,250 (too high), apparently because members of both groups calculated the first few steps and then extrapolated without sufficient adjustment. When [*revealed preferences](#) are determined empirically, the technique of asking decision makers whether they prefer various gambles to a fixed alternative tends to lead to anchoring and adjustment on the probability scale, whereas asking them how much they would be willing to stake on the gamble tends to lead to anchoring and adjustment on the money scale. The heuristic was first introduced in 1971 by the US psychologists Paul Slovic (born 1938) and Sarah C. Lichtenstein (born 1933). See also [OVERCONFIDENCE EFFECT](#), [PREFERENCE REVERSAL \(1\)](#).

*****ebook converter DEMO Watermarks*****

anchor test *n.* In psychometrics, a common set of test items administered in combination with two or more **alternative forms* of the test with the aim of establishing the equivalence of the scores on the alternative forms.

ancient mariner effect *n.* A tendency for people to be more willing to disclose intimate details of their lives to strangers than to acquaintances. Also called the *passing stranger effect*. [Named after Samuel Taylor Coleridge's poem *The Rime of the Ancient Mariner* (1798), in which the aged sailor tells his horrific story over and over again to strangers]

androgen *n.* A male sex hormone such as **testosterone* or **androsterone* that is produced by the testes and that promotes the development of male sexual organs and masculine **secondary sexual characteristics*, or a synthetic substance with a similar pharmacological action. **androgenic** *adj.* Of or relating to androgens. [From Greek *andros* a man + *genes* born or produced]

androgen decline in the ageing male *n.* A form of **irritable male syndrome*. US *aging*. **ADAM** *abbrev.*

androgenization *n.* The process whereby exposure to **androgens* causes male sex organs to develop in an embryo.

androgenous *adj.* Producing only male offspring. Often confused with **androgynous*, which has a different meaning and a different etymology. [From Greek *andros* a man + *genes* born or produced + *-ous* having or characterized by]

androgynous *adj.* Having both male and female characteristics. Often confused with **androgenous*. See also *BEM SEX ROLE INVENTORY*, *EPICENE (1)*.

androgyny *n.* The condition or state of being androgynous. [From Greek *andros* a man + *gyne* a woman + *-ous* having or characterized by]

andromania *n.* Another name for **nymphomania*. [From Greek *andros* a man + *mania* madness + *-ia* indicating a condition or quality]

andropause *n.* A male counterpart of the female **menopause*, caused

chiefly by a decline in the level of ***testosterone** in the blood, typically about 1 per cent per annum from age 40 onwards. Symptoms include decreased ***libido**, ***asthenia**, ***impotence**, and ***depression**. See also **IRRITABLE MALE SYNDROME**. [From Greek *andros* a man + *pausis* a halt]

androsterone *n.* An ***androgen** steroid hormone, less active than ***testosterone**, produced in the testes and detectable in men's urine, synthesized artificially from cholesterol. [From *andro(gen)* + *ster(ol)* + (*horm*)one]

anecdotal evidence *n.* Evidence obtained informally from isolated observations rather than from systematic investigation, seldom collected with sufficient care or reported in sufficient detail to be trusted as a basis for generalization, but often a source of hypotheses for further investigation.

anechoic room *n.* A room specially designed to minimize the penetration of sounds from outside and reflections of sounds from surfaces on the inside. [From Greek *an-* without + *echo* a sound + Latin *-icus* of, relating to, or resembling]

anergasia *n.* Loss of function, especially in relation to ***organic disorders**. [From Greek *an-* without + *ergasia* work or business]

anergia *n.* Listlessness or lack of activity. **anergic** *adj.* [From Greek *an-* without + *ergon* work + *-ia* indicating a condition or quality]

anesthesia See **ANAESTHESIA**.

aneurysm *n.* An abnormal dilation of a blood vessel at a point where its wall is weakened, either in the brain (where it can lead to a ***stroke**) or elsewhere in the body. Also spelt *aneurism*. [From Greek *aneurysma* an aneurysm, from *ana* up + *eurys* wide]

angel dust *n.* A common street name for the depressant drug ***phencyclidine**.

angina *n.* Short for angina pectoris, a sudden and intense chest pain, generally following physical exertion, often radiating towards the left shoulder and arm and accompanied by feelings of suffocation, caused by an inadequate blood supply to the heart muscle. *See also* [REFERRED PAIN](#). [From Latin *angina* quinsy, from Greek *anchone* a strangling]

angiogram *n.* An X-ray image of the blood vessels of the brain or other organ made after injecting a contrast medium, usually containing iodine, that is opaque to X-rays. *See also* [BRAIN IMAGING](#). **angiography** *n.* The process of producing angiograms. [From Greek *angeion* a (blood) vessel + *gramme* a line]

angiotensin II *n.* A polypeptide hormone that causes constriction of the blood vessels, raising blood pressure, precipitates [*adrenalin](#) release and blocks its reuptake, and stimulates the release of [*aldosterone](#), thereby promoting sodium retention. The hormone [*renin](#), which is secreted by the kidneys in response to a decline in blood pressure, converts a plasma protein to angiotensin I, and this in turn is converted to angiotensin II by angiotensin converting enzyme. [From Greek *angeion* a (blood) vessel + Latin *tensus* tight, from *tendere* to stretch + *-in(a)* indicating an organic compound]

angst *n.* **1.** An unfocused feeling of anxiety. **2.** In [*existentialism](#) in general and [*existential therapy](#) in particular, the dread arising from the realization that one's existence leads to an undetermined future, the emptiness of which must be filled by freely chosen actions. **3.** In [*psychoanalysis](#), anxiety, which is distinguished from fright (*Schreck*), and fear (*Furcht*) according to Sigmund Freud (1856–1939) in his book *Beyond the Pleasure Principle* (1920). Anxiety ‘describes a particular state of expecting the danger or preparing for it, even though it may be an unknown one’; fright ‘is the name we give to the state a person gets into when he has run into danger without being prepared for it’; and fear ‘requires a definite object of which to be afraid’ (*Standard Edition*, XVIII, pp. 7–64, at pp. 12–13). **angsty** *adj.* [From German *Angst* fear]

angstrom *n.* One ten billionth of a metre (10^{-10} metre) or one ten millionth of a millimetre, used mainly for expressing wavelengths of light and other electromagnetic radiation. The [*visible spectrum](#) extends from
*****ebook converter DEMO Watermarks*****

approximately 3,900 angstroms at the violet end of the spectrum to 7,400 angstroms at the red end. Also called an *angstrom unit*, but that usage is obsolescent. Also written *Ångström*, *Ångström unit*. Compare [NANOMETRE](#). [Named after the Swedish physicist Anders Jonas Ångström (1814–74) who introduced it]

angular gyrus *n.* The **gyrus* immediately behind **Wernicke's area* that curves round the back of the **lateral sulcus* of each cerebral hemisphere, on the border of the parietal and temporal lobes. It is implicated in the control of visual gaze, and in the left hemisphere it has a specialized language function, lesions in this area being associated with nominal aphasia (see [APHASIA](#)). See also [DEFAULT MODE NETWORK](#).

angular size *n.* The magnitude of an object or image expressed in terms of the **visual angle* that it subtends at the eye. See also [SIZE CONSTANCY](#).

anhedonia *n.* Inability to experience pleasure or interest in formerly pleasurable activities. Compare [HYPOHEDONIA](#). **anhedonic** *adj.* [From Greek *an-* without + *hedone* pleasure + *-ia* indicating a condition or quality]

aniconia *n.* Absence of mental imagery. [From Greek *an-* without + *eikon* an image + *-ia* indicating a condition or quality]

anima *n.* In **analytical psychology*, the feminine principle as represented in the male unconscious, an **archetype* (2) forming part of the **collective unconscious*, representing the feminine aspect of human nature, characterized by imagination, fantasy, and play, manifesting itself in personified form in dreams and fantasies, and acting as a **psychopomp* connecting the **ego* and the unconscious. As Carl Gustav Jung (1875–1961) described it: ‘Every man carries with him the eternal image of woman, not the image of this or that particular woman, but a definitive feminine image. This image is fundamentally unconscious, an hereditary factor of primordial origin engraved in the living organic system of the man, an imprint or “archetype” of all the ancestral experiences of the female, a deposit, as it were, of all the impressions ever made by woman’ (*Collected Works*, 17, paragraph 338). See also [IMAGO](#) (1), [SYZYGY](#). Compare [ANIMUS](#) (3). [From Latin *anima* air, breath, or spirit]

*****ebook converter DEMO Watermarks*****

animal magnetism *n.* A term introduced in 1779 by the Viennese physician Franz Anton Mesmer (1734–1815) for a substance resembling ordinary magnetism (believed also to be a substance) that he claimed to have discovered in human bodies and that could be channelled, stored, and transmitted between people. Two Royal Commissions in France, where Mesmer was then practising, investigated this claim in 1784 and declared that the effects that Mesmer had reported were in fact due to touch, imagination, and imitation. Mesmer's work is often cited as the basis for later research into **hypnosis*, but animal magnetism was not hypnosis, and there is no evidence that Mesmer ever hypnotized anyone. Also called *mesmerism*.

animal psychology *n.* The study of animal behaviour through laboratory experimentation. *See also* *COMPARATIVE PSYCHOLOGY*. *Compare* *ETHOLOGY*.

animism *n.* 1. The ascription of psychological **attributes* such as desires and intentions to plants, inanimate objects, or natural phenomena. The term was first used in this sense by the British social anthropologist Sir Edward Burnett Tylor (1832–1917) in his book *Primitive Culture* (1871) to describe the beliefs of the 'runder tribes' of India, who believed, for example, that the sun shines in order to provide warmth. Although the French anthropologist Lucien Lévy-Bruhl (1857–1939) criticized such usage in 1910 in his book *Les Fonctions Mentales dans les Sociétés Inférieures* (translated into English under the less provocative title *How Natives Think*), the Swiss psychologist Jean Piaget (1896–1980) adopted the term to describe the thinking of children who have not yet learned to distinguish animate from inanimate objects and popularized this usage in his book *La Représentation du Monde chez l'Enfant* (The Child's Conception of the World), first published in 1926. According to Piaget, animistic thinking undergoes four stages of development: first, between 4 and 6 years of age, children believe that everything is alive; second, between 6 and 7 years, they believe that everything that moves is alive; third, between 8 and 10 years, they believe that everything that moves by itself is alive; and fourth, from about 11 years, they distinguish correctly between animate and inanimate objects. The ascription of specifically human attributes to non-human animals and objects is a form of animism called **anthropomorphism*. 2. The doctrine that the soul is the vital principle (*anima mundi*) on which all organic development depends, propounded most

*****ebook converter DEMO Watermarks*****

influentially by the German physician Georg Ernst Stahl (1660–1734) in his book *Theoria Medica Vera* in 1707. **3.** A doctrine promoted by the Greek philosophers Pythagoras (?580–?500 BC) and Plato (?427–?347 BC) according to which an immaterial force organizes and animates the material world. **animist** *n.* One whose thinking is characterized by animism. **animistic** *adj.* [From Latin *anima* air, breath, or soul + *-ismus* indicating a state or condition]

animus *n.* **1.** Antipathy or animosity. **2.** Intention, purpose, or motivation. **3.** In **analytical psychology*, the masculine principle present as an **archetype* (2) in the female **collective unconscious*, characterized by focused consciousness, authority, and respect. It is the counterpart of the **anima* in the male unconscious, and it functions as a **psychopomp* connecting the **ego* and the unconscious. According to Carl Gustav Jung (1875–1961), ‘In its primary *unconscious* form the animus is a compound of spontaneous, unpremeditated opinions which exercise a powerful influence on the woman's emotional life’ (*Collected Works*, 16, paragraph 521). See also *IMAGO* (1), *SYZYGY*. [From Latin *animus* mind or spirit]

anion *n.* A negatively charged **ion* such as **chloride*. Compare *CATION*. [From Greek *ana* up + *ion* going, from *ienai* to go]

anion channel *n.* An **ion channel* across a cell membrane permitting the transport of **anions* across it.

anisotropic *adj.* Having different physical properties in different directions or with respect to different axes. Compare *ISOTROPIC*. **anisotropy** or **anisotrophy** *n.* [From Greek *anisos* unequal, from *an-* without + *isos* equal or the same + *tropos* a turn, from *trepein* to turn]

ankle reflex *n.* Another name for the **Achilles tendon reflex*.

Anna O *n.* The name used by the Austrian physician Josef Breuer (1842–1925) to refer to his patient Bertha Pappenheim (1860–1936), the first person ever to undergo **psychoanalysis*. She suffered from various symptoms of **hysteria*, which were made to disappear by enabling her under **hypnosis* to recall the traumatic events that precipitated them, her recollections of these
*****ebook converter DEMO Watermarks*****

events being accompanied by violent outbursts of emotion that Breuer labelled **catharsis*. Breuer described the case in 1895 in *Studies on Hysteria*, co-authored with Sigmund Freud (1856–1939) (*Standard Edition*, II, at pp. 21–47), but the veracity of the account, and in particular the claim that Anna O was cured, have been questioned by later researchers.

annealing *n.* 1. In **connectionism* (1) and **parallel distributed processing*, the use of random shocks to alter the states of units in a network of connected units until they are all responding as consistently as possible to signals received from one another and no further adjustments in connections and firing rates can lead to further improvements. The random shocks are designed to overcome the problem of entrapment in local minima after **gradient descent* or in local maxima after **hill climbing* procedures. The technique is analogous to tapping or shaking a toaster to get the crumbs to fall to the bottom. Compare RELAXATION TECHNIQUE (2). 2. In **genetic engineering*, heating double-stranded **DNA* so that the strands separate and then allowing them to cool in the presence of single strands from another organism to form **heteroduplex DNA*. See also DNA HYBRIDIZATION, HYBRIDIZATION, RECOMBINANT DNA. **anneal** *vb.* [Alluding to *annealing*, making metal easier to work by heating it and allowing it to cool slowly, thereby removing internal stresses and realigning the molecules or crystals within the microstructure of the material, from Old English *onaelan* to set on fire, from *on* on + *aelan* to burn, from *al* fire]

anniversary reaction *n.* An emotional reaction on the anniversary of a traumatic event or experience such as a **bereavement*.

anoesia *n.* An obsolescent term for **intellectual disability*. US *anesia*. Also called *anoia*. [From Greek *anoesia* want of understanding, from *a-* not or without + *noein* to understand]

anomaloscope *n.* A device for mixing light from the red and green parts of the **visible spectrum* and comparing the result with a standard yellow to measure defects in colour vision according to the **Rayleigh equation*. [So called because it is used to detect **colour anomalies*]

anomalous dichromacy *n.* A form of **colour-blindness* caused by a

*****ebook converter DEMO Watermarks*****

defect in the functioning of one of the three ***visual pigments** in the cones of the retina, leading to a form of colour vision in which only two of the three ***primary colours** (1) can be perceived and therefore any spectral hue can be matched by only two primary colours, the most common form being ***deutanopia**. Also called *anomalous dichromasy*, *anomalous dichromatism*, *anomalous dichromatopsia*, *anomalous dichromopsia*. See also **PROTANOPIA**, **TRITANOPIA**. Compare **ANOMALOUS TRICHRMACY**. **anomalous dichromat** *n.* A person with anomalous dichromacy.

anomalous myopia *n.* A transient form of ***myopia** caused by the temporary absence of adequate stimuli for ***accommodation** (1). See also **DARK FOCUS**.

anomalous sentence *n.* A sentence that is syntactically well formed but semantically meaningless. The best-known example, suggested by the US linguist and philosopher (Avram) Noam Chomsky (born 1928), is *Colourless green ideas sleep furiously*.

anomalous trichromacy *n.* A form of ***colour-blindness** in which the proportions of three ***primary colours** (1) that are mixed to match a comparison colour deviate from the normal. Also called *anomalous trichromasy*, *anomalous trichromatism*, *anomalous trichromatopsia*, *anomalous trichromopsia*. See also **RAYLEIGH EQUATION**. Compare **ANOMALOUS DICHROMACY**. **anomalous trichromat** *n.* A person with anomalous trichromacy.

anomia *n.* Inability to name common objects or pictures of common objects; another name for anomic ***aphasia**. [From Greek *a-* without + *onomia* a name + *-ia* indicating a condition or quality]

anomic aphasia See **APHASIA**.

anomic suicide See **SUICIDE**.

anomie *n.* A state of society in which rules and standards of belief and conduct have weakened or broken down, or an analogous condition in an

individual, characterized by hopelessness, disorientation, loss of belief and sense of purpose, and social isolation. The concept was introduced by the French sociologist Émile Durkheim (1858–1917), who provided evidence in his book *Suicide* (1897) of correlations between suicide rates and indicators of anomie such as divorce rates. Also spelt *anomy*. **anomic** *adj.* [From French *anomie*, from Greek *anomia* lawlessness or normlessness, from *a-* without + *nomos* a law + *-ia* indicating a condition or quality]

anoopsia *n.* ***Strabismus**, especially the common form in which one or both eyes are deviated upwards. Also spelt *anopsia*. Also called *hypertropia*. See also [AMBLYOPIA EX ANOPSIA](#). [From Greek *ano* upwards, from *ana* up + *ops* an eye + *-ia* indicating a condition or quality]

anopia *n.* ***Blindness**, especially when caused by a defect in one or both eyes. Also called *anopsia*. See also [AMBLYOPIA](#), [HEMIANOPIA](#), [HOMONYMOUS HEMIANOPIA](#), [NYCTALOPIA](#), [OBJECT BLINDNESS](#). Compare [AMAUROSIS](#). [From Greek *an-* without + *ops* an eye + *-ia* indicating a condition or quality]

anopsia *n.* 1. A variant spelling of ***anoopsia**. 2. A variant form of ***anopia**. [From Greek *ano* upwards or *an-* without + *ops* an eye + *-ia* indicating a condition or quality]

anorexia *n.* Absence of appetite, distinguished in careful usage from the disorder ***anorexia nervosa**, which should not be shortened to *anorexia*. See also [APHAGIA](#), [DYSPHAGIA](#). Compare [PSEUDOANOREXIA](#). **anorectic** *adj.* [From Greek *an-* not or without + *orexis* appetite + *-ia* indicating a condition or quality]

anorexia nervosa *n.* An ***eating disorder** in ***DSM-5** usually (but not exclusively) occurring in adolescent girls and young women, characterized by intense fear of becoming fat even though underweight, a refusal to maintain body weight at a normal level (at least 85 per cent of expected weight for sex, age, and height), disturbances in body image, and sometimes amenorrhoea. People with the disorder avoid eating even though hungry, and it is distinguished in careful usage from ***anorexia**. It is popularly (and misleadingly) known as the *slimmers' disease*. See also [LANUGO](#), [PRO-ANA](#). Compare [BULIMIA NERVOSA](#). **AN** *abbrev.* [From Greek *an-* not or without +

*****ebook converter DEMO Watermarks*****

orexis appetite + Latin *nervus* a nerve]

anorgasmia *n.* Failure of orgasmic response during sexual activity. Also called *anorgasmy*. See [FEMALE ORGASMIC DISORDER](#), [MALE ORGASMIC DISORDER](#).

anorthopia *n.* Abnormal or defective vision. [From Greek *an-* without + *orthos* right + *ops* an eye + *-ia* indicating a condition or quality]

anorthoscope *n.* A 19th-century device for studying **anorthoscopic* perception, consisting of a pair of circular discs mounted one behind the other, capable of rotating at different speeds and in opposite directions, enabling images attached to the rear disc to be viewed through a slit in the front disc.

anorthoscopic *adj.* Abnormally viewed, of or relating to perception of a figure that is revealed one section at a time through a narrow slit behind which the figure moves. If images such as simple geometric shapes or letters of the alphabet are presented anorthoscopically, form perception occurs and the shapes of the images are clearly perceived in spite of the absence of any retinal image of the corresponding shapes. The other major example of form perception without a corresponding retinal image is a **Kanizsa triangle*. See also [ANORTHOSCOPE](#), [ILLUSORY CONTOUR](#), [RETINAL PAINTING](#). Compare [VOID MODE](#). [From Greek *an-* without + *orthos* right + *skopeein* to view + *-ikos* of, relating to, or resembling]

anosmia *n.* Absence of the sense of smell. See also [SPECIFIC ANOSMIA](#). Compare [CACOSMIA](#), [DYSOSMIA](#), [HYPEROSMIA](#), [HYPOSMIA](#), [PAROSMIA](#). [From Greek *an-* without + *osme* a smell + *-ia* indicating a condition or quality]

anosognosia *n.* Impaired ability or refusal to recognize that one has a sensory or motor impairment or, in some cases following a massive **stroke* and **hemiplegia*, even to recognize part of one's body as one's own. Also spelt *anosagnosia*. See also [ANTON'S SYNDROME](#), [AGNOSIA](#). [From French *anosognosi*, named in 1914 by the French neurologist Josef F(rançois) F(élix) Babinski (1857–1932), from Greek *an-* without + *nosos* a disorder + *gnosis* knowledge + *-ia* indicating a condition or quality]

Antabuse *n.* A proprietary name for the drug disulfiram that is used in the treatment of **alcohol dependence*. It interferes with the normal metabolism of ethyl alcohol by blocking the action of the enzyme **aldehyde dehydrogenase* that normally converts it into acetic acid, allowing the noxious metabolite **acetaldehyde* to accumulate, resulting in nausea, vomiting, pounding of the heart, shortness of breath, and other unpleasant symptoms. [Trademark]

antagonist *n.* 1. An opponent or adversary in a struggle. *Compare* AGONIST (1). 2. A muscle that opposes the action of another. *Compare* AGONIST (2). 3. A substance that depresses the effect of an **agonist* (3) either by acting at different **neuroreceptor* sites from those of the agonist (a **non-competitive antagonist*) or by binding to the same neuroreceptors as the agonist without exciting or inhibiting the **postsynaptic* neurons (a competitive antagonist, also called a *receptor blocker*), a typical example being the narcotic antagonist **naloxone*, which binds to neuroreceptors in the brain that would otherwise be occupied by morphine, and thereby prevents morphine from exerting its usual effects. *See also* DOPAMINE ANTAGONIST. *Compare* AGONIST (3). [From Greek *anti* against + *agon* a festival of competitions, from *agein* to lead]

antecedent *See* CONDITIONAL REASONING.

antedating of consciousness *See* LIBET'S DELAY.

anterior *adj.* In front or before. *Compare* POSTERIOR. [From Latin *anterior* in front, from *ante* before]

anterior cingulate cortex *n.* The upper frontal part of the **cingulate gyrus*, implicated in decisions between competing responses, language processing, and monitoring of performance. It shows activity when a person experiences social exclusion or distress. **ACC** *abbrev.* [From Latin *anterior* in front, from *ante* before + *cingulatus* belted, from *cingulus* a belt, from *cingere* to surround or gird + *cortex* bark or outer layer]

anterior commissure *n.* A round bundle of nerve fibres connecting the

anterior or front parts of the left and right [*temporal lobes](#) and [*olfactory bulbs](#). See also [COMMISSURE](#). [From Latin *commissura* a joining together, from *com-* together + *mittere* to send]

anterior funiculus See [FUNICULUS](#).

anterior horn *n.* Either of the two [*ventral](#) ends of the H-shaped column of grey matter that runs throughout the length of the spinal cord and to which most of the motor neurons are attached. Compare [POSTERIOR HORN](#).

anterior pituitary *n.* The front part or lobe of the [*pituitary gland](#) that, in response to hormones from the [*hypothalamus](#), secretes [*trophic hormones](#) controlling most of the other [*endocrine glands](#) in the body, and that also acts directly on [*somatic cells](#) by secreting [*growth hormone](#), affecting bodily growth and [*metabolism](#), and [*melanocyte-stimulating hormone](#), affecting skin and other pigmentation. Also called the *adenohypophysis*. See [ADRENOCORTICOTROPHIC HORMONE \(ACTH\)](#), [BETA-ENDORPHIN](#), [BETA-LIPOTROPIN](#), [FOLLICLE-STIMULATING HORMONE](#), [LUTEINIZING HORMONE](#), [PROLACTIN](#), [THYROID-STIMULATING HORMONE](#). Compare [POSTERIOR PITUITARY](#).

anterior prefrontal cortex *n.* The foremost part of the [*frontal lobe](#), [*Brodmann Area 10](#). See [FRONTOPOLAR CORTEX](#). **APFC** abbrev. [From Latin *anterior* in front, from *ante* before]

anterograde amnesia *n.* Loss of memory for events or experiences after the traumatic event or incident that caused the amnesia. It generally affects [*declarative memory](#) but not [*procedural memory](#). See also [GLOBAL AMNESIA](#), [TRANSIENT GLOBAL AMNESIA](#). Compare [RETROGRADE AMNESIA](#). [From Latin *anterior* previous + *gradus* a step]

anterograde degeneration *n.* Another name for [*Wallerian degeneration](#). [From Latin *anterior* in front or forward + *gradi* to go]

anterograde transport *n.* The movement of freshly synthesized components of neurons along [*microtubules](#) into [*axons](#) and [*dendrites](#).

Compare [RETROGRADE TRANSPORT](#).

anthrax *n.* A highly infectious disease of warm-blooded animals, especially cattle and sheep, caused by the bacterium *Bacillus anthracis*, transmissible to humans and formerly called *wool sorter's disease*, occasionally stockpiled as a potential biological weapon. [From Greek *anthrax* coal, charcoal, or a carbuncle, alluding to the dark scabs that form on the skin of an infected person]

anthropic principle *n.* An umbrella term for several variants of the idea that theories of the universe are constrained by the necessity to allow for human existence. The most widely accepted *weak anthropic principle* asserts that physical and cosmological constants, including the age of the universe, are fine-tuned to allow carbon-based life to evolve. For example, if the strong nuclear force were even slightly stronger than it is, then all the hydrogen would be converted to helium, hence there would be no water for life to evolve, and if it were slightly weaker, then atoms with multiple protons would not hold together, hence hydrogen would be the only element in the universe. This explains why conditions happen to be just right for the existence of intelligent life at the present time: if the constants were slightly different, then we would not be here to observe them. Stronger (and more debatable) versions of the principle have been used to support theories of creationism or intelligent design. The principle was named by the Australian theoretical physicist Brandon Carter (born 1942) in a paper entitled 'Large Number Coincidences and the Anthropic Principle in Cosmology' delivered at a symposium in 1973 and published in the proceedings in 1974, although he later claimed that a better name would have been the 'cognizability principle'. See also [GOLDILOCKS EFFECT](#). [From Greek *anthropos* man or the human species + *-ikos* of, relating to, or resembling]

anthropobiology *n.* The biology of human beings. [From Greek *anthropos* man or the human species + English *biology*]

anthropocentrism *n.* Viewing or considering an issue from a narrowly human perspective, especially when disregarding or disdaining other animals, or an exaggerated conception of the significance of the human species in the universe. Compare [ANTHROPOMORPHISM](#). **anthropocentric** *adj.* [From Greek

*****ebook converter DEMO Watermarks*****

anthropos man or the human species + *kentron* the centre]

anthropogenic *adj.* Of or relating to the origins of the human species.
anthropogenesis or **anthropogeny** *n.* The study of the origins of the human species. [From Greek *anthropos* man or the human species + *genesis* birth or origin + *-ikos* of, relating to, or resembling]

anthropography *n.* The study of the geographical distribution of humans. [A blend of Greek *anthropo(s)* man or the human species and English *(geo)graphy*]

anthropoid *adj.* 1. Resembling the human species in form, applied especially to the **Anthropoidea* or higher primates (humans, apes, and monkeys) or more narrowly to the highest apes (gorillas, chimpanzees, orangutans, and gibbons). *n.* 2. An anthropoid primate or ape. *Compare* *PROSIMIAN*. [From Greek *anthropos* man or the human species + *-oeides* denoting resemblance of form, from *eidos* shape]

Anthropoidea *n.* A suborder of higher primates, including humans, apes, and monkeys, within the order of Primates. *See also* *ANTHROPOID* (1, 2). *Compare* *PROSIMIAN*.

anthropology *n.* The study of humans, including their origins, physical attributes, and cultures. *See also* *CULTURAL ANTHROPOLOGY*, *ETHNOGRAPHY* (1, 2), *ETHNOLOGY*, *PHYSICAL ANTHROPOLOGY*, *SOCIAL ANTHROPOLOGY*.
anthropological *adj.* **anthropologist** *n.* One who practises anthropology. [From Greek *anthropos* man or the human species + *logos* word, discourse, or reason]

anthropomorphism *n.* The attribution of human characteristics to non-human entities, especially animals. In literature, art, and philosophy, attribution of human emotions to inanimate entities is often called the **pathetic fallacy*. *See also* *ANIMISM* (1). *Compare* *ANTHROPOCENTRISM*.
anthropomorphic *adj.* Of, relating to, or characterized by anthropomorphism. **anthropomorphize** *vb.* To attribute human characteristics to non-human entities, especially animals. [From Greek *anthropos* man or the human species + *morphe* a form or shape + *-ismos*]
*****ebook converter DEMO Watermarks*****

indicating a state or condition]

anthroponomastics *n.* The study of personal names. The study of names in general is called *onomastics*, and it is usually divided into *anthroponomastics* and *toponomastics* or *toponymy*, the study of place names. [From Greek *anthropos* man or human + *onoma* name]

anthropophagus *n.* A cannibal. **anthropophagi** *pl.* **anthropophagous** *adj.* Cannibalistic. **anthropophagy** *n.* Cannibalism. [From Greek *anthropos* man or the human species + *phagein* to eat]

anthropophonics *n.* The study of the full range of speech sounds of which the human vocal apparatus is capable, irrespective of the sounds actually used in **natural languages*. [From Greek *anthropos* man or human + *phone* sound]

anthroposophy *n.* The spiritualistic and mystical doctrine of the Austrian philosopher Rudolf Steiner (1861–1925), emphasizing the educational and psychological value of creative activities, such as the types of myth-making that played a larger part in life in earlier times. [From Greek *anthropos* man or the human species + *sophia* wisdom]

anti-anxiety drug *n.* Another name for an **anxiolytic* drug.

antibody *n.* A protein of the **immunoglobulin* class, produced in the blood of an organism in response to the presence of an **antigen*. By attaching itself to an antigen, it may render the antigen innocuous or cause it to be destroyed by other cells of the immune system. *See also* **B LYMPHOCYTE**, **IMMUNE RESPONSE**, **T LYMPHOCYTE**.

anticathexis *n.* Another name for **countercathexis*.

anticholinergic *adj.* Of or relating to any drug such as **atropine* or **scopolamine* that blocks nerve impulses in the **parasympathetic nervous system* or counteracts the effects of **acetylcholine*, such blocking also resulting from the action of certain **antiparkinsonian* drugs, **neuroleptics*

(1), and ***tricyclic antidepressants**. Effects include dilation of the pupils of the eyes and preparation for far vision, dry mouth, quickening of the heart, reduction of gastric juice secretion, and retention of urine. *See also* BENZTROPINE, BIPERIDEN, CYCLOPLEGIA, PROCYCLIDINE, TRIHEXYPHENIDYL. *Compare* CHOLINERGIC. [From *anti* + (acetyl)cholin(e) + Greek *erg(on)* work + -ik(os) of, relating to, or resembling]

anticholinesterase *n.* A drug such as ***physostigmine** or ***sarin** that blocks the action of ***acetylcholinesterase** in mopping up ***acetylcholine** in the ***peripheral nervous system**. ***Nerve gases** are based on such agents. [From *anti* + (acetyl)cholin(e) + *ester* + Greek -ase denoting an enzyme, from *diastasis* separation]

anticipation method *n.* Another name for the ***serial anticipation method**.

anticipatory socialization *n.* Adoption of attitudes and values of a group to which one does not belong, serving the twin functions of facilitating a move into that group and easing the process of adjustment after becoming a member of it. The concept was popularized by the US sociologist Samuel A(ndrew) Stouffer (1900–60) and several co-authors of the monumental study of the US Army entitled *The American Soldier* (1949), in which it was reported that privates in the army who accepted the attitudes and values of the officer ranks were more likely than others to be promoted, and it was subsequently analysed in detail, in relation to ***reference groups**, by the US sociologist Robert K(ing) Merton (1910–2003) in his book *Social Theory and Social Structure* (1957). Subsequent researchers found evidence that the working-class parents of children who are destined to be upwardly mobile within the class structure tend to hold, and to pass on to their children, the attitudes and values of the class into which the child is destined to move. *See also* SOCIALIZATION (1).

anticonformity *n.* Behaviour that deliberately goes against the ***norms** (1) or social pressure of a group. It differs from independence inasmuch as the person responds to the group pressure rather than remaining unaffected by it. *Compare* CONFORMITY.

anticonvulsant *adj. n.* (Of or relating to) a drug such as **phenytoin*, **carbamazepine*, or any of the **benzodiazepines* that prevents or reduces the severity of epileptic or other **convulsions* or **seizures*. See also *HEMERALOPIA*. Compare *CONVULSANT*.

antidepressant *adj. n.* (Of or relating to) any drug that tends to alleviate **depression* and that is used in the treatment of **mood disorders*, including the **monoamine oxidase inhibitors* (MAOIs), the **tricyclic antidepressants* and **tetracyclic antidepressants*, the **selective serotonin reuptake inhibitors* (SSRIs), and **St John's wort*. Also called a *thymoleptic*. See also *GHB*, *INOSITOL*, *STIMULANT DRUG*.

antidiuretic hormone *n.* Another name for **vasopressin*. **ADH** *abbrev.*

antidromic *adj.* Of or relating to a nerve impulse conducted in the opposite direction to normal, towards the cell body rather than away from it, as when the axon of a sensory neuron responds to injury of the skin by sending impulses backwards to branching points, triggering the release of **substance P*. See *AXON REFLEX*. Compare *ORTHODROMIC*. [From Greek *anti* against + *dromos* a course or run + *-ikos* of, relating to, or resembling]

antigen *n.* Any entity or substance, including a **bacterium*, **virus*, or **toxin*, that mobilizes an **antibody* when it enters or invades an organism, or a protein on the surface of an invading entity that has such an effect. [From *anti(body)* + Greek *gen(es)* born or produced]

antigen–antibody response *n.* Another name for an **immune response*.

antihistamine *n.* Any substance that counteracts the physiological and pharmacological effects of **histamine*, including non-prescription drugs that block histamine receptors without stopping the release of histamine and that are used for the treatment of allergies (including hay fever) and the prevention of **motion sickness*. **antihistaminic** *adj.*

anti-intraception *n.* A dislike of subjectivity and imagination. See **F SCALE**. [From Greek *anti* against + Latin *intra* within + *capere*, *ceptum* to take + *-ion* indicating an action, process, or state]

antimanic *adj. n.* (Of or relating to) a drug such as ***lithium carbonate** or ***carbamazepine** that is used in the treatment of acute ***manic episodes** and ***bipolar disorders**. Compare **MOOD STABILIZER**.

antimorph *n.* A ***mutant (2)** gene that has the opposite effect to its normal ***allele** and competes with it in a ***heterozygous** organism. [From *anti* against + Greek *morphe* a form or shape]

anti-Müllerian hormone *n.* Another name for ***Müllerian inhibiting substance**. **AMH** *abbrev.*

antinomy *n.* A type of ***paradox** consisting of a contradiction between two apparently unassailable propositions. **antinomic** *adj.* [From Greek *anti* against + *nomos* a law]

antiparkinsonian *adj. n.* (Of or relating to) any drug that alleviates ***parkinsonism** or the pseudo-parkinsonian side-effects of neuroleptic drugs such as the ***phenothiazines**. In particular, ***L-dopa** or ***bromocriptine** compensates for the shortfall of dopamine in the substantia nigra and striatum of the brains of people with ***Parkinson's** disease; ***deprenyl** inhibits the action of a monoamine oxidase enzyme that destroys cells in the substantia nigra in people with Parkinson's disease; the antiviral drug ***amantadine** is believed to increase ***dopamine** release; and ***anticholinergic** drugs such as ***benztropine**, ***biperiden**, ***procyclidine**, and ***trihexyphenidyl** counteract the relative overabundance of ***acetylcholine** in the striatum.

antipsychiatry *n.* A radical critique of traditional (especially medical) approaches to mental disorders, influenced by ***existentialism** and ***sociology**, popularized by the Scottish psychiatrist Ronald D(avid) Laing (1927–89), the South African psychiatrist David (Graham) Cooper (1931–86), and others during the 1960s and 1970s. [The term was first used, though not defined, by Cooper in his book *Psychiatry and Anti-Psychiatry* (1967)]

antipsychotic *n.* Another name for a ***neuroleptic** (1).

anti-Semitism scale *n.* Any scale designed to measure prejudice against Jews, especially the ***A–S scale**.

antisocial personality disorder *n.* A ***personality disorder** in ***DSM-5**, also coded as a ***disruptive**, ***impulse-control**, and ***conduct disorder**, characterized by a pervasive pattern of disregard for and violation of the rights of others, beginning in childhood or early adolescence and continuing into adulthood, with such signs and symptoms as failure to conform to social norms, manifested by repeated unlawful behaviour; deceitfulness, as indicated by repeated lying or swindling for pleasure or personal gain; impulsivity or failure to plan ahead; irritability and aggressiveness involving frequent assaults or fights; reckless disregard for the safety of self or others; consistent irresponsibility involving failure to hold down jobs or to honour financial obligations; and lack of remorse for the mistreatment of others, as indicated by indifference and rationalization. Also called *sociopathy* or (in ***ICD-10** and elsewhere) *dissocial personality disorder*. Compare **CONDUCT DISORDER**, **PSYCHOPATHY**, **XXX SYNDROME**. **APD** *abbrev.*

Anton's syndrome *n.* A rare form of ***anosognosia** in which a person who is totally blind, usually as a result of extensive damage to the visual cortex or the optic nerves, is unaware of the blindness, typically either guessing at the appearance of objects from non-visual cues while believing that they are being perceived visually, or believing that for some reason the surroundings are plunged in darkness. Also called *blindness denial*. Compare **BLINDSIGHT** (which may be interpreted as the inverse of Anton's syndrome). [Named after the Czech neurologist and psychiatrist Gabriel Anton (1858–1933) who first described it in a case study published in 1899 in the journal *Wiener klinische Wochenschrift*, translated into English in the journal *Cognitive Neuropsychology* in 1993]

antonym *n.* A word that has the opposite meaning to another word, such as *high*, which is an antonym of *low*. Some authorities, notably the British linguist John Lyons (born 1932), reserve the term for *graded antonyms*, such as the example just given, in which degrees of difference exist, and refer to
*****ebook converter DEMO Watermarks*****

ungraded antonyms—words that are either/or opposites, such as *male* and *female*, or *single* and *married*—as *complementaries*. See also [ANTONYM TEST](#). Compare [SYNONYM](#). **antonymous** *adj.* **antonymy** *n.* The relationship between words that are antonyms. [From Greek *anti* against + *onoma* a name]

antonym test *n.* A type of [*intelligence test](#) item in which the respondent is presented with a word and is asked to supply a word with the opposite meaning to it, often by choosing from a set of response alternatives. Also called an *opposites test*. See also [ANTONYM](#). Compare [SYNONYM TEST](#).

anvil *n.* A non-technical name for the [*incus](#) of the middle ear. See also [HAMMER](#). [So called because of its resemblance to a blacksmith's anvil]

anxiety *n.* A state of uneasiness, accompanied by dysphoria and somatic signs and symptoms of tension, focused on apprehension of possible failure, misfortune, or danger. See also [ANXIETY DISORDERS](#), [ANXIOLYTIC](#), [AUTOMATIC ANXIETY](#), [NEUROTIC ANXIETY](#), [PERFORMANCE ANXIETY](#), [PRIMAL ANXIETY](#), [PRIMARY ANXIETY](#), [REALISTIC ANXIETY](#), [SEPARATION ANXIETY](#), [SIGNAL ANXIETY](#), [STATE ANXIETY](#), [STRANGER ANXIETY](#), [TRAIT ANXIETY](#). [From Latin *anxietas* anxiety, from *angere* to press tightly]

anxiety disorders *n.* A class of [*mental disorders](#) in [*DSM-5](#) in which [*anxiety](#) features prominently. See [AGORAPHOBIA](#), [GENERALIZED ANXIETY DISORDER](#), [PANIC DISORDER](#), [SELECTIVE MUTISM](#), [SEPARATION ANXIETY DISORDER](#), [SOCIAL ANXIETY DISORDER](#), [SPECIFIC PHOBIA](#). See also [ANXIOLYTIC](#), [ACUTE STRESS DISORDER](#), [OBSESSIVE—COMPULSIVE DISORDER](#), [OVERANXIOUS DISORDER](#), [POST-TRAUMATIC STRESS DISORDER](#), [PROLONGED DURESS STRESS DISORDER](#).

anxiety hysteria *n.* In [*psychoanalysis](#), a [*neurosis](#) with a [*phobia](#) as its central symptom. The term was introduced in 1908 by the Austrian psychiatrist Wilhelm Stekel (1868–1940) in his book *Nervöse Angstzustände und ihre Behandlung* (Neurotic Anxiety States and their Treatment) specifically to emphasize its structural resemblance to conversion hysteria (now called [*dissociative disorder](#)). See also [TRANSFERENCE NEUROSIS \(1\)](#).

anxiety neurosis *n.* Another name for [*generalized anxiety disorder](#). The term was introduced by Sigmund Freud (1856–1939) in the title of an
*****ebook converter DEMO Watermarks*****

article in 1894 ‘On the Grounds for Detaching a Particular Syndrome from Neurasthenia Under the Description “Anxiety Neurosis” ’ (*Standard Edition*, I, pp. 315–44), in which he distinguished it from **neurasthenia*, because of the predominance of anxiety, and from **hysteria*, because unlike hysteria, he interpreted it as an **actual neurosis*.

anxiolytic *adj. n.* (Of or relating to) any of the drugs that reduce **anxiety* or tension, especially the **benzodiazepines* and **buspirone*. Also called an *anti-anxiety* drug, and formerly called a *minor tranquillizer*. *See also* SEDATIVE-, HYPNOTIC-, OR ANXIOLYTIC-RELATED DISORDERS. [From *anxiety* + Greek *lysis* dissolution, from *lyein* to loose + *-itikos* resembling or marked by]

anxious personality disorder *n.* Another name for **avoidant personality disorder*.

apathy *n.* Absence of emotion, interest, or enthusiasm. [From Greek *apatheia* indifference, from *a-* without + *pathos* feeling]

Apgar score *n.* An index of the physical and psychological condition of a newborn infant obtained by adding points (0, 1, or 2) for heart rate, respiratory effort, muscle tone, response to stimulation, and skin coloration, a score of 10 representing perfect condition on the test. [Named after the US anaesthesiologist Virginia Apgar (1909–74) who introduced it in an article in the journal *Current Research in Anesthesia and Analgesia* in 1953, notwithstanding a popular folk etymology in medical circles according to which it is an abbreviation for ‘activity, pulse, grimace, appearance, and respiration’]

aphagia *n.* Inability or lack of desire to eat, sometimes caused by damage to the **glossopharyngeal nerve* or **hypoglossal nerve*, making swallowing difficult or impossible, or a lesion in the **lateral hypothalamic feeding centre*, and sometimes due to **psychogenic* causes. *See also* LATERAL HYPOTHALAMIC SYNDROME. *Compare* ANOREXIA, DYSPHAGIA. [From Greek *a-* without + *phagein* to consume + *-ia* indicating a condition or quality]

aphakia *n.* Absence of the **crystalline lens* of an eye resulting in severe
*****ebook converter DEMO Watermarks*****

***hyperopia**, whether congenital or due to some other cause, such as surgical removal of the lens to treat a ***cataract**. [From Greek *a-* without + *phakos* a lentil + *-ia* indicating a condition or quality]

aphanisis *n.* A term used in ***psychoanalysis** to denote the disappearance of sexual desire. It was coined in 1927 by the Welsh psychoanalyst Ernest Jones (1879–1958) in his *Papers on Psycho-Analysis* (5th ed., pp. 438–50). [From Greek *aphanes* invisible]

aphasia *n.* An ***impairment** of expression or comprehension of language caused by injury or disease in the language centres of the brain. The major forms related specifically to speech (*see also* **AGRAPHIA**, **DYSLEXIA**) are: *acoustic–mnestic aphasia* (impaired ability to recall lists of words or to repeat long sentences, caused by a lesion in the left ***temporal lobe** of the brain); *agrammatism* (impairment in ability to arrange words in their correct order, to use ***function words** properly, and/or to use ***accidence** appropriately in an ***inflecting language**); *amnesic aphasia* (impaired ability to retrieve words that are required for fluent speech, also written *amnestic aphasia*); *anomic aphasia* (impaired ability to name objects or representations of objects, also called *anomia*; compare *amnesic aphasia*); *aphemia* (another name for Broca's aphasia); *ataxic aphasia* (another name for Broca's aphasia); *auditory aphasia* (another name for Wernicke's aphasia); *Broca's aphasia* (impaired ability to speak, with intact ability to comprehend speech, associated with damage to ***Broca's area** of the brain); *conduction aphasia* (impaired ability to repeat spoken words, together with errors in word selection in spontaneous speech, resulting from damage to the links between auditory and motor areas of the brain; compare **TRANSCORTICAL APHASIA**, **TRANSCORTICAL MOTOR APHASIA**, **TRANSCORTICAL SENSORY APHASIA**; *see also* **ARCUATE FASCICULUS**); *dynamic aphasia* (a variant of non-fluent aphasia characterized by almost total failure to initiate speech but an intact ability to name objects, to read, and to repeat sentences); *dysprosody* (impaired ability to produce the appropriate ***prosody** required in speech); *expressive aphasia* (another name for Broca's aphasia); *fluent aphasia* (any form of aphasia, such as Wernicke's aphasia or conduction aphasia, in which speech flows without difficulty, but either language comprehension is impaired or the speech is unintelligible); *ideomotor aphasia* (a generic term for transcortical motor aphasia, transcortical sensory aphasia, and mixed transcortical aphasia); *jargon*

aphasia (copious unintelligible speech); *laloplegia* (a form of aphasia resulting from paralysis of the muscles of the ***vocal tract** and not those of the tongue); *mixed transcortical aphasia* (a blend of transcortical motor aphasia and transcortical sensory aphasia, with impaired spontaneous speech but intact ability to repeat spoken language; *compare* **CONDUCTION APHASIA**); *motor aphasia* (another name for Broca's aphasia); *nominal aphasia* (a form of amnesic aphasia in which there is an impaired ability to retrieve the names of people or things); *non-fluent aphasia* (any form of aphasia, such as Broca's aphasia, in which speech is impaired); *optic aphasia* (selective impairment in ability to name objects presented visually, with intact ability to name them after touching them); *paraphasia* (habitual substitution of one word for another); *receptive aphasia* (another name for Wernicke's aphasia); *sensory aphasia* (another name for Wernicke's aphasia); *spasmophemia* (speech that is impaired by ***spasms** of the muscles in the vocal tract); *standard aphasia* (sparse speech with ***content words** but few ***function words**); *syntactic aphasia* (impaired ability to arrange words in grammatical sequence); *tactile aphasia* (selective impairment in ability to name objects by touch alone, with intact ability to name them after seeing them); *transcortical motor aphasia* (any form of aphasia resulting from disconnection of fibre tracts across the cortex to motor areas, resulting in impaired spontaneous speech but intact ability to repeat spoken language; *compare* **CONDUCTION APHASIA**); *transcortical sensory aphasia* (any form of aphasia resulting from disconnection of fibre tracts across the cortex to sensory areas, resulting in impaired spontaneous speech but intact ability to repeat spoken language; *compare* **CONDUCTION APHASIA**); *visual aphasia* (another name for ***alexia**); *Wernicke's aphasia* (impaired ability to understand speech, with intact ability to speak fluently, though not always intelligibly, associated with damage to ***Wernicke's area** in the brain). *Compare* **DYSPHONIA**, **MUTISM**, **SELECTIVE MUTISM**. [From Greek *a-* without + *phasis* speech, from *phanai* to speak + *-ia* indicating a condition or quality]

aphemia *n.* Loss of ability to speak; Broca's aphasia (see **APHASIA**). [From Greek *a-* without + *phanai* to speak + *-ia* indicating a condition or quality]

aphonia *n.* Loss of the voice resulting from damage to the vocal tract. If the inability to speak is of psychological origin or caused by a lesion in the central nervous system, then the condition is not properly called *aphonia*.

*****ebook converter DEMO Watermarks*****

[From Greek *a-* without + *phone* voice + *-ia* indicating a condition or quality]

aphorism *n.* A succinct, pithy adage or maxim expressing a universal truth, such as *Procrastination is the thief of time* or, more pointedly, *Punctuality is the thief of time*. [From Greek *aphorizein* to define, from *apo* from + *horos* a limit]

aphrasia *n.* Another name for ***mutism**. [From Greek *a-* without + *phrazein* to express + *-ia* indicating a condition or quality]

aphrodisiac *adj. n.* (Of or relating to) any substance such as ***amyl nitrite**, ***bufotenin**, ***cantharides**, ***ginkgo**, ***ginseng**, ***L-dopa**, or ***yohimbine** that stimulates or excites sexual desire. A central nervous system ***depressant drug** such as alcohol tends to lower sexual inhibitions, ***cannabis** generally increases the intensity of sensations, including sexual sensations, and ***empathogens** such as ***ecstasy (2)** or ***GHB** cause people to feel intensely benevolent to one another, but such substances are not true aphrodisiacs, because they do not directly affect sexual desire. Compare **ANAPHRODISIAC**. [From Greek *aphrodisiakos* aphrodisiac, from *Aphrodite* the Greek goddess of love]

Aplysia *n.* The sea hare, a marine snail approximately 25 centimetres long with only a vestigial shell, widely studied in neuroscience because of its large ***neurons** and comparatively simple neural circuits. [From Greek *aplytos* unwashed, from *a-* without + *plynein* to wash + *-ia* indicating a condition or quality]

apnoea *n.* Cessation of breathing. US *apnea*. See also **OBSTRUCTIVE SLEEP APNOEA** **HYPOPNOEA**, **SLEEP APNOEA**. Compare **HYPOPNOEA**. [From Greek *apnoia* cessation of breathing, from *a-* without + *pnein* to breathe]

apocrine *adj.* Of or relating to a gland such as the mammary, the secretion of which contains part of the secreting cell. Compare **HOLOCRINE**, **MEROCRINE**. [From Greek *apo* off + *krinein* to separate]

Apollonian *adj.* Rational and controlled; in the philosophy of the German

philosopher Friedrich Wilhelm Nietzsche (1844–1900), of or relating to static qualities of form, reason, harmony, and sobriety. *Compare* [DIONYSIAN](#). [Named after Apollo, the Greek god of light, poetry, music, healing, and prophecy]

apomorphine *n.* An [*alkaloid](#) that is prepared by dehydrating [*morphine](#) and that acts as a [*dopaminomimetic](#) drug, used as a powerful emetic, expectorant, and hypnotic. [From Greek *apo* from + English *morphine*]

apoplexy *n.* Abrupt loss of consciousness, often followed by paralysis, usually caused by a rupture or thrombosis of a blood vessel in the brain. **apoplectic** *adj.* Of, relating to, or resembling apoplexy; colloquially (arising from a misapprehension of the nature of the disorder), enraged or infuriated. [From Greek *apoplexia* paralysis from a stroke, from *apo* away + *plessein* to strike]

apoptosis *n.* Programmed cell death, an active process requiring RNA and protein synthesis, that in the nervous system sometimes results from cytotoxic substances or a decrease in nerve growth factor, but that also occurs naturally as part of neuronal [*pruning](#) during development and growth. *See also* [NEURAL DARWINISM](#). [From Greek *apo* off + *ptosis* a falling, from *piptein* to fall + *-osis* indicating a process or state]

apostatic selection *n.* A [*frequency-dependent](#) form of [*natural selection](#) in which a [*predator](#) selects the most common type in a population of [*prey](#). *See also* [DISRUPTIVE SELECTION](#). *Compare* [STABILIZING SELECTION](#). [From Greek *apo* off + *stasis* a standing]

a posteriori *adj. adv.* Of, relating to, or denoting [*propositions](#) (1), arguments, or [*concepts](#) that proceed from observation or experience rather than from theoretical deduction; proceeding from observation rather than inference. *See* [A PRIORI](#). *See also* [SYNTHETIC STATEMENT](#). [Latin: from what comes after]

a posteriori test *n.* A statistical test that was not planned before the data were collected, especially a [*multiple comparison](#) corrected for the bias that can arise when tests are made of differences that emerge from inspecting
*****ebook converter DEMO Watermarks*****

data. Also called a *post hoc test*. See [BONFERRONI CORRECTION](#), [DUNCAN'S MULTIPLE RANGE TEST](#), [LEAST-SIGNIFICANT DIFFERENCE TEST](#), [NEWMAN-KEULS TEST](#), [SCHEFFÉ TEST](#), [TUKEY-HSD TEST](#). Compare [PLANNED COMPARISON](#). [From Latin *a* from + *posteriori* the latter]

apostrophe *n.* 1. A [*figure of speech](#) involving a sudden deviation from the ordinary course of speech to address an object, a place, or a person present or absent, dead or alive, as in *Milton! Thou shouldst be living at this hour* (William Wordsworth, *Written in London, Sept. 1802*, I.13). 2. A typographical mark usually indicating the omission of letters in the contraction of a word, as in the formation of genitive or possessive case (*John's*, a contraction of *John his* or *John is*). [From Greek *apo* from + *strophe* a turn]

apotemnophilia *n.* A [*paraphilia](#) characterized by recurrent sexually arousing fantasies, sexual urges, or behaviour associated with having one of one's own limbs (usually a leg) amputated. It should be carefully distinguished from [*acrotomophilia](#). Also (preferably) called *xenomelia*. [From Greek *apo* away + *temnein* to cut + *philos* loving, from *philein* to love + *-ia* indicating a condition or quality]

apparent movement *n.* A sensation of movement in the absence of actual movement, especially a class of visual illusions that arise when two visual stimuli a few centimetres apart are exposed or displayed in an alternating pattern, first studied systematically in 1912 by the German Gestalt psychologist Max Wertheimer (1880–1943), who distinguished the following stages (*Stadien*). If each stimulus is exposed for about 50 milliseconds, then with an [*interstimulus interval](#) below about 25 milliseconds the stimuli, though possibly flickering, appear to be simultaneous (this is called the *Simultanstadium*); with an interstimulus interval over about 400 milliseconds there is no illusion and the stimuli are seen to alternate (the *Sukzessivstadium*); but between approximately 25 and 400 milliseconds, under certain conditions defined by [*Korte's laws](#), powerful illusions of movement are created: first [*partial movement](#) when the interstimulus interval is relatively short, then [*optimal movement](#) when the interval is increased, and finally [*phi movement](#) when the interval is increased further. These phenomena underlie the effects created by illuminated signboards with

*****ebook converter DEMO Watermarks*****

arrows or other elements that appear to move, and they also explain the motion pictures of cinema and television. The concepts of **alpha movement*, **beta movement*, **gamma movement*, and **delta movement*, denoting different forms of apparent movement, were introduced by other German Gestalt psychologists between 1913 and 1915. Apparent movement is also called *apparent motion*, *phenomenal motion*, or the *phi phenomenon*, but in careful usage this latter term is reserved for the phenomenon of phi movement in particular. *See also* [AUTOKINETIC EFFECT](#), [ICONIC STORE](#), [MOTION CAPTURE](#), [PHANTOM GRATING](#), [RANDOM-DOT KINEMATOGRAM](#), [TERNUS PHENOMENON](#), [VECTION](#), [WATERFALL ILLUSION](#).

appeasement behaviour *n.* Submissive behaviour of an animal, discouraging an attack by a hostile aggressor. US *appeasement behavior*. [From Old French *apeser* to bring peace, from Latin *ad* to + *pax* peace]

apperception *n.* The process of comprehending a **perception* by integrating it with similar or related perceptions or previously acquired knowledge; also, the awareness of the act or experience of perceiving, or self-consciousness in contrast to perception—first used in this sense by the German philosopher and mathematician Gottfried Wilhelm von Leibniz (1646–1716). *See also* [APPERCEPTIVE MASS](#), [TAT](#). **apperceive** *vb.* **apperceptive** *adj.* [From Latin *ad* to + *percipere*, *perceptum* to perceive, from *per* through or thoroughly + *capere*, *ceptum* to take + *-ion* indicating an action, process, or state]

apperceptive agnosia *See* [AGNOSIA](#).

apperceptive mass *n.* The previously acquired perceptions and knowledge with which a new perception is integrated in the process of **apperception*.

apestat *n.* A mechanism in the **hypothalamus* that is sensitive to **glucose* levels in the blood and that regulates eating. It is located in the **lateral hypothalamic feeding centre*, where stimulation of it increases eating and destruction inhibits eating, and in the **ventromedial hypothalamus*, where stimulation inhibits eating and destruction increases eating. [From *appetite* + Greek *statikos* causing to stand, from *histanai* to stand + *-ikos* of,

*****ebook converter DEMO Watermarks*****

relating to, or resembling]

appetite *n.* Desire for food; more generally, desire to satisfy any physical craving; more generally still, any enthusiasm or inclination, such as an appetite for war. [From Latin *appetitus* a craving, from *appetere* to desire ardently]

appetitive behaviour *n.* Behaviour motivated by desire for food or drink. US *appetitive behavior*.

appetitive phase *n.* The first phase of the **sexual response cycle*.

apples *n.* An edible fruit; also, a branded version of the stimulant designer drug **ecstasy* (2). [Identified by a symbol of an apple]

applied behaviour analysis *n.* Application of principles of **learning* (1) and especially **operant conditioning* to behavioural problems in everyday settings, including hospitals, clinics, schools, and factories. Research and practice in this field is described by its practitioners as applied, behavioural, analytic, and technological. *See also* *BEHAVIOUR THERAPY*. US *applied behavior analysis*. **ABA** *abbrev.*

applied psychology *n.* An umbrella term covering various branches of psychology in which research findings are applied to practical problems. In **clinical psychology* and **counselling psychology*, research into mental disorders is applied with the ultimate aim of helping people with those disorders. In **educational psychology* and **school psychology*, research into problems of learning, adjustment, and behaviour among schoolchildren is applied in an effort to provide practical help to children, their parents, and their teachers. In **occupational psychology* and **industrial/organizational psychology*, the results of research into the well-being and efficiency of people in work is used to tackle problems arising in the workplace and in organizations generally. In **forensic psychology* and **criminological psychology*, problems associated with criminal behaviour, criminal investigation, and legal processes in court are addressed. In **health psychology*, research findings are applied to psychological aspects of health promotion and the prevention and treatment of illness. *See also* *COACHING*

*****ebook converter DEMO Watermarks*****

PSYCHOLOGY, OCCUPATIONAL HEALTH PSYCHOLOGY.

applied research *n.* Research undertaken with the primary goal of solving practical problems, often contrasted with ***basic research**. See **ACTION RESEARCH**, **EVALUATION RESEARCH**. See also **DESCRIPTIVE RESEARCH**, **EXPLORATORY RESEARCH**.

apprehension span See **SPAN OF APPREHENSION**.

approach–approach conflict *n.* A choice between two or more equally attractive goals, one of the three main types of conflict identified in 1931 by the German–US psychologist Kurt Lewin (1890–1947), though he did not name any of the types. He published his classification in a monograph that was translated into English and issued in 1935 under the title *A Dynamic Theory of Personality*. Lewin mentioned ***Buridan's ass** as a typical example of this type of conflict. See also **APPROACH–AVOIDANCE CONFLICT**, **AVOIDANCE–AVOIDANCE CONFLICT**.

approach–avoidance conflict *n.* Ambivalence towards a goal that embodies both positive and negative characteristics, one of the three main types of conflict identified in 1931 by the German–US psychologist Kurt Lewin (1890–1947), though he did not name any of the types. When a goal is simultaneously satisfying and threatening, pleasant and unpleasant, attractive and anxiety-arousing, people's behaviour tends to vacillate at a point near but not too near the goal. Further from the goal the tendency to approach predominates, nearer the goal the tendency to avoid predominates, and equilibrium occurs where the approach and avoidance functions cross. See also **APPROACH–APPROACH CONFLICT**, **AVOIDANCE–AVOIDANCE CONFLICT**, **ROSENCRANTZ AND GUILDENSTERN EFFECT**.

approximant *n.* A ***consonant** speech sound in which the organs of articulation approach each other, but not so closely as to cause audible friction. There are two major classes of approximants: ***semivowels** such as the initial ***phonemes** in the English words *win* and *yes*, and ***liquids** such as the initial phonemes in the English words *love* and *road*. [From Latin *proximare* to draw near or approach]

approximate answers See [GANSER SYNDROME](#).

approximation to language *n.* A random string of words in which the relative frequencies of words or word sequences correspond to their relative frequencies in the language. A *zero-order approximation* is a random string of words that takes no account of relative frequencies; in a *first-order approximation*, the relative frequencies of words correspond to their relative frequencies in the language, so that the most common words, such as *the* and *is* in English, occur relatively frequently; in a *second-order approximation*, the relative frequencies of word pairs correspond to their relative frequencies in the language, and so on. The US psychologist George A(rmitage) Miller (1920–2012) and the English-born US psychologist Jennifer A(nne) Selfridge (born 1929) introduced a psychological technique, published in the *American Journal of Psychology* in 1950, for constructing a slightly different type of approximation: for a zero-order approximation, words are selected at random from a dictionary (*Combat callous irritability migrates depraved temporal prolix...*); for a first-order approximation, words are selected from published word counts in proportion to their frequencies (*Day to is for they have proposed I the it materials of are...*); for a second-order approximation, a word is chosen at random and is shown to a person, who is asked to suggest the most likely word to follow it, then this second word alone is shown to another person, who suggests the most likely word to follow it, and so on (*Gone down here is not large feet are the happy days and so what is dead weight that many were constructed...*); for a third-order approximation, each person sees the two preceding words (*Happened to see Europe again is that trip to the end is...*); and for a fourth-order approximation, each person sees the three preceding words (*We are going to see him is not correct to chuckle loudly and depart for home...*). Each successive order of approximation is more meaningful and is easier to learn, to recall after learning, and to hear when spoken softly or with background noise. See also [STYLOSTATISTICS](#).

appurtenance *n.* In [*Gestalt psychology](#), the mutual influence of parts of the [*visual field](#), a typical example being the influence of two adjacent patches of colour on each other in simultaneous [*colour contrast](#), other areas of the visual field not affecting the phenomenon. [From Old French *apertenir* to appertain, from Latin *appertinere* to appertain, from *ad* to + *pertinere* to belong]

*****ebook converter DEMO Watermarks*****

apraxia *n.* A loss or diminution in ability, caused by neurological impairment usually in the left hemisphere of the brain, to perform purposeful bodily movements or ***gestures (1)** on request, though often with apparently unimpaired ability to perform them when they arise in natural contexts (such as when circumstances call for waving goodbye to someone), the impairment not being due to paralysis or poor comprehension. The major forms are: *akinetic apraxia* (impaired ability to perform a spontaneous gesture); *amnesic apraxia* (impaired ability to perform purposeful bodily movements or gestures on request because of amnesia for the request, also written *amnestic apraxia*); *constructional apraxia* (impaired ability to copy simple drawings or patterns); *dressing apraxia* (impaired ability to dress); *gait apraxia* (impaired ability to walk); *ideational apraxia* (impaired ability to repeat previously well-established actions); *ideomotor apraxia* (impaired ability to imitate unfamiliar actions, also called *motor apraxia* or *ideokinetic apraxia*); *left-sided apraxia* (impaired ability to carry out verbal requests with the left side of the body, resulting from damage to the ***corpus callosum** preventing impulses from the left hemisphere reaching the right motor cortex, also called *callosal apraxia*, *sympathetic apraxia*, *unilateral limb apraxia*); *oculomotor apraxia* (impaired ability to make eye movements, also called *ocular apraxia* or *optic apraxia*); *oral apraxia* (impaired ability to perform actions of the mouth and tongue, such as opening the mouth or protruding the tongue); *paramimia* (impaired ability to gesture); *sensory apraxia* (another name for ideational apraxia); *speech apraxia* (impaired ability to speak, without other language impairments). See also **ADIADOCHOKINESIA**, **ALIEN HAND SIGN**, **KINESICS**. [From Greek *apraxia* inaction, from *a-* without + *praxis* a deed or action + *-ia* indicating a condition or quality]

a priori *adj. adv.* Of, relating to, or denoting ***propositions (1)**, arguments, or ***concepts** that proceed from theoretical deduction rather than from observation or experience, hence being based on inference rather than observation. An a priori proposition can be known to be true or false without reference to observation or experience, whereas the truth or falsity of an ***a posteriori** proposition is contingent and can be established only by ***empirical** test. An a priori argument seeks to deduce conclusions from a priori premises, whereas an a posteriori argument proceeds from a posteriori premises. An a priori concept is one that is not derived from experience: the ***empiricist** philosophers claimed that all concepts are empirical and a

*****ebook converter DEMO Watermarks*****

posteriori, but the Greek philosopher Plato (?427–?347 BC) and [*rationalists](#) such as the German philosopher and mathematician Gottfried Wilhelm von Leibniz (1646–1716) claimed that some concepts, such as those of substance, cause, equality, likeness, and difference, are a priori, and the German idealist philosopher Immanuel Kant (1724–1804) argued that observation and experience themselves presuppose a priori knowledge. The terms *a priori* and *a posteriori* were introduced by scholastic philosophers of the late medieval period and were popularized in the 17th century by Leibniz and the French philosopher René Descartes (1596–1650). *See also* [ANALYTIC STATEMENT](#). *Compare* [A POSTERIORI](#). [Latin: from what comes before]

a priori probability *n.* Another name for a [*prior probability](#) (2).

a priori test *n.* Another name for a [*planned comparison](#).

a priori validity *n.* Another name for [*face validity](#).

aprosexia *n.* Inability to concentrate. *Compare* [HYPERPROSEXIA](#), [HYPOPROSEXIA](#). [From Greek *a-* without + *prosexis* heedfulness, from *prosechein* to heed + *-ia* indicating a condition or quality]

aprosodia *n.* A flat, unmodulated speaking voice, lacking the normal range of [*prosody](#), often indicative of [*affective flattening](#) or a lesion in the [*frontal lobe](#) of the right [*cerebral hemisphere](#). *Compare* [DYSPROSODY](#). [From Greek *a-* without + *prosoidia* a song set to music, from *pros* towards + *oide* a song + *-ia* indicating a condition or quality]

aptitude *n.* Suitability, natural ability, or capacity to learn; especially (in psychology) potential rather than existing capacity to perform some function, whether physical, mental, or a combination of the two, given the necessary education or training. *See also* [APTITUDE TEST](#). *Compare* [ABILITY](#). [From Latin *aptus* suitable or adapted, from *apere* to fasten + *-tudo* indicating a state or condition]

aptitude test *n.* A test designed to measure an [*aptitude](#). *See also* [VOCATIONAL APTITUDE TEST](#). *Compare* [ABILITY TEST](#), [ACHIEVEMENT TEST](#).

aptronym *n.* A name that befits a person's nature, occupation, or activities. Examples relevant to psychology include the Austrian neurologist Sigmund Freud (1856–1939), who based his theory of psychoanalysis on the ***pleasure principle** (pleasure is *Freude* in German), his rival the Swiss psychologist Carl Gustav Jung (1875–1961), who was almost 30 years younger than Freud (young is *jung* in German), and his feminist disciple, the German-born US psychoanalyst Karen Horney (1885–1952), who rejected his theory of ***penis envy**. Other aptronyms include Sir Henry Head, the English neurologist; Iris C. Love, the US archaeologist who excavated the temple of Aphrodite (the Greek goddess of love) at Cnidus in Turkey in 1969; Gay Search, author of *The Last Taboo: Sexual Abuse of Children* (1988); and J. J. C. Smart, the clever Australian philosopher. *See also* **FOLK ETYMOLOGY (2)** for the aptronym *Crapper*, nominative determinism. [Irregular formation from Latin *aptus* fitting + Greek *onoma* or *onyma* a name]

aqueduct of Sylvius *n.* Another name for the ***cerebral aqueduct**. [From Latin *aqua* water + *ducere, ductum* to lead, named after the French anatomist Sylvius (1478–1555), also called Jacques Dubois, who discovered it]

aqueous humour *n.* The watery fluid in the space between the cornea and crystalline lens of the eye. US *aqueous humor*. *See also* **GLAUCOMA**. *Compare* **VITREOUS HUMOUR**. [From Latin *aqua* water + *-osus* having or characterized by + *umor* bodily fluid, from *umere* to be moist]

arachnoid membrane *n.* The middle of the three ***meninges**, being a thin, transparent, non-vascular membrane covering the brain and spinal cord, attached tightly to the dura mater. Sometimes called the *arachnoid layer* or the *arachnoid mater*. *Compare* **DURA MATER**, **PIA MATER**. [From the Greek *arachne* a spider, alluding to its delicate weblike structure]

arachnoid space *n.* The space, filled with ***cerebrospinal fluid**, between the ***arachnoid membrane** and the inner ***pia mater**.

Arago phenomenon *n.* The relatively greater sensitivity of ***peripheral vision** as compared to ***central vision** in dim light, owing to the physiological

characteristics of [*scotopic](#) vision, in particular the distribution of [*rods](#) on the retina. Ancient astronomers were the first to notice that when observing the night sky, stars can be seen in peripheral vision that disappear when fixated directly. See [FOVEA](#). [Named after the French astronomer and physicist (Dominique) François (Jean) Arago (1786–1853) who first examined it in detail]

arboreal *adj.* 1. Tree-like in form or appearance. 2. Tree-dwelling. [From Latin *arbor* a tree]

arborization *n.* Any branching tree-like formation or structure. [From Latin *arbor* a tree + *-izare* from Greek *-izein* to cause to become + *-ation* indicating a process or condition]

archaecortex *n.* The type of cortex that is found mainly in the [*hippocampus](#) and that evolved in humans earlier than any other part of the human [*cerebral cortex](#). Also spelt *archicortex* or *archecortex*. Also called the *archaepallium* or *archipallium*. See also [NEOCORTEX](#). Compare [MESOCORTEX](#), [PALAEOCORTEX](#). [From Greek *archaios* ancient, from *arche* beginning + Latin *cortex* bark or outer layer]

archetypal form *n.* In [*analytical psychology](#), an image, motif, pattern, or theme associated with an [*archetype](#) (2), the archetype itself not being susceptible to direct representation. See [GOD-IMAGE](#), [MANDALA](#), [PRIMORDIAL IMAGE](#). See also [COLLECTIVE UNCONSCIOUS](#).

archetype *n.* 1. A perfect or typical example of its class, or another name for a [*prototype](#) (2). 2. In [*analytical psychology](#), an inherited mental structure or pattern, forming part of the [*collective unconscious](#), observable only through its manifestations in behaviour, especially that associated with ancient and universal experiences such as birth, marriage, motherhood, and death. Carl Gustav Jung (1875–1961) introduced the term into his technical vocabulary in 1919 and later defined it as ‘an irrepresentable, unconscious, pre-existent form that seems to be part of the inherited structure of the psyche and can therefore manifest itself spontaneously anywhere, at any time’ (*Collected Works*, 10, paragraph 847). Also (originally) called a *primordial image*. See also [ANIMA](#), [ANIMUS](#) (3), [ARCHETYPAL FORM](#), [COLLECTIVE UNCONSCIOUS](#),

*****ebook converter DEMO Watermarks*****

IMAGO (1), PRIMORDIAL IMAGE, PUER AETERNUS, SHADOW (2). **archetypal** *adj.* [From Greek *archetypon* an original, from *arche* the beginning + *typos* a model]

Archimedes spiral *n.* A plane curve whose equation is $r = a\theta$ in polar coordinates, meaning that the length of the curve's radius r from its centre is always a constant ratio of the angle that the radius forms with a fixed axis, and as a consequence the coils of the spiral are a constant distance apart like the grooves of old-fashioned vinyl phonograph records, which are in fact Archimedes spirals. The term is sometimes used as a synonym for a ***Plateau spiral**, but this is avoided in careful usage because a Plateau spiral is merely a device based on it and often on some other spiral. Also called an *Archimedean spiral*. [Named after the ancient Greek mathematician and physicist Archimedes of Syracuse (?287–212 BC) who was the first to study it and whose treatise *On Spirals* is devoted mainly to it]

arctic hysteria See PIBLOKTOQ.

arcuate fasciculus *n.* A small bundle of nerve fibres in each cerebral hemisphere that curves round the back of the lateral sulcus and that in the (usually) left hemisphere connects ***Broca's area** with ***Wernicke's area**. Lesions to it often result in conduction aphasia (see **APHASIA**). See also **DISCONNECTION SYNDROME**. [From Latin *arcuatus* bent like a bow, from *arcuare* to bend like a bow, from *arcus* a bow + *fasciculus* a little bundle, diminutive of *fasculus* a bundle]

arcuate nucleus *n.* A small nucleus near the base of the ***hypothalamus** containing the cell bodies that produce hypothalamic ***hormones**.

area postrema *n.* An area of the brain in the roof of the fourth ***ventricle** at its posterior tip, outside the ***blood–brain barrier**, functioning as a chemoreceptor trigger area and controlling the vomiting reflex, also containing ***serotonergic** nerve fibres. [From Latin *postremus* hindmost]

Areas V1, V2, V3, V4, V5, V6, V7, V8 See **VISUAL CORTEX**. Compare **BRODMANN AREA**.

argot *n.* A secretive form of **jargon* (1) or **slang* peculiar to a specific group, originally a band of thieves. *See also* BACK SLANG, CANT (2), REGISTER (2), RHYMING SLANG. [French, origin unknown]

Argyll Robertson pupil *n.* A **pupil* of the eye that manifests **accommodation* (1) by constricting when watching a finger that is brought close to the face but does not respond to light by constricting, a neurological sign of damage to the midbrain relays of the **oculomotor nerve*. It is a specific sign of neurological damage caused by syphilis, a sexually transmitted disease. Also called *prostitute pupil*. **ARP** *abbrev.* [Named after the Scottish physician Douglas M. C. L. Argyll Robertson (1837–1909) who drew attention to it]

ARIMA *abbrev.* Autoregressive integrated moving average, a widely used class of models developed in 1970 by the British statisticians George Edward Pelham Box (1919–2013) and Gwilym Meirion Jenkins (1933–82) for **time-series analysis*, also called *Box–Jenkins models*. *See also* TYPE III ERROR. [Named after the three components of the model, namely the *autoregression*, *integration* (differencing), and *moving average* coefficients]

Aristotle's illusion *n.* A **tactile illusion* that is created when the eyes are closed, two fingers of one hand are crossed, and a small object such as an acorn is pressed (especially by another person) into the cleft between the tips of the crossed fingers. The sensation is that of touching two objects rather than one. The first written account of it was given by the Greek philosopher Aristotle (384–322 BC) in the essay *On Dreams* in the *Parva Naturalia*: ‘When the fingers are crossed, one object seems to be two; but yet we deny that it is two; for sight is more authoritative than touch. Yet, if touch stood alone, we should actually have pronounced the one object to be two’ (Chapter 2). Aristotle mentioned it also in *Metaphysics*: ‘Touch says there are two objects when we cross our fingers, while sight says there is one’ (Book 4, Chapter 6). The explanation for the illusion, apparently overlooked by Aristotle, is that when the fingers are crossed the outsides of two fingers are touched simultaneously, and in ordinary circumstances and past experience that requires stimulation by two separate objects. This explanation was first advanced in *Problems*, a spurious work often attributed to Aristotle, probably written by one of his followers: ‘When we hold the hand in its natural

*****ebook converter DEMO Watermarks*****

position, we cannot touch an object with the outer sides of two fingers' (Book 35, Chapter 10). Further references to the illusion are to be found in Book 31, Chapters 11 and 17 of *Problems*. Also called *Aristotle's experiment*. See also [DIPLAESTHESIA](#).

arithmetic mean *n.* In descriptive statistics, the average value, calculated (for a finite set of scores) by adding the scores together and then dividing the total by the number of scores. Often referred to simply as the *mean*, this is the most commonly used measure of [*central tendency](#). See also [LAKE WOBEGON EFFECT](#), [MEDIAN](#), [MODE](#), [TRIMMED MEAN](#). Compare [GEOMETRIC MEAN](#), [HARMONIC MEAN](#). **M** *abbrev.* [From Old French *moien*, from Latin *medianus* median]

armchair experiment *n.* Another name for a [*Gedankenexperiment](#).

arms race *n.* A competition between military powers building up armaments; hence figuratively in evolutionary theory, a sequence of evolutionary changes in two (or more) species competing for survival and reproduction, often a [*predator](#) and its [*prey](#), in which each advantageous [*adaptation](#) (1) in one is countered by a corresponding adaptation in the other.

Army Alpha and Beta tests *n.* The first [*group tests](#) of intelligence, providing the prototypes of many that were to follow, intended to improve selection, placement, and training for specific occupations within the US army during the First World War, constructed by a group of US psychologists under the leadership of Robert Mearns Yerkes (1876–1956), including Lewis Madison Terman (1877–1956), and applied to approximately 1,750,000 recruits in just over one year. The test and the results that it generated were kept secret until the war ended, eventually being published by the National Academy of Sciences in 1921 in a book edited by Yerkes entitled *Psychology Examining in the United States Army*, and in 1919 Yerkes published a version of the tests called the *National Intelligence Test*, which was widely used by schools, universities, and commercial companies. The Army Alpha test included the earliest examples of [*analogies tests](#), [*number-completion tests](#), [*synonym tests](#), and [*antonym tests](#), and the Army Beta test, designed specifically for people who were illiterate, introduced the first [*incomplete-](#)

*****ebook converter DEMO Watermarks*****

pictures test and *coding test, all the subtests being strictly timed.

Army General Classification Test *n.* An *intelligence test used during the Second World War and after, suitable for literate adults. **AGCT** *abbrev.*

aromatic *adj.* Spicy or fragrant, belonging to the class of benzene derivatives or closed-chain organic compounds. *Aliphatic and aromatic hydrocarbons in petrol or gasoline, glue, paint thinners, and some aerosol propellants are *psychotropic when inhaled. *See also* INHALANT-RELATED DISORDERS, SOLVENT ABUSE. [From Greek *aroma*, *aromatos* spice + *-ikos* of, relating to, or resembling]

arousal *n.* Short for physiological arousal: excitation of the *ascending reticular activating system, leading to a condition of alertness and readiness to respond, as evidenced by such physiological signs as increased heart rate and blood pressure, *galvanic skin response (GSR), and *desynchronized EEG activity. *See also* AROUSAL PHASE, COGNITIVE-APPRAISAL THEORY, YERKES–DODSON LAW.

arousal phase *n.* The second phase of the *sexual response cycle, when sexual excitement develops.

arrangement problem *n.* A measure of problem-solving ability in which the respondent tries to arrange a number of elements in the correct sequence, the most common version being a *picture-arrangement test.

Arrow's impossibility theorem *n.* A theorem introduced in 1951 by the US economist Kenneth J(oseph) Arrow (born 1921) and modified in 1963 to correct an error that had been found in it, showing that no voting system or any other social choice function could ever guarantee to aggregate the individual preferences of a group into a collective preference ranking so as to satisfy the following four seemingly necessary but mild conditions of fairness. (U) *Unrestricted domain*: the social choice function must generate a collective preference order from any logically possible set of individual preference orders; (P) *Pareto condition*: whenever all individuals prefer an alternative *x* to another *y*, *x* must be preferred to *y* in the collective preference

*****ebook converter DEMO Watermarks*****

order; (I) *Independence of irrelevant alternatives*: the collective preference order of any pair of alternatives x and y must depend solely on the individuals' preferences between these alternatives and not on their preferences for other (irrelevant) alternatives; (D) *Non-dictatorship*: the collective preference order must not invariably correspond to the preferences of any single individual, regardless of the preferences of the others. The proof of the theorem relies on the profile of individual preferences that gives rise to **Condorcet's paradox* of **intransitive preferences* and shows that any social choice function that satisfies U , P , and I necessarily violates D and is therefore dictatorial. Also called *Arrow's paradox*.

artefact *n.* 1. An article, such as a tool or a work of art, made by a person or people. 2. Something that is observed in an empirical investigation and is not a natural occurrence but a by-product of the investigation itself. Also (especially in US) spelt *artifact*. **artefactual** or **artifactual** *adj.* [From Latin *arte* by art, from *ars* skill or art + *factum* made, from *facere* to make]

arteriogram *n.* Another name for an **angiogram*. **arteriography** *n.* Another name for **angiography*. [From Greek *arteria* an artery + *gramme* a line]

arteriosclerosis *n.* Hardening or **sclerosis* of the arteries. *See also* *ATHEROSCLEROSIS*, *CEREBRAL ARTERIOSCLEROSIS*. **arteriosclerotic** *adj.* **arteriosclerotic dementia** *n.* Another name for **vascular dementia* or **multi-infarct dementia*. [From Greek *arteria* an artery + *sklerosis* a hardening, from *skleros* hard + *-osis* indicating a process or state]

articulation *n.* The production of speech sounds by using the speech organs to modify the airstream, usually from the lungs. **Consonants* are classified chiefly by **place of articulation* and **manner of articulation*. [From Latin *articulus* a little joint, hence *articulare* to provide with joints + *-ation* indicating a process or condition]

articulation disorder *n.* Another name for **phonological disorder*.

articulatory coding *n.* Remembering something by storing the physical movements required to produce its verbal expression, rather than by storing
*****ebook converter DEMO Watermarks*****

its sound or its meaning. *Compare* [ACOUSTIC CODING](#), [SEMANTIC CODING](#).

articulatory loop *n.* Another name for a [*subvocal rehearsal loop](#). Also called an *articulatory rehearsal loop*.

articulatory store *n.* Another name for a [*subvocal rehearsal loop](#).

artifact *See* [ARTEFACT](#).

artificial insemination *n.* Introduction of sperm into the [*vagina](#) or uterus by any method other than coitus.

artificial intelligence *n.* The design of hypothetical or actual computer programs or machines to do things normally done by minds, such as playing chess, thinking logically, writing poetry, composing music, or analysing chemical substances. The most challenging problems arise in attempting to simulate functions of intelligence that are largely unconscious, such as those involved in vision and language. The term was introduced in 1956 by the US computer engineer John McCarthy (1927–2011). *See* [STRONG AI](#), [WEAK AI](#). *See also* [CASE GRAMMAR](#), [CHINESE ROOM](#), [COMPUTER VISION](#), [DEFAULT REASONING](#), [EXPERT SYSTEM](#), [FRAME \(2\)](#), [FRAME PROBLEM](#), [FUZZY LOGIC](#), [GENERAL PROBLEM SOLVER](#), [GÖDEL'S THEOREM](#), [KNOWLEDGE REPRESENTATION](#), [NEURAL NETWORK](#), [NON-MONOTONIC REASONING](#), [OPTICAL CHARACTER RECOGNITION](#), [PANDEMONIUM](#), [SHRDLU](#), [TURING MACHINE](#), [TURING TEST](#). Also called *machine intelligence*. **AI** *abbrev.*

artificial language *n.* A language deliberately invented or constructed, especially as a means of communication in computing or information technology. *See also* [LANGUAGE \(1\)](#). *Compare* [NATURAL LANGUAGE](#).

artificial neural network *n.* Another name for a [*neural network](#). Also called an *artificial neural net*. **ANN** *abbrev.*

artificial pupil *n.* Another name for a [*reduction screen](#).

artificial scotoma *n.* A [*scotoma](#) induced by a pattern of randomly twinkling visual spots against a grey background, such as is produced by a

television receiver tuned to an open channel, against which a small uniform grey square is displayed a short distance from the observer's **fixation* (1) point. After about five seconds, on average, the square vanishes and is filled in with the twinkling pattern of the background. If the twinkling spots are displayed against a coloured background and the small square is grey, then the colour fills in first, followed by the twinkling movement. If the whole display is replaced by a uniform grey (non-twinkling) display, then a small twinkling square appears for two to three seconds in the area previously occupied by the grey square. **Filling-in* is thus not explained by observers merely failing to notice the missing information but involves active neural representation of it. The phenomenon was first studied in detail by the Indian-born US psychologist and neuroscientist Vilayanur S. Ramachandran (born 1951) and the English psychologist Richard L(angton) Gregory (1923–2010) and reported in a letter to the journal *Nature* in 1991. See also *FILLING-IN ILLUSION*, *MODAL COMPLETION*, *MOTION-INDUCED BLINDNESS*, *TROXLER EFFECT*. [From English *artificial* + Greek *skotoma* dizziness, from *skotos* darkness + *-oma* indicating an abnormality]

art therapy *n.* A form of **psychotherapy* in which clients or patients are encouraged to express their feelings and inner conflicts through art.

ascending reticular activating system *n.* The ascending fibres of the **reticular formation* in the brainstem, defined functionally rather than anatomically according to their control of the level of physiological **arousal* or activation of the cerebral cortex, essential for wakefulness, attention, and concentration. Also called the *reticular activating system* (*RAS*). See also *CERVEAU ISOLÉ*. Compare *DESCENDING RETICULAR FORMATION*. **ARAS** *abbrev.*

Asch experiment *n.* A classic experiment on **conformity* introduced in 1951 by the Polish-born US psychologist Solomon E(lliott) Asch (1907–96) and subsequently used by numerous researchers. A group of people (usually seven to nine in Asch's original series) were seated around a table and told that they were to take part in an experiment on visual discrimination. They were shown 18 pairs of cards, and in each case were asked to say out loud, one at a time, which of the three lines on one card was the same length as the comparison line on the other. The task was deliberately made sufficiently easy to ensure that errors were virtually zero when people were tested alone,

*****ebook converter DEMO Watermarks*****

without any conformity pressure, but in the experiment there was only one real subject or participant in the group, usually sitting at the end of the row and therefore having to formulate judgements after hearing those of the other group members, and the rest of the group were accomplices of the experimenter, trained to give unanimous wrong answers on 12 critical trials out of the 18. About 37 per cent of judgements on critical trials were conforming responses—the real subject going along with the incorrect unanimous majority. The experience was rather stressful for those who remained independent, and conformity was found to increase with the size of the unanimous majority ranged against the real subject, but only up to a majority of three against one, after which further increases produced no significant increases in conformity.

ascorbic acid See [VITAMIN C](#).

asemia *n.* Impaired ability to encode or comprehend signs such as [*gestures](#) (1) or the spoken and written signs and symbols of human languages. Also called *asemasia* or *asymbolia*. [From Greek *a-* without + *semeion* a sign + *-ia* indicating a condition or quality]

asexual reproduction *n.* Procreation as it occurs in some species without formation of male or female [*gametes](#), usually by [*fission](#) (2). In careful usage it is distinguished from [*parthenogenesis](#).

askable parent *n.* A parent who is willing to answer a child's questions about sex. [The term appeared in print for the first time in an article by the *New York Times* journalist Eleanor Charles (1923–2012) on 11 January 1981]

asonia *n.* Impaired ability to discriminate between tones of different pitches. Also (non-technically) called *tone deafness*. See also [AMUSIA](#), [DYSMUSIA](#). [From Latin *a-* away or away from + *sonus* a sound]

aspartame *n.* The intensely sweet non-carbohydrate crystalline compound $C_{14}H_{18}N_2O_5$ formed from the amino acids [*phenylalanine](#) and [*aspartic acid](#), used as an artificial sweetener that is 200 times sweeter than sucrose (table sugar). [From *aspart(ic) (acid)* + *(phenyl)a(lanine)* + *me(thyl)*

(ester)]

aspartate *n.* Another name for **aspartic acid*.

aspartic acid *n.* A non-essential **amino acid* that is a component molecule of proteins and that functions as a **neurotransmitter*. Also called *aspartate*. See also *ASPARTAME*. **Asp** *abbrev.* [From *aspar(agus)*, in which it is found, + Greek *-ikos* of, relating to, or resembling]

Asperger's disorder *n.* A relatively mild form of **autism spectrum disorder*. A **pervasive developmental disorder* characterized by severe and sustained impairment in social interaction together with restricted, repetitive, or stereotyped patterns of behaviour, interests, or activities, causing clinically significant impairment in everyday living, without the language and cognitive deficits characteristic of more severe forms of autism spectrum disorder but in other ways similar to it, usually found in males. Compare *SCHIZOID PERSONALITY DISORDER*. [Named after the Austrian psychiatrist Hans Asperger (1906–80) who first described it in 1944]

aspiration *n.* 1. A hope, desire, or ambition to achieve a specified goal. Hence an *aspiration level* or *level of aspiration* is a goal or target that a person sets for future achievement. 2. Audible breath that may accompany the articulation of a speech sound. For example, in most **accents* (1) of English, the initial **consonants* in the words *pen*, *ten*, and *ken* are followed by a brief sound like /h/ before the voicing of the vowel begins, but when /p/, /t/, or /k/ is preceded by /s/, as in *spy*, *sty*, and *sky*, it is not aspirated. See also *GRASSMANN'S LAW (LINGUISTICS)*. **aspirate** *vb.* 1. To pronounce a speech sound with aspiration. *n.* 2. A speech sound pronounced with aspiration. [From Latin *aspirare* to aspire to achieve something, from *ad* to + *spirare* to breathe + *-ation* indicating a process or condition]

aspirin *n.* Acetylsalicylic acid, a white, crystalline compound originally derived from the bark of the willow tree *Salix alba*, identified and first synthesized by the German chemist Felix Hoffmann (1868–1946) at the Bayer division of the German chemical company I. G. Farben in 1898, widely used as an **analgesic* (1). It consists of an acetyl group linked to a salicylic acid group, and its powerful anti-inflammatory and antipyretic

*****ebook converter DEMO Watermarks*****

(fever-reducing) effects result from its inhibition of **prostaglandin* synthesis. When it enters the molecule prostaglandin H₂ synthase or *PGHS*, the enzyme that produces prostaglandins, its acetyl group binds to a site within the enzyme and blocks the channel through which arachidonic acid from the **endoplasmic reticulum* is converted to prostaglandins. It also shuts down forms of the PGHS enzyme that protect the lining of the stomach. Signs and symptoms of aspirin overdose include gastrointestinal bleeding, dizziness, sweating, thirst, tinnitus, visual disturbances, confusion, drowsiness, breathlessness, nausea, vomiting, coma, and death. Formula: CH₃COOC₆H₄COOH. *See also* *OTOTOXIC*. [The original proprietary name given to it by Bayer, from *a(cetyl)* + German *Spir(säure)* spiraeic (now salicylic) acid + *-in(e)* indicating an organic compound]

A/S ratio *abbrev.* Association/sensation ratio, an index of the comparative **intelligence* of mammalian species formulated by the Canadian psychologist Donald O(lding) Hebb (1904–85), defined as brain volume devoted to **association areas* divided by brain volume devoted to sensory and motor areas. *Compare* *ENCEPHALIZATION QUOTIENT*, *PROGRESSION INDEX*.

A–S Reaction Study *n.* An early personality inventory designed to measure ascendance versus submissiveness in everyday social relationships, constructed by the US psychologists Gordon W(illard) Allport (1897–1967) and Floyd H(enry) Allport (1890–1978) and published in their book *The A–S Reaction Study* (1928). Not to be confused with the **A–S scale*.

A–S scale *abbrev.* A scale to measure anti-Semitism (prejudice against or hostility to Jews), especially the scale first published by the German philosopher, sociologist, and psychologist Theodor W(iesengrund) Adorno (1903–69) and several colleagues in the book *The Authoritarian Personality* (1950). Not to be confused with the **A–S Reaction Study*. *See also* *AUTHORITARIANISM*.

assembled phonology *n.* The sound of a word or verbal expression as it is built up from knowledge of the usual sounds of letters and sequences of letters. This method fails with irregular words such as *yacht* in English, but in regular languages such as German or Spanish the correct pronunciation can

always be worked out in this way. *Compare* [ADDRESSED PHONOLOGY](#).

assertiveness training *n.* A form of [*counselling](#) or [*psychotherapy](#) developed in 1949 by the US psychologist Andrew Salter (1914–96) in which people learn to express their needs, wishes, and feelings frankly, honestly, and directly, in a way that causes others to take them into account. Also called *assertion training*. *See also* [MODELLING](#), [SOCIAL SKILLS TRAINING](#).

assimilation *n.* **1.** Absorption or incorporation of information or of a substance, or more generally the act or process of making things similar or alike. **2.** In the writings of the Swiss psychologist Jean Piaget (1896–1980) and his followers, a form of [*adaptation \(3\)](#) in which novel experiences are incorporated into existing psychological structures or processes, as when an infant responds to a new toy that is introduced into its environment by treating it like an already familiar object, interpreting it on the basis of past experience as something to be grasped, shaken, put in the mouth, and so on. *See also* [EQUILIBRATION](#). *Compare* [ACCOMMODATION \(2\)](#). **3.** The influence on a speech sound by one of its neighbours, making the two sounds more alike than they would otherwise be. For example, the plural-forming /s/ is pronounced with a voiced [z] [*allophone](#) when it follows a voiced [*consonant](#), as in the English word *dogs*, but with a voiceless [s] allophone when it follows a voiceless consonant as in *cats*. *See also* [WUG TEST](#). **4.** Decreasing the discrepancy between one's own attitude and that of a persuasive source or message. *See also* [ASSIMILATION–CONTRAST THEORY](#), [FALSE-CONSENSUS EFFECT](#). *Compare* [CONTRAST \(4\)](#). **5.** The distortion of a memory through making it similar to already existing memories, a phenomenon that also occurs in [*serial reproduction](#) and [*rumour](#) transmission. *Compare* [LEVELLING \(1\)](#), [SHARPENING](#). **6.** A tendency for the perception of objects or images to take on perceptual characteristics of adjacent objects or images. *See* [COLOUR ASSIMILATION](#). **assimilate** *vb.* **assimilative** *adj.* [From Latin *assimilare* to make similar or alike, from *ad* to + *similis* like + *-ation* indicating a process or condition]

assimilation–contrast theory *n.* A theory of judgement and [*attitude change](#) according to which a judge's initial judgement or attitude acts as an anchor, so that items of information or persuasive communications that are not very discrepant from the anchor and that therefore fall within the

person's *latitude of acceptance* are assimilated, the person's judgement or attitude changing in the direction of the communication, whereas items of information or persuasive communications that are highly discrepant produce either minimal change if they fall within the person's *latitude of neutrality* or produce contrast effects if they fall within the *latitude of rejection*, the person's judgement or attitude changing in the opposite direction. Attitudes associated with high ***ego involvement** tend to have narrow latitudes of acceptance and wide latitudes of rejection, and the reverse applies to attitudes of low ego involvement. A consequence of this theory is that an extreme and ego-involving judgement or attitude tends to be polarized (to become even more extreme) in response to most types of information or persuasive communications. The theory was formulated in 1961 by the US-based Turkish psychologist Muzafer Sherif (1906–88) and the US psychologist Carl I(vor) Hovland (1912–61). *See also* **BOOMERANG EFFECT**, **CONTRAST (5)**, **DISCREPANCY EFFECTS**, **FALSE-CONSENSUS EFFECT**. *Compare* **ADAPTATION-LEVEL THEORY**.

association area *n.* Another name for a ***tertiary projection area**, or more loosely any area of the cerebral cortex not devoted to primary sensory or motor functions, or to primary and secondary sensory or motor functions (usage is not consistent). Also called an *association centre* or an area of the *association cortex*.

association fibre *n.* Any of the nerve fibres that pass from one ***gyrus** to another within or between lobes of the same cerebral hemisphere. US *association fiber*.

association, free *See* **FREE ASSOCIATION**.

associationism *n.* A psychological doctrine concerning the attraction between mental elements or ideas, first suggested in a chapter entitled 'Of the Association of Ideas' that the English empiricist philosopher John Locke (1632–1704) added in 1700 to a new edition of his *Essay Concerning Human Understanding*, originally published in 1690, the doctrine later being elaborated by the Scottish philosopher James Mill (1773–1836) and his English son John Stuart Mill (1806–73). According to the Mills, mental experiences consist of elementary *sensations* when sense organs are

*****ebook converter DEMO Watermarks*****

stimulated, and *ideas* are thoughts and memories experienced in the absence of sensory stimulation. Ideas have a tendency to become associated with one another: complex ideas arise from the association of simple ideas, and once two ideas have become associated, it is then difficult to experience one without the other, as when the idea of redness, associated in most people's minds with warmth, tends to come to mind whenever we think of warmth. James Mill believed that the single **contiguity law* (elements become associated when they are close to one another in time or space) explained all mental associations and complex ideas. John Stuart Mill added the **similarity law* (similar ideas tend to become associated), and the **frequency law* (the more frequently ideas occur together, the more strongly they become associated), and also introduced what he called **mental chemistry*, according to which simple ideas combine to form complex ideas that are qualitatively different from their constituent elements. The Scottish mental philosopher Alexander Bain (1818–1903) was the first to suggest that behavioural actions can also form associations with ideas. *See also* [GROUPING LAW](#). *Compare* [CONNECTIONISM \(2\)](#).

association/sensation ratio *See* [A/S RATIO](#).

association test *n.* Another name for the **word-association test*. Also called the *association method*.

association value *n.* A property of **nonsense syllables* and other materials that are themselves meaningless or of being, to varying degrees, suggestive of meaningful words or ideas. For example, according to empirical studies, the nonsense syllables *BAL*, *FUT*, and *MOD* have very high association value, whereas *CIJ*, *VAF*, and *XEJ* have very low association value.

associative illusion *n.* Any **visual illusion* in which one part of an image or object is misperceived because of the effect of another. Also called a *geometric illusion*. *See* [BALDWIN ILLUSION](#), [CHEQUER-SHADOW ILLUSION](#), [CRAIK-O'BRIEN EFFECT](#), [CURVATURE ILLUSION](#), [DELBOEUF ILLUSION](#), [EBBINGHAUS ILLUSION](#), [EHRENSTEIN'S BRIGHTNESS ILLUSION](#), [EHRENSTEIN'S SQUARE ILLUSION](#), [FILLED-SPACE ILLUSION](#), [FILLING-IN ILLUSION](#), [FRASER SPIRAL](#), [GELB EFFECT](#), [HELMHOLTZ ILLUSION](#), [HERING ILLUSION](#), [HERMANN GRID](#), [HOLLOW SQUARES](#)

*****ebook converter DEMO Watermarks*****

ILLUSION, HORIZONTAL–VERTICAL ILLUSION, IRRADIATION ILLUSION, JASTROW ILLUSION, KARDOS EFFECT, LAND EFFECT, MARGARET THATCHER ILLUSION, MORINAGA MISALIGNMENT ILLUSION, MÜLLER-LYER ILLUSION, MÜNSTERBERG ILLUSION, ORBISON ILLUSION, OUCHI ILLUSION, PATTERN-INDUCED FLICKER COLOUR, POGGENDORFF ILLUSION, PONZO ILLUSION, SANDER PARALLELOGRAM, STAR ILLUSION, TEACUP ILLUSION, TOP HAT ILLUSION, TWISTED-CORD ILLUSION, WUNDT ILLUSION, ZANFORLIN ILLUSION, ZÖLLNER ILLUSION. *See also* CONTEXT EFFECT, FIELD EFFECT, VISUAL INDUCTION.

associative interference *n.* An umbrella term for **proactive interference* and **retroactive interference*. Also called *associative inhibition*.

associative laws *n.* The principles governing **associative learning*. *See also* ASSOCIATIONISM.

associative learning *n.* The learning of contingencies between events such as occurs in **conditioning* (1). In **classical conditioning*, associations between **conditioned stimuli* and **unconditioned stimuli* are learned; in **operant conditioning*, associations between **responses* and **reinforcers* are learned. *See also* AUTOSHAPING, EVALUATIVE CONDITIONING, SHAPING (1).

associative memory *n.* Memory for links or connections between items, often studied through **paired-associate learning*.

associative priming *See* PRIMING (1).

assortative mating *n.* Preference for sexual partners with similar **phenotypes*, as when humans select mates who tend to resemble themselves in wealth, social class, intelligence, or attractiveness, or when other organisms choose mates that resemble themselves on specific criteria. *See also* HERITABILITY, POPULATION GENETICS. *Compare* DISASSORTATIVE MATING. [From French *assortir* to classify, from Latin *ad* to + *sors*, *sortis* a lot]

astereognosis *n.* Inability to identify or recognize objects by touch, often resulting from a lesion in the somatosensory association area (see SOMATOSENSORY CORTEX). The unimpaired ability is called *stereognosis*. [From

Greek *a-* without + *stereos* solid + *gnosis* knowledge]

asthenia *n.* Listlessness, debility, or tendency to fatigue. *See also* NEURASTHENIA. **asthenic** *adj.* [From Greek *astheneia* weakness, from *a-* without + *sthenos* strength + *-ia* indicating a condition or quality]

asthenic body type *n.* A slender, long-limbed **somatotype* believed by the German psychiatrist Ernst Kretschmer (1888–1964) and his followers to be prone to **schizophrenia*. *See also* KRETSCHEMER CONSTITUTIONAL TYPE. *Compare* ATHLETIC BODY TYPE, DYSPLASTIC BODY TYPE, PYKNIC BODY TYPE. [From Greek *a-* without + *sthenos* strength]

astigmatism *n.* A defect in a lens or mirror in which rays of light from a single point do not all focus at the same point but are drawn into a line; hence a visual defect resulting from astigmatism of the **crystalline lens* of the eye, characterized by lines oriented in a certain direction being perceived more distinctly than lines in the transverse direction. *See also* ABERRATION (3). [From Greek *a-* without + *stigma*, *stigmatos* a point or focus]

astonishing hypothesis *n.* The name given in 1994 by the Nobel prizewinning English molecular biologist Francis H(arry) C(ompton) Crick (1916–2004) to the proposition that a person's mental experiences are entirely explained by the behaviour of neurons, glial cells, and the atoms, ions, and molecules that constitute and influence them.

astrocyte *n.* Any of the large **neuroglial* cells shaped like many-pointed stars that support the rigid structure of the brain, mop up **potassium* ions during periods of intense neuronal activity, recycle glutamate and GABA after release, function as phagocytes by engulfing debris from decaying cells, and possibly play a role in the **blood–brain barrier* by surrounding capillaries in the brain with the terminal boutons of their dendrites. Also called *astroglia*. *See also* GLIOSIS. [From Greek *astron* a star + *kytos* a vessel or hollow]

astrocytoma *n.* A tumour in the central nervous system composed of proliferating **astrocytes*, the main type of brain tumour in humans. [From Greek *astron* a star + *kytos* a vessel or hollow + *-oma* indicating an
*****ebook converter DEMO Watermarks*****

abnormality]

asymbolia *n.* Another name for ***asemia**. [From Greek *a-* without + *symbolon* a token, from *syn* together + *ballein* to throw]

asyndeton *n.* A form of sentence construction in which a conjunction is omitted for economy of expression or rhetorical effect. A double asyndeton occurs in the usual English translation of Julius Caesar's sentence: *I came, I saw, I conquered*. [From Greek *a-* not or without + *syndetos* bound together, from *syn* together + *detos* bound or tied]

ataque de nervios *n.* A ***culture-bound syndrome** found mainly among Latino communities in the Caribbean, but also in many Latin American and Mediterranean cultures, characterized by outbursts of uncontrollable shouting, crying, trembling, a sensation of heat in the chest rising to the head, and aggression, both verbal and physical, accompanied by a sense of loss of control, generally precipitated by a ***psychosocial stressor** such as bereavement, divorce, or a family conflict. It is sometimes interpreted as a form of ***panic attack**. **ataques de nervios** *pl.* [From Spanish *ataque* attack + *de* of + *nervios* nerves, hence literally an attack of nerves]

ataraxia *n.* Tranquillity or freedom from anxiety. **ataractic** *adj.* Capable of calming or tranquillizing. An ataractic drug is a ***tranquillizer**. [From Greek *ataraktos* undisturbed, from *a-* without + *tarassein* to trouble + *-ia* indicating a condition or quality]

ataxia *n.* Diminution or loss of the ability to coordinate voluntary movements, caused by a lesion in the ***cerebellum** or another area of the ***central nervous system**. See **GAIT ATAXIA**, **LOCOMOTOR ATAXIA**, **OPTIC ATAXIA**, **SENSORY ATAXIA**. See also **DRAVET SYNDROME**, **POSTUROGRAPHY**, **ROMBERG'S SIGN**. Compare **DYSTAXIA**, **PSEUDOATAXIA**. [From Greek *a-* without + *taxis* order + *-ia* indicating a condition or quality]

ateleiosis *n.* Dwarfism without loss of proportion between body parts. [From Greek *a-* without + *telos* an end + *-osis* indicating a process or state]

atheism *n.* Rejection of belief in God. **atheist** *n.* One who rejects belief in God. *Compare* AGNOSTICISM, DEISM, PANTHEISM, THEISM. **atheistic** or **atheistical** *adj.* [From Greek *a-* without + *theos* a god + *-ismos* indicating a state or condition]

atherosclerosis *n.* The major form of **arteriosclerosis*, involving **sclerosis* and thickening of the inner walls of the arteries through the deposit of **cholesterol* and other fatty substances. In the coronary arteries, this may lead to coronary heart disease; in the brain, to **neurological* impairments such as **vascular dementia* or multi-infarct dementia. [From Greek *athera* porridge or gruel + *sklerosis* a hardening, from *skleros* hard + *-osis* indicating a process or state]

athetosis *n.* A neuromuscular condition characterized by involuntary, slow, writhing movements, especially of the fingers, hands, head, and tongue, associated with some forms of **cerebral arteriosclerosis*, **cerebral palsy*, lesions in the **basal ganglia*, or **tardive dyskinesia*. **athetoid** *adj.* [From Greek *athetos* not in place, from *a-* not + *tithenai* to place + *-osis* indicating a process or state]

athletic body type *n.* A muscular, well-built **somatotype* believed by the German psychiatrist Ernst Kretschmer (1888–1964) and his followers to be prone to **schizophrenia*. *See also* KRETSCHMER CONSTITUTIONAL TYPE. *Compare* ASTHENIC BODY TYPE, DYSPLASTIC BODY TYPE, PYKNIC BODY TYPE. [From Greek *athletes* an athlete, from *athlos* a contest]

Ativan *n.* A proprietary name for the benzodiazepine drug **lorazepam*. [Trademark]

atmosphere effect *n.* In **person perception*, the tendency for one characteristic of a person to influence the way the person's other characteristics are perceived by others. *See* HALO EFFECT, TRAIT CENTRALITY.

atmosphere hypothesis *n.* The conjecture that errors in judging the validity of **syllogisms* sometimes arise from a bias in favour of judging a conclusion as valid if it contains the same **quantifiers* (1, 2) or other logical

terms as the premises. For example, the following syllogism is often wrongly judged to be valid: *Some professors are logicians; Some logicians are absent-minded; Therefore, some professors are absent-minded.* The reasons for the plausibility of this invalid syllogism are the repetition of the form *Some P are Q* and the fact that the conclusion seems plausible. Compare BELIEF-BIAS EFFECT, CONVERSION HYPOTHESIS.

atmosphere perspective *n.* Another name for **aerial perspective*.

atomoxetine *n.* The generic name of a drug for the treatment of **attention-deficit/hyperactivity disorder (ADHD)*, developed by Eli Lilly and first marketed in January 2003. It is administered in the form atomoxetine hydrochloride, and some doctors and patients prefer it to **methylphenidate* (Ritalin) because it has milder side-effects, being a selective **noradrenalin reuptake inhibitor* and not a **stimulant drug*, and because it is suitable for use by adults as well as children. Formerly named *tomoxetine*. Commonly called *Strattera* (trademark). Formula: C₁₇H₂₁NO.

atonia *n.* Absence of normal muscle **tonus*. Also called *atony*. See also CATAPLEXY (1, 2), DYSTONIA, REM ATONIA, SLEEP PARALYSIS. [From Greek *a-* without + *tonos* tension or tone + *-ia* indicating a condition or quality]

ATP *abbrev.* Adenosine triphosphate, a nucleotide synthesized in the mitochondria of all animal and plant cells during the **Krebs cycle*. Its main function is to store energy, which it liberates when it is converted by **ATPase* to **ADP* during nerve impulses or muscular contractions. It is also converted by **adenylate cyclase* into **cyclic AMP*, which functions as a **second messenger*.

ATPase *abbrev.* (pronounced ay-tee-pee-aze). Adenosine triphosphatase, an **enzyme* that converts **ATP* to **ADP* when energy is consumed in a nerve impulse or muscular contraction. It consumes ATP and uses the resulting energy to pump proteins across the cell membrane, maintaining the **pH* level within the cell. It also manufactures ATP by means of a motor located in the **cell membrane* that rotates a shaft attached to a head. The head protrudes into the **cytoplasm*, synthesizing ATP as it spins. [From ATP

+ Greek *-ase* denoting an enzyme, from *diastasis* separation]

atrophy *n.* Degeneration or wasting away of an organ, structure, or body part through disease, inadequate nutrition, or disuse. *Compare* [HYPERTROPHY](#). [From Greek *a-* without + *trophe* nourishment]

atropine *n.* A poisonous [*alkaloid](#) obtained from the deadly nightshade plant *Atropa belladonna*, being a [*muscarine](#) [*antagonist](#) (3) that blocks the action of [*acetylcholine](#) in the parasympathetic nervous system, paralysing smooth muscles, and is used as a pre-anaesthetic medication and an antidote to chemical nerve agents. It was popular with medieval poisoners, and because a few drops of it in the eyes cause the pupils to dilate, it has been used throughout history by women as a cosmetic and is still used medicinally for eye examinations. *See also* [BELLADONNA](#), [BZ GAS](#), [HYOSCYAMINE](#), [LOMOTIL](#), [METHYL ATROPINE](#), [MUSCARINIC RECEPTOR](#). *Compare* [CURARE](#), [SCOPOLAMINE](#), [STRYCHNINE](#). [From Greek *Atropos* the eldest of the three Fates and the one who cuts the thread of life, from *atropos* that may not be turned away from, from *a-* without + *tropos* a turn, from *trepein* to turn]

attachment disorder *See* [REACTIVE ATTACHMENT DISORDER](#).

attachment theory *n.* A theory advanced in 1951 by the English psychiatrist (Edward) John (Mostyn) Bowlby (1907–90) according to which an infant has an inborn biological need for close contact with its mother (or other main carer), a normal bond developing within the first 6 months of life through the mother's responsiveness to these needs, and [*maternal deprivation](#) during this critical period having adverse effects on psychological development. *See also* [ANACLITIC DEPRESSION](#), [HOSPITALISM](#), [LOVE](#), [SEPARATION ANXIETY](#), [SEPARATION ANXIETY DISORDER](#). *Compare* [IMPRINTING](#).

attensity *n.* A term introduced by the English psychologist Edward Bradford Titchener (1867–1927) for the type of sensory clarity distinguishing a sensation that is the focus of attention from one that is not. [From *at(tributive)* + *tensity* stretching, from Latin *tendere*, *tensus* to stretch]

attention *n.* Sustained concentration on a specific stimulus, sensation, idea, thought, or activity, enabling one to use information-processing systems
*****ebook converter DEMO Watermarks*****

with limited capacity to handle vast amounts of information available from the sense organs and memory stores. *See also* [ALPHA BLOCKING](#), [ATTENTION OPERATING CHARACTERISTIC](#), [ATTENTION SPAN \(1, 2\)](#), [ATTENUATION THEORY](#), [AUTOMATIC PROCESSING](#), [BOTTLENECK THEORY](#), [COCKTAIL PARTY PHENOMENON](#), [CONTROLLED PROCESSING](#), [DUAL-TASK PERFORMANCE](#), [FILTER THEORY](#), [FLANKER COMPATIBILITY EFFECT](#), [HYPERCATHESIS](#), [INATTENTIONAL BLINDNESS](#), [LATE SELECTION](#), [MARGINAL CONSCIOUSNESS](#), [VISUAL SEARCH](#). *Compare* [ATTENTIVITY](#), [CONSCIOUSNESS](#). [From Latin *attentio* attention, from *attendere* to apply the mind to something, from Latin *tendere*, *tensus* to stretch]

attentional dyslexia *n.* A rare form of [*dyslexia](#) characterized by normal reading of individual words and naming of individual letters presented in isolation but an impaired ability to read more than one word or to name more than one letter when two or more are presented simultaneously on the page. *See also* [HYPERLEXIA](#).

attention-deficit/hyperactivity disorder *n.* A [*neurodevelopmental disorder](#) in [*DSM-5](#) affecting about 5 per cent of children and 2.5 per cent of adults, more common in boys than girls, characterized by persistent inattention, hyperactivity, or impulsivity, with some signs and symptoms appearing before the age of 12, causing problems at school or work and in the home, and interfering significantly with social, academic, or occupational functioning. Inattention is manifested by drifting off task, losing focus, or lacking persistence; hyperactivity by fidgeting, tapping, running around unnecessarily, and feeling restless when inactive; and impulsivity by hasty decision making without forethought, risky behaviour, social intrusiveness, and pursuit of immediate rather than [*deferred gratification](#). The disorder may be manifested as a predominantly inattentive subtype, a predominantly hyperactive–impulsive subtype, or a combined subtype, and it has substantial [*heritability](#). It is not a disorder of attention per se, as was formerly believed, but a developmental failure in areas of the brain responsible for inhibition and self-control, especially the [*caudate nucleus](#), the [*globus pallidus](#), the [*prefrontal cortex](#), and the [*vermis](#) of the cerebellum, areas that use [*dopamine](#) to communicate with one another and that tend to be shrunken in people with the disorder. Also called *attention-deficit disorder (ADD)*, *minimal brain dysfunction (MBD)*. *See also* [ATOMOXETINE](#), [METHYLPHENIDATE](#). *Compare* [HYPERKINESIS](#), [HYPERKINETIC](#)

DISORDERS, INTERMITTENT EXPLOSIVE DISORDER, OPPOSITIONAL DEFIANT DISORDER.
ADHD *abbrev.*

attention operating characteristic *n.* A type of **performance operating characteristic* used in the study of **attention*, consisting of a graph in which the level of performance of one task is plotted against the level of performance of the other, the tasks being performed simultaneously and attention shifted periodically from one task to the other. **AOC** *abbrev.*

attention span *n.* 1. The length of time for which a person can attend to something. 2. Another name for the **span of apprehension*. *See also* CHUNKING, MAGICAL NUMBER SEVEN.

attenuation *n.* Reducing the force, effect, or value of something. In statistics, a reduction in the magnitude of a **correlation* below its theoretical true value as a result of measurement error in one or both of the sets of scores entering into the relationship. A widely used *correction for attenuation*, which assumes that the errors are uncorrelated with the true scores and with each other, states that the true correlation is equal to the correlation between the observed scores divided by the **geometric mean* of their **reliabilities*. [From Latin *attenuare* to make thin, from *ad* to + *tenuis* thin + *-ation* indicating a process or condition]

attenuation theory *n.* Any theory of **attention* according to which information that is not attended to is processed, though at a shallower **level of processing* than the information receiving attention. The mechanism that implements this process is called an *attenuating filter*. The theory was formulated in 1960 by the US-based English psychologist Anne (Marie) Treisman (born 1935). *See also* COCKTAIL PARTY PHENOMENON, FILTER THEORY, SELECTIVE ATTENTION. *Compare* BOTTLENECK THEORY. [From Latin *attenuare* to make thin or to weaken, from *tenuis* thin]

attitude *n.* 1. An enduring pattern of evaluative responses towards a person, object, or issue. According to a frequently quoted classical definition, it is a more or less consistent pattern of affective, cognitive, and **conative* or behavioural responses (or of feeling, thinking, and behaving) towards a psychological object, but the consistency implied by this definition is a
*****ebook converter DEMO Watermarks*****

supposition that is frequently unmatched by reality, and it is possible to have an attitude towards something without ever having the opportunity to express it in behaviour. *See also* [ATTITUDE CHANGE](#), [ATTITUDE SCALE](#), [DUAL-PROCESS MODEL](#), [ELABORATION LIKELIHOOD MODEL](#), [EXPECTANCY-VALUE THEORY](#), [IMPLICIT ATTITUDE](#), [SELF-PERCEPTION THEORY](#), [THEORY OF PLANNED BEHAVIOUR](#), [THEORY OF REASONED ACTION](#). **2.** A bodily posture, especially one indicative of a mental state (*She assumed an attitude of dejection, holding her head in her hands*). **3.** Informally, truculent or cheeky demeanour or behaviour (*My teenage son was sulking and gave me nothing but attitude*). **attitudinal** *adj.* Of or relating to an attitude (1, 2) or to attitudes. [From Italian *attitudine* disposition, from Latin *aptitudo* fitness, from *aptus* fit or apt]

attitude change *n.* The process whereby an [*attitude \(1\)](#) towards a person, object, or issue becomes more or less favourable, usually as a consequence of [*persuasion](#). *See also* [ASSIMILATION-CONTRAST THEORY](#), [BALANCE THEORY](#), [COGNITIVE CONSISTENCY THEORY](#), [CONGRUITY THEORY](#), [ELABORATION LIKELIHOOD MODEL](#), [FORCED COMPLIANCE](#), [GROUP POLARIZATION](#), [INGRATIATION](#), [INOCULATION THEORY](#), [LAW OF SOCIAL IMPACT](#), [RHETORIC \(1\)](#), [SLEEPER EFFECT](#).

attitude scale *n.* An instrument for measuring [*attitudes \(1\)](#), often but not necessarily consisting of some form of [*questionnaire](#). *See* [GUTTMAN SCALE](#), [LIKERT SCALE](#), [SEMANTIC DIFFERENTIAL](#), [THURSTONE SCALE](#), [UNFOLDING TECHNIQUE](#), [UNOBTRUSIVE MEASURE](#).

attitude similarity hypothesis *n.* The proposition that people tend to be attracted to others who share their attitudes and values in important areas. This hypothesis has received strong and consistent support from empirical investigations. Also called the *similarity-attraction hypothesis*. *Compare* [NEED COMPLEMENTARITY HYPOTHESIS](#).

attribute *n.* A quality, property, aspect, or [*feature \(1\)](#) of any [*phenomenon](#), whether an object, event, [*concept](#), [*schema](#), or person. *See* [INTEGRAL ATTRIBUTE](#), [SEPARABLE ATTRIBUTE](#). [From Latin *attribuere* to associate with, from *ad* to + *tribuere* to give]

attribution *n.* The assignment of causes to behaviour, or the perception or
*****ebook converter DEMO Watermarks*****

inference of the causes of behaviour, such causes including personal dispositional factors and external situational factors. The term was introduced in this sense in 1958 by the Austrian-born US psychologist Fritz Heider (1896–1988). *See also* ACTOR–OBSERVER DIFFERENCE, ATTRIBUTIONAL BIAS, ATTRIBUTION THEORY, COVARIATION PRINCIPLE, FALSE-CONSENSUS EFFECT, FUNDAMENTAL ATTRIBUTION ERROR, KELLEY'S CUBE, PERSON PERCEPTION, POSITIVITY BIAS (1), SELF-SERVING BIAS. **attributional** *adj.*

attributional bias *n.* Any systematic distortion in the assignment of causes to behaviour or in inferring the causes of behaviour. The most important ones so far discovered are the *actor–observer difference, *base-rate fallacy, *fundamental attribution error, *positivity bias (1), and *self-serving bias. *See also* ATTRIBUTION, ATTRIBUTION THEORY.

attribution error *See* FUNDAMENTAL ATTRIBUTION ERROR.

attribution theory *n.* A theory designed to explain how people perceive, infer, or ascribe causes to their own and other people's behaviour. Basic research in this area has established that we tend to attribute another person's behaviour to internal, dispositional causes rather than external, situational causes if the behaviour seems different from how other people would behave in the same situation but characteristic of that person's behaviour in similar and dissimilar situations in the past; but if the behaviour seems similar to that of others in the same situation but uncharacteristic of that person's past behaviour in similar and different situations, then we are likely to attribute it to external causes. The theory was first formulated by the Austrian-born US psychologist Fritz Heider (1896–1988) in articles published in 1944 and 1946 and in his book *The Psychology of Interpersonal Relations* in 1958, and it was developed from the 1960s onwards especially by the US psychologists Edward Ellsworth Jones (1926–93) and Harold H(arding) Kelley (1921–2003), the most influential theory being *Kelley's cube. *See also* ACTOR–OBSERVER DIFFERENCE, ATTRIBUTIONAL BIAS, CAUSAL SCHEMA, COGNITIVE-APPRAISAL THEORY, COVARIATION PRINCIPLE, FALSE-CONSENSUS EFFECT, FUNDAMENTAL ATTRIBUTION ERROR, IMPRESSION FORMATION, PERSON PERCEPTION, POSITIVITY BIAS (1), SELF-PERCEPTION THEORY, SELF-SERVING BIAS. **AT** *abbrev.*

attributive *adj.* Of or relating to an adjective or adjectival phrase

*****ebook converter DEMO Watermarks*****

occurring within the same noun phrase as the noun that it modifies. For example, the adjective *good* is attributive in the phrase *the good terrorist*, but it is ***predicative** in *the terrorist is good*. [From Latin *attribuere* to associate with + *-ivus* indicating a tendency, inclination, or quality]

attuition *n.* A hypothetical form of apprehension lower than human ***perception** but higher than simple ***sensation**. Compare **INTUITION**. [From Latin *ad* towards + *intuitio* a contemplation, from *intueri* to gaze at, from *tueri* to look or gaze at]

atypical antipsychotic *n.* Any of a class of drugs that are used in the treatment of ***schizophrenia** and other psychotic disorders and that have fewer ***neuroleptic-induced** side-effects than conventional ***neuroleptic** (1) drugs. See **CLOZAPINE**, **OLANZAPINE**, **RISPERIDONE**, **SERTINDOLE**.

Aubert effect *n.* The phenomenon that occurs after fixating one's gaze on an illuminated vertical bar in a dark room for a minute or two and then tilting one's head to one side through an angle of 30 degrees or more. This creates the illusion that the bar is tilted in the opposite direction and shows that the ***semicircular canals** of the vestibular system provide insufficient information for full orientation in the vertical dimension. A stimulus for demonstrating this effect is most easily constructed by placing a battery torch or flashlight in a cardboard box with a vertical slit cut into one of its sides and covered with tissue paper to diffuse the light. [Named after the German physiologist and psychologist Hermann Ludimar (Rudolf) Aubert (1826–92) who first drew attention to it]

Aubert–Fleischl paradox *n.* The tendency for a moving stimulus to appear to move more slowly when the eyes track it with ***smooth eye movements** than when the gaze is fixated on the static background. It is a slightly surprising phenomenon rather than a true ***paradox**. [Named after the German physiologist and psychologist Hermann Ludimar (Rudolf) Aubert (1826–92) and the Austrian physiologist Marxow Ernst Fleischl (1846–91) who discovered it]

Aubert–Förster law *n.* The proposition that the minimum size at which a stimulus such as a printed letter of the alphabet is just recognizable is
*****ebook converter DEMO Watermarks*****

directly proportional to its angular distance from the **fixation* (1) point or, equivalently, to the distance from the **fovea* of its projection on the **retina*. The law holds from 2 to 40 angular degrees. *Compare* AUBERT–FÖRSTER PHENOMENON. [Named after the German physiologist and psychologist Hermann Ludimar (Rudolf) Aubert (1826–92) and the German ophthalmologist Carl Friedrich Richard Förster (1825–1902) who formulated it and published it briefly in 1856 and fully in 1857]

Aubert–Förster phenomenon *n.* The proposition that near objects are perceived with greater acuity than objects further away, even if they subtend the same **visual angle*. Also called the *Förster phenomenon*. *See also* AERIAL PERSPECTIVE. *Compare* AUBERT–FÖRSTER LAW.

auction game *See* DOLLAR AUCTION GAME.

audibility function *n.* A graph depicting a listener's **absolute threshold* for sound intensity across the range of audible frequencies. **AF** *abbrev.*

audibility range *n.* The frequencies of sound waves that a listener can hear as **tones* (1), between the *audibility limits* of the lowest to the highest frequencies that can be perceived. For a person with normal hearing, the range is more than 10 **octaves*, from 16 hertz to about 20,000 hertz, but for most people the upper audibility limit decreases sharply throughout adulthood. Also called the *auditory spectrum*. *See also* FREQUENCY THEORY, GALTON WHISTLE, INFRASOUND, ULTRASOUND.

audible thought *n.* A **hallucination* in which one hears one's own thoughts being spoken.

audience effect *n.* The effect of passive onlookers or spectators on an individual's task performance. Depending on the nature of the task, the effect on performance may be positive or negative. *See also* DRIVE THEORY OF SOCIAL FACILITATION, NEXT-IN-LINE EFFECT, OVERLEARNING, RESPONSE COMPETITION, SOCIAL FACILITATION. *Compare* COACTION EFFECT.

audile *adj.* 1. Another word for **auditory*. *n.* 2. A person whose

characteristic style of mental imagery is auditory rather than visual, tactile, or motor. Compare [MOTILE \(2\)](#), [TACTILE \(2\)](#), [VISUALIZER](#).

audioanalgesia *n.* Diminished sensation of [*pain](#) during exposure to loud sounds; also, the use of music to distract a person's attention from pain, as during dentistry. See also [ANALGESIA](#). [From Latin *audio* I hear, from *audire* to hear + Greek *an-* without + *algos* pain + *-ia* indicating a condition or quality]

audiogenic seizure *n.* A [*convulsion](#) brought about by prolonged exposure to high-frequency sounds, especially in rats, mice, hamsters, and rabbits. See also [INFRASOUND](#), [ULTRASOUND](#). [From Latin *audio* I hear, from *audire* to hear + *generare* to produce]

audiogram *n.* A graphic record of a listener's [*absolute threshold](#) for [*pure tones](#) as a function of the frequency of the tones, a full description of auditory acuity as measured by an [*audiometer](#). It is often plotted in terms of hearing loss (deviations from average thresholds) in decibels as a function of frequency. [From Latin *audio* I hear, from *audire* to hear + Greek *gramme* a line]

audiogravic illusion *n.* An error in [*sound localization](#) arising from the body being tilted out of the upright position in the absence of visual cues, resulting in the sound source being perceived where it would be in relation to the body if the body were upright. Compare [AUDIOGYRAL ILLUSION](#). [From Latin *audio* I hear, from *audire* to hear + *gravis* heavy + *-icus* of, relating to, or resembling]

audiogyral illusion *n.* An error in [*sound localization](#) that occurs when a sound source on the end of a boom attached rigidly to a listener's head is thus kept at a fixed point relative to the head, usually a few feet in front of the nose, even when the head is turned from side to side, the invariable consequence being that the sound is heard as coming from a point directly overhead. A second version of the same illusion occurs when a person is seated on a slowly rotating platform and a sound source some distance in front rotates with the person's body, again creating the illusion that the sound source is directly overhead. A closely related version occurs when a person

*****ebook converter DEMO Watermarks*****

sits motionless inside a slowly rotating striped drum that induces **vection*, a sensation that the body is rotating in the opposite direction, and a sound source is located at a fixed point outside the drum, creating the illusion once again that the sound source is directly overhead. The illusion in its various forms was discovered by the German-born US psychologist Hans Wallach (1904–98) and published in the *Journal of Experimental Psychology* in 1940. It is explained by the fact that in ordinary circumstances rotation of the body or head produces changes in **transient disparities*, **phase delays*, and **sonic shadows*, except when the sound originates from directly above or below, and experience teaches us that in such circumstances, because we are terrestrial creatures, it almost invariably originates from above. *See also* [SOUND LOCALIZATION](#). *Compare* [AUDIOGRAVIC ILLUSION](#). [From Latin *audio* I hear, from *audire* to hear + *gyrus* a circle + *-alis* of or relating to]

audiokinetic response *n.* An automatic movement of the eyes in response to a change in the position of the body relative to a continuous sound source, its effect being to maintain fixation of gaze on an object of potential interest. [From Latin *audio* I hear, from *audire* to hear + *kinetikos* of or relating to motion, from *kineein* to move + *-ikos* of, relating to, or resembling]

audiometer *n.* A device for measuring a person's auditory acuity across a range of sound intensities and frequencies. *See also* [AUDIOGRAM](#). **audiometric** *adj.* [From Latin *audio* I hear, from *audire* to hear + Greek *metron* a measure]

audiometric zero *n.* The normal or average intensity threshold for sound of a specified frequency.

audiometry *n.* The measurement of auditory acuity with an **audiometer*.

audio-oculogyric reflex *n.* A **reflex* turning of the head and eyes towards a sudden or unexpected sound. [From Latin *audio* I hear, from *audire* to hear + *oculus* the eye + *gyrus* a circle or turning + *-icus* of, relating to, or resembling]

audition *n.* 1. The act or experience of **hearing*. 2. A trial performance by
*****ebook converter DEMO Watermarks*****

a musician or other performing artist applying to join a group, gain a place on a course, or take part in a performance. [From Latin *auditis*, -onis a hearing, from *audire* to hear + -ion indicating an action, process, or state]

auditory *adj.* Of or relating to the sense of hearing or **audition* (1). Also called *audile*. [From Latin *auditorius* relating to hearing, from *audire* to hear]

auditory acuity *n.* Keeness or sharpness of hearing. *See also* *ACUITY*, *AUDIOGRAM*, *AUDIOMETER*.

auditory adaptation *n.* Transient loss of hearing sensitivity to tones of certain frequencies following prolonged exposure to an unchanging sound wave. When the sound that causes the effect is loud and the hearing loss is more than transient it is usually called *auditory fatigue*. *See also* *ADAPTATION* (2).

auditory agnosia *See* *AGNOSIA*.

auditory aphasia *See* *APHASIA*.

auditory association cortex *See* *AUDITORY CORTEX*.

auditory beat *n.* The periodic waxing and waning of sound, produced when two tones with slightly different **frequencies* (1) are sounded simultaneously, caused by wave interference as the two tones alternately reinforce and cancel each other's amplitude, as when a tone of 256 hertz (Middle C) is sounded simultaneously with a tone of 260 hertz, generating a beat frequency of 4 hertz (cycles per second). Piano tuners work by counting beats. Beats occur even if the tones are presented separately to the two ears via headphones (*see* *BINAURAL BEAT*).

auditory canal *n.* Either of two passages in each ear, the *external auditory canal* (also called the *external meatus*) leading from the **outer ear* to the **tympanic membrane*, and the *internal auditory canal* (also called the *internal meatus*) located in the **temporal bone* and containing the **vestibulocochlear nerve* that transmits impulses from the **inner ear* to the

brain. When unspecified, the external canal is usually meant, but such ambiguity is avoided in careful usage. *Compare* [EUSTACHIAN TUBE](#).

auditory cortex *n.* Areas of the [*cerebral](#) cortex, namely the primary auditory cortex and the auditory association cortex, devoted to processing information from the organs of hearing. In each cerebral hemisphere, the primary auditory cortex occupies [*Heschl's gyrus](#), a small gyrus running transversely across the superior temporal gyrus, the upper gyrus of the temporal lobe (temporal operculum). It is divided into separate bands responding to particular tonal frequencies, and projections from the [*basilar](#) membranes of both ears are represented in a [*tonotopic map](#) in each hemisphere. In the (usually) left hemisphere it includes [*Wernicke's area](#), and the auditory association cortex is adjacent to it in the superior temporal gyrus. *See also* [INFERIOR COLLICULUS](#), [MEDIAL GENICULATE NUCLEUS](#).

auditory egocentre *n.* The point in the centre of the skull where auditory sensations are perceived or felt to converge. US *auditory egocenter*. *See also* [EGOCENTRE](#).

auditory fatigue *n.* Temporary loss of hearing sensitivity resulting from exposure to a loud tone, the loss usually extending from the frequency of the fatiguing tone to about one [*octave](#) above it. *Compare* [AUDITORY ADAPTATION](#).

auditory flutter *n.* The sensation produced by sound that is periodically interrupted at a rate below the frequency of [*auditory](#) flutter fusion and that can therefore be heard as intermittent by the listener. Also called *auditory flicker*. *Compare* [FLICKER](#).

auditory flutter fusion *n.* The lowest interruption frequency at which a listener ceases to hear [*auditory](#) flutter and begins to hear a continuous sound. Also called *auditory flicker fusion*. *Compare* [CRITICAL FLICKER FREQUENCY](#). **AFF** *abbrev.*

auditory fusion *n.* Hearing two or more sounds as one. When the sounds are presented to different ears it is also called *binaural fusion*. *Compare* [PRECEDENCE EFFECT](#).

auditory hallucination *n.* A **hallucination* of a sound, usually of voices speaking. The definition sometimes (but not in **DSM-5* or **ICD-10*) excludes sounds perceived as emanating from inside the head.

auditory illusion *n.* Any **illusion* of **hearing*. See AUDIOGRAVIC ILLUSION, AUDIOGYRAL ILLUSION, AUDITORY STAIRCASE ILLUSION, BINAURAL SHIFT, MELODIC PARADOX, MISSING FUNDAMENTAL ILLUSION, PHONEMIC RESTORATION, SEMITONE PARADOX, TRITONE PARADOX, VENTRILOQUISM EFFECT, VERBAL TRANSFORMATION EFFECT. See also DOPPLER EFFECT (which is not strictly illusory). Compare POSTURAL AFTEREFFECT, TACTILE ILLUSION, VISUAL ILLUSION.

auditory localization See SOUND LOCALIZATION.

auditory masking *n.* The obscuring of one sound, sometimes called a *test stimulus*, by another, called a *masking stimulus*, causing the **absolute threshold* of the test stimulus to increase or its perceived **loudness* to decrease. The masking stimulus is presented either before the test stimulus (**forward masking*), at the same time as the test stimulus (**simultaneous masking*), or after the test stimulus (**backward masking*), and backward or forward masking has been found to occur when the masking stimulus is presented within 100 milliseconds of the test stimulus. See also CENTRAL MASKING, CRITICAL BAND, MASKING.

auditory meatus *n.* Another name for the external or internal **auditory* canal. [From Latin *meatus* a course]

auditory nerve *n.* Another name for the **vestibulocochlear nerve*.

auditory receptive field *n.* An area of space around the head from which auditory stimuli elicit responses from a specified auditory neuron, the spatial area being the auditory neuron's receptive field. The auditory cortex and midbrain of the barn owl, which is capable of more accurate **sound localization* than any other species that has been tested, have been found to contain neurons that respond only to sounds in very specific spatial areas. See also RECEPTIVE FIELD.

auditory receptor *n.* A **sensory* receptor consisting of **hair cells* in the **basilar* membrane of the **organ of Corti* that translate sound waves—pressure waves with frequencies between 16 hertz and 20,000 hertz—into nerve impulses. Also called a *phonoreceptor*.

auditory space perception *n.* Another name for **sound localization*.

auditory spectrum *n.* Another name for the **audibility range*. [So called by analogy with the spectrum of visible light]

auditory staircase illusion *n.* A sound equivalent of the **staircase illusion*, discovered in 1964 by the US psychologist Roger N(ewland) Shepard (born 1929) in the perception of musical tones that are clearly defined in terms of pitch class (the twelve tones of the octave that are usually labelled C, C#, D,..., B) but are ambiguous as regards the octaves to which they belong, each tone being composed of equal-intensity **sinusoidal* waves from several octaves. If a sequence of such tones moving up or down through the twelve tones of the octave is played repeatedly, then instead of hearing a sequence of twelve tones being repeated, listeners hear a single sequence apparently rising or descending endlessly. Also called the *illusion of circular pitch*. See also *MELODIC PARADOX*, *SEMITONE PARADOX*, *TRITONE PARADOX*.

auditory suffix effect *n.* The impairment of memory for a list of words caused by the presentation at the end of the list, during the learning process, of further words or speech sounds that need not be committed to memory. Non-speech sounds do not normally produce such an effect. See also *PRECATEGORICAL ACOUSTIC STORE*.

auditory system *n.* A generic name for the totality of structures in the nervous system that are involved in hearing.

auditory tube *n.* Another (informal) name for the Eustachian tube.

Aufgabe *n.* A task or assignment, whether self-imposed or resulting from external instructions or an experimental manipulation, that creates a particular mental set or behavioural predisposition. See also *EINSTELLUNG*, *SET (2)*, *WATER-*

JAR PROBLEM. [From German *Aufgabe* task, job, or assignment, from *auf* on + *Gabe* something given, from *geben* to give]

aura *n.* 1. A distinctive ambience or quality generated by a person or thing. 2. A brief sensation, such as a flash of light (**phosphene*), a blind spot (**scotoma*), or a sound, experienced as a **prodromal* warning of an attack of (especially) **epilepsy* or **migraine*. 3. In occultism and **parapsychology*, an emanation supposedly surrounding a person or other living thing and said to be visible only to a person with a special psychic ability or gift. [From Latin *aura* a breeze]

aural *adj.* Of, relating to, or perceived through the ear. [From Latin *auris* an ear]

aural harmonic *n.* A **harmonic* generated by the auditory system.

auricle *n.* 1. Another name for the **pinna* or external part of the ear. 2. The atrium or upper chamber of the heart, or a small sac in the atrium of the heart. 3. Any ear-shaped biological structure. **auricular** *adj.* [From Latin *auricula* the external ear, from *auris* an ear]

australopithecine *adj. n.* (Of or relating to) any member of the extinct genus of human-like **hominids* *Australopithecus*, believed to have lived between 4 million and 1 million years ago in southern and eastern Africa, including *Australopithecus africanus*, *A. robustus*, and *A. afarensis*. [From Latin *australis* southern + Greek *pithekos* ape]

authoritarianism *n.* A personality characteristic associated with a potentiality for fascism first identified in 1950 by the German philosopher, sociologist, and psychologist Theodor W(iesengrund) Adorno (1903–69) and several colleagues in a monumental study entitled *The Authoritarian Personality*, usually measured with the **F scale* or a modification of it. It correlates positively with anti-Semitism, **ethnocentrism*, political and economic conservatism, and **intolerance of ambiguity*. See also *A–S SCALE*, *E SCALE*, *PEC SCALE*. **authoritarian** *adj.*

autism *n.* 1. A pathological self-absorption and preoccupation with the self to the exclusion of the outside world, characteristic of some forms of **autistic disorder* and **schizophrenia*. 2. An alternative name for **autism spectrum disorder*. See also *AUTISTIC DISORDER*, *MIRROR NEURON*. **autistic** *adj.* [From Greek *autos* self + *-ismos* indicating a state or condition]

autism spectrum disorder *n.* A **neurodevelopmental disorder* in **DSM-5* characterized by gross and sustained impairment of social interaction and communication; restricted and stereotyped patterns of behaviour, interests, and activities; symptoms present in early development but possibly not fully manifest until later in social development, language acquisition, or play; clinically significant impairment in social, occupational, or other areas of life; the symptoms not being attributable to **intellectual disability* or general developmental delay. Symptoms may include emotional non-responsiveness, lack of reciprocity in social interaction, failure to develop peer relations, delay or failure of speech development, stereotyped and idiosyncratic language or non-verbal behaviour (including **gaze aversion*), insistence on sameness, and ritualized mannerisms. According to DSM-5, the **prevalence* in the US and other countries is about 1 per cent in both child and adult samples. The disorder was first described in 1943 by the Austrian-born US child psychiatrist Leo Kanner (1894–1981) and in 1944 by the Austrian psychiatrist Hans Asperger (1906–80). Also called *autism*, *autistic disorder*, *childhood autism*, *infantile autism*, *Kanner's syndrome*. See also *ASPERGER'S DISORDER*, *IDIOT SAVANT*, *THEORY OF MIND*. Compare *ATTENTION-DEFICIT/HYPERACTIVITY DISORDER*, *RETT'S DISORDER*, *SCHIZOPHRENIA*, *SELECTIVE MUTISM*. **ASD** *abbrev.*

autistic disorder *n.* A term formerly used (in **DSM-IV*) for what was later renamed **autism spectrum disorder*.

autobiographical memory *n.* Another name for **episodic memory*.

autochthonous *adj.* Indigenous; originating from within a person or an organ rather than from external stimulation. It is applied to functions such as heartbeat that originate within the organ and also to psychological phenomena such as an *autochthonous Gestalt* that is generated by the perceiver rather than being inherent in the stimulus. [From Greek *autochthon*

*****ebook converter DEMO Watermarks*****

from the Earth, from *autos* self + *chthon* the Earth + *-ous* having or characterized by]

autocorrelation *n.* A **correlation* between values of a **time series* and values of the same time series shifted backwards or forwards by a fixed amount, called a *lag*. A typical example would be a correlation between a migraine patient's daily ratings of headache severity with the ratings one day earlier, each rating being paired with the one given on the previous day. In this case, the rating on the first day is paired with the rating on the second day, the rating on the second day with the rating on the third day, and so on. This is called the *first-order autocorrelation*, and it tends to be positive if score *t* tends to be predictive of score *t* + 1. The autocorrelation of scores *t* with scores *t* + 2 is the *second-order autocorrelation*, and so on. *See also* *AUTOREGRESSION*, *CORRELOGRAM*. [From Greek *autos* self + English *correlation*]

auto-erotic *adj.* Of or relating to sexual stimulation of one's own body or **masturbation*. In **psychoanalysis*, of or relating to **auto-erotism*.

auto-erotism *n.* In **psychoanalysis*, a form of behaviour characteristic of early infancy in which an **instinct* (3) is satisfied without recourse to an external **instinctual object*. The word was first used in 1898 by the English sexologist Havelock Ellis (1859–1939) in his book *Studies in the Psychology of Sex* (vol. 1), where he defined it as ‘spontaneous sexual emotion generated in the absence of an external stimulus proceeding, directly or indirectly, from another person’ (p. 110). Also called *auto-eroticism*. *See also* *ALLO-EROTISM*, *NARCISSISM*. [From Greek *autos* self + *eros* love or sexual desire + *-ismos* indicating a state or condition]

autogenic training *n.* A form of **psychotherapy* in which the client is taught self-hypnosis and **biofeedback* as techniques of managing stress. It involves a sequence of graded mental exercises (concentrating in turn on feelings of heaviness in the limbs, a sense of warmth in the limbs, heart rate, breathing, warmth of the upper abdomen, and coolness of the forehead) designed to promote physical relaxation. It was developed in Germany from the 1930s to the 1950s and popularized by the German psychiatrist and neurologist Johann Heinrich Schultz (1884–1970). Also called *autogenics*. [From German *das autogene Training*, from Greek *autogenes* self-generated,

*****ebook converter DEMO Watermarks*****

from *autos* self + *genein* to produce]

autogynephilia *n.* A **paraphilia* characterized by sexual arousal in a person born male caused by thinking about being a woman. [From Greek *autos* self + *gyne* a woman + *philos* loving, from *phileein* to love + *-ia* indicating a condition or quality]

autohypnosis *n.* Self-induced **hypnosis*. Also called *self-hypnosis*. [From Greek *autos* self + *hypnos* sleep + *-osis* indicating a process or state]

autointoxication *n.* Self-poisoning by a substance produced within the body. [From Greek *autos* self + Latin *intoxicare* to poison, from *toxicum* a poison + *-ation* indicating a process or condition]

autokinetic effect *n.* The **apparent movement* of a stationary point of light when viewed in a totally dark environment, resulting from **physiological nystagmus* that the visual system cannot compensate for in the absence of any visible frame of reference. Also called the *autokinetic phenomenon* or the *autokinetic illusion* (AKI). [Coined in 1887 by the German physiologist and psychologist Hermann Aubert (1826–92) from Greek *autos* self + *kinetikos* of or relating to motion, from *kineein* to move or *kinesis* movement + *-ikos* of, relating to, or resembling]

autological *adj.* Of or relating to an adjective that is self-descriptive, such as the adjective *short* (which is short), *English* (which is English), and *polysyllabic* (which is polysyllabic). See also *GRELLING'S PARADOX*. Compare *HETEROLOGICAL*. [From Greek *autos* self + *logos* a word + Latin *-icalis* of, relating to, or resembling]

automatic anxiety *n.* In **psychoanalysis*, an infant's psychological feeling of helplessness, arising from biological helplessness, experienced as a form of **anxiety*, or a reproduction of such anxiety in an older child or an adult when confronted with a situation with which it is difficult to cope. The concept was introduced by Sigmund Freud (1856–1939) in his book *Inhibitions, Symptoms and Anxiety* (1926, *Standard Edition*, XX, pp. 77–175, at p. 138). See also *ANXIETY*.

automaticity See [AUTOMATIC PROCESSING](#), [AUTOMATISM](#).

automatic priming See [PRIMING \(1\)](#).

automatic processing *n.* Any [*information](#) processing that occurs involuntarily and without conscious intention or control, as in the performance of well-practised activities such as seeing, reading, riding a bicycle, playing a game, or driving a car. Compared to [*controlled processing](#), automatic processing is generally much faster, can be carried out with less effort, is less easily impaired by fatigue or alcohol, and can involve parallel processing of information from more than one sensory channel, but its development is slower and involves much more practice than controlled processing, and once established it is less controllable. The [*Stroop effect](#) provides a dramatic illustration of automatic processing. Also called *automaticity*, *preconscious processing*, or *pre-attentive processing*. See also [ABSENT-MINDEDNESS](#), [ATTENTION](#), [CENTIPEDE EFFECT](#), [DUAL-PROCESS MODEL](#), [HUMPHREY'S LAW](#), [HYPER-REFLECTION](#), [MINDLESSNESS](#), [OPEN-LOOP CONTROL](#), [PRINCIPLE OF LEAST EFFORT](#), [TOP-DOWN PROCESSING](#).

automatism *n.* Behaviour executed without conscious awareness or control, as for example in [*sleepwalking](#), [*hypnosis](#), [*fugue](#) states, and certain forms of [*epilepsy](#). Also called *automaticity*. See also [DISSOCIATION THEORY](#).

automaton *n.* A machine or mechanical device that can perform tasks intelligently; a person who behaves mechanically, without emotion, like a robot. See also [ZOMBIE \(1\)](#). **automata** *pl.* [From Greek *automatos* self-moving, from *autos* self]

automnesia *n.* Spontaneous revival of memories from an earlier phase of life. [From Greek *autos* self + *mneme* memory + *-ia* indicating a condition or quality]

automorphic perception *n.* A tendency to perceive others as physically more similar to oneself than they actually are. An example from fine art is the work of the Italian painter and sculptor Amedeo Modigliani

(1884–1920) who depicted, and therefore presumably perceived, most of his subjects with elongated features resembling his own. *See also* [EGOCENTRISM](#), [FALSE-CONSENSUS EFFECT](#). [From Greek *autos* self + *morphe* a form or shape]

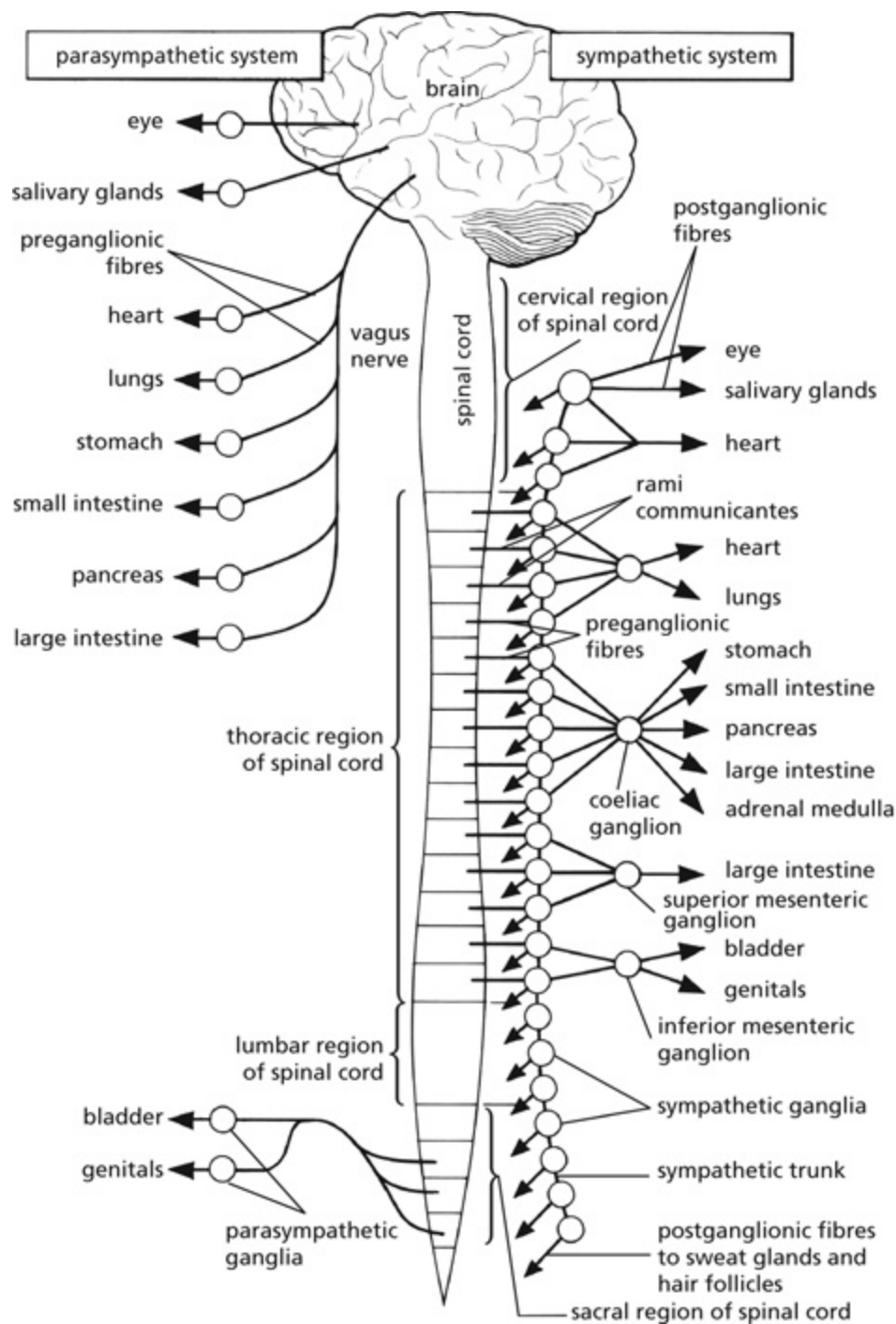
autonoetic *adj.* Self-knowing, used in relation to [*consciousness](#) of something personally experienced. In an article in the journal *Canadian Psychologist* in 1985, the Estonian-born Canadian psychologist Endel Tulving (born 1927) first put forward the idea that consciousness is not always autonoetic, because a person can know what happened, and when and where it happened, without conscious [*episodic memory](#) of the event. For example, most people know when and where they were born without autonoetic conscious recollection of the birth. Autonoetic consciousness is the subjective re-experiencing of a past event. *See also* [MENTAL TIME TRAVEL](#).

autonoesis *n.* [From Greek *autos* self + *noetikos* of or relating to the rational mind, from *noesis* thought, from *noein* to think + *-ikos* of, relating to, or resembling]

autonomic *adj.* **1.** Self-governing or self-regulating. **2.** Of or relating to the autonomic nervous system. [From Greek *autonomos* living under one's own laws, from *autos* self + *nomos* a law + *-ikos* of, relating to, or resembling]

autonomic arousal disorder *n.* A disorder characterized by persistent or recurrent signs and symptoms mediated by the [*autonomic](#) nervous system, excluding pain but including palpitation, hyperventilation, or nausea. It is not diagnosed if it is caused by a [*general medical condition](#).

autonomic nervous system *n.* The largely self-regulating division of the [*nervous](#) system of vertebrates, controlling the involuntary and vegetative cardiovascular, digestive, reproductive, and respiratory functions of the body, itself subdivided into the [*sympathetic nervous system](#) and the [*parasympathetic nervous system](#) (see [illustration](#)). *Compare* [SOMATIC NERVOUS SYSTEM](#). **ANS** *abbrev.*



Autonomic nervous system. The parasympathetic and sympathetic systems.

autonomous speech *n.* An invented language understood only by its inventor(s), such as the secret languages sometimes used by twins, especially in their second year of life. Also called *idioglossia* or *cryptophasia*.

*****ebook converter DEMO Watermarks*****

autonomy, functional See FUNCTIONAL AUTONOMY.

autonomy versus shame and doubt *n.* One of the crises in the developmental theory of the German-born *ego psychologist Erik H. Erikson (1902–94). See DEVELOPMENTAL CRISES.

autopagnosia *n.* A common misspelling of *autotopagnosia.

autoplastic *adj.* Of or relating to *adaptation (1) through alteration of the self. Compare ALLOPLASTIC. [From Greek *autos* self + *plastikos* mouldable, from *plassein* to form + *-itikos* resembling or marked by]

autopsy, psychological See PSYCHOLOGICAL AUTOPSY.

autoradiograph *n.* A photograph produced by *autoradiography.

autoradiography *n.* A technique for showing the distribution of radioactively labelled molecules in a tissue specimen by exposing a photographic plate to radiation from the specimen. [From Greek *autos* self + English *radiography*]

autoreceptor *n.* A *neuroreceptor for a *neurotransmitter located on the neuron that secretes it, such as one of the receptors that are located in the membranes of *presynaptic cells and that monitor the amount of neurotransmitter synthesized and secreted.

autoregression *n.* A property of a *time series in which each score is a linear function of the preceding score (first-order autoregression) or of more than one of the preceding scores (higher-order autoregression). Such a series, even with only first-order autoregression, has a memory in the sense that each score is correlated with all preceding scores. See also ARIMA, AUTOCORRELATION. **autoregressive** *adj.* [From Greek *autos* self + English *regression*]

autoregressive integrated moving average model See ARIMA.

autoscopic phenomena *n.* Hallucinatory experiences in which one perceives one's face or body in front of one like a mirror reflection, though usually colourless and transparent. [From Greek *autos* self + *skopeein* to watch]

autoshaping *n.* A type of **conditioning* (1) that occurs when an animal learns to respond to a **stimulus* without **reinforcement* (1) of the response but with **associative learning* of a contingency between a **conditioned stimulus* and the reinforcement. For example, in pigeons, brief illumination of a plastic key before the delivery of food results in the pigeon learning to peck the key whenever it is illuminated. *Compare* *SHAPING* (1).

autosomal disorder *n.* A disorder such as Huntington's disease or phenylketonuria that is **genetic* but not **sex-linked*, the relevant gene being carried on an **autosome*.

autosome *n.* Any **chromosome* other than the X and Y **sex* chromosomes. **autosomal** *adj.* [From Greek *autos* self + *soma* a body]

autotopagnosia *n.* A form of agnosia involving an impaired ability to identify parts of one's own body, often indicative of a lesion in the pathway between the **thalamus* and the **parietal lobe*. Often misspelt *autopagnosia*. *See also* *AGNOSIA*, *FINGER AGNOSIA*. *Compare* *asomatagnosia* (*see* *AGNOSIA*), *TOPAGNOSIA*. [From Greek *autos* self + *topos* place + *a-* without + *gnosis* knowing + *-ia* indicating a condition or quality]

availability *n.* The property of being accessible or obtainable, especially (in cognitive psychology) the property of information in long-term memory of being retrievable provided that **cues* (3), **prompts*, or appropriate retrieval strategies can be implemented. An *available memory* is one that can potentially be retrieved. *See also* *AVAILABILITY HEURISTIC*. *Compare* *ACCESSIBILITY* (1). [From Latin *ad* to + *valere* to be strong or to prevail + *-abilitas* capacity, from *habilis* able]

availability heuristic *n.* A cognitive **heuristic* through which the frequency or probability of an event is judged by the number of instances of

it that can readily be brought to mind. It can generate biased or incorrect judgements, as when people are asked whether the English language contains more words beginning with the letter *k* or more words with *k* as the third letter, most people finding it easier to think of instances of words beginning with *k* and therefore concluding that there are more words beginning with *k*, whereas in fact a typical long text contains twice as many words with *k* as the third letter. The heuristic was first identified in 1973 by the Israeli-American psychologists Amos Tversky (1937–96) and Daniel Kahneman (born 1934). See also [ILLUSORY CORRELATION](#), [SIMULATION HEURISTIC](#).

available memory *n.* A memory that potentially can be retrieved. See [AVAILABILITY](#).

average *n.* An informal term for a score or value that is typical of a group or distribution of scores or values. When a precise meaning is attached to this term, it is usually the [*arithmetic mean](#). [From Arabic *awariyah* damaged goods, referring to damage to ships or their cargoes leading to losses that were shared equally among traders]

average error method See [METHOD OF AVERAGE ERROR](#).

average evoked potential *n.* The fluctuation in amplitude of an [*evoked potential](#), averaged over a large number of separate readings to eliminate random [*noise](#) (2). Also called an *average evoked response* (AER). See also [EVENT-RELATED POTENTIAL](#), [N140](#), [N400](#), [P50](#), [P200](#), [P300](#), [P600](#), [STRING LENGTH](#). **AEP** *abbrev.*

average heterozygosity *n.* A measure of the genetic variability within a population, being the average proportion of organisms that are [*heterozygous](#) for a specified set of [*gene](#) loci. Low genetic variability, such as is found for example among cheetahs in Africa, can result from an [*evolutionary bottleneck](#) and can make the species vulnerable to extinction.

average linkage between groups method *n.* In statistics, a popular technique of [*cluster analysis](#) in which the distance between two clusters is defined as the average of the distances between all pairs of individuals or cases formed by taking one from each cluster. In contrast to
*****ebook converter DEMO Watermarks*****

single and complete linkage methods, it uses information about all pairs of distances, not just the nearest or the furthest. Also called the *unweighted pair-group method using arithmetic averages* ([UPGMA](#)).

average linkage within groups method *n.* In statistics, a technique of [*cluster analysis](#) in which clusters are combined in such a way that the average distance between all individuals or cases in the resulting cluster is minimized. Also, the distance between two clusters is defined as the average distance between all possible pairs of individuals in the cluster that would result if they were combined.

aversion therapy *n.* A technique of [*behaviour](#) therapy used to eliminate undesirable habits, like cigarette smoking, by repeatedly pairing unpleasant or painful stimuli such as electric shock, or responses such as nausea (induced by a drug such as [*Antabuse](#)), with the unwanted behaviour or associated stimuli. [From Latin *aversus* turned away, from *avertere* to turn away, from *vertere* to turn]

aversive *n.* Tending to repel or deter; unpleasant. [From Latin *aversus* opposed, from *avertere* to turn from, from *ab* from + *vertere* to turn + *-ivus* indicating a tendency, inclination, or quality]

avoidance–avoidance conflict *n.* Conflict arising from the simultaneous presence of two or more approximately equal threats, one of the three main types of conflict identified in 1931 by the German–US psychologist Kurt Lewin (1890–1947), though he did not name any of the types. Such conflicts tend to be stable and to remain unresolved, because approach towards one of the horns of the dilemma increases the tendency to retreat towards the other, and fear or anxiety is therefore minimized at a point where distances from both are greatest. *See also* [APPROACH–APPROACH CONFLICT](#), [APPROACH–AVOIDANCE CONFLICT](#), [DOUBLE BIND](#).

avoidance conditioning *n.* In [*operant](#) conditioning, a form of [*negative reinforcement](#) in which an organism avoids an aversive stimulus by making a particular response. Typically, a rat is placed in a long, narrow alleyway with a grid floor that becomes electrified and delivers a shock a few seconds after the presentation of a [*conditioned stimulus](#) such as a light, and

*****ebook converter DEMO Watermarks*****

the rat can avoid the painful stimulation by running to the end of the alley and stepping into a non-electrified goal box in the time interval between the signal and the shock. In *active avoidance conditioning* the organism has to make a positive response in order to avoid the aversive stimulus, whereas in *passive avoidance conditioning* it has to abstain from making the response in order to avoid the aversive stimulus. Also called *avoidance learning*. See also [KAMIN EFFECT](#), [SIDMAN AVOIDANCE CONDITIONING](#), [TWO-WAY AVOIDANCE CONDITIONING](#). Compare [ESCAPE CONDITIONING](#).

avoidant personality disorder *n.* A [*personality disorder](#) in [*DSM-5](#) characterized by a pervasive pattern of social inhibition, feelings of inadequacy, and hypersensitivity to criticism, disapproval, or rejection, beginning by early adulthood and indicated by such signs and symptoms as avoidance of work involving significant interpersonal contact; unwillingness to associate with people unless certain of being liked; restraint in intimate relationships for fear of being shamed or ridiculed; preoccupation with criticism or rejection; inhibition in new social situations arising from feelings of inadequacy; self-image as inept, unappealing, and inferior to others; and reluctance to engage in activities carrying the risk of embarrassment. Also called *anxious personality disorder*. Compare [SCHIZOID PERSONALITY DISORDER](#).

avoidant/restrictive food intake disorder *n.* An [*eating disorder](#) in [*DSM-5](#) characterized by an apparent lack of interest in food or eating, leading to significant weight loss, nutritional deficiency, dependence on nutritional supplements, and marked impairment of psychosocial functioning. The diagnosis is made only if the symptoms are not explained by [*anorexia nervosa](#), [*bulimia nervosa](#), or any other mental disorder or medical condition, and if there is no evidence of any disturbance in the experience of body shape or weight.

avolition *n.* Inability to initiate or sustain purposeful activities; one of the [*negative symptoms](#) of [*schizophrenia](#). [From Greek *a-* without + English *volition* the exercise of will, from Latin *volo* I will]

axiom *n.* A statement or proposition that can be accepted without proof or evidence and that may therefore occur as a premise but not the conclusion of an argument. In formal proofs in logic and mathematics, axioms are

*****ebook converter DEMO Watermarks*****

stipulated as true for the purposes of the chain of argument that follows. Also called a *postulate*. **axiomatic** *adj.* [From Greek *axioma* a self-evident truth, from *axioein* to consider worthy, from *axios* worthy]

axiomatic measurement theory *n.* A branch of mathematics and mathematical psychology concerned with the correspondence between measurements of psychological or other **attributes* and the attributes themselves. Also called *abstract measurement theory*. See also [ADDITIVITY](#), [MEASUREMENT](#), [MEASUREMENT LEVEL](#), [MEASUREMENT MODEL](#), [MULTIPLICATIVE MODEL](#), [SCALE \(1\)](#). Compare [CONJOINT MEASUREMENT THEORY](#).

axoaxonic *adj.* Of or relating to a comparatively rare type of **synapse (1)* between the **axon* of an **inhibitory* neuron and the axon of a neuron that it inhibits. Compare [AXODENDRITIC](#), [AXOSOMATIC](#), [DENDRODENDRITIC](#). **A-A** *abbrev.*

axodendritic *adj.* Of or relating to a **synapse (1)* between the **axon* of one **neuron* and the **dendrite* of another, usually excitatory in its effect on the target neuron. Compare [AXOAXONIC](#), [AXOSOMATIC](#), [DENDRODENDRITIC](#). **A-D** *abbrev.*

axolemma *n.* Another name for a **neurolemma*.

axon *n.* A long, threadlike **process (2)* or extending fibre of a **neuron*, capable of conducting a nerve impulse away from the cell body towards the neuron's terminal **bouton*, from where it is transmitted via a **synapse (1)* to another neuron, a muscle, or a gland. Also called a *nerve fibre*. See also [MICROTUBULE](#). Compare [DENDRITE](#). **axonal** *adj.* [From Greek *axon* an axis]

axonal transport *n.* The movement of chemical substances such as **neurotransmitters* and sometimes small objects such as **organelles* along the **axon* of a neuron, either away from the cell body (anterograde axonal transport) or towards it (retrograde axonal transport). See also [MICROTUBULE](#).

axon hillock *n.* The small protuberance on the cell body of a neuron where the **axon* arises and where a nerve impulse is normally (except in certain large neurons) initiated.

axon reflex *n.* A ***reflex** response to scratching of the skin with a sharp object: a red line appears within seconds, followed by a red flare in the surrounding skin, and finally a white weal, these phenomena constituting the *triple response*. The weal and flare result from the activity of ***pain** receptors that transmit impulses along their ***axons** not only in the normal ***orthodromic** direction towards the central nervous system but also in the ***antidromic** direction from axon forking nodes into the neighbouring skin, where the free nerve endings respond by releasing ***substance P**, which binds to artery walls causing them to dilate and to produce the flare response, and which also binds to ***mast cells** and stimulates them to release ***histamine**, resulting in the accumulation of fluid that constitutes the weal response.

axosomatic *adj.* Of or relating to a ***synapse (1)** between an ***axon** and a ***soma (1)** or cell body, usually inhibitory in its effect on the target neuron. *Compare* AXOAXONIC, AXODENDRITIC, DENDRODENDRITIC. **A–S** *abbrev.*

azimuth *n.* The direction of an object or image in the horizontal plane, relative to a fixed point such as an object immediately in front or to the north pole. *Compare* ZENITH DISTANCE. [From Arabic *as-sumūt* azimuth, from *al* the + *sumūt* directions, from *samt* direction]



babbling *n.* The speech sounds, generally characterized by repeated syllables such as *bababa* and *dada*, produced by infants immediately before the onset of recognizable speech, restricted largely to **phonemes* of the language being acquired. *Compare* *COOING*.

Babinski reflex *n.* The involuntary fanning of the toes when the sole of the foot is stroked with a hard object such as a metal key, observed in normal infants below 2 years of age but considered an abnormal neurological sign in older children and adults, suggestive of a lesion in the **corticospinal tract*. It is normally replaced around 2 years of age by the **plantar response*, which is a curling inwards of the toes. The *Babinski sign* is the presence of the Babinski reflex in a person over 2 years of age, an indication of neurological damage. [Named after the French neurologist Josef F(rançois) F(élix) Babinski (1857–1932) who is credited with having discovered it]

baby talk *n.* An ambiguous term referring both to the style of speech used by young children and that of older people when speaking to them. *See also* *CARETAKER SPEECH*, *MOTHERESE*.

back cross *n.* In genetics, a cross between a **hybrid (1)* of the first generation and one of its parents, or the offspring resulting from such a mating.

back formation *n.* The creation of a new word on the basis of a familiar word that is mistakenly assumed to be derived from it. For example, the verb *to edit* is a back formation from the noun *editor*, which is not derived from the verb but is a Latin word meaning producer, derived from the prefix *e-* out

and the word *datum*, meaning given, from the verb *dare* to give; similarly to *burgle* is a back formation from *burglar*, to *peddle* from *pedlar* or *peddler*, and to *sculpt* from *sculptor*. Compare [FOLK ETYMOLOGY \(2\)](#), [METANALYSIS](#).

back mutation *n.* The restoration of a [*mutant \(2\)](#) phenotype to the normal form by a further mutation of the same gene. Also called a *reversion* .

backprop *n.* A colloquial name for the [*back-propagation algorithm](#).

back-propagation algorithm *n.* In [*parallel distributed processing](#), a method of adjusting the output of a multi-layered [*neural](#) network to produce a desired state for a given input, by first checking the input and computing the required output for that input, then comparing the current output to the required output and adjusting the connection weights to reduce the discrepancy between the required output and the current output, and then repeating this process of adjustment for the next level down in the system and for each lower level of the system in turn down to the lowest level, thus causing the system to learn to produce the required output. It implements a method of learning by [*gradient descent](#). It was discovered simultaneously and independently by several researchers in 1982 and became well known after an influential publication by the US psychologist David E(verett) Rumelhart (1942–2011) and his colleagues in 1986, the term itself having been introduced in 1962 by the US psychologist Frank Rosenblatt (1928–71) in connection with his work on the [*perceptron](#). Also called *backward propagation* or *backprop* . See [DELTA RULE](#). See also [ALGORITHM](#), [CONNECTIONISM](#).

back slang *n.* A secret language in which words are spelt and spoken backwards or approximately backwards. A familiar British example is *yob* instead of *boy*, and less well-known examples include *tekram* instead of *market* and *tenip* instead of *pint*. Back slang has been reported in the UK among soldiers, labourers, shopkeepers, thieves, and public school pupils, and it has also been found in several other parts of the world, including France, Java, and Thailand. See also [SLANG](#).

back vowel *n.* A [*vowel](#) (see the diagram accompanying that entry) articulated towards the back of the mouth with the back of the tongue raised,

*****ebook converter DEMO Watermarks*****

such as the vowels in *goose*, *lot*, *thaw*, and *heart*. Compare [CENTRAL VOWEL](#), [FRONT VOWEL](#).

backward association *n.* A learned association between a [*stimulus](#) (1) and either another stimulus or a [*response](#) occurring before it in time. Also called a *retroactive association*. Compare [FORWARD ASSOCIATION](#).

backward conditioning *n.* A modified form of [*classical conditioning](#) in which the [*conditioned stimulus](#) does not precede the [*unconditioned stimulus](#) but follows it. Compare [FORWARD CONDITIONING](#).

backward masking *n.* A form of [*masking](#) that occurs when perception of a stimulus called the *test stimulus* is reduced or eliminated by the presentation of a second stimulus called the *masking stimulus* which, in the case of [*visual masking](#), follows the test stimulus up to 500 milliseconds later—as when a row of printed letters is exposed for 50 milliseconds, long enough to make them easily legible in normal circumstances, and this is followed after 150 milliseconds by a dark ring surrounding the position of one of the letters, completely masking the letter and causing it to vanish from the array. When the test stimulus and masking stimulus do not overlap spatially, the phenomenon is called [*metacntrast](#). See also [AUDITORY MASKING](#), [LIBET'S DELAY](#). Compare [FORWARD MASKING](#), [SIMULTANEOUS MASKING](#).

backward propagation See [BACK-PROPAGATION ALGORITHM](#).

backward referral of sensation See [LIBET'S DELAY](#).

backward span *n.* A test of [*short-term memory](#) in which the respondent is presented with a sequence of items, usually numbers, and then tries to repeat them back in reverse order. The [*Wechsler scales](#) include both backward span and [*ordered recall](#) subtests.

bacteria *n. pl.* Unicellular or threadlike micro-organisms that reproduce by [*fission](#) (2) and are often parasitic and liable to cause diseases. **bacterial** *adj.* **bacterium** *sing.* [From Greek *bakterion* a little rod, diminutive of *baktron* a rod]

bad breast See GOOD BREAST.

bad faith *n.* In the **existentialism* of the French philosopher Jean-Paul Sartre (1905–80), a form of self-deception and deception of others in which people refuse to acknowledge responsibility for their own freely chosen actions and perceive or depict themselves as the passive victims of circumstance. See also EXISTENTIAL THERAPY.

bad object See GOOD OBJECT.

bah tschi See LATAH.

balanced bilingual *n.* Another name for an **ambilingual* (2). Compare UNBALANCED BILINGUAL. [From *balanced* + Latin *bis* two + *lingua* a tongue + *-alis* of or relating to]

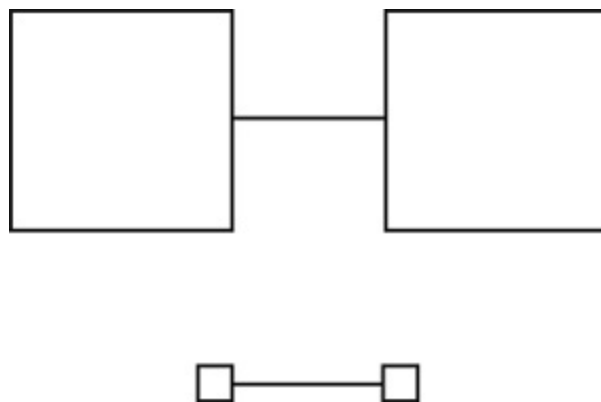
balanced polymorphism *n.* A type of **genetic polymorphism* characterized by a relatively permanent equilibrium with different **alleles* of a gene present at fixed relative frequencies in the population. Also called a *Hardy–Weinberg equilibrium*. See also HARDY–WEINBERG LAW, HETEROSIS. Compare TRANSIENT POLYMORPHISM.

balanced scale *n.* In psychometrics, any scale designed to control for potential sources of bias by **counterbalancing* (2); especially a questionnaire that controls for **acquiescence response set* by ensuring that half the items are keyed positively, affirmative answers increasing a respondent's score on the attribute being measured, and half the items are scored negatively, negative answers increasing the score, the net effect being that scores on the test are not biased systematically in either direction by acquiescence.

balance theory *n.* A **cognitive* consistency theory of **person perception* and **attitude* change in which the elements, often depicted as vertices of a triangle, are a person (*p*), another person (*o*), and an attitude object (*x*), the relations between the three elements, represented by the sides of the triangle, being either positive or negative according to *p*'s attitudes and beliefs. The model represents *p*'s cognitions, and it can exist in a state of

either *balance*, if none of the relations is negative or if two are negative, or *imbalance*, if just one of the relations is negative. In some later versions of the theory, the state of the model with three negative relations is considered ambiguous or *non-balanced*. According to the theory, an imbalanced state of the model, with just one negative relation, is dynamically unstable and has a tendency to become balanced, which means that one or more of the relations tends to change. For example, if Peter (*p*) hates classical music (*x*) but falls in love with Olivia (*o*), who tells him that she loves classical music, then there is one negative and two positive relations, and Peter's attitude towards either classical music or Olivia is likely to change, unless he can change her attitude towards classical music or his belief about her attitude. The theory was developed by the Austrian-born US psychologist Fritz Heider (1896–1988), first published in an article in 1946, and later presented in his book *The Psychology of Interpersonal Relations* in 1958, and the US psychologist Theodore M(ead) Newcomb (1903–84) contributed to its development in 1953. See also [POSITIVITY BIAS \(2\)](#).

Baldwin illusion *n.* A visual illusion in which a line spanning the distance between two large squares appears shorter than a line of the same length spanning the distance between two smaller squares (see [illustration](#)). It is a close relative of the Zanolini illusion. [Named after the US psychologist James Mark Baldwin (1861–1934) who first drew attention to it]



Baldwin illusion. The horizontal lines between the squares are equal in length.

Bálint's syndrome *n.* A syndrome caused by bilateral brain damage in the area where the [*parietal](#) and [*occipital lobes meet](#), characterized by

**optic ataxia*, ocular **apraxia* (inability to shift gaze on command), and **simultanagnosia*. [Named after the Hungarian physician Rezsoe (Rudolph) Bálint (1874–1929) who first described it in 1907]

ballism *n.* A condition usually resulting from damage to the **subthalamic nucleus* characterized by involuntary violent flailing of the limbs, resembling throwing movements, which are exhausting and incapacitating. *Compare* *HEMIBALLISM*. [From Greek *ballein* to throw]

ballistic movement *n.* A movement such as a **saccade* that cannot be controlled once it has been initiated and that is thought to be programmed by the **cerebellum*. *See also* *OPEN-LOOP CONTROL*. *Compare* *RAMP MOVEMENT*. [From Latin *ballista* a Roman military weapon for projecting heavy objects, from Greek *ballein* to throw]

band-pass filter *n.* A type of **filter* (2) for screening light, sound, alternating current, or other oscillating signals and transmitting frequencies only or mainly within a specified range. A *high-pass filter* transmits frequencies above a specified threshold, and a *low-pass filter* those below a specified threshold.

bandwagon effect *n.* An accelerating diffusion through a group or population of a pattern of behaviour, the probability of any individual adopting it increasing with the proportion who have already done so. It occurs in situations in which people believe that their interests are served by joining a fashionable movement, as when soldiers decide during a revolution or civil war to defect to the rebel faction because many others have already defected. [So called because a bandwagon is a vehicle that carries the band in a circus procession and drums up popular support]

bandwidth *n.* The range of frequencies over which a sense organ or any other communication channel functions or responds. Thus the human auditory system responds within a bandwidth corresponding to the **audibility range* from about 16 hertz to 20,000 hertz (cycles per second). *See also* *SPECTRUM*.

bar aesthesia *n.* The sensation of pressure. US *baresthesia*. [From Greek
*****ebook converter DEMO Watermarks*****]

baros weight + *aisthesis* sensation, from *aisthanesthai* to feel + *-ia* indicating a condition or quality]

baragnosis *n.* An impaired ability to judge weight with the cutaneous and muscle senses. Often confused with **barognosis*. [From Greek *baros* weight + *a-* without + *gnosis* knowledge]

Bárány nystagmus *n.* Another name for **caloric nystagmus*. See *BÁRÁNY TEST*.

Bárány test *n.* A method for detecting diseases of the **semicircular canals* by irrigating the ears alternately with warm water or air and cold water or air, the stimulus eliciting **caloric nystagmus* towards the stimulated side if the stimulus is warm and away from the stimulated side if it is cold. Also called the *caloric test*. [Named after the Nobel prizewinning Austrian physician Robert Bárány (1876–1936) who devised it]

barber's paradox *n.* A close relative of **Russell's paradox*, expressed in terms of a village in which there is a barber who shaves all and only those men who do not shave themselves. From this it follows that if this barber shaves himself, then he does not, and if he does not, then he does. It was first published in 1918 by the Welsh philosopher Bertrand (Arthur William) Russell (1872–1970), who attributed it to an unnamed source.

barber's pole effect *n.* The phenomenon whereby a rotating pole painted with spiral stripes of alternating colours, if viewed through a horizontal slit, is seen as marks moving horizontally, and if viewed through a vertical slit as marks moving vertically, although the movement of the stripes themselves is the same in both cases.

barbiturate *n.* Any of a number of drugs derived from barbituric acid, including the long-acting **phenobarbital* and the short-acting **amobarbital*, **pentobarbital*, **secobarbital*, and **thiopental*, that generally act as central nervous system **depressants* (although stimulant barbiturates have also been synthesized) by stimulating the **GABA* receptor complex and are used as **sedative–hypnotic* drugs or **anaesthetics* (1) and are frequently taken as street drugs. Street names for barbiturates in general include *barbs*, *candy*,
*****ebook converter DEMO Watermarks*****

dolls, goofers. See also [SEDATIVE-, HYPNOTIC-, OR ANXIOLYTIC-RELATED DISORDERS](#); [TRUTH DRUG](#). [From German *Barbitursäure*, from the name *Barbara* + *uric* + *Säure* acid, coined by the German chemist Adolf von Bayer (1835–1917) who discovered the drug on Saint Barbara's Day, 4 December 1864]

barbiturism *n.* Acute or chronic poisoning by a [*barbiturate](#), leading to depressed respiration, disorientation, bluish discoloration of the skin and mucous membranes caused by a deficiency of haemoglobin in the blood, and possibly coma and death.

barbs *n.* A street name for [*barbiturate](#) drugs in general.

bar chart *n.* In descriptive statistics, a graph resembling a [*histogram](#) but having a base (usually horizontal) axis representing values of a qualitative variable such as gender or religion rather than a quantitative variable such as age. Also called a *block diagram*. [From Latin *barra* a bar or rod + *c(h)atra* a paper, from Greek *chartes* a leaf of papyrus]

Bard–Cannon theory *n.* Another name for the [*Cannon–Bard theory](#).

bar detector *n.* A type of cell in the [*primary visual cortex](#) (Area V1) that responds maximally to a bar (lighter than the surround for some cells, darker than the surround for others) oriented at a particular angle on the retina, the response being strongest for a moving bar-shaped stimulus. *See also* [COMPLEX CELL](#), [END-STOPPED RECEPTIVE FIELD](#), [FEATURE DETECTOR](#), [HYPERCOMPLEX CELL](#), [SIMPLE CELL](#). *Compare* [EDGE DETECTOR](#).

Barnum effect *n.* A tendency for people to accept vague, ambiguous, and generalized statements as being accurate descriptions of their own personalities. The effect was first demonstrated empirically in 1949 by the US psychologist Bertram R(obin) Forer (1914–2000), who constructed a personality profile consisting of the following 13 statements, drawn largely from an astrology book: ‘You have a great need for other people to like and admire you. You have a tendency to be critical of yourself. You have a great deal of unused capacity which you have not turned to your advantage. While you have some personality weaknesses, you are generally able to compensate

*****ebook converter DEMO Watermarks*****

for them. Your sexual adjustment has presented problems for you. Disciplined and self-controlled outside, you tend to be worrisome and insecure inside. At times you have serious doubts as to whether you have made the right decision or done the right thing. You prefer a certain amount of change and variety and become dissatisfied when hemmed in by restrictions and limitations. You pride yourself as an independent thinker and do not accept others' statements without satisfactory proof. You have found it unwise to be too frank in revealing yourself to others. At times you are extraverted, affable and sociable, while at other times you are introverted, wary and reserved. Some of your aspirations tend to be pretty unrealistic. Security is one of your major goals in life.' People who are presented with this profile and are told that it is based on a personality test, handwriting analysis, or some other plausible data typically rate it quite highly as being applicable to them personally. In Forer's original experiment, the profile was supposedly based on a personality questionnaire that a group of 39 students had filled in a week earlier. The students were asked to 'rate on a scale of zero to five the degree to which the personality description reveals the basic characteristics of your personality', and most of them chose 4 or 5, with a mean of 4.26. They were also asked to 'check each statement as true or false about yourself'; the average number of statements accepted as true was 10.23 out of 13. See also [ILLUSORY CORRELATION](#). [The term *Barnum effect* was introduced in 1956 in an article in the journal *American Psychologist* by the US psychologist Paul Everett Meehl (1920–2003), quoting an unpublished comment by the US psychologist Donald G(ildersleeve) Paterson (1892–1962) about 'personality description after the manner of P. T. Barnum', alluding to the US showman P(hineas) T(aylor) Barnum (1810–91), co-founder of the Barnum and Bailey circus, and by implication to one or both of the following quotations attributed to him: 'My secret of success is always to have a little something for everyone' and 'There's a sucker born every minute']

barognosis *n.* The sense of weight or the ability to judge lifted weights. Often confused with [*baragnosis](#). [From Greek *baros* weight + *gnosis* knowledge]

baroreceptor *n.* Any of the pressure-sensitive receptors in the right atrium of the heart and in certain large blood vessels that respond to

decreases in blood volume or pressure, resulting from loss of extracellular fluid, by sending impulses to the **hypothalamus*, leading to the release of **angiotensin II* and a sensation of **thirst*. Also called a *baroreceptor*. *See also* HYPOVOLAEMIC THIRST, SUBFORNICAL ORGAN. *Compare* BLOOD-FLOW RECEPTOR. [From Greek *baros* weight + English *receptor*]

Bartholin's gland *n.* Either of a pair of **exocrine glands* in a woman's vagina that secrete a lubricating mucus when she is sexually aroused. [Named by its discoverer, the Danish anatomist Caspar Bartholin (1655–1738), in honour of his father, Thomas]

Bartlett–Box F test *n.* In statistics, a test that several groups come from populations with the same **variance*. For sufficiently large sample sizes, a non-significant probability allows a researcher to reject the hypothesis that the variances differ. The test assumes that the observations come from **normal distributions*. [Named after the English statisticians Maurice Stevenson Bartlett (1910–2002) and George Edward Pelham Box (1919–2013) and the **F statistic* that it uses]

basal forebrain *n.* An ill-defined region at the bottom of the forebrain, dorsal to the hypothalamus, including the **preoptic nucleus*, **septum pellucidum*, and the **nucleus basalis of Meynert*.

basal ganglia *n. pl.* Structures containing clusters of neuron cell bodies in and around the thalamus near the base of the brain, sometimes taken to include the amygdala and claustrum, but in careful usage restricted to structures involved in the control of voluntary movement, namely the **caudate nucleus*, **lenticular nucleus* (including the **putamen* and **globus pallidus*), **subthalamic nucleus*, and **substantia nigra*. The caudate nucleus and putamen together constitute the **striatum*. Lesions in these areas can lead to movement disorders such as **athetosis*, **ballism*, **chorea*, **dystonia*, **hemiballism*, **Huntington's disease*, **Parkinson's disease*, **tardive dyskinesia*, and **tremor*. **basal ganglion** *sing.* [From Greek *ganglion* a cystic tumour]

basal metabolic rate *n.* The rate at which **metabolism* occurs in the body at rest, 12 to 14 hours after eating, usually measured in kilocalories of
*****ebook converter DEMO Watermarks*****

heat generated per square metre of body surface area per hour. *See also* [CALORIE](#). **BMR** *abbrev.*

base *n.* **1.** An [*alkaline](#) chemical compound that reacts with an acid to form a salt and water; in biochemistry often denoting the constituent nitrogenous bases of DNA and RNA, namely [*adenine](#), [*cytosine](#), [*guanine](#), and either [*thymine](#) (in DNA) or [*uracil](#) (in RNA). *See also* [PURINE](#), [PYRIMIDINE](#). **2.** In biology, the part of an organ closest to its point of attachment. **3.** The bottom, root, or supporting foundation of anything. **basal** or **basilar** *adj.* Pertaining to the bottom or root. **basic** *adj.* Of, relating to, or consisting of a chemical base, or pertaining to the bottom, root, or supporting foundation of anything. [From Latin *basis* a pedestal]

basement effect *n.* Another name for the [*floor effect](#).

base pairing *n.* Another name for [*complementary base pairing](#).

base rate *n.* The natural value or level of a [*variable](#) when it is unaffected by any special or unusual influences, especially the [*prior probability](#) (1) of an event, or the average number of times an event occurs in a given time period divided by the maximum number of times it could occur. *See also* [BASE-RATE FALLACY](#).

base-rate fallacy *n.* A failure to take account of the [*base rate](#) or [*prior probability](#) (1) of an event when subjectively judging its [*conditional probability](#). A classic experiment in 1973 by the Israeli-American psychologists Daniel Kahneman (born 1934) and Amos Tversky (1937–96) showed that people's judgements as to whether a student who was described in a personality sketch was more likely to be a student of engineering or of law tended to ignore the additional information that the student was drawn randomly from a group of 70 engineering students and 30 law students or from a group of 30 engineering students and 70 law students, although that information was highly relevant to the question in hand. The fallacy is usually explained by the use in problems of this kind of the [*representativeness heuristic](#), which is insensitive to prior probabilities. *See also* [ATTRIBUTIONAL BIAS](#), [BAYESIAN INFERENCE](#), [TAXICAB PROBLEM](#), [WELLS EFFECT](#). *Compare* [CONJUNCTION FALLACY](#), [SAMPLE SIZE FALLACY](#).

*****ebook converter DEMO Watermarks*****

base sequence *n.* Another name for a **DNA sequence*. [So called because it is made up of bases]

BASIC-ID *abbrev.* Behaviours, affective processes, sensations, images, cognitions, and interpersonal relationships springing from drugs or biological factors. This acronym summarizes the core elements of human life and basic modalities of response to situations in **multimodal therapy*, according to which an intervention is most likely to be effective if it follows the order of the response pattern of the patient or client. Thus, if the first-order anxiety response is in the sensory modality (for example, churning of the stomach), then sensory techniques such as relaxation or biofeedback are used as initial treatments.

basic-level category *n.* The level of specificity/generality of a **concept* within a conceptual hierarchy at which most people tend naturally to categorize it, usually neither the most specific nor the most general available category but the one with the most **attributes* distinctive of the concept in question. Thus, in most ordinary circumstances a cat is conceptualized and referred to as a *cat* rather than a *quadruped* (which would include dogs and other four-legged animals) or a *tabby cat* (which would exclude ginger toms and other cats). Also called a *basic-level concept*, a *natural-level category* or *concept*, or a *natural category*, but this latter term is avoided in careful usage. *See also* [PROTOTYPE THEORY](#).

basic mistrust *n.* In **psychoanalysis*, an initial relationship lacking trust, developed by an infant with its mother or carer as a result of bad mothering when basic trust does not develop. Also called *basic distrust*. *See* [BASIC TRUST VERSUS BASIC MISTRUST](#).

Basic Orthographic Syllabic Structure *See* [BOSS](#).

basic period of information processing *See* [BIP](#) in the main body of the dictionary.

basic research *n.* Research undertaken with the primary goal of contributing to knowledge or understanding of some phenomenon or

phenomena by testing explicit **hypotheses*, generally contrasted with **applied research*. Also called *theoretical research*. Compare ACTION RESEARCH, DESCRIPTIVE RESEARCH, EVALUATION RESEARCH, EXPLORATORY RESEARCH.

basic rest–activity cycle *n.* A **biological rhythm* of waxing and waning alertness with a period of approximately 90 minutes in humans. During sleep it controls the cycles of **REM* and **slow-wave sleep*. Also called the *rest–activity cycle*. **BRAC** *abbrev.*

basic rule of psychoanalysis *n.* Another name for the **fundamental rule of psychoanalysis*.

basic trust versus basic mistrust *n.* One of the crises in the developmental theory of the German-born **ego psychologist* Erik H. Erikson (1902–94). The English psychoanalyst Donald Woods Winnicott (1896–1971), and the British-based Hungarian psychiatrist Michael Balint (1896–1970), among others, also use the term *basic trust* to denote the initial trusting relationship normally developed by an infant with its mother or carer. See DEVELOPMENTAL CRISES. Compare BASIC MISTRUST.

basilar *adj.* Situated at the base.

basilar artery *n.* An unpaired artery at the base of the brain, supplying the pons, cerebellum, posterior part of the cerebrum, and inner ears.

basilar membrane *n.* The membrane of the **organ of Corti* in the inner ear, containing **hair cells* that convert sound waves into nerve impulses. See also PLACE THEORY, TRAVELLING WAVE.

basilect *n.* The least prestigious variety of a language within a speech community, or the variety furthest away from the **acrolect*. See also DIALECT, IDIOLECT, LECT. Compare ACROLECT, MESOLECT. [From Greek *basis* bottom + *legein* to speak]

Baskerville effect *n.* Death resulting directly from extreme fear or psychological stress. The term was coined by the South African-born US

sociologist David P. Phillips (born 1943) and several co-authors in an article in the *British Medical Journal* in 2001, reporting the results of a study of the death certificates of 200,000 people of Chinese and Japanese descent in the US from 1973 to 1998. The study capitalized on a superstition about the number four, which is considered unlucky among these ethnic communities and is often omitted in Chinese and Japanese room and floor numbering, partly because the words for death and four are pronounced similarly in Mandarin, Cantonese, and Japanese. The results revealed a 13 per cent increase in cardiac deaths on the fourth day of the month, relative to the chance baseline, and the increase was 27 per cent above chance in California, where Chinese and Japanese communities are largest and relatively well established, but no such increase was found in a comparison group of 47 million non-Asian US deaths. *See also* [NOCEBO EFFECT](#), [VOODOO DEATH](#). [Named after Sir Charles Baskerville, who died of a heart attack and turned out to have been literally frightened to death by a hound in *The Hound of the Baskervilles* (1902) by the Scottish detective story writer and physician Sir Arthur Conan Doyle (1859–1930)]

basket cell *n.* Any of a class of inhibitory [*interneurons](#) found in the [*cerebral](#) cortex and the [*cerebellum](#), having a short axon that divides into a large number of processes and forms basket-like networks round the cell bodies of numerous [*Purkinje cells](#), whose action it inhibits. *Compare* [GOLGI CELL](#), [STELLATE CELL](#).

basulca *n.* Coca paste, a crude extract of the coca plant, consumed as a drug in cocaine-producing countries in South America. *See* [COCAINE](#). [Spanish]

Bateman's principles *n.* A set of three principles put forward by the English geneticist Angus J(ohn) Bateman (1919–96) in an article in the journal *Heredity* in 1948 that, if correct, lead to the conclusion that [*natural selection](#) should always favour ‘an indiscriminating eagerness in the males and a discriminating passivity in the females’ to obtain mates. The principles are:

- (1) Males show greater variance in number of offspring than females;
- (2) Males show greater variance in number of sexual partners than females;

and

- (3) There is a stronger relationship between reproductive success and mating success among males than females.

The fundamental ideas are that females generally invest more energy in producing offspring than males do, and that females are a resource over which males compete; this leads to competition among males, and the resulting **sexual selection* generates greater variability in reproductive success among males than females. Although Bateman's own research with fruit flies was flawed, biologists generally accept his principles and the implication that males tend to be promiscuous and indiscriminating, whereas females tend to be coy and choosy, although there are exceptions in some species, and the relevance to humans is controversial. *See also* [PARENTAL INVESTMENT](#).

Batesian mimicry *n.* A form of **mimicry* in which a species that is harmless or palatable to a **predator* is protected from predation by its resemblance in shape or coloration to a harmful or unpalatable species. *Compare* [MÜLLERIAN MIMICRY](#). [Named after the English naturalist and explorer Henry Walter Bates (1825–92) who first described it in 1861]

bathyaesthesia *n.* Sensation from receptors inside the body. US *bathyesthesia*. Also called *bathaesthesia* or *bathesthesia*. *Compare* [BATHYANAESTHESIA](#). [From Greek *bathys* deep + *aisthesis* sensation, from *aisthanesthai* to feel + *-ia* indicating a condition or quality]

bathyanaesthesia *n.* Impairment or loss of sensation from receptors within the body. US *bathyanesthesia*. Also called *bathanaesthesia* or *bathanesthesia*. *See also* [ANAESTHESIA](#). *Compare* [BATHYAESTHESIA](#). [From Greek *bathys* deep + *anaesthesia* absence of sensation, from *an-* without + *aisthesis* feeling + *-ia* indicating a condition or quality]

battered baby syndrome *n.* A term coined by the German-born US paediatrician C(harles) Henry Kempe (1922–84) in an article in the *Journal of the American Medical Association* in 1962 to denote the pattern of physical and psychological injuries inflicted on a baby by intentional neglect or repeated excessive beating by a parent or carer. *See also* [BATTERED CHILD](#)

SYNDROME, CHILD ABUSE. *Compare* BATTERED WIFE SYNDROME.

battered child syndrome *n.* An extension of the term **battered baby syndrome*, used when the victim is an older child. **BCS** *abbrev.*

battered wife syndrome *n.* A non-technical term used loosely to denote the physical and psychological consequences of physical abuse, usually of a woman by her husband or partner, sometimes involving **post-traumatic stress disorder* or **prolonged duress stress disorder*. *See also* SPOUSE ABUSE. *Compare* BATTERED BABY SYNDROME. **BWS** *abbrev.*

battery *See* TEST BATTERY.

baud *n.* A unit of information transmission speed corresponding to one unit or **bit* per second. *See also* INFORMATION (2). **Kbaud** or **kilobaud** *n.* Thousands of bits or units per second. [Named after the French engineer and inventor of the first successful teleprinter, Jean-Maurice-Émile Baudot (1845–1903)]

Bayesian inference *n.* A form of statistical reasoning in which **prior probabilities* (2) are modified in the light of data or empirical evidence in accordance with **Bayes' theorem* to yield **posterior* probabilities, which may then be used as prior probabilities for further updating in the light of subsequent data. Bayesian inference is often based on **subjective probabilities*, and the following example shows how Bayesian updating is done. Suppose a physician begins with a prior probability $P(H)$ that a certain patient has HIV infection. This prior probability may be the base rate of HIV infection in the community or may be a subjective estimate derived from anywhere; let us assume that it is .001. The physician then observes a relevant symptom, dementia, and needs to determine the posterior probability $P(H|D)$ that the patient has HIV infection, given this new datum. Using Bayes' theorem, the physician multiplies the prior probability $P(H)$ by $P(D|H)/P(D)$, which is the **likelihood ratio* (1) of the subjective probability of the symptom occurring if the patient has the disorder (let us say .50) divided by the subjective probability of the symptom irrespective of the disorder—let us say .002. Thus the posterior probability $P(H|D) = (.001)(.50/.002) = .25$, and the physician's subjective probability that the patient has HIV infection has

*****ebook converter DEMO Watermarks*****

risen from .001 to .25. This posterior probability can then be used as a prior probability for updating in the light of further evidence, and so on. Also called *Bayesian statistics* or *conditioning*. See also [INSUFFICIENT REASON](#).

Bayes' rule *n.* The proposition that the [*conditional probability](#) of an event H , given another event D , is equal to the joint probability of both events divided by the probability of the conditioning event: $P(H | D) = P(H \text{ and } D)/P(D)$. It follows immediately from the fourth of [*Kolmogorov's axioms](#) of probability, and in spite of its apparent triviality it is important because [*Bayes' theorem](#) is easily derived from it, eliminating the necessity to memorize Bayes' theorem. [Named after the English mathematician and Presbyterian clergyman Thomas Bayes (1702–61) who introduced it]

Bayes' theorem *n.* In statistics, a theorem, easily proved from [*Bayes' rule](#), expressing the [*conditional probability](#) of an event H given an event D , written $P(H | D)$, in terms of the conditional probability of D given H , written $P(D | H)$, the probability of D , and the probability of H . In its simplest form, $P(H | D) = P(D | H)P(H)/P(D)$. The theorem enables the [*prior probability](#) (2) of a hypothesis (H) to be updated repeatedly to produce [*posterior](#) probabilities in the light of data (D) derived from observation or experience, and it underpins the whole edifice of [*Bayesian inference](#). In its most general form, the theorem states that if H_n is one of a set H_i of mutually exclusive and exhaustive events, then $P(H_n | D) = P(D | H_n)P(H_n)/\sum_i [P(D | H_i)P(H_i)]$. [Named after the English mathematician and Presbyterian clergyman Thomas Bayes (1702–61) and published posthumously in 1763]

Bayley Scales of Infant Development *n.* A popular instrument for measuring infant development, comprising three subscales: a mental scale, measuring memory, perception, and other cognitive functions; a motor scale, measuring the quality of motor performance; and an infant behaviour scale, measuring social behaviour, persistence, and other general factors. [Named after the US psychologist Nancy Bayley (1899–1994) who introduced an early version of the scales in 1924 and a revised version in 1965]

B cell *n.* Another name for a [*B lymphocyte](#).

beat, auditory See AUDITORY BEAT.

Beck Depression Inventory *n.* A widely used questionnaire, originally designed to be administered by a trained test administrator but widely used as a self-report scale, comprising 21 items, each describing a behavioural manifestation of *depression together with between four and six self-evaluative statements from which the respondent is asked to choose the one that is most applicable. The questionnaire provides a total score between 0 and 60 indicating the depth of the respondent's depression. A revised version called the Beck Depression Inventory-II was published in 1993. Other Beck inventories designed to measure suicide ideation, hopelessness, and anxiety have also been constructed. Compare HAMILTON DEPRESSION RATING SCALE. **BDI** or **BDI-II** *abbrev.* [Named after the US psychiatrist Aaron (Temkin) Beck (born 1921) who, together with four colleagues, first discussed it in an article in the *Archives of General Psychiatry* in 1961]

bed-wetting *n.* Urinating in bed. See ENURESIS, NOCTURIA.

bee dance See ROUND DANCE, WAGGLE DANCE.

behaviour *n.* The physical activity of an *organism, including overt bodily movements and internal glandular and other physiological processes, constituting the sum total of the organism's physical *responses to its environment. The term also denotes the specific physical responses of an organism to particular *stimuli or classes of stimuli. US *behavior*. Compare ACTION (1). **behavioural** (US **behavioral**) *adj.* [From Old French *havoir* to have, from Latin *habere* to have]

behavioural cardiology *n.* Another name for *psychocardiology. US *behavioral cardiology*.

behavioural contagion *n.* Another name for *social contagion, especially when applied to overt behaviour such as *yawning. US *behavioral contagion*.

behavioural decision theory *n.* An approach to judgement and

decision making focusing on **subjective expected utility* and on departures from **normative (1)* theories such as **Bayes' theorem* and **utility theory*. It was first put forward by the US psychologist Ward (Dennis) Edwards (1927–2005) in an influential article in 1954, and many authorities interpret it to include **psychological decision theory*. US *behavioral decision theory*. Compare *DECISION THEORY*. **BDT** abbrev.

behavioural ecology *n.* A branch of study devoted to understanding behaviour in terms of **natural selection* and **adaptation (1)*. US *behavioral ecology*. See also *ECOLOGY (1)*, *EVOLUTIONARY PSYCHOLOGY*.

behavioural oscillation *n.* In **Hullian learning theory*, momentary fluctuations in an organism's propensity to respond to a **stimulus (1)*. US *behavioral oscillation*. *_SO_R* abbrev.

behavioural pharmacology *n.* The branch of **pharmacology* concerned with the study of the effects of drugs on behaviour, with particular emphasis on the development and classification of drugs. US *behavioral pharmacology*.

behavioural science *n.* The application of scientific principles to the study of the behaviour of organisms. The term is applied to disciplines such as psychology, anthropology, sociology, behavioural zoology, and any other discipline devoted to studying behaviour scientifically. The term was coined by the US psychologist James G(rier) Miller (1916–2002) in a privately circulated memo in 1949. US *behavioral science*.

behaviour contrast *n.* The phenomenon whereby if an organism is given a small reward for a particular response, and then the reward is increased, the organism's rate of responding tends to increase to a level higher than it would have been if the larger reward had been given from the start. Also, if a large reward is replaced by a smaller one, the rate of responding tends to fall below the level that would have occurred if the smaller reward had been given from the outset, but this version of the phenomenon is less robust. In its positive form it is also called the *elation effect* or the *Crespi effect*. US *behavior contrast*.

behaviour control *n.* In the **interdependence theory* of the US social psychologists Harold H(arding) Kelley (1921–2003) and John W(alter) Thibaut (1917–86), expounded in their book *The Social Psychology of Groups* (1959) and developed further in *Interpersonal Relations: A Theory of Interdependence* (1978), an interpersonal situation involving two people, A and B, in which ‘A’s control over B’s outcomes is contingent on what B does; therefore, they jointly affect B’s outcomes’ (1978, p. 31). US *behavior control*. Compare *FATE CONTROL*. **BC** abbrev.

behaviour genetics *n.* An interdisciplinary field of study concerned with the **genetic* or hereditary bases of animal and human behaviour. US *behavior genetics*. Also called *behavioural genetics* or *behavioral genetics*. See *ADOPTION STUDY*, *DF EXTREMES ANALYSIS*, *KINSHIP STUDY*, *TWIN STUDY*.

behaviourism *n.* A school of psychology launched in 1913 by the US psychologist John B(roadus) Watson (1878–1958) with the theoretical goal of the ‘prediction and control of behavior’, representing a radical break with the classical experimental psychology of **structuralism* (2), which emphasized neither prediction nor control nor behaviour. Watson considered the introspective methods of structuralism to be unscientific, he excluded everything except behaviour from psychology, and he borrowed the doctrine of **operationalism* from **logical positivism*, defining the meaning of psychological concepts as literally the operations through which they are measured. According to behaviourism, virtually all behaviour can be explained as the product of **learning* (1), and all learning consists of **conditioning* (1). The contemporary work on **classical conditioning* of the Russian physiologist Ivan Petrovich Pavlov (1849–1936), of which Watson was apparently unaware, added further impetus to the behaviourist movement when it became known in the US. The most influential proponent of neobehaviourism since the 1940s was the US psychologist B(urrhus) F(rederic) Skinner (1904–90), who initiated the study of **operant conditioning*. As a complete explanation of all forms of behaviour, the doctrines of classical and operant conditioning have lost much of their force in the face of mounting attacks from various sources and the decline of positivist dogmas, but neobehaviourism is still influential in the English-speaking world. US *behaviorism*. See also *ASSOCIATIONISM*, *CONNECTIONISM* (2). **behaviourist** or **behaviorist** *adj. n.* (Of or relating to) a member or follower

*****ebook converter DEMO Watermarks*****

of the school of behaviourism or one who advocates or practises behaviourism.

behaviour modification *n.* Another name for **behaviour therapy*. US *behavior modification*.

behaviour therapy *n.* A collection of **psychotherapeutic techniques* aimed at altering maladaptive or unwanted behaviour patterns, especially through the application of principles of **conditioning (1)* and **learning (1)*, the basic assumptions being that most forms of mental disorder can be interpreted as maladaptive patterns of behaviour, that these patterns result from learning processes, and that the appropriate treatment involves the unlearning of these behaviour patterns and the learning of new ones. US *behavior therapy*. Also called *behaviour modification*. See *ABC (2)*, *AVERSION THERAPY*, *CONTINGENCY MANAGEMENT*, *FLOODING*, *MODELLING*, *PARADOXICAL INTENTION*, *RECIPROCAL INHIBITION*, *SHAPING (1)*, *SYSTEMATIC DESENSITIZATION*, *TOKEN ECONOMY*. Compare *COGNITIVE BEHAVIOUR MODIFICATION*, *MULTIMODAL THERAPY*. [The terms 'behaviour therapy' and 'behaviour therapist' were introduced by the South African psychiatrist Arnold A(IIan) Lazarus (1932–2013) in an article in the *South African Medical Journal* in 1958.]

bel *n.* A unit for comparing the intensity of any two power levels, given by the logarithm to the base 10 of the ratio of the two levels. Hence a ratio of 10 : 1 corresponds to 1 bel and a ratio of 100 : 1 to 2 bels. For sound measurements, the more common unit is the **decibel*, which is equal to one-tenth of a bel. [Named after the Scottish-born US scientist Alexander Graham Bell (1847–1922), inventor of the telephone]

belief *n.* Any **proposition (1)* that is accepted as true on the basis of inconclusive evidence. A belief is stronger than a baseless **opinion* but not as strong as an item of **knowledge*. More generally, belief is conviction, faith, or confidence in something or someone. **believe** *vb.*

belief-bias effect *n.* A key finding in support of **dual-process models* of reasoning, produced by creating a conflict between logical reasoning and prior beliefs. For example, in the following invalid **syllogism*, the conclusion conflicts with prior beliefs, and only about 10 per cent of

*****ebook converter DEMO Watermarks*****

undergraduate students accept it as valid: *No millionaires are hard workers; Some rich people are hard workers; Therefore, some millionaires are not rich people.* In contrast, when the same argument is couched in the following terms, in which the conclusion conforms to prior beliefs, more than 70 per cent accept it as valid: *No addictive things are inexpensive; Some cigarettes are inexpensive; Therefore, some addictive things are not cigarettes.* This shows that people tend to be influenced by both the logic of arguments and the believability of their conclusions. The term was introduced in 1980 in an article in the journal *Memory and Cognition* by the US psychologist Russell Revlin (born 1943) and others. Compare [ATMOSPHERE HYPOTHESIS](#).

belladonna *n.* Either of two [*alkaloid](#) drugs, [*atropine](#) or [*hyoscyamine](#), extracted from the leaves and roots of the deadly nightshade plant *Atropa belladonna*. [From Italian *bella donna* fair lady, because one of its pharmacological effects is to enlarge the pupils of the eyes, thereby enhancing a woman's sexual attractiveness]

bell curve *n.* A colloquial name for the [*normal distribution](#), so called because of its appearance, though many other probability distributions are also approximately bell-shaped.

belle indifférence, la See [LA BELLE INDIFFÉRENCE](#).

Bellevue–Wechsler scales *n.* Another name for the Wechsler–Bellevue scales. See [WECHSLER SCALES](#).

Bell–Magendie law *n.* The principle that [*afferent](#) neurons enter the spinal cord dorsally (from the back), whereas [*efferent](#) neurons issue from the spinal cord ventrally (from the front). See also [DORSAL ROOT](#), [VENTRAL ROOT](#). [Named after the Scottish anatomist Sir Charles Bell (1774–1842) who discovered it in 1811 and the French physiologist François Magendie (1783–1855) who rediscovered it independently in 1822]

Bell's palsy *n.* Paralysis of one side of the face caused by inflammation of the [*facial nerve](#), often accompanied by [*hyperacusis](#) on the affected side owing to loss of the nerve's dampening effect on the [*stapedius](#) muscle. It is temporary in 80 per cent of cases. Compare [MÖBIUS SYNDROME](#). [Named after
*****ebook converter DEMO Watermarks*****]

the Scottish anatomist Sir Charles Bell (1774–1842), who first described it]

Bem Sex Role Inventory *n.* A questionnaire designed to measure psychological **androgyny*, developed by the US psychologist Sandra (Lipsitz) Bem (1944–2014) and published in articles in the *Journal of Consulting and Clinical Psychology* in 1974 and the *Journal of Personality and Social Psychology* in 1975. It is based on the finding that masculinity–femininity is not a single bipolar dimension but is better conceptualized as two unipolar dimensions: people with high scores on the measure of masculinity and low scores on the measure of femininity are labelled *masculine*, and those with high scores on the measure of femininity and low scores on the measure of masculinity are labelled *feminine*; but some people obtain high scores on both measures and are labelled *androgynous*, and some score low on both measures and are labelled *undifferentiated*. Bem reported evidence that androgynous people are able to act in a masculine fashion when circumstances demand, such as maintaining independence when subjected to pressures to conform, and in a feminine fashion in situations requiring femininity, such as playing with a kitten.

Bender Gestalt Test *n.* A neurological test, designed to help in the diagnosis of loss of function and organic brain damage in children and adults, consisting of nine geometrical figures that are copied by the respondent, the drawings being evaluated according to the overall quality of the reproductions, their organization in relation to Gestalt **grouping laws*, and the errors made. It was constructed by the US neurologist Lauretta Bender (1897–1987) and first described by her in an article in the *American Orthopsychiatric Association Research Monographs* in 1938. It is sometimes used as a **projective test*. Also called the *Bender Visual–Motor Gestalt Test* or the *Visual–Motor Gestalt Test*. **BGT** abbrev.

benefit–cost analysis *n.* Another name for **cost–benefit analysis*.

benefit–cost ratio *n.* The ratio of total present benefits (*B*) to total present costs (*C*), sometimes used in **cost–benefit analysis* with the assumption that a project is worthwhile if and only if *B/C* is greater than 1, but this ratio leads to ambiguities. Consider a proposed wind farm that is judged to produce benefits worth 5m (in any currency), to result in

*****ebook converter DEMO Watermarks*****

environmental damage worth 2m, and to cost 1m to build. If the environmental damage is classified as a negative benefit, then $B = 5m - 2m = 3m$, $C = 1m$, and the benefit–cost ratio $B/C = 3/1 = 3$, suggesting that the project is very worthwhile. But if the environmental damage is classified as a positive cost, then $B = 5m$, $C = 2m + 1m = 3m$, and the benefit–cost ratio $B/C = 5/3 = 1.67$, and the project is much less worthwhile. The *net benefit index* $B - C = 5m - 3m = 2m$ without any ambiguity. Also written *benefit/cost ratio* or *benefit : cost ratio*.

Benham's top *n.* A black-and-white patterned disc that induces perceptions of colours, called * [pattern-induced flicker colours](#) (PIFCs), when rotated in white or monochromatic light. The basic design (on which there are many variations) consists of a disc divided into black and white halves, with a triplet of concentric black arcs in each of three equal sectors of the white half, the arcs in the first sector being close to the circumference, and the arcs in each of the succeeding sectors being closer to the centre than the arcs in the previous sector (see [illustration](#)). The top produces visual illusions of bright colours, especially when rotated at 5–10 hertz (cycles per second), the colours of the arcs from the circumference to the centre being either red, green, blue, and violet; or violet, blue, green, and red, depending on the direction of rotation. The top stimulates adjacent areas of the retina at the same frequency but with slight phase differences, black following white at different points in each revolution of the top, and the perception of colours is believed to originate from retinal neurons that form lateral connections between such areas and are phase-sensitive, although research using *[dichoptic](#) stimuli has shown that brain processes may also play a part. The top was marketed as a toy in Victorian England. Also called *Benham's wheel*. See also [COLOUR INDUCTION](#), [FECHNER–BENHAM COLOURS](#). [Named after the English amateur scientist and polymath Charles Edwin Benham (1860–1929), whose ‘artificial spectrum top’ was discussed in the journal *Nature* in 1894, although unknown to Benham it had already been discovered by the German philosopher, physician, psychologist, and mystic Gustav Theodor Fechner (1801–87), who published his findings in 1838, and before him, in 1826, by the Swiss-born French scientist and philosopher Isaac Bénédict-Prévost (1755–1819)]



Benham's top. Bright colours appear when it rotates.

bennies *n.* A street name for **benzodiazepine* drugs.

Benzedrine *n.* A proprietary name for **amphetamine*. [Trademark]

benzilic acid *See* BZ GAS.

benzodiazepine *n.* Any member of a class of drugs with chemical structures based on 1,4-benzodiazepine or 1,2-imidazo-benzodiazepine that all have **anxiolytic*, **hypnotic* (1), **anticonvulsant*, **muscle relaxant*, and **anaesthetic* (2) effects and are sometimes taken as street drugs. They have a strong affinity for **neuroreceptors* belonging to the **GABA receptor*

*****ebook converter DEMO Watermarks*****

complex, and they lower arousal by virtue of their interaction with neurons that release GABA, thereby acting as central nervous system ***depressants**. Common street names for benzodiazepines include *bennies* and *benzos*. See **ALPRAZOLAM** (Xanax), **CHLORDIAZEPOXIDE** (Librium), **DIAZEPAM** (Valium), **FLUNITRAZEPAM** (Rohypnol), **LORAZEPAM** (Ativan), **TEMAZEPAM** (Restoril), **TRIAZOLAM** (Halcion). See also **SEDATIVE-, HYPNOTIC-, OR ANXIOLYTIC-RELATED DISORDERS**. Compare **BUSPIRONE**, **PICROTOXIN**. [From *benzo-* of or relating to benzene + *di-* two, from Greek *dis* twice + *az-* denoting nitrogen, from Greek *a-* not + *zaein* to live + *ep(oxide)* a compound containing oxygen joined to other atoms, from Greek *epi* on or above + *oxide* a compound of oxygen and another element]

benzos *n.* A street name for ***benzodiazepine drugs**.

benztropine *n.* Benztropine mesylate, an ***anticholinergic** and ***antihistaminic drug** that is used in the treatment of ***parkinsonism**. See also **ANTIPARKINSONIAN**. [From *benz(o)-* of or relating to benzene + (*a*)*tropine*]

bereavement *n.* Loss of a relative or friend through death; the ***grief reaction** that often follows such a loss. [From Old English *bereafian* to plunder]

Bereitschaftspotential *n.* The original German name for the ***readiness potential**. **BP** abbrev.

Bernoulli trial *n.* In the theory of probability, any of a sequence of independent random experiments each of which has two possible outcomes, often labelled success (*S*) or failure (*F*), with unchanging probabilities, a standard example being a sequence of coin tosses. See also **BINOMIAL TEST**. [Named after the Swiss mathematician Jacob (or Jacques or James) Bernoulli (1654–1705) who developed it in his book *Ars Conjectandi* (1713)]

Bernreuter Personality Inventory *n.* The first multi-score personality questionnaire, published by the US psychologist Robert Gibbon Bernreuter (1901–95) in his book *The Personality Inventory* (1931). It comprises 125 items to be answered Yes, No, or ? and yields scores on six variables: Neurotic Tendency, Self-Sufficiency, Introversion–Extraversion, *****ebook converter DEMO Watermarks*****

Dominance–Submission, Sociability, and Confidence. Compare [PERSONAL DATA SHEET](#).

Bertrand's box paradox See [MONTY HALL PROBLEM](#).

bestiality *n.* 1. A [*paraphilia](#) characterized by sexual intercourse between a person and an animal. Also called *zoophilia* or *zooerasty*. 2. Brutal or savage behaviour or character. **bestial** *adj.* [From Latin *bestia* a beast]

beta-adrenergic receptor See [ADRENERGIC RECEPTOR](#).

beta-blocker *n.* A drug such as [*propranolol](#) that inhibits the action of neurons that respond to [*adrenalin](#) (epinephrine) by blocking their (beta-) [*adrenergic receptors](#), and thus subdues the activity of the heart; used as a medication in the treatment of cardiac arrhythmias, hypertension, migraine, tremor caused by anxiety, [*akathisia](#) caused by neuroleptic medication, [*social anxiety disorder](#), [*panic disorder](#), and [*withdrawal](#) from alcohol and other substances; also used by musicians and actors to suppress the effects of [*performance anxiety](#) and by athletes as a [*performance](#) enhancer to moderate excessive arousal.

beta coefficient *n.* In [*multiple regression](#), a name for a standardized regression coefficient, calculated after first transforming the independent variable into [*standard scores](#) or [*z scores](#). This makes the regression coefficients more comparable by removing differences due to differing units of measurement of the independent variables. When the independent variables are uncorrelated with one another, beta coefficients are equal to the simple correlations with the [*dependent variable](#). Beta coefficients are sometimes called *beta weights* or *standardized regression coefficients*. Symbol: β .

beta element *n.* In [*psychoanalysis](#), a term introduced by the Indian-born British psychoanalyst Wilfred R(uprecht) Bion (1897–1979) to denote any of the raw elements of [*emotion](#) that are transformed by the [*alpha function](#) into [*alpha elements](#) suitable for mental ‘digestion’.

beta-endorphin *n.* An **endogenous opioid*, secreted by the **anterior pituitary*, that is more powerfully **analgesic (2)* than morphine, also causing rigidity and alterations of mood and behaviour. It occurs both in free form and as a terminal polypeptide chain of 31 amino acids in a **beta-lipotropin molecule*. Also written β -endorphin. *See also* ENDORPHIN, POMC.

beta-lipotropin *n.* A lipotropin (a fat-mobilizing protein hormone) that is released by the anterior pituitary and that contains **beta-endorphin* as the final sequence of 31 amino acids of its polypeptide chain. Also written *beta-lipotrophin*, β -lipotropin, or β -lipotrophin.

beta movement *n.* A form of **apparent movement* that is produced when identical stimuli are presented in an alternating pattern with an interstimulus interval of about 60 milliseconds, the visual illusion being created of a single object moving back and forth. Also called *beta motion*, *optimal movement*, or *stroboscopic movement*. *See also* KORTE'S LAWS. *Compare* ALPHA MOVEMENT, GAMMA MOVEMENT, DELTA MOVEMENT.

beta personality factor *n.* A higher-order factor arising from the **Big Five* personality factors, suggested by the US psychologist John M. Digman (1923–98) in an article in the *Journal of Personality and Social Psychology* in 1997. It combines **extraversion* and **openness to experience*, and Digman suggested that it may represent personal growth, or agency in the sense of striving for power and mastery. The US psychologist Colin G. DeYoung (born 1976) and others have suggested that it represents plasticity. *See also* ALPHA PERSONALITY FACTOR.

beta receptor *n.* Another name for a beta **adrenergic receptor*. [From *beta* (β) the second letter of the Greek alphabet]

beta wave *n.* A low-voltage **EEG* wave with a frequency of 13–30 hertz, usually occurring in a state of arousal. Also called a *beta rhythm*.

betel *n.* The leaf of the betel pepper *Piper betle* or the nut of the betel palm *Areca catechu*, sometimes chewed, especially by people of the Indian subcontinent and South-East Asia, as a digestive and for its **psychotropic*

effects of mild euphoria. *See also* [EUPHORIAN](#). [Portuguese, from Malayalam *vettila*]

between-groups variance *n.* In ** analysis of variance* (ANOVA), the part of the total **variance* in the **dependent variable* that can be explained by differences between group means.

between-subjects design *n.* Any research design in which different groups of research participants or subjects are tested under different **treatment conditions*. *Compare* [SPLIT-PLOT DESIGN](#), [WITHIN-SUBJECTS DESIGN](#).

Betz cell *n.* Any of the giant **pyramidal cells* in the primary **motor cortex*, the axons of which form the major part of the **corticospinal tract* involved in voluntary movements. [Named after the Russian anatomist Vladimir Aleksandrovich Betz (1834–94) who discovered it in 1874]

Bezold–Brücke phenomenon *n.* The shift in hue with a change in the physical intensity of illumination, objects and images appearing relatively red or green in dim light and relatively blue or yellow in bright light, the **psychological primary* colours themselves being largely unaffected. *See also* [PURKINJE SHIFT](#). [Named after the German meteorologist Wilhelm von Bezold (1837–1907), who described it briefly in 1873, and the German physiologist Ernst Wilhelm von Brücke (1819–92) who studied it thoroughly in 1878]

bhang *n.* The dried leaves, flowering tops, and young stems of the female **cannabis* plant, used as a psychotropic drug, usually prepared as an infusion and taken as a drink. Also spelt *bang* . [From Hindi *bhang*, from Sanskrit *bhanga*]

bibliotherapy *n.* Any form of **psychotherapy* in which the reading of prescribed texts forms an important part of the therapeutic process. [From Greek *biblion* a book]

biceps reflex *n.* A **deep tendon reflex* occurring in response to a tap on the tendon of the biceps muscle near the elbow. [Named after the biceps brachii muscle, from Latin *bis* twice + *caput* a head, alluding to the fact that it

has two heads at its origin]

biconditional *n.* In logic and mathematics, a statement of the form *p if and only if q*. This means that *q* is a necessary and sufficient condition of *p*, and it is sometimes written *p iff q*. An example is: *A number is prime iff it can be evenly divided only by itself and 1*. It is called a biconditional because it is equivalent to the double (bi-) statement *If p then q and if q then p*. A biconditional is true if both of its component statements are true or if both are false, and otherwise it is false.

bidialectal *adj.* Proficient in the use of two **dialects*.

Bidwell's ghost *n.* An afterimage trailing behind a moving spot of light that is observed with dark-adapted eyes and fixated gaze in a dimly lit room. Behind the moving spot, with a delay of about 0.2 second, there appears to follow a ghost light leaving a trail that glows for several seconds. If the original stimulus is white, blue, or green, then the ghost is violet; if the original stimulus is orange or yellow, then the ghost is blue or blue–green; and if the original stimulus is red, then no clear ghost appears. The effect can be demonstrated by adapting one's eyes in darkness for 15 minutes and then moving a spot of light from a small torch or flashlight rapidly over a light-coloured surface while keeping the gaze fixated rather than tracking the movement of the spot; if the spot is moved through a tortuous path, the ghost will follow the same tortuous path one-fifth of a second later. The term is also used loosely as a synonym for a static **afterimage* or a **Purkinje image*, but in careful usage it is reserved for the moving afterimage described by Bidwell. [Named after the English physicist and barrister Shelford Bidwell (1848–1909) who described it in his book *Curiosities of Light and Vision* (1899)]

big-fish-little-pond effect *n.* The tendency for equally able schoolchildren to show lower academic **self-esteem* when attending a school in which the average ability level of the other children is high than when it is low. The effect is believed to result from **social comparison* processes, and it implies that children tend to have lower academic self-esteem in academically selective schools than in non-selective schools. The concept was introduced by the Australian educational psychologist Herbert W. Marsh

*****ebook converter DEMO Watermarks*****

(born 1946) and a colleague in an article in the *Journal of Personality and Social Psychology* in 1984 and strongly corroborated by a survey of 4,000 15-year-olds in 26 countries published by Marsh and a colleague in the journal *American Psychologist* in 2003. Also called the *frog-pond effect* . **BFLPE** abbrev. [From the expression *big fish in a little pond*, referring to a person who ranks highly in a relatively small group or community]

Big Five *n.* The following factors, derived from **factor analysis* and widely accepted since the 1980s as the fundamental dimensions of human personality: **extraversion*, **agreeableness*, **conscientiousness*, **neuroticism*, and **openness to experience* or intellect. The evidence for the Big Five was reviewed by the US psychologist Lewis Robert Goldberg (born 1932) in an influential article in the journal *American Psychologist* in 1993. Also called the *five-factor model (FFM)* . See also *ALPHA PERSONALITY FACTOR*, *BETA PERSONALITY FACTOR*, *GENERAL FACTOR OF PERSONALITY*, *IPIP*, *LITTLE THIRTY*, *NEO*. Compare *HEXACO*.

Big One *n.* Another name for the **general factor of personality*.

bigorexia *n.* A non-technical name for **muscle dysmorphia*. The word was first used in *People* magazine on 12 August 1985, and the US psychiatrist Harrison G. Pope Jr (born 1947) and several colleagues referred to it in an article in 1993 but initially renamed it *reverse anorexia nervosa*, before coining the term *muscle dysmorphia* a few years later. [From *big* + (*an*)*orexia*, from Greek *an-* not or without + *orexis* appetite + *-ia* indicating a condition or quality]

bilabial *adj.* Of, relating to, or denoting a speech sound articulated with the lower lip touching the upper lip, as in the initial **phonemes* in *may*, *pay*, and *bay*. See also *PLACE OF ARTICULATION*. [From Latin *bis* twice + *labium* a lip + *-alis* of or relating to]

bilateral transfer *n.* **Transfer of training* from one side of the body to the other, as when practising a skill with one hand improves its performance with the other. [From Latin *bis* twice + *lateralis* situated on the side, from *latus* the side]

bile *n.* A viscous bitter greenish or golden brown alkaline fluid secreted by the liver, stored in the gall bladder, and discharged into the duodenum during digestion for the emulsification and absorption of fats. *See also* HUMOUR (3). [From Latin *bilis* bile]

bilingual *adj.* 1. Able to speak two languages. *Compare* AMBILINGUAL (1). *n.* 2. A bilingual person. **bilingualism** *n.* [From Latin *bis* twice + *lingua* a tongue + *-alis* of or relating to]

bilis *n.* A **culture-bound syndrome* found in many Latin American communities, characterized by intense anger or rage, accompanied by acute nervous tension, headache, trembling, screaming, stomach upset, and even loss of consciousness, often followed by chronic fatigue or asthenia, interpreted locally as a result of a disturbance in the balance of **humours* (3) in the body. Also called *colera* or *muina* . [Spanish *bilis* bile, from Latin *bilis* bile]

bimodal distribution *n.* Any **probability* distribution or **frequency* distribution with two **modes*, therefore appearing visually with two peaks, indicating a clustering of scores around two different values.

binary code *n.* A system of representing information by using the digits 0 and 1, so that each number, letter, or other item of information is represented by a unique sequence of **bits*.

binary colour *n.* Another name for a **secondary colour*. US *binary color*.

binaural *adj.* Of, relating to, or involving the simultaneous use of two ears or the presentation of the same audible stimulus to both ears. Often confused with **dichotic*. *Compare* MONAURAL. [From Latin *bis* twice, *bini* two by two + *auris* an ear + *-alis* of or relating to]

binaural beat *n.* An **auditory beat* that is heard when two tones with slightly different **frequencies* (1) are presented separately to the two ears via headphones, proving that the waves can reinforce and cancel each other in the auditory cortex rather than in the ear. *Compare* CENTRAL MASKING.

binaural cue *n.* In **sound localization*, a **cue* (2) that helps to determine the location of a sound source and that depends on **binaural* information. See INTERAURAL INTENSITY DIFFERENCE, INTERAURAL TIME DIFFERENCE, PHASE DELAY, SONIC SHADOW, TRANSIENT DISPARITY.

binaural disparity *n.* Any difference in the sound reaching the two ears from a single source, providing a **binaural* cue for **sound localization*.

binaural fusion *n.* Hearing sounds presented to different ears as a single sound. See also AUDITORY FUSION.

binaural intensity difference *n.* Another name for a **sonic shadow*. Also called an *interaural intensity difference* .

binaural ratio *n.* The relative sound intensities reaching the two ears from a single source affected by a **sonic shadow* cast by the listener's head.

binaural shift *n.* An **auditory illusion* that arises when two low-pitched tones with frequencies close to each other are presented separately to the two ears, resulting in the impression of a single sound source whose location seems to swing periodically from one side to the other as the **phase delay* and **transient disparity* changes continuously.

binaural sound localization See SOUND LOCALIZATION.

binaural summation *n.* The relatively greater perceived loudness of a sound that is heard binaurally rather than monaurally, the **absolute threshold* for loudness being 3 dB lower when it is heard binaurally.

binaural time difference *n.* A generic name for **phase delay* and/or **transient disparity*. Also called an *interaural time difference* .

binaural unmasking *n.* A phenomenon in which a **monaural* sound that masks another monaural sound loses its masking property when it is heard **binaurally*. See also AUDITORY MASKING, MASKING.

binding *n.* Tying, securing, or constraining. In **psychoanalysis*, an operation tending to restrict the flow of **libidinal energy*, usually by the **ego* exerting a restraining influence on the **primary process*. For example, in an article on 'Project for a Scientific Psychology', published in 1895, Sigmund Freud (1856–1939) cited the example of a painful memory that needs to be tamed: 'particularly large and repeated binding from the ego is required before this facilitation to unpleasure can be counterbalanced' (*Standard Edition*, I, pp. 177–397, at pp. 380–1). Freud developed the idea further in his book *Beyond the Pleasure Principle* (1920, *Standard Edition*, XVIII, pp. 7–64), and in *An Outline of Psycho-Analysis* (1938/40, *Standard Edition*, XXIII, pp. 144–207, at p. 148) he described binding as a preservative operation that is a primary aim of **Eros*, in contrast to **Thanatos*, whose primary aim is to destroy things. *See also* [BOUND ENERGY](#).

binding problem *n.* Within the field of **knowledge representation*, the problem of how to represent conjunctions. In visual perception, in order to pick out a blue square from a display including a collection of red squares and blue triangles, it is not enough to isolate its non-unique shape or its non-unique colour; it is necessary to bind each shape to its colour and then to isolate the unique conjunction (blue + square). In language comprehension, in order to understand a sentence such as *The cause of Mary's hatred of John, in Peter's opinion, was John's betrayal of her trust*, it is necessary to bind the noun phrase *John's betrayal of her trust* to *The cause of Mary's hatred of John*. The problem of binding underlies symbolic representation in general. *See also* [FEATURE INTEGRATION THEORY](#), [GOVERNMENT AND BINDING](#).

Binet–Simon scale *n.* The first **standardized* (2) **intelligence* test, constructed in 1905 by the French psychologists Alfred Binet (1857–1911) and Théodore Simon (1873–1961). It included items designed to measure ability to follow instructions, to exercise judgement, and to solve a wide variety of problems. The final version contained 54 items arranged in order of difficulty, from following the movement of a lighted match with the eyes, through pointing to named parts of the body and counting backwards from 20, to working out what time a clock face would show if the hour and minute hands swapped places. Also called the *Binet scale*, though this is unfair to Simon, who played a major part in its development. *See also* [MENTAL AGE](#), [STANFORD–BINET INTELLIGENCE SCALE](#).

*****ebook converter DEMO Watermarks*****

binge-eating disorder *n.* An **eating disorder*, introduced in **DSM-5*, characterized by recurrent episodes of eating much more than normal within a two-hour period, with a feeling of loss of control, at least once a week for three months. Binge-eating episodes cause significant distress, may be associated with eating more quickly than normal, even when not hungry, often alone or in secret, and may be followed by guilt, self-disgust, and depression. The condition has similar signs and symptoms to **bulimia nervosa* but without the compensatory behaviour intended to prevent weight gain, such as self-induced vomiting, misuse of laxatives or diuretics, enemas, fasting, or excessive exercise. [Probably from Lincolnshire dialect English *binge* to soak]

binocular *adj.* Of, relating to, or involving the simultaneous use of both eyes. *Compare* *DICHOPTIC*, *MONOCULAR*. [From Latin *bis* twice, *bini* two by two + *oculus* an eye]

binocular cell *n.* A neuron in the **visual cortex* that receives inputs from both eyes. Approximately half the neurons in the **primary visual cortex* are binocular. *See also* *DISPARITY-SELECTIVE CELL*, *OCULAR DOMINANCE*.

binocular cue *n.* Either of the **cues* (2) of distance, known as **ocular convergence* and **stereopsis*, that contribute towards visual **depth perception* and that depend on integration of information from both eyes. *Compare* *MONOCULAR CUE*.

binocular disparity *n.* The slight discrepancy between the two retinal images of a three-dimensional object or scene, caused by **binocular parallax* and providing the basis for **stereopsis*, certain **disparity-selective cells* in Areas V1, V2, and V5 (MT) of the **visual cortex* responding selectively to particular disparities and thus being selectively tuned to stimuli at specific distances. If the disparity lies within **Panum's fusion area*, then **binocular fusion* occurs and stereopsis results, whereas if the disparity is greater, then **diplopia* occurs. Binocular disparity is usually expressed in terms of the difference between the **visual angles* subtended by points on the object or surface being viewed, the visual system being capable of responding with sensations of three-dimensional depth to retinal disparities as small as 2 seconds of arc, corresponding to 1/1,800 of a degree, and near the fovea the
*****ebook converter DEMO Watermarks*****

maximum binocular disparity resulting in fusion corresponds to a visual angle of about 10 minutes of arc or 1/6 of one degree. Also called *retinal disparity* or *visual disparity* . See also [ANAGLYPH](#), [CORRESPONDENCE PROBLEM](#), [CORRESPONDING RETINAL POINTS](#), [HOROPTER](#), [PANUM'S LIMITING CASE](#), [RANDOM-DOT STEREOGRAM](#), [STEREOBLINDNESS](#), [STEREOSCOPIC ACUITY](#).

binocular fusion *n.* Merging of slightly different images from the two eyes, arising from **binocular disparity*, into a single stereoscopic perception. Also called simply *fusion* or *binocular interaction* . See also [CORRESPONDING RETINAL POINTS](#), [HOROPTER](#), [PANUM'S FUSION AREA](#), [PANUM'S LIMITING CASE](#). Compare [BINOCULAR RIVALRY](#).

binocular interaction *n.* Another name for **binocular fusion*.

binocular parallax *n.* The disparity between the two retinal images of a three-dimensional object or scene arising from the slightly different vantage points of the two eyes, such **binocular disparity* functioning as one of the binocular cues of visual **depth perception* and providing the basis for **stereopsis*. See also [CORRESPONDING RETINAL POINTS](#), [DISPARITY-SELECTIVE CELL](#), [PARALLAX](#). Compare [MONOCULAR PARALLAX](#).

binocular rivalry *n.* Inability to perceive two markedly different images presented to the left and right eyes simultaneously, one invariably dominating over the other for the whole or part of the percept at any particular time. Also called *binocular suppression* or *retinal rivalry* . See also [AMBLYOPIA EX ANOPSIA](#), [CHESHIRE CAT EFFECT](#), [HOLE-IN-THE-HAND ILLUSION](#). Compare [BINOCULAR FUSION](#).

binocular summation *n.* Stimulation of corresponding areas of the two retinas with light, the perceived **lightness* being approximately the average lightness of the two stimuli perceived monocularly. See also [FECHNER'S PARADOX](#).

binocular suppression *n.* Another name for **binocular rivalry*.

binomial test *n.* In inferential statistics, a simple test of whether a sample

of dichotomous scores, labelled success/failure (or male/female, remember/don't remember, and so on) comes from a binomial probability distribution. The binomial distribution represents the probability, given a sequence of **Bernoulli trials* with a fixed probability of success on each trial, of achieving a number of successes as extreme as the number observed in a specified number of trials. For example, a string of guesses (hits/misses) with a pack of 25 ESP or Zener cards, which contains five cards with each of five different symbols, entails a 1/5 probability of a hit on each trial. Application of the binomial test shows that, for a statistically significant result (conventionally, a probability of less than $p < .05$), leading to a rejection of the null hypothesis that the scores come from a binomial distribution, more than eight (or fewer than two) hits in 25 guesses would be required. [From Latin *bis* twice, *bini* two by two + *nomen* a name]

bioacoustics *n.* The study of the relation between organisms and sound. [From Greek *bios* life + *akoustikos* of or relating to sound, from *akouein* to hear + *-ikos* of, relating to, or resembling]

bioavailability *n.* The proportion of a drug or of its active ingredient that is absorbed and that therefore becomes available at its target **neuroreceptor* sites after ingestion or administration. It is usually estimated by comparing the concentration of the drug in the blood after intravenous injection (full bioavailability) with its concentration after administration by the usual route, such as eating or swallowing, drinking in an infusion, snorting, or smoking.
bioavailable *adj.*

biodata *n.* **1.** Biographical information, such as the personal details about research participants or subjects recorded by researchers, or similar information recorded by personnel officers about employees. **2.** Sometimes, especially in Indian English usage, a curriculum vitae. [From *bio(graphical) data*, from Greek *bios* life + *graphein* to write, + Latin *data* things given, from *dare* to give]

biodemography *n.* The science dealing with the interface between **ecology* (1) and **population genetics*. [From *bio(logy)* + *demography*]

bioenergetics *n.* **1.** The study of energy relationships in living
*****ebook converter DEMO Watermarks*****

organisms. 2. A technique of **psychotherapy* developed by the US psychiatrist Alexander Lowen (1910–2008), influenced by **psychoanalysis* and Reichian **orgone therapy*. See also BODY THERAPIES. [From Greek *bios* life + *energeia* activity, from *ergon* work + *-itikos* resembling or marked by]

bioengineering *n.* The design and provision of devices such as artificial limbs, hearing aids, and spectacles to replace lost bodily functions or to rectify or supplement defective functioning of body parts or organs. Also called *biological engineering* .

biofeedback *n.* A technique whereby a person learns to control a normally involuntary **autonomic* response (such as blood pressure, heart rate, or alpha wave EEG activity) by attending to the output of a device that monitors the response continuously (such as a blood pressure monitor, an electrocardiograph, or an electroencephalograph, respectively). It is sometimes used to treat stress disorders such as **migraine* headaches, hypertension, and **attention-deficit/hyperactivity disorder*. It can be traced back to an experiment carried out by the US medical psychologist Joe Kamiya (born 1925), who in 1958 trained a volunteer to recognize and increase his output of **alpha wave* brain activity. In 1965, the US neurobiologist M(aurice) Barry Stermann (born 1935) used **operant* conditioning techniques to train cats to increase **sensorimotor rhythm* activity, and he later discovered that, when these cats were exposed to toxic rocket fuel, they responded significantly less often with **seizures* and had better survival rates than cats that had not had such training. This led to the clinical application of similar methods to reduce seizures in patients with **epilepsy* and other disorders. [From Greek *bios* life + English *feedback*]

bioflavonoids See VITAMIN P.

biogenesis *n.* The biological principle according to which living organisms originate from parent organisms similar to themselves, in contrast to the 19th century doctrines of spontaneous generation and **abiogenesis*. [From Greek *bios* life + *genesis* birth]

biogenic amine *n.* Any member of a group of **amines* that are produced in the body and that play important roles in nervous system functioning,

*****ebook converter DEMO Watermarks*****

including catecholamines such as **dopamine*, **adrenalin* (epinephrine), and **noradrenalin* (norepinephrine); indoleamines such as **serotonin*; and imidazoleamines such as **histamine*. *See also* [NEUROTRANSMITTER](#). [From Greek *bios* life + *genein* to produce, referring to the fact that they are produced naturally in the body, unlike amines such as amphetamine]

bioinformatics *n.* The use of computational methods in genetics and genomics, and more generally the science of information and information flow in biological systems. [From Greek *bios* life + Russian *informatika* information science]

biological clock *n.* Any mechanism or process responsible for a **biological rhythm*. *See also* [PACEMAKER NEURON](#), [SUPRACHIASMATIC NUCLEUS](#), [TELOMERE](#), [ZEITGEBER](#).

biological engineering *n.* Another name for **bioengineering*.

biological motion *n.* Another name for the perception created by a **point-light display*. Also called *biological movement* or *biomechanical motion*.

biological rhythm *n.* Any periodic, more-or-less regular fluctuation or cycle in a biological system or process that is not wholly under the control of environmental cues but is controlled centrally by a **biological clock*. It may be an **ultradian rhythm* such as a **circannual rhythm* or a **menstrual cycle*; a **circadian rhythm* such as the **sleep–wake cycle*; or an **infradian rhythm* such as an **alpha wave*, **basic rest–activity cycle*, **beta wave*, **delta wave*, **gamma wave*, **sensorimotor rhythm*, or **theta wave*. *See also* [CHRONOBIOLOGY](#), [PACEMAKER NEURON](#), [SUPRACHIASMATIC NUCLEUS](#), [ZEITGEBER](#). *Compare* [BIORHYTHM](#).

biology *n.* The study of living **organisms*; or a generic term for the life sciences, including botany, zoology, anatomy, physiology, biochemistry, and related disciplines. [From Greek *bios* life + *logos* word, discourse, or reason]

bioluminescence *n.* The emission of light by certain living organisms,

including insects such as fireflies, certain bacteria and fungi, and especially deep-sea marine organisms. It is achieved by the oxidation of the light-producing compound **luciferin* by the enzyme **luciferase*. **bioluminescent** *adj.* [From Greek *bios* life + Latin *lumen* light]

biomechanical motion *n.* Another name for the perception created by a **point-light display*. Also called *biomechanical movement* or *biological motion* .

Bio-Medical Data Package *See* [BMDP](#).

biometry *n.* The statistical analysis of biological data. Also called *biometrics* . **biometric** *adj.* [From Greek *bios* life + *metron* a measure]

bionics *n.* The study of brain functions and other biological processes applied to the design of electronic devices such as computers that can perform similar operations; or the process of replacing or augmenting the function of body parts with artificial (especially electronic) devices. **bionic** *adj.* Of, relating to, or resembling bionics. [From *bio(logical) (electro)nics*]

biophilia *n.* Love of life and living things. The word gained prominence when it was used by the German-born US psychoanalyst Erich Fromm (1900–80) in his book *The Heart of Man: Its Genius for Good and Evil* (1965), although he had already used it in an article in the magazine *The Saturday Review* (4 January, 1964, pp. 22–25): ‘There is an orientation which we may call love of life (*biophilia*); it is the normal orientation among healthy persons. But there is also to be found in others a deep attraction to death which, following Unamuno's classic speech made at the University of Salamanca (1938), I call necrophilia. It is the attitude which a Franco general, Millán Astray, expressed in the slogan “Long live death,” thus provoking Unamuno's protest against this necrophilous and senseless cry’ (p. 22). The US sociobiologist Edward O(sborne) Wilson (born 1929) popularized the term in the title of his book *Biophilia* (1984), defining it as an instinctive bond or sense of affinity of human beings with nature, or ‘an innate tendency to focus on life and lifelike processes’ (p. 1). *Compare* [BIOPHOBIA](#) (*see* [Appendix I](#)), [NECROPHILIA](#). **biophilic**, **biophilous**, or **biophilistic** *adj.* **biophile** *n.* A person manifesting biophilia. [From Greek *bios* life + *philos* loving,

*****ebook converter DEMO Watermarks*****

from *phileein* to love + *-ia* indicating a condition or quality]

biophysics *n.* The physics of biological processes, and the application of the techniques and concepts of physics to biology.

biopsychology *n.* A branch of biology or psychology that deals with the interaction of mind and body and the effects of this interaction.

biorhythm *n.* According to a discredited doctrine developed by the German ear, nose, and throat specialist Wilhelm Fliess (1858–1928), any of three precisely periodic rhythms of 23 days (physical cycle), 28 days (emotional cycle), and 33 days (intellectual cycle), supposedly fixed at the time of birth for a person's entire life, the interaction between the three cycles determining critical days on which problems are likely to occur throughout life. *Compare* BIOLOGICAL RHYTHM.

biosonar *n.* A system of object detection, location, identification, and ranging by means of **echolocation*, the emission of sound or **ultrasound* and the analysis of returning echoes. It has evolved independently in two groups of bats and also in dolphins, whales, oilbirds (*Steatornis caripensis*) of South America and Trinidad, and cave swiftlets of the Asian genus *Collacalia*, and is also used in a primitive form and to a small extent by shrews, rats, seals, and blind human beings (see FACIAL VISION). In its most sophisticated form as used by dolphins, whales, and some bats, the time delay of an echo provides information about the distance of the target object; **transient disparities*, **phase delays*, and **sonic shadows* enable the target's direction to be pinpointed; the amplitude of an echo indicates the target's overall size; the amplitudes of the echo's component frequencies provide clues as to the sizes of the target's features; and the **Doppler effect* indicates whether the target is coming closer or moving away. The bottlenose dolphin (*Tursiops truncatus*) can detect a steel ball the size of a walnut under water at a range of 64 metres (210 feet). [From Greek *bios* life + English *sonar* an acronym for *so(und) na(vigation and) r(anging)*]

biostatics *n.* The branch of biology devoted to studying the structure of organisms in relation to their function. **biostatic** *adj.* [From Greek *bios* life + *stasis* a standing + *-itikos* resembling or marked by]

*****ebook converter DEMO Watermarks*****

biotechnology *n.* 1. The industrial use of living organisms, especially bacteria, to manufacture substances such as beer, wine, cheese, antibiotics, hormones, or vaccines, to recycle waste, or to create energy. *See also* MONOCLONAL ANTIBODY. 2. In the US, another name for **ergonomics*.

biotin *See* VITAMIN H.

biotope *n.* A small ecological environment or microhabitat, such as the bark of a tree, that supports a distinct biological community. [From Greek *bios* life + *topos* place]

BIP *abbrev.* Basic period of information processing, generally taken to be equal to about 62.5 milliseconds ever since the US inventor and scientist Thomas (Alva) Edison (1847–1931) discovered that 16 frames per second was the minimum rate for critical flicker fusion ($62.5 = 1/16 \times 1,000$), though some psychologists have claimed that the precise figure varies slightly, depending on the observer's IQ. The concept was introduced in an article by the German psychologists Siegfried Lehrl (born 1943) and Bernd Fischer (born 1939) in the *European Journal of Personality* in 1990.

biperiden *n.* A synthetic **anticholinergic* drug that is used in the treatment of **Parkinson's disease*, biperiden hydrochloride being administered orally and biperiden lactate by intramuscular or intravenous injection. *See also* ANTIPARKINSONIAN.

bipolar *adj.* Having two poles, as in a **bipolar cell* or bipolar neuron; or more generally having two extremes or extremities, as in a bipolar adjective pair such as *good–bad*, frequently used in rating scales.

bipolar affective disorder *See* BIPOLAR DISORDERS.

bipolar cell *n.* A **neuron*, usually a sensory nerve cell, with two **processes* (2), an **axon* and a **dendrite*, extending in opposite directions from its cell body or soma. It is found abundantly in the middle layer of the **retina*, where retinal bipolar cells with **centre-surround receptive fields*—the centre being supplied by direct inputs from **photoreceptors* and the

surround by [*horizontal cells](#), or vice versa—relay information to retinal [*ganglion cells](#), but in general it is the least common type of neuron in the nervous system, although it is the one usually depicted in the standard textbook diagram of a supposedly typical neuron. Also called a *bipolar neuron*. See also [OFF-CENTRE CELL](#), [ON-CENTRE CELL](#).

bipolar disorders *n.* A class of [*mood disorders](#) characterized by [*manic episodes](#) or [*mixed episodes](#) and usually, but not necessarily, also [*major depressive episodes](#). Some classifications, including [*DSM-5](#), also distinguish bipolar I disorders, characterized by major depressive episodes together with manic episodes, from bipolar II disorders with major depressive episodes together with [*hypomanic episodes](#) rather than manic episodes. The third major form of bipolar disorder is [*cyclothymic disorder](#). Bipolar disorders are also called *manic–depressive psychoses*. See also [ANTIMANIC](#), [BORNA DISEASE VIRUS](#), [MOOD STABILIZER](#). Compare [CYCLOTHYMIA](#), [DISRUPTIVE MOOD DYSREGULATION DISORDER](#). [From Latin *bis* twice + *polaris* of or relating to a pole, from *polus* a pole]

bipolar rating scale *n.* Any [*rating scale](#) in which the response alternatives provided for each item are anchored with pairs of opposites or [*antonyms](#), often adjective pairs such as *good*———*bad*, or *useful*———*useless*. See also [SEMANTIC DIFFERENTIAL](#).

birth trauma *n.* The supposedly distressing aspect of the process of being born, according to the Austrian psychoanalyst Otto Rank (1884–1939) and later therapists, including the US psychoanalyst Phyllis Greenacre (1894–1989) and the US psychologist Arthur Janov (born 1924). Rank argued in his book *The Trauma of Birth* (1929) that the shock of birth creates a reservoir of anxiety and that all neuroses stem from birth anxiety. See also [PRIMAL ANXIETY](#).

bisection method See [METHOD OF BISECTION](#).

bisexual *n.* 1. A person who is sexually attracted to both men and women. Compare [HETEROSEXUAL \(1\)](#), [HOMOSEXUAL \(1\)](#). *adj.* 2. Being sexually attracted to both men and women. Compare [HETEROSEXUAL \(2\)](#), [HOMOSEXUAL \(2\)](#). 3. Of, relating to, or showing characteristics of both sexes, [*androgynous](#), or having

*****ebook converter DEMO Watermarks*****

both male and female reproductive organs. See [HERMAPHRODITE \(2\)](#). See also [DIGIT RATIO](#). **bisexuality** or, especially in the US, **bisexualism** *n.* Attraction to or sexual activity with members of both sexes. [From Latin *bis* twice + *sexus* sex + *-alis* of or relating to]

bit *n.* In computer technology, a single digit in binary notation symbolized by either 0 or 1, represented by a switch that is either off or on, a location on a disk or a tape that is either not magnetized or magnetized, or the absence or presence of an electrical or electronic pulse. In [*information theory](#), it is the standard unit of [*information \(2\)](#), representing the information required to specify one of two alternatives, the number of bits in a given signal being defined by the minimum number of binary digits required to encode it. The binary equivalents of the decimal digits 0, 1, 2, 3, 4, 5, 6, 7, 8, and 9 are 0, 1, 10, 11, 100, 101, 110, 111, 1000, and 1001, respectively; therefore, if the information specifies a choice of one out of just two alternatives, then one bit of information is sufficient to encode the information, three or four alternatives require two bits, five to eight alternatives require three bits, nine or ten alternatives require four bits, and so on. See also [BAUD](#), [BINARY CODE](#), [BOOLEAN](#), [BYTE](#), [NYBBLE](#). [A blend of *b(inary)* and *(dig)it*, named in the 1940s by the US statistician John Wilder Tukey (1915–2000)]

bite bar *n.* A device containing a hollow mould of a person's teeth that can be bitten on to in order to keep the head completely still during an experiment.

bitter *n.* One of the primary tastes in [*Henning's tetrahedron](#), the characteristic taste of [*quinine](#) or orange peel.

bivariate statistics *n.* The branch of statistics devoted to analysing the relationship between pairs of variables when neither is an [*independent variable](#) in an experiment. The prototypical example of bivariate statistics is the [*product–moment correlation coefficient](#). Compare [MULTIVARIATE STATISTICS](#), [UNIVARIATE STATISTICS](#). [From Latin *bis* twice + English *variate*]

black bile See [HUMOUR \(3\)](#).

blackboard memory *n.* Another name for a [*buffer store](#).

*****ebook converter DEMO Watermarks*****

Black English Vernacular *n.* A speech style, nowadays thought to be *creole in origin, characteristic of inner-city African-American communities in the United States, recognizable through such expressions as: *It's just the same old same old* (It's just the same old thing); *I be done fed the baby soon*; *I been know your address, mister*; *They real fine*; *Don't nobody understand me?* Also called *Ebonics* or (colloquially) *soul talk* . See also [VERNACULAR](#). **BEV** abbrev. [From Latin *vernaculus* belonging to a household slave, from *verna* a household slave]

blacking out *n.* Another name for [*falling out](#).

Blacky pictures *n.* A [*projective test](#) resembling the [*TAT](#) but designed for children, comprising a series of twelve cartoon drawings in which a dog called Blacky, designated as male or female to match the sex of the respondent, is depicted playing human roles with other dogs called Mama and Papa and a sibling of indeterminate age and sex called Tippy. The respondent is asked to make up a vivid, imaginative story about each picture and then to respond to a series of multiple-choice and short-answer questions about the picture. The test was constructed by the US psychologist Gerald S. Blum (born 1922) in the course of postgraduate research and first published by him in the journal *Genetic Psychology Monographs* in 1949. Also called the *Blacky Test* . Compare [CHILDREN'S APPERCEPTION TEST](#).

blaming the victim *n.* A pervasive tendency to assume that a person who has suffered a misfortune must have done something wrong to deserve it. It is explained by the [*just world hypothesis](#).

blastocyst *n.* An early form of an embryo, consisting of a hollow ball of cells one cell thick, that develops from a [*morula](#). See also [EMBRYO](#), [FOETUS](#), [ZYGOTE](#). [From Greek *blastos* a bud + *kystis* a bladder]

blend *n.* A word formed by joining the end of one word on to the beginning of another, or more generally part of one word on to part of another, typical examples being *brunch*, which is formed from the beginning of *breakfast* and the end of *lunch*, *moped* from *motor* and *pedal*, *motel* from *motorcar* and *hotel*, *napalm* from *naphthene* and *palmitate*, *prissy* from *prim* and *sissy*, and

smog from *smoke* and *fog*. Also called a *portmanteau word* .

blending inheritance *n.* A once-popular doctrine, subsequently discredited following the general acceptance of **Mendelian* genetics, that the intermediate characteristics of **hybrids* (1) result from a physical merging or mixing of the substances carrying the parental characteristics rather than from the recombination of unchanged particulate hereditary factors (genes). Compare *PARTICULATE INHERITANCE*.

blindness *n.* Inability to see. Total blindness, which is a comparatively rare condition, is unambiguously defined as an inability to perceive light in either eye; partial blindness in which there is some residual vision is comparatively common, affecting approximately 90 per cent of registered blind people in the US and the UK, and is variously defined. The American Foundation for the Blind proposed a twofold criterion: either a **Snellen fraction* of 20/200 or less in the better eye with maximum correction (spectacles), or **tunnel vision* limiting the visual field to a **visual angle* of no more than 20 degrees. Blindness is usually an acquired condition, congenital causes accounting for only about one per cent of registered blind people, the major cause among registered blind people in the US and the UK being **diabetes*, although blindness in one eye, among people not usually registered blind, is most often caused by **amblyopia* ex anopsia. Also called *visual impairment* , especially when there is some residual vision. See also AMAUROSIS, AMETROPIA, ANOPIA, ANTON'S SYNDROME, BLINDSIGHT, BRAILLE, CATARACT, CHANGE BLINDNESS, CHARLES BONNET SYNDROME, CHROMATOPSIA, COLOUR-BLINDNESS, CONVERSION SYMPTOM, CORTICAL BLINDNESS, FACIAL VISION, GLAUCOMA, HEMERALOPIA, HEMIANOPIA, HOMONYMOUS HEMIANOPIA, INATTENTIONAL BLINDNESS, NYCTALOPIA, OBJECT BLINDNESS, OPTACON, OPTOHAPT, RETINITIS PIGMENTOSA, SCOTOMA, SPATIAL NEGLECT, STEREOBLINDNESS, STRABISMUS, TADOMA METHOD, TAY–SACHS DISEASE, THERMOFORM, VISUAL SEARCH. **blind** *adj.* [From Old English *blind* and Old Norse *blindr* sightless, cognate with Old Norse *blunda* to close one's eyes]

blindness denial *n.* Another name for **Anton's syndrome*.

blindsight *n.* Residual vision in the absence of a functioning **primary visual cortex* in primates and possibly other animals. More specifically, a

*****ebook converter DEMO Watermarks*****

capacity possessed by some people who appear to be totally blind, owing to lesions in the primary visual cortex, to respond to visual stimuli. Such people have no conscious experience of vision, but if forced to guess they can correctly direct their eyes towards light sources, identify objects moving in particular directions, or even discriminate between simple visual shapes, and they are often surprised that their guesses are correct. This phenomenon is explained by small but direct connections, bypassing the primary visual cortex, between the **lateral geniculate nuclei* and areas of the prestriate **visual cortex* that are specialized for colour, movement, and form perception. The term was introduced in 1974 by the US-born British neuropsychologist Lawrence Weiskrantz (born 1926) and several colleagues in a case report of a patient with the condition, and became widely known after the publication of Weiskrantz's book *Blindsight: A Case Study and Implications* (1986). Also written *blind sight*. Compare *ANTON'S SYNDROME* (which may be interpreted as the inverse of blindsight).

blind spot *n.* **1.** A small oval area on the **retina* of each eye, approximately 2 millimetres in diameter, where the ganglion cells in the inner retinal layer, nearest the front of the eye, feed backwards through the retina into the optic nerve, and where there are therefore no photoreceptors and vision is absent. Squids and octopuses do not have blind spots, because their eyes have evolved with the retinal layers arranged the other way round, with the ganglion cells in the outer retinal layer at the back of the eye. A person is not ordinarily aware of a blind spot because the gap is covered by vision from the other eye, and if one eye is closed it is not noticed because of the **filling-in* phenomenon, but its location can be mapped as follows. Gaze fixedly at a distant object with one eye, keeping the other eye closed, and hold a small distinctive stimulus such as a cotton bud or Q-tip at arm's length directly in front of the object, then slowly move the stimulus horizontally outwards from the direction of gaze until it vanishes approximately 18 degrees out—about the width of one's hand at arm's length. Also called an *optic disc*. **2.** Any part of the visual field in which vision is absent. Also called a *scotoma*. **3.** Any place where vision, hearing, or reception of broadcast signals is difficult or impossible. **4.** A topic on which a person is notably ignorant or lacking in insight or ability.

blind study *n.* A research design planned so that, in order to control for

the influence of **demand characteristics*, the research participants or subjects do not know the details of the investigation or the **experimental hypothesis* being tested, at least until after the data have been collected. See *DOUBLE-BLIND STUDY*, *RANDOMIZED DOUBLE-BLIND EXPERIMENT*, *SINGLE-BLIND STUDY*.

blind watchmaker *n.* A term coined in 1986 by the British ethologist Richard Dawkins (born 1941) to denote **natural selection*, alluding to the Argument from Design, an argument for the existence of God put forward in 1802 by the theologian William Paley (1743–1805). Paley argued that if he found a watch while crossing a heath he would conclude that it must have had a maker, because it is too intricate and precise to have arisen by accident, and that for the same reason the intricacy and precision of the works of nature forced him to conclude that they too must have had a maker, namely God; but Dawkins argued that natural selection operates like a blind watchmaker in fashioning the complicated structures of nature.

blink reflex *n.* An involuntary reflex blinking of both eyes when an object or puff of air touches the cornea of one eye. The **afferent* pathway is the **trigeminal nerve* and the **efferent* pathway is the **facial nerve*.

blivet See *IMPOSSIBLE TRIDENT*.

blob *n.* Any of the ovoid (egg-shaped) areas in the **primary visual cortex* (Area V1), about a quarter of a millimetre in diameter and separated by half-millimetre interblobs, containing neurons with **double-opponent receptive fields* sensitive to light of a specific wavelength (red–green and blue–yellow), and others with ordinary **centre-surround receptive fields* (white–black), not at all sensitive to shape or movement, responsible for perception of colours including **achromatic* shades of black, white, and grey. Blobs are found in layers 2 and 3 of the primary visual cortex, receiving projections from sublayers 4C α and 4C β and projecting to Area V2 of the **visual cortex*, which in turn projects to Area V4 in the **fusiform gyrus*, an area specialized for colour vision. See also *W CELL*. [So called because it shows up as a blob when the cerebral cortex is stained for the enzyme cytochrome oxidase]

Bloch's law *n.* Another name for the **Bunsen–Roscoe law*.

block design test *n.* A type of [*intelligence](#) test item or subtest in which the respondent tries to arrange a number of painted wooden blocks to copy a design formed by the examiner or shown on a diagram.

block diagram *n.* Another name for a [*bar chart](#), a [*histogram](#), or a [*flow chart](#).

blocking memory *n.* A memory that intrudes into consciousness and impedes or obstructs retrieval of a different though related memory. See [UGLY SISTER EFFECT](#). Compare [SCREEN MEMORY](#).

block portrait *n.* A degraded image, usually of a face, divided into large rectangles or blocks, the lightness of each block being set to the average of the image in that region, so that a block overlaying an area of dark hair becomes uniformly black, a block overlaying an area of light skin becomes uniformly light, and a block straddling light skin and a dark eyebrow becomes uniformly grey (see [illustration](#)). Coarse block portraits, made up of approximately 16×16 rectangles using eight or sixteen lightness values or shades of grey, have information of high [*spatial frequency](#) filtered out and are impossible to recognize when viewed close up in clear detail, but they are easy to recognize when viewed from a distance or blurred by half-closing the eyes or overlaying the portrait with tissue paper or frosted glass, the resulting loss of information paradoxically increasing the recognizability of the image. The first block portrait was constructed by the US biomedical engineer Leon D(avid) Harmon (1922–84) and published in a technical report in 1971, followed by an article in *Scientific American* magazine in 1973. See also [ABRAHAM LINCOLN EFFECT](#). Compare [HYBRID IMAGE](#).



Block portrait

blood *n.* The fluid that is pumped through the arteries and veins by the heart to supply the tissues of the body with nutrients and oxygen, to remove waste products, and to transport **hormones* and other substances. In vertebrates it is red and is composed of a pale yellow fluid called **plasma* (1) in which are suspended **erythrocytes*, **leucocytes*, and **platelets*. See also [BLOOD—BRAIN BARRIER](#), [BLOOD GROUP](#), [ERYTHROPOIETIN](#), [HUMOUR](#) (3).

blood alcohol concentration *n.* The amount of alcohol in a given volume of blood, usually expressed in units of mass per units of volume, as milligrams or grams of alcohol per decilitre (100 millilitres) of blood. See also [ALCOHOL](#), [DRINK-DRIVING](#). Also called *blood alcohol level* (BAL). **BAC**

*****ebook converter DEMO Watermarks*****

abbrev.

blood alcohol level *See* [BLOOD ALCOHOL CONCENTRATION](#).

blood–brain barrier *n.* A protective mechanism that allows blood to flow freely to the brain but prevents most substances in the bloodstream from reaching the brain tissue. It is effected through the unique structure of the capillaries that supply blood to the brain, such capillaries being composed of [*endothelial cells](#) sealed together in continuous tight junctions to form solid walls not found anywhere else in the body. These capillaries are also almost completely encircled by [*astrocytes](#), forming a jigsaw pattern on their outer walls and providing [*glial sheaths](#) around them. [*Lipid](#)-soluble substances such as [*alcohol](#), [*nicotine](#), [*caffeine](#), and [*heroin](#) easily cross the barrier and enter the brain, because the [*cell](#) membranes and glial sheaths are composed of lipid molecules, whereas water-soluble substances are generally kept out, but certain water-soluble substances such as [*glucose](#) (in its dextral form only), [*phenylalanine](#), and [*L-dopa](#) are carried across the barrier by specialized [*active transport](#) processes. *See also* [CIRCUMVENTRICULAR ORGAN](#). **BBB** *abbrev.*

blood-flow receptor *n.* Any of a number of sensory receptors in the kidneys that respond to a decrease in blood flow by releasing [*renin](#), which acts as an [*enzyme](#) for the synthesis of [*angiotensin II](#).

blood group *n.* Any of the blood types identified by the many classification systems, especially one of the four types of the ABO system based on the presence or absence of two genetically determined [*antigens](#), A and B, on the surface of red blood cells. Type A shows the A antigen and an [*antibody](#) to the B antigen called anti-B agglutinin, Type B shows the B antigen and anti-A agglutinin, Type AB shows both antigens and neither agglutinin, and Type O shows neither antigen and both agglutinins. Also called *blood type* . *See also* [RACE \(2\)](#).

blue–yellow cell *n.* A neuron that is located in the visual system and is excited by blue light and inhibited by yellow light or vice versa. Such [*opponent-process cells](#) are not found in the retina, where the [*trichromatic theory](#) applies, but at higher levels in the visual system. *See also* [RED-GREEN](#)

*****ebook converter DEMO Watermarks*****

CELL. Compare CONE.

blunted affect See AFFECT.

B lymphocyte *n.* A type of *lymphocyte that is synthesized in bone marrow and secreted from the spleen and that mobilizes *antibodies of *immunoglobulin and plays an important part in the *immune system. Also called a *B cell* . See also MONOCLONAL ANTIBODY, STEM CELL. Compare T LYMPHOCYTE. [From *b(one marrow) lymphocyte*]

BMDP *abbrev.* Bio-Medical Data Package, a suite of statistical computer programs often used by psychologists, distributed by the University of California Press, USA. Compare SAS, SPSS, SYSTAT.

boarding school syndrome *n.* A pattern of emotional and behavioural adjustment acquired as a protective shell by young children at boarding schools but persisting into adult life and manifesting itself in problems associated with intimacy. People displaying this syndrome may appear outwardly confident but find intimate relationships threatening, and typically enter into deeply dependent relationships only to abandon their loved ones abruptly, either emotionally or physically. [The term was introduced by the English analytical psychotherapist Joy Schaverien (born 1943) in an article in the *British Journal of Psychotherapy* in 2011, followed by a book entitled *Boarding School Syndrome: Broken Attachments and Hidden Trauma* (2015)]

body adjustment test *n.* Another name for the *tilting-room test. **BAT** *abbrev.*

body cell *n.* A somatic cell as opposed to a *germ cell.

body dysmorphic disorder *n.* A *mental disorder in *DSM-5 characterized by a pathological preoccupation with an imagined or exaggerated defect in physical appearance. Also called *dysmorphophobia* . See also ADONIS COMPLEX, MUSCLE DYSMORPHIA, SOMATIC DELUSION, TAIJIN KYOFUSHO. **BDD** *abbrev.* [From Greek *dys-* bad or abnormal + *morphe* form]

body image *n.* A mental representation of one's own physical appearance, based partly on self-observation and partly on the reactions of others. See also [IMAGE \(3\)](#), [SCHEMA](#).

body language *n.* Another name for [*kinesics](#) or, loosely speaking, of [*non-verbal communication](#) in general.

body ownership illusion See [RUBBER HAND PHENOMENON](#).

body therapies *n.* Techniques of [*psychotherapy](#) that emphasize physical approaches to psychological problems, especially [*Alexander technique](#), [*bioenergetics](#), [*orgone therapy](#), [*primal therapy](#), and [*rolfing](#).

Bogardus social distance scale *n.* Another name for a [*social distance scale](#).

bogus pipeline *n.* A technique designed to reduce [*response](#) bias in self-report measures of attitudes or emotions by convincing the respondent that the researcher has a reliable and valid means, usually in the form of a sham [*lie detector](#) attached to the respondent's body, of checking the truthfulness of the verbal responses. The technique was introduced by the US psychologists Edward Ellsworth Jones (1926–93) and Harold Sigall (born 1943) in an article in the journal *Psychological Bulletin* in 1971. See also [NON-REACTIVE MEASURE](#).

bondage *n.* 1. Slavery, servitude, or (in medieval Europe) the obligation of peasants to supply labour and other services in return for small landholdings. 2. A common form or aspect of [*sexual sadism](#) and [*sexual masochism](#) in which the participants derive pleasure from physically binding each other or being bound or restrained. [From Old Norse *band*, cognate with Old High German *bant* a fetter + Old French *-age* indicating a process or action, from Latin *agere* to do]

bonding *n.* The formation of close personal attachment, especially by an infant or child with its mother. See [ATTACHMENT THEORY](#).

bone conduction *n.* The transmission of sound waves to the auditory receptors in the inner ear through the bones of the skull rather than through the air in the outer ear, eardrum, and middle ear. **bone-conducted** *adj.*

bone conduction threshold *n.* The **absolute threshold* of **bone-conducted* sound, bypassing the outer ear and middle ear and therefore used to determine whether hearing loss is caused by damage to the inner ear.

Bonferroni correction *n.* In statistics, a procedure whereby the significance level of a statistical test is adjusted in order to protect against **Type I errors* when **multiple comparisons* are being made. Thus if 10 **t tests* need to be performed on a set of scores, a researcher may use a Bonferroni-corrected significance level of $.05/10=.005$ instead of the conventional $.05$. This procedure is extremely conservative inasmuch as it may lead to **Type II errors*, but it is safe, easy to understand, and can be used with a wide variety of tests. A Bonferroni-corrected *t* test is sometimes called simply a *Bonferroni t test* or a *modified LSD test*. A Bonferroni-corrected **Mann–Whitney U test* is sometimes called a *Bonferroni Mann–Whitney U test*, and so on. Compare DUNCAN'S MULTIPLE RANGE TEST, LEAST-SIGNIFICANT DIFFERENCE TEST, NEWMAN–KEULS TEST, SCHEFFÉ TEST, TUKEY-HSD TEST. [Named after the Italian mathematician Carlo Emilio Bonferroni (1892–1960) who, in 1935 and 1936, published inequalities on which the procedure is based]

bong *n.* A water pipe used for smoking **cannabis* and other drugs. [From Thai *baung* a wooden cylinder]

Bonnet syndrome See CHARLES BONNET SYNDROME.

bony labyrinth *n.* The cavity in the temporal bone that contains the **membranous labyrinth* of the inner ear, with the **vestibular system* and the **semicircular canals*, and the **cochlea* with the **organ of Corti*. Also called the *osseous labyrinth*.

Boolean *adj.* Of, relating to, or comprising a system of algebra or symbolic logic in which **propositions (1)* are represented by the binary digits 0 (false)

and 1 (true), used especially in computing and electronics. A *Boolean algebra* comprises a set of elements together with two binary operations (the *Boolean sum* denoted by the symbol + and the *Boolean product* denoted by .) obeying certain axioms. In *Boolean set theory* the Boolean sum is interpreted as set union, the Boolean product as set intersection, 0 as the null set, and 1 as the universal set; in *Boolean logic* the Boolean sum is interpreted as *or*, the Boolean product as *and*, 0 as *false*, and 1 as *true*, so that $0 + 0 = 0$, $0 + 1 = 1$, $1 + 1 = 1$, $0 \cdot 0 = 0$, $0 \cdot 1 = 0$, and $1 \cdot 1 = 1$. Boolean set theory and Boolean logic are **isomorphic*. See also [BIT](#), [FUZZY LOGIC](#), [SET THEORY](#). [Named after the English mathematician George Boole (1815–64) who formulated the ideas in his books *Mathematical Analysis of Logic* (1847) and *An Investigation of the Laws of Thought* (1854)]

boomerang effect *n.* An attitude change in a direction opposite to that of a persuasive message, supposedly resulting from the persuasive message being too discrepant from the target person's original attitude. It is often feared by persuasive communicators but seldom if ever occurs in practice. See also [ASSIMILATION—CONTRAST THEORY](#), [DISCREPANCY EFFECTS](#).

bootstrapping *n.* Constructing a **linear model* of a judge's predictions of a criterion variable and then using the linear model instead of the judge to make further judgements or predictions. Such linear models consistently outperform the judges from whose judgements they are derived, because the coefficient weights are distillations of the judges' underlying principles, free of the extraneous variables that inevitably influence each of their specific judgements. This technique became widely known in the early 1970s under the leadership of the US psychologists Lewis Robert Goldberg (born 1932) and Robyn Mason Dawes (1936–2010). In one typical study, a group of judges studied ten background, aptitude, and personality measures taken from graduate students and predicted the students' grade point averages in the first year of graduate study. Linear models of every one of the judges performed better than the judges themselves in predicting the students' grade point averages. See also [ACTUARIAL PREDICTION](#). **bootstrap** *adj. vb.* [So called because it is reminiscent of lifting oneself up by one's own bootstraps]

borderline intelligence *n.* An **IQ* in the range from 71 to 84. [So called because it is just above the margin of **intellectual disability*]

*****ebook converter DEMO Watermarks*****

borderline personality disorder *n.* A **personality disorder* in **DSM-5* characterized by a pervasive pattern of impulsivity and unstable personal relationships, self-image, and affect, beginning in early childhood, and indicated by such signs and symptoms as frantic attempts to avoid real or imagined abandonment; intense and unstable personal relationships; continuously fluctuating self-image; impulsivity (in spending, unsafe sex, substance abuse, reckless driving, binge eating, and the like); recurrent suicidal or self-mutilating gestures or behaviour; emotional instability; chronic feelings of emptiness; intense and inappropriate anger (such as frequent outbursts of temper); and transient, stress-related **paranoid* ideation or **dissociation*. See also DIALECTICAL BEHAVIOUR THERAPY. **BPD** *abbrev.* [So called because it cannot easily be assigned to any of the other personality disorders]

Boring figure *n.* Another name for the most familiar version of the **young girl/old woman figure*. [Named after the US psychologist Edwin Garrigues Boring (1886–1968) who published it in 1930, although he did not create it]

Borna disease virus *n.* An **RNA* virus, transmitted through saliva and nasal secretions, causing **neurological* disorders in a wide range of species, and in humans appearing to be associated with **bipolar disorders*, **chronic fatigue syndrome*, **depression*, **dysthymic disorder*, **schizophrenia*, and other mental disorders. Treatment is most effective with antiviral drugs such as **amantadine*. **BDV** *abbrev.* [Named after Borna, a town in Saxony, Germany, where sad horse disease, as it was called, was first observed]

BOSS *abbrev.* The initial syllable of a word as it is pronounced, such as the syllable *ne-* in the word *nevertheless*. [From *B(asic) O(rthographic) S(yllabic) S(tructure)*, a model of syllabic recognition]

bottleneck, evolutionary See BOTTLENECK THEORY, EVOLUTIONARY BOTTLENECK.

bottleneck theory *n.* Any theory of **attention* according to which all incoming information is subjected to some **level of processing* before a

portion of it is selected for attention. *See also* [COCKTAIL PARTY PHENOMENON](#), [FILTER THEORY](#), [SELECTIVE ATTENTION](#). [So called because the quantity of incoming information is narrowed like the neck of a bottle]

bottom-up processing *n.* Any form of [*information](#) processing that is initiated, guided, and determined by input and that proceeds in sequential stages, with each stage coming closer to a final interpretation than the last, as in [*computational theories](#) of vision that proceed from raw sensory data to more abstract cognitive operations. A clear example of bottom-up processing is provided by [*feature detection theory](#). This form of processing allows the possibility of learning from experience during the processing procedure. *Bottom-up theories* of perception are theories according to which low-level sensory [*features](#) (1) of a stimulus are first recognized and then built up, with the help of memory and existing [*schemata](#), into higher-order perceptions. The term was introduced in 1975 by the US psychologists Donald A(rthur) Norman (born 1935) and David E(verett) Rumelhart (1942–2011). Also called *data-driven processing*. *See also* [ANALYSIS BY SYNTHESIS](#). Compare [TOP-DOWN PROCESSING](#).

bouffée délirante *n.* A [*culture-bound syndrome](#) of Francophone West Africa and Haiti, characterized by sudden outbursts of violent behaviour, accompanied by confusion, [*psychomotor agitation](#), and sometimes also [*paranoid ideation](#) and [*hallucinations](#). It is sometimes interpreted as a [*brief psychotic disorder](#). [From French *bouffée* explosion + *délirante* raving]

boulimia *n.* A variant spelling of [*bulimia](#).

bounded rationality *n.* A concept introduced in influential articles in 1955 and 1956 by the US political scientist and decision theorist Herbert A(lexander) Simon (1916–2001) to refer to human cognitive capacities and decision processes that are not strictly [*rational](#) and are therefore not guaranteed to produce optimal results. The bounds on human rationality arise from limitations of our information-processing abilities and the costs involved in exhaustive comparison of all available options; furthermore, perfectly rational choice is often impossible to achieve in practice, as (for example) in the [*travelling salesman problem](#). Cognitive [*heuristics](#), including Simon's own [*satisficing](#), and [*elimination by aspects](#) are among

*****ebook converter DEMO Watermarks*****

the most thoroughly investigated bounded-rationality choice procedures. See also [PSYCHOLOGICAL DECISION THEORY](#).

bound energy *n.* In [*psychoanalysis](#), psychic energy in the [*secondary process](#), contained and accumulating within particular groups of neurons, its flow being subject to checks and controls through [*binding](#). Sigmund Freud (1856–1939) attributed the concept to the Austrian physician Josef Breuer (1842–1925), but Breuer, although he discussed a related concept, never used the term, and the version of the concept that Freud published in 1895 in his ‘Project for a Scientific Psychology’ (*Standard Edition*, I, pp. 177–397) is quite different from Breuer's, although both based their notions on the [*principle of constancy](#). See also [NIRVANA PRINCIPLE](#), [REALITY PRINCIPLE](#). Compare [FREE ENERGY](#).

bound form *n.* A [*morpheme](#) that cannot occur on its own as a word, such as the prefix *un-* or the suffix *-tion* in English. Also called a *bound morpheme*. Compare [FREE MORPHEME](#).

bouton *n.* The swollen tip of an [*axon](#) that forms a [*synapse](#) (1) with part of another nerve fibre, muscle, or gland. Also called a *synaptic terminal*, *terminal bouton*, *end foot*, or *end bulb*. [From French *bouton* a button, alluding to its appearance]

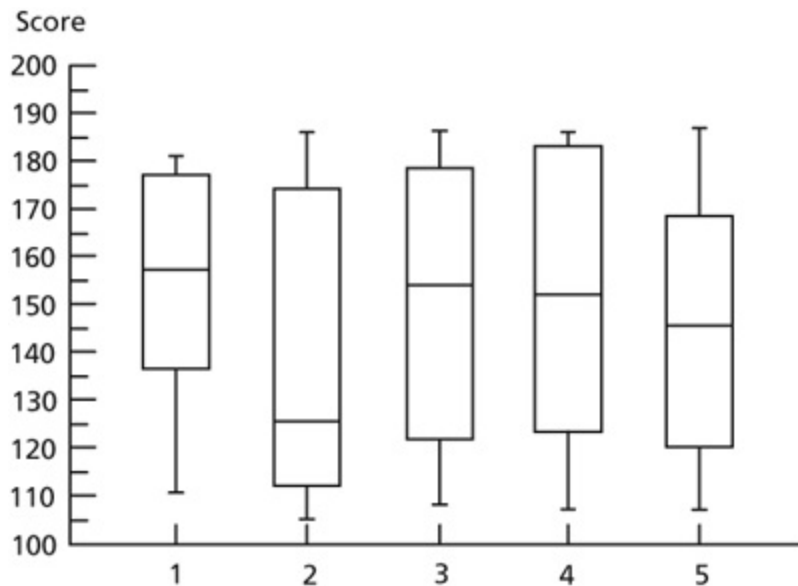
bovine spongiform encephalopathy *n.* The full name of the disease [*BSE](#). [From Latin *bos*, *bovis* an ox or cow + *spongia* a sponge + *forma* form + Greek *enkephalos* brain, from *en* in + *kephale* head + *pathos* suffering]

bow-wow theory *n.* A dismissive name for the [*onomatopoeic theory](#) of the origin of language. Also called the *ding-dong theory*. [From the sound of a dog barking]

box-and-whisker plot *n.* In statistics, a graph representing the distribution of a variable, showing a box to represent the [*interquartile range](#), with a mark inside it representing the [*median](#), and from each end of the box a line (whisker) extending as far as the smallest and largest scores (see [illustration](#)). Also called a *box plot* or *boxplot*. See also [FIVE-NUMBER SUMMARY](#).

*****ebook converter DEMO Watermarks*****

Compare [ERROR BAR](#).



Box-and-whisker plot

boxcar design *n.* A type of [*experimental design](#) in which each research participant or subject is exposed to a series of alternating levels of an [*independent variable](#). It is widely used in fMRI research (see [MRI](#)), a typical example being a study in which experimental trials, in which participants look at pictures of faces, are alternated with control trials, in which they look at neutral images, and brain activity in these two conditions is compared. It is a special type of [*within-subjects design](#). [Named after the resemblance of a graph of the independent variable to the alternating up and down shape of a railway train consisting of boxcars or closed freight wagons]

Box-Jenkins model *n.* Another name for an [*ARIMA](#) model. [Named after the British statisticians George Edward Pelham Box (1919–2013) and Gwilym Meirion Jenkins (1933–82), who co-authored a book describing the model, entitled *Time-Series Analysis: Forecasting and Control* (1970)]

box plot *n.* Another name for a [*box-and-whisker plot](#).

brachygraphy *n.* An obsolescent form of shorthand writing. Compare [STENOGRAPHY](#), [TACHYGRAPHY](#). [From Greek *brachys* short + *graphein* to write]

*****ebook converter DEMO Watermarks*****

brachymetropia *n.* Another name for **myopia*. [From Greek *brachys* short + *metron* a measure + *ops* an eye + *-ia* indicating a condition or quality]

bracketing *n.* Another name for **epoche*.

bradycardia *n.* Abnormally slow pulse, often defined as less than 60 beats per minute. *Compare* **TACHYCARDIA**. [From Greek *bradys* slow + *kardia* the heart]

bradykinesia *n.* Abnormal slowing of bodily movements, notably as a feature of **Parkinson's disease* and of **parkinsonism*. *See also* **NEUROLEPTIC-INDUCED**. *Compare* **AKINESIA**. [From Greek *bradys* slow + *kinesis* movement + *-ia* indicating a condition or quality]

bradykinin *n.* A **kinin* that is formed in injured tissue in human and animal bodies, causing contraction of most smooth muscles but dilation of blood vessels. [From Greek *bradys* slow + *kineein* to move, so called because it causes slow muscle contractions]

Braille *n.* A writing system designed for blind people in which text is encoded in raised dots that can be read by touch, each dot or group of dots standing for a letter, numeral, or punctuation mark. *Compare* **OPTACON**, **OPTOHAPT**. [Named after Louis Braille (1809–52), French musician and teacher, blind from an early age, who invented the system in 1829]

brain *n.* The part of the **central nervous system* that is enclosed within the skull, comprising, from the top down, the **cerebrum*, **midbrain*, **cerebellum*, **pons*, and **medulla oblongata*. The remainder of the central nervous system is the **spinal cord*. The adult human brain weighs 1,300–1,400 grams (about 3 pounds), contains about 80 billion neurons (50 billion of them in the **cerebral cortex*), each typically forming **synapses* (1) with hundreds or thousands of other neurons, and consumes about 20 per cent of the body's total oxygen intake. *See also* **CEREBRAL CORTEX**. [From Old English *brægen* a brain, cognate with Greek *bregma* the front part of the head]

brain fag *n.* A **culture-bound syndrome* originally reported among

English-speaking school and university students in West Africa, who attributed it to overwork, characterized by loss of ability to concentrate, learn, remember, or think, usually accompanied by sensations of pain, pressure, or tightness around the head or neck and blurred vision. [From *fag* in the sense of being fagged out or exhausted, perhaps from *flag* to droop]

brain imaging *n.* Any of several techniques for imaging or visualizing the structure or function of the brain, including electroencephalography or **EEG*, computed tomography or **CT scans*, magnetic resonance imaging or **MRI*, **magnetoencephalography*, positron emission tomography or **PET scans*, and single photon emission computed tomography or **SPECT scans*. *See also* *ANGIOGRAM*, *NUCLEAR MAGNETIC RESONANCE*, *RADIOISOTOPE SCAN*, *REGIONAL CEREBRAL BLOOD FLOW*, *ULTRASOUND*.

brainstem *n.* The stalklike structure at the bottom of the brain between the cerebral hemispheres and the spinal cord, consisting of the **midbrain*, the **pons*, and the **medulla oblongata*, containing the nuclei of most of the cranial nerves and controlling consciousness and certain vegetative functions such as breathing and the operation of the heart and lungs. Also written *brain stem*.

brainstem reticular formation *n.* Another name for the **reticular formation*. **BSRF** *abbrev.*

brainstorming *n.* A method of generating ideas and solving problems through the encouragement of intensive spontaneous group discussion.

brain tissue transplantation *See* *FOETAL BRAIN TRANSPLANTATION*.

brainwashing *n.* The process of attempting to produce radical changes in a person's attitudes or beliefs through the application of techniques such as **sensory deprivation*, sleep deprivation, induced hunger, pain, extreme physical discomfort, and the alternation of interrogations by kind and cruel inquisitors. The word was first used in print by the US journalist and (as it transpired) CIA agent Edward Hunter (1902–78) in an article in the *Miami News* entitled “‘Brain-Washing’ Tactics Force Chinese into Ranks of Communist Party’ on 24 September 1950 and widely adopted after the
*****ebook converter DEMO Watermarks*****

publication in 1951 of Hunter's book, *Brain-washing in Red China: The Calculated Destruction of Men's Minds*. [From Mandarin Chinese *xǐ-nǎo* brain-washing, from *xǐ* to wash or bathe + *nǎo* brain]

Brazelton assessment *n.* Another name for the **Neonatal Behavioral Assessment Scale*. Also called the *Brazelton scale*. [Named after the US paediatrician Thomas Berry Brazelton (born 1918)]

breakage and reunion *n.* In genetics, another name for **crossing over*.

breathing-related sleep disorders *n.* An umbrella term used in **DSM-5* to cover **obstructive sleep apnoea hypopnoea*, **central sleep apnoea*, and **sleep-related hypoventilation*. See also *SLEEP-WAKE DISORDERS*.

breeding size *n.* The number of animals in a population actively involved in breeding.

bregma *n.* The point at the top of the skull where the **coronal sutures* meet the **sagittal suture*, or where the frontal bone joins the two parietal bones; in infants it corresponds to the anterior **fontanelle*. **bregmata** *pl.* [From Greek *bregma* the front of the head]

bricolage *n.* A term used especially in writings on **qualitative research* to characterize the use of multiple diverse research methods, such as observation, interviewing, interpretation of textual material, and introspection, together with multiple theoretical approaches. **bricoleur** *n.* One who practises bricolage. [From French *bricolage* DIY (do-it-yourself) or the hobby of constructing and repairing household objects and systems, first applied to research by the French social anthropologist Claude Lévi-Strauss (1908–2009) in a publication in 1966]

bridge of Varolius *n.* An obsolescent name for the **pons*. [Named after the Italian anatomist Costanzo Varolius (?1543–75) who first identified it]

brief psychotherapy *n.* Any form of **psychotherapy* limited to a small number of sessions (often 15), usually aimed at dealing with a circumscribed

symptom or achieving a narrow and specific objective. *See also* [COGNITIVE—ANALYTIC THERAPY](#), [CRISIS INTERVENTION](#), [FOCAL THERAPY](#).

brief psychotic disorder *n.* A [*mental disorder](#) in [*DSM-5](#) characterized by the sudden appearance of [*delusions](#), [*hallucinations](#), [*disorganized speech](#), [*disorganized thinking](#), or grossly disorganized behaviour such as [*catatonia](#), the episode lasting at least one day but less than four weeks. *Compare* [SCHIZOPHRENIA](#).

bright light therapy *See* [PHOTOTHERAPY](#).

brightness *n.* The experienced or subjective intensity of light; also another name for [*lightness](#), but some authorities believe that this second sense confuses two distinct though closely related phenomena. *See also* [LUMINANCE](#).

brightness constancy *n.* Another name (avoided in careful usage) for [*lightness constancy](#).

brightness contrast *n.* Another name (avoided in careful usage) for [*lightness contrast](#).

brightness enhancement *n.* The greater brightness of a light flickering at about 10 hertz than the same light presented with steady luminance, the phenomenon being explained by the fact that there is more activity in retinal [*ganglion](#) cells stimulated by light flickering below the [*critical flicker frequency](#) than by light flickering above this frequency or by continuous light.

brightness masking *n.* [*Visual masking](#) with a flash of bright light.

bril *n.* A unit of [*brightness](#) in which light of 1 millilambert (see [LAMBERT](#)) is arbitrarily assigned a value of 100 bril.

Briquet's syndrome *n.* Another name for [*somatization disorder](#) or [*somatic symptom disorder](#). [Named after the French psychiatrist Paul

Briquet (1796–1881), who described it in 1859]

British Ability Scales *n.* An **intelligence test*, first published in 1979, designed for use with children and adolescents up to 17 or 18 years of age, comprising a set of 23 subtests designed to measure a wide diversity of mental abilities and yielding three scores: visual IQ, verbal IQ, and general IQ. Its subtests are designed to measure the following six mental processes: speed of information-processing, reasoning, spatial imagery, perceptual matching, short-term memory, and retrieval and application of knowledge. The correlations between the subtests are all moderate or high, and general IQ scores derived from the test correlate well with independent measures of scholastic and academic attainment. *See also* [RASCH SCALE](#). **BAS** *abbrev.*

British Sign Language *n.* A communication system for deaf people in the UK in which meaning is conveyed by hand signals and the positions of the hands relative to the upper part of the body. *See also* [MAKATON](#), [SIGN LANGUAGE](#). *Compare* [AMERICAN SIGN LANGUAGE](#). **BSL** *abbrev.*

broad heritability *See* [HERITABILITY](#).

Broca's aphasia *See* [APHASIA](#).

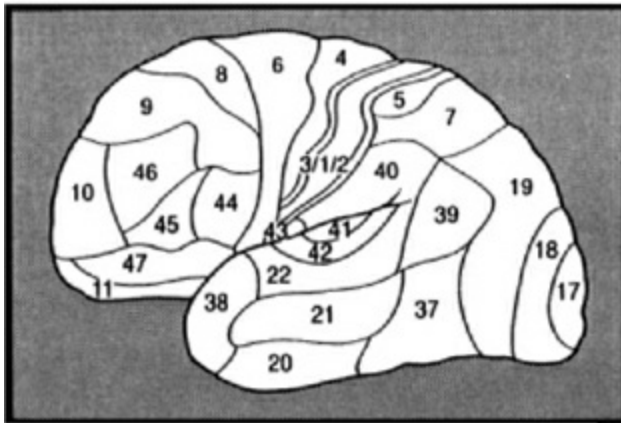
Broca's area *n.* A region of the **cerebral* cortex towards the back of the inferior (lowest) gyrus of the frontal lobe, immediately anterior to the tip of the temporal lobe, usually in the left cerebral hemisphere in both left-handed and right-handed people, involved in the production of spoken and written language. Lesions in this area are associated with Broca's aphasia, also called *expressive aphasia* or *motor aphasia* (*see* [APHASIA](#)). Also called *Broca's centre* or *Broca's speech centre*. *Compare* [WERNICKE'S AREA](#). [Named after the French surgeon and anthropologist Paul Broca (1824–80), who discovered its function in 1861]

Brodmann area *n.* Any of the 47 numbered areas of the **cerebral cortex*, such as Area 17, the primary visual cortex, in the most widely used reference map of the brain (*see* [illustration](#)). It was constructed as a **cytoarchitectonic map* based on differences in cell layers and structures, but the areas turned out in general to correspond to different psychological functions. **BA** *abbrev.*

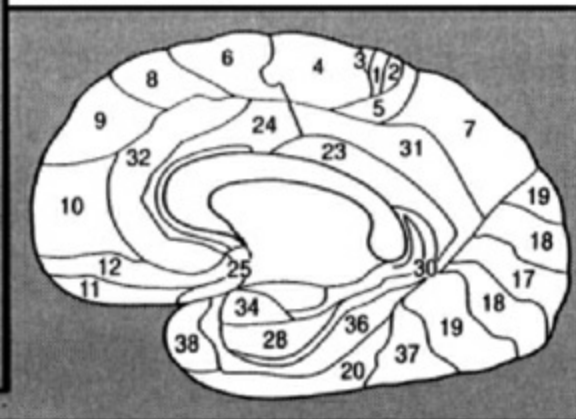
*****ebook converter DEMO Watermarks*****

[Named after the German neurologist Korbinian Brodmann (1868–1918), who developed an early version of it in 1903 and published it in an influential book in 1909]

Lateral surface



Medial surface



Brodman areas

bromocriptine *n.* Bromocriptine mesylate, an **alkaloid* drug derived from **ergot* that mimics the activity of **dopamine* and is used in the treatment of **Parkinson's disease* and is also used to treat certain forms of amenorrhoea and female infertility, because it selectively inhibits the secretion of **prolactin* by the anterior pituitary. Also called *Parlodel* (trademark). See also *ANTIPARKINSONIAN*, *DOPAMINOMIMETIC*. [From Greek *bromos* a bad smell + English *ergocryptine* a type of ergot, from *ergot* + Greek *kryptos* hidden + *-ine* indicating an organic compound]

Bruce effect *n.* The failure of a recently mated female mouse to produce offspring if housed near a strange male, although the presence of her own stud male or a strange castrated male does not have this effect. The destruction of the female's olfactory bulbs eliminates the effect, because it is caused by the presence in the strange male's urine of a **pheromone* that inhibits the female's secretion of prolactin and implantation of the fertilized ovum. Also called *pregnancy blockage*. [Named after the British reproductive biologist Hilda M(argaret) Bruce (1903–74), who first reported it in 1959]

brujería *n.* A name for [*rootwork](#) in Spanish-speaking communities of the Caribbean and the southern United States, where it is also called *mal puesto* . [Spanish *brujería* witchcraft, from *bruja* a witch]

Brunswik faces *n.* Schematic drawings of faces, with simplified representations of eyes, nose, and mouth that can be varied from one face to another, used for research into perceptual discrimination and cognitive categorization. [Named after the Hungarian-born US psychologist Egon Brunswik (1903–55), who introduced them]

Brunswikian *adj.* Of, relating to, or resembling the theory of perception introduced by the Hungarian-born US psychologist Egon Brunswik (1903–55). *See also* [BRUNSWIK FACES](#), [BRUNSWIK RATIO](#), [ECOLOGICAL CRITERION](#), [ECOLOGICAL FALLACY](#), [ECOLOGICAL VALIDITY \(2\)](#), [ECOLOGY \(2\)](#), [LENS MODEL](#), [PROBABILISTIC FUNCTIONALISM](#), [RATIOMORPHIC](#).

Brunswik ratio *n.* An index of [*perceptual constancy](#) given by $(R-S)/(A-S)$, where R is the physical magnitude or intensity of the stimulus chosen as a match, S is the physical magnitude or intensity for a stimulus match with zero constancy, and A is the physical magnitude or intensity that would be chosen under 100 per cent constancy. The ratio is equal to zero when there is no perceptual constancy and 1 when there is perfect constancy. Because sensation increases as the logarithm of physical magnitude or intensity, according to [*Fechner's law](#), a modified version called the [*Thouless ratio](#) was introduced in 1931. *See also* [BRUNSWIKIAN](#). [Named after the Hungarian-born US psychologist Egon Brunswik (1903–55), who introduced it in 1929]

brute force algorithm *n.* A method of [*problem solving](#) in which every possibility is examined and the best one (or a best one) is chosen. It is often implemented by computers, but it cannot be used to solve complex problems such as the [*travelling salesman problem](#) or the game of chess, because the number of alternatives is too large for any computer to handle.

bruxism *n.* The habit of grinding the teeth, either unconsciously while awake or in Stage II [*NREM sleep](#). [From Greek *brychein* to gnash]

BSE *abbrev.* Bovine spongiform encephalopathy, a progressive and ultimately fatal disease that attacks the nervous system of cattle and may infect human beings, causing new-variant **Creutzfeldt–Jakob disease*. It is believed by most authorities to be a **prion disease*, but according to an alternative theory it is an autoimmune disease, similar to **multiple sclerosis*, caused by the immune system's reaction to the bacterium *Acinetobacter*, a common microbe found in water, soil, sewage, and in the skin of cattle and human beings, where it infects open wounds and cuts and mimics the molecular structure of a brain tissue protein, causing the immune system to attack both the bacteria and normal brain tissue. Its non-technical name is *mad cow disease* .

buccal *adj.* Of or relating to the cheek or mouth. [From Latin *bucca* a cheek]

buffer store *n.* A temporary memory store that holds information for short periods, for example the **phonological loop* or the **visuospatial sketchpad* of **working memory*. Also called *blackboard memory* .

bufotenin *n.* A psychoactive drug found in **cohoba* snuff, in the mushroom **Amanita muscaria*, and in the poisonous secretions from the skin glands of toads. It is an **indole* alkaloid and an analogue of **serotonin*, but unlike true serotonin it has **psychedelic* or **hallucinogenic* effects and also functions as an **aphrodisiac*. The metabolism of serotonin into bufotenin instead of 5-hydroxyindoleacetic acid is believed to be of significance in the aetiology of schizophrenia. Also spelt *bufotenine* . *See also* PHANTASTICANT. [From Latin *bufo* a toad + *-ten* origin unknown, perhaps from Latin *tenu* a snare + *-ine* indicating an organic compound]

bulbar *adj.* Of, relating to, or attached to the **medulla* oblongata or the medulla oblongata and the **pons*. [From Greek *bolbos* an onion or garlic bulb, so called because of the bulbous appearance of these structures]

bulimia *n.* 1. Pathologically voracious appetite, including cases caused by a brain lesion. Also called *hyperorexia*, *hyperphagia* , or loosely speaking *polyphagia* .

2. A shortened name for ***bulimia nervosa**. [From Greek *boulimia* bulimia, from *bous* ox + *limos* hunger + *-ia* indicating a condition or quality, indicating the condition of someone who is hungry enough to eat an ox, not (as often stated) one who is as hungry as an ox, the ox being a creature not known for its voracity]

bulimia nervosa *n.* An ***eating disorder** in ***DSM-5** characterized by recurrent episodes of binge eating, often carried out in secret, accompanied by a sense of loss of control, followed by feelings of shame and compensatory behaviour intended to prevent weight gain, such as self-induced vomiting, misuse of laxatives or diuretics, enemas, fasting, or excessive exercise, together with undue emphasis attached to body shape and weight in self-evaluation. *See also* BULIMIA (1, 2), PRO-MIA. *Compare* ANOREXIA NERVOSA, BINGE-EATING DISORDER. **BN** *abbrev.* [From *bulimia* + Latin *nervus* a nerve]

bundle hypothesis *n.* The notion, attacked in ***Gestalt psychology**, that a complex perception is nothing more than the sum of its component elements.

Bunsen–Roscoe law *n.* A basic principle of photochemistry according to which the reaction of any light-sensitive pigment, including a ***visual pigment** in the retina of the eye, is a multiplicative function of the intensity of the light exposure and its duration, the photochemical effect on pigment molecules depending simply on the total number of incident light quanta. It is usually expressed as $I \times t = k$, where I is the physical intensity of the flash, t is its duration, and k is a constant. It is valid up to about 100 milliseconds for ***absolute thresholds** and ***difference thresholds** or just noticeable differences in visual sensations, and is valid over a far wider range of durations for photographic emulsions. Also called *Bloch's law*. [Named after the German chemist Robert Wilhelm Eberhard Bunsen (1811–99) and the English chemist Henry Enfield Roscoe (1833–1915) who formulated it]

buprenorphine *n.* Buprenorphine hydrochloride, an ***opiate** partial ***antagonist** (3) that acts by binding to opiate ***neuroreceptors** in the brain, causing ***analgesia**, ***euphoria**, and other effects. Though much less potent than ***heroin** and other narcotic antagonists, it remains attached to the

*****ebook converter DEMO Watermarks*****

receptors long after it has disappeared from the bloodstream, making it useful in the treatment of **addiction* to heroin and other opiates. At low doses, it enables addicted people to avoid such drugs without experiencing **withdrawal* symptoms. In 2002, the US Food and Drug Administration approved it as a medication for the treatment of drug addiction. Formula: $C_{29}H_{41}NO_4HCl$. Also called *Buprenex* or *Subutex* (trademarks). *See also* *SUBOXONE*. [Named after *morphine*]

Buridan's ass *n.* A problem of decision making typified by a hungry ass standing between two equidistant and equally attractive bales of hay who starves to death because **reason* provides no grounds for choosing one rather than the other. *See also* *APPROACH—APPROACH CONFLICT*. [Named after the French scholastic philosopher Jean Buridan (?1295–1358) to whom the example is attributed]

burnout *n.* An **acute stress disorder* or reaction characterized by exhaustion resulting from overwork, with anxiety, fatigue, insomnia, depression, and impairment in work performance.

burnt odour *n.* One of the six primary odours in **Henning's prism*, and one of the four in the **Crocker–Henderson system*, resembling the odour of tar oil. US *burned odor*.

buspirone *n.* Buspirone hydrochloride, an **anxiolytic* drug that is chemically unrelated to most other anxiolytic drugs in common use (the benzodiazepines) and does not manifest **cross-tolerance* with them. Its pharmacological action is poorly understood but is known to involve **serotonin* receptors. Also called *Buspar* (trademark).

butyrophenone *n.* Any of a small number of **neuroleptic* (1) drugs with **dopamine antagonist* action, especially **haloperidol*, **droperidol*, and **spiroperidol*, used in the treatment of **schizophrenia*, **Huntington's disease*, and **Tourette's disorder*. [From Greek *boutyron* fat, from *bous* ox + *tyros* cheese + English *phene* an old name for benzene, from Greek *phainein* to show, alluding to its use in manufacturing illuminating gas + *-one* indicating a ketone, from Greek *-one* a feminine name suffix]

bystander effect *n.* The reluctance of bystanders to intervene in an emergency, especially when a person appears to be in distress or when a crime is being committed. Scores of experiments have shown that people are much less likely to intervene in an emergency, and are generally slower to respond, when other people are present than when they are alone, and this phenomenon is sometimes called *group inhibition of helping* . It was discovered by the US psychologists Bibb Latané (born 1937) and John M(cConnon) Darley (born 1938), who reported an experiment in the *Journal of Personality and Social Psychology* in 1968 in which people found themselves either alone or in a group in a waiting-room when smoke started billowing through a vent in the wall, quickly filling the room and making breathing difficult. Of the people who were alone when the smoke appeared, 55 per cent reported the fire within 2 minutes of first noticing it, and 75 per cent reported it within 6 minutes; but when groups of three were tested together, in only 12 per cent of cases did any of the three report the fire within 2 minutes, and in only 38 per cent of cases within 6 minutes. Also called the *bystander apathy* effect. See also [DIFFUSION OF RESPONSIBILITY](#).

byte *n.* A measure of [*information \(2\)](#) equivalent to (usually) eight [*bits](#), sufficient to encode a character from a basic set of letters, numbers, and other symbols. Compare [NYBBLE](#). [Named in 1956 by the German computer engineer Werner Buchholz (born 1922) while working for IBM. An arbitrary formation, based on *bit* and *bite*, possibly influenced by *b(inar)y (digi)t e(ight)*]

BZ gas *abbrev.* Benzilic acid gas, an [*atropine](#)-like substance that when inhaled produces incapacitating physical and psychological effects. See also [INCAPACITANT](#). Compare [CN GAS](#), [CS GAS](#), [MACE](#), [PEPPER SPRAY](#), [TEAR GAS](#).



cachexia *n.* General debilitation resulting from any chronic disorder. [From Greek *kakos* bad + *hexis* condition + *-ia* indicating a condition or quality]

cachinnation *n.* Loud, raucous laughter, without appropriate cause, most often found in **hebephrenic schizophrenia*. **cachinnate** *vb.* [From Latin *cachinnare* to laugh loudly + *-ation* indicating a process or condition]

cacogeusia *n.* The **hallucination* or **illusion* of an unpleasant taste in the mouth, often found in people with idiopathic **epilepsy*, people receiving **tranquillizer* therapy, and some people with **delusional disorders*. *Compare* AGEUSIA, DYSGEUSIA, HYPERGEUSIA, HYPOGEUSIA, PARAGEUSIA, TASTE BLINDNESS. [From Greek *kakos* bad + *geusis* taste + *-ia* indicating a condition or quality]

cacography *n.* Bad handwriting or incorrect spelling. *Compare* ORTHOGRAPHY (1). [From Greek *kakos* bad + *graphein* to write]

cacology *n.* Bad or faulty speech or choice of words. [From Greek *kakos* bad + *logos* a word or discourse]

cacophony *n.* Unpleasant, harsh, or discordant sounds, especially disagreeable speech sounds. [From Greek *kakos* bad + *phone* sound]

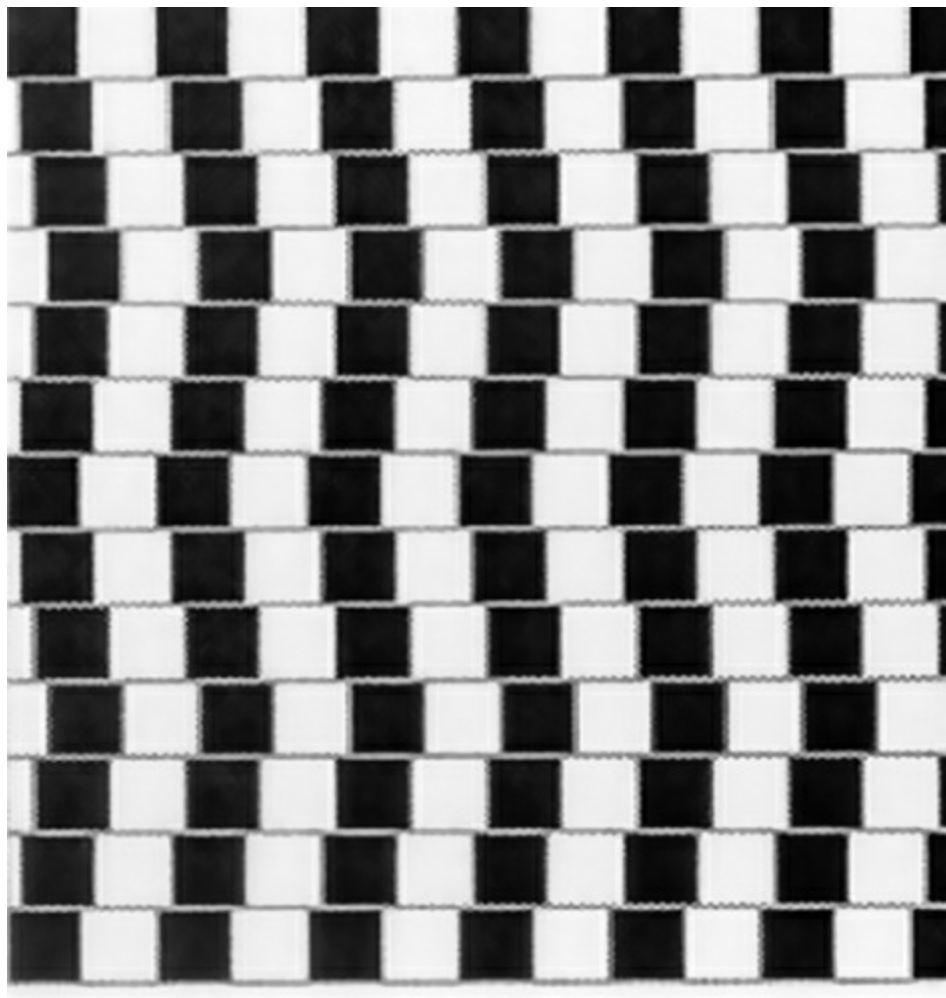
cacosmia *n.* The **hallucination* or **illusion* of an unpleasant smell in the nostrils. Also spelt *kakosmia* . *See also* ANOSMIA, DYSOSMIA, HYPEROSMIA, HYPOSMIA, PAROSMIA, SPECIFIC ANOSMIA. [From Greek *kakos* bad + *osme* a smell + *-ia* indicating a condition or quality]

*****ebook converter DEMO Watermarks*****

cafard *n.* A variant name for ***amok** in Polynesia. Also called *cathard* .
[From French *cafard* a cockroach or hypocrite]

cafeteria feeding *n.* A procedure in which organisms are permitted to choose from a range of different foods. It is used to study their ability to select a balanced diet or to correct for dietary deficiencies.

cafe wall illusion *n.* Another name for the ***Münsterberg illusion**, so called because a cafe in Bristol city, England, is tiled on the outside with the pattern that creates a vivid example of the illusion (see [illustration](#)). *See also* [LAVATORY WALL ILLUSION](#). [Named by the English psychologist Richard L(angton) Gregory (1923–2010) in an editorial in the journal *Perception* in 1972]



Cafe wall illusion. The horizontal lines are all parallel.

*****ebook converter DEMO Watermarks*****

caffeine *n.* The white crystalline ***alkaloid** central nervous system ***stimulant** that is present in coffee, tea, cocoa, cola, chocolate, and many analgesic and tonic medicines and that dilates blood vessels and prevents adenosine from inhibiting glutamate release. It is the most common and the most potent of the three pharmacologically active ***xanthine** derivatives, the others being ***theobromine** and ***theophylline**. Its major psychological effects when taken in moderate dosages include a decrease in fatigue and drowsiness, an increase in speed and efficiency, and a reduction in the number of errors (especially in an overlearned task such as typing); large dosages cause insomnia, tachycardia, diuresis, tremor, and possibly cardiovascular and respiratory failure, and there is evidence of caffeine ***dependence** (2), abrupt discontinuation after repeated and regular moderate or high dosages tending to lead to headaches, drowsiness, depression, and sometimes nausea and vomiting. Formula $C_8H_{10}N_4O_2$. **caffeinated** *adj.* Containing caffeine. **caffeinism** or **caffeism** *n.* Addiction to caffeine, or habitual excessive caffeine ingestion. **decaffeinated** *adj.* With all or most of the caffeine removed. Also spelt *caffein* . *See also* **CAFFEINE-RELATED DISORDERS**. [From German *Kaffee* coffee + *-ine* indicating an organic compound]

caffeine-related disorders *n.* ***Substance-related** and addictive disorders in ***DSM-5** associated specifically with the consumption of ***caffeine**, including caffeine ***intoxication**, caffeine-induced ***anxiety disorder**, and caffeine-induced ***sleep–wake disorder**. DSM-5 distinguishes caffeine intoxication and caffeine withdrawal as separate disorders. *See also* **SUBSTANCE-INDUCED DISORDERS**, **SUBSTANCE-RELATED AND ADDICTIVE DISORDERS**, **SUBSTANCE USE DISORDERS**.

CAGE *abbrev.* A four-item questionnaire constructed in 1970 by the Scottish-born US psychiatrist John A. Ewing (1923–2006) and the US epidemiologist Beatrice A. Rouse (1936–2010) as a quick screening device for ***alcohol dependence**: (1) Have you ever felt you should *Cut* down on your drinking? (2) Have people *Annoyed* you by criticizing your drinking? (3) Have you ever felt *Guilty* about your drinking? (4) Have you ever used a drink as an *Eye-opener* first thing in the morning?

Calabar bean *n.* The dark brown poisonous seed of the tropical African plant *Physostigma venenosum* from which the drug ***physostigmine** is extracted. [Named after Calabar, the Nigerian port that is the capital of the Cross River state where it grows abundantly]

calcarine sulcus *n.* A deep horizontal groove that bisects the inner or ***medial surface** of the ***occipital lobe** of each ***cerebral hemisphere**, running from the ***parieto-occipital sulcus** to the back of the lobe. The ***gyri** on both sides of this sulcus are occupied by the ***primary visual cortex** (Area V1). Also called the *calcarine fissure* . [From Latin *calcar*, *calcaris* a spur, alluding to the wishbone or spur shape formed by both calcarine sulci taken together]

calcitonin *n.* A hormone that is secreted by the ***thyroid gland** and that regulates the level of ***calcium** in the blood and restricts the loss of calcium from the bones of the skeleton resulting from the effects of ***parathyroid hormone**.

calcium *n.* A white–grey metallic element found in sea water, limestone, chalk, marble, and gypsum; an essential constituent of teeth and bones, occurring most often in the form of calcium carbonate, required as an ***electrolyte** for human physiology. *See also* **CALCITONIN**, **CALCIUM CHANNEL**, **CALPAIN**, **PARATHYROID HORMONE**. **Ca** *abbrev.* [From Latin *calx*, *calcis* lime or limestone]

calcium channel *n.* An ***ion channel** across a cell membrane allowing the passage of calcium ions and believed to be implicated in the ***long-term potentiation** of memory traces.

California F scale *n.* Another name for the ***F scale**. **California A–S scale** *See* **A–S SCALE**. **California E scale** *See* **E SCALE**. **California PEC scale** *See* **PEC SCALE**.

California Psychological Inventory *n.* A widely used ***personality** test in the form of a ***self-report** questionnaire containing 434 (originally 480, then 462) yes/no questions (including 12 duplicates), such as ‘I enjoy social

gatherings just to be with people', constructed by the US psychologist Harrison G. Gough (1921–2014) and first published in 1956/57. It is designed to measure the lay concepts that are used in personality description in everyday life, and originally yielded 18 scores: Dominance (Do), Capacity for status (Cs), Sociability (Sy), Social presence (Sp), Self-acceptance (Sa), Sense of well-being (Wb), Responsibility (Re), Socialization (So), Self-control (Sc), Tolerance (To), Good impression (Gi), Community (Cm), Achievement via conformance (Ac), Achievement via independence (Ai), Intellectual efficiency (Ie), Psychological-mindedness (Py), Flexibility (Fx), and Femininity (Fe). In 1987 Independence (In) and Empathy (Em) were added to the scale. **CPI** *abbrev.*

callosal apraxia *n.* Another name for ***left-sided apraxia**. See also **APRAXIA**.

caloric nystagmus *n.* A form of ***nystagmus** resulting from the introduction of warm or cold fluid into the ear, stimulating the ***dynamic** labyrinth and eliciting a rotation of the eyeballs towards the stimulated side if the stimulating fluid is warm, and away from the stimulated side if it is cold. Also called *Bárány nystagmus*. See also **BÁRÁNY TEST**, **VESTIBULO-OCULAR REFLEX**. [From Latin *calor* heat + Greek *nystagmos* nystagmus, from *nystazein* to nap]

caloric test *n.* Another name for the ***Bárány test**.

Calorie *n.* A unit of heat, energy, or food value, equal to 1,000 calories (with lower-case initial *c*, see below). Also (preferably) called a *kilocalorie*, a *large calorie*, or a *kilogram calorie*. **Cal.** or **kcal** *abbrev.* **calorie** *n.* Formerly defined as the heat required to raise the temperature of one gram of water by one degree centigrade, now defined in standard SI units as 4.1868 joules. Also called a *small calorie* or *gram calorie*. **cal.** *abbrev.* There is much confusion, *calorie* often being written when *Calorie* is meant. In psychology, and in writing about food and nutrition, *calorie* usually denotes *kilocalorie*. **caloric** or **calorific** *adj.* [From Latin *calor* heat]

calpain *n.* A protein that is activated by ***calcium** ions found in some synapses and that has been hypothesized to erode the membranes of
*****ebook converter DEMO Watermarks*****

***postsynaptic** neurons, allowing pre-existing ***dendritic** spines to emerge, or bringing hidden receptors to the surface of dendritic spines, thus strengthening certain synaptic connections and providing a physical substrate for ***long-term potentiation** and memory ***consolidation** without requiring any new neural growth, which does not normally occur in the central nervous system. It is synthesized from papain, a proteolytic enzyme present in papaya latex, and is used as a protein digestant and meat tenderizer. [From *cal(cium)* + *(pa)pain*]

calque *n.* A word or phrase borrowed from another language by translating its component parts separately and literally, such as the English word *superman* taken from the German word *Übermensch*, or the English phrase *power politics* taken from the German word *Machtpolitik*. Also called a *loan translation*. [From French *calque* a tracing, from Latin *calcare* to tread, from *calx* a heel]

canalizing selection *n.* A form of ***natural selection** that is relatively insensitive to fluctuations in the environment.

cancellation heuristic *n.* A judgemental and decision-making ***heuristic** that involves discarding the components that are shared by the available alternatives. The Israeli-American psychologists Daniel Kahneman (born 1934) and Amos Tversky (1937–96), who introduced the heuristic in 1979, illustrated it with the following two-stage game. In the first stage, there was a .75 probability of the game terminating without any prize and a .25 probability of moving on to the second stage. Participants who reached the second stage had a choice between (a) 3,000 Israeli pounds with certainty, and (b) a .80 probability of winning 4,000 Israeli pounds, but they had to make their decisions for the second stage before the result of the first stage was known. Most ignored the first stage, which is common to both alternatives, and 80 per cent preferred (a), which they considered a certainty in spite of the chance element in the first stage. But in (a) there is a $.25 \times 1.00 = .25$ probability of winning 3,000 Israeli pounds, and in (b) there is a $.25 \times .80 = .20$ probability of winning 4,000 Israeli pounds, and when the choice was framed in this way, 65 per cent of the research participants chose (b). In fact, the expected payoff is higher in (b). See also **FRAMING EFFECT**.

cancellation method *n.* A technique for measuring the subjective loudness of a ***combination tone** by delivering a real tone, of the same frequency as the combination tone but with exactly opposite phase, called a *cancellation tone*, and increasing its intensity until the combination tone is no longer heard.

cancer-prone behaviour See **TYPE C**. US *cancer-prone behavior*.

candela *n.* A basic unit of ***luminous intensity**, equal to that of a source emitting monochromatic light of frequency 540×10^{12} hertz in a given direction with a radiant intensity in that direction of 1/683 watts per steradian—a stereo radian or solid angle with its vertex at the centre of a sphere cutting off an area of the sphere's surface equal to the square of its radius. See also **BRIL**, **LUMEN**, **LUMINANCE**, **LUMINOUS FLUX**. **cd** *abbrev.* [From Latin *candela* a candle]

candlepower *n.* A unit of luminous intensity, now replaced by the ***candela**.

candy *n.* 1. Confectionary in general. 2. A street name for ***barbiturate** drugs. [From Old French *sucre candi* candied sugar, from Arabic *qandi* candied, from *qand* cane sugar, from Dravidian]

cannabis *n.* The ***psychotropic** drug ***delta-9-tetrahydrocannabinol** (THC) and related substances called *cannabinoids* that are found in the leaves, flowering tops, and young stems of the female common hemp plant *Cannabis sativa*, and whose biochemical action remains largely unknown. The earliest record of its use as a drug is found in a compendium of medicines of the Chinese Emperor Shen Nung dated 2737 BC, and it is now a popular street drug, inducing euphoria, relaxation of inhibitions, and intensification of perceptions, with potential medicinal benefits, alleviating painful muscular spasms in people with multiple sclerosis, reducing the nausea and vomiting accompanying chemotherapy for cancer, and reducing intra-ocular pressure in people with glaucoma. The cut and dried leaves, tops, and stems of the plant, rolled into cigarettes and smoked, are generally called *marijuana*; the dried resinous exudate of the flowering tops of the female hemp plant and the

undersides of its leaves, when smoked with tobacco or added to foods and eaten, is called *hashish* ; and the drink made from an infusion of cannabis is called *bhanga* . The common street names of cannabis include *dope*, *ganja*, *grass*, *joint*, *pot*, *reefer*, *spliff*, and *weed* (see separate entries for specific meanings). See also [ANANDAMIDE](#), [CANNABIS-RELATED DISORDERS](#), [ENDOCANNABINOID](#), [SKUNK](#), [SUBSTANCE ABUSE](#), [SUBSTANCE-RELATED AND ADDICTIVE DISORDERS](#). [From Latin *Cannabis* the biological name of the common hemp genus, perhaps from an expression used in ancient Mesopotamia *kah nah bah* cane with two, denoting a cane-like plant with male and female forms]

cannabis-related disorders *n.* *Substance-related and addictive disorders in *DSM-5 associated specifically with the use of *cannabis. DSM-5 distinguishes cannabis use disorder, cannabis intoxication, and cannabis withdrawal as separate disorders. See also [SUBSTANCE-INDUCED DISORDERS](#), [SUBSTANCE-RELATED AND ADDICTIVE DISORDERS](#), [SUBSTANCE USE DISORDERS](#).

cannibal *n.* A human being who eats the flesh of other human beings, or an animal that eats the flesh of others of its own species (conspecifics). **cannibalism** *n.* The act or practice of eating flesh of one's own species. **cannibalistic** *adj.* [From Spanish *Canibales*, the word used by the Italian-born navigator Christopher Columbus (1451–1506) for the Carib people of Cuba and Haiti]

cannibalistic stage *n.* Another name for the *oral sadistic phase.

Cannon–Bard theory *n.* The proposition that the quality of an emotion is determined by the pattern of stimulation sent from the *thalamus to the *cerebral cortex, and that the bodily expression of emotion is governed by signals from the thalamus to muscles and glands. Also called *Cannon's theory* or the *Bard–Cannon theory* . Compare [JAMES–LANGE THEORY](#). [Named after the US physiologist Walter Bradford Cannon (1871–1945) and the US psychologist Philip Bard (1898–1977) who were the first to suggest it in the 1930s]

canonical correlation *n.* A statistical procedure that seeks to discover and describe the relationship between a set of *predictor variables and a set of *dependent variables. Pairs of linear combinations of the two sets of
*****ebook converter DEMO Watermarks*****

variables are found that are maximally correlated, and the proportion of the total ***variance** in the criterion set that is explained by the predictor set is extracted. Compare **DISCRIMINANT FUNCTION ANALYSIS**, in which there is usually only one dependent variable. [From Greek *kanon* rule, measuring rod, standard, related to *kanna* a reed + *correlation*]

canonical sequence *n.* In genetics, another name for a ***consensus sequence**. [From Latin *canonicus* living under a rule, from *canon* a rule, from Greek *kanon* a rule or measuring rod]

cant *n.* **1.** Insincere or hypocritical speech or the repetition of trite phrases that have lost their original meanings. **2.** The ***argot** of a particular social group, such as thieves, journalists, lawyers, or gypsies. **3.** A rare word for the sing-song, mewling style of speech occasionally used by people pleading for something.

[From Latin *cantare* to sing]

cantharides *n.* A poisonous urogenital irritant and diuretic made from the dried bodies of the blister-beetle *Lytta vesicatoris* belonging to the family Meloidae, and not Cantharidae as often stated, used mainly as a blistering agent or ***aphrodisiac**. Also called *Spanish fly*. **cantharis** *sing.* [From Greek *kantharis* Spanish fly]

capacity *n.* The ability to contain or the amount that can be contained or absorbed. In psychology, it usually refers to latent ***ability** or the capability to learn. [From Latin *capacitas* capacity, from *capax* spacious, from *capere* to take]

Capgras syndrome *n.* A ***delusional misidentification** of familiar people, usually relatives or friends, who are believed to have been replaced by exact doubles or impostors; thus a delusion of underidentification, in contrast to ***Frégoli syndrome**, which involves overidentification. The poet John Cowper was afflicted with Capgras syndrome, believing as he did that his friend, the Reverend John Newton, had been supplanted by an impersonator. Also called *l'illusion de sosies* or the *illusion of doubles*. Compare **DOPPELGÄNGER**, **INTERMETAMORPHOSIS**, **REDUPLICATIVE PARAMNESIA**.

*****ebook converter DEMO Watermarks*****

[Named after the French psychiatrist Jean Marie Joseph Capgras (1873–1950) who, together with the French psychiatrist Jean Marie Joseph Reboul-Lachaux (1894–1935), first described it in 1923]

caprylic odour *n.* One of the primary odours in the ***Crocker–Henderson system**, goat-like or putrid. US *caprylic odor*. [From Latin *caper* a goat, cognate with *Capricorn* the Goat, the tenth sign of the zodiac]

capsaicin *n.* A bitter ***alkaloid** present in capsicums, hot peppers, and chillis that excites peripheral nerve endings of the ***trigeminal nerve** and causes certain neurons to release ***substance P**. *See also* **COMMON CHEMICAL SENSE**. [From Latin *capsa* a box or case + *-in(a)* indicating an organic compound]

carbachol *n.* A synthetic drug that acts as a ***parasympathomimetic** and ***cholinergic** agent but is immune to the inactivating effects of ***acetylcholinesterase**. It is used in the treatment of urinary retention, abdominal distention, and glaucoma. *See also* **CHOLINOMIMETIC**. [From its chemical name *carba(moyl)-chol(ine) (chloride)*]

carbamate *n.* A salt or ester of carbamic acid, used in certain ***psychotropic** medications, including ***glutethimide** (Doriden) and ***meprobamate** (Miltown). [From *carbamic* + *-ate* indicating chemical compound]

carbamazepine *n.* An ***antimanic**, ***anticonvulsant**, and ***analgesic** (2) drug that is often used instead of or in addition to ***lithium carbonate** in the treatment of acute manic episodes, bipolar disorders, neuralgia affecting the trigeminal nerve, and epilepsy. Also called *Tegretol* (trademark). [From its chemical name *carbam(oyl) + -azepine* as in *benzodiazepine*]

carcinogen *n.* Any substance or agent that causes cancer. **carcinogenic** *adj.* [From Greek *karkīnoma* a cancer, from *karkinos* a crab + *genein* to produce]

carcinoma *n.* A type of malignant tumour originating in epithelial tissue;

more loosely, any cancer, but this meaning is avoided in careful usage. [From Greek *karkinoma* a cancer, from *karkinos* a crab + *-oma* indicating a tumour]

cardiac muscle *n.* A specialized type of involuntary striated muscle that is found only in the heart and that is exceptional inasmuch as involuntary muscles are generally smooth. It consists of contractile fibres that resemble those of **skeletal muscles* but are much smaller in diameter. *Compare* SMOOTH MUSCLE, STRIPED MUSCLE. [From Greek *kardia* the heart]

cardiac psychology *n.* Another name for **psychocardiology*.

cardinal humour *See* HUMOUR (3).

cardinal vowels *n.* A set of idealized speech sounds devised by the British phonetician Daniel Jones (1881–1967), usually represented by their location in a *vowel quadrilateral* representing the mouth (*see* VOWEL), used as reference points to classify the vowel sounds of any language. *See also* BACK VOWEL, CENTRAL VOWEL, CLOSE VOWEL, FRONT VOWEL, MID VOWEL, OPEN VOWEL.

caretaker speech *n.* A speech style often used by adults and older children when talking to infants or young children, characterized by shortened sentences, simplified grammar, restricted vocabulary, slow speech with many repetitions, diminutive and reduplicative words, such as *doggy* and *choo-choo*, raised pitch and exaggerated pitch variation, and many utterances ending in questions with a rising tone (*some more?*, *go walkies?*). Also called *child-directed speech*, *motherese* (misleadingly, because it is not restricted to mothers) and *baby talk* (ambiguously, because it is used by adults).

caricature advantage *n.* The enhanced recognizability of caricatured images of familiar faces relative to undistorted or veridical images of the same faces, the distorted images being paradoxically easier to recognize. Like the **differential inversion effect*, it is not confined exclusively to faces but is found also with other classes of stimuli that differ only in configuration provided that the viewers have expert knowledge of the stimuli, as when bird-watchers view images of songbirds.

carnivore *n.* Any animal of the order Carnivora of flesh-eating mammals, including dogs, cats, bears, raccoons, hyenas, civets, and weasels. *Homo sapiens* is not a carnivore but an omnivore. *See also* **PREDATOR**. *Compare* herbivore, omnivore. **carnivorous** *adj.* Flesh-eating. [From Latin *caro*, *carnis* flesh + *vorare* to devour]

carpentered world *n.* The built environment of industrial societies, containing numerous ***artefacts (1)** constructed from straight lines and right angles. The absence of such objects in tribal cultures of sub-Saharan Africa was put forward in 1967 by the South African psychologist William Hudson (born 1914) as an explanation for the apparent inability of tribal Africans to interpret ***linear perspective** in ***pictorial depth** perception and their relative lack of susceptibility to the ***Müller-Lyer illusion** and related visual illusions, this notion being called the *carpentered-world hypothesis*.

carrier (genetic) *n.* In genetics and pathology, an organism that does not itself manifest a particular trait or disease but is capable of passing it on to others.

carrier protein *n.* Any ***protein** in a cell membrane that binds to molecules and transports them across the membrane. *See also* **ACTIVE TRANSPORT**, **IONOPHORE**.

carrying capacity *n.* In ***ecology (1)** and the theory of ***evolution**, the maximum number of individuals that a habitat or area can support indefinitely, the limit usually being determined by the available food supply.

Cartesian *adj.* Of or relating to the writings or doctrines of the French philosopher René Descartes (1596–1650). *See* **A PRIORI**, **CARTESIAN DUALISM**, **MIND–BODY PROBLEM**, **RATIONALISM (1)**.

Cartesian dualism *n.* An approach to the ***mind–body problem** introduced by the French philosopher René Descartes (1596–1650), who believed that mental experiences are functions of the soul and, because the soul is immaterial, that they cannot be located in any particular organ of the body, but that the soul and the body influence each other, and that the seat of

soul–body interaction is the ***pineal gland**. Descartes' reasons for choosing the pineal gland were that it is close to the centre of the head, that it was believed at the time to be found only in human beings—and that human beings are the only creatures with rational souls—and that the pineal gland is the only part of the main structure of the brain that is not divided into two halves and that therefore seemed to Descartes to be the only organ capable of integrating the images from the two eyes into a single percept. He believed that the pineal gland operates like a valve, controlling the flow of 'vital spirits' through the body, enabling the soul and body to influence each other. Descartes appears to have been oblivious to the philosophical problem underlying this conception until it was pointed out to him in 1643 by Princess Elizabeth of Bohemia (1596–1662), the daughter of King James I of England and VI of Scotland, in a letter that has survived.

cascade processing *n.* The implementation of later stages of ***information** processing before the completion of earlier stages. For example, in retrieving the meaning of a printed word, a person may have to identify all the letters and match the word against an internal ***lexicon** (2) in order to extract its meaning. According to ***discrete processing** models, information is not passed on to the next stage until processing at the current stage is complete, but in a cascade processing model a word may, for example, be matched against items in the lexicon, by way of hypotheses or guesses, before all the letters have been identified, and conjectures about meaning may be made before a complete lexical match has been established. The concept was introduced in 1979 by the US cognitive scientist James L(oyd) McClelland (born 1948) and has been influential in ***connectionist models** of information processing. *See also* **PARALLEL PROCESSING**, **SERIAL PROCESSING**.

case grammar *n.* A form of ***generative grammar** introduced in the late 1960s by the US linguist Charles J. Fillmore (1929–2014) in which linguistic elements are categorized according to their ***semantic** roles. In the theory, the ***deep-structure** cases of noun phrases do not correspond to the ***surface structure** or the ***syntax**. The cases originally suggested were *agentive* (a person or entity causing a verb's action to be performed), *instrumental* (an inanimate entity causally involved in a verb's action), *dative* (a person or animal affected indirectly by a verb's action), *factitive* (an entity resulting from a verb's action), *locative* (the location of a verb's action), and *objective*

(an entity affected directly by a transitive verb's action). Later, further cases were suggested: *source* (the place from which something moves), *goal* (the place to which something moves), *counter-agent* (the force of resistance against which a verb's action is performed), *experiencer* (a person or thing affected by a verb's action, replacing dative), and *result* (an entity or state resulting from a verb's action, replacing factitive). For example, in the sentence *The child opened the door with a key*, the noun phrase *the child* is agentive, *the door* is objective, and *a key* is instrumental. Case grammar has been incorporated in some [*artificial intelligence](#) programs designed to accept [*natural language](#) input.

case study *n.* A research method involving a detailed investigation of a single individual or a single organized group, used extensively in clinical psychology and also, though less often, in other branches of the discipline. In case studies of organized groups, [*participant observation](#) is often used. Also called a *single-case design*.

castrate *vb.* To emasculate or remove the testicles from; or, figuratively, to deprive of power. **castration** *n.* The act or process of castrating. **castrato** *n.* A male singer castrated before puberty to preserve his unbroken soprano or alto voice, especially in the 17th and 18th centuries (**castrati** *pl.*). [From Latin *castrare* to emasculate or geld]

castration complex *n.* In [*psychoanalysis](#), a [*complex](#) (2), closely linked with the [*Oedipus complex](#), focusing on fantasies of one's penis being cut off, evoked in a child by the discovery of the anatomical difference between the sexes. In a boy, it induces anxiety about being castrated and initiates the [*latency period](#); in a girl, it is experienced as a loss that she has suffered and initiates a desire for the paternal penis and attempts to deny or compensate for the loss. Sigmund Freud (1856–1939) introduced the concept in 1908 in an article 'On the Sexual Theories of Children' (*Standard Edition*, IX, pp. 209–26, at pp. 215–17) and developed it further in his famous case of [*Little Hans](#), 'Analysis of a Phobia in a Five-Year-Old Boy', first published in 1909 (*Standard Edition*, X, pp. 5–149). See also [PHALLIC STAGE](#).

catabolism *n.* A destructive form of [*metabolism](#) in which complex molecules are broken down into simpler ones with the release of energy.

*****ebook converter DEMO Watermarks*****

Compare [ANABOLISM](#). **catabolic** *adj.* **catabolite** *n.* Any substance produced by catabolism. [From Greek *kataballein* to throw down, from *kata* down + *ballein* to throw]

catachresis *n.* Any misuse or wrong application of a word, often by assuming its meaning to be that of a word with a similar sound, as in the utterance *I suffer from prostrate trouble*, seeming to imply that I can't get up from a lying position, when *prostate* is meant. Compare [MALAPROPISM](#). [From Greek *katachresis* a misuse, from *kata* down + *chresthai* to use]

catalepsy *n.* A state of myotonia in which a person's muscles are partly rigid, sometimes manifested in [*hypnosis](#), in people with [*catatonia](#), and in people with certain forms of brain damage, notably [*cerebellar](#) lesions. People in such a state tend to leave their arms, legs, or bodies in whatever positions they are placed by another person. Sometimes confused with [*cataplexy](#) (1). Also called *cerea flexibilitas*. See also [MYOTONIA](#), [TONUS](#). Compare clasp-knife rigidity, cogwheel rigidity. **cataleptic** *adj.* [From Greek *kata* down + *lepsis* a seizure, from *lambanein* to seize]

catalexia *n.* A form of [*dyslexia](#) in which the same word or phrase is read repeatedly. [From Greek *kata* down + *lexis* a word + *-ia* indicating a condition or quality]

catamnesis *n.* The follow-up medical history of a patient or client after recovery from a disorder. Compare [ANAMNESIS](#) (2). **catamneses** *pl.* **catamnestic** *adj.* [From Greek *kata* back + *mnesis* memory]

cataphora *n.* In speaking or writing, the use of a pronoun or other word to refer forward to something mentioned later in a sentence or linguistic expression. In the sentence *When I was questioned, this is what I told the police: I heard a loud argument at about midnight*, the word *this* exemplifies cataphora, because it refers forward to *I heard a loud argument at about midnight*. See also [DEIXIS](#). Compare [ANAPHORA](#). **cataphoric** *adj.* [From Greek *kata* down + *pherein* to carry]

cataplexy *n.* 1. A sudden loss of muscle [*tonus](#), without loss of [*consciousness](#), leading to collapse, immobility, and a state closely
*****ebook converter DEMO Watermarks*****

resembling ***REM sleep** without loss of consciousness, induced by laughter or strong emotions such as fear, anger, or surprise, sometimes confused with ***catalepsy**. A propensity for cataplexy is genetic in origin, and strains of cataplexic dogs have been bred. *Compare* **NARCOLEPSY**. **2.** A death-like state of immobility adopted by some animals to deter predators. **cataplectic** or **cataplexic** *adj.*

[From Greek *kata* down + *plessein* to strike]

cataract *n.* A waterfall or downpour, hence figuratively a partial or total opacity of the ***crystalline lens** of the eye leading to ***blindness**, characterized by a greyish white appearance of the lens visible through the pupil, usually caused by degenerative changes after 45 years of age, treated by excision of the lens and the prescription of spectacles or contact lenses. *See also* **APHAKIA**, **CORNEA**. [From Latin *cataracta* a waterfall, from Greek *katarrhaktes* a waterfall]

catastrophe theory *n.* A mathematical theory, developed by the French mathematician René Frédéric Thom (1923–2002) and first published in 1972, devoted to the classification of surfaces according to their shape. Aspects of the theory that describe abrupt changes occurring when gradually changing variables reach critical points, as when the locus of a point moving along the topmost fold of a smoothly folded surface suddenly drops to the surface below, have been used to model psychological phenomena such as gradually increasing anger abruptly erupting into a temper tantrum.

catastrophism *n.* **1.** A theory that gradual processes of ***evolution** have been modified by the effects of great natural cataclysms. Also (preferably) called *neocatastrophism* to distinguish it from sense 2. **2.** An obsolete theory of biological and geological development, widely accepted in the 18th and 19th centuries, according to which the fossil record represents a series of sudden abrupt changes brought about by divine creations and extinctions rather than gradual evolutionary processes.

[From Greek *katastrephein* to overturn, from *kata* down + *strephein* to turn + *-ismos* indicating a state or condition]

catathymia *n.* A state in which mental processes are under the control of the emotions. **catathymic** *adj.* [From Greek *kata* according to + *thymos* spirit or temper + *-ia* indicating a condition or quality]

catathymic amnesia *n.* Another name for **episodic amnesia*.

catatonia *n.* A **mental disorder* in **DSM-5* characterized by marked abnormality of muscle **tonus* or behaviour including motor immobility, excessive and apparently purposeless motor activity, **catalepsy* or cerea flexibilitas, extreme **negativism (1)* or **mutism*, posturing or stereotyped movements, **echolalia*, or **echopraxia*. See CATATONIC DISORDER DUE TO ANOTHER MEDICAL CONDITION, SCHIZOPHRENIA SPECTRUM AND OTHER PSYCHOTIC DISORDERS. **catatonic** *adj.* [From Greek *kata* down + *tonos* tension, from *teinein* to stretch + *-ia* indicating a condition or quality]

catatonic disorder due to another medical condition *n.* A form of **catatonia* arising as a secondary or symptomatic effect of a **general medical condition*, characterized by catatonic signs such as motor immobility, excessive and purposeless motor activity, **catalepsy* or cerea flexibilitas, extreme **negativism (1)* or **mutism*, peculiarities of voluntary movement, **echolalia*, or **echopraxia*.

catatonic schizophrenia *n.* One of the major types of **schizophrenia*, the essential feature of which is pronounced **psychomotor* disturbance, manifested as physical immobility evidenced by **catalepsy* or cerea flexibilitas, **stupor*, excessive (apparently purposeless) motor activity or peculiarities of voluntary movement, **negativism (1)*, **mutism*, and **echolalia*, or **echopraxia*.

catch trial *n.* In a series of trials used to determine an **absolute threshold* in **psychophysics*, a trial in which no stimulus is presented, usually included a number of times to estimate the individual's baseline tendency to give positive responses. See also SIGNAL DETECTION THEORY.

catecholamine *n.* A group of **biogenic amines* that are derivatives of catechol (2-hydroxyphenol) and that also contain an **amine* group, including

the **neurotransmitters* **adrenalin* (epinephrine), **noradrenalin* (norepinephrine), and **dopamine*. **CA** *abbrev.* [From *catechol* a substance found in resins and lignins, named after the *Acacia catechu* tree + English *amine*]

catechol-o-methyl-transferase *n.* An **enzyme* that metabolizes free **catecholamines* in the space between and around synapses. *Compare* MONOAMINE OXIDASE (MOA). **COMT** *abbrev.*

Catego *n.* Computer software for processing **SCAN* data according to categories of **signs* (1) and **symptoms*, introduced by the English psychiatrist John Kenneth Wing (1923–2010) and several co-authors in their book *The Description and Classification of Psychiatric Symptoms* (1974). [From *catego(ries)*]

categorical attitude *n.* Another name for **abstract attitude*.

categorical imperative *n.* A principle of morality first formulated in 1785 by the German idealist philosopher Immanuel Kant (1724–1804) in *Grundlegung zur Metaphysik der Sitten* (Foundations of the Metaphysics of Morals). His first formulation, most often quoted is: ‘Act only on such a maxim that you can at the same time will to become a universal law’ (*Immanuel Kants Werke*, Volume IV, p. 52). According to Kant, a *maxim* is a personal rule of conduct, and it is a hypothetical imperative if it takes the form ‘If you want *X*, then do *Y*’, assuming that *Y* is the only or the best means of obtaining *X* and the reason for doing *Y* is actually contingent on your desire for *X*. A maxim is a categorical imperative if it takes the form ‘Always do *Y*’, where the reason for doing *Y* is not contingent on any desire in the sense of being your means of obtaining some end that you desire. A categorical imperative is intended not only to be rational, but also to serve as a fundamental principle of morality. Only certain maxims can be categorical imperatives. Kant’s clearest example of one that cannot is: ‘Always borrow money when in need and promise to pay it back without any intention of keeping the promise’ (p. 54). One cannot rationally will this maxim to be a universal law, because it cannot be universalized without generating a contradiction. If everybody habitually broke promises, then there could be no promises; nobody would believe them, because a promise needs a promisee

*****ebook converter DEMO Watermarks*****

as well as a promiser, and there would be no promisees.

categorical perception *n.* Perception of stimuli as belonging to two or more distinct classes when in physical terms they vary along a **continuum*, as when light varying in wavelength within the **visible spectrum* is perceived as four (or sometimes five, six, or seven) qualitatively different colours, in contrast to musical tones varying in wavelength within the **audibility range*, which are heard by most listeners as points on a continuum. The perception of **phonemes* tends to be categorical, so that if voicing is gradually added to the unvoiced initial consonant in the word *tie*, the listener hears no significant change until a critical point at which the word abruptly changes to *die*. See also *METATHETIC STIMULUS DIMENSION*, *TYPE FALLACY*.

categorical syllogism *n.* A conventional **syllogism* of the type introduced by the Greek philosopher Aristotle (384–322 BC), and used by almost all his successors, in which the **propositions (1)* are expressed in terms of category membership, using the four standard categorical proposition forms *All S are P*, *No S are P*, *Some S are P*, and *Some S are not P*. Examples of propositions that might be used in a categorical syllogism are *All men are mortal*, *No wombats play tennis*, *Some thunderstorms are thrilling*, and *Some swans are not white*. A categorical syllogism cannot express a logical argument containing non-categorical propositions such as *Elizabeth is the mother of Charles*. See also *MODAL LOGIC*.

categorical variable *n.* In statistics, any **discrete variable* that has a limited number of distinct values, such as gender—which has two values, namely male and female. Compare *CONTINUOUS VARIABLE*.

category mistake *n.* A statement about something that belongs to one category but is intelligible only of something belonging to another category, as when the mind is referred to as if it were a physical entity. The concept was introduced by the English philosopher Gilbert Ryle (1900–76) on page 17 of his book *The Concept of Mind* (1949), where he used the example of someone who can see a university library, lecture halls, and other university buildings but wonders where the university is. Ryle described **Cartesian dualism* as the dogma of ‘the ghost in the machine’.

*****ebook converter DEMO Watermarks*****

catharsis *n.* A word used by the Greek philosopher Aristotle (384–322 BC) to denote the purging of emotions that results from watching a staged performance of a tragedy. The key passage is as follows: ‘A tragedy, then, is the imitation of an action that is serious and also, as having magnitude, complete in itself; in language with pleasurable accessories, each kind brought in separately in the parts of the work; in a dramatic, not in a narrative form; with incidents arousing pity and fear, wherewith to accomplish its catharsis of such emotions’ (*Poetics*, Chapter 6, Bekker edition, p. 1449b). Aristotle may well have returned to this topic in the lost Book 2 of this work. In ***psychoanalysis**, catharsis is the bringing to consciousness of repressed ideas, accompanied by the expression of emotions, thereby relieving tension. The Austrian physician Josef Breuer (1842–1925) first investigated it in the context of therapy in his case of ***Anna O**, after which he and Sigmund Freud (1856–1939) imported the concept into psychoanalysis in 1895 in *Studies on Hysteria* (*Standard Edition*, II, pp. 21–47), and it became a therapeutic technique designed to produce ***abreaction**. It was at first closely associated with ***hypnosis**, but Freud soon began to use ***free association** as a basic therapeutic procedure instead of hypnosis, and as a consequence catharsis receded into the background. The term has been used loosely in psychology to denote the supposed reduction of aggressive urges resulting from exposure to violence enacted in television programmes, films, or computer games. **cathartic** *adj.* [From Greek *katharsis* purgation, from *kathairein* to purge or purify]

cathexis *n.* In ***psychoanalysis**, the emotional charge associated with an ***instinct** (3), or the process of investing psychic energy in a part of the body or an ***instinctual object**. The Austrian physician Josef Breuer (1842–1925) and Sigmund Freud (1856–1939) introduced the concept in 1895 in their book *Studies on Hysteria* (*Standard Edition*, II). The original German word used by Breuer and Freud was *Besetzung*, an everyday word meaning occupation; the word *cathexis* was coined in 1922 by Freud’s translator James Strachey (1887–1967), who revealed that Freud considered it too technical (*Standard Edition* III, p. 63, note 2). A word more in harmony with the German is *investment*. See also **ECONOMIC**, **HYPERCATHEXIS**. Compare **COUNTERCATHEXIS**, **DECATHEXIS**. **cathect** *vb.* To load with psychic energy through cathexis. [From Greek *kathexis* occupation, from *kathechein* to hold fast]

cation *n.* A positively charged ***ion** such as an ion of sodium, potassium, or calcium. *Compare* **ANION**. [From Greek *kata* down + *ion* going, from *ienai* to go]

cation channel *n.* An ***ion channel** across a cell membrane permitting the transport of ***cations** across it. *See also* **SODIUM CHANNEL**. *Compare* **ANION CHANNEL**.

catnip *n.* A herb belonging to the family Lamiaceae (the mint family), the smell of which has the effect on cats of a euphoriant and intoxicant. Its main active ingredient is ***nepetalactone**, whose structure resembles a ***sex pheromone** in the urine of female cats and happens to fit the ***neuroreceptors** for this pheromone in the cat's ***vomeronasal organ**. In the presence of catnip, most cats roll around in it, paw it, lick and chew it, purr, and meow for several minutes. The response is genetically determined, approximately a quarter of cats being unaffected. When consumed by humans, usually in the form of an infusion, it can occasionally produce mild sedative effects. Also called *catmint* or *catnep*. [From Latin *Nepeta cataria*, its botanical name]

Cattell Culture-Fair Test *n.* An ***intelligence** test designed specifically to avoid the ***test bias** assumed to affect scores on more conventional tests, such as the ***Wechsler scales** and the ***Stanford–Binet test**, by excluding items requiring linguistic skills and general knowledge. *See also* **CULTURE-FAIR**. *Compare* **RAVEN'S PROGRESSIVE MATRICES**. **CCFT** *abbrev.* [Named after the English-born US psychologist Raymond B(ernard) Cattell (1905–98) who first published it in the *Journal of Educational Psychology* in 1940, describing it as 'culture-free']

Cattell 16-PF *See* **16PF**.

caudal *adj.* Towards the tail or the ***posterior** part of the body, organ, or part or, in the human brain, towards the brainstem. *Compare* **ROSTRAL**. [From Latin *cauda* a tail]

caudate *adj.* Having a tail or a tail-like appendage. [From Latin *cauda* a tail]

caudate nucleus *n.* One of the ***basal ganglia** in the ***corpus striatum**: a crescent-shaped mass of grey matter in each cerebral hemisphere, near the thalamus, concerned with inhibitory control of movement. *See also* **ATTENTION-DEFICIT/HYPERACTIVITY DISORDER**. [From Latin *cauda* a tail, alluding to its shape]

caudatolenticular *adj.* Of or belonging to the ***caudate nucleus** and ***lenticular nucleus** of the basal ganglia in the brain.

causal *adj.* Of, relating to, or acting as something that brings about a particular result. [From Latin *causalis* causal, from *causa* a cause]

causal effect *n.* A change in a ***dependent variable** brought about directly by an ***independent variable**.

causalgia *n.* A condition in which burning pain is experienced along the course of a peripheral nerve without the application of heat. Also called *thermalgia* . [From Greek *kausos* fever + *algos* pain + *-ia* indicating a condition or quality]

causal inference *n.* A conclusion based on evidence and reasoning that an event or process brought about a certain consequence.

causal schema *n.* A concept introduced in 1958 by the Austrian-born US psychologist Fritz Heider (1896–1988) to denote a conceptual organization of a sequence of events in which some are identified as causes and others as effects. The concept was elaborated in 1977 by the Israeli-American psychologists Amos Tversky (1937–96) and Daniel Kahneman (born 1934), whose conceptual schemas include causal data (perceived as causes of the events of interest), diagnostic data (perceived as consequences of the events of interest), and also incidental data (perceived as neither causes nor consequences of the events of interest). *See also* **ATTRIBUTION THEORY**, **COVARIATION PRINCIPLE**, **KELLEY’S CUBE**, **SCHEMA**.

causal texture *n.* A term introduced in 1935 by the US psychologist Edward C(hace) Tolman (1886–1959) and the Hungarian-born US

psychologist Egon Brunswik (1903–55) to denote the regular pattern of dependency of events in the environment on one another.

causal variable *n.* An **independent variable* that produces a **causal effect*.

cautious shift *See* RISKY SHIFT.

CCC trigram *abbrev.* Another name for a **consonant trigram*. [An acronym of *c(onsonant) c(onsonant) c(onsonant)*]

ceiling effect *n.* In statistics and measurement theory, an artificial upper limit on the value that a **variable* can attain, causing the distribution of scores to be skewed. For example, the distribution of scores on an ability test will be skewed by a ceiling effect if the test is much too easy for many of the respondents and many of them obtain perfect scores. *Compare* FLOOR EFFECT.

celestial illusion *n.* Another name for the **moon illusion*, especially when referring to other heavenly bodies apart from the moon. [From Medieval Latin *celestialis*, of or relating to the heavens, from *caelum* heaven]

cell *n.* The smallest independently functioning unit of an **organism*, consisting of a **nucleus* (1) containing genetic information, surrounded by a **cytoplasm* containing various organelles including **mitochondria*, **ribosomes*, and **lysosomes*, bounded by a **cell membrane*. *See also* EUKARYOTE, PROKARYOTE. **cellular** *adj.* [From Latin *cella* a room, from *celare* to hide]

cell assembly *n.* A collection of neurons that have become functionally interrelated, through repeated excitation, into a circuit capable of responding as a unit, providing a neural basis for perception, learning, and other mental activities, according to a hypothesis of the Canadian psychologist Donald O(lding) Hebb (1904–85). *See also* HEBB SYNAPSE, PHASE SEQUENCE, REVERBERATING CIRCUIT.

cell body *n.* The central part of a neuron or other cell containing the

***nucleus (1)** and other structures that keep the cell alive, as distinct from a cell ***process (2)**. Also called a *soma* (1).

cell division *n.* The process whereby a cell splits into two new cells by ***fission (2)** in bacteria and other prokaryotes and by ***mitosis** or ***meiosis (1)** during growth or reproduction, respectively, in other organisms.

cell membrane *n.* A double layer of ***amphipathic *lipid** molecules (a lipid bilayer), plus various protein molecules, punctured by tiny pores approximately 60 nanometres (billionths of a metre) in diameter, forming a ***semipermeable membrane** that segregates the fluid inside a cell from the fluid outside it and maintains the structural integrity of the cell. Molecules smaller than the pores can cross the membrane by passive diffusion; larger molecules that are lipid soluble can dissolve in the membrane and cross it by diffusion; and larger molecules that are not lipid soluble can cross the membrane only by ***active transport**. Also called a *plasma membrane*. See also **OSMOSIS**, **SODIUM PUMP**. [From Latin *membrana* a thin skin]

cellular automaton *n.* A mathematical ***model** of self-replication and destruction, usually represented by a checkerboard of either fixed or infinite dimensions, each cell of which has a finite number of states, usually including a quiescent or empty state, and a finite set of neighbouring cells that can influence its state, the pattern of changes being determined by transition rules that apply simultaneously to all cells in each discrete time unit. The concept was introduced in the early 1950s by the Hungarian-born US mathematician John von Neumann (1903–57), whose cellular automata incorporated universal ***Turing machines** and whose articles on the subject were published posthumously under the title *Theory of Self-Replicating Automata* (1966). See also **MICROTUBULE**. **cellular automata** *pl.* [From Greek *automatos* spontaneous or self-moving, from *autos* self]

censored variable *n.* In statistics, any ***variable** showing a ***floor effect** or a ***ceiling effect** owing to the fact that observations could not be made beyond the most extreme value.

censorship *n.* The policy or practice of examining publications, television programmes, or other forms of communication with a view to suppressing or

*****ebook converter DEMO Watermarks*****

altering those that are considered unacceptable or offensive. In ***psychoanalysis**, the suppression of unconscious wishes and their modification before entering consciousness. Sigmund Freud (1856–1939) first used the term in its psychoanalytic sense in a letter to Fliess in 1897 (*Standard Edition*, I, p. 273), and he developed the concept further in his book *Interpretation of Dreams* (1900, *Standard Edition*, IV–V), where he used it to explain the distortion of meaning in dreams. According to Freud, the *first censorship* operates between the ***unconscious** (2) and the ***preconscious**, and the *second censorship* between the preconscious and ***consciousness**: ‘To every transition from one system to that immediately above it (that is, every advance to a higher stage of psychical organization) there corresponds a new censorship’ (p. 192). *See also* **FREE ASSOCIATION**.

centile *n.* Another name for a ***percentile**.

centipede effect *n.* A term occasionally used to denote ***hyper-reflection**. It alludes to the following poem, usually attributed to Anonymous but in fact published in 1871 by the English poet Katherine (Margaret) Craster *née* Broadwood (1841–74): ‘The Centipede was happy quite, / Until a Toad in fun / Said, “Pray, which leg goes after which?” / And worked her mind to such a pitch, / She lay distracted in a ditch / Considering how to run.’ *See also* **HUMPHREY’S LAW**.

central alveolar hypoventilation syndrome *n.* A ***breathing-related** ***sleep–wake disorder** in DSM-IV. *See* **CENTRAL SLEEP APNOEA**. [From Latin *alveolus* a small depression, referring to the terminal air cavities in the lungs + Greek *hypo* under + Latin *ventilare* to ventilate, from *ventus* a wind]

central auditory processing disorder *n.* An impairment in the interpretation of sound stimuli in the absence of any peripheral hearing loss, usually caused by a lesion in the ***brainstem** or ***auditory** cortex, usually resulting in reading or learning difficulties in children with this disorder. Also called *central deafness* or *cortical deafness* . **CAPD** *abbrev.*

central canal *n.* A narrow duct filled with ***cerebrospinal fluid** running through the length of the ***spinal cord**. *See also* **LUMEN** (2).

central deafness *n.* Another name for **central auditory processing disorder*.

central dogma *n.* In genetics, the principle according to which genetic information is transferred from DNA to the proteins that it encodes, and not from protein to DNA, therefore implying that although genes can influence the form of an organism's body or its behaviour, the form of the organism's body or its behaviour cannot influence its genes. In a stronger formulation of the dogma, information supposedly flows unidirectionally from DNA to RNA and from RNA to proteins, but that version had to be abandoned with the discovery of **retroviruses*. See also *WEISMANNISM*.

central dyslexias *n.* A general term for forms of **dyslexia* that are thought to depend on cognitive processing operations occurring in the central nervous system after the words have been visually analysed. One major subtype of central dyslexias is **surface dyslexia*; another is **deep dyslexia*.

central executive *n.* A part of **working memory* containing both a short-term memory store and an executive processor that operates on and briefly stores information and plays an important part in language comprehension. It is aided by two **buffer stores*, a **phonological loop* and a **visuospatial sketchpad*.

central fissure *n.* Another name for the **central sulcus*. [From Latin *fissus* split, from *findere* to split]

central grey matter *n.* Another name for the **periaqueductal grey matter*. US *central gray matter*.

centralized communication network *n.* A **communication network* in which one group member has access to more communication channels than any other and therefore tends to process more **information* (2) than the peripheral group members. Compare *DECENTRALIZED COMMUNICATION NETWORK*.

central limit theorem *n.* In statistics, a theorem showing (roughly)

that the sum of any sufficiently large number of unrelated variables tends to be distributed according to the ***normal distribution**, irrespective of how the individual variables are distributed, except in certain special cases. It explains why psychological and biological variables that are due to the additive effects of numerous independently acting causes are often distributed approximately normally. The earliest version of it was proved in 1818 by the French mathematician Pierre Simon Marquis de Laplace (1749–1827).

central masking *n.* A form of ***auditory** masking in which the test stimulus is presented to one ear and the masking stimulus to the other, the masking being interpreted as central because it cannot be ascribed to any peripheral process occurring in the ear but must arise centrally at or beyond the point where information from the two ears is combined. Also, an analogous form of ***visual masking** usually called ***dichoptic masking** that leads to similar conclusions. *Compare* **BINAURAL BEAT**.

central nervous system *n.* The part of the ***nervous** system that in humans and other vertebrates comprises the ***brain** and ***spinal cord**. *Compare* **PERIPHERAL NERVOUS SYSTEM**. **CNS** *abbrev.*

central nystagmus *n.* A form of ***nystagmus** resulting from damage to a ***vestibular nerve** or one of its nuclei.

central processing unit *n.* The part of a computer that executes programs. Also called a *central processor* . **CPU** *abbrev.*

central processor *n.* 1. Another name for a ***central processing unit**. 2. In ***cognition**, a ***hypothetical construct** analogous to the ***central processing unit** of a computer that receives information, allocates resources to subsystems, takes decisions, and controls voluntary behaviour. *See also* **FILTER THEORY**.

central reaction time *n.* According to an analysis introduced in 1868 by the Dutch ophthalmologist Franciscus Cornelius Donders (1818–89), the fraction of ***reaction time** that remains after subtracting the time taken up by the passage of a nerve impulse from the ***sensory** receptor to the brain and for another nerve impulse from the brain to the muscle. *Compare* **PHYSIOLOGICAL**

*****ebook converter DEMO Watermarks*****

TIME. Also called *abbreviated reaction time* or *reduced reaction time* .

central sleep apnoea *n.* A **breathing-related sleep disorder* in **DSM-5* involving **sleep apnoea*, occurring usually in elderly people, in which the episodes of breathing cessation during sleep are not associated with any obstruction to the upper airway or loud snoring but arise from cardiac or neurological disorders. US *central sleep apnea* . See *OBSTRUCTIVE SLEEP APNOEA HYPOPNOEA*. See also *ONDINE'S CURSE*.

central sulcus *n.* The deep vertical cleft in each of the two cerebral hemispheres separating the **frontal lobe* from the **parietal lobe*. Also called the *central fissure* , the *fissure of Rolando* , or the *Rolandic fissure* . [From Latin *sulcus* a furrow]

central tendency *n.* In descriptive statistics, the middle or typical value of any **probability distribution* or set of scores, usually measured by the **arithmetic mean*, **median*, or **mode*.

central trait See *TRAIT CENTRALITY*.

central vision *n.* Vision that results from stimuli in the centre of the field of vision, the images of which fall on the **macula lutea* of the retina. See also *AMBIENT SYSTEM*, *ARAGO PHENOMENON*. Compare *PERIPHERAL VISION*.

central vowel *n.* A **vowel* (see the diagram accompanying that entry) produced in the middle of the mouth with the central part of the tongue raised, such as the vowel in *girl* or the initial vowel in *alone*, which is phonetically the same as the vowel in *the* and is called a schwa. Compare *BACK VOWEL*, *FRONT VOWEL*.

centration *n.* A term introduced by the Swiss psychologist Jean Piaget (1896–1980) to refer to the tendency of young children to focus attention on only one salient aspect of an object, situation, or problem at a time, to the exclusion of other potentially relevant aspects. A classic example is provided by an experiment first described by Piaget in 1941 in *The Child's Conception of Number* in which a child watches while a number of objects are set out in a

row and then moved closer together, and the child is asked whether there are now more objects, fewer objects, or the same number of objects. Most children in the **pre-operational stage* of development focus on the relative lengths of the rows without taking into account their relative densities or the fact that nothing has been added or taken away, and conclude that there are fewer objects than before. The process of cognitive development by which a child develops from centration to a more objective way of perceiving the world is called *decentration* , *decentring* , or *decentering* . See also CONSERVATION.

centre-surround receptive field *n.* A type of **receptive field* characteristic of retinal **ganglion cells* and **bipolar cells* with a central ON area in which stimulation tends to excite neural responses and a surrounding OFF area in which stimulation tends to suppress neural responses by **lateral inhibition*, so that the strongest response occurs when only the central region is stimulated; the term also applies to a receptive field with a central OFF area and a surrounding ON area. US *center-surround receptive field*. See also BLOB, DOUBLE-OPPONENT RECEPTIVE FIELD, HERMANN GRID, OFF-CENTRE CELL, ON-CENTRE CELL, OUCHI ILLUSION.

centring *n.* Another name for **centration*.

centroid method *n.* In statistics, a technique of **cluster analysis* in which the distance between two clusters is defined as the distance between their means.

centromere *n.* The part of a **chromosome* that attaches to a **nuclear spindle* during **mitosis*. Like a **telomere*, it consists of hundreds of stuttering units of **repetitive DNA*. [From German *Zentromer* a centromere, from Latin *centrum* the middle, from Greek *kentron* a sharp point + *meros* a portion]

cephalic *adj.* Of, relating to, or situated in or near the head. [From Greek *kephale* a head + *-ikos* of, relating to, or resembling]

cephalic index *n.* A numerical indication of the broadness of a head, obtained by dividing its maximum breadth by its maximum length and then
*****ebook converter DEMO Watermarks*****

multiplying by 100. The cephalic index of long (*dolichocephalous*) heads is below 76, of medium (*mesocephalous*) heads is between 76 and 80, and of broad (*brachycephalous*) heads is above 80. Compare [CRANIAL INDEX](#) (which is a measure of narrowness).

cephalocaudal *adj.* From the head to the tail, referring to the development of an embryo, and also later stages of development, in which growth is fastest at the head and progressively slower in parts of the body distant from the head. Compare [PROXIMODISTAL](#). [From Greek *kephale* a head + *cauda* a tail]

cerea flexibilitas *n.* A wax-like malleability of the body, sometimes manifested in [*hypnosis](#) and in people with [*catatonia](#) and certain forms of brain damage, notably [*cerebellar](#) lesions. People in such a state tend to leave their arms, legs, or bodies in whatever positions they are placed by another person. Also called *catalepsy*, *flexibilitas cerea*. Compare [COGWHEEL RIGIDITY](#), [CLASP-KNIFE RIGIDITY](#). [From Latin *cera* wax + *flexus* bent, from *flectere* to bend]

cerebellar developmental delay *n.* A condition characterized by incomplete development of the connections between the [*cerebellum](#) and the [*cerebrum](#). **CDD** *abbrev.*

cerebellar peduncle *n.* Any of three paired bundles of nerve fibres connecting the [*cerebellum](#) to the midbrain and the medulla oblongata. The superior, middle, and inferior cerebellar peduncles receive afferent inputs from most of the external sense organs (touch, vision, and hearing) and the vestibular system and send efferent outputs to the thalamus and various nuclei in the midbrain and brainstem. Compare [CEREBRAL PEDUNCLE](#). [From Latin *pedunculus*, a corruption of *pediculus* a little foot, from *pes*, *pedis* a foot]

cerebellar syndrome *n.* A pattern of signs and symptoms associated with damage to the [*cerebellum](#), including unsteady body movements, a characteristic cerebellar gait with feet wide apart and difficulty turning, [*ataxia](#), [*adiadochokinesia](#), [*dysmetria](#), [*intention tremor](#), [*postural tremor](#), and mispronunciation of words. Also called *Nonne's syndrome*. See also

*****ebook converter DEMO Watermarks*****

GERSTMANN–STRÄUSSLER–SCHEINKER SYNDROME, VESTIBULOCEREBELLUM.

cerebellospinal tract *n.* A bundle of motor nerve fibres running from the cerebellum to the spinal cord, concerned with the regulation of muscle tonus and posture. *Compare* SPINOCEREBELLAR TRACT.

cerebellum *n.* One of the main structures in the brain, situated at the back of the skull, behind the brainstem and beneath the back of the cerebrum, consisting of two deeply fissured lateral hemispheres separated by a narrow central girdle, the **vermis*, connected to the brainstem by three pairs of **cerebellar peduncles*. The vermis on the upper surface, containing an inverted **topographic map* of the body, is involved in trunk and eye movements; the intermediate zones and hemispheres on either side of the vermis, containing separate topographic maps (not inverted) of each side of the body, regulate limb movements by the same side; and the **flocculonodular lobe*, separated by a deep fissure from the base of the cerebellum, is concerned chiefly with posture, balance, and **ballistic movements*. Unlike the cerebral hemispheres, each hemisphere of the cerebellum is associated with the same side of the body. Lesions in the cerebellum produce deficits of movement and balance but do not affect sensory functions. See NEOCEREBELLUM, SPINOCEREBELLUM, VESTIBULOCEREBELLUM. See also ADIADOCHOKINESIA, BASKET CELL, CATALEPSY, CEREAL FLEXIBILITAS, CEREBELLAR DEVELOPMENTAL DELAY, CEREBELLAR SYNDROME, CEREBELLOSPINAL TRACT, CLIMBING FIBRE, DENTATE NUCLEUS, DYSMETRIA, FOLIUM, GAIT ATAXIA, GERSTMANN–STRÄUSSLER–SCHEINKER SYNDROME, GLOMERULUS, GOLGI CELL, GRANULE CELL, MEDULLOBLASTOMA, METENCEPHALON, MOSSY FIBRE, PARALLEL FIBRE, PURKINJE CELL, SPINOCEREBELLAR TRACT, STELLATE CELL. **cerebellar** *adj.* [From Latin *cerebellum* a little brain, diminutive of *cerebrum* a brain]

cerebral *adj.* Of or relating to the **cerebrum*, or more loosely to the brain as a whole. [From Latin *cerebrum* the brain + *-al*, from *-alis* of or relating to]

cerebral angiogram *n.* An **angiogram* of the brain. Also called a *cerebral arteriogram*. [From Greek *angeion* a (blood) vessel + *gramme* a line]

cerebral angiography *n.* The process of producing ***angiograms** of brains. Also called *cerebral arteriography* .

cerebral aqueduct *n.* A canal filled with cerebrospinal fluid connecting the third and fourth ventricles of the brain. Also called the *aqueduct of Sylvius* or *Sylvian aqueduct* . [From Latin *aqua* water + *ducere, ductum* to lead]

cerebral arteriogram *n.* Another name for a ***cerebral angiogram**. [From Greek *arteria* an artery + *gramme* a line]

cerebral arteriography *n.* Another name for ***cerebral angiography**.

cerebral arteriosclerosis *n.* An ***organic disorder** involving ***arteriosclerosis** of the brain, the signs and symptoms of which may be neurological (such as ***aphasia**, ***athetosis**, ***chorea**, ***dementia**, ***parkinsonism**), or cognitive and affective (such as ***amnesia**, ***delusions**, ***affective flattening**), or both. [From Latin *cerebrum* the brain + Greek *arteria* an artery + *sklerosis* a hardening, from *skleros* hard + *-osis* indicating a process or state]

cerebral blood flow *n.* The flow of blood to specific parts of the brain to fuel the functions being performed there, generally accepted as an index of ***synaptic** activity. Studies of ***regional cerebral blood flow** are used to localize brain functions. **CBF abbrev.**

cerebral cortex *n.* The outer layer of ***grey matter** covering the ***cerebrum**, largely responsible for sensory, motor, emotional, and integrative functions, divided into two ***cerebral** hemispheres each subdivided into the ***frontal lobe**, ***parietal lobe**, ***temporal lobe**, and ***occipital lobe**. It varies in thickness from 2 millimetres to 4 millimetres, covers a surface area of approximately 1.4 square metres (roughly equivalent to 15 square feet, the upper surface area of a large umbrella), mostly hidden within the walls of the ***sulci**, and it contains approximately 50 billion ***neurons** and 500 billion ***neuroglial** cells. *See also* **ALLOCORTEX**, **ANGULAR GYRUS**, **ARCHAECORTEX**, **ASSOCIATION AREA**, **AUDITORY CORTEX**, **BROCA'S AREA**, **BRODMANN AREA**, **CAUDATE**

NUCLEUS, CINGULATE GYRUS, FASCICULUS, HESCHL'S GYRUS, LONGITUDINAL FISSURE, MESOCORTEX, MOTOR CORTEX, NEOCORTEX, NIGROSTRIATAL BUNDLE, OLFACTORY CORTEX, PALAEOCORTEX, PARAHIPPOCAMPAL GYRUS, PIRIFORM CORTEX, PLANUM TEMPORALE, POSTCENTRAL GYRUS, PRECENTRAL GYRUS, RHINENCEPHALON, SOMATOSENSORY CORTEX, STRIATUM, SULCUS, SUPERIOR TEMPORAL GYRUS, TELEENCEPHALON, VISUAL CORTEX, WERNICKE'S AREA. [From Latin *cerebrum* a brain + *cortex* bark]

cerebral dominance *n.* The tendency for one of the **cerebral* hemispheres of the brain to dominate certain functions, as when the left hemisphere predominates for language functions, or when it predominates for voluntary motor control in a person who is right-handed, or when the right hemisphere predominates, perhaps in the same person, for spatial and musical functions. *See also* HANDEDNESS (1), HEMISITY, LATERALITY, SPINNING DANCER ILLUSION, WADA TEST. [From Latin *cerebrum* brain + *dominari* to be master]

cerebral gigantism *n.* A congenital disorder characterized by large size and weight at birth, accelerated growth in infancy and childhood, **acromegalic* features, and neurological disorder usually accompanied by moderate **intellectual disability*. Also called *Sotos syndrome*, after the US paediatrician Juan Fernandez Sotos (born 1927) who, with four colleagues, first described it in 1964.

cerebral hemisphere *n.* Either of the two halves of the **cerebrum*, separated by the **longitudinal fissure*, having slightly different functions in humans. Also called simply a *hemisphere*. *See also* CEREBRAL DOMINANCE, LATERALITY. [From Latin *cerebrum* brain + *hemi-* half + *sphaira* a sphere or globe]

cerebral palsy *n.* A form of congenital **paralysis* with muscular discoordination, caused by brain injury during birth, viral infection, or lack of oxygen in the brain before, during, or immediately after birth, often associated with some degree of **mental retardation*. [Corruption of *cerebral paralysis*]

cerebral peduncle *n.* Either of two large bundles of white nerve fibres in front of the brainstem, connected to the sides of the **pons*, arising from the

*****ebook converter DEMO Watermarks*****

cerebral hemispheres and carrying descending fibres of the ***corticospinal tract**. Compare **CEREBELLAR PEDUNCLE**. [From Latin *cerebrum* the brain + *pedunculus*, a corruption of *pediculus* a little foot, from *pes, pedis* a foot]

cerebral ventricle See **VENTRICLE**.

cerebrospinal *adj.* Of or relating to the brain and spinal cord.

cerebrospinal fluid *n.* The clear colourless fluid that fills the ***subarachnoid** space, thereby immersing the entire ***central nervous system**, and that circulates through the ***ventricles** of the brain, within which it is secreted, before flowing passively into the venous bloodstream, the total volume of fluid (about 150 millilitres) being replaced in an adult human being every three or four hours. Also called *neurolymph* . See also **CHOROID PLEXUS**, **EPENDYMA**, **EPENDYMAL CELL**, **HYDROCEPHALUS**. **CSF** *abbrev.*

cerebrovascular *adj.* Of or relating to the blood vessels of the ***cerebrum**. [From *cerebrum* + Latin *vasculum* a little vessel, diminutive of *vas* a vessel]

cerebrovascular accident *n.* Another name for a ***stroke**. **CVA** *abbrev.*

cerebrum *n.* The largest brain structure, comprising the ***diencephalon** and the ***cerebral hemispheres**, the outer layer or ***cerebral** cortex of which controls most sensory, motor, and cognitive processes in humans. [Latin *cerebrum* a brain]

certainty effect *n.* The tendency of human judges to overweight outcomes that are certain relative to outcomes that are merely probable. Thus, if given a choice between \$1,000 and gamble in which a fair coin is tossed and the prize is \$2,010 if the coin falls heads and nothing if it falls tails, most people prefer the certainty of \$1,000, although the ***expected value** of the gamble is \$1,005. This phenomenon arises from ***risk aversion**.

ceruminous deafness *n.* Loss of hearing caused by the build-up of

earwax in the **external auditory canal* of the outer ear. *See also* CONDUCTIVE DEAFNESS. [From *cerumen* earwax, from Latin *cer(a)* wax + (*alb*)*umen* egg white, from *albus* white]

cerveau isolé *n.* A surgical preparation in which the brainstem is severed between the diencephalon and the hindbrain, or between the superior colliculi and the inferior colliculi. Because it separates the brain from the **ascending reticular activating system*, cats operated on in this way show chronic somnolence, with only **delta wave* activity in their **EEGs*, their **pupils* are constricted, and no eye movements occur. *See also* DECEREBRATE RIGIDITY. *Compare* ENCÉPHALE ISOLÉ. [From French *cerveau* the cerebrum + *isolé* isolated]

C fibre *n.* A very small unmyelinated type of **afferent* nerve fibre with low conduction velocity (1 to 2 metres per second), found especially in the **autonomic nervous system* and in receptors for dull pain and temperature. US *C fiber*. *See also* AXON REFLEX. *Compare* ALPHA FIBRE, DELTA FIBRE, GAMMA FIBRE, IA FIBRE, IB FIBRE, II FIBRE.

chained reinforcement schedule *n.* A **compound reinforcement schedule* in which **reinforcement* (1) is delivered after an organism has completed two or more **simple reinforcement schedules* in succession, a signal being given to indicate to the organism which schedule is operating at any particular time. Also called a *chained schedule*. *See also* REINFORCEMENT SCHEDULE. *Compare* TANDEM REINFORCEMENT SCHEDULE.

chain ganglia *n.* Another name for a **sympathetic ganglionic chain*.

chairwork *n.* Another name for the **empty-chair technique*.

chandelier cell *n.* A type of inhibitory neuron found in the cerebral cortex, the axons of which form synapses with numerous pyramidal cells. [So called because of its appearance]

change blindness *n.* Failure to notice a change in the **visual field* occurring during a **saccade* or when vision is otherwise interrupted.

Compare [INATTENTIONAL BLINDNESS](#), [MOTION-INDUCED BLINDNESS](#).

change of life *n.* A euphemism or non-technical name for the [*climacteric](#) or [*menopause](#).

channel of communication See [COMMUNICATION CHANNEL](#) (1, 2).

character *n.* **1.** The aggregate or combination of psychological [*traits](#) that distinguish a person from others. In his influential book *Personality: A Psychological Interpretation* (1937), the US psychologist Gordon W(illard) Allport (1897–1967) established [*personality](#) as the preferred term in psychology and rejected the word ‘character’ because of its ethical connotations: ‘The psychologist does not need the term at all; personality alone will serve. *Character is personality evaluated, and personality is character devaluated*’ (p. 52, italics in original). **2.** Any genetically determined structure, function, or phenotypic characteristic of an organism. **3.** A symbol, such as a letter of the alphabet, used in a system of writing; or in computer technology, any unit of information in the form of a symbol that can be represented by a unique binary code.

[From Latin *character* a distinguishing mark, from Greek *charakter* an engraver’s tool, from *charassein* to cut or engrave]

character convergence *n.* A form of interaction between the evolution of two species in which they come to resemble each other more closely in one or more characters or traits. Compare [CHARACTER DISPLACEMENT](#).

character disorders *n.* Another name for [*personality disorders](#). Also called *character neuroses*, misleadingly in view of the fact that symptoms of personality disorders are not typically [*ego-dystonic](#).

character displacement *n.* A form of interaction between the evolution of two species in which they diverge from each other in one or more characters or traits. Compare [CHARACTER CONVERGENCE](#).

characteristic features *n.* In [*prototype theory](#), the [*features](#) (1) or [*attributes](#) of a prototypical instance of a concept or of a prototypical member

*****ebook converter DEMO Watermarks*****

of a category, shared by many or most but not all instances or members, and providing a basis for assigning meaning to the concept or category. *Compare* [DEFINING PROPERTIES](#).

characteristic frequency *n.* The frequency of a sound at which the threshold of a single fibre of an auditory nerve is lowest and to which it is therefore most responsive. *See also* [TUNING CURVE](#). **CF** *abbrev.*

character neurosis *n.* In [*psychoanalysis](#), a type of [*neurosis](#) in which psychological conflict manifests itself in the form of character traits or patterns of behaviour rather than clearly identifiable [*signs](#) (1) or [*symptoms](#). It is exemplified in articles by Sigmund Freud (1856–1939) in 1908 on ‘Character and Anal Erotism’ (*Standard Edition*, IX, pp. 169–75), in 1916 on ‘Some Character Types Met With in Psycho-Analytic Work’ (*Standard Edition*, XIV, pp. 311–33), and in 1931 on ‘Libidinal Types’ (*Standard Edition*, XXI, pp. 215–20). It was used extensively in the theories of the Austrian-born (later US-based) psychiatrist Wilhelm Reich (1897–1957), especially in his book *Charakteranalyse* (Character Analysis) published in 1933.

Charcot–Marie–Tooth syndrome *n.* A hereditary form of muscular atrophy characterized by slowly progressive wasting and weakness of muscles of the arms and feet, caused by degeneration of the peripheral nerves. Symptoms, including loss of reflexes, diminished [*cutaneous senses](#), and raised foot arches leading to a high-stepping gait, usually develop in childhood or adolescence and progress slowly. It is usually inherited through an [*autosomal](#) [*dominant gene](#), but some forms are passed on by [*recessive](#) and [*X-linked genes](#), the latter occurring mostly in boys. It is the most common inherited disorder of the [*nervous system](#), affecting one in 2,500 people in the US. Type I (or hypertrophic) CMT, generally associated with a dominant gene on [*chromosome](#) 17, is characterized by a thickening of the [*myelin](#) sheath surrounding [*neurons](#) in the [*white matter](#) of the [*central nervous system](#), whereas Type II (neuronal) CMT is characterized by degeneration of the [*axons](#) of peripheral nerves. *Compare* [MULTIPLE SCLEROSIS](#), [MUSCULAR DYSTROPHY](#). **CMT** *abbrev.* [Named after the French neurologists Jean-Martin Charcot (1825–93) and Pierre Marie (1853–1940), who published a classic description of five cases of the disorder in *Revue de*

*****ebook converter DEMO Watermarks*****

Médecine in 1886, and the English postgraduate medical student Howard H(enry) Tooth (1856–1925) who completed an MD thesis on the disorder in the same year]

Charles Bonnet syndrome *n.* Visual [*hallucinations](#) in people who have lost their vision, experienced most commonly during the first year to 18 months after becoming blind, sometimes with [*micropsia](#). It is a common condition, experienced by many (perhaps most) people who suffer significant visual loss, and those who are not prepared for it are sometimes alarmed, believing that they are losing their sanity. It is named after the Swiss naturalist and philosopher Charles Bonnet (1720–93) whose grandfather, almost blind from [*cataracts](#) in both eyes, hallucinated men, women, birds, carriages, buildings, tapestries, and other objects, as first described by Bonnet in his *Essai analytique sur les facultés de l'âme* (1760, pp. 426–8), although it was not widely known in English-speaking countries until 1982, when an article describing it appeared in the journal *Age and Ageing*. **CBS** *abbrev.*

Charlie *n.* A street name for [*cocaine](#).

Charpentier bands *n.* Illusory black spokes that are seen when a black disc with a white sector is rotated slowly. [Named after the French physician (Pierre Marie) Augustin Charpentier (1852–1916) who discussed them]

Charpentier's illusion *n.* Another name for the [*size–weight illusion](#). [Named after the French physician (Pierre Marie) Augustin Charpentier (1852–1916) who published an article on it in 1891, although the German psychologists Georg Elias Müller (1850–1934) and Friedrich Schumann (1863–1940) had already discovered and reported the illusion in 1889]

cheating husbands problem *See* [MUDDY CHILDREN PROBLEM](#).

checker–shadow illusion *See* [CHEQUER–SHADOW ILLUSION](#).

cheese effect *n.* An acute attack of hypertension that can occur in a person taking a [* monoamine oxidase inhibitor \(MAOI\)](#) drug who eats cheese, caused by an interaction of the MAOI with [*tyramine](#), formed in ripe

cheese when bacteria provide an enzyme that reacts with the amino acid **tyrosine* in the cheese. Other foods and drinks that produce the same effect include pickled herring, yeast extract, and certain red wines. Also called the *cheese reaction* .

chemically gated ion channel *n.* An **ion channel*, the permeability of which is regulated by a **neurotransmitter*; different neurotransmitters sometimes opening and closing different ion channels in the cell membrane. *Compare* VOLTAGE-GATED ION CHANNEL.

chemical sense *n.* A sensory system that responds to chemical stimuli, especially the sense of **taste* or **smell* mediated by **chemoreceptors*. See also COMMON CHEMICAL SENSE, REDINTEGRATION.

chemoaffinity hypothesis *n.* The proposition that molecules of specific chemical substances guide neurons in the formation of appropriate **synapses* (1) during development and regeneration. [From *chem(ical)* + *affinity*]

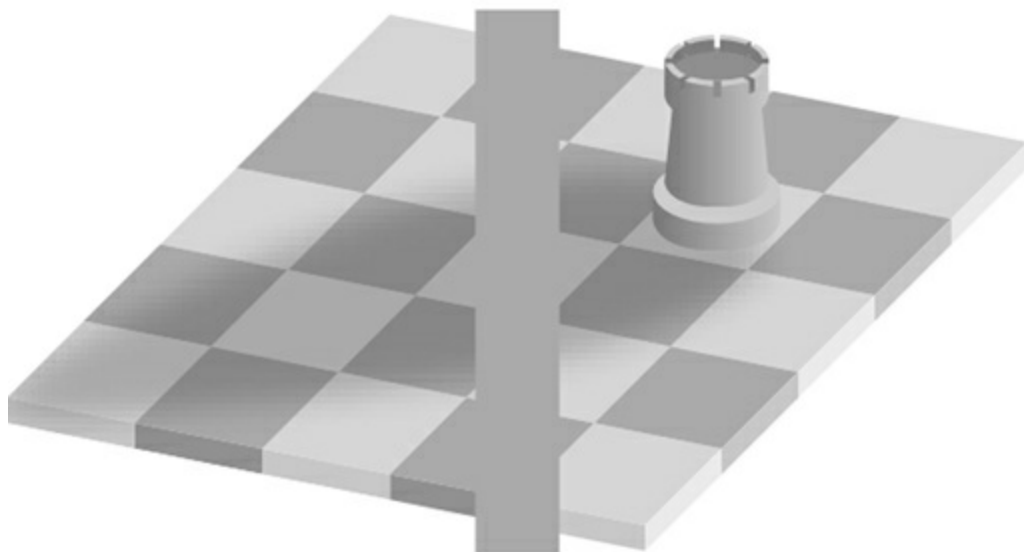
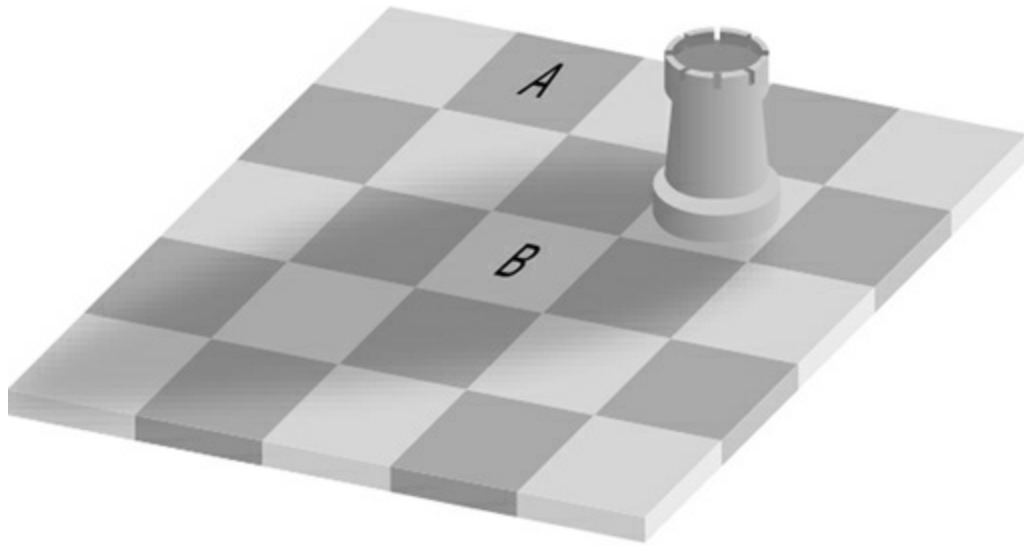
chemoreceptor *n.* A **sensory receptor* in a biological cell membrane specialized to allow the binding of molecules from external chemical stimuli, leading to the generation of sensations of **taste* or **smell*. Also called a *chemoceptor* .

chemorepellant *n.* Any chemical substance that causes organisms to move away from it or to avoid it.

chemotaxis *n.* Responses of a micro-organism or a cell to a chemical stimulus by moving towards or away from it. **chemotactic** *adj.* [From Greek *taxis* order]

chequer-shadow illusion *n.* An image of an object casting a shadow across a chequer-board, the same colour or shade being used to depict one of the 'dark' squares outside the shadow and one of the 'light' squares inside it (see *illustration*). The visual system discounts for the shadow, even if the viewer does not notice it consciously, causing the 'dark' square to appear

much darker than the 'light' square. This shows that the perceived **lightness* of an object or surface is not determined simply by its physical **luminance* but is subject to **context effects*, the visual system responding primarily to lightness contrasts between adjacent regions of the visual field. The illusion, devised by the US vision scientist Edward Adelson (born 1952) and first published on the World Wide Web in 1995, is so powerful as to be almost unbelievable, and it persists even after the viewer knows that the shades are actually identical. Many people are willing to bet large sums of money on the 'dark' square being physically darker than the 'light' square. US *checker-shadow illusion*. Compare *GELB EFFECT*, *KARDOS EFFECT*. [From Old French *eshec* check, originally used in the game of chess to indicate that the king is under attack, through Arabic from Persian *shah* a king + Old English *sceadu* shade, cognate with Greek *skotos* darkness]



Chequer-shadow illusion. Almost incredibly, the shade of grey is identical in the squares marked A and B in the top image. This can be verified by examining the bottom image.

cherology *n.* A term coined in the 1960s, by analogy with **phonology*, to denote the study of **sign language*. See also *AMERICAN SIGN LANGUAGE*, *BRITISH SIGN LANGUAGE*. [From *chereme* a basic contrastive unit in a sign language + Greek *logos* word, discourse, or reason]

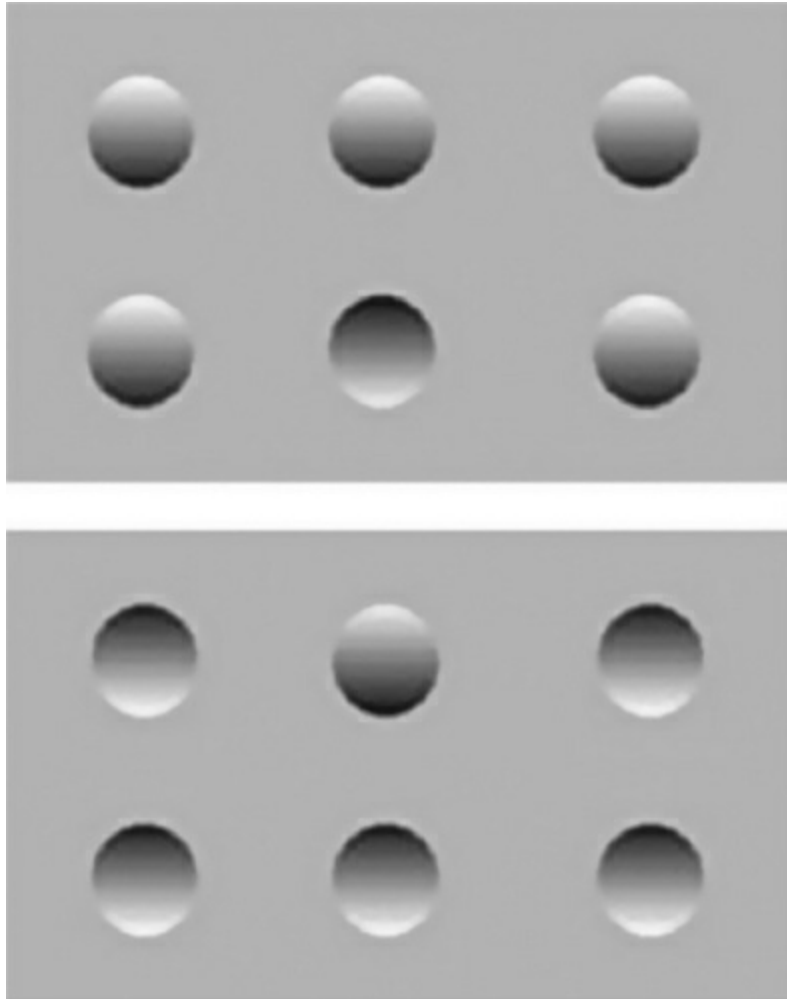
Cheshire Cat effect *n.* A form of **binocular rivalry* in which a moving

*****ebook converter DEMO Watermarks*****

object seen by one eye renders invisible a stationary object in the same region of the visual field seen by the other eye. The effect can be demonstrated vividly by dividing the visual field with a mirror held edge-on in front of the nose at a slight angle, so that one eye looks straight at a stationary object, such as a sleeping cat, while the other sees a reflection of stationary objects in another part of the environment. If a hand is then waved about on the mirror side, in the region of the visual field where the cat is seen with the other eye, then part or the whole of the cat disappears. [Named after an episode at the end of Chapter 6 of *Alice's Adventures in Wonderland* by Lewis Carroll, the pen name of Charles Lutwidge Dodgson (1832–98), in which the Cheshire Cat ‘vanished quite slowly, beginning with the end of the tail, and ending with the grin, which remained some time after the rest of it had gone’]

Chevreul pendulum *n.* A device consisting of a weight attached to a length of about 35 or 40 centimetres of string. A person holds the string in one hand, suspending the weight above the centre of a diagram depicting a circle superimposed on a cross, while being asked a series of questions, having been told that the pendulum will sway from left to right if the answer is yes, up and down if the answer is no, and in a circle if the answer is unknown. The pendulum often reveals true answers, as a result of unconscious muscular movements made by the respondent. The device is sometimes used to measure [*suggestibility](#) or [*hypnotic susceptibility](#) and has occasionally been used as a crude [*lie detector](#). [Named after the French chemist Michel Eugène Chevreul (1786–1889) who first described it in *De la Baquette Divinatoire, du Pendule Dit Explorateur et des Tables Tournantes* (1854) as an instrument for analysing unconscious responses and discussed it in relation to a possible explanation of the phenomenon of table-turning at spiritualist séances]

chiaroscuro *n.* The disposition of areas of light and shade in an image; specifically one of the monocular cues of visual [*depth perception](#), patterns of shadow and highlight providing information about depth (see [illustration](#)). The human visual system usually interprets such information on the unconscious assumption that the light source is above. Also called *shading*. See also [ANAGLYPTOSCOPE](#), [HOLLOW-FACE ILLUSION](#). [From Italian *chiaro* clear + *oscuro* obscure or dark]



Chiaroscuro. Most of the shapes in the upper panel appear convex and most of those in the lower panel concave, because the visual system assumes by default that the light source is above. But the upper panel is merely an inverted copy of the lower one, as can be confirmed by turning the page upside down.

chiasm *n.* A crossing over or **decussation* of two structures, as in the fibres of the nerves in the **optic chiasm*, which in humans and other animals with forward-pointing eyes and therefore overlapping visual fields are only partly crossed or decussated. Also called a *chiasma* . **chiasms**, **chiasmata**, or **chiasmas** *pl.* **chiasmic** or **chiasmal** *adj.* [From Greek *chiasma* a cross, named after the shape of the upper-case letter chi (X)]

chiasmus *n.* A **figure of speech* in which the main elements are repeated in a reversed order to create a symmetrically balanced structure, as in *Ask not what your country can do for you; ask what you can do for your country* (The

inaugural address of John F. Kennedy, 1917–63, 35th US president, 20 January 1961). Two of the best psychological examples are *I'd rather have a full bottle in front of me than a full-frontal lobotomy* and the following mordant comment on achieving something that makes others jealous: *It's champagne for my real friends and real pain for my sham friends*. **chiasmi pl. chiasmic** *adj.* [From Greek *chiasmōs* a crisscross arrangement, from *chiasma* a cross, named after the shape of the upper-case letter chi (X) + *ismos* indicating a state or condition]

Chicken game *n.* A two-person strategic ***game** (1), generally considered to be the prototype of a dangerous game. In its canonical interpretation, two motorists speed towards each other. Each has the option of swerving to avoid a head-on collision or driving straight ahead. If both swerve, the outcome is a draw with second-best payoffs to each; if both drive straight ahead, they risk annihilation and each receives the worst (fourth-best) payoff; but if one chickens out by swerving while the other exploits the co-player's caution by driving straight on, then the swerver loses face and earns the third-best payoff, and the 'exploiter' wins a prestige victory and earns the best payoff. The game provides a strategic model of brinkmanship. Written accounts of Chicken can be traced at least as far back as the 8th century BC when the Greek epic poet Homer described in *The Iliad* (p. 273 of Rouse's translation) a version played with chariots that Antilochos won against Menelaos, but the game was first analysed and studied empirically in the early 1960s. *See also* **HAWK–DOVE GAME**. [Named and first described in its canonical interpretation in 1959 by the Welsh philosopher Bertrand (Arthur William) Russell (1872–1970) in *Common Sense and Nuclear Warfare* (p. 30), from a slang sense of *chicken*, a cowardly person, which became popular after the release in 1955 of Nicholas Ray's film *Rebel Without a Cause* starring James Dean, in which teenagers played a slightly different version of the game involving driving cars over a cliff and jumping out at the last moment]

child abuse *n.* Any form of physical, mental, or sexual exploitation of or cruelty towards a child by a parent or other adult, causing significant harm to its victim. *See also* **BATTERED BABY SYNDROME**, **BATTERED CHILD SYNDROME**, **CHILD SEXUAL ABUSE**, **FACTITIOUS DISORDER IMPOSED ON ANOTHER**, **SEXUAL ABUSE**.

child-directed speech *n.* Another name for **caretaker speech*.

childhood amnesia *n.* Another name for **infantile amnesia*.

childhood autism *n.* An alternative name for **autism spectrum disorder*.

childhood disintegrative disorder *n.* A term used in **DSM-IV* for a **pervasive developmental disorder* characterized by at least two years of apparently normal development followed by significant loss of language abilities, social skills, bowel or bladder control, motor skills, or play, together with impairment in social interaction and communication, or restricted, repetitive, or stereotyped mannerisms, interests, or activities. In DSM-5 it falls under **autism spectrum disorder*. Also called *dementia infantilis*, *disintegrative disorder*, or *Heller's syndrome*, after the Austrian neuropsychiatrist Theodor O. Heller (1869–1938) who first described it in an article entitled 'Dementia Infantilis' in the *Zeitschrift für die Erforschung und Behandlung des jugendlichen Schwachsinn*s in 1908. **CDD** abbrev.

childhood-onset fluency disorder *n.* A **communication disorder* introduced in **DSM-5*, characterized by disturbed fluency and rhythm of speech, involving repetitions of sounds or syllables, prolonged **consonants* and **vowels*, words broken by pauses, word substitutions to avoid problem words, and excessive physical tension in pronouncing words, the symptoms causing **anxiety* and affecting social, academic, or occupational functioning, with onset in early development (2 to 6 years in most cases), not attributable to **deafness*, **neurological* impairment, a **side-effect of medication*, **general medical condition*, or another mental disorder, such as **Tourette's disorder*. Also (informally) called *stuttering* or *stammering*.

Children's Apperception Test *n.* A version of the **TAT* designed specifically for children, consisting of 10 pictures in which animals take the place of human beings in all cases on the assumption that children are likely to empathize more easily with animal figures. The test was constructed by the Austrian-born US psychoanalyst Leopold Bellak (1916–2000) and Sonia Sorel Bellak (born 1918) and published in 1949; Leopold Bellak described it

in his book *The Thematic Apperception Test and the Children's Apperception Test in Clinical Use* (1954). Compare [BLACKY PICTURES](#). **CAT** abbrev.

child sexual abuse *n.* A form of [*sexual abuse](#) in which the victim is a child. **CSA** abbrev.

chimera *n.* **1.** An organism composed of two or more genetically distinct tissue types or created by combining genes from two or more different individuals or species. Also called a *mosaic* . Also spelt *chimaera* . **2.** In Greek mythology, a fire-breathing monster with a lion's head, a goat's body, and a serpent's tail. **chimeric** or **chimaeric** *adj.*

[From Greek *chimaira* a she-goat]

chimeric face *n.* A facial portrait made by combining the left and right halves of the faces of two different people, used to study the functions of the cerebral hemispheres, especially in [*split-brain preparations](#), because [*fixation \(1\)](#) on the midpoint leads to each half of the image being represented in the opposite cerebral hemisphere.

China white *n.* A street name for the drug [*fentanyl](#).

Chinese room *n.* A [*Gedankenexperiment](#) first proposed by the US philosopher John Searle (born 1932) in the journal *Behavioral and Brain Sciences* in 1980 as a refutation of the [*strong AI](#) proposition that a computer capable of passing the [*Turing test](#) by responding to inputs in a manner indistinguishable from a human being would necessarily have a mind and be capable of thought. Searle's Chinese room contains a person who understands no Chinese but has detailed and comprehensive instructions for the mechanical processing (without translation) of Chinese symbols to generate meaningful responses to written messages. Anyone who delivers a message in Chinese to the room receives a reply in Chinese and has no way of knowing that the person in the room does not understand a word (or a [*logograph](#)) of Chinese. Searle argued that an [*artificial intelligence](#) machine or program is analogous to the Chinese room, and that passing the Turing test would not prove that it had a mind or that it could think, because a computational simulation of a phenomenon is very different from the

*****ebook converter DEMO Watermarks*****

phenomenon itself. If valid, the argument undermines **weak AI* as well as strong AI. Compare *GÖDEL'S THEOREM*.

chi-square distribution *n.* In statistics, a **probability* distribution used to obtain an approximate measure of the discrepancy between sets of observed and expected scores and to perform a **chi-square test*. If a set of values distributed according to the **normal distribution* are squared and then summed, the resulting scores are distributed according to the chi-square distribution. Symbol: χ^2 . [Named after the square of *chi* the 22nd letter of the Greek alphabet]

chi-square test *n.* In statistics, a test based on the **chi-square distribution* to test for a possible association between two variables measured on **nominal scales* (called the *chi-square test of association*) or to determine the **goodness of fit (1)* of observed frequencies to a theoretical **frequency* distribution (called the *chi-square goodness of fit test*), the same formula being used for both types of test. In both cases, researchers most commonly use the Pearson chi-square test, the formula for calculating the test statistic being $\chi^2 = \Sigma(O-E)^2/E$, where *O* represents an observed frequency, *E* an expected frequency under the **null hypothesis*, and the summation is over all pairs of observed and expected frequencies. The main alternative is the **likelihood ratio* chi-square test. See also *NON-PARAMETRIC STATISTICS*. Compare *LOG-LINEAR ANALYSIS*. Symbol: χ^2 .

chloral hydrate *n.* A colourless crystalline compound that acts as a central nervous system **depressant* and is used as a sedative–hypnotic drug. Also called *Noctec* (trademark). [So called because it is produced by mixing the aldehyde chloral with water]

chlordiazepoxide *n.* A member of the **benzodiazepine* group of drugs, used as an anxiolytic, sedative, and muscle relaxant, and in the treatment of **alcohol-related disorders*. In its hydrochloride form it is usually called *Librium* (trademark). See also *SEDATIVE-, HYPNOTIC-, OR ANXIOLYTIC-RELATED DISORDERS*. **CDP** *abbrev.* [From *chlor-* denoting chlorine + *di-* two, from Greek *dis* twice + *az-* denoting nitrogen, from Greek *a-* not + *zaein* to live + *ep(oxide)* a compound containing oxygen joined to other atoms, from Greek

epi on or above + *oxide* a compound of oxygen and another element, from French *oxy(gène)* + (*ac*)*ide*]

chloride *n.* Any of the salts of hydrochloric acid or any compound containing a chlorine atom.

chloroacetophenone See [CN GAS](#).

chlorpromazine *n.* Chlorpromazine hydrochloride, a [*neuroleptic](#) (1) drug that stabilizes the autonomic nervous system during stress by blocking [*dopamine](#) neuroreceptors and is effective in reducing psychotic symptoms, originally developed in 1950 as the first of the [*phenothiazines](#). Also called *Largactil* or *Thorazine* (trademark). See also [DOPAMINE ANTAGONIST](#). **CPZ** *abbrev.* [From *chlor-* denoting chlorine + *pro(pyl)* containing the monovalent group C_3H_7 + (*a*)*m(ine)* + *azine* denoting an organic compound with a six-member ring and at least one nitrogen atom]

choice of neurosis *n.* In [*psychoanalysis](#), the combination of processes that determine which particular [*neurosis](#) a patient develops. The notion that a patient in some sense chooses a neurosis was first mentioned by Sigmund Freud (1856–1939) in a letter to his friend, the German physician Wilhelm Fliess (1858–1928) in 1896 (*Standard Edition*, I, pp. 220–1) and was developed fully in 1913 in an article on ‘The Disposition to Obsessional Neurosis’ (*Standard Edition*, XII, pp. 317–26). See also [COMPROMISE FORMATION](#), [RETURN OF THE REPRESSED](#), [SYMPTOM FORMATION](#).

choice reaction time *n.* [*Reaction time](#) in a situation in which there are two or more possible stimuli requiring different responses. The usual measure involves a home button surrounded by eight other buttons, arranged in a semicircle around it, each accompanied by a small light. The person being tested places a finger or a stylus on the home button and then attempts to move it as quickly as possible to press whichever of the other buttons is lit up on each trial. It is negatively correlated with psychometric measures of intelligence. Also called *complex reaction time* or *compound reaction time*. See also [FLANKER COMPATIBILITY EFFECT](#), [HICK’S LAW](#), [PROCESSING SPEED](#), [SIMON EFFECT](#). Compare [DISCRIMINATION REACTION TIME](#), [SIMPLE REACTION TIME](#). **CRT**

abbrev.

choice shift *n.* Another name for the ***risky shift** phenomenon or, more generally the ***group polarization** phenomenon.

cholecystokinin *n.* A hormone secreted in the ***duodenum** that causes the ***gall bladder** to contract and that stimulates the secretion of enzymes by the ***pancreas**, also present in the central nervous system, where it acts as a ***neurotransmitter**, amplifying the effects of ***dopamine** in the brain. *See also* **KININ**. **CCK** *abbrev.* [From Greek *chole* bile + *kystis* a bladder + English *kinin*]

cholesterol *n.* A ***sterol** present in all animal tissues, blood, bile, and fat, involved in the transport of lipids in the bloodstream and in the formation of ***steroid** hormones. High levels of cholesterol in the blood may sometimes cause ***atherosclerosis**, leading to coronary heart disease, and may be implicated in neurological impairments such as ***vascular dementia** (multi-infarct dementia). [From Greek *chole* bile + *stereos* solid]

choline *n.* An alcohol present in ***bile**, synthesized from lecithin, and a precursor in the synthesis of ***acetylcholine** in the body. *See also* **MUSCARINE**. [From Greek *chole* bile + *-ine* indicating an organic compound]

cholinergic *adj.* Releasing ***acetylcholine**; also activated by or responding to acetylcholine, this extended usage being widespread but consistently rejected by the English physiologist Sir Henry Hallet Dale (1875–1968), who coined the suffix *-ergic*, and by many other authorities. The term applies especially to nerve fibres such as those in the ***parasympathetic nervous system** or in the ***nucleus basalis of Meynert** that use acetylcholine as their ***neurotransmitter**, or any drug that stimulates the activity of the parasympathetic nervous system, causing such effects as constriction of the pupils of the eyes and preparation for close-up vision, salivation, slowing of the heart, secretion of gastric juices, and voiding of urine. *See also* **MUSCARINIC RECEPTOR**, **NICOTINIC RECEPTOR**. *Compare* **ADRENERGIC**, **ANTICHOLINERGIC**, **DOPAMINERGIC**, **GABAERGIC**, **NORADRENERGIC**, **SEROTONERGIC**. [From (*acetyl*)*cholin(e)* + Greek *ergon* work + *-ikos* of, relating to, or resembling]

*****ebook converter DEMO Watermarks*****

cholinesterase *n.* Another name for **acetylcholinesterase*. [From *choline* + *ester* + Greek *-ase* denoting an enzyme, from *diastasis* separation]

cholinoceptor *n.* A **neuroreceptor* for **acetylcholine*. See also MUSCARINIC RECEPTOR, NICOTINIC RECEPTOR.

cholinomimetic *adj. n.* (Of or relating to) any substance, such as **carbachol* or **methacholine*, that mimics the action of **acetylcholine* in the nervous system. See also MUSCARINE, NICOTINE. [From (*acetyl*)*choline* + Greek *mimesis* imitation, from *mimeisthai* to imitate]

Chomskyan *adj.* Of, relating to, or resembling the theory of language of the US linguist and philosopher (Avram) Noam Chomsky (born 1928). See ANOMALOUS SENTENCE, COMPETENCE (2), DEEP STRUCTURE, GENERATIVE GRAMMAR, LANGUAGE ACQUISITION DEVICE, PERFORMANCE (2), SURFACE STRUCTURE, TRANSFORMATIONAL GRAMMAR, UNIVERSAL GRAMMAR.

chorda tympani *n.* One of the branches of the **facial nerve*, running through the cavity of the middle ear, supplying efferent impulses to two of the salivary glands and receiving afferent impulses from the anterior (front) two-thirds of the tongue, responsible for all of the sweet and some of the sour and salty taste sensations. In spite of its name, it is not involved in hearing. [From Latin *chorda* a string + *tympanum* a drum, so called because it crosses the eardrum in the middle ear]

chorea *n.* Involuntary, rapid, jerky, non-repetitive, purposeless movements, such as flexing and extending the fingers, raising and lowering the shoulders, or grimacing, characteristic especially of **Huntington's disease*. [From Greek *choreia* a dance]

chorea minor *n.* Another name for **Sydenham's chorea*.

choreiform *adj.* Resembling the rapid, jerky movements of **chorea*.

chorionic gonadotrophin *n.* A **gonadotrophin* secreted by the placenta in humans and other mammals, stimulating the release of

***progesterone** by the ***corpus luteum**. A measure of its presence in the urine is used as a pregnancy test. Also spelt *chorionic gonadotropin* . [From Greek *chorion* an afterbirth]

choroid *n.* The vascular ***membrane** between the outer ***sclera** and the ***retina** of the eye. [From Greek *chorion* the membrane surrounding an embryo or foetus]

choroid plexus *n.* A collection of small, reddish tufts of vascular membrane that project into the cerebral ***ventricles**, secrete ***cerebrospinal fluid**, and act like a ‘kidney’ for the brain, maintaining the chemical stability of the fluid as the kidneys do the blood. *See also* EPENDYMA, EPENDYMAL CELL, PLEXUS. [From Greek *chorioeides* resembling a placenta, from *chorion* an afterbirth]

chroma *n.* The quality or hue of a colour irrespective of the ***achromatic** (1) black/ grey/white colour present. *See also* MUNSELL COLOUR SYSTEM, SATURATION (1). [From Greek *chroma* colour]

chromaesthesia *n.* A form of ***synaesthesia** (1) in which stimuli not normally associated with colour, such as musical tones or numbers, elicit sensations of colour. When the stimuli are auditory it is also called *chromatic audition*, *colour audition*, *coloured audition*, *colour hearing* , or *coloured hearing* . US *chromesthesia* . [From Greek *chroma* colour + *aisthesis* feeling + *-ia* indicating a condition or quality]

chromaffin cell *n.* A type of cell that is abundantly present in the ***adrenal medulla** and that synthesizes ***adrenalin** (epinephrine) from tyrosine in the presence of the cofactor vitamin C, stores it in vesicles, and secretes it into the bloodstream together with various other proteins and peptides in response to fear, anxiety, or stress. About 10 per cent of chromaffin cells synthesize and secrete the closely related substance ***noradrenalin** (norepinephrine). [From *chromium* + Latin *affinis* related to, alluding to the propensity of adrenalin to stain brown when exposed to chromium salts]

chromatic *adj.* 1. Of, relating to, or having colour. A *chromatic colour* is a colour having ***chroma**, in contradistinction to an ***achromatic** colour
*****ebook converter DEMO Watermarks*****

without chroma. **2.** Pertaining to musical tones that are sharpened or flattened without changing the key of the passage, or the musical scale containing all twelve **semitones* of the octave, also called the *chromatic scale* . Compare *DIATONIC*.

[From Greek *chromatikos* of or relating to colour, from *chroma*, -atos colour + -ikos of, relating to, or resembling]

chromatic aberration See *ABERRATION* (3).

chromatic adaptation *n.* **1.** A form of **adaptation* (2) resulting from continuous exposure to light of a particular colour or hue and consequent bleaching of the associated **visual pigment*, causing a gradual loss of **saturation* (1) of the perceived colour and the appearance of its **complementary colour* if a white surface is viewed. See also *XANTHOPSIA*. **2.** More generally, an alteration of the balance of pigments in a biological membrane in response to the colour and intensity of the ambient light. Also called *colour adaptation* .

chromatic audition *n.* Another name for **colour hearing*.

chromaticity *n.* The quality of colour or light in terms of the purity of its dominant wavelength, involving both **hue* and **saturation* (1). The *chromaticity coordinates* of a colour are the three **tristimulus values*, symbolized by *x*, *y*, and *z*, representing the proportions of the three **additive primaries* that when mixed match the given colour. Also called *chromaticness* . See also *PRIMARY COLOUR* (1, 2, 3).

chromaticness *n.* Another name for **chromaticity*.

chromatic system *n.* In the **opponent-process theory* of colour vision, the pathway that carries information about an object's **hue*. Compare *ACHROMATIC SYSTEM*.

chromatic threshold *n.* The minimal stimulus, depending on the wavelength of the light, that induces a sensation of colour or hue.

chromatic vision *n.* Normal vision in which colours are perceived and distinguished, in contradistinction to **colour-blindness*.

chromatid *n.* Either of the two threadlike strands formed when a **chromosome* divides longitudinally during **mitosis*. [From *chromatin*]

chromatin *n.* The part of a cell nucleus that contains **DNA*, **RNA*, and **proteins* and is readily stained with basic dyes: see *BASE (1)*. [From Greek *chroma*, *chromatos* colour]

chromatopsia *n.* A form of partial blindness characterized by loss or serious impairment of all aspects of vision except colour perception, resulting in a form of misidentification exemplified by guessing that a blue vehicle in a television picture is sky in spite of its different form, relative size, and movement. The condition is occasionally found in people who suffer the effects of smoke inhalation during fires, resulting in carbon monoxide poisoning and oxygen deprivation, causing widespread damage to most areas of the **visual cortex* apart from **blobs* in Area V1 and the associated thin stripes in Area V2, both of which mediate colour perception and are more richly supplied with blood vessels than other areas of the visual cortex and therefore more likely to survive such conditions. Compare *ACHROMATOPSIA*.

chromatopsic *adj.* [From Greek *chroma*, *chromatos* colour + *opsis* sight, from *ops* an eye + *-ia* indicating a condition or quality]

chromesthesia See *CHROMAESTHESIA*.

chromophore *n.* The group of atoms in a chemical compound that are responsible for its colour, including the atoms in the **visual pigments* of the eye's photoreceptors. [From Greek *chroma* colour + *phoros* bearing, from *pherein* to bear]

chromosomal aberration *n.* Any visible or gross abnormality in the number or structure of a set of **chromosomes*. See *KLINEFELTER'S SYNDROME*, *TRISOMY*, *TURNER'S SYNDROME*, *XXX SYNDROME*, *XYY SYNDROME*. Compare *WILLIAMS SYNDROME*.

chromosome *n.* A microscopic rod-shaped structure in the nucleus of every **cell*, containing **DNA* that encodes the **genes* and determines hereditary characteristics. There are 46 chromosomes in every human **somatic cell*, 22 pairs of **autosomes* and one pair of **sex chromosomes*, whereas each of the sex cells or **gametes* carries only 23 chromosomes—one member of every pair. **chromosomal** *adj.* [From Greek *chroma* colour + *soma* a body, so called because they stain deeply with basic dyes]

chronic *adj.* Lasting a long time; of or relating to a disorder or a symptom that develops slowly and either persists or recurs frequently. *Compare* *ACUTE*. [From Greek *chronikos* of or relating to time, from *chronos* time + *-ikos* of, relating to, or resembling]

chronic fatigue syndrome *n.* A cluster of disorders first identified and named in an article by the US physician Gary P(aul) Holmes (born 1956) and 14 co-authors in the *Annals of Internal Medicine* in 1988 and redefined in an influential article in the same journal in 1994, characterized by persistent or recurrent **fatigue* (1) experienced for at least four to six months, not resulting from unusual exertion or any identifiable medical cause and not significantly relieved by rest, resulting in a marked decline in occupational, educational, social, and everyday activities. Some authorities believe that it is often triggered by a viral infection. *See also* *ACTIGRAPHY*, *BORNA DISEASE VIRUS*, *MYALGIC ENCEPHALOMYELITIS*, *POST-VIRAL FATIGUE SYNDROME*. **CFS** *abbrev.*

chronic motor or **vocal tic disorder** *n.* Another name (used in **DSM-IV*) for **provisional tic disorder*.

chronic pain *n.* Prolonged or lasting **pain*, defined in the *Classification of Nursing Diagnoses* (1994) of the North American Nursing Diagnosis Association as a condition in which an individual experiences pain that continues for more than six months. *Compare* *ACUTE PAIN*.

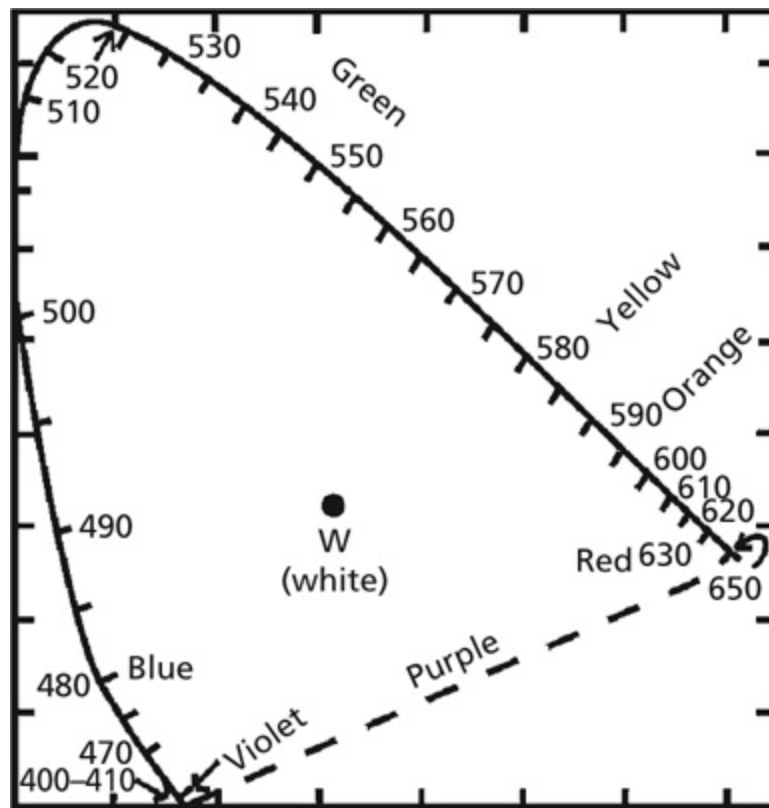
chronobiology *n.* The branch of biology concerned with **biological rhythms*. *See* *BIOLOGICAL CLOCK*, *BIOLOGICAL RHYTHM*. *See also* *ALPHA WAVE*, *BASIC REST–ACTIVITY CYCLE*, *BETA WAVE*, *CIRCADIAN RHYTHM*, *CIRCANNUAL RHYTHM*, *DELTA WAVE*, *GAMMA WAVE*, *INFRADIAN RHYTHM*, *MENSTRUAL CYCLE*, *SENSORIMOTOR*

RHYTHM, SLEEP–WAKE CYCLE, SUPRACHIASMATIC NUCLEUS, TELOMERE, THETA WAVE, ULTRADIAN RHYTHM, *ZEITGEBER*. [From Greek *chronos* time + English *biology*]

chronological age *n.* A person's actual age, in terms of time elapsed since birth, in contrast to **mental age*. See also DEVELOPMENTAL QUOTIENT, IQ. Compare SOCIAL AGE. **CA** *abbrev.* [From Greek *chronos* time + *logos* word, discourse, or reason + Latin *-icalis* of, relating to, or resembling]

chunking *n.* The grouping together of a number of items of information so that they are processed cognitively as a single entity called a *chunk*, as when the letters *c, h, u, n, k, i, n,* and *g* are perceived, interpreted, and easily remembered as a single word, whereas without the key the same letters presented alphabetically as *c, g, h, i, k, n, n, u* would be difficult to memorize for more than a few seconds. The limitation of **short-term memory* to about seven items of information can be overcome by chunking because, as first pointed out in 1956 by the US psychologist George A(rmitage) Miller (1920–2012), the limitation applies to chunks. In 1974 the US political scientist and decision theorist Herbert A(lexander) Simon (1916–2001) suggested that the capacity of short-term memory is about five chunks, but that as the number of elements per chunk increases, the number of chunks that can be remembered decreases slightly. Simon found that he could not recall the following nine words after one quick reading: *Lincoln, milky, criminal, differential, address, way, lawyer, calculus, Gettysburg*; but when they were arranged into the following four chunks, he could remember them easily: *Lincoln's Gettysburg address, milky way, criminal lawyer, differential calculus*. See also MAGICAL NUMBER SEVEN, SPAN OF APPREHENSION, SUBITIZE.

CIE colour system *n.* An internationally accepted system put forward in 1931 by the Commission Internationale de l'Éclairage (the French International Lighting Commission) for specifying any spectral colour precisely in terms of the proportions (**tristimulus values*) of three **additive primary* colours *x, y,* and *z* required by a standard observer to match it. Also called the *XYZ system*. The *CIE colour diagram* (see *illustration*) shows the colour that results from mixing any pair of spectral colours with each other or with purple or white.



CIE colour diagram. The spectral locus (curve) is shown, together with purple and white. To predict the appearance of a mixture of two colours, draw a straight line connecting them and locate the point on the line corresponding to the proportion of each. Thus an equal mixture of green at 550 nm with red at 630 nm is equidistant between these two points, matching yellow at 580 nm; and an equal mixture of blue–green at 505 nm with green at 550 nm yields a point in the interior matching a mixture of three parts green at 520 nm with one part white.

cilia *n. pl.* The hairlike structures projecting from the surface of a cell or membrane, the rhythmic beating of which causes the surrounding liquid to move or, in certain organisms, including protozoans such as **paramecia* and flatworms, causes the organism itself to move. *See also* *KINOCILIUM*, *MICROTUBULE*, *STEREOCILIUM*. **cilium** *sing.* [From Latin *cilium* an eyelash]

ciliaris *n.* Another name for the **ciliary muscle*.

ciliary body *n.* The thickened vascular tunic of the eye between the **choroid* and the **iris*, including the **ciliary muscle*. [From Latin *cilium* an eyelash]

ciliary muscle *n.* The circular ring of smooth muscle fibres that is attached to the ***choroid** and ***crystalline lens** of the eye and that reduces the convexity of the lens when it contracts. Also called the *ciliaris* . *See also* CYCLOPLEGIA.

ciliary reflex *n.* A reflex relaxation of the ***ciliary muscles** of the eyes in response to an object appearing suddenly in front of the face. It causes the convexity of the lenses to increase, preparing the eyes for ***near vision**, and it is part of the ***accommodation reflex**.

ciliary zonule *n.* Another name for the ***zonule of Zinn**.

cingulate gyrus *n.* A gyrus within the ***longitudinal fissure** above and almost surrounding the ***corpus callosum**. It is part of the ***limbic system** and is involved in ***pain** sensations, control of visceral responses associated with emotions, and the planning of motor actions. Also called the *cingulate cortex* . *See also* ANTERIOR CINGULATE CORTEX, DEFAULT MODE NETWORK. [From Latin *cingere* to gird + Greek *gyros* a circle or ring, alluding to the way it partly encircles the corpus callosum]

cingulum *n.* The ***white matter** within the ***cingulate gyrus**.

circadian rhythm *n.* Any ***biological rhythm** or cycle, such as the ***sleep–wake cycle** in humans, that occurs or fluctuates at intervals of approximately 25 hours in controlled environments from which day/night cues have been eliminated. Also called a *diurnal rhythm* . *See also* BIOLOGICAL CLOCK, CHRONOBIOLOGY, CIRCADIAN RHYTHM SLEEP–WAKE DISORDERS, PINEAL GLAND, SUPRACHIASMATIC NUCLEUS, ZEITGEBER. *Compare* CIRCANNUAL RHYTHM, INFRADIAN RHYTHM, ULTRADIAN RHYTHM. [From Latin *circa* about + *dies* a day]

circadian rhythm sleep–wake disorders *n.* Any of several ***sleep–wake disorders** in ***DSM-5**, characterized by persistent or recurrent disruption of sleep, resulting in ***hypersomnia** or ***insomnia**, caused by a mismatch between the exogenous environmental sleep–wake schedule and the person’s endogenous ***circadian rhythm**. The disorder may arise from a persistent pattern of late sleeping, ***jet lag**, or shift working. Also called

desynchronized sleep rhythm . Compare [DELAYED SLEEP-PHASE SYNDROME](#).

circannual rhythm *n.* Any [*biological rhythm](#) involving a biological or psychological process that occurs or fluctuates at intervals of approximately one year, even in controlled environments from which seasonal cues have been eliminated, such as the seasonal changes in behaviour of some migratory birds, which persist even under constant laboratory conditions from which fluctuations in temperature, daylight, and other seasonal cues have been excluded. See also [BIOLOGICAL CLOCK](#), [CHRONOBIOLOGY](#), [ZEITGEBER](#). Compare [CIRCADIAN RHYTHM](#), [INFRADIAN RHYTHM](#), [ULTRADIAN RHYTHM](#). [From Latin *circa* about + *annus* a year]

circaseptan rhythm *n.* Any [*biological rhythm](#) with a period of approximately seven days. [From Latin *circa* about + *septem* seven]

circling dance *n.* Another name for the honey-bee's [*round dance](#).

circular pitch illusion *n.* Another name for the [*auditory staircase illusion](#).

circumstantiality *n.* A speech style that is logical and does not involve [*loosening of associations](#) but is difficult to follow because it dwells on irrelevant details and takes an inordinate length of time coming to the point. Compare [GANSER SYNDROME](#), [TANGENTIALITY](#). [So called because it is circumstantial in the sense of being filled with minute details]

circumvallate papilla *n.* Any of the dozen or so large [*papillae](#) arranged in an inverted V formation near the back of the [*tongue](#), each surrounded by a ridge on its upper margin and studded near its base with [*taste buds](#), mainly responsive to bitter tastes. Compare [FILOFORM PAPILLA](#), [FOLIATE PAPILLA](#), [FUNGIFORM PAPILLA](#). **circumvallate papillae** *pl.* [From Latin *circumvallatus* surrounded with a wall, from *circumvallare* to surround with a wall, from *circum* around + *vallum* a rampart]

circumventricular organ *n.* Any of a small number of brain structures, most importantly the [*subfornical organ](#), [*posterior pituitary](#), and

***pineal gland**, that lie adjacent to the ventricular system of the brain and outside the ***blood–brain barrier** and are therefore able to monitor substances in the bloodstream that are inaccessible in other areas of the brain.

Cirpam(il) *n.* A proprietary name for the antidepressant drug ***citalopram**.
[Trademark]

cisterna *n.* A hollow space containing a bodily fluid such as ***cerebrospinal fluid** or ***lymph**, especially several ***subarachnoid** pockets or pools of cerebrospinal fluid at the base of the brain, the most prominent of which are the *cisterna magna* between the ***cerebellum** and the bottom of the ***medulla oblongata**, the *superior cisterna* above the ***midbrain**, and the *lumbar cisterna* in the lower spinal area. Also called a *cistern* . [From Latin *cisterna* an underground tank, from *cista* a box]

cis–trans complementation test *n.* A test to determine the unit of genetic function and to provide a criterion for defining a ***cistron** by examining whether two independent recessive mutations giving the same abnormal ***phenotype** are located on the same or different genes. A cross is made between ***homozygotes** of each mutation, and the ***heterozygous** offspring are examined. If the mutations are in different genes, then neither mutation will be expressed in the heterozygous offspring because of ***complementation** (each mutant ***allele** being compensated for by the normal allele received from the other parent), whether the mutations are on the same chromosome (in *cis* position) or on different chromosomes (in *trans* position); but if the mutations are in the same gene, then the mutation will be expressed in the offspring, but only if the mutations lie in *trans* position, because in that case both alleles at the specified locus will be mutants. Also called the *cis–trans test* or *complementation test*. [From Latin *cis* in this side + *trans* across, over, or beyond]

cistron *n.* A sequence of DNA constituting a single functional gene or coding for a single ***polypeptide**; defined more rigorously by the ***cis–trans complementation test**, two recessive mutations within a single cistron failing to complement each other in a ***heterozygous** phenotype when on different chromosomes but showing complementation when on the same chromosome. *See also* **OPERON**. [From *cis–trans*, on the model of *codon*]

*****ebook converter DEMO Watermarks*****

citalopram *n.* An **antidepressant* drug belonging to the group of **selective serotonin reuptake inhibitor (SSRI)* agents. Also called *Cipram*, *Cipramil*, *Elopram*, or *Seropram* (trademarks).

citation form *n.* The pronunciation of a word in isolation, often quite different from the way it is pronounced in any linguistic context.

citric acid cycle *n.* Another name for the **Krebs cycle*. [So called because citric acid is formed during the process]

clairaudience *n.* A conjectural **paranormal* ability to sense sounds that are beyond the range of normal hearing. *See also* *EXTRA-SENSORY PERCEPTION (ESP)*. *Compare* *CLAIRVOYANCE*. [From French *clair* clear, from Latin *clarus* clear + *audientia* hearing, from *audire* to hear]

clairvoyance *n.* **Extra-sensory visual perception* of objects or events, a conjectural **paranormal* phenomenon. When the objects or events are far away it is also called *remote viewing*. *Compare* *CLAIRAUDIENCE*, *PRECOGNITION*, *TELAESTHESIA*, *TELEGNOSIS*, *TELEPATHY*. **clairvoyant** *adj.* [From French *clair* clear, from Latin *clarus* clear + French *voir* to see, from Latin *videre* to see]

clamon *n.* Any secret behavioural strategy or device for the entrapment of wrongdoers or miscreants, such as the use of an ultraviolet security marker to label personal property with an inscription that is invisible under ordinary light, or the insertion of a **digital* signature into text to deter plagiarism. [From *cla(ndestine) mon(ition)*, a furtive or concealed warning, from Latin *clandestinus* concealed or hidden, from *clam* secretly + *monere*, *monitum* to warn or advise]

clang association *n.* An association made between words or phrases based on their similar sound rather than their associated meaning, as between *claustrophobia* and *close to February*. **clanging** *n.* Speaking or thinking according to clang associations rather than meaningful associations.

clasp-knife rigidity *n.* A form of muscular spasm or exaggerated muscle **tonus* in a limb or body part that resists passive movement and then

suddenly gives way, in the manner of a jackknife. It is indicative of a lesion in the **corticospinal tract*. See also DECEREBRATE RIGIDITY. Compare CATALEPSY, CEREAL FLEXIBILITAS, COGWHEEL RIGIDITY.

class *n.* 1. Members of a society sharing a similar social rank and certain economic and cultural characteristics in common, also called a *social class* or a *socio-economic class* ; in Marxist theory, members of a society sharing a common relationship to the means of production, the three major classes being capitalists, landlords, and workers or proletarians. 2. In biology, any **taxonomic* group into which a **phylum* is divided, containing one or more **orders* (3). Examples are the classes of Amphibia, Mammalia, and Reptilia within the phylum Chordata.

[From Latin *classis* a class or rank]

classical conditioning *n.* One of the two major forms of **conditioning* (1), being the process of **learning* (1) through which an initially neutral **stimulus* (1), such as the ticking of a metronome, comes to elicit a particular **response*, such as salivation, as a consequence of being paired repeatedly with an **unconditioned stimulus*, such as food. Also called *Pavlovian conditioning* . See also BACKWARD CONDITIONING, DELAYED CONDITIONING, EVALUATIVE CONDITIONING, FEATURE NEGATIVE LEARNING, FEATURE POSITIVE LEARNING, FORWARD CONDITIONING, HIGHER-ORDER CONDITIONING, LATENT INHIBITION, OVERSHADOWING. Compare OPERANT CONDITIONING, REFLEXOLOGY (2).

classical receptive field See RECEPTIVE FIELD.

classical test theory *n.* A statistical approach to the theory of psychological testing in which an individual's measured score is assumed to be equal to the true score plus random measurement error. The measurement error is usually assumed to have a **mean* of zero and to be uncorrelated with the true score. Within this theoretical framework, the **reliability* of a test item is defined as the proportion of the total **variance* in scores that is due to variance in the true scores. Also called *classical measurement theory* . The principal alternative is **item response theory*.

claustrum *n.* Either of two thin sheets of grey matter, composed chiefly of

*****ebook converter DEMO Watermarks*****

spindle cells, separating the **internal capsule* from the **insula*, situated on either side of the **lenticular nucleus* at the base of the brain. [From Latin *claustrum* a bar]

Clérambault's syndrome See DE CLÉRAMBAULT'S SYNDROME.

Clever Hans *n.* The most famous of the **Elberfeld horses*, trained by the retired German mathematics teacher Wilhelm von Osten (1838–1909) in 1901 and displayed in Berlin for several years, appearing to have a good knowledge of spoken and written German and an ability to tell the time and carry out mental arithmetic, among other equally unlikely capabilities. Clever Hans (*der kluge Hans*) answered yes/no questions by tapping its hoof on the ground according to a prearranged code, and fraud seemed unlikely, because von Osten allowed anyone to watch the horse perform and even to put questions to the horse in his absence, but the psychologist Oskar Pfungst (1874–1932) studied the horse experimentally and discovered that its abilities were illusory. Clever Hans could not respond intelligently when no one within its visual field knew the right answer to the question being asked: for example, if one person whispered a number into its left ear and another person a different number into its right ear, then if Clever Hans was asked to add the two numbers, it was stumped. Pfungst concluded that Clever Hans had learnt to respond to **non-verbal communication*: it began tapping whenever people standing nearby adopted expectant postures and turned their attention to its hoof, and it stopped as soon as the onlookers (probably unwittingly) gave anticipatory head and eye movements when the correct number of taps was reached. Von Osten usually wore a wide-brimmed hat, which had the effect of amplifying small head movements and making the horse's task easier, but he was probably unaware of this. In 1907 Pfungst published an account, the English translation of which was entitled *Clever Hans (the Horse of Mr von Osten): A Contribution to Experimental and Animal Psychology* (1911). See also FACILITATED COMMUNICATION.

client *n.* A person in receipt of a professional service, including a person being treated by a professional psychologist, psychiatrist, psychoanalyst, or counsellor. Also called a *patient*.

client-centred therapy *n.* A technique of **counselling* or
*****ebook converter DEMO Watermarks*****

***psychotherapy** developed by the US psychologist Carl Rogers (1902–87) from the 1940s onwards, in which therapists or counsellors deliberately refrain from interpreting what their clients say but try instead to convey an attitude of *unconditional positive regard* in the context of a permissive, accepting, non-threatening relationship, and to help by clarifying, rephrasing, and ***reflecting back** the feelings or emotions that lie behind the clients' words and behaviour, the assumption being that people are capable of identifying the sources of their own emotional problems and of working out solutions for themselves once they are freed from feelings of anxiety and insecurity. US *client-centered therapy*. Also called *client-centred counselling*, *person-centred therapy* or *counselling*, *non-directive therapy* or *counselling* .

climacteric *n.* Another name for the ***menopause**; by analogy, a supposed period in a man's life corresponding to the female menopause, characterized by diminished sexual activity and energy, also called a *male menopause* ; more generally, any critical phase of development when major bodily changes occur. *See also* **ANDROPAUSE**, **IRRITABLE MALE SYNDROME**. [From Greek *klimakterikos* a critical event or period, from *klimakter* a rung of a ladder, from *klimax* a ladder + *-ikos* of, relating to, or resembling]

climbing fibre *n.* One of the two types of afferent neurons conveying signals to the ***cerebellum**, projecting from the contralateral ***inferior olivary nucleus** and forming multiple synapses with single ***Purkinje cells** of the cerebellar cortex. US *climbing fiber*. *Compare* **MOSSY FIBRE**.

Clinical History Schedule *n.* A semi-structured clinical interview, designed for the objective evaluation of patients with mental disorders, forming part of the ***SCAN** system. **CHS** *abbrev.*

clinical prediction *n.* Prediction based on subjective judgement or intuition, as when a psychologist uses clinical experience to formulate a prediction informally, on the basis of interview impressions, other life-history data, and possibly psychometric test data, about how an individual is likely to behave or respond to treatment. The first systematic analysis and comparison of clinical prediction and ***actuarial prediction** was made by the US psychologist Paul Everett Meehl (1920–2003) in his book *Clinical and Statistical Prediction: A Theoretical Analysis and a Review of the Evidence*

*****ebook converter DEMO Watermarks*****

in 1954.

clinical psychology *n.* One of the major professions of psychology, concerned with the nature, diagnosis, classification, treatment, and prevention of **mental disorders* and disabilities, to be distinguished in careful usage from **abnormal psychology*, which is the scientific study of mental disorders. *See also* *PSYCHIATRY*. **clinical psychologist** *n.* One who practises clinical psychology.

clinical trial *n.* A research investigation designed to provide objective information on the therapeutic efficacy of a drug or other form of treatment, the most important type of clinical trial being the ** randomized controlled trial* (RCT).

clipping *n.* Pronouncing a **vowel* more quickly than normal, without changing its sound quality, as in the pronunciation of the vowel in the word *rice* compared with the same vowel in the word *rise*. In English, a vowel is clipped when followed by a **fortis* consonant rather than a **lenis* consonant within the same syllable, and this phenomenon is called pre-fortis clipping: compare *beat/bead*, *loose/lose*, *rate/raid*.

clique *n.* A small, exclusive group of friends or associates. In a **sociogram*, a subgroup of members within a larger group, each more positively attracted to members of the subgroup than to other members of the larger group. [From Old French *clique*, a latch or a clicking sound, from *cliquer* to click]

clitic *n.* A linguistic item that resembles a word but cannot function independently because of its dependence on an adjoining word and can never be stressed. A clitic is thus intermediate between a word and an affix (prefix or suffix). The usual examples are the French pronouns *je* and *tu*, but the English negative *-n't* (in words like *shouldn't*) is another example. *See also* *ENCLITIC*, *PROCLITIC*. [Back formation from *enclitic* and *proclitic*]

clitoridectomy *n.* Surgical removal of the external tip of the **clitoris* in female circumcision. *See also* *FEMALE GENITAL MUTILATION*. [From Greek *kleitoris* a clitoris + *ectome* an excision, from *tome* a cut]

*****ebook converter DEMO Watermarks*****

clitoris *n.* An elongated erotically sensitive erectile organ visible near the front of a woman's ***vulva** and extending far into her body. It is much larger than is generally realized and as is shown in standard diagrams, and it is homologous with the male ***penis**. See also **CLITORIDECTOMY**. **clitoral** *adj.* [New Latin, from Greek *kleitoris* a clitoris, perhaps from *kleithria* a keyhole, from *kleis* a key, from *kleiein* to close]

cloacal theory *n.* In ***psychoanalysis**, a sexual theory, often adopted by children, that confuses the female vagina and the anus, recognizing only one orifice that is believed to function as a birth canal and also for defecation and coitus. Sigmund Freud (1856–1939) first referred to it in 1908 in an article 'On the Sexual Theories of Children' (*Standard Edition*, IX, pp. 209–26). According to Freud, children of both sexes tend to believe that 'the baby must be evacuated, like a piece of excrement, like a stool' (p. 219). Also called *cloaca theory*. [From *cloaca* the pelvic cavity of most vertebrates, apart from higher mammals, into which both the alimentary canal and the genital ducts open, from Latin *cloaca* a sewer, from Greek *klyzein* to wash out]

Clock Drawing Test *n.* A quick and easy test of visuospatial ability, often used as a screening test for ***Alzheimer's disease** or ***dementia**. The respondent is asked to draw a traditional (analogue) clock face with all the numbers in place and the hands pointing to 11:10 or ten minutes past eleven. The following 10-point scoring system is typical: 10: hands correctly positioned, minute hand longer than hour hand, all numbers correct; 9: hands slightly incorrect, or one number incorrect; 8: one hand significantly misplaced by one number, or numbers poorly spaced; 7: hands misplaced by more than one number, or numbers very poorly spaced; 6: hands or numbers inappropriately depicted, or numbers crowded or reversed; 5: hands not clearly pointing to numbers, or numbers wrongly depicted; 4: hands or numbers absent, or outside clock face, or numbers in wrong sequence; 3: hands missing, or numbers and clock face unconnected; 2: only vague representation of clock face; 1: irrelevant drawing or no attempt. Scores between 7 and 10 are considered normal, 6 is borderline (scored by about 13 per cent of normal respondents and almost 90 per cent of patients with Alzheimer's disease), and scores of 5 and below are rare in normal populations (less than 1 per cent) but common in Alzheimer's patients. The

*****ebook converter DEMO Watermarks*****

origin of the test is uncertain, but it may have been introduced in the 1920s by the English neurologist Sir Henry Head (1861–1940). **CDT** *abbrev.*

clomipramine *n.* Clomipramine hydrochloride, a **tricyclic antidepressant* drug, closely related to **imipramine*, that is a potent **selective serotonin reuptake inhibitor*, and is used chiefly in the treatment of obsessive-compulsive disorder. Also called *Anafranil* (trademark). [From *c(h)lo(ro)*-denoting chlorine + *(i)mipramine*]

clone *n.* **1.** An organism with identical genetic constitution to one or more others, descended from a common parent or ancestor by a form of asexual reproduction or created artificially. **2.** A segment of **DNA* that has been isolated and copied by **genetic engineering*. *vb.* **3.** To replicate as a clone (1, 2) or clones. **cloning** *n.* Producing clones (1, 2).

[From Greek *klon* a shoot or bud]

clonic convulsion *n.* An involuntary rhythmic alternation between contraction and relaxation of skeletal muscles. Also called a *clonic spasm*. Compare *TONIC–CLONIC*, *TONIC CONVULSION*. [From Greek *klonos* contraction]

closed head injury *n.* A blow to the head causing brain damage without penetrating the skull.

closed-loop control *n.* In **cybernetics*, a control process in which a system's output is returned to its input as **feedback*, this being characteristic of **controlled processing* and all **homeostatic* processes. Compare *OPEN-LOOP CONTROL*.

closed node *n.* A **node* (2) that has been processed. Compare *OPEN NODE*.

closed question *n.* A question to which an answer must be selected from a limited set. Questionnaire items with fixed **response categories* are closed questions, and questions in interviews or informal conversations can be open or closed. *Are you angry about that?* is a closed question, because it implies a yes/no answer, whereas *How do you feel about that?* is an **open-ended question*, because the range of possible answers is unlimited. Open-

*****ebook converter DEMO Watermarks*****

ended questions are more effective in breaking the ice or drawing out responses in tense or awkward social situations. Also called a *close-ended question* .

close-ended question *n.* Another name for a **closed question*.

close vowel *n.* A **vowel* (see the diagram accompanying that entry) produced at a high position in the mouth with the body of the tongue raised towards the roof of the mouth, such as the vowels in *seen* and *soon*. Also called a *high vowel* . Compare MID VOWEL, OPEN VOWEL.

closure grouping law *n.* One of the four original **grouping laws* of **Gestalt psychology*, formulated in 1923 by the German psychologist Max Wertheimer (1880–1943) to explain the organization of parts into wholes by the visual system. According to the law, elements that are perceived to form a closed contour tend to be grouped together, so that the array [] [] [] [] tends to be perceived as four rectangular units rather than eight separate elements. See also CLOZE PROCEDURE, COMMON FATE, COMMON REGION, CONNECTEDNESS GROUPING LAW, LANDOLT CIRCLE, *PRÄGNANZ*. Compare GOOD CONTINUATION, PROXIMITY GROUPING LAW, SIMILARITY GROUPING LAW.

clouding of consciousness *n.* A state of consciousness affecting **thinking*, **attention*, and **perception*, in which one is confused about, or not fully aware of, one's immediate surroundings.

Cloud nine *n.* A street name for **ephedrine*.

clozapine *n.* A **dibenzodiazepine* drug that belongs to the group of **atypical antipsychotics* and that acts as a receptor antagonist of both **serotonin* and **dopamine* and is used in the treatment of schizophrenia, having fewer **neuroleptic-induced* side-effects than are associated with conventional **neuroleptic* (1) drugs. Also called *Clozaril* (trademark). See also DOPAMINE ANTAGONIST. [From *c(h)lo(ro)-* denoting chlorine + *(ben)z(odi)a(ze)pine*]

cloze procedure *n.* A method for testing a person's ability to

comprehend written text by guessing missing words that have been deleted at regular intervals from the text. [From to *close* in the sense of to complete, alluding to the **closure grouping law* of Gestalt psychology]

cluster analysis *n.* A statistical technique, introduced in 1935 by the US psychologist Robert Choate Tryon (1901–67) for assigning a set of individual people or other items to groups called *clusters* on the basis of one or more measurements of the individuals, so that individuals within the same cluster are in some sense closer or more similar to one another than to individuals in another cluster. For example, measurements of a cross-section of the population on variables such as age, income, and number of books in the home, if subjected to cluster analysis, may reveal distinct and recognizable clusters such as students, pensioners, and unemployed people. There are many different methods of cluster analysis, including **agglomerative hierarchical clustering*, **average linkage between groups method*, **average linkage within groups method*, **complete linkage clustering*, **divisive hierarchical clustering*, **nearest neighbour method*, **single-linkage clustering*, and (perhaps most popular) **Ward's method*. *See also* DENDROGRAM, HORIZONTAL ICICLE PLOT. *Compare* FACTOR ANALYSIS, PRINCIPAL-COMPONENTS ANALYSIS. **cluster-analytic** *adj.*

clustering *n.* In **free recall*, a tendency for items that are conceptually related to be remembered consecutively whether or not they were grouped together during the learning phase. For example, if the names of cities, trees, and animals are learnt in random order, the cities will tend to be recalled together in one group, the trees in another group, and the animals in a third group.

cluster sample *n.* A **probability sample* used when there is no suitable **sampling frame* of the population but a sampling frame for subgroups is available. Thus, to survey hospital patients throughout an entire country, an investigator may be able to select a random sample of hospitals from a list of all hospitals in the country and could then apply a questionnaire to all patients in the selected hospitals. *See also* MULTISTAGE CLUSTER SAMPLING, RANDOM DIGIT DIALLING, SIMPLE RANDOM SAMPLE, STRATIFIED RANDOM SAMPLE. *Compare* ACCIDENTAL SAMPLE, CONVENIENCE SAMPLE, NON-PROBABILITY SAMPLE, OPPORTUNITY SAMPLE, QUOTA SAMPLE, SELF-SELECTED SAMPLE, SNOWBALL SAMPLE.

*****ebook converter DEMO Watermarks*****

cluster suicides *n.* Multiple suicides occurring in the same area at about the same time, usually assumed to involve **social contagion*.

clysmaphilia *n.* An alternative spelling of **klysmaphilia*.

CN gas *abbrev.* Chloroacetophenone gas, a chlorine compound used as a **tear gas*. [So called because it is a chlorine derivative of acetophenone]

coaching psychology *n.* A branch of **applied psychology* that emerged in the early 2000s, defined in 2005 in the first issue of *The Coaching Psychologist* (p. 7), and in 2006 in the first issue of the *International Coaching Psychology Review* (p. 8) as the application of psychological techniques for ‘enhancing well-being and performance in personal life and work domains underpinned by models of coaching grounded in established adult learning or psychological approaches’. [From French *coche* a wagon or coach, from Hungarian *kocsi szekér* a wagon of Kocs, a Hungarian village where coaches were first made, alluding figuratively to the idea that coaching involves carrying pupils along a road]

coaction effect *n.* The effect on an individual’s task performance of the presence of other individuals engaged in the same activity. Depending on the nature of the task, the effect on performance may be positive or negative. *See also* *DRIVE THEORY OF SOCIAL FACILITATION*, *SOCIAL FACILITATION*. *Compare* *AUDIENCE EFFECT*, *SOCIAL LOAFING*. [From Latin *co-* together + *agere, actum* to do]

coactor *n.* Any organism engaging in joint action with another or engaging in the same behaviour in the same place as another.

cocaine *n.* A highly addictive **sympathomimetic* **alkaloid* substance obtained from the Andean coca shrubs *Erythroxylon coca* and *E. truxillense*, consumed as a drug in various forms, including coca leaves, which are chewed by native populations in parts of Central and South America, coca paste (**basulca*), which may be smoked, and cocaine hydrochloride, which is either snorted through the nostrils in powder form or dissolved in water and injected intravenously. It is the prototypic local anaesthetic drug, though no

longer used for that purpose owing to the risk of its being abused if readily available in medicine cabinets. It also blocks the amine reuptake mechanism of noradrenergic and dopaminergic neurons, thereby causing **noradrenalin* (norepinephrine) and **dopamine* to accumulate at **synapses* (1) in the central nervous system, resulting in mood elevation, and it acts as a central nervous system **stimulant* by increasing the release of **catecholamines*, high doses producing visual, auditory, and sometimes tactile hallucinations, together with paranoia and disruption of thought processes. Until 1904 it was one of the ingredients of Coca Cola. Its street names include *Charlie*, *coke*, and *snow*. Formula $C_{17}H_{21}NO_4$. *See also* ADDICTION, COCAINE-RELATED DISORDERS, CRACK, DEPENDENCE (2), SPEEDBALL, SUBSTANCE DEPENDENCE, SUBSTANCE-INDUCED DISORDERS, SUBSTANCE-RELATED AND ADDICTIVE DISORDERS, SUBSTANCE USE DISORDERS. *Compare* AMPHETAMINE, TRICYCLIC ANTIDEPRESSANT. [From *coca* + *-ine* indicating resemblance, from Latin *-inus* resembling or consisting of]

cocaine bug *n.* A name given to **formication* when it occurs as a **withdrawal* symptom in cocaine users. Also called the *Magnan sign*.

cocaine-related disorders *n.* **Substance-related and addictive disorders* associated specifically with the consumption of **cocaine* or **crack*. *See* SUBSTANCE ABUSE, SUBSTANCE DEPENDENCE, SUBSTANCE-INDUCED DISORDERS, SUBSTANCE USE DISORDERS.

coccygeal nerve *n.* Either of a pair of **spinal nerves* attached to the bottom of the spinal cord, serving the **striped muscles*, the skin, and the **autonomic nervous system*. [From Greek *kokkyx* the cuckoo, from the resemblance of the coccyx to a cuckoo's beak]

cochlea *n.* The spiral bony tube in the inner ear containing the **organ of Corti* with its **basilar membrane* on which are situated **hair cells* that respond to sound waves by converting them into nerve impulses. *See also* SCALA. **cochleae** *pl.* **cochlear** *adj.* [From Latin *cochlea* a snail or spiral, from Greek *kochlias* a snail]

cochlear canal *n.* A spiral tunnel within the **cochlea* of the inner ear, narrowing gradually in diameter towards the apex of the cochlea,

communicating through one opening with the **middle ear*, through a second with the **vestibular system*, and through a third with a tiny canal on the inner surface of the temporal bone. *See also* *OVAL WINDOW*, *ROUND WINDOW*, *SCALA*. Also called the *cochlear duct* .

cochlear duct *n.* Another name for the **cochlear canal*.

cochlear emissions *n.* Sounds generated by vibrations originating within the **cochlea*.

cochlear implant *n.* An electronic device surgically inserted into the **cochlea* of a deaf person, feeding electrical signals from a transmitter outside the scalp into the **vestibulocochlear nerve*. It does not transmit speech clearly but restores some awareness of sound in a totally deaf person.

cochlear microphonic *n.* The summated electrical activity of large numbers of neurons in the **cochlea*, recorded from flat metal electrodes attached to the skin in the vicinity of the ear, analogous to the **EEG* or the **electroretinogram*. Also called a *cochleogram* . **CM** *abbrev.*

cochlear nerve *n.* One of the two major branches of the **vestibulocochlear nerve*, transmitting auditory information from the **organ of Corti* in the cochlea of the inner ear to the brain. *See also* *VESTIBULAR NERVE*.

cochlear nucleus *n.* Either of the nuclei of the **cochlear nerves* in the floor of the fourth ventricle of the brain, the first relay station for auditory nerve fibres.

cochlear window *n.* Another name for the **round window*.

cochleogram *n.* Another name for the **cochlear microphonic*.

cochleotopic map *n.* Another name for a **tonotopic map*.

Cochrane review *n* A **systematic review* of research into the effects of

a healthcare intervention, designed to inform and guide practical decision making. A Cochrane review adheres to a structured format described in the *Cochrane Handbook for Systematic Reviews of Interventions* published by the Cochrane Collaboration, an international organization established in 1993. [Named after the Scottish epidemiologist Archie L(eman) Cochrane (1909–88) who promoted the use of systematic reviews of randomized controlled trials]

Cochran's C *n.* In statistics, a test of the assumption of **homogeneity of variance* required by procedures such as ** analysis of variance (ANOVA)*, namely that several groups come from populations with the same variance. Cochran's *C* test is based on the ratio of the largest group variance to the sum of all the group variances. [Named after the Scottish statistician William Gemmell Cochran (1909–80) who developed the test in 1947]

Cochran's Q *n.* In statistics, a test of the null hypothesis that several related dichotomous variables, measured on the same individual or on matched individuals, have the same mean. Cochran's *Q* is an extension of the **McNemar test* to the *k*-sample case. [Named after the Scottish statistician William Gemmell Cochran (1909–80) who developed the test in 1950]

cockney *n.* A working-class native of the East End of London, traditionally within earshot of the bells of St Mary-le-Bow church, and the associated **dialect* of English, incorporating the **glottal stop* and **rhyming slang*. [From Middle English *cokeney* a cock's egg, hence an oddity, or perhaps from French *coquin* a rogue]

cocktail party phenomenon *n.* A phenomenon of selective **attention* in speech perception that enables a listener to attend to one among several equally loud conversations occurring simultaneously, factors such as voice quality and directional cues facilitating the task. Recordings of conversations under similar circumstances are very much harder to understand. The term was introduced in 1957 by the British telecommunications engineer Colin Cherry (1914–79). *See also* ATTENUATION THEORY, BOTTLENECK THEORY, FILTER THEORY, SELECTIVE ATTENTION.

co-counselling *n.* A technique of do-it-yourself **counselling* or
*****ebook converter DEMO Watermarks*****

***psychotherapy** in which people work in pairs, taking turns at playing the role of counsellor and client. It was developed in the 1950s by the US counsellor (Carl) Harvey Jackins (1916–99). US *co-counseling*. Also called *re-evaluation counsel(l)ing*. Compare **CO-FACILITATOR**.

coda *n.* **1.** A concluding passage of a musical composition, dance, or other work, separate from the basic structure of the work. **2.** The ***consonant** at the end of a syllable, if one exists. The main part of a syllable is almost invariably a ***vowel**, and if nothing follows it, as in all Japanese syllables, then the vowel is said to have zero coda. In English up to four consonants can be present in a coda, as in the word *sixths*.

[From Latin *cauda* a tail]

codeine *n.* A white crystalline ***alkaloid** and ***narcotic analgesic** drug, synthesized partly from ***morphine** and having similar, though much milder, effects. See also **OPIOID-RELATED DISORDERS**. [From Greek *kodeia* the head of a poppy + *-ine* indicating resemblance, from Latin *-inus* resembling or consisting of]

co-dependency *n.* A relationship or partnership in which two or more people support or encourage each other's unhealthy habits, especially substance dependencies.

coding test *n.* Any ***intelligence** test item or subtest in which the respondent has to encode information according to a specified rule. Also called a *recoding test*, a *symbol-substitution test*, or a *substitution test*. See **DIGIT—SYMBOL TEST**.

codon *n.* A triplet of ***bases (1)** in a ***DNA** molecule, or a corresponding triplet in an ***RNA** molecule, that either codes for a single ***amino acid** during ***protein** synthesis or is interpreted as a marker for the beginning or end of a segment of nucleic acid to be translated. See also **EXON**, **GENETIC CODE**, **INTRON**, **START CODON**, **STOP CODON**. [A blend of *cod(ing)* and *(regi)on*]

codon family *n.* A set of ***codons** all coding for the same ***amino acid** or signalling the end of a genetic message, such as the set of ***RNA** codons

*****ebook converter DEMO Watermarks*****

GGU, GGC, GGA, and GGG, all coding for the amino acid **glycine*, or the set UAA, UAG, and UGA, all reserved as **stop codons*. With only 20 amino acids involved in the synthesis of proteins and four bases to encode them, there is redundancy in the **genetic code*, because there are 64 possible triplets of four bases; consequently, every amino acid apart from **tryptophan* (UGG) is encoded by at least two different codons.

coefficient alpha *n.* Another name for **Cronbach's alpha*.

coefficient of consanguinity *n.* The probability, symbolized by F_{ij} or f_{ij} , that a pair of **alleles* belonging to different individuals are the same, given their degree of common ancestry. Also called the *coefficient of kinship*. Compare COEFFICIENT OF RELATIONSHIP.

coefficient of determination *n.* In statistics, a measure of the **goodness of fit (1)* of a set of scores to a **linear model*. It is defined as the proportion of the variance in the **dependent variable* that is explained by the model. It can range in value from 0 to 1, with 1 indicating perfect fit. Symbol: R^2 .

coefficient of kinship *n.* Another name for the **coefficient of consanguinity*.

coefficient of relationship *n.* The proportion of **alleles* that are the same in two related individuals, symbolized by r . Compare COEFFICIENT OF CONSANGUINITY.

coefficient of reliability See RELIABILITY COEFFICIENT.

coefficient of validity See VALIDITY COEFFICIENT.

coenaesthesia *n.* The general feeling of bodily existence arising from the sum of bodily sensations as distinct from the particular sensations themselves; the vital sense. Also called *coenesthesia*. US *cenesthesia*, *cenesthesia*. [From Greek *koinos* common + *aisthesis* feeling]

co-evolution *n.* A process in which the simultaneous evolution of two or more organisms, such as a **predator* and its **prey*, is dependent on or influenced by their mutual interaction or relationship.

co-facilitator *n.* A counsellor or therapist who works in conjunction with another, especially in leading a **group therapy* session. Also called a *co-therapist*.

cognate languages *n.* Languages sharing a common source, such as Italian and Spanish, which both come from Latin.

cognition *n.* The mental activities involved in acquiring and processing **information* (1). Its study includes **cognitive psychology*, **psycholinguistics*, **artificial intelligence*, and **cognitive neuropsychology*. A cognition is an item of knowledge or belief. *See also* *INFORMATION PROCESSING*. [From Latin *cognoscere* to get to know, from *com-* together + *noscere* to know]

cognitive *adj.* Of, relating to, or involving **cognition*.

cognitive ability *n.* An ability to perform any of the functions involved in **cognition*; more generally, another name for **intelligence*.

cognitive-analytic therapy *n.* A form of **brief psychotherapy* based on **object relations* theory, **personal construct theory*, and aspects of **behaviour therapy* and **cognitive therapy*.

cognitive-appraisal theory *n.* A theory of **emotions* according to which **arousal* provides the basis for any emotion, but the quality of the emotion is provided by the person's interpretation of its cause, the specific emotion that is felt depending on the person's interpretation and explanation of the felt arousal. The theory, proposed in 1964 by the US psychologist Stanley Schachter (1922–97), is a type of **attribution* theory based on the **James–Lange theory* but taking into account the main criticism of it—that different emotions tend to share the same bodily responses. In a famous experiment in 1962 by Schachter and the US psychologist Jerome E(verett)

Singer (1929–2010), participants were injected with adrenalin, and some of them were led to interpret the resulting arousal as a purely physiological side-effect of the injection. The participants were then placed in situations designed to elicit either euphoria or anger, and those who had been led to attribute the arousal to the injection expressed less emotion than those who attributed it to the situations they were placed in, although the results were not entirely clear-cut. Also called the *cognitive-evaluation theory* . See also [FACIAL FEEDBACK HYPOTHESIS](#). Compare [CANNON–BARD THEORY](#).

cognitive balance See [BALANCE THEORY](#).

cognitive behaviour modification *n.* A form of [*psychotherapy](#) based on [*cognitive](#) therapy and [*behaviour](#) modification, in which the client or patient learns to replace dysfunctional self-speech (such as *I knew I'd never be able to cope with this job*) with adaptive alternatives (*The job's not going well, but I am capable of working out a plan to overcome the problems*). Its applications include anger control, stress management, coping with anxiety, and developing social skills. US *cognitive behavior modification*. Also called *cognitive behaviour therapy* (CBT) or *cognitive behavioural therapy* . See also [ACCEPTANCE AND COMMITMENT THERAPY](#), [DIALECTICAL BEHAVIOUR THERAPY](#), [MINDFULNESS-BASED COGNITIVE THERAPY](#), [THOUGHT STOPPING](#). Compare [BEHAVIOUR THERAPY](#). **CBM** abbrev.

cognitive behaviour therapy *n.* Another name for [*cognitive behaviour modification](#). **CBT** abbrev..

cognitive consistency theory *n.* Any of a number of theories of [*attitude](#) (1) and [*attitude change](#) according to which people strive to maintain consistency between their cognitions. The most prominent are [*balance theory](#), [*congruity theory](#), and [*cognitive dissonance](#) theory.

cognitive derailment *n.* A pattern of [*thinking](#), closely related to [*loosening of associations](#), in which ideas tend to slide from one track on to an unrelated or only indirectly related track. It is manifested in speech by idiosyncratic shifts between meaningful sentences or clauses, rather than within them. See also [DISORGANIZED SPEECH](#), [DISORGANIZED THINKING](#). Compare [INCOHERENCE](#).

*****ebook converter DEMO Watermarks*****

cognitive development *n.* The growth of cognitive abilities and capacities from birth to old age.

cognitive disorders *n.* A group of ***mental disorders**, the predominant symptoms of which are clinically significant deficits in an aspect or aspects of ***cognition**. See **AMNESTIC DISORDER**, **DELIRIUM**, **DEMENTIA**, **NEUROCOGNITIVE DISORDERS**.

cognitive dissonance *n.* A deceptively simple ***cognitive consistency theory**, first proposed in 1957 by the US psychologist Leon Festinger (1919–89), concerned with the effects of inconsistent cognitions—interpreted as items of knowledge or belief. If one of a pair of cognitions follows from the other, then the two are consonant; if one follows from the converse of the other, then they are dissonant; and if neither follows from the other or from its converse, then they are irrelevant to each other. The ‘follows from’ criterion is psychological rather than logical, consonance being said to exist if an outside observer would consider it more likely that a person who held one of the cognitions would also hold the other, rather than its converse. The dissonance relation is a motivating state of tension that tends to generate three kinds of dissonance-reducing behaviour: changing one of the cognitions, decreasing the perceived importance of dissonant cognitions, and/or adding further (justifying) cognitions. The standard example of a dissonance relation is the pair of cognitions *I smoke cigarettes* and *Cigarette smoking damages my health*. People who hold both cognitions can reduce the dissonance in three ways: changing the first cognition by giving up smoking or convincing themselves that they have given up, but this is difficult because this cognition is behaviourally anchored; changing the second cognition by rejecting, ignoring, or playing down the evidence linking cigarette smoking to ill health, but it is difficult in this case because of the overwhelming evidence; or adding justifying cognitions such as *But I smoke only low-tar brands*, *But I’m more likely to die in a car accident than from the effects of smoking*, and so on, which is the easiest and commonest method of dissonance reduction. The theory generates counter-intuitive predictions relating to the effects of free choices, resisting temptations, and telling lies. Also called *dissonance theory*. See also **ENDOWMENT EFFECT**, **EQUITY THEORY**, **FORCED COMPLIANCE**, **REACTANCE**, **SELF-PERCEPTION THEORY**.

cognitive economy *n.* The tendency for cognitive processes to minimize processing effort and resources. For example, we do not squander memory capacity on storing the information *has two legs* for every individual we know; instead, we store this fact as a general *default assumption* for people in general and add a separate memory *has one leg* or *has no legs* only in exceptional cases in which the default does not apply. *See also* COGNITIVE MISER, DEFAULT REASONING, PRINCIPLE OF LEAST EFFORT.

cognitive enhancer *n.* Another name for a **smart drug*.

cognitive-evaluation theory *n.* Another name for the **cognitive-appraisal theory*.

Cognitive Failures Questionnaire *n.* A questionnaire first published in 1982 by the English psychologist Donald E(ric) Broadbent (1926–93) and several colleagues, in which respondents answer questions about lapses such as forgetting to buy certain items when shopping. It is designed to measure forgetfulness and **absent-mindedness* in everyday life. CFQ *abbrev.*

cognitive heuristic *n.* Another name for a **heuristic*.

cognitive illusion *n.* An **illusion* in the cognitive domain, one of the best known examples being the **size–weight illusion*, although it is also a tactile illusion. *See also* EXPERIMENTALLY INDUCED FALSE MEMORY, FILLED-DURATION ILLUSION, ILLUSORY CORRELATION, MOSES ILLUSION, RUBBER HAND PHENOMENON, RUMPELSTILTSKIN PHENOMENON, TYCHO’S ILLUSION, YOLK PHENOMENON.

cognitive impairment *n.* Any diminution in the quality or strength of **cognitive* functioning, especially **amnesia*, **dementia*, or **delirium*. *See also* MILD COGNITIVE IMPAIRMENT.

cognitive impairment no dementia *n.* Another name for **mild cognitive impairment*. CIND *abbrev.*

cognitive interview *n.* A structured form of interviewing developed in 1984 by the US psychologist R(alph) Edward Geiselman (born 1949) and colleagues as an investigative tool in **forensic psychology* to maximize the amount of reliable information that witnesses can recall. It incorporates several memory-enhancing features, such as reinstating the context of the episode to be recalled (see *STATE-DEPENDENT MEMORY*) and encouraging the interviewee to think about the events in different sequences and from different perspectives.

cognitive invention *n.* A term introduced by the US psychologist Irvin Rock (1922–95) to denote the process by which **illusory contours* arise.

cognitive map *n.* A mental representation of a portion of the physical environment and the relative locations of points within it. Cognitive maps are generally distorted by simplifying assumptions and preconceptions: in people's cognitive maps roads tend to join at right angles even when they do not in reality, and in the cognitive maps of most British people, Bristol lies to the west of Edinburgh, presumably because of knowledge that Bristol is on the west coast and Edinburgh on the east coast, whereas on a cartographer's map the reverse is true. Humans and animals, including birds, navigate partly by cognitive maps and partly by heading vectors (travelling in a fixed direction towards the goal), the former but not the latter being controlled by the **hippocampus*. The term was introduced in an article in the journal *Psychological Review* in 1948 by the US psychologist Edward C(hace) Tolman (1886–1959), who described an experiment in which he trained a group of rats to run through a maze to a goal box, then blocked off the path that the rats were using and observed that most of the rats unhesitatingly chose alternative paths heading in the right general direction. Also called a *conceptual map* or a *mental map* .

cognitive miser *n.* An interpretation of **stereotypes* as psychological mechanisms that economize on the time and effort spent on **information* processing by simplifying social reality, which would otherwise overwhelm our cognitive capacities with its complexity. The concept was introduced by the US journalist Walter Lippmann (1899–1974) in his book *Public Opinion* in 1922. A more general term for essentially the same phenomenon is **cognitive economy*. See also *DUAL-PROCESS MODEL*, *PRINCIPLE OF LEAST EFFORT*.

*****ebook converter DEMO Watermarks*****

cognitive neuropsychology *n.* The study of *deficits or *impairments in human *cognitive function resulting from brain damage. Alongside *cognitive psychology and *artificial intelligence, it is one of the three main approaches to cognition and has been especially fruitful in research into processes such as reading and writing. For example, it has established that different routes exist for translating written words into speech, because some brain-damaged patients with *surface dyslexia are able to read only by translating each letter into its corresponding sound and have great difficulty with orthographically irregular words like *yacht*, whereas others with *deep dyslexia or *phonological dyslexia can read only by whole-word recognition and have difficulty with simple non-words like *bink*, because they cannot translate letters into sounds. *See also* NEUROLINGUISTICS.

cognitive penetrability *n.* The degree to which a cognitive process is unconsciously influenced by assumptions and expectations. For example, research has shown that if one imagines shifting one's gaze from a lighthouse to a bridge, then the time taken is not related to the imagined distance, whereas if one imagines walking or running from the lighthouse to the bridge, or imagines an object moving between these locations, then the time taken is proportional to the imagined distance, suggesting that these cognitive processes are unconsciously influenced by assumptions and expectations about physical movement and are therefore cognitively penetrable. The concept was introduced and named in articles in 1978 and 1979 by the Canadian psychologist Zenon Walter Pylyshyn (born 1937), who carried out the lighthouse-bridge experiment and who also argued that the reason why the time taken for *mental rotation increases in direct proportion to the angle through which the image is rotated, is that mental rotation is cognitively penetrable inasmuch as it is influenced by the assumption that the object rotates smoothly through intermediate positions.

cognitive psychology *n.* The branch of psychology concerned with all forms of *cognition, including *attention, *perception, *learning (1, 2), *memory, *thinking, *problem solving, *decision making, and *language (1). *See also* INFORMATION PROCESSING.

cognitive restructuring *n.* Any form of *cognitive therapy, especially *rational emotive behaviour therapy, in which clients are encouraged and
*****ebook converter DEMO Watermarks*****

helped to adopt more rational or constructive ways of thinking about their problems.

cognitive schema *See* [SCHEMA](#).

cognitive science *n.* An umbrella term for an interdisciplinary enterprise, embracing cognitive psychology, psychobiology, anthropology, computer science, artificial intelligence, linguistics, and philosophy, concerned with information acquisition and processing. It includes research into language, learning, perception, thinking and problem solving, and knowledge representation. The term was introduced in 1973 by the English theoretical chemist and computer scientist H(ugh) Christopher Longuet-Higgins (1923–2004) in a review of [*artificial intelligence](#) included in a document entitled *Artificial Intelligence: A Paper Symposium* published by the Science Research Council of the UK.

cognitive set *n.* A temporary readiness to think or to interpret information in a particular way. *See also* [AUFGABE](#), [SET \(2\)](#).

cognitive slippage *n.* A form of [*thought disorder](#) characterized by a disturbing sense of discontinuity with respect to time and person; a tendency to interpret experiences according to symbols and meanings rather than facts; and an impaired ability to generalize from one situation to another analogous one. It is most commonly referred to as a characteristic of [*schizotypy](#) or [*schizotypal \(personality\) disorder](#).

cognitive style *n.* A characteristic and self-consistent mode of intellectual and perceptual functioning. The earliest classification of cognitive styles was suggested in 1923 by the Swiss psychologist Carl Gustav Jung (1875–1961), and a modified form of it is assessed through the [* Myers–Briggs Type Indicator \(MBTI\)](#). *See also* [CONVERGENCE–DIVERGENCE](#), [FIELD DEPENDENCE–INDEPENDENCE](#), [INTOLERANCE OF AMBIGUITY](#), [LOCUS OF CONTROL](#), [REFLECTION–IMPULSIVITY](#).

cognitive therapy *n.* A form of [*psychotherapy](#) aimed at modifying people's beliefs, expectancies, assumptions, and styles of thinking, based on the assumption that psychological problems often stem from erroneous
*****ebook converter DEMO Watermarks*****

patterns of thinking and distorted perceptions of reality (such as overgeneralizations of the type, *People are always letting me down*) that can be identified and corrected. It has been applied especially to the treatment of depression. The first widely used form of cognitive therapy, not labelled as such, was *rational emotive therapy (RET), and the most influential proponent of a later and more complex form of cognitive therapy was the US psychiatrist Aaron (Temkin) Beck (born 1921). Beck was the first to suggest in his book *Depression: Clinical, Experimental, and Theoretical Aspects* (1967) that depression-prone people tend to have negative *self-schemas revolving around assumptions of inadequacy, failure, loss, and worthlessness; Beck assumed that these beliefs are unrealistic and biased, but research into *depressive realism suggests the opposite. See also COGNITIVE BEHAVIOUR MODIFICATION, COGNITIVE RESTRUCTURING, DEPRESSIVE REALISM, MINDFULNESS-BASED COGNITIVE THERAPY.

cognitivism *n.* A psychological perspective according to which the study of cognition is likely to lead to a broad understanding of human psychology.

cogwheel rigidity *n.* A form of myotonia or muscular rigidity characteristic of *Parkinson's disease, in which pushing on an arm causes it to move in jerky increments rather than smoothly. Compare CATALEPSY, CEREAL FLEXIBILITAS, CLASP-KNIFE RIGIDITY.

Cohen's d *n.* A measure of *effect size, the most familiar form being the difference between two means (M_1 and M_2) expressed in units of *standard deviations: the formula is $d = (M_1 - M_2)/\sigma$, where σ is the pooled standard deviation of the scores in both groups. A value of d below 0.20 is considered small, 0.50 medium, and 0.80 large. [Named after the US psychologist Jacob (Jack) Cohen (1923–98) who devised it and popularized it in his book *Statistical Power Analysis for the Behavioral Sciences* (1969, 1988)]

Cohen's kappa coefficient See KAPPA STATISTIC.

cohesive self *n.* In *self-psychology, a coherent structure representing the normally functioning self.

cohoba *n.* A psychotropic snuff containing ***bufotenin**, derived from the seeds of the South American tree *Piptadenia peregrina*. Compare **AMANITA MUSCARIA**, **FLY AGARIC**. [From Latin American Spanish *cojoba* cohoba, derived from native Arawakan]

cohort *n.* A group of people who share some experience or demographic ***trait** in common, especially that of being the same age (an age cohort). A *cohort study* is a type of research design in which a cohort of individuals is investigated repeatedly over an extended period. A *cohort effect* is a potentially misleading conclusion about developmental changes derived from a ***cross-sectional study**, such as the conclusion that individual IQs decline precipitately from about 20 years of age, a finding that is in fact due to younger cohorts having higher average IQs than older ones (see **FLYNN EFFECT**). [From Latin *cohors* company of soldiers]

coitus *n.* Sexual intercourse. Also called *coition* . [From Latin *coitus* uniting, from *coire* to meet, from *co-* together + *ire* to go]

coitus interruptus *n.* Sexual intercourse deliberately interrupted by withdrawing the penis before ejaculation.

coitus reservatus *n.* Sexual intercourse in which ejaculation is deliberately delayed or avoided altogether.

coke *n.* A common street name for ***cocaine**.

cold pressor pain *n.* Pain induced by immersing a hand and forearm in circulating ice water close to freezing point, used in experimental studies of pain because it causes no permanent tissue damage. Pain begins to mount immediately and typically becomes unbearable after approximately 40 seconds. See also **ALGESIMETER**, **DOLORIMETER**, **HIDDEN OBSERVER**, **ISCHAEMIC PAIN**.

cold spot *n.* A small area of the skin supplied by ***free nerve endings** that transmit sensations of coldness when touched by cold stimuli. See also **PARADOXICAL COLD**, **PARADOXICAL HEAT**. Compare **WARM SPOT**.

cold turkey *n.* A slang term for the signs and symptoms, often including shivering and goose pimples, that are brought about by abrupt drug **withdrawal*.

colera *n.* Another name for **bilis*. [Spanish *colera* bile]

collective unconscious *n.* In **analytical psychology*, a part of the **unconscious* (2) additional to the **personal unconscious*, containing memories, instincts, and experiences that are shared by all people. According to Carl Gustav Jung (1875–1961), these mental elements are inherited and often organized into **archetypes* (2), and they become manifest in dreams and in fairy tales, myths, religions, and other cultural phenomena. Also called the *objective psyche*, *racial memory*, or *racial unconscious*. See also *ANIMA*, *ANIMUS* (3), *ARCHETYPAL FORM*, *INNATE IDEA*, *PSYCHOID*.

colliculus *n.* A small elevation or prominence, especially any one of the four prominences on the **tectum* of the midbrain, which are collectively called the *corpora quadrigemina*. See *INFERIOR COLLICULUS*, *SUPERIOR COLLICULUS*. **colliculi** *pl.* [From Latin *colliculus* a small hill, from *collis* a hill]

colorimeter *n.* An instrument for determining or specifying the quality of colours by comparing them with standard colours or combinations of colours. **colorimetric** *adj.* Of or relating to colorimetry. **colorimetry** *n.* The science of determining and specifying colours by using a colorimeter. [From Latin *color* a colour or hue + Greek *metron* a measure]

colour *n.* The distinctive visual sensation induced by light in the **visible spectrum* having a particular wavelength, not in absolute value but relative to the wavelengths emitted by or reflected from objects or surfaces in other parts of the visual field. Its dimensions are **hue*, **saturation* (1), and **lightness*. US *color*. See *COLOUR-BLINDNESS*, *CONE*, *LAND EFFECT*, *MUNSELL COLOUR SYSTEM*, *PRIMARY COLOUR* (1, 2, 3), *SPECTRUM*. See also *BENHAM'S TOP*, *BEZOLD-BRÜCKE PHENOMENON*, *CATEGORICAL PERCEPTION*, *CHROMA*, *CHROMAESTHESIA*, *CHROMATIC* (1), *CHROMATIC ADAPTATION* (1), *CHROMATICITY*, *CHROMATOPSIA*, *CIE COLOUR SYSTEM*, *COLORIMETER*, *COLOUR ASSIMILATION*, *COLOUR CIRCLE*, *COLOUR CONSTANCY*, *COLOUR CONTRAST*, *COLOUR INDUCTION*, *COLOUR SOLID*, *COLOUR TRIANGLE*, *COLOUR*

ZONE, COMPLEMENTARY COLOURS, CONE PIGMENT, FILM COLOUR, FLIGHT OF COLOURS, GRASSMANN'S LAWS (PERCEPTION), ISOLUMINANT, LADD-FRANKLIN THEORY, MAXWELL DISC, MCCOLLOUGH EFFECT, METAMER, OPPONENT-PROCESS THEORY, PATTERN-INDUCED FLICKER COLOUR, RAYLEIGH EQUATION, RETINEX THEORY, STROOP EFFECT, SURFACE COLOUR, TALBOT'S LAW, TRICHROMACY, TRICHROMATIC THEORY, TRISTIMULUS VALUES, YOUNG-HELMHOLTZ THEORY. [From Old French *colour* colour, from Latin *color* a colour or hue, cognate with *celare* to cover or conceal]

colour adaptation *n.* Another name for **chromatic adaptation* (1, 2). US *color adaptation*.

colour anomaly *n.* A defect in colour vision, the term usually being reserved for relatively mild forms of **colour-blindness*. US *color anomaly*. Also called *colour weakness*.

colour assimilation *n.* A tendency for a colour to become tinged with a different colour that is juxtaposed with it, as when an area of colour such as grey is surrounded by an area of another colour such as red that is not its **complementary colour*. US *color assimilation*. See also ASSIMILATION (6). Compare COLOUR CONTRAST.

colour audition *n.* Another name for **colour hearing*. US *color audition*. Also called *coloured audition* or *colored audition*.

colour-blindness *n.* Inability to distinguish some colours from others under bright illumination, a condition affecting between 7 and 8 per cent of men and 0.4 per cent of women, the major form being **daltonism*, characterized by a defective ability to distinguish reds from greens, rather than **achromatopsia* (total colour-blindness) or **monochromatism*. Everyone is totally colour-blind in dim light when **scotopic* vision depends on **rods*, and mammals with poor or absent colour vision in bright light include rats, mice, rabbits, dogs, and nocturnal owl monkeys; cats have colour vision but use it only when there is no other way of distinguishing between objects. US *color-blindness*. See also ACHROMATOPSIA, ANOMALOUS DICHROMACY, ANOMALOUS TRICHROMACY, COLOUR ANOMALY, COLOUR DEFICIENCY, CONE PIGMENT, DALTONISM, DEUTERANOMALY, DEUTERANOPIA, DYSCHRMATOPSIA, HOLMGREN TEST, HORNER'S

*****ebook converter DEMO Watermarks*****

LAW, ISHIIHARA TEST, PARACHROMATOPSIA, PROTANOMALY, PROTANOPIA, PSEUDO-ISOCHROMATIC, RAYLEIGH EQUATION, STILLING TEST, TRITANOMALY, TRITANOPIA. Compare CHROMATIC VISION, CHROMATOPSIA, COLOUR DYSNOMIA. **colour-blind** *adj.* US *color-blind* .

colour circle *n.* A diagram showing the relationship between the **hue* and **saturation* (1) dimensions of colours, differences in hue being represented by different positions around the circumference of the circle in their natural **spectrum* order, with similar hues close together and **complementary colours* opposite one another, and saturation represented by the distance from the centre, white light being situated at the centre and saturation increasing radially towards the circumference, a special segment of which is occupied by the **non-spectral colour* purple linking spectral blue with spectral red and completing the circle. **Achromatic* (1) colour is not represented, and therefore neither is the **lightness* dimension of colour. US *color circle*. See also METAMER. Compare COLOUR SOLID, COLOUR TRIANGLE.

colour constancy *n.* The tendency for an object or a surface to retain approximately the same apparent colour as the amount and wavelength of light reflected from it changes under varying conditions of illumination, as when the intensity of daylight decreases and its wavelength increases at sunset. The computations required to achieve this result occur in Area V4 of the **visual cortex*, situated on the **fusiform gyrus*. US *color constancy*. See also LAND EFFECT, PERCEPTUAL CONSTANCY, RETINEX THEORY.

colour contrast *n.* The change in perceived colour resulting from its juxtaposition with a different colour, as occurs when **complementary colours* such as blue and yellow are juxtaposed, making the blue look bluer and the yellow yellower, or when red and cyan (blue–green) are juxtaposed, making the red look redder and the cyan more intensely cyan, **simultaneous contrast* occurring when a colour is viewed alongside another and tends to shift towards the complementary colour of the other colour, and **successive contrast* occurring when one colour and then another is viewed, the second tending to shift towards the complementary colour of the first. US *color contrast*. See also APPURTENANCE, CONTRAST (2), VISUAL INDUCTION. Compare COLOUR ASSIMILATION.

colour deficiency *n.* Any defect in the capacity to perceive colours. US *color deficiency*. See [COLOUR-BLINDNESS](#).

colour dysnomia *n.* A defective ability to name colours in spite of an intact ability to match and distinguish them, usually interpreted as a form of nominal aphasia (see [APHASIA](#)). US *color dysnomia*. Compare [AGNOSIA](#), [COLOUR-BLINDNESS](#). [From Greek *dys-* bad or abnormal + *onoma* a name + *-ia* indicating a condition or quality]

coloured noise *n.* Any [*noise](#) (2) apart from [*white noise](#). US *colored noise*.

colour equation *n.* A formula showing the proportions of three [*additive primary](#) colours required by a viewer to match a specified stimulus colour, especially a formula based on the [*CIE colour system](#). US *color equation*. See also [GRASSMANN'S LAWS \(PERCEPTION\)](#), [PRIMARY COLOUR \(1\)](#), [RAYLEIGH EQUATION](#), [TRISTIMULUS VALUES](#).

colour flight See [FLIGHT OF COLOURS](#).

colour hearing *n.* Any form of [*chromaesthesia](#) in which the stimuli that elicit sensations of colour are auditory. US *color hearing*. Also called *coloured audition* or *coloured hearing*.

colour induction *n.* The generation of illusory sensations of colour without direct stimulation of the corresponding [*cones](#) in the retina, by any of a number of different devices. US *color induction*. See also [AFTERIMAGE](#), [BENHAM'S TOP](#), [BIDWELL'S GHOST](#), [CHROMAESTHESIA](#), [COLOUR ASSIMILATION](#), [COLOUR CONTRAST](#), [FLIGHT OF COLOURS](#), [LAND EFFECT](#), [PATTERN-INDUCED FLICKER COLOUR](#), [PURKINJE IMAGE](#).

colour mixing *n.* Producing a colour by combining light of two or more different wavelengths. US *color mixing*. See [ADDITIVE COLOUR MIXTURE](#), [SUBTRACTIVE COLOUR MIXTURE](#). See also [MAXWELL DISC](#).

colour solid *n.* A three-dimensional onion-shaped or spindle-shaped

representation of the relationship between the **hue*, **saturation (1)*, and **lightness* dimensions of colours, the vertical dimension representing **achromatic (1)* colour or lightness, with white at the pointed top and black at the pointed bottom, and the horizontal cross-section consisting of a **colour* circle or ellipse of variable diameter representing hue and saturation. US *color solid*. Compare COLOUR TRIANGLE.

colour spindle *n.* A spindle-shaped **colour solid*. US *color spindle*.

colour surface *n.* Any two-dimensional representation of the relationships between **hue* and **saturation (1)*, notably a **colour* circle or a **colour triangle*. US *color surface*. Compare COLOUR SOLID.

colour triangle *n.* A triangular representation of the relationship between the **hue* and **saturation (1)* dimensions of colours, having hues arranged in their natural **spectrum* order around its perimeter, with similar hues close together and **complementary colours* opposite one another, the centre representing white light and saturation increasing towards the perimeter, a part of which is occupied by the **non-spectral colour* purple linking spectral blue with spectral red. **Achromatic (1)* colour is not represented, and therefore neither is the **lightness* dimension of colour. US *color triangle*. Compare COLOUR CIRCLE, COLOUR SOLID.

colour weakness *n.* Any deficiency in colour vision falling short of **achromatopsia*. US *color weakness*. Also called *colour anomaly*. See also COLOUR-BLINDNESS.

colour wheel *n.* Another name for a **Maxwell disc*. US *color wheel*.

colour zone *n.* Any of the three concentric areas of the **retina* in which **hues* are perceived in particular ways, namely the **macula lutea* in which all hues are visible to a person with normal vision; the intermediate zone in which blues, yellows, and **achromatic (1)* colours appear normally but reds and greens are perceived as shades of grey, yellow, or blue; and the peripheral zone in which all hues appear as achromatic colours. US *color zone*.

coma *n.* A state of deep unconsciousness and absence of responses to external and internal stimuli caused by severe head injury, brain tumour, loss of blood supply to the brain, acute infection, stroke, drug overdose, or poisoning. **comatose** *adj.* In a state of coma. [From Greek *koma* heavy sleep]

combat fatigue *n.* An obsolescent and misleading term (because fatigue is not necessarily a symptom) for ***post-traumatic stress disorder**, especially when caused by traumatic experiences during military actions. Also called *shell shock*.

combination tone *n.* A musical tone such as a ***difference tone** or a ***summation tone** that is heard in a ***complex tone** but is not present in the sensations produced by the constituent components of the stimulus when they are presented singly. When there are two components, the lower having a frequency of f_1 and the higher a frequency of f_2 , then the most easily audible combination tone is generally $2f_1 - f_2$, thus if tones with frequencies of 1,800 hertz and 2,000 hertz are presented, then a combination tone with frequency 1,600 hertz is heard, because $(2 \times 1,800) - 2,000 = 1,600$. *See also* CANCELLATION METHOD, MISSING FUNDAMENTAL ILLUSION, OTOGENIC TONE.

combined parent-figure *n.* A concept introduced into ***psychoanalysis** by the British-based Austrian psychoanalyst Melanie Klein (1882–1960) to denote an infantile fantasy in which the parents are united in a permanent sexual act, the mother containing the father's penis or the whole father, or the father containing the mother's breast or the whole mother. Klein developed the concept fully in her book *The Psycho-Analysis of Children* (1932, at pp. 103–4). Also called a *combined parent*. *See also* PHALLIC WOMAN.

comcon *n.* A ***decentralized communication network** in which every group member has an open channel of communication with every other member. *See also* COMMUNICATION NETWORK. [A blend of *com(pletely)* and *con-(nected)*]

commensal *adj.* Of or relating to two distinct species that live in close proximity to each other without being interdependent. [From Latin *com-* together + *mensa* a table, alluding to eating from the same table]

commissure *n.* A band of fibres or tissue linking two homologous organs, structures, or parts, especially the great cerebral commissure called the **corpus callosum* connecting the two cerebral hemispheres, and other minor inter-hemisphere bundles of nerve fibres, such as the **anterior commissure*, **hippocampal commissure*, **massa intermedia*, **middle commissure*, and **posterior cerebral commissure*. [From Latin *commissura* a joining together, from *com-* together + *mittere* to send]

commissurotomy *n.* Surgical severing of a cerebral **commissure* linking the two hemispheres of the brain, usually the **corpus callosum*, performed on humans as a treatment for chronic, generalized **epilepsy*. Also called *commissurectomy* . See *SPLIT-BRAIN PREPARATION*. See also *DISCONNECTION SYNDROME*. [From Latin *commissura* a connection + Greek *tome* a cut]

common chemical sense *n.* A **chemical sense* that is stimulated by substances such as irritant solutions or vapours capable of exciting receptors in mucous membranes of the nose, mouth, eyes, and respiratory tract. It is mediated by the **trigeminal nerve*, and it accounts for the burning sensation caused by **capsaicin*, the active ingredient in chilli pepper. Also called *trigeminal chemoreception* .

common fate *n.* A special case of the **good continuation* grouping law of **Gestalt psychology*, applying to elements that are moving in time in the same direction and at the same speed and tending to cause them to be grouped together perceptually. See also *PRÄGNANZ*. Compare *CLOSURE GROUPING LAW*, *COMMON REGION*, *CONNECTEDNESS GROUPING LAW*, *PROXIMITY GROUPING LAW*, *SIMILARITY GROUPING LAW*.

common knowledge *n.* Any **proposition (1)* that every member of a specified group knows to be true, knows that every other member knows to be true, knows that every other member knows that every other member knows to be true, and so on. It is not the same as all members of the group merely knowing the proposition to be true, as shown in the **muddy children problem*. The concept was introduced in 1969 by the US philosopher David K(elllogg) Lewis (1941–2001) in his book *Convention: A Philosophical Study* (pp. 52–68).

*****ebook converter DEMO Watermarks*****

common language effect size statistic *n.* The probability that a score selected randomly from one distribution will be greater than a score selected randomly from another. First suggested in an article in the journal *Psychological Bulletin* in 1992 by the US psychologist Kenneth Oakley McGraw (born 1944) and the Malaysian-born US statistician Seok Pin Wong (born 1939), it has a more intuitive interpretation than most other **effect size* measures. The example they gave was based on data from the US National Center for Health Statistics, showing the mean height of men to be 69.7 inches (standard deviation 2.8 inches) and of women 64.3 inches (standard deviation 2.6 inches). If both height distributions are assumed to be normal, then the probability that a randomly selected man will be taller than a randomly selected woman turns out to be .92 or 92 per cent. The statistic is calculated by dividing the difference between the two **means* by the square root of the sum of their **variances* and then determining the probability associated with the resulting **z score*. In the height example, $z = (69.7 - 64.3) / \sqrt{(2.8^2 + 2.6^2)} = 1.41$, and from a published *z* table, the probability of $z < 1.41 = .92$. **CL** or **CLES** *abbrev.*

common ratio effect *n.* A famous violation of **expected utility theory* that seems intuitively appealing to many human decision makers, a typical example being as follows. An urn contains 100 chips numbered 1 to 100. First, you are given a choice between the following pair of options:

Option A: A chip is drawn at random from the urn. If it is numbered 1–20, you receive nothing; if it is numbered 21–100, you receive £16.

Option B: You receive £10 with certainty.

Now you face a choice between a second pair of options:

Option C: A chip is drawn at random from the urn. If it is numbered 1–80, you receive nothing; if it is numbered 81–100, you receive £16.

Option D: A chip is drawn at random from the urn. If it is numbered 1–75, you receive nothing; if it is numbered 76–100, you receive £10.

Many people prefer *B* to *A*, because it guarantees a substantial payoff without the risk associated with *A*, and many of the same people also prefer *C* to *D*, because it offers the prospect of a higher payoff than *D* with only slightly greater risk. But it is easy to show that this pattern of preferences

violates expected utility theory. Writing $u(16)$ for the utility of £16 and $u(10)$ for the utility of £10, the preference of B over A implies that $.80 \times u(16) < u(10)$, which means that $u(16) < 1.25 \times u(10)$. But the preference of C over D implies that $.20 \times u(16) > .25 \times u(10)$, which simplifies to $u(16) > 1.25 \times u(10)$, a contradiction. In general, if $x > y > z$ are sums of money, and p and q are non-zero probabilities, then the common ratio effect occurs if a decision maker prefers the prospect $py + (1 - p)y$ to $px + (1 - p)z$, and also prefers $p(1 - q)x + (1 - p)(1 - q)z + qz$ to $p(1 - q)y + (1 - p)(1 - q)y + qz$. Compare [ALLAIS PARADOX](#), [ELLSBERG PARADOX](#), [MODIFIED ELLSBERG PARADOX](#), [ST PETERSBURG PARADOX](#). **CRE** abbrev.

common region *n.* A [*grouping law](#) formulated in 1990 by the US psychologist Stephen E. Palmer (born 1948) to explain the organization of parts into wholes by the visual system. According to the law, elements that are located within the same perceived region tend to be grouped perceptually, so that the array

[O O] [O O] [O O] [O O]

tends to be perceived as being composed of four pairs rather than eight separate elements. Also called the *enclosure grouping law*. See also [PRÄGNANZ](#). Compare [CLOSURE GROUPING LAW](#), [COMMON FATE](#), [CONNECTEDNESS GROUPING LAW](#), [GOOD CONTINUATION](#), [PROXIMITY GROUPING LAW](#), [SIMILARITY GROUPING LAW](#).

commons dilemma *n.* A type of [*resource dilemma](#) interpreted as a problem of overgrazing on a common pasture, illustrated by the following simple example. Three farmers each own a single cow weighing 1,000 kg and have access to a common that can sustain a maximum of three cows without deterioration. They all want to increase their wealth by adding a further cow to the common, but for each additional cow on the common the weight of every cow decreases by 200 kg. If one farmer adds a cow, then that farmer's personal wealth increases from 1,000 kg (one 1,000 kg cow) to 1,600 kg (two 800 kg cows); if two farmers add a cow each, then the wealth of each increases from 1,000 kg to 1,200 kg (two 600 kg cows); and if all three add a cow each, then the wealth of each *decreases* from 1,000 kg to 800 kg (two 400 kg cows), and each farmer is poorer than if each had acted cooperatively by not adding a further cow to the common. It is always in a farmer's individual self-interest to acquire an additional cow, whether or not one or more of the others does so, but if they all pursue individual self-interest in

*****ebook converter DEMO Watermarks*****

this way, then each ends up poorer than if they all cooperate, which means that the problem is a ***social dilemma**. [So called because of a reference in 1833 in an essay on population growth by the English economist William Forster Lloyd (1795–1852) to the ‘tragedy of the commons’—the overgrazing of the commons in 14th-century England, which led to the enclosures and the eventual disappearance of many of the commons]

communality *n.* In ***factor analysis**, the proportion of the total ***variance** in the scores of one variable accounted for by the factors that the variable has in common with other variables.

communication channel *n.* **1.** The medium or route through which a message is communicated to its recipients, the most common channels being face-to-face communication, telephone, films, internet, television, radio, and the printed media, including newspapers, books, and magazines. **2.** Another name for ***sensory modality**.

communication disorders *n.* In ***DSM-5**, an umbrella term for a group of ***neurodevelopmental disorders** characterized by impairment in language, speech, and communication. *See also* CHILDHOOD-ONSET FLUENCY DISORDER, LANGUAGE DISORDER, SOCIAL (PRAGMATIC) COMMUNICATION DISORDER, SPEECH SOUND DISORDER.

communication network *n.* A group of individuals and the ***communication channels** between some or all of the pairs, indicating the routes along which information can flow or messages can be transmitted, the structure of the network often being determined by the organizational structure of the group. *See also* CENTRALIZED COMMUNICATION NETWORK, DECENTRALIZED COMMUNICATION NETWORK.

communication skills training *n.* Another name for ***social skills training**, especially when it focuses primarily on verbal skills and ***non-verbal communication**. **CST** *abbrev.*

community psychiatry *n.* A branch of ***psychiatry** devoted to the prevention and treatment of mental disorders and the provision of mental health care to people in local communities.

*****ebook converter DEMO Watermarks*****

community psychology *n.* A branch of **applied psychology* involving work at a community level, often including **counselling* and **health psychology*.

companionate love *n.* A type of love characterized by intimacy and commitment but lacking erotic passion. See *LOVE*.

comparable forms *n.* In psychometrics, **alternative forms* of a test that are similar in content but have not been shown to have similar psychometric properties.

comparative judgement *n.* Any judgement of something in relation to something else; more specifically, a sensory judgement elicited by the **method of comparative judgement*. See also *LAW OF COMPARATIVE JUDGEMENT*.

comparative psychology *n.* The study of behaviour in different species, seeking to throw light on the underlying mechanisms and evolution of behaviour. The term is often applied loosely to any form of **animal psychology*.

comparative reference group See *REFERENCE GROUP*.

comparison level *n.* In the **interdependence theory* of the US social psychologists Harold H(arding) Kelley (1921–2003) and John W(alter) Thibaut (1917–86), the quantity of reward or positive outcomes expected by a person on the basis of previous interactions and relationships, outcomes above the comparison level being gratifying and those below it frustrating or disappointing. *Comparison level for alternatives* is the reward that an individual could realize in the best currently available alternative relationship. **CL** *abbrev.*

comparison stimulus *n.* Another name for a **variable stimulus*. **Co** *abbrev.*

compensation *n.* The act or process of making amends, or something done or given to make up for a loss. In **psychoanalysis*, a **defence*

mechanism in which one attempts to redress a perceived deficiency that cannot be eliminated, such as a physical defect, by excelling in some other way. The Austrian psychiatrist Alfred Adler (1870–1937) attached great importance to it in his ***individual psychology**, especially in his concept of the ***inferiority complex**.

compensation neurosis *n.* A collection of symptoms presented by a person who has the prospect of receiving financial compensation for an industrial injury, failed surgical operation, car accident, or the like, susceptible to being interpreted as an attempt to profit from the incident. *Compare* **FACTITIOUS DISORDER**, **MALINGERING**.

compensatory eye movement *n.* A normally involuntary ***smooth eye movement** that occurs in response to a movement of the head to keep the ***gaze** fixated on the same point in the visual field.

competence *n.* **1.** The capacity, skill, or ability to do something correctly or efficiently, or the scope of a person's or a group's ability or knowledge. **2.** In linguistics, a term introduced by the US linguist and philosopher (Avram) Noam Chomsky (born 1928) to denote a person's unconscious knowledge of the grammatical rules of a language, especially those of ***generative grammar** and ***transformational grammar**. Also called *linguistic competence*. *Compare* **PERFORMANCE (2)**. **3.** The legal authority of a court or other body to deal with a particular matter.

[From Latin *competens* competent, from *competere* to be fit and proper, from *com* together + *petere* to aim at or seek]

competency test *n.* An ***achievement test** used to determine whether a person has attained a predetermined level of skill or knowledge in some specified ***content domain**.

competitive antagonist *n.* An ***antagonist (3)** drug that interacts with a class of ***neuroreceptors**, without itself eliciting any response, by producing a change in the neuroreceptors that prevents the ***agonist (3)** from acting on them. Also called a *receptor blocker*. *Compare* **NON-COMPETITIVE ANTAGONIST**.

competitive exclusion principle *n.* The proposition that two distinct but similar species cannot occupy the same *ecological niche indefinitely. Also called *Gause's principle*.

competitive reaction time paradigm *n.* Another name for the *Taylor aggression paradigm.

complemental series *n.* In *psychoanalysis, an arrangement or distribution of a group of cases, from one extreme where hereditary causes predominate, to the other extreme where environmental causes predominate, enabling any specific case to be assigned to a position on a scale according to the relative contributions of nature and nurture. Sigmund Freud (1856–1939) expounded this concept most clearly in 1916–17 in his *Introductory Lectures on Psycho-Analysis* (*Standard Edition*, XV–XVI, especially at pp. 346–7, 362).

complementarity hypothesis *See* NEED COMPLEMENTARITY HYPOTHESIS.

complementary afterimage *n.* An *afterimage in which colours appear approximately as the *complementary colours of the original stimulus. *See also* NEGATIVE AFTERIMAGE (1, 2), POSITIVE AFTERIMAGE.

complementary base pairing *n.* Bonding between the bases adenine and thymine in DNA, between adenine and uracil in RNA, and between cytosine and guanine in both DNA and RNA. Also called *base pairing*. *See also* PURINE, PYRIMIDINE.

complementary colours *n.* Any pair of colours that produce white or grey when mixed in the correct proportions. There is an infinite number of such complementary pairs, but the following typical examples can be read off the *CIE colour system diagram: red (650 nanometres) and blue–green or cyan (495 nm); yellow (580 nm) and blue (480 nm); green (535 nm) and deep bluish purple or magenta (a 2 : 5 mixture of blue and red). *US complementary colors*. *See also* COLOUR ASSIMILATION, COLOUR CIRCLE, COLOUR CONTRAST, PURKINJE IMAGE.

complementary DNA *n.* A form of **DNA* synthesized artificially from a **messenger RNA* template for producing clones by **genetic engineering*. *cDNA* *abbrev.*

complementation *n.* In genetics, the combination of a pair of **homologous chromosomes*, with a **recessive mutant gene* in one and a normal dominant **allele* at the same locus in the other, resulting in a normal **phenotype*, the deficiency being corrected by the normal allele of the other chromosome. *See also* *CIS–TRANS COMPLEMENTATION TEST*, *SEX-LINKED*.

complementation test *n.* Another name for the **cis–trans* complementation test.

complete linkage clustering *n.* In statistics, a technique of **cluster analysis* in which the distance between two clusters is calculated as the distance between their two furthest members, also called the *furthest neighbour method*.

complete Oedipus complex *See* *OEDIPUS COMPLEX*.

completion test *n.* A type of **intelligence* test item in which an incomplete series of items is shown and the respondent tries to select or supply the missing item. The most common form of completion test is a **number-completion test*. Also called a *continuation problem*.

complex *n.* **1.** An organized structure made up of interconnected units. **2.** In **psychoanalysis*, an organized collection of ideas, emotions, impulses, and memories that share a common emotional tone and that have been excluded either partly or entirely from consciousness but continue to influence a person's thoughts, emotions, and behaviour. This concept was introduced in 1895 by the Austrian physician Josef Breuer (1842–1925) in *Studies on Hysteria* (*Standard Edition*, II, at p. 231) and later adapted by Sigmund Freud (1856–1939) and Carl Gustav Jung (1875–1961). The word *complex* is derived from **complexion* (2) in the transitional sense already established by the time of Shakespeare's *Hamlet*: 'So oft it chances in particular men, / That for some vicious mole of nature in them, / As in their birth, wherein they are

not guilty / (Since nature cannot choose his origin), / By the o'ergrowth of some complexion, / Oft breaking down the pales and forts of reason...' (I.iv.23–8). See [CASTRATION COMPLEX](#), [COMPLEX INDICATOR](#), [DIANA COMPLEX](#), [ELECTRA COMPLEX](#), [FATHER COMPLEX](#), [INFERIORITY COMPLEX](#), [INVERTED OEDIPUS COMPLEX](#), [JOCASTA COMPLEX](#), [MOTHER COMPLEX](#), [OEDIPUS COMPLEX](#), [ORESTES COMPLEX](#), [PARTICULAR COMPLEX](#), [PHAEDRA COMPLEX](#), [WORD-ASSOCIATION TEST](#). **3.** In informal usage, an [*obsession](#) or a [*phobia](#). Compare [COMPLEXION](#) (2).

[From Latin *com-* together + *plexus* plaited or twined, from *plectere* to braid]

complex cell *n.* Any of a number of different types of neurons in the [*primary visual cortex](#) (Area V1) in the occipital lobe of the brain, being the most common cell types in that region, responding maximally to stimuli in the form of lines, edges, and/or bars oriented at particular angles and moving at right-angles to their longitudinal axes or stationary anywhere in their [*receptive fields](#), their behaviour being impossible to explain by a straightforward subdivision of the receptive field into excitatory and inhibitory regions. The first complex cell was discovered in a cat's cerebral cortex in 1958 by the Canadian-born US neurophysiologist David H(unter) Hubel (1926–2013) and his Swedish-born collaborator Torsten N(ils) Wiesel (born 1924). See also [BAR DETECTOR](#), [EDGE DETECTOR](#), [END-STOPPED RECEPTIVE FIELD](#), [FEATURE DETECTOR](#), [HYPERCOMPLEX CELL](#), [ORIENTATION-SPECIFIC CELL](#). Compare [SIMPLE CELL](#).

complex indicator *n.* In [*analytical psychology](#), an aspect of a person's response to a [*word-association test](#) that is suggestive of a [*complex](#) (2). Carl Gustav Jung (1875–1961), who popularized the test, listed the main complex indicators in an article entitled 'The Association Method' in the *American Journal of Psychology* in 1910: an unusual reaction to a word, such as laughing or blushing, an abnormally long reaction time, a repetition of the stimulus word, an absurd or far-fetched association, and a failure to respond to a stimulus word.

complexion *n.* **1.** The colour or appearance of the skin, originally believed to be indicative of a person's temperament. See [COMPLEXION](#) (2). **2.** In medieval physiology, the combination of qualities or [*humours](#) (3) believed to determine a person's temperament or personality, as in the Prologue to

Chaucer's *Canterbury Tales*: 'Of his complexion he was sangwyn' (line 333).
See also [COMPLEX \(2\)](#).

[From Latin *complexio*, *complexionis* a combination, from *com-* together + *plectere* to plait]

complex reaction time *n.* Another name for [*choice reaction time](#).

complex receptive field *n.* The [*receptive field](#) of a [*complex cell](#).

complex tone *n.* A sound wave composed of a number of [*pure tones](#) of different [*frequencies \(1\)](#). See also [FOURIER ANALYSIS](#), [HARMONIC](#), [OVERTONE](#), [PARTIAL TONE](#), [TONE \(1\)](#).

compliance *n.* A form of [*social influence](#) in which a person yields to explicit requests from another person or other people. Also called *social compliance*. See [DOOR-IN-THE-FACE TECHNIQUE](#), [FOOT-IN-THE-DOOR TECHNIQUE](#), [LOWBALL TECHNIQUE](#). See also [FORCED COMPLIANCE](#), [LAW OF SOCIAL IMPACT](#). Compare [CONFORMITY](#), [OBEDIENCE](#).

compliance, somatic See [SOMATIC COMPLIANCE](#).

componential theory *n.* A theory of [*concepts](#), [*concept formation](#), and [*semantics](#) according to which the meaning of a concept or a word can be understood by analysing it into its set of [*defining properties](#). The standard example is the concept *even number*, which is completely specified by the defining property *evenly divisible by two*; the theory amounts to an assumption that all concepts can be reduced to their defining properties or essences in this way. It is a form of [*essentialism](#) that can be traced to the writings of the Greek philosophers Plato (?427–?347 BC), in *Laws* (859d–e), and especially Aristotle (384–322 BC), in *Metaphysics* (Bekker edition, pp. 1030–1). It is still hugely influential and is often encountered in the form of a belief that every concept has a defining [*attribute](#) or essence that determines its identity, or that one ought always to define one's terms in any argument or discussion, but it was severely attacked by the Austrian-born British philosopher Karl Raimund Popper (1902–94) in *The Open Society and its Enemies* (1945) and has serious weaknesses in psychology—see [PROTOTYPE](#)

*****ebook converter DEMO Watermarks*****

THEORY. Also called a *definitional theory* or a *feature list theory* .

component instinct *n.* In **psychoanalysis*, any of the basic elements of the **sexual instinct* as defined by its **instinctual source* (oral, anal, and so on) and to a lesser extent by its **instinctual aim* and **instinctual object*. Sigmund Freud (1856–1939) introduced the concept in 1905 in his book *Three Essays on the Theory of Sexuality* (*Standard Edition*, VII, pp. 130–243). In one of his encyclopedia articles published in 1923, he explained: ‘The sexual instinct, the dynamic manifestation of which in mental life we shall call “*libido*”, is made up of component instincts into which it may once more break up and which are only gradually united into well-defined organizations.... The first (pregenital) stage of organization to be discerned is the *oral one*’ (*Standard Edition*, XVIII, pp. 235–59, at p. 244). Also called an *instinctual component* , a *partial instinct* , or a *part instinct* .

composite light *n.* In the terminology introduced by the English physicist and mathematician Sir Isaac Newton (1642–1727) in a paper to the Royal Society in 1675, and elaborated in his book *Opticks* in 1704, any light that can be broken down into constituent colours. *Compare* **PURE LIGHT**.

compound eye *n.* The type of eye found in insects and some crustaceans, composed of a cluster of separate simple eyes, called **ommatidia*, closely packed together but separated by darkly pigmented cells, arranged on a convex membrane and covered by a transparent **cornea*.

compound reaction time *n.* Another name for **choice reaction time*.

compound reinforcement schedule *n.* In **operant* conditioning, any **reinforcement schedule* that incorporates two or more simple schedules. Also called a *compound schedule* or a *higher-order reinforcement schedule* . See **CHAINED REINFORCEMENT SCHEDULE**, **TANDEM REINFORCEMENT SCHEDULE**. *Compare* **SIMPLE REINFORCEMENT SCHEDULE**.

compromise formation *n.* In **psychoanalysis*, a form assumed by a repressed wish, idea, or memory to gain admission to consciousness as a **symptom*, usually **neurotic (1)*, a **dream (1)*, a **parapraxis*, or some other manifestation of unconscious activity, the original idea being distorted
*****ebook converter DEMO Watermarks*****

beyond recognition so that the unconscious element that needs to be repressed and consciousness that needs to be protected from it are both partially satisfied by the compromise. The idea was introduced by Sigmund Freud (1856–1939) in 1896 in his article ‘Further Remarks on the Neuro-Psychoses of Defence’ (*Standard Edition*, III, pp. 162–85, at p. 170) and developed further in his book *Introductory Lectures on Psycho-Analysis* (1916–17): ‘The two forces which have fallen out meet once again in the symptom and are reconciled. It is for that reason, too, that the symptom is so resistant: it is supported from both sides’ (*Standard Edition*, XV–XVI, at pp. 358–9). *See also* [CHOICE OF NEUROSIS](#), [RETURN OF THE REPRESSED](#), [SUBSTITUTE FORMATION](#), [SYMPTOM FORMATION](#).

compulsion *n.* A repetitive pattern of behaviour (such as hand-washing, tidying, or checking) or mental activity (such as praying, counting, reciting words or phrases silently) that a person feels compelled to perform, following strict rules or rituals, with the aim of relieving anxiety or avoiding some dreaded outcome, the behaviour or mental activity being either clearly excessive or not realistically capable of achieving its desired objective, and being recognized as such by the person concerned. *See also* [FUNCTIONAL AUTONOMY](#), [OBSESSIVE–COMPULSIVE DISORDER](#), [OBSESSIVE–COMPULSIVE PERSONALITY DISORDER](#), [REPETITION COMPULSION](#), [RHINOTILLEXOMANIA](#). *Compare* [OBSESSION](#). **compulsive** *adj.* [From Latin *compulsare* to compel habitually, from *compellere* to compel + *-ion* indicating an action, process, or state]

compulsion to repeat *n.* Another name for a [*repetition compulsion](#).

compulsive personality *See* [OBSESSIVE–COMPULSIVE PERSONALITY DISORDER](#).

compulsive sexual behaviour *n.* A [*compulsion](#) characterized by a repetitive pattern of sexual behaviour that is recognized by the person concerned as either clearly excessive or not realistically capable of yielding sexual satisfaction. It typically involves brief sexual encounters with numerous partners and is found in both [*heterosexual](#) and [*homosexual](#) men and women. US *compulsive sexual behavior*. **CSB** *abbrev.*

computational theory *n.* A formal analysis of perception, especially

*****ebook converter DEMO Watermarks*****

one based on the theory of vision pioneered in the late 1970s by the English psychologist David Courtenay Marr (1945–80), which seeks to explain how the pattern of light falling on the retinas of the eyes is transformed into an internal **representation* (2) of the shapes, colours, and movements of what is observed, the three stages in the process being the **primal sketch*, the **2½-D sketch*, and the **3-D model description*. See also EYE–HEAD MOVEMENT SYSTEM, GENERALIZED CONE, IMAGE–RETINAL SYSTEM, ZERO-CROSSING.

computed (axial) tomography See CT SCAN.

computer vision *n.* A branch of **artificial intelligence* concerned with designing or programming computers to process visual stimuli in order to perform such functions as recognizing objects or faces, analysing X-ray images or breast scans, or searching for comets in images from optical telescopes. See also OPTICAL CHARACTER RECOGNITION, PATTERN RECOGNITION, PERCEPTRON, TEMPLATE MATCHING.

conation *n.* The psychological processes involved in purposeful action.
conative *adj.* [From Latin *conatus* attempt, undertaking, or effort]

concept *n.* A mental representation, idea, or thought corresponding to a specific entity or class of entities, or the defining or prototypical **features* (1) of the entity or class, which may be either concrete or abstract. The traditional psychological definition is a category that divides some domain into positive and negative instances. According to some authorities, to qualify as a concept the mental process must be conscious: young children do not have concepts of *noun* or *verb* although their linguistic behaviour shows that they understand these concepts and can discriminate between them. According to evidence, people can form concepts without awareness: in 1920 the US psychologist Clark L(eonard) Hull (1884–1952) reported one of the earliest experiments on concept formation in which participants or subjects sorted Chinese characters into two categories with the help of simple right/wrong feedback, the concept being based on the presence or absence of a certain radical element, but even after learning to sort the elements more or less correctly, some people were unable to describe or draw the defining **attribute*. See also BASIC-LEVEL CATEGORY, COMPONENTIAL THEORY, CONJUNCTIVE CONCEPT, CONSTRUCT, DISJUNCTIVE CONCEPT, EXEMPLAR, INTENSION, INTUITION,

*****ebook converter DEMO Watermarks*****

PROTOTYPE THEORY. **conceptual** *adj.* Of, relating to, or based on a concept or concepts. [From Latin *conceptum* something received or conceived, from *concipere* to take in or conceive, from *con-* with + *capere*, *ceptum* to take]

concept formation *n.* The process by which a **concept* is acquired or learnt, usually from exposure to examples of items that belong to the concept category and items that do not belong to it. In general, it involves learning to distinguish and recognize the relevant **attributes* according to which items are classified and the rules governing the combination of relevant attributes, which may be disjunctive, as in the concept of a coin, which may be circular, polygonal, or annular. Also called *concept identification* or *concept learning*. See also **COMPONENTIAL THEORY**, **FEATURE COMPARISON MODEL**, **INTUITION**, **MISMATCH**, **OVEREXTENSION**, **PROTOTYPE THEORY**, **SEMANTICS**, **2-4-6 PROBLEM**, **UNDEREXTENSION**, **VYGOTSKY BLOCKS**.

concept identification *n.* Another name for **concept formation*.

concept learning *n.* Another name for **concept formation*.

conceptual dependency theory *n.* In the field of **knowledge representation*, a theory of how meaning is represented. According to the theory, propositions are reduced to a small number of **semantic* primitives, such as agents, actions, and objects, and are interpreted according to knowledge stored as **scripts* (3). The theory was introduced in the 1970s by the US linguist and cognitive scientist Roger C. Schank (born 1946).

conceptually driven processing *n.* Any **cognitive* or **perceptual* process that is controlled by higher-level processing or **top-down processing*. See also **CONSTRUCTIVISM**.

conceptual map *n.* Another name for a **cognitive map*.

conceptual tempo *n.* Another name for **reflection–impulsivity*.

concomitant variable *n.* Another name for a **covariate*.

concordance *n.* 1. In genetics, the proportion of **monozygotic twins*, or relatives of other known degrees of genetic relatedness, who share the same characteristic or **phenotype*. See also *MAP DISTANCE*, *TWIN STUDY*. Compare *DISCORDANCE* (1). 2. In statistics, the degree of agreement between **ranks*. See *GAMMA STATISTIC*, *KENDALL COEFFICIENT OF CONCORDANCE*, *KENDALL'S TAU*, *SOMERS' D*. Compare *DISCORDANCE* (2). **concordant** *adj.*

Concorde fallacy *n.* Continuing to invest in a project merely to justify past investment in it, rather than assessing the current rationality of investing, irrespective of what has gone before. Thus gamblers often throw good money after bad in an attempt to escape from escalating debts, marriage partners often become trapped in escalating spirals of hostility and counter-hostility from which they feel increasingly incapable of extricating themselves on account of past emotional investments, and the length of time a female great golden digger wasp *Sphex ichneumoneus* is prepared to fight over a disputed burrow depends not on how much food there is in the burrow but on how much she herself has put there, the wasp that has carried the largest amount of prey into the burrow being generally least willing to give up fighting. The phenomenon was first identified and named in an article in the journal *Nature* in 1976 by the British ethologist Richard Dawkins (born 1941) and his undergraduate student Tamsin R. Carlisle (born 1954). Also called the *sunk cost fallacy*, especially in decision theory and economics. See also *DOLLAR AUCTION GAME*. [Named after the Anglo-French supersonic airliner, the Concorde, whose cost rose steeply during its development phase in the 1970s so that it soon became uneconomical, but British and French governments continued to support it to justify past investment]

concrete operations *n.* According to the theory of cognitive development of the Swiss psychologist Jean Piaget (1896–1980), the stage of cognitive development between the ages of approximately 7 and 12 years during which a child becomes proficient at manipulating internal representations of physical objects and acquires mastery of the various forms of **conservation*. See also *MENTAL OPERATION*. Compare *FORMAL OPERATIONS*, *PRE-OPERATIONAL STAGE*, *SENSORIMOTOR STAGE*.

concurrent validity *n.* In psychometrics, a form of **criterion validity* based on predictor and criterion scores obtained at approximately the same
*****ebook converter DEMO Watermarks*****

time, as when a test of depression is validated against clinical diagnoses made at about the same time. Compare [PREDICTIVE VALIDITY](#).

concussion *n.* Jarring of the brain caused by a blow to the head, a fall, or an explosion, causing a temporary loss of consciousness or disturbance of normal brain function. **concuss** *vb.* [From Latin *concussus* violently shaken, from *concutere* to shake violently, from *quater* to shake + *-ion* indicating an action, process, or state]

condensation *n.* Compressing or making more compact. In [*psychoanalysis](#), the representation of several chains of mental associations by a single idea. This phenomenon is manifested in [*dreams \(1\)](#), [*neurotic \(1\)](#) or other [*symptoms](#), jokes, and other manifestations of unconscious activity, and it is characteristic of the [*primary process](#). Sigmund Freud (1856–1939) first referred to it in 1900 in his book *The Interpretation of Dreams* (*Standard Edition*, IV–V, at pp. 293–5). By 1916–17, when his *Introductory Lectures on Psychoanalysis* was published, Freud had come to the view that condensation is probably not caused directly by [*censorship](#) but that it serves the interests of censorship none the less (*Standard Edition*, XV, at p. 191). In an article in the journal *La Psychoanalyse* in 1957, the French psychoanalyst Jacques Lacan (1901–81) related condensation to [*metaphor](#) and the defence mechanism of [*displacement](#) to [*metonymy](#). See also [DREAMWORK](#), [OVERDETERMINATION](#).

conditional probability *n.* Another name for [*posterior probability](#): the probability assigned to an event in accordance with [*Bayes' theorem](#) in the light of empirical evidence as to its observed relative frequency. See also [CONDITIONAL REASONING](#). Compare [PRIOR PROBABILITY \(2\)](#).

conditional reasoning *n.* A form of logical reasoning based on *conditional statements* or *conditional propositions* having the form *If p, then q*, in which *p* is the [*antecedent](#) and *q* is the [*consequent](#). An example is *If this substance is glass, then a diamond will scratch it*. The conditional statement is logically equivalent to *Not-(p and not-q)*, and it is true, by definition, if and only if *p* and *q* are both true or *p* is false (whether *q* is true or false). A *subjunctive conditional* is a conditional statement or [*proposition \(1\)](#) in which the antecedent and consequent are both hypothetical or

*****ebook converter DEMO Watermarks*****

contingent: *If the polar ice cap were to melt, then many people would drown.* A *counterfactual conditional* is a subjunctive conditional in which the antecedent is not merely hypothetical but false: *If she had pulled the trigger, then I would have been killed*; and in logic it is necessarily true because its antecedent is false. See also [AFFIRMING THE ANTECEDENT](#), [AFFIRMING THE CONSEQUENT](#), [BICONDITIONAL](#), [DENYING THE ANTECEDENT](#), [DENYING THE CONSEQUENT](#), [SIMULATION HEURISTIC](#).

conditional response *n.* An uncommon but more accurate name for a **conditioned response*. Also called a *conditional reflex*.

conditional stimulus *n.* An uncommon but more accurate name for a **conditioned stimulus*.

conditioned avoidance learning *n.* A form of **operant conditioning* in which the organism must make a particular response to evade punishment. See [AVOIDANCE CONDITIONING](#).

conditioned emotional response *n.* A phenomenon of **conditioning* (1) that occurs when a baseline behaviour such as lever pressing for food reward is established at a stable rate of responding, then a long-lasting **conditioned stimulus* (such as a 90-second tone) is presented and terminates with the presentation of an aversive **unconditioned stimulus* (such as a brief electric shock). After several such pairings of conditioned and unconditioned stimulus, the organism suppresses responding during the conditioned stimulus presentation, even though the food reward is still available in response to lever pressing and is completely independent of the tone–shock pairing, the usual interpretation being that the conditioned stimulus (tone) elicits a **conditioned response* (fear) that is incompatible with the suppressed behaviour (feeding). Also called *conditioned suppression*. **CER** *abbrev.*

conditioned food aversion *n.* Another name for **food aversion learning*.

conditioned reflex *n.* Another name for a **conditioned response*, presupposing that such a response arises from modification of a **reflex arc*.

*****ebook converter DEMO Watermarks*****

Also called a *conditional reflex* .

conditioned response *n.* In **classical conditioning*, a learned response that follows a **conditioned stimulus* as a consequence of a process of classical conditioning. *Conditioned* is a slight mistranslation of *conditional*, the term originally used by the Russian physiologist Ivan Petrovich Pavlov (1849–1936), referring to a response occurring only conditionally (after a process of conditioning). Also called a *conditioned reflex* or a *conditional reflex* , presupposing that it arises from modification of a **reflex arc*. Compare UNCONDITIONED RESPONSE. **CR** abbrev.

conditioned stimulus *n.* In **classical conditioning*, a **stimulus* (1) such as the ticking of a metronome that is initially neutral but that comes to elicit a particular **response* such as salivation only as a consequence of being paired with an **unconditioned stimulus* such as food during a process of classical conditioning. It is a slight mistranslation of *conditional stimulus*, the term originally used by the Russian physiologist Ivan Petrovich Pavlov (1849–1936), meaning a stimulus that elicits a particular response only conditionally (after a process of conditioning). Compare UNCONDITIONED STIMULUS. **CS** abbrev.

conditioned suppression *n.* Another name for a **conditioned emotional response*. More generally, a reduction in the frequency of a **conditioned response* resulting from the presence of a stimulus previously associated with pain.

conditioned taste aversion *n.* Another name for **food aversion learning*.

conditioning *n.* 1. The process of **learning* (1) through which the behaviour of organisms becomes dependent on environmental **stimuli* (1). Its two major forms are **classical conditioning* (Pavlovian conditioning) and **operant conditioning* (instrumental conditioning). See also ASSOCIATIVE LEARNING, AUTOSHAPING, BEHAVIOURISM, EVALUATIVE CONDITIONING, OVERSHADOWING, SHAPING (1). 2. In linguistics, the influence of linguistic context on a linguistic unit or form. The **allophone* of a **phoneme* may be determined by phonological context (for an example, see ASPIRATION); or the

*****ebook converter DEMO Watermarks*****

*allomorph of a *morpheme may be determined by grammatical context, as when the morpheme *a* becomes *an* before a *vowel. 3. Another name for *Bayesian inference.

[Sense 1 is a back formation from *conditioned* (originally *conditional*) *response*]

Condorcet's paradox *n.* A *paradox of *intransitive preferences arising from the aggregation of individual *transitive preferences under majority rule. Its simplest manifestation is in a group of three voters choosing among three alternatives *x*, *y*, and *z*, the first voter preferring the three alternatives in the order *xyz*, the second *yzx*, and the third *zxy*. In a majority vote, *x* is preferred to *y* by a majority of two to one (the first and third voters preferring the alternatives in that order), and similarly *y* is preferred to *z* by a majority, and *z* is preferred to *x* by a majority. Also called a *cyclic majority* or the *paradox of voting*. See also [ARROW'S IMPOSSIBILITY THEOREM](#). [Named after the French philosopher and mathematician Marie Jean Antoine Nicolas de Caritat Condorcet (1743–94) who discovered it in 1785]

conduct disorder *n.* In *DSM-5, a *disruptive, *impulse-control, and conduct disorder of childhood or adolescence characterized by repetitive and persistent violations of the rights of others and of social norms and rules, including bullying, aggressive or threatening behaviour towards people or animals, deliberate destruction of property, deceitfulness, or theft, with the behaviour causing significant impairment in social, academic, or occupational functioning. Compare [ANTISOCIAL PERSONALITY DISORDER](#). **CD** abbrev.

conduction aphasia See [APHASIA](#).

conductive deafness *n.* Any form of *deafness resulting from disease, damage, or obstruction in the *outer ear canal or the *middle ear. Common causes are accumulation of wax in the outer ear (*ceruminous deafness), *otitis media, and otosclerosis, a disorder of the *oval window in which the *stapes becomes fused with the vestibule of the *bony labyrinth. Also called *conduction deafness* or *transmission deafness*. Compare [CENTRAL AUDITORY PROCESSING DISORDER](#), [SENSORINEURAL DEAFNESS](#).

cone *n.* One of the two classes of [*photoreceptors](#) at the back of the [*retina](#), mediating [*photopic](#) vision, responsive to bright light, colour-sensitive and found especially abundantly in the [*fovea](#), with an outer segment at its back end containing photosensitive membranes stacked like an orderly pile of discs decreasing in diameter towards the tip, studded with light-absorbing molecules of [*visual pigment](#), and a [*synapse](#) (1) at the other end transmitting nerve impulses to [*bipolar cells](#) and [*horizontal cells](#) in the retina. Cones are divided into three types containing different visual pigments having broad and overlapping sensitivity curves with peak absorption at about 430, 530, and 560 nanometres, loosely called blue, green, and red cones, respectively. Because of the overlap, signals from one type of cone are not sufficient to give rise to a specific sensation of colour, light of any wavelength invariably causing two or more types to respond in different degrees, and the relative strengths of the signals from all three types providing the necessary information for sensations of colour, as when weak signals from red and green cones accompanied by strong signals from blue cones evoke the sensation of blue, or when equal signals from red and green cones accompanied by weak signals from blue cones evoke the sensation of yellow. The human retina contains approximately 6 million cones, far outnumbered by the 120 million rods. Also called a *retinal cone* . *See also* [DOMINATOR](#), [GANGLION CELL](#), [MODULATOR](#), [PIGMENT](#), [TRICHROMATIC THEORY](#). *Compare* [ROD](#). [So called because it is cone-shaped, with a tapering outer segment]

cone of confusion *n.* A cone-shaped set of points, radiating outwards from a location midway between an organism's ears, from which a sound source produces identical [*phase delays](#) and [*transient disparities](#), making the use of such binaural cues useless for [*sound localization](#). Any cross-section of the cone represents a set of points that are equidistant from the left ear and equidistant from the right ear.

cone pigment *n.* Any of three distinct [*visual pigments](#) in the normal (non-colour-blind) human retina that are responsible for colour vision and that have peak sensitivities at approximately 430 nanometres, 530 nm, and 560 nm, usually called blue, green, and red pigments, respectively, although light of these wavelengths actually looks violet, blue-green, and yellowish-green. *See also* [IODOPSIN](#). *Compare* [RHODOPSIN](#).

*****ebook converter DEMO Watermarks*****

confabulation *n.* A memory disorder related to ***amnesia** but involving the generation of fabricated accounts of events, experiences, or facts, either deliberately or without conscious intent, to compensate for memory loss. Some authorities think of it as ‘honest lying’. It is a common sign of ***Korsakoff’s psychosis**. [From Latin *con-* with + *fabula* a story + *-(a)tion* indicating a process or condition]

confederate *n.* A person taking part in a conspiracy. In research methodology, an accomplice of the experimenter in research involving deception, pretending to be an experimental participant or subject, along with the real participants, but actually playing out an assigned role. Also called a *stooge*. Compare **NAIVE PARTICIPANT**.

confidence interval *n.* In statistics, a range of values bounded by *confidence limits* within which there is a specified probability that the true value of a population ***parameter** is expected, with a specified level of confidence, to lie. By convention, the 95 and 99 per cent confidence intervals are most often used. For example, in a population of 8,000, a sample of 950 respondents is required to achieve a 95 per cent confidence interval of ± 3 per cent. This means that if a survey found that 25 per cent of a random sample were in favour of capital punishment, then if 100 different random samples of that size were drawn from the population, 95 per cent of them would give results between 22 and 28 per cent. In large populations, over about 5,000, the necessary sample size for a given confidence interval is surprisingly insensitive to the population size: for a population of 40,000, a sample of 1,050 is required to achieve the same 95 per cent confidence interval of ± 3 per cent, and the required sample size increases only very slowly for larger samples than that, hence opinion polls in the UK (population 64 m), the US (population 317 m), and Ireland (population 4.5 m) all use sample sizes slightly over 1,000 to achieve 95 per cent confidence intervals of ± 3 per cent, which is the conventional confidence interval for public opinion polls. See also **PROBABLE ERROR**.

confidence limits *n.* The bounds of a ***confidence interval**.

configural scoring rule *n.* In psychometrics, any rule for assigning weights to predictor variables so that the interpretation of one predictor score
*****ebook converter DEMO Watermarks*****

depends on the level of one or more others, as for example in a **lexicographic semiorder*. See also [SCORING FORMULA](#).

configural superiority effect *n.* The tendency for some complex visual stimuli, such as faces or printed words, to be more easily recognizable than any of their constituent parts presented in isolation. Also called the *object superiority effect*. See also [WORD SUPERIORITY EFFECT](#).

configuration law *n.* Another name for the principle of **Prägnanz* in Gestalt psychology.

confirmation bias *n.* The tendency to test one's beliefs or conjectures by seeking evidence that might confirm or verify them and to ignore evidence that might disconfirm or refute them. This bias, which helps to maintain **prejudices* and **stereotypes*, is clearly manifested in problem-solvers' behaviour in the **Wason selection task* and the **2-4-6 problem*. See also [FALSIFIABILITY](#), [HEMPEL'S PARADOX](#), [LOGICAL POSITIVISM](#). Compare [MATCHING BIAS](#).

confirmation paradox *n.* Another name for **Hempel's paradox*.

confirmatory factor analysis *n.* The use of **factor analysis* to test **hypotheses* about the factors underlying a set of correlations. Compare [EXPLORATORY FACTOR ANALYSIS](#). **CFA** *abbrev.*

conflict, psychological See [PSYCHICAL CONFLICT](#).

conformity *n.* A form of **social influence* in which a person yields to group pressure in the absence of any explicit order or request from another person to comply, as in the **Asch experiment*. See also [ANTICONFORMITY](#), [LAW OF SOCIAL IMPACT](#). Compare [COMPLIANCE](#), [OBEDIENCE](#).

confounding *n.* In research design, the problem that arises when two or more **causal variables*, often an **independent variable* and an **extraneous variable*, are not properly controlled, so that their separate effects on the **dependent variable* cannot be disentangled. [From Latin *confundere* to mingle or pour together, from *fundere* to pour]

confusion matrix *n.* A **matrix* representing the relative frequencies with which each of a number of stimuli is mistaken for each of the others by a person in a task requiring recognition or identification of stimuli. Analysis of these data allows a researcher to extract **factors* (2) indicating the underlying dimensions of similarity in the perception of the respondent. For example, in colour-identification tasks, relatively frequent confusion of reds with greens would tend to suggest **daltonism*.

congener *n.* 1. A member of the same **genus* as another organism. 2. A drug that belongs to the same category, class, or group as its parent compound. 3. Any additional substance apart from alcohol that is present in an alcoholic beverage and that is partly responsible for its effects.

[From Latin *con* with + *genus* birth]

congenital central hypoventilation syndrome See CENTRAL HYPOVENTILATION SYNDROME. **CCHS** *abbrev.*

congenital facial diplegia *n.* Another name for **Möbius syndrome*.

congenital oculofacial paralysis *n.* Another name for **Möbius syndrome*.

congruent validity *n.* The **validity* of a test determined by its **correlation* with existing tests designed to measure the same **construct*.

congruity theory *n.* A **cognitive* consistency theory of **attitude change*, based on **balance theory* but formulated as a quantitative model, according to which if a source *S* and attitude object *O* are linked by an *associative assertion* (such as *S is an O*, *S likes O*, *S shakes hands with O*, or *S goes with O*) or a *dissociative assertion* (such as *S is not an O*, *S dislikes O*, *S avoids O*, or *S criticizes O*), then the attitudes to both *S* and *O* of the person receiving this message will shift towards a point of equilibrium, the less polarized of the two elements moving proportionately more than the more polarized one. Attitudes towards *S* and *O* are measured on a seven-point **semantic* differential scale from -3 to +3, and the change equation for the source is $\text{Change}(S) = [|O| / (|O| + |S|)]P$, where $|O|$ and $|S|$ are the

*****ebook converter DEMO Watermarks*****

absolute values (ignoring any negative signs) of the two initial attitudes and P is the pressure towards change—the total amount of change required to produce congruity. Similarly, the change equation for the attitude object is $\text{Change}(O) = [|S| / (|S| + |O|)]P$. For example, if a person has a positive attitude towards the composer Tchaikovsky (+2) and a very negative attitude towards homosexuality (−3), and if the person discovers that Tchaikovsky was gay, then the distance between the two and hence the value of P is 5, and $\text{Change}(S) = [3/(3 + 2)]5 = 3$, which means that the attitude towards Tchaikovsky moves three units in the direction of the attitude towards homosexuality; and by a similar calculation, the attitude towards homosexuality moves two units in the direction of the attitude towards Tchaikovsky; so that the person's attitudes to Tchaikovsky and homosexuality both end up at −1. For a dissociative assertion, the two move away from each other. In the light of empirical findings two correction factors were added to the theory: an *assertion constant* to account for the fact that the attitude towards the attitude object tends to change more than the attitude towards the source, and a *correction for incredulity* that reduces the amount of change in both S and O in proportion to their distance apart (for an associative assertion) or their closeness (for a dissociative assertion). The theory was formulated in 1955 by the US psychologist Charles E(gerton) Osgood (1916–91) and the Canadian-born US psychologist Percy (Hyman) Tannenbaum (1927–2009).

conjoint measurement theory *n.* A mathematical method for constructing measurement *scales (1) for objects with multiple *attributes in such a way that attributes are traded off against one another and the scale value of each object is a function of the scale values of its component attributes. The method determines whether apparent *interaction effects arise from actual interactions between the underlying attributes or as *artefacts (2) of the particular *measurement model adopted. *Axiomatic conjoint measurement* investigates qualitative aspects of the data to determine how best to scale the data to provide the optimal composition rule. In *numerical conjoint measurement*, also called *conjoint analysis*, a particular composition rule is assumed and then the data are scaled, if possible, to yield an *additive model solution. The theory was introduced in 1964 by the US mathematical psychologist Robert Duncan Luce (1925–2012) and the US statistician John Wilder Tukey (1915–2000). See also AXIOMATIC MEASUREMENT THEORY,

*****ebook converter DEMO Watermarks*****

UNFOLDING TECHNIQUE. [From Latin *coniungere* to link together, from *com* together + *iungere* to join]

conjoint therapy *n.* Any form of **psychotherapy* or **counselling* in which two or more clients or patients are treated simultaneously. *See also* **GROUP THERAPY.**

conjugate movement *n.* A coordinated movement, as of the two eyes turning together in the same direction or the pupils of both eyes constricting at the same time (a *conjugate eye movement*). Also called a *consensual movement*. *See also* **DEITERS' NUCLEUS**, **PUPILLARY LIGHT REFLEX**. *Compare* **DISJUNCTIVE EYE MOVEMENT.** [From Latin *coniugare* to join together, from *con-* together + *iugare* to marry or join, from *iugum* a yoke]

conjunction *n.* **1.** The act or process of joining together, or the state of being joined. **2.** In logic, two **propositions* (1) connected by an operator denoting *and* to form a single compound proposition, usually written $p \wedge q$, where p and q represent the component propositions or conjuncts, the compound proposition being true only if both of its conjuncts are true. *See also* **CONJUNCTION FALLACY**. *Compare* **DISJUNCTION** (2).

[From Latin *con-* with + *iunctio* joining + *-ion* indicating an action, process, or state]

conjunction fallacy *n.* A widespread error of judgement according to which a combination of two or more **attributes* is judged to be more probable or likely than either attribute on its own. It was identified and named in 1982 by the Israeli-American psychologists Amos Tversky (1937–96) and Daniel Kahneman (born 1934) who presented undergraduate students with personality sketches of a hypothetical person called Linda (young, single, deeply concerned about social issues, and involved in anti-nuclear activity) and asked them whether it was more probable that (a) Linda is a bank teller, or (b) Linda is a bank teller who is active in the feminist movement; 86 per cent of the students judged (b) to be more probable than (a). This is a fallacy, because it is an elementary principle of probability theory that the probability of the **conjunction* (2) *A* and *B* can never exceed the probability of *A* or the probability of *B*. The fallacy arises from the use of

the **representativeness heuristic*, because Linda seems more typical of a feminist bank teller than of a bank teller. *See also* [KOLMOGOROV'S AXIOMS](#).

conjunction search *n.* A search for a target stimulus representing a **conjunctive concept* among a number of distractor stimuli. *Compare* [DISJUNCTION SEARCH](#), [FEATURE SEARCH](#).

conjunctive concept *n.* A concept defined by the simultaneous possession or **conjunction (2)* of two or more **attributes*, for example, a red square. *Compare* [DISJUNCTIVE CONCEPT](#).

conjunctive eye movement *n.* Another name for a **conjugate movement*. [From Latin *coniunctivus* joined, from *coniungere* to conjoin, from *iungere* to join]

connectedness grouping law *n.* A perceptual **grouping law* formulated in 1990 by the US psychologists Irvin Rock (1922–95) and Stephen E. Palmer (born 1948) to explain the organization of parts into wholes by the visual system. According to the law, the perceptual system has a tendency to perceive any uniform, connected line or area as a single unit, so that the array

O–O O–O O–O O–O

tends to be perceived as being composed of four rather than eight or twelve elements. *See also* [PRÄGNANZ](#). *Compare* [CLOSURE GROUPING LAW](#), [COMMON FATE](#), [COMMON REGION](#), [GOOD CONTINUATION](#), [PROXIMITY GROUPING LAW](#), [SIMILARITY GROUPING LAW](#).

connectionism *n.* 1. An approach to **artificial intelligence* involving the design of intelligent systems composed of **neural networks* in which items of knowledge are represented not by single locations or units but by patterns of activation over collections of units, these patterns being adaptive inasmuch as they are capable of learning from experience. It was first introduced in 1948 in an article on 'Intelligent Machinery' by the English mathematician Alan Mathison Turing (1912–54) but became popular only after the publication in 1981 of a connectionist model of human memory developed by the US

cognitive scientist James L(oyd) McClelland (born 1948). Turing's article was partly anticipated by an article in 1943 by the US neurophysiologist Warren S(turgis) McCulloch (1898–1968) and the self-taught US logician Walter Pitts (1923–69), but that early version crucially lacked the ability to learn. Also called *parallel distributed processing* . See also [BACK-PROPAGATION ALGORITHM](#), [CASCADE PROCESSING](#), [DELTA RULE](#), [DISTRIBUTED NETWORK MODEL](#), [GRADIENT DESCENT](#), [HEBBIAN RULE](#), [HILL CLIMBING](#), [KNOWLEDGE REPRESENTATION](#), [TEACHER UNIT](#). Compare [DISTRIBUTED COGNITION](#). **2.** A term used by the US psychologist Edward Lee Thorndike (1874–1949) to refer to his interpretation of trial-and-error learning as the formation of associations between situations (not ideas) and responses. See also [LAW OF EFFECT](#). Compare [ASSOCIATIONISM](#). **connectionist** *n.* **1.** One who practises or advocates connectionism (1, 2). *adj.* **2.** Of or relating to connectionism (1, 2).

connectionist model *n.* Any model of [*information](#) processing based on the conceptual framework of [*connectionism](#) (1). Also called a *connectionist network* .

connotation *n.* **1.** An association or idea suggested or implied by a word or expression; for example, the word *mother* has connotations of home, family, maternal love, and so on. This meaning should be carefully distinguished from sense 2. See also [SEMANTIC DIFFERENTIAL](#). Compare [DENOTATION](#) (1). **2.** In philosophy, the set of [*attributes](#) or properties that determine the thing or things to which a word or expression refers; hence the connotation of the word *mother* is the following set of attributes or properties: {female, human or animal, parent}. See also [INTENSION](#). Compare [DENOTATION](#) (2). **connotative** *adj.* **connote** *vb.*

[From Latin *connotare* to connote, from *con-* with + *notare* to mark, from *nota* a mark or sign + *-ation* indicating a process or condition]

consanguinity, coefficient of See [COEFFICIENT OF CONSANGUINITY](#).

consanguinity study *n.* Another name for a [*kinship study](#).

conscience *n.* A moral sense of what is right and wrong, generally accompanied by corresponding regulation of thought and behaviour. More

*****ebook converter DEMO Watermarks*****

specifically, a feeling of remorse or regret following an unethical ***action** (*I have a guilty conscience about not repaying the loan*). See also **KNOBE EFFECT**, **SUPEREGO**, **TROLLEY PROBLEM**. [From Latin *conscientia* knowledge, from *conscire* to know well, from *con-* wholly + *scire* to know + *entia* indicating a state, condition, or quality]

conscientiousness *n.* One of the ***Big Five** personality factors, characterized by ***traits** such as organization, thoroughness, reliability, and practicality, and the relative absence of carelessness, negligence, and unreliability. Also called *dependability*. See also **ALPHA PERSONALITY FACTOR**, **GENERAL FACTOR OF PERSONALITY**, **HEALTH PSYCHOLOGY**. **conscientious** *adj.* [From Latin *con* with + *scire* to know]

conscious *adj.* **1.** Of or relating to the function of the mind through which one is aware of mental experiences such as perceptions, thoughts, emotions, and wishes. In ***psychoanalysis**, functioning as a noun (*the conscious*), denoting the conscious mind. See also **CONSCIOUSNESS**. Compare **UNCONSCIOUS (1)**. **2.** Awake, alert, and aware of what is happening in the immediate vicinity; not in a state of sleep, trance, or coma. **3.** Aware of and giving due weight to something, as in *Are you conscious of the need for action?* or *I am not at all clothes-conscious*.

[From Latin *conscius* sharing knowledge, from *con* with + *scire* to know]

consciousness *n.* The state of being ***conscious (1, 2)**; the normal mental condition of the waking state of humans, characterized by the experience of perceptions, thoughts, feelings, awareness of the external world, and often in humans (but not necessarily in other animals) self-awareness. See also **ACCESS CONSCIOUSNESS**, **ALTERED STATE OF CONSCIOUSNESS**, **ASTONISHING HYPOTHESIS**, **ATTENTION**, **AUTONOETIC**, **BLINDSIGHT**, **CHINESE ROOM**, **COGNITIVE PENETRABILITY**, **CONTROLLED PROCESSING**, **FUNCTIONALISM**, **GÖDEL'S THEOREM**, **IMAGERY**, **LIBET'S DELAY**, **MARGINAL CONSCIOUSNESS**, **MENTAL MODEL**, **MINDFULNESS**, **NEODISSOCIATION THEORY**, **PERCEPTION—CONSCIOUSNESS SYSTEM**, **PHENOMENAL CONSCIOUSNESS**, **PHENOMENOLOGY**, **READINESS POTENTIAL**, **STREAM OF CONSCIOUSNESS**, **STRONG AI**, **THING-PRESENTATION**, **TOPOGRAPHY**, **TRANSLIMINALITY**, **TURING TEST**, **WEAK AI**. Compare **ABSENCE**, **AUTOMATIC PROCESSING**, **AUTOMATISM**, **HYPNOSIS**, **PRECONSCIOUS**, **SLEEP**, **SUBLIMINAL PERCEPTION**, **UNCONSCIOUS (1, 2)**.

conscious *adj.* **Cs** *abbrev.*

consensual pupillary reflex *n.* Another name for the ***pupillary light reflex**. Also called the *consensual light reflex*. [From Latin *consensus* agreement, from *consentire* to agree or feel together, from *com* with + *sentire* to feel]

consensual validity *n.* The ***validity** of a test determined by its general acceptance in the community of test administrators or by the number of users who judge it to be valid. *See also* **FACE VALIDITY**, **INTRINSIC VALIDITY**.

consensus sequence *n.* A sequence of ***DNA** such as the ***telomere** sequence TTAGGG that is found in widely divergent organisms and has a similar function in each. Also called a *canonical sequence*.

consequent *See* **CONDITIONAL REASONING**.

conservation *n.* A term introduced by the Swiss psychologist Jean Piaget (1896–1980) to denote the understanding that material quantity is unaffected by certain transformations that change its appearance. *Conservation of number* is exemplified by understanding the invariance of the number of objects when their spatial arrangement is changed, *conservation of substance* the invariance of the quantity of a liquid when it is poured into a differently shaped container, and *conservation of mass* and *conservation of volume* the invariance of the mass and the volume of a lump of plasticine, play dough, or similar material when it is moulded into a different shape. The various types of conservation generally appear at different stages of a child's development, first number and substance, then mass, then volume; conservation of number and substance typically appearing by age 7 or 8 and the others soon after. The lack of mastery of conservation of number in a younger child at the ***pre-operational stage** of development can be demonstrated by setting up a row of egg-cups, each containing an egg, asking the child to confirm that the number of egg-cups is the same as the number of eggs, then removing the eggs and moving them close together to make a row that is much shorter than the row of egg-cups, and asking the child whether there are more eggs than egg-cups, more egg-cups than eggs, or the same number of egg-cups and eggs. A child who has not yet mastered the conservation of number usually believes that

*****ebook converter DEMO Watermarks*****

there are more egg-cups, because the row is longer. Variations of this experiment were first described by Piaget in 1941 in his book *La Genèse du Nombre chez l'Enfant* (*The Child's Conception of Number*, English translation published in 1952). See also [CENTRATION](#), [CONCRETE OPERATIONS](#), [DÉCALAGE](#).

conservation of energy law *n.* The first law of [*thermodynamics](#), stating that when a system changes from one state to another, energy is converted to a different form but the total energy remains unchanged or is conserved, making a perpetual-motion machine impossible. It was discovered by the German physician and physicist Julius Mayer (1814–78), who submitted it to the leading physics journal *Annalen der Physik*, but it was rejected, and Mayer was forced to publish it in an obscure chemistry journal where it had little impact; then it was independently rediscovered by the Scottish physicist and mathematician William Thomson (later Lord Kelvin, 1824–1907), who presented it to the Royal Society in 1851 and was credited with its discovery. See also [PRINCIPLE OF CONSTANCY](#).

consistency theory See [COGNITIVE CONSISTENCY THEORY](#).

consolidation *n.* The process whereby new information is fixed in [*long-term memory](#), where it is integrated with existing stored information. The process continues for some time after exposure to the new information. See also [CALPAIN](#), [HEBB SYNAPSE](#), [HIPPOCAMPUS](#), [LONG-TERM POTENTIATION](#), [PHASE SEQUENCE](#).

consonant *n.* Any speech sound that involves a significant obstruction of the airstream in the vocal tract and that functions at the beginning or end of a syllable, either singly or in a cluster, or a letter of the alphabet representing such a speech sound. [*Plosive](#) consonants involve complete stoppage of the airstream and are maximally consonantal; [*nasal](#) (2) consonants complete blockage of the airstream through the mouth but not the nose; [*fricatives](#) considerable obstruction but not stoppage; [*lateral](#) consonants obstruction in the centre of the mouth only; and [*approximants](#) relatively little obstruction of the airflow. Compare [SEMIVOWEL](#), [VOWEL](#). **consonantal** *adj.* [From Latin *consonare* to sound at the same time]

consonant trigram *n.* A string of three consonants, such as *CBT*, sometimes used in experiments on memory instead of **CVC trigrams*. Also called a *CCC trigram*.

consonant-vowel-consonant trigram *n.* A string of three letters, beginning and ending with a consonant, with a vowel in the middle, such as *KUG*. See also *CVC*, *NONSENSE SYLLABLE*.

conspecific *n.* 1. An organism of the same species as another. *adj.* 2. Belonging to the same species.

[From Latin *con* with + *specificus* of or relating to a species, from *species* appearance, from *specere* to look + *-ikos* of, relating to, or resembling]

constancy See *PERCEPTUAL CONSTANCY*.

constancy, principle of See *PRINCIPLE OF CONSTANCY*.

constant error *n.* In **psychophysics*, any systematic error of judgement or perception involving either overestimation or underestimation of a variable magnitude. It is used as a measure of the magnitude of certain perceptual illusions. Compare *VARIABLE ERROR*. **CE** abbrev.

constant stimuli method See *METHOD OF CONSTANT STIMULI*.

constituent *n.* A component part of a larger whole; in linguistics, a word, phrase, or clause forming part of a larger linguistic structure. For example, a sentence can be analysed into its constituent subject and predicate, and each of these units can be analysed further into their constituent parts. The results of such an analysis into constituents at different levels may be depicted by a **phrase marker*. [From Latin *constituens* setting up, from *constituere* to establish, from *con* together + *statuere* to place]

constitutional psychology *n.* A theory, especially that of the US psychologist William H(erbert) Sheldon (1899–1977), postulating that **personality* is dependent on physique or **somatotype*. See *ECTOMORPH*,

ENDOMORPH, MESOMORPH. *Compare* KRETSCHMER CONSTITUTIONAL TYPE.

construct *n.* A **model* based on observation guided by a theoretical framework. In **psychometrics*, a psychological attribute, such as **intelligence* or **extraversion*, on which people differ from one another; more generally any complex **concept* synthesized from simpler concepts. Also called a *latent variable*. See also HYPOTHETICAL CONSTRUCT, PSYCHOANALYTIC CONSTRUCTION, THEORY (2). [From Latin *constructus* piled up or built, from *construere* to pile up or build, from *con-* together + *struere* to arrange or erect]

constructional apraxia See APRAXIA.

construction in analysis *n.* Another name for **psychoanalytic construction*.

constructive memory *n.* The production of memories under the influence of prior experience and expectations in such a way that existing **schemas* or new information affect how the information is stored in memory. See also CONSTRUCTIVISM, PIAGET KIDNAPPING MEMORY, REALITY MONITORING, REPRESENTATIONAL MOMENTUM. *Compare* RECONSTRUCTIVE MEMORY.

constructivism *n.* A doctrine according to which perceptions, memories, and other complex mental structures are actively assembled or built by the mind, rather than being passively acquired. The idea was introduced in 1932 by the English psychologist Sir Frederic Charles Bartlett (1886–1969) to explain phenomena that he observed in his study of memory. An influential example of constructivism in perception is the concept of the **perceptual cycle* introduced by the German-born US psychologist Ulric (Richard Gustav) Neisser (1928–2012), and it has been used by the English psychologist Richard L(angton) Gregory (1923–2010) and others to explain a number of visual illusions. Radical constructivism, deriving from writings in the 1950s of the Swiss psychologist Jean Piaget (1896–1980), is based on the assumption that children construct mental structures by observing the effects of their own actions on the environment. Social constructivism, first popularized by the Austrian-born US sociologist Peter Ludwig Berger (born 1929) and the Yugoslav-born US sociologist Thomas Luckmann (born 1927)

*****ebook converter DEMO Watermarks*****

in their influential book *The Social Construction of Reality* (1966), focuses on the way people come to share interpretations of their social environment. See also [CONSTRUCTIVE MEMORY](#), [RECONSTRUCTIVE MEMORY](#), [SCHEMA](#), [SOCIAL CONSTRUCTIONIST PSYCHOLOGY](#), [TOP-DOWN PROCESSING](#).

construct validity *n.* In psychometrics, the extent to which a test measures a specified [*construct](#) or [*hypothetical construct](#), determined by interpreting the psychological meaning of test scores and testing implications of this interpretation. For example, according to the construct of [*extraversion](#) proposed by the German-born British psychologist Hans J(ürgen) Eysenck (1916–97), extraverts form [*conditioned responses](#) more slowly than introverts; therefore, if a scale designed to measure extraversion is administered to a group of respondents, and high scorers are shown in a conditioning procedure to condition more slowly than low scorers, then these data constitute evidence for the construct validity of the scale relative to Eysenck's concept of extraversion. More specific interpretations of construct validity have been suggested in terms of [*convergent validity](#) and [*discriminant validity](#) in relation to the [*multitrait–multimethod matrix](#), and in terms of the [*nomological network](#).

consumer psychology *n.* A branch of psychology devoted to the study of the delivery of goods and services and the effects of advertising, marketing, packaging, and display on the behaviour of purchasers.

consummate love *n.* A type of love characterized by erotic passion, commitment, and intimacy. See [LOVE](#). [From Latin *consummare*, *consummatum* to perfect, from *con* with + *summus* the highest, from *summa* a sum]

contact hypothesis *n.* The proposition by the US psychologist Gordon W(illard) Allport (1897–1967) that sheer social contact between social groups is sufficient to reduce intergroup [*prejudice](#). Empirical evidence suggests that this is so only in certain circumstances.

contact receptor *n.* A [*sensory receptor](#) such as a [*touch receptor](#) or a [*taste receptor](#) that is stimulated by an object or substance touching it. Compare [DISTANCE RECEPTOR](#).

*****ebook converter DEMO Watermarks*****

contagion, behavioural/social See BEHAVIOURAL CONTAGION, SOCIAL CONTAGION.

content-addressable memory *n.* In computer technology, a memory store that can be accessed by specifying the information that it contains, so that an instruction to find a particular item of information can be automatically converted into an instruction to go to the physical location where that information is stored. Human memory is evidently content addressable, and so are the memory systems of **connectionism* (1) and **parallel distributed processing*. Also called a *content-addressable store*.

content analysis *n.* A collection of techniques often used in **qualitative research* for the systematic and objective description and classification of the manifest or latent subject matter of written or spoken verbal communications, usually by counting the incidence or coincidence of utterances falling into several (usually predetermined) categories.

content domain *n.* In psychometrics, a clearly defined body of knowledge, skills, abilities, aptitudes, or tasks that may be measured with an appropriately constructed test. See also CONTENT VALIDITY, DOMAIN-REFERENCED TEST, DOMAIN SAMPLING.

contentive *n.* Another name for a **content word*.

content psychology *n.* The psychological study of the components of consciousness as practised in **structuralism* (2), rather than of individual acts. Compare ACT PSYCHOLOGY.

content validity *n.* In psychometrics, the extent to which the items of a test are appropriate to the **content domain* of the test. For example, a test used for employment selection has high content validity if the test items cover the abilities, skills, or competencies required to perform the job and do not cover other irrelevant attributes. See also DOMAIN-REFERENCED TEST, DOMAIN SAMPLING.

content word *n.* Any word with an independent meaning that can be

stated, such as *flower*, *write*, and the great majority of words in any natural language. Also called a *contentive* or a *lexical word*. Compare [FUNCTION WORD](#).

context-dependent grammar *n.* A type of [*generative grammar](#) in which a rule can be conditional on the linguistic context—the linguistic units adjacent or nearby those to which the rule applies directly. For example, *Rewrite X as X + Y in the context of Z* is a typical *context-dependent rule* in such a grammar. Also called a *context-sensitive grammar*. Compare [CONTEXT-FREE GRAMMAR](#).

context-dependent memory *n.* A form of [*state-dependent memory](#) associated with the context in which information is learned and recalled.

context effect *n.* Any influence of surrounding objects, events, or information on an organism's response to a [*stimulus \(1\)](#), especially on perception and cognition. See also [ADAPTATION-LEVEL THEORY](#), [ASSOCIATIVE ILLUSION](#), [CHEQUER-SHADOW ILLUSION](#), [DIALECTICAL MONTAGE](#), [FIELD EFFECT](#), [GELB EFFECT](#), [INDUCED MOTION](#), [KARDOS EFFECT](#), [WORD SUPERIORITY EFFECT](#). Compare [FRAMING EFFECT](#).

context-free grammar *n.* A type of [*generative grammar](#) in which the rules apply regardless of the linguistic context—the linguistic units adjacent or nearby those to which the rule applies directly. For example, *Rewrite X as X + Y* is a possible *context-free rule* in such a grammar, and it would apply irrespective of linguistic context. Compare [CONTEXT-DEPENDENT GRAMMAR](#).

context-sensitive grammar *n.* Another name for a [*context-dependent grammar](#).

contiguity law *n.* In the doctrine of [*associationism](#), the most basic law, introduced by the Scottish philosopher James Mill (1773–1836), according to which mental elements or ideas become associated when they are close to one another in time or space. Thus redness is associated with warmth because the two are often contiguous in everyday experience, as when one encounters a hearth full of glowing coals. See also [GROUPING LAW](#). Compare [FREQUENCY LAW](#), [SIMILARITY LAW](#). [From Latin *contigere* to touch on all sides, from *con-* *****ebook converter DEMO Watermarks*****]

wholly + *tangere* to touch]

contiguity theory *n.* The learning theory of the US psychologist Edwin R. Guthrie (1886–1959), according to which an organism invariably gives the same response to a **stimulus (1)* pattern that it gave when it last encountered the pattern (including internal stimuli), the function of **reinforcement* being to create a new stimulus pattern to which the organism responds similarly in the future.

contingency coefficient *n.* In statistics, a measure of association between two categorical variables, applicable to a **contingency table* of any size. It is based on the **chi-square distribution* and ranges from 0 (no association) to 1 (perfect association) and is calculated by dividing the chi-square value for the table by the chi-square value plus the number of observations and then extracting the square root. *Compare* **CRAMÉR'S C** , **PHI COEFFICIENT**.

contingency management *n.* A technique of **behaviour therapy* based on **operant conditioning* in which therapists and family members ignore behaviour that is symptomatic of the disorder being treated and actively reward behaviours that are incompatible with the disorder. In the first decade of the 21st century, contingency management began to be applied more widely in the US, especially in drug treatment programmes and company health initiatives. As a consequence, more homeless people with HIV started remembering to take their medication when they were paid small incentives for doing so, and recidivism rates of drug offenders reduced markedly.

contingency table *n.* A rectangular array of numbers formed by the intersection of two classification variables, showing frequencies of observations in each of its cells. For example, if the two variables are male/female and left-handed/right-handed, then the frequencies of cases in each of the four categories could be displayed in a 2×2 contingency table, that is, a contingency table with two rows and two columns.

contingency theory of leadership effectiveness *n.* A model of leadership style and leadership effectiveness proposed by the US-based
*****ebook converter DEMO Watermarks*****

Austrian psychologist Fred E(dward) Fiedler (born 1922) in his book *Theory of Leadership Effectiveness* (1967), according to which a directive, authoritarian leadership style is most effective when circumstances are either very unfavourable or very favourable for the leader, and non-directive leadership is most effective in intermediate circumstances. The three key factors determining the favourableness of the circumstances for the leader are leader-member relations (how much the leader is liked and respected by the group members), position power (how much authority the leader has over the group members), and task structure (how structured the group task is).

contingent aftereffect *n.* A type of **aftereffect* that results from selective adaptation to specific stimulus features, the resultant effect being contingent on the presence in the visual field of one of these features, the classic example being the **McCollough effect* in which illusory colours are contingent on the presence of particular grating patterns. *See also* [TILT AFTEREFFECT](#).

contingent negative variation *n.* A type of **event-related potential*, believed to indicate attention, consisting of a large negative change in potential voltage across the cerebral cortex, especially in the frontal lobe, that develops slowly in a person who is actively expecting the occurrence of some significant stimulus requiring a response. It is observable as an **evoked potential* occurring typically during the 1–2 seconds after a warning signal is given. *See also* [p300](#). *Compare* [READINESS POTENTIAL](#). **CNV** abbrev.

continuant *n.* Any speech sound such as /l/, /f/, /r/, or /s/ whose **articulation* involves incomplete blockage of the airstream through the vocal tract. *Compare* [PLOSIVE](#).

continuation problem *n.* Another name for a **completion test*.

continuity (Gestalt) *See* [GOOD CONTINUATION](#).

continuity theory *n.* A theory of learning espoused by the US psychologist Clark L. Hull (1884–1952), among others, according to which an organism learns a small amount about all **stimuli* (1) that it encounters, and learning is therefore gradual and continuous. *Compare* [DISCONTINUITY](#)

*****ebook converter DEMO Watermarks*****

THEORY.

continuous reinforcement *n.* In **operant conditioning*, a **reinforcement schedule* in which the organism is rewarded after every response. *Compare* PARTIAL REINFORCEMENT.

continuous variable *n.* In statistics, any **variable* that has a **continuum* of possible values, so that integration rather than simple addition is required to determine cumulative probabilities of its **probability distribution*. *See also* METATHETIC STIMULUS DIMENSION, PROTHETIC STIMULUS DIMENSION. *Compare* DISCRETE VARIABLE.

continuum *n.* A continuous sequence or dimension in which adjacent points are not noticeably different but the extremes are clearly distinct. [From Latin *continuus* uninterrupted, from *continere* to hang together, from *com* together + *tenere* to hold]

contour *n.* A visual line, edge, or border outlining a part of the visual field, usually determined by abrupt **lightness*, **colour*, or **texture gradients* but sometimes induced as a subjective or **illusory contour* without any corresponding retinal image gradient. *See also* EHRENSTEIN'S BRIGHTNESS ILLUSION, ILLUSORY CONTOUR, KANIZSA TRIANGLE, ZERO-CROSSING.

contrafreeloading *n.* Working for **reinforcement* (1) even though the identical reinforcement is freely available, as when a rat repeatedly presses a lever for food (earned food) that is available to be taken with less effort from a dish (free food). This phenomenon has been shown to occur in a wide variety of vertebrate species, including fish, birds, gerbils, mice, rats, monkeys, chimpanzees, and human children and adults, a rare and possibly unique exception being the domestic cat *Felis domesticus*, and it apparently contradicts conventional theories of learning and motivation because, if reinforcement or reward is equated with food eaten, then organisms seem not to be maximizing the reinforcement/effort or reward/cost ratio. The phenomenon was first reported by the US psychologist Glen D. Jensen (1932–2007) in an article in the *Journal of Experimental Psychology* in 1963. [From Latin *contra* against + US English *freeloading* obtaining goods or services at someone else's expense]

*****ebook converter DEMO Watermarks*****

contralateral *adj.* On, pertaining to, or affecting the opposite side of the body. *Compare* **IPSILATERAL**. [From Latin *contra* against + *lateralis* of or relating to a side, from *lateris* a side]

contrast *n.* **1.** A distinction between things being compared, or an emphasis on the distinction between things that are juxtaposed. **2.** In perception, an enhancement of the perceived differences between stimuli resulting from juxtaposing them. In ***simultaneous contrast** the stimuli are presented together; in ***successive contrast** they are presented sequentially. *See* **COLOUR CONTRAST**, **LIGHTNESS CONTRAST**, **WARMTH CONTRAST**. *See also* **CONTRAST RATIO**. **3.** In statistics, a comparison of two or more ***means** calculated by forming a weighted linear combination of means. For example, the contrast $\frac{1}{2}(\text{Mean } 1) + \frac{1}{2}(\text{Mean } 2) - (\text{Mean } 3)$ could be used to test the ***null hypothesis** that the average of Mean 1 and Mean 2 is equal to Mean 3 in the population. In most cases it is necessary for statistical reasons for the contrast to be orthogonal (3), with the coefficients summing to zero, as are the coefficients of $\frac{1}{2}$, $\frac{1}{2}$, and -1 in this example. **4.** The degree to which areas of an optical image, such as those in television or photographic pictures, differ in ***luminance**, often indexed by $(L_{\max} - L_{\min}) / (L_{\max} + L_{\min})$, where $L_{\max}$ is a measure of the luminance of the brightest area and $L_{\min}$ the luminance of the darkest area. *See also* **CONTRAST RATIO**, **CONTRAST THRESHOLD**. **5.** Exaggerating or increasing the discrepancy between one's own attitude and that of a source of a persuasive communication or message. *See also* **ASSIMILATION-CONTRAST THEORY**. *Compare* **ASSIMILATION (4)**.

[From Latin *contra* opposite to + *stare* to stand]

contrast ratio *n.* An index of the difference between the ***luminance** of an image (L_i) and the luminance of its background (L_b) usually expressed as a percentage of the background luminance: $100 \times (L_i - L_b) / L_b$. *Compare* **CONTRAST (4)**.

contrast sensitivity function *n.* A graph depicting the relationship between the ***spatial frequencies** of simple visual images such as ***gratings** with variable distances between their bars and a viewer's ability to perceive the fluctuations in luminance across the images, the horizontal axis showing

different spatial frequencies and the vertical axis sensitivity, the reciprocal of the [*absolute threshold](#). Also called a *modulation transfer function* (MTF). CSF abbrev.

contrast threshold *n.* An [*absolute threshold](#) for [*contrast](#) (4), being the minimum contrast required for an observer to detect a target image reliably.

contrient interdependence *n.* A condition of social situations in which the actions that benefit some individuals harm others. It tends to promote competition. [From Latin *con-* together + *terere* to rub or grind + *-ent* present participle ending + English *interdependence*]

control analysis *n.* A [*psychoanalysis](#) carried out by a student training to become an analyst, under the supervision of a qualified analyst. Also called a *supervised analysis* . Compare [TRAINING ANALYSIS](#).

control, delusion of See [DELUSION OF CONTROL](#).

control group *n.* In experimental design, a comparison group of research participants or subjects who, when the [*independent variable](#) is manipulated, are not exposed to the treatment that subjects in the [*experimental group](#) are exposed to, but who in other respects are treated identically to the experimental group, to provide a baseline against which to evaluate the effects of the treatment. The first deliberate use of a control group was described in the ‘Statistical Inquiries into the Efficacy of Prayer’ by the English explorer, amateur scientist, and psychologist Sir Francis Galton (1822–1911), published in *Fortnightly Review* in 1872. Galton explained the idea as follows: ‘We simply look for the final result—whether those who pray attain their objectives more frequently than those who do not pray, but who live in all other respects under similar conditions’ (p. 126). His results suggested that prayer is ineffective. Compare [EXPERIMENTAL GROUP](#).

controlled association *n.* Another name for [*directed association](#).

controlled experiment *n.* Another name for a true [*experiment](#).

controlled processing *n.* Any form of [*information processing](#) requiring conscious [*attention](#) or control, as in the performance of a novel or difficult task. Compared to [*automatic processing](#), controlled processing is generally much slower, requires more effort, is more easily impaired by fatigue or alcohol, and does not normally involve parallel processing of information from more than one sensory channel, but it can be developed faster and with less practice than automatic processing, often in a few trials, and it leaves the learner with greater control of the behaviour. *See also* [DUAL-PROCESS MODEL](#), [MINDFULNESS](#), [PRINCIPLE OF LEAST EFFORT](#).

control variable *n.* **1.** In experimental design, any variable apart from the [*independent variable](#) that is controlled by the experimenter by being randomized, held constant, statistically controlled, or suppressed in some other way (also called a *controlled variable*). **2.** Any variable whose values are used to separate cases into subgroups in a cross-tabulation.

convenience sample *n.* A [*non-probability sample](#) of research participants or subjects selected not for their representativeness but for their accessibility or handiness, as when university researchers use their own students. *See also* [ACCIDENTAL SAMPLE](#), [OPPORTUNITY SAMPLE](#), [QUOTA SAMPLE](#), [SELF-SELECTED SAMPLE](#), [SNOWBALL SAMPLE](#). *Compare* [CLUSTER SAMPLE](#), [PROBABILITY SAMPLE](#), [RANDOM DIGIT DIALLING](#), [SIMPLE RANDOM SAMPLE](#), [STRATIFIED RANDOM SAMPLE](#).

conventional fighting *n.* The relatively harmless forms of combat used by many species to settle conflicts over scarce resources, as when bighorn rams leap at each other head-on, although they could inflict more damage by charging each other in the flank; many species of fish seize each other's leathery jaws, rather than biting where more injury would be inflicted; male fiddler crabs never injure each other, although their enlarged claws are powerful enough to crush their opponents; rattlesnakes wrestle but never bite; male deer lock antlers but seldom use them to pierce each other's bodies; and some antelopes actually kneel down to fight. Also called *ritualized fighting*. *See also* [DISPLAY \(1, 2\)](#), [DOMINANCE HIERARCHY](#), [HAWK-DOVE GAME](#), [HAWK-DOVE-RETALIATOR GAME](#), [RESOURCE-HOLDING POTENTIAL](#), [SUBMISSIVE BEHAVIOUR](#). *Compare* [ESCALATED FIGHTING](#).

conventional morality *n.* The second *Kohlberg stage of moral development, in which right and wrong are defined in terms of convention and ‘what people would say’. It is divided into two levels: at Level 3 the child’s moral behaviour is guided by the goal of gaining approval and avoiding disapproval of others (*I should not tell lies because then people will respect me*), and at Level 2 by rigid codes of ‘law and order’ (*I should not tell lies because it is forbidden*). Compare POSTCONVENTIONAL MORALITY, PRECONVENTIONAL MORALITY.

convergence *n.* Any process of coming together, specifically *ocular convergence. Compare DIVERGENCE. [From Latin *convergere* to bend together, from *con-* together + *vergere* to incline]

convergence–divergence *n.* A *cognitive style defined by two radically different modes of *thinking. At one extreme is *convergent thinking*, characterized by a tendency to home in on a unique solution to a problem, usually involving the synthesis of information, typified by analytical, deductive thinking in which formal rules are followed, as in arithmetic. It is logical, consciously controlled, reality-oriented, and largely dependent on previously learnt knowledge and skills, and it is measured by conventional IQ tests. At the opposite extreme is *divergent thinking*, characterized by the fluent production of a variety of novel ideas relevant to the problem in hand. Divergent thinkers prefer, and perform better at, open-ended problems that do not have unique solutions. Tests of divergent thinking, which tap more creative types of thinking, include items such as the following: ‘How many uses can you think of for a brick?’ In a study of schoolboys, the English psychologist Liam Hudson (1933–2005) found that most of the boys could think of only three or four answers in about three minutes, but most of those whom he identified as divergent thinkers gave ten or more answers. Some psychologists equate divergent thinking with creativity. The concept was introduced in 1946 by the US psychologist J(oy) P(aul) Guilford (1897–1987), and convergent production and divergent production are two of the six different types of mental operations in *Guilford’s cube.

convergence insufficiency *n.* Diminished or impaired *ocular convergence.

*****ebook converter DEMO Watermarks*****

convergent validity *n.* A form of **validity* that, together with **discriminant validity*, provides evidence of **construct validity*. It is based on the assumption that different measures of the same **hypothetical construct* ought to correlate highly with one another if the measures are valid. The concept was introduced in an article by the US psychologists Donald T(homas) Campbell (1916–96) and Donald W(inslow) Fiske (1916–2003) in the journal *Psychological Bulletin* in 1959. See also [MULTITRAIT–MULTIMETHOD MATRIX](#).

conversational maxims *n.* Four assumptions about the quality, quantity, relevance, and manner of utterances in ordinary conversations suggested in 1975 by the English philosopher H(erbert) P(aul) Grice (1913–88) and generally assumed to underpin the **cooperative principle*. Also called *Gricean maxims*.

conversation analysis *n.* A collection of techniques used in **ethnomethodology* and other forms of **qualitative research* for analysing naturally occurring verbal dialogues. It studies the structure and coherence of conversations using empirical and inductive techniques in contrast to the theoretical and deductive approach characteristic of **discourse analysis*. **CA** *abbrev.*

conversion *n.* A qualitative alteration in form, character, or function. In **psychoanalysis*, a **defence mechanism* in which an unconscious conflict that would otherwise arouse **anxiety* is expressed symbolically, the repressed wish or idea being transformed into a physical **symptom*, such as a pain, paralysis, or loss of sensory function. Sigmund Freud (1856–1939) introduced the concept in 1894 in an article on ‘The Neuro-Psychoses of Defence’ (*Standard Edition*, III, pp. 45–61, at p. 49) and developed it further in 1908/9 in an article entitled ‘Some General Remarks on Hysterical Attacks’ (*Standard Edition*, IX, pp. 229–33). See also [CONVERSION DISORDER](#), [CONVERSION HYSTERIA](#).

conversion disorder *n.* A disorder in **DSM-5* characterized by one or more symptoms related to voluntary body movements or **sensory* functions, with clinical findings showing that these symptoms are not caused by a **neurological* or other medical condition, the symptoms causing significant
*****ebook converter DEMO Watermarks*****

distress or impairment in social, occupational, or everyday life. The term relates to ***conversion symptoms**. In some taxonomies of mental disorders, such as ***ICD-10**, but not DSM-IV or DSM-5, this condition is classified as a ***dissociative disorder**. Also called *functional neurological symptom disorder*. See also **CONVERSION**, **CONVERSION HYSTERIA**, **CONVERSION SYMPTOM**, **LA BELLE INDIFFÉRENCE**. Compare **BODY DYSMORPHIC DISORDER**, **FACTITIOUS DISORDER**, **MALINGERING**, **PANIC DISORDER**, **SOMATIC SYMPTOM DISORDER**.

conversion hypothesis *n.* A conjecture that some errors in judging the validity of ***syllogisms** arise because people mentally translate a premise into one that appears equivalent but actually has a different logical meaning, for example *If p, then q* may be translated mentally to *If and only if p, then q*, which could lead to the incorrect inference, *If not-p, then not-q*. Compare **ATMOSPHERE HYPOTHESIS**.

conversion hysteria *n.* An obsolescent term for ***conversion disorder**. In ***psychoanalysis**, Sigmund Freud (1856–1939) introduced the term in his celebrated analysis of ***Little Hans** in an article in 1909 entitled ‘Analysis of a Phobia in a Five-Year-Old Boy’ (*Standard Edition*, X, pp. 5–149, at p. 116) to denote a form of hysteria characterized by physical symptoms (paralyses, anaesthesias, blindness, deafness, and the like) and to distinguish it from forms of hysteria characterized by anxiety and phobias without physical symptoms. See also **CONVERSION**, **CONVERSION DISORDER**, **CONVERSION SYMPTOM**, **TRANSFERENCE NEUROSIS (1)**.

conversion symptom *n.* A loss or change of sensory or voluntary motor functioning, such as blindness, deafness, numbness, or paralysis, not fully explained by any neurological or ***general medical condition** or drug, and not intentionally produced, but judged to be of psychological origin. Also called a *conversion reaction*. See also **CONVERSION**, **CONVERSION DISORDER**, **CONVERSION HYSTERIA**, **GLOVE ANAESTHESIA**.

convolution *n.* Any of the convex folds or ridges on the surface of the brain, also called a *gyrus*; more generally, anything coiled or twisted together or, by analogy, any confused or intricate issue or condition. **convolute** *vb.* **convoluted** *adj.* [From Latin *convolutus* rolled up, from *con* with + *volvere*, *volutus* to turn + *-ion* indicating an action, process, or state]

*****ebook converter DEMO Watermarks*****

convulsant *adj. n.* (Of or pertaining to) a drug such as **picrotoxin*, **strychnine*, or **tetanus toxin* that produces **convulsions* by blocking the **inhibitory* action of neurotransmitters such as **GABA* or **acetylcholine* in the nervous system. *Compare* ANTICONVULSANT.

convulsion *n.* An episode, which may be recurrent and episodic, of violent involuntary contractions of a group of muscles of the body, as in a **convulsive disorder*, or acute, as in a convulsion following a head injury and concussion. *See* CLONIC CONVULSION, SEIZURE, TONIC–CLONIC, TONIC CONVULSION. *See also* ANTICONVULSANT, AUDIOGENIC SEIZURE, DRAVET SYNDROME, PSEUDOSEIZURE. [From Latin *convulsio* *cramp*, from *convolvere* *to roll together*, from *con-* *together* + *volvere* *to roll* + *-ion* indicating an action, process, or state]

convulsive disorders *n.* Disorders such as **epilepsy* that are characterized by recurrent **convulsions*.

convulsive therapy *See* ELECTROCONVULSIVE THERAPY.

cooing *n.* The earliest identifiable stage in the development of infant vocalization, usually beginning at about three months and characterized by indeterminate **vowel*-like sounds, including **phonemes* not found in the language that the infant will eventually acquire. Cooing is eventually supplanted by **babbling*.

Cook's D *n.* In **regression analysis*, a measure of the influence of a particular case on the overall results. A large value of Cook's *D* indicates that exclusion of the case would cause the regression coefficients to change substantially. [Named after the US statistician R. Dennis Cook (born 1944), who published the statistic in the journal *Technometrics* in 1977]

Coolidge effect *n.* An increase in sexual responsiveness and reduction in the sexual **refractory period* (1) resulting from the arrival of a new mating partner. [Named after US President Calvin Coolidge (1872–1933) and the following apocryphal story, which is seldom recounted in print. During a visit to an egg farm with her husband in the 1920s, Mrs Coolidge, the First Lady,

was impressed by the frequency with which the roosters were mating with the hens, and she pointedly asked an aide to draw this to the attention of her husband. President Coolidge enquired whether each rooster always mated with the same hen, and the reply came that, to maintain the high frequency of mating, each rooster had to be paired with a new hen every few days. The President asked the aide to draw this to the attention of his wife.]

Coombs unfolding technique *n.* Another name for the [*unfolding technique](#).

cooperative principle *n.* A precept derived from the writings of the English philosopher H(erbert) P(aul) Grice (1913–88) according to which speakers normally try to cooperate when communicating, and in particular they usually attempt to be truthful, informative, relevant, and clear—following Grice’s conversational maxims of quality, quantity, relevance, and manner, respectively. Speakers may flout any of these maxims, for example by lying or being sarcastic, but conversation normally proceeds on the assumption that the maxims are being followed. Thus if Person *A* says *I’m thirsty*, and Person *B* replies *I can recommend the Queen’s Head*, then, in the UK at least, if the cooperative principle is being followed, *A* will normally assume that *B* is referring to a pub rather than, for example, to the upper part of the sovereign’s body or to a coin or a banknote carrying her effigy. Some linguists believe that the maxim of relevance is the fundamental explanatory principle of human communication. *See also* [DISTRIBUTED COGNITION](#), [PRAGMATICS](#), [THEORY OF MIND](#).

Coopersmith Self-Esteem Inventories *n.* An instrument comprising three forms designed to measure self-esteem: two forms for schoolchildren and an adult form, all items having dichotomous response categories (*Like me* or *Unlike me*). Each scale yields scores for self-esteem in relation to social self and peers, home and parents, school and academic, total self, and a [*lie scale](#) score. The scales were constructed by the US psychologist Stanley Coopersmith (1926–79), and the original version was published in Coopersmith’s book *Antecedents of Self-Esteem* (1967). **CSEI** *abbrev.*

coprolagnia *n.* An alternative name for [*coprophilia](#). [From Greek *kopros*

*****ebook converter DEMO Watermarks*****

excrement + *lagneia* lust + *-ia* indicating a condition or quality]

coprolalia *n.* Repetitive or obsessive obscene utterances, such as sometimes occurs in **Tourette's disorder*. [From Greek *kopros* excrement + *lalia* speech + *-ia* indicating a condition or quality]

coprophagia *n.* Eating of excrement or faeces. *See also* *PICA*. [From Greek *kopros* excrement + *phagein* to consume + *-ia* indicating a condition or quality]

coprophilia *n.* A **paraphilia* characterized by recurrent sexually arousing fantasies, sexual urges, or behaviour involving excrement or faeces; more generally, an exaggerated interest in or preoccupation with faeces and their excretion. [From Greek *kopros* excrement + *philos* loving, from *philein* to love + *-ia* indicating a condition or quality]

copropraxia *n.* Compulsive or repetitive obscene **gestures (1)*, such as sometimes occur in **Tourette's disorder*. [From Greek *kopros* excrement + *praxis* a deed or action, from *prassein* to do + *-ia* indicating a condition or quality]

copulation *n.* Sexual intercourse or coitus. **copulate** *vb.* [From Latin *copula* a bond or connection, from *co-* together + *apere* to fasten + *-ation* indicating a process or condition]

core self-evaluation *n.* A fundamental personality trait reflecting high **self-esteem*, high **self-efficacy*, high **locus of control*, and low **neuroticism*. The concept was introduced by the US management researcher Timothy A(lan) Judge (born 1962) and two colleagues in the *Journal of Applied Psychology* (1998).

corium *n.* Another name for the **dermis*. [From Latin *corium* skin, rind, or leather]

cornea *n.* The convex, transparent, five-layered fibrous membrane that forms the outer covering of the eyeball and that is responsible for about two-

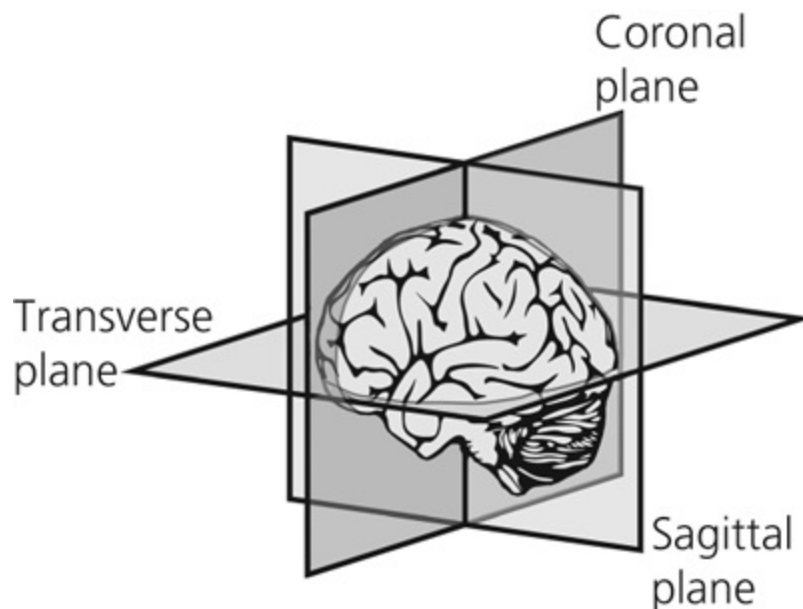
thirds of the ***refraction** of light required for focusing visual images on the retina, the remaining one-third being supplied by the ***crystalline lens** of the eye. See also **EYE**. **corneal** *adj.* [From Latin *corneus* horny, from *cornu* a horn]

corneal reflex *n.* A ***reflex** closing of the eyelids when the cornea is touched or a puff of air is blown on to it, mediated by the fifth cranial ***trigeminal nerve** (sensory) and the seventh cranial ***facial nerve** (motor), often diminished or absent in people who wear contact lenses.

Cornsweet illusion *n.* Another name for the ***Fraud–O’Brien effect**. [Named after the US cognitive scientist Tom Norman Cornsweet (born 1929) who studied it]

cornu ammonis *n.* Another name for ***Ammon’s horn**. [From Latin *cornu* a horn + *Ammonis* of Ammon]

coronal plane *n.* A vertical plane dividing the brain or any other organ or organism into front and back parts (see **illustration**). Also called a *frontal plane*. Compare **SAGITTAL PLANE**, **TRANSVERSE PLANE**. [From Latin *corona* a crown, alluding to the position in which a tiara is normally worn]



Coronal plane. The figure shows the coronal, sagittal, and transverse or horizontal planes.

coronal section *n.* A cutting through a ***coronal plane**. Also called a *frontal section*. Compare **HORIZONTAL SECTION**, **SAGITTAL SECTION**, **TRANSVERSE SECTION**.

coronal suture *n.* The serrated line down each side of the skull towards the temple where the frontal and parietal bones join together.

coronary-prone See **TYPE A**, **TYPE D**.

corpora cavernosa *n. pl.* Masses of tissue situated along the ***penis** and ***clitoris** that, together with the ***corpus spongiosum**, form the erectile tissue capable of responding to sexual excitement. See also **CYCLIC GMP**, **NITRIC OXIDE**, **VIAGRA**. **corpus cavernosum** *sing.* [From Latin *corpus* body + *cavernosus* hollow]

corpora quadrigemina *n.* A generic name for the ***inferior colliculi** and ***superior colliculi**. [From Latin *corpora* bodies, from *corpus* a body + *quadrigemina* fourfold]

corpus callosum *n.* The largest bundle of nerve fibres in the nervous system, consisting of a broad curved band of more than 200 million white fibres (axons) connecting matching areas of the left and right cerebral hemispheres. The main central part is called the trunk of the corpus callosum, and the other parts are its ***splenium**, ***genu**, and ***rostrum** (1). See also **AGENESIS OF THE CORPUS CALLOSUM**, **ALIEN HAND SIGN**, **DISCONNECTION SYNDROME**, **LEFT-SIDED APRAXIA**, **SPLIT-BRAIN PREPARATION**, **TAPETUM** (2). Compare **ANTERIOR COMMISSURE**, **HIPPOCAMPAL COMMISSURE**, **MASSA INTERMEDIA**, **MIDDLE COMMISSURE**, **POSTERIOR CEREBRAL COMMISSURE**. [From Latin *corpus* a body + *callosus* callous]

corpus luteum *n.* A mass of yellow glandular tissue that forms in a ***Graafian follicle** when an ***ovum** is released and that secretes ***progesterone** in preparation for the implantation of the ovum in the uterus. See also **RELAXIN**. **corpora lutea** *pl.* [From Latin *corpus* body + *luteus* yellow]

corpus spongiosum *n.* The spongy blood-carrying tissue of the ***penis**

or ***clitoris** that, together with the ***corpora cavernosa**, forms the erectile tissue capable of responding to sexual excitement. *See also* **CYCLIC GMP**, **NITRIC OXIDE**. [From Latin *corpus* body + *spongiosum* spongy]

corpus striatum *n.* A term used confusingly for the ***caudate nucleus** and ***lenticular nucleus** taken together, because of their striped appearance in stained sections, leading to frequent confusion with the ***striate cortex** (to which it is unrelated) and the ***striatum**. It includes the striatum, also called the *neostriatum*, and the palaeostriatum, usually called the *globus pallidus*. [From Latin *striatus* streaked, from *stria* a furrow or a flute of a column]

correction for attenuation *See* **ATTENUATION**.

correct rejection *n.* In ***signal detection theory**, an instance of failing to detect a signal when the signal is in fact absent. Also called a *correct reject*. *Compare* **FALSE ALARM (2)**, **HIT**, **MISS**.

correlation *n.* In statistics, the degree of (usually) linear relationship between two variables such that high scores on one tend to go with high scores on the other and low scores on one with low scores on the other (positive correlation), or such that high scores on one tend to go with low scores on the other (negative correlation). The most commonly used index of correlation, the ***product-moment correlation coefficient**, symbolized by *r*, ranges from 1.00 for perfect positive correlation, through zero for uncorrelated variables, to -1.00 for perfect negative correlation. The concept of the correlation coefficient was first suggested by the English explorer, amateur scientist, and psychologist Sir Francis Galton (1822–1911) at a meeting of the Royal Institution in London in 1877. *See also* **AUTOCORRELATION**, **KENDALL'S TAU**, **PARTIAL CORRELATION**, **SPEARMAN RANK CORRELATION COEFFICIENT**. **correlate** *vb.* **correlational** *adj.* [From Latin *com* together + *relatio* a relation + *-ion* indicating an action, process, or state]

correlational study *n.* A non-experimental type of research design, without manipulation of an ***independent variable** or control of ***extraneous variables**, in which patterns of ***correlations** between two or more variables are analysed. *See* **ANALYSIS OF COVARIANCE STRUCTURES**, **MULTIPLE REGRESSION**, **PATH DIAGRAM**.

*****ebook converter DEMO Watermarks*****

correlation centre *n.* Any of a large number of regions in the brain where information from disparate sense organs is integrated. US *correlation center*.

correlation coefficient *n.* A numerical index of **correlation*, usually the **product–moment correlation coefficient*, but sometimes another index, such as **Kendall’s tau* or **Spearman rank correlation coefficient*.

correlation ratio *n.* In statistics, a correlation coefficient that provides an index of the degree of non-linear relationship between two variables. The correlation ratio is symbolized by η and is also called *eta*, the seventh letter of the Greek alphabet. *Compare* *PRODUCT–MOMENT CORRELATION COEFFICIENT*.

correlogram *n.* A plot of the **autocorrelation* of a **time series* at lags 1, 2, and so on. The shape or form of the correlogram reveals information about trends and cycles in the time series. [From *correlation* + Greek *gramme* a line]

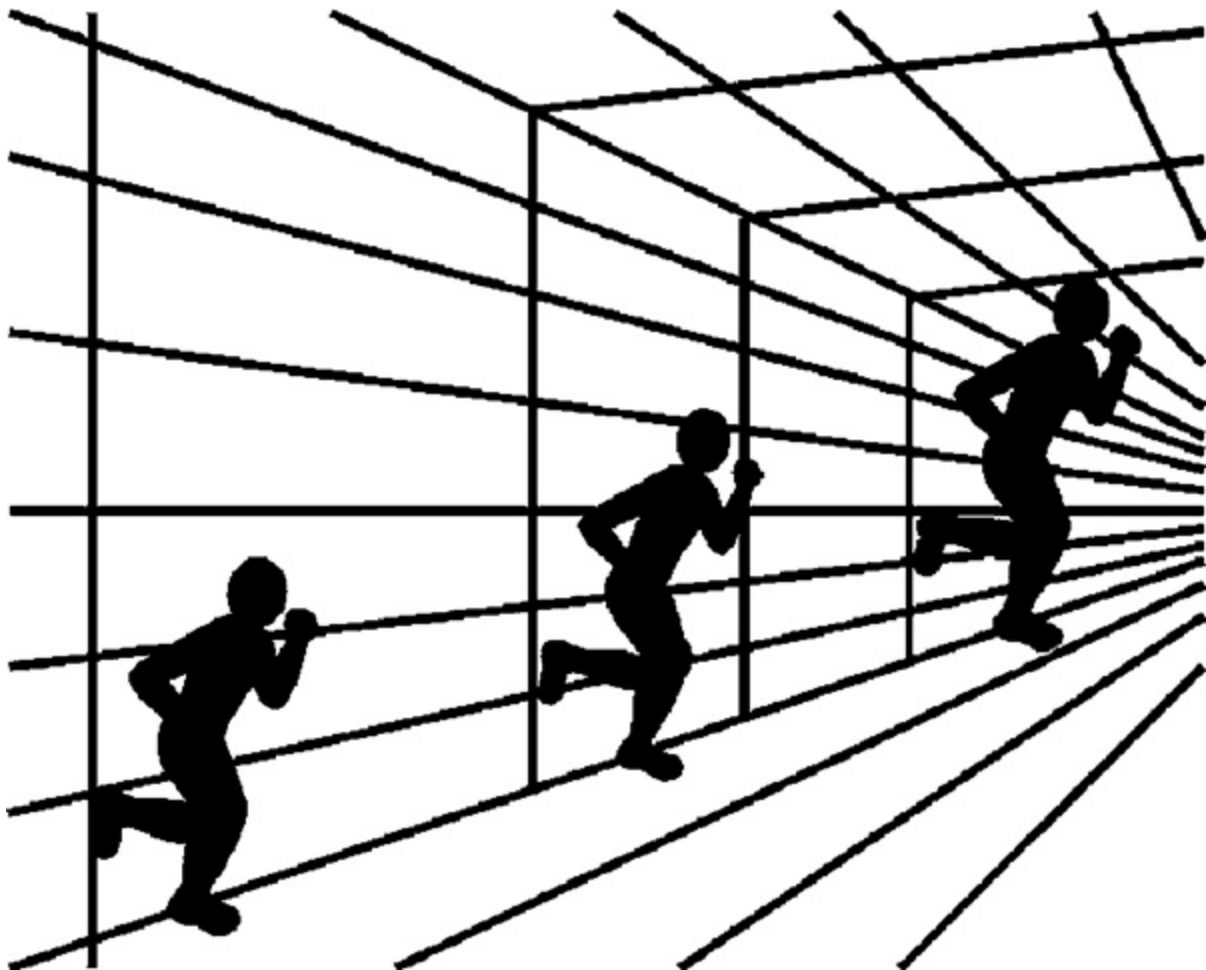
correspondence analysis *n.* A technique of data analysis applicable to categorical scores in two-way **contingency tables*, usually involving the depiction of the interrelationships between categories of row and column variables in two-dimensional maps. It is sometimes considered a form of **factor analysis* and sometimes as **principal-components analysis* of qualitative data.

correspondence problem *n.* In visual depth perception based on **binocular disparity*, the matching up in the retinal images of points that are projections of **corresponding retinal points* in the object or image being perceived, a computational problem that is carried out unconsciously by the visual system. *See also* *CORRESPONDING RETINAL POINTS*.

correspondent inference *n.* Another name for the **fundamental attribution error*. The term was introduced in 1965 by the US psychologists Edward Ellsworth Jones (1926–93) and Keith Eugene Davis (born 1936). Also called *correspondence bias*, although this is avoided in careful usage.

corresponding retinal points *n.* For a given degree of **ocular convergence*, any pair of points, one on each retina, on to which a point in the visual field is projected. If the left retina and its image were to be superimposed on the right retina and its image, with the two foveas overlapping, then the corresponding retinal points and all other points on the **horopter* would coincide. *See also* CORRESPONDENCE PROBLEM.

corridor illusion *n.* A visual illusion that causes images of equal size in a perspective picture of a corridor to appear larger the further away they seem to be (see *illustration*). *See also* EMMERT'S LAW, PERSPECTIVE, PONZO ILLUSION, SIZE CONSTANCY.

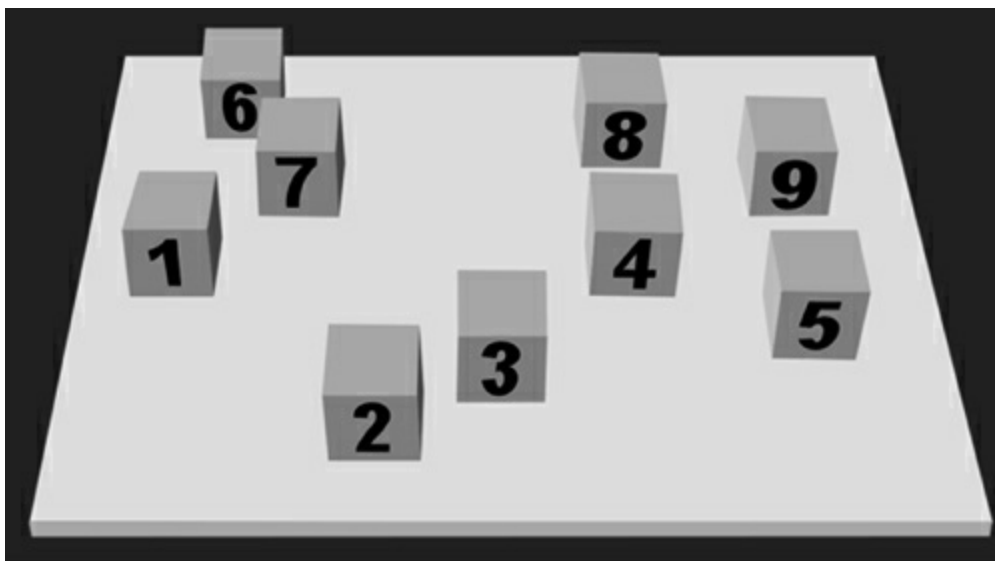


Corridor illusion. The three human figures are the same size.

Corsi blocks *n.* A popular test of **short-term memory* and **spatial ability*

*****ebook converter DEMO Watermarks*****

based on a set of nine wooden blocks, arranged quasi-randomly on a board with numbered faces visible to the experimenter but not to the person being tested (see [illustration](#)). The examiner taps the blocks in an arbitrary sequence, and the examinee attempts to reproduce the sequence. In clinical use, difficulty is varied by altering the sequence length. Also called the *Corsi tapping test* or *Corsi block-tapping test*. [Named after the Canadian PhD student (later farmer) Philip (Michael) Corsi who introduced it in his PhD research; first published by the English neuropsychologist Brenda Milner (born 1918) in an article in the journal *Clinical Neurosurgery* in 1972]



Corsi blocks. The person being tested sits on the opposite side of the board and cannot see the numbers on the blocks.

cortex *n.* The outer layer of any organ or part, such as the [*cerebrum](#), the [*cerebellum](#), or [*adrenal gland](#). Often used as a shorthand for the [*cerebral cortex](#). **cortical** *adj.* [From Latin *cortex* bark or outer layer]

cortical blindness *n.* Any form of [*blindness](#), such as [*achromatopsia](#), caused by damage to the [*visual cortex](#).

cortical deafness *n.* Any form of [*deafness](#) caused by damage to the [*auditory cortex](#), another name for [*central auditory processing disorder](#).

cortical spreading depression *n.* Another name for [*spreading](#)

*****ebook converter DEMO Watermarks*****

depression.

corticobulbar pathway *n.* A bundle of nerve fibres belonging to the *trigeminal nerve, *facial nerve, and *hypoglossal nerve, leading from the primary *motor cortex to nuclei in the medulla oblongata. A lesion in this pathway can lead to *pseudobulbar palsy. [From *cortex* + Greek *bolbos* an onion, alluding to the onion-shaped medulla oblongata]

corticopontine *adj.* Pertaining to a tract of nerve fibres connecting the *cerebral cortex and the *pons.

corticospinal tract *n.* The bundle of nerve fibres that originate mainly from the *motor cortex and descend through the *internal capsule, *brainstem, and *spinal cord, most of the fibres crossing the midline of the body at the *pyramidal decussation. It mediates voluntary movements of all kinds, and damage to it causes *paresis or *paralysis. Also called the *pyramidal tract* . **CST** *abbrev.*

corticosteroid *n.* Any *steroid hormone that is synthesized in and secreted by the *adrenal cortex, including the *glucocorticoids and *mineralocorticoids, or any of a group of synthetic drugs with a similar pharmacological action used to treat inflammatory or allergic conditions. See ALDOSTERONE, CORTICOSTERONE, CORTISOL, CORTISONE, PREDNISOLONE, PREDNISONE.

corticosterone *n.* A *corticosteroid hormone belonging to the *glucocorticoid group, secreted by the *adrenal cortex in response to serious injury or stress, shifting the body from carbohydrate to fat metabolism, regulating blood pressure, having anti-inflammatory effects, and sometimes suppressing immune responses.

corticotrophin *n.* Another name for * adrenocorticotrophic hormone (ACTH). Also spelt *corticotropin* .

corticotrophin-releasing hormone *n.* A *releasing hormone that is secreted by the hypothalamus and that controls the secretion of * adrenocorticotrophic hormone (ACTH) from the anterior pituitary. Also spelt

corticotropin releasing hormone . Also called *corticotrop (h)in-releasing factor (CRF)* . **CRH** abbrev.

Corti's membrane *n.* Another name for the ***tectorial membrane**.

cortisol *n.* A ***corticosteroid** hormone belonging to the ***glucocorticoid** group secreted into the bloodstream by the adrenal cortex in response to ***adrenocorticotrophic hormone (ACTH)** secreted by the anterior pituitary, especially in response to stress or injury, switching the body from carbohydrate to fat metabolism, regulating blood pressure, and having powerful anti-inflammatory effects. The amount of cortisol (and also adrenalin or epinephrine and noradrenalin or norepinephrine) in the blood or urine is sometimes used as a measure of stress. Also called *hydrocortisone* . [From *cortis(one)* + Latin *ol(eum)* oil]

cortisone *n.* A ***corticosteroid** hormone secreted by the adrenal cortex that suppresses inflammation and promotes carbohydrate formation. *See also DHEA*. [From *corti(co)s(ter)one*]

Corti's organ *See* **ORGAN OF CORTI**.

cost–benefit analysis *n.* A method of assigning a numerical value to the cost-effectiveness of a proposed operation, procedure, or undertaking. It is based on techniques of forecasting that are used to judge the value of each option in relation to its cost, to choose the option or options with the greatest net benefit, and sometimes to determine the optimal scale of the chosen operation(s), for example in terms of the amount to be invested. The basic decision criterion is maximization of the *difference* between total present benefits and total present costs (maximization of benefits minus costs), not the ***benefit–cost ratio** (benefits divided by costs), contrary to common belief and practice in some agencies, including the US Army Corps of Engineers. Also called *benefit–cost analysis* or *C–B analysis* . **CBA** abbrev.

Cotard's syndrome *n.* A pessimistic and distrustful ***delusional** condition characterized by a tendency to deny everything, even to the point of believing that one's body has disintegrated and that one's family no longer exists. Also called *délire de négation* or *insanity of negation* . *See also* *****ebook converter DEMO Watermarks*****

NIHILISM, NIHILISTIC DELUSION. [Named after the French neurologist Jules Cotard (1840–87), who first described it in 1880]

co-therapist *n.* A therapist who works in conjunction with another, especially in leading a **group therapy* session. Also called a *co-facilitator*.

counselling *n.* The practice or profession of applying psychological theories and communication skills to clients' personal problems, concerns, or aspirations. Some forms of counselling also include advice-giving, but the dominant ethos is one of providing facilitation without directive guidance. Counselling psychologists work with individuals, couples, and families in a variety of settings, including counselling agencies, general practitioners' surgeries, educational establishments, business organizations, and private practice. US *counseling*. See ASSERTIVENESS TRAINING, CLIENT-CENTRED THERAPY, CO-COUNSELLING, DISASTER COUNSELLING, EDUCATIONAL PSYCHOLOGY, GENETIC COUNSELLING, GESTALT THERAPY, MARRIAGE COUNSELLING, OFFENDER COUNSELLING, OUTPLACEMENT COUNSELLING, PASTORAL COUNSELLING. See also COUNSELLING PSYCHOLOGY, DISTRESS RELIEF QUOTIENT. Compare PSYCHOTHERAPY. [From Latin *consilium* advice, from *consulere* to consult]

counselling psychology *n.* A branch of **applied psychology* concerned with the application of psychological principles and research to **counselling*. US *counseling psychology*.

counteracting selection *n.* Pressures of **natural selection* that favour certain genes at one level (individual, family, or population) but disfavour them at another. Compare REINFORCING SELECTION.

counterbalancing *n.* 1. In experimental design, a method of controlling for the effects of an **extraneous variable* by ensuring that its effects are equal in all **treatment conditions*. For example, **order* effects can be counterbalanced by administering the various procedures in different sequences. 2. In questionnaire design, a method of controlling for **acquiescence response set* by wording a test so that an affirmative answer is scored in the direction of the **attribute* being measured in half of the questions and in the opposite direction in the rest. See also BALANCED SCALE.

countercathexis *n.* In **psychoanalysis*, the process by which ideas that have undergone **repression* and are constantly striving to break through into consciousness are prevented from doing so by an equal force operating in the opposite direction. It was first postulated in 1900 by Sigmund Freud (1856–1939) in his book *The Interpretation of Dreams* (*Standard Edition*, IV–V, at pp. 604–5), and it was subsequently used to explain the operation of **defence mechanisms*. Also called *anticathexis*. See also *REACTION FORMATION*. Compare *CATHEXIS*.

counterexample set *n.* In **logic*, the premises of an argument, followed by the conclusion with ‘It is not true that’ in place of ‘Therefore’. For example, this is an argument: *Pensioners who live in rented accommodation are eligible for the maximum tax rebate. I am a pensioner. I live in rented accommodation. Therefore I am eligible for the maximum tax rebate.* The counterexample set of this argument is: *Pensioners who live in rented accommodation are eligible for the maximum tax rebate. I am a pensioner. I live in rented accommodation. It is not true that I am eligible for the maximum tax rebate.* An argument is valid precisely if its counterexample set is inconsistent, as this counterexample set obviously is.

counterfactual conditional *n.* A conditional statement or proposition (of the form *If p, then q*) in which *p* is assumed to be false and *q* hypothetical. Such a statement or proposition is invariably and necessarily true: for example *If 2 + 2 = 5, then I’m a monkey’s uncle* is true. See *CONDITIONAL REASONING*.

counterfactual reasoning *n.* Reasoning based on **counterfactual conditionals*.

counter-rotating circles illusion *n.* Another name for the **Pinna–Brelstaff illusion*.

counter-transference *n.* In **psychoanalysis*, the analyst’s emotional reactions to the patient and to the patient’s **transference*, influenced by the analyst’s unconscious needs and conflicts. It should be carefully distinguished from the analyst’s conscious reactions to the patient. It was first

mentioned by Sigmund Freud (1856–1939) in 1910 in an article on ‘The Future Prospects of Psycho-Analytic Therapy’ (*Standard Edition*, XI, pp. 141–51). Since the 1970s there has been an increasing tendency in psychoanalysis to exploit the counter-transference in a controlled manner as part of the technique of psychoanalysis, support for this approach being drawn from Freud’s comment in 1913 in an article on ‘The Disposition to Obsessional Neurosis’ that ‘everyone possesses in his own unconscious an instrument with which he can interpret the utterances of the unconscious in other people’ (*Standard Edition*, XII, pp. 317–26, at p. 320).

couples therapy *n.* Any form of [*psychotherapy](#) aimed at treating problems of couples, whether married or not. *Compare* [MARITAL THERAPY](#).

courtship *n.* **1.** A pattern of behaviour, often involving a form of [*display](#) (1), shown by members of one or both sexes as a prelude to copulation, ensuring that mating occurs between members of the same species, between opposite sexes, and with females that are receptive. **2.** The art or process of wooing someone with the intention of marriage.

[From Latin *cortis* a courtyard, related to *hortus* a garden]

couvade *n.* A custom in many tribal societies according to which the father of an unborn child behaves as if he were also bearing the child, takes to bed, experiences a [*sympathetic pregnancy](#), and is treated as if he were pregnant. It is sometimes considered an example of [*Munchausen’s syndrome](#). [From French *couver* to hatch, from Latin *cubare* to lie down]

covariance *n.* In descriptive statistics, an index of the degree of association between two variables, defined as the expected (average) value of the product of the deviations of the two variables from their means, calculated in samples by transforming the scores in both groups to deviations from their respective group means, multiplying pairs of scores from each group together, and calculating the [*mean](#) of these products. The covariance of variables *X* and *Y* is written *Cov* (*X*, *Y*). *See also* [PRODUCT–MOMENT CORRELATION COEFFICIENT](#). *Compare* [VARIANCE](#).

covariance structures, analysis of *See* [ANALYSIS OF COVARIANCE](#)

*****ebook converter DEMO Watermarks*****

STRUCTURES.

covariate *n.* In * [analysis of variance \(ANOVA\)](#), a variable that is measured in addition to a dependent variable and that represents a source of variance in the dependent variable not controlled for in the experiment. For example, in an experiment on reading comprehension, the covariate might be the research participants' or subjects' ages. In * [analysis of covariance \(ANCOVA\)](#) such a covariate can be controlled for statistically. Also called a *concomitant variable* . [From *covariance*]

covariation principle *n.* In *[attribution theory](#), the tendency to ascribe behaviour to a cause that is present only when the behaviour occurs, or that is observed to vary over time with the behaviour. A typical example is the tendency to attribute competitive behaviour to external causes in people who are observed to behave competitively in interactions with competitive partners but to attribute the competitiveness to internal dispositional causes in people who appear to behave competitively independently of their partners' actions. *See also* [CAUSAL SCHEMA](#), [KELLEY'S CUBE](#). [From Latin *com* together + *variare* to vary + *-ation* indicating a process or condition]

cover memory *n.* Another name for a *[screen memory](#).

crack *n.* A street name for an *[alkaloid](#) extracted from *[cocaine](#) hydrochloride salt, mixed with sodium bicarbonate, and dried into so-called rocks. It differs from other forms of cocaine inasmuch as it is easily vaporized by heat and can be inhaled to produce an extremely rapid effect. Also called *free base* . *See also* [COCAINE-RELATED DISORDERS](#), [FREEBASING](#). [So called because it makes a crackling sound when it is heated]

Craik–O'Brien effect *n.* A powerful visual illusion produced by separating two identical grey areas with a blurred contour flanked by a narrow light strip merging into a narrow dark strip, resembling the appearance of *[Mach bands](#), causing the whole grey area adjacent to the light strip to appear much lighter than the grey area adjacent to the dark strip, the illusion being eliminated if the contour and flanking strips are covered with a narrow object such as a pencil or (if the contour is curved) a piece of string or cord (see [illustration](#)). Also called the *Cornsweet illusion* or the *Craik–*

*****ebook converter DEMO Watermarks*****

O'Brien–Cornsweet illusion . [Named after the Scottish philosopher and psychologist Kenneth J(ames) W(illiams) Craik (1914–45) who was the first to describe it in his doctoral thesis in 1940, and who died following a car accident before publishing it, and the US physicist Vivian O'Brien (1924–2010) who rediscovered and published it in 1958]



Craik–O'Brien effect. The left and right halves are identical, as can be confirmed by covering the join with a matchstick or similar object. In this simplified version of the effect, each half consists of a gradation from a lighter shade on the left to a darker shade on the right.

Cramér's C *n.* In statistics, a measure of association between two categorical variables, applicable to a **contingency table* of any dimensions, based on the **chi-square distribution*. The value of C is calculated by taking the square root of $\chi^2/N(k - 1)$, where N is the total number of scores and k is either the number of rows or the number of columns, whichever is smaller. Unlike the **contingency coefficient*, the value of C is relatively independent of the number of rows and columns. Also called *Cramér's V*. See also *PHI COEFFICIENT*. [Named after the Swedish mathematician and statistician Harald Cramér (1893–1985) who introduced it]

cranial accessory nerve *n.* Another name for either of the pair of **accessory nerves* that are distributed by the **vagus nerve* to the muscles of the larynx and pharynx.

cranial index *n.* A numerical indication of the narrowness of a **cranium* or head, given by its maximum length divided by its maximum breadth multiplied by 100. Compare *CEPHALIC INDEX*.

cranial nerve *n.* Any of the 12 pairs of nerves attached directly to the brain and projecting through natural openings in the skull, supplying the sense organs and the muscles of the head, neck, shoulders, heart, viscera, and vocal tract. They are referred to by either their names or their numbers, which are: ***olfactory nerve** (I), ***optic nerve** (II), ***oculomotor nerve** (III), ***trochlear nerve** (IV), ***trigeminal nerve** (V), ***abducens nerve** (VI), ***facial nerve** (VII), ***vestibulocochlear nerve** (VIII), ***glossopharyngeal nerve** (IX), ***vagus nerve** (X), ***accessory nerve** (XI), and ***hypoglossal nerve** (XII). Compare **SPINAL NERVE**.

cranium *n.* The skull. **cranial** *adj.* [From Latin *cranium* a skull, from Greek *kranion* a skull]

crank *n.* A common street name for ***methamphetamine**. [Supposedly so called because it was frequently smuggled in the crankcases of vehicles]

creak See **VOCAL FRY**.

creatine *n.* A product of protein metabolism produced by the liver and kidneys and found in ***striped muscle**, where it helps to replenish energy and reduce muscle fatigue. It is sometimes taken by athletes and sports competitors as a ***performance enhancer**, and is liable to cause liver and kidney damage if taken in excess, but it is difficult to legislate against because it is a naturally occurring amino acid and is also found in dietary meat. See **CREATINE PHOSPHATE**. [From Greek *kreas*, *kreatos* flesh + *-ine* indicating an organic compound]

creatine phosphate *n.* The ***phosphate** of ***creatine** through which phosphate is stored in muscles to enable adequate quantities of ***ATP** to be produced. Also called *phosphocreatine*.

creationism *n.* The doctrine that all things, including organisms, owe their existence to God's creation and not to ***evolution**. **creationist** *n.* One who believes in or promotes creationism.

creativity *n.* The production of ideas and objects that are both novel or

original and worthwhile or appropriate, that is, useful, attractive, meaningful, or correct. According to some researchers, in order to qualify as creative, a process of production must in addition be **heuristic* or open-ended rather than **algorithmic* (having a definite path to a unique solution). *See also* CONVERGENCE—DIVERGENCE, MULTIPLE INTELLIGENCES, TRANSLIMINALITY, TRIARCHIC THEORY OF INTELLIGENCE. **creative** *adj.*

CREB *abbrev.* Cyclic AMP response element binding protein, a compound present in **neurons*. When activated by **cyclic AMP* it initiates the consolidation of **long-term memories* by switching on genes whose protein production strengthens specific **synapses*. A drug that enhances CREB production or function might enhance memory and function as a **smart drug*. *See also* MEM 1414.

credibility *n.* The quality of meriting belief or confidence. In social psychology, the persuasiveness of a person or message source, generally associated with prestige. Research has shown that it consists of two major components, namely perceived trustworthiness and perceived competence or expertness, and a **multiplicative model* is required to represent the way they combine: if either approaches zero, then so does credibility, irrespective of the value of the other. The first serious discussion of it was by the Greek philosopher Aristotle (384–322 BC) in his *Rhetoric*, the key passage being: ‘Persuasion is achieved by the speaker’s personal character when the speech is also spoken as to make us think him credible. We believe good men more fully and more readily than others; this is true generally whatever the question is, and absolutely true where exact certainty is impossible and opinions are divided’ (Book I, Chapter 2, Bekker edition, p. 1356a). *See also* PRESTIGE SUGGESTION, SLEEPER EFFECT.

creole *n.* A form of language, originally a **pidgin*, that has become the mother tongue of a speech community through a process of linguistic development whereby an increasing proportion of a community use the pidgin as their primary mode of communication and children begin to adopt it as their mother tongue. Striking similarities, such as similar rules for conjugating verbs, have been noted in the structure of all creole languages and cannot be explained by a common ancestor language or exposure to other languages, which suggests that what is common to creole languages is widely

*****ebook converter DEMO Watermarks*****

scattered communities may be the basis of language acquisition everywhere, or that children learn languages by first constructing an abstract form of a creole. See also [BLACK ENGLISH VERNACULAR](#), [CREOLIZATION](#), [DECREOLIZATION](#), [HYPERCREOLIZATION](#). [From Portuguese *crioulo*, which originally meant a person of European descent born and brought up in a colonial territory]

creolization *n.* The process whereby a [*pidgin](#) language becomes a [*creole](#) language. See also [BLACK ENGLISH VERNACULAR](#), [DECREOLIZATION](#), [HYPERCREOLIZATION](#).

Crespi effect *n.* Another name for [*behaviour contrast](#) in its positive form, when increased reward leads to increased response rate. [Named after the US psychologist Leo P(aul) Crespi (1916–2008) who first reported it in an article in the *American Journal of Psychology* in 1942]

cretinism *n.* A congenital deficiency of [*thyroxine](#), the thyroid hormone, resulting in arrested physical development and [*intellectual disability](#) if untreated. **cretin** *n.* A person with congenital thyroid deficiency; colloquially (and offensively) a stupid person. [French *crétin* from Latin *Christianus* Christian, here meaning human, referring to the fact that such afflicted people are not animals]

Creutzfeldt–Jakob disease *n.* A progressive and degenerative human [*prion disease](#) that attacks the central nervous system, causing [*dementia](#), with loss of virtually all cognitive functions, [*ataxia](#), and death within 1–2 years. One form of it, called *new-variant Creutzfeldt–Jakob disease* (*nvCJD* or *vCJD*) may be caused by eating beef products from cattle infected with [*BSE](#). **CJD** *abbrev.* [Named after the German neurologists Hans G. Creutzfeldt (1885–1964) and Alfons M. Jakob (1882–1927) who first described its signs and symptoms; Creutzfeldt described one case, now considered atypical, in 1920, and Jakob described four more in 1921]

crib, air See [AIR CRIB](#).

cri du chat *n.* A rare congenital condition caused by a partial deletion of chromosome 5, resulting in [*intellectual disability](#). [French *cri du chat* cat's cry, referring to the cat-like cries emitted by a child with the condition as a
*****ebook converter DEMO Watermarks*****]

result of underdevelopment of the larynx]

criminal profiling *n.* In **investigative psychology*, the analysis of the behaviour and circumstances associated with serious crimes in an effort to identify the probable characteristics of the perpetrator. It is used especially in cases of serial murder or rape. It can be traced back at least as far as the 1880s, when it was used in an unsuccessful attempt to catch the London serial murderer 'Jack the Ripper', and it came to prominence in the US when the FBI set up its Behavioral Science Unit in 1974. *See also* *ORGANIZED CRIME (1)*. **criminal profile** *n.* A description of the psychological and demographic characteristics of a person who is most likely to have committed a crime or (more usually) a series of crimes. [From Italian *profilo* a profile or outline representation of something, from *profilare* to sketch, from Latin *pro* for or in place of + *filum* a thread]

criminological psychology *n.* A field of **applied psychology* devoted to psychological problems associated with criminal behaviour, criminal investigation, and the treatment of criminals. The term is sometimes used synonymously with **forensic psychology*, but this is avoided in careful usage. *See also* *CRIMINAL PROFILING*, *INVESTIGATIVE PSYCHOLOGY*.

crisis intervention *n.* A form of **brief psychotherapy* applied to problems arising from medical or other emergencies, often in hospitals.

crista *n.* A ridge or crest-like biological structure, especially (a) one of the folds in the inner membrane of a **mitochondrion*, or (b) the **crista acoustica*. **cristae** *pl.* [From Latin *crista* a ridge or crest]

crista acoustica *n.* A crest-shaped structure on the inner surface of the bulge or ampulla of each **semicircular canal*, containing **hair cells* that project into the gelatinous membrane of the canals, functioning as sensory receptors for the labyrinthine sense and responding only to accelerations of the head, which cause them to bend. Also called simply a *crista*. **cristae acousticae** *pl.* [From Latin *crista* a ridge or crest + Greek *akoustikos* of or relating to sound, from *akouein* to hear + *-ikos* of, relating to, or resembling]

criterion-referenced test *n.* A test that measures an **attribute* of a
*****ebook converter DEMO Watermarks*****

respondent against a predefined absolute standard (the criterion) without reference to the scores of other respondents. *See also* [CRITERION VALIDITY](#). *Compare* [DOMAIN-REFERENCED TEST](#), [NORM-REFERENCED TEST](#).

criterion validity *n.* In psychometrics, any measure of [*validity](#) based on determining the strength of the relationship between scores on the test and an independent criterion that is accepted as a standard against which the test may be judged. For example, in validating a test to measure depression, the criterion might be diagnosis of depression by clinical psychologists or psychiatrists, or in validating a test to measure scholastic aptitude, the criterion might be scores on tests of school performance. *See also* [CONCURRENT VALIDITY](#), [CRITERION-REFERENCED TEST](#), [PREDICTIVE VALIDITY](#).

criterion variable *n.* Another name for a [*dependent variable](#) in [*canonical correlation](#), [*discriminant function analysis](#), and [*multiple regression](#).

critical band *n.* For any specified [*tone \(1\)](#), the range of frequencies of sounds that are capable of [*masking](#) the tone, sounds outside this range having little or no masking effect. The *critical bandwidth* increases from a minimum of about 100 hertz for a tone of 500 hertz to over 1,000 hertz for tones above 5,000 hertz. *See also* [AUDITORY MASKING](#).

critical flicker frequency *n.* The threshold rate at which light from an intermittent or fluctuating source begins to be seen as continuous or fused, the usual criterion being the viewer's report of seeing it as continuous 50 per cent of the time. It depends on the [*luminance](#) of the image, its [*angular size](#), and the level of adaptation of the eyes, but its minimum value is about 16 hertz or cycles per second, and it is often taken as approximately 30 hertz. Television presents 25 still images per second (British standard) or 30 per second (US standard), but each image is given twice to raise the flicker rate to 50 or 60 per second, comfortably above the critical flicker frequency. Also called *critical fusion frequency (cff)* or *flicker fusion frequency (fff)*. *See also* [BRIGHTNESS ENHANCEMENT](#), [EPISCOTISTER](#), [FERRY–PORTER LAW](#), [FLICKER](#). *See also* [BIP](#). *Compare* [AUDITORY FLUTTER FUSION](#). **cff** abbrev.

critical period *n.* A biologically determined stage of development at
*****ebook converter DEMO Watermarks*****

which a person or animal is optimally ready to acquire some pattern of behaviour. *See also* [IMPRINTING](#).

critical theory *n.* A philosophical analysis of culture in general and literature in particular, associated especially with the [*Frankfurt school](#), that rejects the possibility of a value-free social science and attempts to address the historical and ideological factors that influence culture and human behaviour. Its proponents conceive it as a practical and [*normative \(1\)](#) theory, rather than as a *positive* or *descriptive* theory, and one that seeks to expose the contradictions in people's belief systems and social practices with a view to changing them. When focusing on psychological issues, also called *critical psychology*. *Compare* [LIBERATION PSYCHOLOGY](#).

Crocker–Henderson system *n.* A system for classifying [*odours](#) based on four primary odours: fragrant, acid, burnt, and caprylic (goat-like or putrid), with each component being given a score from 0 to 8; thus acetic acid, for example, is characterized as 3803—moderately fragrant, very acid, not at all burnt, and moderately caprylic. Also called the *odour square* or *smell square*. *Compare* [HENNING'S PRISM](#), [ZWAARDEMAKER SMELL SYSTEM](#). [Named after the US chemists Ernest Charlton Crocker (1888–1964) and Lloyd F. Henderson, who put it forward in 1927]

Cronbach's alpha *n.* In psychometrics, a reliability coefficient indicating the degree of [*internal consistency](#) of items within a test. Mathematically, it is the equivalent of the average of all possible [*split-half reliability](#) coefficients of the test. If certain assumptions are met, it ranges from 0 (zero internal consistency) to 1 (perfect internal consistency); a negative alpha coefficient indicates that items of the scale are negatively correlated and that an inappropriate reliability model is being used. Also called *alpha reliability coefficient* and *coefficient alpha*. *See also* [KUDER–RICHARDSON COEFFICIENT](#). [Named after the US psychologist Lee J(oseph) Cronbach (1916–2001), who introduced it in *Psychometrika* in 1951, and *alpha* (α) the first letter of the Greek alphabet, which symbolizes it]

cross-adaptation *n.* A temporary loss of sensitivity to a stimulus, especially an odour or a taste, following exposure to a different stimulus, as when exposure to sodium chloride (table salt) reduces sensitivity to other

*****ebook converter DEMO Watermarks*****

salts, or exposure to sucrose (table sugar) reduces sensitivity to fructose and other sweet substances. *See also* [ADAPTATION \(2\)](#).

cross-cultural survey *n.* Any investigation using [*survey research](#) methods to compare different cultural or subcultural groups.

cross-dependence *n.* Transferral of [*dependence \(2\)](#) on a drug to a different drug, enabling addiction to a dangerous drug such as [*heroin](#) to be treated by replacing it with a supposedly less dangerous substitute such as [*methadone](#). *Compare* [CROSS-TOLERANCE](#).

cross-dressing *n.* Another name for [*transvestism](#).

crossing over *n.* The interchange or swapping of [*homologous](#) sections of paired [*chromosomes](#) during [*meiosis \(1\)](#), producing variability in the hereditary characteristics of the offspring. Also called *crossover* or *breakage and reunion*. *See also* [DNA RECOMBINATION](#), [LINKAGE](#).

cross-modal matching *n.* A scaling method used in [*psychophysics](#) in which an observer matches the apparent intensities of stimuli across two [*sensory modalities](#), as when an observer adjusts the brightness of a light to indicate the loudness of a variable stimulus sound. An unusual but memorable example is the remark made in November 2009 by the English supermodel Kate Moss (born 1974): ‘Nothing tastes as good as skinny feels.’ Some authorities consider [*magnitude estimation](#) and [*magnitude production](#) to be forms of cross-modal matching in which one modality is the observer’s perception of the number system. Also called *cross-modality matching*.

cross-modal transfer *n.* The use of information gained through one [*sensory modality](#) to interpret information gained from another, as when a person born blind acquires the power of vision late in life, usually through a surgical operation, and immediately recognizes familiar objects by sight alone. In 1690 the English empiricist philosopher John Locke (1632–1704) expressed the opinion in his *Essay Concerning Human Understanding* (Book 2, Chapter 9, section 8) that such a person would not at first recognize any objects by sight alone, but in 1963 the case of SB reported by the English psychologists Richard L(angton) Gregory (1923–2010) and his research
*****ebook converter DEMO Watermarks*****

assistant Jean G. Wallace clearly refuted Locke's view and showed that cross-modal transfer had occurred, SB being able, immediately after his eye operation in middle age, to read upper-case letters and numerals that he had learnt only through touch. Also called *cross-modality transfer* . See also [MOLYNEUX'S QUESTION](#).

cross-sectional study *n.* A research design commonly used in developmental psychology and other branches of the discipline in which samples of research participants or subjects of different ages or from different groups are studied simultaneously and their behaviour compared. In contrast to a [*longitudinal study](#), this design does not control for [*cohort](#) effects.

cross-tabulation *n.* In statistics, a table with a cell for each combination of values of two or more variables in which the entries represent the number of cases having each specific combination of values.

cross-tolerance *n.* [*Tolerance \(3\)](#) to a drug resulting indirectly from tolerance to a different but chemically related drug. Compare [CROSS-DEPENDENCE](#).

cross-validation *n.* **1.** In psychometrics, evaluating the [*validity](#) of a test by administering it to an independent sample drawn from the same population as the sample on which it was originally validated, in order to determine the stability of the scores. **2.** In [*regression analysis](#) and [*multiple regression](#), measurement of [*predictor variables](#), and comparison of predicted and observed values of the [*dependent variable](#), in a fresh sample drawn from the same population as the sample from which the regression equation was derived, in order to determine the stability of the predictions.

crowd psychology *n.* The study of collective behaviour in crowds and mobs, including phenomena such as [*deindividuation](#), [*diffusion of responsibility](#), [*personal space](#).

cryptaesthesia *n.* In [*parapsychology](#), a putative hidden sense underlying extra-sensory perception. US *cryptesthesia*. [From Greek *kryptos* hidden + *aisthesis* feeling + *-ia* indicating a condition or quality]

cryptomnesia *n.* An apparently creative or original idea that is in fact derived from a latent or subconscious memory. [From Greek *kryptos* hidden + *mneme* memory, from *mnasthai* to remember + *-ia* indicating a condition or quality]

cryptophasia *n.* Another name for **autonomous speech*.

crystalline lens *n.* The biconvex, transparent, elastic structure immediately behind the iris of the vertebrate **eye* that helps to focus light rays on to the retina, although most (about two-thirds) of the refraction of light entering the eye occurs at the **cornea*. The degree of convexity of the crystalline lens can be altered by radial **ciliary muscles* up to about age 45, after which the lens becomes hard and its focus cannot be altered. *See also* ABERRATION (3), ACCOMMODATION (1), AMETROPIA, APHAKIA, ASTIGMATISM, CATARACT, CYCLOPLEGIA, LENS, REFRACTION. *Compare* COMPOUND EYE, OMMATIDIUM. [So called because of its internal crystalline structure]

crystallized intelligence *n.* A fundamental **factor* (2) of human intelligence, derived from **factor analysis*, corresponding roughly to **verbal intelligence*, consisting of the knowledge and expertise accumulated over a lifetime of experience, and measured by vocabulary and comprehension subtests of IQ tests. The concept was introduced in an article by the English-born US psychologist Raymond B(ernard) Cattell (1905–98) in the journal *Psychological Bulletin* in 1941 and became widely known after the publication of his book *Abilities: Their Structure, Growth and Action* (1971). Also called *crystallized ability*. *Compare* FLUID INTELLIGENCE. **g(C)** *abbrev.*

crystal meth *n.* A common street name for **methamphetamine*. Sometimes abbreviated to *crystal* or *meth*. [So called because it is often supplied in the form of salt crystals]

CS gas *abbrev.* A gas that irritates the mucous membranes of the eyes, nose, throat, and lungs, causing pain, temporary blindness, and breathing difficulty, used as an **incapacitant* primarily for crowd control. Formula: $C_6H_4ClCH:C(CN)_2$. *Compare* BZ GAS, CN GAS, MACE, PEPPER SPRAY, TEAR GAS. [From the surname initials of the US chemists Ben B. Corson (1896–

1987) and Roger W. Staughton (1906–57) who first developed it in 1928, not (as widely believed) an abbreviation of Civilian Security gas]

CSI effect *n.* An unrealistically high expectation sometimes held by juries in criminal trials of the amount and quality of forensic evidence required for conviction, arising from fictional (especially television) portrayals of crime scene investigations and leading to acquittal of defendants who might otherwise have been convicted chiefly on circumstantial evidence. The term was introduced by the US crime reporter Robin Franzen (born 1964) in an article headlined ‘ “CSI” Effect on Potential Jurors has Some Prosecutors Worried’ published in the *San Diego Union-Tribune* on December 16, 2002. [Named after the US crime drama series *CSI: Crime Scene Investigation*, first broadcast in October 2000]

CT scan *abbrev.* Computed (or computerized) tomography scan, a non-invasive method of ***brain** imaging or of visualizing other organs of the body, in which a computer builds up a three-dimensional picture from a series of plane cross-sectional X-ray images made at evenly spaced intervals along an axis. Formerly called a **CAT** (*computed axial tomography*) scan.

cue *n.* **1.** An ***attribute** of an object or event to which an organism responds, typical examples being the size or shape of a visual ***stimulus** (1) to which a response may be conditioned. **2.** A dimension or aspect of a proximal ***stimulus** (3) on the basis of which an organism makes inferences about a distal ***stimulus** (2), typical examples being the monocular and binocular depth cues on the basis of which ***depth perception** occurs. **3.** In research into memory, a stimulus that aids the recall of information not recalled spontaneously. *See also* **ACOUSTIC CUE** (2), **CUED RECALL**, **PRIMING** (1), **PROBE**. **4.** A signal to an actor or performer to begin performing, or more generally a hint about how to behave in a certain situation. *vb.* **5.** To supply someone with a cue (3, 4).

[Perhaps from French *queue* a tail, from Latin *cauda* a tail; in the 17th century written Q, standing for Latin *quando* when (the actor should begin)]

cued recall *n.* Retrieval of information from memory with the help of ***cues** (3), typical examples of such cues being the first letter of a word or

*****ebook converter DEMO Watermarks*****

name to be remembered, or the category to which the item of information belongs (such as, *a kind of food*). It is often contrasted with **free recall*. See also PRIMING (3), RECALL.

cultural anthropology *n.* The branch of anthropology devoted to the study of cultural as opposed to physical or biological aspects of humans, especially (though not exclusively) in non-literate societies. Compare PHYSICAL ANTHROPOLOGY, SOCIAL ANTHROPOLOGY.

cultural truism *n.* A proposition that most members of a cultural group accept without question and have never heard questioned, such as (in Western industrial cultures) *It is a good idea to brush your teeth three times a day if possible*. See INOCULATION THEORY.

culture *n.* The sum total of the ideas, beliefs, customs, values, knowledge, and material artefacts that are handed down from one generation to the next in a society. [From Latin *cultus* cultivation, from *colere* to till]

culture-bound syndromes *n.* Patterns of aberrant behaviour that do not fit easily into standard classifications of mental disorders and are entirely or mainly restricted to particular cultural groups, usually (ethnocentrically) excluding disorders such as **anorexia nervosa* that are restricted to Western industrial cultures. Also called *culture-specific disorders* or *syndromes*. See AMOK, ATAQUE DE NERVIOS, BILIS, BOUFFÉE DÉLIRANTE, BRAIN FAG, BRUJERÍA, CAFARD, COLERA, DHAT, ESPANTO, FALLING OUT, GHOST SICKNESS, HIKIKOMORI, HWA-BYUNG, IICH'AA, KHYÂL CAP, KORO, KUFUNGISISA, LATAH, LOCURA, MALADI MOUN, MAL DE OJO, MAL DE PELEA, MAL PUESTO, NERVIOS, PA-LENG, PERDIDA DEL ALMA, PIBLOKTOQ, QI-GONG PSYCHOTIC REACTION, ROOTWORK, SAKA, SANGUE DORMIDO, SHENJING SHUAIRUO, SHEN-K'UEI, SHIN-BYUNG, SHINKEI-SHITSU, SPELL, SUSTO, TAIJIN KYOFUSHO, TRIPA IDA, UFUFUNYANE, UQAMAIRINEQ, WINDIGO, ZAR.

culture-fair *adj.* Of or relating to a psychometric test that is fair and appropriate for respondents of all cultures or subcultures. **Non-verbal tests* of **intelligence*, such as **Raven's Progressive Matrices*, the **Cattell Culture-Fair Test*, the **Peabody Picture Vocabulary Test*, or the **Porteus Maze Test*, are generally considered more culture-fair than verbal and information-based tests and subtests, but culture-fairness is a matter of degree, and no **IQ test*

*****ebook converter DEMO Watermarks*****

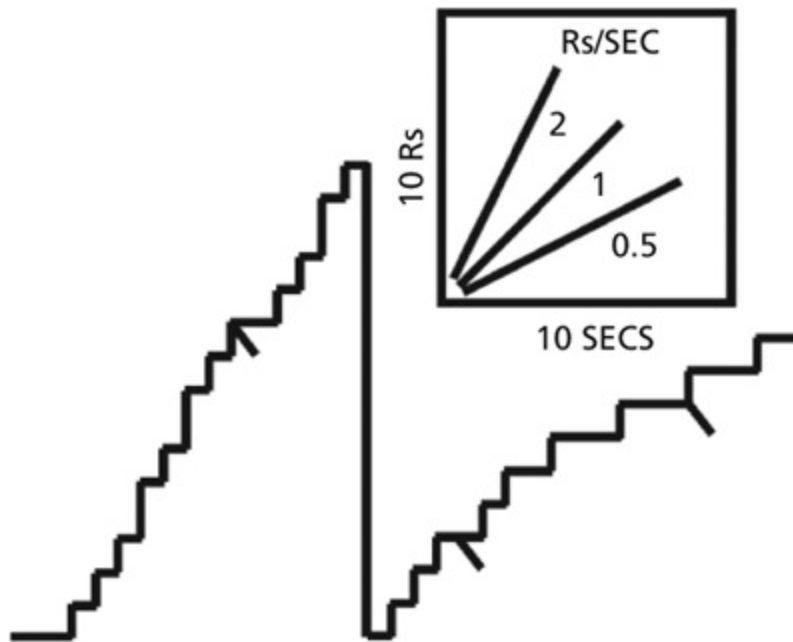
could be entirely ***culture-free** unless it were based on purely biological measures such as properties of ***event-related potentials**. *See also* **CHOICE REACTION TIME**, **INSPECTION TIME**, **NERVE CONDUCTION VELOCITY**, **N140**, **PROCESSING SPEED**, **P200**, **STRING LENGTH**. **culture-fairness** *n*.

culture-free *adj*. Of or relating to a psychometric test yielding scores that are completely independent of all cultural influences. *See* **CULTURE-FAIR**.

culture shock *n*. Disorientation, often accompanied by feelings of isolation and rejection, resulting from a radical change in culture, through migration to a different country, or when a person's culture is confronted by another, alien culture. In severe cases, it may lead to ***adjustment disorders**.

culture-specific disorders *See* **CULTURE-BOUND SYNDROMES**.

cumulative record *n*. A ***learning curve** drawn by a pen that moves across a roll of paper at a steady rate, increasing its vertical height by a fixed amount for every response of an organism, such as a lever press by a rat in a ***Skinner box** or a peck by a pigeon of an illuminated plastic key (see **illustration**). To prevent the curve rising off the top of the paper, the pen resets instantly to the bottom of the paper whenever it approaches the top. The slope of the curve within a specified region indicates the rate of responding at that time. It was invented by the US psychologist B(urrhus) F(rederic) Skinner (1904–90) while he was a postgraduate student at Harvard University in the late 1920s. *See also* **LEARNING CURVE**, **OPERANT CONDITIONING**, **REINFORCEMENT (1)**. **cumulative recorder** *n*. A device for producing a cumulative record. [So called because it represents a cumulative distribution of responses]



Cumulative record. A segment of a typical cumulative record, showing a declining rate of responding. The small check marks sloping down to the right indicate reinforcements.

cuneate nucleus *n.* Either of two areas of the **medulla oblongata* where the left or right **fasciculus cuneatus* terminates, functioning as a relay station for somatosensory information. Also called the *nucleus cuneatus* . [From Latin *cuneatus* wedge-shaped, from *cuneus* a wedge]

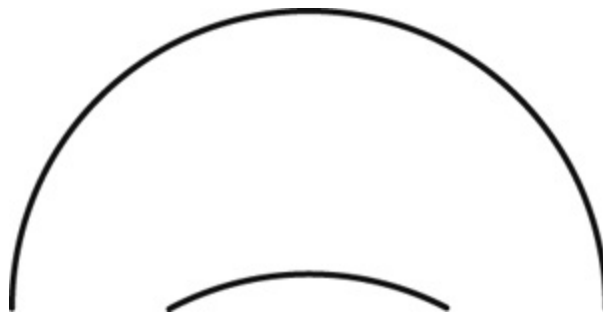
cunnilingus *n.* Sexual activity in which a woman's genitalia are stimulated by her partner's tongue and lips. Also called *cunnilinctus* or *cunnilinctio* . Compare *FELLATIO*. [From Latin *cunnus* a vulva + *lingere* to lick, from *lingua* a tongue]

cupula *n.* A dome-shaped gelatinous membrane within the **semicircular canals* of the inner ears into which the **hair cells* of the **crista* project. **cupulae** *pl.* [From Latin *cupula* a small cask, from *cupa* a tub]

curare *n.* A black resin that is present in the bark of certain trees indigenous to tropical South America and is used as an arrow poison by South American Indians and as a muscle relaxant in modern medicine. It blocks the action of **acetylcholine* in the somatic nervous system, paralysing

skeletal muscles. **curarize** *vb.* To paralyse the skeletal muscles with curare, as in experiments in which visceral or autonomic responses are being studied and indirect effects via voluntary responses need to be ruled out. *See also* [NICOTINIC RECEPTOR](#). *Compare* [ATROPINE](#), [STRYCHNINE](#). [From Portuguese *curare*, from Carib *kurari* curare]

curvature illusion *n.* A visual illusion in which a semicircle appears more curved than a shorter circular arc with the same radius of curvature (see [illustration](#)). The illusion appears to have been discovered by the English physicist Samuel Tolansky (1907–73), who discussed it in his book *Optical Illusions* (1964), together with a variation that he called the ‘lens illusion’ involving pairs of curves resembling lenses, commenting that ‘I have noticed that there exists a most curious illusory difficulty when we attempt by eye to assess the radius of curvature’ (p. 51) and that ‘it is strange that these [two] illusions have escaped notice before’ (p. 54). Also called *Tolansky’s curvature illusion*. [From Latin *curvatura* bending, from *curvare* to bend, + *-ure* indicating an action or process, from Latin *-ura*]



Curvature illusion. The two arcs have the same radius of curvature and are parallel.

cutaneous rabbit illusion *n.* Another name for [*sensory saltation](#). [From Latin *cutaneus* of or relating to the skin, from *cutis* skin]

cutaneous sense *n.* Any of a number of sensory systems having receptors located in the [*skin](#), including the four basic senses of heat, cold, pain, and pressure first identified in 1904 by the Austrian physiologist Max von Frey (1852–1932), pressure now being known to include sensations of texture and vibration. Also called a *dermal sense* or *skin sense*. *See also* [DELTA FIBRE](#), [DORSAL COLUMN](#), [FASCICULUS CUNEATUS](#), [FASCICULUS GRACILIS](#),

MERKEL CELL, PALLAESTHESIA, SOMATOSENSORY CORTEX, SOMATOSENSORY HOMUNCULUS, SPINOTHALAMIC TRACT, TACTILE ACUITY, TEMPERATURE SENSE, TOUCH RECEPTOR. *Compare* DYNAMIC TOUCH, HAPTIC TOUCH. [From Latin *cutaneus* of or relating to the skin, from *cutis* skin]

cut score *n.* In psychometrics, in a scale used for selection, a predetermined score at or above which respondents are deemed to have passed or are accepted and below which they are deemed to have failed or are rejected.

CVC *abbrev.* Consonant–vowel–consonant, the type of **nonsense syllable* most often used in research into memory, typical examples being *WUD* and *KEB*, the initials C and V standing for phonetic consonants and vowels—speech sounds rather than letters—so that strictly speaking *DAX* is not CVC but CVCC, because the *X* represents two **phonemes* /ks/. The various types of syllable that can exist within a language are denoted analogously; thus in English it is possible to have clusters of up to three consonants at the beginning of a syllable (as in *splash*, which is CCCVC) and up to four at the end of a syllable (as in *sixths*, which is CVCCCC). *See also* CVC TRIGRAM.

CVC trigram *abbrev.* A three-letter word or non-word composed of a consonant, vowel, and consonant in that order, for example *DOG* or *KEB*. *See also* CVC, NONSENSE SYLLABLE. [From Greek *treis* three + *gramma* a letter]

CV digram *abbrev.* A two-letter word or non-word composed of a consonant followed by a vowel, for example *PA* or *BU*. [From Greek *dis* twice + *gramma* a letter]

cyanocabalamine *See* VITAMIN B₁₂.

cybernetics *n.* The comparative study of automatic **feedback* and control processes in mechanical, electronic, and biological systems, especially processes in which negative feedback keeps the system in a particular state or on course towards a particular goal. The term was coined in 1947 by the US mathematician Norbert Wiener (1894–1964) and the Mexican neurophysiologist Arturo Rosenblueth (1900–70). *See also* CLOSED-

LOOP CONTROL, HOMEOSTASIS, OPEN-LOOP CONTROL, TOTE. **cybernetic** *adj.* [From Greek *kybernetes* a steersman + *-ikos* of, relating to, or resembling, chosen in recognition of the fact that the first significant publication on feedback mechanisms was an article in 1868 on mechanical governors by the Scottish physicist James Clerk Maxwell (1831–79)]

cybersex *n.* Communication in **cyberspace*, usually via e-mail messages or internet chat rooms, for the primary purpose of achieving sexual arousal and **orgasm*. *See also* TELEDILDONICS. [From English *cyberspace*, from Greek *kybernetes* a steersman, + English *sex*]

cyberspace *n.* A notional electronic environment created by computer networks, such as the internet, in which people communicate and interact. [From *cyber(netics)* + *space*]

cyclic AMP *n.* Cyclic adenosine monophosphate, a compound widely distributed in biological cells that regulates reactions dependent on **hormones* and **neurotransmitters* and functions as a universal **second messenger*. **cAMP** *abbrev.* *See also* AMP, CREB in the main body of the dictionary.

cyclic GMP *n.* Cyclic guanosine monophosphate, a compound that is analogous to **cyclic AMP* and that keeps **sodium channels* open in the outer membranes of rods and cones in the retina when its ring structure is intact, but is inactivated by **transducin* if stimulated by light, closing the sodium channels and triggering **action potentials*. It also relaxes the smooth muscles in the walls of arteries in the penis, causing the arteries to dilate and tending to constrict veins, its secretion increasing in response to sexual excitement and affecting the **corpora cavernosa* and the **corpus spongiosum* of the penis or clitoris, facilitating the inflow and reducing the outflow of blood into the erectile tissue. *See also* PHOSPHODIESTERASE TYPE 5, VIAGRA. **cGMP** *abbrev.*

cyclic guanosine monophosphate *See* CYCLIC GMP.

cyclic majority *n.* An **intransitive preference* order arising from majority voting in a group of individuals with transitive individual preferences. *See* CONDORCET'S PARADOX.

*****ebook converter DEMO Watermarks*****

cyclic model of perception *n.* Another name for the **perceptual cycle*.

cyclic preferences *n.* Another name for **intransitive preferences*, especially when cyclicity exists among more than three alternatives, as in the following example. A die is rolled, and the outcomes I, II, ..., VI, denoting the number of dots on the face that comes up, are equiprobable. Before the die is rolled, you are given a choice between two gambles as follows, with payoffs in pounds, dollars, or any other currency:

Die shows:	I	II	III	IV	V	VI
Gamble A payoffs:	1	2	3	4	5	6
Gamble B payoffs:	2	3	4	5	6	1

This means that if you choose Gamble A, then if I comes up you win 1 unit, if II comes up you win 2 units, and so on, whereas if you choose Gamble B, then if I comes up you win 2 units, if II comes up you win 3 units, and so on. If you are like most people, you probably prefer Gamble B to Gamble A, because it offers a higher payoff in five cases out of six, despite the fact that the payoff from Gamble A is much greater in the sixth case. Next, you choose between the following pair of gambles:

Die shows:	I	II	III	IV	V	VI
Gamble B payoffs:	2	3	4	5	6	1
Gamble C payoffs:	3	4	5	6	1	2

You probably prefer C to B for the same reason as before. Continuing in the same way, you eventually choose between the following gambles:

Die shows:	I	II	III	IV	V	VI
Gamble F payoffs:	6	1	2	3	4	5
Gamble G payoffs:	1	2	3	4	5	6

You probably prefer G to F for the usual reason. Taking all your preferences into account, your preference order, from most preferred on the left to least preferred on the right, is GFEDCBA. But G is identical to A, which means that your preferences are cyclic: GFEDCBG.... See also [DECISION THEORY](#), [MONEY PUMP](#). Compare [TRANSITIVE PREFERENCES](#).

Cyclopean eye *n.* A hypothetical brain structure where the images from both eyes are brought together, believed by the French philosopher René

*****ebook converter DEMO Watermarks*****

Descartes (1596–1650) to be the pineal gland, by virtue of its location in the centre of the head, but eventually, in 1959, located by the Canadian-born US neurophysiologist David H(unter) Hubel (1926–2013) and his Swedish-born collaborator Torsten N(ils) Wiesel (born 1924) in the **binocular cells* of the **visual cortex*, approximately half the neurons in the **primary visual cortex* being binocular. *See also* *DISPARITY-SELECTIVE CELL*. [Named by the German physiologist, physicist, and mathematician Hermann Ludwig Ferdinand von Helmholtz (1821–94) after the Cyclops in Greek mythology with an eye in the middle of its forehead]

Cyclopean perception *n.* A term introduced by the Hungarian-born US radar engineer and psychologist Bela Julesz (1928–2003) to refer to **stereopsis*, especially of **random-dot stereograms* or **anaglyphs*.

Cyclopean stimulus *n.* Any stimulus, such as a **random-dot stereogram*, that requires binocular vision in order to be perceived.

cyclophoria *n.* A form of **heterophoria* in which the vertical axis of one eye rotates to the left or right because of a weakness of one of the **oblique muscles* of the eye. *Compare* *ESOTROPIA*, *EXOPHORIA*, *HETEROPHORIA*, *HYPERPHORIA*, *HYPOPHORIA*. [From Greek *kyklos* a circle, ring, or wheel + *-phoros* carrying, from *pherein* to bear]

cycloplegia *n.* Paralysis of the **ciliary muscles* that alter the shape of the **crystalline lens* of the eye, resulting in loss of ability to focus, often induced by **anticholinergic* drugs. **cycloplegic** *adj.*

cyclothymia *n.* A chronic instability of mood characterized by recurrent periods of **depression* and elation, below the threshold of severity of **cyclothymic disorder*.

cyclothymic disorder *n.* In **DSM-5*, a **mental disorder* within the category of **bipolar disorders* characterized by chronic instability of moods, with recurrent **hypomanic episodes* and **depressive episodes* falling short of **major depressive episodes*. Its sub-clinical form is called *cyclothymia*. [From Greek *kyklos* a circle + *thymos* spirit]

cypoterone *n.* A synthetic steroid whose acetate is used as an *antagonist (3) to *androgens. [Probably from cy(cle) + pro(ges)terone]

cyranoïd *n.* A person interacting with another using responses supplied by a third party through a hidden earphone, the cyranoïd thus acting as a medium or go-between, merely repeating words provided by someone else. In a typical use of this technique, a person with severe *social skills deficits may conduct what appears to be a sophisticated interaction and may learn by so doing to become more skilled. The concept was introduced by the US psychologist Stanley Milgram (1933–84) in a research grant proposal in 1979 and a paper delivered at the annual convention of the American Psychological Association in Toronto, Canada, in August 1984. **cyranoïc** *adj.* [Named after the balcony scene (Act 3, Scene 6) in the play *Cyrano de Bergerac* (1897) by the French poet and dramatist Edmond Rostand (1868–1918) in which Christian, a handsome but inarticulate nobleman, stands in front of Roxane’s balcony and declares his love for her, using words whispered to him by Cyrano, who is hiding below the balcony]

cytoarchitectonic map *n.* A chart, especially of the brain, based on variations in the cellular structure of tissues, the most widely used being the map of *Brodmann areas. [From Greek *kytos* a vessel + *architekton* a master builder, from *archi-* chief + *tekton* a builder]

cytology *n.* The study of the structure and function of biological cells. [From Greek *kytos* a vessel + *logos* word, discourse, or reason]

cytoplasm *n.* The *protoplasm surrounding the *nucleus (1) of a *cell. Also called the *perikaryon* or (now rarely) *plasma* . See also ECTOPLASM (1), MATERNAL INHERITANCE, MITOCHONDRIAL DNA. [From Greek *kytos* a vessel + *plasma* a form]

cytosine *n.* One of the constituent *bases (1) of the nucleic acids *DNA and *RNA, having an affinity for *guanine. **C** *abbrev.* [From Greek *kytos* a vessel + *-ine* indicating an organic compound]

cytoskeleton *n.* The network of fibrous proteins that provides the

framework for the shape of a [*neuron](#) or other cell, containing [*microtubules](#) that act as transport routes for molecules within the cell and a poorly understood control mechanism analogous to the nervous system of an organism, in some circumstances enabling the cell to make purposeful movements. *See also* [MITOSIS](#), [PARAMECIUM](#).

cytotoxic *adj.* Poisonous to living cells. *See also* [NEUROTOXIN](#). **cytotoxin** *n.* Any cytotoxic substance. [From Greek *kytos* a vessel + *toxikon* arrow-poison, from *toxon* a bow + *-ikos* of, relating to, or resembling]



dactylology *n.* A type of **sign language* in which each letter of the alphabet has its own special sign. Also called *finger spelling* . [From Greek *daktylos* a finger + *logos* word or discourse]

Dale's law *n.* The principle according to which a **neuron* can release only one **neurotransmitter* substance from its synaptic endings. This law has been repealed in the light of research findings. [Named after the English physiologist Sir Henry Hallet Dale (1875–1968) who propounded it]

daltonism *n.* The most common type of **colour-blindness*, occurring in about 7 or 8 per cent of males and 0.4 per cent of females, usually a form of **deuteranomaly* or **deuteranopia* resulting in a defective ability to distinguish reds from greens, caused by a **recessive *X-linked* gene and expressed predominantly in males, because they have only one X chromosome and therefore **complementation* cannot occur. Also called *red–green colour-blindness* . See also *HORNER'S LAW*. [Named after the English chemist and physicist John Dalton (1766–1844) who was red–green colour-blind and gave the first account of his condition in 1794, describing blood as appearing similar in colour to objects usually described as bottle-green]

dance of the bees See *ROUND DANCE*, *WAGGLE DANCE*.

dance therapy *n.* A form of **psychotherapy* in which clients or patients are encouraged to express their feelings and inner conflicts through dance.

dancing mania *n.* Another name for **tarantism*.

dantrolene *n.* Dantrolene sodium, a skeletal muscle relaxant drug that acts by limiting the release of calcium ions in muscle fibres and that is used in the treatment of muscle spasticity resulting from spinal cord injury. [Trademark]

dark adaptation *n.* A form of **adaptation* (2) in which the visual system is adjusted for efficient response in dim illumination, the **pupil* dilating and the **absolute threshold* for vision gradually decreasing with time spent in the dark, the threshold for red, orange, and yellow objects or images attaining its minimum after about 5 minutes, and the threshold for green, blue, and violet also decreasing to a plateau after about 5 minutes but then declining again from about 10 minutes and approaching its minimum after about 25 minutes, this dual or **duplexity function* being due to the different adaptation rates of the **photopic* and **scotopic* systems. See also *FIELD ADAPTATION*, *PHOTOCHROMATIC INTERVAL*, *PURKINJE SHIFT*. Compare *LIGHT ADAPTATION*. **dark-adapted** *adj.* Of or relating to the eye or the visual system after it has undergone dark adaptation.

dark focus *n.* A stable resting **accommodation* (1) of the eye's **crystalline lens*, usually corresponding to a focal distance of about one metre, that the eye assumes when confronted with a stimulus lacking any features on which to focus, such as a completely enveloping blank screen resembling the inside of a giant ping-pong ball, or a blank screen viewed through a lens that makes it appear too close to focus on, or an **isoluminant* stimulus, or complete darkness. It produces a temporary condition of **anomalous myopia*.

dark light *n.* The dim cloud of light that is experienced in complete darkness owing to the spontaneous activity of neurons in the visual system. Also called *intrinsic light* or *idioretinal light*, either of which is less of an **oxymoron*.

Darvon *n.* A proprietary name for the narcotic analgesic drug **propoxyphene* hydrochloride. [Trademark]

Darwinian evolution *n.* The theory according to which species evolve

by **natural selection*. See also *NEO-DARWINISM*. Compare *LAMARCKISM*, *LYSENKOISM*, *NEO-LAMARCKISM*, *NON-DARWINIAN EVOLUTION*. [Named after the English naturalist Charles (Robert) Darwin (1809–82) who expounded the theory in 1859 in his book *The Origin of Species by Means of Natural Selection or the Preservation of Favoured Races in the Struggle for Life*]

Darwinian fitness *n.* The lifetime reproductive success of an organism or **genotype*, indexed by the average number of offspring that it produces, relative to other organisms or genotypes, and hence the relative number of copies of its **genes* that it passes on to future generations. See also *FITNESS*. Compare *INCLUSIVE FITNESS*.

Darwinian reflex *n.* Another name for the **grasp reflex*.

Darwinism *n.* Another name for **Darwinian evolution*. **Darwinist** *n.* One who promotes or believes in **Darwinian evolution*.

Dasein *n.* In the philosophy of the German philosopher Georg Wilhelm Friedrich Hegel (1770–1831), existence. In **existentialism*, it is usually translated as being-in-the-world. [From German *dasein* to be there, from *da* there + *sein* to be]

Daseinsanalyse *n.* Another name for **existential analysis*, focusing on **Dasein*. See also *EXISTENTIAL THERAPY*.

data *n. pl.* Facts or information collected for reference or analysis. In statistics and measurement theory, results of any empirical investigation, usually but not necessarily in the form of numerical scores, that may be interpreted to provide information about the outcome of the investigation. According to the US psychologist Clyde Hamilton Coombs (1912–88), data are what are derived from observations or **raw scores* by the application of a **measurement model* that may or may not be explicitly described. Often treated as singular (*We have not finished analysing this data*), but this is avoided in careful usage. **datum** *sing.* [From Latin *data* things given, from *dare* to give]

data-driven processing *n.* Another name for **bottom-up processing*.

dataholic *n.* An informal term for a person addicted to information, especially a person who spends an excessive amount of time gathering information from the internet and suffers from **withdrawal* symptoms when deprived of access to information. See *INTERNET ADDICTION SYNDROME*, *INTERNET GAMING DISORDER*. [Formed on the model of *alcoholic*, from *data* + (*alco*)*holic*]

data mining *n.* A collective name for analytic techniques designed to discover hidden patterns or relationships in large **data* sets and to overcome the difficulties involved in drawing meaningful inferences from vast quantities of information. The term is occasionally, but misleadingly, used as a synonym for **data snooping*. Compare *EXPLORATORY DATA ANALYSIS*. [Named by analogy with digging for tiny amounts of metal in large volumes of earth]

data set *n.* A collection of **data* relevant to a single research problem.

data snooping *n.* In statistics, laboratory jargon for the haphazard and unplanned inspection of the results of an investigation in the hope of finding significant effects when the results that had been expected or hoped for have not emerged. Not to be confused with **data mining* and **exploratory data analysis*.

date rape *n.* Rape committed by someone with whom the victim has gone on a date, or by someone whom the victim is dating.

date rape drug *n.* A drug that is used to facilitate **date rape*, especially **Rohypnol*.

day blindness *n.* A non-technical name for **hemeralopia*.

daydream *n.* A pleasant dreamlike **fantasy* (2), such as the **Madame Butterfly fantasy*, that distracts one's attention from the present.

daylight vision *n.* A non-technical name for **photopia*.

*****ebook converter DEMO Watermarks*****

deadly nightshade *n.* The plant *Atropa belladonna*, from which the poisonous **alkaloids* **atropine* and **hyoscyamine* are extracted. Also called *belladonna* .

deaf mute *n.* An obsolescent term for a person who is unable to hear or to speak.

deafness *n.* Complete or partial loss of hearing, congenital or acquired, affecting about 10 per cent of adults and more than 50 per cent of people over 65 years old in the UK, the US, and other advanced industrial countries; divided into **conductive deafness*, **sensorineural deafness*, and **central auditory processing disorder*. Also called *hearing impairment* or *hearing loss* , especially when there is some residual hearing. *See also* *AMBLYACUSIA*, *ANACUSIA*, *ASONIA*, *CERUMINOUS DEAFNESS*, *COCHLEAR IMPLANT*, *CONVERSION SYMPTOM*, *CORTICAL DEAFNESS*, *DECIBEL*, *HYPACUSIA*, *OTITIS*, *OTOSCLEROSIS*, *OTOTOXIC*, *PARACUSIA*, *POSTENCEPHALITIC SYNDROME*, *PRESBYACUSIS*, *STENGER TEST*, *TADOMA METHOD*, *TELETACTOR*, *VESTIBULITIS*, *WORD DEAFNESS*. *Compare* *DIPLACUSIS*, *DYSACUSIA*, *HYPERACUSIS*. **deaf** *adj.*

death instinct *n.* Another name for **Thanatos*.

debriefing *n.* Providing research participants or subjects with a retrospective explanation of the purpose of the investigation, including any deception that may have been involved. The ethical codes of the American Psychological Association, the British Psychological Society, and other professional bodies encourage debriefing wherever possible, although there are research studies in which it is not feasible, in some **naturalistic observation* studies, for example, in which the research participants are not even aware of having participated. *See also* *DEHOAXING*.

décalage *n.* A term introduced by the Swiss psychologist Jean Piaget (1896–1980) for the non-simultaneous attainment of different but closely related operational abilities. *Horizontal décalage* is the non-simultaneous attainment of different aspects of a cognitive operation during the same developmental stage, as when conservation of volume is preceded by conservation of mass, which in turn is preceded by conservation of number

and substance, all of these attainments occurring during the stage of concrete operations; *vertical décalage* refers to changes that occur as a child progresses from one developmental stage to another; and *oblique décalage* refers to refinements of abilities at one developmental stage that prepare the way for attainments at a later stage. [From French *décalage* a gap or lag, from *décaler* to bring forward]

decathexis *n.* In **psychoanalysis*, the withdrawal of **cathexis* from an idea or **instinctual object*, as occurs in **narcissistic neurosis*, when cathexis is withdrawn from external instinctual objects and turned on the **ego*. Also called *withdrawal of cathexis* . See also ISOLATION OF AFFECT.

decay theory *n.* The proposition that forgetting is caused by passive degeneration or deterioration of **memory traces*. Compare PROACTIVE INTERFERENCE, RETROACTIVE INTERFERENCE.

decentralized communication network *n.* A **communication network* in which all group members have access to the same number of communication channels, as in a **comcon*. Compare CENTRALIZED COMMUNICATION NETWORK.

decentration *n.* The process of cognitive development by which a child progresses from **centration* to a more objective way of perceiving the world. Also called *decentring* .

decerebrate rigidity *n.* A postural syndrome of continuous muscular spasm, exaggerated **tonus*, and **clasp-knife rigidity* resulting from a lesion in the **brainstem* or **cerebellum*. [From Latin *de* away + *cerebrum* a brain]

decibel *n.* A unit equal to one-tenth of a **bel* for expressing the intensity of a sound or any other power level relative to a reference level. When it is used to specify absolute rather than relative sound intensity, the reference level is conventionally fixed at 10^{-16} W/cm² (watts per square centimetre), slightly below the average human **absolute threshold* for a sound of 1,000 hertz (about two octaves above Middle C), and the intensity so defined is referred to as *decibel sound pressure level (dB SPL)* or simply *sound pressure level*

([SPL](#)). A sound of 60 dB SPL, the approximate level of ordinary conversational speech, is 60dB higher than the reference level and has an intensity of 10^{-10} W/cm², and a doubling or halving of absolute sound pressure level always corresponds to a change of 3 dB SPL. If two people speak at once, the sound level rises from 60 to 63 dB SPL, if four people speak at once it rises to approximately 66 dB SPL, and so on. In units of dB SPL, a sound that is loud enough to reach the pain threshold is about 130, a loud rock group reaches about 120, a person shouting at close range 100, a busy street 80, a loud conversation 70, a normal conversation 60, a quiet conversation 50, a soft whisper 30, and for a sound at 1,000 hertz the average human absolute threshold is 6.5 dB SPL. Exposure to sound above 85 dB SPL entails a risk of damage to the outer hair cells and permanent hearing loss. *See also* [EQUAL-LOUDNESS CONTOUR](#), [PHON](#), [SENSATION LEVEL](#). **dB** *abbrev.* [From Latin *deci(mus)* tenth + English *bel*, named after the Scottish-born US scientist Alexander Graham Bell (1847–1922), inventor of the telephone]

decile *n.* Any of the ten equal groups into which a distribution of scores can be divided, or the value of a variable such that a specified proportion of scores arranged in order of magnitude, divided into tenths, falls below that value, the sixth decile, for example, being the value of the variable such that 60 per cent of the other scores fall below that value. The fifth decile is the **median*. *See also* [PARTILE](#). *Compare* [PERCENTILE](#), [QUARTILE](#). [From Latin *decem* ten]

decision analysis *n.* Applied **decision theory*.

decision frame *See* [FRAMING EFFECT](#).

decision making *n.* The act or process of choosing a preferred option or course of action from a set of alternatives. It precedes and underpins almost all deliberate or voluntary behaviour. Three major classes of theories have guided research into decision making: normative, descriptive (or positive), and prescriptive theories. *See* [DUAL-PROCESS MODEL](#), [NORMATIVE \(1\)](#). *See also* [ALLAIS PARADOX](#), [BEHAVIOURAL DECISION THEORY](#), [BOUNDED RATIONALITY](#), [BURIDAN'S ASS](#), [CERTAINTY EFFECT](#), [COMMON RATIO EFFECT](#), [COST-BENEFIT ANALYSIS](#), [CYCLIC PREFERENCES](#), [DECISION THEORY](#), [DOMINANT ALTERNATIVE/STRATEGY](#), [ELIMINATION BY ASPECTS](#), [ELLSBERG PARADOX](#), [EXPECTED UTILITY](#), [EXPECTED UTILITY](#)

*****ebook converter DEMO Watermarks*****

THEORY, EXPECTED VALUE, FRAMING EFFECT, GAME THEORY, HEURISTIC, LESS-IS-MORE EFFECT, LEXICOGRAPHIC CHOICE, MAXIMIN, MINIMAL SOCIAL SITUATION, MODIFIED ELLSBERG PARADOX, MONTY HALL PROBLEM, MULTI-ATTRIBUTE DECISION MAKING, NEWCOMB'S PROBLEM, PORTFOLIO THEORY, PREFERENCE REVERSAL (1, 2), PROSPECT THEORY, PSYCHOLOGICAL DECISION THEORY, RATIONAL CHOICE THEORY, READINESS POTENTIAL, REVEALED PREFERENCE, RISK AVERSION, RISK SEEKING, RISKY SHIFT, SATISFICING, SOCIAL DILEMMA, ST PETERSBURG PARADOX, SUBJECTIVE EXPECTED UTILITY THEORY, SURE-THING PRINCIPLE, UTILITY THEORY.

decision rule *n.* A formal or mechanical principle or formula for choosing a course of action in response to any given input data. A typical example is a formula for deciding whether a student passes or fails a course on the basis of a set of marks; another is a **significance test* for deciding whether or not to reject a **null hypothesis*.

decision theory *n.* A **normative* (1) approach to **decision making* based on **expected utility theory*, some versions also incorporating **Bayesian inference*. It starts from the assumption that, for any pair of alternatives, the decision maker can express a preference, and that the preferences satisfy the following axioms, which accord with our intuitions about preferences. (1) *Completeness*: for every pair of alternatives *x* and *y*, either *x* is preferred to *y*, *y* is preferred to *x*, or the decision maker is indifferent between *x* and *y*; (2) *Reflexivity*: every alternative *x* is at least as preferable as itself; (3) *Transitivity*: if *x* is at least as preferable as *y*, and *y* is at least as preferable as *z*, then *x* is at least as preferable as *z*. The theory then requires a decision maker always to choose a maximally preferable alternative (which may not be unique). Many writers use the term synonymously with **rational choice theory*. Applied decision theory, taking into account the decision makers' **utility functions*, is called *decision analysis*. *See also* EXPECTED UTILITY THEORY, INTRANSITIVE PREFERENCES, MONEY PUMP. *Compare* BEHAVIOURAL DECISION THEORY, PSYCHOLOGICAL DECISION THEORY. **DT** abbrev.

declarative knowledge *n.* Awareness and understanding of factual information about the world—*knowing that* in contrast to *knowing how*. Its necessary and sufficient conditions are that the information must be true, that the person must believe it to be true, and that the person must be in a position

*****ebook converter DEMO Watermarks*****

to know it. Typical items of declarative knowledge might include: that Princess Diana died in 1997; that Goethe was 83 when he finished writing *Faust*; that there is a village in Hertfordshire, England, called Ugley. *See also* ACT*, DECLARATIVE MEMORY, KNOWLEDGE. *Compare* ACQUAINTANCESHIP KNOWLEDGE, NON-DECLARATIVE KNOWLEDGE, PROCEDURAL KNOWLEDGE.

declarative memory *n.* A storage system for *declarative knowledge, involving structures in the *temporal lobes, especially the *hippocampus. Information contained in it is acquired by a form of learning that requires conscious awareness and that occurs quickly, often in a single trial, generally involving the formation of associations among multiple stimuli. Also called *explicit memory*. *See also* ACT*, EPISODIC MEMORY, MIRROR DRAWING, SEMANTIC MEMORY. *Compare* PROCEDURAL MEMORY.

de Clérambault's syndrome *n.* Another name for *erotomania. [Named after the French psychiatrist Gaëtan de Clérambault (1872–1934), who published an influential article entitled 'Les Psychoses Passionelles' that discussed the disorder in 1921]

deconstruction *n.* A method of critical analysis, associated prominently with the writings of the Algerian-born French philosopher and literary critic Jacques Derrida (1930–2004), in which the meaning of a word or other form of expression is considered to be volatile and unstable and not anchored in the relationship between words and the things that they are supposed to designate, but permanently deferred and always subject to and produced by its difference from other meanings. Deconstruction arose primarily as an attack on *structuralism (1), aiming to show inherent contradictions in the rules governing the structure of texts, especially binary oppositions. It suggests that there is no firm or fixed presence that can guarantee or underwrite the meaning of a term. *Compare* PSYCHOANALYTIC CONSTRUCTION.

deconstruct *vb.* To perform deconstruction on a text or other verbal product, especially by questioning the basis of the opposition between speech and writing. This usage, though common in popular discourse, is regarded as spurious by some deconstructionists who believe that there is no verb associated with *deconstruction*.

decreolization *n.* A process whereby speakers of a *creole language,

*****ebook converter DEMO Watermarks*****

coexisting in a community with a standard language that is associated with higher status, prestige, and wealth, come under social pressure to alter their speech in the direction of the standard. *See also* [CREOLIZATION](#). *Compare* [HYPERCREOLIZATION](#).

decussation *n.* A [*chiasm](#), crossing over, or intersection in the form of the letter X, as in the nerve fibres in the [*optic chiasm](#) or the [*pyramidal decussation](#), both of which are partly rather than fully decussated in the human brain. The partial decussation of the visual pathways was discovered in 1704 by the English mathematician and physicist Isaac Newton (1642–1727). In most fishes and birds the visual pathways are completely crossed, but as animals evolved with eyes more towards the front of the head than the side, the percentage of uncrossed fibres increased. In mammals, the percentage of uncrossed fibres is related to the amount of overlap between the visual fields of the two eyes, overlapping visual fields providing an accurate depth perception through [*stereopsis](#). In human beings there is almost complete overlap of visual fields and almost half the fibres are uncrossed. Most other sensory and motor information is fully crossed, except in the [*cerebellum](#). *See also* [DIVIDED VISUAL FIELD](#), [VENTROMEDIAL TRACT](#). **decussate** *vb.* [From Latin *decussis* the numeral 10, written X, from *decem assi* a coin worth ten asses, from *decem* ten + *as*, *assis* a Roman copper coin + *-ation* indicating a process or condition]

deduction *n.* The form of reasoning characteristic of logic and mathematics in which a conclusion is inferred from a set of premises that logically imply it. The term also denotes a conclusion drawn by this process. *See also* [DEDUCTIVE REASONING](#), [INFERENCE](#), [LOGIC](#). *Compare* [INDUCTION \(1, 2\)](#). **deduce** *vb.* **deductive** *adj.* [From Latin *deducere* to lead away or deduce, from *de-* from + *ducere* to lead + *-ion* indicating an action, process, or state]

deductive reasoning *n.* A form of logical reasoning based on [*deduction](#) in which a conclusion is derived from premises using rules of inference, a valid deduction being one in which it is impossible to assert the premises and deny the conclusion without contradiction. One form, though by no means the only form, of deductive reasoning is the [*syllogism](#). *See also* [CONDITIONAL REASONING](#), [MODAL LOGIC](#).

deep dyslexia *n.* A form of [*dyslexia](#) characterized by inability to read non-words (such as *kebbby*), semantic errors, and impairment in reading abstract rather than concrete words; reading by relying on an established vocabulary of words that are recognized by sight. A person with deep dyslexia may misread *drink* as *beer* or *country* as *nation* and may also make visual errors such as reading *single* as *signal*. *See also* [COGNITIVE NEUROPSYCHOLOGY](#). *Compare* [SURFACE DYSLEXIA](#).

deep structure *n.* A representation of a sentence at a fundamental level, with the grammatical relations between its parts explicitly shown, before any of the transformational rules have been applied to produce the [*surface structure](#). In a famous example suggested by the US linguist and philosopher (Avram) Noam Chomsky (born 1928), the sentences *John is eager to please* and *John is easy to please* have similar surface structures but completely different deep structures, because the first involves John pleasing someone and the second John being pleased by someone. *See also* [CASE GRAMMAR](#), [GENERATIVE GRAMMAR](#), [TRANSFORMATIONAL GRAMMAR](#).

deep tendon reflex *n.* The simplest type of reflex, involving only two neurons, characterized by a quick contraction of a muscle (with a normal latency of 15–25 milliseconds), triggered by a signal from a [*muscle spindle](#) in response to a sudden stretch induced by a sharp tap on the muscle tendon. Absence of the reflex indicates damage to the muscle, nerves, or spinal cord, and a hyperactive reflex suggests [*hyperthyroidism](#) or a lesion in the [*pyramidal tract](#). The most important deep tendon reflexes are the [*Achilles tendon reflex](#), [*biceps reflex](#), [*patellar reflex](#), and [*triceps reflex](#). Also called a *myostatic reflex*, or *tendon reflex*. *See also* [MONOSYNAPTIC REFLEX](#), [REFLEX](#), [STRETCH REFLEX](#). **DTR** *abbrev.*

Deese–Roediger–McDermott paradigm *See* [EXPERIMENTALLY INDUCED FALSE MEMORY](#).

default mode network *n.* An interconnected system of cortical areas that are active in a person who is in a state of wakeful rest, daydreaming, reminiscing, or contemplating future events, but not focused on a specific task involving the processing of external sensory (especially visual) input. It includes the [*parahippocampal gyrus](#), the medial [*prefrontal cortex](#), the
*****ebook converter DEMO Watermarks*****

posterior ***cingulate gyrus**, the ***angular gyrus**, and the medial, lateral, and inferior ***parietal lobe**, and it is characterized by low-frequency ***EEG** waves at about 0.1 Hz (one oscillation every 10 seconds). The term was introduced by the US neurologist Marcus E. Raichle (born 1937) and several collaborators in an article in the *Proceedings of the National Academy of Sciences* in 2001. Also called the default network or the task-negative network. Compare **TASK-POSITIVE NETWORK**. **DMN** abbrev.

default reasoning *n.* A form of ***non-monotonic reasoning** in which a ***premise** is assumed to be true by default but can be rejected if a further premise is added. For example, in the argument *Birds fly; Tweety is a bird; Therefore Tweety can fly*, the default premise *Birds fly* may be defeasible in the light of a further premise, such as *Tweety is a penguin*. See also **FRAME PROBLEM**. Also called *default logic*, but this is avoided in careful usage, because default reasoning violates the ***extension theorem** and is therefore not strictly logical. See also **COGNITIVE ECONOMY**.

defence, ego See **EGO DEFENCE MECHANISM**.

defence hysteria *n.* In ***psychoanalysis**, one of three types of ***hysteria** distinguished by Sigmund Freud (1856–1939) in 1894 in his article ‘The Neuro-Psychoses of Defence’ (*Standard Edition*, III, pp. 45–61), and by the Austrian physician Josef Breuer (1842–1925) and Freud in 1895 in their book *Studies on Hysteria* (*Standard Edition*, II), characterized by prolific use of ***defence mechanisms**. After 1895 Freud came to believe that defence plays a part in all hysteria, and he abandoned the tripartite distinction, but others continued to use it. US *defense hysteria*. Compare **HYPNOID HYSTERIA**, **RETENTION HYSTERIA**.

defence mechanism *n.* A term used originally in ***psychoanalysis** and later more widely in psychology and psychiatry to refer to a process whereby the ***ego** protects itself against demands of the ***id**. More generally, it is a pattern of feeling, thought, or behaviour arising in response to a perception of psychic danger, enabling a person to avoid conscious awareness of conflicts or anxiety-arousing ideas or wishes. In his book *The Ego and the Id* (1923), Sigmund Freud (1856–1939) made it clear that it is an unconscious function of the ego: ‘We have come upon something in the ego itself which is also

*****ebook converter DEMO Watermarks*****

unconscious, which behaves exactly like the repressed—that is, which produces powerful effects without itself being conscious and which requires special work before it can be made conscious’ (*Standard Edition*, XIX, pp. 12–66, at p. 17). The most influential survey and discussion of defence mechanisms was provided by Freud’s daughter, the Austrian-born British psychoanalyst Anna Freud (1895–1982), in her book *The Ego and the Mechanisms of Defence* (1936/7). US *defense mechanism*. Also called an *ego defence mechanism*. See [ACTING OUT \(2\)](#), [COMPENSATION](#), [CONVERSION](#), [DENIAL](#), [DISPLACEMENT](#), [DISSOCIATION](#), [EXTERNALIZATION](#), [FORECLOSURE](#), [IDEALIZATION](#), [IDENTIFICATION \(2\)](#), [IDENTIFICATION WITH THE AGGRESSOR](#), [INCORPORATION](#), [INTELLECTUALIZATION](#), [INTROJECTION](#), [ISOLATION OF AFFECT](#), [NEGATION \(2\)](#), [PROJECTION \(1\)](#), [RATIONALIZATION](#), [REACTION FORMATION](#), [REGRESSION \(2\)](#), [REPRESSION](#), [REVERSAL \(1\)](#), [SPLITTING OF THE OBJECT](#), [SUBLIMATION](#), [SUBSTITUTION](#), [SUPPRESSION](#), [SYMBOLIZATION](#), [UNDOING](#). See also [CATHEXIS](#), [COUNTERCATHEXIS](#), [DEFENCE HYSTERIA](#), [WORD-ASSOCIATION TEST](#).

defence, perceptual See [PERCEPTUAL DEFENCE](#).

defensive identification *n.* Another name for [*identification](#) with the aggressor.

defensive technique *n.* In [*psychoanalysis](#), a concept introduced by the Scottish psychoanalyst W. Ronald D. Fairbairn (1889–1964) to denote any of four different processes that occur during normal development, in the transition to quasi-independence, as a result of [*splitting of the object](#) (the mother or breast) into a [*good object](#) that satisfies and a bad object that frustrates. The particular technique adopted depends on where (internally or externally) the good object and the bad object are located, and this also explains the form that a mental disorder is likely to take if development does not proceed normally. See [HYSTERICAL TECHNIQUE](#), [OBSESSIONAL TECHNIQUE](#), [PARANOID TECHNIQUE](#), [PHOBIC TECHNIQUE](#).

deferred action *n.* In [*psychoanalysis](#), a term used frequently by Sigmund Freud (1856–1939), though never defined by him, apparently to denote the revision of memories to fit in with new experiences or the attainment of later stages of development. Freud used the German word *Nachträglichkeit*, meaning the state or condition of being after the event or

*****ebook converter DEMO Watermarks*****

having hindsight, and the usual translation as *deferred action* may be slightly misleading. The French psychoanalyst Jacques Lacan (1901–81) was the first to draw attention to the importance of the concept in Freud's writings. See also [FALSE MEMORY](#), [RECONSTRUCTIVE MEMORY](#).

deferred gratification *n.* A reward or [*reinforcement](#) that is postponed or delayed, such as the profit that accrues from a long-term investment. See also [MARSHMALLOW TEST](#), [SOMATIC MARKER HYPOTHESIS](#). [From Latin *deferre* to carry off, from *de-* from + *ferre* to carry]

deficit *n.* A shortfall; more specifically, any deficiency in functioning owing to a disorder or [*impairment](#). [From Latin *deficit* it lacks, from *deficere* to lack]

defining properties *n.* In [*componential theory](#), a set of [*attributes](#) or [*features](#) (1) that specify the meaning of a particular concept, each a necessary or essential attribute of any instance of the concept, the entire set constituting a sufficient definition of the concept. This classical interpretation of concepts was undermined by the Austrian-born British philosopher Ludwig (Josef Johann) Wittgenstein (1889–1951), who showed in his *Philosophical Investigations* (1953, paragraph 66) that concepts such as *game* or *chair* lack defining properties. See [FEATURE THEORY](#), [PROTOTYPE THEORY](#). Compare [CHARACTERISTIC FEATURES](#).

definitional theory *n.* Another name for the [*componential theory](#) of concept formation.

defusion of instincts *n.* In [*psychoanalysis](#), the separation of [*Eros](#) and [*Thanatos](#), so that they pursue independent [*instinctual aims](#). Sigmund Freud (1856–1939), in his book *The Ego and the Id* (1923), cited the [*ambivalence](#) of obsessional neurosis ([*obsessive–compulsive disorder](#)) as one of the clearest examples of this phenomenon (*Standard Edition*, XIX, pp. 12–66, at p. 42). Compare [FUSION OF INSTINCTS](#).

degraded stimulus *n.* A stimulus whose detectability or discriminability has been reduced by decreasing its signal-to-noise ratio. Also called an *impoverished stimulus*. See also [ABRAHAM LINCOLN EFFECT](#), [BLOCK](#)
*****ebook converter DEMO Watermarks*****

PORTRAIT.

degrees of freedom *n.* In statistics, a quantity associated with many **significance tests* and with estimates of variability such as the sample **variance*, defined as the number of observations minus the number of restrictions on the freedom of the observations to vary. For example, in estimating the variance in a sample of n scores with a known mean, there are $n-1$ degrees of freedom, because having calculated $n-1$ deviations from the mean, the last deviation is not free to vary but can assume only one value. Similarly, in a 2×2 **contingency table* with fixed row and column totals (marginals), there is only 1 degree of freedom, because if a value is assigned to any of the four cells, then the other three are determined by the constraints and have no freedom to vary. *df abbrev.*

dehoaxing *n.* A form of **debriefing* following research involving deception, in which research participants or subjects are told the true nature of the research, both for ethical reasons and to eliminate any undesirable effects of the deception.

dehydroepiandrosterone *See* DHEA.

deimatic *adj.* Frightening or threatening, of or relating to a posture adopted by an animal to intimidate another. [From Greek *deimatos* frightening, from *deimos* fright]

deindividuation *n.* A psychological state characterized by loss of the sense of individuality and a submerging of personal identity and accountability in a group. In some circumstances it can lead to a relaxation of inhibitions and the release of antisocial behaviour, and it has been used to explain certain forms of mob behaviour. *See also* *BYSTANDER EFFECT*, *DIFFUSION OF RESPONSIBILITY*. *Compare* *INDIVIDUATION*.

deism *n.* Belief in a god who created the universe but does not govern worldly events, does not answer prayers, and has no direct involvement in human affairs. **deist** *n.* One who espouses deism. *Compare* *AGNOSTICISM*, *ATHEISM*, *PANTHEISM*, *THEISM*. **deistic** or **deistical** *adj.* [From Latin *deus* a god + Greek *-ismos* indicating a state or condition]

*****ebook converter DEMO Watermarks*****

Deiters' cell *n.* A modified cell with an elongated ending and a terminal plate, such cells alternating with and supporting the outer ***hair cells** of the ***organ of Corti**. [Named after the German anatomist Otto F. K. Deiters (1834–63)]

Deiters' nucleus *n.* A cluster of nerve cell bodies in the ***medulla oblongata**, with neural connections to the ***flocculonodular lobe** of the cerebellum, receiving afferent impulses from the ***semicircular canals** via the ***vestibular nerve**, and sending efferent motor impulses to the spinal cord and cerebral cortex. It controls equilibrium, muscular tonus, and conjugate eye movements. Often misspelt *Deiter's nucleus*. [Named after the German anatomist Otto F. K. Deiters (1834–63) who discovered it]

deixis *n.* Features of language that refer to personal, locational, or temporal characteristics of the situation in which an utterance occurs and whose meaning is therefore relative to the situation, such as *this/that*, *here/there*, *now/then*, *I/you*. The term is also sometimes applied to words that refer backwards or forwards in discourse, namely ***anaphora** and ***cataphora**.
deictic *adj. n.* (Of or relating to) a verbal expression exhibiting deixis. [From Greek *deiknynai* to show]

déjà vu *n.* A form of ***paramnesia** (1) distinguished by a delusion of having already seen or experienced before something that is in reality being encountered for the first time. Less common variants include *déjà entendu* (already heard), *déjà éprouvé* (already experienced or tested), *déjà fait* (already done), *déjà pensé* (already thought), *déjà raconté* (already told or recounted), *déjà voulu* (already desired). The term first appeared in a letter to the editor of the journal *Revue Philosophique* in 1876 and became popular after the English neurologist J(ohn) Hughlings Jackson (1835–1911) used it in an article in the journal *Brain* in 1888. It is most common in people between 20 and 25 years old, 75 to 80 per cent of whom experience it, and it tends to occur less frequently as people get older. *See also* **PARAPRAXIS**, **PROMNESIA**. *Compare* **JAMAIS VU**. [From French *déjà* already + *vu* seen]

de la Tourette's syndrome *See* **TOURETTE'S DISORDER**.

delay conditioning *n.* A type of **conditioning* (1) in which the **conditioned stimulus* is presented repeatedly for longer and longer periods of time until there is eventually a very long delay between the onset of the conditioned stimulus and the occurrence of the **unconditioned stimulus*. The Russian physiologist Ivan Petrovich Pavlov (1849–1936) found that animals were not only able to bridge this gap in time but were ultimately able to delay the occurrence of the **conditioned response* until it just preceded the arrival of the unconditioned stimulus. *Compare* [TRACE CONDITIONING](#).

delayed auditory feedback *n.* A procedure in which a person speaks into a microphone attached to a voice recorder, and the speech is played back to the speaker through headphones after a brief delay. With a delay of about 200 milliseconds (one-fifth of a second), the effect on most speakers is a severe disruption of speech, with stuttering, slurring, and often complete inability to produce intelligible words. **DAF** *abbrev.*

delayed conditioning *n.* A form of **classical conditioning* in which the **conditioned stimulus* precedes the **unconditioned stimulus* by a significant time period and the organism learns to withhold its **conditioned response*. *See* [DELAY CONDITIONING](#).

delayed ejaculation *n.* In **DSM-5*, a **sexual dysfunction* in men characterized by marked delay in ejaculating or marked infrequency or absence of ejaculation following the excitement phase of the male **sexual response cycle*, causing clinically significant distress for at least six months. Occasional delayed ejaculation is common: according to *DSM-5*, 25% of men report not always ejaculating during sex. Also called *orgasmic impotence*, *ejaculatory impotence*, or *impotence* . *See also* [DE-REFLECTION](#), [IMPOTENCE](#) (2). *Compare* [ERECTILE DISORDER](#).

delayed gratification *n.* Renouncing immediate reward or satisfaction in order to obtain a larger reward in the future, as when a person invests money instead of spending it immediately.

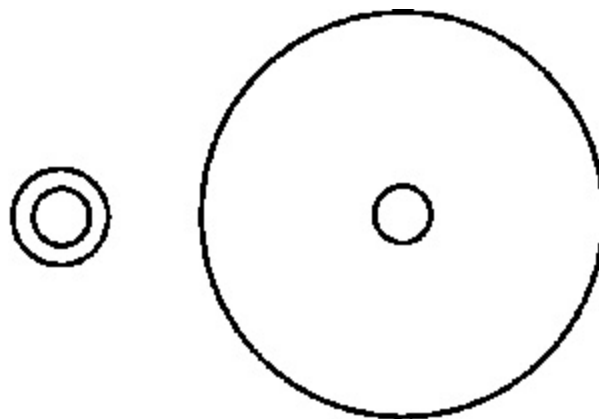
delayed matching to sample *See* [MATCHING TO SAMPLE](#).

delayed-response task *n.* A test of **working memory* in which the human or non-human organism responds on the basis of stored internal representations rather than information currently present in the environment. Typically, the organism receives a brief visual or auditory stimulus that is then withdrawn, and after a delay of several seconds attempts to identify the location where the stimulus appeared, and is rewarded if correct.

delayed sleep-phase syndrome *n.* One of the **circadian rhythm sleep-wake disorders*, characterized by falling asleep very late, sleep-onset **insomnia*, and difficulty waking up in time to meet work, school, or social demands. **DSPS** *abbrev.*

delay-line timing circuit *n.* A series of neuronal connections or circuits that are capable of sustaining activity for an extended period of time.

Delboeuf illusion *n.* A visual illusion in which a circle surrounded by a concentric circle of slightly greater diameter appears larger than another circle of the same size surrounded by a concentric circle of much greater diameter (see *illustration*). [Named after the Belgian physicist and psychologist Joseph Rémy Léopold Delboeuf (1831–96) who published it in 1893]



Delboeuf illusion. The two inner circles are the same size.

deletion *n.* An erasure or blotting out. In genetics, the loss or absence of part of a **chromosome*. **deletion mutation** *n.* A type of **mutation* in which one or more **bases* (1) are lost from a segment of **DNA*.

*****ebook converter DEMO Watermarks*****

Delilah syndrome *n.* Promiscuity in a woman motivated by a desire to render men weak and helpless. [Named after the Philistine mistress of Samson (in Judges 16:4–22), who deprived him of his strength by cutting off his hair]

deliriant *adj. n.* (Of or relating to) a substance such as an **inhalant* that produces a state of **delirium* or a degree of general **anaesthesia*. *See also* INHALANT-RELATED DISORDERS, NITRITE INHALANT, SOLVENT ABUSE.

delirium *n.* A **neurocognitive disorder* in **DSM-5* involving **clouding of consciousness* and impairment of cognition, including such symptoms as memory loss, disorientation, language disturbance, perceptual change, and often sleep disturbances (insomnia or nightmares), the disorder developing quickly (usually in a matter of hours or days) and not being explicable by **dementia*, but accompanied by evidence that it is caused by a **general medical condition*, **substance intoxication* or **withdrawal*, medication, or exposure to a **toxin*. *See also* COGNITIVE DISORDERS, SUBSTANCE INTOXICATION DELIRIUM, SUBSTANCE WITHDRAWAL DELIRIUM. [From Latin *delirium* insanity, from *delirus* insane, from *delirare* to turn aside, from *de* from + *lira* a furrow]

delirium tremens *n.* An acute and sometimes fatal **rebound effect* occurring as a reaction to alcohol withdrawal following prolonged alcohol abuse, characterized by **anorexia* and **insomnia* followed by **psychomotor agitation*, **anxiety*, **hallucinations*, **delusions*, coarse **intention tremor* of the hands, feet, legs, and tongue, fever, **tachycardia*, and profuse sweating. *Compare* ALCOHOL HALLUCINOSIS. **DTs** *abbrev.* [From Latin *tremens* trembling, from *tremere* to shake]

Delphi method *n.* A method of research, analysis, decision making, and often forecasting, developed in the early 1950s by the RAND Corporation in the US, involving the repeated collection and distribution of the judgements and opinions of individual experts through the exchange of written documents or electronic mail. Proponents claim that it avoids domination of the decision process by forceful personalities and the disrupting effects of interpersonal dynamics in face-to-face groups. Also called the *Delphi*

*****ebook converter DEMO Watermarks*****

technique . [Named after the oracle of Delphi in ancient Greece]

delta fibre *n.* A small-diameter, thinly myelinated type of **afferent* nerve fibre with low conduction velocity, such as any of the afferent fibres from certain pain, temperature, and touch receptors. US *delta fiber*. Also written δ fibre . Compare ALPHA FIBRE, IA FIBRE, IB FIBRE, II FIBRE, C FIBRE, GAMMA FIBRE. [From *delta* (δ) the fourth letter of the Greek alphabet]

delta movement *n.* A form of **apparent movement*, first described in 1915 by the German Gestalt psychologist Adolf Korte, that occurs when two stimuli quite close together are presented in an alternating pattern, the second being much brighter than the first. Under certain conditions relating to sizes of the stimuli and interstimulus interval, the visual illusion is created of the second stimulus moving in a reverse direction from its position towards the first stimulus. Also called *delta motion* . Compare ALPHA MOVEMENT, BETA MOVEMENT, GAMMA MOVEMENT.

delta-9-tetrahydrocannabinol *n.* The chemical name for the primary psychotropic substance in **cannabis*. **THC** or **delta-9-THC** *abbrev.*

delta rule *n.* In the **back-propagation algorithm*, adjustment of the weights of connections between units as a function of the discrepancies between actual output and target output as determined by a **teacher unit*. Also called the *Widrow–Hoff rule* . See also CONNECTIONISM (1), HEBBIAN RULE.

delta sleep-inducing peptide *n.* A **peptide* consisting of nine amino acids, extracted from the venous blood of rabbits after putting them to sleep through electrical stimulation of the thalamus. When injected into other rabbits, it induces **slow-wave sleep*, and when injected into human subjects it has a similar effect. [So called because it induces deep sleep with associated **delta waves*]

delta wave *n.* A very low-frequency (1–3 hertz), high amplitude (approximately 150 microvolts) **EEG* wave characteristic of deep, dreamless, **slow-wave sleep*. Also called a *delta rhythm* . See also DELTA SLEEP-INDUCING PEPTIDE.

*****ebook converter DEMO Watermarks*****

delusion *n.* A false belief maintained in the face of overwhelming contradictory evidence, apart from beliefs that are articles of religious faith or are widely accepted in the person's culture. See [DELUSIONAL JEALOUSY](#), [DELUSIONAL MISIDENTIFICATION](#), [DELUSION OF CONTROL](#), [DELUSION OF DEPERSONALIZATION](#), [DELUSION OF REFERENCE](#), [EROTOMANIA \(1\)](#), [GRANDIOSE DELUSION](#), [LYCANTHROPY \(2\)](#), [NIHILISTIC DELUSION](#), [PERSECUTORY DELUSION](#), [SOMATIC DELUSION](#), [SYSTEMATIZED DELUSION](#), [THOUGHT BROADCASTING DELUSION](#), [THOUGHT INSERTION DELUSION](#). See also [DELUSIONAL DISORDER](#). Compare [HALLUCINATION](#), [ILLUSION](#). **delusional** *adj.* [From Latin *deludere* to mock or play false, from *de* away from + *ludere* to play + *-ion* indicating an action, process, or state]

delusional disorder *n.* A [*mental disorder](#) characterized by one or more [*delusions](#), such as being stalked, poisoned, loved from afar, deceived by a sexual partner, or having a physical abnormality. In [*DSM-5](#), this disorder can be diagnosed only if the symptoms persist for at least a month and criteria for [*schizophrenia](#) have never been met. See [EROTOMANIC DELUSIONAL DISORDER](#), [GRANDIOSE DELUSIONAL DISORDER](#), [JEALOUS DELUSIONAL DISORDER](#), [PERSECUTORY DELUSIONAL DISORDER](#), [SOMATIC DELUSIONAL DISORDER](#). See also [SCHREBER CASE](#). Compare [PARANOID PERSONALITY DISORDER](#), [PARANOID SCHIZOPHRENIA](#).

delusional jealousy *n.* A [*delusion](#) that one's sexual partner is being unfaithful.

delusional misidentification *n.* Any [*delusion](#) involving the identity of another person or people, the best known examples occurring in [*Capgras syndrome](#), [*Frégoli syndrome](#), and [*intermetamorphosis](#).

delusion, nihilistic See [NIHILISTIC DELUSION](#).

delusion of control *n.* A [*delusion](#) that one's actions or thoughts are being controlled by an external agent.

delusion of depersonalization *n.* A [*delusion](#), the main content of which is a belief of [*depersonalization](#).

delusion of grandeur *n.* Another name for a **grandiose delusion*.

delusion of influence *n.* Another name for a **delusion of control*.

delusion of persecution *See* PERSECUTORY DELUSION.

delusion of reference *n.* A **delusion* that certain people, events, or things in one's environment have a special (usually baleful) significance, such as a belief that people are talking about one or plotting behind one's back. *Compare* IDEAS OF REFERENCE, PARANOIA.

demand characteristics *n.* Features of an experimental situation that encourage certain types of behaviour from the research participants or subjects and can contaminate the results, especially when this behaviour arises from research participants' expectations or preconceptions or from their interpretations of the experimenter's expectations. *See also* EXPERIMENTER EFFECT, EXPERIMENTER EXPECTANCY EFFECT, REACTIVITY.

deme *n.* A group of closely related organisms living in the same locality. A deme of organisms related genetically is called a *genodeme*, and a deme of organisms related through mating is called a *gamodeme*. [From Greek *demos* a district in local government]

dementia *n.* A **neurocognitive disorder* in **DSM-5* involving impairment or loss of memory, especially evident in the learning of new information, and of thinking, language, judgement, and other cognitive faculties, without **clouding of consciousness*; any of a family of **mental disorders* characterized by memory impairment, especially for newly acquired information, and one or more cognitive disturbances (notably **aphasia*, **apraxia*, or **agnosia*) causing significant difficulties in social or occupational functioning. It is characteristic of old age, occurring in about 10 per cent of people in their early 80s and rising to 20 per cent of those in their late 80s. The most important types are dementia of the Alzheimer type (*see* ALZHEIMER'S DISEASE), **vascular dementia* or **multi-infarct dementia*, dementia resulting from **HIV* infection, head trauma, **Parkinson's disease*, **Huntington's disease*, **Pick's disease*, **Creutzfeldt-Jakob disease*, and

substance-induced persisting dementia resulting from **alcohol*, **inhalants*, **sedatives*, **hypnotics*, or **anxiolytics*. See also CHILDHOOD DISINTEGRATIVE DISORDER, COGNITIVE DISORDERS, PRESENILE DEMENTIA, PROGRESSIVE SUPRANUCLEAR PALSY, SENILE DEMENTIA. Compare AMENTIA. [From Latin *dementare* to drive mad, from *de* from + *mens* mind + *-ia* indicating a condition or quality]

dementia infantilis *n.* Another name for **childhood disintegrative disorder*, introduced in 1908 by the Austrian neuropsychiatrist Theodor O. Heller (1869–1938). [From *dementia* + Latin *infans* speechless, from *in-* without + *fans* speaking, from *fari* to speak + *-alis* of or relating to]

dementia praecox *n.* An obsolete name for **schizophrenia*. [From Latin *dementia* insanity + *praecox* premature]

Demerol *n.* A proprietary name for **pethidine* (meperidine). [Trademark]

demography *n.* The study of human populations, especially as regards size, structure, density, and distribution. **demographic** *adj.* [From Greek *demos* the people + *graphein* to write]

dendrite *n.* A collection of branched, threadlike extensions of a **neuron* specialized to receive impulses via **synapses* (1) from other neurons or from **sensory* receptors and to conduct them towards the cell body or soma. Also called a *dendron*. See also MICROTUBULE. Compare AXON. **dendritic** *adj.* [From Greek *dendron* a tree]

dendrodendritic *adj.* Of or relating to a relatively uncommon type of **synapse* (1) between the **dendrite* of one neuron and the dendrite of another. It does not generate nerve impulses but alters the receptivity of the target neuron. Compare AXOAXONIC, AXODENDRITIC, AXOSOMATIC. **D-D** *abbrev.*

dendrogram *n.* In statistics, a branching diagram showing the clusters formed at each step of a hierarchical **cluster analysis*. [From Greek *dendrites* of or relating to a tree, from *dendron* a tree + *gramme* a line]

dendron *n.* Another name for a **dendrite*.

denial *n.* In *psychoanalysis, a *defence mechanism involving a disavowal or failure consciously to acknowledge thoughts, feelings, desires, or aspects of reality that would be painful or unacceptable, as when a person with a terminal illness refuses to acknowledge the imminence of death. Sigmund Freud (1856–1939) introduced it into psychoanalysis in 1923 in an article on ‘The Infantile Genital Organization’ (*Standard Edition*, XIX, pp. 141–5), where he discusses it in relation to children denying that girls do not have penises although they can see that to be the case, and he developed the concept further in 1938/40 in his book *An Outline of Psycho-Analysis* (*Standard Edition*, XXIII, pp. 144–207, at pp. 203–4). Also called *disavowal*.

denotation *n.* **1.** The explicit dictionary meaning of a word or expression, with reference to the entity or thing that the word designates. This meaning should be carefully distinguished from sense 2. *See also* SEMANTIC FEATURE, SEMANTIC-FEATURE HYPOTHESIS. *Compare* CONNOTATION (1). **2.** In philosophy, the particular entities to which a word or expression can correctly be applied; hence the denotation of the word *mother* is the set of all particular mothers in the world, including the mother of anyone who reads these words, the Queen Mother (mother of Queen Elizabeth II, Queen of Great Britain and Northern Ireland), Mary mother of Christ, and so on. Some words and expressions have no denotation in this sense, a familiar example being *unicorn*, although it does have a *connotation (2), namely *horse-like one-horned animal*. *See also* INTENSION. *Compare* CONNOTATION (2). **denotative** *adj.* **denote** *vb.* [From Latin *denotare* to mark, from *de* from + *notare* to mark, from *nota* a mark or sign + *-ation* indicating a process or condition]

density, tonal *See* TONAL DENSITY.

dental *adj.* Of, relating to, or denoting a speech sound articulated with the tongue tip against upper teeth, as in the initial *phonemes in *thin* and *this*. *See also* ARTICULATION, PLACE OF ARTICULATION. [From Latin *dens*, *dentis* a tooth + *-alis* of or relating to]

dentate gyrus *n.* A small crescent-shaped structure in the hippocampal formation (*see* HIPPOCAMPUS), separated from the narrow tip of *Ammon’s horn. Often confused with the *dentate nucleus. [From Latin *dens*, *dentis* a tooth + *-atus* having the shape of]

*****ebook converter DEMO Watermarks*****

tooth + Greek *gyros* a circle or ring]

dentate nucleus *n.* A large wrinkled horseshoe-shaped strip of nerve cell bodies deep within each hemisphere of the **cerebellum*, involved in the control of rapid skilled movements. Often confused with the **dentate gyrus*. [From Latin *dens*, *dentis* a tooth + *nucleus* a kernel, from *nux*, *nucis* a nut, alluding to its toothed appearance]

denying the antecedent *n.* In **conditional reasoning*, arguing invalidly from a hypothetical proposition of the form *If p then q* that, because *p* is false, therefore *q* is false. For example, given the proposition *If the burglars entered by the front door, then they forced the lock*, it is invalid to deduce from the fact that the burglars did not enter by the front door that they did not force the lock. Compare [AFFIRMING THE ANTECEDENT](#), [AFFIRMING THE CONSEQUENT](#), [DENYING THE CONSEQUENT](#).

denying the consequent *n.* In **conditional reasoning*, arguing validly from a hypothetical proposition of the form *If p then q* that, because *q* is false, therefore *p* is false. For example, given the proposition *If the burglars entered by the front door, then they forced the lock*, it is valid to deduce from the fact that the burglars did not force the lock that they did not enter by the front door. Also called *modus tollens*. Compare [AFFIRMING THE ANTECEDENT](#), [AFFIRMING THE CONSEQUENT](#), [DENYING THE ANTECEDENT](#).

deontic *adj.* Of or relating to obligation and permissibility. See also [DEONTIC LOGIC](#), [DEONTIC REASONING](#), [DEONTOLOGY](#). [From Greek *deon* duty, from *deen* to be necessary, to behave + *-ikos* of, relating to, or resembling]

deontic logic *n.* A branch of **modal logic* devoted to the study of propositions expressing obligation and permission, first suggested by the Finnish logician Georg Henrik von Wright (1916–2003) in an article in the journal *Mind* in 1951 and chapter 5 of his book *Essay in Modal Logic* (1951). It is concerned with seeking to discover and understand what actions a person should or may perform, in contrast to conventional logic, which seeks to discover and understand what propositions a person should or may believe to be true. Several formal systems have been developed in which obligation and permission stand in a relation of duality to each other, as when permission to

*****ebook converter DEMO Watermarks*****

perform an action *p* is defined as not being obliged not to perform *p*. *See also* [DEONTIC](#), [DEONTIC REASONING](#), [DEONTOLOGY](#).

deontic reasoning *n.* Reasoning about obligation and duty, most often in relation to ethical or moral actions, but also in some forms of non-ethical problem solving, to be distinguished from conventional reasoning inasmuch as it is not governed by criteria of conventional [*logic](#). For example, the statement *If a girl is under the age of 16, then she should not wear lipstick* is not true or false in the usual sense but enunciates a deontic conditional rule of conduct. *See also* [DEONTIC](#), [DEONTIC LOGIC](#), [DEONTOLOGY](#).

deontology *n.* The study of obligation and permission. The term was coined by the English philosopher Jeremy Bentham (1748–1832) as the title of a book published posthumously in 1834. *See also* [DEONTIC LOGIC](#), [DEONTIC REASONING](#). **deontological** or **deontic** *adj.* [From Greek *deon* duty, from *deen* to be necessary, to behove + *logos* word, discourse, or reason]

deoxyribonucleic acid *See* [DNA](#).

deoxyribose *n.* Any of a group of sugars similar to [*ribose](#) but having one of its alcoholic hydroxyl groups replaced by hydrogen, especially the sugar that forms part of the backbone of [*DNA](#) and emerges as a product of the hydrolysis of DNA. [From *deoxy-* indicating less oxygen + *ribose*]

dependability *n.* Another name for [*conscientiousness](#).

dependence *n.* **1.** Reliance on another person for financial, emotional, or some other form of support. **2.** A psychological and sometimes physical state of reliance on a substance, especially on a narcotic drug such as cocaine or heroin, but also on everyday drugs such as nicotine, caffeine, or alcohol, characterized by a compulsion to take the drug in order to experience its effects and generally also [*withdrawal](#) and [*tolerance](#) (**3**). *See also* [ADDICTION](#), [CROSS-DEPENDENCE](#), [NUCLEUS ACCUMBENS](#), [SUBSTANCE DEPENDENCE](#). **3.** In probability theory and statistics, a relation between variables that are correlated with one another.

dependent personality disorder *n.* A *personality disorder in *DSM-5 characterized by a pervasive and excessive need to be taken care of, leading to submissive, clinging behaviour and *separation anxiety, beginning by early adulthood and indicated by such signs and symptoms as difficulty making everyday decisions without advice and reassurance from others; a need for others to assume responsibility for major areas of life; difficulty expressing disagreement with others for fear of disapproval or loss of support; difficulty initiating projects or doing things alone; tendency to go to excessive lengths to gain nurturance or support; fear of being unable to cope when alone; urgent seeking of a new relationship as a source of care and support as soon as one ends; and unrealistic preoccupation with fears of being left to cope alone.

dependent variable *n.* In research methods and statistics, a variable that is potentially liable to be influenced by one or more *independent variables. The purpose of an *experiment is typically to determine whether one or more independent variables influence one or more dependent variables in a predicted manner. In *multiple regression, a set of independent or *predictor variables are combined in a *linear model to provide a best prediction of a dependent variable, which is sometimes called a *criterion variable. See also INTERVENING VARIABLE. **DV** abbrev.

depersonalization *n.* A feeling of emotional detachment or estrangement from the perception of self, as if one were acting in a play or observing one's physical and mental activities from without. If it causes clinically significant distress or impairment in social, occupational, or other important areas of functioning, then it may be diagnosed as *depersonalization/derealization disorder. See also ALIENATION (3), DELUSION OF DEPERSONALIZATION, OUT-OF-BODY EXPERIENCE, SELF-ESTRANGEMENT. Compare DEREALIZATION.

depersonalization/derealization disorder *n.* A *dissociative disorder in *DSM-5 characterized by persistent and recurrent feelings of *depersonalization or *derealization causing clinically significant distress or impairment in social, occupational, or other important areas of functioning. Also called *depersonalization neurosis*.

depersonalization disorder *n.* A *dissociative disorder in *DSM-IV included in *depersonalization/derealization disorder in DSM-5.

depolarization *n.* A reduction in the voltage across a neuron's *cell membrane from its normal *resting potential of -70 millivolts or mV (negative on the inside). The reduction tends to excite the neuron and increase its propensity to transmit a nerve impulse, the momentary collapse and reversal of the resting potential constituting an *action potential. *See also* EXCITATORY POSTSYNAPTIC POTENTIAL. *Compare* HYPERPOLARIZATION.

deprenyl *n.* A drug that controls the symptoms and slows the progression of *Parkinson's disease by inhibiting the action of a *monoamine oxidase enzyme that destroys *dopaminergic cells in the *substantia nigra. It has more general anti-oxidant effects, in low doses it increases the life expectancy of experimental animals by more than twenty per cent, and it is sometimes considered to be a *smart drug. *See also* ANTIPARKINSONIAN.

depressant drug *n.* Any drug that reduces or tends to reduce the function of a system or organ of the body, especially a drug that reduces or slows down the activity of the *central nervous system and that in high dosages can lead to slurred speech, behaviour resembling drunkenness, coma, and death. Among the most frequently used depressants are *alcohol, the *barbiturates, the *benzodiazepines, *chloral hydrate, *glutethimide, *haloperidol, *methaqualone, *paraldehyde, *phencyclidine, and *scopolamine. A common street name for depressant drugs in general is *downers*. Also called a *psychomotor depressant*. *See also* SEDATIVE-HYPNOTIC, SEDATIVE-, HYPNOTIC-, OR ANXIOLYTIC-RELATED DISORDERS, SUBSTANCE ABUSE, SUBSTANCE-RELATED AND ADDICTIVE DISORDERS. *Compare* STIMULANT DRUG. [From Latin *depressum* pressed down, from *de* down + *premere*, *pressum* to press]

depressed mood *n.* A *mood (1) state characterized by *depression.

depression *n.* A *mood (1) state of sadness, gloom, and pessimistic ideation, with loss of interest or pleasure in normally enjoyable activities, accompanied in severe cases by *anorexia and consequent weight loss, *insomnia (especially middle or terminal insomnia) or *hypersomnia,

***asthenia**, feelings of worthlessness or guilt, diminished ability to think or concentrate, or recurrent thoughts of death or suicide. It appears as a symptom of many mental disorders. See [DEPRESSIVE DISORDERS](#). See also [AGITATED DEPRESSION](#), [ANACLITIC DEPRESSION](#), [ANTIDEPRESSANT](#), [BECK DEPRESSION INVENTORY](#), [BORNA DISEASE VIRUS](#), [COGNITIVE THERAPY](#), [DEPRESSIVE EPISODE](#), [DEPRESSIVE MOOD](#), [DEPRESSIVE REALISM](#), [DYSTHYMIA \(1\)](#), [DYSTHYMIC DISORDER](#), [ENDOGENOUS DEPRESSION](#), [EXOGENOUS DEPRESSION](#), [HAMILTON DEPRESSION RATING SCALE](#), [INOSITOL](#), [INVOLUTIONAL DEPRESSION](#), [INVOLUTIONAL PSYCHOSIS](#), [IRRITABLE MALE SYNDROME](#), [LEARNED HELPLESSNESS](#), [MAJOR DEPRESSIVE DISORDER](#), [MASKED DEPRESSION](#), [MELANCHOLIA](#), [MHPG](#), [NEUROTIC DEPRESSION](#), [NERVOUS BREAKDOWN](#), [NORADRENALIN](#), [POSTPARTUM BLUES](#), [POSTPARTUM DEPRESSION](#), [PREMENSTRUAL SYNDROME](#), [PSEUDODEMENTIA](#), [PSYCHOMOTOR RETARDATION](#), [PSYCHOTIC DEPRESSION](#), [REACTIVE DEPRESSION](#), [RESERPINE](#), [RETARDED DEPRESSION](#), [SCHIZOAFFECTIVE DISORDER](#), [SEASONAL AFFECTIVE DISORDER \(SAD\)](#), [SEROTONIN](#), [UNIPOLAR DEPRESSION](#). Compare [PSEUDODEPRESSION](#). **depress** *vb.* **depressive** *adj.* [From Old French *depresser* to depress, from Latin *depressum* pressed down, from *de-* down + *premere* to press + *-ion* indicating an action, process, or state]

depression, anaclitic See [ANACLITIC DEPRESSION](#).

depression scale *n.* Any scale to measure ***depression**, including the Depression scale of the ***MMPI** and the ***Beck Depression Inventory**.

depressive disorders *n.* A class of ***mental disorders** in ***DSM-5**. See [DISRUPTIVE MOOD DYSREGULATION DISORDER](#), [MAJOR DEPRESSIVE DISORDER](#), [PERSISTENT DEPRESSIVE DISORDER](#), [PREMENSTRUAL DYSPHORIC DISORDER](#).

depressive episode *n.* A period of ***depression**. See also [MAJOR DEPRESSIVE EPISODE](#).

depressive neurosis *n.* Another name for ***dysthymic disorder**.

depressive position *n.* In ***Kleinian** analysis, a modality of ***object relations** occurring after the ***paranoid–schizoid position**, from about the fourth month until the end of the first year of life, and sometimes reappearing during childhood and adulthood, especially during states of mourning and depression. During the depressive position, the infant for the first time
*****ebook converter DEMO Watermarks*****

recognizes the mother as a ***whole object**, the splitting into ***good object** and bad object is reduced, with both libido and aggressive drives tending to focus on the same ***instinctual object**, resulting in ***ambivalence**, and anxiety is aroused by fear of losing the mother. The concept was introduced in 1934 by the British-based Austrian psychoanalyst Melanie Klein (1882–1960), who explained her preference for the word *position* to *stage* or *phase* in a co-authored book in 1952: ‘these groupings of anxieties and defences, although arising first during the earliest stages, are not restricted to them but occur and recur during the first years of childhood and under certain circumstances in later life’ (*Developments in Psycho-Analysis*, p. 236). See also **REPARATION**, **SPLITTING OF THE OBJECT**.

depressive realism *n.* A reduction or absence of ***unrealistic optimism** and the ***overconfidence effect** in a person with ***depression**, depressed people being characteristically (across situations and domains) more accurate in their processing of information related to themselves and non-depressed people being characteristically positively biased. The concept was introduced in 1979 in an article by the US psychologists Lauren B(ersh) Alloy (born 1953) and Lyn Y(vonne) Abramson (born 1950) in the *Journal of Experimental Psychology: General*. See also **ILLUSION OF CONTROL**.

deprivation, maternal See **MATERNAL DEPRIVATION**.

depth cue *n.* Any ***cue (2)**, indication, or hint of distance that contributes towards visual ***depth perception**. See **BINOCULAR CUE**, **MONOCULAR CUE**.

depth from motion *n.* Another name for *** structure from motion (SFM)**.

depth interview *n.* A type of ***interview** used in ***qualitative research**, and especially in ***motivational research** and ***dynamic psychology** generally, typically lasting at least an hour and attempting to uncover unconscious motives and wishes, sometimes supplemented with ***projective tests**. See also **DEPTH PSYCHOLOGY**.

depth of field *n.* The range of distance from a point behind to a point in front of an object being focused by the eye’s lens, or by any lens, within
*****ebook converter DEMO Watermarks*****

which the image is in focus, the range being relatively great when the **pupil* or aperture is constricted, which is usually the case in bright light, and relatively small when the pupil or aperture is dilated in dim light. Also called *depth of focus* .

depth of processing *n.* The cognitive level at which a stimulus is analysed. For example, the word *clock*, presented as a visual stimulus, may be perceived as a collection of black marks on white paper, or as a string of five letters, or as a word with a corresponding pronunciation, or it may evoke a mental representation of a complicated mechanism capable of keeping time, each of these responses representing a greater depth of processing than its predecessor. See *LEVELS OF PROCESSING*.

depth perception *n.* The visual perception of three-dimensional space through **monocular* cues and **binocular* cues that are present in the two-dimensional images projected on to the retinas of the eyes. It is served by the **magnocellular system*, which is colour-blind (see *ISOLUMINANT*). The monocular depth cues are **accommodation* (1), **aerial perspective*, **chiaroscuro*, **elevation in the visual field*, **interposition*, **linear perspective*, **monocular parallax*, **relative size*, **sfumato*, and **texture gradient*. The binocular depth cues are **ocular convergence* and **stereopsis*. See also *KINETIC DEPTH EFFECT*, *PICTORIAL DEPTH*, *REDUCTION SCREEN*.

depth psychology *n.* A term introduced by the Swiss psychiatrist Eugen Bleuler (1857–1939) to denote psychological approaches that take account of **unconscious* (2) forces, especially **psychoanalysis* in its various forms and varieties. See also *DEPTH INTERVIEW*, *DYNAMIC PSYCHOLOGY*, *METAPSYCHOLOGY*.

derailment See *COGNITIVE DERAILMENT*.

derealization *n.* An experience or perception of the external world as unreal, strange, or alien, as if it were a stage on which people were acting. See also *ALIENATION* (3). Compare *DEPERSONALIZATION*.

de-reflection *n.* A technique of **logotherapy* designed to counter **hyper-reflection* by turning the clients' attention away from themselves and their own activity. It is used chiefly for the treatment of **erectile disorder*, **male*
*****ebook converter DEMO Watermarks*****

orgasmic disorder, and impotence. *See also* CENTIPEDE EFFECT, HUMPHREY'S LAW.

dereism *n.* Thinking that deviates from reality or logic. **dereistic** *adj.* [From Latin *de* from + *res* a thing + Greek *-ismos* indicating a state or condition]

derived score *n.* In psychometrics, a score obtained by applying a mathematical **transformation* to a **raw score*. Common forms of derived scores are **IQ scores*, **stanine scores*, **sten scores*, **T scores*, and **z scores*.

dermal sense *n.* Another name for a **cutaneous sense*. [From Greek *derma* skin]

dermis *n.* The inner layer of the **skin*, below the **epidermis*, containing connective tissue, blood vessels, fat, and most of the skin's **free nerve endings*. Also called the *corium*, *derm* , or *derma* . [From Greek *derma* skin]

dermo-optical perception *n.* A **paranormal* ability claimed by some people to see with the skin, often demonstrated by reading print or perceiving pictorial images or colours with the tips of the fingers shielded from vision.

descending reticular formation *n.* The part of the **corticospinal tract* that descends through the **reticular formation* in the brainstem and controls spinal reflexes and motor behaviour. *Compare* ASCENDING RETICULAR ACTIVATING SYSTEM.

descriptive research *n.* Research that has no other purpose than to describe phenomena and is not intended to explain, predict, or control them. *Compare* ACTION RESEARCH, APPLIED RESEARCH, BASIC RESEARCH, EVALUATION RESEARCH, EXPLORATORY RESEARCH.

descriptive statistics *n.* Summaries of numerical data that make them more easily interpretable, including especially the **mean*, **variance*, **standard deviation*, **range*, **standard error of the mean*, **kurtosis*, and **skewness* of a set of scores. The **correlations* between variables are also

considered to be descriptive statistics by most statisticians. *Compare* [INFERENTIAL STATISTICS](#).

descriptive theory *See* [NORMATIVE \(1\)](#).

desensitization *See* [SYSTEMATIC DESENSITIZATION](#).

designer drug *n.* A drug synthesized specifically to mimic the [*psychotropic](#) effect of an existing (usually illegal) substance, with a slightly modified molecular structure to avoid classification as an illicit drug, typical examples being [*ecstasy \(2\)](#), [*MDA](#), and [*MPPP](#).

desipramine *n.* A [*tricyclic antidepressant](#) used in the treatment of [*mood disorders](#), especially [*bipolar disorders](#). [From *des(methyl) (im)ipramine* demethylated imipramine, from Latin *de* from or away from + *methyl* the alkyl radical CH₃ derived from methane by removal of one hydrogen atom, from Greek *methy* wine + *hyle* wood]

destructive instinct *n.* In [*psychoanalysis](#), a term denoting [*Thanatos](#) or the death instinct in so far as it is directed outwards.

destrudo *n.* In [*psychoanalysis](#), a term coined by the Italian psychoanalyst Edoardo Weiss (1889–1971) to denote the form of energy associated with [*Thanatos](#), intended as a counterpart to [*libido](#). *See also* [MORTIDO](#). [A blend of *destru(ctive)* + *(libi)do*]

desynchronized EEG *n.* An [*EEG](#) pattern lacking regular periodicity in its waveform as a result of blocking of [*alpha wave](#) activity through arousal or focused attention in the waking state, or blocking of [*delta wave](#) activity through dreaming during sleep.

desynchronized sleep *n.* Another name for [*REM sleep](#). **D sleep** *abbrev.* [So called because it is characterized by desynchronized EEG patterns]

desynchronized sleep rhythm *n.* Another name for [*circadian](#)

rhythm sleep–wake disorders.

detection task *n.* Any task in which an observer tries to perceive a signal or a stimulus. *See also* RECEIVER OPERATING CHARACTERISTIC, SIGNAL DETECTION THEORY. *Compare* IDENTIFICATION TASK.

determinant *n.* A number associated with any square **matrix* showing whether the matrix is *singular*, that is, whether two or more rows or columns of the matrix are linearly dependent in the sense of being linear combinations of each other. If the determinant is equal to zero, then the matrix is singular, and many statistical techniques require matrices that are assumed to be non-singular. [From Latin *determinare* to set boundaries, from *terminus* a boundary]

determination, coefficient of *See* COEFFICIENT OF DETERMINATION.

determiner *n.* A word such as a definite or indefinite article (*the, a*), a **quantifier* (2) (*all, some, every, many, any*), or a demonstrative or possessive adjective or pronoun (*this, that, my, our, your, his, her, their*) that limits or determines the meaning of a noun or noun phrase, as in the sentence *I received your letter*, in which *your* determines the meaning of *letter*.

determinism, psychic *See* PSYCHICAL DETERMINISM.

deterministic *adj.* Of, relating to, or consisting of a non-random process or variable whose past completely determines its future forever, so that it can be equally well predicted from its remote past as from its recent past. *Compare* STOCHASTIC.

detour problem *n.* Any problem in which a goal can be reached only by moving away from it at some stage, often because an obstacle blocks the direct route to the goal. Also called an *Umweg problem*.

detoxification *n.* The process of freeing a drug user or an alcoholic from dependence on or addiction to a substance. **detoxification centre** *n.* A unit or facility that specializes in detoxification. US *detoxification center*. **detoxify**

vb. To carry out a process of detoxification, or more generally to remove the poison from someone or something. [From Latin *de* indicating a deprivation + *toxicum* a poison + *-ation* indicating a process or condition]

detrended normal plot *n.* In statistics, a graph of the differences between observed and expected values, the expected values being based on the assumption of a **normal distribution*. If the observed scores are normally distributed, then the points should cluster in a horizontal band close to zero without any discernible pattern. *See also* *NORMAL PROBABILITY PLOT*.

detumescence *n.* Subsidence of a swelling or enlargement, especially of the penis during the resolution phase of the **sexual response cycle*. *Compare* *TUMESCENCE*. [From Latin *detumescere* to cease swelling, from *de* away from + *tumescere* to begin to swell, from *tumere* to swell]

deuteranomaly *n.* A form of partial **colour-blindness* in which the proportion of green light required to be mixed with red to match yellow is abnormally high according to the normal **Rayleigh equation*, owing to a deficiency in the **visual pigment* that absorbs light in the middle part of the visible spectrum. *Compare* *DEUTERANOPIA*, *PROTANOMALY*, *TRITANOMALY*. [From Greek *deuteron* second, alluding to the second of the three **primary colours* (1) red, green, and blue + *anomalos* uneven or inconsistent, from *an-* without + *homalos* even, from *homos* the same]

deuteranopia *n.* The most common form of **anomalous dichromacy* in which the **visual pigment* that absorbs medium-wavelength (green) light is non-functional, resulting in poor hue discrimination in the red and green regions of the spectrum and a tendency to confuse reds with greens and greens with blues. *Compare* *DEUTERANOMALY*, *PROTANOPIA*, *TRITANOPIA*. [From Greek *deuteros* second, alluding to the second of the three **primary colours* (1) red, green, and blue + *anopia* blindness, from *an-* without + *ops* an eye + *-ia* indicating a condition or quality]

developmental age *n.* In psychometrics, a score on a test of ability or intelligence expressed in terms of the average age in years at which the score is attained by children according to the standardization data. *See also* *DEVELOPMENTAL QUOTIENT*.

*****ebook converter DEMO Watermarks*****

developmental coordination disorder *n.* A ***neurodevelopmental disorder** in ***DSM-5**, formerly classified as a ***motor skills disorder**, characterized by substantially below-average motor coordination (in activities such as crawling, sitting, walking, catching a ball, using scissors or cutlery, writing, or riding a bicycle) for the given age, intelligence, and education of the child, and clumsiness manifested by dropping or bumping into objects, the ***deficit** interfering significantly with scholastic or academic achievement or everyday life and not being due to a sensory deficit, ***cerebral palsy**, ***muscular dystrophy**, or any other neurological or degenerative disorder. See also **DYSPRAXIA**. **DCD** abbrev.

developmental crises *n.* A concept introduced in 1959 by the German-born ***ego psychologist** Erik H. Erikson (1902–94), and popularized in his book *Childhood and Society* (1963), denoting eight stages in life, each presenting a fundamental opposition that needs to be resolved. They are *early infancy*: basic trust versus basic mistrust; *later infancy* (during toilet training): autonomy versus shame and doubt; *early childhood* (while learning to walk): initiative versus guilt; *middle childhood* (during the ***latency period** of the early school years): industry versus inferiority; *puberty and adolescence*: identity versus role confusion; *young adulthood*: intimacy versus isolation; *mature adulthood*: generativity versus stagnation; *late adulthood*: ego integrity versus despair. Erikson regarded particular ego ‘virtues’ as emerging through the resolution of each phase, namely hope, will, purpose, competence, fidelity, love, care, and wisdom respectively. See also **EGO IDENTITY**, **IDENTITY CRISIS**.

developmental disorder See **NEURODEVELOPMENTAL DISORDERS**.

developmental dyslexia *n.* One of the two major categories of ***dyslexia**, forms of the disorder that develop during childhood from unknown causes, also called *reading disorder*. See also **SPECIFIC LEARNING DISORDER**. Compare **ACQUIRED DYSLEXIA**.

developmental psychology *n.* The branch of psychology concerned with psychological phenomena of all kinds in infants, children, adolescents, adults, and old people, and all the psychological changes that occur across the lifespan. It includes research into the development of perception, cognition,
*****ebook converter DEMO Watermarks*****

language, skills, moral attitudes, and social relationships.

developmental quotient *n.* In psychometrics, ***developmental age** divided by ***chronological age**, sometimes multiplied by 100. *See* **IQ**. **DQ** *abbrev.*

deviance *n.* **1.** Departing or diverging from an accepted norm of behaviour. *See also* **LABELLING THEORY**. **2.** In statistics, a measure of the goodness of fit of a ***model** to a set of data. [From Latin *deviare* to turn aside, from *de* from + *via* a way]

deviant *n.* A person whose behaviour departs from socially acceptable standards, especially in relation to sexual behaviour. *See* **DEVIANCE (1)**, **PARAPHILIA**. **deviant** *adj.*

deviate *vb.* To depart from an established tradition or standard. *n.* Another name for a ***deviant**. [From Latin *deviare* to turn aside, from *de* from + *via* a way]

deviation IQ *n.* The modern, statistical conception of ***IQ**, introduced in 1939 by the Romanian-born US psychologist David Wechsler (1896–1981), according to which IQ is a normally distributed variable with a mean of 100 and a ***standard deviation** of 15 (usually). By definition, an IQ of 100 is average, approximately 68 per cent of IQ scores fall between 85 and 115, approximately 95 per cent fall between 70 and 130, approximately 99.74 fall between 55 and 145, and so on. *See also* **NORMAL DISTRIBUTION**. *Compare* **RATIO IQ**. [So called because it is based on standard deviations]

deviation score *n.* In statistics, a score representing the difference between the ***raw score** and the ***arithmetic mean** of the raw scores in the group to which it belongs. For example, in the group of raw scores 1, 4, 10, the mean is 5, so the corresponding deviation scores are (1 – 5), (4 – 5), and (10 – 5), that is, –4, –1, and 5. The term is also used to refer to a score expressed in units of ***standard deviations**, also called a ***z score**.

devotee *n.* **1.** A person who is ardently enthusiastic about something. **2.** A

colloquial name for a person with **acrotomophilia*.

dexamethasone *n.* A potent synthetic **glucocorticoid* hormone, used as an anti-inflammatory and anti-allergic drug, that inhibits the secretion of **adrenocorticotrophic hormone* (ACTH) by the pituitary gland, and consequently also the secretion of **cortisol* (hydrocortisone) by the adrenal glands. *See also* DEXAMETHASONE SUPPRESSION TEST. [From *d(ecah)exameth(yl)(corti)sone*, from Greek *deka* ten + *hex* six + *methyl* the alkyl radical CH₃ derived from methane by removal of one hydrogen atom, from Greek *methy* wine + *hyle* wood + English *cortisone*]

dexamethasone suppression test *n.* A diagnostic procedure involving the injection of **dexamethasone*, followed by a measure of the extent to which **cortisol* secretion into the bloodstream has been suppressed. Patients with Cushing's syndrome (overactivity of the adrenal glands) fail to suppress cortisol secretion, and so do some patients with severe **depression*, **melancholia*, **anorexia nervosa*, and **bulimia nervosa*. **DST** *abbrev.*

dextroamphetamine *n.* Dextroamphetamine hydrochloride or sulphate (US *sulfate*), a dextrorotatory (right-handed) form of **amphetamine*, used as a central nervous system **stimulant*. [From Latin *dexter* right + English *amphetamine*]

DF extremes analysis *n.* In behaviour genetics, a method for estimating the **heritability* of a disorder such as dyslexia that is defined qualitatively, people being diagnosed as either having the disorder or not having it, but that depends on an underlying **trait* that varies quantitatively along a **continuum*. The method involves testing a random selection of people who have twins, isolating those that have the disorder, then testing the **monozygotic* and **dizygotic twins* of those individuals, the assumption being that if the disorder is influenced by genes that also affect variability within the normal range, then the mean scores of the monozygotic and dizygotic twins of the disordered individuals should both be closer to the mean of the disordered group than to the mean of the random group of twins, and the mean of the monozygotic twins should be closer to the mean of the disordered group than should the mean of the dizygotic twins. [Named after the behavioural geneticists John C. DeFries (born 1934) and David W. Fulker

*****ebook converter DEMO Watermarks*****

(1937–98) who developed it in the 1990s at the University of Colorado]

dhat *n.* A ***culture-bound syndrome** found in India, where there is another similar syndrome called *jiryan*, and Sri Lanka, where a syndrome resembling dhat is called *sukra prameha*, characterized by severe ***anxiety**, together with ***hypochondria** focused on concerns about weakness and exhaustion, attributed to excessive discharge of semen by both men and women (also believed to secrete semen), and whitish discolouration of urine interpreted as semen loss. Also written *dhatu*. Compare **SHEN-K'UEI**. [From Hindi *dhatu* a plant with strongly narcotic properties]

DHEA *abbrev.* Dehydroepiandrosterone, a ***steroid** hormone that is produced by the ***adrenal cortex** and is often called the mother (or grandmother) of hormones because it functions as a precursor of many other hormones, including ***cortisone**, ***oestrogen**, ***progesterone**, and ***testosterone**. It plays a part in weight control, and its decline with age is believed to account for some of the diseases of old age. Formula: C₁₉H₂₈O₂.

diabetes *n.* Any of several diseases characterized by the excretion of abnormally large quantities of urine. **diabetes insipidus** *n.* A form of diabetes caused by a disorder of the pituitary gland and malfunction of the kidneys. **diabetes mellitus** *n.* A form of diabetes caused by a loss of ***insulin** secretion from the ***islets of Langerhans**, leading to a failure of carbohydrate metabolism and excess sugar in the urine. See also **BLINDNESS**, **HYPOGLYCAEMIA**. **diabetic** *adj.* Of, relating to, or for diabetes or people with diabetes. [From Greek *diabetes* a siphon, from *dia* through + *bainein* to go + Latin *insipidus* insipid, or *mellitus* honied, from *mel* honey]

diagnosis *n.* The process of identifying a disorder by examining its ***signs** (1) and ***symptoms**; an identification of a disorder reached by such a process. See also **DIFFERENTIAL DIAGNOSIS**. [From Greek *dia* between + *gnosis* knowing]

Diagnostic and Statistical Manual of Mental Disorders See **DSM** in the main body of the dictionary.

diagnostic checking *n.* In statistics and mathematical modelling, the

process of carrying out visual and statistical checks to see how well the estimated model fits the data and whether the necessary assumptions of the model have been satisfied.

dialect *n.* A variety of a language, identifiable by its vocabulary and grammar, spoken by people in a particular geographical area or by members of a particular social class or group, to be distinguished from an **accent* (1), which is distinguished by pronunciation only. Compare *ACROLECT*, *BASILECT*, *IDIOLECT*, *LECT*, *MESOLECT*. See also *EYE DIALECT*. **dialectology** *n.* The study of dialects, especially regional dialects. [From Greek *dialektos* speech or dialect]

dialectical behaviour therapy *n.* A form of **cognitive* behaviour therapy specially designed for the treatment of **borderline personality disorder* and sometimes used to treat other **personality disorders*, its paramount aim being to reduce **parasuicidal* and other life-threatening behaviour. During weekly individual and **group therapy* sessions, and between sessions via telephone contact, the therapist reinforces adaptive behaviour, teaching the patient how to manage emotional traumas and practise **mindfulness*. The therapy was introduced in an article by the US psychologist Marsha M. Linehan (born 1943) and several colleagues in the *Archives of General Psychiatry* in 1991. US *dialectical behavior therapy*. Compare acceptance and commitment therapy. **DBT** *abbrev.* [From Greek *dialektikos* pertaining to argument, from *dia* between + *legein* to speak + *-ikos* of, relating to, or resembling]

dialectical montage *n.* A term introduced by the Russian film-maker and editing theorist Lev Kuleshov (1899–1970) for a type of **context effect* that enables an actor in a film or motion picture in certain circumstances to convey emotion without expressing it. In 1922 Kuleshov carried out an experiment in which the famous Russian actor Ivan Mozhukhin (1889–1939) posed with a neutral **facial expression* for several seconds, and a close-up shot of his face was intercut with shots of a bowl of soup, a woman in a coffin, and a child playing with a toy. Viewers of the resulting montage thought they could see faint expressions of satisfaction, sadness, and happiness on Mozhukhin's face as he appeared to respond to each of the cutaway vignettes in turn. [From Greek *dialektikos* pertaining to argument,

*****ebook converter DEMO Watermarks*****

from *dia* between + *legein* to speak + *-ikos* of, relating to, or resembling + French *montage* an assemblage or superimposition of images, from *monter* to mount]

dialinguistics *n.* The study of the full range of dialects and languages in a speech community. [A blend of *dialect* + *linguistics*]

dialysis *n.* The diffusion of small particles in a solution across a **semipermeable membrane* from the side where the solution is more concentrated to the side where it is less concentrated. *Compare* *OSMOSIS*. [From Greek *dialysis* a dissolution, from *dia* through or across + *lysis* a loosening]

Diana complex *n.* In the **individual psychology* of the Austrian psychiatrist Alfred Adler (1870–1937) and his followers, the repressed wish of a woman to be a man. *See also* *COMPLEX (2)*, *GENDER DYSPHORIA*, *GENDER IDENTITY DISORDER*, *MASCULINE PROTEST*. [Named after Diana, the Roman goddess of hunting, considered a typically masculine activity]

diary study *n.* A research methodology in which the research participants or subjects record their own behaviour or experiences for subsequent analysis and interpretation by the investigator.

diaschisis *n.* A temporary disruption of brain activity caused by a localized injury, resulting in a generalized breaking up of a pattern of functioning, not caused directly by the lesion itself but arising from indirect or secondary effects in other areas of the central nervous system. [From Greek *dia* through + *schizein* to split]

diathesis *n.* A hereditary predisposition to a disorder. [From Greek *diathesis* arrangement, from *dia* asunder + *tithenai* to place]

diathesis-stress hypothesis *n.* The conjecture that many disorders are caused by the interaction of predisposing **diathesis* and precipitating environmental **stress (1)* factors.

diatonic *adj.* Pertaining to any musical scale that contains seven notes or tones, separated by five intervals of a **tone* (2) and two intervals of a **semitone*, the most familiar examples being the major and minor scales of Western music. *Compare* *CHROMATIC* (2). [From Latin *diatonicus* diatonic, from Greek *diatonikos* diatonic, from *dia* between + *tonos* a tone + *-ikos* of, relating to, or resembling]

diazepam *n.* A member of the **benzodiazepine* group of drugs, used as a sedative and muscle relaxant. Often referred to as *Valium* (trademark). *See also* *SEDATIVE-, HYPNOTIC-, OR ANXIOLYTIC-RELATED DISORDERS*. **DZP** *abbrev.* [From *di-* two, from Greek *dis* twice + *az-* denoting nitrogen, from Greek *a-* not + *zaein* to live + *ep(oxide)* a compound containing oxygen joined to other atoms, from Greek *epi* on or above + *oxide* a compound of oxygen and another element, from French *oxy(gène)* + *(ac)ide*]

dibenzodiazepine *n.* Any drug having a dibenzodiazepine nucleus in its chemical structure, including **carbamazepine*, various **tricyclic antidepressant* drugs, and a class of **atypical antipsychotic* drugs such as **clozapine* that block both **serotonin* and **dopamine* receptors and cause fewer **neuroleptic-induced* side-effects than are associated with conventional neuroleptic drugs. *See also* *DOPAMINE ANTAGONIST*. [From Greek *dis* twice + English *benzodiazepine*]

dichhaptic technique *n.* Simultaneous presentation of a different tactile stimulus (such as letter shapes or novel shapes without names) to each of the two hands, shielded from vision, in order to study **laterality* of functions, based on the fact that the touch receptors in each hand are projected predominantly to the opposite or contralateral **somatosensory cortex*, the results generally confirming a left hemisphere dominance for linguistic or sequential functions and a right hemisphere dominance for spatial functions. Also spelt *dichaptic*. *Compare* *DICHOPTIC*, *DICHOTIC*. [From Greek *dicha* in two, from *dis* twice + *haptein* to touch]

dichoptic *adj.* Of or relating to the presentation of different stimuli to each eye. *Compare* *BINOCULAR*, *MONOPTIC* (2). [From Greek *dicha* in two, from *dis* twice + *optikos* of or relating to vision, from *optos* visible, from *ops* an eye]

dichoptic masking *n.* A form of [*visual masking](#) in which a test stimulus is presented to one eye and a masking stimulus to the other. When masking is found, it can be inferred that it must occur at a higher level of the visual system than the eyes. *See also* [CENTRAL MASKING](#).

dichotic *adj.* Of or relating to the simultaneous presentation of a different auditory message to each ear via earphones, a task used to study [*attention](#) and [*laterality](#) of functions, based on the fact that the nerve fibres that carry auditory signals from each ear are almost entirely crossed to the [*auditory cortex](#) of the opposite [*cerebral hemisphere](#). Often confused with [*binaural](#). *See also* [SHADOWING](#). *Compare* [DICHAPTIC TECHNIQUE](#), [DIOTIC](#). [From Greek *dicha* in two, from *dis* twice + *ous*, *otos* an ear]

dichromacy *See* [ANOMALOUS DICHROMACY](#). Also called *dichromasy*, *dichromatism*, *dichromatopsia*, *dichromopsia*.

dictyosome *n.* Another name for a Golgi body. *See* [GOLGI APPARATUS](#). [From Greek *diktyon* a net + *soma* a body, alluding to the common appearance of a Golgi body when stained]

diencephalic amnesia *n.* A form of amnesia resulting from loss of neurons in the [*diencephalon](#), especially the midline [*thalamus](#) and the [*mammillary bodies](#) of the [*hypothalamus](#). This pattern of pathology is often associated with [*Korsakoff's psychosis](#) or syndrome as a consequence of alcohol abuse and thiamine deficiency.

diencephalon *n.* The bottom part of the forebrain or prosencephalon, linking the cerebral hemispheres with the midbrain, including the [*basal ganglia](#), [*thalamus](#), [*hypothalamus](#), and [*epithalamus](#). *See also* [GLOBAL AMNESIA](#). *Compare* [TELENCEPHALON](#). [From Greek *dia* between + *en* in + *kephale* head, alluding to its position between the cerebral hemispheres and the brainstem]

diethylstilboestrol *n.* Another name for [*stilboestrol](#). US *diethylstilbestrol*. [From Greek *dis* twice + English *eth(er)*, from Greek *aithein* to burn + English *stilboestrol*]

difference limen *n.* Another name for a **difference threshold* or just noticeable difference. **DL** *abbrev.* [From Latin *limen* a threshold]

difference threshold *n.* In **psychophysics*, the smallest detectable change in a stimulus or difference between two stimuli that can be reliably detected, often defined as the difference for which the percentage of correct discriminations is 75 per cent, though other percentages are sometimes used. Also called the *difference limen (DL)*, *discrimination threshold*, or just *noticeable difference (jnd)*. *See also* *ACUITY*, *ABX PARADIGM*, *BUNSEN–ROSCOE LAW*, *DIFFERENTIAL ACUITY*, *DISCRIMINATION FUNCTION*, *FULLERTON–CATTELL LAW*, *PIPER’S LAW*, *RICCO’S LAW*, *WEBER FRACTION*, *WEBER’S LAW*. *Compare* *ABSOLUTE THRESHOLD*.

difference tone *n.* A **combination tone* whose frequency is equal to the difference between the frequencies of the two tones generating it. *Compare* *SUMMATION TONE*.

differential acuity *n.* The maximum keenness or sharpness of a sense organ in detecting differences or discriminating between stimuli, usually expressed in terms of the **difference threshold*. *See also* *ACUITY*. *Compare* *ABSOLUTE ACUITY*.

Differential Aptitude Tests *n.* An integrated battery of psychometric tests designed for educational and vocational guidance of schoolchildren. The tests measure the following eight aptitudes: verbal reasoning, numerical ability, abstract reasoning, clerical speed and accuracy, mechanical reasoning, spatial relations, spelling, and language usage. **DAT** *abbrev.*

differential diagnosis *n.* The process of distinguishing between two or more disorders with similar or overlapping signs and symptoms. *See also* *DIAGNOSIS*.

differential inversion effect *n.* The relatively greater decrease in recognizability resulting from inverting images of human faces compared to images of other objects. The effect is not peculiar to faces, as was initially believed when it was discovered in 1969 by the US psychologist Robert Kuo-

Zuir Yin (born 1931), but is found with other classes of stimuli that are recognizably different only to viewers who have expert knowledge of them, as when experts on sporting dogs view inverted profiles of dogs. *See also* [MARGARET THATCHER ILLUSION](#). *Compare* [CARICATURE ADVANTAGE](#).

differential reinforcement *n.* In **operant conditioning*, **reinforcement* (1) that is contingent on more than a single response, as when a rat is reinforced for pressing a lever when one type of signal is given but not another. It is useful for determining what kinds of discriminations the organism is capable of making. *See also* [DIFFERENTIAL REINFORCEMENT OF HIGH RESPONSE RATES](#), [DIFFERENTIAL REINFORCEMENT OF LOW RESPONSE RATES](#), [DIFFERENTIAL REINFORCEMENT OF OTHER BEHAVIOUR](#), [DIFFERENTIAL REINFORCEMENT OF PACED RESPONSES](#).

differential reinforcement of high response rates *n.* In **operant conditioning*, a **reinforcement schedule* in which an organism is rewarded only when it responds within a specified interval after its previous response. *See also* [DIFFERENTIAL REINFORCEMENT](#). *Compare* [DIFFERENTIAL REINFORCEMENT OF LOW RESPONSE RATES](#). **DRH** *abbrev.*

differential reinforcement of low response rates *n.* In **operant conditioning*, a **reinforcement schedule* in which an organism is rewarded only for a response made after a specified interval has elapsed since its previous response. *See also* [DIFFERENTIAL REINFORCEMENT](#). *Compare* [DIFFERENTIAL REINFORCEMENT OF HIGH RESPONSE RATES](#). **DRL** *abbrev.*

differential reinforcement of other responses *n.* In **operant conditioning*, a **reinforcement schedule* in which an organism is rewarded for abstaining from making a specified response for a predetermined period of time, any other response being reinforced. *See also* [DIFFERENTIAL REINFORCEMENT](#). **DRO** *abbrev.*

differential reinforcement of paced responses *n.* In **operant conditioning*, a **reinforcement schedule* in which an organism is rewarded for responding at a particular rate, both slower and faster rates of responding leading to withdrawal of reinforcement. *See also* [DIFFERENTIAL REINFORCEMENT](#). **DRP** *abbrev.*

*****ebook converter DEMO Watermarks*****

difficulty effect *n.* Another name for the **hard–easy effect*.

diffraction grating *n.* A plate of glass or a mirror that has equidistant parallel grooves engraved on its surface and that diffracts light, often more strongly than a **prism*. See also *SPECTRUM*. [From Latin *diffRACTIO* a breaking into pieces, from *diffRINGERE* to shatter, from *dis-* apart + *frangere* to break]

diffuse fibres *n.* Touch receptors with large **receptive fields* that have ill-defined borders.

diffusion of responsibility *n.* A reduced sense of personal responsibility and individual accountability experienced in certain circumstances by members of a group, often leading to behaviour untypical of any of the group members when alone. See *BYSTANDER EFFECT*, *DEINDIVIDUATION*, *SOCIAL LOAFING*.

digestive tract *n.* Another name for the **alimentary canal*.

digital *adj.* Of, relating to, consisting of, or containing digits or numerals; representing measurements in the form of discrete numbers rather than continuously varying quantities such as points on a dial. The term is descriptive of the form in which electronic data are stored and handled by computers. See also *BIT*. Compare *ANALOGUE (2)*. [From Latin *digitus* a toe or finger + *-alis* of or related to]

digitalis *n.* Any plant of the genus *Digitalis*, including the foxglove, or a drug prepared from its dried leaves and seeds, functioning as a sympathetic nervous system **stimulant*, used in the treatment of various forms of heart failure. See also *XANTHOPSIA*. **digitalin** or **digitoxin** *n.* The poisonous bitter-tasting white substance extracted from foxglove leaves in the preparation of digitalis. [From Latin *digitalis* of or relating to a finger or toe, from *digitus* a finger or toe, referring to the purple foxglove flowers, which children like to attach to their fingers like thimbles]

digital signature *n.* A technical device for producing an electronic fingerprint, usually a *hash function*, created and verified by public-key

cryptography, applied to electronic data for authentication of documents, especially those transmitted via the internet, and for legal identification of signers with documents.

digit ratio *n.* The ratio of the length of the index finger to the length of the fourth finger (ring finger), measuring from the basal crease near the palm to the tip of the finger. Counting the thumb as digit 1, the ratio compares digits 2 and 4 and is sometimes called the 2D:4D ratio. In men, the index finger is usually shorter than the fourth finger, the ratio averaging about 0.96, whereas in women, the ratio is close to 1.00. The English evolutionary biologist John T. Manning (born 1942) discovered this sexual ***dimorphism** and first described it in an article co-authored with others in the journal *Human Reproduction* in 1998. A low digit ratio tends to be associated with high concentrations of ***testosterone** in the blood. The sex difference is believed to arise from the effects of testosterone on the developing ***embryo** during the 8th to the 13th week after conception, promoting growth of the fourth finger. In his book *Digit Ratio: A Pointer to Fertility, Behavior and Health* (2000), Manning summarized further evidence suggesting that, in men, a low digit ratio tends to be associated with ***fertility**, assertiveness or aggressiveness, proclivity for ***homosexuality** or ***bisexuality**, and musical and sporting aptitude, and a high digit ratio with increased risk of heart disease; in women, a low digit ratio tends to be associated with assertiveness or aggressiveness and a proclivity for homosexuality or bisexuality, and a high digit ratio with fertility and an increased risk of breast cancer. See also **INDUCTION (5)**. **2D:4D** *abbrev.*

digit span *n.* A type of ***intelligence test** item or subtest in which the respondent tries to repeat back a string of numbers that are read out. Sometimes the numbers have to be repeated in reverse order.

digit-symbol test *n.* A type of ***intelligence test** item or subtest in which the respondent learns a code in which each digit is represented by a symbol—for example, 1 might be represented by a star, 2 by a square, 3 by a triangle, and so on—and then tries to substitute the correct symbols for a series of digits as quickly and accurately as possible. Also called a *symbol-digit test* or a *coding test*.

digram *n.* A combination of two letters, which may be a word (*do*) or a non-word (*kd*). See also [CV DIGRAM](#). Compare [DIGRAPH](#). [From Greek *dis* twice + *gramma* a letter or character]

digraph *n.* A two-letter combination representing a single speech sound, such as *sh* in *sheet* or *ph* in *digraph*. Compare [DIGRAM](#), [DIPHTHONG](#).

dihybrid *n.* A cross between parents differing in two pairs of genes or two independently heritable characters. Also called a *dihybrid cross*. Compare [HYBRID \(1\)](#). [From Greek *dis* twice + English *hybrid*]

dilator pupillae *n.* The muscle that contracts the [*iris](#) and thereby dilates the pupil of the eye. Compare [SPHINCTER PUPILLAE](#). [From Latin *dilatare* to spread out + *pupilla* a pupil, diminutive of *pupa* a girl or a doll, alluding to the tiny reflection in the eye]

dimension-abstracted oddity *n.* A type of [*oddity problem](#) in which the set of stimuli contains an odd one out, distinguishable from the others on an oddity-defining dimension, and the other alternatives are indistinguishable from one another on the oddity-defining dimension but distinguishable from one another on other dimensions, often called *ambiguous dimensions*. Such a problem differs from a conventional oddity problem, in which, apart from the odd one out, the stimuli are indistinguishable from one another on any dimension. A typical example might involve a set of objects differing perceptibly in size, colour, and shape, including an odd one out that is a different size from the other stimuli, which in turn are indistinguishable in size but differ from one another in colour and shape.

dimethyltryptamine *n.* The chemical name of [*DMT](#). [From Greek *dis* twice + *methyl* the alkyl radical CH₃ derived from methane by removal of one hydrogen atom, from Greek *methy* wine + *hyle* wood + English *tryptamine*]

dimorphic *adj.* Of or relating to a species with two distinct [*phenotypic](#) forms, such as physically distinct male and female forms. Also written

dimorphous . **dimorphism** *n.* See also [SEXUAL DIMORPHISM](#). [From Greek *dis* twice + *morphe* a form or shape + *-ikos* of, relating to, or resembling]

ding-dong theory *n.* A dismissive name for the [*onomatopoeic theory](#) of the origins of language. Also called the *bow-wow theory* . [From the sound of bells ringing]

Dionysian *adj.* Spontaneous and uncontrolled; in the philosophy of the German philosopher Friedrich Wilhelm Nietzsche (1844–1900), of or relating to creative qualities of spontaneity, irrationality, and rejection of discipline. Compare [APOLLONIAN](#). [Named after Dionysus, the Greek god of wine and bestower of ecstasy]

diopetre *n.* A unit of measurement for the refractive power of a lens, being the reciprocal of the lens's [*focal length](#) in metres. US *dioptr*. [From Greek *dioptron* a spyglass from *dia* through + *opsesthai* to see]

dioptric aberration *n.* Another name for [*aberration \(3\)](#).

diotic *adj.* Of or relating to an auditory signal that is identical in both ears. Compare [DICHOTIC](#). [From Greek *dis* twice + *ous*, *otos* an ear]

diphthong *n.* Any complex [*vowel](#) sound comprising a [*glide](#) from one vowel sound to another within a single syllable, with movement of the tongue between the two sounds. In [*Received Pronunciation](#) there are three diphthongs in which the final sound is similar to the vowel in *tip* (as in the words *day*, *tie*, *boy*); two in which the final vowel sound is similar to the vowel in *put* (as in *go* and *how*); and three in which the final vowel sound is similar to the vowel in *the* (as in *veer*, *care*, and *poor*). Compare [DIGRAPH](#), [MONOPHTHONG](#), [TRIPHTHONG](#). [From Greek *di-* two + *phthongos* sound]

diplacusis *n.* A hearing impairment arising from a difference between the two ears, resulting in hearing a single tone as two tones of different pitch. Also spelt *diplacousis* . Also called *diplacusia* or *diplacousia* . [From Greek *diploos* double + *akusis* hearing, from *akouein* to hear + *-sis* indicating a condition or state]

diploaesthesia *n.* An illusory experience of touching two objects when actually touching only one, occurring occasionally as a neurological sign. US *diplesthesia*. See also **ARISTOTLE'S ILLUSION**. [From Greek *diploos* double + *aisthesis* feeling + *-ia* indicating a condition or quality]

diplegia *n.* Bilateral paralysis of corresponding parts on both sides of the body. Compare **HEMIPLEGIA**, **MONOPLEGIA**, **OPHTHALMOPLEGIA**, **PARAPLEGIA**, **QUADRIPLÉGIA**, **TRIPLEGIA**. **diplegic** *adj.* [From Greek *dis* twice + *plege* a blow + *-ia* indicating a condition or quality]

diploid *adj.* Of or relating to a cell that has a full complement of paired ***chromosomes**, such as a body or somatic cell of humans and most sexually reproducing animals, rather than half the normal number, as in sex cells or gametes; also of or relating to an organism whose body cells contain paired chromosomes. Compare **HAPLODIPLOID**, **HAPLOID**. **diploidy** *n.* The state or condition of being diploid. [From Greek *diploos* double + *-oeides* denoting resemblance of form, from *eidos* shape]

diplopia *n.* Double vision resulting from incorrect fixation or defective functioning of the ***extra-ocular muscles** or the nerves that control the muscles, sometimes resulting from fatigue, stress, or intoxication by alcohol or other depressant drugs. Diplopia when looking down, as when descending stairs, is a cardinal symptom of malfunction of the ***trochlear nerve**. See also **BINOCULAR DISPARITY**. [From Greek *diploos* double + *ops* an eye + *-ia* indicating a condition or quality]

dipsomania *n.* Intermittent pathological craving for alcohol. Compare **ALCOHOL DEPENDENCE**. [From Greek *dipsa* thirst + *mania* madness + *-ia* indicating a condition or quality]

Dircks's ghost *n.* A fairer name for what is usually called ***Pepper's ghost**. [Named after the retired English civil engineer and patent agent Henry Dircks (1806–73) who invented it in 1862]

direct analysis *n.* A technique of ***psychoanalysis** in which the analyst presents ***interpretations (2)** to the patient bluntly, attempting to communicate

directly with the patient's **unconscious* (2). For example, the analyst might interpret a male patient's **Oedipus complex* by telling him: 'You want to fuck your mother and cut your father's balls off'. It was introduced in 1946 by the US psychoanalyst John N(athaniel) Rosen (1902–83), who claimed that it was especially effective in treating **schizophrenia*, in which the unconscious overwhelms the patient's defences, but in the early 1980s it became enveloped in controversy and Rosen stopped practising it. The technique is discussed in detail in Rosen's book *Direct Analysis: Selected Papers* (1953).

directed association *n.* In **analytical psychology*, spontaneously produced chains of related ideas proceeding from the recollection of a dream. In contrast to **free association*, the associated ideas are required constantly to relate to the original dream memory. Also called *controlled association*.

directed thinking *n.* In **analytical psychology*, conscious use of language and concepts, closely tied to reality, characteristic of intellectual communication, scientific exposition, and common sense. It is closely related to the **secondary process* of **psychoanalysis*. Carl Gustav Jung (1875–1961) discussed it at length, contrasting it with **fantasy thinking* (*Collected Works*, 5, paragraphs 4–46).

directional selection *n.* A form of **natural selection* operating against one extreme of the range of variation of a characteristic and shifting the entire population towards the opposite extreme by either increasing or reducing the frequency of an **allele*.

directional test *n.* In **inferential statistics*, a test of the significance of a departure from the **null hypothesis* in one direction only, so that a departure in the opposite direction, no matter how large, is attributed to chance. In a *non-directional test*, a departure from the null hypothesis in either direction results in its rejection. Also called a 1-tailed test. See also [1-TAILED PROBABILITY](#).

direction-sensitive neuron *n.* A **ganglion cell* in the **retina* that is specialized to respond to movement in just one direction in the visual field and that underlies the **image-retinal system*. It is believed to receive

*****ebook converter DEMO Watermarks*****

excitatory signals from one or more [*photoreceptor](#) cells and inhibitory signals from one or more others, the excitatory cells being positioned on the retina in front of the inhibitory cells, relative to the direction of movement that the direction-sensitive neuron is tuned to detect, so that when an image crosses the retina in that direction excitatory signals reach the direction-sensitive ganglion cell before inhibitory signals, and consequently the inhibitory signals fail to suppress the responses of the ganglion cells and the ganglion cells therefore fire, eliciting a perception of movement. Also called a *direction-selective cell* or a *motion detector* .

directory plus one sampling *n.* A variation of [* random digit dialing](#) (RDD) in which a [*probability sample](#) of telephone subscribers is drawn by selecting telephone numbers randomly from directories and adding one to the final digit of each number before dialling it, the purpose being to ensure that ex-directory subscribers are adequately represented in the sample.

direct perception *n.* A theory of (mainly visual) perception, developed by the US psychologist James Jerome Gibson (1904–79) over a period of more than three decades, according to which the flux of light (called the *ambient optic array*) reaching the visual [*receptors](#) (1) of a perceiving organism is richly structured; movements of the organism or of surrounding objects cause some aspects of the array to change while others remain constant, hence the array is composed of *variants* and *invariants*, and the invariants are sufficient to provide perception of aspects of the environment such as spatial arrangements and surfaces directly, that is, without recourse to inference or memory. *See also* [AFFORDANCE](#), [AIR THEORY](#), [GIBSONIAN](#), [GLOBAL PSYCHOPHYSICS](#), [MOTION PERSPECTIVE](#).

direct scaling *n.* In [*psychophysics](#), any method of scaling such as [*magnitude estimation](#) or [*cross-modal matching](#) in which an observer specifically estimates the magnitude of the variable stimulus. *Compare* [INDIRECT SCALING](#).

dirhinic *adj.* Of or relating to any olfactory stimulus that affects both nostrils alike. [From Greek *dis* twice + *rhis*, *rhinos* the nose + *-ikos* of, relating to, or resembling]

disabling agent See INCAPACITANT.

disassortative mating *n.* Preference for mating partners with dissimilar *phenotypes, observed in some species but much less common than *assortative mating. See also POPULATION GENETICS.

disaster counselling *n.* A form of *counselling offered to the victims of major disasters, including accidents such as aircraft crashes, criminal acts such as terrorist bombs, and natural catastrophes such as earthquakes. The survivors of such disasters often experience *post-traumatic stress disorder and other psychological problems. US *disaster counseling*.

disavowal *n.* In *psychoanalysis, another name for *denial.

disconnection syndrome *n.* A term coined in 1965 by the US neurologist Norman Geschwind (1926–84) for a condition in which information transfer between parts of the brain is interrupted or blocked. The term is most often applied to disconnection between the left and right *cerebral hemispheres via the *corpus callosum, although the hemispheres are also connected through the *anterior commissure (interconnecting the olfactory system) and the *hippocampal commissure (limbic system). The most common causes of disconnection syndrome are *commissurotomy and *agenesis of the corpus callosum. In the absence of any other abnormalities, a person with disconnection syndrome appears normal to family and friends, but application of specific tests reveals signs and symptoms of disconnection including left-hand *tactile aphasia, objects placed in the left hand, and therefore represented in the right hemisphere, being impossible to name, because language is normally processed only in the left hemisphere. For the same reason, *left-sided apraxia is manifested in an inability to respond with the left hand to verbal commands, and there is usually very poor understanding of verbal signals presented to the left ear. Striking manifestations of disconnection syndrome are the *alien hand sign and *anarchic hand. See also APHASIA, ARCUATE FASCICULUS, SPLIT-BRAIN PREPARATION.

discontinuity theory *n.* A theory of learning propounded by the US

physiological psychologist Karl Spencer Lashley (1890–1958) according to which an organism does not learn gradually about **stimuli* (1) that it encounters but forms hypotheses, such as *always turn left*, and learns about a stimulus only in relation to its current hypotheses, so that a process of learning can include sudden jumps, as one hypothesis is replaced by another. Compare CONTINUITY THEORY.

discordance *n.* 1. In genetics, the proportion of **monozygotic twins* (or relatives of other known degrees of genetic relatedness) who display different forms of a particular characteristic or different **phenotypes*. See also MAP DISTANCE, TWIN STUDY. Compare CONCORDANCE (1). 2. In statistics, the degree of disagreement between **ranks*. See GAMMA STATISTIC, KENDALL COEFFICIENT OF CONCORDANCE, KENDALL'S TAU, SOMERS' D. Compare CONCORDANCE (2). **concordant** *adj.*

discourse *n.* A continuous stream of spoken (and sometimes written) language longer than a sentence. [From Latin *discursus* argument, from *discurrere* to run to and fro, from *dis-* apart + *currere* to run]

discourse analysis *n.* A method of **qualitative research* and a field of study devoted to understanding all forms of spoken interaction and written texts. It views language critically as an activity that constructs reality rather than merely describing or referring to it, and its theoretical approach is influenced by **deconstruction*, **semiology*, and **speech act* theory and tends to be critical of traditional theories and research methodologies in psychology. Research focuses on well-formed rules governing the sequence of permissible linguistic units and on such aspects of language as *discourse markers*—verbal expressions such as *anyway*, *oh well*, or *I mean* that demarcate units of speech. See also CONVERSATION ANALYSIS, PSYCHOANALYTIC CONSTRUCTION. **DA** *abbrev.*

discrepancy effects *n.* The effects on **attitude change* resulting from the distance of persuasive communications or messages from the recipients' initial attitude positions. See ASSIMILATION (4), ASSIMILATION–CONTRAST THEORY, BOOMERANG EFFECT, CONTRAST (5).

discrete processing *n.* The implementation of later stages of
*****ebook converter DEMO Watermarks*****

***information** processing only after the completion of earlier stages, so that information is not passed on to the next stage until processing at the current stage is complete. *See also* SERIAL PROCESSING. *Compare* CASCADE PROCESSING, PARALLEL PROCESSING.

discrete variable *n.* In statistics, any ***variable** whose adjacent values are not infinitesimally close, so that cumulative values of its ***probability distribution** require simple addition rather than integration. *See also* METATHETIC STIMULUS DIMENSION, PROTHETIC STIMULUS DIMENSION. *Compare* CONTINUOUS VARIABLE.

discriminability *n.* The extent to which stimuli can be distinguished from one another or discriminated. In ***signal detection theory**, it is more specifically an index of the extent to which a signal can be detected or distinguished from noise, and it is also called *d prime* or *d'*. **discriminable** *adj.* [From Latin *discriminare* to divide, from *discrimen* a division, from *discernere* to divide, from *dis* apart + *cernere* to separate + *-abilitas* capacity, from *habilis* able]

discriminability effect *n.* Another name for the ***hard–easy effect**.

discriminanda *n.* Any set of stimuli among which an organism has to discriminate before making a response.

discriminant function analysis *n.* In statistics, a procedure for optimal classification of individuals into groups or classes on the basis of a number of discriminating variables on which each of the individuals has been measured. For example, a researcher might use the discriminating variables age, sex, level of education, and income in order to discriminate optimally between people who support capital punishment and those who oppose it. This is achieved by weighting the variables and combining them into discriminant functions that separate the two groups maximally. This procedure is mathematically equivalent to ***canonical correlation** with the discriminating variables considered as predictor variables and the group membership variable considered as a dummy criterion variable taking on arbitrary values (0 and 1 in the case of two groups). Alternatively, it may be thought of as ***multiple regression** with a categorical dependent variable.

*****ebook converter DEMO Watermarks*****

Also called *discriminant analysis* . **DFA** abbrev.

discriminant validity *n.* A form of **validity* that, together with **convergent validity*, provides evidence of **construct validity*. It is based on the assumption that measures of unrelated **hypothetical constructs* ought not to correlate highly with one another if the measures are valid: they ought to discriminate between dissimilar constructs. The concept was introduced in an article by the US psychologists Donald T(homas) Campbell (1916–96) and Donald W(inslow) Fiske (1916–2003) in the journal *Psychological Bulletin* in 1959. *See also* [MULTITRAIT–MULTIMETHOD MATRIX](#).

discriminating power *n.* In psychometrics, the degree to which a test yields different scores when applied to different criterion groups; specifically, the degree to which an item in an **attitude scale*, or the scale as a whole, yields different scores when it is applied to people holding different attitudes towards the attitude object in question. *See also* [ITEM DISCRIMINATION INDEX](#).

discrimination *n.* **1.** The act or process of distinguishing between stimuli or of recognizing or understanding the differences between things. *See also* [DISCRIMINABILITY](#), [DISCRIMINATION LEARNING](#). **2.** The unfair or prejudiced treatment of a person or group, as in *racial discrimination* or *sexual discrimination*. **discriminate** *vb.*

discrimination function *n.* The **difference threshold* expressed as a function of the physical intensity of the stimuli, as when the difference threshold for loudness is plotted against **sound pressure level* to yield a loudness discrimination function, showing the lowest thresholds for intermediate sound pressure levels.

discrimination learning *n.* Any form of **learning* (1) in which the organism has to discriminate between two or more **stimuli* (1) in order to respond correctly, studies of such learning often being used to establish the capacity of the organism to make certain discriminations. *See also* [PEAK SHIFT](#), [PROBABILITY LEARNING](#).

discrimination reaction time *n.* **Reaction time* to differences in an objectively measurable perceptual dimension such as brightness, length, or
*****ebook converter DEMO Watermarks*****

weight. A common procedure for measuring it involves an observer comparing pairs of visual displays, presented simultaneously, and responding by pressing one of two buttons according to which display appears brighter, longer, heavier, or greater in magnitude on whatever dimension is being examined, the time elapsing between stimulus presentation and key-pressing response being the discrimination reaction time. The three main dependent variables in research using this technique are reaction time, degree of confidence, and relative frequency of each available response. *Compare* CHOICE REACTION TIME, SIMPLE REACTION TIME. **DRT** *abbrev.*

discrimination threshold *n.* Another name for the *difference threshold.

discriminative response *n.* A *response made by an organism to one of two or more different stimuli that it has to distinguish from the other(s) in order to obtain a reward.

dishabituation *n.* The restoration of the prior strength of an *unconditioned response that has been weakened by *habituation (2), such restoration usually being induced by a strong stimulus of a different type. *See also* DISINHIBITION. **dishabituate** *vb.*

disinhibited social engagement disorder *n.* In *DSM-5, a *trauma- and stressor-related disorder of infancy or childhood, characterized by a pattern of behaviour in which a child displays indiscriminate sociability to unfamiliar adults, acting in an overly familiar and trusting manner, together with evidence that the child has experienced pathogenic care, assumed to be responsible for the disturbed social relating, such as neglect or persistent lack of adult care, repeated changes of carers with limited opportunity to form stable attachments, or rearing in institutions with insufficient numbers of carers or other circumstances of severely limited opportunities for forming attachments to carers. *See also* ATTACHMENT THEORY, TRAUMA- AND STRESSOR-RELATED DISORDERS. *Compare* ATTENTION-DEFICIT/HYPERACTIVITY DISORDER, REACTIVE ATTACHMENT DISORDER.

disinhibition *n.* The reappearance of a *conditioned response that has been inhibited, usually by *extinction (2), following the presentation of a
*****ebook converter DEMO Watermarks*****

novel or strong stimulus. Also called *inhibition of inhibition* . Compare [INHIBITION \(3\)](#).

disintegrative disorder *n.* An alternative name for [*childhood disintegrative disorder](#).

disjunction *n.* **1.** The act or process of disconnecting, or the state of being disconnected, especially the separation during [*meiosis](#) or [*mitosis](#) of the members of each pair of [*homologous chromosomes](#). **2.** In logic, two [*propositions \(1\)](#) connected by an operator denoting *or* to form a single compound proposition, usually written $p \vee q$, where p and q represent the component propositions or disjuncts, the compound proposition being true if one or both of its disjuncts are true. Also called an *inclusive disjunction* to distinguish it from the less common *exclusive disjunction*, which is true if either of its disjuncts is true but not if both are true. See also [DISJUNCTIVE CONCEPT](#). Compare [CONJUNCTION \(2\)](#). [From Latin *dis-* indicating reversal + *iunctio* joining + *-ion* indicating an action, process, or state]

disjunction search *n.* A search for a target stimulus representing a [*disjunctive concept](#) among a number of distractor stimuli. Compare [CONJUNCTION SEARCH](#), [FEATURE SEARCH](#).

disjunctive concept *n.* A concept defined by a [*disjunction \(2\)](#) specifying the possession of either one [*attribute](#) or another, for example, a figure that is either red or is a square. Compare [CONJUNCTIVE CONCEPT](#).

disjunctive eye movement *n.* Any turning of the eyes in different directions. Compare [CONJUGATE MOVEMENT](#). [From Latin *dis-* apart + *iungere* to join]

dis legomenon *n.* A twice-occurring word. See [HAPAX LEGOMENON](#). **dis legomena** *pl.* [From Greek *dis* twice + *legomenon* something spoken, from *legein* to say]

disorder of excessive somnolence *n.* Another name for [*hypersomnolence disorder](#). **DOES** *abbrev.*

disorder of initiating and maintaining sleep *n.* Any of the *dyssomnias. **DIMS** *abbrev.*

disorder of written expression *See* SPECIFIC LEARNING DISORDER.

disorganized crime *See* ORGANIZED CRIME (1).

disorganized schizophrenia *n.* One of the major types of *schizophrenia, the essential features of which are *disorganized thought and behaviour and *affective flattening or inappropriate *affect.

disorganized speech *n.* A term used in *DSM-IV for what was later called *disorganized thinking.

disorganized thinking *n.* In certain mental disorders, notably forms of *disorganized schizophrenia, a form of *thought disorder manifested by *cognitive derailment, *loosening of associations, *incoherence, or replies that are unrelated or only obliquely related to the questions posed (*see* GANSER SYNDROME).

disorientation *n.* 1. Generally, a loss of one's bearings. 2. In relation to a mental disorder, confusion about who or where one is or such matters as the day of the week, time of day, or season of the year.

disparate retinal points *n.* Any pair of points, one on each retina, that are not *corresponding retinal points. [From Latin *disparatus* unequal, from *dis-* indicating reversal + *parare* to make ready, influenced by *dispar* unequal, from *par* equal]

disparity, binocular *See* BINOCULAR DISPARITY.

disparity, retinal *n.* Another name for *binocular disparity.

disparity-selective cell *n.* A *binocular cell in the *visual cortex that receives inputs from both eyes and responds only when the *binocular disparity is within certain predetermined limits, thus providing a basis for

*****ebook converter DEMO Watermarks*****

***stereopsis.** Also called a *disparity-selective neuron* , a *disparity-tuned cell* , or a *disparity-tuned neuron* . See also [STEREOBLINDNESS](#).

dispersion *n.* In descriptive statistics, the degree of scatter or variability in a group of scores, usually measured by the ***variance** or ***standard deviation**. See also [INTERQUARTILE RANGE](#), [PROBABLE ERROR](#), [RANGE](#), [SEMI-INTER QUARTILE RANGE](#).

displaced aggression *n.* In ***psychoanalysis**, aggression that has undergone ***displacement** and has been redirected from its original target, usually a source of frustration, on to a substitute target.

displacement *n.* Moving something from its current position. In ***psychoanalysis**, a ***defence mechanism** involving redirection of emotional feelings from their original object to a substitute object related to the original one by a chain of associations. Although not essential to the concept as originally conceived by Sigmund Freud (1856–1939), and expounded further in 1900 in his book *The Interpretation of Dreams* (*Standard Edition*, IV–V, at pp. 180–1, 306–8) and in other writings, the substitute object may be less threatening than the original one, and the displacement may therefore have the effect of avoiding or reducing anxiety. Displacement is a characteristic mechanism of the ***primary process**. In an article in the journal *La Psychoanalyse* in 1957, the French psychoanalyst Jacques Lacan (1901–81) related displacement to ***metonymy** and the defence mechanism of ***condensation** to ***metaphor**. See also [DISPLACED AGGRESSION](#), [DREAMWORK](#), [QUOTA OF AFFECT](#), [TRANSFERENCE](#).

displacement activity *n.* In ethology, the substitution of an irrelevant pattern of behaviour for behaviour that is appropriate to a particular situation, especially as a reaction to a conflict of motives. Male stickleback fish stand on their heads and dig into the sand as if building a nest when the impulses of attack and retreat are evenly balanced; fighting roosters often peck at the ground between bouts as though feeding; and humans often scratch their heads or perform self-grooming ***gestures** (1) when in a state of conflict, embarrassment, or stress. Also called *displacement behaviour* . See also [ADAPTOR](#).

display *n.* 1. An exhibition or show; especially an ostentatious pattern of behaviour by an animal as part of a **courtship (1)* ritual or when defending territory, establishing a position in a **dominance hierarchy* or **pecking order*, or engaging in some other form of social behaviour. *See also CONVENTIONAL FIGHTING.* *vb.* 2. To engage in a display. [From Latin *displicare* to unfold, from *dis-* indicating reversal + *plicare* to fold]

display rule *n.* A cultural **norm (1)* or convention governing the circumstances in which **facial expressions* and other **affect displays* are allowed, suppressed, or exaggerated. For example, in European and North American cultures, it is considered bad etiquette to smile broadly if a person slips on a banana peel and falls face-down, whereas one is expected to smile when greeting an acquaintance even if not genuinely happy. Japanese culture prescribes suppression of affect displays in many situations in which they are allowed or encouraged elsewhere, this no doubt being the origin of the notion of the inscrutable East.

dispositionist bias *n.* Another name for the **fundamental attribution error*, considered more apt by some social psychologists.

disruptive behaviour disorders *n.* A generic name for **attention-deficit/hyperactivity disorder*, **conduct disorder*, and **oppositional defiant disorder*. US *disruptive behavior disorders*.

disruptive, impulse-control, and conduct disorders *n.* An umbrella term introduced in **DSM-5* to bring together disorders involving self-control of emotion and behaviour. *See ANTISOCIAL PERSONALITY DISORDER, CONDUCT DISORDER, INTERMITTENT EXPLOSIVE DISORDER, KLEPTOMANIA, OPPOSITIONAL DEFIANT DISORDER, PYROMANIA.*

disruptive mood dysregulation disorder *n.* A **depressive disorder* introduced in **DSM-5* to address concerns about excessive diagnosis of **bipolar disorder* in children. It can be diagnosed in children between 6 and 18 years of age who have exhibited, for at least 12 months, chronic, severe, persistent irritability and recurrent temper **tantrums*, verbal rages, or physical aggression directed to people or property at least three

times per week on average, and whose mood between outbursts is irritable or angry. *Compare* BIPOLAR DISORDER, INTERMITTENT EXPLOSIVE DISORDER, OPPOSITIONAL DEFIANT DISORDER.

disruptive selection *n.* A form of *natural selection operating against the middle range of variation of a characteristic and tending to split the population into two extreme types. *See also* APOSTATIC SELECTION. *Compare* STABILIZING SELECTION.

dissocial personality disorder *n.* Another name (used in *ICD-10) for *antisocial personality disorder. The diagnostic criteria are similar, with the addition of incapacity to maintain enduring relationships, though with no difficulty in establishing them, and incapacity to experience guilt or to profit from adverse experience, particularly punishment.

dissociation *n.* Partial or total disconnection between memories of the past, awareness of identity and of immediate sensations, and control of bodily movements, often resulting from traumatic experiences, intolerable problems, or disturbed relationships. *See also* DISSOCIATIVE DISORDERS, DISSOCIATION THEORY, NEODISSOCIATION THEORY. [From Latin *dissociare* to separate, from *dis-* apart + *sociare* to associate + *-ation* indicating a process or condition]

dissociation theory *n.* A theory proposed in 1899 by the French psychologist and neurologist Pierre Janet (1859–1947) to explain *automatism and in 1907 to explain *hysteria. According to the theory, these disorders are the result of *dissociation. *See also* NEODISSOCIATION THEORY.

dissociative amnesia *n.* In *DSM-5, a *dissociative disorder characterized by loss of memory, usually for important recent events associated with serious problems, *stress (1), or unexpected *bereavement. It is not diagnosed if it is attributable to ordinary forgetfulness, fatigue, drugs, or a *general medical condition. *See also* AMNESIA, DISSOCIATION.

dissociative convulsions *n.* A *dissociative disorder characterized by sudden spasmodic *convulsions resembling those of *epilepsy but not associated with loss of consciousness.

dissociative disorders *n.* A category of *mental disorders with *dissociation as a prominent feature. In *DSM-5 it includes *depersonalization/derealization disorder, *dissociative amnesia, and *dissociative identity disorder. *See also* DISSOCIATIVE AMNESIA, DISSOCIATIVE CONVULSIONS, DISSOCIATIVE FUGUE, DISSOCIATIVE MOVEMENT DISORDERS, DISSOCIATIVE STUPOR, DISSOCIATIVE TRANCE DISORDER, GANSER SYNDROME. In some taxonomies of mental disorders, including *ICD-10, but not in DSM-5, *conversion disorder is also classified as a dissociative disorder. **DD** *abbrev.*

dissociative fugue *n.* A feature of *dissociative amnesia characterized by sudden unexpected travel away from home, *amnesia for some or all of the past, confusion about personal identity or (occasionally) the assumption of a new identity. It is not diagnosed if it is caused by drugs or a *general medical condition. *Compare* FUGUE. [From Latin *fuga* a flight]

dissociative identity disorder *n.* A *dissociative disorder in *DSM-5 characterized by the presence of two or more (sometimes many) separate personalities, each with its own memories and patterns of behaviour, at least two of which take turns in recurrently taking control of behaviour, the disorder also being characterized by *amnesia for personal information that is too great to be attributable to ordinary forgetfulness. It is sometimes interpreted as a form or variant of *post-traumatic stress disorder, and some researchers and practitioners believe that it is usually a consequence of childhood abuse or other traumatic experiences, but the disorder is the subject of considerable controversy and is not universally recognized. Also called *multiple personality disorder* (*MPD*) or *split personality*. Often confused with (but in fact unrelated to) *schizophrenia. **DID** *abbrev.*

dissociative movement disorders *n.* Forms of *dissociative disorders in which there is a partial or complete loss of ability to perform bodily movements that are normally under voluntary control, without any apparent *organic disorder, including dissociative forms of *akinesia, *aphonia, *apraxia, *ataxia, *convulsions, *dysarthria, *dyskinesia, and *dysstasia. Also called *dissociative motor disorders* or *motor dissociative disorders*.

dissociative stupor *n.* Profound diminution or absence of voluntary
*****ebook converter DEMO Watermarks*****

movement and responsiveness to external stimuli apparently resulting from **stress* (1). *See also* DISSOCIATION.

dissociative trance disorder *n.* A condition characterized by behaviour and experience associated with a **trance* or a **possession trance*. Also called *trance and possession disorder*. *See also* DISSOCIATION, DISSOCIATIVE DISORDER.

dissonance theory *n.* Another name for **cognitive dissonance* theory.

distal *adj.* Farther or farthest from the centre, point of attachment, or origin. *Compare* PROXIMAL. [From *distant* + *-al* from Latin *-alis* of or relating to, by analogy with *central*]

distal criterion *n.* Another name for an **ecological criterion*.

distal stimulus *n.* An object, event, or agent in the external environment producing a pattern of physical energy called the **proximal stimulus* that in turn excites a **sensory receptor*.

distance receptor *n.* A **sensory receptor* for stimuli such as light and sound that are produced by distant stimuli. *Compare* CONTACT RECEPTOR.

distance sense *n.* Another name for a **far sense*.

distinctive feature *n.* Any **feature* (1) or **attribute* of speech or writing that is relevant or significant inasmuch as it enables a contrast to be made between phonological, syntactic, or semantic units of a language, especially the phonological attributes that distinguish **minimal pairs* and that therefore underlie the definition of a **phoneme*. *See also* ACOUSTIC CUE (1).

distorted-room illusion *n.* Another name for the **Ames room*.

distractibility *n.* Diminished ability to maintain attention, usually manifested as excessive shifting of attention from one topic to another or a tendency to be captivated by unimportant details or stimuli.

distractor *n.* A stimulus that diverts attention from a **target item* that a research participant is searching for or trying to concentrate on, frequently used in studies of perception and memory. A *token distractor* resembles the target item closely, differing from it in detail only, whereas a *type distractor* differs substantially from the target item. Also called a *foil*.

distressed personality type See *TYPE D*.

distress relief quotient *n.* The ratio of verbal expressions of distress to verbal expressions of relief in a sequence of discourse, sometimes used as an index to track the process of improvement in **psychotherapy* or **counselling*.

distributed cognition *n.* **Information* processing that is shared among several separate agents. The classic example, due to the US cognitive scientist Edwin Hutchins (born 1948), is that of a group of crew members cooperating to navigate a large ship: one crew member plots the ship's position on a chart, another takes compass bearings on landmarks, another keeps time and communicates with the bearing-takers, another maintains a deck log in which changes in heading and speed are recorded, another monitors water depth, and another operates the steering mechanism. It should be distinguished from **parallel distributed processing* or **connectionism* (1), in which separate sub-processes are distributed within a single agent. The **cooperative principle* is often cited as an example of distributed cognition, making purposeful communication possible as a cooperative endeavour.

distributed network model *n.* A representation of anything by a pattern of activation over a number of connected units, characteristic of **connectionism* (1). Also called *distributed representation*.

distributed practice *n.* Learning that is divided up into sessions, leaving gaps either between trials or between blocks of trials, generally leading to superior recall after a delay relative to **massed practice*.

distributed representation *n.* Another name for a **distributed network model*.

distribution-free test *n.* In inferential statistics, any significance test that makes no assumptions about the precise distribution or form of the sampled **population*. Although the term *distribution-free* is often used interchangeably with *non-parametric*, strictly speaking it is possible for a test to be distribution-free without being non-parametric; for example the **sign* test makes no assumptions about the distribution of the sampled population but tests the hypothesis that a certain parameter of the binomial distribution (the proportion of successes) is 1/2, so it is not really non-parametric. See also NON-PARAMETRIC STATISTICS, PROBABILITY DISTRIBUTION.

distribution, probability See PROBABILITY DISTRIBUTION.

disulfiram *n.* A drug that induces nausea when taken with **alcohol* and is used in the treatment of **alcoholism*. See ANTABUSE.

diurnal *adj.* Occurring during the day or daily. Compare NOCTURNAL. [From Latin *diurnalis* of or relating to a day, from *dies* a day]

diurnal rhythm *n.* Another name for a **circadian rhythm*. See also BIOLOGICAL CLOCK, CHRONOBIOLOGY, ZEITGEBER.

divergence *n.* The act, process, or condition of separation or of going in different directions, especially **ocular divergence*, the turning outwards of the eyes in order to fixate an object or image further away than the previous fixation point. See also HOROPTER, VERGENCE. Compare CONVERGENCE. [From Latin *divergere* to move apart, from *di-* apart + *vergere* to incline]

divergent thinking *n.* Imaginative thinking, characterized by the generation of multiple possible solutions to a problem, often associated with **creativity*. The concept was introduced in 1946 by the US psychologist J(oy) P(aul) Guilford (1897–1987) and is one of the six different types of mental operations in **Guilford's cube*. See CONVERGENCE–DIVERGENCE.

divided visual field *n.* A generic name for a variety of experimental techniques in which a viewer **fixates* (1) on a point while visual stimuli are flashed briefly in the left or right **visual field*, and measures of response

accuracy and [*reaction time](#) are taken, in order to study lateralization of brain functions. It is based on the fact that the partial [*decussation](#) of nerve fibres at the [*optic chiasm](#) results in each half of the visual field being projected to the opposite-hemisphere [*primary visual cortex](#) (Area V1). *See also* [HOMONYMOUS HEMIANOPIA](#), [LATERALITY](#).

divisive hierarchical clustering *n.* In statistics, any technique of [*cluster analysis](#) that begins with all individuals or cases grouped into a single cluster and then splits individuals into separate clusters until there are as many clusters as individuals.

dizygotic *adj.* Developed from two [*zygotes](#). *Compare* [MONOZYGOTIC](#). **DZ** *abbrev.* [From Greek *dis* double + *zygotos* yoked, from *zygon* a yoke + *-itikos* resembling or marked by]

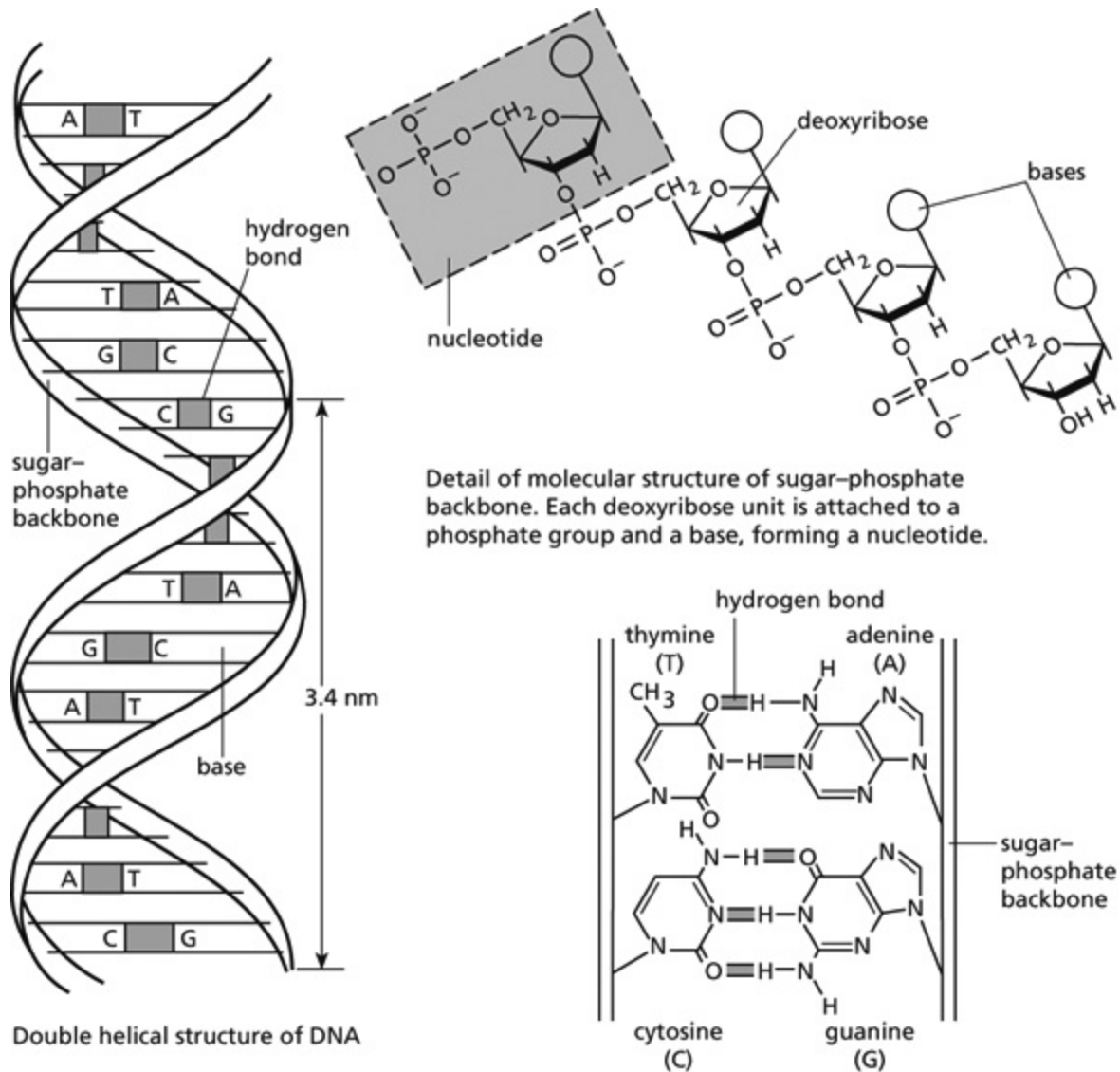
dizygotic twins *n.* Twins that are [*dizygotic](#), arising from the fertilization of two separate ova or eggs by two separate spermatozoa at about the same time, leading to the development of individuals usually (if they have the same father) sharing about half their genes in common like ordinary siblings. Their relative frequency is affected by many environmental factors and is greatly increased by the use of fertility drugs. Also called *fraternal twins* or *non-identical twins* . *See also* [TWIN STUDY](#). *Compare* [MONOZYGOTIC TWINS](#). **DZ twins** *abbrev.*

DMT *abbrev.* The usual name for dimethyltryptamine, a [*hallucinogenic](#) and [*psychedelic](#) drug belonging to the group of [*indole alkaloids](#), found in many South American snuffs. *See also* [PHANTASTICANT](#).

DNA *abbrev.* Deoxyribonucleic acid (also written *desoxyribonucleic acid*), a self-replicating molecule that is the major functional constituent of [*chromosomes](#) and is also found inside [*mitochondria](#) in the cytoplasm of cells, containing the [*genes](#) transmitted from parents to offspring in most organisms, and consisting of two strands of complementary chemical [*base](#) (1) pairs (adenine paired with thymine and cytosine with guanine) incorporating the genetic information, the strands being linked to a backbone composed of the sugar [*deoxyribose](#) alternating with a [*phosphate](#) and coiled into a double helix (spiral) (see [illustration](#)). Human DNA contains

*****ebook converter DEMO Watermarks*****

approximately 21,000 to 23,000 genes, each gene consisting of a sequence of base pairs encoding a corresponding sequence of ***amino acids** that constitute a specific ***protein**. See also **CISTRON**, **CODON**, **COMPLEMENTARY BASE PAIRING**, **DOUBLE HELIX**, **GENETIC CODE**, **INTRON**, **MITOCHONDRIAL DNA**, **NUCLEOTIDE**, **PLASMID**, **POLYMERASE CHAIN REACTION**, **PURINE**, **PYRIMIDINE**, **RECOMBINANT DNA**, **RESTRICTION MAPPING**, **TELOMERE**, **TRANSPOSON**.



The four bases of DNA, showing the hydrogen bonding between base pairs

DNA. Molecular structure.

DNA cloning *n.* Producing ***clones** (2) of ***genes**. Also called *gene*
 *****ebook converter DEMO Watermarks*****

cloning .

DNA fingerprinting *n.* Another name for **genetic fingerprinting*.

DNA hybridization *n.* A technique for determining the similarity of two strands of DNA, or of DNA and RNA, by bringing single strands of each molecule together and examining the degree of double helix formation, which is indicative of corresponding base sequences. It is also used to isolate specific DNA or RNA molecules from a mixture by causing complementary strands to reassociate. The technique is based on the fact that if DNA (or a mixture of DNA and RNA) is heated to the point at which it dissociates into single strands and is then cooled, double helices reform at regions of base-sequence complementarity. *See also* [ANNEALING \(2\)](#), [HYBRIDIZATION](#).

DNA ligase *n.* An **enzyme* that is capable of uniting two strands of **DNA* and is used in **recombinant DNA* techniques and in **genetic engineering*. [From Latin *ligare* to bind + Greek *-ase* denoting an enzyme, from *diastasis* separation]

DNA polymerase *n.* Any of several **enzymes* that catalyse the synthesis of additional units of **DNA* by a process of **transcription (2)*, using single-stranded DNA as a template. *See also* [DNA REPLICATION](#), [POLYMERASE CHAIN REACTION](#). *Compare* [RNA POLYMERASE](#). [From *DNA* + *polymer* + Greek *-ase* denoting an enzyme, from *diastasis* separation]

DNA profiling *n.* Another name for **genetic fingerprinting*.

DNA recombination *n.* Any process of **DNA* exchange in a sexually reproducing organism that produces chromosomes containing new combinations of **genes* not found in the cells of either of its parents, especially the rearrangement of genes resulting from **independent assortment* and **crossing over*. Also called *genetic recombination* or simply *recombination* . Often confused with **recombinant DNA*.

DNA replication *n.* The process, catalysed by **DNA polymerase*, whereby the two complementary strands of a **DNA* double helix molecule

separate, each strand then functioning as a template for the synthesis of a new complementary strand, resulting in the formation of two double-stranded DNA molecules identical to the original.

DNA sequence *n.* The order in which ***base (1)** pairs appear in a ***DNA** molecule, determining within the protein-coding sections of DNA the order of the ***amino acids** to be synthesized. Also called a *base sequence* or a *nucleotide sequence*. **DNA sequencing** *n.* Determining the DNA sequence in a sample of nucleic acid.

DNA splicing *n.* In ***genetic engineering**, artificial rearrangement of sections of ***DNA** using ***restriction enzymes** and ***DNA ligase**.

dodo bird conjecture *n.* The proposition that all methods of ***psychotherapy** are equally effective. The term derives from an article in the *American Journal of Orthopsychiatry* in 1936 in which the US psychologist Saul Rosenzweig (1907–2004) put forward the conjecture and quoted from *Alice's Adventures in Wonderland* by Lewis Carroll, the pen name of Charles Lutwidge Dodgson (1832–98). The quotation was from Chapter 3, after the dodo had arranged a 'caucus-race' but no one knew who had won: 'At last the Dodo said, "Everybody has won, and all must have prizes" '.

doing gender *n.* The study of the interpersonal aspects of ***gender (1)**, focusing on the ways in which cognitive categories based on ***sex (1)** act as social cues that influence people's behaviour and elicit gender-specific patterns of interaction, thereby creating, maintaining, and reinforcing social inequalities.

Dollar Auction game *n.* A strategic ***game (1)** devised by the US economist Martin Shubik (born 1926) and published in the *Journal of Conflict Resolution* in 1971, designed to model strategic escalation and entrapment. A dollar bill (or other currency note) is auctioned to the highest bidder in a group. The highest bidder gets the dollar bill, and the second-highest bidder receives nothing, but *both* bidders must pay the auctioneer amounts corresponding to their last bids. Suppose the bidding stops at 40c and the previous (second-highest) bid was 35c, then the 40c bidder gets the dollar, and the auctioneer collects 40c from that bidder and 35c from the

*****ebook converter DEMO Watermarks*****

second-highest bidder (who receives nothing in return). The first moment of truth occurs after two bids have been made—say 10c and 20c. If no other bids are made, then the first bidder will simply lose 10c, but putting in a further bid for 30c opens up the possibility of winning 70c provided that the auction ends there. The most disturbing moment of truth occurs if the bidding reaches the one-dollar mark, and the second-highest bidder must decide whether to bid more than a dollar for the one-dollar payoff in the hope of minimizing what is by then an inevitable loss: for example, a bid of 105c will result in a loss of only 5 cents if the bidding stops there, but the other bidder may bid even higher for the same reason. Once the bidding passes the one-dollar threshold, the bidders are motivated to minimize losses rather than to maximize gains. When played with real bidders, the game is usually highly profitable for the auctioneer, and controlled experiments have shown that bidding almost invariably exceeds the value of the prize and sometimes goes as high as 20 dollars, causing much distress to the participants. *See also* [CONCORDE FALLACY](#).

Dollo's law *n.* The proposition that a structure or function lost in the course of evolution is never regained in its original form, and that in this sense evolution is irreversible. [Named after the Belgian palaeontologist Louis Antoine Marie Joseph Dollo (1857–1931) who propounded it in 1893]

dolls *n.* A street name for [*barbiturate](#) drugs in general.

Dolophine *n.* A proprietary name for the narcotic drug [*methadone](#). [Trademark]

dolorimeter *n.* A device for measuring [*pain](#) on a scale from mildly unpleasant to unbearable by means of heat applied to the skin. *See also* [ALGESIMETER](#), [COLD PRESSOR PAIN](#), [ISCHAEMIC PAIN](#). **dolorimetry** *n.* The measurement of pain sensations using a dolorimeter. **dolorimetric** *adj.* Of or relating to dolorimetry. [From Latin *dolor* pain, from *dolere* to grieve + *metron* a measure]

dolorology *n.* The study of the origins, nature, and management of pain. [From Latin *dolor* pain, from *dolere* to grieve + *logos* word, discourse, or reason]

*****ebook converter DEMO Watermarks*****

domain-referenced test *n.* A test that measures an **attribute* by estimating the proportion of a specified **content domain* of knowledge, skills, or abilities the respondent has acquired. *See also* CONTENT VALIDITY, DOMAIN SAMPLING. *Compare* CRITERION-REFERENCED TEST, NORM-REFERENCED TEST.

domain sampling *n.* In psychometrics, the process of choosing test items that are appropriate to the **content domain* of the test. *See also* CONTENT VALIDITY, DOMAIN-REFERENCED TEST.

domains of processing theory *n.* The proposition that the more **elaboration* is involved in information processing at a given level of processing, the better it will be remembered. *See also* ELABORATION, LEVELS OF PROCESSING.

dominance *See* DOMINANCE (GENETIC), DOMINANT ALTERNATIVE/STRATEGY.

dominance, eye *See* EYE DOMINANCE.

dominance (genetic) *n.* The property of being a **dominant gene*. If a **hybrid* (1) between two strains is on average exactly intermediate between the two on some measured **trait*, then there is zero dominance and complete **additivity*; if the average hybrid is somewhat more similar to one of the strains, then there is partial dominance by the corresponding **allele*; and if the average hybrid is exactly like one of the strains, then there is complete dominance by the corresponding allele. Also called *genetic dominance*. *See also* HETEROZYGOUS, OVERDOMINANCE, PENETRANCE. *Compare* EPISTASIS. **dominant** *adj.*

dominance hierarchy *n.* A more or less stable rank order of animals competing for resources such as food, territory, or mates, in which each individual is more likely than not to lose a fight or competition against any individual above it in the rank order and to win against any individual below it. Such hierarchies, usually established and maintained by aggressive **displays* (1) or **conventional fighting* rather than **escalated fighting*, have been found in both captive and wild populations of many species, though

they are not always perfectly linear (they tend to include non-linearities in which *A* dominates *B*, *B* dominates *C*, *C* dominates *A*), and the middle position of a hierarchy tends to be less stable and less linear than the top and bottom. See also [HOOK ORDER](#), [PECKING ORDER](#).

dominant alternative/strategy *n.* In decision theory and game theory, an alternative or [*strategy](#) (2) that, in every contingency that might arise, yields a [*payoff](#) at least as good as the payoff from any other available alternative or strategy and a strictly better payoff in at least one. A dominant strategy is *strongly dominant* if it yields a strictly better payoff than any other alternative or strategy in every possible contingency, otherwise it is *weakly dominant*. An alternative or strategy that is not dominated by any other is an *admissible alternative/strategy*, and in a decision problem in which a dominant strategy exists, another alternative or strategy that is not dominant is a *dominated alternative/strategy* or an *inadmissible alternative/strategy*. It is generally agreed that a [*rational](#) decision maker or player will never deliberately choose a dominated alternative or strategy, but this principle appears counter-intuitive to some people in puzzles such as [*Newcomb's problem](#) and the [*Prisoner's Dilemma game](#). Also called a *dominating alternative/strategy*. See also [PROSPECT THEORY](#), [SURE-THING PRINCIPLE](#).

dominant gene *n.* A [*gene](#) displaying [*dominance](#) (genetic) in the sense that if it is inherited from one parent it tends to produce the same [*phenotype](#) in the organism whether the corresponding [*allele](#) inherited from the other parent is the same or different. For example, the gene for brown eyes is dominant and the allele for blue eyes is recessive, so an individual who is heterozygous at this locus will have brown eyes, and only an individual with two blue-eyed alleles will be phenotypically blue-eyed. Also (less commonly but more accurately) called a *dominant allele*. See also [SEX-INFLUENCED TRAIT](#). Compare [RECESSIVE GENE](#).

dominator *n.* Anyone or anything that dominates; in visual perception a hypothetical [*ganglion cell](#) receiving inputs from a group of retinal [*cones](#) that respond to brightness, its responses being regulated by [*modulator](#) cells.

Donders' law *n.* The proposition that for any head position and any direction of [*gaze](#) the eye always assumes the same position, resulting in the

*****ebook converter DEMO Watermarks*****

fixation point being focused on the ***fovea**. [Named after the Dutch ophthalmologist Franciscus Cornelius Donders (1818–89) who formulated it in 1846]

Donders' method *n.* Another name for the ***subtraction method**. [Named after the Dutch ophthalmologist Franciscus Cornelius Donders (1818–89) who introduced it in 1868]

Don Juanism *n.* A non-technical name for ***satyriasis**. [Named after the legendary Spanish nobleman Don Juan, noted for his insatiable sexual appetite]

door-in-the-face technique *n.* A technique for eliciting ***compliance** by making a very large initial request, which the recipient is sure to turn down, followed by a smaller request. It was introduced in 1975 by the US social psychologist Robert B(eno) Cialdini (born 1945) and several colleagues who performed a field experiment in which students were approached on campus and requested to volunteer to spend two hours a week, for two or more years, as unpaid counsellors at a local juvenile detention centre. No one agreed to this, but when they were then asked whether they would be willing on just one occasion to escort a group of juveniles from the detention centre on a two-hour trip to the zoo, 50 per cent agreed, compared with 17 per cent in the control group who received only the second, smaller request. Also called the *rejection-then-retreat technique*. See also **FOOT-IN-THE-DOOR TECHNIQUE**, **LOWBALL TECHNIQUE**.

dopa *n.* An ***amino acid** found in certain fruits and vegetables, especially broad beans, derived by oxidation from ***tyrosine**, and abundantly present in the adrenal glands. It is a precursor of ***dopamine**, ***adrenalin** (epinephrine), and ***noradrenalin** (norepinephrine). The laevorotatory (left-handed) isomer ***L-dopa** is used to treat ***Parkinson's disease**. [A contraction of its chemical name *d(ihydr)o(xy)p(henyl)a(lanine)*]

dopamine *n.* A ***biogenic amine** and ***catecholamine** that is one of the ***neurotransmitter** substances significantly involved in central nervous system functioning, and that also functions as a ***hormone**. Its three main pathways within the brain are from the ***midbrain** to the ***basal ganglia** (see also *****ebook converter DEMO Watermarks*****)

PARKINSON'S DISEASE), from the midbrain to the **frontal lobes*, and from the midbrain to the **limbic system*, the mesolimbic dopamine pathway being strongly implicated in experiences of pleasure or reward and also responses to salient stimuli in general. Formula: C₈H₁₁NO₂. Also called *3-hydroxytyramine*. See also DOPAMINERGIC, L-DOPA, MESOLIMBIC SYSTEM, MESOTELENCEPHALIC PATHWAY, NUCLEUS ACCUMBENS, 6-HYDROXYDOPAMINE, VENTRAL TEGMENTAL AREA. **DA** abbrev. [From *dopa* + *amine*]

dopamine antagonist *n.* Any drug such as **olanzapine* or one of the **phenothiazines*, **butyrophenones*, or **dibenzodiazepines* that inhibits the action of **dopamine* by blocking the dopamine receptors. See also ANTAGONIST (3), NEUROLEPTIC (1). Compare DOPAMINOMIMETIC.

dopaminergic *adj.* Releasing **dopamine*; also activated by or responding to dopamine, this extended usage being widespread but consistently rejected by the English physiologist Sir Henry Hallet Dale (1875–1968), who coined the suffix *-ergic*, and by many other authorities. The term applies especially to nerve fibres, such as those of the **mesotelencephalic pathway* and the **mesolimbic system*, that use dopamine as their main or only **neurotransmitter*. Compare ADRENERGIC, CHOLINERGIC, GABAERGIC, NORADRENERGIC, SEROTONERGIC. [From *dopamine* + Greek *ergon* work + *-ikos* of, relating to, or resembling]

dopaminomimetic *adj. n.* (Of or relating to) a drug such as **apomorphine* or **bromocriptine* that reproduces some or all of the effects of **dopamine* by acting on dopamine receptors as an **agonist* (3). Compare DOPAMINE ANTAGONIST. [From *dopamine* + Greek *mimesis* imitation, from *mimeisthai* to imitate]

dope *n.* A term used for a variety of substances; more specifically, a street name for **cannabis*, **heroin*, or occasionally other drugs. [From Dutch *doop* a sauce, from *doopen* to dip]

Doppelgänger *n.* A **reduplicative paramnesia* in which a person believes that he or she has a double or replica. Compare CAPGRAS SYNDROME. [German: literally double-goer]

Doppler effect *n.* An increase in the **frequency* (1) of a sound wave, or of an electromagnetic wave such as light, emitted by a source moving towards the observer, or a decrease in frequency from a source moving away from the observer, a familiar example being the rise and fall in the pitch of an ambulance siren as it approaches and then recedes, the effect being the result of a compression or stretching out of waves due to the motion of the source relative to the observer. Also called the *Doppler shift*. See also [BIOSONAR](#). [Named after the Austrian physicist Christian Johann Doppler (1803–53) who formulated it in 1842]

Dora *n.* In **psychoanalysis*, the pseudonym of an 18-year-old woman treated by Sigmund Freud (1856–1939) in 1900 for **hysteria* and discussed in his famous case study in 1901/5 entitled ‘Fragment of an Analysis of a Case of Hysteria’ (*Standard Edition*, VII, pp. 7–122). See also [URETHRAL EROTISM](#).

Doriden *n.* A proprietary name for the depressant drug **glutethimide*. [Trademark]

dorsal *adj.* Of, relating to, or situated towards the spine, except in the human forebrain, where *dorsal* is synonymous with *superior* or *top*, as if humans walked on all fours and the cerebrum were not bent forwards 80 degrees relative to the brainstem to keep it horizontally oriented when standing upright. Compare [VENTRAL](#). [From Latin *dorsum* the back]

dorsal attention network *n.* Another name for the **task-positive network*. **DAN** *abbrev.*

dorsal column *n.* A column of nerve fibres, including the **fasciculus cuneatus* and **fasciculus gracilis*, lying dorsally in the posterior **funiculus* of each lateral half of the spinal cord, conveying sensations of touch and proprioception. It is one of two major routes by which afferent spinal nerve fibres carrying sensations of **somaesthesia* are transmitted to the thalamus. Compare [SPINOTHALAMIC TRACT](#).

dorsal root *n.* The short pathways into which a spinal nerve divides near

its point of attachment to the back of the spinal cord, containing afferent or sensory fibres transmitting nerve impulses to the spinal cord. *See also* [BELL–MAGENDIE LAW](#), [DORSAL ROOT GANGLION](#). *Compare* [VENTRAL ROOT](#).

dorsal root ganglion *n.* Any of a number of swellings containing sensory neuron cell bodies located outside the spinal cord close to the dorsal roots of the spinal nerves. **dorsal root ganglia** *pl.* [From Greek *ganglion* a cystic tumour]

dorsolateral prefrontal cortex *n.* An area (top, side) of the [*prefrontal cortex](#) strongly implicated in [*working memory](#). *See also* [TASK-POSITIVE NETWORK](#). **DLPFC** *abbrev.* [From Latin *dorsum* the back + *lateralis* of or relating to a side, from *lateris* a side + *prae* in front + *frons* the forehead + *alis* of or relating to + *cortex* bark or outer layer]

dorsomedial thalamus *n.* A nucleus in the [*thalamus](#) that transmits afferent nerve impulses to the [*prefrontal cortex](#). It usually degenerates in cases of [*Korsakoff's psychosis](#) associated with dense [*amnesia](#).

dose–response curve *n.* The functional relationship between the dosage of a drug and the size or strength of a physiological or behavioural response to it. It is almost invariably monotonically increasing, with larger dosages of the drug producing larger responses, at least within a certain range, but very low and/or very high dosages may not follow this pattern. For example, a low dosage of adrenalin (epinephrine) or acetylcholine produces a slight drop in blood pressure, whereas a high dosage produces a large increase in blood pressure, and a low dosage of caffeine may enhance typing skill whereas a larger dosage impairs it. Also called the *dose–response relation(ship)*. *See also* [HORMESIS](#), [INITIAL VALUES LAW](#).

Dostoevsky syndrome *n.* Another name for [*interictal syndrome](#). [Named after the Russian novelist Fyodor (Mikhailovich) Dostoevsky (1821–81) who is believed to have manifested the syndrome]

double-aspect theory *n.* A response to the [*mind–body problem](#) according to which mental and physical phenomena and processes are not two different kinds of things but rather different aspects of the same thing, *****ebook converter DEMO Watermarks*****

just as a cloud and a mist are the same thing seen from different vantage points, or the morning star and the evening star are the same thing (the planet Venus). See also [IDENTITY THEORY](#), [MATERIALISM](#), [MONISM](#).

double bind *n.* An inescapable dilemma involving conflicting demands that allow no right or satisfactory response. An influential theory of the aetiology of [*schizophrenia](#) was put forward by the English-born US anthropologist Gregory Bateson (1904–80) and several co-authors in an article in the journal *Behavioral Science* in 1956, according to which schizophrenia is caused by parenting styles that create double binds for children, as when a mother complains to her son for not giving her a kiss but recoils physically whenever the child does kiss her. This theory was enthusiastically adopted by the Scottish psychiatrist Ronald D(avid) Laing (1927–89) and others during the 1970s and 1980s, but empirical evidence has not been forthcoming in support of the theory, despite its attractiveness. See also [AVOIDANCE—AVOIDANCE CONFLICT](#), [SCHIZOPHRENOGENIC](#).

double-blind study *n.* A research design planned in such a way that, in order to control for [*experimenter effects](#) and the influence of [*demand characteristics](#), neither the experimenter nor the research participants or subjects know, until after the data have been collected, which experimental treatment has been applied to which individuals. This type of design is used, for example, in drug trials, often with the use of a [*placebo \(1\)](#), to avoid contamination of the results from biases and preconceptions on the part of the experimenter or the subjects. See also [RANDOMIZED CONTROLLED TRIAL](#), [RANDOMIZED DOUBLE-BLIND EXPERIMENT](#). Compare [OPEN STUDY](#), [SINGLE-BLIND STUDY](#).

double helix *n.* The molecular structure of [*DNA](#): two spirals or helixes coiled round a single axis with [*complementary base pairing](#) between the strands. It is also displayed by double-stranded [*RNA](#). It was discovered in 1953 by the US biologist James D(ewey) Watson (born 1928) and the English molecular biologist Francis H(arry) C(ompton) Crick (1916–2004), working with X-ray diffraction images produced by the biophysicist Rosalind E. Franklin (1920–58), although the Nobel prize awarded for this work in 1962 went to Watson, Crick, and Franklin's research supervisor at King's College London, the New Zealand-born biophysicist Maurice H(ugh)

*****ebook converter DEMO Watermarks*****

F(rederick) Wilkins (1916–2004). [From Greek *helix* a spiral]

double-opponent receptive field *n.* A type of **centre-surround receptive field* characteristic of neurons belonging to **blobs* in the **primary visual cortex* in which stimulation of the centre with light of a particular range of wavelengths elicits neural responses and stimulation with the complementary-colour wavelength inhibits responses, whereas stimulation of the immediately surrounding area elicits the reverse responses, the commonest type, involving red (*r*) and green (*g*), being a r^+g^- centre surrounded by a r^-g^+ ring.

double recessive *n.* Carrying two copies of a **recessive gene* and therefore manifesting the recessive **phenotype*.

double vision *n.* A non-technical name for **diplopia*.

Dover's powder *n.* A preparation containing **opium* that was formerly used as an **analgesic* (1), to induce sweating, and to control muscular spasms. [Named after the English physician Thomas Dover (1660–1742) who popularized its medicinal use]

doves *n.* A branded version of the stimulant designer drug **ecstasy* (2). [Identified by a symbol of a dove]

downers *n.* A common street name for central nervous system **depressant drugs* in general. *Compare* *UPPERS*.

Down's syndrome *n.* A disorder linked to a **chromosomal* abnormality resulting in a broadened and flattened face and nose, short, stubby fingers, skin folds at the edges of the eyes, **intellectual disability*, and the premature development of **Alzheimer's disease*, usually in middle age. Formerly called *mongolism*. *See also* *TRISOMY*. *Compare* *WILLIAMS SYNDROME*. **DS** *abbrev.* [Named after the English psychiatrist John Langdon Haydon Down (1828–96) who first described it]

d prime *n.* In **signal detection theory*, an index of the detectability or

discriminability of a signal, given by the difference between the means (or separation between the peaks) of the signal-plus-noise and the noise-only probability distributions, divided by the **standard deviation* of the noise-only distribution. *See also* *NOISE (2)*, *RECEIVER OPERATING CHARACTERISTIC*, *TWO-ALTERNATIVE FORCED-CHOICE TASK*. Symbol: *d'*.

Dracula hormone *n.* Another name for **melatonin*. [Named after the exclusively nocturnal vampire in Bram Stoker's novel *Dracula* (1897)]

drama therapy *n.* A form of **psychotherapy*, including **psychodrama*, in which clients or patients are encouraged to express their feelings and inner conflicts through acting them out in front of others. Sometimes written *dramatherapy*. *See also* *SOCIODRAMA*.

drapetomania *n.* A form of **mania (2)* supposedly affecting slaves in the 19th century, manifested by an uncontrollable impulse to wander or run away from their white masters, preventable by regular whipping. The disorder was first identified in a medical report that is often cited as a fanciful case of **psychologism*. *Compare* *DYSAESTHESIA AETHIOPIS*. [Coined by the US physician Samuel Adolphus Cartwright (1793–1863) in the *New Orleans Medical and Surgical Journal* in 1851, from Greek *drapeteusis* an escape + *mania* madness]

Dravet syndrome *n.* A severe form of childhood **epilepsy*, twice as common in boys than girls, that appears during the first year of life and is characterized by frequent **convulsions* or seizures, accompanied initially by fever and resistant to conventional **anticonvulsant* medication. It is a rare disorder, with an incidence of about 1 in 30,000, and is believed to be caused by a non-inherited genetic defect affecting **sodium channel* and **GABA* receptor functioning. Children with Dravet syndrome typically manifest poor language development, **ataxia*, **hyperactivity*, and difficulty relating to others. Also called *severe myoclonic epilepsy of infancy (SMEI)*. **DS** *abbrev.* [Named after the French neuropsychiatrist Charlotte Dravet (born 1936) who first described it in an article in the journal *La Vie Médicale* in 1978]

Draw-a-Man test *n.* A test of a child's intellectual ability based on a method of scoring the child's drawing of a human figure. It was introduced in
*****ebook converter DEMO Watermarks*****

1926 by the US psychologist Florence Laura Goodenough (1886–1959). Also called the *Goodenough Draw-a-Man test* or the *Goodenough test* . **DAM** abbrev.

Draw-a-Person test *n.* A **projective test* developed by the US psychologist Karen Alper Machover (1902–96) and discussed in her book *Personality Projection in the Drawing of the Human Figure* (1949). The respondent is handed a blank sheet of paper and a pencil and is asked simply to draw a person, then, on a separate sheet, to draw a person of opposite sex to the first, then finally to indicate the age, educational level, occupation, fears, and ambitions of each person drawn. The drawings are interpreted in terms of feature placement (size, body details, positioning, clothing, and so on), the assumptions being that people tend to project acceptable impulses on to the same-sex figure and unacceptable impulses on to the opposite-sex figure, and that various features have special significance: large eyelashes indicate hysteria; prominent eyes or ears indicate suspiciousness; large figures suggest **acting out*; small figures, lack of facial features, or dejected facial expressions indicate depression; lack of body periphery details indicate suicidal tendencies; dark shading indicates aggressive impulses; lack of physical details suggests psychosis or brain damage; and so on. Also called the *Machover Draw-a-Person Test* . **DAP** abbrev.

dream *n.* 1. The mental experiences, usually in the form of a sequence of ideas, images, and imagined events, often accompanied by emotions, occurring during **REM sleep*. See also *DREAM ANALYSIS*, *DREAMWORK*, *INTERPRETATION (2)*, *LUCID DREAM*, *NIGHTMARE*, *SLEEP TERRORS*. *vb.* 2. To experience a dream or dreams; hence, figuratively, to imagine or fantasize. [From Old English *dream* a song]

dream analysis *n.* A technique of **psychoanalysis* in which **interpretation (2)*, aided by **free association*, is applied to the **manifest content* of **dreams (1)* in an effort to reveal their **latent content* which, according to psychoanalytic theory, invariably consists of unconscious **wish fulfilments* that are potentially disturbing to the dreamer and would interrupt sleep if they were not disguised through symbolism. Sigmund Freud (1856–1939) propounded this theory in his book *The Interpretation of Dreams* (1900, *Standard Edition*, IV–V). However, in his later book *Beyond the*

*****ebook converter DEMO Watermarks*****

Pleasure Principle (1920), he raised doubts about the assumption that dreams are wish fulfilments and suggested that they may serve a more primitive function (*Standard Edition*, XVIII, pp. 31–3). See also [DREAMWORK](#), [OVERDETERMINATION](#), [WOLF MAN](#).

dream interpretation See [DREAM ANALYSIS](#).

dreamwork *n.* In [*psychoanalysis](#), a collective name for all the processes that transform the [*latent content](#) of a [*dream \(1\)](#) into its [*manifest content](#), concealing its meaning from the dreamer and thus allowing undisturbed sleep to occur. Sigmund Freud (1856–1939) identified the processes in his book *The Interpretation of Dreams* (1900, *Standard Edition*, IV–V) as [*condensation](#), [*displacement](#), [*secondary revision](#), and [*representability](#). See [DREAM ANALYSIS](#). See also [OVERDETERMINATION](#).

dressing apraxia See [APRAXIA](#).

drink-driving *n.* The crime of driving with excess alcohol in the blood. In the UK and many other jurisdictions, the drink-drive limit is 80mg/dl (.08g/dl), often rather misleadingly referred to as .08 per cent blood alcohol concentration. It equates to roughly four units of alcohol (half pints of beer, glasses of wine, or measures of spirits) taken by an average 150 lb (68 kg) person in quick succession, and this is also the figure recommended by the American College of Emergency Physicians ([ACEP](#)) as *per se* evidence of driving while impaired. In some countries, including several members of the European Union, the drink-drive limit is 50mg/dl, and in Sweden it is 20mg/dl. See also [ALCOHOL](#), [BLOOD ALCOHOL CONCENTRATION](#).

drive *n.* Any internal source of [*motivation](#) that impels an organism to pursue a goal or to satisfy a need, such as sex, hunger, or self-preservation. A *primary drive* is an innate physiological urge or need, such as hunger, thirst, or the need for sex; a *secondary drive* is an acquired non-physiological urge, such as the [*need](#) for achievement or the [*need for affiliation](#). More generally, a person's energy and determination to achieve something (*We're looking for a salesman with a lot of drive*). In [*psychoanalysis](#), another name for [*instinct \(3\)](#). See also [NEED \(2\)](#).

drive strength *n.* In **Hullian learning theory*, the strength of a primary **drive* operative during the formation of a habit. *D abbrev.*

drive theory of social facilitation *n.* A theory formulated in 1965 by the US-based Polish psychologist Robert B(oleslaw) Zajonc (1923–2008) to explain what had until then appeared to be contradictory findings on **audience effects* and **coaction effects*. According to the theory, when an individual performs a task, the effect of an audience or coactors is to increase the individual's **arousal* level, which in turn increases the emission of dominant responses in the individual's response repertoire. If the task is simple or well learned, then the dominant responses are likely to be mostly correct, and the audience or coaction effect results in an improvement or enhancement of performance; but if the task is difficult or inadequately learned, then wrong responses are likely to predominate and the effect is an impairment of performance. *See also* EVALUATION APPREHENSION, SOCIAL FACILITATION.

droperidol *n.* A **neuroleptic* (1) and **sedative* drug belonging to the group of **butyrophenones*, often prescribed in combination with a narcotic drug such as **fentanyl*. *Compare* HALOPERIDOL.

drosophila *n.* Any fruit fly of the genus *Drosophila*, especially *D. melanogaster*, widely used in research in genetics because it breeds quickly and prolifically, is easy to maintain, displays scores of hereditary characteristics that can be observed without difficulty, and has relatively simple genetic material comprising only four pairs of chromosomes per cell. [From Greek *drosos* dew or moisture + *phileein* to love]

drostanalone *n.* Drostanolone propionate, a fast-acting, orally administered **anabolic androgenic steroid* used by athletes to build muscle strength without increasing weight, and occasionally used in the treatment of breast cancer. Formula: C₂₃H₃₆O₃.

drowning *See* INSTINCTIVE DROWNING RESPONSE.

Dr Strangelove syndrome *n.* Another name for the **anarchic hand*.

*****ebook converter DEMO Watermarks*****

[Named after the eponymous Doctor Strangelove in Stanley Kubrick's 1964 film, *Dr Strangelove or: How I Learned to Stop Worrying and Love the Bomb*, who struggles continually to prevent his right hand from giving Nazi salutes]

drug *n.* Any chemical substance that can affect the structure or function of a living body, often used as a medicine, or in making a medicine, or taken for its pleasurable or satisfying effects. *See also* [DOSE—RESPONSE CURVE](#), [DRUG ACTION](#), [DRUG EFFECT](#), [HORMESIS](#), [PSYCHOTROPIC](#), [SUBSTANCE ABUSE](#), [SUBSTANCE-RELATED AND ADDICTIVE DISORDERS](#). [From French *drogue* a drug, perhaps from Middle Dutch *droge* a dry barrel]

drug abuse *n.* Another name for [*substance abuse](#). Preferred usage *drug misuse*. *See also* [ADDICTION](#), [DEPENDENCE \(2\)](#), [SUBSTANCE DEPENDENCE](#), [SUBSTANCE-INDUCED DISORDERS](#), [SUBSTANCE-RELATED AND ADDICTIVE DISORDERS](#), [SUBSTANCE USE DISORDERS](#).

drug action *n.* The interaction of a [*drug](#) with components of living tissues, such as [*neuroreceptors](#), and the biochemical consequences of this interaction, distinguished in careful usage from the [*drug](#) effect—the physiological and psychological consequences of the drug's action. *See also* [PSYCHOPHARMACOLOGY](#). *Compare* [PHARMACODYNAMICS](#).

drug addiction *See* [ADDICTION](#).

drug-dependent memory *n.* A form of [*state-dependent memory](#) associated with states induced by [*psychotropic](#) drugs during learning and recall.

drug effect *n.* The physiological and psychological effects of a [*drug](#), distinguished in careful usage from the biochemical [*drug action](#). *See also* [PSYCHOTROPIC](#). **drug tolerance** *See* [TOLERANCE \(3\)](#).

DSM *abbrev.* The *Diagnostic and Statistical Manual of Mental Disorders* of the American Psychiatric Association, widely regarded as the most authoritative reference work on the definition and classification of [*mental](#)

disorders. The first edition appeared in 1952, the second in 1968, the third (DSM-III) in 1980, a revision of the third in 1987, the fourth (DSM-IV) in 1994, and the 5th (DSM-5) in 2013. *Compare* [ICD](#).

dual-code theory *n.* 1. A theory of [*imagery](#) according to which imaginative cognition involves the activity of two functionally independent subsystems: a non-verbal imagery system specialized to handle objects and events, and a verbal imagery system specialized to perceive and generate language. *See also* [DUAL-PROCESS MODEL](#). 2. A theory according to which physical objects and events are stored in memory in the form of both visual images and verbal representations, whereas abstract information is represented only verbally. **DCT** *abbrev.*

dualism *n.* The state of being twofold or double, especially a philosophical doctrine regarding the [*mind–body problem](#) according to which reality comprises two realms of existence, usually identified as mind and matter, or two types of entities, mental and physical. *See also* [CARTESIAN DUALISM](#), [CATEGORY MISTAKE](#), [EPIPHENOMENALISM](#), [INTERACTIONISM \(1\)](#), [PSYCHOPHYSICAL PARALLELISM](#). *Compare* [DOUBLE-ASPECT THEORY](#), [IDENTITY THEORY](#), [MONISM](#). [From Latin *dualis* twofold, from *duo* two]

dual personality *n.* Multiple personality disorder involving two separate personalities. *See* [DISSOCIATIVE IDENTITY DISORDER](#).

dual-process model *n.* Any of a number of theories of social information processing that emerged in the 1980s and 1990s to explain social [*attitudes \(1\)](#), [*stereotypes](#), [*person perception](#), [*memory](#), and [*decision making](#), although the roots of the idea can be traced at least as far back as the *Principles of Psychology* (1890, p. 451) of the US psychologist William James (1842–1910). According to these theories, two qualitatively different mechanisms of information processing operate in forming judgements, solving problems, or making decisions, the first being a quick and easy processing mode based on effort-conserving [*heuristics](#), and the second being a slow and more difficult rule-based processing mode based on effort-consuming systematic reasoning. The first type of process is often unconscious and tends to involve [*automatic processing](#), whereas the second is invariably conscious and usually involves [*controlled processing](#), and in

*****ebook converter DEMO Watermarks*****

some domains of application the first is affective and the second cognitive. The most influential dual-process theory is the [*elaboration likelihood model](#). Also called *dual-process theory*. See also [BELIEF-BIAS EFFECT](#), [COGNITIVE ECONOMY](#), [COGNITIVE MISER](#), [HODOLOGICAL SPACE](#), [PRINCIPLE OF LEAST EFFORT](#), [SYSTEM 1 THINKING](#).

dual-task performance *n.* An experimental paradigm in which participants or subjects perform two tasks simultaneously under different instructions, such as counting backwards from 100 while responding with key-presses to signals presented through headphones. It is widely used in research into [*attention](#).

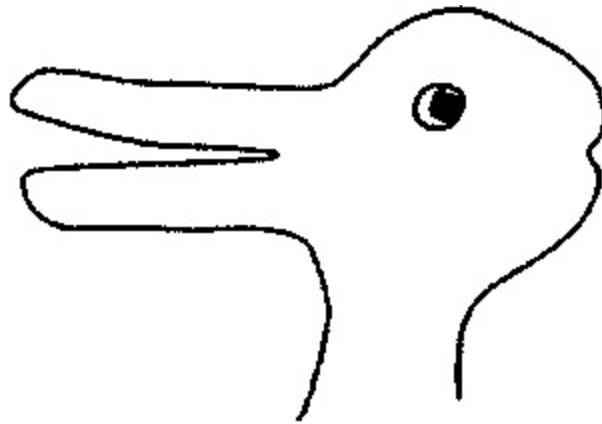
Duchenne muscular dystrophy *n.* The commonest form of [*muscular dystrophy](#), characterized by progressive wasting of leg and pelvis muscles, usually in boys under 10 years old, caused by an [*X-linked *recessive gene](#). Also called *Duchenne dystrophy*. **DMD** abbrev. [Named after the French neurologist Guillaume Benjamin Amand Duchenne (1806–75) who was the first to describe it in 1858]

Duchenne smile *n.* A [*facial expression](#) involving contractions of the muscles at the outer ends of the mouth (*zygomatic major* muscles), raising the corners of the mouth, and the muscles encircling the eyes (*orbicularis oculi* muscles), raising the cheeks, narrowing the eye apertures, and producing crows' feet wrinkles at the outer corners of the eyes. In contrast, a non-Duchenne smile involves only the *zygomatic major* muscles. A Duchenne smile is considered to be indicative of spontaneous and genuine happy emotion, rather than a mere [*affect display](#), because the *orbicularis oculi* muscles are more difficult to control voluntarily. [Named after the French neurologist Guillaume Benjamin Amand Duchenne (1806–75) who discussed it in his book *The Mechanism of Human Facial Expression* (1862)]

duck-rabbit *n.* An early [*ambiguous figure](#), first published by the Polish-born US psychologist Joseph Jastrow (1863–1944) in his book *Fact and Fable in Psychology* (1900), and later discussed by the Austrian-born British philosopher Ludwig (Josef Johann) Wittgenstein (1889–1951) in his *Philosophical Investigations* (1953, II.xi, pp. 194–206). The figure can be seen as a duck or a rabbit (see [illustration](#)), and Wittgenstein argued that

*****ebook converter DEMO Watermarks*****

recognition of what the figure represents comes only at the moment of change from one to the other and is not characteristic of the perception in general: 'It would have made as little sense for me to say "Now I am seeing it as ..." as to say at the sight of a knife and fork "Now I am seeing this as a knife and fork". This expression would not be understood.' (p. 195)



Duck-rabbit. A much-discussed reversible figure that appears as a duck facing left or a rabbit facing right.

ductless gland *n.* Another name for an **endocrine gland*.

duetting *n.* A series of bird calls each followed by a rapid antiphonal response from a mating partner, functioning as a recognition and bonding signal. It is often mistaken for the song of a single bird, as by William Shakespeare (1564–1616) in *Love's Labour Lost* (V.ii.903) when he attributed *tu-whit, tu-who* to a single staring owl.

dulosis *n.* A practice in some species of ants of forcing members of a different species to work for the colony as slaves. [From Greek *doulos* enslavement, from *doulos* a slave + *-osis* indicating a process or state]

Duncan's multiple range test *n.* In statistics, a method of **multiple comparisons* in which the group means are ranked from smallest to largest, and then the number of steps that two means are apart in this ranking is used to compute a range statistic for each comparison. Compare *BONFERRONI CORRECTION*, *LEAST-SIGNIFICANT DIFFERENCE TEST*, *NEWMAN-KEULS TEST*, *SCHEFFÉ TEST*, *TUKEY-HSD TEST*. [Named after the Australian-born US statistician

David Beattie Duncan (1916–2006) who developed it in 1955]

duodenum *n.* The first section of the small intestine, into which the pancreas and gall bladder secrete digestive enzymes. [Shortened from Latin *intestinum duodenum digitorum* intestine of twelve fingers' length]

duplexity function *n.* The dual curve of **dark adaptation* resulting from the different adaptation rates of **photopic* and **scotopic* vision. Also called the *duplicity function* .

duplexity theory *n.* The conceptualization of the **retina* as containing two different types of photoreceptors, now identified as **rods* and **cones*, mediating **scotopic* and **photopic* vision respectively. Also called *duplicity theory* .

duplicity function *n.* Another name for the **duplexity function*.

duplicity theory *n.* Another name for the **duplexity theory*.

dura mater *n.* The outermost and toughest of the three **meninges* covering the brain and spinal cord, attached tightly to the arachnoid membrane. Often shortened to *dura*. Also called the *pachymeninx* . Compare *ARACHNOID MEMBRANE*, *PIA MATER*. [From Latin *dura mater* hard mother, a literal translation of its Arabic name *umm al-jafiyah* in accordance with the Arabic usage of *mother* to indicate a relation between things]

duration estimation paradox *n.* A tendency for people to make more accurate prospective time estimations, that is, signalling when they believe that a specified period has elapsed, than retrospective time estimations, that is, estimating at the end of a period how long they believe it to have lasted.

Dutch book *n.* A **money pump* in which a person holds intransitive or **cyclic preferences*, for example, preferring *x* to *y*, *y* to *z*, and *z* to *x*. Such a person is therefore willing to pay to have any of them exchanged for one that is preferred to it, and is then willing to pay to have that one exchanged for

another, and so on indefinitely. The property that differentiates a Dutch book from any other money pump is that the price for each exchange is lowered until the person is willing to pay for it, although the term is often used as a synonym for a money pump. [Probably named after a Dutch auction in which the price of a lot is reduced by steps until a buyer comes forward]

dyad *n.* A two-person group; more generally, an entity consisting of two elements or parts. **dyadic** *adj.* Of or relating to a dyad or dyads. [From Latin *dyas* a dyad, from Greek *duo* two]

dynamic *adj.* Of, relating to, or consisting of forces that produce movement or change. In **psychoanalysis*, of or relating to **dynamic psychology*. [From Greek *dynamikos* powerful, from *dynamis* power, from *dynasthai* to be able]

dynamic aphasia *n.* A name given by the Russian neuropsychologist Alexandr Romanovich Luria (1902–77) to a variant of non-fluent aphasia (see *APHASIA*) characterized by almost total failure to initiate speech, and responses to questions that are sparse and laconic and given only after long pauses, but no impairment in ability to name objects, to read, and to repeat sentences.

dynamic assessment *n.* An approach to assessment following the same basic principles as **dynamic testing*, including not only tests but also other forms of assessment, such as projects, essays, and performances.

dynamic labyrinth *n.* The **semicircular canals* and their **cristae*, operating the **vestibulo-ocular reflex* to keep **gaze* fixated on target when the head is moved.

dynamic memory span *n.* The number of items that a person can remember when presented with a continuous sequence of items, such as words, numbers, or letters, the sequence being halted without warning and the person asked to recall as many items as possible, working back from the most recent items. The usual span is only approximately three items, compared to a **memory span* of approximately seven items when the sequence is confined to that length. See also *SHORT-TERM MEMORY*.

*****ebook converter DEMO Watermarks*****

dynamic psychology *n.* A term loosely applied to all forms of [*psychoanalysis](#), alluding to the [*dynamic](#) interplay of psychological process and phenomena arising from [*instincts](#) (3) that facilitate, inhibit, and combine with one another, or produce [*compromise formations](#). In 1909/10, Sigmund Freud (1856–1939) distinguished his theory of the split between [*consciousness](#) and the [*unconscious](#) (2) from static theories that had gone before: ‘We explain it dynamically, from the conflict of opposing mental forces, and recognize it as the outcome of an active struggling on the part of the two psychical groupings against each other’ (‘Five Lectures on Psycho-Analysis’, *Standard Edition*, XI, pp. 9–55, at pp. 25–6). *See also* [DEPTH INTERVIEW](#), [DEPTH PSYCHOLOGY](#), [METAPSYCHOLOGY](#), [MOTIVATIONAL RESEARCH](#).

dynamic testing *n.* An approach to [*psychometrics](#) that attempts to measure not only the products or processes of learning but also the potential to learn. It focuses on the difference between latent capacity and developed abilities, or the extent to which developed abilities reflect latent capacity, and it seeks to quantify the psychological processes involved in learning and change, rather than the products of such processes, by presenting sequences of progressively more challenging tasks and providing continuous feedback on performance in an atmosphere of teaching and helping that guides the testee towards the right answer. Credit for introducing the concept is usually assigned to the Russian psychologist Lev Semyonovich Vygotsky (1896–1934) who discussed it in *Thought and Language* (1934). Also called *dynamic assessment*. *See also* [LEARNING POTENTIAL ASSESSMENT DEVICE](#), [LERNTEST](#), [ZONE OF PROXIMAL DEVELOPMENT](#). *Compare* [STATIC ASSESSMENT ENVIRONMENT](#).

dynamic touch *n.* The ability to discern certain physical properties of an object by moving it around, an example being the ability of people to judge the length of a rod quite accurately by grasping one end of it and swinging it around, even in the dark or with the hand and the rod screened from vision. *See also* [TOUCH](#). *Compare* [CUTANEOUS SENSE](#), [HAPTIC TOUCH](#).

dynamic visual acuity *n.* The keenness or sharpness of perception of a moving target, related to skills such as driving. *See also* [ACUITY](#), [VISUAL ACUITY](#).

dynamometer *n.* Any of a number of different devices for measuring muscular strength or effort. **dynamometry** *n.* The measurement of power or force. [From Greek *dynamis* power + *metron* measure]

dynorphin *n.* One of a number of *endogenous opioid peptides that are found in the central nervous system and that have a strong affinity for *opiate receptors. Compare BETA-ENDORPHIN, ENDORPHIN, ENKEPHALIN. [From Greek *dyn(amis)* power + English (*end*)orphin]

dysacusia *n.* A condition characterized by pain or discomfort from sounds or noises, usually resulting from damage to the *cochlea. Also spelt *dysacousia* . Also called *dysacusis*, *dysacusmia* , or *dysacousis* . **dysacusic** *adj.* [From Greek *dys-* bad or abnormal + *akousis* hearing, from *akouein* to hear + *-ia* indicating a condition or quality]

dysaesthesia *n.* A loss of feeling, usually experienced as numbness or *paraesthesia, often resulting from spinal injury and experienced below the level of the lesion. US *dysesthesia*. [From Greek *dys-* bad or abnormal + *aisthesis* sensation + *-ia* indicating a condition or quality]

dysaesthesia aethiopsis *n.* A mental disorder supposedly peculiar to black slaves and endemic among them in North America in the mid nineteenth century, manifested by laziness and insensibility to pain when whipped. The article in which it was first reported is often cited as a fanciful example of *psychologism. US *dysesthesia aethiopsis*. Compare DRAPETOMANIA. [Coined by the US physician Samuel Adolphus Cartwright (1793–1863) in the *New Orleans Medical and Surgical Journal* in 1851, from *Aethiop* an archaic word for a black person]

dysarthria *n.* Imperfect articulation of speech caused by paralysis, weakness, or involuntary movements of the muscles involved in speech production. [From Greek *dys-* bad or abnormal + *arthron* articulation + *-ia* indicating a condition or quality]

dysbasia *n.* Partial *abasia; impairment in the ability to walk. [From Greek *dys-* bad or abnormal + *basis* a step, from *bainein* to step or go + *-ia* indicating a condition or quality]

indicating a condition or quality]

dysbulia *n.* Mild **aboulia*. Also spelt *dysboulia* .

dyscalculia *n.* Impairment in ability to do arithmetic. See also [SPECIFIC DISORDER OF ARITHMETIC SKILLS](#), [SPECIFIC LEARNING DISORDER](#). Compare [ACALCULIA](#). [From Greek *dys-* bad or abnormal + Latin *calcularē* to count, from *calculus* a stone, diminutive of *calx* limestone + *-ia* indicating a condition or quality]

dyschiria *n.* Difficulty in distinguishing left from right. [From Greek *dys-* bad or abnormal + *cheir* a hand + *-ia* indicating a condition or quality]

dyschromatopsia *n.* Any acquired loss of colour vision. See [COLOUR-BLINDNESS](#). See also [ACHROMATOPSIA](#), [PARACHROMATOPSIA](#). [From Greek *dys-* bad or abnormal + *chroma* colour + *ops* an eye + *-ia* indicating a condition or quality]

dysdiadochokinesia *n.* Impaired ability to perform rapidly alternating movements, such as rapid rhythmic tapping of the fingers. Also called *dysdiadochokinesis* . Compare [ADIADOCHOKINESIA](#). [From Greek *dys-* bad or abnormal + *diadochos* working in turn + *kinesis* movement + *-ia* indicating a condition or quality]

dysesthesia See [DYSAESTHESIA](#).

dysexecutive syndrome *n.* An impairment in ability to plan and organize purposive behaviour, caused by lesions in the **frontal lobes* of the brain.

dysfunction *n.* Abnormality or disturbance of function. **dysfunctional** *adj.* [From Greek *dys-* bad or abnormal + Latin *functio* to perform + *-ion* indicating an action, process, or state]

dysgenic *adj.* Liable to lead to a degeneration or diminution in the quality or fitness of a group of interbreeding organisms. Compare [EUGENIC](#). [From

Greek *dys-* bad or abnormal + *genein* to produce + *-ikos* of, relating to, or resembling]

dysgeusia *n.* Impaired or abnormal sense of taste. See [AGEUSIA](#), [CACOGEUSIA](#), [HYPERGEUSIA](#), [HYPOGEUSIA](#), [PARAGEUSIA](#), [TASTE BLINDNESS](#). [From Greek *dys-* bad or abnormal + *geusis* taste + *-ia* indicating a condition or quality]

dysgraphia *n.* Inability to write correctly, resulting from a neurological or other disorder. See also [AGRAPHIA](#). [From Greek *dys-* bad or abnormal + *graphein* to write + *-ia* indicating a condition or quality]

dyskinesia *n.* Involuntary repetitive bodily movements. See also [TARDIVE DYSKINESIA](#). **dyskinetic** *adj.* [From Greek *dys-* bad or abnormal + *kinesis* movement + *-ia* indicating a condition or quality]

dyskinesia, tardive See [TARDIVE DYSKINESIA](#).

dyslalia *n.* Defective speech, characteristic of people with [*aphasia](#). [From Greek *dys-* bad or abnormal + *lalia* speech]

dyslexia *n.* Impairment in ability to read, not resulting from low [*intelligence](#). It was first described in 1877 by the German physician Adolf Kussmaul (1822–1902), who coined the term *word blindness* to refer to it. The first detailed case report was published by the Irish-born general practitioner William Pringle Morgan (1861–1934) in the *British Medical Journal* in 1896, where he called it *congenital word blindness*. See also [ACQUIRED DYSLEXIA](#), [ALEXIA](#), [ATTENTIONAL DYSLEXIA](#), [CATALEXIA](#), [CENTRAL DYSLEXIAS](#), [COGNITIVE NEUROPSYCHOLOGY](#), [DEEP DYSLEXIA](#), [DEVELOPMENTAL DYSLEXIA](#), [NEGLECT DYSLEXIA](#), [PHONOLOGICAL DYSLEXIA](#), [READING DISORDER](#), [SPECIFIC LEARNING DISORDER](#), [SPELLING DYSLEXIA](#), [STREPHOSYMBOLIA](#), [SURFACE DYSLEXIA](#), [VISUAL WORD-FORM DYSLEXIA](#). Also called *alexia*, *hypolexia*, and *word blindness*. Compare [HYPERLEXIA](#). **dyslexic** *adj.* [First used in its German form *Dyslexie* in 1883 by the German ophthalmologist Rudolf Berlin (1833–97) in the journal *Medicinisches Correspondenz-Blatt des Württembergischen Ärztlichen Vereins*, from Greek *dys-* bad or abnormal + *lexis* a word + *-ia* indicating a condition or quality]

*****ebook converter DEMO Watermarks*****

dysmelodia *n.* Impaired ability to recognize or reproduce tunes. Also called *dysmusia* . Compare [AMUSIA](#), [ASONIA](#). [From Greek *dys-* bad or abnormal + *meloidia* a tune]

dysmenorrhoea *n.* Painful or difficult menstruation. US *dysmenorrhea*. [From Greek *dys-* bad or abnormal + *men* a month + *rhoia* a flow]

dysmetria *n.* Impaired ability to judge distances associated with body movements, typically underestimating or overestimating the amount of muscular effort required to make a voluntary movement, usually caused by a lesion in the [*cerebellum](#). [From Greek *dys-* bad or abnormal + *metron* a measure + *-ia* indicating a condition or quality]

dysmnesia *n.* A memory disorder characterized by an inability to learn simple new skills in spite of an ability to perform complex skills learnt before the onset of the disorder. Also called *dysmnesic syndrome* . [From Greek *dys-* bad or abnormal + *mnasthai* to remember + *-ia* indicating a condition or quality]

dysmorphophobia *n.* 1. A pathological fear of a personal physical defect or deformity. 2. Another name for [*body dysmorphic disorder](#). [From Greek *dys-* bad or abnormal + *morphe* form + *phobos* fear + *-ia* indicating a condition or quality]

dysmusia *n.* Impaired ability to recognize or reproduce tunes. Also called *dysmelodia* . Compare [AMUSIA](#), [ASONIA](#). [From Greek *dys-* bad or abnormal + *mousika* (*teckne*) musical art, from *mousa* a muse]

dysorexia *n.* Any abnormality or disorder of appetite. [From Greek *dys-* bad or abnormal + *orexis* appetite + *-ia* indicating a condition or quality]

dysosmia *n.* Impaired or abnormal sense of smell. See [ANOSMIA](#), [CACOSMIA](#), [HYPEROSMIA](#), [HYPOSMIA](#), [PAROSMIA](#), [SPECIFIC ANOSMIA](#). [From Greek *dys-* bad or abnormal + *osme* a smell + *-ia* indicating a condition or quality]

dyspareunia *n.* A [*sexual dysfunction](#) in both women and men,

characterized by recurrent or persistent genital pain associated with sexual intercourse, causing significant distress or problems of interpersonal interaction. It is not diagnosed as such if it is attributable to a drug or a **general medical condition*. Compare *VAGINISMUS*. [From Greek *dys-* bad or abnormal + *para* beside + *eune* a bed + *-ia* indicating a condition or quality]

dysphagia *n.* Difficulty in swallowing. Compare *ANOREXIA*, *APHAGIA*. [From Greek *dys-* bad or abnormal + *phagein* to consume + *-ia* indicating a condition or quality]

dysphasia *n.* Another name for **aphasia*. [From Greek *dys-* bad or abnormal + *pheme* speech + *-ia* indicating a condition or quality]

dysphemia *n.* Impaired ability to speak; Broca's aphasia (see *APHASIA*). [From Greek *dys-* bad or abnormal + *pheme* speech + *-ia* indicating a condition or quality]

dysphemism *n.* A usage of language in which an unpleasant or derogatory word or expression is substituted for a neutral one, as in *jackals and hyenas of the press for journalists*, or *self-abuse for masturbation*. Compare *EUPHEMISM*. [From Greek *dys-* ill, bad, or abnormal + *pheme* speech, from *phanai* to speak]

dysphonia *n.* Inability to speak normally, resulting from impairment of voice quality, such as hoarseness or strain of the vocal cords. Compare *APHASIA*. [From Greek *dys-* bad or abnormal + *phone* voice or sound + *-ia* indicating a condition or quality]

dysphoria *n.* A feeling of uneasiness, discomfort, anxiety, or anguish. [From Greek *dys-* bad or abnormal + *pherein* to bear + *-ia* indicating a condition or quality]

dysphoric mood *n.* Any disagreeable or unpleasant **mood* (1), such as sadness or anxiety.

dysplastic body type *n.* A misshapen and ugly **somatotype* believed

by the German psychiatrist Ernst Kretschmer (1888–1964) and his followers to be prone to **schizophrenia*. See also [KRETSCHMER CONSTITUTIONAL TYPE](#). Compare [ASTHENIC BODY TYPE](#), [ATHLETIC BODY TYPE](#), [PYKNIC BODY TYPE](#). [From Greek *dys-* bad or abnormal + *plastikos* mouldable, from *plassein* to form + *-itikos* resembling or marked by]

dyspnoea *n.* Difficult or abnormal breathing. US *dyspnea*. [From Greek *dys-* bad or abnormal + *pnoe* breathing]

dyspraxia *n.* An impairment in ability to perform deliberate movements, not caused by any defect in sensory or motor functions. See also [DEVELOPMENTAL COORDINATION DISORDER](#). Compare [APRAXIA](#). [From Greek *dys-* bad or abnormal, *praxis* a deed or action, from *prassein* to do + *-ia* indicating a condition or quality]

dysprosody *n.* A pathological deficit in the ability to generate appropriate **prosody* in speech. Also called *expressive dysprosody*. Compare [APROSODIA](#). **dysprosodic** *adj.* [From Greek *dys-* bad or abnormal, *prosoidia* a song set to music, from *pros* towards, *oide* a song]

dyssocial personality See [DISSOCIAL PERSONALITY DISORDER](#).

dyssomnias *n.* Disorders of **sleep* with **insomnia* or **hypersomnia* as the major symptom, causing clinically significant distress or impairment in social, occupational, or other important areas of functioning. See [BREATHING-RELATED SLEEP DISORDERS](#), [CIRCADIAN RHYTHM SLEEP–WAKE DISORDERS](#), [DELAYED SLEEP-PHASE SYNDROME](#), [HYPERSONMIA](#), [INSOMNIA](#), [NARCOLEPSY](#), [PRIMARY HYPERSONMIA](#), [SLEEP APNOEA](#), [SLEEP–WAKE DISORDERS](#). Also called *disorders of initiating and maintaining sleep* ([DIMS](#)). See also [ACTIGRAPHY](#), [CATAPLEXY \(1\)](#). Compare [PARASOMNIAS](#), [PSEUDOINSOMNIA](#). [From Greek *dys-* bad or abnormal + Latin *somnus* sleep + *-ia* indicating a condition or quality]

dysstasia *n.* Impairment in ability to stand upright. [From Greek *dys-* bad or abnormal + *stasis* a standing + *-ia* indicating a condition or quality]

dyssymbiosis *n.* A pathological mother-child relationship in which the

child manipulates the mother with neurotic or psychotic mechanisms. [From Greek *dys-* bad or abnormal + *syn-* together + *bios* life + *-osis* indicating a process or state]

dyssynergia *n.* Impaired muscular coordination resulting from a **neurological* disorder. [From Greek *dys-* bad or abnormal + *synergia* cooperation, from *syn-* together + *ergein* to work + *-ia* indicating a condition or quality]

dystaxia *n.* Partial **ataxia*. [From Greek *dys-* bad or abnormal + *taxis* order + *-ia* indicating a condition or quality]

dysthymia *n.* 1. A mild but chronic depressive **mood* (1) state, not severe enough to lead to a diagnosis of **depression* or **dysthymic disorder*. In **DSM-5* it is included under **persistent depressive disorder*. 2. A term used by the German-born British psychologist Hans J(ürgen) Eysenck (1916–97) for people scoring high on measures of neuroticism and introversion and manifesting traits of **anxiety*, **depression*, and **compulsions*. [From Greek *dys-* bad or abnormal + *thymos* spirit + *-ia* indicating a condition or quality]

dysthymic disorder *n.* A form of **depression* (included in the **DSM-5* classification) with similar signs and symptoms to **major depressive disorder* or **persistent depressive disorder* but considered less severe and more chronic, with the **major depressive episodes* being less discrete and the depression less severe and more persistent than in major depressive disorder. Also called *depressive neurosis*, *minor depressive disorder*, or *neurotic depression*. See also ANTIDEPRESSANT, BORNA DISEASE VIRUS, COGNITIVE THERAPY, DYSTHYMIA, INOSITOL. [From Greek *dys-* bad or abnormal + *thymos* spirit + *-ikos* of, relating to, or resembling]

dystonia *n.* A neurological condition associated with **neuroleptic* (1) medication or damage to the **basal ganglia*, characterized by disordered muscle **tonus* and usually spasm of the muscles of the trunk, shoulders, and neck, causing unnatural body postures. See also YIPS. **dystonic** *adj.* [From Greek *dys-* bad or abnormal + *tonos* tension, from *teinein* to stretch + *-ia* indicating a condition or quality]

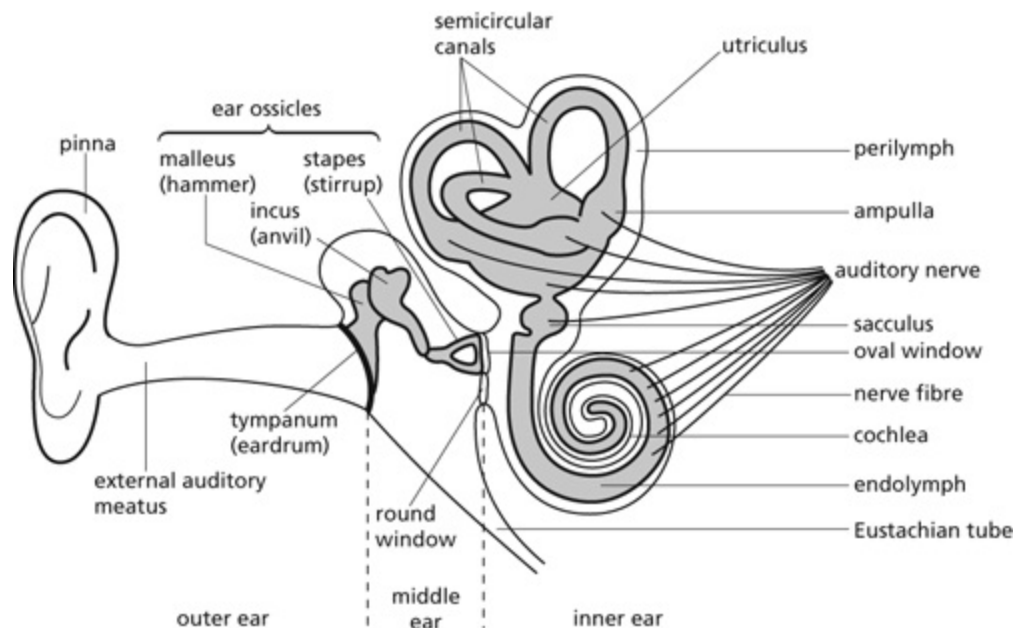
dystopia *n.* An imaginary world or place where everything is as bad as possible. [Coined by the English philosopher John Stuart Mill (1806–73) from Greek *dys-* bad or abnormal + English *utopia*]

dystrophy *n.* **1.** Any abnormality caused by deficient nutrition; a term often applied to muscle wasting. **2.** A shortened name for ***muscular dystrophy**. [From Greek *dys-* bad or abnormal + *trophe* nourishment]

dysuria *n.* Painful or difficult urination. [From Greek *dys-* bad or abnormal + *ouron* urine + *-ia* indicating a condition or quality]



ear *n.* The organ of hearing and equilibrium, which in vertebrates is usually divided into the sound-collecting ***outer ear** separated by a ***tympanic membrane** from the sound-transmitting ***middle ear**, separated in turn by a ***round window** and an ***oval window** from the ***inner ear** in which are situated the ***vestibular system** and its ***semicircular canals** containing sensory receptors that govern sensations of balance, orientation, and acceleration, and the ***cochlea** with its auditory ***organ of Corti** (see [illustration](#)).



Ear. Main structures of the mammalian ear.

eardrum *n.* A non-technical name for the ***tympanic membrane**.

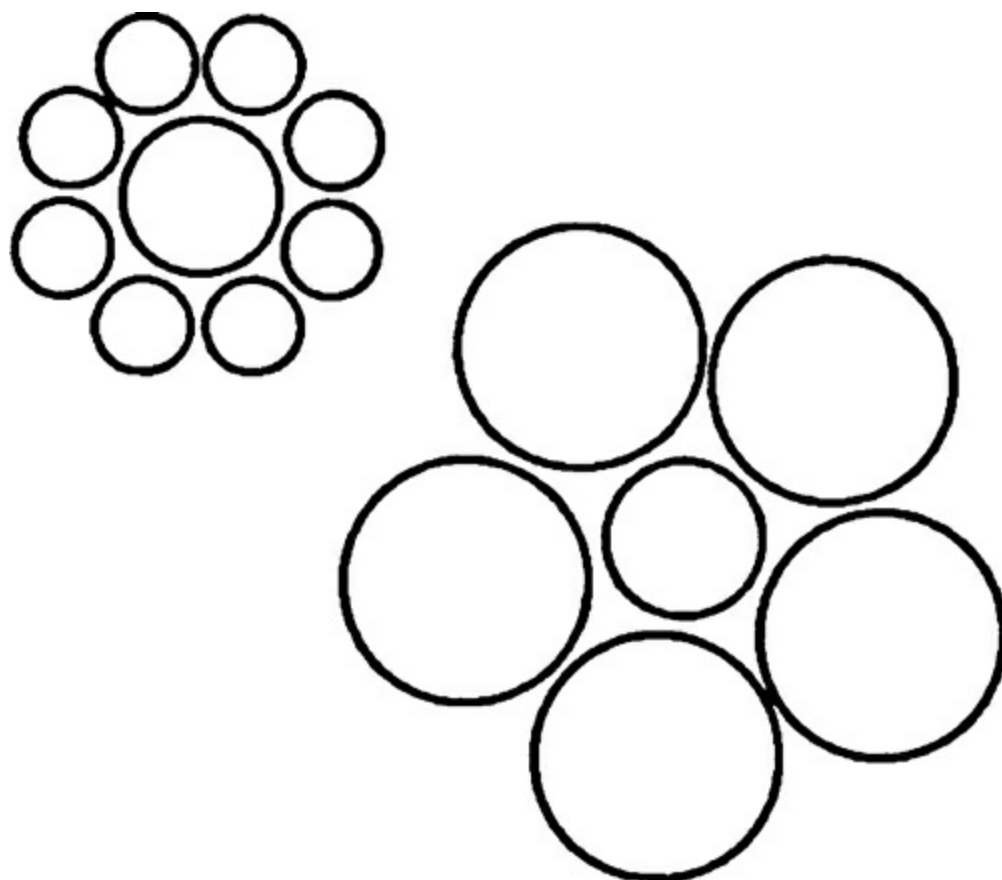
early oral phase *n.* The first of the two phases of the **oral stage*, according to a subdivision suggested in 1924 by the German psychoanalyst Karl Abraham (1877–1925) in his book *Versuch einer Entwicklungsgeschichte der Libido* (A Study of the Developmental History of the Libido). It is characterized by sucking, in contrast to the second **oral sadistic phase*, which is characterized by biting. Also called the *oral-incorporative phase*.

ear-minded *adj.* Having a marked preference or ability to think in sounds or to carry out mental operations by auditory images. **ear-mindedness** *n.*

eating disorders *n.* A class of **mental disorders* characterized by disturbances or problems associated with feeding or eating. See *ANOREXIA NERVOSA*, *AVOIDANT/RESTRICTIVE FOOD INTAKE DISORDER*, *BINGE-EATING DISORDER*, *BULIMIA NERVOSA*, *PICA*, *RUMINATION DISORDER*. See also *ACTIGRAPHY*.

Ebbinghaus curve *n.* A graph depicting the rate of forgetting of information. The amount of learned material—originally the number of **nonsense syllables*—remembered is plotted on the vertical axis against time on the horizontal axis. [Named after the German psychologist Hermann von Ebbinghaus (1850–1909) who introduced it in his book *Über das Gedächtnis* (On Memory) in 1885]

Ebbinghaus illusion *n.* A visual illusion in which a circle appears larger when surrounded by smaller circles than when surrounded by larger circles (see *illustration*). Also called the *Titchener circles* or *Titchener illusion*. [Named after the German psychologist Hermann von Ebbinghaus (1850–1909) who published a version of it in 1902, although the English psychologist Edward Bradford Titchener (1867–1927) had already discovered and published it in 1898]



Ebbinghaus illusion. The circles at the centre of each cluster are identical.

Ebonics *n.* Another name for **Black English Vernacular*. [A **blend* of *ebony*, from Latin *ebenus* ebony, from Greek *ebenos* ebony, + *phonics* the science of spoken sounds, from Greek *phonikos* of or relating to speech, from *phone* a voice or sound + *-ikos* of, relating to, or resembling]

eccentric *adj.* **1.** Positioned off centre.**2.** Of or relating to a retinal image cast by a visual stimulus off the centre of the **fovea*.**3.** Odd or unconventional. **eccentricity** *n.* [From Greek *ek* out of + *kentron* centre]

eccentric chessboard figure *n.* Another name for the **Münsterberg illusion*. [From German *verschrobene Schachbrettfigur*, Münsterberg's own name for it]

eccentric projection *n.* The **eccentric* (1) localization of a sensation

*****ebook converter DEMO Watermarks*****

at the position in space of the stimulus object rather than at the point where the sense organ is stimulated, so that the greenness of a leaf is perceived as being on the tree rather than on the retina. Visual sensations are projected eccentrically in most cases, but touch sensations are projected only with **haptic* touch when objects are held in the hand, smells have indefinite spatial location, and eccentric projection is not possible for tastes. Also called *extradition*.

echoic store *n.* One of the **sensory registers*, supposedly allowing an auditory image to persist for up to two seconds after its stimulus has ceased, making speech intelligible and enabling **sound localization* with the use of **binaural* time differences between the arrival of the sound at the two ears, although there is controversy regarding its existence. Also called *echoic memory*. See also *PRECATEGORICAL ACOUSTIC STORE*, *SENSORY MEMORY*. Compare *ICONIC STORE*. [From Greek *echo* a sound + *-ikos* of, relating to, or resembling]

echolalia *n.* A pathological parrot-like repetition of overheard words or speech fragments, often with a mocking intonation, symptomatic of some mental disorders, including **catatonic schizophrenia*, **latah*, **pibloktoq*, and some **tic disorders*. Compare *ECHOPRAXIA*, *PALILALIA*. [From Greek *echo* a sound + *lalia* speech]

echolocation *n.* A method of determining the position of objects by emitting sound or **ultrasound* and analysing the returning echoes. Also written *echo location*. See *BIOSONAR*, *FACIAL VISION*. **echolocate** *vb.*

echopraxia *n.* Automatic or uncontrollable imitation of other people's movements, **gestures* (1), or postures, symptomatic of some mental disorders, including **catatonic schizophrenia*, **latah*, and **pibloktoq*. Compare *ECHOLALIA*. [From Greek *echo* a sound + *praxis* a deed or action + *-ia* indicating a condition or quality]

eclipse scotoma See *SCOTOMA*.

ecmnesia *n.* Loss of memory for events of a particular period. [From Greek *ek* from + *mneme* memory + *-ia* indicating a condition or quality]

ecological criterion *n.* In the writings of the Hungarian-born US psychologist Egon Brunswik (1903–55) and his followers, an aspect of an **ecology* (2) that an organism cannot perceive directly but judges from a sensory **cue* (2) to the best of its ability, the correlation between the sensory cue and the ecological criterion being the **ecological validity* (2) of the cue. Also called a *distal criterion*. See also [BRUNSWIKIAN](#), [LENS MODEL](#), [PROBABILISTIC FUNCTIONALISM](#).

ecological fallacy *n.* The inference of individual characteristics from aggregate data. The difficulty that most people have in understanding the following story illustrates the fallacy. *A man was attacked by a mugger while he was walking home from a football match with his young son Peter. Peter left his father lying unconscious in the street and ran into a nearby police station to report the mugging. When Peter arrived at the police station, one of the officers on duty greeted him warmly, because Peter was that police officer's son.* This story sounds impossible or illogical to most people when they read it or hear it for the first time, because they tend to commit the ecological fallacy in interpreting it. In fact, there is nothing illogical about the story. See also [BRUNSWIKIAN](#), [ECOLOGY](#) (2), [LENS MODEL](#), [NOMOTHETIC](#), [PROBABILISTIC FUNCTIONALISM](#).

ecological niche *n.* The position or role of an organism in its environment, defined by such factors as its food, predators, and temperature tolerances.

ecological validity *n.* 1. The confidence with which the conclusions of an empirical investigation can be generalized to naturally occurring situations in which the phenomenon under investigation occurs. See also [VALIDITY](#), [VALIDITY GENERALIZATION](#). Compare [EXTERNAL VALIDITY](#), [INTERNAL VALIDITY](#). 2. In the writings of the Hungarian-born US psychologist Egon Brunswik (1903–55) and his followers, the correlation between a sensory **cue* (2) that an organism uses to judge an **ecological criterion* and the actual though imperceptible ecological criterion itself. See also [BRUNSWIKIAN](#), [ECOLOGY](#) (2), [LENS MODEL](#), [PROBABILISTIC FUNCTIONALISM](#).

ecology *n.* 1. The study of the relationship of living organisms to their natural environments. See also [ECOSYSTEM](#). 2. In the writings of the Hungarian-
*****ebook converter DEMO Watermarks*****

born US psychologist Egon Brunswik (1903–55) and his followers, the environmental context to which an organism must adapt functionally. See also [ECOLOGICAL CRITERION](#), [ECOLOGICAL FALLACY](#), [ECOLOGICAL VALIDITY \(2\)](#), [LENS MODEL](#). **ecological** *adj.* [From German *Ökologie*, from Greek *oikos* a house + *logos* word, discourse, or reason]

economic *adj.* Of or relating to the management of resources or the production, distribution, and consumption of goods and services. In **psychoanalysis*, of or relating to the circulation and distribution of **cathexis* or **instinctual energy* within the mental apparatus. See also [HYDRAULIC THEORY](#), [METAPSYCHOLOGY](#), [PRINCIPLE OF CONSTANCY](#), [QUOTA OF AFFECT](#). [From Greek *oikonomia* household management, from *oikos* a house + *nemein* to manage]

ecosystem *n.* A relatively self-contained biological community and its physical environment considered as a functioning unit. See also [ECOLOGY \(1\)](#). Compare [HABITAT](#). [From Greek *oikos* a house + English *system*]

e-counselling See [E-THERAPY](#).

écouteur *n.* A person who derives sexual gratification from eavesdropping on sexual encounters between others or listening to other people speaking about sex. Compare [VOYEUR](#). [From French *écouter* to listen]

ecphoric *adj.* Pertaining to a mental state, such as an emotion or a memory, evoked or revived by means of a stimulus. The term was introduced by the German biologist Richard Semon (1859–1918) in his treatise *De Mneme* (1912). See also [REDINTEGRATION](#). **ecphorically** *adv.* **ecphore** *vb.* [From German *ekphorieren* to revive, from Greek *ekphorein* carrying or bringing forth, producing, or disclosing, from *ek* out of + *-phoros* carrying, from *pherein* to bear + *-ikos* of or relating to]

ecstasy *n.* **1.** A state of exalted pleasure or euphoria. **2.** The common name for the central nervous system **stimulant* and **designer drug* 3,4-methylenedioxy-methamphetamine (MDMA), a **phenylalkylamine* originally synthesized by the pharmaceutical company Merck in 1912 and patented two years later as an appetite suppressant, then rediscovered as a street drug in the
*****ebook converter DEMO Watermarks*****

late 1970s. It is an ***amphetamine** analogue, sharing many of the characteristics of ***speed** (amphetamine sulphate) but also increasing ***serotonin** and ***dopamine** activity in the brain and inducing feelings of euphoria, empathy, and benevolence. It often causes hyperthermia (overheating) and extreme thirst, especially when accompanied by prolonged and energetic dancing. It sometimes has ***hallucinogenic** effects, though a typical 75–100 mg dosage is not normally hallucinogenic, and prolonged use often results in damage to ***serotonergic** nerve fibres. It is sometimes called the *hug drug* or *XTC* and has many branded versions and street names, including *Adam*, *apples*, *doves*, *E*, and *Einsteins*, and other constantly changing names depending on colour and appearance, such as *custards*, *diamonds*, *rhubarb*, and *strawberries*. See also **AMPHETAMINE-RELATED DISORDERS**, **EMPATHOGEN**, **ENTACTOGEN**, **SUBSTANCE-RELATED AND ADDICTIVE DISORDERS**. Compare **YABA**. [From Greek *ekstasis* trance, from *ex* out + *histanai* to cause to stand]

ectoderm *n.* The outer germ layer of a human or animal embryo, or the epidermis and nervous tissue that develops from it. Compare endoderm, mesoderm. **ectodermal** or **ectodermic** *adj.* [From Greek *ektos* outside + *derma* skin]

ectomorph *n.* A light and delicate physique or body build, believed by the US psychologist William H(erbert) Sheldon (1899–1977) and followers of his ***constitutional psychology** to be associated with such personality characteristics as alertness, intellectualism, and inhibition. Compare **ENDOMORPH**, **MESOMORPH**. **ectomorphic** *adj.* **ectomorphy** *n.* The state or condition of being an ectomorph. [From Greek *ektos* outside + *morphe* a form or shape]

ectopic *adj.* Abnormally displaced. [From Greek *ek* outside + *topos* a place + *-ikos* of, relating to, or resembling]

ectopic pregnancy *n.* The abnormal development of a fertilized ovum outside the uterus, usually within a Fallopian tube. Compare **ENTOPIC**.

ectoplasm *n.* 1. The outer layer of ***cytoplasm** that differs in many cells from the inner cytoplasm in being a clear gel. 2. In parapsychology, a

*****ebook converter DEMO Watermarks*****

substance supposedly exuded by a spirit medium during a trance. [From Greek *ek* outside + *topos* a place + *plasma* a form]

ectotherm *n.* Any animal that does not generate its own body heat but derives it externally, specifically a fish, amphibian, or reptile. *Compare* **ENDOTHERM**. **ectothermic** *adj.* Cold-blooded. [From Greek *ektos* outside + *therme* heat]

edge detector *n.* A cell in the **primary visual cortex* (Area V1) that responds maximally to a straight edge that is darker on one side than the other and has a particular position and orientation on the retina, the response being strongest when the stimulus is moving. *See also* **COMPLEX CELL**, **END-STOPPED RECEPTIVE FIELD**, **FEATURE DETECTOR**, **HYPERCOMPLEX CELL**, **SIMPLE CELL**. *Compare* **BAR DETECTOR**.

edge effect *n.* Another name for the **serial position effect*.

educable mentally retarded *adj.* An obsolescent term for an educational category equivalent to mild **intellectual disability*. **EMR** *abbrev.*

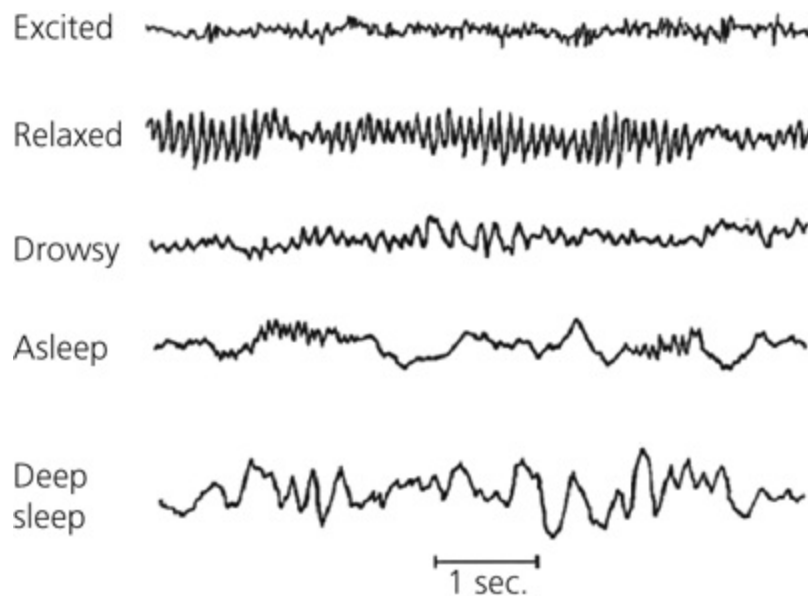
educationally subnormal *adj.* Of or pertaining to someone with a **learning disability*. **ESN** *abbrev.*

educational psychology *n.* A field of **applied psychology* related to the education and emotional and social well-being of children and young people. In the US, educational psychologists are trained in education rather than psychology, and they work mainly as counsellors in universities and colleges. In the UK they are trained in child development, the psychology of learning and teaching, and the psychological aspects of assessing and educating children with special needs; many are employed by Local Authority departments but some directly by schools, voluntary bodies, or parents. Similar work is called *school psychology* in the US. **EP** *abbrev.*

educational psychotherapy *n.* A psychotherapeutic approach in which children are encouraged to explore and resolve emotional difficulties that are holding back learning.

Edwards Personal Preference Schedule *n.* A personality inventory comprising 225 pairs of statements relating to likes and preferences (A: *I like to do things by myself.* B: *I like to help others do things*), the respondent being required to choose the preferred alternative in each case. The scale is **ipsative*, and it yields scores on 15 needs based on the theory of personality introduced by the US psychologist Henry Alexander Murray (1893–1988) in his book *Explorations in Personality* (1938), namely needs for achievement, deference, order, exhibition, autonomy, affiliation, intraception, succourance, dominance, abasement, nurturance, change, endurance, homosexuality, and aggression. **EPPS** *abbrev.* [Named after the US psychologist and statistician Alan L. Edwards (1914–94) who introduced it in 1953]

EEG *abbrev.* Electroencephalogram, a graphical representation of the gross electrical activity of the brain, recorded via electrodes attached to the scalp by an instrument called an *electroencephalograph*, first demonstrated in 1924 and examples published in 1929 by the German psychiatrist Hans Berger (1873–1941). EEGs manifest approximately periodic oscillating waves (see *illustration*) because of a form of **feedback* in which groups of excitatory neurons stimulate inhibitory neurons, which in turn stimulate excitatory neurons, creating negative-feedback circuits that cycle indefinitely. *See also* ALPHA BLOCKING, ALPHA WAVE, BETA WAVE, BRAIN IMAGING, DEFAULT MODE NETWORK, DELTA WAVE, DESYNCHRONIZED EEG, GAMMA WAVE, MU WAVE, SENSORIMOTOR RHYTHM, THETA WAVE. *Compare* ELECTROCORTICOGRAM, ENCEPHALOGRAM. [From Greek *elektron* amber (in which electricity was first observed) + *en* in + *kephale* the head + *gramme* a line]



EEG. Typical brain-wave patterns in various states of consciousness.

EEG spindle *n.* Another name for a **sleep spindle*.

effective dosage *n.* The minimum dosage of a drug that is required to produce a specified effect in an organism. **ED** *abbrev.*

effective dosage 50 *n.* Another name for the **median effective dosage*. See also *THERAPEUTIC INDEX*, *THERAPEUTIC RATIO*. Compare *LETHAL DOSAGE*, *TOXIC DOSAGE*. **ED-50** or **ED₅₀** *abbrev.*

effector *n.* A cell or organ that is specialized to perform a specific function in response to a signal from the nervous system, the most important examples being a **muscle*, **gland*, **cilium*, or **electric organ*.

effect size *n.* In statistics, the magnitude of an experimental outcome, represented by a numerical index, the most prominent of which is **Cohen's d* for the difference between two means. For the differences between *k* means of equal-sized samples compared by one-way **analysis of variance*, the usual effect size index *f* is the standard deviation of the *k* means divided by the pooled within-population standard deviation, and it is considered small if *f* = 0.10, medium if *f* = 0.25, and large if *f* = 0.40. For **correlations*, the value of

*****ebook converter DEMO Watermarks*****

the product–moment correlation coefficient r is its own index of effect size, and it is considered to be small if $r = 0.10$, medium if $r = 0.30$, and large if $r = 0.50$. For the ***chi-square test**, the effect size index w is calculated by dividing the chi-square value by the number of scores and taking the square root, and it is considered small if $w = 0.10$, medium if $w = 0.30$, and large if $w = 0.50$. An effect size index represents the magnitude of an effect, independent of sample size. Effect size measures are often reported alongside the results of ***significance tests** and are widely used in ***meta-analysis**. See also **COMMON LANGUAGE EFFECT SIZE STATISTIC**. **ES** abbrev.

efferent *adj.* Away from the central nervous system; of or relating to a ***motor neuron** or a ***motor nerve** that transmits impulses away from the central nervous system to a muscle, gland, or other ***effector**. Compare **AFFERENT**. [From Latin *eferre* to carry off, from *e* from + *ferre* to carry]

ego *n.* In ***psychoanalysis**, one of the three components of the human mental apparatus in the second formulation of the theory by Sigmund Freud (1856–1939), after he replaced the ***topography** of unconscious-preconscious-conscious with the structural model of id-ego-superego in 1920. It is a largely ***conscious (1)** part of the mind, governed mainly (though not exclusively) by the ***reality principle**, mediating between external reality, the ***id**, and the ***superego**. In his book *The Ego and the Id* (1923) Freud described its role as follows: ‘it owes service to three masters and is consequently menaced by three dangers: from the external world, from the libido of the id and from the severity of the super-ego’ (*Standard Edition*, XIX, pp. 12–66, at p. 56). The ego is not simply the conscious mind, as is often stated in popularized accounts of Freud's theory: in a neurosis, the ego generates ***defence mechanisms**, and this ego function is largely unconscious. Freud introduced the concept of the ego in his earliest writings, using the German word *Ich*, a noun that he coined from the ordinary everyday pronoun *ich* (I), and the translator James Strachey (1887–1967) rendered it as *ego*, adding a veneer of obscurity and technicality that the original German lacks. In colloquial usage, the word is used to denote a person's sense of self-esteem (*Getting the job boosted her ego*) or self-importance (*The managing director has a big ego*). See also **EGO-DYSTONIC**, **EGO IDEAL**, **EGO INSTINCT**, **EGO INTEREST**, **EGO INVOLVEMENT**, **EGO LIBIDO**, **EGO PSYCHOLOGY**, **EGO STRENGTH**, **EGO-SYNTONIC**, **MIRROR PHASE**, **PLEASURE-EGO**, **REALITY-EGO**, **REGRESSION IN THE SERVICE OF THE**

EGO, SPLITTING OF THE EGO. [From Latin *ego* I]

ego-alien *adj.* A synonym for ***ego-dystonic**.

egocentre *n.* A point in the body where sensations from a particular ***sensory modality** are perceived or felt to converge. US *egocenter*. See AUDITORY EGOCENTRE, TACTILE EGOCENTRE, VISUAL EGOCENTRE. [From Latin *ego* I + *centrum* the centre]

egocentric *adj.* Self-centred. See also EGOCENTRISM. Compare EGOMANIA. [From Latin *ego* I + *centrum* the centre + *-icus* of, relating to, or resembling]

egocentric localization *n.* Awareness of the spatial positions of objects in the immediate environment relative to one's body.

egocentrism *n.* Self-centredness, a term given a technical meaning in 1926 by the Swiss psychologist Jean Piaget (1896–1980) to denote a cognitive state in which a child in the ***pre-operational stage** of development comprehends the world only from its own point of view and is unaware that other people's points of view differ from its own. It implies a failure to differentiate subjective from objective aspects of experience, and it therefore imposes an unconscious personal bias on cognition. The classic demonstration of it is Piaget's three mountains task, in which a child sits in front of a table-top model of three mountains and is asked how the scene would look to a doll viewing it from a different angle; most children in the pre-operational stage (children about 5 years old, for example) consistently describe the doll's viewpoint as being the same as their own. See also AUTOMORPHIC PERCEPTION, FALSE-CONSENSUS EFFECT. **egocentric** *adj.* [From Latin *ego* I + *centrum* the middle + Greek *-ismos* indicating a state or condition]

ego defence mechanism *n.* Another name for a ***defence mechanism**. US *ego defense mechanism*.

ego-dystonic *adj.* Experienced as self-repugnant, alien, discordant, or inconsistent with the total personality, as ***obsessions** are generally experienced to be, and as ***homosexuality** may sometimes be. The term was

introduced by Sigmund Freud (1856–1939) in 1914 in an article ‘On Narcissism: An Introduction’ (*Standard Edition*, XIV, pp. 73–102, at p. 99), and he discussed it again in 1923 in an encyclopedia article (*Standard Edition*, XVIII, pp. 235–59, at p. 246). See also [EGO-DYSTONIC SEXUAL ORIENTATION](#). Compare [EGO-SYNTONIC](#). **ego dystonia** *n.* [From Latin *ego* I + Greek *dys-* bad or abnormal + *tonos* tone + *-ikos* of, relating to, or resembling]

ego-dystonic sexual orientation *n.* A controversial term for a sexual preference that is experienced as [*ego-dystonic](#). Hence *ego-dystonic bisexuality*, *ego-dystonic homosexuality*. In 1973 the American Psychiatric Association removed the mental disorder of [*homosexuality](#) from the *Diagnostic and Statistical Manual of Mental Disorders*, resulting in a furious reaction from dissident psychiatrists, who accused the leadership of the Association of capitulation to gay liberationists, and after an acrimonious debate and a referendum of the entire membership of the Association, the third edition (DSM-III) included homosexuality only under *ego-dystonic homosexuality*. Also called *sexual orientation disturbance* ([SOD](#)).

ego ideal *n.* In [*psychoanalysis](#), an internal notion of personal perfection serving as a model to which one strives to conform, derived from the fusion of [*narcissism](#) and early [*identification \(2\)](#) with parents. Sigmund Freud (1856–1939) introduced the concept in 1914 in an article ‘On Narcissism: An Introduction’, where its origins in narcissism were clearly stated: ‘What man projects before him as his ideal is the substitute for the lost narcissism of his childhood in which he was his own ideal’ (*Standard Edition*, XIV, pp. 73–102, at p. 94), and he used it in a central role to explain social phenomena in his book *Group Psychology and the Analysis of the Ego* (1921, *Standard Edition*, XVIII, pp. 69–143). In his later book *New Introductory Lectures on Psycho-Analysis* (1932/3), he described it as one of the three functions of the [*superego](#), the other two being self-observation and conscience (1933, *Standard Edition*, XXII, pp. 5–182, at p. 66).

ego identity *n.* In [*ego psychology](#), a term introduced by the German-born psychoanalyst Erik H. Erikson (1902–94) in 1946 to denote a psychological state that an individual achieves at the end of adolescence if earlier [*developmental crises](#) have been successfully negotiated. It involves a

*****ebook converter DEMO Watermarks*****

sense of personal identity (who one is) and of how one is perceived by others. An adolescent who fails to achieve ego identity is likely to experience despair, to lack a sense of comradeship with peer groups, and to have difficulty handling intimacy and forming loving relationships.

ego instinct *n.* In *psychoanalysis, a *self-preservation instinct that supplies energy to the *ego in a defensive conflict, distinguished by Sigmund Freud (1856–1939) in his early (1910–15) classification from an *object instinct, which is concerned with sexual or destructive relations to an external object. Freud introduced the concept in 1910 in an article on ‘The Psycho-Analytic View of Psychogenic Disturbance of Vision’ (*Standard Edition*, XI, pp. 211–18), the key passage being: ‘A quite specially important part is played by the undeniable opposition between the instincts which subserve sexuality, the attainment of sexual pleasure, and those other instincts which have as their aim the self-preservation of the individual—the ego-instincts’ (pp. 214–15). In his later classification from 1920 onwards, he recognized as ego instincts not merely sexual instincts subserved by *Eros (the life instincts), but also destructive instincts subserved by *Thanatos (the death instinct). *See also* EGO INTEREST.

ego integrity versus despair *n.* One of the crises in the developmental theory of the German-born *ego psychologist Erik H. Erikson (1902–94). *See* DEVELOPMENTAL CRISES.

ego interest *n.* In *psychoanalysis, *cathexis of the ego by *ego instincts, in contrast to *narcissism, which is cathexis of the ego by *sexual instincts. Sigmund Freud (1856–1939) drew this distinction in 1915/17 in ‘A Metapsychological Supplement to the Theory of Dreams’ (*Standard Edition*, XIV, pp. 217–36, at p. 223).

ego involvement *n.* The involvement of one's *self-esteem in an activity or task. **ego-involving** *adj.*

egoistic suicide *See* SUICIDE.

ego libido *n.* In *psychoanalysis, *libido involved in the *cathexis of oneself, in contradistinction to *object libido, which is libido involved in the
*****ebook converter DEMO Watermarks*****

cathexis of an external **instinctual object*. Sigmund Freud (1856–1939) discussed this distinction in 1914 in his article ‘On Narcissism: An Introduction’ (*Standard Edition*, XIV, pp. 73–102, at pp. 77–81), where he theorized that an energy balance exists, ego libido decreasing as object libido increases, and vice versa. Also called *narcissistic libido*. See also [NARCISSISM](#).

egomania *n.* Pathological love for or preoccupation with oneself. Another name for **narcissistic personality disorder*. Compare [EGOCENTRIC](#). **egomaniac** *n.* A person with egomania. **egomaniacal** *adj.* [From Latin *ego* I + *mania* madness]

ego psychology *n.* A school of **psychoanalysis* based on the analysis of the **ego*, founded in 1939 by the Austrian-born US psychoanalyst Heinz Hartmann (1894–1970), including the US-based German psychologist Ernst Kris (1901–57), the Hungarian-born US psychologist David Rapaport (1911–60), and the German-born (of Danish parentage) psychoanalyst Erik H. Erikson (1902–94). The essential theme is that the ego is capable of functioning autonomously and is not confined to internal conflicts with the **id* and **superego*. Hartmann argued that gratification is gained from the sheer exercise of one's functions, as when a child is delighted by learning to walk or to draw, and Rapaport identified novelty-seeking as a self-rewarding activity. Ego psychologists reject the classical psychoanalytic theory of motivation in terms of tension reduction only. See also [DEVELOPMENTAL CRISES](#), [EGO IDENTITY](#), [IDENTITY CRISIS](#), [PSYCHOSOCIAL MORATORIUM](#), [REGRESSION IN THE SERVICE OF THE EGO](#).

ego regression See [REGRESSION \(2\)](#).

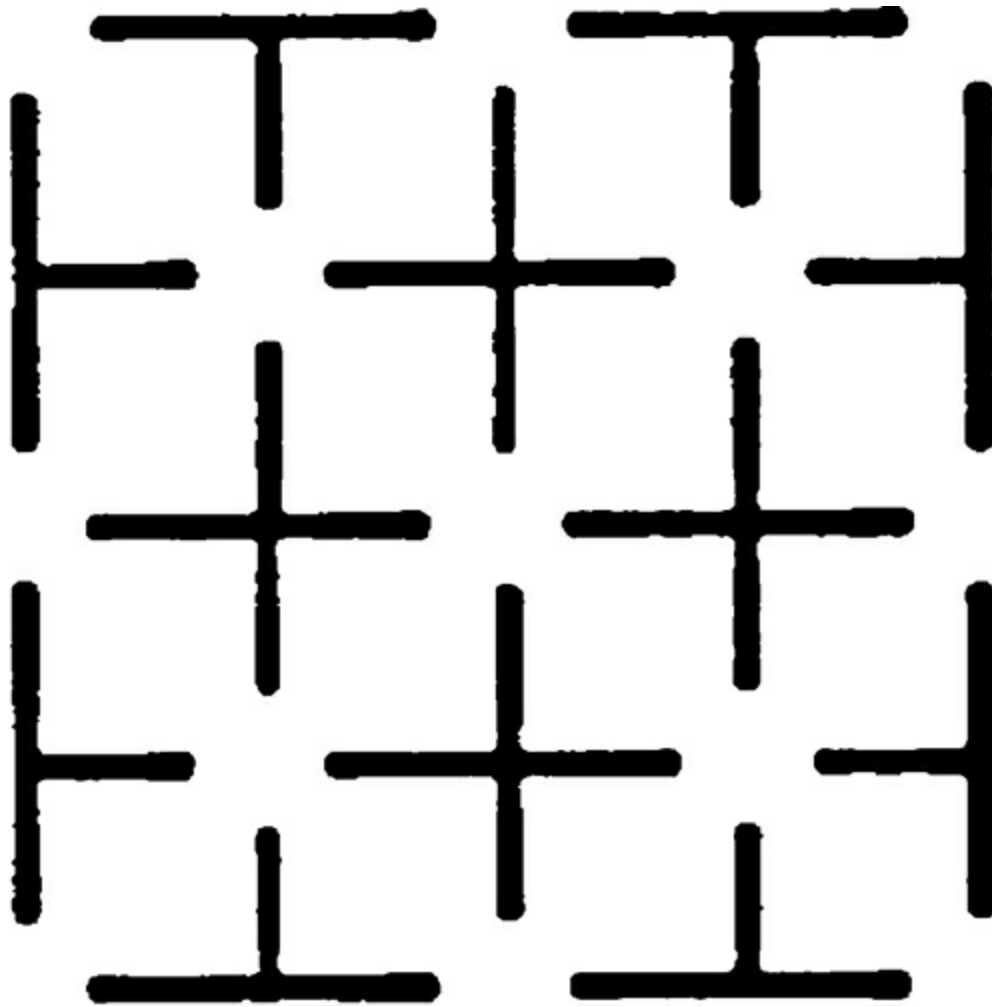
ego-splitting See [SPLITTING OF THE EGO](#).

ego strength *n.* In **psychoanalysis*, the degree to which the **ego* is capable of handling the demands of the **id* and the **superego* without disruption, a person with high ego strength being self-confident, strong-willed, and robust in response to frustration.

ego-syntonic *adj.* Experienced as consistent or harmonious with the total **personality*. The term was introduced by Sigmund Freud (1856–1939) in
*****ebook converter DEMO Watermarks*****

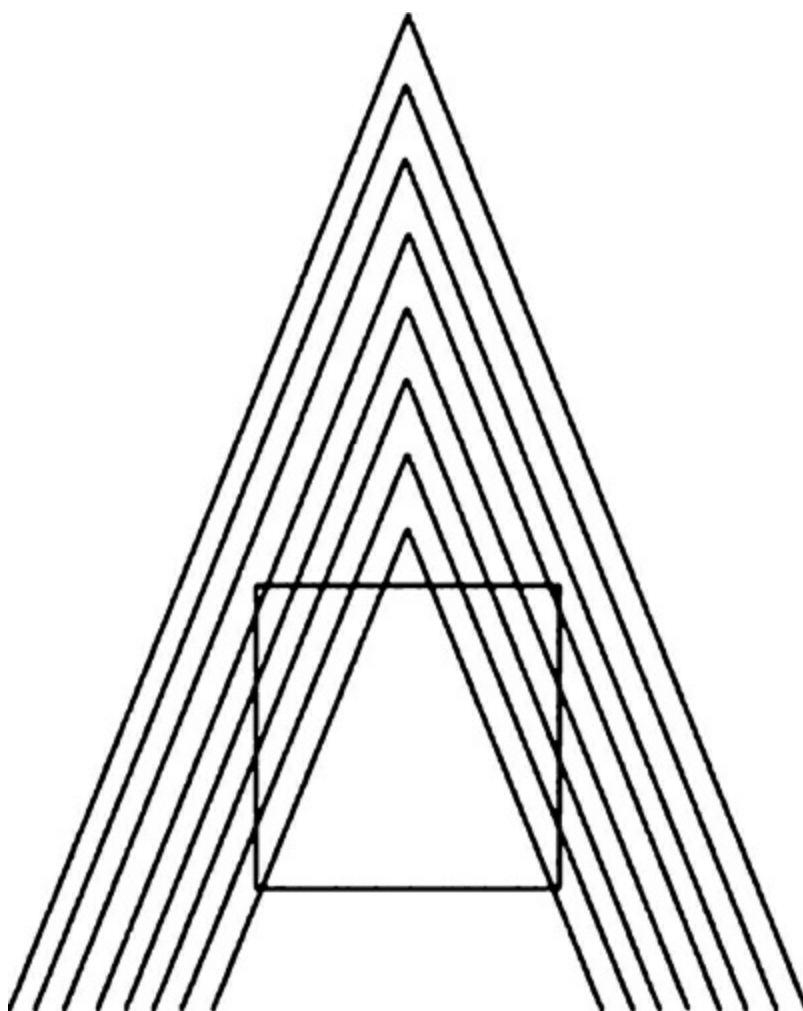
1914 in an article 'On Narcissism: An Introduction' (*Standard Edition*, XIV, pp. 73–102, at p. 99), and discussed again in 1923 in an encyclopedia article (*Standard Edition*, XVIII, pp. 235–59, at p. 246). Compare [EGO-DYSTONIC](#). **ego syntony** *n.* [From Latin *ego* I + Greek *syn-* together + *tonos* tone + *-ikos* of, relating to, or resembling]

Ehrenstein's brightness illusion *n.* A visual illusion in which a lattice of black lines with the regions around their intersections erased appears to have white discs with [*illusory contours](#) at the intersections, seemingly occluding the lines and appearing lighter than the background (see [illustration](#)). If the colours are reversed, then illusory dark discs appear at the erased intersections. Also (ambiguously) called the *Ehrenstein illusion*. Compare [EHRENSTEIN'S SQUARE ILLUSION](#), [HERMANN GRID](#). [Named after the German Gestalt psychologist Walter Ehrenstein (1899–1961) who discovered it in 1939/40 and published it in 1941]



Ehrenstein's brightness illusion. The white patches at the intersections of the lines are illusory.

Ehrenstein's square illusion *n.* A visual illusion in which a square superimposed on a fanlike pattern of diverging lines appears distorted (see [illustration](#)) into a trapezium (US trapezoid). It is closely related to the [*Ponzo illusion](#) and the [*Orbison illusion](#). Also (ambiguously) called the *Ehrenstein illusion*. Compare [EHRENSTEIN'S BRIGHTNESS ILLUSION](#). [Named after the German Gestalt psychologist Walter Ehrenstein (1899–1961) who first reported it in his doctoral dissertation in 1921 and published it in 1925]



Ehrenstein's square illusion. The rectangle is a perfect square.

eidetic image *n.* A mental image or memory that is extraordinarily clear and vivid, as though actually being perceived, a significant minority of children and a much smaller proportion of adults being capable of such imagery, according to some authorities. More specifically, it is a clear and vivid visual image representing a previously perceived stimulus, persisting for more than a few seconds and often for several or many minutes, appearing to be located in front of the eyes. It is distinguished from an ***afterimage**, which does not have these properties. [From Greek *eidetikos* belonging to a (visual) image, from *eidos* form + *-ikos* of, relating to, or resembling]

eidetiker *n.* A person who perceives **eidetic images*.

Eigengrau *n.* A nondescript grey fog that is perceived by a viewer experiencing **stabilized retinal images*. [From German *eigen* own or one's own + *grau* grey]

eigenvalue *n.* In statistics, a quantity often used in **multivariate statistics* to indicate the relative contribution of a **factor (2)* or **independent variable* to the **variance* in a **dependent variable*. [From German *eigen* own + English *value*]

Eigenwelt *n.* In **phenomenology* and **existentialism*, the personal world as it is experienced, including one's awareness of mind and body and the sense of who one is. *See also* *EXISTENTIAL ANALYSIS*, *EXISTENTIAL THERAPY*. *Compare* *MITWELT*, *UMWELT*. [From German *eigen* own or one's own + *Welt* world]

eight-month anxiety *n.* Another name for **stranger anxiety*.

Einfühlung *n.* Another name for **empathy*. [German]

Einsteins *n.* A street name for the stimulant designer drug **ecstasy (2)*.

Einstellung *n.* A temporary attitude, expectation, or state of readiness, especially in relation to a stimulus that is about to be experienced. Nowadays more often called a *set*. *See also* *AUFGABE*, *FUNCTIONAL FIXEDNESS*, *SET (2)*, *WATER-JAR PROBLEM*. [From German *Einstellung* adjustment or setting, from *ein* in + *Stellung* placement, from *stellen* to place]

ejaculation *n.* 1. The emission of semen by a male during **orgasm*. 2. A sudden utterance or exclamation. **ejaculate** *vb.* **ejaculatory** *adj.* [From Latin *ejaculatio* ejaculation, from *e* from + *iaculatus* thrown, from *iacere* to throw + *-ation* indicating a process or condition]

ejaculatio praecox *n.* Another name for **premature (early) ejaculation*. *See also* *MALE ORGASMIC DISORDER*. *Compare* *DELAYED EJACULATION*. [From

Latin *ejaculatio* ejaculation + *praecox* premature]

ejaculatio retardata *n.* Delayed ejaculation. See [EJACULATORY INCOMPETENCE](#). [From Latin *ejaculatio* ejaculation + *retardata* retarded or delayed]

ejaculatory incompetence *n.* Inability or delay in reaching orgasm and ejaculating. See [DELAYED EJACULATION](#), [IMPOTENCE \(2\)](#), [MALE ORGASMIC DISORDER](#).

elaborated code *n.* A concept introduced by the British sociologist Basil Bernstein (1924–2000) in an article in the *British Journal of Sociology* in 1958 to denote a comparatively complex and formal use of language, not restricted to immediate situations (context free), with a wide semantic and syntactic range, characteristic of middle-class speakers. Compare [RESTRICTED CODE](#).

elaboration *n.* The depth or level at which information is processed, or the extent to which a person processes information or arguments in relation to existing knowledge or beliefs. See also [ELABORATIVE REHEARSAL](#). **elaborate** *vb.*

elaboration likelihood model *n.* A model of [*persuasion](#) and [*attitude](#) change according to which recipients of a persuasive message who are highly motivated and able to process the content of the message with care tend to elaborate or think about issue-relevant arguments, and if they find the arguments in the message compelling, then they may show lasting [*attitude change](#), whereas recipients whose motivation and processing ability are low are likely to be influenced by peripheral factors such as the attractiveness of the source, and any attitude change achieved by this peripheral route will tend to be short-lived and poorly predictive of behaviour. The model was formulated in 1981 and revised in 1986 by the US psychologists Richard E(dward) Petty (born 1951) and John T(errance) Cacioppo (born 1951). See also [DUAL-PROCESS MODEL](#), [ELABORATION](#), [ELABORATIVE REHEARSAL](#). **ELM** *abbrev.*

elaboration, secondary *n.* Another name for [*secondary revision](#).

elaborative rehearsal *n.* Deep processing of material that needs to be remembered, involving formation of associations, organization (grouping of material into categories), use of mnemonic strategies, or other forms of cognitive processing. *See also* [ELABORATION](#), [ELABORATION LIKELIHOOD MODEL](#), [REHEARSE \(2\)](#), [VERBAL OVERSHADOWING](#). *Compare* [MAINTENANCE REHEARSAL](#).

elation effect *n.* Another name for [*behaviour contrast](#) in its positive form, when increased reward leads to increased response rate.

Elavil *n.* A proprietary name for the tricyclic antidepressant drug [*amitriptyline](#). [Trademark]

Elberfeld horses *n.* Trained horses in Germany in the early years of the 20th century that appeared to possess remarkable human-like intellectual abilities, including especially [*Clever Hans](#). [Named after the German city of Elberfeld, later merged into Wuppertal, where they were trained]

elder abuse *n.* Any form of physical, mental, sexual, or economic exploitation or cruelty by a carer towards an old person, causing significant harm to its victim. *See also* [SEXUAL ABUSE](#), [SPOUSE ABUSE](#).

elective mutism *n.* An alternative name for [*selective mutism](#).

Electra complex *n.* In [*analytical psychology](#), the female [*Oedipus complex](#). Carl Gustav Jung (1875–1961) introduced the term in an article in 1913 in the *Jahrbuch für psychoanalytische und psychopathologische Forschungen*, although Sigmund Freud (1856–1939) stated in 1920 that he did not consider the term useful (*Standard Edition*, XVIII, p. 155*n*), and in an article on ‘Female Sexuality’ in 1931, he went further in denying the existence of such a complex: ‘It is only in the male child that we find the fateful combination of love for one parent and simultaneous hatred for the other as a rival’ (*Standard Edition*, XXI, pp. 225–43, at p. 229). *See also* [COMPLEX \(2\)](#). [Named after Electra in Greek mythology who arranged for the murder of her mother Clytemnestra, who in turn had murdered Electra's father Agamemnon]

electrical brain stimulation *n.* Stimulation of specific areas of the brain with weak electrical currents in order to determine their functions. See also [ELECTRICAL SELF-STIMULATION OF THE BRAIN](#). **EBS** abbrev.

electrical self-stimulation of the brain *n.* Performance by an experimental animal of a response, such as pressing a lever, to deliver a weak electrical current to an area of the brain into which an electrode is permanently implanted. See [PLEASURE CENTRE](#). **ESSB** abbrev.

electrical synapse *n.* Another name for a [*gap junction](#).

electric organ *n.* A specialized area of modified muscle tissue in certain fishes such as the electric eel (*Electrophorus electricus*), the electric catfish (*Malapterurus electricus*), or the electric ray (*Tetranarce occidentalis*), such tissue being capable of discharging an electric shock to any animal that touches it. See also [ELECTRORECEPTOR](#).

electric receptor *n.* Another name for an [*electroreceptor](#).

electroconvulsive therapy *n.* A treatment for some forms of [*depression](#) and other mental disorders by administering an anaesthetic and a muscle relaxant drug and then passing an electric current through the brain to induce either [*convulsions](#) or [*coma](#). It was first used on a human patient in 1938 by the Italian neurologist Ugo Cerletti (1877–1963), who got the idea from watching pigs being anaesthetized by electroshock before being butchered. Its mode of action is controversial and poorly understood. Also called *electric shock therapy* ([EST](#)), *electroconvulsive shock* (*ECS*), *shock therapy*. **ECT** abbrev.

electrocorticogram *n.* A form of [*EEG](#) in which the electrodes are placed in direct contact with brain tissue. [From Greek *elektron* amber (in which electricity was first observed) + Latin *cortex* bark or outer layer + Greek *gramme* a line]

electrodermal response *n.* Another name for [*galvanic skin response](#) ([GSR](#)). **EDR** abbrev.

electroencephalogram See EEG.

electrokymograph *n.* An instrument for recording the flow of air from the mouth and nose during speech. [From *electro-* electric, from Greek *elektron* amber (in which electricity was first observed) + Greek *kyma* a wave + *graphein* to write]

electrolaryngograph *n.* An instrument for recording the vibration of the **vocal folds* during speech. [From *electro-* electric, from Greek *elektron* amber (in which electricity was first observed) + Greek *larynx* the larynx + *graphein* to write]

electrolyte *n.* A liquid or gel solution that contains free **ions* and can therefore conduct electricity, or a chemical compound such as an acid, base, or salt that releases free ions when it is dissolved. The main electrolytes required for human physiology are solutions of the salts of **calcium* for relaxation of skeletal muscles and contraction of cardiac muscle, **potassium* for contraction of skeletal muscles and relaxation of cardiac muscle, and **sodium* for maintaining fluid balance. **electrolysis** *n.* The process of passing an electrical current through an electrolyte. [From Greek *elektron* amber (in which electricity was first observed) + *lysis* loosening]

electromagnetic sense *n.* Another name for the **magnetic sense*.

electromyogram *n.* A recording of the electrical activity of a muscle with an instrument called an **electromyograph*. **EMG** *abbrev.* [From Greek *elektron* amber (in which electricity was first observed) + *mys, myos* a muscle + *gramme* a line]

electromyograph *n.* An instrument for measuring the electrical activity of muscles and producing an **electromyogram*. [From *electro-* electric, from Greek *elektron* amber (in which electricity was first observed) + Greek *mys, myos* a muscle + *graphein* to write]

electro-oculogram *n.* A recording of eye movements, even behind the closed lids of a person who is asleep, obtained from an instrument called an

electro-oculograph that measures electrical potentials in the ***extra-ocular muscles**. **EOG** *abbrev.* [From Greek *elektron* amber (in which electricity was first observed) + Latin *oculus* the eye + Greek *gramme* a line]

electropalatograph *n.* An instrument for recording the contacts between the tongue and palate during speech. [From *electro-* electric, from Greek *elektron* amber (in which electricity was first observed) + English *palate* + Greek *graphein* to write]

electrophoresis *n.* The migration of suspended particles, such as segments of ***DNA**, usually through a gel or colloid under the influence of an applied electrical field, the lightest particles tending to move furthest. Also called *gel electrophoresis*. *See also* **GENETIC FINGERPRINTING**, **RESTRICTION MAPPING**. [From Greek *elektron* amber (in which electricity was first observed) + *phorein* to bear]

electroreceptor *n.* A ***sensory receptor** possessed by some species of fish that is specialized for detecting electrical discharges. *See also* **ELECTRIC ORGAN**. *Compare* **MAGNETIC SENSE**. [From Greek *elektron* amber (in which electricity was first observed) + English *receptor*]

electroretinogram *n.* The summated electrical activity of large numbers of neurons in the ***retina**, recorded from the front of the eyes, analogous to the ***cochlear microphonic** or the ***EEG**. **ERG** *abbrev.* [From Greek *elektron* amber (in which electricity was first observed) + English *retina*, probably from Latin *rete* a net + Greek *gramme* a line]

electroshock therapy (EST) *n.* Another name for ***electroconvulsive therapy**.

element movement *n.* A form of apparent movement that occurs in the ***Ternus phenomenon** when a short interstimulus interval is used, one element appearing to hop back and forth across the others.

elevated mood *n.* A heightened mood characterized by feelings of euphoria, elation, and well-being. A person in such a mood may describe the

feeling as *high* or *ecstatic*.

elevation in the visual field *n.* The relative height of an object relative to the rest of the visual field, suggestive of distance because the horizon is generally higher than the foreground, hence one of the monocular cues of visual **depth perception*. Also called *height in the visual field*.

elimination by aspects *n.* A theory of **multi-attribute decision making*, introduced in 1972 by the Israeli-American psychologist Amos Tversky (1937–96), according to which a choice is reached through an iterated series of eliminations. At each iteration, the decision maker selects an **attribute* (aspect), the probability of selection being proportional to the attribute's perceived importance, and eliminates all alternatives lacking that attribute, then selects the next most important attribute and proceeds in the same way, and so on until all but one of the alternatives have been eliminated. It is a **stochastic* version of **lexicographic choice*, and although it is not guaranteed to produce an optimal choice it appears from experimental tests to be characteristic of human multi-attribute decision making. *See also* *BOUNDED RATIONALITY*. **EBA** *abbrev.*

elimination disorders *n.* An umbrella term introduced in **DSM-5* to cover **enuresis*, **encopresis* and related disorders.

elision *n.* The omission of a speech sound that would normally be present, especially in **allegro speech*, as when the second /t/ sound in the phrase *next time* is omitted, or when *terrific* is pronounced as a two-syllable rather than a three-syllable word. *Compare* *HAPLOLOGY*. [From Latin *elidere* to knock + *-ion* indicating an action, process, or state]

Ellen West *n.* The pseudonym of a young woman with **anorexia nervosa* who became the subject of the most famous case study of **existential analysis*, a long and disturbing account by the Swiss psychiatrist Ludwig Binswanger (1881–1966), published in the *Schweizer Archiv für Neurologie und Psychiatrie* in three instalments in 1944. Quotations from the patient's own diary and letters, in which she recorded her most intimate thoughts and feelings during her psychological decline, were used by Binswanger to draw the reader into her distressing mental state, which ended in tragic death.

*****ebook converter DEMO Watermarks*****

Ellsberg paradox *n.* A [*paradox](#) of choice that usually elicits responses inconsistent with [*expected utility theory](#). Two urns are filled with red and green balls. Urn A contains 50 red balls and 50 green balls randomly mixed; Urn B contains 100 red and green balls randomly mixed in an unknown ratio. You choose an urn and a colour, and you then draw a ball at random from your chosen urn. If the ball is your chosen colour, you win a prize. Most people strongly prefer to draw a ball of either colour from Urn A, although this violates the axioms of expected utility theory. According to expected utility theory, if a decision maker prefers to draw a red ball from Urn A than to draw a red ball from Urn B, then the (subjective) probability of drawing a red ball from Urn B must be less than 1/2; but that means that the (subjective) probability of drawing a green ball from Urn B must be greater than 1/2, and the decision maker should therefore prefer it to drawing a red ball from Urn A, which carries a 1/2 probability of winning. According to Ellsberg, human decision makers tend to maximize expected utility (or subjective expected utility) in judgements involving [*risk](#) (2), such as exists in Urn A, to use [*maximin](#) strategies (to maximize minimum utility) in judgements involving [*uncertainty](#) (2), as in Urn B, and to use compromise strategies when the degree of confidence in their probability estimates is intermediate between risk (high confidence) and uncertainty (low confidence), confidence being derived from the amount, type, reliability, and unanimity of information. This implies that expected utility theory, subjective expected utility theory, and the concept of [*revealed preferences](#) apply to situations of risk but not to situations involving uncertainty. Also called the *Ellsberg–Fellner paradox*, in recognition of an article by the US economist William Fellner (1905–83), drawing attention to the same phenomenon, published in 1961 in the same volume of the *Quarterly Journal of Economics* in which Ellsberg's article appeared. The phenomenon underlying the paradox is called [*ambiguity aversion](#). See also [MODIFIED ELLSBERG PARADOX](#). Compare [ALLAIS PARADOX](#), [COMMON RATIO EFFECT](#), [ST PETERSBURG PARADOX](#). [Named after the US political analyst Daniel Ellsberg (born 1931) who published it in 1961]

Elopram *n.* A proprietary name for the antidepressant drug [*citalopram](#). [Trademark]

elusion *n.* The act or process of eluding or evading. In [*psychoanalysis](#), a term first used by the Scottish psychiatrist Ronald D(avid) Laing (1927–89)

*****ebook converter DEMO Watermarks*****

in his book *The Self and Others* (1961) to denote a mechanism whereby people avoid confrontation with themselves and others by self-impersonation, that is, by deliberately playing out the roles that are assigned to them. Laing cited *Madame Bovary* (1857) by the French novelist Gustave Flaubert (1821–80) as an example of this mechanism.

emasculation *n.* Another name for ***castration**. [From Latin *emasculare* to castrate, from *e* from + *masculus* manly or virile, from *mas* male or masculine + *-ation* indicating a process or condition]

embedded-figures test *n.* A test designed by the German Gestalt psychologist Kurt Gottschaldt (1902–91), and first published in the journal *Psychologische Forschung* in 1926, in which the respondent tries to locate simple geometrical shapes that are hidden in more complex diagrams. It is most often used to measure ***field dependence–independence**, people who are field independent performing the task significantly better than those who are field dependent. Also called the *Gottschaldt figures test*. **EFT** abbrev.

emblem *n.* A visible object, symbol, or representation of something else, especially (in social psychology) a ***gesture (1)** that functions as a substitute for a verbal expression. Many non-verbal emblems, including waving the hand for *goodbye*, putting a forefinger to the lips for *silence*, or crossing two fingers for *good luck*, have wide cross-cultural consistency, whereas others are regionally specific: making a ring with the thumb and forefinger indicates *OK* in the US and northern Europe, whereas in southern Europe it conveys *nothing* or *zero*, and in Japan *money*; and the chin-flick emblem (tapping the back of the fingers against the underside of the chin) means *get lost* in France and northern Italy but is largely unknown in the UK and the US. *See also* **KINESICS**, **SUBMISSIVE BEHAVIOUR**. **emblematic** or **emblematical** *adj.* [From Latin *emblema* a raised decoration or mosaic, from Greek *emblema* something inserted, from *en* in + *ballein* to throw]

embrace reflex *n.* Another name for the ***Moro reflex**. [So called because of its resemblance to a gesture of embrace]

embryo *n.* An ***organism** in the earliest phase of its development after the first cleaving of the ***zygote**; in humans, up to about the end of the second

*****ebook converter DEMO Watermarks*****

month after conception, before the main internal organs have begun to take shape, thereby being distinguished from a **foetus*, or more loosely up to birth. *See also* *BLASTOCYST*, *MORULA*. **embryonic** *adj.* [From Greek *embryon* an embryo, from *bryein* to swell]

embryology *n.* The study of the formation and development of **embryos*.

emergence *n.* In **polygenic inheritance*, the property of being determined by several genes that combine configurally, rather than merely additively, characteristic of a trait with high **heritability* that tends to be shared by identical (monozygotic) twins but nevertheless does not run in families. The game of Scrabble provides a useful analogy: a child's mother and father may each be holding letters that form the word PICTURE, but if the child gets seven letters selected at random from both parents, they are unlikely to enable the child to spell PICTURE; and conversely, if neither parent holds all the letters for PICTURE, the child could nevertheless get those letters from the parents. A typical example of emergence is found in the trait of **subjective well-being*: the correlation between identical twins reared together or apart is approximately .50, but parent-child correlations and correlations between pairs of non-identical twins or siblings are all approximately zero. The term was coined by the US psychologist David T(horeson) Lykken (1928–2006) in a presidential address to the Society for Psychophysiological Research in 1981 and published in the journal *Psychophysiology* in the same year. **emergent** *adj.* Of or relating to emergence. [From *emergent* appearing suddenly, from Latin *emergere* to rise up, from *e* out of + *mergere* to plunge + Greek *genesis* birth or origin, from *genein* to produce]

emic *adj.* In linguistics, of or relating to speech characteristics that are considered in terms of their function within a particular language. For example, an emic approach to **intonation* focuses on those features of pitch pattern that signal differences in meaning, whereas an **etic* approach analyses pitch movements regardless of meaning. In sociology and social psychology, of or relating to an account of a social phenomenon made from the perspective or viewpoint of a participant in the social situation, in contrast to an **etic* account given by an outside observer such as a researcher. [Coined in 1967 by the US linguist Kenneth Lee Pike (1912–2000), from ***

*****ebook converter DEMO Watermarks*****

(phon)emic]

emitted behaviour *n.* In the theory of ***operant conditioning**, responses made spontaneously by an organism as a result of internal factors rather than external ***reinforcement**. *See also OPERANT.* US *emitted behavior*.

Emmert's law *n.* The apparent increase in the size of a visual ***afterimage** when viewed against a relatively nearby surface and then against a more distant surface. Formally, the law asserts that $h/H = d/D$, where h is the linear size (height, width, or diameter) of the object, H is the apparent linear size of its image, d is the object's distance from the observer, and D is the distance between the observer and the surface on which the afterimage is perceived. The relation is one of proportionality, a doubling of distance producing a doubling in apparent size, because it follows from the law that $H = hD/d$, and the explanation lies in the fact that the visual angle remains constant but the apparent distance increases, which would normally indicate an increase in size (*see VISUAL ANGLE*). The law can be demonstrated by staring at a brightly lit image with a steady gaze for a minute and then shifting one's gaze first to a blank sheet of paper and then to a distant wall: the afterimage will appear to grow much larger. *See also CORRIDOR ILLUSION.* [Named after the Swiss ophthalmologist and psychologist Emil Emmert (1844–1911) who formulated it in 1881, although it had been discovered more than two centuries earlier by the Italian physicist Benedetto Castelli (1578–1643)]

emmetropia *n.* The condition of perfect vision in which light rays from distant objects, which are approximately parallel, are focused on the retina without ***accommodation** (1). *Compare HYPEROPIA, MYOPIA.* **emmetrope** *n.* A person with emmetropia. **emmetropic** *adj.* [From Greek *emmetros* in due measure, from *en* in + *metron* a measure + *ops* an eye + *-ia* indicating a condition or quality]

emotion *n.* Any short-term evaluative, affective, intentional, psychological state, including happiness, sadness, disgust, and other inner feelings. *See also AFFECT, CANNON–BARD THEORY, COGNITIVE-APPRAISAL THEORY, IAPS, JAMES–LANGE THEORY, MIRROR NEURON, PERSONAL CONSTRUCT THEORY, PRIMARY EMOTIONS.* *Compare MOOD.* **emotional** *adj.* [From Latin *e-* away + *movere*, *motum* to move + *-ion* indicating an action, process, or state]

*****ebook converter DEMO Watermarks*****

emotional intelligence *n.* Ability to monitor one's own and other people's emotions, to discriminate between different emotions and label them appropriately, and to use emotional information to guide thinking and behaviour. The term appeared sporadically in the psychological literature during the 1970s and 1980s, but the concept was first formally defined in 1990 by the US psychologists Peter Salovey (born 1958) and John D. Mayer (born 1953), who later specified four groups of competencies that it encompasses: (a) the ability to perceive, appraise, and express emotions accurately; (b) the ability to access and evoke emotions when they facilitate cognition; (c) the ability to comprehend emotional messages and to make use of emotional information; and (d) the ability to regulate one's own emotions to promote growth and well-being. The following passage from *The Nicomachean Ethics* by the Greek philosopher Aristotle (384–322 BC) is often quoted as an illustration of emotional intelligence: 'Those who are not angry at the things they should be angry at are thought to be fools, and so are those who are not angry in the right way at the right time, or with the right persons; for such a man is thought not to feel things nor to be pained by them, and, since he does not get angry, he is thought unlikely to defend himself' (Book 4, Chapter 5, Bekker edition, p. 1126a). Popularized interpretations of emotional intelligence include various other factors such as interpersonal skills and adaptability. Also called *social intelligence*, especially when focusing on competencies belonging to (a) and (c). *See also* [EMOTIONAL QUOTIENT](#), [INTELLIGENCE](#), [MULTIPLE INTELLIGENCES](#), [PONS](#). **EI** *abbrev.*

emotional quotient *n.* An index of [*emotional intelligence](#) analogous to the [*IQ](#) index of conventional intelligence. A number of scales to measure the emotional quotient were developed following the publication in 1995 of a best-selling book *Emotional Intelligence* by the US psychologist and journalist Daniel Goleman (born 1946). Early measures of this variable were based on self-report measures of individuals' perceptions or appraisals of their own competencies and experiences in areas of functioning associated with emotional intelligence; development of more valid measures focusing on the key competencies began in the late 1990s. **EQ** *abbrev.*

empathogen *n.* Any drug such as [*ecstasy \(2\)](#) or [*GHB](#) that induces a feeling of [*empathy](#) and benevolence towards others. *See also* [ENTACTOGEN](#), [SOCIABILIZER](#). [From *empathy* + Greek *genein* to produce]

*****ebook converter DEMO Watermarks*****

empathy *n.* The capacity to understand and enter into another person's feelings and emotions or to experience something from the other person's point of view. The word was introduced into English in 1909 by the English psychologist Edward Bradford Titchener (1867–1927) as a translation of the German *Einfühlung*. See also [EMPATHOGEN](#), [MIRROR NEURON](#). [From Greek *empathēia* affection or passion, from *en-* in + *pathos* suffering]

empirical *adj.* Derived from observation or experiment rather than speculation or theory. See also [A POSTERIORI](#), [A PRIORI](#), [EMPIRICISM](#). [From Greek *en* in + *peira* a trial + *-ikos* of or relating to]

empirical induction *n.* Another name for [*induction \(1\)](#).

empiricism *n.* The doctrine associated especially with the English philosopher John Locke (1632–1704), the Irish philosopher Bishop George Berkeley (1685–1753), and the Scottish philosopher David Hume (1711–76), collectively known as British empiricists, that all elements of knowledge—or, in a less extreme version, all factual knowledge as distinct from logically deduced inferences—is derived from experience, adherents to this view often taking the experimental method as a prototype of knowledge acquisition in general. See also [A PRIORI](#), [A POSTERIORI](#), [HUME'S FORK](#), [INFERENCE](#), [LOGICAL EMPIRICISM](#), [LOGICAL POSITIVISM](#), [MOLYNEUX'S QUESTION](#), [POSITIVISM \(1\)](#), [TABULA RASA](#), [TRANSACTIONALISM](#). Compare [INNATE IDEA](#), [NATIVISM](#), [RATIONALISM \(1, 2\)](#).
empiricist *adj. n.*

empty-chair technique *n.* In [*Gestalt therapy](#), a technique in which the client switches between two chairs, acting out both sides of a conversation or argument with a spouse, relative, or other significant person. Also called *chairwork*.

enantiodromia *n.* The principle attributed to the Greek philosopher Heraclitus (?535–?475 BC) according to which everything eventually changes into its opposite. In [*analytical psychology](#), Carl Gustav Jung (1875–1961) described it as ‘the principle which governs all cycles of natural life, from the smallest to the greatest’ (*Collected Works*, 7, paragraph 112). [From Greek *enantios* opposite + *dromos* course + *-ia* indicating a condition or quality]

enantiomorph *n.* A structure that is a mirror image of another, being exactly the same shape as the other except for the reversal of left and right. Some pairs of molecules have this relational property. *See also* [HANDEDNESS \(2\)](#), [MENTAL ROTATION](#), [MIRROR REVERSAL PROBLEM](#). **enantiomorph***ic* *adj.* [From Greek *enantios* opposite + *morphe* a form or shape]

encéphale isolé *n.* A surgical preparation in which the central nervous system is severed between the bottom of the medulla oblongata and the top of the spinal cord. In cats operated on in this way, a normal sleep–wake cycle has been observed in their **EEGs*. *Compare* [CERVEAU ISOLÉ](#). [From French *encéphale* the brain + *isolé* isolated]

encephalic *adj.* Of or relating to the brain. [From Greek *enkephalos* brain, from *en* in + *kephale* the head + *-ikos* of, relating to, or resembling]

encephalitis *n.* Inflammation of the brain, causing signs and symptoms such as headache, neck pain, fever, nausea, vomiting, and sometimes neurological disturbances such as **convulsions*, **paralysis*, **asthenia*, or **coma*, sometimes leading to death. *Compare* [ENCEPHALOMYELITIS](#), [ENCEPHALOPATHY](#). [From Greek *enkephalos* brain, from *en* in + *kephale* head + *-itis* inflammation]

encephalitis lethargica *n.* A form of **encephalitis*, characterized by extreme **lethargy* and sleepiness, that emerged at the end of the First World War, developed into a worldwide epidemic in the 1920s, claiming the lives of more than a million people, and ended abruptly in 1928 without its cause ever having been determined, and that may have reappeared sporadically in subsequent decades. Also (colloquially) called *sleepy sickness*.

encephalization *n.* The increasing anatomical sophistication of the developing brain, beginning with the spinal cord and brainstem, followed by midbrain and forebrain regions, with the cerebral cortex, and particularly the frontal lobes, the last to show fully developed anatomical complexity. [From Greek *en* in + *kephale* the head + *-izein* to cause to become + *-ation* indicating a process or condition]

encephalization quotient *n.* An index of the comparative **intelligence* of animal species formulated by the Polish-born US psychologist Harry Jacob Jerison (born 1925): brain volume of the animal in question divided by brain volume of a standard comparison animal belonging to the same class, correcting for body size. If a cat is arbitrarily assigned a standard mammalian encephalization quotient of 1.0, then a rat scores 0.4, a chimpanzee 2.5, a dolphin 6.0, and a human 6.3. *Compare* [A/S RATIO](#), [PROGRESSION INDEX](#). **EQ** *abbrev.* [From Greek *en* in + *kephale* the head + Latin *quotiens* how many]

encephalogram *n.* An X-ray image of the brain, often taken after first replacing the **cerebrospinal fluid* with air or dye to show the **ventricles* clearly. Also called an *encephalograph*. *See also* [PNEUMOENCEPHALOGRAM](#). *Compare* [EEG](#). **encephalography** *n.* The production and interpretation of encephalograms. [From Greek *en* in + *kephale* the head + *gramme* a line]

encephalomalacia *n.* Softening of the brain caused by a vascular disorder associated with inadequate cerebral blood flow. [From Greek *en* in + *kephale* the head + *malakia* softness, from *malakos* soft + *-ia* indicating a condition or quality]

encephalomyelitis *n.* Inflammation of the brain and spinal cord, causing fever, headache, stiff neck, back pain, vomiting, and possibly **convulsions*, **coma*, and death. A person who recovers from this condition may be left with a **convulsive disorder* or impairment in intellectual ability. *Compare* [ENCEPHALITIS](#), [ENCEPHALOPATHY](#), [MYALGIC ENCEPHALOMYELITIS](#). [From Greek *enkephalos* brain, from *en* in + *kephale* head + *myelos* marrow + *-itis* inflammation]

encephalon *n.* A technical name for the brain. [From Greek *enkephalos* the brain, from *en* in + *kephale* the head]

encephalopathy *n.* Any pathological abnormality in the structure or function of the brain, especially a chronic and degenerative condition such as **BSE*, **Creutzfeldt–Jakob disease (CJD)*, **Gerstmann–Sträussler–Scheinker syndrome (GSS)*, **fatal familial insomnia (FFI)*, or **Wernicke's*

encephalopathy. Compare ENCEPHALITIS, ENCEPHALOMYELITIS. [From Greek *enkephalos* brain, from *en* in + *kephale* head + *pathos* suffering]

enclitic *n.* A monosyllabic *clitic that follows the word on which it depends. Compare PROCLITIC. [From Greek *enklitikos* something leaning, from *enklainein* to cause to lean + *-itikos* resembling or marked by]

enclosure grouping law *n.* Another name for the *common region grouping law of Gestalt psychology.

encoding *n.* Converting information into a different form or representation, especially (in psychology) the process whereby physical sensory information is transformed into a representation suitable for *storage in *memory and subsequent *retrieval. See also LEVELS OF PROCESSING. **encode** *vb.*

encoding specificity *n.* The effect on *recall from memory of the relation between *encoding operations at the time of learning and the *cues (3) available at the time of recall, the effectiveness of the encoding operation being dependent on the nature of the cues at recall, and the effectiveness of particular cues at recall being dependent on the nature of the earlier encoding operations. For example, research has shown that if a person reads the sentence *The man tuned the piano*, together with many other sentences, and later tries to recall the objects mentioned in all the sentences, then the cue *nice sound* facilitates the recall of *piano*, whereas the cue *something heavy* does not; but if the original sentence is *The man lifted the piano*, then *something heavy* is an effective cue but *nice sound* is not. References to this phenomenon can be traced to a book by the US psychologist Harry L. Hollingworth (1880–1956) published in 1928, where it was called the *principle of reinstatement of stimulating conditions*. Also called *encoding-retrieval interaction* or *transfer-appropriate processing*. See also STATE-DEPENDENT MEMORY.

encopresis *n.* In *DSM-5 an *elimination disorder of children at least 4 years old (or of equivalent *mental age), characterized by repeated defecation in inappropriate places, such as in clothing or on the floor, whether unintentionally or (less commonly) intentionally, the behaviour not being

*****ebook converter DEMO Watermarks*****

attributable to laxatives or other substances or to a ***general medical condition**. [From Greek *en* in + *kopros* excrement + *-esis* on the model of *enuresis*]

encounter group *n.* A form of ***experiential therapy** or ***group therapy** that aims to increase self-awareness and to encourage greater understanding of others through open and uninhibited expression of feelings along with verbal and physical confrontation and contact. *Compare* **T-GROUP**. [From Old French *encontrer* to meet face to face, from Latin *en* in + *contra* against]

endbrain *n.* Another name for the ***telencephalon**.

end bulb *n.* Another name for an ***axon's bouton**.

end effect *n.* Another name for the ***serial position effect**.

endemic *adj.* In ***epidemiology**, of or relating to a disorder commonly found in a particular place or population. *Compare* **EPIDEMIC (2)**, **PANDEMIC (2)**. [From Greek *endemos* native, from *en* in + *demos* the people + *-ikos* of, relating to, or resembling]

Endep *n.* A proprietary name for the tricyclic antidepressant drug ***amitriptyline**. [Trademark]

end foot *n.* Another name for a ***bouton**, or more generally a structure at the end of either an ***axon** or a ***dendrite**.

endocannabinoid *n.* A substance manufactured within the body, closely related to the active ***psychotropic** ingredient of ***cannabis**, functioning as an important regulator to control pain, to govern the flow of blood, and to influence the operation of the ***immune system** in ways that are not well understood. The existence of endocannabinoids, suspected for decades, was established in the late 1990s. [From Greek *endon* within + English *cannabis* + *-oid* indicating likeness or resemblance, from Greek *eidos* shape or form]

endocrine disorder *n.* Any disorder of the ***endocrine glands** or their

functions, including disorders of the [*HPA axis](#), which often have psychological effects.

endocrine gland *n.* Any of the ductless glands, including the [*adrenal glands](#), [*islets of Langerhans](#), [*ovaries](#), [*parathyroid glands](#), [*pineal gland](#), [*pituitary gland](#), [*testes](#), [*thymus gland](#), and [*thyroid glands](#), that secrete [*hormones](#) directly into the bloodstream, where they come into contact with specific receptors on target cells, allowing the endocrine system to function as an extensive signalling system within the body, alongside but independently of the nervous system. Secretions from the [*hypothalamus](#) control those of the pituitary gland, the master endocrine gland, and secretions from the pituitary in turn control those of the other endocrine glands. Also called a *ductless gland*. Compare [EXOCRINE GLAND](#). See also [NEUROENDOCRINE](#). [From Greek *endon* within + *krinein* to separate]

endocrine system *n.* The complete set of [*endocrine glands](#) and associated structures in an organism considered as a functional unit.

endocrinology *n.* The study of the [*endocrine glands](#) and their secretions.

endoderm *n.* The innermost germ layer of a human or animal [*embryo](#), from which the lining of the digestive and respiratory tracts are formed. Compare [ECTODERM](#), [MESODERM](#). [From Greek *endon* within + *derma* skin]

endogamy *n.* The cultural practice or custom of marriage between people within the same clan, tribe, or other group of related individuals; more generally, the fusion of [*gametes](#) from closely related parents. Compare [EXOGAMY](#). [From Greek *endon* within + *gameein* to marry]

endogenous depression *n.* A form of [*depression](#) that is not a reaction to an upsetting event or experience. Compare [REACTIVE DEPRESSION](#). [From Greek *endon* within + *genes* born]

endogenous opioid *n.* Any [*opiate](#) that is produced naturally in the brain and that binds to opiate receptors and blocks pain sensations. See [BETA-](#)

ENDORPHIN, DYNORPHIN, ENDORPHIN, ENKEPHALIN. [From Greek *endon* within + *genes* born]

endolymph *n.* A fluid contained within the **scala media* and the **semicircular canals* of the inner ears, functioning as an inertial mass resisting angular acceleration of the head, so that when the head is rotated, the **hair cells* that extend from the crista into the gelatinous membrane or cupula bend in the opposite direction, triggering nerve impulses. *See also* OTOLITH. *Compare* PERILYMPH. [From Greek *endon* within + Latin *lymph* water, influenced by Greek *nymphē* a nymph, alluding to the fact that it is a fluid within the membranous labyrinth, unlike perilymph]

endomorph *n.* A heavy and rounded physique or body build, believed by the US psychologist William H(erbert) Sheldon (1899–1977) and followers of his **constitutional psychology* to be associated with such personality characteristics as placidity, lack of anxiety, and pursuit of pleasure. *Compare* ECTOMORPH, MESOMORPH. **endomorph** *adj.* **endomorph** *n.* The state or condition of being an endomorph. [From Greek *endon* within + *morphe* a form or shape]

endoplasmic reticulum *n.* An extensive convoluted **membrane* inside cells, occurring in clumps called Nissl bodies, in which certain proteins are synthesized by **ribosomes* and are transported through or secreted from the cell. Areas of endoplasmic reticulum that are studded with protein-synthesizing ribosomes are called *rough endoplasmic reticulum* (*RER*), and areas that are not are called *smooth endoplasmic reticulum* (*SER*). *See also* ASPIRIN, MICROSOME, PROSTAGLANDIN. **ER** *abbrev.* [From Greek *endon* within + *plasma* a form + Latin *reticulum* a little net, diminutive of *rete* a net]

endopsychic *adj.* Of, relating to, or consisting of the contents of the mind. [From Greek *endon* within + *psyche* the mind + *-ikos* of, relating to, or resembling]

end organ *n.* The structure at the end of a peripheral neuron or nerve, such as a **bouton* at the end of a **motor nerve* or a **sensory receptor* at the end of a **sensory nerve*.

endorphin *n.* Any member of the group of **endogenous opioid* peptides that occur naturally in the brain and that bind to **opiate* receptors and block **pain* sensations, the other major families of brain opiates being **dynorphin* and **enkephalin*. The most important type of endorphin is **beta-endorphin* (β -endorphin). [From Greek *endon* within + *Morpheus* the god of sleep and dreams]

endothelium *n.* A single layer of cells that is derived from the embryonic **mesoderm* and that lines the internal cavities of the blood vessels and other fluid-filled internal cavities and glands of the body. *Compare* EPITHELIUM.
endothelia *pl.* **endothelial** *adj.* [From Greek *endon* within + *thele* a nipple]

endotherm *n.* Any animal that generates its own body heat, specifically a bird or a mammal. *Compare* ECTOTHERM. **endothermic** *adj.* Warm-blooded. [From Greek *endon* within + *therme* heat]

endowment effect *n.* The tendency to demand much more to give up an object than one is willing to pay to acquire it. The phenomenon was identified and named in 1980 by the US economist Richard H. Thaler (born 1945) and subsequently investigated experimentally by Thaler and others. In a typical experiment, participants were given either a lottery ticket or \$2.00. Some time later, each participant was offered the opportunity to trade the lottery ticket for money, or vice versa, but very few chose to switch, most preferring what they were endowed with. The phenomenon is closely related to **loss aversion*, and it shows that preferences must be understood in relation to status quo reference points, as in **prospect theory*. Also called *status quo bias*. *See also* COGNITIVE DISSONANCE.

end plate *n.* A shortened name for a **motor end plate*.

end-plate potential *n.* The **depolarization* of a **postsynaptic* cell membrane of a muscle fibre when it is stimulated at the **motor end plate* by a **motor neuron*, causing the muscle fibre to contract. *Compare* MINIATURE END-PLATE POTENTIAL. **EPP** *abbrev.*

end-stopped receptive field *n.* An area of the retina that when

stimulated by a bar or an edge oriented at a particular angle causes a neuron in the ***primary visual cortex** (Area V1) to discharge a nerve impulse, but that elicits a weaker response or no response from the neuron if the length of the stimulus exceeds a certain limit. A cortical neuron that responds in this way is called an *end-stopped neuron* or *end-stopped cell*. See also **HYPERCOMPLEX CELL**, **RECEPTIVE FIELD**.

engineering psychology *n.* Another name for ***ergonomics**.

engram *n.* A physical representation of a memory in the brain; a memory trace. Also called a *memory trace* or a *neurogram*. [From German *Engramm* an engram, from Greek *en* in + *gramme* a line]

enkephalin *n.* Either of two major ***endogenous opioid** peptides, met-enkephalin and leu-enkephalin, occurring naturally in the brain in small quantities and functioning as both ***hormones** and ***neurotransmitters**, binding to opiate receptors and blocking ***pain** sensations, the other major families of brain opiates being ***dynorphin** and ***endorphin**. [From Greek *en* in + *kephale* head + *-in(e)* indicating an organic compound]

entactogen *n.* An alternative name for an ***empathogen**, introduced by the US medicinal chemist and neuropharmacologist David E(arl) Nichols (born 1944) in an article in the *Journal of Psychoactive Drugs* in 1986 to avoid the implication of ***pathogenesis** and to capture the sense of something that produces ‘a touching within’. A typical entactogen is MDMA or ***ecstasy**. [From Greek *en-* in + Latin *tactus* a touching, from *tangere* to touch + Greek *genes* born]

entelechy *n.* According to the ancient Greek philosopher Plato (?427–347 BC), actuality as opposed to potential; according to the German rationalist philosopher and mathematician Gottfried Wilhelm von Leibniz (1646–1716), either the soul or a fundamental constituent element of reality called a ***monad**; according to the vitalist philosophers, a life force directing an organism towards a final end. [From Greek *en* in + *telos* an end + *echein* to have]

entopic *adj.* Situated normally. Compare **ECTOPIC**. [From Greek *endon* in +
*****ebook converter DEMO Watermarks*****]

topos a place + *-ikos* of, relating to, or resembling]

entorhinal cortex *n.* A thin strip of cortex in the **limbic system*, at the front of the parahippocampal gyrus, adjacent to and closely connected with the hippocampus, involved in integrating information from disparate sensory systems and in certain memory functions. *See also* *PAPEZ CIRCUIT*, *PERFORANT PATHWAY*. [From Greek *entos* within + *rhis*, *rhinos* the nose, alluding to the **rhinencephalon*]

entrainment *n.* The adjustment of a **biological clock* to synchronize with an external **Zeitgeber* such as the **diurnal* cycle of light and dark. **entrain** *vb.* [From French *entraînement* dragging along, from *entraîner* to drag along, from *en-* in + *trainer* to drag]

entropy *n.* A measure of the degree of disorder of a closed system, originally applied to a contained gas, expressed by $S = \sum p_i \log_2 p_i$ where p_i is the probability of a particular state of the system, the value of S in a closed system never decreasing over time according to the second law of **thermodynamics*. In work on **information theory*, the US mathematicians Norbert Wiener (1894–1964) and Claude E(lwood) Shannon (1916–2001) interpreted information as negative entropy, but this was deprecated by the British telecommunications engineer Colin Cherry (1914–79) and others. *See also* *NERNST HEAT THEOREM*. [Coined in 1865 by the German physicist and mathematician Rudolf Julius Clausius (1822–88) from Greek *en* in or into + *tropos* a turn, from *trepein* to turn, alluding to transformation of energy]

enuresis *n.* In **DSM-5*, an **elimination disorder* of children at least 5 years old (or of equivalent **mental age*), characterized by repeated urination into clothes or bedding, whether unintentional or (less commonly) intentional, occurring frequently or causing clinically significant distress or impairment of social, academic, or occupational functioning, the behaviour not being attributable to diuretics or other substances or to a **general medical condition*. *See also* *NOCTURIA*. [From Greek *en* in + *ouresis* urination]

environment *n.* The external surroundings within which an organism lives; or any external factors that affect the organism's development or

behaviour, as distinct from intrinsic **genetic* factors. **environmental** *adj.*
[From Old French *environner* to surround, from *environ* around]

environmentability *n.* The proportion of the **variance* in a **phenotypic trait* explained by, attributable to, or shared with environmental variance in a specified population at a particular time, and symbolized by e^2 . If environmental variance is V_E and total phenotypic variance is V_P , then $e^2 = V_E/V_P$. Also called *environmentality*. Compare *HERITABILITY*. [Formed from *environment* by analogy with *heritability*]

environmentality *n.* 1. Awareness of environmental issues and sense of responsibility to the natural world. 2. Another word for **environmentability*.

environmental psychology *n.* The study of psychological aspects and effects of the physical surroundings, including especially the built environment, in which people live and work.

envy, penis See *PENIS ENVY*.

enzyme *n.* Any of a large group of **protein* substances that are produced in living cells and that function as catalysts in biochemical reactions. An enzyme usually has an affinity for a particular chemical structure (the substrate), and the enzyme-substrate complex proceeds through the chemical reaction faster than the substrate alone. Chemical names ending in *-ase* are generally enzymes. See *ACETYLCHOLINESTERASE*, *ADENYLATE CYCLASE*, *ATPASE*, *CATECHOL-O-METHYL-TRANSFERASE*, *DNA LIGASE*, *DNA POLYMERASE*, *ESTERASE*, *LUCIFERASE*, *MONOAMINE OXIDASE*, *PEPSIN*, *PHOSPHODIESTERASE TYPE5*, *POLYMERASE CHAIN REACTION*, *RESTRICTION ENZYME*, *REVERSE TRANSCRIPTASE*, *RNA POLYMERASE*, *TYROSINE HYDROXYLASE*, *TRYPTOPHAN HYDROXYLASE*. [From Greek *en* in + *zyme* leaven]

enzyme induction *n.* The synthesis, usually by the liver, of an **enzyme* specifically adapted to metabolize a food or drug newly introduced to the body. It is one of the mechanisms of drug **tolerance* (3).

eonism *n.* The wearing of female clothing by a male. See *TRANSVESTISM*.

*****ebook converter DEMO Watermarks*****

[Named after Charles Eon de Beaumont (1728–1810), a celebrated French transvestite in the court of Catherine the Great]

epencephalon *n.* The part of the brain comprising the ***cerebellum** and ***pons**. Compare **METENCEPHALON**. [From Greek *epi* on + *enkephalos* the brain, from *en* in + *kephale* the head]

ependyma *n.* An epithelial ***membrane** that lines the ***ventricles** of the brain and the central canal of the spinal cord. **ependymal** *adj.* Of or relating to the ependyma. See also **EPENDYMAL CELL**. [From Greek *ependyma* an outer garment, from *epi* on + *endyma* a dress or garment, from *endyein* to put on]

ependymal cell *n.* Any of the ***neuroglial** cells of the ***ependyma** in the ventricles of the brain, with ***cilia** on their surfaces helping to propel cerebrospinal fluid through the ventricular system. Specialized ependymal cells form the ***choroid plexus**.

ephebophilia *n.* Sexual attraction to adolescents, sometimes classified as a ***paraphilia**. **ephebophiliac** *n.* One who practises ephebophilia. **ephebophilic** *adj.* [From Latin *ephebus* an adolescent, from Greek *ephebos* a young citizen from eighteen to twenty years of age, from *epi* above + *hebe* young manhood]

ephedrine *n.* A central nervous system ***stimulant drug** and ***sympathomimetic**, extracted mainly from the Chinese mahuang plant or manufactured synthetically, that acts indirectly by increasing the release of ***noradrenalin** (norepinephrine) from presynaptic neurons in the central nervous system and is used mainly for treating hay fever and asthma. It manifests ***tachyphylaxis**, a standard dosage producing a rapid and short-lived increase in blood pressure, but the same dosage repeated at 10-minute intervals resulting in smaller and smaller effects until, after several dosages, there is virtually no change in blood pressure. Also spelt *ephedrin*. Its street names include *Cloud nine* and *herbal ecstasy*. Formula: $\text{C}_6\text{H}_5\text{CHOHCH}(\text{CH}_3)\text{—NHCH}_3$. [From Latin *Ephedra sinica* the biological name of the mahuang plant from which it was originally extracted + *-ine* indicating a chemical compound]

epicene *adj.* **1.** Having characteristics of both **sexes* (1) or neither sex. Compare *ANDROGYNOUS*, *HERMAPHRODITE* (2). **2.** Of or relating to a noun that may refer to either **sex* (1) without changing its form, such as *flight attendant* as opposed to *air stewardess* or *firefighter* as opposed to *fireman*. See also *POLITICAL CORRECTNESS*. [From Greek *epikoinos* common (to both), from *epi* on + *koinos* common (to both)]

epicritic *adj.* Of or relating to certain **sensory nerve* fibres in the skin that are capable of fine discrimination between small degrees of variation. [From Greek *epikritikos* decisive, from *epi* on + *krinein* to separate or judge + *-itikos* resembling or marked by]

epidemic *n.* **1.** In **epidemiology*, an outbreak of a disorder afflicting large numbers of people in a particular place or population before moving to a different area. *adj.* **2.** Of, relating to, or taking the form of an epidemic (1). Compare *ENDEMIC*, *PANDEMIC* (2). [From Greek *epidemos* general, from *epi* among + *demos* the people + *-ikos* of, relating to, or resembling]

epidemiology *n.* The study of the **incidence*, **prevalence*, distribution, and control of disorders. [From Greek *epi* among + *demos* the people + *logos* word, discourse, or reason]

epidermis *n.* The thin outer **epithelial layer* of the **skin*, with a total surface area of approximately 1.67 square metres (18 square feet) in a human adult, containing some of the **touch receptors* and **pain* receptors. Compare *DERMIS*. **epidermal** or **epidermic** *adj.* [From Greek *epi* on + *derma* the skin]

epidural *adj.* On or outside the **dura mater*. [From Greek *epi* on + Latin **dura mater*]

epidural anaesthetic *n.* An injection of an anaesthetic into the space outside the dura mater at the bottom of the spinal cord, especially during childbirth.

epigenesis *n.* **1.** The theory, now universally accepted, that the development of an **embryo* consists of the gradual differentiation of the

fertilized ***ovum** and the piecemeal production and organization of structures, organs, and parts, in opposition to the theory of ***preformationism**, according to which an embryo is fully differentiated in the ovum or a spermatozoon and merely increases in size during development. **2.** More generally, changes in an organism that are due to environmental factors or to gene-environment interaction rather than to purely genetic factors. **3.** The appearance of specific characteristics at certain stages of development. [From Greek *epi* on + *genesis* birth]

epigenetics *n.* Changes in ***genes** other than changes in their ***DNA sequences**, including additions of methyl groups to the DNA backbone and changes caused by the activity of ***regulator genes** binding to ***gene operators**. Epigenetic changes caused by environmental factors are preserved when cells divide, and can sometimes be inherited by offspring. The best known example of epigenetics is the differentiation of a single fertilized cell after conception to form cells of different types, including ***neurons**, blood cells, skin cells, and muscle cells. *See also* **EPIGENOTYPE**, **GENETIC IMPRINTING**. **epigenetic** *adj.* **epigenome** *n.* The full epigenetic environment of a cell. **epigenomics** *n.* The study of epigenetic effects on cells. [Coined by the English geneticist Conrad Hal Waddington (1905–75) in an article entitled ‘The Epigenotype’ in the magazine *Endeavour* in 1941, from Greek *epi* on + *genesis* birth + *-itikos* resembling or marked by]

epigenotype *n.* The set of ***epigenetic** processes used by an organism to generate a ***phenotype** from a ***genotype**.

epilepsy *n.* A ***neurological** disorder, generally of unknown ***aetiology** though sometimes associated with brain damage, especially to the ***hippocampus** or ***temporal lobes**, characterized by recurrent ***convulsions**, sensory disturbances, ***absences**, or all of these, sometimes preceded by ***auras** (2), often associated with abnormal ***EEG** patterns during and also between attacks. *See also* **AMYGDALOHIPPOCAMPECTOMY**, **CLONIC CONVULSION**, **COMMISSUROTOMY**, **DRAVET SYNDROME**, **HEMISPHERECTOMY**, **IDIOPATHIC EPILEPSY**, **JACKSONIAN EPILEPSY**, **MAJOR EPILEPSY**, **MINOR EPILEPSY**, **PHOSPHENE**, **PHOTOSENSITIVE EPILEPSY**, **SCOTOMA**, **STATUS EPILEPTICUS**, **TEMPORAL LOBE EPILEPSY**, **TONIC-CLONIC**, **TONIC CONVULSION**. [From Greek *epi* on + *lepsis* a seizure, from *lambanein* to seize]

epinephrine *n.* Another name for ***adrenalin**, especially in US usage. **E** abbrev. [From Greek *epi* on + *nephros* a kidney + *-ine* indicating an organic compound]

epinosic gain *n.* Another name for ***secondary gain**. Also called *epinosic advantage*. [From Greek *epi* on + *nosos* a disorder]

epiphenomenalism *n.* An approach to the ***mind–body problem** that is a form of ***dualism** and one-way ***interactionism (1)**, assuming as it does that mental experiences are real but are merely trivial by-products or epiphenomena of one particular class of physical brain processes, real but incidental, like the smoke rising above a factory, so that physical processes can cause mental experiences but not vice versa. Compare **PSYCHOPHYSICAL PARALLELISM**. [From Greek *epi* on + *phainein* to show + *-ismos* indicating a state or condition]

epiphenomenon *n.* A by-product or any fortuitous or extraneous side-effect of a ***phenomenon**. [From Greek *epi* after + *phainomenon* a thing shown, from *phainein* to show]

epiphysis *n.* Short for epiphysis cerebri, literally a growth on the brain, the rarely used technical name of the ***pineal gland**. [From Greek *epi* on + *physis* growth, from *phyein* to produce, alluding to its appearance as a pimple on the base of the brain]

episcotister *n.* A device consisting of a rapidly rotating disc with opaque and transparent sectors of adjustable relative sizes, used for reducing the intensity of light by a known proportion and to determine ***critical flicker frequency** thresholds. [From Greek *episkotizein* to shadow or darken, from *epi* on + *skotizein* to darken, from *skotos* dark]

episodic amnesia *n.* Inability to recall certain (usually emotionally laden) experiences, with the rest of the memory functions intact. Also called *catathymic amnesia* or *lacunar amnesia*. Compare **EPISODIC MEMORY**.

episodic buffer *n.* A third ***buffer store** added to the ***working memory**

model by the English psychologist Alan (David) Baddeley (born 1934) in articles in the journals *Trends in Cognitive Sciences* (2000), *American Psychologist* (2001), and *Behavioral and Brain Sciences* (2001). It was intended to solve the problem of integrating items of information from the various subsystems of working memory and from long-term memory to enable their active maintenance and manipulation. It is assumed to be a limited-capacity buffer store capable of holding integrated scenes or episodes coded in multiple modalities, including especially visual and auditory codes. See also [EPISODIC MEMORY](#).

episodic memory *n.* A type of [*long-term memory](#) for personal experiences and events, such as being stung by a bee many years ago, getting married a few months ago, reading a particular book yesterday, or having an egg for breakfast a few minutes ago. Such knowledge is characteristically stored as information about specific experiences and events occurring at particular times and places, and it affords a sense of personal continuity and familiarity with the past. It accounts for only a small proportion of human memory, most of our memories having no basis in personal experience. The concept was introduced in 1972 by the Estonian-born Canadian psychologist Endel Tulving (born 1927), who distinguished it from [*semantic memory](#) and from [*procedural memory](#). Also called *autobiographical memory*. See also [AUTONOETIC](#), [EPISODIC BUFFER](#), [HYPERTHYMESIA](#), [MENTAL TIME TRAVEL](#). Compare [EPISODIC AMNESIA](#). [So called because it relates to episodes in one's life]

episodic paroxysmal anxiety *n.* Another name for [*panic disorder](#).

epistasis *n.* In genetics, the suppression or masking of a gene by another gene that is not its [*allele](#). See also [PENETRANCE](#). Compare [DOMINANCE \(GENETIC\)](#), [DOMINANT GENE](#). **epistatic** *adj.* [From Greek *epistasis* a stoppage, from *epi* on + *stasis* a standing]

epistemic *adj.* **1.** Of or relating to knowledge or [*epistemology](#). **2.** Of or relating to the use of a modal verb, such as *can*, *may*, *shall*, or *will* in a context in which the truth or falsity of a [*proposition \(1\)](#) is at issue, as in *Can she drive a car?* [From Greek *episteme* knowledge + *-ikos* of, relating to, or resembling]

epistemic reasoning *n.* *Reasoning about knowledge, especially reasoning that involves *modal logic. The *muddy children problem is a classic illustration of epistemic reasoning, and the *unexpected hanging is its most famous paradox.

epistemology *n.* The theory of *knowledge, especially the enquiry into what is to count as knowledge, the validity of knowledge, what distinguishes mere belief from knowledge, what kinds of things are knowable, and whether anything can be known for certain. *See also* GENETIC EPISTEMOLOGY, SOCIOLOGY OF KNOWLEDGE. [From Greek *episteme* knowledge + *logos* word, discourse, or reason]

epithalamus *n.* The part of the diencephalon immediately above the thalamus, comprising the *habenula, *pineal gland, and *posterior cerebral commissure. [From Greek *epi* on + English *thalamus*]

epithelium *n.* A sheet of tissue of tightly bound cells only a few cells thick that is derived from the embryonic *ectoderm and *endoderm and that covers the outer surface of the body, the *mucous membranes, and the lining of the gut, the retinas, and the glands. *See also* EPIDERMIS, NASAL EPITHELIUM. *Compare* ENDOTHELIUM. **epithelia** *pl.* **epithelial** *adj.* [From Greek *epi* on + *thele* a nipple]

epoche *n.* In *phenomenology, suspension of preconceptions, interpretations, and explanations as a precondition for the experience and description of uninterpreted sense experiences and ideas. Also called *bracketing*. [From Greek *epoche* stoppage or cessation, from *epechein* to hold back or pause, from *epi* on + *echein* to hold or have]

equal and unequal cases *See* METHOD OF EQUAL AND UNEQUAL CASES.

equal-appearing intervals *See* METHOD OF EQUAL-APPEARING INTERVALS, THURSTONE SCALE.

equality grouping law *n.* Another name for the *similarity grouping law of Gestalt psychology.

equal-loudness contour *n.* A plot determined by *loudness matching of tones, varying in frequency across the audible range, with the intensity levels in *decibel sound pressure level (dB SPL) that cause them to sound equally as loud to a listener as a standard comparison tone. For a standard comparison tone with a frequency of 1,000 hertz presented at an intensity of 60dB SPL, a tone with a frequency of 100 hertz may sound equally loud and therefore attain a loudness level of 60 *phons at about 80dB SPL, and so on. It was introduced in 1933 by the US acoustical scientist Harvey Fletcher (1884–1981) and the US engineer Wilden A. Munson (1902–82) and is also called a *Fletcher–Munson contour* or an *isophonic contour*.

equated forms *n.* Another name for *parallel forms.

equilibration *n.* In the theories of the Swiss psychologist Jean Piaget (1896–1980) and his followers, a process of *adaptation (3) to the environment that occurs mainly through *assimilation (2) and *accommodation (2) and that tends to maintain a state of cognitive equilibrium or balance when an individual acquires new information.

equilibrium hypothesis *n.* The proposition that participants in a social interaction who feel that the degree of intimacy conveyed by certain channels of *non-verbal communication is inappropriate to the level of intimacy of the relationship, will tend to compensate by reducing the intimacy conveyed through other channels. For example, when crowded situations such as underground trains force people to stand closer together than is ordinarily appropriate with strangers, they tend to reduce the level of intimacy by engaging in less *eye contact. The hypothesis was formulated by the English psychologist Michael Argyle (1925–2002) and his undergraduate student Janet Dean (now Janet Dean Fodor, born 1942) and first published in the journal *Sociometry* in 1965, together with experimental evidence that increased proximity tends to result in decreased eye contact.

equilibrium point (in game theory) *n.* Another name for a *Nash equilibrium. Often called simply an *equilibrium*.

equilibrium potential *n.* Another name for the *resting potential.

equiluminant *adj.* Another word for ***isoluminant**.

equipotentiality *n.* The principle formulated by the US physiological psychologist Karl Spencer Lashley (1890–1958) that different regions of the ***cerebral cortex** are equally involved in performing specific functions and have the capacity to take over functions from other regions that are damaged. This principle is now known to be true only within limits, there being a great deal of ***localization** of function in the brain. *See also* **MASS ACTION**.

equity theory *n.* A theory of social justice according to which people perceive a situation as fair when their own ratio of outcomes to inputs is the same as those of others with whom they compare themselves. Outcomes are the perceived receipts from a social interaction or exchange, including material benefits, social status, and intrinsic rewards, and inputs are the perceived contributions, including material contributions, seniority, education, skills, and effort. In terms of the theory, inequity is felt as uncomfortable even when it is in an individual's favour, and it tends to generate behaviour aimed at restoring equity, such as altering inputs or outcomes or cognitively distorting them, leaving the field, attempting to distort the other person's perceptions of inputs or outcomes, or changing the person used as a point of comparison. It was formulated by the US sociologist George Caspar Homans (1910–89) in his books *The Human Group* (1950) and *Social Behavior: Its Elementary Forms* (1961) and introduced into psychology in 1965 by the Belgian-born US psychologist J(ohn) Stacey Adams (born 1925). *See also* **COGNITIVE DISSONANCE**, **RELATIVE DEPRIVATION**.

equivalent-form reliability *n.* A measure of the ***reliability** of a test based on the correlation between ***equivalent forms** of a test. Also called *parallel-form reliability*.

equivalent forms *n.* In psychometrics, ***alternative forms** of a test that are similar in all important properties.

equivocal sign *n.* Another name for a ***soft sign**.

erectile disorder *n.* A *sexual dysfunction in *DSM-5 characterized by persistent or recurrent inability to attain or maintain an adequate erection of the penis until completion of sexual activity, causing significant distress or problems of interpersonal interaction, believed to affect between 13 per cent and 21 per cent of men aged 40–80 years on at least some occasions. It is not diagnosed if it is attributable to a drug or a *general medical condition. Also called *erectile dysfunction (ED)*, *erectile impotence*, or *impotence*. See also CYCLIC GMP, DE-REFLECTION, IMPOTENCE (2), VIAGRA. Compare MALE ORGASMIC DISORDER. **ED** abbrev.

erectile dysfunction See ERECTILE DISORDER, IMPOTENCE (2). **ED** abbrev.

erectile impotence See IMPOTENCE (2).

ergonomics *n.* A branch of *industrial/organizational psychology or *occupational psychology concerned with fitting jobs to people rather than people to jobs. Ergonomists design jobs, equipment, and work places to maximize performance and well-being and to minimize accidents, fatigue, boredom, and energy expenditure. Also (especially in the US) called *biotechnology*, *human factors psychology*, or *engineering psychology*. See also KNOBS-AND-DIALS PSYCHOLOGY, PERSONNEL PSYCHOLOGY. **ergonomic** *adj.* **ergonomist** *n.* One who practises ergonomics. [From Greek *ergon* work + *nomos* management, from *nemein* to manage]

ergot *n.* A fungus that grows on wheat or rye, or an *alkaloid drug derived from it that induces contractions of the womb in women and is a powerful vasoconstrictor, useful in the treatment of *migraine headaches and haemorrhage. [From French *ergot* a cock's spur, which the fungal projections on the ears of wheat or rye resemble in shape]

ergotism *n.* Poisoning resulting from eating grain affected by *ergot or from an overdose of ergot alkaloid drugs (often in medicines prescribed for migraine headaches), characterized by cerebrospinal symptoms, spasms, cramps, and dry gangrene caused by vasoconstriction. See also BROMOCRIPTINE.

Erhard Seminars Training See EST.

Eriksen flanker task See FLANKER COMPATIBILITY EFFECT.

Eriksonian *adj.* Of or relating to the theories of the German-born psychoanalyst of Danish extraction Erik H. Erikson (1902–94), or to the work of the US physician Milton H. Erikson (1901–80), who developed a form of therapy based on hypnosis. See DEVELOPMENTAL CRISES, EGO IDENTITY, EGO PSYCHOLOGY, IDENTITY CRISIS.

Erklärung See VERSTEHEN.

erogenous zone *n.* Any area of the body that is capable of causing or increasing sexual arousal when stimulated. See also EROTOGENIC ZONE. [From Greek *eros* love or desire + *genes* born]

Eros *n.* In *psychoanalysis, the life instincts, usually including both the *sexual instinct and the *ego instinct (the *self-preservation instinct), the aim of which are to create and maintain the integrity of things. Sigmund Freud (1856–1939) was not entirely consistent in his usage of the term: in his book *Beyond the Pleasure Principle* (1920), he used it as a synonym for *libido: ‘the libido of our sexual instincts would coincide with the Eros of the poets and philosophers’ (*Standard Edition*, XVIII, p. 50), but in other publications he included self-preservation within its scope. In his last discussion of this issue in his book *An Outline of Psycho-Analysis* (1938/40) he defined libido as the energy associated with Eros: ‘the total available energy of Eros, which henceforward we shall speak of as “libido”’ (*Standard Edition*, XXIII, p. 149), and he also identified the underlying principle of Eros to be *binding: ‘to establish ever greater unities and to preserve them’, whereas the principle underlying *Thanatos is ‘to undo connections and so to destroy things’ (p. 148). See also HORME, OBJECT INSTINCT. [Named after Eros in Greek mythology, the god of love and daughter of Aphrodite, from Greek *eros* love or sexual desire]

erotic *adj.* Of or relating to sexual desire. [From Greek *eros* love + *-ikos* of, relating to, or resembling]

erotic love *n.* A primary type of ***love** that is passionate and ***erotic**, being rooted in sexual attraction. *Compare* AGAPIC LOVE, LUDIC LOVE, MANIC LOVE, PRAGMATIC LOVE, STORGIC LOVE.

erotism *See* ALLO-EROTISM, ANAL EROTISM, AUTO-EROTISM, ORGAN EROTISM, PHALLIC EROTISM, URETHRAL EROTISM.

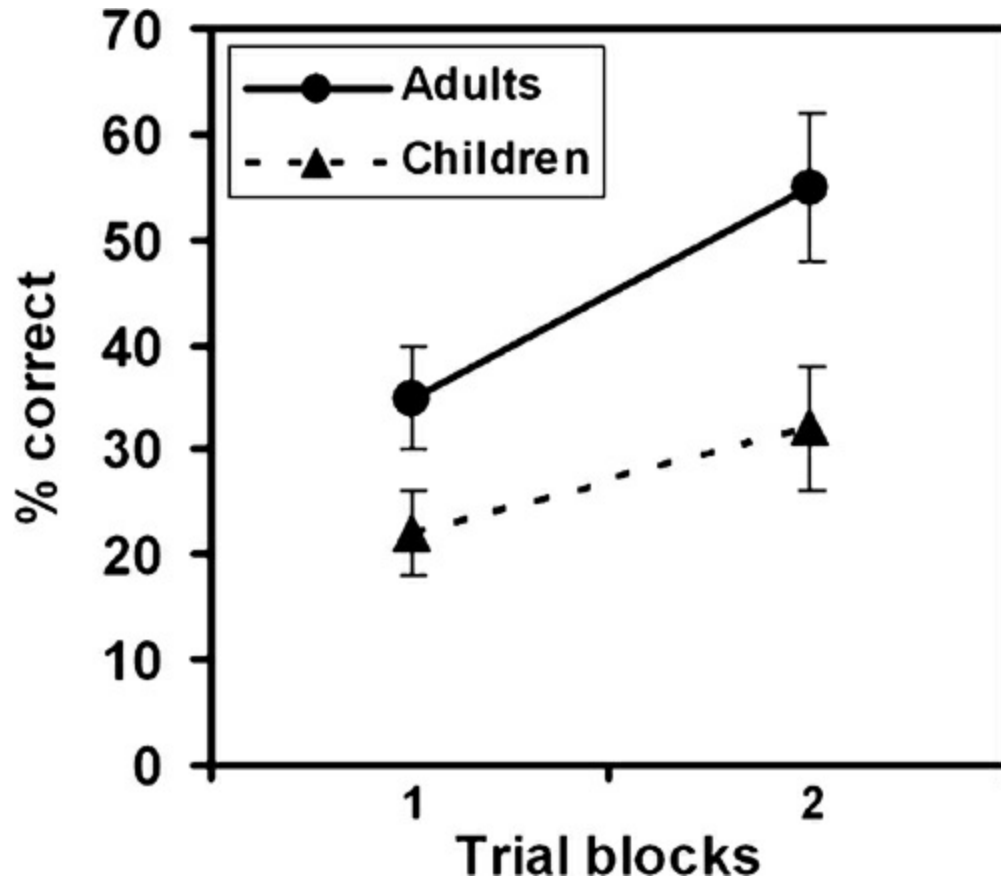
erotogenic zone *n.* In ***psychoanalysis**, another name for an ***erogenous zone**, specifically the oral, anal, and genital areas of the body. Sigmund Freud (1856–1939) first outlined his ideas about erotogenic zones in 1896 and 1897 in letters to his friend, the German physician Wilhelm Fliess (1858–1928), and then published his theory in 1905 in his book *Three Essays on the Theory of Sexuality* (*Standard Edition*, VII, pp. 130–243, at pp. 183–4). By 1938, when he published *An Outline of Psycho-Analysis*, he had decided that ‘in fact the whole body is an erotogenic zone’ (*Standard Edition*, XXIII, pp. 144–207, at p. 151). Also called a *primary zone*. *See also* ANAL EROTISM, INSTINCTUAL SOURCE, LIBIDINAL STAGE, ORAL EROTISM, PHALLIC EROTISM, URETHRAL EROTISM. *Compare* HYSTEROGENIC ZONE. [From Greek *eros* love or sexual desire + *genes* born + *-ikos* of, relating to, or resembling]

erotomania *n.* 1. A ***delusion** of being loved by another person, often a famous person or someone of higher status. People with the disorder usually have little or no direct contact with those they imagine to be in love with them but frequently believe that their secret lovers initiated the relationships and communicate their love by gestures, choice of clothing, or other subtle signals. Also called *de Clérambault's syndrome*. *See also* EROTOMANIC DELUSIONAL DISORDER, STALKING. 2. Abnormally strong sexual desire. [From Greek *erotikos* of or relating to love, from *eros* love + *-ikos* of, relating to, or resembling + *mania* madness]

erotomantic delusional disorder *n.* A type of ***delusional disorder** in which the central delusion is ***erotomania** (1); also called *Clérambault's syndrome*, *psychose passionelle*, or *pure erotomania*.

error bar *n.* On a graph of points representing ***means**, a line through a point indicating the margin of error (see *illustration*). Error bars on a ***line**

graph or *[histogram](#) may indicate *[confidence intervals](#), *[standard deviations](#), or *[standard errors](#) of the means, standard errors frequently being preferred because they provide a visual guide to *[statistical significance](#): if two SE error bars overlap, then the difference between the two means is non-significant (at $p < .05$), whereas if they do not overlap, then the difference is usually significant. Compare [BOX-AND-WHISKER PLOT](#).



Error bar. The vertical lines through the four means represent standard errors of the means, suggesting that adults improved significantly but children did not.

error variable *n.* In statistics, any variable defined by the difference between observed scores and values predicted by a *[model](#).

error variance *n.* In statistics, the portion of the *[variance](#) in a set of scores that is due to *[extraneous variables](#) and measurement error.

erythrocyte *n.* A red button-shaped blood corpuscle containing

***haemoglobin** and transporting oxygen to and carbon dioxide from body tissues. Also called a *red blood cell* or *red blood corpuscle*. See also **ERYTHROPOIETIN**, **STEM CELL**. Compare **LEUCOCYTE**. [From Greek *erythros* red + *kytos* a vessel]

erythropoietin *n.* A protein that is secreted by the kidney in response to low levels of oxygen in the blood and that increases the rate of formation of ***erythrocytes** in the ***blood**. Sometimes injected by competitive cyclists and other athletes as a virtually undetectable ***performance** enhancer that allows more oxygen to be transported to the muscles, thereby raising the level of ***aerobic** energy production. **EPO** *abbrev.* [From Greek *erythro(s)* red + *poiet(ikos)* capable of making, from *poiein* to make + *-itikos* resembling or marked by + *-in(e)* indicating an organic compound]

erythropsia *n.* A visual defect in which everything appears reddish, often caused by overexposure to bright light. Also spelt *erythropia*. [From Greek *erythr(os)* red + *ops* an eye + *-ia* indicating a condition or quality]

escalated fighting *n.* Physical aggression or conflict involving actual or potential bodily injury to the participants, comparatively rare among animals and humans. See also **HAWK–DOVE GAME**, **HAWK–DOVE–RETALIATOR GAME**, **RESOURCE-HOLDING POTENTIAL**. Compare **CONVENTIONAL FIGHTING**.

E scale *abbrev.* A scale to measure ***ethnocentrism**, especially the scale first published by the German philosopher, sociologist, and psychologist Theodor W(iesengrund) Adorno (1903–69) and several colleagues in the book *The Authoritarian Personality* (1950). See also **AUTHORITARIANISM**.

escape conditioning *n.* A form of ***operant** conditioning in which an organism learns to avoid an aversive stimulus. Typically, a rat is placed in a long, narrow alleyway with an electrified grid floor and can escape painful stimulation by running to the end of the alley and stepping into a non-electrified goal box, learning being evidenced by progressively faster running speeds. Also called *escape learning*. Compare **AVOIDANCE CONDITIONING**.

escape learning *n.* Another name for ***escape conditioning**.

Escher figure *n.* Another name for an **impossible figure*. [Named after the Dutch graphic artist Maurits C(ornelis) Escher (1898–1972) who included many impossible figures in his etchings]

eserine *n.* Another name for **physostigmine*. [From *éséré* West African name for the **Calabar bean* + *-ine* indicating an organic compound]

esophagus See OESOPHAGUS.

esotropia *n.* A form of **strabismus* in which one or both eyes turn inwards towards the nose, referred to non-technically as *cross-eye squint*.
esotropic *adj.* [From Greek *eso* inner + *tropos* a turn + *ops* an eye + *-ia* indicating a condition or quality]

espanto *n.* Another name for **susto*. [Spanish *espanto* fright or terror, from *espantar* to scare or frighten]

ESP cards *n.* Another name for **Zener cards*.

essential amino acid See AMINO ACID.

essentialism *n.* The doctrine propounded by the Greek philosophers Plato (?427–?347 BC) and Aristotle (384–322 BC), and developed in the modern era by the German philosopher Edmund (Gustav Albert) Husserl (1859–1938) and others, that any concept or thing is defined by certain attributes (essences) that it necessarily possesses. According to some versions, these necessary attributes are logically prior to particular instances of concepts or things, and classifications can be made only according to the underlying essences. The **componential theory* is a typical example of essentialism. *Methodological essentialism* asserts that scientific research must penetrate to the essence of things in order to explain them. The terms *essentialism* and *methodological essentialism* were introduced and the concepts criticized by the Austrian-born British philosopher Karl R(aimund) Popper (1902–94) in a journal article in *Economica* published in 1944, reprinted in Section 10 of his book *The Poverty of Historicism* (1957). See also PSYCHOLOGICAL ESSENTIALISM. Compare NOMINALISM, PROTOTYPE THEORY.

essentialist *adj.* [From Latin *essentia* essence, from *esse* to be + Greek *-ismos* indicating a state or condition]

est *abbrev.* Erhard Seminars Training, a technique of **group therapy*, designed to raise self-awareness and foster psychological growth, in which people spend sessions lasting many hours deprived of food, drink, and toilet facilities during which they are hectored, abused, and demeaned by stewards. In 1984 the name was changed to Landmark Forum, but it continued to be called est by many people. [Named after the US businessman Werner Erhard (born 1935), who developed the technique in 1971 after dropping his original name Jack Rosenberg and styling himself after the German theoretical physicist Werner Heisenberg and the German economics minister Ludwig Erhard]

ester *n.* A compound formed by a reaction between an alcohol and an acid with the elimination of water, usually resulting in the formation of a volatile aromatic oil or fat that is **psychotropic* when inhaled. *See also* *INHALANT-RELATED DISORDERS*. [Named in 1822 by the German chemist and physician Leopold Gmelin (1788–1853), from German *Es(sig)* vinegar + *(Ä)t(h)er* ether]

esterase *n.* Any **enzyme* that **hydrolyses* an **ester* into an alcohol and an acid. [From *ester* + *-ase* denoting an enzyme, from *diastasis* separation]

esthesiometer *See* *AESTHESIOMETER*.

estimation *n.* The branch of statistics devoted to estimating **parameters* on the basis of data from samples and analysing the properties of estimators such as unbiasedness and efficiency.

estradiol *See* *OESTRADIOL*.

estrogen *See* *OESTROGEN*.

estrone *See* *OESTRONE*.

estrous cycle See OESTROUS CYCLE.

estrus See OESTRUS.

eta coefficient See CORRELATION RATIO. [From the name of η , the seventh letter of the Greek alphabet]

ethanol *n.* Another name for ***ethyl alcohol**. See ALCOHOL.

e-therapy *n.* ***Psychotherapy** conducted over the internet, by e-mail, or by phone. Also called *online counselling* (US *online counseling*) or *online therapy*. [From *e(lectronic)* + Greek *therapeuein* to heal or take care of, from *theraps* an attendant]

ethereal odour *n.* One of the six primary odours in ***Henning's prism**, one of the nine in the ***Zwaardemaker smell system**, and one of the seven in the ***stereochemical theory**, resembling the odour of ether or cleaning fluid. US *ethereal odor*. [From Greek *aither* ether]

ethnic *adj.* Of, relating to, or characteristic of a human community or group with shared historical roots and a common language, religion, and culture. Ethnic groups are often, though not always, distinguished also by shared territory and/or common ***race (2)**. **ethnicity** *n.* Shared historical, linguistic, religious, and cultural identity of a social community, group, nation, or race. [From Greek *ethnos* a nation + *-ikos* of, relating to, or resembling]

ethnic marker *n.* Any of the signs by which ***ethnic** boundaries are defined or maintained, including language, religious and cultural symbols, or territory.

ethnocentrism *n.* A tendency or disposition to judge other ***ethnic** groups, cultures, nations, or societies by the standards and customs of one's own, often accompanied by a dislike or misunderstanding of other such groups and a belief in the intrinsic superiority of one's own. See also AUTHORITARIANISM. Compare ABLEISM, AGEISM, FATTISM, HETEROSEXISM, RACISM,

[SEXISM](#), [SPECIESISM](#). **ethnocentrist** *n.* 1. One who practises or advocates ethnocentrism. *adj.* 2. Of or relating to ethnocentrism. [From Greek *ethnos* a nation + *kentron* a sharp point]

ethnography *n.* 1. The branch of anthropology devoted to the scientific study of individual human societies. 2. A scientific study of an individual human society. **ethnographer** *n.* One who practises ethnography. **ethnographic** or **ethnographical** *adj.* [From Greek *ethnos* a nation + *graphein* to write]

ethnology *n.* The branch of anthropology concerned with the comparative study of cultures; formerly, the historical and comparative study of [*races](#) (2). **ethnological** *adj.* **ethnologist** *n.* One who practises ethnology. [From Greek *ethnos* a nation + *logos* word, discourse, or reason]

ethnomethodology *n.* A term coined in 1967 by the US sociologist Harold Garfinkel (1917–2011) to denote an approach to the study of human communication emphasizing common-sense language and interpretations of the world and making considerable use of [*participant observation](#). See also [CONVERSATION ANALYSIS](#). **ethnomethodological** *adj.* [From Greek *ethnos* a nation or race + English *methodology* denoting people's method]

ethology *n.* The study of behaviour in natural habitats, especially but not exclusively animal behaviour. Compare [ANIMAL PSYCHOLOGY](#), [COMPARATIVE PSYCHOLOGY](#). See also [EVOLUTIONARY PSYCHOLOGY](#). **ethological** *adj.* **ethologist** *n.* One who practises ethology. [From Greek *ethos* character + *logos* word, discourse, or reason]

ethyl alcohol *n.* The main psychotropic constituent of intoxicating liquors. Also called *ethanol*. Formula C₂H₅OH. See [ALCOHOL](#). [From *eth(er)*, from Greek *aithein* to burn + (h)yl(e) wood or matter + English *alcohol*]

etic *adj.* In linguistics, of or relating to speech characteristics that are considered without regard to their function within the language. In sociology and social psychology, of or relating to an account of a social phenomenon made from the perspective or viewpoint of an outside observer, such as a

researcher, rather than that of a participant in the social situation. *Compare* [EMIC](#). [Coined in 1967 by the US linguist Kenneth Lee Pike (1912–2000), from **(phon)etic*]

etiology *See* [AETIOLOGY](#).

etymological fallacy *n.* The belief that an earlier or the earliest meaning of a word is necessarily the right one. That it is fallacious is illustrated by the fact that *orchard* once meant a treeless garden, *treacle* a wild beast, and *villain* a farm labourer.

etymology *n.* The study of the origins and development of words and their meanings. [From Greek *etymos* true + *logos* a word]

eudaimonic well-being *n.* An ancient concept imported into modern psychology in an article in the *Journal of Personality and Social Psychology* in 1989 by the US psychologist Carol D. Ryff (born 1950) and incorporated into [*positive psychology](#) after 2000. According to Ryff, it is a type of well-being with the following six dimensions: self-acceptance, positive relations with others, autonomy, environmental mastery, purpose in life, and personal growth. Its chief significance is that it goes beyond short-term [*hedonic well-being](#); it reflects how one feels about life when thinking about it, rather than how one feels about life when living it. Also spelt *eudemonic* or *eudaemonic well-being*. [From Greek *eudaimonia* defined by Aristotle in his *Nicomachean Ethics* (1095a, 15–22) as ‘doing and living well’, from *eu-* well + *daimon* inner or guardian spirit pleasure + *-ikos* of, relating to, or resembling]

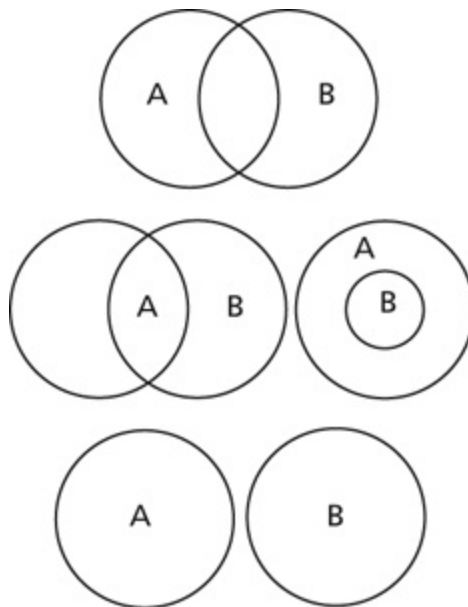
eugenic *adj.* Tending to lead to an increase in the quality or fitness of a group of interbreeding organisms. *Compare* [DYSGENIC](#). **eugenicist** *n.* One who practises or advocates [*eugenics](#). [From Greek *eu* well or good + *genein* to produce + *-ikos* of, relating to, or resembling]

eugenics *n.* The science or pseudoscience concerned with the genetic improvement of the human species, or of selected [*races](#) (2), especially by selective breeding.

eukaryote *n.* An organism composed of cells with well-defined ***nuclei** (1) containing genetic material. All organisms except bacteria, cyanobacteria (blue-green algae), and viruses are eukaryotes. Also spelt *eucaryote*. Compare **PROKARYOTE**. [From Greek *eu* well or good + *karyon* a kernel]

eukaryotic cell *n.* A biological cell with a ***nucleus** (1) containing genetic information. Also spelt *eucaryotic cell*.

Euler diagram *n.* A pictorial representation of ***propositions** (1) or ***sets** (1) by means of overlapping circles (see **illustration**). A ***Venn diagram** is a refined and improved version of it. Also called *Euler's circles*. [Named after the Swiss mathematician Leonhard Euler (1707–83) who introduced them and used them extensively]



Euler diagram. The four basic relations between two sets, A and B. The first diagram at the top shows 'some A are not B'. The two diagrams below it show 'some A are B' and 'all B are A'. The bottom diagram shows 'no A is B'.

euphemism *n.* A usage of language in which an inoffensive word or expression is substituted for one that is considered unpleasant or derogatory, as in *pass away* for *die* or *sleep with* for *have sexual intercourse with*. Compare **DYSPHEMISM**. [From Greek *eu* good + *pheme* speech, from *phanai* to speak]

euphoria *n.* An **affective* state of exaggerated well-being or elation.
euphoric *adj.* [From Greek *eu* good + *pherein* to bear + *-ia* indicating a condition or quality]

euphoriant *n.* (Of or relating to) anything, especially a **psychotropic* drug, that induces or tends to induce euphoria. See ANABOLIC STEROID, ANTIDEPRESSANT, ANXIOLYTIC, APHRODISIAC, BETEL, CANNABIS, CATNIP, EMPATHOGEN, HALLUCINOGEN, KAVA, MEPHEDRONE, Mescaline, NARCOTIC, OPIUM, PHANTASTICANT, PSYCHEDELIC, STIMULANT DRUG. [From Greek *euphoria* good ability to endure, from *eu* good + *pherein* to bear]

eureka moment *n.* A point in time when a scientific discovery is made or an **insight* occurs; more generally, a moment of inspiration, an exciting or significant experience, or an **aha experience*. [From Greek *heureka* I have found it, from *heuriskein* to find]

eusocial *adj.* Of or relating to certain species of **social insects* that cooperate in caring for their young, show reproductive division of labour, with sterile organisms working for others that are reproductive, and contribute simultaneously to the work of the colony with an overlap of at least two generations. The eusocial insects include all ants and termites and some bees and wasps. **eusociality** *n.* [From Greek *eu* well or good + Latin *socius* a companion]

Eustachian tube *n.* A passageway lined with a mucous membrane that joins the **pharynx* and the **middle ear* cavity, allowing equalization of the air pressure in the middle ear when atmospheric pressure changes, as when travelling by aircraft. Also (non-technically) called an *auditory tube*. Compare AUDITORY CANAL. [Named after the Italian physician Bartolomeo Eustachio (1520–74) who was the first to describe it in his *De Auditu Organis* in 1562]

eustress *n.* Any form of **stress* (1) that is beneficial, usually associated with a feeling of fulfilment and achievement rather than anxiety. See also POST-TRAUMATIC GROWTH. [Formed from Greek *eu* well or good + English *stress*, on the model of *distress*]

euthymic mood *n.* A *mood (1) within the temperate range, without the characteristics of *depressed mood, *dysphoric mood, *elevated mood, *irritable mood, or any other strongly affective mood. [From Greek *eu-* well + *thymos* spirit]

evaluation apprehension *n.* Anxiety induced in a person performing some task while being observed by others and feeling anxious about being judged or appraised by them. One of its effects is to increase the person's level of *arousal, which may improve or impair performance, depending on the nature of the task. *See also* AUDIENCE EFFECT, COACTION EFFECT, DRIVE THEORY OF SOCIAL FACILITATION.

evaluation research *n.* A form of *applied research undertaken to test the effectiveness of some programme or intervention, such as a new teaching method in a school system or a new crime prevention policy in a city. *See also* BASIC RESEARCH, DESCRIPTIVE RESEARCH, EXPLORATORY RESEARCH. *Compare* ACTION RESEARCH.

evaluative conditioning *n.* An increase or decrease in liking occurring as a consequence of *associative learning or *classical conditioning, first reported by the Russian-born US psychologist Gregory Razran (1901–73) in an article in the journal *Psychological Bulletin* in 1940. Participants rated a series of political slogans (considered as *conditioned stimuli) on a like–dislike rating scale, and were later asked to rate the slogans a second time. Those who performed the second rating in the context of a free lunch (considered as an *unconditioned stimulus) rated the slogans significantly more positively than others who performed the second rating while being exposed to an unpleasant smell. The term *evaluative conditioning* was introduced in 1975 by the Canadian-born British psychologist Archie B(anks) Levey (1924–2012) and the English psychologist Irene Martin (1926–2009) in an article in the journal *Behaviour Research and Therapy* that also popularized the *picture–picture technique. **EC** abbrev.

Eve *n.* In the Old Testament (Genesis 2:18–25), the first woman, fashioned from Adam's rib. By analogy, the name given by the US biochemist Allan C. Wilson (1935–91) to a woman living in Africa 150,000–200,000 years ago from whom the *mitochondrial DNA of the entire population of the world
*****ebook converter DEMO Watermarks*****

evolved, according to research using the technique of the **evolutionary clock*. [Named after the Old Testament Eve, influenced by the fact that the name echoes the first syllable of *evolution*]

event-related potential *n.* Another name for an **evoked potential*, especially an **EEG* response to a specific sensory, motor, or cognitive **stimulus* (5), associated with the sequential processing of information. When evoked by an external event, it is called an *exogenous event-related potential*, and when evoked by an internal mental process, it is called an *endogenous event-related potential*. Particular event-related potentials are generally named by the letter P or N, depending on whether their voltage deflections are positive or negative, followed by a number indicating the **latency* of the waveform's peak in milliseconds. For example, the first major deflection in response to an auditory click is usually a positive deflection peaking 50 ms after the stimulus, therefore called P50; but sometimes they are labelled P1, P2, P3 or N1, N2, N3, and so on, the numbers indicating their ordinal positions in the waveform (first, second, and so on). See *CONTINGENT NEGATIVE VARIATION*, *N140*, *N400*, *P50*, *P200*, *P300*, *P600*. See also *AVERAGE EVOKED POTENTIAL*, *READINESS POTENTIAL*, *STRING LENGTH*. **ERP** *abbrev.*

evil eye *n.* An English name for **mal de ojo*.

eviration *n.* A delusion of a man that he has been transformed into a woman. [From Latin *e-* away + *vir* a man + *-ation* indicating a process or condition]

evoked potential *n.* A type of **EEG* response, either generated in the primary sensory areas of the brain, initiated by a sensory stimulus, and called a sensory or exogenous potential, or generated elsewhere in the brain, initiated by cognitive activity, and called an event-related or endogenous potential. It is conventionally plotted as an amplitude change over time and symbolized by a letter followed by a number, thus the second positive evoked potential occurring 200 milliseconds after the initiating event is written either P2 (because it is the second positive potential) or P200. Also called an *evoked response*. See also *AVERAGE EVOKED POTENTIAL*, *CONTINGENT NEGATIVE VARIATION*, *EVENT-RELATED POTENTIAL*, *NERVE CONDUCTION VELOCITY*, *N140*, *N400*, *P50*, *P200*, *P300*, *P600*, *READINESS POTENTIAL*, *STRING LENGTH*. **EP** *abbrev.*

*****ebook converter DEMO Watermarks*****

evolution *n.* The gradual changes in populations of organisms over successive generations, producing new species that are quite distinct from their remote ancestors. *See also* [DARWINIAN EVOLUTION](#), [NATURAL SELECTION](#). [From Latin *evolutio* an unrolling, from *evolvere* to unroll, from *e-* from + *volvere*, *volutum* to roll + *-ion* indicating an action, process, or state]

evolutionarily stable strategy *n.* Any hereditary pattern of behaviour that is fixed in the sense that, in a population in which most individuals adopt it, no alternative behaviour pattern has a greater **Darwinian fitness*, and therefore none is favoured over it by **natural selection*. The concept was introduced in 1973 by the English biologist John Maynard Smith (1920–2004) and the US physicist and chemist George R(obert) Price (1922–75). Often mistakenly written *evolutionary stable strategy*. *See also* [HAWK–DOVE GAME](#), [HAWK–DOVE–RETALIATOR GAME](#), [STRATEGY \(2\)](#). **ESS** *abbrev.*

evolutionary bottleneck *n.* A sudden decrease in the size of a population, usually because of an environmental catastrophe, resulting in a loss of genetic variability and therefore adaptability even if the population recovers to its original size. *See also* [AVERAGE HETEROZYGOSITY](#).

evolutionary clock *n.* The accumulation of changes in non-genetic stretches or **introns* of (especially) **mitochondrial DNA* that occur at a fairly constant rate and can be calibrated with real time to enable estimates to be made of how long ago present-day organisms diverged from their common ancestors. *See also* [EVE](#), [MATERNAL INHERITANCE](#), [PARSIMONY PRINCIPLE](#). *Compare* [GLOTTOCHRONOLOGY](#), [LEXICOSTATISTICS](#).

evolutionary psychology *n.* An approach to psychology influenced by **sociobiology* and **ethology*, based on the assumption that human cognition can best be understood in the context of evolution. The human **brain* is viewed as a physical system of neural circuitry incorporating multiple psychological **adaptations (1)* evolved by **natural selection* to generate behaviour and solve problems posed by environmental circumstances in the evolutionary history of the species, especially during the Stone Age, the period from about 2.5 million to 6,000 BC, covering well over 99 per cent of human evolutionary history. The approach reached maturity in
*****ebook converter DEMO Watermarks*****

the late 1980s, through the writings of the US psychologist Leda Cosmides (born 1957) and the US anthropologist John Tooby (born 1952), among others, and was popularized by their influential book, *The Adapted Mind: Evolutionary Psychology and the Generation of Culture* (1992), co-edited with a colleague, although the term *evolutionary psychology* had been introduced by the US biologist Michael T. Ghiselin (born 1939) in the title of an article in the journal *Science* in 1973. *See also* [BEHAVIOURAL ECOLOGY](#).

examination anxiety *n.* Another name for [*test anxiety](#). Also called *exam anxiety*.

excitation *n.* The action of a [*stimulus](#) (1, 5) in evoking a [*response](#) from an organism, or from a cell, tissue, or organ, or the disturbed or altered state resulting from such arousal. *See also* [EXCITATORY](#), [EXCITATORY POSTSYNAPTIC POTENTIAL](#). *Compare* [INHIBITION](#) (2, 3). **excite** *vb.* [From Latin *ex-* out + *ciere* to set in motion + *-ation* indicating a process or condition]

excitatory *adj.* Tending to cause [*excitation](#). In neurophysiology, characteristic of [*neurons](#) that cause other neurons to fire, or neurotransmitters, the action of which tends to cause neurons to fire, or [*synapses](#) (1) at which the transmission of nerve impulses tends to cause postsynaptic neurons to fire. *See also* [EXCITATORY POSTSYNAPTIC POTENTIAL](#). *Compare* [INHIBITORY](#).

excitatory postsynaptic potential *n.* A graded depolarization or decrease in electrical potential across the membrane of a [*postsynaptic](#) neuron, occurring in response to a signal transmitted across a synapse by a [*presynaptic](#) neuron, increasing the propensity of the postsynaptic neuron to initiate a nerve impulse. Also called *postsynaptic excitation*. *See also* [ACTION POTENTIAL](#), [DEPOLARIZATION](#), [POSTSYNAPTIC POTENTIAL](#), [RESTING POTENTIAL](#). *Compare* [INHIBITORY POSTSYNAPTIC POTENTIAL](#). **EPSP** *abbrev.*

excluded middle law *n.* The principle or law according to which for any proposition *p*, the proposition *p* or *not-p* is true by logical necessity. Also called the *principle of the excluded middle*.

exclusive disjunction *See* [DISJUNCTION](#) (2).

*****ebook converter DEMO Watermarks*****

excoriation disorder *n.* A mental disorder introduced in *DSM-5 characterized by recurrent, habitual skin-picking, resulting in skin lesions, most commonly on the face, arms, or hands, despite repeated attempts to eliminate the behaviour, the skin-picking causing significant distress or impairment of social, occupational, or everyday life. *Compare* OBSESSIVE–COMPULSIVE DISORDER, TRICHOTILLOMANIA. [From Latin *excoriare* to strip or flay, from *ex-* out + *corium* a skin or hide]

executive *See* CENTRAL EXECUTIVE.

exemplar *n.* An instance or representative of a *concept; more generally something to be copied or imitated. *Compare* PROTOTYPE (2). [From Latin *exemplarium* a model, from *exemplum* an example]

exhaustion stage *n.* The third and final stage of the *general adaptation syndrome to stress, reached by an organism that has failed to adapt to a stressor, characterized by physical and/or mental disorder or disease. *See also* ALARM REACTION, RESISTANCE STAGE.

exhibitionism *n.* 1. A *paraphilia characterized by recurrent, intense sexual fantasies, urges, or behaviour involving exposure of one's sexual organs to unsuspecting strangers. *See also* EXHIBITIONISTIC DISORDER. 2. Extravagant, theatrical, or boasting behaviour designed to draw attention to oneself. [From Latin *exhibere* to display, from *ex-* out + *habere* to have]

exhibitionistic disorder *n.* A *paraphilic disorder in *DSM-5 characterized by intense, recurrent sexual arousal from exposure of genitals to unsuspecting others, or associated fantasies or urges over a period of at least six months. To meet the diagnostic criteria, the individual must either have acted out this behaviour with a non-consenting person, or the fantasies or urges must have caused clinically significant distress or impairment in social, occupational, or other areas of life. *See also* EXHIBITIONISM.

existential analysis *n.* A form of *psychoanalysis based on *existentialism, introduced in the early 1930s by the Swiss psychiatrist Ludwig Binswanger (1881–1966) and described in his 726-page book

Grundformen und Erkenntnis menschlichen Daseins (1942, Basic Forms and Knowledge of Human Existence), the aim of which is not to cure symptoms but to reconstruct the inner experience of patients, even severely **psychotic* (1) patients, and to get them to confront their existence and exercise their autonomy. The most famous case study in existential analysis, and one of the most disturbing in the annals of psychiatry, is Binswanger's case of **Ellen West*. Also called *Daseinsanalyse*. See also *BAD FAITH*, *EIGENWELT*, *EXISTENTIAL THERAPY*, *MITWELT*, *UMWELT*. **existential analyst** *n.* One who practises existential analysis.

existentialism *n.* A philosophical movement, inspired by **phenomenology*, that developed in the second quarter of the 20th century under the influence of the Danish philosopher and religious thinker Søren Aabye Kierkegaard (1813–55), the German philosopher Martin Heidegger (1889–1976), and the French philosophers and writers Jean-Paul Sartre (1905–80), Simone de Beauvoir (1908–86), and Albert Camus (1913–60). It stresses the existence of the individual person as a free agent who is burdened with personal responsibility and whose existence cannot be investigated objectively, being revealed by reflection on existence in time and space. It tends to disparage scientific methodology and knowledge and to reject objective values. See also *ANGST* (2), *ANTI-PSYCHIATRY*, *BAD FAITH*, *DASEIN*, *DASEINSANALYSE*, *EIGENWELT*, *EXISTENTIAL ANALYSIS*, *EXISTENTIAL THERAPY*, *HERMENEUTICS* (3), *MITWELT*, *UMWELT*. **existential** *adj.* Of or relating to existence or to existentialism. **existentialist** *adj.* Of or relating to existentialism.

existential quantifier See *QUANTIFIER*.

existential therapy *n.* A diverse and fragmented group of techniques of **psychotherapy*, including both **existential analysis* and various other techniques based loosely on the philosophies of **phenomenology* and **existentialism*, in which clients are encouraged to confront their inner emotions and values, stripping away preconceptions and assumptions, and to take responsibility for their lives. See also *ANGST* (2), *ANTI-PSYCHIATRY*, *BAD FAITH*, *INTENTIONALITY* (2).

exocrine gland *n.* A gland that originates in **epithelial tissue* and
*****ebook converter DEMO Watermarks*****

secretes through a duct on to the **skin* or a **mucous membrane* rather than directly into the bloodstream. See *BARTHOLIN'S GLAND*, *GASTRIC GLAND*, *MAMMARY GLAND*, *SALIVARY GLAND*, *SWEAT GLAND*. Compare *ENDOCRINE GLAND*. [From Greek *exo* outside + *krinein* to separate]

exogamy *n.* The cultural practice or custom of marriage between people of different clans, tribes, or other groups of related individuals; more generally, outbreeding, or the fusion of **gametes* from parents that are not closely related. Compare *ENDOGENY*. [From Greek *exo* outside + *gameein* to marry]

exogenous depression *n.* Another name for **reactive depression*. Compare *ENDOGENOUS DEPRESSION*. [From Greek *exo* outside + *genes* born]

exon *n.* Any segment of a gene consisting of **codons* representing instructions for synthesizing a protein. Compare *INTRON*. [From Greek *exo* outside, on the model of *codon*]

exophoria *n.* A form of latent **strabismus* in which the eyes tend to turn outward towards the temples. Compare *CYCLOPHORIA*, *ESOTROPIA*, *HETEROPHORIA*, *HYPERPHORIA*, *HYPOPHORIA*. [From Greek *ex* out + *-phoros* carrying, from *pherein* to bear]

expansive mood *n.* A **mood* (1) characterized by unrestrained emotional expression, often accompanied by an overvaluation of one's importance or significance to others; sometimes merely another name for **elevated mood*.

expectancy-value theory *n.* A theory according to which behaviour is affected by the values of the possible outcomes weighted by the estimated probabilities of those outcomes. The earliest version of it was put forward in 1944 by the German–US psychologist Kurt Lewin (1890–1947) and several colleagues. In relation to **attitudes* (1) it is the theory according to which an attitude reflects the subjective probability (expectancy) that the object of the attitude has certain **attributes*, weighted by the subjective feelings (values) evoked by those attributes. For example, a person may have an expectancy (high subjective probability) that *a united Ireland* (the attitude object) would lead to *peace between Irish Catholics and Protestants* (a positively valued

*****ebook converter DEMO Watermarks*****

attribute). To predict a person's attitude to a united Ireland, the expectancy and value terms for each attribute are multiplied together, and these products are then added: $\text{Attitude} = \sum \text{Expectancy} \times \text{Value}$. This approach to attitudes was formulated in 1975 by the US psychologist Martin Fishbein (1936–2009) and the Polish-born US psychologist Icek Ajzen (born 1942). *See also* [THEORY OF REASONED ACTION](#).

expectation-dependent priming *See* [PRIMING \(1\)](#).

expected utility *n.* The average [*utility \(1\)](#) associated with a decision, calculated by multiplying each of the possible outcomes of the decision by its probability and then summing the resulting products. If the probabilities are subjective, rather than objective measures of relative frequency, then it is called *subjective expected utility*. *Compare* [EXPECTED VALUE](#). **EU** *abbrev.*

expected utility theory *n.* A theory of decision making, formalized in 1947 by the Hungarian-born US mathematician John von Neumann (1903–57) and the German-born US economist Oskar Morgenstern (1902–77), according to which a decision maker chooses actions or strategies that maximize [*expected utility](#), and utilities are determined by [*revealed preferences](#). If the probabilities are subjective, then it is called *subjective expected utility theory*. *See also* [ALLAIS PARADOX](#), [CANCELLATION HEURISTIC](#), [COMMON RATIO EFFECT](#), [ELLSBERG PARADOX](#), [MODIFIED ELLSBERG PARADOX](#), [NEWCOMB'S PROBLEM](#), [PASCAL'S WAGER](#), [PREFERENCE REVERSAL \(1, 2\)](#), [PROSPECT THEORY](#), [RATIONAL CHOICE THEORY](#), [ULTIMATUM GAME](#), [UTILITY THEORY](#). **EU theory** *abbrev.*

expected value *n.* The average value associated with a decision, calculated in the same way as an [*expected utility](#) but using the monetary value of the outcomes rather than their [*utility \(1\)](#) in the calculation. *See also* [PROSPECT THEORY](#), [RISK AVERSION](#), [ST PETERSBURG PARADOX](#). **EV** *abbrev.*

experience sampling *n.* A research technique, very similar to the [*time sampling diary](#), and virtually synonymous with time sampling, introduced by the Italian-born US psychologist Mihaly Csikszentmihalyi (born 1934) and two co-authors in an article in the *Journal of Youth and Adolescence* in 1977, where they originally called it the ‘experiential

*****ebook converter DEMO Watermarks*****

sampling method’.

experiential therapy *n.* Any of a group of techniques of *psychotherapy that focus on emotional release, inner growth, and *self-actualization, including *encounter groups, *Gestalt therapy, *primal therapy, and *transcendental meditation (TM).

experiment *n.* A research method whose defining features are manipulation of an *independent variable or variables and control of *extraneous variables that might influence the *dependent variable. Control of extraneous variables is often, though not necessarily, achieved through *randomization. Experimental methods are uniquely powerful in allowing rigorous examination of *causal effects without the uncertainties of other research methods. *See also* CONTROL GROUP, EXPERIMENTAL GROUP, HYPOTHETICO-DEDUCTIVE METHOD, RANDOMIZED CONTROLLED TRIAL, RANDOMIZED DOUBLE-BLIND EXPERIMENT. *Compare* CASE STUDY, CORRELATIONAL STUDY, OBSERVATIONAL STUDY, QUASI-EXPERIMENT, SURVEY RESEARCH. [From Latin *experimentum* proof or trial]

experimental analysis of behaviour *n.* The application of the theory of *operant conditioning to behaviour, especially in animals, focusing almost exclusively on the effects of *reinforcement on rate of *response. The term can also be applied to the study of behaviour through experiments generally, but in practice it has tended to become confined to the meaning defined above. US *experimental analysis of behavior*.

experimental design *n.* The general plan of an *experiment, including the method of assigning research participants or subjects to *treatment conditions, controlling *extraneous variables, manipulating the *independent variable, and measuring the *dependent variable.

experimental group *n.* In *experimental design, a group of research participants or subjects exposed to an *independent variable in order to examine the *causal effect of that treatment on a *dependent variable. *Compare* CONTROL GROUP.

experimental hypothesis *n.* Another name for an *alternative hypothesis.

*****ebook converter DEMO Watermarks*****

experimentally induced false memory *n.* Any repeatable technique for generating **false memories*, especially a procedure first reported in 1959 by the US psychologist James Earle Deese (1921–99) in an article in the *Journal of Experimental Psychology*. Deese constructed several lists of 12 words, each list consisting of the most common **word-association test* responses to a critical word that was not included in the list, a typical example being the critical word *needle*, from which Deese constructed the list *thread, pin, eye, sewing, sharp, point, pricked, thimble, haystack, pain, hurt, injection*. Experimental participants studied each list, and then tried to recall the words contained in it, and on some of the lists (including the *needle* list) many participants falsely recalled the critical word as having been included in the list, though on other lists they did not—for example, on the *butterfly* list (*moth, cocoon*, and so on), not a single participant falsely recalled the critical word. In an article in the *Journal of Experimental Psychology: Learning, Memory, and Cognition* in 1995, the US psychologists Henry L(ederer) Roediger III (born 1947) and Kathleen B(lyth) McDermott (born 1968) replicated and extended Deese's neglected experiment using published word-association norms. Their results revealed that on immediate **free recall* tests, the missing critical words were falsely recalled by 40 per cent of participants, and in a subsequent experiment with 15-word lists, the rate of false recall rose to 55 per cent. This experimental procedure creates a powerful **cognitive illusion*, causing people to believe that they can remember experiences that did not occur. *See also* EYEWITNESS MISINFORMATION EFFECT.

experimental neurosis *n.* An abnormal pattern of behaviour in an animal usually induced by presenting it with an insoluble learning problem or subjecting it to inescapable electric shocks. *See also* LEARNED HELPLESSNESS.

experimental psychology *n.* The study of psychological processes such as cognition (including perception, memory, thinking, and language), learning, and skills through controlled experiments. The term was originally applied to any psychological research using experimental methods, but it has acquired specialized connotations, and in practice experimental research in social psychology, for example, is not normally published in the major journals of experimental psychology.

experimental variable *n.* Another name for an **independent variable*.

*****ebook converter DEMO Watermarks*****

experimenter bias See EXPERIMENTER EFFECT, EXPERIMENTER EXPECTANCY EFFECT.

experimenter effect *n.* A biasing effect on the results of an experiment caused by expectations or preconceptions on the part of the experimenter. Also called *experimenter bias*. See also DEMAND CHARACTERISTICS, EXPERIMENTER EXPECTANCY EFFECT.

experimenter expectancy effect *n.* A particular type of **experimenter effect* in which the expectations of the experimenter as to the likely outcome of the experiment acts as a **self-fulfilling prophecy*, biasing the results in the direction of the expectation. In a series of classic experiments carried out by the German-born US psychologist Robert Rosenthal (born 1933) in the early 1960s, the effect was induced by telling experimenters what kind of behaviour to expect from laboratory animals. In one experiment published in 1963, 12 psychology students were each given five laboratory rats of the same strain, but six were told that the rats had been bred for maze brightness and the other six that they had been bred for maze dullness. The students were given the assignment of running the rats in a maze-learning experiment, and the rats believed to be bright performed significantly better than those believed to be dull. Later research suggested that in such experiments the effect is due to subtle differences in the way experimenters handle the animals. Also called the *Rosenthal effect*. See also DEMAND CHARACTERISTICS, OEDIPUS EFFECT, PYGMALION EFFECT.

expert system *n.* In **artificial intelligence*, a computer program based on a database of expert knowledge in a specified field, such as medical diagnosis, designed to offer advice or make decisions requiring a high level of expertise.

explicit memory *n.* Memory that is revealed when performance on a task requires conscious recollection of information previously learnt. The term was introduced by the Canadian psychologist Peter Graf (born 1951) and the US psychologist Daniel L. Schacter (born 1952) in an article in the *Journal of Experimental Psychology: Learning, Memory, and Cognition* in 1985. Compare IMPLICIT MEMORY.

exploitative orientation *n.* In **neo-Freudian* theory, a term used by the German-born US psychoanalyst Erich Fromm (1900–80) to denote a character type who tries to take things from others by force and cunning, an extreme example being a person with **kleptomania*. *Compare* *HOARDING ORIENTATION*, *MARKETING ORIENTATION*, *PRODUCTIVE ORIENTATION*, *RECEPTIVE ORIENTATION*.

exploratory data analysis *n.* A general term introduced in 1977 by the US statistician John Wilder Tukey (1915–2000) to refer to techniques of summarizing, organizing, and displaying data in ways that help to show what the data mean. Typical examples are **box-and-whisker plots* and **stem-and-leaf displays*. Not to be confused with **data snooping*. **EDA** *abbrev.*

exploratory factor analysis *n.* The use of **factor analysis* to discover the latent factors lying behind a set of correlated variables. *Compare* *CONFIRMATORY FACTOR ANALYSIS*.

exploratory research *n.* Research that is not explicitly intended to test hypotheses (as in **basic research*) nor to solve practical problems (as in **applied research*) but is used to make initial forays into unfamiliar territory when studying new or poorly understood phenomena. *Compare* *ACTION RESEARCH*, *DESCRIPTIVE RESEARCH*, *EVALUATION RESEARCH*.

explosive disorder *See* *INTERMITTENT EXPLOSIVE DISORDER*.

exposure therapy *n.* Another name for **flooding*.

expression *n.* 1. The transformation of ideas into words. 2. Any non-verbal manifestation of **emotion*. 3. In genetics, the effect of a **gene* on a **phenotype* (also called *gene expression*). **express** *vb.* **expressive** *adj.* [From Latin *expressus* squeezed out, from *ex-* out + *premere*, *pressum* to press + *-ion* indicating an action, process, or state]

expressive aphasia *See* *APHASIA*.

expressive behaviour *n.* Behaviour that communicates emotions or

personality. In human beings this occurs especially through **facial expression*, though it can also occur through other types of **affect displays*, dress styles, handwriting, and so on.

expressive dysprosody *See* *DYSPROSODY*.

expressive language disorder *n.* A **communication disorder* in **DSM-IV*, absorbed into **language disorder* *DSM-5*.

expressivity *n.* In genetics, the strength of a gene's effect on a **phenotype*.

extended family *n.* A family unit comprising not only a mother, father, and their children, but also other relatives, such as grandparents, uncles, and aunts. *Compare* *NUCLEAR FAMILY*.

extended phenotype *n.* All effects that a **gene* has on the external world in comparison with the effects of its **alleles*, including effects associated with such phenomena as **co-evolution*, **inclusive fitness*, evolutionary **arms races*, and **reciprocal altruism*, all of which have a bearing on the number of copies of the gene that are likely to be transmitted to the next generation. It is distinguished from the conventional **phenotype*, which is restricted to the gene's effects on the individual organism in which it resides and which excludes extra-organismic effects associated with such phenomena. *See also* *SELFISH GENE*. [Coined in 1982 by the British ethologist Richard Dawkins (born 1941) in the title of his book *The Extended Phenotype*]

extension/intension *See* *INTENSION*.

extension theorem *n.* In **logic*, a theorem of semantic entailment in propositional calculus according to which if a set of premises *P* entails a conclusion *q*, then the addition of further premises from a larger set *S* that includes *P* cannot affect the truth of the conclusion *q*. The theorem underpins the **monotonicity* of logic. *See also* *DEFAULT REASONING*, *NON-MONOTONIC REASONING*.

external auditory canal *n.* The passageway leading from the *outer ear to the *tympanic membrane. Also called the *external meatus*. Compare INTERNAL AUDITORY CANAL.

external control of reinforcement See LOCUS OF CONTROL.

external ear *n.* Another name for the *outer ear.

external eye muscle *n.* Another name for an *extra-ocular muscle.

externalization *n.* In *psychoanalysis, a *defence mechanism whereby a person unconsciously attributes inner impulses to the external world, as when a child converts unconscious angry or aggressive impulses into a fear of monsters or demons in the dark. A common form of externalization is *projection (1). See also DEFENSIVE TECHNIQUE. **externalize** *vb.*

external meatus *n.* Another name for the *external auditory canal. [From Latin *meatus* a course]

external rectus *n.* Another name for either of the lateral *rectus muscles attached externally to the eyeball.

external validity *n.* The extent to which the conclusions of an empirical investigation remain true when different research methods and research participants or subjects are used. The term is also used to denote *concurrent validity or *predictive validity established by reference to an external criterion, in other words *criterion validity. See also REPLICATION (2), VALIDITY, VALIDITY GENERALIZATION. Compare ECOLOGICAL VALIDITY (1), INTERNAL VALIDITY.

exteroception *n.* Any form of sensation that results from stimuli located outside the body and is detected by *exteroceptors, including vision, hearing, touch or pressure, heat, cold, pain, smell, and taste. Compare INTEROCEPTION, KINAESTHESIS, PROPRIOCEPTION. **exteroceptive** *adj.* [From Latin *exterus* exterior + English *receptor* + *-ion* indicating an action, process, or state]

exteroceptor *n.* Any of several *sensory receptors specialized for

*****ebook converter DEMO Watermarks*****

**exteroception*, whether a **somatic receptor* or a **telereceptor*. Compare INTEROCEPTOR, PROPRIOCEPTOR.

extinction *n.* 1. The wiping out or elimination of something, including a species or life form. 2. The diminution in the strength or frequency of a **conditioned response* as a result of its having been elicited repeatedly without **reinforcement* (1, 2). Compare HABITUATION (2). **extinct** *adj.*

extracellular *adj.* Outside cells. [From Latin *extra* outside + *cella* a room, from *celare* to hide]

extracellular fluid *n.* Fluid that circulates around and between the cells of the body and is separated from the **intracellular* fluid by semipermeable cell membranes. See also OSMOSIS, SODIUM PUMP. Compare INTRACELLULAR FLUID. **ECF** *abbrev.*

extracellular thirst *n.* Another name for **hypovolaemic thirst*.

extradite *vb.* 1. To hand a person over to a foreign government for trial or punishment. 2. To localize a sensation away from the centre of the sensation. See ECCENTRIC PROJECTION. **extradition** *n.* The act or process of extraditing. [From Latin *ex* from + *traditio* a handing over, from *tradere* to give up, from *trans* across + *dare* to give]

extrafusar *adj.* Of or relating to ordinary contractile muscle fibres outside **muscle spindles*. When an extrafusar fibre is stimulated by a **motor neuron*, **actin* filaments slide to overlap with **myosin* filaments, causing the muscle to contract. Compare INTRAFUSAL. [From Latin *extra* outside + *fusus* a spindle]

extramission *n.* Discharge or sending out, especially of ‘visual fire’ from the eyes in the process of seeing, according to a false theory propounded by the Greek philosopher Empedocles (?490–430 BC) and endorsed by later Greek philosophers and scientists, including Plato, Euclid, and Ptolemy. In modern times, the Swiss psychologist Jean Piaget (1896–1980) was the first to report, in his book *La Représentation du Monde chez l'Enfant* (1926, translated as *The Child's Conception of the World*, 1929), that children

continue to believe in emissions of rays or fluids from the eyes during vision, and they tend to assume that people's gazes can collide or mix. More recent studies have revealed that a large proportion of adults (in some US studies more than half) implicitly believe in visual extramission. *Compare* [INTUITIVE PHYSICS](#). [From Latin *extra* outside + *missio* a sending out, from *mittere* to send]

extraneous variable *n.* In statistics and research design, a variable that is of no immediate interest to a researcher but is capable of influencing variables that *are* of interest. In experimental design, such an extraneous variable is capable of influencing the [*dependent variable](#), and it is normally controlled by [*randomization](#); when it cannot be controlled, efforts are often made to measure and allow for it. Also called a *nuisance variable*.

extra-ocular muscle *n.* A generic name for either of the [*oblique muscles](#) or any of the [*rectus muscles](#) that control the rotation of the eyeball within its socket. Also called an *extrinsic eye muscle*. *See also* [ELECTRO-OCULOGRAM](#). [From Latin *extra* outside + *oculus* an eye]

extrapyramidal *adj.* Of or relating to structures outside the pyramidal tract or [*corticospinal tract](#) of the central nervous system, the pathway responsible for coordinating and integrating motor behaviour. [From Latin *extra* outside + English *pyramidal*]

extrapyramidal syndrome *n.* A condition arising from a lesion in the [*extrapyramidal](#) system or as a side-effect of medication with psychotropic drugs, including such signs and symptoms as [*tremor](#), [*parkinsonism](#), [*akathisia](#), [*dystonia](#), [*akinesia](#), [*myotonia](#), drooling, and absence of facial expression.

extra-sensory perception *n.* A generic term for various conjectural [*paranormal](#) phenomena that are defined by the *Journal of Parapsychology* to involve experience of, or response to, a target object, state, event, or influence without sensory contact, hence perception without the use of sense organs, usually divided into [*clairvoyance](#), [*telepathy](#), and [*precognition](#). It is often defined as perception by means *as yet unexplained by science*, but this debilitating interpretation is avoided in careful usage, because it

*****ebook converter DEMO Watermarks*****

encompasses types of perception that are not necessarily extra-sensory or paranormal and therefore implies (for example) that the ***infra-red vision** of rattlesnakes was a form of extra-sensory perception before it was explained in the 1930s, that the use of ***biosonar** by bats was a form of extra-sensory perception before it was explained in 1941, and that the use of the stars as a navigational aid by nocturnally migrant birds such as European warblers was a form of extra-sensory perception before it was explained in the mid 1950s; and there are numerous phenomena in human and animal perception that are still unexplained but do not necessarily involve extra-sensory perception. See also **CRYPTAESTHESIA**, **PSI**, **PSI-MISSING**, **PSYCHOPRAXIA**, **ZENER CARDS**. Compare **PSYCHOKINESIS**. **ESP** abbrev. [From Latin *extra* outside + *sensorius* of the senses, from *sensus* felt, from *sentire* to sense. The US parapsychologist Joseph Banks Rhine (1895–1980) claimed in 1934 to have coined the term, but a book by the Haitian-born German physician Gustav Pagenstecher (1855–1942) entitled *Aussersinnlicher Wahrnehmung*, which means extra-sensory perception in German, had already been published in 1924]

extra-spectral colour *n.* Another name for a ***non-spectral colour**. US *extra-spectral color*. [From Latin *extra* outside + *spectrum* a spectacle, from *spectare* to watch, from *specere* to look at + *-alis* of or relating to]

extrastriate cortex *n.* Areas of the cerebral cortex near and functionally related to the ***primary visual cortex** (Area V1). [So called because they are outside the ***striate cortex**]

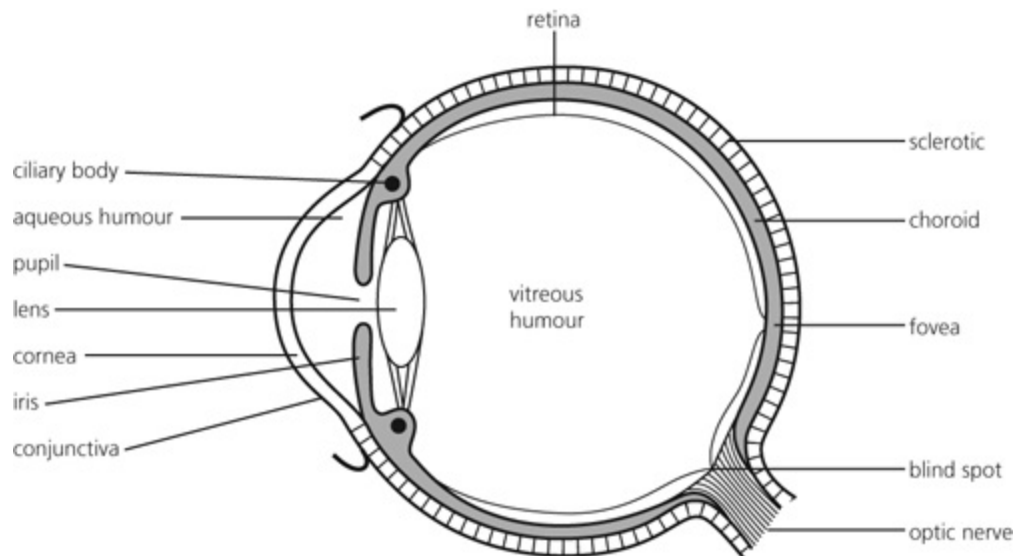
extraversion *n.* One of the ***Big Five** personality factors, ranging from extreme extraversion, characterized by ***traits** such as sociability and assertiveness, to extreme ***introversion**, characterized by reserve and passivity. The concept of introversion/extraversion was introduced in 1910 by Carl Gustav Jung (1875–1961). Also called *surgency*. Often spelt *extroversion*, but this is an unnecessary deviation from the Latin root. See also **BETA PERSONALITY FACTOR**, **GENERAL FACTOR OF PERSONALITY**, **LITTLE THIRTY**. **extravert** *n.* A person who manifests extraversion. **extraverted** *adj.* [From Latin *extra* outside + *vertere* to turn]

extrinsic eye muscle *n.* Another name for an ***extra-ocular muscle**. [From Latin *extrinsecus* on the outside, from *exter* outward + *secus*

*****ebook converter DEMO Watermarks*****

alongside]

eye *n.* The organ of vision in animals, each of the human eyeballs being protected by an upper and a lower eyelid and rotating within its bony orbit under the control of four **rectus muscles* and two **oblique muscles*, its structure allowing light to enter through the transparent external **cornea* and to pass through the **aqueous humour*, the dark central adjustable **pupil* in the iris, the **crystalline lens*, and the **vitreous humour*, to be projected on to the **retina* where light-sensitive **photoreceptors* specialized to convert the light into nerve impulses transmit visual information along the **optic nerve* via the **lateral geniculate nuclei* to the **visual cortex* (see *illustration*). Compare COMPOUND EYE, OMMATIDIUM.



Eye. Main structures of the vertebrate eye.

eye contact *n.* The event of two people simultaneously **gazing* at each other in the vicinity of each other's eyes. Also called *mutual gaze*. See also EQUILIBRIUM HYPOTHESIS, GAZE AVERSION, NON-VERBAL COMMUNICATION, REGULATOR.

eye dialect *n.* An alteration to the spelling of words to indicate a regional or social **dialect*, as in the following: *Aw knaow you. Youre the one that took way may girl. Youre the one that set er agen me. Well, I'm gowin to ev er aht* (Bill Walker, 'a rough customer of about 25', in Act II of George Bernard

*****ebook converter DEMO Watermarks*****

Shaw's play *Major Barbara*).

eye dominance *n.* An unconscious preference for the use of one eye rather than the other, analogous to hand preference, though there is no simple relation between the two.

eye-dominance column *n.* Another name for an **ocular-dominance column*.

eye-head movement system *n.* A subsystem of the visual system that enables the movement of objects in the environment to be computed from the **image-retinal system*, discounting movements of the eyes and head, necessary because movements of images across the retinas provide insufficient information for determining movement of objects in the environment, given that eye and head movements cause retinal images to move even when the objects themselves are stationary. *See also* [REAFFERENCE](#).

eye-movement desensitization and reprocessing *n.* A form of **psychotherapy* designed originally for treating **post-traumatic stress disorder* (PTSD) and sometimes applied to other anxiety disorders. When it is applied to PTSD, the client or patient is first asked to visualize or recall the traumatic experience as vividly as possible and to provide a verbal statement, such as *I feel as if I'm about to die*, epitomizing its psychological impact. The client then rates the experienced level of anxiety on a 0–10 scale of Subjective Units of Distress ([SUDs](#)) and provides a competing positive statement epitomizing a desired response to the imagined situation, such as *I can survive*, and a rating of degree of belief in this statement, on a 0–8 scale of Validity of Cognition. Following these preparatory steps, the client focuses visual attention on an object and tracks its movements as the therapist sweeps it rhythmically back and forth in groups of 12 to 24 side-to-side movements in front of the client's face, at a rate of approximately two strokes per second. After each group of strokes, the client is asked to blank out the visual image or memory, to inhale deeply, and to revise the SUD and Validity of Cognition ratings, and this process continues until the SUD rating falls below 2 and the Validity of Cognition rating rises above 6. The technique was developed in 1987 and introduced in 1989 by the US psychologist Francine Shapiro (born 1948), who discovered fortuitously that back-and-forth eye movements

*****ebook converter DEMO Watermarks*****

reduced her own anxiety. **EMDR** *abbrev.*

eye-movement potential *n.* A brief, high-amplitude ***EEG** spike, identical in appearance to a ***PGO spike** and originating in the same brain structures, but occurring in the waking state as an alerting response to unexpected sensory stimuli.

eye-placement principle *n.* A principle of composition in portrait painting that involves the placement of one of the subject's eyes somewhere on the vertical axis running down the centre of the frame. It was discovered by the British-born US psychologist Christopher W(illiam) Tyler (born 1943) and published in the journal *Nature* in 1997. Tyler found that it has governed portrait painting throughout the modern period, 68 per cent of portraits showing one of the sitter's eyes within a narrow strip centred on the vertical axis occupying 10 per cent of the frame width, but that it had not been mentioned in manuals of composition, suggesting that it operates unconsciously.

eye rhyme *n.* Words that have similar endings in their written form but are pronounced differently, such as *love* and *move*.

eye-tracking *n.* Recording eye positions and rotations in order to determine directions of ***gaze** and points of ***fixation** (1), usually in a person who is looking at an image or reading text, a research technique pioneered in the 1950s by the Russian psychologist Alfred Lukyanovich Yarbus (1914–86). An instrument designed for eye-tracking is called an *eye-tracker*. Some use optical devices that do not involve direct contact with the eye, including most commonly video-based systems and, in the case of *dual-Purkinje eye-trackers*, devices that determine eye movements from ***Purkinje–Sanson images** reflected from the front of the ***cornea** and the back of the ***crystalline lens**; others use special contact lenses with embedded mirrors or electrical field sensors to measure eye rotations directly; and some use ***electro-oculogram** recordings from ***extra-ocular muscles** that control eye movements. There are also portable systems available for eye-tracking during activities such as driving. *See also* **SACCADE**.

eye–voice span *n.* In relation to a person who is reading aloud, the

*****ebook converter DEMO Watermarks*****

average number of units (either words or syllables) by which the speech is ahead of the written text, used as a measure of reading proficiency.

eyewitness misinformation effect *n.* A phenomenon whereby misleading post-event information distorts an eyewitness's recall of an event, as when a victim of a sexual assault who is subsequently told that an arrested suspect has a tattoo on his left arm comes to believe that she can recall seeing a tattoo on the perpetrator's arm. The effect may be caused by the post-event information overwriting the original memory, or by the eyewitness becoming confused about the sources of different items of information, without the original memory necessarily being impaired. These processes were first studied systematically by the US psychologists Elizabeth F. Loftus (born 1944) and John Palmer (born 1954), who reported their findings in the *Journal of Verbal Learning and Verbal Behavior* in 1974, and the effect was discussed at length by Loftus in her book *Eyewitness Testimony* (1979). In the original experiment, participants viewed a video recording of two cars colliding, and they were then asked how fast the cars were going when they *hit* or when they *smashed* into each other; when the word *smashed* was used in the question, the participants estimated the speed as 7 miles per hour faster, on average, than when the word *hit* was used, and a week later, 32 per cent of those exposed to the word *smashed* falsely recalled broken glass in the video, compared to only 14 per cent of those exposed to the word *hit*. Also called the *misinformation effect*. See also [EXPERIMENTALLY INDUCED FALSE MEMORY](#), [FALSE MEMORY](#), [FALSE MEMORY SYNDROME](#), [PARAMNESIA \(1\)](#), [PIAGET KIDNAPPING MEMORY](#), [REALITY MONITORING](#), [RECOVERED MEMORY](#).

eyewitness testimony *n.* Evidence of events that occurred, actions that were performed, or words that were spoken, given in court by a person who observed the events or actions at first hand or heard the words being spoken. See also [EYEWITNESS MISINFORMATION EFFECT](#), [FALSE MEMORY](#), [WEAPON FOCUS](#).

Eysenck Personality Inventory *n.* A questionnaire designed to measure two major dimensions of personality, namely [*extraversion](#) and [*neuroticism](#), according to the theory of personality propounded by the German-born British psychologist Hans J(ürgen) Eysenck (1916–97). It was published in 1963 as a commercial test by Hans and Sybil B. G. Eysenck

*****ebook converter DEMO Watermarks*****

(born 1927), as a revision of the [*Maudsley Personality Inventory](#). *See also* [EYSENCK PERSONALITY QUESTIONNAIRE](#). **EPI** *abbrev.*

Eysenck Personality Questionnaire *n.* A revised version of the [*Eysenck Personality Inventory \(EPI\)](#), measuring three major dimensions of personality, namely [*extraversion](#), [*neuroticism](#), and [*psychoticism](#), and including a [*lie scale](#). It was published as a commercial test in 1975. **EPQ** *abbrev.*



F₁ *abbrev.* The first **filial generation*. F₂ represents the second filial generation, and so on.

face–goblet illusion *n.* Another name for the **reversible goblet*.

face recognition *n.* The sum total of the processes involved in the recognition and identification of faces. *See also* FUSIFORM GYRUS, PROSOPAGNOSIA, SUPERIOR TEMPORAL SULCUS.

face validity *n.* The **validity* of a test estimated or judged intuitively, without recourse to any objective evidence. Also called *a priori validity*. *See also* CONSENSUAL VALIDITY, INTRINSIC VALIDITY.

facial expression *n.* A form of **non-verbal communication* in which an **affect* display is communicated via the face, the musculature of which is sufficiently complex to enable a vast range of expressions to be conveyed. *See also* DIALECTICAL MONTAGE, DISPLAY RULE, DUCHENNE SMILE, EXPRESSIVE BEHAVIOUR, FACIAL FEEDBACK HYPOTHESIS, FACIAL NERVE, MÖBIUS SYNDROME, PRIMARY EMOTION.

facial feedback hypothesis *n.* The proposition that adopting a facial expression associated with a particular **emotion* tends to induce that emotion. The hypothesis can be traced back to a remark by the English naturalist Charles (Robert) Darwin (1809–82) in his book, *The Expression of the Emotions in Man and Animals* (1872): ‘Even the simulation of an emotion tends to arouse it in our minds’ (p. 336). Darwin proposed a weak version of the hypothesis, according to which expressing an emotion

*****ebook converter DEMO Watermarks*****

outwardly strengthens the emotional experience and suppressing the outward expression reduces the emotional experience; whereas the US psychologist William James (1842–1910) proposed a strong version, believing that bodily expressions actually *cause* emotions, as postulated in the [*James–Lange theory](#). More recent research has shown that both electrical stimulation of facial muscles to induce expressions artificially and temporary paralysis of facial muscles with Botox injections affect experienced emotions. In an article in the *Journal of Personality and Social Psychology* in 1988, the German social psychologist Fritz Strack (born 1950) and two colleagues showed that even holding a pen sideways between the teeth so that the mouth is forced into a quasi-smiling position tends to induce positive [*affect](#) or emotion. *See also* [COGNITIVE-APPRAISAL THEORY](#).

facial nerve *n.* Either of the seventh pair of [*cranial nerves](#), supplying the muscles involved in [*facial expression](#), the salivary and nasal glands, the taste buds towards the front two-thirds of the tongue, and the stapedius muscle of the inner ear. It is the most frequently paralysed of all peripheral nerves, as in [*Bell's palsy](#). *See also* [CHORDA TYMPANI](#), [CORNEAL REFLEX](#), [GLOSSOPALATINE NERVE](#).

facial vision *n.* An awareness of obstacles without vision, experienced by people who are blindfolded and often highly developed in people who are blind, usually felt as a tactile sensation in the facial area but shown by experiments to be explained by reflected sound waves and mediated entirely by hearing. The French philosopher Denis Diderot (1713–84), in a letter in 1749, first attributed it to the action of nerve endings in the face, but experiments later established that it is due to [*echolocation](#). Also called *obstacle sense*. *See also* [BIOSONAR](#).

facilitated communication *n.* A teaching method and therapeutic technique in which facilitators or partners help people with severe developmental disabilities to communicate by providing sufficient manual guidance to enable them to convey messages through a keyboard, a picture board, or a speech synthesizer. When applied to a person with [*autism spectrum disorder](#), [*cerebral palsy](#), [*Down's syndrome](#), or severe [*intellectual disability](#), it often appears to reveal unexpected literacy and a far higher level of intellectual functioning than the person was believed to

*****ebook converter DEMO Watermarks*****

possess, but [*single-blind studies](#) and [*double-blind studies](#) have revealed that disabled people are unable to respond intelligently to stimuli that are unseen by their facilitators and that the facilitators unwittingly control the responses in a manner reminiscent of [*Clever Hans](#). It was pioneered by the Australian special needs educator Rosemary Crossley (born 1945), who applied it to 12 children with physical and mental handicaps in the early 1970s, and in 1989 it was adopted enthusiastically by a number of speech therapists and special educators in the United States. Also called *facilitated communication training*. **FC** or **FCT** abbrev.

facilitation *n.* The act or process of assisting the progress of something or making it easier; more specifically, the increased ease with which [*neurons](#) transmit impulses as a result of prior excitation. *See also* [CELL ASSEMBLY](#), [LONG-TERM POTENTIATION](#), [PHASE SEQUENCE](#). [From Latin *facilis* easy, from *facere* to do + *-ation* indicating a process or condition]

facilitative priming *See* [PRIMING \(1\)](#).

factitious disorder *n.* A mental disorder in [*DSM-5](#) characterized by a persistent pattern of feigned symptoms and/or self-inflicted injuries to simulate disorder, in the absence of a confirmed physical or mental condition, and without any economic or other external incentive for the behaviour, the motive being to receive medical treatment, to gain admission to hospital, or to assume the sick role, multiple surgical operations often being eagerly sought. Also called *Munchausen syndrome*, *pathomimicry*, or (colloquially) *hospital hopper syndrome*. *See also* [FACTITIOUS DISORDER IMPOSED ON ANOTHER](#), [GANSER SYNDROME](#). *Compare* [BORDERLINE PERSONALITY DISORDER](#), [COMPENSATION NEUROSIS](#), [CONVERSION DISORDER](#), [MALINGERING](#), [PSEUDOLOGIA FANTASTICA](#), [SOMATIC SYMPTOM DISORDER](#). [From Latin *facticius* artificial or made, from *facere* to make]

factitious disorder by proxy *n.* A pattern of behaviour included in the DSM-IV appendix of conditions meriting further study, included in the [*DSM-5](#) classification under a different label. *See* [FACTITIOUS DISORDER IMPOSED ON ANOTHER](#).

factitious disorder imposed on another *n.* A disorder in [*DSM-](#)
*****ebook converter DEMO Watermarks*****

5 characterized by a pattern of behaviour involving intentional feigning of physical or psychological signs or symptoms in another person who is being cared for, without any economic or other external incentive for the behaviour, the motive being to procure medical treatment for the person being cared for and thereby to assume a sick role by proxy. According to the British paediatrician (Samuel) Roy (later Sir Roy) Meadow (born 1933), who was the first to identify the phenomenon and who coined the alternative term *Munchausen by proxy syndrome* (MBPS) in 1977, it is not a psychological disorder but a form of physical or psychological abuse of children or others being cared for. See also [FACTITIOUS DISORDER](#). Compare [BORDERLINE PERSONALITY DISORDER](#), [CONVERSION DISORDER](#), [MALINGERING](#), [SOMATIC SYMPTOM DISORDER](#).

factor *n.* 1. In experimental design, another name for an [*independent variable](#). 2. In [*factor analysis](#), one of the underlying dimensions derived from the larger number of original variables. It is a derived, hypothetical dimension that accounts, in part, for the correlations between a number of variables. The term is also commonly applied to the psychological [*construct](#) associated with the dimension derived from factor analysis, as when the common factor [*g](#) is interpreted as general intelligence. See also [GROUP FACTOR](#). 3. More generally, anything that contributes to an outcome or result. **factorial** *adj.* [From Latin *factor* something that acts, from *facere* to do]

factor analysis *n.* A statistical technique for analysing the correlations between a large number of variables in order to reduce them to a smaller number of underlying dimensions, called *factors*, in a manner analogous to the way in which all spectral colours can be reduced to combinations of just three primary colours, and to determine how much of the [*variance](#) in each of the original variables is explained by each factor. See also [ANALYSIS OF COVARIANCE STRUCTURES](#), [CLUSTER ANALYSIS](#), [COMMUNALITY](#), [CONFIRMATORY FACTOR ANALYSIS](#), [CORRESPONDENCE ANALYSIS](#), [EXPLORATORY FACTOR ANALYSIS](#), [G](#), [PRIMARY MENTAL ABILITIES](#), [PRINCIPAL-COMPONENTS ANALYSIS](#), [Q-METHODOLOGY](#), [R-METHODOLOGY](#), [ROTATION](#), [SIMPLE STRUCTURE](#). **factor-analytic** *adj.*

factorial analysis of variance *n.* Another name for [*multifactorial analysis](#) of variance.

factorial design *n.* Any experimental design in which there are two or more ***independent variables** or factors, and every level of each factor is combined with every level of each other factor. For example, if there are two factors, and if one of the factors has two levels, the other has three levels, and all six combinations are represented, then the design is called a 2×3 factorial design.

factorial validity *n.* The ***validity** of a test determined by its ***correlation** with a ***factor** (2) determined by ***factor analysis**. The idea behind this form of validity was introduced by the English statistician and psychologist Charles Spearman (1863–1945) in an article in the *American Journal of Psychology* in 1904, where he interpreted intelligence as the factor *g* that underlies all test items and subtests with good ***content validity** (that is, items and subtests that appear to require intelligence) and argued that the most valid tests are those with highest loadings on the factor *g*.

faculty psychology *n.* An obsolete school of psychology based on arbitrarily posited powers or capacities (called *faculties*) into which the mind was divided, such as will, reason, and instinct, through whose interaction all mental functions and phenomena were supposed to occur. The most influential figure in the development of this approach was the German philosopher and mathematician Christian Wolff (1679–1754), whose *Psychologia Empirica* (1732) and *Psychologia Rationalis* (1734) popularized a version of faculty psychology that formed the foundation for the later development of ***phrenology**. [From Latin *facultas* a capacity]

failure neurosis *n.* A term introduced in 1939 by the French psychoanalyst René Laforgue (1894–1962) for a class of disorders characterized by behaviour that appears calculated to bring misfortunes on oneself and an inability to accept the things that one most ardently desires. This syndrome is an extension and elaboration of ideas first set forth in 1916 by Sigmund Freud (1856–1939) in an article entitled ‘Some Character-Types Met With in Psycho-Analytic Work’ (*Standard Edition*, XIV, pp. 311–33, at pp. 317–18). Also called *failure syndrome*. Compare **FATE NEUROSIS**.

Fairbairn's revised psychopathology *n.* In ***psychoanalysis**, a term used to denote the theory of mental disorder proposed by the Scottish
*****ebook converter DEMO Watermarks*****

psychoanalyst W. Ronald D. Fairbairn (1889–1964), especially his theory of the ***defensive technique**. He published an early version of it in 1941 in an article entitled ‘A Revised Psychopathology of the Psychoses and Psychoneuroses’, reprinted in his book *Psychoanalytic Studies of the Personality* (1952). See **HYSTERICAL TECHNIQUE**, **OBSessional TECHNIQUE**, **PARANOID TECHNIQUE**, **PHOBIC TECHNIQUE**.

falling out *n.* A ***culture-bound syndrome** found among communities in the southern United States and the Caribbean, characterized by a sudden collapse, occurring either without warning or after a brief spell of dizziness, followed by a sensation of blindness, although the eyes are open, and an inability to speak or move although the person is aware of what is happening in the immediate vicinity. It is sometimes interpreted as a ***conversion disorder** or a ***dissociative disorder**. Also called *blacking out*.

false alarm *n.* 1. A warning signal that turns out to have been unnecessary. 2. In ***signal detection theory**, an incorrect detection of a signal when it is absent. Also called a *false positive*. See also **MEMORY OPERATING CHARACTERISTIC**, **RECEIVER OPERATING CHARACTERISTIC**. Compare **CORRECT REJECTION**, **HIT**, **MISS**.

false anorexia *n.* Another name for ***pseudoanorexia**.

false-consensus effect *n.* A form of ***assimilation** (4) characterized by a tendency to overestimate the extent to which other people share one's beliefs, attitudes, and behaviours. In ***social perception** and ***attribution**, people tend to assume that their own responses are more common than they really are and to consider alternative responses as uncommon, deviant, or inappropriate. The concept was introduced and named by the Canadian psychologist Lee D(avid) Ross (born 1942) and two colleagues in an article in the *Journal of Experimental Social Psychology* in 1977 in which they reported four experiments, including a typical one in which Stanford University students were asked whether they would be willing to walk around the campus for 30 minutes wearing a sandwich board inscribed with the message REPENT; those who agreed to do this estimated, on average, that 63.50 per cent of their fellow students would also agree, and those who refused estimated that 76.67 per cent of their fellow students would also

*****ebook converter DEMO Watermarks*****

refuse. *See also* [ASSIMILATION—CONTRAST THEORY](#), [AUTOMORPHIC PERCEPTION](#), [EGOCENTRISM](#). **FCE** *abbrev.*

false friends *n.* Words in different languages that resemble each other but have different meanings. For example, in French *magasin* means shop or store, not magazine, and *sensible* means sensitive, not sensible; and in German *Mist* means excrement, not mist, and *Gift* means poison, not gift.

false memory *n.* An apparent recollection of something that one did not actually experience, especially sexual abuse during infancy or childhood, often arising from suggestion implanted during counselling or psychotherapy. A classic example, though one unrelated to counselling and psychotherapy, is the [*Piaget kidnapping memory](#). Also called a *pseudomemory* or *pseudomnesia*. *See also* [DEFERRED ACTION](#), [DÉJÀ VU](#), [EXPERIMENTALLY INDUCED FALSE MEMORY](#), [EYEWITNESS MISINFORMATION EFFECT](#), [FALSE MEMORY SYNDROME](#), [INFANTILE AMNESIA](#), [PARAMNESIA \(1\)](#), [RECOVERED MEMORY](#).

false memory syndrome *n.* A condition in which a person's identity and personal relationships are strongly influenced by an objectively false but strongly believed memory of a traumatic experience, such as an objectively false recollection of sexual abuse by a parent or other relative or abduction by alien beings. *See* [FALSE MEMORY](#). *See also* [CONSTRUCTIVE MEMORY](#), [EYEWITNESS MISINFORMATION EFFECT](#), [INFANTILE AMNESIA](#), [PARAMNESIA \(1\)](#), [PIAGET KIDNAPPING MEMORY](#), [RECONSTRUCTIVE MEMORY](#), [RECOVERED MEMORY](#). **FMS** *abbrev.*

false negative *n.* An incorrect classification of an element as not belonging to a class to which it does in fact belong or, especially in [*signal detection theory](#), a failure to detect a signal when it is in fact present. Also called a *miss*. *Compare* [CORRECT REJECTION](#), [FALSE ALARM \(2\)](#), [HIT](#).

false neurotransmitter *n.* Any substance that is not a neuron's normal [*neurotransmitter](#) but that can be taken up by the neuron, stored in its vesicles, and released along with the neuron's normal neurotransmitter when the neuron is stimulated. It may inhibit the function of the neuron if it is less effective than the normal neurotransmitter or enhance the neuron's function if it is more effective.

false positive *n.* An incorrect classification of an element as a member of a class to which it does not in fact belong, as when a decision procedure results in a person being wrongly diagnosed as having a disorder. In **signal detection theory* it is often called a *false alarm*. Compare CORRECT REJECTION, HIT, MISS.

false pregnancy *n.* Another name for **pseudocyesis*.

falsifiability *n.* In the philosophy of science, the property of a **hypothesis* or theory of being capable of refutation by **empirical* evidence, with the implication that a hypothesis lacking this property does not belong to science. The concept was introduced by the Austrian-born British philosopher Karl R(aimund) Popper (1902–94) as a solution to the problem of **induction* (1) and as a criterion of demarcation between science, which deals with falsifiable hypotheses, and metaphysics, which admits unfalsifiable propositions. See also CONFIRMATION BIAS, HYPOTHETICO-DEDUCTIVE METHOD. Compare LOGICAL EMPIRICISM, LOGICAL POSITIVISM.

family *n.* 1. The primary social group, comprising parents, their offspring, and in some societies other relatives sharing the same household (the **extended family*); or more generally any group of individuals related by blood or descended from an identifiable common ancestor. 2. In biology, a **taxonomic* group into which an **order* (3) is divided, containing one or more **genera*. For example, Felidae, the cat family, and Canidae, the dog family, together with the other meat-eating families of bears, raccoons, hyenas, civets, and weasels are all members of the order Carnivora. [From Latin *familia* a household]

family neurosis *n.* A term used mainly in French **psychoanalysis*, not to denote any specific disorder, but to refer to the tendency for individual neuroses of family members to complement and reinforce one another. The concept was introduced in the title of an article published in a French psychoanalytic journal in 1936: ‘La névrose familiale’.

family study *n.* In behaviour genetics, another name for a **kinship study*.

family therapy *n.* A form of **psychotherapy*, based on the assumption that psychological problems are often rooted in and sustained by family relationships, in which two or more members of a family participate simultaneously with the aim of improving communication and modes of interaction between them. *See also* *SYSTEMS THEORY*.

famous names test *n.* A technique for measuring **long-term memory* and providing evidence for **amnesia*. Respondents are presented with the names of people who were famous for limited periods up to several decades previously and are asked to try to identify them and recall what they were famous for. The names that are chosen are usually of people such as Winston Churchill, John F. Kennedy, and Elvis Presley, who were so famous that respondents with intact memories are expected to remember all of them.

fan effect *n.* A tendency for the amount of time required to retrieve a particular fact about a concept to increase with the number of facts that are known about that concept. The effect has been found in retrieval of various categories of knowledge, and also in face recognition, and it may in part be responsible for the slowing of memory retrieval with age. The concept was first reported in 1974 by the Canadian-born US psychologist John R(ober) Anderson (born 1947), who performed an experiment in which participants tried to memorize a list of 26 sentences about people in locations, such as *A hippie is in the park*, *A hippie is in the church*, and *A lawyer is in the cave*. In the list, each person (concept) was associated with either one, two, or three locations (facts); for example, *hippie* was associated with *park*, *church*, and *bank*, and in addition each location was associated with either one, two, or three persons, for example, *cave* was associated with *lawyer* only. Recall was tested by asking the participants to pick out the target sentences from a list in which the sentences that they had learnt were mixed up with **foils* constructed from the same people and locations in novel combinations. The average time required to accept target sentences and reject foils was 1.19 seconds for concepts with one associated fact, 1.28 seconds for concepts with two associated facts, and 1.30 seconds for concepts with three associated facts, and this effect has been replicated many times. *See also* *ACT**. [An acronym, from *facts associated with node*, a concept being represented by a **node (2)* in Anderson's network model. Anderson did not use the word *fan* in his original 1974 article but began using it immediately after]

*****ebook converter DEMO Watermarks*****

fantasize *vb.* To engage in **fantasy* (1) or to produce **fantasies* (1, 2).

fantasticant *See* PHANTASTICANT.

fantasy *n.* 1. Imagination or mental **imagery*. *See also* ALEXITHYMIA, FANTASY THINKING, MALE HYPOACTIVE SEXUAL DESIRE DISORDER. 2. A product of the imagination, especially one detached from reality, or a **daydream* such as the **Madame Butterfly fantasy*. *See also* PRIMAL FANTASY. 3. A whimsical or unrealistic plan or idea. Also spelt *phantasy*. [From Latin *phantasia* a fantasy, from Greek *phantazein* to make visible, from *phainein* to show, from *phaein* to shine]

fantasy thinking *n.* In **analytical psychology*, a form of thinking based on **fantasy* (1) that relies on **imagery*, **emotion*, and **intuition*, without logical or moral constraints. It is closely related to the **primary process* of **psychoanalysis*, and it occurs in dreams and mythology; it is debatable whether it should be called thinking. Carl Gustav Jung (1875–1961) contrasted it with **directed thinking* (*Collected Works*, 5, paragraphs 4–46).

far point *n.* The most distant point from the eye at which an object is focused on the retina without **accommodation* (1) of the crystalline lens, theoretically located at infinity for a normal eye but in practice usually set as 6 metres or 20 feet. *See also* RANGE OF ACCOMMODATION. *Compare* NEAR POINT.

far sense *n.* Any of the senses, such as vision or hearing, that are mediated by **telereceptors* and that enable an organism to perceive objects or events at a distance. Also called a *distance sense*. *Compare* NEAR SENSE.

far-sighted *adj.* 1. Having the ability to see at great distances. 2. Exhibiting foresight and shrewd judgement. 3. A non-technical word for **hyperopic*. **far-sightedness** *n.*

far vision *n.* Distance viewing, usually defined for objects more than 2 feet or about 60 centimetres from the eyes. *See also* ACCOMMODATION (1), ACCOMMODATION REFLEX, CILIARY REFLEX, MYOPIA, SYMPATHETIC NERVOUS SYSTEM. *Compare* NEAR VISION.

fascicle *n.* Another name for a **fasciculus*. [From Latin *fascis* a bundle]

fasciculus *n.* A small bundle or bunch, especially a bundle of nerve fibres such as the **arcuate fasciculus*, **fasciculus cuneatus*, **fasciculus gracilis*, **inferior longitudinal fasciculus*, **superior longitudinal fasciculus*, **subthalamic fasciculus*, or **uncinate fasciculus*. Also called a *fascicle*. [From Latin *fasciculus* a small bundle, diminutive of *fascis* a bundle]

fasciculus cuneatus *n.* A subdivision of the bundle of ascending nerve fibres in the posterior funiculus of the spinal cord, the part towards either side that carries information about touch and position from the arm on the same side of the body and that terminates in the **cuneate nucleus*. See also DORSAL COLUMN. Compare FASCICULUS GRACILIS. [From Latin *cuneatus* wedge-shaped, from *cuneus* a wedge]

fasciculus gracilis *n.* A subdivision of the bundle of ascending nerve fibres in the posterior funiculus of the spinal cord, the part towards the centre that carries information about touch and position of the leg on the same side of the body and that terminates in the **gracile nucleus*. Compare FASCICULUS CUNEATUS. [From Latin *gracilis* slender]

FAST *abbrev.* Face Arm Speech Test, or Face Arm Speech Tongue test, quick and easy assessments for paramedics and members of the public designed to maximize the proportion of **stroke* victims receiving treatment within three hours of the onset of symptoms. Facial weakness is assessed by asking a potential stroke victim to smile and noting any difficulty in smiling without the mouth or eyes dropping; arm weakness by difficulty in raising both arms successfully; speech impairment by difficulty speaking clearly without slurring; and (added later by health practitioners) tongue protrusion difficulty by an inability to stick the tongue out straight from the mouth. Presence of any of these signs is a possible indication of stroke. The test was developed in 1998 by stroke specialists, paramedics, and an emergency room physician in the United Kingdom.

fast glycolytic fibre *n.* A type of **fast-twitch fibre* that is light-coloured and is adapted for **anaerobic* metabolism. US *fast glycolytic fiber*.

Compare **FAST OXIDATIVE GLYCOLYTIC FIBRE**. **FG fibre** *abbrev.* [So called because it is adapted for metabolism by ***glycolysis**]

fast oxidative glycolytic fibre *n.* A type of ***fast-twitch fibre** that is red and is adapted for oxidative metabolism. US *fast oxidative glycolytic fiber*. Compare **FAST GLYCOLYTIC FIBRE**. **FOG fibre** *abbrev.* [So called because it is adapted for oxidative or aerobic metabolism by ***glycolysis**]

fast-twitch fibre *n.* A ***striped muscle** fibre that responds quickly and powerfully but is more prone to fatigue than ***slow-twitch fibre**. US *fast-twitch fiber*. See **FAST GLYCOLYTIC FIBRE**, **FAST OXIDATIVE GLYCOLYTIC FIBRE**.

fatal familial insomnia *n.* A human ***prion** disease characterized by ***insomnia**, disorders of the ***autonomic nervous system**, ***ataxia**, ***dementia**, and death within three years. **FFI** *abbrev.*

fate control *n.* In ***interdependence theory**, as expounded by the US social psychologists Harold H(arding) Kelley (1921–2003) and John W(alter) Thibaut (1917–86) in their books *The Social Psychology of Groups* (1959) and *Interpersonal Relations: A Theory of Interdependence* (1978), an interpersonal situation involving two people, *A* and *B*, in which ‘by simply varying what he does, *A* can produce a variation in *B*’s outcomes. We have described this as *fate control* (**FC**) because *A* has absolute control over *B*’s fate’ (1978, p. 31). Compare **BEHAVIOUR CONTROL**. **FC** *abbrev.*

fate neurosis *n.* In ***psychoanalysis**, a syndrome of repeating patterns of unpleasant life events, the recurrences appearing to be misfortunes but bearing an uncanny similarity to one another. It was discussed by Sigmund Freud (1856–1939) in 1920 in his book *Beyond the Pleasure Principle* (*Standard Edition*, XVIII, 7–64, at pp. 21–2), where he gave examples of people whose good deeds are constantly repaid by ingratitude or bad luck, people who are repeatedly betrayed by friends, and similar cases, and he explained it as a manifestation of a ***repetition compulsion**. The word that Freud coined was *Schicksalszwang* (fate compulsion) rather than *Schicksalneurose* (fate neurosis), but the latter term became conventional in both German and English. Compare **FAILURE NEUROSIS**.

father complex *n.* In **psychoanalysis*, **ambivalence* in a boy's feelings towards his father, being one of the elements of the **Oedipus complex*. See also *COMPLEX (2)*.

fatigue *n.* **1.** Weariness or exhaustion, normally resulting from physical or mental work or lack of sleep. **2.** In physiology, a temporary diminution in the response of an organ or part to a stimulus resulting from overactivity. [From French *fatiguer* to tire, from Latin *fatigare* to tire]

fatigue syndrome See *CHRONIC FATIGUE SYNDROME*.

fattism *n.* Discrimination against people who are overweight, or the tendency to poke fun at them. The word was coined by the US psychologist Rita (Jackaway) Freedman (born 1940) in her book *Bodylove* (1988). Also spelt *fatism*. Compare *ABLEISM*, *AGEISM*, *ETHNOCENTRISM*, *HETEROSEXISM*, *RACISM*, *SEXISM*, *SPECIESISM*. **fattist** or **fatist** *n.* **1.** One who practises or advocates fattism. *adj.* **2.** Of or relating to fattism. [From *fat* + Greek *-ismos* indicating a state or condition, on the model of words such as *racism*]

fatuous love *n.* A type of love characterized by erotic passion and commitment but lacking intimacy. See also *LOVE*. [From Latin *fatuus* foolish]

fear of success *n.* Anxiety about accomplishing goals and achieving ambitions, especially among women because of cultural associations of ambition and success with lack of femininity, as a consequence of which success can lead to social rejection and disapproval. The concept was introduced in 1968 in a doctoral dissertation by the US psychologist Matina S(ouretis) Horner (born 1939) and became well known after an article by her in the *Journal of Social Issues* in 1972. Horner presented men and women with the following brief statement and asked them to write stories based on it: 'After first-term finals (Anne/John) finds (herself/himself) at the top of (her/his) medical class.' The stories written by women responding to the version with the female character called Anne often expressed ambivalence and conflict over Anne's success; they described Anne living a lonely and miserable life, being ugly and horrid, having no love life, and so on. Evidence of fear of success was found in only 10 per cent of stories written by men but

in 65 per cent of stories written by women. Later research reported some decline in fear of success among women as gender inequality declined after the early 1970s, and evidence emerged that both men and women fear success in various circumstances, including occupations that are not traditional for their gender. *See also* [SUCCESS NEUROSIS](#).

feature *n.* 1. Any attribute of a sensory [*stimulus \(1, 2, 3\)](#). A [*local feature](#) is an attribute of part of the stimulus, and a [*global feature](#) is an attribute of the stimulus as a whole. *See also* [ACOUSTIC FEATURE](#), [CHARACTERISTIC FEATURES](#), [CONCEPT](#), [DEFINING PROPERTIES](#), [DISTINCTIVE FEATURE](#), [FEATURE COMPARISON MODEL](#), [FEATURE DETECTION THEORY](#), [FEATURE DETECTOR](#), [FEATURE INTEGRATION THEORY](#), [FEATURE SEARCH](#), [LEVELS OF PROCESSING](#), [PROTOTYPE THEORY](#). 2. More specifically, any of the distinctive parts of the face, such as the eyes, nose, mouth, ears, or chin. [From Old French *faiture* a feature, from Latin *factura* a making, from *facere* to make]

feature abstraction theory *n.* Another name for [*feature detection theory](#).

feature comparison model *n.* Any theory of [*concept formation](#) according to which a decision as to whether a particular item or element belongs to a class proceeds by comparing the [*features \(1\)](#) of the item with those of the class. For example, the theory posits that a person decides whether a particular animal is a cat by checking it for various features associated with cats, such as whiskers, a tail, a propensity to mew, and so on. **FCM** *abbrev.*

feature contrast *n.* In perceptual learning, the isolation of distinctive [*features \(1\)](#) of stimuli by first examining a pair of stimuli that are clearly or obviously differentiated on the feature in question and then responding to a sequence of pairs in which discrimination becomes progressively more difficult.

feature detection theory *n.* Any of a number of theories according to which the perception of objects proceeds by recognizing individual [*features \(1\)](#), such as a pair of wheels, a pair of pedals, a handlebar, a saddle, and an M-shaped metal frame, and assembling them to form a coherent pattern, in

*****ebook converter DEMO Watermarks*****

this example a bicycle, which is then identified as such. Also called *feature abstraction theory*. Compare [FEATURE INTEGRATION THEORY](#), [TOP-DOWN PROCESSING](#).

feature detector *n.* A neuron that responds selectively to a specific **feature* (1) of its input, such as an **edge detector*, a **bar detector*, or a cell specified for facial recognition in the visual association cortex (see [VISUAL CORTEX](#)). Feature detectors in the **retina* were first proposed by the US neuroscientist Jerry (Jerome Ysroael) Lettvin (1920–2011) and three co-authors in an article in the *Proceedings of the Institute of Radio Engineers* in 1959 entitled ‘What the Frog’s Eye Tells the Frog’s Brain’. See also [COMPLEX CELL](#), [GRANDMOTHER CELL](#), [HYPERCOMPLEX CELL](#), [SIMPLE CELL](#).

feature integration theory *n.* A theory first presented in 1977 and 1980 by the US-based English psychologist Anne (Marie) Treisman (born 1935) and colleagues according to which **features* (1) of a stimulus such as colour and shape are analysed separately and only later integrated in the process of perception. Indirect evidence for this comes from experiments showing that, without attention, features are often incorrectly bound, giving rise to illusory conjunctions, and that a red square hidden among blue squares can be detected just as quickly if it is hidden among 20 blue squares as among 10 blue squares, but the time taken to detect a red square hidden among blue squares and red triangles increases with the number of distractor items. See also [BINDING PROBLEM](#), [CONJUNCTION SEARCH](#), [CONJUNCTIVE CONCEPT](#). Compare [FEATURE DETECTION THEORY](#).

feature list theory *n.* Another name for the **componential theory* of concept formation.

feature negative learning *n.* A form of **classical conditioning* in which an animal is given **reinforcement* (2) in the presence of a **conditioned stimulus* that has feature *B* but not a stimulus that has features *A* and *B*. Compare [FEATURE POSITIVE LEARNING](#).

feature positive learning *n.* A form of **classical conditioning* in which an animal is given **reinforcement* (2) in the presence of a **conditioned stimulus* with two features *A* and *B* but not a stimulus that has
*****ebook converter DEMO Watermarks*****

only feature *B. Compare* [FEATURE NEGATIVE LEARNING](#).

feature search *n.* A search for a particular [*feature \(1\)](#) or [*attribute](#), as when a person scans a page in a telephone directory searching for telephone numbers ending with the digit 9. *Compare* [CONJUNCTION SEARCH](#), [DISJUNCTION SEARCH](#).

feature theory *n.* Any theory according to which objects or concepts are recognized by examining their individual features and comparing them to a stored list of [*defining properties](#) for the object or concept concerned. One of the problems with any such theory is that it takes no account of relations between features.

Fechner–Benham colours *n.* Another name for [*pattern-induced flicker colours](#) induced by [*Benham's top](#). US *Fechner–Benham colors*. Also called *Fechner colours* or *subjective colours*. [Named after the German philosopher, physician, psychologist, and mystic Gustav Theodor Fechner (1801–87) who discovered the phenomenon in 1838 using a disc with 18 progressively longer arcs and the English amateur scientist and polymath Charles Edwin Benham (1860–1929) who rediscovered the phenomenon in its more familiar form in 1894]

Fechner's law *n.* In [*psychophysics](#), the proposition that the magnitude of a sensation is proportional to the logarithm of the intensity of the stimulus causing it, usually expressed by the equation $\psi = k \log \phi$, where ψ is the magnitude of the sensation, ϕ is the physical intensity of the stimulus, and k is a constant scaling factor that varies from one kind of sensation to another. It has been largely supplanted by a [*power law](#), which Fechner's law approximates for many sensory modalities. Also called the *Weber–Fechner law*, Fechner himself having called it *Weber's law*. *See also* [PSYCHOPHYSICAL FUNCTION](#). [Named after the German philosopher, physician, psychologist, and mystic Gustav Theodor Fechner (1801–87) to whom it came as a revelation as he lay in bed on 22 October 1850 contemplating the [*mind–body problem](#), although its influence was felt mainly after the publication of his *Elemente der Psychophysik* in 1860]

Fechner's paradox *n.* An increase in the perceived [*lightness](#) of an
*****ebook converter DEMO Watermarks*****

image or scene that is viewed first with both eyes, but with an achromatic light-reducing filter over one eye, and then with the other eye alone and without a filter, despite the fact that less light enters the visual system in the second viewing. It arises as a direct consequence of ***binocular summation**, according to which the perceived lightness of an image or scene viewed binocularly is approximately the average of the brightness of the two stimuli perceived monocularly. It is a surprising phenomenon rather than a true ***paradox**. [Named after the German philosopher, physician, psychologist, and mystic Gustav Theodor Fechner (1801–87) who first pointed it out]

feeble-mindedness *n.* An obsolescent term for ***intellectual disability**.

feedback *n.* The return of part of a system's output to its input, usually as a means of achieving self-correction or modification of performance. In *negative feedback* an increase in output causes a decrease in input, as in a thermostat or other self-regulating mechanism and many ***homeostatic** biological processes including ***EEG** waves. In *positive feedback* an increase in output causes an increase in input, as in the howling of a public address system when a microphone is held too close to its loudspeaker. The term is also used informally for information given to research participants about their own performance or behaviour. *See also* **CLOSED-LOOP CONTROL**, **CYBERNETICS**, **DELAYED AUDITORY FEEDBACK**, **OPEN-LOOP CONTROL**, **TOTE**. *Compare* **FEEDFORWARD**.

feedforward *n.* The effect of a signal pre-empting a subsequent error, such as the efferent output of the extra-ocular muscles during a ***saccade**, suppressing the sensation of movement that would otherwise be created by the motion of images across the retinas during the saccade. *See also* **VISUAL SUPPRESSION**. *Compare* **FEEDBACK**.

feeding and eating disorders *n.* An umbrella term introduced in ***DSM-5** for ***mental disorders** associated with disturbance of eating or eating-related behaviour with significant impairment of physical health or psychosocial functioning. *See* **ANOREXIA NERVOSA**, **AVOIDANT/RESTRICTIVE FOOD INTAKE DISORDER**, **BINGE-EATING DISORDER**, **BULIMIA NERVOSA**, **PICA**, **RUMINATION DISORDER**. *See also* **ACTIGRAPHY**.

feeding centre *n.* One of the two structures of the **appestat*, situated in both halves of the lateral **hypothalamus*, stimulation of which increases eating and destruction inhibits eating. US *feeding center*. See also LATERAL HYPOTHALAMIC FEEDING CENTRE. Compare SATIETY CENTRE.

feeling type *n.* One of the subsidiary personality types in **analytical psychology*. See FUNCTION TYPE.

fellatio *n.* Sexual activity in which a man's genitalia are stimulated by his partner's tongue and lips. Also called *fellation*. Compare CUNNILINGUS. **fellate** *vb.* To perform fellatio. [From Latin *fellare* to suck]

female genital mutilation *n.* Another name for **clitoridectomy*, widely practised in parts of Africa and elsewhere to deter women's sexual infidelity. **FGM** *abbrev.*

female orgasmic disorder *n.* A **sexual dysfunction* in **DSM-5* characterized by a persistent or recurrent delay or absence of **orgasm* following the excitement phase of the female **sexual response cycle* on all or almost all occasions (75–100 per cent), causing significant distress or interpersonal problems, persisting for at least six months, and not being attributable to a drug, another medical condition, or relationship distress, such as partner violence. Compare PERSISTENT SEXUAL AROUSAL SYNDROME.

female sexual interest/arousal disorder *n.* A **sexual dysfunction* in **DSM-5* characterized by reduced or absent interest in sex and erotic thoughts or fantasies, reduced or absent sexual excitement or pleasure during sex, unresponsiveness to sexual cues, and absent genital sensations in all or most sexual encounters (75–100 per cent). It is usually accompanied by a persistent or recurrent inability to attain or maintain adequate lubrication and swelling of the external sexual organs until completion of sexual activity.

fenestra *n.* A window, or a window-like opening in an anatomical structure. **fenestrae** *pl.* [From Latin *fenestra* a window]

fenestra ovalis *n.* The **oval window*. Also called the *fenestra vestibuli*.

fenestra rotunda *n.* The **round window*. Also called the *fenestra cochleae* or *fenestra tympani*.

fentanyl *n.* A **narcotic analgesic* drug that has a pharmacological action similar to that of morphine and is used as an adjunct to general anaesthesia, as a sedative or **neuroleptic (1)* drug, and sometimes as a street drug. Its most common street name is *China white*. See also *DROPERIDOL*. [A corruption of *phenethyl*]

feral *adj.* Wild or untamed, especially after having previously been domesticated. [From Latin *feralis* wild, from *fera* a wild beast]

feral child *n.* A child supposedly raised by wild animals with little or no involvement of other humans. See also *KASPAR HAUSER EXPERIMENT*, *WILD BOY OF AVEYRON*.

Ferberize *vb.* To train an infant to be self-reliant and to sleep on its own by placing it in its crib, leaving the room, and ignoring its crying for at least 20 minutes, then returning, patting it but not picking it up, and leaving quickly. When this influential but controversial child-care practice is followed, the procedure is repeated every night, increasing by five minutes per night the waiting period before responding to the infant's crying with patting. **Ferberization** *n.* The practice of Ferberizing. [Named after the US paediatric sleep researcher Richard Ferber (born 1944) who developed it in 1986]

Ferry–Porter law *n.* The proposition that the **critical flicker frequency* increases in proportion to the logarithm of light intensity. Also called *Porter's law*. [Named after Edwin Sidney Ferry (1868–1956), US physicist, and Thomas Cunningham Porter (1860–1933), assistant science and mathematics master at Eton College, England, who discovered it independently]

fertility *n.* The reproductive activity of an organism or of a population, species, or other taxonomic group, indexed by the number of viable offspring that it produces in a specified time period. [From Latin *fertilis* fruitful, from *ferre* to bear]

fertilization *n.* The union of a male and a female **gamete*, such as an ovum and a spermatozoon in humans, to produce a **zygote*.

festination *n.* A manner of walking with an involuntary acceleration of gait, as if trying to catch up with one's displaced centre of gravity, often shown by people with **Parkinson's disease*. [From Latin *festinare* to hurry + *-ation* indicating a process or condition]

fetal alcohol syndrome *See* FOETAL ALCOHOL SYNDROME.

fetal brain transplantation *See* FOETAL BRAIN TRANSPLANTATION.

fetish *n.* 1. An inanimate object to which a pathological sexual attachment is formed, or by extension a person who is the object of an obsessive **fixation* (3). 2. An object, the possession of which is believed to procure the services of a spirit lodged within it. *See also* FETISHISM. [From Portuguese *feitício* magic, from *feitício* artificial, from Latin *facticius* artificial or made, from *facere* to make]

fetishism *n.* A **paraphilia* characterized by recurrent, intense sexual fantasies, urges, or behaviour involving inanimate objects such as women's undergarments, stockings, or shoes that are treated as **fetishes* (1). *See also* FETISHISTIC DISORDER, SPLITTING OF THE EGO. **fetishistic** *adj.*

fetishistic disorder *n.* A **paraphilic disorder* in **DSM-5* characterized by intense, recurrent sexual arousal from either non-living objects or non-genital body parts, or associated fantasies or urges over a period of at least six months. To meet the diagnostic criteria, the fantasies, urges, or behaviour must have caused clinically significant distress or impairment in social, occupational, or other areas of life, and the fetish objects must not be limited to opposite-sex clothing or sex toys or devices. *See also* FETISHISM.

fetishistic transvestism *n.* A **paraphilia* characterized by recurrent sexually arousing fantasies, sexual urges, or behaviour involving the wearing of clothes of the opposite sex and appearing as a member of the opposite sex. Also called *transvestic fetishism*. *Compare* TRANSSEXUALISM, TRANSVESTISM.

[From Latin *trans* across + *vestire* to dress]

fetus *n.* An alternative (etymologically more correct) spelling of **foetus*.
[From Latin *fetus* offspring]

fibril *n.* A small fibre or threadlike structure such as one of the contractile strands of muscle tissue. [From Latin *fibrilla* a little fibre, diminutive of *fibra* a fibre]

fibrillation *n.* A localized and involuntary twitching of muscle fibres; also, a chaotic twitching of muscle fibres of the heart. [So called because it arises from the discoordinated actions of muscle **fibrils*]

fictional finalism *n.* In the **individual psychology* of the Austrian psychiatrist Alfred Adler (1870–1937) and his followers, a term used to denote the characteristic form of human motivation, being driven by striving after unattainable ultimate goals. Except in cases of neurosis, however, people are normally able to suspend such fantasies and adopt more realistic judgements of the future.

fiction, guiding *See* GUIDING FICTION.

field *n.* A bounded area, especially a region within which a body experiences forces resulting from the presence of other bodies not in contact with it (as in a gravitational or a magnetic field), or more generally any region within which certain specified phenomena occur. *See also* FIELD DEPENDENCE–INDEPENDENCE, FIELD EFFECT, FIELD THEORY, LIFE SPACE, RECEPTIVE FIELD, TOPOLOGICAL PSYCHOLOGY, VISUAL FIELD.

field adaptation *n.* The component of **visual adaptation* during **dark adaptation* or **light adaptation* that occurs relatively quickly through neural processes rather than as a result of pigment bleaching. Also called *neural adaptation*.

field dependence–independence *n.* A **cognitive style* characterized by the propensity to differentiate perceptual and other

experiences from their backgrounds or contexts, a person with a weak propensity of this kind being field dependent and a person with a strong propensity field independent. Men tend on average to be more field independent than women, adults than children, and people who score high on abstract reasoning subtests of IQ tests (as opposed to vocabulary, information, and comprehension subtests) than those who score low on such subtests. It was discovered in 1950 by the US psychologist Herman A. Witkin (1916–79) and is usually measured by the **rod-and-frame test*, the **embedded-figures test*, or the **tilting-room test*. Field independence is also called *psychological differentiation*. **FD–I** abbrev.

field effect *n.* A term used by **Gestalt psychologists* to denote a **context effect* in which the appearance of an image or part of an image is affected by its spatial or temporal setting, as in **associative illusions*. See also *PRÄGNANZ*.

field experiment *n.* Any **experiment* carried out in a natural setting rather than in the artificial environment of a laboratory. Compare *FIELD STUDY*.

field of vision *n.* Another name for the **visual field*.

field study *n.* A research investigation, possibly but not necessarily a **field experiment*, carried out in a natural setting rather than in the artificial environment of a research laboratory.

field theory *n.* Any theory in which phenomena are interpreted as resulting from the dynamic interplay of elements within a **field*, especially (in psychology) the theory introduced in 1935 by the German–US psychologist Kurt Lewin (1890–1947). According to Lewin's field theory, psychological events occur within a type of field called a **life space*, within which the important relations are qualitative aspects of connection and position, such as belongingness, membership, and part-whole relationships. Behaviour is interpreted as a function of the person and the life space, this relation being expressed by the equation $B = f(LS)$, and the life space is interpreted as the person and the environment, so that $B = f(P, E)$, meaning that behaviour is a joint function of the person and the environment, behaviour being represented as *locomotion* from one region of the life space to another, regions that attract or repel having *valence*. See also *HODOLOGICAL*

*****ebook converter DEMO Watermarks*****

SPACE, LEWINIAN, TOPOLOGICAL PSYCHOLOGY.

fight-or-flight response *n.* A term introduced by the US physiologist Walter Bradford Cannon (1871–1945), and popularized in his book *Bodily Changes in Pain, Hunger, Fear and Rage* (1929), for the syndrome of physiological **responses* of an organism confronted with a situation that evokes fear, pain, or anger, such responses being mobilized by the secretion of **adrenalin* (epinephrine) from the adrenal medulla, preparing the organism to fight or to flee. It includes increased blood pressure, accelerated heart rate, deepened respiration, increased sweating, dilation of the pupils, diversion of blood flow from the digestive tract to the skeletal muscles and cessation of digestive processes, release of sugar from reserves in the liver, and closure of the sphincter of the bladder, leading to retention of urine.

figural aftereffect *n.* A change in perception of a visual stimulus resulting from prolonged (usually 30 seconds or more) exposure to a different visual stimulus, as when the contour of the second stimulus falling on the retina near the contour of the original stimulus appears displaced away from the position occupied by the original contour, or more generally any distortion in visual perception resulting from a prior visual stimulus, as occurs in **successive contrast*. *See also* [AFTEREFFECT](#), [CONTINGENT AFTEREFFECT](#), [MOTION AFTEREFFECT](#), [SPIRAL AFTEREFFECT](#), [TILT AFTEREFFECT](#), [VISUAL AFTEREFFECT](#). **FAE** *abbrev.*

figure-ground reversal *n.* A phenomenon underlying many **ambiguous figures*, the alternating perceptions of which depend on shifting interpretations of which parts of the image represent the figure and which represent the (back)ground. The Dutch graphic artist Maurits C(ornelis) Escher (1898–1970) often exploited this phenomenon, together with visual puzzles in the form of **impossible figures* (Escher figures). *See* [REVERSIBLE GOBLET](#).

figure of speech *n.* A linguistic expression or device in which words are used to create special effects or to express ideas different from their usual or literal meaning. Also called an *image*. *See* [APOSTROPHE \(1\)](#), [CHIASMUS](#), [HENDIADYS](#), [METAPHOR](#), [METONYMY](#), [OXYMORON](#), [PERSONIFICATION](#), [SIMILE](#), [SYNECDOCHE](#).

*****ebook converter DEMO Watermarks*****

filament *n.* Any slender, threadlike structure, such as the tail of a **spermatozoon*. [From Latin *filum* a thread, from *filare* to spin]

file drawer problem *n.* A bias in the body of published research in any field resulting from the fact that studies reporting positive results are more likely to be published than those reporting negative or non-significant results. It is especially problematical in research areas such as **parapsychology*, and in any area it makes difficulties for the interpretation of **meta-analyses*. [So called because researchers relegate unpublished findings to file drawers]

filial generation *n.* In genetics, any generation following a parental generation that has been designated arbitrarily as the first in a hereditary line. By convention, F_1 designates the first filial generation, F_2 the second filial generation, and so on. [From Latin *filialis* pertaining to a son or daughter, from *filius* a son]

filial imprinting See *IMPRINTING*.

filial regression *n.* The tendency for a child of a parent who scores extremely high or extremely low on some heritable characteristic, such as IQ or physical stature, to score closer to the population **mean* than the parent. This phenomenon is explained by **regression towards the mean*. Also called *Galton's law of filial regression*. See also *OVERDOMINANCE*. [From Latin *filius* a son + *regressus* a retreat + *-ion* indicating an action, process, or state]

filled-duration illusion *n.* A **cognitive illusion* that causes a specified period of time to be experienced as longer when many events are experienced during it than when it is relatively empty. For example, if two clicks mark the beginning and end of a period of silence (an unfilled interval), it tends to be perceived as shorter than the same objective interval filled with a sequence of clicks (a filled interval). Compare *FILLED-SPACE ILLUSION*.

filled pause *n.* A vocal hesitation into which the speaker inserts a meaningless vocalization such as *um* or *er*.

filled-space illusion *n.* A visual illusion in which a line, area, or

volume appears larger if it is occupied by a number of distinct elements than if it is empty (see [illustration](#)). The first written reference to it is to be found in Book 16, Chapter 7 of *Problems*, a work often spuriously attributed to the Greek philosopher Aristotle (384–322 BC), probably written by one of his followers. The illusion is there presented the wrong way round, and the explanation that is offered to clarify it is therefore beside the point: ‘Why is it that magnitudes always appear less when divided than when taken as a whole? Is it because, though things which are divided always possess number, in size they are smaller than that which is single and undivided?’ The first systematic investigation of the illusion was reported in 1860–1 (not 1854–5 as often stated) by the German physicist Johann Joseph Oppel (1815–94). Also called the *filled and unfilled extent illusion*, the *Oppel illusion*, or the *Oppel–Kundt illusion*. See also [KUNDT'S RULES](#). Compare [FILLED-DURATION ILLUSION](#).



Filled-space illusion. The distance between A and B is the same as that between B and C.

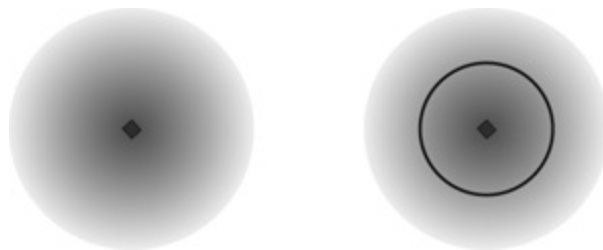
fillet *n.* A narrow strip of meat or other material; also, a non-technical name for the [*lemniscus](#). [Via Old French from Latin *filum* a cord or thread]

filling-in *n.* The action of the visual system or other perceptual system, when responding to a stimulus with gaps or missing information, of guessing the missing information by assuming that it is the same as the information presented and generating perception without gaps. Also called *perceptual completion*. See also [AMODAL COMPLETION](#), [ARTIFICIAL SCOTOMA](#), [BLIND SPOT \(1\)](#), [CRAIK–O'BRIEN EFFECT](#), [FILLING-IN ILLUSION](#), [MODAL COMPLETION](#), [PHONEMIC RESTORATION](#), [TROXLER EFFECT](#).

filling-in illusion *n.* A visual illusion of [*filling-in](#) consisting of a central black dot surrounded by a dark region that fades very gradually into a lighter background. Steady, unmoving fixation on the dot with one eye (keeping the other eye closed or covered) causes the dark region to vanish after a few seconds by a process of [*filling-in](#), but the effect is eliminated if the dark region is surrounded by a clearly defined ring or boundary (see [illustration](#)).

*****ebook converter DEMO Watermarks*****

The illusion arises from an approximation to a **stabilized retinal image*: the eye movements resulting from **physiological nystagmus* during fixation do not produce any noticeable changes in the peripheral areas of the retinal image because of its smoothly graded contour, and the visual system therefore allows the image to fade as if it were fixed, but the addition of a sharply defined ring or boundary makes movements in the peripheral image detectable and causes the visual system to refresh that part of the image.



Filling-in illusion. In the left-hand figure, steady fixation on the black dot with one eye, keeping the other eye covered or closed, causes the dark region surrounding the dot to disappear, whereas in the right-hand figure the ring prevents fading.

film colour *n.* A misty appearance of colour without any fixed distance that is experienced when there are no lines or edges present in the visual field. US *film color*. Also called *volume colour*. See also [GANZFELD](#). Compare [SURFACE COLOUR](#).

filiform papilla *n.* Any of the numerous threadlike **papillae* that are situated on the upper surface of the **tongue* and that conspicuously lack **taste* buds. Compare [CIRCUMVALLATE PAPILLA](#), [FOLIATE PAPILLA](#), [FUNGIFORM PAPILLA](#). **filiform papillae** *pl.* [From Latin *filum* a thread + *forma* a shape]

filter *n.* **1.** A porous substance or device that removes suspended particles while allowing fluid to pass through it. **2.** Any electronic, acoustic, optical, or purely mathematical device that blocks signals of certain frequencies while allowing others to pass. See also [BAND-PASS FILTER](#). *vb.* **3.** To remove or separate suspended particles from a fluid or certain wavelengths from a signal, or more generally to exclude certain types of stimuli from attention. See also [FILTER THEORY](#).

filter theory *n.* A theory of **attention* proposed in 1958 by the English

*****ebook converter DEMO Watermarks*****

psychologist Donald E(ric) Broadbent (1926–93) according to which there exists a ***central processor (2)** with a limited capacity that can select only one sensory input channel at a time and can switch between input channels no more than about twice per second, information in an unattended channel being held in ***short-term memory** for a few seconds. Evidence for the theory was provided by *split-span* experiments in which pairs of digits were presented simultaneously to both ears at a rate of up to two per second, and listeners invariably recalled them ear by ear rather than pair by pair, evidently switching attention from one ear to the other, but later findings necessitated refinements of the theory. *See also* [ATTENUATION THEORY](#), [COCKTAIL PARTY PHENOMENON](#), [BOTTLENECK THEORY](#), [SELECTIVE ATTENTION](#).

fimbria *n.* The fringe of white nerve fibres along the edge of the ***hippocampus**, meeting in the ***fornix**. [From Latin *fimbriae* fibres or a fringe]

finger agnosia *n.* A form of ***autotopagnosia**, usually associated with a lesion in the posterior region of the dominant hemisphere, characterized by a primary inability to recognize, identify, differentiate, name, select, or indicate individual fingers of either hand. If a person with finger agnosia is touched on either one or two fingers, each finger being touched in either one or two places, such a person is unable to state how many fingers are being touched. *See also* [AGNOSIA](#), [GERSTMANN SYNDROME](#).

fingerprint, genetic *See* [GENETIC FINGERPRINTING](#).

finger spelling *n.* Another name for ***dactylology**.

finite-state grammar *n.* A simplified form of ***generative grammar** capable of yielding only a limited number of sentences.

fire-setting, pathological *n.* Another name for ***pyromania**.

FIRO-B *abbrev.* A 54-item ***self-report** questionnaire designed to measure needs for inclusion, control, and affection in the way people behave towards others and the way they desire others to behave towards them. Developed in

1957 by the US consulting psychologist William C. ('Will') Schutz (1925–2002), it is the most popular of several FIRO scales, especially in [*industrial/organizational psychology](#) and [*occupational psychology](#). [Fundamental Interpersonal Relations Orientation–Behavior]

first censorship *See* [CENSORSHIP](#).

first-order approximation to language *See* [APPROXIMATION TO LANGUAGE](#).

fishberry *n.* The climbing plant *Cocculus indicus* that contains [*picrotoxin](#). [So called because its berries are sometimes fed to fish so that they die and float to the surface]

Fisher's exact test *n.* A statistical test that can be applied to data in a 2×2 contingency table and is especially useful when the total sample size or some of the expected values are small so that the [*chi-square test](#) cannot be used. This [*distribution-free test](#) establishes the exact probability, under the [*null hypothesis](#) that the row and column variables are independent, of obtaining a result as extreme or more extreme than the observed result assuming that the marginals (the row and column totals) are fixed. It is the prototypical [*randomization test](#). Also called *Fisher's exact probability test*, *Fisher–Yates test*. [Named after the English statistician and geneticist Ronald Aylmer Fisher (1890–1962) who in 1934 encouraged Frank Yates (1902–94) to develop it]

Fisher's r to z transformation *n.* In statistics, a method of transforming [*product–moment correlation coefficients](#) into [*standard scores](#) or z scores to facilitate interpretation and to enable tests such as those for the significance of the difference between two correlation coefficients to be carried out. [Named after the English statistician and geneticist Ronald Aylmer Fisher (1890–1962)]

Fisher–Yates test *n.* Another name for [*Fisher's exact test](#).

fis phenomenon *n.* A child's refusal to accept an adult's rendering of

what the child has just said. The phenomenon was first reported in 1960 by the US psychologists Jean Berko (born 1931, later called Jean Berko Gleason) and Roger William Brown (1925–97) in an account of a child who called his plastic fish a *fis* but refused to accept this pronunciation from adults and was satisfied only when they called it a *fish*. This is often taken to illustrate that young children can hear more than they can say.

fission *n.* **1.** The process of splitting something into parts. **2.** A form of **asexual reproduction* in which a single-celled organism such as a **bacterium divides* into two or more equal parts, each of which then develops into a new cell. [From Latin *fissio* a cleaving + *-ion* indicating an action, process, or state]

fissure *n.* A narrow cleft or crack; any of the longer and deeper grooves or furrows between the **gyri* or convolutions of the brain. Also called a *sulcus*. [From Latin *fissus* split, from *findere* to split]

fissure of Rolando *n.* Another name for the **central sulcus*. [Named after the Italian physician Luigi Rolando (1773–1831)]

fissure of Sylvius *n.* Another name for the **lateral sulcus*. [Named after the Flemish anatomist Franciscus Sylvius (1614–72), also called Franz de le Boë, who apparently discovered it]

fitness *n.* The condition of being fit and healthy, or of being suitable for a particular function. More specifically, the degree of **adaptation (1)* of an organism to its environment, usually measured in terms of the average contribution of its **genotype* to the next generation, relative to that of other genotypes. Also called *genetic fitness*. See also *DARWINIAN FITNESS*. Compare *INCLUSIVE FITNESS*.

Fitts' law *n.* In **reaction time* experiments in which a subject or participant moves a stylus as quickly as possible from a starting position to a target, a relation observed between movement time (*MT*) on the one hand and target width (*W*) and movement amplitude (*A*) on the other, expressed by the equation $MT = a + b \log_2 (2A/W)$, where *a* and *b* are constants representing

the intercept and slope of the function respectively. Thus movement time decreases with the size of the target and increases with the amplitude of the movement. Often incorrectly spelt *Fitt's law*. Compare [HICK's LAW](#). [Named after the US psychologist Paul Morris Fitts (1912–65) who formulated it in 1954]

five-factor model *n.* Another name for the [*Big Five](#). **FFM** *abbrev.*

5-hydroxyindoleacetic acid *n.* A substance that is produced by the [*metabolism](#) of [*serotonin](#) and whose concentration in [*cerebrospinal fluid](#) has been found to be negatively correlated with suicidal depression. See also [BUFOTENIN](#). **5-HIAA** *abbrev.*

5-hydroxytryptamine *n.* The chemical name for [*serotonin](#). **5-HT** *abbrev.*

5-hydroxytryptophan *n.* A precursor of [*serotonin](#) (5-hydroxytryptamine), synthesized in the brain from dietary [*tryptophan](#), an amino acid that, unlike serotonin itself, is able to cross the [*blood–brain barrier](#). **5-HTP** *abbrev.*

five-number summary *n.* A set of figures providing a useful basic summary of a [*data set](#). It comprises the lowest score, the lower [*quartile](#), the [*median](#), the upper quartile, and the highest score. These data can be displayed in a [*box-and-whisker plot](#).

5 per cent trim *n.* In statistics, the [*arithmetic mean](#) calculated after eliminating the largest five per cent and smallest five per cent of the cases. It is used occasionally when a set of scores contains values that are much smaller or much larger than the rest, because in such cases it may yield a more useful indication of [*central tendency](#) than the untrimmed mean. See also [TRIMMED MEAN](#).

fixate *vb.* **1.** To train one's eyes on an object or point in the visual field so that its image falls on the [*foveas](#) of the eyes. See also [DONDERS' LAW](#), [READING SPAN](#). **2.** To engage or indulge in [*fixation](#) (3); to become

preoccupied or obsessed with something. [From Latin *fixus* fixed]

fixation *n.* **1.** The act or process of **fixating* (1). Also called *visual fixation*. See also *DONDERS' LAW*, *EYE-TRACKING*, *READING SPAN*. **2.** In **psychoanalysis*, the persistence of a mode of **libidinal* satisfaction characteristic of an earlier stage of **psychosexual development*, as when **libido* remains attached to a particular **instinctual object* or an **erotogenic zone* associated with a pre-genital **libidinal stage*, such as the **oral stage*, **anal stage*, or **phallic stage*. The concept rests on the insight that people retain throughout life latent attachments to earlier modes of satisfaction and **object-relationships*, and that these are reactivated by **regression* (2). Sigmund Freud (1856–1939) referred to it in 1905 in his book *Three Essays on the Theory of Sexuality* (*Standard Edition*, VII, pp. 130–243) and repeatedly in his later writings. See also *ANAL CHARACTER*, *GENITAL CHARACTER*, *ORAL CHARACTER*, *PHALLIC CHARACTER*, *URETHRAL CHARACTER*. **3.** The act or process of becoming preoccupied or obsessed with something.

fixed-action pattern *n.* In ethology, a **response* to a **sign stimulus* or **releaser*, taking the form of a stereotyped pattern of innate behaviour, such as the aggressive attack of a male European robin elicited by the red feathers on the breast of a rival. It is relatively uninfluenced by learning and is assumed to be governed by an **innate releasing mechanism*. See also *VACUUM ACTIVITY*. **FAP** abbrev.

fixed idea See *IDÉE FIXE*.

fixed image *n.* Another name for a **stabilized retinal image*.

fixed-interval schedule *n.* In **operant conditioning*, a simple **reinforcement schedule* in which reward follows the first response that the organism makes after a predetermined time interval, and then the first response that it makes after the same interval, and so on, the duration of the interval being specified in seconds as an affix to the abbreviation, hence *FI20* indicates a fixed-interval schedule with a 20-second interval. Also called a *fixed-interval reinforcement schedule*. See also *SIMPLE REINFORCEMENT SCHEDULE*. Compare *FIXED-RATIO SCHEDULE*, *VARIABLE-INTERVAL SCHEDULE*, *VARIABLE-RATIO SCHEDULE*. **FI** abbrev.

*****ebook converter DEMO Watermarks*****

fixedness, functional See FUNCTIONAL FIXEDNESS.

fixed-ratio schedule *n.* In *operant conditioning, a simple *reinforcement schedule in which reward is delivered after the organism has made a fixed number of responses, and is delivered again after the same number of responses, and so on, the number of responses required before each reinforcement being specified as an affix to the abbreviation, hence *FR10* indicates a fixed-ratio schedule with reinforcement after every 10 responses. Also called a *fixed-ratio reinforcement schedule*. See also SIMPLE REINFORCEMENT SCHEDULE. Compare FIXED-INTERVAL SCHEDULE, VARIABLE-INTERVAL SCHEDULE, VARIABLE-RATIO SCHEDULE. **FR** abbrev.

fixed-role therapy *n.* A form of *psychotherapy based on the *personal construct theory of the US psychologist George A(lexander) Kelly (1905–67), first explored by Kelly and his colleagues in 1939 and described in his book *The Psychology of Personal Constructs* (1955, Volume 1, pp. 360–451), in which the client begins with a self-characterization then modifies it in the direction of a desired alternative. See also PERSONAL CONSTRUCTS THERAPY. **FRT** abbrev.

flanker compatibility effect *n.* A shorter *choice reaction time in response to a target stimulus closely flanked by compatible than incompatible stimuli. For example, if target stimuli are presented in the middle of five-letter strings, and participants are instructed to press one key whenever the target is H or K and a different key whenever the target is S or C, then HHKHH has compatible flankers and SSKSS incompatible flankers. Reaction times are significantly shorter with compatible flankers or without flankers than with incompatible flankers, suggesting that incorrect responses compete with correct ones (compare STROOP EFFECT) and that the *levels of processing of stimuli deliberately excluded from *attention are deeper than required by the task. The effect was first reported by the US psychologists Charles W(alter) Eriksen (born 1923) and James E. Hoffman (born 1948) in the journal *Perception and Psychophysics* in 1973, and by Barbara A(nn) Eriksen (born 1931) and Charles W(alter) Eriksen in a second article in the same journal in 1974, after which it was frequently used to study *selective attention. Also called the *Eriksen flanker task* or *flanker effect*. **FCE** abbrev. [From Old French *flanc* the side of the body between ribs and hip, from Latin

*****ebook converter DEMO Watermarks*****

flancum]

flashback *n.* **1.** In a novel, film, or other fictional work, a sudden transition to an earlier episode in the narrative. **2.** A recurrence of a memory, or the experience of reliving an episode from the past. *See also* [POST-TRAUMATIC STRESS DISORDER](#), [REDINTEGRATION](#). **3.** After consumption of a **hallucinogen*, the re-experiencing of some of the perceptual effects of the intoxication, such as geometric illusions, false perceptions of motion in the periphery of the visual field, flashes of light or colour, **afterimages*, **micropsia*, and **macropsia*. Also called *posthallucinogen perception disorder*.

flashbulb memory *n.* An unusually vivid, richly detailed, and long-lasting memory for the circumstances surrounding a dramatic event. The standard example is the assassination of the US president John F. Kennedy in 1963: most people who were adults at the time have flashbulb memories of where they were and what they were doing when they first heard about this event. [So called because it has the subjective quality of something indelibly recorded as by a flash camera, although research has shown that in reality it is often less than perfectly accurate]

flash-lag effect *n.* A **movement illusion* whereby a brief flash occurring at the same position as a moving object or image appears to lag behind the object or image. It also occurs with a moving sound source. It was first reported by the German Gestalt psychologist Wolfgang Metzger (1899–1979) in an article in the journal *Psychologische Forschung* in 1931. **FLE** *abbrev.*

flattening of affect *See* [AFFECTIVE FLATTENING](#).

flavour *n.* The quality of a food or drink perceived in the mouth, determined by a combination of sensory effects including its taste, odour, texture, temperature, colour, irritability, and sound (when chewed). US *flavor*. *See also* [TASTE](#). [From Old French *flaour* flavour, probably influenced by *savour* taste, from Latin *sapor* taste, from *sapere* to taste]

flavour aversion learning/conditioning *See* [FOOD](#) [AVERSION](#)

*****ebook converter DEMO Watermarks*****

LEARNING.

Flesch indices *n.* Indices designed to measure two aspects of the readability of text: the **reading ease score*, which measures how easy the text is to read, and the **human interest score*, which measures how interesting it is to read. [Named after the Austrian-born US researcher Rudolf (Franz) Flesch (1911–86), who devised the indices in 1946 and revised them in 1949]

Fletcher–Munson contour *n.* Another name for an **equal-loudness contour*. Also called a *Fletcher–Munson curve*. [Named after the US acoustical scientist Harvey Fletcher (1884–1981) and the US engineer Wilden A. Munson (1902–82) who introduced it in 1933]

flexibilitas cerea *See* CEREAL FLEXIBILITAS.

flexion reflex *n.* A type of **reflex (1)* consisting of a quick, involuntary bending of a joint to withdraw a limb, hand, finger, or other part in response to a strong painful **stimulus (1)* applied to it. [From Latin *flectere*, *flexum* to bend]

flicker *n.* Intermittent or rapidly fluctuating light, or the visual sensation resulting from a light stimulus fluctuating periodically in brightness below the **critical flicker frequency*. *Compare* AUDITORY FLUTTER.

flicker fusion frequency *n.* Another name for **critical flicker frequency*. **fff** *abbrev.*

flight into health *n.* In **psychoanalysis*, a sudden claim by a patient to be fully recovered and in no further need of help, interpreted as a defensive reaction to **psychotherapy*. The term is based on the original concept of the **flight into illness*.

flight into history *n.* In **counselling* and **psychotherapy*, a tendency to dwell excessively on the past, interpreted as a defensive reaction to pain or embarrassment evoked by the present. The term was coined on the model of **flight into illness*.

*****ebook converter DEMO Watermarks*****

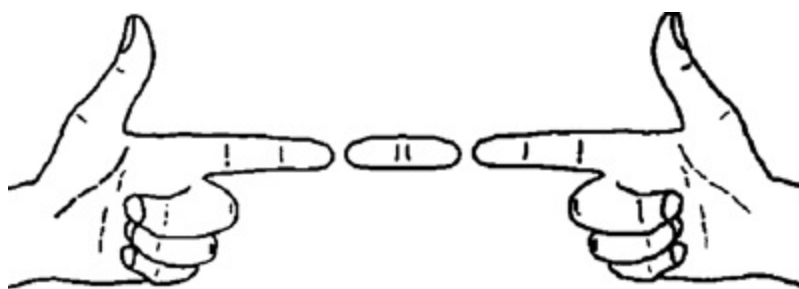
flight into illness *n.* An attempt to escape from unacceptable feelings or conflicts by developing **neurotic (1)*, **psychotic (1)*, or **psychosomatic* symptoms. The term originated in **psychoanalysis*: Sigmund Freud (1856–1939) referred in 1894 to the ‘flight into psychosis’ (*Standard Edition*, III, p. 59), then in 1908 to the ‘flight into neurotic illness’ (*Standard Edition*, IX, p. 192), and then finally in 1909 to the ‘flight into illness’ (*Standard Edition*, IX, p. 231). See also *PRIMARY GAIN*. Compare *FLIGHT INTO HEALTH*, *FLIGHT INTO HISTORY*.

flight of colours *n.* The sequence of **afterimages* of different colours that follow brief exposure to a bright stimulus, especially in dark-adapted eyes. It can be demonstrated by adapting one's eyes in the dark for 25 minutes, then switching on a light, fixating it with a steady gaze for several seconds, turning the light off, and keeping the eyes as steady as possible—the phenomenon tends to vanish when the eyes are moved. US *flight of colors*. Also called *colour flight* or *color flight*.

flight of ideas *n.* A form of **thought disorder* in which a rapid flow of thoughts occur, flitting from one topic to another, usually with transitions based on arbitrary conceptual or verbal links. It is often seen in a **manic episode* and occasionally in certain forms of **schizophrenia*.

floater *n.* A dark speck that appears to float in front of one's eyes and appears to follow their movements, caused by dead cells and fragments of cells suspended in the vitreous humour and crystalline lens of the eye.

floating-finger illusion *n.* A visual illusion that is seen when the forefingers of each hand are held horizontally about 30 centimetres in front of the eyes, with the fingertips touching and the gaze focused on a point in the distance, and the fingertips are then drawn apart about one centimetre. A disembodied finger, with two tips, appears floating in mid-air, and it can be lengthened or shortened by varying the distance between the fingertips (see *illustration*). The illusion was discovered in 1928 and described in the journal *Psychological Review* by the US psychologist Winford Lee Sharp (1890–1975).



Floating-finger illusion

flocculonodular lobe *n.* The evolutionarily oldest part of the ***cerebellum**, present even in fishes, consisting of a pair of small irregular structures (flocculi) joined in the middle by a ***node (1)** or nodulus and separated by a deep fissure from the back of the cerebellum, connected to the vestibular system and concerned chiefly with posture, balance, and ballistic movements. [From Latin *flocculus* a small tuft of wool, diminutive of *floccus* a tuft of wool + *nodulus* a small knot, diminutive of *nodus* a knot, alluding to its appearance as two small tufts of wool with a small knot in the middle]

flooding *n.* A technique of ***behaviour therapy** used to treat ***post-traumatic stress disorder**, ***phobias**, and other ***anxiety** disorders by exposing the anxious person intensively to the anxiety-producing situation until the anxiety subsides. Also called *exposure therapy*, *implosion therapy*.

floor effect *n.* In statistics and measurement theory, an artificial lower limit on the value that a ***variable** can attain, causing the distribution of scores to be skewed. For example, the distribution of scores on an ability test will be skewed by a floor effect if the test is much too difficult for many of the respondents and many of them obtain zero scores. Also called a *basement effect*. Compare **CEILING EFFECT**.

floral odour See **FRAGRANT ODOUR**.

flow chart *n.* A diagram consisting of a series of boxes, each representing a particular process or operation, joined by arrows indicating the output of one process or operation to another. There is usually one particular box from which the sequence begins, and some boxes, often distinguished by a

*****ebook converter DEMO Watermarks*****

distinctive shape, may represent decision or choice points from which two or more arrows emerge, each indicating a different decision or choice. Also called a *block diagram*.

flowery odour *See* FRAGRANT ODOUR.

fluent aphasia *See* APHASIA.

fluid intelligence *n.* A fundamental **factor* (2) of human intelligence, derived from **factor analysis*, corresponding roughly to non-verbal reasoning, requiring rapid understanding of novel relationships, measured by tests such as **Raven's Progressive Matrices*. The concept was introduced in an article by the English-born US psychologist Raymond B(ernard) Cattell (1905–98) in the journal *Psychological Bulletin* in 1941 and became widely known after the publication of his book *Abilities: Their Structure, Growth and Action* (1971). Also called *fluid ability*. Compare CRYSTALLIZED INTELLIGENCE. **g(F)** *abbrev.*

flunitrazepam *n.* The chemical name of the benzodiazepine drug **Rohypnol*, sometimes called the *date rape drug*.

fluoxetine *n.* Fluoxetine hydrochloride, the chemical name of the antidepressant drug **Prozac*. **FXT** *abbrev.*

fluphenazine *n.* Fluphenazine hydrochloride, or fluphenazine decanoate, or fluphenazine enanthate, different forms of a **neuroleptic* (1) drug belonging to the group of **phenothiazines*, frequently used in the treatment of schizophrenia. Also called *Prolixin* (trademark).

flutter, auditory *See* AUDITORY FLUTTER.

fluvoxamine *n.* An antidepressant drug belonging to the group of **selective serotonin reuptake inhibitors* (SSRIs). Also called *Luvox* (trademark).

fly agaric *n.* The slightly poisonous woodland mushroom *Amanita*

muscaria, with a scarlet cap, white warts, and gills, made famous by *Alice's Adventures in Wonderland* by Lewis Carroll, the pen name of Charles Lutwidge Dodgson (1832–98). It contains the drugs **muscimol*, **muscarine*, **ibotenic acid*, and **bufotenin*, sometimes eaten for its **hallucinogenic* effects and used for ritual purposes by shamans of eastern Siberia. Also called *magic mushroom*. See also *LIBERTY CAP*, *TEONANACTYL*. Compare *COHOBA*. [From Greek *agarikon* a mushroom, called *fly agaric* because of its use as a poison on flypaper]

Flynn effect *n.* A secular increase in average IQ scores, typically averaging about three IQ points per decade, that has been occurring since the introduction of IQ tests in many industrialized societies, including the United States, the United Kingdom, Belgium, France, The Netherlands, Norway, Israel, Canada, New Zealand, Australia, and Japan, the effect being most pronounced on measures of **fluid intelligence* such as **Raven's Progressive Matrices*. Because IQ tests are periodically re-standardized to a mean of 100, the increase is not apparent in continuously rising average IQ scores, but people who score 100 on a newly standardized test tend to score more than 100 on older ones. The effect has been attributed to various causes, including improved nutrition and parenting, better schooling, increased test-taking sophistication, and various effects of growing up with television and video games in an increasingly complex environment, but it is generally acknowledged to be poorly understood and largely mysterious. See also *COHORT*. [Named after the US-born New Zealand political scientist James R(obert) Flynn (born 1934) who was the first to draw attention to it in two influential articles in the journal *Psychological Bulletin* in 1984 and 1987]

F max *n.* Another name for **Hartley's F max*.

focal colour *n.* A colour that is a **prototypical* instance of a particular colour name, such as a shade of red that a majority of viewers consider to be the best example of a red colour. US *focal color*.

focal epilepsy *n.* Another name for **Jacksonian epilepsy*.

focal length *n.* The distance between the centre of a lens or curved mirror and its **focal point*. See also *DIOPTRE*.

*****ebook converter DEMO Watermarks*****

focal point *n.* The point at which parallel light rays passing through a lens or reflected from a curved mirror converge, or the point from which they appear to diverge after refraction or reflection by the lens or mirror. Also called the *focus* or the *principal focus*. See also [FOCAL LENGTH](#).

focal system *n.* The aspect of vision that governs object identification and discrimination, using predominantly [*central vision](#) without [*peripheral vision](#). Compare [AMBIENT SYSTEM](#).

focal therapy *n.* A form of [*brief psychotherapy](#) that concentrates solely on a single core problem.

focus See [FOCAL POINT](#).

focus group *n.* A small group of people selected and assembled for research purposes, to participate in an organized discussion, under the guidance of a moderator, of an issue or topic of which they have personal experience. Focus groups were first proposed by the US sociologist Robert K(ing) Merton (1910–2003) and co-authors in *The Focused Interview: A Manual of Problems and Procedures* (1956), and they have had a long history in [*market research](#), where they have been used to sample the range of opinions and attitudes that might be expected in the wider population. They have been used to a lesser extent in psychology, generally in the tradition of [*qualitative research](#), when interaction between group members is felt to add an important element that is lacking in other types of [*interviews](#).

foetal alcohol syndrome *n.* A highly variable pattern of congenital defects, including small stature, intellectual disability, pixie-like facial features, and malformations of the skull and brain, that tend to occur in infants of mothers who drink large quantities of alcohol during pregnancy. Also spelt *fetal alcohol syndrome*. **FAS** abbrev.

foetal brain transplantation *n.* The surgical grafting of brain tissue from an aborted foetus into the brain of an adult to repair damage caused by disease or injury, as in the replacement of dopamine-secreting brain tissue in the [*substantia nigra](#) or [*striatum](#) of patients with [*Parkinson's disease](#). Also

spelt *fetal brain transplantation*.

foetus *n.* An unborn animal at an early stage of development, after its main internal organs have begun to become distinctly formed, especially an unborn human baby from the end of the eighth week of pregnancy (to distinguish it from an **embryo*) until birth. US *fetus*, this spelling being more correct etymologically but unusual in British orthography. See also *BLASTOCYST*, *MORULA*, *ZYGOTE*. **foetal** or **fetal** *adj.* [From Latin *fetus* offspring]

foil *n.* In research methodology, another name for a **distractor*.

foliate papilla *n.* Any of a large number of paired oval **papillae* on the sides of the back part of the **tongue* with **taste buds* at their bases that respond mainly to sour tastes. Compare *CIRCUMVALLATE PAPILLA*, *FILOFORM PAPILLA*, *FUNGIFORM PAPILLA*. **foliate papillae** *pl.* [From Latin *folium* a leaf + *forma* a shape]

folie à deux *n.* Another name for **shared psychotic disorder*. Also *folie à trois* (a delusion shared by three people living together), *folie à quatre* (a delusion shared by four people living together), and so on. [French *folie* insanity + *à* of + *deux* two]

folium *n.* One of the flattened structures of the **cerebellum* that expand sideways to form its superior lobes. [From Latin *folium* a leaf]

folk etymology *n.* **1.** An alteration in the form of a word through the influence of a more familiar word or words that people associate with it, as in *sparrow-grass* for *asparagus*. **2.** A popular misconception about the origin of a word. Thus *belfry*, the part of a tower in which bells are hung, comes from Medieval Latin *berfredus* a tower, not from the English word *bell*; *crap*, excrement or faeces, comes from Middle Dutch *krappe* chaff and is not named after Thomas Crapper (1836–1910), the Victorian English sanitary engineer who contributed to the development of the siphonic flush toilet and whose **aptronym* is inscribed on a manhole cover, popular with brass-rubbers, in the cloisters of Westminster Abbey; *penthouse*, a top-floor flat, comes via Middle English *pentis* from Latin *appendicium* an appendage, not from English *pent* or *house*; and *pickaxe*, a large double-pointed garden tool,

*****ebook converter DEMO Watermarks*****

comes from Old French *picois* a mattock, not from English *pick* or *axe*. See also [BACK FORMATION](#), [METANALYSIS](#).

folk psychology *n.* The assumptions, hypotheses, and beliefs of ordinary people about behaviour and mental experience. See also [BASIC-LEVEL CATEGORY](#), [GROUNDED THEORY](#), [IMPLICIT PERSONALITY THEORY](#).

follicle *n.* Any small sac or cavity, such as the pit in which a hair-root is embedded. [From Latin *folliculus* a small bag, diminutive of *folis* a bellows or money-bag]

follicle-stimulating hormone *n.* A [*gonadotrophic](#) hormone that is secreted by the anterior pituitary and that stimulates the growth of [*Graafian follicles](#) in females and production of [*spermatozoa](#) in males. See also [OESTROUS CYCLE](#). Compare [LUTEINIZING HORMONE](#). **FSH** *abbrev.*

follicular phase *n.* The first phase of the [*oestrous cycle](#) or [*menstrual cycle](#), initiated by the secretion of [*follicle-stimulating hormone](#) and ending with [*ovulation](#). Also called the *proliferative phase*. Compare [LUTEAL PHASE](#), [MENSTRUAL PHASE](#). [Named after the [*Graafian follicles](#)]

following behaviour *n.* In [*ethology](#), the trailing of a young bird or animal behind its parent or another organism or object, especially as a consequence of [*imprinting](#).

Folstein Mini-Mental State Examination See [MINI-MENTAL STATE EXAMINATION](#).

F₁ *abbrev.* The first [*filial generation](#). F₂ represents the second filial generation, and so on.

fontanelle *n.* A soft membranous gap between the immature skull bones of an infant or foetus. Also spelt *fontanel*. See also [BREGMA](#). [From Old French *fontanele* a little fountain, from Latin *fons*, *fontis* a fountain]

food aversion learning *n.* Avoidance of food with a distinctive taste

by an organism that has felt ill after eating food with that taste, the aversion often being learned after a single trial, even if the ill feeling arises many hours after eating the food and is not caused by the food. In the original experiment carried out by the US psychologists Sam Revusky (born 1933) and John Garcia (1917–2012) and published in 1970, rats were fed a sweet-tasting sucrose solution and were then injected with lithium chloride, which made them mildly ill, and they refused to touch the sucrose solution the next day. Also called *conditioned food/taste aversion*, *flavour aversion learning/conditioning*, *food aversion conditioning*, *food avoidance learning/conditioning*, *Garcia effect*, *learned flavour aversion*, *learned taste aversion*, *taste aversion learning/conditioning*, *toxicosis*.

food chain *n.* In **ecology* (1), a hierarchy of organisms in which each is consumed as food by one or more of the ones above it. *See also* [PYRAMID OF NUMBERS](#).

footbridge problem *See* [TROLLEY PROBLEM](#).

foot-candle *n.* An obsolescent unit of **illuminance*, equal to one lumen per square foot. *See also* [FOOT-LAMBERT](#). **fc** *abbrev.*

foot-in-the-door technique *n.* A technique for eliciting **compliance* by preceding a request for a large commitment with a request for a small one, the initial small request serving the function of softening up the target person. It was introduced and named in 1966 by the US social psychologists Jonathan L. Freedman (born 1937) and Scott C(ameron) Fraser (born 1943), who reported a field experiment in which householders were visited in their homes where some were asked whether they would be willing to put a very small sticker in their house or car windows about road safety or keeping California beautiful and others were asked to sign a petition on one of these issues; two weeks later, a different person, supposedly from a different organization, arrived and asked the same householders whether they would be willing to have a hole dug in their front gardens and a large, ugly *Drive Carefully* sign planted there. Among a control group who had not received the earlier small request, only 17 per cent agreed to have the safe driving sign planted in their gardens, but 55 per cent of the participants in the foot-in-the-door condition agreed. *See also* [DOOR-IN-THE-FACE TECHNIQUE](#), [LOWBALL TECHNIQUE](#).

*****ebook converter DEMO Watermarks*****

foot-lambert *n.* An obsolescent unit of **luminance* equal to that of a surface emitting or reflecting one **lumen* per square foot, a completely reflecting surface illuminated by 1 foot-candle having a luminance of 1 foot-lambert. *See also* LAMBERT. **ft-L** *abbrev.*

foramen magnum *n.* The large hole at the base of the skull through which the **spinal cord* passes. [From Latin *foramen* a hole, from *forare* to bore or pierce + *magnum* large]

foramen of Monro *n.* Either of the openings of the two lateral **ventricles* of the brain into the third ventricle. Also called the *interventricular foramen*. [Named after the Scottish anatomist Alexander Monro (1733–1817) who first drew attention to them in 1783]

forced-choice *adj.* Of or relating to a test, experiment, procedure, or questionnaire in which the respondent has to select a response from a set of alternatives such as Yes/No or Strongly Disagree/Disagree/Neutral/Agree/Strongly Agree. *See also* RESPONSE CATEGORY. *Compare* FREE RESPONSE.

forced compliance *n.* Yielding to social pressure to make a statement or behave in a way that conflicts with one's attitudes, as when an experimenter induces a research participant to tell a lie to another research participant. According to the theory of **cognitive dissonance*, such behaviour tends to result in an **attitude change* to reduce the dissonance between the two cognitions *My attitude is X* and *My statement (or behaviour) was anti-X*. The second cognition is behaviourally anchored and cannot easily be changed once the statement has been made or the action performed, but the first cognition can and often does change. The theory predicts, and experimental research confirms, that the attitude change tends to be greatest when the justification for the counterattitudinal behaviour is least—for example, when the person was offered a small rather than a large financial incentive for it.

forebrain *n.* The front part of the brain, divided into the **telencephalon* and **diencephalon*. It includes the **cerebral hemispheres*, **thalamus*, **hypothalamus*, and associated structures. Also called the *prosencephalon*,

especially in a developing embryo. Compare MIDBRAIN, HINDBRAIN.

foreclosure *n.* In *psychoanalysis, a *defence mechanism, first identified in 1956 by the French psychoanalyst Jacques Lacan (1901–81), involving the expulsion of a fundamental signifier, such as the *phallus as a fundamental signifier of the *castration complex, from a person's symbolic universe. It may be a defence mechanism specific to *psychosis (1), and it differs from *repression inasmuch as the foreclosed signifier is not integrated into the person's unconscious and does not re-emerge from within as a *neurotic (1) *symptom but may return in the form of a *psychotic (1) *hallucination. The idea is traceable to an article in 1894 by Sigmund Freud (1856–1939) on 'The Neuro-Psychoses of Defence' (*Standard Edition*, III, pp. 45–61): 'There is, however, a much more energetic and successful kind of defence. Here, the ego rejects the incompatible idea together with its affect and behaves as if the idea had never occurred to the ego at all' (p. 58).

foreign accent syndrome *n.* A rare condition, resulting from *stroke, *traumatic brain injury, or the aftereffects of brain surgery, in which a person begins to speak with an *accent (1) that sounds foreign, sometimes resembling the accent associated with a specific foreign language, but is actually caused by disrupted *articulation and *prosody resulting from left hemisphere brain injury. The condition was first reported by the Czech neurologist Arnold Pick (1851–1924) in an article in the journal *Zeitschrift für die gesamte Neurologie und Psychiatrie* in 1919. Reports of *foreign language syndrome*, in which, following brain injury, people allegedly speak foreign languages that they have never previously spoken, are spurious, although there are cases of people reverting to languages that they used to speak earlier in life. FAS abbrev.

forensic linguistics *n.* The application of linguistic techniques in the investigation of crimes to show, for example, that an incriminating recording of an utterance is unlikely to have been spoken by the defendant in a criminal trial, or that different passages in an alleged confession were probably written by different people. See also HAPAX LEGOMENON, STYLOSTATISTICS.

forensic psychiatry *n.* Applications of *psychiatry to legal questions, such as diminished responsibility and fitness to stand trial. Compare FORENSIC

*****ebook converter DEMO Watermarks*****

PSYCHOLOGY. [From Latin *forensis* public, from *forum* a public place]

forensic psychology *n.* A field of **applied psychology* devoted to psychological aspects of legal processes in court. The term is increasingly often applied to **criminological psychology* as well, although the derivation of the word suggests a more limited meaning. *Compare* **FORENSIC PSYCHIATRY**.

foreplay *n.* Sexual activity, such as kissing and stroking, preceding sexual intercourse.

forgetting *n.* The process by which memories are lost. *See* **AMNESTIC DISORDER**, **DECAY THEORY**, **DISSOCIATIVE AMNESIA**, **DISSOCIATIVE IDENTITY DISORDER**, **EBBINGHAUS CURVE**, **FORGETTING LAW**, **MEMORY**, **METHOD OF SAVINGS**, **PROACTIVE INTERFERENCE**, **REMINISCENCE (2)**, **RETRIEVAL-INDUCED FORGETTING**, **RETROACTIVE INTERFERENCE**. *See also* **ALETHIA**, **COGNITIVE FAILURES QUESTIONNAIRE**, **INTENTIONAL FORGETTING**.

forgetting law *n.* The proposition that the amount of information forgotten increases linearly with the logarithm of the time elapsed since learning.

formal operations *n.* In the theory of cognitive development of the Swiss psychologist Jean Piaget (1896–1980), the developmental stage beginning at about 12 years when children become proficient in manipulating their internal representations of abstract concepts as well as concrete objects. *See also* **MENTAL OPERATION**. *Compare* **CONCRETE OPERATIONS**, **PRE-OPERATIONAL STAGE**, **SENSORIMOTOR STAGE**.

formal universals *n.* One of the classes of **linguistic universals*, consisting of the abstract rules that govern the grammars of languages, such as the transformational rules that all languages appear to have for converting a statement such as *This job is easy* into a question such as *Is this job easy?* In this case the transformational rule is simply to move the verb to the beginning of the sentence. *See also* **TRANSFORMATIONAL GRAMMAR**, **UNIVERSAL GRAMMAR**.

formant *n.* A peak in the spectrum of frequencies of a specific speech sound, analogous to the **fundamental frequency* or one of the **overtones* of a musical tone, which helps to give the speech sound its distinctive sound quality or **timbre*. For example, in a typical female voice, the first two formants F1 and F2 of the **schwa* vowel in the word *bird* or *fern* are about 650 hertz and 1,593 hertz; in a typical male voice F1 is about 513 hertz and F2 about 1,377 hertz.

form constancy *n.* Another name for **shape constancy*. See also *PERCEPTUAL CONSTANCY*.

formication *n.* The sensation of insects crawling over or under one's skin, most commonly experienced as a symptom of **withdrawal* from alcohol or cocaine. Also called *parasitosis*. See also *COCAINE BUG*, *TACTILE HALLUCINATION*. [From Latin *formicare* to crawl around, from *formica* an ant + *-ation* indicating a process or condition]

fornix *n.* Any structure resembling an arch, especially the archlike band of white fibres in the limbic system at the base of the brain, projecting from the **hippocampus* to the **mammillary bodies*, involved in memory and the control of eating. Also called the *vault*. **fornical** *adj.* [From Latin *fornix* a vault]

Förster phenomenon *n.* Another name for the **Aubert–Förster phenomenon*.

fortis *adj.* Of or relating to a **consonant* speech sound articulated with considerable muscular tension of the organs of speech and strong breath pressure, such as the initial phonemes in *pie*, *tea*, *key*, *chew*, *jaw*, *fee*, *thigh*, *see*, and *shoe*. In English, a **vowel* is shortened when it occurs immediately before a fortis consonant, and this is called pre-fortis **clipping*. Compare *LENIS*. [From Latin *fortis* strong]

Fortral *n.* A proprietary name for the narcotic analgesic drug **pentazocine*. [Trademark]

40-hertz oscillations *n.* Another (inaccurate) name for **gamma waves*.

forward association *n.* A learned association between a **stimulus* (1) and either another stimulus or a **response* occurring later in time. *Compare* BACKWARD ASSOCIATION.

forward conditioning *n.* The usual method of **classical conditioning*, in which the **conditioned stimulus* precedes the **unconditioned stimulus*. *Compare* BACKWARD CONDITIONING.

forward masking *n.* A form of **masking* that occurs when the perception of a stimulus called the *test stimulus* is diminished or eliminated by the presentation of a different stimulus called the *masking stimulus* that precedes it. In the case of **visual masking*, when the test stimulus and masking stimulus do not overlap spatially, the phenomenon is called **paracontrast*. *See also* AUDITORY MASKING. *Compare* BACKWARD MASKING, SIMULTANEOUS MASKING.

founded content *n.* Another name for **Gestaltqualität*. [From *found* to cast metal or some other substance by melting and pouring it into a mould]

founder effect *n.* The tendency for an isolated offshoot of a population to develop genetic differences from the parent population owing to the distribution of **alleles* in its founder members not being perfectly representative of the distribution in the parent population. *Compare* GENETIC DRIFT.

four-card problem *n.* Another name for the **Wason selection task*.

Fourier analysis *n.* The decomposition of a **time series* or a periodic phenomenon such as a sound wave or the variation in luminance across a visual image into its component **sinusoidal* components of different frequencies and amplitudes by fitting terms of a **Fourier series* to it. *See also* FOURIER SERIES, FOURIER THEOREM, FOURIER TRANSFORM, OHM'S ACOUSTIC LAW. [Named after the French mathematician Baron Jean Baptiste Joseph Fourier (1768–1830) who published the fundamental mathematical results underlying

it in 1822]

Fourier series *n.* An infinite series of the form $\frac{1}{2} a_0 + a_1 \cos x + b_1 \sin x + a_2 \cos 2x + b_2 \sin 2x + \dots$ that can be used to decompose or to approximate a **time series* or periodic function in **Fourier analysis*.

Fourier theorem *n.* A mathematical proof that any periodic function can be decomposed by **Fourier analysis* into a **Fourier series* that is a sum of sine and cosine terms with suitable constants.

Fourier transform *n.* A function of the form $f(t)$ that can be obtained from another function $f(x)$ by multiplying by e^{itx} and integrating over all values of x . It plays a crucial part in **Fourier analysis*.

fourth ventricle *See* VENTRICLE.

fovea *n.* Any small pit or depression on or in the body, especially the *fovea centralis*, the small pit in the centre of the **macula lutea* of the **retina*, about half a millimetre in diameter, densely packed with **cones* but lacking rods, where the image of an object in the direct line of vision falls and where vision is sharpest. *See also* ARAGO PHENOMENON, DONDERS' LAW, PARAFOVEA. **foveae** *pl.* **foveal** *adj.* [From Latin *fovea* a pit]

fractionation *n.* A technique of scaling used in **psychophysics* in which an observer is presented with a stimulus that is assigned an arbitrary value or number, then the observer is asked to select a stimulus whose magnitude is exactly half, that stimulus being assigned a number half the size of the first one, and so on. *See also* MEL.

fragile X syndrome *n.* The most common inherited cause of **intellectual disability*, involving an easily damaged X chromosome with a tip hanging by a narrow thread; the syndrome is often accompanied by **attention-deficit/hyperactivity disorder*, with additional characteristics such as enlarged head, long face, prominent ears and (in males) enlarged testicles. It is caused by a single gene on the **X chromosome* that is invariably expressed in males but rarely in females—only if they inherit copies on both

their X chromosomes—resulting in a greater preponderance of intellectual disability in males than females.

fragrant odour *n.* One of the six primary odours in **Henning's prism*, one of the four in the **Crocker–Henderson system*, and one of the seven in the **stereochemical theory*, resembling the odour of lavender or rose petals. US *fragrant odor*. Also called *flowery odour* or *floral odour*.

frame *n.* **1.** A rigid structure surrounding or enclosing an object such as a picture or a window. **2.** An underlying assumption or set of assumptions that supports an interpretation or a concept and that functions as an interpretive frame of reference for thinking about the concept. In the branch of **artificial intelligence* devoted to **knowledge* representation, a frame is a knowledge structure of an everyday aspect of the world such as a house, containing fixed structural information (all houses are assumed to have walls, a roof, and various other fixed attributes) and slots capable of accepting one of two or more values representing variable information (a house may be built from brick, concrete, or wood, and it may or may not have a garden, a garage, a swimming pool, and so on). This sense, close to the concept of a **schema*, was formulated in 1975 by the US cognitive scientist Marvin (Lee) Minsky (born 1927). See *FRAME PROBLEM*, *FRAMING EFFECT*. **3.** A single image in a sequence forming a cinema, television, or video film; hence, figuratively, a part of a **script* (3) representing a single event, action, or scene. See also *SCHEMA*.

frame problem *n.* In **artificial intelligence* and especially **knowledge representation*, the problem of specifying formally what is left unchanged when an action is performed. A simple example might involve moving a block from a table on to the floor: this obviously leaves the colour of the block unchanged, and in a formal representation of the action this needs to be made explicit, because some actions do have side-effects, but a difficulty arises from the fact that an infinity of potential changes have to be accounted for. This problem is often solved with the help of some form of **non-monotonic reasoning*, especially **default reasoning*.

frameshift mutation *n.* A **mutation* resulting from the insertion or deletion of a base pair, or a number of base pairs that is not a multiple of

*****ebook converter DEMO Watermarks*****

three, causing subsequent base pairs to be grouped wrongly into triplets at the stage of translation into **amino acids*. See also [FRAMESHIFT SUPPRESSION](#). [So called because the genetic code is in effect read through a moving window or frame displaying three bases at a time]

frameshift suppression *n.* The process whereby the effects of a **frameshift mutation* are overcome, either by the reinsertion of the original gene or by the action of a specialized form of **transfer RNA*, called an extragenic frameshift suppressor, that can recognize four-base sequences.

framing effect *n.* An effect of the description, labelling, or presentation of a problem on responses to it. A classic example was provided in 1981 by the Israeli-American psychologists Amos Tversky (1937–96) and Daniel Kahneman (born 1934), who invited participants to choose between two programmes for combating an unusual disease that was expected to kill 600 people. Participants in one group were told that programme *A* would save 200 lives, whereas programme *B* had a 1/3 probability of saving 600 lives and a 2/3 probability of saving no one, and in this **frame (2)*, focusing on gains, 72 per cent preferred *A* to *B*. Participants in a second group were told that under programme *C* 400 people would die, whereas under programme *D* there was a 1/3 probability that no one would die and a 2/3 probability that 600 would die, and in this frame, focusing on losses, 78 per cent preferred *D* to *C*. The majority of participants were **risk-averse* in their preference of *A* over *B* in the gain frame but **risk-seeking* in their preference of *D* over *C* in the loss frame, although the two frames are merely different ways of describing the same problem. This effect occurs even if both problems are presented to the same group of participants. A framing effect on a decision is called a *decision frame*. See also [CANCELLATION HEURISTIC](#), [PROSPECT THEORY](#), [RISK AVERSION](#), [WASON SELECTION TASK](#). Compare [CONTEXT EFFECT](#).

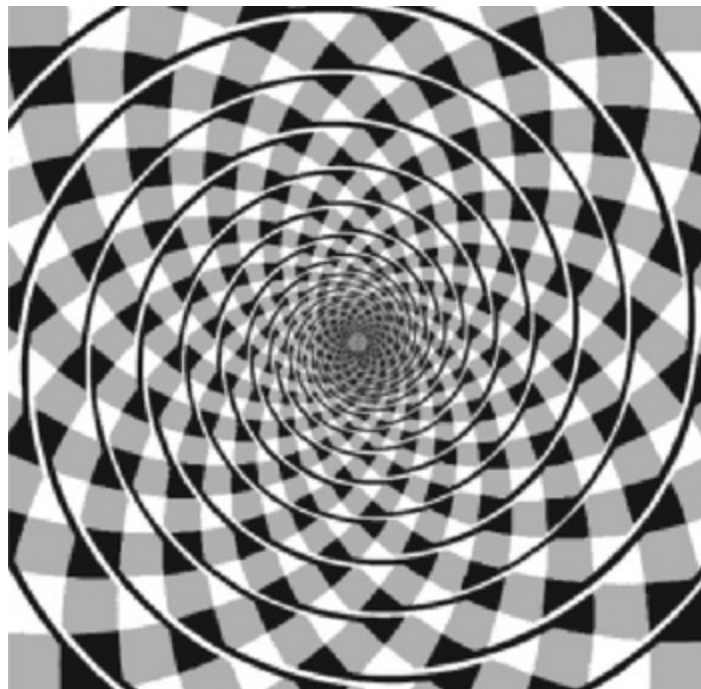
Frankfurt school *n.* A movement involving political philosophy and psychology founded at the Institute for Social Research at the University of Frankfurt in Germany, closed by the Nazis in 1933, and re-established in 1934 at Columbia University in New York. Its leading figures included Max Horkheimer (1895–1973), Theodor W(iesengrund) Adorno (1903–69), and Herbert Marcuse (1898–1979), who were united by a belief in the possibility and desirability of a Marxist **critical theory* and a rejection of **positivism (1,*

*****ebook converter DEMO Watermarks*****

2).

Fraser illusion *n.* Another name for any of the forms of the ***twisted-cord illusion**, which Fraser himself called the ‘twisted cord with a chequer-work background illusion’. *See also* **FRASER SPIRAL**. [Named after the Scottish physician and psychologist James Fraser (1863–1936) who published it as a new illusion in the *British Journal of Psychology* in 1908]

Fraser spiral *n.* A ***twisted-cord illusion** in which a series of concentric circles composed of cord made by twisting dark and light strands together, or of thin strips of diagonal stripes resembling such a twisted cord, appear as a spiral when presented against a chequered background composed of radiating curved bands (see **illustration**). The term is a misnomer, given that it is not actually a spiral. [Named after the Scottish physician and psychologist James Fraser (1863–1936) who published it together with other twisted-cord illusions in the *British Journal of Psychology* in 1908]



Fraser spiral. What appears to be a spiral is in fact a series of concentric circles, as can be confirmed by tracing all the way round any of them.

fraternal twins *n.* A non-technical name for ***dizygotic twins**. [From

*****ebook converter DEMO Watermarks*****

Latin *frater* a brother]

fraud syndrome *n.* Another name for the [*imposter phenomenon](#). [From Latin *fraus* deception, from *fraudare* to deceive]

free association *n.* A technique of [*psychoanalysis](#) in which the patient is encouraged to relate to the analyst all thoughts, feelings, wishes, sensations, memories, and images that come to mind, however embarrassing or trivial they might seem. It is designed to incapacitate the *second censorship* between the [*preconscious](#) and [*consciousness](#), thereby exposing the unconscious defences operating through the *first censorship* between the [*unconscious](#) (2) and preconscious. Sigmund Freud (1856–1939) revealed in ‘A Note on the Prehistory of the Technique of Analysis’ in 1920 that he was influenced by the German political writer and satirist Ludwig Börne (originally called Löb Baruch, 1786–1837), who recommended a form of generative writing that begins by putting on paper everything that comes to mind, in order to avoid self-censorship and to increase originality (*Standard Edition*, XVIII, pp. 263–5, at p. 265). Some credit for developing the technique should be given to Frau Emmy von N, one of Freud's earliest patients who, as Freud recounted in 1895 in his co-authored book *Studies on Hysteria* (*Standard Edition*, II), asked him ‘not to keep on asking her where this or that came from, but to let her tell me what she had to say’ (p. 63), and when she followed this procedure, her verbal accounts turned out to contain ‘a fairly complete reproduction of the memories and new impressions which have affected her since our last talk, and it often leads on, in a quite unexpected way, to pathogenic reminiscences of which she unburdens herself without being asked to’ (p. 56). At about the same time (in 1904) and independently of Freud, Carl Gustav Jung (1875–1961) introduced his [*word-association test](#), and this also influenced the development of the technique of free association. *See also* [DREAM ANALYSIS](#), [FUNDAMENTAL RULE OF PSYCHOANALYSIS](#). *Compare* [DIRECTED ASSOCIATION](#), [INTROSPECTION](#).

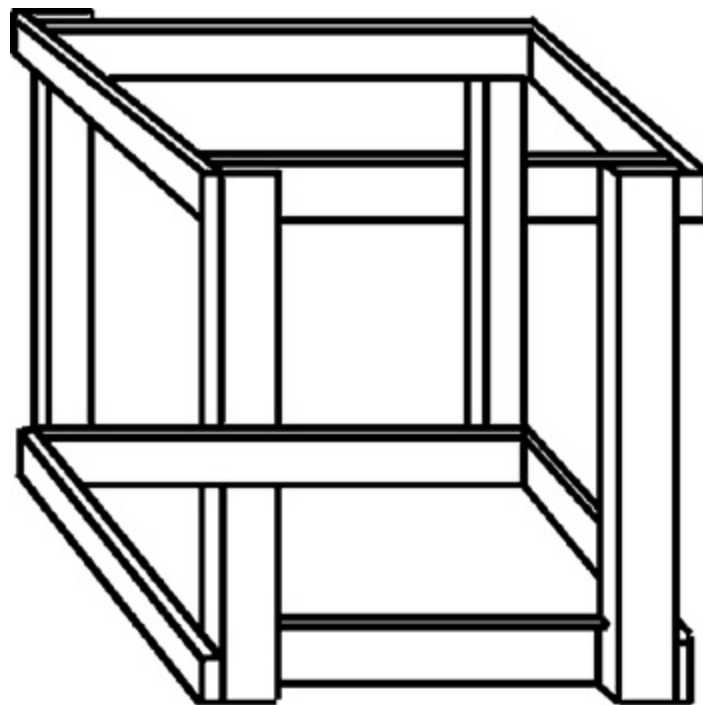
freebasing *n.* Increasing the potency of [*cocaine](#) by extracting its active alkaloid (the free base), heating it, and inhaling the vapours through a cigarette or water pipe ([*bong](#)). *See also* [CRACK](#).

free energy *n.* In [*psychoanalysis](#), psychic energy in the [*primary](#)
*****ebook converter DEMO Watermarks*****

process, which seeks immediate and total discharge through the most direct route available. Sigmund Freud (1856–1939) published his theory of free energy and ***bound energy** in 1895, in his ‘Project for a Scientific Psychology’ (*Standard Edition*, I, pp. 177–397), basing it on the ***principle of constancy**. See also **NIRVANA PRINCIPLE**, **PLEASURE PRINCIPLE**.

free-floating anxiety *n.* Another name for ***generalized anxiety disorder**.

Freemish crate *n.* A popular ***impossible figure** depicting the frame of a box-like object that can be drawn but could not exist in actual space (see **illustration**). [Origin obscure, named in a letter to the *Scientific American* in June 1966 containing the earliest published version of the object]



Freemish crate

free morpheme *n.* A ***morpheme** that can occur on its own as a word, such as *tree*. Compare **BOUND FORM**.

free nerve ending *n.* A ***sensory** receptor consisting of finely myelinated or unmyelinated ends of the axons of nerve fibres, located
*****ebook converter DEMO Watermarks*****

throughout the body but concentrated mainly in the **dermis* or **epidermis* of the skin, in certain **mucous membranes*, in the **corneas* of the eyes, adjacent to the roots of hairs, and around the bodies of **sweat glands*. Some free nerve endings are **pain receptors* (nocireceptors); others function as **temperature receptors* supplying **warm spots* and **cold spots* on the skin.

free operant avoidance conditioning *n.* Another name for **Sidman avoidance conditioning*.

free radical *n.* Any of a number of highly reactive **radical* (2) molecules having an unpaired electron occupying the outer orbital and therefore being prone to snatch electrons from other molecules in processes such as oxidation, which rusts metals, spoils butter, and injures cells in the body, probably including neurons in the basal ganglia in Parkinson's disease. See also *MITOCHONDRIAL DNA*.

free recall *n.* Retrieval of information from memory without the help of **cues* (3), and hence often contrasted with **cued recall*. The term is also used for retrieval of a number of items of information in any order, in contradistinction to **serial recall*. See also *CLUSTERING*, *RECALL*.

free response *n.* In psychometrics, a response to a test item that the respondent supplies without constraints, in contradistinction to a response that the respondent chooses from a set of alternatives. Compare *FORCED-CHOICE*, *MULTIPLE-CHOICE*, *RESPONSE CATEGORY*.

free-rider problem *n.* Another name for a **public goods dilemma*. [From the colloquial term *free-rider*, a person who enjoys benefits obtained for workers by a trade union without joining the union]

Frégoli syndrome *n.* A **delusional misidentification* of strangers as familiar people in disguise; thus a delusion of overidentification, in contrast to **Capgras syndrome*, which involves underidentification. Compare *INTERMETAMORPHOSIS*. [Named after Leopoldo Frégoli (1867–1936), an Italian actor of the *belle époque* who was famous for his ability as a mimic]

frequency *n.* 1. The number of times that an event occurs in a specified time period; more specifically the number of times that a wave repeats itself in one second, generally expressed in **hertz* (Hz) or cycles per second. Frequency (f) is equivalent to the velocity of propagation (v) divided by wavelength (λ): $f = v/\lambda$. The **audibility range* of sound waves extends from about 16 Hz at the low end to about 20,000 Hz at the high end for a person with normal hearing, and the **visible spectrum* of light from about 405,405 billion Hz at the red end to about 769,231 billion Hz at the violet end. See also SPATIAL FREQUENCY. 2. In statistics and measurement theory, the number of items or scores falling into a particular class. *Frequency data* are scores representing counts rather than other kinds of measurements.

frequency-dependent *adj.* Of or relating to a **gene* or **allele* whose **Darwinian fitness* is dependent on the frequency of the gene or allele in the population, as when a phenotypic characteristic is advantageous only if it is unusual in the population or only if it is common.

frequency-dependent selection *n.* A form of **natural selection* in which the **fitness* of a particular **genotype* depends on its frequency in the population. See also APOSTATIC SELECTION, STABILIZING SELECTION.

frequency distribution *n.* In statistics, a table or graph showing classes into which the data have been grouped, together with their corresponding frequencies, that is, the number of scores falling into each class.

frequency law *n.* In the doctrine of **associationism*, a law introduced by the English philosopher John Stuart Mill (1806–73), according to which mental elements that frequently occur together tend to become associated. It was influential in the early development of **behaviourism*. See also GROUPING LAW. Compare CONTIGUITY LAW, SIMILARITY LAW.

frequency polygon *n.* In descriptive statistics, a line graph showing the relationship between the values of scores, usually on the horizontal axis, and their frequencies of occurrence, usually on the vertical axis.

frequency theory *n.* A theory of pitch perception first proposed in 1886 by the British physiologist William Rutherford (1839–99) according to which the ear converts acoustic vibrations into nerve impulses by emitting one impulse for each cycle of the sound wave in the manner of a telephone. This mechanism is believed to operate for low-frequency sounds, but because an auditory neuron can respond up to only about 500 hertz, this theory cannot explain the perception of higher-pitched sounds within the **audibility range*. Also called the *telephone theory*. Compare *PLACE THEORY*, *VOLLEY THEORY*.

frequency threshold curve *n.* Another name for the **tuning curve*. **FTC** *abbrev.*

frequency tuning curve *n.* Another name for the **tuning curve*. **FTC** *abbrev.*

Freudian *adj.* Of or relating to the **psychoanalytic* ideas and practices of the Austrian neurologist Sigmund Freud (1856–1939) or of his daughter, the Austrian-born British psychoanalyst Anna Freud (1895–1982). The term *Freudian analysis* generally refers to the classical approach of Anna Freud and is used in contradistinction to **Adlerian*, **Eriksonian*, **Jungian*, **Kleinian*, **Kohutian*, **Lacanian*, **Winnicottian*, and other schools of analysis.

Freudian slip *n.* A colloquial name for a **parapraxis*.

fricative *n.* A **consonant* speech sound articulated by narrowing the mouth passage to make the airflow turbulent but to allow it to pass through without interruption, as in the initial **phonemes* in the words *fire*, *high*, *see*, *shoe*, *thee*, *thigh*, *vow*, *zoo*, and the second phoneme in *azure*. See also *MANNER OF ARTICULATION*.

Friedman two-way analysis of variance *n.* A distribution-free statistical test of the **null hypothesis* that several related samples are distributed similarly. For each subject or case, the scores are ranked across samples, and the test statistic is based on these ranks. The standard equivalent distribution-dependent test is one-way **analysis of variance* (*ANOVA*). Also

called *Friedman two-way ANOVA*. [Named after the prominent US economist Milton Friedman (1912–2006) who developed it in 1937]

fright *n.* Sudden fear or alarm. Sigmund Freud (1856–1939) distinguished in 1920 between fright (German *Schreck*), anxiety (*Angst*), and fear (*Furcht*): fright ‘is the name we give to the state a person gets into when he has run into danger without being prepared for it’; anxiety ‘describes a particular state of expecting the danger or preparing for it, even though it may be an unknown one’; and fear ‘requires a definite object of which to be afraid’ (*Beyond the Pleasure Principle*, *Standard Edition*, XVIII, pp. 7–64, at pp. 12–13).

frigidity *n.* 1. A lack of warmth, passion, or emotional responsiveness. 2. More specifically in relation to females, sexual unresponsiveness. *See also* [DYSpareunia](#), [Female Orgasmic Disorder](#), [Female Sexual Interest/Arousal Disorder](#), [Vaginismus](#). **frigid** *adj.* [From Latin *frigidus* frozen, from *frigus* cold]

frog-pond effect *n.* Another name for the [*big-fish-little-pond effect](#).

Fromm's typology *n.* In [*neo-Freudian](#) theory, a classification of character types suggested by the German-born US psychoanalyst Erich Fromm (1900–80) in his book *Man for Himself* (1947), comprising: [*exploitative orientation](#), [*hoarding orientation](#), [*marketing orientation](#), [*productive orientation](#), [*receptive orientation](#).

frontal eye field *See* [MOTOR CORTEX](#). **FEF** *abbrev.*

frontal leucotomy *n.* Surgical severing of the neural connections between the [*thalamus](#) and the [*frontal lobes](#) of the brain to relieve severe cases of [*schizophrenia](#) and [*bipolar](#) disorders. Also called *prefrontal leucotomy* or simply *leucotomy*. *Compare* [FRONTAL LOBOTOMY](#). Also spelt *frontal leukotomy*. [From Greek *leukos* white + *tome* a cut, alluding to white matter in the brain]

frontal lobe *n.* The anterior [*lobe](#) of each [*cerebral hemisphere](#), separated on its lateral or outer surface from the parietal lobe by the [*central sulcus](#) and

from the temporal lobe by the **lateral sulcus*, involved in attention, short-term memory, and activities requiring planning and organization. Lesions in this area are associated with **frontal lobe syndrome*. See also *APROSODIA*, *DYSEXECUTIVE SYNDROME*, *FRONTAL LEUCOTOMY*, *FRONTAL LOBE SYNDROME*, *FRONTAL LOBOTOMY*, *LOBE*, *PREFRONTAL CORTEX*, *PSEUDODEPRESSION*, *WISCONSIN CARD SORTING TEST*, *WITZELSUCHT*.

frontal lobe syndrome *n.* A pattern of signs and symptoms associated with damage to the **frontal lobe* of the brain, typically including general impairment of planning functions, and either boastfulness, lack of inhibition, **hypomanic episodes*, impulsiveness, and antisocial behaviour, or **depression*, apathy, negligence about personal appearance, and **perseveration* (2). See also *DYSEXECUTIVE SYNDROME*.

frontal lobotomy *n.* Surgical removal of portions of the **frontal lobes* of the brain, usually in the **prefrontal cortex*, and severing of the neural connections between the **thalamus* and the **frontal lobes*, as a method of treating intractable **depression* or pain. Also called *prefrontal lobotomy* or simply *lobotomy*. Compare *FRONTAL LEUCOTOMY*. [From Greek *lobos* a lobe + *tome* a cut]

frontal plane *n.* Another name for a **coronal plane*.

frontal section *n.* Another name for a **coronal section*.

frontopolar cortex *n.* The area of the **frontal lobe* immediately behind the forehead, specifically **Brodmann Area 10*, involved in strategic planning, problem-solving, reasoning, and **episodic memory* retrieval. See also *BRODMANN AREA* and accompanying illustration. Also called the *anterior prefrontal cortex*. **FPC** *abbrev.* [From Latin *frons* forehead + *polus* end of an axis + *-aris* belonging to or like]

frontotemporal neurocognitive disorder *n.* A **neurocognitive disorder* in **DSM-5* characterized by impairments in either behavioural or language functions associated with **frontal lobe* deterioration and sometimes also, in later stages of the disorder, also **temporal lobe* deterioration, most commonly diagnosed in people in the sixth decade of life. To meet the
*****ebook converter DEMO Watermarks*****

diagnostic criteria for the behavioural variant, evidence is required of prominent decline in **social cognition* and/or executive abilities (planning or organizing ability) plus at least three of the following: disinhibited social behaviour or minor law-breaking, **apathy* or **abulia*, loss of **empathy* or sympathy, **compulsions* and **perseveration* (2), or marked dietary changes, especially binge eating or **pica*. For the language variant, evidence is required of prominent decline in language ability affecting speech production, retrieval of words, object naming, and grammar. In both variants, learning, memory, and perceptual–motor functioning in other areas must be relatively unaffected, and the signs and symptoms must not be better explained by another neurocognitive disorder. [From Latin *frons* the forehead + *temporalis* of the temple, from *tempus*, *temporis* a temple (on the side of the head) + *-alis* of or relating to]

front vowel *n.* A **vowel* (see the diagram accompanying that entry) produced in the front of the mouth with the front part of the tongue raised, such as the vowels in *see*, French *thé*, *red*, *trap*, and German *Mann*. Compare BACK VOWEL, CENTRAL VOWEL.

frotteurism *n.* A **paraphilia* characterized by recurrent, intense sexual fantasies, urges, or behaviour involving touching or rubbing up against non-consenting people, often in crowded public places. Also called *frottage*. See also FROTTEURISTIC DISORDER. **frotteur** *n.* One who practises frotteurism. [From French *frotter* to rub]

frotteuristic disorder *n.* A **paraphilic disorder* in **DSM-5* characterized by intense, recurrent sexual arousal from touching or rubbing against a non-consenting person, or associated fantasies or urges over a period of at least six months. To meet the diagnostic criteria, the individual must either have acted out this behaviour with a non-consenting person, or the fantasies or urges must have caused clinically significant distress or impairment in social, occupational, or other areas of life. See also FROTTEURISM.

frozen noise *n.* A burst of **white noise* that has been recorded and is repeated over and over again. Compare PINK NOISE, COLOURED NOISE.

frustration *n.* The blocking or prevention of a potentially rewarding or satisfying act or sequence of behaviour; or the emotional response to such hindrance. See also **FRUSTRATION–AGGRESSION HYPOTHESIS**. [From Latin *frustrare* to cheat + *-ation* indicating a process or condition]

frustration–aggression hypothesis *n.* A conjecture, originally put forward by the US psychologist John Dollard (1900–80) and four colleagues in their book *Frustration and Aggression* in 1939, the strongest form of which states that the instigation to aggressive behaviour always presupposes frustration and that frustration always leads to aggression.

F scale *n.* A questionnaire to measure ***authoritarianism**, first published by the German philosopher, sociologist, and psychologist Theodor W(iesengrund) Adorno (1903–69) and several colleagues in the book *The Authoritarian Personality* (1950). It is composed of the following nine aspects, typical items being shown in italics, and a Yes answer always indicating a tendency to authoritarianism. Conventionalism (rigid adherence to conventional middle-class values): *Obedience and respect for authority are the most important virtues children should learn*; Authoritarian Submission (a submissive and uncritical attitude towards authority figures): *Young people sometimes get rebellious ideas, but as they grow up they ought to get over them and settle down*; Authoritarian Aggression (a punishing attitude towards violations of conventional values): *Sex crimes, such as rape and attacks on children, deserve more than mere imprisonment; such criminals ought to be publicly whipped, or worse*; Anti-Intraception (a dislike of subjectivity and imagination): *When a person has a problem or worry, it is best for him not to think about it, but to keep busy with more cheerful things*; Superstition and Stereotypy (a belief in supernatural determinants of human fate and a tendency to think in rigid categories): *Some day it will probably be shown that astrology can explain a lot of things*; Power and Toughness (a preoccupation with strong/weak, leader/follower relationships): *People can be divided into two distinct classes: the weak and the strong*; Destructiveness and Cynicism (a distrustful and misanthropic attitude towards people in general): *Human nature being what it is, there will always be war and conflict*; Projectivity (a tendency to project one's own unconscious impulses on to others): *Homosexuals are hardly better than criminals and ought to be severely punished*; Sex (exaggerated concern with people's sexual activities):

*****ebook converter DEMO Watermarks*****

The wild sex life of the old Greeks and Romans was tame compared to some of the goings-on in this country, even in places where people might least expect it. Also called the California F scale. [From (Potentiality for) F(ascism) scale]

F statistic *n.* An important statistic that underlies the *analysis of variance (ANOVA). For a set of scores divided into groups, it is defined as the total *variance or *mean square between groups divided by the total variance or mean square within groups. Also called the *F ratio*.

fugue *n.* A form of *dissociation characterized by apparently purposeful travel outside one's normal range of movement, with *amnesia during the period of travel. If it causes significant distress or impairment in social, occupational, or other areas of functioning, it may be diagnosed as the mental disorder *dissociative fugue. [From Latin *fuga* a flight]

Fullerton–Cattell law *n.* In *psychophysics, the proposition that for any stimulus intensity I , the *difference threshold ΔI is proportional to the square root of I , hence $\Delta I = k\sqrt{I}$, where k is a constant, rather than being proportional to I itself, as in *Weber's law, which is both simpler and generally more accurate. [Named after the US psychologists George Stuart Fullerton (1859–1925) and James McKeen Cattell (1860–1944) who formulated it in 1892]

full primal sketch See PRIMAL SKETCH.

functional *adj.* In relation to a disorder, referring to changes in behaviour or action, without any observable change in physical structure in the person or any organ or body part.

functional analysis of behaviour *n.* The application of the laws of *operant conditioning, or less commonly those of another learning theory, to establish the relationships between *stimuli (1) and *responses. US *functional analysis of behavior*.

functional autonomy *n.* The property of a drive or habit that has

become detached from the goal that originally motivated it and operates independently. A classic example is the drive or habit associated with making money, initially to buy goods and services that improve the quality of one's life, but often becoming an end in itself. Many **compulsions* such as hand-washing manifest functional autonomy.

functional equivalence hypothesis *n.* The proposition that **imagery*, although it does not result from stimulation of sense organs, is essentially the same as perception in the way that it functions.

functional fixedness *n.* An impaired ability to solve a problem requiring the use of a particular object, the impairment being caused by recent use of the object for a different function, or by recent perception of the object performing a different function. The phenomenon was first reported in 1935 by the German-born US psychologist Karl Duncker (1903–40), who experimented with five problems, including what he called the *box problem*: Three small lighted candles are to be attached to a wooden door at eye level. The participants or subjects were presented with many objects, including a matchbox containing matches, a similar-sized cardboard box containing small candles, and a third similar box containing thumbtacks (drawing pins). The solution was to empty the three boxes, to fix them to the door with thumbtacks, and to stand a lighted candle in each box. Only 43 per cent of Duncker's subjects solved the box problem in that form, but 100 per cent of a control group solved it when presented with the same objects but with the three boxes empty, thus avoiding functional fixedness arising from perceiving the boxes as containers of other objects. Across all five problems, Duncker found that functional fixedness of the crucial objects reduced the number of solutions by almost a half. Duncker pointed out that the phenomenon applies not only to physical objects or tools, but also to mental objects or concepts. A translation from the original German into English of Duncker's classic article was published in the journal *Psychological Monographs* in 1945. Also called *functional fixity* or *functional embeddedness*. See also *EINSTELLUNG*, *SET* (2).

functionalism *n.* Any doctrine that emphasizes utility or purpose, especially the school of psychology that was launched in 1896 by the US pragmatist philosopher and psychologist John Dewey (1859–1952) and that

*****ebook converter DEMO Watermarks*****

flourished for many years at the University of Chicago under the influence of Dewey, George Herbert Mead (1863–1931), and James Rowland Angell (1869–1949), at Columbia University under the influence of Edward Thorndike (1874–1949) and Robert S(essions) Woodworth (1869–1962), and at Harvard University under the influence of William James (1842–1910). Instead of analysing the structure of mental experience, as was conventional in **structuralism* (2), functionalism examined both mental experience and behaviour from the standpoint of their functional value in adapting the organism to its environment, in a deliberate attempt to introduce evolutionary ideas into psychology. Conscious experiences were interpreted as phenomena that arise when automatic, reflex behaviour is inadequate to meet the needs of an organism, as when a person who is learning to ride a bicycle eventually ceases to be conscious of every movement when conscious awareness is no longer needed. The early practitioners of functionalism were the first to use non-human animals in psychological experiments. During the 1920s and 1930s, functionalism was gradually swallowed up by **behaviourism*. [From Latin *functio* a performance, from *fungi* to perform + Greek *-ismos* indicating a state or condition]

functionalist *n.* A member or follower of the school of **functionalism*, or one who advocates or practises functionalism.

functional MRI *See* [MRI](#).

functional neurological symptom disorder *See* [CONVERSION DISORDER](#).

function type *n.* In **analytical psychology*, any of the personality types identified by Carl Gustav Jung (1875–1961). According to Jung, people fall into the *rational type* (subdivided into *feeling type* or *thinking type*) or *irrational type* (subdivided into *sensing type* or *intuitive type*). Jung also distinguished between *extraverts* and *introverts*. *See also* [MYERS–BRIGGS TYPE INDICATOR](#).

function word *n.* Any word that fulfils a specific grammatical role but has little or no independent meaning outside of its linguistic context, typical examples being articles such as *the*, pronouns such as *she*, and conjunctions

*****ebook converter DEMO Watermarks*****

such as *and*. See also [TELEGRAPHIC SPEECH](#). Compare [CONTENT WORD](#).

fundamental attribution error *n.* A pervasive tendency to underestimate the importance of external situational pressures and to overestimate the importance of internal motives and dispositions in interpreting the behaviour of others. In a typical experiment, participants filled in questionnaires indicating their attitudes towards the Cuban leader Fidel Castro and towards the legalization of cannabis, then half of them were instructed to write essays in favour of Castro and the rest to write essays in favour of legalizing cannabis. The pro-Castro essays were then shown to the writers of the pro-cannabis essays and vice versa, and the readers estimated the writers' true attitudes towards the issues discussed in their essays. Although the readers knew the constraints under which the essays had been written, they failed to take these external situational factors sufficiently into account and persistently misjudged the writers' attitudes in the direction of the views expressed in the essays. The phenomenon was first identified in 1929 in an article in the journal *Zeitschrift für angewandte Psychologie* by the Polish-born Austrian psychologist Gustav Ichheiser (1897–1969) and was subsequently observed and described in 1944 by the Austrian-born US psychologist Fritz Heider (1896–1988), and in 1965 by the US psychologist Edward Ellsworth Jones (1926–93), who called it *correspondent inference*, but it was not until 1977 that it was named and given prominence by the Canadian psychologist Lee D(avid) Ross (born 1942), to whom it is often (mis)attributed. Ross later came to believe that it could more aptly be called the *dispositionist bias*, and many other social psychologists call it the *overattribution bias*. Cross-cultural research suggests that it is far less pervasive in more collectivist (less individualist) cultures than in the US and northern Europe. See also [ATTRIBUTION](#), [ATTRIBUTIONAL BIAS](#), [ATTRIBUTION THEORY](#), [KELLEY'S CUBE](#).

fundamental colour *n.* Another name for a **primary colour* (1, 2, or 3). US *fundamental color*.

fundamental frequency *n.* The **pure tone* with the lowest frequency forming a component of a **complex tone*, or the analogous sine wave in some other complex oscillatory vibration. Also called a *fundamental*. See also [MISSING FUNDAMENTAL ILLUSION](#). Compare [HARMONIC](#).

*****ebook converter DEMO Watermarks*****

fundamental rule of psychoanalysis *n.* The principle according to which a patient undergoing **psychoanalysis* should engage wholeheartedly in **free association*. Also called the *basic rule of psychoanalysis*. See also INTELLECTUALIZATION, THERAPEUTIC ALLIANCE.

fungiform papilla *n.* Any of a large number of flat-topped, mushroom-shaped, reddish-coloured **papillae* on the upper surface of the **tongue*, most of which are studded with **taste buds* around their bases. See also SUPERTASTER. Compare CIRCUMVALLATE PAPILLA, FILOFORM PAPILLA, FOLIATE PAPILLA. **fungiform papillae** *pl.* [From Latin *fungus* a mushroom + *forma* a shape]

funiculus *n.* Any of the three bundles of nerve fibres into which the H-shaped column of **grey matter* running through the length of the **spinal cord* divides the **white matter*: the lateral funiculus on either side of the H, the posterior funiculus between the dorsal uprights of the H, and the anterior funiculus between the ventral uprights of the H. **funiculi** *pl.* [From Latin *funiculus* a string, diminutive of *funis* a rope]

furthest neighbour method *n.* Another name for **complete linkage clustering*.

fusiform cell *n.* Another name for a **spindle cell*. [From Latin *fuscus* a spindle + *forma* a shape]

fusiform gyrus *n.* A spindle-shaped **gyrus* on the medial (inside) surface of each **temporal lobe*, at the junction with the occipital lobe, occupied by Area V4 of the **visual cortex*, largely responsible for colour perception and also implicated in face recognition. The left fusiform gyrus is involved in word recognition in reading, and lesions in that region are associated with **spelling dyslexia*. It is sometimes taken to include a region that is adjacent and anterior to this and is involved in object perception. [From Latin *fuscus* a spindle + *forma* a shape + Greek *gyros* a circle or ring]

fusion See BINOCULAR FUSION.

fusional language *n.* Another name for an [*inflecting language](#).

fusion of instincts *n.* In [*psychoanalysis](#), the mixing of [*Eros](#) and [*Thanatos](#) so that they operate jointly, in contrast to the [*defusion of instincts](#) in which they operate independently, each pursuing its own [*instinctual aim](#). In a key passage on this phenomenon, Sigmund Freud (1856–1939) wrote in his book *New Introductory Lectures on Psycho-Analysis* (1933, *Standard Edition*, XXII, pp. 5–182): ‘In sadism and masochism we have before us two excellent examples of a mixture of two classes of instinct, of Eros and aggressiveness; and we proceed to the hypothesis that this relation is a model of one—the very instinctual impulse that we can examine consists of similar fusions or alloys of the two classes of instinct. These fusions, of course, would be in the most varied ratios’ (pp. 104–5).

fuzzy logic *n.* A form of logic based on [*fuzzy set](#) theory in which [*propositions \(1\)](#) have continuously graded truth values ranging from 0 to 1, rather than being either false (0) or true (1) as in conventional [*Boolean](#) logic. It is influential mainly in the field of [*knowledge](#) representation and [*neural networks](#).

fuzzy set *n.* A generalized concept of a set in which elements have continuously graded degrees of set membership ranging from 0 to 1, rather than either not belonging (0) or belonging (1) as in conventional [*set theory](#). It was developed in 1965 by the Azerbaijani-born US engineer and systems theorist Lotfi A. Zadeh (born 1921) to reflect the fact that many natural categories, such as baldness, tallness, and beauty, have intrinsically indistinct boundaries. *See also* [FUZZY LOGIC](#), [GUPPY EFFECT](#), [PROTOTYPE THEORY](#).



g *abbrev.* General factor of ability or intelligence, a concept first proposed in an article by the English psychologist Charles Edward Spearman (1863–1945) in the *American Journal of Psychology* in 1904 on the basis of **factor analysis* to explain the correlations between scores on diverse intelligence tests and subtests. Spearman interpreted it as mental energy, but others reinterpreted it as abstract reasoning ability or as neural processing speed, and some, starting in 1916 with the English psychologist Godfrey H(ilton) (later Sir Godfrey) Thomson (1881–1955), viewed it as a mere statistical abstraction devoid of psychological meaning. Also called *general ability*. *See also* FACTORIAL VALIDITY. *Compare* PRIMARY MENTAL ABILITIES.

GABA *abbrev.* Gamma-aminobutyric acid, the commonest inhibitory **neurotransmitter* in the central nervous system. When it is released into a synapse, it tends to prevent the postsynaptic neuron from firing. *See also* DRAVET SYNDROME, PICROTOXIN, PURKINJE CELL. [From *g(amma)* (γ) the third letter of the Greek alphabet + *a(mine)* + Greek *b(outyron)* butter, from *bous* ox + *tyros* cheese + *-ikos* of, relating to, or resembling]

GABAergic *adj.* Releasing **GABA*; also activated by or responding to GABA, this extended usage being widespread but consistently rejected by the English physiologist Sir Henry Hallet Dale (1875–1968), who coined the suffix *-ergic*, and by many other authorities. *Compare* ADRENERGIC, CHOLINERGIC, DOPAMINERGIC, NORADRENERGIC, SEROTONERGIC.

GABA receptor complex *n.* A structure that is present in certain cells of the central nervous system and that comprises three interacting neuroreceptors, the first being a receptor that is stimulated by sedative or

hypnotic drugs such as *barbiturates and is inhibited by *convulsant drugs; the second a receptor that is stimulated by *benzodiazepines; and the third the primary *GABA receptor, stimulation of which inhibits neuronal activity by enlarging chloride channels, this effect being augmented by the presence of either barbiturates or benzodiazepines and blocked by convulsants.

gag reflex *n.* A reflex contraction of muscles in the *pharynx and retraction of the tongue in response to stroking of the *velar or *pharyngeal surfaces. Its absence is a sign of a lesion in the vagus nerve or the glossopharyngeal nerve. Also called the *pharyngeal reflex*. [From *gag* to *retch*]

gain from illness *n.* An umbrella term for *primary gain and *secondary gain.

gain-loss effect *n.* The finding that people tend to be most attracted to others whose liking for them appears to have increased, and least attracted to others whose liking for them appears to have decreased, such increases and decreases in the perceived estimation of others having more impact on their attraction towards those others than constant levels of liking or rewarding behaviour from them. The phenomenon was first remarked on by the Dutch philosopher Baruch Spinoza (1632–77) in his *Ethics*, published posthumously in 1677: ‘Hatred which is completely vanquished by love passes into love; and love is thereupon greater than if hatred had not preceded it. For he who begins to love a thing, which he had wont to hate or regard with pain, from the very fact of loving feels pleasure’ (proposition 44). The phenomenon was first studied empirically by the US psychologists Elliot Aronson (born 1932) and Darwyn E. Linder (born 1939) who reported in the *Journal of Experimental Social Psychology* in 1965 the results of an experiment in which students overheard conversations in which they were being discussed by a fellow student either entirely positively, entirely negatively, beginning with negative comments and becoming more positive (gain), or beginning with positive comments and becoming more negative (loss). The students were later asked how much they liked the fellow student whose conversation they had overheard, and the results showed that their liking was greatest in the gain condition and least in the loss condition.

gain, primary/secondary See PRIMARY GAIN, SECONDARY GAIN.

gain score *n.* In psychometrics, the difference between a person's score on a test and the same person's score on the same test, or an **equivalent form* or **parallel form*, administered earlier.

gait apraxia *n.* A form of **apraxia* characterized by difficulty in walking, and often in making other voluntary movements with the feet or legs such as kicking a ball, sometimes sufficiently severe to require confinement to a wheelchair. [From Old Norse *gata* a path, way, street, or manner of behaviour]

gait ataxia *n.* A form of **ataxia* caused by a lesion in the **anterior* lobe of the **cerebellum*, usually as a consequence of **alcohol dependence*, characterized by staggering movement even when sober and inability to stand still with feet together. See also ROMBERG'S SIGN, TANDEM GAIT. Compare LOCOMOTOR ATAXIA.

Galatea effect *n.* Any positive **Pygmalion effect*, when expectations function as **self-fulfilling prophecies* with positive consequences, as when high expectations by teachers of the potential school performance of particular children has positive effects on their actual performance. The term was introduced in an article in the *Journal of Educational Psychology* in 1982 by the Israeli psychologist Alisha Y. Babad (born 1944), the Argentine-born Israeli psychologist Jacinto Inbar (born 1943), and the German-born US psychologist Robert Rosenthal (born 1933). Compare GOLEM EFFECT. [Named after the Greek myth of Pygmalion and Galatea in which an ivory sculpture of a woman, created by Pygmalion, the king of Cyprus, was brought to life as Galatea after Pygmalion fell in love with it]

gall bladder *n.* A muscular sac attached to the right side of the liver that releases **bile* into the duodenum. [From Greek *chole* bile]

Galton bar *n.* A device consisting of a horizontal rod that can be bisected by an adjustable vertical pointer, used to test the accuracy of visual estimates of length. [Named after the English explorer, amateur scientist, and

psychologist Sir Francis Galton (1822–1911) who invented it]

Galton's law of filial regression *n.* Another name for ***filial regression**. [Named after the English explorer and scientist Sir Francis Galton (1822–1911) who first drew attention to it]

Galton whistle *n.* An instrument for emitting high-pitched tones and ***ultrasound** for determining the upper limits of the ***audibility range** in humans and other animals. The original version, which the English explorer, amateur scientist, and psychologist Sir Francis Galton (1822–1911) first described in 1876, was a whistle attached to a hollow walking-stick, with a rubber bulb for its operation in the handle, which he used to experiment on animals at London Zoo and elsewhere.

galvanic skin response *n.* A fall in the resistance of the ***skin** to the passage of a weak electric current, usually measured in the palm of the hand in units of ohms, indicative of emotion or physiological arousal, also called a *psychogalvanic response* (**PGR**) or an *electrodermal response* (**EDR**). See also **POLYGRAPH**. Compare **SKIN CONDUCTANCE RESPONSE**. **GSR** abbrev. [From *galvanic* of or relating to current electricity, named after the Italian physiologist Luigi Galvani (1737–98) who first showed that muscles contract when electricity is passed through them]

gambler's fallacy *n.* The false belief that the probability of an event in a random sequence is dependent on preceding events, its probability increasing with each successive occasion on which it fails to occur. Thus if black has come up many times in succession at a roulette table, a false belief may develop that red is increasingly likely on each subsequent spin of the wheel, to even out the sequence in the long run; or if a fair coin is tossed repeatedly and tails comes up many times in a row, a gambler may believe that heads is more likely on the following toss; or if a mother gives birth to several girls in succession, she may come to believe that the probability of a boy is greater than 1/2 for her next baby. See also **SAMPLE SIZE FALLACY**.

gambling disorder *n.* A ***substance-related and addictive disorder** in ***DSM-5** (the only one that is not substance-related), characterized by persistent and maladaptive gambling, causing clinically significant
*****ebook converter DEMO Watermarks*****

impairment or distress, indicated by such signs and symptoms as needing increasing amounts of money to achieve the desired level of excitement; becoming restless or irritable while refraining from gambling; attempting repeatedly and unsuccessfully to cut down or to stop gambling; frequent preoccupation with gambling; using gambling as an escape from worry or unhappiness; attempting to recoup gambling losses by further gambling; jeopardizing a significant job, personal relationship, or educational opportunity by gambling; and relying on others to relieve financial crises caused by gambling. *Compare* [INTERNET GAMING DISORDER](#), [MANIC EPISODE](#).

gambling, pathological *See* [GAMBLING DISORDER](#).

game *n.* **1.** An interactive decision modelled in [*game theory](#). Also called a *strategic game* or a *game of strategy*. *See* [CHICKEN GAME](#), [DOLLAR AUCTION GAME](#), [NEWCOMB'S PROBLEM](#), [N- PERSON PRISONER'S DILEMMA](#), [PRISONER'S DILEMMA GAME](#), [PUBLIC GOODS DILEMMA](#), [RESOURCE DILEMMA](#), [SOCIAL DILEMMA](#), [ULTIMATUM GAME](#). **2.** More generally, any sport, recreational contest, amusement, or pastime conducted according to a code or system of rules.

gamete *n.* A sexual reproductive cell, such as an [*ovum](#) or a [*spermatozoon](#), that fuses with another during fertilization. Also called a *germ cell*. [From Greek *gamete* a wife and *gametes* a husband, from *gameein* to marry]

game theory *n.* A branch of mathematics devoted to the logic of interactive decision making, applicable to any social interaction in which there are two or more decision makers, called [*players](#), each having two or more ways of acting, called [*strategies \(2\)](#), such that the outcome depends on the strategy choices of all the players, and the players have well-defined preferences among the possible outcomes so that numerical [*payoffs](#) reflecting these preferences can be assigned to all players for all outcomes. Many social, economic, political, military, and interpersonal conflicts are games in the technical sense, and experimental games based on game theory have been used to study such phenomena as individual and collective rationality, cooperation and competition, trust and suspicion, threats and commitments. Also called the *theory of games* or *games theory*, though the latter phrase is avoided in careful usage. *See* [GAME \(1\)](#). *See also* [ADMISSIBLE](#)

*****ebook converter DEMO Watermarks*****

ALTERNATIVE/STRATEGY, DOMINANT ALTERNATIVE/STRATEGY, EVOLUTIONARILY STABLE STRATEGY, MAXIMIN, MINIMAL SOCIAL SITUATION, MINIMAX, MIXED-MOTIVE GAME, MIXED STRATEGY, NASH EQUILIBRIUM, NORMATIVE (1), PAYOFF, PLAYER (1), PROGRAMMED STRATEGY, SOCIAL DILEMMA, STRATEGY (2), SURE-THING PRINCIPLE, TIT FOR TAT STRATEGY, UTILITY (1), WIN-STAY, LOSE-SHIFT STRATEGY, ZERO-SUM GAME.

gamma-aminobutyric acid *n.* The full name of what is usually called *GABA. [From *gamma* (γ) the third letter of the Greek alphabet + *amine* + Greek *boutyron* butter, from *bous* ox + *tyros* cheese + *-ikos* of, relating to, or resembling]

gamma fibre *n.* A medium-diameter partly myelinated type of *efferent somatic nerve fibre, composed of *gamma motor neurons and having intermediate conduction velocity. A typical example is a fibre supplying a muscle spindle. US *gamma fiber*. Also written γ fibre. Compare ALPHA FIBRE, IA FIBRE, IB FIBRE, II FIBRE, C FIBRE. [From *gamma* (γ) the third letter of the Greek alphabet]

Gamma-hydroxybutyrate See GHB.

gamma motor neuron *n.* A type of spinal *motor neuron that supplies *intrafusal muscles and forms part of a *gamma fibre. Also called a *gamma motoneuron*. Compare ALPHA MOTOR NEURON, RENSCHAW CELL.

gamma movement *n.* A form of *apparent movement that is elicited when a stimulus is presented in an alternating pattern of high and low illumination or *brightness, with an interstimulus interval of about 60 milliseconds, the visual illusion being created of a single object expanding and shrinking in all dimensions. Also called *gamma motion*. See also KORTE'S LAWS. Compare ALPHA MOVEMENT, BETA MOVEMENT, DELTA MOVEMENT.

gamma-OH *n.* A proprietary name for gamma-hydroxybutyrate. See GHB.

gamma statistic *n.* In descriptive statistics, an index of association between two variables measured on *ordinal scales. If two pairs of scores are examined, they must either be concordant, in the sense that the one ranked

higher than the other on the first variable is also ranked higher than the other on the second variable, or discordant. Gamma is defined as the difference between the number of concordant pairs and the number of discordant pairs divided by the total number of concordant and discordant pairs, and it ranges from 0 to 1. Also called *Goodman–Kruskall gamma*, and closely related to **Somers' D* and to **Kendall's tau*. [From *gamma* (γ), the third letter of the Greek alphabet]

gamma wave *n.* A high-frequency (35–75 hertz) **EEG* wave that occurs during thinking. Also called a *40-hertz oscillation*, but this inaccurate term is avoided in careful usage. [From *gamma* (γ) the third letter of the Greek alphabet]

gamodeme *See* *DEME*.

ganglion *n.* A nerve-centre or collection of neuron cell bodies usually (apart from the **basal ganglia* and adjacent structures) located in the **peripheral nervous system*. *See* *DORSAL ROOT GANGLION*, *POSTGANGLIONIC*, *PREGANGLIONIC*, *SYMPATHETIC GANGLIONIC CHAIN*. **ganglia** or **ganglions** *pl.* [From Greek *ganglion* a cystic tumour]

ganglion cell *n.* A type of **neuron* found in the inner layer of the **retina*, nearest the front of the eye, receiving inputs from retinal **bipolar cells*, which in turn receive inputs from **rods* and **cones*. An ON ganglion cell is excited by a spot of light and inhibited by light in a ring surrounding the spot, the inhibition being effected by **horizontal cells*; an OFF ganglion cell behaves in the opposite way. Two types of ganglion cells are intermixed in the inner layer: large ganglion cells, which form the first stage of the **magnocellular system* and that do not distinguish between signals from different types of photoreceptors and simply add the signals from all three types of cones together, and small ganglion cells that form the first stage of the **parvocellular system* and that distinguish between different cone types, from which they add and subtract information, as when a red-minus-green ganglion cell responds only to red light. *See also* *CENTRE-SURROUND RECEPTIVE FIELD*, *DIRECTION-SENSITIVE NEURON*, *DOMINATOR*, *MIDGET CELL*, *PARASOL CELL*, *MODULATOR*, *OFF-CENTRE CELL*, *ON-CENTRE CELL*, *SPIRAL GANGLION CELL*.

ganja *n.* A common street name for **cannabis*. [From Hindi *gaja*, from Sanskrit *grñja*]

Ganser syndrome *n.* A condition sometimes classified as a **dissociative disorder* and sometimes as a **factitious disorder*, characterized by the giving of approximate answers to questions, the answers being suggestive of a knowledge of the right answers. Thus, on being asked how many legs a dog has, a person with Ganser syndrome may reply either three or five, and Sigbert Ganser labelled this *vorbeireden*, literally talking past. Also called *nonsense syndrome*. See also *PRISON PSYCHOSIS*. Compare *CIRCUMSTANTIALITY*, *TANGENTIALITY*. [Named after the German psychiatrist Sigbert Josef Maria Ganser (1853–1931) who first described it in 1897]

Ganzfeld *n.* A uniform and featureless **visual field*, usually created by taping halved ping-pong balls over both eyes and shining a dim red light on to them, perceived as **film colour*. [From German *ganz* whole + *Feld* field]

gap junction *n.* A rare type of synapse in which a signal is transmitted from one neuron to another by electrical induction across a very narrow gap between them without the involvement of any chemical neurotransmitter. Also called an *electrical synapse*.

Garcia effect *n.* Another name for **food aversion learning*. [Named after the US psychologist John Garcia (1917–2012) who did much of the early work on it]

gargoylism *n.* A term sometimes used to describe the grotesque facial features associated with some forms of **intellectual disability*, especially **Hurler's syndrome*.

gastric gland *n.* A tubular **exocrine gland* in the stomach wall that secretes gastric juice containing pepsin, hydrochloric acid, and mucus. [From Greek *gaster* the stomach]

gastrointestinal *adj.* Of or relating to the **stomach* and the **intestinal tract*. **GI** *abbrev.* [From Greek *gaster* the stomach + Latin *intestinum* gut,

from *intestinus* internal]

gastrointestinal tract *n.* Another name for the **alimentary canal*.

gate-control theory *n.* A theory of **pain*, put forward by the Canadian psychologist Ronald Melzack (born 1929) and the US-based English anatomist Patrick D(avid) Wall (1925–2001) in an article in the journal *Science* in 1965, according to which pain signals transmitted by small-diameter nerve fibres may be blocked at the level of the **spinal cord* and prevented from reaching the brain by the firing of larger sensory nerve fibres, which act as a gate without normally transmitting pain signals themselves. Chronic pain occurs when disease, injury, or infection damage the large fibres that normally close the gate so that pain messages are not blocked on their path to the brain. According to this theory, **acupuncture* anaesthesia may work by stimulating large-diameter sensory nerves to close the spinal gates.

gateway drug *n.* A generic name for **alcohol*, **cocaine*, or **cannabis*, referring to their supposed roles as avenues leading people on to harder drugs. *See also* *SOFT DRUG*.

gating *n.* The exclusion from attention of certain stimuli while attending to other stimuli.

Gause's principle *n.* In **ecology* (1), the proposition that two or more similar species cannot share the same **ecological niche* indefinitely. Also called the *competitive exclusion principle*. [Named after the Russian biologist Georgyi Frantsevich Gause (1910–86) who propounded it in 1934]

Gaussian distribution *n.* Another name for the **normal distribution*. [Named after the mathematician Johann Karl Friedrich Gauss (1777–1855), born in the Duchy of Brunswick in what is now Germany, who investigated its basic properties]

gay *adj. n.* 1. Another word for **homosexual*. *adj.* 2. Light-hearted and carefree, pleasure-seeking; brightly coloured or decorated. [From Old French

gai happy, introduced in sense 1 by homosexual men in the 1960s as a non-pejorative word to describe themselves, later accepted as a general term to describe male and female homosexuals, rendering sense 2 obsolescent]

gaze *vb. n.* To look steadily at something or someone, or a prolonged and steady look. In social psychology, it refers to steady looking at other people in the region of their eyes, and it is a form of ***non-verbal communication**. It tends to increase with interpersonal liking, but also when a person is attempting to dominate another, and one of its important functions is to regulate turn-taking in conversations: speakers tend to gaze at the beginning and end of a speaking turn. *Mutual gaze* or *eye contact* occurs when two people simultaneously gaze in the direction of each other's eyes, as tends to occur at points in a conversation when the floor is handed over smoothly to another speaker. See also **BÁLINT'S SYNDROME**, **COMPENSATORY EYE MOVEMENT**, **DONDERS' LAW**, **DYNAMIC LABYRINTH**, **EYE-TRACKING**, **REGULATOR**, **ROTATING HEAD ILLUSION**. [From Swedish dialect *gasa* to stare or gape at]

gaze aversion *n.* Active avoidance of ***eye contact**, such as occurs as a result of embarrassment or a feeling of being socially dominated and is often observed in people with ***autism spectrum disorder**. Also called *gaze avoidance*. See also **EQUILIBRIUM HYPOTHESIS**.

GBH *abbrev.* **1.** Grievous bodily harm, a technical term in English law denoting the crime of causing serious physical injury to another person, contrasted with *actual bodily harm* (**ABH**), the crime of causing minor physical injury to another person. **2.** A common jocular reference to ***GHB**.

gear *n.* A common street name for ***heroin**.

Gedankenexperiment *n.* An imaginary experiment, such as the ***Chinese room** or the ***Turing test**. As an example of how such an experiment can be highly illuminating, imagine walking into a dark room and switching on a 60-watt light, and then another 60-watt light. It is obvious from experience, without actually performing the experiment, that the room will not seem twice as brightly lit after the second light it turned on, which shows that the sensation of brightness does not double when the physical intensity of the light doubles (see **FECHNER'S LAW**, **POWER LAW**). Also called a

*****ebook converter DEMO Watermarks*****

thought experiment or an *armchair experiment*. [From German *Gedanke* a thought + *Experiment* an experiment]

Gelb effect *n.* The appearance of a black surface as white when it is brightly illuminated by a narrowly focused spotlight and viewed in front of a dimly illuminated background. If a white object is held in the beam of the spotlight in front of the black surface, the black surface immediately appears black, but as soon as the white object is removed it reverts to looking white. This phenomenon can be demonstrated using a slide projector or electric torch (flashlight) to produce a narrow beam of light. Together with its counterpart, the ***Kardos effect**, it demonstrates that the lightness dimension of colour is not determined straightforwardly by physical light intensity but is subject to ***context effects**, as are other dimensions of colour. *See also* LIGHTNESS, LUMINANCE. *Compare* CHEQUER–SHADOW ILLUSION, LAND EFFECT. [Named after the Russian-born German psychologist Adhémar Maximillian Maurice Gelb (1887–1936) who published his discovery of it in a book chapter in 1929]

gel electrophoresis *See* ELECTROPHORESIS.

gender *n.* 1. Non-technically, a synonym for ***sex (1)**. More specifically, especially in feminist psychology, the behavioural, social, and cultural attributes associated with sex. *See also* DOING GENDER. 2. The categories into which nouns of a language are divided (such as masculine, feminine, and neuter). [From Old French *gendre* gender, from Latin *genus* a kind]

gender dysphoria *n.* A ***mental disorder**, introduced in ***DSM-5**, characterized by a feeling of incongruence between assigned ***gender (1)** or ***sex (1)** and experienced gender. To meet the diagnostic criteria in children, six of the following must be present: a strong desire to be the other gender; in boys, a strong preference for cross-dressing, or in girls, a strong preference for masculine clothes; a strong preference for cross-gender roles in fantasy play; a strong preference for the toys, games, and activities of the other gender; a strong preference for playmates of the other gender; in boys, a strong rejection of typically masculine toys and games, or in girls, a strong rejection of typically feminine toys and games; a strong dislike of one's sexual anatomy; and a strong desire for the sexual anatomy of the

*****ebook converter DEMO Watermarks*****

experienced gender. A corresponding set of criteria applies to adolescents and adults. *See also* [DIANA COMPLEX](#), [MASCULINE PROTEST](#), [TRANSVESTISM](#). [From English *gender* + Greek *dys-* bad or abnormal + *pherein* to bear + *-ia* indicating a condition or quality]

gender identity *n.* A sense of awareness, usually beginning in infancy, continuing throughout childhood, and reaching maturity in adolescence, of being male or female, or of the experienced [*gender \(1\)](#) associated with one's biological [*sex \(1\)](#). *See also* [GENDER DYSPHORIA](#).

gender identity disorder *n.* A term used in [*DSM-IV](#) for what was later renamed [*gender dysphoria](#). **GID** *abbrev.*

gender role *n.* A set of behaviour patterns, attitudes, and personality characteristics stereotypically perceived as masculine or feminine within a culture. *See also* [GENDER \(1\)](#).

gene *n.* The unit of hereditary transmission encoded in [*DNA](#), occupying a fixed [*locus](#) on a [*chromosome](#) and transmitted from a parent to its offspring, consisting of a sequence of [*base \(1\)](#) pairs corresponding to a specific sequence of [*amino acids](#) making up a [*protein](#), functioning either to build body cells (if it is a [*structural gene](#)) or else to regulate the expression of other genes (if it is a [*regulator gene](#)). The human [*genome](#), present in every [*somatic cell](#), contains approximately 21,000 to 23,000 genes encoded in about 3 billion base pairs. *See also* [CISTRON](#), [CODON](#), [GENE ACTIVATOR](#), [GENE LOCUS](#), [GENE MAPPING](#), [GENE OPERATOR](#), [GENE REPRESSOR](#), [GENE SPLICING](#), [OPERON](#), [SUPERGENE](#). **genetic** *adj.* Of or pertaining to genes. [The word was introduced in 1909 by the Danish plant physiologist and geneticist Wilhelm Johannsen (1857–1927) in a book entitled *Elemente der exakten Erblchkeitslehre* (Elements of Exact Heredity), from German *Gen* a gene, from Greek *genes* born]

gene activator *n.* A protein that increases the expression of a [*structural gene](#) by binding to a [*gene](#) operator in a segment of [*DNA](#). *See also* [ACTIVATOR GENE](#). *Compare* [GENE REPRESSOR](#).

gene amplification *n.* The duplication of a gene to produce multiple
*****ebook converter DEMO Watermarks*****

copies of it within a cell nucleus.

gene cloning *n.* Producing ***clones (2)** of genes. Also called *DNA cloning*.

gene complex *n.* A group of genes that combine to produce a distinct characteristic of a ***phenotype**.

gene expression *n.* The transcription of a gene into an ***RNA** sequence or a ***protein**, or more generally its effects on a ***phenotype**. Also called *expression*.

gene frequency *n.* The relative frequency of a specific ***allele** of a gene in a population relative to the frequency of its other alleles.

gene locus *n.* The site occupied by a particular gene on a ***chromosome**. If the gene has two or more ***alleles**, then they occupy the same gene locus. Also called simply a *locus*. **gene loci** *pl.* [From Latin *locus* a place]

gene mapping *n.* The determination of the positions of genes on chromosomes (***gene loci**) by such means as studying ***linkages** that emerge when genes that are close to one another tend to be inherited together. Also called *genetic mapping*.

gene operator *n.* A binding site in a region of ***DNA** to which a ***gene** regulator can become attached, thereby affecting the expression of a ***structural gene** by increasing or repressing the synthesis of its protein product. Also called an *operator*. See **GENE ACTIVATOR**, **GENE REPRESSOR**. See also **OPERON**.

gene pool *n.* The sum total of all genes present in an interbreeding population. Compare **MEME POOL**.

genera *n. pl.* Plural of ***genus**.

general ability See **G**.

*****ebook converter DEMO Watermarks*****

general adaptation syndrome *n.* The three-stage biological response of an organism to **stress* (1) according to the Austrian-born Canadian physician and endocrinologist Hans Selye (1907–82), comprising an **alarm reaction*, a **resistance stage*, and an **exhaustion stage*. Also called the *adaptation syndrome*. **GAS** abbrev.

general factor of personality *n.* A superordinate **factor* (2) of personality suggested by the Slovenian psychologist Janek Musek (born 1945) in an article in the *Journal of Research in Personality* in 1977. It incorporates the **Big Five* personality factors as lower-order factors, and a person who scores highly on this factor is consequently extraverted, agreeable, conscientious, emotionally stable (rather than neurotic), and open to experience or intelligent. Also called the *Big One*. See also *ALPHA PERSONALITY FACTOR*, *BETA PERSONALITY FACTOR*. **GFP** abbrev.

General Health Questionnaire *n.* A self-rating questionnaire that takes between six and eight minutes to fill in and is designed to provide a rough-and-ready screening device for a wide range of mental disorders excluding **psychoses* (1). It comprises 60 items, each describing a symptom and being accompanied by four response categories indicating personal experience of the symptom (*less than usual, no more than usual, rather more than usual, much more than usual*) from which the respondent chooses one. Shorter versions containing 20, 28, and 30 items have also been constructed. It was developed by the English psychiatrist David (Paul Brandes) Goldberg (born 1934) and published initially in monograph form in 1972; this was followed by a co-authored article in the journal *Psychological Medicine* in 1979 describing a scaled version of the questionnaire. **GHQ** abbrev.

generalizability theory *n.* In psychometrics, the use of **analysis* of variance to estimate the extent to which the scores derived from a test are applicable beyond the specific test items, respondents, and testing conditions from which they were obtained. It is an extension of the theory of **reliability*.

generalization, acoustic See *ACOUSTIC GENERALIZATION*.

generalization gradient *n.* In **stimulus generalization*, a change in

the strength or frequency of a response to a variable stimulus as a function of the degree to which it resembles a particular stimulus to which the response has been learned or conditioned. It is sometimes used to examine perceptual similarity and discrimination in infants and non-human organisms that cannot give verbal judgements.

generalization, semantic See SEMANTIC GENERALIZATION.

generalized anxiety disorder *n.* An *anxiety disorder in *DSM-5 characterized by excessive and largely uncontrollable *anxiety not focused on any specific circumstances but related to everyday events or activities such as problems at work or school, with symptoms of restlessness, tiredness, difficulty concentrating, irritability, muscle tension, or sleep disturbance (insomnia or restless sleep), causing significant impairment in everyday functioning. Also called *anxiety neurosis*, *free-floating anxiety*. See also ACTUAL NEUROSIS, OVERANXIOUS DISORDER. **GAD** abbrev.

generalized cone *n.* In the *computational theory of vision pioneered in the late 1970s by the English psychologist David Courtenay Marr (1945–80), a basic element that is used in the perceptual *representation (2) of a three-dimensional object and that consists of a surface formed by moving a cross-section of constant shape but continuously variable size along an axis. For example, with a circular cross-section and a vertical axis of movement, a generalized cone can generate a three-dimensional outline of a wine glass, the diameter of the circle changing as it moves down the glass, and multiple generalized cones with differently shaped cross-sections and axes of movement can be used to generate images of more complex objects such as people. Compare GEON.

generalized habit strength *n.* In *Hullian learning theory, the *habit strength after taking into account the reduction resulting from a difference between the current *stimulus (1) and the stimulus present during the learning process. ${}_sH_R$ abbrev.

generalized matching to sample See MATCHING TO SAMPLE.

generalized oddity problem *n.* A form of **serial learning (2)* in which, in order to solve an **oddity problem*, an organism has to generalize a principle established in a series of earlier oddity problems with different sets of stimuli, as when the general principle is that the reward is always in the smallest container.

generalized reaction potential *n.* In **Hullian learning theory*, the strength of an organism's propensity to respond to a stimulus after taking into account **generalized habit strength* and several other intervening variables. *See also* NET REACTION POTENTIAL. sE_R abbrev.

general medical condition *n.* Any disorder not considered to be a **mental disorder*, specifically any disorder not included in the section devoted to mental and behavioural disorders in **ICD-10* and used in **DSM-IV* as a term of convenience, without any implication of a fundamental or sharp distinction between mental disorders and general medical conditions.

general paralysis (paresis) of the insane *n.* An obsolete term for **neurological* impairments arising from tertiary syphilis. *See also* PARESIS. GPI abbrev.

General Problem Solver *n.* A computer program designed to simulate human **problem solving*, introduced in 1958 by the US cognitive scientist Allen Newell (1927–92), the US economist John Clark Shaw (born 1933), and the US political scientist and decision theorist Herbert A(lexander) Simon (1916–2001), and developed further in 1972 by Newell and Simon. In this program, a problem is represented as a table of connections showing the distances between all pairs of states (initial, intervening, and final), and problem solving is modelled as a search through the problem space using permissible operators (actions), the task being to find a path of operators from an initial state to a goal state. A typical initial state is the starting position in a game of chess, and the corresponding goal state is checkmating the opponent; a more commonplace initial state is being at home with a child and a car that has a flat battery, and the corresponding goal state in this case might be delivering the child to nursery school. In general, the problem space is too large for exhaustive search to be feasible, and therefore the cognitive

***heuristic** of ***means–end analysis** is implemented. The program is able to solve ***water-jar problems**, the ***Tower of Hanoi** problem, and many logic problems and chess problems. It represents one of the first major landmarks in the history of ***artificial intelligence**. **GPS** *abbrev.*

general systems theory *n.* A theory of organization and wholeness, introduced by the Austrian biologist Ludwig von Bertalanffy (1901–72) in 1940 and expounded at length in his book *General Systems Theory* (1968), after he had moved to the US. It seeks to incorporate ideas of hierarchical organization, multivariable interaction, and goal-directed processes that are absent from physics and, according to general systems theorists, are therefore bypassed, denied, or overlooked in psychology and other areas where they occur. **GST** *abbrev.*

generative grammar *n.* A term introduced by the US linguist and philosopher (Avram) Noam Chomsky (born 1928) in his book *Syntactic Structures* (1957) to refer to a description of a language in terms of a finite set of explicitly specified rules capable of generating the potentially infinite set of all grammatical sentences in the language, and only those sentences. *See also* **CASE GRAMMAR**, **CONTEXT-DEPENDENT GRAMMAR**, **CONTEXT-FREE GRAMMAR**, **KERNEL**, **COMPETENCE (2)**, **PERFORMANCE (2)**, **PHRASE-STRUCTURE GRAMMAR**, **REWRITE RULE**. *Compare* **FINITE-STATE GRAMMAR**, **TRANSFORMATIONAL GRAMMAR**.

generativity versus stagnation *n.* One of the crises in the developmental theory of the German-born ***ego** psychologist Erik H. Erikson (1902–94). *See* **DEVELOPMENTAL CRISES**.

generator potential *n.* A graded change in the voltage difference across the membrane of a ***sensory receptor** that results from an appropriate stimulus and that tends either to excite or to inhibit an ***action potential** in the associated sensory neuron. Also called *receptor potential*.

gene regulator *n.* A ***protein** that can become attached to the binding site of a region of ***DNA**, thereby affecting the expression of a ***structural gene** by increasing or repressing the synthesis of its protein product. *See also* **GENE ACTIVATOR**, **GENE OPERATOR**, **GENE REPRESSOR**, **REGULATOR GENE**.

*****ebook converter DEMO Watermarks*****

gene repressor *n.* A protein that prevents the expression of a ***structural gene** by binding to a ***gene operator** in a segment of ***DNA**. *See also* REPRESSOR GENE. *Compare* GENE ACTIVATOR.

generic knowledge *n.* Knowledge of facts other than personal experiences or episodes from one's life. It is the type of information that is stored in ***semantic** knowledge.

gene splicing *n.* A technique of genetic engineering in which a phenotypic characteristic is produced in an organism by introducing DNA from another organism into its genetic material.

gene therapy *n.* The prevention and treatment of genetic defects by replacing or supplementing affected cells with genetically corrected cells.

genetic activation *n.* The process whereby the expression of a ***structural gene** is enhanced by a ***gene** activator. Also called *gene activation* or simply *activation*. *Compare* GENETIC REPRESSION.

genetically modified *adj.* Of or relating to a plant or animal that has been altered by ***genetic engineering**. **GM** *abbrev.*

genetic code *n.* The system by which genetic information is represented in the arrangement of the ***bases (1)** of the ***DNA** and ***RNA molecules**, thereby determining the proteins to be synthesized by the cell. The four bases are arranged in triplets, each specifying a particular ***amino acid**, and the amino acids combine to form ***proteins** (see *illustration*). ***Mitochondrial DNA** has its own genetic code, slightly different from the universal code of nuclear DNA and subject to variation between species. The idea of a genetic code in the sequence of bases was first suggested in 1954 (the year after the discovery of the ***double helix**) by the Russian-born US physicist George Gamow (1904–68), but the dictionary of ***codons** was worked out in detail between 1961 and 1967 by the US biochemist Marshall Warren Nirenberg (1927–2010), the Indian-born US molecular chemist Har Gobind Khorana (1922–2011), and the US biochemist Robert William Holley (1922–93), for which they shared a Nobel prize in 1968. *See also* CODON FAMILY, EXON,

INTRON.

First base in codon	Second base in codon				Third base in codon
	U	C	A	G	
U	UUU Phe	UCU Ser	UAU Tyr	UGU Cys	U
	UUC Phe	UCC Ser	UAC Tyr	UGC Cys	C
	UUA Leu	UCA Ser	UAA (stop codon)	UGA (stop codon)	A
	UUG Leu	UCG Ser	UAG (stop codon)	UGG Trp	G
C	CUU Leu	CCU Pro	CAU His	CGU Arg	U
	CUC Leu	CCC Pro	CAC His	CGC Arg	C
	CUA Leu	CCA Pro	CAA Gln	CGA Arg	A
	CUG Leu	CCG Pro	CAG Gln	CGG Arg	G
A	AUU Ile	ACU Thr	AAU Asn	AGU Ser	U
	AUC Ile	ACC Thr	AAC Asn	AGC Ser	C
	AUA Ile	ACA Thr	AAA Lys	AGA Arg	A
	AUG Met (start codon)	ACG Thr	AAG Lys	AGG Arg	G
G	GUU Val	GCU Ala	GAU Asp	GGU Gly	U
	GUC Val	GCC Ala	GAC Asp	GGC Gly	C
	GUA Val	GCA Ala	GAA Glu	GGA Gly	A
	GUG Val	GCG Ala	GAG Glu	GGG Gly	G

Genetic code. For RNA, the bases uracil (U), cytosine (C), adenine (A), and guanine (G), and the amino acids for which they code: Phe (phenylalanine), Leu (leucine), and so on. For DNA, substitute T for U throughout.

genetic counselling n. Information given to prospective parents on the basis of *chromosomal investigation and (with pregnant women) *amniocentesis, including the odds that their own child would have genetic abnormalities and the course and management of such conditions, especially when there is a family history of genetic disorders. US *genetic counseling*.

genetic dominance See [DOMINANCE \(GENETIC\)](#).

genetic drift *n.* Change in the relative frequencies of genes in a population resulting not from natural selection but from [*neutral mutation](#). Also called *non-Darwinian evolution* or *random drift*. See also [DARWINIAN EVOLUTION](#), [NATURAL SELECTION](#). Compare [FOUNDER EFFECT](#).

genetic engineering *n.* The artificial manipulation and alteration of [*DNA](#), using techniques such as [*gene cloning](#) and [*gene splicing](#), in the course of research, to modify plants and animals that are being bred, to manufacture proteins such as insulin, or to find treatments for genetic disorders. See also [CLONE \(1, 2\)](#), [COMPLEMENTARY DNA](#), [DNA CLONING](#), [DNA HYBRIDIZATION](#), [DNA LIGASE](#), [DNA SPLICING](#), [GENE SPLICING](#), [GENE THERAPY](#), [GENETICALLY MODIFIED](#), [HETERODUPLEX DNA](#), [HYBRIDIZATION](#), [MONOCLONAL ANTIBODY](#), [PLASMID](#), [RECOMBINANT DNA](#), [RESTRICTION ENZYME](#), [TRANSGENIC](#). Compare [MEMETIC ENGINEERING](#), [POLYMERASE CHAIN REACTION](#).

genetic epistemology *n.* The term used by the Swiss psychologist Jean Piaget (1896–1980) to describe the nature of his own research. He began his research career with the ambition of contributing to [*epistemology](#), believing that many epistemological problems were in fact empirical questions and that a genetic (by which he meant developmental) approach would be most fruitful. His three-volume series specifically devoted to genetic epistemology, *Introduction à l'Épistémologie Génétique* (1950) covers various branches of knowledge, including mathematics, logic, physics, biology, psychology, and sociology, all from an epistemological point of view. See also [PIAGETIAN](#).

genetic equilibrium *n.* A state or condition of a population in which the relative frequencies of genes stay constant from generation to generation. See [HARDY–WEINBERG LAW](#).

genetic fingerprint *n.* A unique pattern of repeated DNA sequences discovered by [*restriction mapping](#) and used in [*genetic fingerprinting](#).

genetic fingerprinting *n.* A technique for establishing an individual's

identity, for determining possible genetic relationships with other individuals, or for linking a suspected criminal to a crime scene where a sample of blood, saliva, semen, or tissue was found, by examining certain highly variable sequences of DNA fragments found by **restriction mapping*, the DNA on which attention is focused being **introns*, **junk DNA*, and especially **repetitive DNA* that are virtually unique to each individual. When only a very small sample of nuclear DNA is available, the **polymerase chain reaction* is used to amplify it, or **mitochondrial DNA* is used instead, because it is generally more plentiful in samples of bone, teeth, hair, and faeces. The technique was developed in the early 1980s by the English geneticist Alec (John) Jeffreys (born 1950) and first used as evidence in a murder trial in 1987. Also called *DNA fingerprinting* or *DNA profiling*.

genetic fitness See *FITNESS*.

genetic genealogy *n.* The application of genetic techniques to determine the degree of relatedness of people, both living and dead. It is based on the analysis of both **junk DNA* and **polymorphic genes*. The first use of the term was by the US science writer Tom Siegfried (born 1950) in an article entitled 'Genetic Genealogy and the Search of Eve' in the *Dallas Morning News* on 20 February 1989. [From Greek *genesis* birth + *-itikos* resembling or marked by + *genes* born + *logos* word, discourse, or study]

genetic imprinting *n.* Differential **expression (3)* of a **gene* depending on whether it is inherited from the mother or father, a phenomenon that occurs in only a small number (about 100) of the genes in the human **genome*. In *paternal imprinting*, an **allele* inherited from the father is not expressed in the offspring; in *maternal imprinting*, an allele inherited from the mother is not expressed in the offspring. Also called *molecular imprinting* or simply *imprinting*. Genetic imprinting occurs in the testes or ovary early in the formation of a sperm or egg. [So called because the gene is imprinted with information about the parent from which it came]

genetic mapping *n.* Another name for **gene mapping*.

genetic polymorphism *n.* The existence in a population of variable **alleles* coding for differences in **phenotypic* characteristics, such as the
*****ebook converter DEMO Watermarks*****

alleles coding for different eye colours or different ABO blood types in humans, a gene locus being defined as polymorphic if the most frequent **homozygote* constitutes less than 90 per cent of the population. It has been estimated that between 20 and 50 per cent of all **structural gene* loci in humans occur in two or more allelic forms. *See also* [BALANCED POLYMORPHISM](#), [NEUTRAL MUTATION](#), [POLYMORPHIC GENE](#), [TRANSIENT POLYMORPHISM](#). [From Greek *polys* many + *morphe* a form or shape]

genetic recombination *See* [DNA RECOMBINATION](#).

genetic repression *n.* The process whereby the expression of a **structural gene* is inactivated by a **gene* repressor. Also called *gene repression* or simply *repression*. *Compare* [GENETIC ACTIVATION](#).

genetics *n.* The branch of biology devoted to the study of heredity and variation, including their physical basis in **DNA*. **geneticist** *n.* One who practises genetics. [From Greek *genesis* birth + *-itikos* resembling or marked by]

genetic sexual attraction *n.* Erotic feelings between close relatives, often between siblings or between parents and children, who are separated early in life and reunited in adolescence or adulthood. The phenomenon was first recognized following the relaxation of adoption laws in the US and the UK in the mid-1970s, providing adopted children with easier access to their adoption records and enabling them to trace their blood relatives. The term was introduced in a newsletter published in 1987 by the US adoption counsellor Barbara Gonyo (born 1937), who felt attracted to her own adult son when she was reunited with him in 1979, having given him up for adoption 26 years earlier. The term became more widely known after the publication of Gonyo's book, *The Forbidden Love (Genetic Sexual Attraction)* in 1991. *See also* [INCEST TABOO](#). **GSA** *abbrev.*

genetic variance *n.* A statistical measure of **genetic variation* used in calculations of **heritability*. Also called *genotypic variance*. *See also* [VARIANCE](#).

genetic variation *n.* Variability in hereditary characteristics within a
*****ebook converter DEMO Watermarks*****

population resulting from the existence of variant forms of genes, called **alleles*, and from genetic recombination resulting from **independent assortment* and **crossing over*. See also GENETIC VARIANCE.

genital character *n.* In **psychoanalysis*, a personality pattern associated with successful negotiation of **libidinal stages* up to the **genital stage*, characterized by the capacity for **genital love*. Also called the *genital personality*.

genital love *n.* In **psychoanalysis*, the sensual and affectionate form of **love* that a person is capable of after successfully negotiating the various **libidinal stages* preceding the **genital stage* and overcoming the **Oedipus complex*. The term does not occur in the writings of Sigmund Freud (1856–1939), but the concept is implicit in his book *Three Essays on the Theory of Sexuality* (1905) and in his article in 1912 ‘On the Universal Tendency to Debasement in the Sphere of Love’ (*Standard Edition*, XI, pp. 179–90). See also GENITAL CHARACTER.

genital stage *n.* In **psychoanalysis*, the final **libidinal stage* of **psychosexual development* coming after the **oral stage*, **anal stage*, **phallic stage*, and **latency period*. The genital stage is characterized by a focus of **libido* on the genital area, and it emerges during puberty, when the **Oedipus complex* reappears and is overcome with greater or lesser success through mature **object-choices*. The concept was developed by Sigmund Freud (1856–1939) in a section added in 1915 to his book *Three Essays on the Theory of Sexuality* (1905), where he suggested that its roots lie in childhood: ‘The only difference lies in the fact that in childhood the combination of the component instincts and their subordination under the primacy of the genitals have been effected only very incompletely or not at all. Thus the establishment of that primacy in the service of reproduction is the last phase through which the organization of sexuality passes’ (*Standard Edition*, VII, pp. 130–243, at p. 199). Also called the *genital phase*. See also GENITAL CHARACTER, GENITAL LOVE, PREGENITAL.

genito-pelvic pain/penetration disorder *n.* A term introduced in **DSM-5* to denote a female **sexual dysfunction* characterized by **dyspareunia* or **vaginismus*.

*****ebook converter DEMO Watermarks*****

genius *n.* A person of exceptional intelligence or ability; also such exceptional intelligence or ability itself (*Michelangelo's artistic genius*). It was first investigated in psychology by the English explorer, amateur scientist, and psychologist Sir Francis Galton (1822–1911), who used eminence as the main criterion of genius in his book *Hereditary Genius* (1869). In later research in psychology, a permissive criterion such as an ***IQ** score of 140 or above has often been used to define it, and in the influential *Genetic Studies of Genius* carried out from 1921 onwards by the US psychometrician Lewis M(adison) Terman (1877–1956) and his colleagues, the ‘geniuses’ were children with IQs above 135. Also called *giftedness*. **geniuses** *pl.* [From Latin *genius* attendant spirit present from one's birth, innate ability or talent, from *gignere*, *genitum* to beget]

genodeme See **DEME**.

genogram *n.* In counselling and psychotherapy, a client's diagrammatic representation of past and present family members and their interrelationships. [From Greek *genos* begetting + *gramme* a line]

genome *n.* The full genetic complement of an organism; the ***haploid** complement of a ***diploid** organism such as the human species. See also **DNA**, **GENE**. Compare **PHENOME**, **PROTEOME**. [A blend of *gen(e)* + (*chromos*)ome]

genotropism *n.* The doctrine first proposed by the Hungarian geneticist Leopold (Lipót) Szondi (1893–1986) in the journal *Acta Psychologica* in 1938, and developed further in 1944 in his book entitled *Schicksalsanalyse* (Analysis of Destiny), that latent ***recessive genes** determine instinctive or spontaneous choices (in love, friendship, occupation, illness, and even manner of death) and underlie attraction between people sharing the same genes. See also **SZONDI TEST**. **genotropic** *adj.* [From *gene* + Greek *tropos* a turn, from *trepein* to turn + *-ismos* indicating a state or condition]

genotype *n.* The genetic constitution of a single organism at a particular ***locus** or set of loci; or more loosely the entire genetic constitution or ***genome** of a single organism. Compare **PHENOTYPE**. **genotypic** *adj.* [The word was introduced in 1909 by the Danish plant physiologist and geneticist

Wilhelm Johannsen (1857–1927) in a book entitled *Elemente der exakten Erblichkeitslehre* (Elements of Exact Heredity), from *gene* + *type*]

genotypic variance *n.* Another name for **genetic variance*. See HERITABILITY.

genu *n.* Any knee-shaped structure, especially the bend at the front of the **corpus callosum*. [From Latin *genu* a knee]

genus *n.* One of the **taxonomic* groups into which a **family* (2) is divided, containing one or more **species*. By convention, a species is denoted by the name of the genus, the initial letter of which is written in upper case, or by its upper-case initial alone, followed by the specific name in lower case. Thus the genus *Felis* of cats includes the species *Felis domesticus* (the domestic cat), *F. leo* (the lion), *F. tigris* (the tiger), *F. pardus* (the leopard), and so on. **genera** *pl.* **generic** *adj.* [From Latin *genus* birth]

geometric illusion *n.* Another name for an **associative illusion*. The term is also used as a synonym for a **visual illusion* of any type, but this over-extended interpretation is avoided in careful usage. Also called a *geometrical illusion*.

geometric mean *n.* In descriptive statistics, the average value of a set of *n* scores calculated by multiplying the scores together and then extracting the *n*th root of the resulting product. The geometric mean of two scores is the square root of their product. Compare ARITHMETIC MEAN, HARMONIC MEAN.

geon *n.* Any of a hypothetical set of three-dimensional geometric elements, such as spheres, cubes, and cylinders, into which a complex figure may be decomposed in the process of perception. Geons are easily distinguishable from all vantage points and are highly resistant to visual distortion. They are central to the recognition-by-component theory of the US psychologist Irving Biederman (born 1939). Compare GENERALIZED CONE. [A blend of *geo*(metrical) and (*ic*)on]

geophagia *n.* A form of **pica* characterized by the eating of earth or dirt.

[From Greek *ge* earth + *phagein* to consume + *-ia* indicating a condition or quality]

geriatrics *n.* The branch of medicine devoted to the prevention, diagnosis, and treatment of disorders affecting old people. *See also* **PSYCHOGERIATRICS**. *Compare* **GERONTOLOGY**. **geriatric** *adj.* [From Greek *geras* old age + *iatros* a doctor + *-ikos* of, relating to, or resembling]

germ cell *n.* Another name for a ***gamete** or sexual reproductive cell. [From Latin *germen* a seed]

germ line *n.* The cells that give rise to germ cells or ***gametes**, being the part of a body that is potentially immortal and can be passed on indefinitely from parents to offspring, in contradistinction to the ***somatic cells**.

germ plasm *n.* The part of a ***gamete** containing the ***chromosomes**. [From Latin *germen* a seed + *plasma* a form]

gerontology *n.* The study of ageing. *Compare* **GERIATRICS**. [From Greek *geron*, *gerontos* an old man + *logos* word, discourse, or reason]

gerontophilia *n.* A ***paraphilia** characterized by recurrent, intense sexual fantasies, urges, or behaviour involving sexual activity with old people. *Compare* **PAEDOPHILIA**. **gerontophile** *n.* A person who manifests gerontophilia. [From Greek *geron*, *gerontos* an old man + *philos* loving, from *philein* to love + *-ia* indicating a condition or quality]

geropsychology *n.* Psychological aspects of ageing. *Compare* **GERONTOLOGY**. [From Greek *geron*, *gerontos* an old man + English *psychology*]

Gerstmann–Sträussler–Scheinker syndrome *n.* A human ***prion** disease usually regarded as a variant of ***Creutzfeldt–Jakob disease** with pathology mainly in the ***cerebellum**, leading to ***cerebellar syndrome**. **GSS** *abbrev.* [Named after the Austrian neurologist Josef Gerstmann (1887–1969) and his colleagues Ernst Sträussler (1872–1959) and the Russian-born

neuropathologist Ilya Mark Scheinker (1902–54) who first described its signs and symptoms in 1936]

Gerstmann syndrome *n.* A neurological disorder characterized by left-right disorientation, **agraphia*, **acalculia*, and **finger agnosia*, generally associated with lesions in the **parietal lobe* of the dominant cerebral hemisphere. [Named after the Austrian neurologist Josef Gerstmann (1887–1969) who first noticed in 1930 the tendency for the four components of the syndrome to occur together]

Gesell Developmental Schedules *n.* A set of norms based on 27 observations of behaviour of infants and young children in standardized situations, providing an assessment of gross motor, fine motor, language, personal-social, and adaptive development. Also called the *Gesell Developmental Scales*. [Named after the US psychologist and paediatrician Arnold (Lucius) Gesell (1880–1961) who, in collaboration with several colleagues, published them in a book entitled *The First Five Years of Life* in 1940]

Gestalt *n.* A perceptual configuration or structure that possesses qualities transcending the sum of its constituent elements or parts and that cannot be described simply in terms of its parts. A classic example underlies **melodic constancy*: the sequence of notes C, D, E, C, C, D, E, C played evenly on any musical instrument is instantly recognizable as the well-known folk tune *Frère Jacques*; and the sequence F, G, A, F, F, G, A, F, which does not contain a single element in common with the first, sounds like exactly the same tune; but the sequence E, D, C, C, E, D, C, C, which contains the same elements as the first sequence in a new configuration, sounds like *Three Blind Mice*, an entirely different Gestalt. *See also* *AUTOCHTHONOUS*, *BUNDLE HYPOTHESIS*, *GESTALT PSYCHOLOGY*, *GESTALTQUALITÄT*, *GROUPING LAW*, *MEMBER*, *MEMBERSHIP CHARACTER*, *PRÄGNANZ*, *PRECISION LAW*, *TRAIT CENTRALITY*. **Gestalten** *pl.* [From German *Gestalt* shape or form, from Old High German *stellen* to shape]

Gestalt psychology *n.* A school of psychology concerned largely with emergent **Gestalt* phenomena in perception. Its forerunners were the German poet Johann Wolfgang von Goethe (1749–1832), the Austrian physicist,
*****ebook converter DEMO Watermarks*****

philosopher, and psychologist Ernst Mach (1838–1916), and especially the German philosopher Christian von Ehrenfels (1859–1932), but the emergence of the school is usually traced to 1912 and the publication of a seminal article on **apparent movement* by the German psychologist Max Wertheimer (1880–1943). The school was transplanted to the US with the rise of Nazism in Germany, as Wertheimer emigrated there together with the other founding German psychologists Kurt Koffka (1886–1941), Wolfgang Köhler (1887–1967), and Kurt Lewin (1890–1947). The cardinal principles of Gestalt psychology are the primary importance in psychology of subjective experience and of its forms and structures, and a rejection of elementalism. *See also* APPURTENANCE, BENDER GESTALT TEST, BUNDLE HYPOTHESIS, FIELD EFFECT, GESTALTQUALITÄT, GOOD GESTALT, GROUPING LAW, HÖFFDING STEP, ISOMORPHISM (3), KORTE'S LAWS, LEVELLING (1), MEMBER, MEMBERSHIP CHARACTER, PERCEPTUAL CONSTANCY, PRÄGNANZ, PRECISION LAW, SYMMETRY LAW, TERNUS PHENOMENON, TRAIT CENTRALITY.

Gestaltqualität *n.* A term coined by the German philosopher Christian von Ehrenfels (1859–1932) and later introduced into **Gestalt psychology* to denote a perceptual **attribute* or quality that emerges from the way in which the elements of an object or image are put together and is not reducible to the sum of those elements, his standard example being **melodic constancy*, according to which a tune is recognizably the same when played in a different key without using any of its original elements (tones). Also called *founded content*. *See* GESTALT. *Gestaltqualitäten* *pl.* [From German *Gestalt* shape or form, from *stellen* to shape + *Qualität* quality]

Gestalt therapy *n.* A form of **counselling* or **psychotherapy*, unconnected with Gestalt psychology, developed in the United States during the 1960s by the German-born psychiatrist Friedrich Salomon (Fritz) Perls (1893–1970), in which clients are encouraged to focus on the immediate present and to express their true feelings openly and honestly. *See also* EMPTY-CHAIR TECHNIQUE, UNFINISHED BUSINESS.

gesture *n.* 1. A bodily movement, usually of the hands or the head, that has a communicative function in **kinesics*. *See also* AMIMIA, APRAXIA, ASEMIA, COPROPRAXIA, ECHOPRAXIA, PARAMIMIA, RETT'S DISORDER. 2. Something that is said or done as a formality or without conviction. *vb.* 3. To make a gesture

*****ebook converter DEMO Watermarks*****

(1). [From Latin *gestura* bearing, from *gestus* carried, from *gerere* to carry or behave]

geusis *n.* The sense of **taste*. [From Greek *geusis* taste, from *geusthai* to taste]

GHB *abbrev.* Gamma-hydroxybutyrate, a colourless, odourless, salty-tasting liquid that acts as an **anaesthetic (1)* drug with sedative–hypnotic and antidepressant effects. It became popular as a street drug in the late 1990s, at moderate doses having a general calming effect, lowering inhibitions, and increasing sociability, and at high doses causing nausea, muscle stiffness, confusion, convulsions, and possible coma and respiratory collapse. Also called *gamma-OH* (trademark). Often humorously called *GBH*, especially in the UK. *See also* *SEDATIVE–HYPNOTIC*; *SEDATIVE-, HYPNOTIC-, OR ANXIOLYTIC-RELATED DISORDERS*, *SOCIABILIZER*.

ghost in the machine *n.* The term first used by the English philosopher Gilbert Ryle (1900–76) on page 17 of his book *The Concept of Mind* (1949) to describe the dogma of mind–body **dualism*, which he interpreted as a **category mistake*.

ghost sickness *n.* A **culture-bound syndrome* found in many American Indian tribes, characterized by **thanatophobia*, **necromania*, **nightmares (1)*, **asthenia*, feelings of danger, **anorexia*, fainting, dizziness, **anxiety*, and **hallucinations*, the **symptoms* often being attributed by the afflicted person to witchcraft.

ghrelin *n.* A **peptide hormone*, produced by **endocrine* cells of the stomach, that acts in the brain to increase food intake and body weight by stimulating hunger and triggering release of **growth hormone* from the **pituitary gland*. Its discovery was reported in an article by the Japanese molecular geneticist Masayasu Kojima (born 1959) and several colleagues in the journal *Nature* in 1999. *Compare* *LEPTIN*. [From *ghre-* the Proto-Indo-European root of the word grow + Latin *-in* indicating an organic or chemical substance]

Gibsonian *adj.* Pertaining to or resembling the interpretation of visual
*****ebook converter DEMO Watermarks*****

perception of the US psychologist James Jerome Gibson (1904–79), according to which information is absorbed from the ambient flow of light, without significant retinal or cognitive processing, by the detection of features of objects that are invariant with motion and rotation. *See also* AFFORDANCE, AIR THEORY, DIRECT PERCEPTION, GLOBAL PSYCHOPHYSICS, MOTION PERSPECTIVE.

giftedness *n.* Exceptional intelligence or talent. *See* GENIUS.

gift of tongues *n.* A non-technical name for *glossolalia.

Gilles de la Tourette's syndrome *n.* Another name for *Tourette's disorder. **GTS** *abbrev.*

ginkgo *n.* The ornamental Chinese tree *Ginkgo biloba*, also called the *maidenhair tree*, the dominant species of tree some 200 million years ago, before the conifers and broadleaved trees we know today had evolved, highly resistant to virus infection, fungi, and effects of pollution and radiation. Also, a herbal substance prepared from it and taken for its alleged *nootropic effect of slowing intellectual decline in old age or as an *aphrodisiac. Also spelt *gingko*. *See also* SMART DRUG. [From Japanese *ginkyo*, from Chinese *yin* silver + *hing* apricot]

ginseng *n.* A plant of the genus *Panax* (*Panax schinseng* in China or *Panax quinquefolius* in North America) whose roots contain ginsenosides, used in Chinese medicine for their tonic, stimulant, or restorative effects. Its pharmacological action is poorly understood, though it is believed to involve enhancement of *nitric oxide (NO) synthesis in the body. Also taken as a *smart drug with a wide range of supposed mental and physical benefits and as an *aphrodisiac. [From Mandarin Chinese *jen* a man, from the resemblance of the roots to human legs + *shen* spirit]

gland *n.* A cell or organ specialized to secrete a substance either through a duct or into the bloodstream. *See* ENDOCRINE GLAND, EXOCRINE GLAND. [From Latin *glans* an acorn]

glaucoma *n.* A relatively common disorder of the eye in which fluid pressure increases within the eyeball because of obstruction of the outflow of ***aqueous humour**, impairing vision and eventually causing ***tunnel vision** if not corrected. *Acute glaucoma*, accompanied by a dilated ***pupil**, intense pain, blurred vision, and red eye, results from the pupil dilating in a manner that causes the ***iris** to fold back against the cornea and to block the exit of aqueous humour, and it results in complete and permanent ***blindness** within 2–5 days if untreated with eye drops that constrict the pupil and unfold the iris; *chronic glaucoma*, which is much more common and often bilateral, develops insidiously, often without symptoms apart from gradual loss of peripheral vision, and is caused by a genetic factor. [From Greek *glaukoma* cataract, from *glaukos* bluish-green or grey + *-oma* indicating an abnormality, alluding to the appearance of an eye affected by ***cataract**, with which glaucoma was confused]

glia *n.* A short name for ***neuroglia**. Often mistakenly assumed to be a plural of *glion* (a spurious ***back formation**), but in fact singular like the word *glue*. See also **MACROGLIA**, **MICROGLIA**, **NEUROGLIA**. **glial** *adj.* [From Greek *glia* glue]

glide *n.* The transitional sound that is made as the vocal organs move from a position for articulating one speech sound to a position for articulating another, as in any ***diphthong**, ***triphthong**, or ***semivowel**.

glioblastoma *n.* A malignant glioma or tumour of ***neuroglia** in the brain or spinal cord. [From *glia* + Greek *blastos* a bud + *-oma* indicating a tumour]

glioma *n.* A tumour affecting the ***neuroglia** (usually ***astrocytes**) in the brain or spinal cord. Symptoms include headache, drowsiness, and vomiting, together with other site-dependent signs, such as motor weakness on one side of the body caused by a cerebral glioma on the opposite side, or clumsiness on one side caused by a ***cerebellar** glioma on the same side. Compare **GLIOBLASTOMA**. [From Greek *glia* glue + *-oma* indicating a tumour]

gliosis *n.* Scar tissue resulting when damaged ***astrocytes** (large ***neuroglial** cells in the brain) form ***plaque**, resulting in a form of ***sclerosis**. [From Greek *glia* glue + *-osis* indicating a process or state]

global amnesia *n.* Severe or total **anterograde amnesia* resulting from damage to the **diencephalon* or medial **temporal lobe*, often accompanied by partial **retrograde amnesia*, with **short-term memory* and **perceptual-motor skills* generally remaining unimpaired. *Compare* TRANSIENT GLOBAL AMNESIA.

global feature *n.* A **feature* (1) of a stimulus as a whole, such as its overall circular shape or its symmetry. *See also* NAVON FIGURE. *Compare* LOCAL FEATURE.

global processing *See* GLOBAL FEATURE, NAVON FIGURE.

global psychophysics *n.* A term used by the US psychologist James Jerome Gibson (1904–79) to characterize his approach to the study of perception, in which an attempt is made to establish psychophysical correspondences between perceptions and behaviour by examining relations between stimulus information and response, in contrast to classical **psychophysics* in which relations between stimulus intensity and response are examined. *See also* DIRECT PERCEPTION.

globus hystericus *n.* The medical name for a lump in the throat.

globus pallidus *n.* One of the **basal ganglia* in the lenticular nucleus of the corpus striatum, either of a pair of pale yellow globular masses involved in posture, muscle tonus, and the control of eating and drinking. Also called the *pallidum* or the *palaeostriatum* (US *paleostriatum*). *See also* ATTENTION-DEFICIT/HYPERACTIVITY DISORDER. [From Latin *globus* a sphere + *pallidus* pale]

glomerulus *n.* Any cluster or coil of blood vessels or nerve fibres, especially the clusters of nerve fibres of the **olfactory bulb* (containing the primary synapses of the olfactory pathway) and the **cerebellum*. [From Latin *glomerulus* a little ball, diminutive of *glomus* a ball]

glossa *n.* The technical name for the tongue. **glossal** *adj.* [From Greek *glossa* a tongue]

glossogenetics *n.* The study of the origins and development of language. [From Greek *glossa* a tongue + *genesis* generation or development]

glossograph *n.* An instrument for recording the movements of the tongue during speech. [From Greek *glossa* a tongue + *graphein* to write]

glossographia *n.* A written variant of ***glossolalia**.

glossolalia *n.* Speech-like utterances with an impoverished range of syllabic and rhythmic patterns and no systematic grammatical structure, often believed by the speaker to be a real but unknown language, but on analysis quite unlike any ***natural language**, commonly produced during Pentecostal Protestant and charismatic Roman Catholic religious services. Also called the *gift of tongues* or *speaking in tongues*. Glossolalia should be carefully distinguished from ***xenoglossia**. **glossolalic** *adj.* [From Greek *glossa* a tongue + *lalein* to babble]

glossopalatine nerve *n.* A branch of the ***facial nerve** supplying the front two-thirds of the tongue and parts of the palate. [From Greek *glossa* a tongue + Latin *palatum* the roof of the mouth]

glossopharyngeal nerve *n.* Either of the ninth pair of ***cranial nerves**, carrying sensations from the pharynx, the back of the tongue, and the middle ear, and supplying the muscles of the pharynx, hence involved in controlling swallowing and, together with the vagus nerve, the ***gag reflex**. [From Greek *glossa* a tongue + *pharynx*, *pharyngos* the throat]

glossosynthesis *n.* Arbitrary invention of new words. [From Greek *glossa* a tongue + *syn* together + *tithenai* to place]

glottal *adj.* Of, relating to, or denoting a speech sound articulated by interrupting the airstream at the ***glottis** by closing the ***vocal folds**, as in the **glottal stop** used in the ***cockney** dialect in place of the usual /t/ sounds in utterances such as *Pat's got a lot of bottle* (*Pa's go' a lo' of bo'le*). See also **PLACE OF ARTICULATION**.

glottal fry See VOCAL FRY.

glottis *n.* The opening between the ***vocal folds**. [From Greek *glotta*, Attic form of Ionic *glossa* a tongue]

glottochronology *n.* The application of techniques of ***lexicostatistics** to study the evolution and establish the relationship between languages and therefore populations and to estimate how long ago they diverged from their common source, believed by many authorities to have been in Africa approximately 150,000 years ago. See also **INDO-EUROPEAN**. Compare **EVOLUTIONARY CLOCK**, **MITOCHONDRIAL DNA**. [From Greek *glotta*, Attic form of Ionic *glossa* a tongue + *chronos* time + *logos* word, discourse, or reason]

glove anaesthesia *n.* Absence of sensation or feeling in the hand, the anaesthetic area ending abruptly at the wrist, invariably a ***conversion symptom**, the distribution of sensory nerve fibres allowing no possible neurological cause of the symptom, because the nerve that supplies the hand also supplies the lower arm. *Shoe anaesthesia* and *stocking anaesthesia* are defined and interpreted analogously. US *glove anesthesia*. See also **ANAESTHESIA**.

glucagon *n.* A hormone secreted by the ***islets of Langerhans** in the pancreas that stimulates the release of glucose into the bloodstream. [From Greek *glykys* sweet + *agein* to lead]

glucocorticoid *n.* Any of a group of ***corticosteroids**, the principal ones being ***cortisol** (hydrocortisone) and ***corticosterone**, that are secreted by the adrenal cortex in response to serious injury or stress and that tend to shift the body from carbohydrate to fat metabolism, to regulate blood pressure, and to have anti-inflammatory effects. See also **DEXAMETHASONE**, **PREDNISOLONE**, **PREDNISONE**, **ZONA FASCICULATA**. Compare **MINERALOCORTICOID**. [From *gluco(se)* + *cortic(al)* + Greek *-oeides* denoting resemblance of form, from *eidos* shape]

glucose *n.* A white crystalline sugar, the most common form being dextrose, that plays an important part in energy supply and metabolism. See **GLYCOLYSIS**, **KREBS CYCLE**. [From Greek *gleukos* sweet wine, from *glykys*

sweet]

glucostatic theory *n.* A ***homeostatic** theory of hunger, according to which the brain monitors the difference between the levels of glucose in the arteries and veins as an index of the rate of glucose removal from the blood. A low rate, which indicates that the blood glucose level is low and is probably being replenished by glucose derived from body fat, stimulates hunger and eating behaviour. *Compare* **LIPOSTATIC THEORY**. [From *glucose* + Greek *statikos* bringing to a standstill, from *histanai* to cause to stand or to weigh in a balance + *-ikos* of, resembling, or characterized by]

glue-sniffing *n.* The deliberate inhalation of the ***psychotropic** fumes given off by certain types of adhesives. *See also* **INHALANT-RELATED DISORDERS, SOLVENT ABUSE**.

glutamate *n.* A salt of glutamic acid, the main excitatory ***neurotransmitter** for all nerve impulses in the ***diencephalon** and ***telencephalon** and for sensory impulses in the ***peripheral nervous system**. *See also* **KAINIC ACID, LITHIUM**. [From *glutamic acid* + *-ate* indicating a salt or ester of an acid]

glutamic acid *n.* A non-essential ***amino acid** that is a precursor of ***glutamate** and is believed to function as a ***neurotransmitter** in the dorsal horns of the spinal cord and in the cerebellum. **Glu** *abbrev.* [From Latin *gluten* glue + *-amine* indicating an amine + *-ikos* of, resembling, or characterized by]

glutamic acid decarboxylase *n.* An ***enzyme** that makes ***GABA**. **GAD** *abbrev.*

glutethimide *n.* One of the ***carbamates**, a central nervous system ***depressant** that is prescribed as a ***sedative–hypnotic** drug in the treatment of anxiety disorders and insomnia. Also called *Doriden* (trademark). *See also* **SEDATIVE-, HYPNOTIC-, OR ANXIOLYTIC-RELATED DISORDERS**. [From its chemical name *glut(aryl)* + *eth(yl)* + *imide*]

glycine *n.* A non-essential [*amino acid](#) that functions as an inhibitory [*neurotransmitter](#) in the spinal cord, binding to the receptor sites on [*alpha motor neurons](#). *See also* [STRYCHNINE](#). **Gly** *abbrev.* [From Greek *glykys* sweet + *-ine* indicating an organic compound]

glycogen *n.* Animal starch, stored in the liver and muscles and converted to [*glucose](#) by [*hydrolysis](#). [From Greek *glykys* sweet + *genein* to produce]

glycol *n.* A chemical used as antifreeze and as a solvent, containing volatile substances that are [*psychotropic](#) when inhaled. *See also* [INHALANT-RELATED DISORDERS](#), [SOLVENT ABUSE](#). [From Greek *glykys* sweet]

glycolysis *n.* The metabolism, by enzymes, of [*glucose](#) with the production of pyruvic acid and the liberation of energy in the form of [*ATP](#). Depending on the cell type and conditions, the pyruvate may then be converted to [*ethanol](#) (an [*anaerobic](#) process), lactic acid (an anaerobic process), or acetyl coenzyme A which enters the [*Krebs cycle](#), initiating a process of [*aerobic](#) respiration. [From *glucose* + Greek *lysis* loosening]

GnRH *abbrev.* Gonadotrophin-releasing hormone. *See* [GONADOTROPHIN](#).

goal-gradient hypothesis *n.* The suggestion that an organism's tendency to approach a goal increases with proximity to the goal. This hypothesis was first proposed by the US psychologist Clark L(eonard) Hull (1884–1952) in an article entitled 'The Goal-Gradient Hypothesis and Maze Learning' in the journal *Psychological Review* in 1932. Experimental evidence subsequently corroborated the hypothesis, among the earliest arising from experiments reported by Hull himself in the *Journal of Comparative Psychology* in 1943 showing that hungry rats in a maze tend to run faster as they approach a goal box containing food than at the beginning of the path, and there is evidence for the phenomenon in human behaviour.

Gödel's theorem *n.* A term that usually refers to Gödel's first incompleteness theorem, the proposition that, in any formal system rich enough to incorporate arithmetic, it is possible to formulate statements that are true but that cannot be proved within the system. Slightly more precisely,

in such a system S , there must be a sentence p such that if S is consistent, then neither p nor its negation ($\text{not-}p$) can be proved within S . This theorem is a genuine [*paradox](#), has far-reaching implications for the foundations of arithmetic and logic, and has (controversially) been used, informally by the Czech-born US philosopher Ernest Nagel (1901–85) and James R(oy) Newman (1907–66) in their book *Gödel's Proof* (1958), more formally by the British philosopher John R(andolph) Lucas (born 1929) in an article in the journal *Philosophy* in 1961, and most formally by the mathematical physicist Roger Penrose (born 1931) in his book *The Emperor's New Mind* (1989) and especially in his later book *Shadows of the Mind* (1994), to argue against the [*strong AI](#) position that conscious thought can be explained in terms of computational principles, and also against the [*weak AI](#) position that conscious thought can be simulated by computational procedures, and in favour of the view that a fundamental difference therefore exists between human and [*artificial intelligence](#). Gödel's second incompleteness theorem is the proposition that the consistency of a formal system rich enough to incorporate arithmetic cannot be proved within the system itself. [Named after the US logician and mathematician Kurt Gödel (1906–78), born in Brno, Austria-Hungary (now in the Czech Republic), who published it in the journal *Monatshefte für Mathematik und Physik* in 1931]

God-image *n.* In [*analytical psychology](#), an image of God that, when it appears spontaneously in a dream or fantasy, symbolizes the self. Carl Gustav Jung (1875–1961) borrowed this term from medieval Christian theology, in which the Latin version *imago Dei* (image of God) was believed to be imprinted on the human soul.

Goldilocks effect *n.* A term applicable to any phenomenon that depends on narrowly constrained conditions for its occurrence, especially life on earth, the evolution of which depends on the earth's orbit remaining within a narrow band of distances from the sun for water to exist in a liquid state. The term was coined by the US sociologists Beth B(owman) Hess (1928–2003) and Joan M. Waring (born 1943) in a chapter in a book entitled *Child Influences on Marital and Family Interaction* (1978), referring to the optimal level of contact with kin that satisfies married people without interfering with their marital relationship. *See also* [ANTHROPIC PRINCIPLE](#). [From the episode in the fairy tale *Goldilocks and the Three Bears* when Goldilocks tastes the porridge

of the small bear and finds it ‘neither too hot nor too cold, but just right; and she liked it so well that she ate it all up’]

Goldstein–Scheerer tests *n.* A set of tests requiring abstract thinking and **concept formation*, used to diagnose **neurological* damage. The tests require the respondent to copy coloured designs, to sort items into categories according to colour, form, and material, and to reproduce designs from memory by arranging sticks. They were developed in the US by the German-born psychiatrist Kurt Goldstein (1878–1965) and the German-born psychologist Martin Scheerer (1900–61) and first published by them in the journal *Psychological Monographs* in 1941. Later editions of the test are also called the *Weigl–Goldstein–Scheerer tests*.

Golem effect *n.* Any negative **Pygmalion effect*, when expectations function as **self-fulfilling prophecies* having negative consequences. The term was introduced in an article in the *Journal of Educational Psychology* in 1982 by the Israeli psychologist Alisha Y. Babad (born 1944), the Argentine-born Israeli psychologist Jacinto Inbar (born 1943), and the German-born US psychologist Robert Rosenthal (born 1933), who reviewed evidence that low expectations of the likely school performance of particular children, when held by dogmatic teachers, can impair the children's actual performance. *Compare GALATEA EFFECT*. [Named after the golem in Hasidic Jewish legend, a mechanical device into which life is infused so that it can serve its creator, turning ultimately into a monster that must be destroyed, from Yiddish *goylem* a golem, from Hebrew *golem* a formless thing]

Golgi apparatus *n.* A complex of easily stained stacks, called Golgi bodies or dictyosomes, of flattened membrane sacs, called Golgi vesicles, in the **cytoplasm* of most cells, involved in transport of **lipids* and **proteins*. Also called a *Golgi complex*. **GA** *abbrev.* [Named after the Italian cytologist Camillo Golgi (1843–1926) who discovered it in 1897, although the term was first used in the scientific literature in 1913]

Golgi cell *n.* A type of **interneuron* found in the cerebellum that acts on **granule cells*. *Compare BASKET CELL, STELLATE CELL*. [Named after the Italian cytologist Camillo Golgi (1843–1926) who discovered it]

Golgi stain *n.* A method of staining neurons with potassium dichromate and silver nitrate, introduced in 1873 by the Italian cytologist Camillo Golgi (1843–1926), affecting only a tiny fraction of the neurons in the stained region but revealing them fully or almost fully, exposing their cell bodies, dendrites, and axons. *Compare* **NISSL STAIN**.

Golgi tendon organ *n.* A ***sensory receptor** that is located in a muscle, near a junction with a tendon, and is sensitive to contractions of the muscle, producing ***action potentials** when compressed by muscle tension. Also called an *organ of Golgi* or a *tendon organ*. *See also* **IB FIBRE**. *Compare* **MUSCLE SPINDLE**. [Named after the Italian cytologist Camillo Golgi (1843–1926) who gave the first complete description of it in 1880]

gonad *n.* Any organ that produces ***gametes**, including a human ***testis** or ***ovary**. The word is often mistakenly believed to apply to male organs only. **gonadal**, **gonadial**, or **gonadic** *adj.* [From Greek *gonos* seed]

gonadotrophin *n.* Any of a number of hormones secreted by the pituitary gland and the placenta that stimulate the activity of the ***gonads**. Also spelt *gonadotropin*. *See also* **CHORIONIC GONADOTROPHIN**, **FOLLICLE-STIMULATING HORMONE**, **LUTEINIZING HORMONE**, **PROLACTIN**. **gonadotrophic** or **gonadotropic** *adj.* [From *gonad* + Greek *trophe* nourishment + *-in(e)* indicating an organic compound]

gonadotrophin-releasing hormone *n.* Another name for ***luteinizing hormone releasing hormone**. Also spelt *gonadotropin-releasing hormone*. **GnRH** *abbrev.*

good breast *n.* In ***psychoanalysis**, a concept introduced by the British-based Austrian psychoanalyst Melanie Klein (1882–1960) to denote one aspect of the mother's breast as a ***part object** in an infant's fantasies after ***splitting of the object** into a good breast and a bad breast as a defence against ***ambivalence** and consequent ***anxiety**. Gratification of hunger tends to produce an ***imago (1)** of a good breast, and withdrawal generates the bad breast through a vicious circle involving ***projection (1)** in which the infant comes to believe that the breast is withdrawn because it is hated. In the theory

of ***defensive techniques** of the Scottish psychoanalyst W. Ronald D. Fairbairn (1889–1964), the location of the good breast and the bad breast define the particular defensive technique adopted by a person with a mental disorder. *See also* **GOOD OBJECT**.

good continuation *n.* One of the four original ***grouping laws** of ***Gestalt psychology**, formulated in 1923 by the German psychologist Max Wertheimer (1880–1943) to explain the organization of parts into wholes by the visual system. According to the law, elements that move in the same direction tend to be grouped perceptually, hence the symbol × is perceived as being composed of two straight lines rather than (for example) two wedges > and <, and the symbol Ø is perceived as a circle crossed by a straight line. A special case of this law for elements moving in time is called ***common fate**. *See also* **COMMON REGION**, **CONNECTEDNESS GROUPING LAW**, **PRÄGNANZ**. *Compare* **CLOSURE GROUPING LAW**, **PROXIMITY GROUPING LAW**, **SIMILARITY GROUPING LAW**.

Goodenough Draw-a-Man test *See* **DRAW-A-MAN TEST**. [Named after the US psychologist Florence Laura Goodenough (1886–1959) who introduced it in 1926]

good-enough mother *n.* A concept introduced in 1953 by the English psychoanalyst Donald Woods Winnicott (1896–1971) to denote a mother who initially behaves towards a totally dependent infant just how the infant wishes, allowing the infant to feel all-powerful and to maintain the fantasy that the mother is a part of itself, and who later allows the child to abandon this fantasy and separate from her in an orderly way. A mother who is too intrusive (too good) interferes with the child's separation and development of selfhood, and a mother who is too distant (not good enough) generates anxiety in the child; in either case the failure to supply good-enough mothering can disrupt the development of the child's self-concept, and as an adult the ability to form meaningful relationships.

good figure *n.* Another name for ***good Gestalt**.

good Gestalt *n.* A law of ***Gestalt psychology** according to which shapes, contours, and patterns tend to be perceived in the most simple, stable, and balanced form compatible with the sensory information. Also called *good*

*****ebook converter DEMO Watermarks*****

figure or *good shape*. See also [LEVELLING \(1\)](#), [PRÄGNANZ](#), [PRECISION LAW](#).

Goodman–Kruskal gamma *n.* Another name for the [*gamma statistic](#). [Named after the US statisticians Leo A. Goodman (born 1928) and William Henry Kruskal (1919–2005) who developed it in a series of articles beginning in 1954, and *gamma* (γ), the third letter of the Greek alphabet]

Goodman–Kruskal lambda *n.* In descriptive statistics, a measure of the degree of similarity between binary or dichotomous variables. It provides an index, on a scale ranging from 0 to 1, of the presence or absence of a characteristic on one variable given its presence or absence on the other variable. Also called the *lambda statistic* L_B . [Named after the US statisticians Leo A. Goodman (born 1928) and William Henry Kruskal (1919–2005) who discussed it in a series of articles beginning in 1954 and *lambda* (λ), the eleventh letter of the Greek alphabet]

Goodman's paradox *n.* A [*paradox](#) of [*induction \(1\)](#). Suppose that someone notes that all emeralds that have ever been observed are green, and argues inductively to conclude that all emeralds are green. Now suppose we define *grue* as the property of being green up to time *t* (say, the beginning of the year 2050) and blue thereafter. All our inductive evidence supports the conclusion that all emeralds are grue just as well as it supports the conclusion that all emeralds are green, therefore we have no grounds for preferring either conclusion. Many people (though not Goodman) interpret this as a refutation of induction. Also called the *grue paradox*. Compare [HEMPEL'S PARADOX](#). [Named after the US philosopher Nelson Goodman (1906–98) who published it in an article in the *Journal of Philosophy* in 1946 and expanded it in 1955 in his book *Fact, Fiction, and Forecast* (pp. 74–5)]

goodness of fit *n.* **1.** In statistics, the closeness of agreement between observed and expected frequencies, usually measured by the [*chi-square test](#) or the [*Kolmogorov–Smirnov test](#). **2.** In fitting a line or a curve to a set of data points, the degree of closeness of the points to the curve, often measured by the [*least-squares method](#) or [*maximum likelihood method](#).

good object *n.* In [*psychoanalysis](#), a concept introduced by the British-

based Austrian psychoanalyst Melanie Klein (1882–1960) to denote a [*part object](#) or [*whole object](#) as it appears in an infant's fantasies. According to Klein, the [*splitting of the object](#) into a good object and a bad object is a defence against ambivalence and the [*anxiety](#) that it generates, the first object to undergo splitting being the mother's breast. A person's handling of the good object and the bad object defines the four [*defensive techniques](#) in the theory of mental disorders of the Scottish psychoanalyst W. Ronald D. Fairbairn (1889–1964). *See also* [GOOD BREAST](#), [IMAGO \(1\)](#).

good shape *n.* Another name for [*good Gestalt](#).

goofers *n.* A street name for [*barbiturate](#) drugs in general.

goose pimples *n.* A colloquial name for [*piloerection](#) when it occurs in skin that is not thickly covered in hair. Also called *goose flesh* or *goose bumps*. *See also* [TICKLE](#). [So called because of resemblance to the skin of a freshly plucked fowl]

Gottschaldt figures test *n.* Another name for the [*embedded-figures test](#). [Named after the German psychologist Kurt Gottschaldt (1902–91) who published it in the journal *Psychologische Forschung* in 1926]

Gough Adjective Check List *n.* Another name for the [*Adjective Check List](#). [Named after the US psychologist Harrison G. Gough (1921–2014) who introduced it in 1952 and discussed its psychometric properties in an article in the journal *Psychological Reports* in 1960]

government and binding *n.* A class of linguistic theories, derived from [*transformational grammar](#), based on the assumption that any syntactic operation can be interpreted as a transformation involving the movement of some linguistic element(s) such as a noun phrase. *See also* [BINDING PROBLEM](#). **GB** *abbrev.*

Graafian follicle *n.* A fluid-filled sac in the [*ovary](#) within which an [*ovum](#) develops. Also called a *Graafian vesicle* or *ovarian follicle*. *See also* [ZONA GRANULOSA](#). [Named after the 17th-century Dutch anatomist Regnier de

Graaf (1641–73) who discovered it in 1672]

graceful degradation *n.* A principle proposed by the English psychologist David Courtenay Marr (1945–80) according to which an efficient information processing system should be able to respond to minor errors without generating completely incorrect output. The human mind appears to have this property, but most computers do not.

gracile nucleus *n.* Either of two areas of the **medulla oblongata* where the **fasciculus gracilis* terminates. Also called the *nucleus gracilis*. [From Latin *gracilis* slender]

gradation method *See* METHOD OF GRADATION.

graded potential *n.* A **depolarization* or **hyperpolarization* of a neuron that varies in amplitude according to the intensity of stimulation and that does not produce a conventional nerve impulse or action potential but is itself conducted passively along the axon as a nerve signal, declining with time and distance. Some cells with very short axons, including **rods*, **cones*, and **bipolar cells*, show only graded potentials and function without conventional nerve impulses, whereas others generate nerve impulses only when their graded potentials reach some threshold as a consequence of **spatial summation* or **temporal summation*. *Compare* ACTION POTENTIAL.

grade-equivalent score *n.* A measure of a person's ability, skill, or knowledge, expressed in terms of the grade level in school at which the average person attains that level of performance. Also called a *grade score*. *Compare* AGE-EQUIVALENT SCORE.

gradient descent *n.* A numerical method for minimizing a function by invariably moving downwards along a steepest path from the current position. The method does not guarantee to reach a global minimum because, like a mountaineer who tries to reach the lowest point by always going down a steepest slope from any given point and who gets trapped in a local basin separated by hills from lower valleys, the process may get trapped in a local minimum far above the global minimum. It is used in **connectionism (1)* and **parallel distributed processing* to minimize the discrepancy between the

*****ebook converter DEMO Watermarks*****

output of a **network model* and the desired state for a given input. Also called *steepest descent*. See also ANNEALING (1), BACK-PROPAGATION ALGORITHM. Compare HILL CLIMBING.

gradient of texture See TEXTURE GRADIENT.

Graduate Records Examination *n.* The most widely used **psychometric* test for selecting entrants into graduate schools in the United States. It comprises subtests designed to measure verbal, mathematical, and analytical aptitudes and an advanced test of knowledge in the particular academic field to be studied. Results are reported as a single standardized score with a **mean* of 500 and a **standard deviation* of 100. Compare MILLER ANALOGIES TEST, SCHOLASTIC ASSESSMENT TEST. **GRE** *abbrev.*

Gräfenberg spot See G SPOT.

gram calorie See CALORIE.

grammar *n.* 1. The branch of **linguistics* concerned with sentence structure, especially **syntax* and **morphology* (2). 2. The system of implicit rules governing a speaker's use of a language, especially **semantics* and **phonology*. See also CASE GRAMMAR, CONTEXT-DEPENDENT GRAMMAR, CONTEXT-FREE GRAMMAR, FINITE-STATE GRAMMAR, GENERATIVE GRAMMAR, PHRASE-STRUCTURE GRAMMAR, PIVOT GRAMMAR, TRANSFORMATIONAL GRAMMAR, UNIVERSAL GRAMMAR. [From Greek *grammatikos* concerning letters]

grandeur, delusion of See GRANDIOSE DELUSION.

grandiose delusion *n.* A **delusion* of inflated importance, power, wealth, knowledge, or identity, or of having a great but unrecognized talent or intelligence, having made a significant discovery, or of being or having a special relationship with a prominent person. See also GRANDIOSE DELUSIONAL DISORDER, MEGALOMANIA. Compare GRANDIOSE IDEAS OR ACTIONS.

grandiose delusional disorder *n.* A type of **delusional disorder* in which the central delusion is a **grandiose delusion*. Compare GRANDIOSE

IDEAS OR ACTIONS.

grandiose ideas or **actions** *n.* A pattern of thought or behaviour, falling short of being classified as a **delusion*, seen in **manic episodes*, **narcissistic personality disorder*, and other mental disorders and states, characterized by feelings of being superbly healthy, exceptionally intelligent, or extraordinarily talented, often associated with overspending, excessive gambling, and similar extravagant behaviour. *See also* *GRANDIOSE SELF*. *Compare* *GRANDIOSE DELUSION*, *GRANDIOSE DELUSIONAL DISORDER*.

grandiose self *n.* In **self-psychology*, a term introduced by the Austrian-born US psychoanalyst Heinz Kohut (1913–81) to denote a protective and inflated self-image that a child develops when its natural **narcissism* is inevitably undermined by the mother's occasional failure to respond adequately. This grandiose self normally moderates as the child grows older and its parents' responses change; but it is liable to remain unaltered if the normal developmental sequence is disrupted, especially if the mother never responds adequately or responds unpredictably or unrealistically, and in such cases the child may develop **narcissistic personality disorder*. Also called the *grandiose-exhibitionist self*. *See also* *GRANDIOSE IDEAS OR ACTIONS*, *SELF-PSYCHOLOGY*.

grand mal *n.* An obsolescent synonym for **tonic-clonic*. [French: literally big illness]

grandmother cell *n.* Based on the discovery of **feature* detectors, a hypothetical cell (improbably exaggerated, but based on reality) in the **visual cortex* that might respond maximally to a highly specific stimulus such as the viewer's own grandmother. The term was introduced by the US neuroscientist Jerry (Jerome Ysroael) Lettvin (1920–2011) in a lecture to students at the Massachusetts Institute of Technology in 1969 in which he suggested that about 18,000 **neurons* could underlie a specific conscious experience.

granule cell *n.* Any of the small **multipolar neurons* that are the principal **interneurons* of the neocortex and are abundantly present in the cerebellum. *See also* *PARALLEL FIBRE*. *Compare* *PYRAMIDAL CELL*. [From Latin

*****ebook converter DEMO Watermarks*****

granulum a small grain]

granulocyte *n.* Any of a group of **leucocytes* with granules in their cytoplasm that play a part in the immune system as **phagocytes* by consuming foreign or malfunctioning cells. *See also* LYMPHOCYTE, MONOCYTE. [From Latin *granulum* a small grain + Greek *kytos* a vessel]

grapheme *n.* The smallest unit in the written form of a language, usually a letter or combination of letters representing a single **phoneme*, such as the *b* in *book*, the *s* in *sip*, the *sh* in *ship*, or the *ph* in *photograph*. [From Greek *graphema* a letter, from *graphein* to write]

graphic rating scale *n.* Any **rating scale* in which a response is indicated by marking a position on a line, such as one anchored by *strongly disagree* at one end and *strongly agree* at the other, or some other **analogue* (2) representation of the dimension being rated. *Compare* NUMERICAL RATING SCALE, VERBAL RATING SCALE.

graphology *n.* The study of handwriting from all angles, including its relationship with character or personality. Speculation about this possibility can be traced to ancient Rome, where in the second century Seutonius Tranquillus remarked on peculiarities in Augustus Caesar's handwriting, and modern interest in graphology was stimulated by the French Abbot Jean Hippolyte Michon (1806–81), who coined the word in the title of his book *Système de Graphologie* (1875). Graphologists study variations of size, layout, slant, connectedness, speed, regularity, letter forms, angularity, and shading of handwriting, but relationships with objective measures of personality have generally produced only weak and unstable correlations. None the less, graphology has been popular as a selection tool in Germany and other continental European countries since the publication of the influential book *Handschrift und Charakter* (1940, *Handwriting and Character*) by the German philosopher and psychologist Ludwig Klages (1872–1956). [From Greek *graphein* to write + *logos* word, discourse, or reason]

graphomania *n.* Overpowering urge to write, often leading to **graphorrhoea*. [From Greek *graphein* to write + *mania* madness]

*****ebook converter DEMO Watermarks*****

graphorrhoea *n.* Excessive, uncontrolled, incoherent writing; a written counterpart of *logorrhoea. US *graphorrhea*. [From Greek *graphein* to write + *rhoia* a flow]

grasp reflex *n.* A type of reflex in which the fingers flex in a clutching motion in response to stroking of the palm of the hand. It is normal in young infants from birth to about four months of age, during which time the grip is strong enough to support the infant's own weight, but in older people it is a neurological sign of a lesion in the premotor cortex (see **MOTOR CORTEX**). Also called the *Darwinian reflex* or the *grasping reflex*.

grass *n.* A common street name for *cannabis, especially in the form of *marijuana.

Grassmann's law (linguistics) *n.* A modification of *Grimm's law, devised to explain exceptions to it, such as the English *daughter*, which was *duhita* in Sanskrit but according to Grimm's law should have been *dhuhita*. Grassmann's law asserts that a sequence of two *aspirates (2) in a word is sufficient to block the sound shift of Grimm's law. [Named after the German–Polish mathematician and physicist Hermann G(ünther) Grassmann (1809–77) who formulated it in 1863]

Grassmann's laws (perception) *n.* Three basic laws of colour mixing. If x , y , and z are distinct stimulus colours, and if the symbol $=$ indicates visual matching, then the laws state that: (a) If $x = y$, then $x + z = y + z$ (if equivalent colours are added to equivalent colours, then the sums are also equivalent); (b) If $x = y$, then $x - z = y - z$ (if equivalent colours are subtracted from equivalent colours, then the differences are also equivalent); (c) If $x = z$ and $y = z$, then $x = y$ (colours that are equivalent to the same colour are equivalent to each other). See also **ADDITIVE PRIMARY**, **PRIMARY COLOUR (1, 2)**, **SUBTRACTIVE PRIMARY**. [Named after the German–Polish mathematician and physicist Hermann G(ünther) Grassmann (1809–77) who formulated them in 1853]

grating *n.* A framework of parallel bars serving as a cover or hatch, hence figuratively an image consisting of alternating dark and light bars used for

studying spatial vision. *See also* [ACUITY GRATING](#), [DIFFRACTION GRATING](#), [McCOLLOUGH EFFECT](#), [PHANTOM GRATING](#), [SINUSOIDAL GRATING](#), [SPATIAL FREQUENCY](#), [TILT AFTEREFFECT](#).

gray matter *See* [GREY MATTER](#).

Great Vowel Shift *n.* A change in the pronunciation of English that took place at the end of the Middle Ages: most long [*vowels](#), such as the vowel in *see* (which before the shift rhymed with the modern French *thé*), were raised, and the already [*close vowels](#) in *shine* (which was pronounced like today's *sheen*) and *mouse* (which was pronounced like today's *moose*) became the [*diphthongs](#) that they now are.

Greenspoon effect *n.* Modification of the content of conversational speech, without the speaker's awareness, through [*reinforcement](#) given by the listener in the form of nods, smiles, or expressions of approval such as 'mmm-hmm'. Such reinforcers have been used to increase the speaker's use of a certain word, or a category of words such as plural nouns, or the frequency with which the speaker expresses personal opinions, and so on. [Named after the US psychologist Joel Greenspoon (1921–2004) who reported the effect in articles in the *American Psychologist* in 1954 and the *American Journal of Psychology* in 1955, although previous studies had already demonstrated the effect]

Grelling's paradox *n.* A [*paradox](#) of non-self-descriptive adjectives. Some adjectives are self-descriptive: the adjective *short* is short, the adjective *English* is English, and the adjective *polysyllabic* is polysyllabic, and each of these adjectives is therefore [*autological](#), because each is self-descriptive. In contrast, some adjectives are [*heterological](#): the adjective *long* is not long, *Russian* is not Russian, and *monosyllabic* is not monosyllabic. Is the adjective *heterological* autological or heterological? If it is autological, then it is self-descriptive, which means that it must be heterological; and if it is heterological, then it must be non-self-descriptive, in which case it is autological. [Named after the German mathematician Kurt Grelling (1886–1942) who published it in 1908]

grey matter *n.* The greyish nerve tissue of the brain and spinal cord,

*****ebook converter DEMO Watermarks*****

containing neuronal cell bodies, unmyelinated axons, and dendrites. US *gray matter*. Also called (technically) the *substantia grisea*. Compare [WHITE MATTER](#).

Gricean maxims *n.* Another name for [*conversational maxims](#).

grid analysis *n.* A collection of techniques for analysing data generated by the [*Repertory Grid Test](#).

grid test See [REPERTORY GRID TEST](#).

grief reaction *n.* Distress and intense sorrow in response to the loss of someone or something to which one is strongly attached, usually through [*bereavement](#). In severe cases it can amount to an [*adjustment disorder](#).

Grimm's law *n.* A proposition about various shifts that occurred in the pronunciation of [*plosive](#) consonants between the Proto-Indo-European language and the various Indo-European languages, including English, that are descended from it, based on a set of nine correspondences observed between Sanskrit, Latin and Greek on the one hand and the Germanic languages such as English on the other, including the change from [p] to [f] as in Latin *pater* becoming English *father* and the change from [t] to [θ] as in Latin *tres* becoming English *three*. The other correspondences are [k] to [x] (the final phoneme in the Scots *loch*), [b] to [p], [d] to [t], [g] to [k], [b^h] (aspirated, that is, accompanied by a brief [h]-sound) to [b], [d^h] to [d], and [g^h] to [g]. See also [GRASSMANN'S LAW \(LINGUISTICS\)](#). [Named after the German philologist Jakob Ludwig Karl Grimm (1785–1863) who formulated it in 1822]

grooming *n.* **1.** A pattern of behaviour whereby an animal cleans and maintains the hair or surface of its body or that of another member of the same species (a conspecific). **2.** In humans, cleaning and tidying one's hair, clothes, and general appearance (also called *self-grooming*), or rubbing down and smartening a horse, dog, or other domesticated animal. [From Middle English *grom* a manservant]

grounded theory *n.* A **theory* built up from **naturalistic observations* of phenomena, generally reflecting the participants' own interpretations, rather than being introduced or imposed by the investigator, sometimes used in **qualitative research*.

group dynamics *n.* The social interactions and influences in small groups and the study of these phenomena.

group factor *n.* In **factor analysis*, a **factor* (2) that accounts for the intercorrelations between a subset of the variables but not all of them.

grouping law *n.* Any of the four laws formulated in 1923 by the Gestalt psychologist Max Wertheimer (1880–1943) to explain the organization of parts into wholes by the visual system, or one of the two additional laws suggested in 1990 by the US psychologists Irvin Rock (1922–95) and Stephen E. Palmer (born 1948). Also called a Gestalt *principle of organization*. See CLOSURE GROUPING LAW, COMMON REGION, CONNECTEDNESS GROUPING LAW, GOOD CONTINUATION, PROXIMITY GROUPING LAW, SIMILARITY GROUPING LAW. See also ASSOCIATIONISM, BENDER GESTALT TEST, COMMON FATE, GESTALT PSYCHOLOGY.

group inhibition of helping See BYSTANDER EFFECT.

group movement *n.* A form of **apparent movement* that occurs in the **Ternus phenomenon* when an intermediate interstimulus interval is used, all three elements appearing to move together in step. Compare ELEMENT MOVEMENT.

group polarization *n.* The tendency for involvement in a group to cause the attitudes and opinions of the group members to become more extreme, in the direction of the predominant attitudes and opinions in the group. The phenomenon is explained by collective involvement and group participation making salient the group **norms* (1), amplifying normative individual attitudes and opinions and causing them to shift even further in the direction of the group norms. The concept was introduced in 1969 by the Romanian-born French social psychologist Serge Moscovici (born 1925) and the Italian-

born Canadian social psychologist Marisa Zavalloni (born 1929), who provided evidence, for example, that the generally favourable attitudes of French students towards de Gaulle became even more positive, on average, and their generally hostile attitudes towards Americans became even more hostile, following group discussion. *See also* [RISKY SHIFT](#), [SOCIAL INFLUENCE](#).

group selection *n.* A form of [*natural selection](#) favouring characteristics that benefit the group or species as a whole, rather than any individual organism, put forward to explain the evolution of [*altruistic](#) behaviour such as the alarm calls of birds responding to the presence of predators, but rejected by most contemporary biologists because of the problem of explaining how it could evolve, except in highly unusual circumstances. *Compare* [KIN SELECTION](#).

group stereotype *See* [STEREOTYPE](#).

group test *n.* A test of [*intelligence](#), [*personality](#), or any other psychological attribute that is presented in [*multiple-choice](#) format and can be administered to groups of respondents simultaneously. The first widely used group tests were the [*Army Alpha and Beta Tests](#). *Compare* [INDIVIDUAL TEST](#).

group therapy *n.* A generic term for various techniques of [*psychotherapy](#) in which clients or patients are treated together in groups, including traditional therapies adapted for application in groups, [*encounter groups](#), [*est](#), [*milieu therapy](#), [*psychodrama](#), [*sociodrama](#), [*T-groups](#), and a myriad of more unconventional marathon, growth, and confrontation therapies. Its first use is believed to have been by the Scottish psychiatrist William (Alexander Francis) Browne (1805–85) at the Crichton Royal Hospital in Dumfries, Scotland, in 1855. Also called *group psychotherapy*, the original term introduced in 1932 by the Romanian-born US psychiatrist Jacob L(ey) Moreno (1892–1974). *See also* [CONJOINT THERAPY](#), [SOCIODRAMA](#), [SYSTEMS THEORY](#).

groupthink *n.* A collective pattern of defensive avoidance, characteristic of group decision making in organizations in which group members develop rationalizations supporting shared illusions of their own infallibility and

*****ebook converter DEMO Watermarks*****

invulnerability within the organization. The US psychologist Irving Lester Janis (1918–90), who introduced the term in his book *Victims of Groupthink* (1972), listed eight characteristic features: an illusion of invulnerability; collective efforts to rationalize in order to discount warnings; an unquestioned belief in the group's inherent morality; stereotyped views of rivals and enemies; direct pressure on any member who dissents from the consensus view; self-censorship of disagreements with the apparent group consensus; a shared illusion of unanimity; and the emergence of self-appointed protectors of the group from adverse information that might undermine the existing complacency.

growth hormone *n.* A ***hormone** secreted by the ***anterior pituitary** that acts directly on somatic cells, promoting the synthesis of proteins essential to growth of muscles and long limb bones, sometimes used as a ***performance enhancer**. Also called *somatotrophin*. **GH** *abbrev.*

growth hormone releasing hormone *n.* A ***releasing hormone** secreted by the hypothalamus that induces the anterior pituitary to secrete ***growth hormone**. Also called *somatotrophin releasing hormone*. Compare **SOMATOSTATIN**. **GHRH** *abbrev.*

GrüBELsucht *n.* A type of ***obsession** in which even simple and obvious things are compulsively questioned. [From German *grüBELn* to ponder + *Sucht* mania]

grue paradox *n.* Another name for ***Goodman's paradox**.

G spot *abbrev.* A region of spongy tissue on the front wall of the vagina, behind the pubic bone, surrounding the urethra approximately two inches from the mouth of the vagina, that when stimulated by firm pressure swells into a ridge, becomes a focus of sexual excitement in some women, and has been claimed to be a source of fluid, similar in composition to a man's prostate fluid, released through the urethra. See also **EROGENOUS ZONE**. [An abbreviation of *Gräfenberg spot*, named after the German gynaecologist Ernst Gräfenberg (1881–1957) who first drew attention to it in 1950]

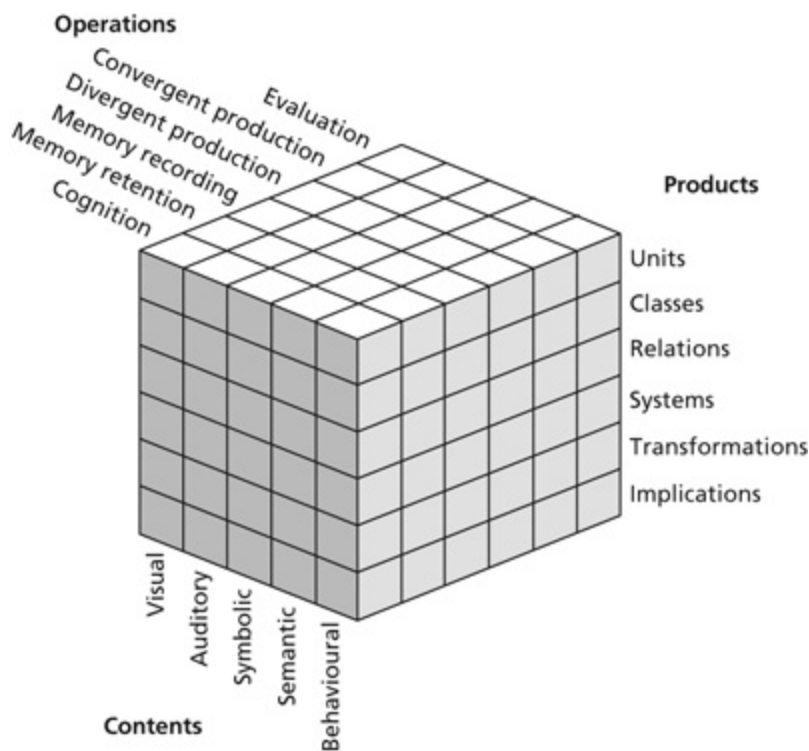
guanine *n.* One of the constituent ***bases** (1) of the nucleic acids ***DNA**
*****ebook converter DEMO Watermarks*****

and [*RNA](#), having an affinity for cytosine, also found in the liver, pancreas, and other organs of animals, in the germ cells of plants, and in guano. **G** *abbrev.* [From Spanish *guano* the dung of fish-eating sea-birds + Greek *-ine* indicating an organic compound]

guided discovery *n.* A technique used in [*cognitive behaviour modification](#) for helping a client to recall the steps that led to a particular instance of feeling anxious or depressed, with a view to locating potentially changeable elements in the client's thinking patterns.

guiding fiction *n.* In the [*individual psychology](#) of the Austrian psychiatrist Alfred Adler (1870–1937) and his followers, a term used to denote the characteristic form of a person's [*self-image](#). Also called a *guiding idea*. See also [NEUROTIC FICTION](#).

Guilford's cube *n.* A multifactorial model of the *structure of intellect* (*SOI*) developed and refined from 1946 onwards by the US psychologist J(oy) P(aul) Guilford (1897–1987) and usually depicted as an object loosely called a cube. According to the theory, intelligence comprises 120 independent abilities, extended in 1982 to 150 and, in a posthumous article in the journal *Educational and Psychological Measurement* in 1988, to 180. In the extended version of the theory, a given mental task may involve any of six possible kinds of mental *operations* (cognition, memory recording, memory retention, divergent production, convergent production, or evaluation); five different kinds of mental representations or *contents* (visual, auditory, symbolic, semantic, or behavioural); and six different kinds of *products* (units, classes, relations, systems, transformations, or implications). Multiplying these together yields 180 different cognitive factors, each of which can be assessed by a different task, and the theory can be represented by a $6 \times 5 \times 6$ 'cube' composed of 180 smaller units (see [illustration](#) overleaf). Also called the *structure-of-intellect model*. See also [CONVERGENCE–DIVERGENCE](#), [MERRILL-PALMER SCALE](#). Compare [MULTIPLE INTELLIGENCES](#).



Guilford's cube. Guilford's extended cube, showing 180 aspects of intelligence.

Gulf War Syndrome *n.* A disorder contracted by soldiers involved in the Gulf War in 1991, characterized by fatigue, muscle and joint pains, headaches, memory loss, insomnia, skin complaints, depression, and irritability, possibly caused by multiple vaccinations, nerve gas, interaction of vaccinations with anti-nerve-gas medication, or **organophosphate* insecticides. *Compare* CHRONIC FATIGUE SYNDROME. **GWS** *abbrev.* [Named after the 1991 Gulf War between an international force led by the US on the one side and Iraq on the other, following Iraq's invasion of Kuwait in 1990]

guppy effect *n.* An anomaly in **prototype theory*, in which an item is more prototypical of a conjunctive concept than of either (or any) of its constituent concepts. Thus a *guppy* is supposedly more prototypical of the conjunctive concept *pet fish* than of either of the constituent concepts *pet* or *fish*, and if prototype theory is formulated in the theory of **fuzzy sets*, this leads to a contradiction, implying that either the apparently natural formulation in the theory of fuzzy sets, or prototype theory itself, must be fundamentally flawed. The concept of *goldfish* has also been claimed to

manifest the guppy effect, because it is a more prototypical instance of a pet fish than of a pet or a fish, and empirical research has uncovered many other examples, such as *atlas*, more prototypical of *reference books* than of *reference sources* or *books*. The anomaly was first uncovered and the example of the guppy suggested in 1981 by the US psychologists Daniel N. Osherson (born 1949) and Edward E. Smith (1940–2012).

gustation *n.* The act or process of tasting or the sense of **taste*. **gustatory** *adj.* [From Latin *gustare* to taste + *-ation* indicating a process or condition]

gustatory acuity *n.* Keenness or sharpness of the sense of **taste*. See also *ACUITY*.

gustatory hallucination *n.* A **hallucination* of a taste, usually experienced as unpleasant. [From Latin *gustare* to taste]

gustatory receptor *n.* A **sensory receptor* specialized for binding to molecules of sapid chemical substances and responding with nerve impulses that generate experiences of **taste*. The term is used sometimes for a **taste bud* and sometimes for a **taste cell*. Also called a *gustatory cell* or *taste cell*.

Guttman scale *n.* A type of **attitude scale*, the items of which can be arranged in a hierarchical order such that agreement with any particular item implies probable agreement with all those below it in the hierarchy, as would apply to the following (non-attitudinal) items: *I am over 5 feet tall; I am over 5 feet 6 inches tall; I am over 6 feet tall; I am over 6 feet 6 inches tall*. It is constructed by the method of *scalogram analysis* in which a large pool of candidate statements about an attitude object (such as *Euthanasia is morally wrong; Euthanasia should be legalized*, and so on) are administered to a group of respondents who mark just those items with which they agree, and from these responses a set of items is selected that can be arranged into a hierarchy with as few errors (deviations from a perfect linear hierarchy) as possible, a satisfactory Guttman scale having relatively few errors as indexed by a **reproducibility* (Rep) of at least .90, implying that the scale is unidimensional, measuring only one major attitude variable. The process of constructing a Guttman scale is called *scalogram analysis*. A simple example of a Guttman scale is a **social distance scale*. [Named after the US (later

*****ebook converter DEMO Watermarks*****

Israeli) psychologist Louis (Eliahu) Guttman (1916–87) who introduced it in an article in the *American Sociological Review* in 1944]

gyrus *n.* A ridge, especially one of the convolutions on the surface of the brain that are separated by **sulci*. See [ANGULAR GYRUS](#), [CINGULATE GYRUS](#), [DENTATE GYRUS](#), [HESCHL'S GYRUS](#), [INFERIOR TEMPORAL GYRUS](#), [PARAHIPPOCAMPAL GYRUS](#), [POSTCENTRAL GYRUS](#), [PRECENTRAL GYRUS](#), [SUPERIOR TEMPORAL GYRUS](#). **gyri** *pl.* [From Latin *gyrus* a circle or turning, from Greek *gyros* a circle or ring]



H *abbrev.* A common street name for **heroin*.

Haab's pupillary reflex *n.* Another name for the **pupillary light reflex*. [Named after the Swiss ophthalmologist Otto Haab (1850–1931) who drew attention to it]

habenula *n.* A small triangular area of the **epithalamus* on each side of the base of the pineal gland. **habenulae** *pl.* [From Latin *habenula* a little strap or thong, from *habena* a strap or thong]

habenular nucleus *n.* A collection of nerve cells in each half of the **habenula*, connected by nerve fibres, functioning as a correlation centre for olfactory information.

habit *n.* A disposition to behave in a particular way, or an established practice or custom. In learning theory, a learned behavioural **response* associated with a particular situation, especially a response that has been subject to **reinforcement* (1, 2) or a **conditioned response*.

habitat *n.* The natural locality in which an organism lives, or the environment of a community; the place in which a person or group of people are normally to be found. *Compare* BIOTOPE, ECOSYSTEM. [From Latin *habitat* it dwells, from *habitare* to dwell]

habit disorders *n.* Any **impulse-control disorders* involving habitual maladaptive behaviour, apart from the **paraphilias* and **substance-related and addictive disorders*. Examples include **internet addiction syndrome*,

*****ebook converter DEMO Watermarks*****

*internet gaming disorder, *kleptomania, *pathological gambling, *pyromania, and *trichotillomania. In careful usage, this term should not be applied to stereotyped movements or to stereotypic movement disorder.

habit reversal *n.* A form of *learning (1) in which an organism choosing repeatedly between two alternatives *A* and *B* is initially rewarded for choosing alternative *A* rather than *B* until a behavioural preference for *A* is established, and is then rewarded for choosing *B* rather than *A* until the preference is reversed, and so on. Birds and mammals show progressive improvement in switching from *A* to *B* and back again, whereas fish show little or no improvement. Also called *reversal learning*. See also OVERTRAINING REVERSAL EFFECT, SERIAL LEARNING (2). Compare NON-REVERSAL SHIFT.

habit strength *n.* The term used in *Hullian learning theory to denote the strength of a connection between a *stimulus (1) and a *response, determined by the number of *reinforcements (1). See also GENERALIZED HABIT STRENGTH. sH_R abbrev.

habituation *n.* 1. The process of making or becoming used to something. 2. More specifically the temporary diminution in the strength or frequency of an *unconditioned response by repeated exposure to the *stimulus (1) that evokes it. 3. A mild form of *tolerance (3) of the effects of a drug. See also INHIBITION (3). Compare DISHABITUATION, EXTINCTION (2).

haemoglobin *n.* A protein present in *erythrocytes (red blood corpuscles). It consists of haem, a red organic pigment containing iron, and globin, a protein, and it combines reversibly with oxygen and plays a vital role in the transport of oxygen through the bloodstream to the tissues. US *hemoglobin*. **Hb** abbrev. [From Greek *haima* blood + Latin *globus* a sphere]

hair cell *n.* Any of the cylindrical or flask-shaped *sensory receptor cells for hearing in the *organ of Corti of the *cochlea, or any of the similar cells in the *vestibular system that are involved in the sense of balance and orientation and that enable human beings to walk upright, certain animals to detect vibrations in the ground, and fishes to detect displacements of water.

The cell is divided into three sections: a front end consisting of a cone-shaped bundle of 30 to 150 **stereocilia* (which are not true cilia) together with a single true cilium called a **kinocilium*, a middle section containing the cell nucleus, **mitochondria*, and **Golgi apparatuses*, and a back section consisting of nerve endings that feed in to the nervous system, the cell as a whole functioning as an extremely sensitive mechano-electrical **transducer* that converts kinetic energy into electrical nerve impulses. A mammalian hair cell responds along its axis of maximum sensitivity to movements of its tip of 100 picometres (trillionths of a metre, about the same distance as the diameter of some atoms), but is totally insensitive to movement along the perpendicular axis. *See also* *DEITERS' CELL*, *INNER HAIR CELL*, *OUTER HAIR CELL*.

hair-pulling, pathological *n.* Another name for **trichotillomania*.

Halcion *n.* A proprietary name for the benzodiazepine drug **triazolam*. [Trademark, from *halcyon*, peaceful and carefree, from Greek *alkyon* a kingfisher, once believed to make a secure floating nest for its eggs]

Haldol *n.* A proprietary name for the neuroleptic drug **haloperidol*. [Trademark]

half-second delay in consciousness *n.* Another name for **Libet's delay*.

halfway house *n.* A residential centre offering temporary accommodation and rehabilitation to people recently released from prison or recovering from a mental disorder not requiring full hospitalization.

hallucination *n.* A perceptual experience similar to a true perception but not resulting from stimulation of a sense organ, generally occurring under a **hallucinogen* or **hypnosis*, or as a symptom of **schizophrenia* or a **neurological* disorder, but excluding dreams occurring while asleep, **hypnagogic images* experienced while falling asleep, and **hypnopompic images* experienced while awakening. To be distinguished in careful usage from an **illusion*, in which a real object or event is misperceived or misinterpreted. *See also* *ALCOHOL HALLUCINOSIS*, *AUDIBLE THOUGHT*, *AUDITORY HALLUCINATION*, *CHARLES BONNET SYNDROME*, *DELIRIUM TREMENS*, *GUSTATORY*
*****ebook converter DEMO Watermarks*****

HALLUCINATION, HALLUCINOGEN, HALLUCINOSIS, MOOD-CONGRUENT, MOOD-INCONGRUENT, ODOUR HALLUCINATION, ORGANIC HALLUCINOSIS, PSEUDOHALLUCINATION, SCHIZOPHRENIA, SOMATIC HALLUCINATION, TACTILE HALLUCINATION, VISUAL HALLUCINATION. *Compare* DELUSION. [From Latin *alucinari* to wander in the mind + *-ation* indicating a process or condition]

hallucinogen *n.* Any of a number of drugs that induce **hallucinations* or perceptual alterations, the most common examples being **phenylalkylamines* such as **mescaline* and **STP*; **indole alkaloids* such as **bufotenin*, **harmine*, **LSD*, **psilocybin*, and **DMT*; and various other compounds such as **ibotenic acid*, **myristin*, and **ololiuqui*. Also called a *psychodysleptic*, a *psycholytic*, or a *psychotomimetic*. *See also* AMANITA MUSCARIA, CANNABIS, FLY AGARIC, HALLUCINOGEN-RELATED DISORDERS, MAGIC MUSHROOM, MORNING GLORY, MUSCIMOL, PHENCYCLIDINE, TEONANACTYL, TRAVEL AGENT, TRIP. *Compare* PHANTASTICANT, PSYCHEDELIC. **hallucinogenic** *adj.* [From Latin *alucinari* to wander in the mind + Greek *genes* born or produced]

hallucinogen-related disorders *n.* **Substance-related and addictive disorders* in **DSM-5* associated specifically with the consumption of **hallucinogens*. DSM-5 distinguishes between **phencyclidine* and other hallucinogens. *See also* SUBSTANCE-INDUCED DISORDERS, SUBSTANCE-RELATED AND ADDICTIVE DISORDERS, SUBSTANCE USE DISORDERS.

hallucinosi *n.* A mental condition in which **hallucinations* occur frequently. *See also* ALCOHOL HALLUCINOSIS, ORGANIC HALLUCINOSIS.

halo effect *n.* In **person perception*, a generalization from the perception of one prominent or salient characteristic, trait, or personality attribute to an impression of the personality as a whole, leading to inflated correlations between rated characteristics. The effect was first reported by the US psychologist Frederick Lyman Wells (1884–1964) in a study of ratings of the literary merit of authors published in the *Archives of Psychology* in 1907. The US psychologist Edward Lee Thorndike (1874–1949) introduced the term *halo error* in 1920. The term is sometimes restricted to instances in which it leads to an overvaluation of the personality as a whole. *See also* ATMOSPHERE EFFECT, TRAIT CENTRALITY.

haloperidol *n.* A central nervous system *depressant and *neuroleptic (1) agent, belonging to the class of *butyrophenones, that blocks *dopamine neuroreceptors and is used in the treatment of *schizophrenia and other psychotic disorders and in the control of symptoms in *Tourette's disorder. Also called *Haldol* (trademark). Compare DROPERIDOL. [From *hal-* indicating a halogen, from Greek *hals* salt + English (*pi*)*perid(ine)* + *-ol* denoting a compound containing a hydroxyl group, from (*alcoh*)*ol*]

Hamilton Depression Rating Scale *n.* A widely used scale for measuring *depression, consisting of a list of 17 symptoms, designed to be rated by a clinician on three-point and five-point scales after a full interview. The symptoms are: depressed mood (0–4); guilt feelings (0–4); suicide (0–4); *insomnia, initial or early (0–2); insomnia, middle (0–2); insomnia, terminal or late (0–2); disturbed work and activities (0–4); *psychomotor retardation (0–4); *psychomotor agitation (0–4); *anxiety, psychological (0–4); anxiety, somatic (0–4); *gastrointestinal symptoms (0–2); *somatic symptoms (0–2); *sexual dysfunction or menstrual disturbance (0–2); *hypochondriasis (0–4); weight loss (0–2); lack of insight (0–2). The maximum score is 52, and the following interpretation of scores is often used: 10–13 mild depression; 14–17 moderate depression; 18–30 marked depression; over 30 severe depression. Several alternative versions of the scale have been devised. Compare BECK DEPRESSION INVENTORY. **HAM-D** or **HRSD** abbrev. It was developed by the English psychiatrist Max Hamilton (1912–88) and first published in the *Journal of Clinical Psychiatry* in 1960.

hammer *n.* A non-technical name for the *malleus of the *middle ear. See also ANVIL. [So called because of its resemblance to a blacksmith's hammer]

handedness *n.* **1.** A preference for using one hand rather than the other, or a tendency to use one hand more skilfully or comfortably than the other, depending on which *cerebral hemisphere is dominant for motor control, approximately 90 per cent of people showing right handedness or left hemisphere dominance for motor control. Also called *lateral dominance*. See also CEREBRAL DOMINANCE, LATERALITY. **2.** A property of some molecules of having an inherent asymmetry in their three-dimensional structure depending on the direction of rotation or twist, such molecules often having both left-handed and right-handed *enantiomorphs.

*****ebook converter DEMO Watermarks*****

handicapped *adj.* An obsolescent term meaning afflicted by a physical disability or **intellectual disability*.

Hanoi, Tower of *See* TOWER OF HANOI.

Hans, Little *See* LITTLE HANS.

hapax legomenon *n.* A word that occurs only once in a specific text, or in the works of a particular author, or in a language (in which case it is a *nonce word*). Such words have special significance in **stylostatistics* and **forensic linguistics*. **hapax dislegomenon** (preferably simply **dis legomenon**) *n.* A twice-occurring word. **hapax legomena** and **dis legomena** *pl.* [Greek: something said once, from *hapax* once + *legomenon* something spoken, from *legein* to speak]

haphalgnesia *n.* A condition in which stimuli that would ordinarily elicit sensations of touch are experienced as painful. [From Greek *haphē* touch + *algnesia* sense of pain, from *algos* pain + *-ia* indicating a condition or quality]

haplodiploid *adj.* Of or relating to a species, including many ants, bees, and wasps, and some bugs, beetles, mites, ticks, and rotifers, in which males emerge from unfertilized eggs and are **haploid* whereas females emerge from fertilized eggs and are **diploid*. This explains how, in a haplodiploid species, females inherit only half their genes from their fathers, although fathers pass all their genes on to their daughters. **haplodiploidy** *n.* The state or condition of being haplodiploid. [From *haplo(id)* + *diploid*]

haplography *n.* An error in writing a word containing a repeated letter or syllable, only one instead of both of the repeated letters or syllables being written, as in *ocurrence* instead of the correct *occurrence*, or *autopagnosia* instead of the correct *autotopagnosia* (this example occurring even in dictionaries of psychology). Also called *lipography*. *Compare* HAPLOLOGY. [From Greek *haplous* single + *graphein* to write]

haploid *adj.* Of or relating to a cell that has a single set of unpaired **chromosomes*, as in the sex cells or **gametes* of humans and other sexually

reproducing animals, rather than the full complement of paired chromosomes; also of or relating to an organism such as a fungus or a male bee whose body cells are haploid. *Compare* [DIPLOID](#), [HAPLODIPLOID](#). **haploidy** *n.* The state or condition of being haploid. [From Greek *haploeides* single, from *haplos* one + *-oeides* denoting resemblance of form, from *eidos* shape]

haplology *n.* An error in fluent speech, especially in **allegro speech*, in pronouncing a word containing a repeated sound or syllable, only one of the repeated sounds or syllables being articulated, as when *library* is pronounced as if it were written *libry* or *probably* as if it were written *probly*. Also called *syncope*. *Compare* [ELISION](#), [HAPLOGRAPHY](#). [From Greek *haplous* single + *logos* a word]

happiness *n.* One of the **primary emotions*, associated with pleasure or joy. *See also* [EUDAIMONIC WELL-BEING](#), [HEALTH PSYCHOLOGY](#), [HEDONIC TREADMILL](#), [HEDONIC WELL-BEING](#), [POSITIVE PSYCHOLOGY](#), [SMILE](#), [SUBJECTIVE WELL-BEING](#). **happy** *adj.* [From Old Norse *happ* good luck + *-ness*, indicating a state]

haptic *adj.* Of or relating to the sense of **touch*. *See also* [HAPTIC TOUCH](#). [From Greek *haptein* to touch + *-ikos* of, relating to, or resembling]

haptic agnosia *n.* Another name for **tactile agnosia*. [From Greek *haptein* to touch + *agnosia*]

haptic touch *n.* One of the major forms of **touch*, involving active exploration, usually by the hands, or the experience that arises when one's hands envelop an object and explore its surface freely, providing information about its general shape or form and allowing object recognition to occur, even if the object is larger than any area of the skin. *See also* [ASTEREOGNOSIS](#), [ECCENTRIC PROJECTION](#), [STEREOGNOSIS](#). *Compare* [CUTANEOUS SENSE](#), [DYNAMIC TOUCH](#).

harassment *See* [SEXUAL HARASSMENT](#), [STALKING](#).

hard AI *n.* Another name for **strong AI*.

hard drug *n.* An imprecise term for a drug such as heroin or cocaine that is highly addictive, but excluding highly addictive drugs such as alcohol or nicotine. *Compare* [SOFT DRUG](#).

hard–easy effect *n.* A tendency to be overconfident about the correctness of answers to difficult questions and underconfident about answers to easy questions. If respondents have to choose from two possible answers to a series of questions, and if they also give confidence ratings for each answer on a scale from 50 per cent probability of being correct (no better than chance) to 100 per cent, then a comparison of their average confidence ratings with the actual percentages of correct answers usually reveals that they overestimated the percentages of difficult questions answered correctly (the [*overconfidence effect](#)) and underestimated the percentages of easy questions answered correctly. The phenomenon was first reported by the US psychologists Sarah C. Lichtenstein (born 1933) and Baruch Fischhoff (born 1946) in an article in the journal *Organizational Behavior and Human Performance* in 1977. Also called the *discriminability effect* or *difficulty effect*.

hard of hearing *n.* Partially deaf. *See* [DEAFNESS](#).

hard sign *n.* An obvious or unambiguous [*sign \(1\)](#) of a [*neurological](#) disorder, such as an absent or pathological [*reflex](#), an abnormal [*EEG](#), a unilateral [*paralysis](#), or a loss of function of one or more of the [*cranial nerves](#). *Compare* [SOFT SIGN](#).

hard-wired *adj.* Of, relating to, or consisting of a circuit or instruction that is built into the hardware of a computer and is therefore effectively unmodifiable; figuratively, of or relating to an innate and unmodifiable response or pattern of behaviour, such as a [*fixed-action pattern](#).

Hardy–Weinberg equilibrium *n.* The stable state of a population in which the [*Hardy–Weinberg law](#) holds, also called a *balanced polymorphism*.

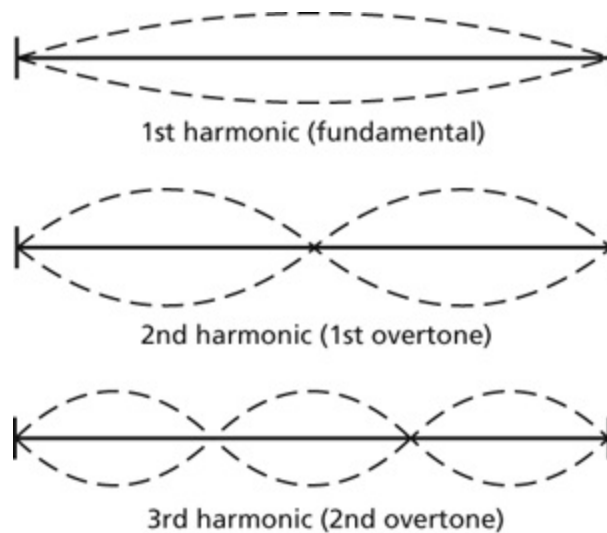
Hardy–Weinberg law *n.* The law according to which relative [*gene](#)

frequencies in a population remain stable from generation to generation provided that mating occurs randomly and there is no *selection (1), *migration, or *mutation. If the relative frequency of one *allele at a particular gene locus is p and that of another is q , then it is easy to prove that the population will contain p^2 homozygotes with two p genes, q^2 homozygotes with two q genes, and $2pq$ heterozygotes with one p and one q gene. See also BALANCED POLYMORPHISM, POPULATION GENETICS. [Named after the English mathematician G(odfrey) H(arold) Hardy (1877–1947) and the German physician Wilhelm Weinberg (1862–1937) who discovered the law independently of each other in 1908]

Hare Psychopathy Checklist See PSYCHOPATHY CHECKLIST–REVISED.

harmine *n.* An *indole alkaloid, sometimes used as a recreational drug, discovered in 1847, found in the seeds of the plants *Peganum harmala* (Syrian rue), native to southern Europe and Asia Minor, and also in *Zygophyllum fabago* and *Passiflora incarnata* (the passion flower). Native South Americans were the first to prepare from it the *hallucinogenic drink *yagé. It is a brief monoamine oxidase inhibitor that also acts as a *serotonin antagonist and *hallucinogen. Formula: $C_{13}H_{12}N_2O$. [From Latin *harmala* wild rue, from Arabic *harmil* + *-ine* indicating an organic compound]

harmonic *n.* A component of a *complex tone, having a frequency that is an integral multiple of the *fundamental frequency. The *first harmonic* is the fundamental tone; the *second harmonic*, also called the *first overtone*, has twice the frequency of the fundamental and is therefore an *octave higher; the *third harmonic* or *second overtone* has three times the frequency of the fundamental; and so on (see illustration). See also MISSING FUNDAMENTAL ILLUSION. [From Latin *harmonicus* of or relating to harmony]



Harmonic. Fundamental and two overtones.

harmonic mean *n.* In descriptive statistics, the average value of a set of scores calculated by taking the reciprocal of the arithmetic mean of the reciprocals of the scores. The scores 3, 4, 5 have reciprocal $1/3$, $1/4$, $1/5$, and the arithmetic mean of these reciprocals is 0.261, so the harmonic mean of the set of scores is $1/0.261 = 3.831$. Compare [ARITHMETIC MEAN](#), [GEOMETRIC MEAN](#).

harp theory *n.* Another name for the [*place theory](#).

Hartley's F max *n.* In statistics, a test for [*homogeneity of variance](#) in several samples based on the ratio of the largest variance to the smallest variance. Also called *F max*, *Hartley's largest F*. [Named after the US-based German statistician Herman Otto Hartley (1912–80) who published the test in 1950]

hashish *n.* The dried resinous exudate of the flowering tops of the female [*cannabis](#) plant and the undersides of its leaves, smoked with tobacco or added to foods and eaten as a psychotropic drug. [From Arabic *hashish* dried hemp]

Hawk–Dove game *n.* Another name for the [*Chicken game](#), especially

in biological literature, where it was rediscovered and interpreted as follows. The Hawk strategy involves **escalated fighting* until the individual adopting it is forced to withdraw or its opponent gives way; the Dove strategy involves **conventional fighting*—the individual adopting it retreats before getting injured if its opponent escalates. The highest payoff, in terms of **Darwinian fitness*, goes to the Hawk strategy pitted against Dove, the second-highest payoff to Dove against Dove, the third-highest to Dove against Hawk, and the lowest to Hawk against Hawk. The English biologist John Maynard Smith (1920–2004) and the US physicist and chemist George R(ober) Price (1922–75) first analysed this game in 1973 and showed that the **evolutionarily stable strategy* is a mixture of Hawk and Dove.

Hawk–Dove–Retaliator game *n.* An extension of the **Hawk–Dove game*, with the additional strategy available of fighting conventionally and escalating only if the adversary escalates: a Retaliator normally plays Dove but responds to a Hawk opponent by playing Hawk. The game was introduced in 1973 by the English biologist John Maynard Smith (1920–2004) and the US physicist and chemist George R(ober) Price (1922–75), who showed that the **evolutionarily stable strategy* is Retaliator.

Hawthorne effect *n.* Improvement in the performance or productivity of workers or students resulting from the introduction of new working methods or conditions, irrespective of the nature of the changes, the effect often being attributed to the feeling of being under concerned observation. In the mid 1920s, informal tests at the Hawthorne works of the effects of changes in lighting on the productivity of women factory workers inspecting parts, assembling relays, and winding coils suggested that the women worked faster irrespective of the lighting changes that were introduced. The first formal investigation of the effect was the Relay Assembly Test Room experiment, focusing on the effects of rest pauses and changes in hours of work, which ran from 1927 to 1932 under the directorship of the Australian psychologist Elton Mayo (1880–1949), with the collaboration of the US human relations researcher Fritz J(ules) Roethlisberger (1898–1974) and others. The interpretation of all the Hawthorne studies has been a matter of controversy, especially since the mid 1970s. [Named after the Hawthorne works in Chicago where the Western Electric Company manufactured equipment for Bell Telephone Systems and where seven separate studies on

the effects of changes in working conditions were carried out between 1924 and 1932]

heading vector *n.* A fixed direction of travel towards a goal, used as a crude method of navigation. *Compare* [COGNITIVE MAP](#). [From Latin *vector* a carrier or bearer, from *vehere*, *vectum* to convey]

head rotation illusion *See* [ROTATING HEAD ILLUSION](#).

health anxiety disorder *n.* Another name for [*somatic symptom disorder](#).

health psychology *n.* A field of [*applied psychology](#) concerned with psychological aspects of physical health, including health promotion and the prevention and treatment of illness and the identification of psychological causes and correlates of health and illness. *See also* [MEDICAL PSYCHOLOGY](#), [OCCUPATIONAL HEALTH PSYCHOLOGY](#). A critical review of decades of research, published in the *Annual Review of Psychology* in 2014, concluded that happiness does not appear to be a cause of good health, nor are negative emotions such as worry or depression significant causes of ill health, but [*conscientiousness](#) appears to be significantly linked to health and well-being across the lifespan.

hearing *n.* One of the five classical [*senses \(1\)](#), responsive to sound waves within the normal [*audibility range](#) of [*frequencies \(1\)](#) from 16 hertz to about 20,000 hertz, the human organ of hearing being the [*ear](#), within which periodic variations in air pressure are amplified in the [*outer ear](#) and [*middle ear](#) and transmitted to the [*inner ear](#) where [*hair cells](#) in the [*organ of Corti](#) located in the [*cochlea](#) convert the vibrations into nerve impulses that are transmitted by the [*vestibulocochlear nerve](#) to the [*inferior colliculi](#) in the tectum of the midbrain and thence to the [*auditory cortex](#) located on [*Heschl's gyrus](#). Also called *audition*. *See also* [AMBLYACUSIA](#), [ANACUSIA](#), [DEAFNESS](#), [DIPLACUSIS](#), [DYSACUSIA](#), [HYPACUSIA](#), [HYPERACUSIS](#), [OHM'S ACOUSTIC LAW](#), [PARACUSIA](#), [PRESBYACUSIS](#).

hearing impairment *n.* Partial [*deafness](#). **hearing-impaired** *adj.*

hearing loss *n.* *Deafness or partial deafness.

heat grill *n.* A device consisting of closely packed alternating warm (40° C) and cool (20° C) bars used for eliciting the *thermal grill illusion.

Hebbian rule *n.* In *connectionism (1) and *parallel distributed processing, a rule governing the alteration of weights of connections between units in order to adjust a *network model in the direction of a target pattern of activation. For example, the *Hopfield rule* strengthens the connection between two units whenever both are simultaneously active or both are simultaneously inactive, and weakens the connection whenever one is active and the other inactive; the *Stent–Singer rule* strengthens the weight of a connection between two units whenever one is active and the other is capable of sending a signal to it and is also active, and it decreases the weight whenever the unit capable of sending the signal is inactive. [Named after the *Hebb synapse]

Hebb synapse *n.* A special type of excitatory *synapse (1) that tends to be strengthened whenever the *postsynaptic cell fires shortly after the *presynaptic cell, even when the firing of the postsynaptic cell occurs in response to an input from a different cell. Such synapses are believed to underlie *long-term potentiation in the hippocampus. Also called a *Hebbian synapse*. See also CELL ASSEMBLY. [Named after the Canadian psychologist Donald O(lding) Hebb (1904–85) who identified and discussed it in his book *The Organization of Behavior* (1949)]

hebephrenia *n.* An obsolescent term for a form of insanity with onset in childhood. **hebephrenic** *adj.* See also HEBEPHRENIC SCHIZOPHRENIA. [From Greek *hebe* youth, from *Hebe* in Greek mythology, the cup-bearer of Olympus and the personification of youth + *phren* mind, originally midriff, the supposed seat of the soul + *-ia* indicating a condition or quality]

hebephrenic schizophrenia *n.* A form of *schizophrenia in adolescents and young adults in which *affective flattening or inappropriate *affect are prominent, *delusions and *hallucinations relatively insignificant, behaviour irresponsible and erratic, and mannerisms common.

hebetude *n.* Emotional dullness, listlessness, or ***lethargy**. [From Latin *hebetare* to dull or blunt]

hedonic treadmill *n.* An interpretation of ***subjective well-being** based on ***adaptation-level theory**, published by the Canadian psychologist Philip Brickman (1943–82) and the US psychologist Donald T(homas) Campbell (1916–96) in a book chapter in 1971, according to which a person's moods change in response to good and bad experiences but return quickly to neutrality, so that both happiness and sadness tend to be transitory. In a classic article in the *Journal of Personality and Social Psychology* (1978), Brickman and two colleagues provided evidence showing that, a short while after the events that changed their lives, lottery winners are not substantially happier, and accident victims who have become paraplegic are not substantially less happy, than other people. *See also* **PROSPECT THEORY**. [From Greek *hedone* pleasure + *-ikos* of, relating to, or resembling + English *treadmill*]

hedonic well-being *n.* Short-term, ***affective** happiness, as distinct from ***eudaimonic well-being**; how one feels about life when living it, rather than how one feels about life when thinking about it. [From Greek *hedone* pleasure + *-ikos* of, relating to, or resembling]

height in the visual field *n.* Another name for ***elevation in the visual field**.

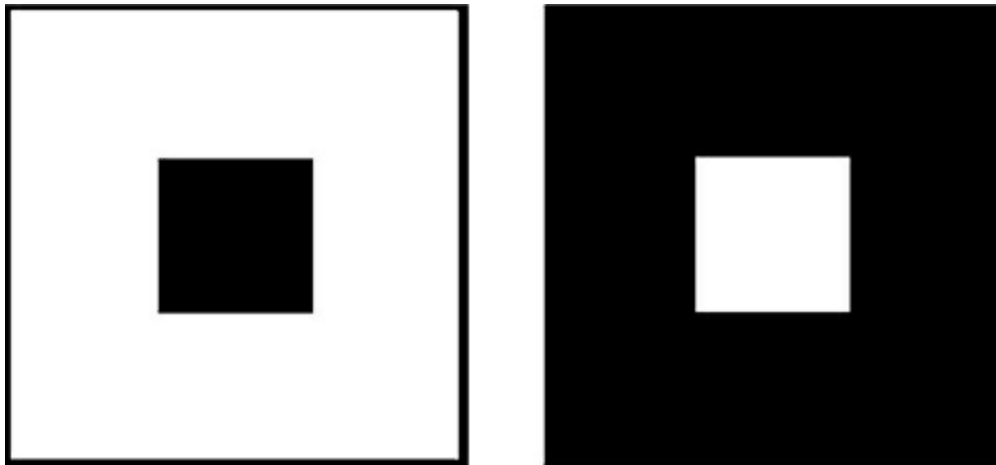
Heimdallr sensitivity *n.* Any extremely low ***absolute threshold**, especially for hearing; another name for ***hyperacusis**, ***hyperaesthesia**, ***hyperalgesia**, ***thermalgesia**, and other forms of sensory hypersensitivity. Also spelt *Heimdal sensitivity* or *Heimdall sensitivity*. [Named after Heimdallr in Norse mythology, the god of light and the dawn, guardian of the rainbow bridge Bifrost between heaven and Earth, who could hear the wool growing on a sheep's back]

Heisenberg uncertainty principle *n.* Another name for the ***uncertainty principle**. [Named after the German physicist Werner (Karl) Heisenberg (1901–76) who propounded it in 1927]

helicotrema *n.* The tiny opening within the apex of the **cochlea* where the **scala tympani* and **scala vestibuli* communicate. [From Greek *helix* a spiral + *trema* a hole]

Heller's syndrome *n.* An alternative name for **childhood disintegrative disorder*. [Named after the Austrian neuropsychiatrist Theodor O. Heller (1869–1938) who first described it and called it *dementia infantilis* in 1908]

Helmholtz illusion *n.* An **irradiation* illusion consisting of a light square on a dark background and a dark square on a light background, the two squares being equal in size but the light one appearing larger than the dark one (see *illustration*). Also called *Helmholtz's flags*. [Named after the German physiologist, physicist, and mathematician Hermann Ludwig Ferdinand von Helmholtz (1821–94) who first drew attention to it]



Helmholtz illusion. The small black square is the same size as the small white square.

helper T cell See *T LYMPHOCYTE*.

helplessness, learned See *LEARNED HELPLESSNESS*.

hemeralopia *n.* A form of partial **blindness* in which bright light causes blurring of vision, resulting from a malfunction of the **photopic* visual system, often as a side-effect of **anticonvulsant* medication prescribed for people with **epilepsy*. The term is sometimes misapplied to **nyctalopia*, but

this is avoided in careful usage. Also called *day blindness*. Compare **NYCTALOPIA**. [From Greek *hemera* day + *alaos* blind + *ops* an eye + *-ia* indicating a condition or quality]

hemianopia *n.* Blindness in the left or right ***visual field** affecting one or both eyes, *left hemianopia* referring to loss of the left visual field and *right hemianopia* to loss of the right visual field. Also called *hemianopsia*, *hemiambyopia*, or *hemiopia*. See also **HOMONYMOUS HEMIANOPIA**, **NASAL HEMIANOPIA**, **SPATIAL NEGLECT**. [From Greek *hemi-* half + *an-* without + *ops* an eye + *-ia* indicating a condition or quality]

hemiballism *n.* A form of ***ballism** resulting from unilateral subthalamic haemorrhage and affecting one side of the body only, caused by a lesion in the ***subthalamic nucleus** of the brain. [From Greek *hemi-* half + *ballein* to throw]

hemifield *n.* Half a field, usually referring to the left or right ***visual field**. [From Greek *hemi-* half + English *field*]

hemineglect *n.* Another name for ***spatial neglect**.

hemiopia *n.* Another name for ***hemianopia**.

hemiparesis *n.* Partial paralysis or muscular weakness confined to one side of the body. Compare **HEMIPLEGIA**. [From Greek *hemi-* half + Latin *paresis* relaxation, from Greek *para* beside or beyond + *hienai* to release]

hemiplegia *n.* Paralysis of one side of the body, usually as a result of a lesion in the contralateral cerebral hemisphere. Compare **DIPLEGIA**, **MONOPLEGIA**, **OPHTHALMOPLEGIA**, **PARAPLEGIA**, **QUADRIPLEGIA**, **TRIPLEGIA**.

hemiplegic *adj.* [From Greek *hemi-* half + *plege* a blow + *-ia* indicating a condition or quality]

hemisity *n.* Preferred mode of ***cognitive** processing associated with either the left or the right ***cerebral hemisphere** predominance in thinking, feeling, and behaviour, found by ***MRI** imaging to be associated with a thicker

ventral gyrus of the ***anterior cingulate cortex (ACC)** on the dominant side. Left-brained people tend to be significantly more logical, verbal, anxiety-prone, and introverted than right-brained people. The term *hemisphericity* was coined by the US neurophysiologist Joseph E. Bogen (1926–2005) in an article in the *Bulletin of the Los Angeles Neurological Society* in 1969. The US neuroscientist Bruce Eldine Morton (born 1938) introduced the term *hemisity* in an online article in 2000. See also **CEREBRAL DOMINANCE**, **LATERALITY**. [A contraction of *hemis(pheric)ity*, from Greek *hemi-* half + *sphaira* a sphere or globe + Latin *-itas*, indicating a state or condition]

hemisphere *n.* Any half sphere, including either of the two ***cerebral hemispheres**. [From Greek *hemi-* half + *sphaira* a sphere or globe]

hemispherectomy *n.* A radical surgical operation involving removal of the cortical structures of one ***cerebral hemisphere**, usually leaving subcortical structures in place, to restrict the spread of tumours or to relieve very severe epilepsy associated with damage to one hemisphere.

hemispheric encoding/retrieval asymmetry *n.* The hypothesis that the left ***prefrontal cortex** is disproportionately involved in ***encoding** and the right prefrontal cortex in ***retrieval** of ***episodic memories**. On the basis of ***brain imaging** data from functional ***MRI** studies, the Estonian-born Canadian psychologist Endel Tulving (born 1927) and co-authors put this hypothesis forward in an article in the *Proceedings of the National Academy of Sciences of the United States of America* in 1994. **HERA** abbrev. [Referring to left and right ***cerebral hemispheres**]

hemisphericity See **HEMISITY**.

hemizygous *adj.* Having only one ***gene** or ***chromosome**, without its ***homologous** counterpart. Thus, for example, males of the human and other mammalian species are hemizygous for their X and Y chromosomes, and consequently for certain genes carried on those chromosomes. [From Greek *hemi-* half + Greek *zygon* a yoke + *-ous* having or characterized by]

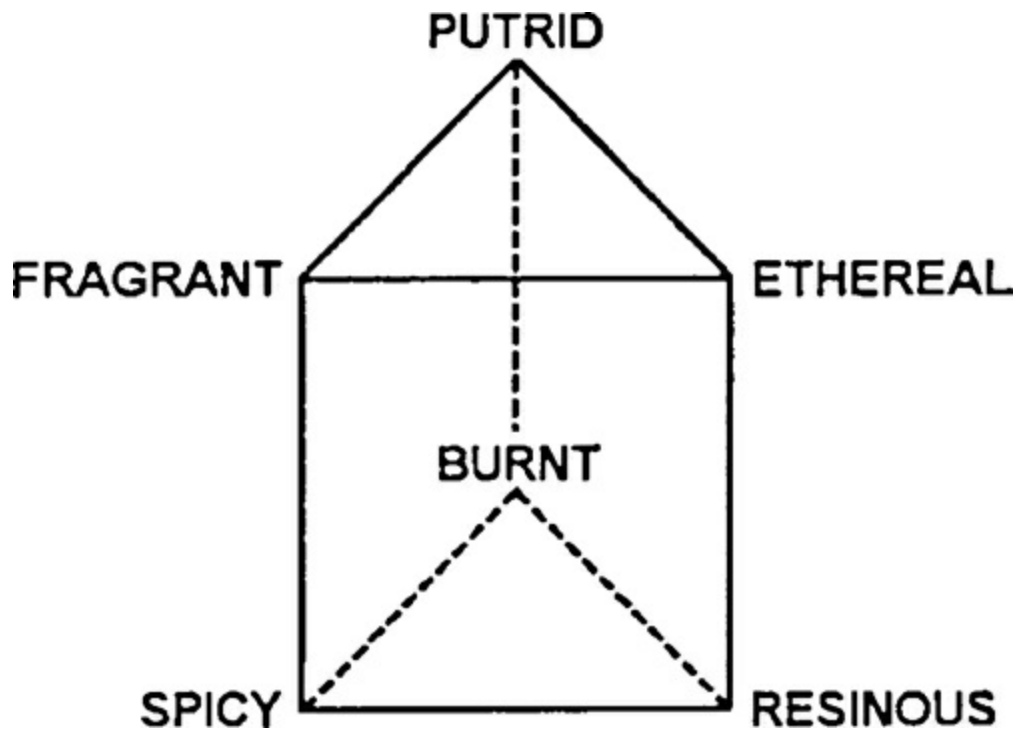
hemoglobin See **HAEMOGLOBIN**.

Hempel's paradox *n.* A [*paradox](#) of [*induction](#) (1). Suppose a researcher wishes to confirm the hypothesis that all ravens are black, using the logic of induction. The more black ravens that are observed, the more probable the hypothesis becomes. But instead of going outside and examining ravens, the researcher may just as well stay indoors and observe a green carpet, a blue skirt, a brown egg, a grey telephone, and so on, because each of these is also a confirming instance of the hypothesis. The reason is that the propositions *All ravens are black* and *All non-black objects are not ravens* are logically equivalent: they are identical in meaning, different merely in wording. Logicians agree that there is no flaw in this reasoning; the difficulty is a purely psychological one arising from misguided intuition. Also called the *confirmation paradox* or the *raven paradox*. See also [CONFIRMATION BIAS](#). Compare [GOODMAN'S PARADOX](#). [Named after the German-born US philosopher Carl (Gustav) Hempel (1905–97) who first expounded it in 1937 in the Swedish journal *Theoria*]

henbane *n.* A poisonous Mediterranean plant *Hyoscyamus niger* from which the drugs [*hyoscyamine](#) and [*scopolamine](#) are obtained. [So called because of its capacity to poison poultry]

hendiadys *n.* A [*figure of speech](#) in which a single idea is expressed by two words, usually nouns, connected by *and*, instead of an adjective and a noun. It is used for rhetorical emphasis, as in the phrase *wind and weather*, which does not denote two separate ideas but one (windy weather). [From Greek *hen* one + *dia* through + *dis* twice, from *dyoin* two]

Henning's prism *n.* A classification of [*odours](#) according to six primary odours: fragrant (like lavender or rose petals), ethereal (like ether or cleaning fluid), resinous (like resin or turpentine), spicy (like cinnamon or nutmeg), putrid (like faeces or rotten eggs), and burnt (like tar oil), the first four being closely related and depicted as the vertices of one face of a prism (see [illustration](#)). Also called the *odour prism* or *smell prism*. Compare [CROCKER–HENDERSON SYSTEM](#), [STEREOCHEMICAL THEORY](#), [ZWAARDEMAKER SMELL SYSTEM](#). [Named after the German psychologist Hans Henning (1885–1946) who presented it in his book *Der Geruch* (Smell) in 1915]



Henning's prism

Henning's tetrahedron *n.* A classification of tastes in terms of a pyramid with a triangular base, its corners representing the fundamental or primary tastes, namely sweet (like sugar or [*aspartame](#)), sour (like vinegar or lemon juice), salty (like sea water or table salt), and bitter (like quinine or orange peel), and points elsewhere representing other tastes, assumed to be blends of the four primaries. Also called the *taste tetrahedron*. *See also* [UMAMI](#). [Named after the German psychologist Hans Henning (1885–1946) who published it in 1927]

hepatic portal vein *n.* A vein that carries newly absorbed food nutrients from the small intestine to the liver. [From Greek *hepar*, *hepatos* the liver + Latin *porta* a gate]

herbal ecstasy *n.* A street name for [*ephedrine](#).

herbivore *n.* An animal that feeds on plants, especially grass. *Compare* [CARNIVORE](#), [OMNIVORE](#). **herbivorous** *adj.* [From Latin *herba* a herb + *vorare* to

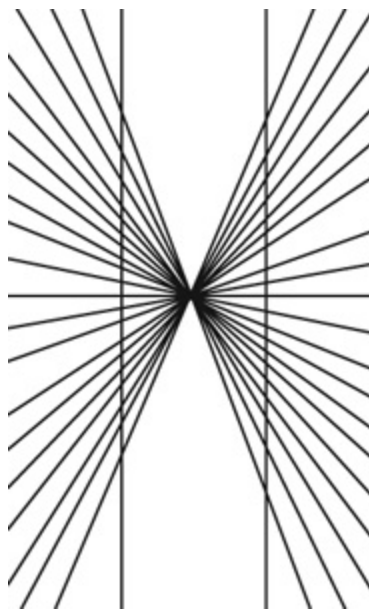
devour]

hereditarianism *n.* The belief that ***heredity** is the predominant factor determining behaviour or individual differences.

heredity *n.* The transmission from parents to their offspring of genetic factors that partly determine individual characteristics. **hereditary** *adj.* Of or relating to characteristics that can be transmitted genetically from parents to offspring. *See also* **GENE**, **HERITABILITY**, **MENDEL'S LAWS**. [From Latin *hereditas* inheritance, from *heres* an heir]

Hering grey *n.* Any of a set of 50 neutral-grey papers, carefully graded in steps of equal subjective ***lightness** from black to white, representing the range of ***achromatic (1)** colours. US *Hering gray*. [Devised by the German psychologist and physiologist Ewald Hering (1834–1918)]

Hering illusion *n.* A visual illusion in which a pair of parallel straight lines appear to be bowed outwards when superimposed on a series of straight lines radiating like spokes of a wheel from a central point between the parallel lines (see **illustration**). It is closely related to the ***Wundt illusion**. [First reported in 1861 by the German psychologist and physiologist Ewald Hering (1834–1918)]



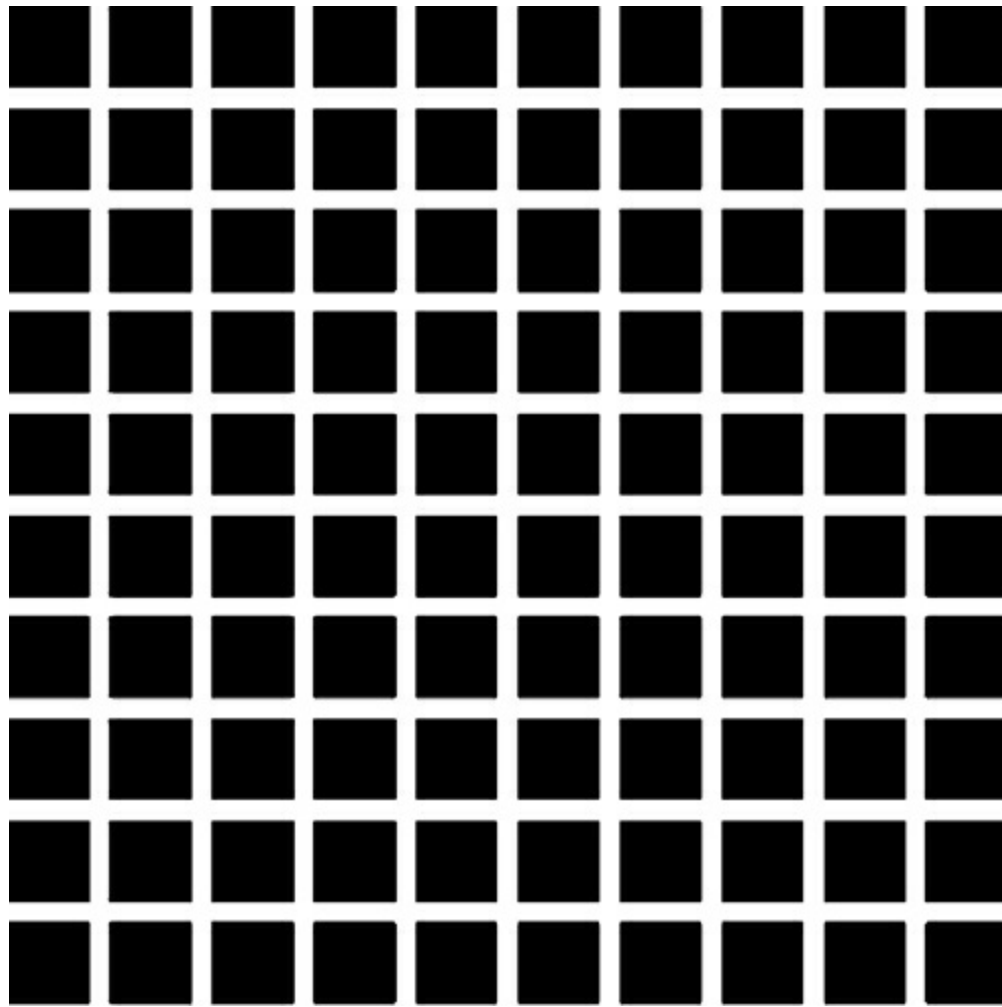
Hering illusion. The vertical lines are straight and parallel.

Hering image *n.* The first **afterimage* in the sequence of afterimages that follow brief exposure to a bright light, a **positive afterimage* provided that the original stimulus was lighter than its surroundings, otherwise a **negative afterimage* (1), usually appearing in the same colour as the original stimulus but sometimes colourless, persisting for only about 50 milliseconds. Also called a *Hering afterimage*. Compare *HESS IMAGE*, *PURKINJE IMAGE*. [Named after the German psychologist and physiologist Ewald Hering (1834–1918) who first reported it]

heritability *n.* The proportion of **variance*, symbolized by h^2 , in a **phenotypic* variable that is explained by, attributable to, or shared with **genetic variance* in a specified population at a particular time. Thus if $h^2 = .30$ for a particular **trait*, this means that 30 per cent of the total phenotypic variance in that trait is explained by genetic factors. The broad heritability h^2 of a trait is the ratio of genetic variance V_G to total phenotypic variance V_P , and its definition is: h^2 (broad) = V_G/V_P . Narrow heritability is the ratio of additive **genetic variance* V_A , excluding the effects of **dominance* (genetic), **epistasis*, and **assortative mating*, to total phenotypic variance V_P , its definition being: h^2 (narrow) = V_A/V_P . See also *ADOPTION STUDY*, *DF EXTREMES ANALYSIS*, *EMERGENESIS*, *KINSHIP STUDY*, *POPULATION GENETICS*, *TWIN STUDY*. Compare *ENVIRONMENTABILITY*. The term *heritability*, although found in some textbooks and dictionaries, is a barbarism that is avoided in careful usage. **heritable** *adj.* Capable of being inherited. [From Old French *heriter* to inherit, from Latin *hereditas* inheritance, from *heres* an heir + *-abilitas* capacity, from *habilis* able]

Hermann grid *n.* A visual illusion induced by a pattern of black squares separated by narrow white channels, at the intersections of which illusory grey spots appear (see *illustration*). The illusion is believed to be caused by the fact that both ON and OFF regions of **centre-surround receptive fields* are stimulated by white light at the intersections, whereas when the gaze is fixed on other parts of the white channels, the edges of the black squares fall on the OFF regions and the white channels on the ON regions, producing

stronger responses from both types of retinal neurons. *Compare* [EHRENSTEIN BRIGHTNESS ILLUSION](#). [Named after the German physiologist Ludimar Hermann (1838–1914) who first observed it in a design on a book cover and reported his observation in 1870]



Hermann grid. Illusory grey spots appear at the corners of the black squares.

hermaphrodite *n.* 1. Any plant or animal with the reproductive organs of both sexes; in the case of humans, usually having a female sex chromosome but being partly masculinized by abnormally high levels of [*androgens](#) in the womb. *Compare* [PSEUDOHERMAPHRODITE](#). *adj.* 2. Of, relating to, or resembling a hermaphrodite. *Compare* [EPICENE \(1\)](#). **hermaphroditism** *n.* The congenital condition of being a hermaphrodite. [Named after Hermaphroditos in Greek mythology, so called because he was the son of Hermes and Aphrodite, who

merged with a female nymph to form one person]

hermeneutics *n.* **1.** A term first used by the German philosopher Wilhelm Dilthey (1833–1911) to denote the art, skill, or theory of interpreting human behaviour, speech, and writing in terms of intentions and meanings, using methods of understanding that are inapplicable to the natural sciences. *See also* [VERSTEHEN](#). **2.** The branch of knowledge that deals with interpretation, especially of literary texts and Scripture. **3.** In [*existentialism](#), discussion of the meaning of life. [From Greek *hermeneutikos* of or relating to interpretation, from *hermeneuein* to interpret, from *hermeneus* an interpreter + *-ikos* of, relating to, or resembling]

heroin *n.* A bitter-tasting white or brown crystalline powder diacetylmorphine, derived from [*morphine](#), a powerful [*narcotic](#) analgesic with [*psychotropic](#) effects when consumed as a street drug, either by intravenous injection or, if very pure, by smoking or snorting through the nostrils. It is often used as a street drug, although it is highly addictive, and its street names include *gear*, *H*, *horse*, *junk*, *skag*, and *smack*. *See also* [ADDICTION](#), [DEPENDENCE \(2\)](#), [OPIOID-RELATED DISORDERS](#), [SUBSTANCE DEPENDENCE](#), [SUBSTANCE-INDUCED DISORDERS](#), [SUBSTANCE-RELATED AND ADDICTIVE DISORDERS](#), [SUBSTANCE USE DISORDERS](#). [Coined as a trademark from Greek *heros* a hero, probably alluding to its aggrandizing effects + English (*morph*)-*in(e)*]

herpes *n.* Any of a group of seven viruses, including herpes simplex viruses 1 and 2, and cytomegalovirus, associated mostly with skin diseases but also with other disorders. *See also* [HERPES SIMPLEX ENCEPHALITIS](#). [From Greek *herpein* to creep]

herpes simplex encephalitis *n.* A condition caused by [*herpes simplex virus 1](#) in people with severely compromised immune systems, usually from [*AIDS](#) or intensive chemotherapy for cancer. It is characterized by variable lesions in the temporal lobes, parietal lobes, and orbitofrontal cortex, leading to [*anterograde amnesia](#) and [*retrograde amnesia](#) but without loss of short-term memory, sometimes producing signs and symptoms resembling those of [*Klüver–Bucy syndrome](#). **HSE** *abbrev.*

herstory *n.* Feminist history, or history viewed from a female or feminine

*****ebook converter DEMO Watermarks*****

perspective. The word was coined by militant feminists in the US in 1970, although the standard word *history* is not, in fact, a compound of *his* + *story* but derives from the Greek and Latin *historia*, meaning narrative. *See also* [POLITICAL CORRECTNESS](#), [PSEUDOMORPHEME](#). **herstorian** *n.* A writer of herstory. [Coined in 1970 by the US poet and radical feminist Robin Morgan (born 1941) in her book *Sisterhood is Powerful* as a deliberate [*folk etymology \(1\)](#), from *her* + *story*, intended to resemble *history*]

hertz *n.* The unit of [*frequency \(1\)](#) known non-technically as cycles per second. Alternating current (mains electricity) cycles at 50 hertz in the UK and at 60 hertz in the US, Middle C has a frequency of 256 hertz, and EEG alpha waves have frequencies in the region of 8–10 hertz. **Hz** *abbrev.* [Named after the German physicist Heinrich Rudolph Hertz (1857–94) who discovered radio waves in 1887]

Heschl's gyrus *n.* A small [*gyrus](#) running transversely across the [*superior temporal gyrus](#) (temporal operculum) on the upper surface of each temporal lobe immediately in front of the planum temporale. It is occupied by the primary [*auditory cortex](#) and arranged in isofrequency stripes, each stripe responding to a particular tonal frequency, both ears being represented in each cerebral hemisphere because of incomplete crossing of the auditory nerve fibres. [Named after the Austrian pathologist Richard Ladislas Heschl (1824–81)]

Hess image *n.* A third [*positive afterimage](#) occurring in the sequence of afterimages that result from exposure to a brief light stimulus. Also called a *Hess afterimage*. *See also* [AFTERIMAGE](#). *Compare* [HERING IMAGE](#), [PURKINJE IMAGE](#). [Named after the German ophthalmologist Carl von Hess (1863–1923) who drew attention to it]

heteroduplex DNA *n.* Double-stranded [*DNA](#) produced by [*annealing \(2\)](#) two single DNA strands from different organisms in genetic engineering. *See also* [DNA HYBRIDIZATION](#), [HYBRIDIZATION](#), [RECOMBINANT DNA](#). [From Greek *heteros* other + Latin *duplex* twofold or double]

heterogeneity of variance *n.* Another name for [*heteroscedasticity](#).

heterographs *n.* Words that have the same pronunciation but different spelling, such as *write* and *right*. Compare [HOMOPHONES](#). [From Greek *heteros* other + *graphein* to write]

heterological *adj.* Of or relating to an adjective that is non-self-descriptive, such as the adjective *long* (which is not long), *Russian* (which is not Russian), and *monosyllabic* (which is not monosyllabic). See also [GRELLING'S PARADOX](#). Compare [AUTOLOGICAL](#). [From Greek *heteros* other + *logos* a word + Latin *-icalis* of, relating to, or resembling]

heteronyms *n.* Words that are spelt the same but pronounced differently, such as *sow* (an adult female pig) and *sow* (to scatter seed). See also [POLYSEMY](#). Compare [HOMOGRAPHS](#), [HOMONYMS](#). [From Greek *heteros* other + *onoma* a name]

heterophoria *n.* A form of [*strabismus](#) in which one eye tends to deviate either outwards or inwards. Also called *heterotropia*. Compare [CYCLOPHORIA](#), [ESOTROPIA](#), [EXOPHORIA](#), [HYPERPHORIA](#), [HYPOPHORIA](#). **heterophoric** *adj.* [From Greek *heteros* other + *-phoros* carrying, from *pherein* to bear + *-ia* indicating a condition or quality]

heteroscedasticity *n.* In statistics, the degree to which the [*variances](#) of two or more variables differ. Many distribution-dependent statistical tests, such as [*analysis](#) of variance and the [*t test](#) assume [*homoscedasticity](#). Compare [HOMOSCEDASTICITY](#). **heteroscedastic** *adj.* [From Greek *heteros* other + *skedasis* a scattering or dispersion]

heterosexism *n.* Prejudice or discrimination in favour of [*heterosexuals](#) (1) and against [*homosexuals](#) (1). It first appeared in a paper given to the National Council of Teachers of English in San Francisco in 1979 by the US linguist and English teacher Julia Penelope (1941–2013). Compare [ABLEISM](#), [AGEISM](#), [ETHNOCENTRISM](#), [FATTISM](#), [RACISM](#), [SEXISM](#), [SPECIESISM](#). **heterosexist** *n.* 1. One who practises or advocates heterosexism. *adj.* 2. Of or relating to heterosexism. [From *heterosexuality* + Greek *-ismos* indicating a state or condition, on the model of words such as *racism*]

heterosexual *n.* 1. A person who is sexually attracted to members of the opposite sex. *Compare* BISEXUAL (1), HOMOSEXUAL (1). *adj.* 2. Of or relating to heterosexuals or heterosexuality. *Compare* BISEXUAL (2), HOMOSEXUAL (2). **heterosexuality** *n.* Attraction to or sexual activity between members of opposite sexes. [From Greek *heteros* other + Latin *sexus* sex]

heterosis *n.* The increased size, robustness, or health often found in a *hybrid (1, 2) compared with a pure genetic form, also called *hybrid vigour*. A well-known example is associated with the gene that causes the disease sickle-cell anaemia, which is endemic in parts of Africa: individuals who are *homozygous for this gene develop the disease and tend to die young, whereas *heterozygous individuals do not normally develop the disease and are significantly more resistant to malaria than other members of the population. Heterosis is a factor that can contribute towards *balanced polymorphism. [From Greek *heteros* other + *-osis* indicating a process or state]

heterotropia *n.* Another name for *heterophoria. [From Greek *heteros* other + *tropos* a turn, from *trepein* to turn + *ops* an eye + *-ia* indicating a condition or quality]

heterozygote *n.* An organism that is *heterozygous. *Compare* HOMOZYGOTE.

heterozygous *adj.* Having a different *allele of a specified gene inherited from each parent at the same chromosomal *locus, one normally being a *dominant gene and the other *recessive. *Compare* HOMOZYGOUS. **heterozygosis** or **heterozygosity** *n.* The condition of having inherited a different *allele of a specified gene from each parent; the state or condition of being heterozygous. [From Greek *heteros* other + *zygon* a yoke + *-ous* having or characterized by]

heuristic *n.* A rough-and-ready procedure or rule of thumb for making a decision, forming a judgement, or solving a problem without the application of an *algorithm or an exhaustive comparison of all available options, and hence without any guarantee of obtaining a correct or optimal result. The

concept can be traced to the work of the US political scientist and decision theorist Herbert A(lexander) Simon (1916–2001) who first suggested in 1957 that human decision makers with ***bounded rationality** use such procedures when thorough examination of all available options is infeasible. The German psychologists Karl Duncker (1903–40) and Wolfgang Köhler (1887–1967) had earlier interpreted the term more closely to its Greek roots to denote ‘serving to find out or discover’. The concept was reintroduced into psychology in the early 1970s by the Israeli-American psychologists Amos Tversky (1937–96) and Daniel Kahneman (born 1934), and the most important heuristics initially identified and studied by them were the ***anchoring and adjustment heuristic**, the ***availability heuristic**, and the ***representativeness heuristic**. Also called a *cognitive heuristic*. See also **BASE-RATE FALLACY**, **CANCELLATION HEURISTIC**, **DUAL-PROCESS MODEL**, **MEANS-END ANALYSIS**, **RECOGNITION HEURISTIC**, **REGRESSION FALLACY**, **SAMPLE SIZE FALLACY**, **SATISFICING**, **SIMULATION HEURISTIC**. Compare **ALGORITHM**. **heuristic** *adj.* [From Greek *heuriskein* to find]

HEXACO *abbrev.* Honesty–humility, emotionality, extraversion, agreeableness, conscientiousness, and openness to experience. A popular scale to measure six dimensions of ***personality** found in lexical studies of personality structure that have been performed in various languages, and also to reflect our theoretical interpretations of those factors. The full 100-item scale and a shorter 60-item version are provided in several languages free to download from the internet. The scale was designed in 2000 by the Canadian psychologist Michael C(raig) Ashton (born 1970) and the Korean psychologist Kibeom Lee (born 1966) and was first reported in the *European Journal of Personality* in 2001. See also **LANGUAGE PERSONALITY SPHERE**. Compare **BIG FIVE**.

hibernate *vb.* To pass the winter in a dormant state with greatly reduced metabolism, as do some amphibians, reptiles, and mammals. **hibernation** *n.* [From Latin *hibernare* to spend the winter, from *hibernus* wintry, from *hiems* winter]

Hick’s law *n.* The proposition that ***choice reaction time** increases as the logarithm of the number of alternatives. The law is usually expressed by the formula $RT = a + b \log_2 (n + 1)$, where *a* and *b* are constants representing the

*****ebook converter DEMO Watermarks*****

intercept and slope of the function, respectively, and n is the number of alternatives. It was first documented by the German psychologist Julius Merkel (1834–1900) in the journal *Philosophische Studien* in 1885, therefore the name by which it is usually known is a misnomer and there is a strong case for calling it *Merkel's law*. Compare [FITTS' LAW](#). [Named after the English physician W(illiam) Edmund Hick (1912–74) who reformulated it in 1952]

hidden figure *n.* Another name for an embedded figure. See [EMBEDDED-FIGURES TEST](#).

hidden observer *n.* In a person who is hypnotized, a part of the mind that functions separately, experiencing things of which the hypnotized person appears to be unaware. For example, a person under hypnotic [*analgesia](#) who is subjected to [*cold pressor pain](#) may report no pain sensation and may appear quite undisturbed, but if the hypnotist says, 'When I place my hand on your shoulder, I shall be able to talk to a hidden part of you that knows things that are going on in your body, things that are unknown to the part of you to which I am now talking', then the hidden observer may emerge and the person may report strong pain sensations. The phenomenon was observed in 1899 by the US psychologist William James (1842–1910) and by several subsequent researchers, but it was first studied experimentally in 1973 by the US psychologist Ernest R(opiequit) Hilgard (1904–2001), who had rediscovered it by chance during a laboratory demonstration in which a hypnotically deaf subject was asked, in a quiet voice, to raise his right forefinger if 'some part' of him could hear the hypnotist's voice, whereupon the finger rose and the subject immediately asked to have his hearing restored because he had felt his finger move and wanted to know what had been done to him. See also [NEODISSOCIATION THEORY](#).

higher-order conditioning *n.* A form of [*classical conditioning](#) in which a [*conditioned stimulus](#) CS1 is first paired with an [*unconditioned stimulus](#), in the usual way, until CS1 elicits a [*conditioned response](#), then a new conditioned stimulus CS2 is paired with CS1, without the unconditioned stimulus, until CS2 elicits the original conditioned response. For example, the ticking of a metronome may be paired with food powder until it elicits salivation, then a bell may be paired with the metronome until the bell elicits

*****ebook converter DEMO Watermarks*****

salivation, and so on. This process can be extended further back. The corresponding phenomenon in **operant* conditioning is **secondary reinforcement*.

higher-order reinforcement schedule *n.* In **operant* conditioning, any **reinforcement schedule* that incorporates two or more simple schedules. Also called a *higher-order schedule* or a *compound reinforcement schedule*. See CHAINED REINFORCEMENT SCHEDULE, TANDEM REINFORCEMENT SCHEDULE. Compare SIMPLE REINFORCEMENT SCHEDULE.

high-pass filter See BAND-PASS FILTER.

high rising intonation Also called *high rising terminal speech*. See UPTALK.

high vowel *n.* Another name for a **close vowel*.

hikikomori *n.* A **culture-bound syndrome* found almost exclusively in Japan, most commonly among male teenagers and young adults, especially eldest sons, although about a quarter of cases are female. It is characterized by extreme social withdrawal and near-total severance of contact with the outside world, without any other evidence of psychiatric or neurological disorder, usually triggered by an upsetting experience, such as being bullied, failing an examination, or experiencing a broken love affair. People with the disorder usually lock themselves in their bedrooms and refuse to come out for weeks, months, or years. The disorder was first recognized in the 1970s, and the word *hikikomori* was first applied to it by the Japanese Health and Welfare Ministry in 1991. Compare AGORAPHOBIA, SOCIAL ANXIETY DISORDER. [From Japanese *hikikomori* social withdrawal, from *hikikomoru* to stay indoors or shut oneself indoors]

hill climbing *n.* In **connectionism* (1), a numerical method for maximizing a function by invariably moving upwards along a slope of steepest ascent from the current position. The method does not guarantee to reach a global maximum because, like a mountaineer who tries to reach the highest point by always climbing up a slope of steepest ascent from any given point and who gets trapped on a local mound separated by valleys from
*****ebook converter DEMO Watermarks*****

higher peaks, the process may get trapped at a local maximum nowhere near the global maximum or summit. It is used in connectionism and ***parallel distributed processing** to maximize the correlation between the output of a ***network model** and the desired state for a given input. Also called *steepest ascent*. See also [ANNEALING \(1\)](#), [BACK-PROPAGATION ALGORITHM](#). Compare [GRADIENT DESCENT](#).

hindbrain *n.* The ***cerebellum**, ***pons**, and ***medulla** oblongata, responsible for unconscious control functions such as regulation of muscle tonus, posture, heartbeat, blood pressure, and respiration. Also called the *rhombencephalon*, especially in a developing embryo. Compare [FOREBRAIN](#), [MIDBRAIN](#).

hindsight bias *n.* The tendency for people who know that a particular event has occurred to overestimate in hindsight the probability with which they would have predicted it in foresight. It was first reported in 1975 by the US psychologist Baruch Fischhoff (born 1946), who initially invited people to predict the likelihood of events (such as the US president's visit to China) before they occurred and later to recall their predictions. Their recall of their predictions was biased towards what had actually occurred, and they were therefore insufficiently surprised by the events, given their earlier predictions. In a later experiment, participants read descriptions of historical events, judged the likelihoods of various possible outcomes, and were then told what had actually happened. When they were invited to estimate the likelihoods of the possible outcomes once again in the light of this additional information—with the benefit of hindsight—they tended to assign higher likelihoods to outcomes they were told had occurred, and they justified this to themselves by perceiving information supporting this outcome as more relevant than other information that they had been given. See also [OVERCONFIDENCE EFFECT](#).

hippocampal commissure *n.* A thin triangular band of transverse nerve fibres connecting the two cerebral hemispheres at the level of the hippocampus. See also [COMMISSURE](#).

hippocampal formation *n.* ***Ammon's horn** (the hippocampus proper) and its associated structures, namely the ***subiculum** and the ***dentate gyrus**.

hippocampus *n.* A phylogenetically primitive structure in the ***limbic**
*****ebook converter DEMO Watermarks*****

system of the brain, folded into the inner surface of each temporal lobe between the thalamus and the main part of the cerebral cortex, having a cross-section shaped like a sea horse, involved in emotion, motivation, navigation by ***cognitive maps**, learning, and the ***consolidation** of long-term memory (only ***declarative memory** and not ***procedural memory**). The entire hippocampal formation consists of ***Ammon's horn** (the hippocampus proper) together with the ***subiculum** and the ***dentate gyrus**. *See also* ARCHAEOCORTEX, ENTORHINAL CORTEX, FIMBRIA, HIPPOCAMPAL COMMISSURE, KINDLING, LONG-TERM POTENTIATION, PAPEZ CIRCUIT, PARAHIPPOCAMPAL GYRUS, THETA WAVE, UNCUS. **hippocampi** *pl.* [From Greek *hippokampos* a fabulous sea horse, from *hippos* a horse + *kampos* a sea monster]

hiragana *See* KANA.

Hiskey–Nebraska Test of Learning Aptitude *n.* A non-linguistic ***intelligence** test for deaf children, constructed by the US psychologist Marshall S. Hiskey (1908–98).

histamine *n.* A ***base (1)** that is present in all body tissues and is released by ***mast cells** during allergic reactions and when the skin is injured or burnt, causing blood vessels to dilate and smooth muscles outside blood vessels to contract, resulting in the accumulation of tissue fluid and the weal response; it is also a ***biogenic amine** belonging to the class of imidazoleamines and functioning as a ***neurotransmitter** in certain areas of the brain. *See also* ANTIHISTAMINE, AXON REFLEX. [From Greek *histos* tissue + English *amine*, from *am(monium)* + Greek *-ine* indicating an organic compound]

histocompatibility antigen *n.* Any of a number of genetically determined and highly variable proteins, including the major histocompatibility antigens, that are displayed on the surface of almost every body cell, defining tissue type, and are involved in antigen recognition. [From Greek *histos* tissue + Latin *compatibilis* agreeable]

histogram *n.* In descriptive statistics, a graph in which the values of scores of a quantitative variable are plotted, usually on the horizontal axis, and their ***frequencies** are represented by the heights of the bars on the vertical axis. Also called a *block diagram*. *See also* ERROR BAR. *Compare* BAR

*****ebook converter DEMO Watermarks*****

CHART. [Perhaps from *history* + Greek *gramme* a line]

histrionic personality disorder *n.* A ***personality disorder** in ***DSM-5** characterized by a pervasive pattern of excessive emotionality and attention-seeking behaviour, beginning by early adulthood and indicated by such signs and symptoms as discomfort when not being the centre of attention, inappropriate sexually seductive interactions with others, labile and shallow emotional expression, consistent use of physical appearance to attract attention, impressionistic speech style with insufficient detail, self-dramatization and theatricality, suggestibility, and a tendency to consider relationships to be more intimate than they really are. **HPD** *abbrev.* [From Latin *histrionicus* like an actor, from *histrion* an actor]

hit *n.* An impact or blow; a musical, theatrical, or literary creation that gains great popularity; or a shot that reaches its target. In ***signal detection theory**, a correct detection of a signal when it is present. *See also* **MEMORY OPERATING CHARACTERISTIC**, **RECEIVER OPERATING CHARACTERISTIC**. *Compare* **CORRECT REJECTION**, **FALSE ALARM (2)**, **MISS**.

HIV *abbrev.* Human immunodeficiency virus, a ***retrovirus** that is transmitted through sexual contact, infected blood or blood products, and from mother to child via the placenta, and that breaks down the human body's immune system, sometimes producing symptoms of ***dementia**, and often leading to ***AIDS**. **HIV positive** *adj.* Infected by HIV according to the positive result of a blood test.

HIV dementia *n.* Human immunodeficiency virus dementia resulting from infection with ***HIV**, a rapidly progressive ***dementia** experienced by almost one-third of people with ***AIDS**, characterized by cognitive deficits such as ***amnesia** and motor abnormalities such as ***tremor** and ***ataxia**. Also called *AIDS dementia complex* (**ADC**).

hoarding disorder *n.* A mental disorder introduced in ***DSM-5** characterized by persistent difficulty in discarding or parting with possessions regardless of their intrinsic value, and distress when forced to discard them, causing significant impairment in social, occupational, or everyday functioning. People with this condition generally accumulate objects that

*****ebook converter DEMO Watermarks*****

clutter their living space until it can no longer be used comfortably. According to DSM-5, the **prevalence* in the US and Europe is between 2 per cent and 6 per cent. *Compare* *OBSESSIVE—COMPULSIVE DISORDER*. [From Old English *hord* to collect or store]

hoarding orientation *n.* In **neo-Freudian* theory, a term used by the German-born US psychoanalyst Erich Fromm (1900–80) to denote a character type in which security is obtained by holding on to possessions, spending is felt to be threatening and anxiety-arousing, and miserliness extends to feelings as well as material things. *Compare* *EXPLOITATIVE ORIENTATION*, *MARKETING ORIENTATION*, *PRODUCTIVE ORIENTATION*, *RECEPTIVE ORIENTATION*.

hodological space *n.* In the **topological psychology* of the German–US psychologist Kurt Lewin (1890–1947), a special form of topological geometry in which paths and vectors are defined psychologically, the distance between one hodological region and another being not the shortest path but the path of least effort given the attractive and repulsive valences of the regions making up the space. *See also* *PRINCIPLE OF LEAST EFFORT*. [From Greek *hodos* a way + *logos* word, discourse, or reason + Latin *-al* from *-alis* of or relating to]

Höfdding step *n.* According to a theory in **Gestalt psychology*, a mental step in which one **memory trace* makes contact with another, such a step being required for the association of ideas to occur, as when the perception of bread elicits the associated idea of butter, a memory trace of bread having first to be activated and to make contact with a memory trace of butter before the association can occur. [Named after the Danish philosopher and psychologist Harald Höfdding (1843–1931) who suggested it]

hog *n.* A common street name for the depressant drug **phencyclidine*.

holandric *adj.* Transmitted only from fathers to sons by genes carried on the **Y chromosome* that do not have counterparts on the **X chromosome*. *See also* *SEX-LINKED*, *Y-LINKED*. *Compare* *HOLOGYNIC*. [From Greek *holos* whole + *andros* a man + *-ikos* of, relating to, or resembling]

hold-out sample *n.* In statistics, a **sample* of observations withheld from estimation when multiple regression, discriminant function analysis, or any other type of analysis designed to yield a predictive model is being developed, so that the model's ability to predict future scores can be estimated by its ability to predict the data of the hold-out sample.

hole-in-the-hand illusion *n.* A visual illusion produced by holding a tube to the right eye, placing the edge of the left hand against the far end of the tube, and looking at a distant object or surface with both eyes open, whereupon the left hand appears to have a circular hole through it. A cardboard tube from the middle of a roll of kitchen towel or foil is ideal for this demonstration. The illusion, which results from **binocular rivalry*, was first described in print in 1871 in the *Philosophical Magazine* by the US physician and geologist Joseph LeConte (1823–1901).

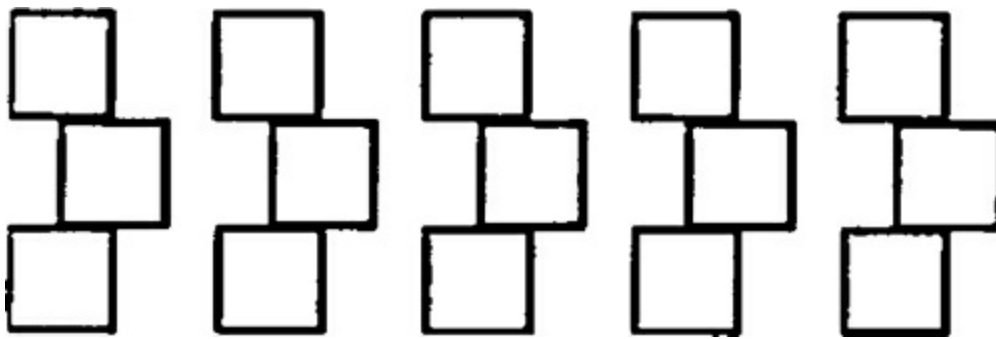
Holland codes *n.* A classification of **personality* types associated with careers and vocational choices devised by the US psychologist John L(ewis) Holland (1919–2008) and first published in articles in the *Journal of Applied Psychology* in 1958 and the *Journal of Counseling Psychology* in 1959. According to this theory, there are six basic types: Doers (Realistic), Thinkers (Investigative), Creators (Artistic), Helpers (Social), Persuaders (Enterprising), and Organizers (Conventional). Later versions of the **Strong–Campbell Interest Inventory* are based on this typology. Holland's own test to measure these types, first published in 1970, is called the *Self-Directed Search* (SDS).

hollow-face illusion *n.* A concave mask or mould of a human face that looks like a normal convex face when viewed from a distance of about 150 centimetres or more and seems to turn to follow the viewer's movements. The illusion arises from a **top-down processing* assumption made by the visual system that objects are likely to be globally convex. The illusion is weaker for inverted faces and for other objects such as potatoes, disappearing in both cases at about 350 centimetres distance, when **bottom-up processing* based on **stereopsis* overcomes the top-down global convexity assumption. Illumination from below enhances the illusion by duplicating the shadows that would be cast on a normal convex face lit from above (see *CHIAROSCURO*), but the effect is seen even without special lighting, suggesting that the global

*****ebook converter DEMO Watermarks*****

convexity assumption is stronger than the assumption of lighting from above. A dramatic demonstration can be constructed from a mask obtained from a novelty store, by painting the hollow inside roughly to match the colours on the outside and attaching a length of stiff wire or other material so that the mask can be rotated. The illusion was first reported in 1916 by the US lighting engineer and psychologist Matthew Luckiesh (1883–1967) in his book *Light and Shade and Their Applications*, where he commented that ‘the mould actually appeared to be a relief lighted from below’ (p. 120) and that ‘the [hollow face] was not suspected of being a mould and not a relief because the relief is by far the most common in objects of this character’ (p. 122). Compare [ROTATING HEAD ILLUSION](#).

hollow squares illusion *n.* A visual illusion in which columns of staggered hollow squares appear to be misaligned on the horizontal axis (see [illustration](#)). It is essentially a variant of the [*Münsterberg illusion](#) without alternating colours. Also called the *Taylor-Woodhouse illusion*. [First published in 1980 by the English optometrists Stephen P(hilip) Taylor (born 1951) and J(oy) Margaret Woodhouse (born 1948)]



Hollow squares illusion. The figure is composed of identical perfect squares.

Holmgren test *n.* One of the first scientific tests of colour vision, still in use, involving the selection of coloured woollen skeins to match three standard skeins. Compare [ISHIHARA TEST](#), [STILLING TEST](#). [Named after the Swedish physiologist Alarik Frithiof Holmgren (1831–97) who introduced it in 1879 following a railway disaster at Lagerlunda, Sweden, that was believed to have resulted from the driver’s colour-blindness]

holocrine *adj.* Of or relating to a gland, such as the sebaceous gland,

*****ebook converter DEMO Watermarks*****

whose secretions contain the whole of the secreting cell. Compare [APOCRINE](#), [MEROCRINE](#). [From Greek *holos* whole + *krinein* to separate]

hologynic *adj.* Transmitted only from mothers to daughters by recessive genes carried on the [*X chromosome](#) that do not have counterparts on the [*Y chromosome](#). See also [SEX-LINKED](#), [X-LINKED](#). Compare [HOLANDRIC](#). [From Greek *holos* whole + *gyne* a woman + *-ikos* of, relating to, or resembling]

holophrase *n.* A grammatically unstructured speech segment, usually a single word, characteristic of the earliest stage of language acquisition in children, such as *mama* or *allgone*, according to some authorities analysable as one-word sentences (as in *mama* = *There is mama* or *allgone* = *It is all gone*) and sometimes found in the language of adults in utterances such as *thanks* and *sorry*. Compare [PIVOT GRAMMAR](#), [TELEGRAPHIC SPEECH](#). **holophrastic** *adj.* [From Greek *holos* whole + *phrazein* to express]

Holtzman Inkblot Technique *n.* A [*projective test](#), designed to overcome the psychometric weaknesses of the [*Rorschach test](#), introduced by the US psychologist Wayne H(arold) Holtzman (born 1923) and several colleagues in 1961, comprising two parallel sets of 45 ink blots and an elaborate scoring procedure. **HIT** *abbrev.*

homeopathy *n.* An unconventional or alternative form of drug therapy for physical and mental disorders devised by the German physician Christian Samuel Hahnemann (1755–1843), based on the dictum of the Greek father of medicine Hippocrates (?460–?377 BC) that ‘like cures like’ (*similia similibus curantur*), in which a drug that produces a particular pattern of symptoms in a healthy person is used in an extremely dilute form to treat disorders characterized by similar symptoms. Successive dilutions of the drug produce a solution containing virtually no molecules of the original active substance but are believed to have therapeutic properties none the less. Also spelt *homoeopathy*. See also [HORMESIS](#). Compare [ALLOPATHY](#). **homeopath** or **homoeopath** *n.* One who practises homeopathy. **homeopathic** or **homoeopathic** *adj.* [From Greek *homoio-* similar to, from *homos* the same + *pathos* suffering]

homeostasis *n.* The maintenance of equilibrium in any physiological,
*****ebook converter DEMO Watermarks*****

psychological, or social process by an automatic ***feedback** mechanism compensating for disrupting changes. The word was coined by the US physiologist Walter Bradford Cannon (1871–1945) and became popular after the publication in 1932 of his book *The Wisdom of the Body*, in which the process is described in relation to the automatic maintenance of body temperature and components of blood, including water, salt, sugar, proteins, fat, calcium, oxygen, hydrogen ions—the list could be extended in the light of subsequent discoveries. *See also* **APPESTAT**, **CLOSED-LOOP CONTROL**, **CYBERNETICS**, **FEEDBACK**, **PRINCIPLE OF CONSTANCY**, **THERMOREGULATION**, **SET POINT**. **homeostatic** *adj.* [From Greek *homos* same + *stasis* a standing]

homeothermic *See* **HOMOIOTHERMIC**.

hominid *n.* Any member of the ***family** (2) Hominidae, including modern humans and their extinct ancestors such as ***australopithecines**. **hominid** *adj.* Belonging to the family Hominidae. [From Latin *homo* man + *-ida* indicating offspring]

hominoid *n.* 1. Any member of the superfamily Hominoidea, including both ***hominids** and ***anthropoid** (1) apes. *adj.* 2. Belonging to the superfamily Hominoidea; apelike. [From Latin *homo* man + Greek *-oeides* denoting resemblance of form, from *eidos* shape]

Homo *n.* A ***genus** of ***hominids** that includes the ***species** *Homo sapiens* (modern man) and various extinct forerunners such as *H. erectus* (increasingly called *H. ergaster*), *H. habilis*, *H. neanderthalensis* (Neanderthal man), and *H. heidelbergensis*, the last of these being a probable ancestor of both *H. neanderthalensis* and *H. sapiens*, the human species that evolved in Africa about 150,000 years ago. *See also* **MITOCHONDRIAL DNA**. [From Latin *homo* a man]

homoeopathy *See* **HOMEOPATHY**.

homogeneity of variance *n.* Another name for ***homoscedasticity**.

homogeneous subset *n.* In statistics, after calculating a ***multiple**

comparison, a set of groups that have means which are not significantly different from one another.

homographs *n.* Words that are spelt the same but have different meanings, such as *content* (what is inside) and *content* (satisfied) or *wind* (air) and *wind* (twist). Homographs are one of the two major classes of ***homonyms**. Compare **HETERONYMS**, **HOMOPHONES**. [From Greek *homos* same + *graphein* to write]

homoiothermic *adj.* Warm-blooded, or having a body temperature that remains constant with changes in ambient temperature. Also called *homeothermal*, *homeothermic*, *homothermal*, or *homothermous*. Compare **POIKILOTHERMIC**. See also **THERMOREGULATION**. **homoiothermy** or **homoiothermism** *n.* [From Greek *homos* the same + *therme* heat + *-ikos* of, relating to, or resembling]

homologous *adj.* Having a related, similar, or corresponding position, structure, or origin. [From Greek *homologos* agreeing, from *homos* the same + *legein* to speak]

homologous chromosomes *n.* Any pair of ***chromosomes**, one from the father and one from the mother, that are similar in appearance and pair with each other during ***meiosis (1)**, one member of each pair being carried by every ***gamete**.

homologue *n.* Anything that is ***homologous** to something else. Also spelt *homolog*.

homonymous hemianopia *n.* Blindness in the left or right ***visual field** affecting both eyes, caused by unilateral damage to the visual cortex or the nerve fibres with projections there, often resulting from a massive ***stroke** in one side of the brain. A person with this condition may be unaware of being totally blind in half the visual field, because the blindness is not like a conspicuous black curtain draped over half a television screen, as many people assume, but is simply a portion of the immediate environment that is not visible, as is the area behind the head of a person with normal vision; but a person with left homonymous hemianopia who gazes fixedly at the dot in
*****ebook converter DEMO Watermarks*****

the printed sequence *L.R* will see the *R* but not the *L*, and a person with right homonymous hemianopia will see the *L* but not the *R*. To test for these forms of ***hemifield** blindness, the person is usually asked to close one eye and fixate on a point directly ahead with the other eye while a conspicuous object is waved in the area to the left and right of the fixation point, and then the procedure is repeated with the other eye. Another method is the ***line bisection test**. Also called *homonymous hemianopsia*, *homonymous hemiopia*, *homonymous hemiamblyopia*, or *spatial neglect*. See also **DIVIDED VISUAL FIELD**. Compare **HEMIANOPIA**. [From Greek *homos* same + *onoma* a name + *hemi-* half + *a-* without + *opsis* sight, from *ops* an eye + *-ia* indicating a condition or quality]

homonyms *n.* Words that are spelt the same way but have different meanings, such as *bear* (animal) and *bear* (carry), also called ***homographs**, or that have the same pronunciation but different spelling or meaning, such as *rest* (relaxation) and *wrest* (take by force), also called ***homophones**. See also **POLYSEMY**. Compare **HETERONYMS**, **HOMOGRAPHS**. [From Greek *homos* same + *onoma* a name]

homonym symptom *n.* A pattern of speech, associated with ***thought disorder** in general and ***loosening of associations** in particular, in which the speaker hops from one topic to another via ***homonyms**, as in: *The pain is hard to bear, doctor, a koala bear came to the zoo from China cups and saucers for the goose is sauce for the gander.*

homophones *n.* Words that have the same pronunciation but different spelling or meaning or both, such as *write* and *right*, *threw* and *through*, or *rest* (relaxation) and *rest* (remainder). Homophones are one of the two major classes of ***homonyms**. Compare **HETEROGRAPHS**, **HOMOGRAPHS**, **HOMONYMS**. [From Greek *homos* same + *phone* sound]

homoscedasticity *n.* In statistics, the degree of similarity in the ***variances** of two or more variables. Many distribution-dependent statistical tests, such as ***analysis** of variance and the ***t test**, assume homoscedasticity. Compare **HETEROSCEDASTICITY**. **homoscedastic** *adj.* [From Greek *homos* same + *skedasis* a scattering or dispersion]

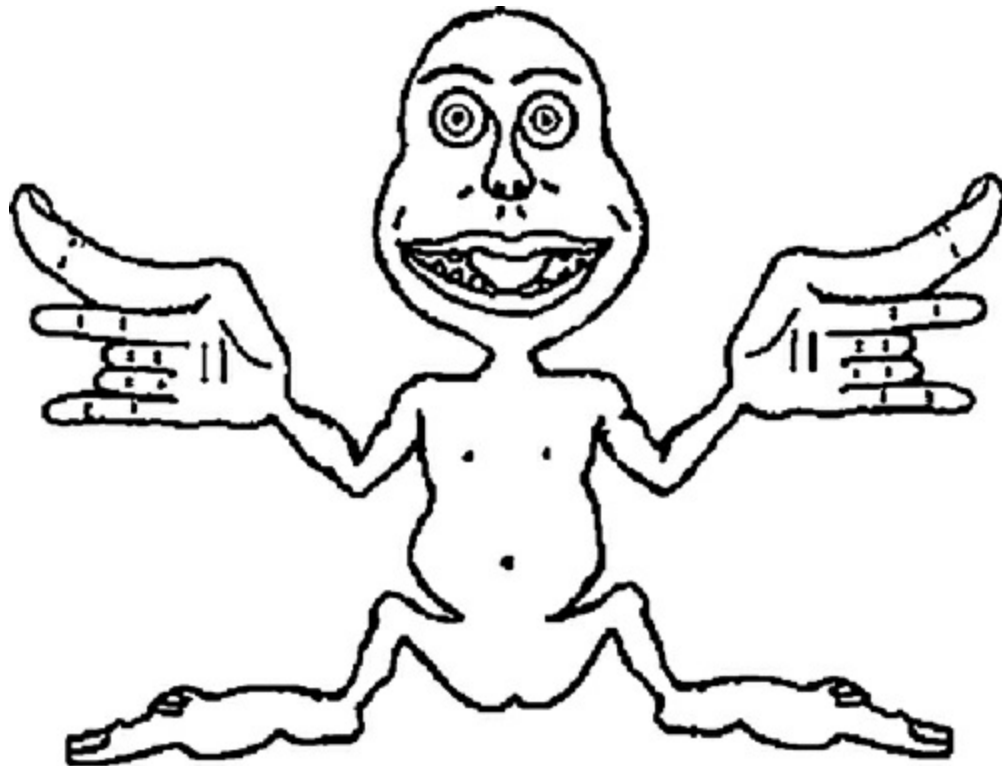
homosexual *n.* **1.** A person who is sexually attracted to members of the same sex. *Compare* [BISEXUAL \(1\)](#), [HETEROSEXUAL \(1\)](#). *adj.* **2.** Of or relating to homosexuals or homosexuality. *Compare* [BISEXUAL \(2\)](#), [HETEROSEXUAL \(2\)](#). **homosexuality** *n.* Attraction to or sexual activity with members of one's own sex. *See also* [DIGIT RATIO](#), [EGO-DYSTONIC SEXUAL ORIENTATION](#), [LATENT HOMOSEXUALITY](#), [LESBIAN](#), [NARCISSISM](#). [From Greek *homos* the same + Latin *sexus* sex]

homothermic *See* [HOMOIOTHERMIC](#).

homozygote *n.* An organism that is **homozygous* for a specified factor, thus having **gametes* of only one kind for that factor and consequently breeding true to type. *Compare* [HETEROZYGOTE](#).

homozygous *adj.* Having identical **alleles* of a specified gene at the same chromosomal **locus*, as in an individual who inherits the same gene for blue eye colour from both parents and is therefore blue-eyed, although the gene is **recessive*. *Compare* [HETEROZYGOUS](#). **homozygosis** or **homozygosity** *n.* The condition of having inherited identical **alleles* of a specified gene from both parents; the state or condition of being homozygous. [From Greek *homos* the same + *zygon* a yoke + *-ous* having or characterized by]

homunculus *n.* A tiny man, especially the completed homunculus depicting the surface of the human body, with each part drawn in proportion to its representation in the **somatosensory cortex* (see [illustration](#)), or the **somatosensory homunculus* often used to depict the layout of the **sensory* projection areas of the somatosensory cortex. The term was formerly used to denote the minute but fully formed human form that was believed by the **preformationists* to be present in every spermatozoon or ovum. [From Latin *homunculus* a little man, diminutive of *homo* a man]



Homunculus. The distorted body parts indicate the relative sizes of their sensory projection areas in the somatosensory cortex; adapted from Penfield and Rasmussen's *The Cerebral Cortex of Man* (1950).

honestly significant difference test See [TUKEY-HSD TEST](#).

honey-bee dance See [ROUND DANCE](#), [WAGGLE DANCE](#).

Honi phenomenon *n.* An effect of viewing a very familiar person in the [*Ames room](#), the illusory distortion usually created by the abnormal perspectives of the room being partly or wholly suppressed. [Named after the family nickname of a woman who first experienced and reported the phenomenon when she observed both a stranger and her husband in the Ames room in 1949 and saw a size distortion in the stranger but not in her husband]

hook order *n.* A [*dominance hierarchy](#) in a herd of cattle in which each animal is able to gore only those lower in the hierarchy without retaliation and is liable to be gored only by those above. Compare [PECKING ORDER](#). [From *hook* to catch or gore with the horns]

*****ebook converter DEMO Watermarks*****

Hopfield rule See [HEBBIAN RULE](#).

horizon *n.* The circle at which the Earth and sky appear to meet and on which the [*vanishing point](#) is usually located, also called the *apparent horizon* or the *visible horizon*; a plane forming a tangent to the Earth at the position of an observer, also called a *sensible horizon*; a plane through the centre of the Earth parallel to the apparent horizon, also called the *celestial horizon* or *rational horizon*; figuratively, the limit or scope of a person's perception, knowledge, interest, experience, or expectation. **horizontal** *adj.* [From Greek *horizon* (*kyklos*) limiting (circle), from *horizein* to limit, from *horos* a limit]

horizontal cell *n.* A type of cell in the [*retina](#) that lacks an [*axon](#), lying perpendicular to the sensory pathway and linking [*photoreceptors](#) and [*bipolar cells](#), one of its important functions being to inhibit neurons outside the immediate zone of excitation. Compare [AMACRINE CELL](#).

horizontal décalage See [DÉCALAGE](#).

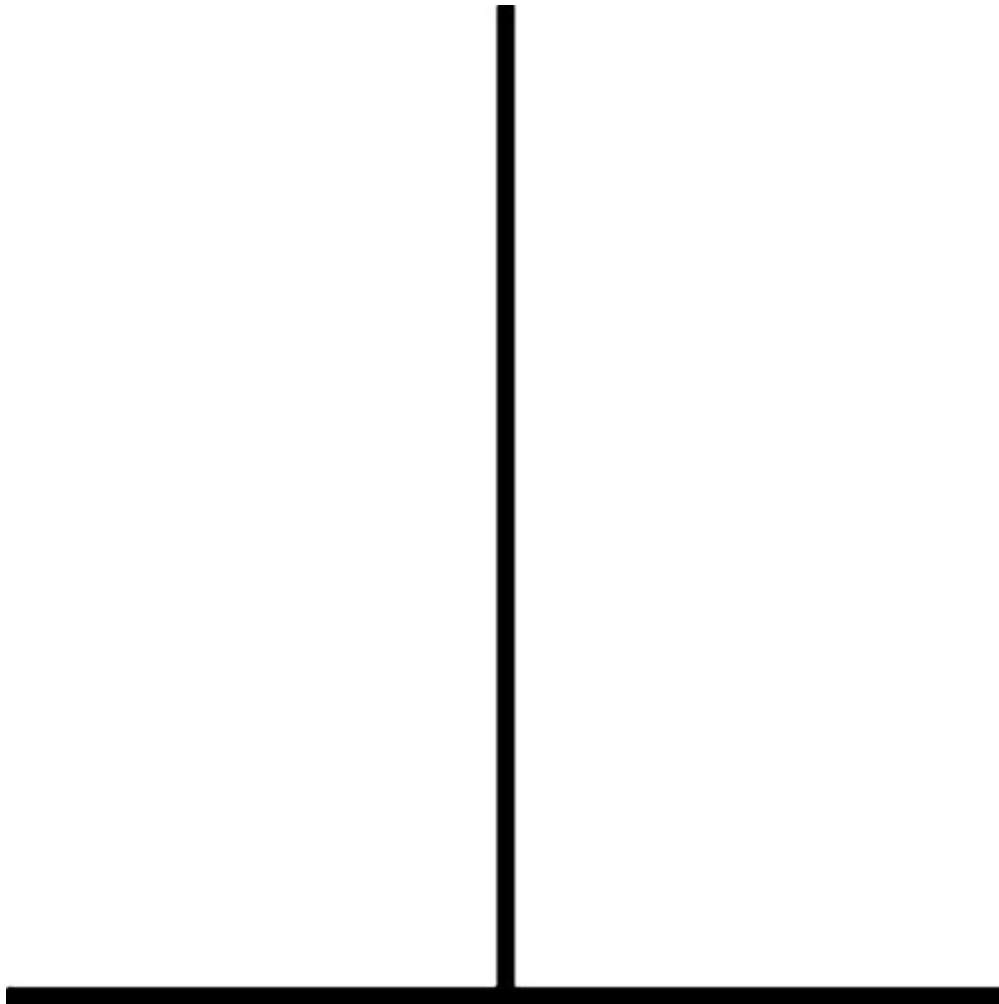
horizontal icicle plot *n.* In statistics, a graphical representation of successive steps of a [*cluster analysis](#) in which the individuals or cases are represented in the display by the rows, and the steps of the analysis by the columns, with individuals or cases in the same cluster being joined by a vertical line. A horizontal icicle plot is especially useful when there are many individuals or cases so that a [*vertical icicle plot](#) cannot fit across a single page. Compare [VERTICAL ICICLE PLOT](#).

horizontal plane *n.* A plane parallel to the horizon dividing the brain or any other organ or organism into top and bottom parts. (see illustration at [*coronal plane](#)). Also called *transverse plane*. Compare [CORONAL PLANE](#), [SAGITTAL PLANE](#).

horizontal section *n.* A cutting through a [*horizontal plane](#). Compare [CORONAL SECTION](#), [SAGITTAL SECTION](#), [TRANSVERSE SECTION](#).

horizontal-vertical illusion *n.* A visual illusion that causes a vertical

distance to appear greater than an equal horizontal distance, usually illustrated with an inverted T whose horizontal and vertical lines are of equal length (see [illustration](#)), first reported in 1858 by the German psychologist Wilhelm (Max) Wundt (1832–1920). *See also* [TEACUP ILLUSION](#), [TOP HAT ILLUSION](#).



Horizontal–vertical illusion. The horizontal and vertical lines are the same length.

horme *n.* In [*analytical psychology](#), a word introduced by Carl Gustav Jung (1875–1961) to denote vital or purposeful energy. Also spelt *hormé*. [From Greek *horme* animal impulse]

hormesis *n.* A phenomenon in which a [*dose–response curve](#) shows low-dose stimulation and high-dose inhibition, as in a [*drug](#) that has beneficial

*****ebook converter DEMO Watermarks*****

effects at a low dose and toxic or harmful effects at a higher dose, relative to criteria such as health, stress tolerance, growth, or longevity. An example is **alcohol*, beneficial at low dosages in preventing heart disease and stroke, but toxic at higher dosages. The phenomenon has controversially been used to lend credibility to **homeopathy*. The term was introduced by the Master's degree student of forestry Chester M. Southam (1919–2002) and his supervisor John Ehrlich (1907–92) in an article in the journal *Phytopathology* in 1943. **hormetic** *adj.* [From Greek *horme* animal impulse + *-sis* indicating action]

hormonagogue *n.* A substance that stimulates the secretion of a hormone, a typical example being nicotine, which stimulates the secretion of vasopressin. [From *hormone* + Greek *agogos* leading, from *agein* to lead]

hormone *n.* Any of a large number of chemical substances secreted into the bloodstream by an **endocrine gland* and transported to another part of the body where it binds to a specific type of receptor and exerts a particular effect, enabling the endocrine system to function as a communication system between cells alongside and independently of the nervous system. Most hormones are either **peptide hormones* or **steroid hormones*, and among the most important are the **androgens*, **corticosteroid hormones*, **gonadotrophins*, **masculinizing hormones*, **neurohormones*, **neuropeptides*, **releasing hormones*, **sex hormones*, and **trophic hormones*. *See also* ADRENALIN, ADRENOCORTICOTROPHIC HORMONE, ALDOSTERONE, ANABOLIC STEROID, ANDROSTERONE, ANGIOTENSIN II, CALCITONIN, CHOLECYSTOKININ, CORTICOSTERONE, CORTICOTROPHIN-RELEASING HORMONE, CORTISOL, CORTISONE, DEXAMETHASONE, DOPAMINE, ENKEPHALIN, FOLLICLE-STIMULATING HORMONE, GLUCAGON, GONADOTROPHIN-RELEASING HORMONE, GROWTH HORMONE, GROWTH HORMONE RELEASING HORMONE, INSULIN, LEPTIN, LUTEINIZING HORMONE, LUTEINIZING HORMONE RELEASING HORMONE, MELANOCYTE-STIMULATING HORMONE, MELATONIN, MÜLLERIAN INHIBITING SUBSTANCE, NORADRENALIN, OESTRADIOL, OESTROGEN, OESTRONE, OXYTOCIN, PARATHYROID HORMONE, PROGESTERONE, PROLACTIN, RELAXIN, RENIN, TESTOSTERONE, THYROID-STIMULATING HORMONE, THYROTROPHIN-RELEASING HORMONE, THYROXINE, VASOPRESSIN. [Coined in 1904 by the British physiologist Ernest Henry Starling (1866–1927) from Greek *horman* to stir up or urge on]

Horner's law *n.* The proposition that the most common forms of **colour-blindness* are transmitted from males to males through female carriers. *See also* DALTONISM, X-LINKED. [Named after the Swiss ophthalmologist Johann Friedrich Horner (1831–86) who formulated it]

Horner's syndrome *n.* A **neurological* condition caused by damage to or malfunction of the **sympathetic nervous system*, often associated with a spinal cord injury, characterized by **ptosis* of one eyelid, constriction of the corresponding pupil, and inability to sweat on that side of the face. [Named after the Swiss ophthalmologist Johann Friedrich Horner (1831–86) who first described it]

horologagnosia *See* AGNOSIA.

horopter *n.* The curved surface of points in space that, for a given degree of **ocular convergence*, are projected on to **corresponding retinal points*, all points on the horopter being perceived as the same distance away as the point being fixated. Points close to the horopter within **Panum's fusion area* give rise to **binocular disparity* and produce sensations of three-dimensional depth, and points far from the horopter outside Panum's fusion area fail to result in **binocular fusion* and produce double images or **diplopia*. *See also* CORRESPONDENCE PROBLEM, STEREOPSIS. [From Greek *horos* boundary + *optos* seen, from *ops* an eye]

horse *n.* A street name for **heroin*.

hospice *n.* A nursing home for the care of people who are terminally ill. [From Latin *hospes* a guest]

hospital hopper syndrome *n.* A colloquial name for **factitious disorder*.

hospitalism *n.* A term introduced in 1945 by the Austrian psychoanalyst René A(rpad) Spitz (1887–1974) to denote the physical and psychological effects on an infant (up to 18 months old) of prolonged and total separation from its mother, due to hospitalization or some other similar cause.

According to Spitz, the characteristics include retarded physical development and disruption of perceptual–motor skills and language. *See also* [ANACLETIC DEPRESSION](#), [ATTACHMENT THEORY](#), [MATERNAL DEPRIVATION](#), [SEPARATION ANXIETY](#), [SEPARATION ANXIETY DISORDER](#).

hot sauce task *n.* A frequently used laboratory measure of [*aggression](#) in response to provocation, developed by the US psychologist Joel D. Leiberma (born 1967) and three colleagues and published in the journal *Aggressive Behavior* in 1999. The task is disguised as a food-tasting study. After tasting and rating a sample of food, participants are asked to prepare a food sample for a fictitious participant who has previously provoked them. The amount of hot sauce that the participant chooses to add to this person's food is taken as an indicator of aggression in response to provocation. *Compare* [POINT SUBTRACTION](#) [AGGRESSION PARADIGM](#), [TAYLOR AGGRESSION PARADIGM](#). **HST** *abbrev.*

hot spot *n.* In genetics, a region of a chromosome or a gene that has a propensity for [*recombination](#) or [*mutation](#). Also written *hotspot*.

HOUND *abbrev.* Humble, old, unattractive, non-verbal, and dumb, the syndrome of personal qualities that counsellors, therapists, and people in general supposedly find most unappealing in their clients or associates. *Compare* [YAVIS](#).

House–Tree–Person technique *n.* A [*projective test](#) developed by the US psychologist John N. Buck (1906–83) and first published in the journal *Clinical Psychology Monographs* in 1948 in which the respondent is asked to make freehand drawings of a house, a tree, and a person, first in pencil, then in crayon, and is then asked 20 questions about each drawing. Interpretations of the drawings are based on the assumptions that the drawing of the house reveals aspects of the respondent's home life and family relationships, the tree reflects unconscious feelings about the self, and the person shows aspects of the self, interpreted similarly to the [*Draw-a-Person test](#). The test gained a certain notoriety during the 1990s when it was recommended as a device for discovering evidence of sexual abuse in children but was criticized for lack of [*validity](#). **H–T–P** *abbrev.*

HPA axis *abbrev.* The hypothalamic–pituitary–adrenal axis, a self-regulating system, based on negative **feedback*, in which **hormones* are released from the **hypothalamus*, stimulating the release of a different class of hormones from the **pituitary gland*, which in turn stimulate secretions of a third class of hormones from the **adrenal glands* and the **testes*, or **ovaries*, the whole cycle playing an important role in the regulation of hunger, thirst, sleep, mood, sexual activity, learning, and memory.

hue *n.* The dimension of a **colour* that is determined by the wavelength of the light in relation to the wavelengths reflected from objects or surfaces in other parts of the visual field and that gives rise to a qualitative sensation such as red or blue, the other major dimensions of colour being **saturation* (1) and **lightness*. The *Munsell hue scale* contains five principal hues (red, yellow, green, blue, purple) and five intermediate hues (yellow–red, green–yellow, blue–green, purple–blue, red–purple). *See also* CHROMA, CHROMATIC (1), CHROMATICITY, MUNSELL COLOUR SYSTEM, NON-SPECTRAL COLOUR. [From Old English *hīw* beauty, cognate with Old Norse *hý* fine hair]

hug drug *n.* A street name sometimes used for **ecstasy* (2), because of the feelings of empathy and benevolence that it induces.

Hullian learning theory *n.* An elaborate theory of **learning* (1) formulated in 1940 by the US psychologist Clark L. Hull (1884–1952), published in his book *Principles of Behavior* (1943), and presented in a modified form in *A Behavior System* (1952). In the final version, the **independent variables* are stimulus energy (*S*), work involved in response (*W*), number of reinforcements (*N*), and difference between the current stimulus and the stimulus used in training (*d*); the **dependent variables* are **reaction latency* (s_{tR}), **response amplitude* (*A*), and number of unreinforced responses required to produce extinction (*n*); and the theory also has scores of **intervening variables*. The gist of the theory is as follows: learning is represented by **habit strength* (sH_R), the *S* and the *R* nestling on either side of the *H* to symbolize the role of a habit in linking stimuli to responses, and sH_R is a logarithmic function of *n*. **Generalized habit strength* (sH_R) is determined jointly by sH_R and *d*. **Generalized reaction potential* (sE_R) is a multiplicative function of sH_R and three other intervening variables: $sE_R =$

*****ebook converter DEMO Watermarks*****

${}_SH_R \times D \times K \times V$, where D is **drive strength*, K is **incentive motivation* (determined in turn by W) and V is **stimulus intensity dynamism* (determined in turn by S). **Net reaction potential* is defined as follows: ${}_SE_R = {}_SE_R - {}_SI_R$, where ${}_SI_R$ is aggregate inhibitory potential (determined in turn by d and W acting via various intervening variables). Finally, ${}_SE_R$ interacts with **behavioural oscillation* (${}_SO_R$) and **reaction threshold* (${}_SL_R$) to determine the dependent variables ${}_St_R$, A , and n .

human factors psychology *n.* Another name for **ergonomics*.

human immunodeficiency virus See *HIV*.

human interest score *n.* One of the **Flesch indices* of the readability of text, defined by the formula $HI = (3.635 \times \text{average number of personal words per 100 words}) + (0.314 \times \text{average number of personal sentences per 100 sentences})$, where personal words are pronouns referring to people, words of identifiable masculine or feminine gender (such as *Mary*, *sister*, or *iceman*), and the words *people* and *folks*, and personal sentences are spoken sentences in quotation marks, questions, commands, requests, other sentences addressed directly to the reader, and also exclamations and grammatically incomplete sentences whose meaning has to be inferred from their contexts. A human interest score of zero indicates that the text has no human interest, 30 that it is interesting, 50 that it is very interesting, and 80 that it is dramatic. Although the theoretical upper limit is about 395, in practice human interest scores are almost always below 100. See also *READING EASE SCORE*.

humanistic psychology *n.* An approach to psychology that became popular in the 1960s, influenced by **existentialism* and **phenomenology*, stressing individual free will, responsibility, and **self-actualization*. See also *CLIENT-CENTRED THERAPY*, *NEED-HIERARCHY THEORY*, *NEURO-LINGUISTIC PROGRAMMING*, *PEAK EXPERIENCE*.

human performance *n.* The effectiveness with which tasks or purposeful activities are carried out or accomplished by people in the workplace, sports arena, or elsewhere. Factors affecting human performance are investigated especially in **ergonomics*.

*****ebook converter DEMO Watermarks*****

human relations group See T-GROUP.

Hume's fork *n.* The argument first advanced by the Scottish philosopher David Hume (1711–76) in section IV, part I of his *Inquiry Concerning Human Understanding*, that the only legitimate sources of knowledge or belief are **reason* and **empirical* evidence, an often-quoted synopsis of the argument occurring at the end of the book: 'If we take in our hand any volume; of divinity or school metaphysics, for instance; let us ask, *Does it contain any abstract reasoning concerning quantity or number?* No. *Does it contain any experimental reasoning concerning matter of fact and existence?* No. Commit it then to the flames: for it can contain nothing but sophistry and illusion' (section XII, part III, italics in original). In **logical positivism*, a strong form of Hume's fork was used as a criterion for distinguishing sense from nonsense, the assumption being that any assertion that failed the test was literally nonsensical. See also EMPIRICISM, RATIONALISM (1).

Hume's problem *n.* The problem of **induction* (1).

humour *n.* **1.** Anything that is funny, witty, or amusing, or that has the capacity to make people laugh. Most forms of humour can be classified into the following categories: slapstick, misunderstanding/farce, innuendo, pun/wordplay, mimicry/parody/satire, irony/sarcasm, exaggeration, analogy/comic metaphor, inappropriate response, comic repetition, reversal of reality, black humour. **2.** A state or disposition of mind or mood, as in the phrases *bad humour* or *good humour*. **3.** According to a doctrine propounded by pre-Socratic philosophy and widely accepted until the Renaissance, any of the four cardinal bodily fluids, the balance of which was believed to determine a person's **temperament* or **personality*: people were thought to be more or less sanguine (optimistic), melancholic (depressive), choleric (short-tempered), or phlegmatic (unemotional) according to the balance in their bodies of blood (*sanguis*), black bile (*melaina chole*), yellow bile (*chole*), and phlegm (*phlegma*). Also called a *cardinal humour*. US *humor*, *cardinal humor*. See also AQUEOUS HUMOUR, COMPLEXION (2), TEMPERAMENT, VITREOUS HUMOUR. Compare YIN AND YANG. [From Latin *umere* to be moist]

Humphrey's law *n.* The proposition that consciously thinking about one's performance of a task that involves **automatic processing* impairs
*****ebook converter DEMO Watermarks*****

one's performance of it. For example, golfers who think too closely about their golf swings may find that they cannot swing properly, and a man who thinks too closely about how he knots a bow tie may find that he cannot do it. *See also* [CENTIPEDE EFFECT](#), [HYPER-REFLECTION](#). [Named after the English psychologist George Humphrey (1889–1966) who propounded it in 1951]

hunger *n.* 1. Appetite, craving, desire, or need for food; figuratively, a strong desire for anything else. *vb.* 2. To have a hunger for something. *See also* [2-DEOXYGLUCOSE](#), [GLUCOSTATIC THEORY](#), [HPA AXIS](#), [HYPOTHALAMUS](#), [LIMBIC SYSTEM](#), [LIPOSTATIC THEORY](#), [MEDIAL FOREBRAIN BUNDLE](#), [SPECIFIC HUNGER](#). **hungry** *adj.* [From Old English *hungor* a hunger, *hyngnan* to hunger]

Huntington's disease *n.* A rare hereditary disorder (affecting about 1 in 20,000 people) transmitted by a single [*dominant gene](#) on the tip of [*chromosome 4](#), with damage to the [*basal ganglia](#), characterized by widespread degeneration of the brain, [*dementia](#), and [*chorea](#), with onset after the age of 40 and slow progression leading to death usually within 10–15 years. Also called *Huntington's chorea*. **HD** *abbrev.* [Named after the US neurologist George S. Huntington (1850–1916) who described it in 1872, though it had already been described in 1841 by the US physician Charles Oscar Waters (1816–92) in a letter to the US-based English physiologist Robley Dunglison (1798–1869), who reported it in a book entitled *Practice of Medicine* (volume 2) in 1842]

Hunt–Minnesota test *n.* A psychometric test constructed by the US psychologist Howard Francis Hunt (1918–2001), designed to detect organic brain damage, including a vocabulary test (taken from the [*Stanford–Binet intelligence scale](#)), six memory and recall tests, and nine further tests.

Hurler's syndrome *n.* A hereditary metabolic disorder transmitted by a recessive gene resulting in the absence of an enzyme and leading to severe [*intellectual disability](#), swelling of the liver and spleen, low forehead, enlarged head, often clouding of the corneas of the eyes, and usually death during childhood from heart or lung complications. Also called *gargoylism*. [Named after the German paediatrician Gertrud Hurler (1889–1965) who first described it in 1919]

hwa-byung *n.* A **culture-bound syndrome* of Korea and emigrant Korean communities in other countries, attributed locally to suppression of anger, characterized by **panic attacks*, **dyspnoea*, **thanatophobia*, **insomnia*, **anorexia*, **palpitation*, **fatigue* (1), joint or muscle pains, indigestion, and a sense of fullness in the pit of the stomach. [Korean *hwa-byung* anger syndrome]

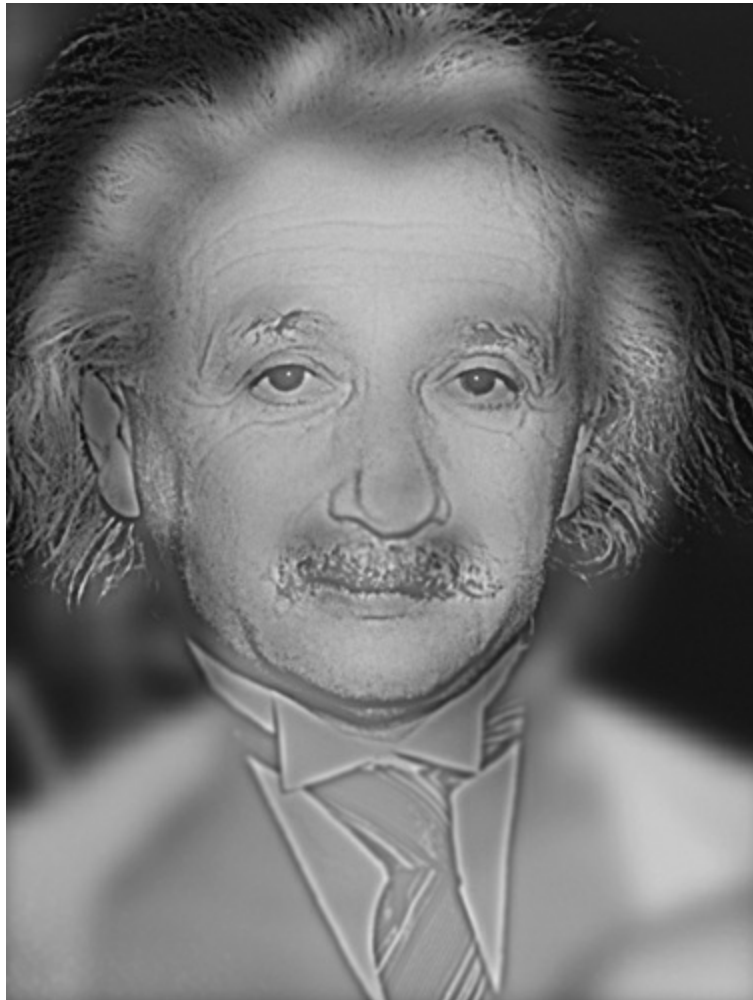
hyalophagia *n.* Eating glass. *See also* *PICA*. [From Greek *hyalos* glass + *phagein* to consume + *-ia* indicating a condition or quality]

hybrid *n.* 1. In genetics, the offspring of a cross between genetically dissimilar forms, such an organism being necessarily sterile if the cross is between different **species*; also, a molecule of **DNA* composed of portions from different organisms. *See also* *DIHYBRID*. 2. Any organism of mixed ancestry. 3. A word formed by combining parts from different languages, as in *bureaucracy*, from French *bureau* a department or office + Greek *kratos* power; or *amoral*, from Greek *a-* not + Latin *moralis* moral. *adj.* 4. Of or relating to an organism of genetically mixed parentage or a word of linguistically mixed origin. [From Latin *hybrida* the offspring of a mixed union, originally a tame sow and a wild boar]

hybrid image *n.* An image that appears to depict different faces, objects, or scenes from different viewing distances (see *illustration*). Such an image is constructed by combining one image represented in low **spatial frequencies* (fine detail) and a different image in high spatial frequencies (broad-brush features). The famously elusive and enigmatic smile in the Mona Lisa painting by the Italian artist and polymath Leonardo da Vinci (1452–1519) was explained in a letter to the journal *Science* in 2000 by the US neurobiologist Margaret S. Livingstone (born 1950) as a hybrid image. When looked at directly, with the sharp resolution of central vision, the high spatial frequency detail in the area of the Mona Lisa's mouth shows no smile, but when observed in peripheral vision or from a distance, the lower frequency **sfumato* outline reveals a distinct smile. *Compare* *AMBIGUOUS FIGURE*, *BLOCK PORTRAIT*, *NAVON FIGURE*. [From *hybrid* of mixed origin, from Latin *hybrida* the offspring of a mixed union, first applied to images and stimuli by the Belgian psychologist Philippe G. Schyns (born 1963) and the French psychologist Aude Oliva (born 1968) in an article in the journal

*****ebook converter DEMO Watermarks*****

Psychological Science in 1994]



Hybrid image. When this image (from Aude Oliva, MIT) is viewed from close up, it looks like Albert Einstein; from farther away, it looks like Marilyn Monroe.

hybridization *n.* A technique of **genetic engineering* for determining the degree of relatedness of two DNA or RNA samples by **annealing (2)* them to form hybrid molecules of **heteroduplex DNA*, the stability of which indicates the degree of relatedness. *See also* [DNA HYBRIDIZATION](#), [RECOMBINANT DNA](#).

hybridize *vb.* To produce a **hybrid (1, 2)* or to interbreed.

hybrid sterility *n.* Inability of an organism to produce offspring owing to

*****ebook converter DEMO Watermarks*****

the fact that it is a ***hybrid (1, 2)**, as in a cross between two different ***species**. Compare **HYBRID VIGOUR**.

hybrid vigour *n.* The increased size, robustness, and health often found in a ***hybrid (1, 2)** compared with its parents. Also called *heterosis*. Compare **HYBRID STERILITY**.

hydraulic theory *n.* Any theory based on liquid in motion or under pressure, either literally as in certain theories of hearing, or figuratively as in the ***economic** aspects of ***psychoanalysis** that are more correctly called the ***principle of constancy** and the ***quota of affect**. [From Greek *hydraulikos* hydraulic, from *hydor* water + *aulos* a pipe + *-ikos* of, relating to, or resembling]

hydrazine *n.* A colourless liquid ***base (1)** made from sodium hydrochlorite and ammonia and used in the manufacture of certain monoamine oxidase inhibitor drugs such as ***isocarboxazid** and ***phenelzine**. [From Greek *hydor* water + *azo* indicating a compound containing the divalent group —N:N— + *-ine* an organic compound]

hydrocephalus *n.* A disorder sometimes caused by a mutant gene on the ***X chromosome**, associated with obstruction of the flow of ***cerebrospinal fluid** and its accumulation in the ***ventricles** of the brain, causing increased intracranial pressure, leading in infants to an enlargement of the head and a wide range of impairments and disorders. Also written *hydrocephaly*, and referred to non-technically as *water on the brain*. See also **AGENESIS OF THE CORPUS CALLOSUM**. Compare **MACROCEPHALY**. **hydrocephalic** *adj.* [From Greek *hydor* water + *kephale* the head]

hydrocortisone *n.* Another name for ***cortisol**. [From Greek *hydor* water + English *cortisone*]

hydrolysis *n.* Chemical decomposition caused by reaction with water, as when a salt is decomposed into an acid and a base, or an ester to an acid and an alcohol. **hydrolyse** or, especially in the US, **hydrolyze** *vb.* [From Greek *hydor* water + *lysis* loosening]

hydromorphone *n.* Hydromorphone hydrochloride, a **narcotic analgesic* drug, used in the management of moderate and severe pain and sometimes taken as a street drug. [From Greek *hydor* water + English *morphine* + Greek *-one* indicating a chemical compound that is a ketone, from *-one* a feminine name suffix]

hyoscine *n.* Another name for **scopolamine*.

hyoscyamine *n.* A poisonous **alkaloid* occurring in **henbane*, **deadly nightshade*, and related plants, with similar pharmacological properties to **atropine*. [From Greek *hyoskyamos*, from *hys* a pig + *kyanion* cyanide, from *kyamos* a bean, alluding to the fact that the plant is poisonous to pigs + English *amine*]

hypacusia *n.* Partial deafness. Also spelt *hypacusia* or *hypoacusia*. Also called *hypacosis*. **hypacusic** *adj.* [From Greek *hypo* under + *akousis* hearing, from *akouein* to hear + *-ia* indicating a condition or quality]

hypoesthesia *n.* Abnormally diminished touch sensitivity. US *hypesthesia*. Also called *hypoesthesia* or *hypoesthesia*. **hypoesthetic** or **hypesthetic** *adj.* [From Greek *hypo* under + *aisthesis* sensation + *-ia* indicating a condition or quality]

hypalgesia *n.* Abnormally diminished sensitivity to pain. **hypalgesic** *adj.* [From Greek *hypo* under + *algesis* sense of pain, from *algos* pain + *-ia* indicating a condition or quality]

hyperactivity *n.* Abnormal or pathological overactivity; a prominent feature of **attention-deficit/hyperactivity disorder* and **hyperkinetic disorders*.

hyperacusis *n.* Abnormally sensitive hearing resulting in uncomfortable sensitivity to sounds, a common symptom of **Bell's palsy* and **Williams syndrome*. Also spelt *hyperacosis*. Also called *hyperacusia* or *hyperacousia*. See also *HEIMDALLR SENSITIVITY*. **hyperacusic** *adj.* [From Greek *hyper* over + *akousis* hearing, from *akouein* to hear + *-ia* indicating a condition or quality]

hyperaesthesia *n.* Increased sensitivity of any of the sense organs, especially touch. US *hyperesthesia*. Also called *superaesthesia* or *superesthesia*. See also [HEIMDALLR SENSITIVITY](#), [THIGMOHYPERAESTHESIA](#), [TRANSLIMINALITY](#). **hyperaesthetic**, **hyperesthetic**, or **hyperesthetic** *adj.* [From Greek *hyper* over + *aisthesis* sensation, from *aisthanesthai* to feel + *-ia* indicating a condition or quality]

hyperalgesia *n.* Abnormally heightened sensitivity to pain. See also [HEIMDALLR SENSITIVITY](#). **hyperalgesic** *adj.* [From Greek *hyper* over + *algesis* sense of pain, from *algos* pain + *-ia* indicating a condition or quality]

hypercathexis *n.* In **psychoanalysis*, additional **cathexis* invested in any object that is already cathected. Sigmund Freud (1856–1939) used the concept especially for explaining **attention*, his most detailed account of this theory appearing in 1895 in his ‘Project for a Scientific Psychology’ (*Standard Edition*, I, pp. 177–397).

hypercolumn *n.* An aggregation of **ocular-dominance columns* containing cells whose **receptive fields* overlap on the same region of the retina.

hypercomplex cell *n.* A type of cell in the **primary visual cortex* (Area V1) that is similar to a **simple cell* or a **complex cell* except that it has an **end-stopped receptive field*, ceasing to fire if the line, edge, or bar that excites it exceeds a certain length. Hypercomplex cells are sensitive to corners, curvature, or to sudden breaks in straight images. See also [BAR DETECTOR](#), [EDGE DETECTOR](#), [END-STOPPED RECEPTIVE FIELD](#), [FEATURE DETECTOR](#), [ORIENTATION-SPECIFIC CELL](#).

hypercomplex receptive field *n.* The **receptive field* of a **hypercomplex cell*.

hypercorrection *n.* A mistaken attempt to correct an imagined error in the use of language, such as the erroneous use of *I* instead of *me* in *The party will be hosted by Jessica and I*, or the occasional pronunciation by people from the North of England, where *cut* rhymes with *but*, of words such as *put*

as if they also rhymed with **Received Pronunciation* of *but*. Also called *overcorrection*. **hypercorrect** *adj. vb.* [From Greek *hyper* over + English *correction*]

hypercreolization *n.* A reaction by **creole* speakers against the standard language of a community, motivated by a desire to protect and maintain their ethnic identity, involving the deliberate adoption and emphasis of distinctive features of the creole. See also *CREOLIZATION*. Compare *DECREOLIZATION*.

hypergasia *n.* Frenzied **psychomotor agitation*. [From Greek *hyper* over + *ergasia* work or business + *-ia* indicating a condition or quality]

hypergeusia *n.* Abnormally heightened taste sensitivity. Compare *AGEUSIA*, *CACOGEUSIA*, *DYSGEUSIA*, *HYPOGEUSIA*, *PARAGEUSIA*, *TASTE BLINDNESS*. **hypergeusic** *adj.* [From Greek *hyper* over + *geusis* taste + *-ia* indicating a condition or quality]

hyperglycaemia *n.* An abnormally high level of sugar in the blood, often caused by a deficiency of insulin secretion by the islets of Langerhans due to **diabetes* mellitus, leading to a failure of carbohydrate metabolism. US *hyperglycemia*. Compare *HYPOGLYCAEMIA*. [From Greek *hyper* over + *glykys* sweet + *haima* blood + *-ia* indicating a condition or quality]

hypericum *n.* The pharmacologically active ingredient of **St John's wort*. See also *ORPHAN DRUG*. [From Latin *Hypericum* the generic name of St John's wort, from Greek *hypereikon*, from *hyper* over + *ereike* heath]

hyperkinaesthesia *n.* Abnormally heightened sense of body movement or **kinaesthesia*. US *hyperkinesthesia*. Also called *hyperkinaesthesia* or *hyperkinesthesia*. [From Greek *hyper* over + *kineein* to move + *aisthesis* sensation, from *aisthanesthai* to feel]

hyperkinesis *n.* Excessive movement, as in such conditions as **athetosis* or **ballism*, or in **hyperkinetic disorders* and **attention-deficit/hyperactivity disorder* in children. [From Greek *hyper* over + *kinesis* movement]

hyperkinetic disorders *n.* A class of disorders with early onset (in the first five years of life) characterized by persistent inattention and lack of persistence in activities requiring concentration, together with excessive, disorganized, and unregulated physical activity or ***hyperkinesis**, and often impulsivity, recklessness, and accident-proneness. *See also* **ATTENTION-DEFICIT/HYPERACTIVITY DISORDER**.

hyperlexia *n.* A ***reading disorder** characterized by advanced word-recognition skills in a person with pronounced cognitive and language deficits. People with hyperlexia manifest word-recognition skills by their ability to pronounce single words presented to them out of context, but they lack the ability to understand printed words and texts and therefore have poor reading comprehension. The condition was first identified and named by Norman E(sau) Silberberg (1931–2007) and Margaret C. Silberberg (1927–82) in 1967. *See also* **ATTENTIONAL DYSLEXIA**, **DYSLEXIA**. [From Greek *hyper* over + *lexis* a word + *-ia* indicating a condition or quality]

hypermania *n.* An exaggerated or extreme form of ***mania (1)**; often confused with ***hypomania**. *See* **MANIC EPISODE**. [From Greek *hyper* over + *mania* madness]

hypermetamorphosis *n.* A tendency to attend indiscriminately and react to every visual stimulus. It is characteristic of ***Klüver–Bucy syndrome**. [From Greek *hyper* over + *meta* among, with, or beside + *morphe* form + *-osis* indicating a process or state]

hypermetropia *n.* Another name for ***hyperopia**. Also written *hypermetropy*. **hypermetrope** *n.* A long-sighted person. **hypermetropic** *adj.* Long-sighted. [From Greek *hypermetros* beyond the measure, from *hyper* over + *metron* a measure + *ops* an eye + *-ia* indicating a condition or quality]

hypermnnesia *n.* Enhanced power of memory, usually under the influence of ***hypnosis** or ***truth drugs**, though the effects may be illusory. The term is also used to denote a form of ***reminiscence (2)**, for material such as pictures or prose passages, in ***successive reproduction** with short intervals between successive tests. For example, people who view a video recording of a

burglary and are then tested repeatedly over a few hours or days for their recall of critical details have shown steady improvement across the repeated tests. If the interval between tests is increased to a week, then recall tends to decline. Compare [AMNESIA](#). [From Greek *hyper* over + *mnasthai* to remember + *-ia* indicating a condition or quality]

hypermotility *n.* Another name for [*hyperkinesis](#).

hyperopia *n.* Long-sightedness (far-sightedness) or difficulty in accommodating the eyes for [*near vision](#), resulting from light rays that enter the eye being focused behind the retina, most often because of [*presbyopia](#). Also called *hypermetropia* or *hypermetropy*. See also [APHAKIA](#). Compare [EMMETROPIA](#), [MYOPIA](#). **hyperope** *n.* A long-sighted person. **hyperopic** *adj.* Long-sighted or far-sighted. [From Greek *hyper* over + *ops* an eye + *-ia* indicating a condition or quality]

hyperorexia *n.* Excessive appetite; another name for [*bulimia \(1\)](#). The term is usually restricted to cases in which it is not caused by a brain lesion. Compare [HYPERPHAGIA](#). [From Greek *hyper* over + *orexis* appetite + *-ia* indicating a condition or quality]

hyperosmia *n.* Abnormal acuteness of the sense of smell. See also [ANOSMIA](#), [CACOSMIA](#), [DYSOSMIA](#), [PAROSMIA](#), [SPECIFIC ANOSMIA](#). Compare [HYPOSMIA](#). **hyperosmic** *adj.* [From Greek *hyper* over + *osme* a smell + *-ia* indicating a condition or quality]

hyperphagia *n.* Compulsive overeating; another name for [*bulimia \(1\)](#), but usually reserved for cases in which it is caused by a lesion in the medial forebrain bundle, the hypothalamus, or some other part of the brain involved in appetite. Compare [HYPEROREXIA](#). [From Greek *hyper* over + *phagein* to consume + *-ia* indicating a condition or quality]

hyperphoria *n.* A form of [*strabismus](#) in which the eye tends to deviate upwards. Compare [CYCLOPHORIA](#), [ESOTROPIA](#), [EXOPHORIA](#), [HETEROPHORIA](#), [HYPOPHORIA](#). [From Greek *hyper* over + *-phoros* carrying, from *pherein* to bear + *-ia* indicating a condition or quality]

hyperphrasia *n.* Excessive volubility or talkativeness, as often occurs in **manic episodes*. [From Greek *hyper* over + *phrazein* to express + *-ia* indicating a condition or quality]

hyperphrenia *n.* Mental overactivity such as occurs in **flight of ideas* or, more generally, in a **manic episode*. [From Greek *hyper* over + *phren* mind, originally midriff, the supposed seat of the soul + *-ia* indicating a condition or quality]

hyperpnoea *n.* Another name for **hyperventilation*. US *hyperpnea*. [From Greek *hyper* over + *pnein* to breathe]

hyperpolarization *n.* An increase in the **membrane potential* of a neuron relative to its **resting potential*, reducing its propensity to generate a nerve impulse, such as occurs in an **inhibitory postsynaptic potential*. Compare *DEPOLARIZATION*. [From Greek *hyper* over + English *polarization*]

hyperprosexia *n.* Excessive and sometimes debilitating attention to trivial matters, such as the sound of a dripping tap. Compare *APROSEXIA*, *HYPOPROSEXIA*. [From Greek *hyper* over + *prosexis* heedfulness, from *prosechein* to heed + *-ia* indicating a condition or quality]

hyper-reflection *n.* Over-consciousness of one's own behaviour, to the point that it interferes with sexual performance, social interaction, or other activities involving skills. The idea can be traced back to the ancient Sanskrit scriptures of the Vedanta, one of the philosophical schools of Hinduism, according to which the knower cannot be known, and the one that sees cannot be seen, but it was first investigated in clinical psychology by the Austrian psychiatrist Viktor E. Frankl (1905–97). It is countered by the therapeutic technique of **de-reflection*. See also *CENTIPEDE EFFECT*, *HUMPHREY'S LAW*.

hyper-reflexia *n.* Overactive or exaggerated reflexes, usually occurring during a period of recovery from spinal injury. [From Greek *hyper* over + English *reflex* + *-ia* indicating a condition or quality]

hypersomnia *n.* Excessive sleepiness, usually manifested as prolonged

nocturnal sleep followed by difficulty in staying awake during the day. See also [DISORDER OF EXCESSIVE SOMNOLENCE](#), [DYSSOMNIAS](#), [HYPERMOMNOLENCE DISORDER](#), [NARCOLEPSY](#), [PRIMARY HYPERMOMNIA](#). Compare [INSOMNIA](#). [From Greek *hyper* over + *somnus* sleep + *-ia* indicating a condition or quality]

hypersomnolence disorder *n.* A [*sleep–wake disorder](#) in [*DSM-5](#) characterized by [*hypersomnia](#) and excessive sleepiness, even after a main sleep period of at least seven hours, with recurrent lapses into sleep during the day, prolonged sleep not being experienced as refreshing or restorative, and difficulty becoming fully awake when woken abruptly. [From Greek *hyper* over + Latin *somnus* sleep + *-entia* indicating a state or condition]

hyperthymesia *n.* Exceptional [*episodic memory](#). People with this trait spend much of their time thinking about past events in their own lives and have an extraordinary capacity to recall them. The condition was first identified in a case of a 41-year old Jewish woman and reported in an article in the journal *Neurocase* in 2006, where it was originally called *hyperthymestic syndrome*. See also [EIDETIC IMAGE](#). Compare [MNEMONIST](#). [From Greek *hyper* over + *thymesia* remembering, from *thymos* spirit or mind + *-ia* indicating a condition or quality]

hyperthymia *n.* Excessive emotionalism. [From Greek *hyper* over + *thymos* spirit + *-ia* indicating a condition or quality]

hyperthyroidism *n.* Overproduction by the thyroid gland of [*thyroxine](#), leading to increased metabolic rate, insomnia, palpitations, tremor, nervousness, weight loss, sweating, hypersensitivity to heat, and possibly swelling of the eyeballs (exophthalmic goitre). See also [DEEP TENDON REFLEX](#).

hypertonia *n.* Abnormally high muscle tone or tension. See [HYPERTONIC \(1\)](#). Compare [HYPOTONIA](#), [ISOTONIA](#).

hypertonic *adj.* 1. Of or relating to muscles that are abnormally tensed. Compare [HYPOTONIC \(1\)](#), [ISOTONIC \(1\)](#). 2. Of or relating to a solution having a greater concentration than another and hence exerting more [*osmotic pressure](#) than the other. A hypertonic saline solution (more than 0.9 per cent) is more concentrated than the [*intracellular fluid](#), so that cells shrink when

*****ebook converter DEMO Watermarks*****

immersed in it. *See also* [OSMOSIS](#). *Compare* [HYPOTONIC \(2\)](#), [ISOTONIC \(2\)](#). [From Greek *hyper* over + *tonos* tension + *-ikos* of, relating to, or resembling]

hypertrophy *n.* Abnormal enlargement of an organ, structure, or part. *Compare* [ATROPHY](#). [From Greek *hyper* over + *trophe* nourishment]

hypertropia *n.* Another name for [*anoopsia](#). [From Greek *hyper* over + *tropos* a turn + *ops* an eye + *-ia* indicating a condition or quality]

hyperventilation *n.* Abnormally increased depth or rate of breathing, often associated with [*anxiety](#), leading to a reduction in blood carbon dioxide, sometimes causing dizziness and muscle cramps. Also called *hyperpnoea*.

hypesthesia *n.* Another name for [*hypoesthesia](#).

hypnagogic image *n.* A dreamlike image, often vivid and resembling a [*hallucination](#), generally accompanied by [*sleep paralysis](#), experienced by a person in the transition state from wakefulness to sleep. *See also* [ISAKOWER PHENOMENON](#). *Compare* [HYPNOPOMPIC IMAGE](#). [From French *hypnagogique* hypnagogic, from Greek *hypnos* sleep + *agogos* bringing + *-ikos* of, relating to, or resembling]

hypnoanalysis *n.* A form of [*psychoanalysis](#) in which [*hypnosis](#) is used to facilitate the uncovering of repressed memories, especially from infancy and early childhood. *See also* [ABREACTION](#), [ANNA O](#), [CATHARSIS](#), [HYPNOID HYSTERA](#).

hypnodermatology *n.* The practice of treating skin disorders with hypnosis. *See also* [PSYCHODERMATOLOGY](#). **hypnodermatologist** *n.* One who practises hypnodermatology. **hypnodermatological** *adj.* [From Greek *hypnos* sleep + *derma*, *dermatos* skin + *logos* word, discourse, or reason]

hypnogenic *adj.* Tending to cause sleep or [*hypnosis](#). [From Greek *hypnos* sleep + *genein* to produce + *-ikos* of, relating to, or resembling]

hypnoid hysteria *n.* In **psychoanalysis*, one of three types of **hysteria* that were distinguished in 1895 by the Austrian physician Josef Breuer (1842–1925) and Sigmund Freud (1856–1939) in *Studies on Hysteria* (*Standard Edition*, II), supposedly originating in a state similar to a hypnotic state. However, Freud wrote: ‘Strangely enough, I have never in my own experience met with a genuine hypnoid hysteria. Any that I took in hand has turned into a defence hysteria’ (p. 286). After 1895 Freud came to believe that all hysteria is defence hysteria, and he abandoned the tripartite distinction. *See also* [HYPNOID STATE](#). *Compare* [DEFENCE HYSTERIA](#), [RETENTION HYSTERIA](#).

hypnoid state *n.* In **psychoanalysis*, a concept introduced by the Austrian physician Josef Breuer (1842–1925) to denote a state of consciousness resembling **hypnosis*, occurring when an emotion intrudes into a reverie or daydream. Breuer’s theory is set out in Freud’s *Standard Edition*, II, pp. 183–252. The concept was later (1901/5) repudiated by Sigmund Freud (1856–1939) in his ‘Fragment of an Analysis of a Case of Hysteria’ (*Standard Edition*, VII, pp. 7–122, at p. 27*n*). *See also* [HYPNOID HYSTERIA](#).

hypnopompic image *n.* A dreamlike image, often vivid and resembling a **hallucination*, sometimes accompanied by **sleep paralysis*, experienced by a person in transition from sleep to wakefulness. *Compare* [HYPNAGOGIC IMAGE](#). [From Greek *hypnos* sleep + *pompos* a guide + *-ikos* of, relating to, or resembling]

hypnosis *n.* Alterations in sensations, perceptions, thoughts, feelings, or behaviour brought about by suggestion, often (though controversially) interpreted as a trance-like altered state of consciousness characterized by heightened suggestibility, associated with such phenomena as suggested **hallucinations*, hypnotic **analgesia*, **hypnotic amnesia*, and **hypnotic age regression*. Also called *hypnotism* or *mesmerism*. *See also* [ANIMAL MAGNETISM](#), [AUTOGENIC TRAINING](#), [AUTOHYPNOSIS](#), [AUTOMATISM](#), [CATALEPSY](#), [CATHARSIS](#), [CEREA FLEXIBILITAS](#), [HIDDEN OBSERVER](#), [HYPERMNESIA](#), [HYPNOANALYSIS](#), [HYPNOID STATE](#), [HYPNOTHERAPY](#), [HYPNOTIC AMNESIA](#), [HYPNOTIC SUSCEPTIBILITY](#), [KOHNSTAMM EFFECT](#), [NEODISSOCIATION THEORY](#), [TRANCE](#), [TRANCE LOGIC](#). **hypnoid** *adj.* Resembling hypnosis. [From Greek *hypnos* sleep + *-osis* indicating a process or state]

*****ebook converter DEMO Watermarks*****

hypnotherapy *n.* A form of **psychotherapy* based on **hypnosis*, using techniques such as helping the client to perceive or interpret things differently (reframing), training the client to experience particular reactions such as calmness around spiders or disgust around cigarette smoke (anchoring), and using language patterns. *See also* [AUTOGENIC TRAINING](#), [RECOVERED MEMORY](#). *Compare* [HYPNOANALYSIS](#).

hypnotic *adj.* **1.** Of, relating to, or tending to produce **hypnosis* or **sleep*. *n.* **2.** Any drug that is used primarily to induce sleep, especially a **barbiturate* acting via the **GABA receptor complex*. In careful usage, the word is reserved for sleeping pills or draughts and is not applied to **sedatives*, **narcotics*, and **anxiolytics* that may induce sleep incidentally to their main function. *See also* [NARCOTIC](#), [SEDATIVE-](#), [HYPNOTIC-](#), OR [ANXIOLYTIC-RELATED DISORDERS](#). [From Greek *hypnos* sleep + *-itikos* resembling or marked by]

hypnotic age regression *n.* The re-experiencing or re-enacting of experiences or patterns of behaviour from earlier life in response to suggestions given under **hypnosis*, usually involving a guided year-by-year retracing of life. *See also* [NEODISSOCIATION THEORY](#).

hypnotic amnesia *n.* The inability of a person who has been hypnotized to recall, after the hypnotic session, all or part of what took place during the session. It usually occurs as a consequence of a direct suggestion given by the hypnotist during the hypnotic session but can also occur spontaneously. Also called *posthypnotic amnesia*.

hypnotic analgesia *See* [ANALGESIA](#).

hypnotic susceptibility *n.* Responsivity or openness to **hypnosis*, some people being significantly more easily or successfully hypnotized than others. Also called *hypnotizability*.

hypnotism *n.* An obsolescent name for the state of **hypnosis*.

hypnotist *n.* A person who induces **hypnosis* in another.

hypnotizability *n.* Another name for **hypnotic susceptibility*.

hypnotize *vb.* To induce **hypnosis* in a person or an animal.

hypoactive sexual desire disorder *n.* A term used in **DSM-IV* for what was later called **female sexual interest/arousal disorder* and **male hypoactive sexual desire disorder*. [From Greek *hypo* under + Latin *activus* in a state of action, from *actus* a doing + *-ivus* tending]

hypoesthesia *n.* Another name for **hypoesthesia*. US *hypoesthesia*. [From Greek *hypo* under + *aisthesis* sensation, from *aisthanesthai* to feel + *-ia* indicating a condition or quality]

hypochondria *n.* Preoccupation and worry about apparently normal **somatic* sensations or physical manifestations, which are interpreted as symptoms of a serious illness. *See also* ACTUAL NEUROSIS, HYPOCHONDRIASIS, MEDICAL STUDENT SYNDROME, SOMATIC SYMPTOM DISORDER. **hypochondriac** *n.* 1. A sufferer from hypochondria. *adj.* 2. Of or relating to a sufferer from hypochondria. **hypochondriacal** *adj.* [From Greek *hypochondrion* the region of the abdomen under the costal cartilages and short ribs, from *hypo* under + *chondros* a cartilage + *-ia* indicating a condition or quality]

hypochondriasis *n.* A **somatoform disorder* characterized by pathological **hypochondria*, intense preoccupation and worry about apparently normal **somatic* sensations or physical signs, which are interpreted as symptoms of a serious illness, in spite of appropriate medical investigation and reassurance that the fear is groundless. In most severe cases the preoccupation can become a hypochondriacal **delusional disorder* involving a false belief that a disease is present. In **DSM-5*, this term was replaced by **somatic symptom disorder*. Also called *health anxiety disorder*. *See also* MEDICAL STUDENT SYNDROME.

hypochondriasis scale *See* MMPI.

hypoergastia *n.* Depression, especially the depressive phase of a **bipolar disorder*. [From *hypo* under + *ergasia* work or business, from *ergon* work + *-*

ia indicating a condition or quality]

hypoesthesia *See* [HYPAESTHESIA](#).

hypogeusia *n.* Abnormally diminished taste sensitivity. *Compare* [AGEUSIA](#), [CACOGEUSIA](#), [DYSGEUSIA](#), [HYPERGEUSIA](#), [PARAGEUSIA](#), [TASTE BLINDNESS](#).

hypogeusic *adj.* [From Greek *hypo* under + *geusis* taste + *-ia* indicating a condition or quality]

hypoglossal nerve *n.* Either of the twelfth pair of [*cranial nerves](#) arising from the medulla oblongata, controlling the muscles of the tongue, and essential for swallowing. [From Greek *hypo* under + *glossa* a tongue]

hypoglycaemia *n.* Abnormally low blood glucose, usually caused either by an overdose of insulin taken therapeutically in the treatment of [*diabetes mellitus](#) or by an excessive secretion of insulin by the pancreas, generally resulting from a pancreatic tumour, alcoholism, or liver disease. The signs and symptoms include asthenia, palpitations, tachycardia, sweating, tremor, ataxia, slowed thinking, confusion, irritability, and aggressiveness, terminating if untreated in delirium, coma, and occasionally death. US *hypoglycemia*. *See also* [INSULIN SHOCK](#). *Compare* [HYPERGLYCAEMIA](#). [From Greek *hypo* under + *glykys* sweet + *haima* blood + *-ia* indicating a condition or quality]

hypohedonia *n.* Abnormally reduced ability to experience pleasure or enjoyment in ordinarily pleasurable activities, falling short of [*anhedonia](#) or [*depression](#). **hypohedonic** *adj.* [From Greek *hypo* under + *hedone* pleasure + *-ia* indicating a condition or quality]

hypokinaesthesia *n.* Reduced sensitivity to positions or movements of body parts. US *hypokinesesthesia*. [From Greek *hypo* under + *kinesis* movement + *aisthesis* sensation, from *aisthanesthai* to feel + *-ia* indicating a condition or quality]

hypokinesis *n.* Diminished bodily movement. [From Greek *hypo* under + *kinesis* movement]

hypolexia *n.* Another name for ***dyslexia**. [From Greek *hypo* under + *lexis* a word + *-ia* indicating a condition or quality]

hypologia *n.* Another name for ***poverty of speech**. [From Greek *hypo* under + *logos* a word or discourse + *-ia* indicating a condition or quality]

hypomania *n.* Another name for a ***hypomanic episode**.

hypomania scale See **MMPI**.

hypomanic episode *n.* A ***mood episode** with similar symptoms to a ***manic episode** but not sufficiently severe to cause marked impairment in social or occupational functioning or to require hospitalization, though characterized by unrealistic optimism, overactivity, a decreased need for sleep, and often reckless spending of money. Also called *hypomania* or *hypomanic disorder*. [From Greek *hypo* under + *mania* madness]

hypomnesia *n.* Partial ***amnesia**. [From Greek *hypo* under + *mnasthai* to remember + *-ia* indicating a condition or quality]

hypophoria *n.* A form of ***strabismus** in which the eye tends to deviate downwards. Compare **CYCLOPHORIA**, **ESOTROPIA**, **EXOPHORIA**, **HETEROPHORIA**, **HYPERPHORIA**. [From Greek *hypo* under + *-phoros* carrying, from *pherein* to bear + *-ia* indicating a condition or quality]

hypophrasia *n.* Another name for ***poverty of speech** or ***hypologia**. [From Greek *hypo* under + *phrazein* to express + *-ia* indicating a condition or quality]

hypophrenia *n.* Another name for ***intellectual disability**. [From Greek *hypo* under + *phren* mind, originally midriff, the supposed seat of the soul + *-ia* indicating a condition or quality]

hypophysis *n.* Short for hypophysis cerebri, a technical name for the ***pituitary gland**. [From Greek *hypophysis* an attachment underneath, from *hypo* under + *phyein* to grow]

hypopnoea *n.* Abnormally shallow breathing or decreased breathing rate. See OBSTRUCTIVE SLEEP APNOEA HYPOPNOEA. US *hypopnea*. Compare APNOEA. [From Greek *hypo* under + *pnein* to breathe]

hypoproslexia *n.* Reduced ability to attend or concentrate. Compare APROSEXIA, HYPERPROSEXIA. [From Greek *hypo* under + *prosexis* heedfulness, from *prosechein* to heed + *-ia* indicating a condition or quality]

hyposmia *n.* Abnormally diminished sensitivity to all or a limited number of odorants. See also ANOSMIA, CACOSMIA, DYSOSMIA, PAROSMIA, SPECIFIC ANOSMIA. Compare HYPEROSMIA. **hyposmic** *adj.* [From Greek *hypo* under + *osme* a smell + *-ia* indicating a condition or quality]

hyposthenia *n.* Debilitation or lack of strength. [From Greek *hypo* under + *sthenos* strength + *-ia* indicating a condition or quality]

hypothalamic hyperphagia *n.* Another name for *ventromedial hypothalamic syndrome.

hypothalamic–hypophyseal portal system *n.* A system of blood vessels connecting capillaries of the *hypothalamus and the *anterior pituitary (hypophysis) through which hypothalamic hormones travel to the anterior pituitary.

hypothalamic–pituitary–adrenal axis See HPA AXIS.

hypothalamic syndromes *n.* Disorders associated with damage to the *hypothalamus arising from tumours, congenital malformations, or head injury, with signs and symptoms such as gross obesity, disturbances of *autonomic control, *hypersomnia, and *amnesia.

hypothalamus *n.* A fingernail-sized area of the diencephalon at the base of the brain in the limbic system, occupying the side walls and floor of the third ventricle, situated below both sides of the thalamus and above the pituitary gland, consisting of two halves with paired right and left nuclei, crucially involved in the regulation of the *endocrine glands and the

***autonomic nervous system** and implicated in the control of temperature, heart rate, blood pressure, hunger, thirst, sexual arousal, predatory aggression, and fight-or-flight responses. See **ARCUATE NUCLEUS**, **LATERAL HYPOTHALAMIC FEEDING CENTRE**, **MEDIAL FOREBRAIN BUNDLE**, **MEDIAN EMINENCE**, **OSMORECEPTOR (2)**, **PARAVENTRICULAR NUCLEUS**, **PREOPTIC NUCLEUS**, **SATIETY CENTRE**, **SUPRACHIASMATIC NUCLEUS**, **SUPRAOPTIC NUCLEUS**, **VENTROMEDIAL HYPOTHALAMUS**, **ZONA INCERTA**. **hypothalamic** *adj.* [From Greek *hypo* under + English *thalamus*, so called because of its situation]

hypothesis *n.* A tentative explanation for a ***phenomenon**, subject to criticism by rational argument and refutation by ***empirical** evidence. See also **ALTERNATIVE HYPOTHESIS**, **HYPOTHETICO-DEDUCTIVE METHOD**, **NULL HYPOTHESIS**. Compare **MODEL**, **THEORY (2)**. **hypotheses** *pl.* [From Greek *hypo* under + *tithenai* to place]

hypothetical construct *n.* A conjectured entity, process, or event that is not observed directly but is assumed to explain an observable phenomenon. It is not merely a summary of the relationships between observable variables but contains surplus meaning over and above such relationships. Typical examples are the ***echoic store**, ***logogen**, ***primal sketch**, and ***superego**. The distinction between hypothetical constructs and ***intervening variables** was first made explicit by the US psychologists Kenneth MacCorquodale (1919–86) and Paul Everett Meehl (1920–2003) in an influential article in the journal *Psychological Review* in 1948, in which they used the examples from physics of an *electron* (a hypothetical construct that is assumed to be an entity, although it is not observed directly) and the *resistance* of a wire (an intervening variable that merely specifies the amperage of current that will be carried by the wire for any given voltage). See also **CONSTRUCT**, **CONVERGENT VALIDITY**, **DISCRIMINANT VALIDITY**, **NOMOLOGICAL NETWORK**.

hypothetico-deductive method *n.* The standard research method of empirical science in which ***hypotheses** are formulated and tested by deducing predictions from them and then testing the predictions through controlled ***experiments**, hypotheses that are falsified being rejected and replaced by new ones. Also called *scientific method*. See also **CONFIRMATION BIAS**, **FALSIFIABILITY**, **INDUCTION (1)**.

hypothymia *n.* Diminished emotional response or **depression*. [From Greek *hypo* under + *thymos* spirit + *-ia* indicating a condition or quality]

hypothyroidism *n.* An underproduction of **thyroxine* by the **thyroid gland*, leading to decreased metabolic rate, asthenia, weight gain, constipation, and sometimes **intellectual disability*, coma, and death. Compare HYPERTHYROIDISM.

hypotonia *n.* Abnormally low muscle **tonus* or tension. See HYPOTONIC (1). Compare HYPERTONIA, ISOTONIA.

hypotonic *adj.* 1. Of or relating to muscles that are abnormally flaccid. Compare HYPERTONIC (1), ISOTONIC (1). 2. Of or relating to a solution having a lower concentration than another and hence exerting less **osmotic pressure* than the other. A hypotonic saline solution (less than 0.9 per cent) is less concentrated than the **intracellular fluid*, so that cells expand when immersed in it. See also OSMOSIS. Compare HYPERTONIC (2), ISOTONIC (2). [From Greek *hypo* under + *tonos* tension + *-ikos* of, relating to, or resembling]

hypoventilation *n.* Abnormally decreased depth and/or frequency of breathing. [From Greek *hypo* under + Latin *ventilare* to ventilate, from *ventus* wind]

hypovolaemic thirst *n.* A form of thirst triggered by decreased blood volume sensed by **baroreceptors*. US *hypovolemic thirst*. Also called *extracellular thirst* or *volumetric thirst*. Compare INTRACELLULAR THIRST. [From Greek *hypo* under + English *volume* + Greek *haima* blood]

hypoxyphilia *n.* A **paraphilia* characterized by recurrent sexually arousing fantasies, sexual urges, or behaviour involving a dangerous and sometimes fatal form of **sexual masochism* in which self-stimulation is sought by oxygen deprivation through the use of a noose, ligature, plastic bag, or chemical substance such as **amyl nitrite*. [From Greek *hypo* under + *oxy-* denoting oxygen + *philos* loving, from *phileein* to love + *-ia* indicating a condition or quality]

hysteria *n.* A once-popular name for a [*mental disorder](#) characterized by emotional outbursts, fainting, heightened [*suggestibility](#), and [*conversion symptoms](#) such as [*paralysis](#), nowadays generally not viewed as a coherent [*syndrome](#) but rather as aspects of [*conversion disorder](#), [*dissociative disorders](#), and [*histrionic personality disorder](#). It has been traced back to the ancient Greek physician Hippocrates (?460–?377 BC). Also called *hysterical neurosis*. See also [ANXIETY HYSTERIA](#), [CONVERSION HYSTERIA](#), [DEFENCE HYSTERIA](#), [DISSOCIATION THEORY](#), [HYPNOID HYSTERIA](#), [HYSTERICAL TECHNIQUE](#), [HYSTEROGENIC ZONE](#), [RETENTION HYSTERIA](#). **hysteric** *n.* A person with hysteria. **hysterical** *adj.* [From Greek *hysteria* the womb, which was formerly thought to underlie the disorder because it occurred mainly in women]

hysteria scale See [MMPI](#).

hysterical convulsion *n.* An obsolete name for a [*pseudoseizure](#). Also called a *hysterical seizure*. See also [HYSTERICAL EPILEPSY](#).

hysterical epilepsy *n.* An obsolete name for a form of [*hysteria](#) assumed to produce [*hysterical seizures](#) or convulsions. See also [PSEUDOSEIZURES](#).

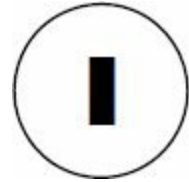
hysterical paralysis *n.* Any [*paralysis](#) of [*psychogenic](#) rather than organic aetiology. See [PSYCHOGENESIS](#). Compare [ORGANIC DISORDERS](#).

hysterical personality *n.* An obsolescent name for [*histrionic personality disorder](#).

hysterical seizure *n.* An obsolete name for a [*pseudoseizure](#). Also called a *hysterical convulsion*. See also [HYSTERICAL EPILEPSY](#).

hysterical technique *n.* In [*psychoanalysis](#), one of the four [*defensive techniques](#) proposed by the Scottish psychoanalyst W. Ronald D. Fairbairn (1889–1964). It involves [*externalization](#) of the [*good object](#) and [*internalization](#) of the bad object, causing the hysterical person to consider internal impulses as bad. See also [SPLITTING OF THE OBJECT](#). Compare [OBSESSIONAL TECHNIQUE](#), [PARANOID TECHNIQUE](#), [PHOBIC TECHNIQUE](#).

hysterogetic zone *n.* In *[psychoanalysis](#), areas of the body identified in 1890 by the French neurologist Jean Martin Charcot (1825–93) as the focal points for symptoms of conversion hysteria (*[conversion disorder](#)). According to Charcot, the patient describes them as painful but experiences sexual pleasure if they are stimulated (they function as *[erotogenic zones](#)), although this can precipitate a hysterical attack. Sigmund Freud (1856–1939) endorsed this theory in 1895 in *Studies on Hysteria* (*Standard Edition*, II, at p. 137) and in ‘Some General Remarks on Hysterical Attacks’ (1908/9), where he describes such a hysterical attack as ‘an equivalent of coition’ (*Standard Edition*, IX, pp. 227–34, at p. 234).



Ia fibre *n.* A large-diameter, thickly myelinated type of **afferent* nerve fibre with high conduction velocity, such as that innervating a **muscle spindle*. US *Ia fiber*. Compare ALPHA FIBRE, C FIBRE, DELTA FIBRE, GAMMA FIBRE, IB FIBRE, II FIBRE.

IAPS *abbrev.* International Affective Picture System, a database of hundreds of colour photographs depicting wildlife, bodily mutilations, landscapes, children, snakes, insects, accidents, puppies, babies, and many other scenes designed to elicit a range of **emotions* along the dimensions of pleasure, arousal, and dominance. The earliest version of the database was developed in 1988 by the US psychologist Peter J(ohn) Lang (born 1930) and collaborators at the University of Florida, and it is widely used in research on emotional arousal.

iatrogenic *adj.* Of or pertaining to a disorder, **sign* (1), or **symptom* caused by a physician's treatment or management of a patient; doctor-induced. [From Greek *iatros* a physician + *genes* born + *-ikos* of, relating to, or resembling]

Ib fibre *n.* A large-diameter, thickly myelinated type of **afferent* nerve fibre with high conduction velocity, such as that innervating a **Golgi tendon organ*. US *Ib fiber*. Compare ALPHA FIBRE, C FIBRE, DELTA FIBRE, GAMMA FIBRE, IA FIBRE, II FIBRE.

ibotenic acid *n.* The **psychedelic* drug α -amino-3-hydroxy-5-isoxazole-acetic acid, found in the **fly agaric* mushroom **Amanita muscaria*, a potent excitatory amino acid **antagonist* (3) that causes initial drowsiness,

*****ebook converter DEMO Watermarks*****

depression of motor activity, and ataxia, followed by hyperactivity and excitability accompanied by changes in perceptions and emotions and delirium. It is also used as a [*neurotoxin](#) to destroy neuron cell bodies while leaving nerve fibres intact in the area where it is applied. *See also* [HALLUCINOGEN](#).

ICD *abbrev.* The *International Classification of Diseases and Related Health Problems*, issued by the World Health Organization in Geneva, a section of which is devoted to mental and behavioural disorders. Along with [*DSM](#), it is one of the most authoritative reference works on matters of definition and classification of mental disorders. The tenth edition, ICD-10, was published in 1992–93, and ICD-11, harmonized with DSM-5, appeared in beta draft form in 2013, prior to full publication in 2015.

ice *n.* Frozen water. Also, a street name for a very pure form of [*methamphetamine](#). Because of its purity and low vaporization point, like crack cocaine it produces a rapid and powerful effect when smoked. [So called because of the appearance of its crystals when seen under magnification]

icicle plot *See* [HORIZONTAL ICICLE PLOT](#), [VERTICAL ICICLE PLOT](#).

iconic memory *See* [ICONIC STORE](#).

iconic store *n.* One of the [*sensory registers](#), allowing a visual image to persist for about half a second (depending on brightness) after its stimulus has ceased. It enables television, which presents 25 still images per second, each given twice to raise the flicker rate to 50 per second (British standard), to convey the illusion of a single continuous image, which, owing to [*apparent movement](#), can be perceived as a moving image. In 1740, the Hungarian physicist Johann Andreas von Segner (1704–77) was the first to measure the duration of iconic memory traces (about half a second) by attaching a glowing ember to the rim of a wheel and determining the minimum speed of rotation (about 120 revolutions per minute) at which a complete circle was perceived. Interest in iconic memory was revived by a classic experiment devised by the US psychologist George Sperling (born 1934) and reported in the journal *Psychological Monographs* in 1960 in

*****ebook converter DEMO Watermarks*****

which three rows of four random letters were exposed for approximately 50 milliseconds; when viewers attempted to recall as many letters as possible from all three rows, they typically reported no more than four or five items, but when they attempted to recall as many letters as possible from a single specified row, cued after the offset of the display, their recall was virtually perfect, provided that the row number was cued immediately, but recall declined steadily with increasing cue delay up to about 500 milliseconds, suggesting (in line with von Segner's earlier finding) that more information is available immediately after the stimulus offset than can be reported before it fades from memory and that much of it has disappeared after about half a second. Also called *iconic memory*, a term introduced by the German-born US psychologist Ulric (Richard Gustav) Neisser (1928–2012) in his book *Cognitive Psychology* (1967). See also [SENSORY MEMORY](#). Compare [ECHOIC STORE](#). [From Greek *eikon* an image + *-ikos* of, relating to, or resembling]

ICSI *abbrev.* Intracytoplasmic sperm injection, an extension of [*in vitro fertilization](#) (IVF) first introduced in Belgium in 1992, in which sperm are injected directly into the [*ovum](#) with a fine needle. Unlike IVF, ICSI can be used for artificial insemination with sperm that have no motility and are therefore incapable of fertilizing ova on their own. [From Latin *intra* within + Greek *kytos* a vessel + *plasma* a form + *-ikos* of, relating to, or resembling]

ictal *adj.* Of or relating to a sudden acute onset or attack, especially of an epileptic seizure or [*convulsion](#). **ictus** *n.* A sudden acute onset or attack. [From Latin *ictus* struck, from *icere* to strike + *-alis* of or relating to]

id *n.* In [*psychoanalysis](#), one of the three components of the human mental apparatus in the second formulation of Sigmund Freud (1856–1939), after he replaced the [*topography](#) of unconscious-preconscious-conscious with the structural model of id-ego-superego in 1920. It is a reservoir of energy derived from [*instincts](#) (3), governed by the [*pleasure principle](#), and its contents are [*unconscious](#) (1), some being [*innate](#) and others derived from experience but submerged by [*repression](#), and it is in constant conflict with the [*ego](#) and the [*superego](#), both of which originate from it during the course of development. Freud used the German word *das Es* (the it) in 1923 in his book *Das Ich und das Es*, translated as *The Ego and the Id* (Standard Edition, XIX, pp. 12–66, at p. 23), where he revealed that he borrowed the term from

*****ebook converter DEMO Watermarks*****

the German psychiatrist Georg Groddeck (1866–1934) but attributed it ultimately to the German philosopher Friedrich Wilhelm Nietzsche (1844–1900), and Freud's translator James Strachey (1887–1967) chose the word *id*, imbuing it with an aura of obscurity and technicality that the original German word lacks. The id is insulated from the [*preconscious](#) and [*consciousness](#) by [*censorship](#), but it is not synonymous with the unconscious, as stated in many elementary expositions of Freud's theory, because the repressive functions of the [*ego](#) and many of the functions of the superego are also unconscious. The functions of the id are governed by the [*primary process](#). [From Latin *id* it]

idea *n.* **1.** In cognitive psychology, a mental representation or image occurring without simultaneous [*sensation](#) or [*perception](#) of the corresponding object or event, though frequently based on memories of earlier perceptions. **2.** Any conception, thought, or mental content. **3.** In the philosophy of the Greek philosopher Plato (?427–?347 BC), a supposed ideal form or [*archetype](#) (1) of a class of things, individual things being imperfect copies of archetypal ideas and deriving their existence from them. *See also* [IDEATION](#), [INNATE IDEA](#). [From Greek *idea* a model, pattern, or form, from *idein* to see]

idea, guiding *See* [GUIDING FICTION](#).

idealization *n.* In [*psychoanalysis](#), a process whereby the attributes of an [*instinctual object](#), especially another person, are represented mentally in a perfected form. Sigmund Freud (1856–1939) defined it as follows in an article ‘On Narcissism: An Introduction’ (1914): ‘Idealisation is a process which concerns the *object*; by it that object, without any alteration in its nature, is aggrandised and exalted in the subject's mind’ (*Standard Edition*, XIV, pp. 73–102, at p. 94). Many subsequent psychoanalysts, including the British-based Austrian psychoanalyst Melanie Klein (1882–1960) in a chapter in a co-authored book *Developments in Psycho-Analysis* in 1952, have interpreted it as a [*defence mechanism](#). *See also* [IMAGO](#) (1).

ideal observer *n.* In [*signal detection theory](#), a hypothetical observer who has complete knowledge of the detection problem and who responds optimally in the light of this knowledge.

*****ebook converter DEMO Watermarks*****

ideal self *n.* A conception of oneself as one would most like to be, in contradistinction to how one actually is or how one sees oneself.

ideas of reference *n.* A pattern of beliefs that external events and activities have a special significance for the person. *Compare* DELUSION OF REFERENCE.

ideation *n.* The act or process of forming *ideas (1) or mental images of things not at the time being experienced through *sensation; a collective term for all phenomena associated with ideas. The word was introduced in 1829 by the Scottish philosopher James Mill (1773–1836) in his book *Analysis of the Phenomena of the Human Mind* (Vol. 1): ‘We have not a name for that complex notion which embraces, as one whole, all the different phenomena to which the term Idea relates. As we say Sensation, we might also say Ideation; it would be a very useful word; and there is no objection to it, except for the pedantic habit of decrying a new term. Sensation would in that case be the general name for one part of our constitution, Ideation for another’ (p. 42). **ideate** *vb.* To form ideas. **ideational** *adj.* Of or relating to the formation of ideas. **ideationally** *adv.* Through or by means of ideation. [From Latin *idea* a general or ideal form, type, or model, from Greek *idein* to see + *-ation* indicating a process or condition]

ideational apraxia *See* APRAXIA.

idée fixe *n.* A fixed idea or *obsession. **idées fixes** *pl.* [From French *idée* idea + *fixe* fixed]

identical twins *n.* A non-technical name for *monozygotic twins. It is a misleading term, avoided in careful scientific usage, because monozygotic twins, though similar, are never identical, phenotype being influenced not only by genetic but also by environmental factors.

identification *n.* **1.** The act or process of recognizing or distinguishing something or someone. **2.** The deliberate adoption of another person's behaviour or ideas as one's own. In *psychoanalysis, a *defence mechanism whereby one unconsciously incorporates attributes or characteristics of

another person into one's own personality. Sigmund Freud (1856–1939) expounded his theory of identification most fully in his book *Group Psychology and the Analysis of the Ego* (1921, *Standard Edition*, XVIII, pp. 69–143, at pp. 105–9). See also [IDENTIFICATION WITH THE AGGRESSOR](#), [INCORPORATION](#), [INTROJECTION](#), [PRIMARY IDENTIFICATION](#), [PROJECTIVE IDENTIFICATION](#), [SECONDARY IDENTIFICATION](#).

identification task *n.* A task in which the subject or participant tries to recognize a stimulus or discriminate it from other stimuli. Compare [DETECTION TASK](#).

identification with the aggressor *n.* In **psychoanalysis*, a **defence mechanism* first named and described in 1936/7 by the Austrian-born British psychoanalyst Anna Freud (1895–1982) in her book *The Ego and the Mechanisms of Defence* whereby a person facing an external threat, such as disapproval or criticism from an authority figure, identifies with the source of the threat, either by appropriating the aggression or else by adopting other attributes of the threatening figure. Anna Freud and the Austrian psychoanalyst René A(rpad) Spitz (1887–1974) argued that this mechanism plays an important part in the early development of the **superego*, before criticism is turned inward at a later stage of development. The Austrian-born US psychologist Bruno Bettelheim (1903–90) described in an article in the *Journal of Abnormal and Social Psychology* in 1943 and in Chapter 4 of his book *The Informed Heart* (1960) how even in Nazi concentration camps, some inmates came to identify with their SS guards. See also [IDENTIFICATION \(2\)](#).

identity crisis *n.* A state of confusion arising from an inability to reconcile conflicting aspects of one's personality. The concept was popularized by the German-born **ego psychologist* Erik H. Erikson (1902–94) in his book *Identity: Youth and Conflict* (1968). See [DEVELOPMENTAL CRISES](#), [EGO IDENTITY](#). See also [DISSOCIATIVE IDENTITY DISORDER](#), [GENDER DYSPHORIA](#).

identity disorder See [DISSOCIATIVE IDENTITY DISORDER](#), [GENDER DYSPHORIA](#).

identity theory *n.* An approach to the **mind–body problem*, a form of
*****ebook converter DEMO Watermarks*****

***materialism** holding that mental states have no separate existence but are identical to physical brain states. *See also* [DOUBLE-ASPECT THEORY](#), [MONISM](#).

identity versus role confusion *n.* One of the crises in the developmental theory of the German-born ***ego psychologist** Erik H. Erikson (1902–94). *See* [DEVELOPMENTAL CRISES](#).

ideograph *n.* A character or symbol used in a system of writing to represent directly a concept, idea, or object rather than a word or a sound. Characters in the writing systems of China and Japan are often called ideographs, but because the characters actually represent linguistic units rather than concepts they are therefore more properly called ***logographs**. Also called an *ideogram*. *See also* [KANJI](#). *Compare* [LOGOGRAPH](#), [PICTOGRAPH](#).
ideographic *adj.* Of or relating to ideographs, not to be confused with ***idiographic**. [From Greek *idea* idea + *graphein* to write]

ideokinetic apraxia *n.* Another name for ***ideomotor apraxia**. *See* [APRAXIA](#).

ideomotor aphasia *n.* Another name for ***transcortical motor aphasia**. *See* [APHASIA](#).

ideomotor apraxia *See* [APRAXIA](#).

idioglossia *n.* Another name for ***autonomous speech**.

idiographic *adj.* Of or relating to the study of individuals or anything unique, especially approaches to the study of ***personality** that deny the possibility of general laws or ***traits** and stress the uniqueness of individuals. Not to be confused with ***ideographic**. The term was coined in 1904 by the German philosopher Wilhelm Windelband (1848–1915). *Compare* [NOMOTHETIC](#). [From Greek *idios* own or private + *graphein* to write + *-ikos* of, relating to, or resembling]

idiolect *n.* A variety of a language peculiar to an individual speaker. *Compare* [ACROLECT](#), [BASILECT](#), [DIALECT](#), [LECT](#), [MESOLECT](#). [From Greek *idios*

private or separate + *legein* to speak]

idiopathic *adj.* Of unknown or uncertain cause. Hence terms such as *idiopathic epilepsy*, *idiopathic convulsion*, *idiopathic seizure* exclude cases resulting from known head injury or other identifiable causes. [From Greek *idios* separate + *pathos* suffering + *-ikos* of, relating to, or resembling]

idioretinal light *n.* Another name for **dark light* or **intrinsic light*. [From Greek *idios* private or separate + English *retina* + *-al* from Latin *-alis* of or relating to]

idiot *n.* An obsolete term for a person with profound **intellectual disability*; also an abusive term for a fool. **idiocy** *n.* Profound **intellectual disability*. **idiotic** *adj.* [From French *idiot* an idiot, from Latin *idiota* an ignorant person, from Greek *idiotes* a private person, or one who has no professional knowledge]

idiot savant *n.* A person with **intellectual disability* who can perform at a high level in some restricted domain of intellectual functioning, such as memorizing vast bodies of information, musical or artistic performance, or calendar calculating—naming the day of the week for a specified date in the past or future. It is not unusual for an idiot savant to suffer from **autism spectrum disorder*. Also called a *savant*. **idiots savants** *pl.* [From French *idiot* an idiot + *savant* wise or knowledgeable]

IE scale *n.* A scale derived from the **MMPI* (Minnesota Multiphasic Personality Inventory) to measure **introversion*—extraversion.

iff *conj.* In logic and mathematics, if and only if. It indicates that the two sentences that it conjoins are necessary and sufficient conditions for each other. See *BICONDITIONAL*.

iich'aa *n.* A variant name for **amok* among the Navajo indians of North America. [Navajo]

II fibre *n.* A medium-diameter, partly myelinated type of **afferent* nerve

fibre with intermediate conduction velocity, such as those of the sensory receptors located in the skin, extrafusal muscles, and joints. US *II fiber*. Compare ALPHA FIBRE, C FIBRE, DELTA FIBRE, GAMMA FIBRE, IA FIBRE, IB FIBRE.

ikota See LATAH.

ill-defined problem *n.* In the study of *problem solving, any problem in which either the starting position, the allowable operations, or the goal state is not clearly specified, or a unique solution cannot be shown to exist. A typical example is the problem of overpopulation, which satisfies none of these criteria. Also called an *ill-structured problem*. Compare WELL-DEFINED PROBLEM.

Illinois Test of Psycholinguistic Abilities *n.* A test for the assessment of psycholinguistic disabilities in children, consisting of 10 ordinary subtests plus a further two optional subtests for children between the ages of 2 and 10. It was developed by the US special educator and psychologist Samuel A(lexander) Kirk (1904–96) and published in 1961, with a revised version in 1968. **ITPA** *abbrev.*

illness anxiety disorder *n.* A term introduced in *DSM-5 to denote a disorder characterized by clearly excessive preoccupation, for at least six months, with the possibility of having or contracting a serious illness, with at most mild or minimal *somatic symptoms (this distinguishes it from *somatic symptom disorder), intense *anxiety about health, and excessive health-related activities, either repeatedly checking for symptoms or fearfully avoiding doctor's appointments. Compare BODY DYSMORPHIC DISORDER, GENERALIZED ANXIETY DISORDER, OBSESSIVE—COMPULSIVE DISORDER, PANIC DISORDER.

illocutionary act *n.* A form of *speech act that does not convey information like a statement but functions as an action in itself. For example, a request, a threat, a welcome, a warning, or an apology cannot be considered as true or false like a statement, but such utterances none the less bring about new psychological or social realities—saying is equivalent to doing. Compare LOCUTIONARY ACT, PERLOCUTIONARY ACT. [From *in-* into + Latin *locutio* an utterance, from *loqui* to speak]

*****ebook converter DEMO Watermarks*****

illuminance *n.* The amount of light falling on a surface, measured in **lux*. Also called *illumination*.

illumination *n.* 1. Another name for **illuminance*. 2. Another name for **insight* (2).

illusion *n.* According to a narrow definition, a misperception or misconception of a stimulus object, image, event, experience, or problem, or a stimulus that generates such a misperception or misconception; more generally, any misleading, deceptive, or puzzling stimulus or the experience that it generates. **Perceptual illusions* can arise through any **sensory modality*, but the most prominent are the **auditory illusions*, **tactile illusions*, and above all **visual illusions*. Illusions of conception rather than of perception are called **cognitive illusions*. Delusions of identification and memory such as **Capgras syndrome*, **déjà vu*, and the other **paramnesias* (1) are often referred to as illusions, but this is avoided in careful usage. See also POSTURAL AFTEREFFECT, SPACE–TIME ILLUSION. Compare DELUSION, HALLUCINATION. [From Latin *illusio*, *illusionis* deceit, from *illudere* to mock or make sport with, from *ludere* to play]

illusion of circular pitch *n.* Another name for the **auditory staircase illusion*.

illusion of control *n.* The belief that one has control over events that are actually determined by chance. For example, choosing a ‘lucky’ number when buying a lottery ticket does not increase the probability of winning, and throwing dice with great effort does not increase the probability of winning numbers coming up, but people often behave as if such actions influence the events in question. People who are presented with a simulation of coin-tossing on a computer and who try to influence the outcomes—for example, to increase the number of heads—by **psychokinesis* often believe that they have had an effect even when the computer has behaved perfectly randomly. The English psychologist Susan J. Blackmore (born 1951) and a colleague provided evidence in 1985 that this occurs especially in people who believe strongly in **extra-sensory perception* (ESP). The concept of illusion of control was introduced and named in 1975 in an article in the *Journal of Personality and Social Psychology* by the US psychologist Ellen J. Langer

*****ebook converter DEMO Watermarks*****

(born 1947), who was also the first to study it experimentally. Research by Langer and others suggests that it occurs most frequently in situations that resemble tasks involving skill, appear familiar, allow free choice, involve competition with apparently incompetent opponents, include foreknowledge of the desired outcome, and emphasize the importance of success. There is also evidence to suggest that depressive mood reduces the illusion of control. See also [DEPRESSIVE REALISM](#), [JUST WORLD HYPOTHESIS](#).

illusion of doubles See [CAPGRAS SYNDROME](#).

illusory conjunction *n.* Mistakenly merging attributes of two distinct stimuli in perception, for example, perceiving a red circle when a blue circle and a red square were displayed.

illusory contour *n.* A visual [*contour](#) in the absence of a lightness or colour gradient in the stimulus, computed in Area V2 of the [*visual cortex](#), generating form perception without a corresponding retinal image, the best-known example being the contour of a [*Kanizsa triangle](#). Also called an *imaginary contour*, a *Kanizsa contour*, or a *subjective contour*. See also [ANORTHOSCOPIC](#), [COGNITIVE INVENTION](#), [EHRENSTEIN'S BRIGHTNESS ILLUSION](#), [RANDOM-DOT KINEMATOGRAM](#), [RANDOM-DOT STEREOGRAM](#).

illusory correlation *n.* An apparent correlation that does not actually exist in the data being judged. In the classic demonstration of the illusion in 1967, the US psychologists Loren J(ames) Chapman (born 1927) and Jean Chapman (born 1929) presented experienced clinicians and students with information about a number of mental patients—for each patient, diagnostic statements and a drawing of a person made by that patient. The clinicians and students then estimated, from memory, the frequency with which different diagnostic statements (such as *The man who drew this is suspicious of other people*) had been associated with specific characteristics of the drawings (such as peculiar eyes in the drawing). Both groups of judges vastly overestimated the co-occurrences that fitted in with their [*implicit personality theories](#), and this illusion was extremely resistant to change, persisting even when the actual correlations were negative. For example, 91 per cent of the experienced clinicians and 58 per cent of the students reported that peculiar eyes had been associated with suspiciousness, and 80 per cent of the

*****ebook converter DEMO Watermarks*****

clinicians and 76 per cent of the students reported that broad shoulders had been associated with being worried about manliness. The illusion helps to underpin superstitions and prejudices, and it is usually explained by the **availability heuristic*, the assumption being that co-occurrences that seem likely are easier to remember than unlikely ones.

illustrator *n.* Anything that elucidates or amplifies, especially by visual signs, or anyone who produces pictures to clarify or explain a written text. In social psychology, a **gesture* (1) that accompanies speech and that depicts, clarifies, or amplifies what is being said, as when a person locks two hands together to illustrate a phrase referring to a powerful bond between two people, or punches the fist of one hand into the palm of the other to accompany a description of a car crash. *See also* KINESICS.

image *n.* 1. A depiction or likeness of an object. 2. An optically formed representation of an object, such as a **retinal image* projected by the crystalline lens of the eye on to the retina. 3. A mental representation of a stimulus in the absence of the physical stimulus, formed by imagination or memory. Also called a *mental image*. *See also* AFTERIMAGE, EIDETIC IMAGE, HERING IMAGE, HESS IMAGE, HYPNAGOGIC IMAGE, HYPNOPOMPIC IMAGE, IMAGERY, PURKINJE IMAGE, PURKINJE–SANSON IMAGE, REPRESENTATION (1, 2), STABILIZED RETINAL IMAGE. 4. The appearance or character that a person or an organization presents in public (as in *Speaking out in favour of legalizing cannabis wouldn't be good for my image*). 5. Another name for a **figure of speech* in which a word or phrase is applied to something other than its usual or literal meaning. **imaging** *n.* Creating or forming images (1, 2, 3). *See also* BRAIN IMAGING. [From Latin *imago* an image]

imageless thought *n.* **Thinking* without mental **imagery*. The **Würzburg school* believed this form of thinking to be possible but never managed to provide evidence persuasive enough to convince sceptics.

imagen *n.* A representation of a visual image in long-term memory. *Compare* LOGOGEN. [From Latin *imago* a copy or representation + Greek *genes* born]

image–retinal system *n.* A subsystem of the visual system, based on
*****ebook converter DEMO Watermarks*****

***direction-sensitive neurons**, that computes the movement of objects from the movement of images across the retina, but that is unable on its own to distinguish between retinal movements caused by movements in the environment and those caused by movements of the observer's eyes and head. *See also* EYE-HEAD MOVEMENT SYSTEM, REAFFERENCE.

imagery *n.* The act or process of forming mental ***images** (3) without stimulation of sense organs, or the mental images formed by ***memory** and ***imagination**, including not only visual images but also images from the other senses, such as hearing, taste, smell, and touch. The German psychologist Wilhelm (Max) Wundt (1832–1920) believed that images are one of the three basic elements of consciousness, together with sensations and feelings. *See also* DUAL-CODE THEORY (1), EIDETIC IMAGE, FUNCTIONAL EQUIVALENCE HYPOTHESIS, IMAGEN, LOGOGEN, MENTAL MODEL, MENTAL ROTATION.

imaginary companion *n.* A child's fanciful or invented friend, playmate, or associate, often believed in with ***delusional** conviction.

imaginary contour *n.* Another name for an ***illusory contour**.

imagination *n.* 1. The act or process of ***imagery**, especially of generating mental ***images** (3) of stimuli that are not being or have never been experienced in perception; more generally creative ability or resourcefulness. 2. In approaches to literary criticism influenced by the English romantic poet and critic Samuel Taylor Coleridge (1772–1834), a creative joining of active and passive perceptual elements that imposes unity on poetic material.
imaginary *adj.*

imago *n.* 1. In ***psychoanalysis**, an idealized image of another person, such as a parent, or of an ***instinctual object**, acquired in infancy and maintained in the ***unconscious** (2) in later life. The concept was introduced in 1911 by Carl Gustav Jung (1875–1961), who believed that some imagos are derived from ***archetypes** (2) rather than from personal experiences, and it became a key concept of his ***analytical psychology**. In the writings of the British-based Austrian psychoanalyst Melanie Klein (1882–1960), it is a fantastically distorted picture of the real object on which it is based. *See also* ANIMA, ANIMUS (3), IDEALIZATION. 2. A mature adult insect produced by

*****ebook converter DEMO Watermarks*****

metamorphosis. [From Latin *imago* a likeness, from *imitari* to copy]

imbecile *n.* An obsolete term for a person with mild [*intellectual disability](#); also, an abusive term for a person of low intelligence. **imbecility** *n.* Mild intellectual disability. **imbecilic** *adj.* [From Latin *imbecillus* feeble]

imidazoleamine *n.* A [*biogenic amine](#) such as [*histamine](#) derived from the five-member imidazole ring $C_3H_4N_2$. [From *imidazole* a white crystalline base + *amine*]

imipramine *n.* A commonly prescribed [*tricyclic antidepressant](#) drug that acts by blocking the reuptake mechanism of amine neurotransmitters, allowing them to accumulate at [*synapses \(1\)](#) in the central nervous system. Also called *Amitril*, *Elavil*, *Endep*, *Laroxyl*, *Saroten*, *Tofranil*, and *Triptafen* (trademarks). Formula $C_{19}H_{24}N_2$. See also [CLOMIPRAMINE](#). [From *imi(de)* indicating a compound containing the divalent group $—CONHCO—$ + *pr(opyl)* indicating a compound containing the monovalent group C_3H_7 + *amine*]

imitation game *n.* The name used by the English mathematician Alan Mathison Turing (1912–54) to refer to what others have always called the [*Turing test](#).

immediate memory *n.* Another name for [*short-term memory](#).

immune response *n.* The production of [*antibodies](#) within the body as a defensive reaction to the presence of an [*antigen](#), as when [*B lymphocytes](#) produce [*immunoglobulin](#) molecules with combining sites that fit shapes on the surface of the antigen and that bind to the antigen, setting in train a process that can neutralize and destroy it. A *primary immune response* follows first exposure to an antigen, usually takes several days to develop, and is mediated initially by immunoglobulin M (IgM), whereas a *secondary immune response* occurs after a second or subsequent exposure, develops much more rapidly, and is mediated primarily by immunoglobulin G (IgG). Also called an *antigen–antibody response*. See also [GRANULOCYTE](#), [INTERLEUKIN](#), [MONOCYTE](#), [PRION DISEASE](#), [T LYMPHOCYTE](#). [From Latin *immunis*

exempt or immune, from *in-* not + *munis* serving]

immune system *n.* The structures, substances, and processes within the body that are responsible for **immune responses*.

immunoglobulin *n.* Any of a group of Y-shaped protein molecules synthesized in blood plasma by B lymphocytes and functioning as an **antibody* in an **immune response*. Immunoglobulins are made up of two pairs of molecular chains, one light pair and one heavy pair, linked by disulphide bonds and containing variable regions providing differently shaped combining sites for different **antigens*, the number and positions determining the particular class. Among the most important classes are immunoglobulin G (IgG), an antibody produced towards the end of a primary immune response and the main antibody in a secondary response; immunoglobulin A (IgA), secreted locally in the gut and occurring in bodily fluids such as saliva, tears, and milk; and immunoglobulin M (IgM), the first class of immunoglobulin appearing in a primary immune response. *See also* B LYMPHOCYTE, T LYMPHOCYTE. **Ig** *abbrev.* [From Latin *immunis* exempt or immune, from *in-* not + *munis* serving + *globulus* a little globe, diminutive of *globus* a globe + *-in(a)* indicating an organic compound, referring to globulins, proteins soluble in dilute salt solutions but not in pure water]

immunology *n.* The study of the nature, functions, and phenomena of the **immune system* and **immune responses*. [From *immune* + Greek *logos* word, discourse, or reason]

impairment *n.* Any diminution in quality or strength; more specifically, any diminution in the quality or strength of physical or psychological functioning in some specified domain. *Compare* DEFICIT. **impair** *vb.* [From Latin *im-* indicating intensive + *peiorare* to make worse, from *peior* worse]

implicational universals *n.* One of the classes of **linguistic universals*, taking the form *if A, then B*, where *A* and *B* are two properties of languages. A typical example, suggested by the US linguist Joseph H. Greenberg (1915–2001), is the following: If a language has **gender (2)* categories in nouns, then it has gender categories in pronouns.

implicit association test *n.* A test designed to measure ***implicit attitudes** by pairing the object of the attitude with pleasant and unpleasant words. To measure implicit prejudice against black people, for example, a respondent may be presented with images of faces of black and white people interspersed with pleasant words (such as *happy, peace, pleasure*) and unpleasant words (such as *filth, rotten, ugly*). In one phase of the test, the respondent's task is to react as quickly as possible by pressing a particular key whenever a black face or an unpleasant word is presented and a different key whenever a white face or a pleasant word is presented. In a second phase, the pairings are reversed, so that the respondent has to press one key for a black face or pleasant word and a different key for a white face or an unpleasant word. A person with an unfavourable implicit attitude to black people should find the first (congruent) phase easier than the second (incongruent) phase and should therefore respond more quickly in the first, the difference between the average ***latencies** in the two phases providing a measure of the implicit attitude. The test was developed by the US psychologist Anthony G(alt) Greenwald (born 1939) and two postgraduate students and published in the *Journal of Personality and Social Psychology* in 1998. Because it is a ***non-reactive** and ***unobtrusive measure** whose purpose is hidden from respondents, and because responses to it are difficult to fake, it is especially useful in assessing socially stigmatized attitudes. Also called the *implicit attitude test*. See also **MODERN RACISM**. **IAT** abbrev. [From Latin *implicitus* interwoven, from *implicare* to interweave, from *plicare* to fold]

implicit attitude *n.* An ***attitude** activated without conscious awareness by memory of past experiences, as when a woman meets a man and takes an instant dislike to him because he reminds her unconsciously of an uncle whom she disliked when she was a child. It is usually measured by means of the ***implicit association test**. See also **MODERN RACISM**.

implicit learning *n.* Acquisition of information occurring largely without conscious effort or explicit knowledge of what is learned. The second part of the definition is controversial because of the difficulty of proving that participants lack knowledge of what they have learned. The concept was introduced in 1967 by the US psychologist Arthur S. Reber (born 1940) in an article in the *Journal of Verbal Learning and Verbal Behavior* in which he reported evidence that, after viewing a series of letter strings formed

*****ebook converter DEMO Watermarks*****

according to an artificial ***finite-state grammar**, participants who had little conscious insight into the underlying rule structure were nevertheless able to classify new letter strings as to whether or not they conformed to the grammar. *See also* **WUG TEST**. *Compare* **IMPLICIT MEMORY**. [From Latin *implicitus* interwoven, from *implicare* to interweave, from *plicare* to fold + English *learning*]

implicit memory *n.* A type of memory that is revealed when learning facilitates performance on a task that does not require conscious or intentional recollection of what was learnt. In a typical test, learners are shown a list of words or pictures, and then they are given an ostensibly unrelated task of recognizing fragmented forms of words or pictures in brief displays, and evidence for implicit memory is found in their ability to recognize the fragmented forms better if they have previously studied them. Evidence suggests that densely amnesic patients, who perform badly on standard memory tests, often perform normally on tests of implicit memory. The term was introduced by the Canadian psychologist Peter Graf (born 1951) and the US psychologist Daniel Lawrence Schacter (born 1952) in an article in the *Journal of Experimental Psychology: Learning, Memory, and Cognition* in 1985. *Compare* **EXPLICIT MEMORY**.

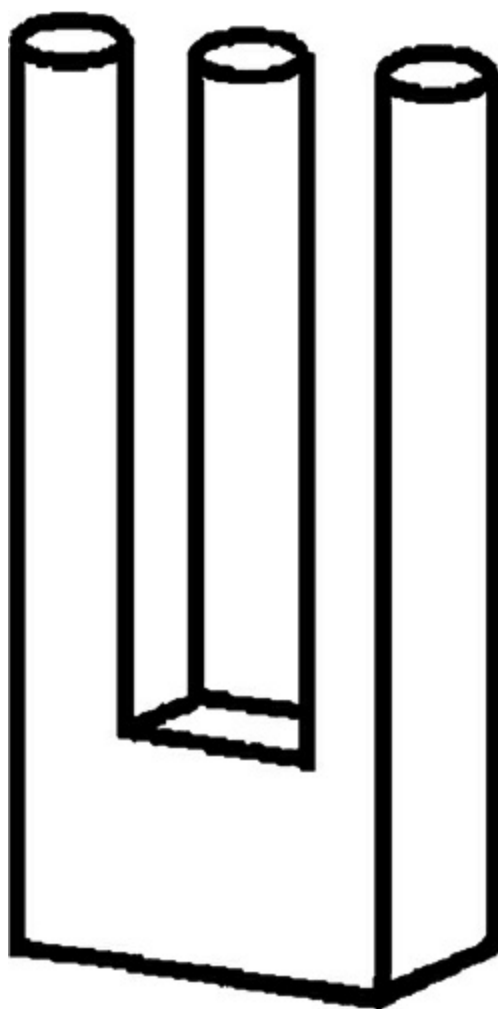
implicit personality theory *n.* A set of assumptions that a person makes, often unconsciously, about the ***correlations** between personality ***traits**, including such widespread assumptions as that *warmth* is positively correlated with *generosity*, so that a person who is warm is perceived as being likely also to be generous, and that *coldness* is positively correlated with *seriousness*, so that a person who is cold is perceived as being likely also to be serious. Some implicit personality theories also include correlations between psychological and physiognomic traits, such as the belief that intelligence is positively correlated with forehead height or that meanness is negatively correlated with distance between the eyes. The concept was introduced in 1954 by the US psychologist Jerome S(eymour) Bruner (born 1915) and the Italian-born US psychologist Renato Tagiuri (1919–2011), who called it a *lay personality theory*, and in 1955 by the US psychologist Lee J(oseph) Cronbach (1916–2001), who introduced the term *implicit personality theory*. *See also* **ILLUSORY CORRELATION**, **TRAIT CENTRALITY**.

implosion therapy *n.* Another name for [*flooding](#). [From Latin *in* in + *plodere* to clap]

impossible figure *n.* A drawing or other representation of an object that could not exist in actual three-dimensional space, the best known examples being the [*Freemish crate](#), [*impossible trident](#), the [*Penrose triangle](#), and the [*staircase illusion](#). It is a misnomer, because what is impossible is not the figure but what it represents. Impossible figures feature strongly in the work of the Swedish artist Oscar Reutersvärd (1915–2001) and the Dutch artist Maurits C(ornelis) Escher (1898–1970). Also called an *Escher figure* or an *undecidable figure*. See also [VISUAL ILLUSION](#). Compare [AMBIGUOUS FIGURE](#).

impossible triangle *n.* Another name for the [*Penrose triangle](#).

impossible trident *n.* An [*impossible figure](#) representing a three-pronged (or two-pronged) object that emerged from an obscure source in the US in 1964 and appeared on the cover of *Mad* magazine in 1965 (see [illustration](#)). It has been incorporated into several of the paintings, drawings, and etchings of the Swedish artist Oscar Reutersvärd (1915–2002) and some of the works of the Dutch graphic artist Maurits C(ornelis) Escher (1898–1970). Also called a *blivet*. See also [VISUAL ILLUSION](#).



Impossible trident. How many prongs does it have?

imposter phenomenon *n.* A subjective experience of phoniness in people who believe that they are not intelligent, capable, or creative despite evidence of high achievement, and who are highly motivated to achieve but live in perpetual fear of being ‘found out’ or exposed as frauds. The phenomenon was first described in 1978 by the US psychologists Pauline Rose Clance (born 1938) and Suzanne A(ment) Imes (born 1944) in an article entitled ‘The Impostor Phenomenon in High Achieving Women: Dynamics and Therapeutic Intervention’ in the journal *Psychotherapy: Theory and Practice*. Also spelt *impostor phenomenon*. Also called the *imposter* (or *impostor*) *syndrome* or *fraud syndrome*. [From Latin *impositus* imposed, from *imponere*, *impositum* to place upon, from *ponere* to place]

impotence *n.* **1.** Weakness or powerlessness. **2.** More specifically in relation to males, incapacity to perform sexual intercourse owing to an inability to achieve or to maintain an erection, believed to affect between 13 and 21 per cent of men aged 20–80 on at least some occasions. Also called *erectile dysfunction* or *erectile disorder (ED)*, *erectile impotence*, or *male erectile disorder*. Also, less commonly, an inability to have an ***orgasm** or to ejaculate. Also called *ejaculatory impotence*, *male orgasmic disorder*, or *orgasmic impotence*. Both forms of impotence may be classified either as *primary impotence*, if successful intercourse has never been possible, and *secondary impotence*, if at least one successful intercourse has been possible. See also **CYCLIC GMP**, **DE-REFLECTION**, **ERECTILE DISORDER**, **PREMATURE (EARLY) EJACULATION**, **VIAGRA**. **impotent** *adj.* [From Latin *in-* not + *potentia* power]

impoverished stimulus *n.* Another name for a ***degraded stimulus**.

impression formation *n.* The rapid creation of a unified perception or understanding of the character or personality of another person on the basis of a large number of diverse characteristics. One of the main problems in this area has been to determine whether people use ***additive** or non-additive models to combine the information. See also **ATTRIBUTION THEORY**, **IMPLICIT PERSONALITY THEORY**, **IMPRESSION MANAGEMENT**, **PERSON PERCEPTION**, **PRIMACY EFFECT (2)**, **SELF-PRESENTATION**, **TRAIT CENTRALITY**.

impression management *n.* Control and regulation of information in order to influence ***impression formation** or the attitudes or opinions of the people on whom such behaviour is targeted. Through impression management one seeks to shape other people's impressions of a person (such as oneself, a friend, or an enemy) or of an event (such as an achievement or a failure). Impression management that is focused on controlling impressions of oneself is called ***self-presentation**.

imprinting *n.* In ethology, a form of rapid ***learning (1)** that takes place during a ***critical period** of development immediately or shortly after birth and is extremely resistant to ***extinction (2)**, the most familiar example being the behaviour of newly hatched ducklings that become imprinted on, and subsequently follow around, virtually any moving object to which they are exposed during the critical period following hatching. It was first studied in
*****ebook converter DEMO Watermarks*****

detail in 1935 by the Austrian zoologist Konrad (Zacharias) Lorenz (1903–89). Also called *filial imprinting*. See also [GENETIC IMPRINTING](#). Compare [ATTACHMENT THEORY](#).

impulse-control disorders *n.* A class of [*mental disorders](#) in [*DSM-IV](#) characterized by a failure to resist impulses, drives, or temptations to behave in ways that are damaging to oneself or others. In DSM-5, they appear under [*disruptive, impulse-control, and conduct disorders](#). See [ANTISOCIAL PERSONALITY DISORDER](#), [CONDUCT DISORDER](#), [INTERMITTENT EXPLOSIVE DISORDER](#), [KLEPTOMANIA](#), [OPPOSITIONAL DEFIANT DISORDER](#), [PYROMANIA](#). See also [INTERNET ADDICTION SYNDROME](#), [INTERNET GAMING DISORDER](#), [ROAD RAGE](#), [ROID RAGE](#), [SUBSTANCE-RELATED AND ADDICTIVE DISORDERS](#).

impulsivity *n.* Acting on the spur of the moment without thinking, planning, or considering the consequences It is frequently accompanied by an inability to stick to plans and a continual sense of urgency. See [ANTISOCIAL PERSONALITY DISORDER](#), [ATTENTION-DEFICIT/HYPERACTIVITY DISORDER](#), [BORDERLINE PERSONALITY DISORDER](#), [PSYCHOPATHY](#), [REFLECTION–IMPULSIVITY](#). [From Latin *impulsus*, a pushing against, from *impellere* to strike against + *-ivus* indicating a tendency + *itas* indicating a state or condition]

imu See [LATAH](#).

inadequate personality *n.* A term occasionally used for a condition, without evidence of any [*mental disorder](#), characterized by lack of judgement, ambition, and initiative, leading to failure at almost everything attempted.

inadequate stimulus *n.* A term sometimes used for a [*stimulus \(1\)](#) that is incapable of evoking a [*response](#) from an organism, such as light or sound that is too faint for the visual or auditory receptors to detect. It is an [*oxymoron](#) and is avoided in careful usage. Compare [ADEQUATE STIMULUS](#).

inadmissible alternative/strategy *n.* In decision theory and game theory, an alternative or [*strategy \(2\)](#) that is dominated by a [*dominant alternative/strategy](#).

inappropriate affect See AFFECT.

inattention blindness *n.* Failure to register consciously a visual stimulus when attention is focused elsewhere. The term was coined in the title of the book *Inattention Blindness* (1998) by the US psychologists Arien Mack (born 1931) and (posthumously) Irvin Rock (1922–95). In Mack and Rock's standard experimental procedure, a small cross was presented briefly on a computer screen, and participants were asked to judge which of its component lines was longer. After several similar trials, an unexpected image, such as a brightly coloured rectangle or an inverted face, appeared on the screen along with the cross. The participants, who were concentrating on the cross, often failed to notice the unexpected image, even when it appeared in the centre of the **visual field*, although a personally meaningful image, such as the participant's own name or a non-inverted happy face, was usually noticed. This phenomenon may help to explain why motorists and train drivers sometimes go through red traffic signals and why certain other accidents occur. See also VISUAL SEARCH. Compare CHANGE BLINDNESS, MOTION-INDUCED BLINDNESS.

inbred strain *n.* A group of organisms produced by or resulting from **inbreeding*.

inbreeding *n.* Producing offspring from closely related parents over a number of generations. See INBREEDING DEPRESSION.

inbreeding depression *n.* Loss of vigour resulting from **inbreeding*, due to the loss of **heterozygosity* and the expression of deleterious **recessive genes* in **homozygous* state. See also INCEST TABOO.

incapacitant *n.* A substance that temporarily disables people and is used for personal protection, crowd control, or biological warfare. Also called an *incapacitating agent* or a *disabling agent*. See BZ GAS, CN GAS, CS GAS, MACE, PEPPER SPRAY, TEAR GAS.

incentive motivation *n.* In **Hullian learning theory*, an **intervening variable* between the work involved in a response and the **generalized*

reaction potential. *K* abbrev.

incentive-sensitization theory *n.* A theory of drug addiction that avoids the assumption that addicts are motivated to take drugs either to experience pleasure or **euphoria* or to avoid unpleasant **withdrawal* symptoms. The theory proposes that potentially addictive drugs produce long-lasting changes in brain organization in areas normally involved in the process of incentive motivation and reward and elsewhere, especially the **nucleus accumbens*. These changes cause brain reward systems to become hypersensitive to drugs and drug-associated stimuli, causing the drug user to 'want' the drug more and more, with the consequence that 'wanting' becomes dissociated from 'liking', and addicts continue to take drugs even when they derive no pleasure or relief from withdrawal symptoms from doing so. The theory was first proposed by the Canadian psychologist Terry E. Robinson (born 1949) and Kent C(harles) Berridge (born 1957) in an article in the journal *Brain Research Reviews* in 1993.

incest *n.* Prohibited sexual intercourse between close relatives. *See also* INCEST TABOO, GENETIC SEXUAL ATTRACTION. [From Latin *incestus* incest, from *in-* not + *castus* chaste or pure]

incest taboo *n.* The custom or law in all societies prohibiting sex and marriage between members of the **nuclear family*, the universality of the taboo being notoriously difficult to explain. According to the *functional theory*, the taboo creates and maintains networks of social relationships without which societies disintegrate into separate nuclear families and are eliminated, but this theory rests on the controversial assumption that without the incest taboo people would naturally want to mate with close relatives, and it fails to explain why the taboo governs sexual intercourse rather than marriage. According to the *inbreeding depression theory*, inbreeding leads to the genetic deterioration and ultimate extinction of any society that practises it, because harmful **recessive genes* are more likely to come together, and the taboo may thus have evolved by natural selection, but this leaves open the question as to why few non-human animals have incest taboos and why some successful human societies, such as the Sotho people of southern Africa, have a positive obligation to marry cousins. The most persuasive explanation is the *prepubertal interaction theory*, put forward in 1894 by the Finnish social

*****ebook converter DEMO Watermarks*****

philosopher Edvard Alexander Westermarck (1862–1939), based on the psychological observation that intimate contact between children at a critical period before puberty, now believed to be between 2 and 6 years of age, results in a lack of sexual attraction between them in adult life. *See also* [ADELPHOGAMY \(2\)](#), [INBREEDING DEPRESSION](#).

incidence *n.* In [*epidemiology](#), the frequency of occurrence or onset of new cases of a disorder as a proportion of a population in a specific time period, usually expressed as the number of new cases per 100,000 per annum. *Compare* [PREVALENCE](#).

incidental learning *n.* Human [*learning \(1\)](#) that is unintentional and unmotivated or that occurs without any apparent [*reinforcement \(1, 2\)](#). In animal learning, the phenomenon is called [*latent learning](#). Also called *passive learning*.

incident light *n.* Light falling on or striking a surface. [From Latin *incidere* to fall into, from *in* into + *cadere* to fall]

inclusive disjunction *See* [DISJUNCTION \(2\)](#).

inclusive fitness *n.* The degree of [*adaptation \(1\)](#) of an organism to its environment, measured in terms of the average number of genes belonging to its [*genotype](#) that are passed on to the next generation, relative to those of other genotypes, taking into account not only the genes that it passes on directly but also those that it shares with other relatives and are passed on by them. The concept was introduced by the British biologist William D(onald) Hamilton (1936–2000) in two articles in the *Journal of Theoretical Biology* in 1964. *See also* [KIN SELECTION](#). *Compare* [DARWINIAN FITNESS](#), [FITNESS](#).

incoherence *n.* Loose, rambling speech that lacks meaningful connections between words or phrases within sentences or clauses and is incomprehensible to others. Extreme instances are sometimes called *word salad*. *See also* [DISORGANIZED SPEECH](#), [DISORGANIZED THINKING](#). *Compare* [COGNITIVE DERAILMENT](#), [LOOSENING OF ASSOCIATIONS](#). [From Latin *in-* not + *cohaerere* to stick together or be consistent, from *co-* together + *haerere* to stick]

*****ebook converter DEMO Watermarks*****

incomplete-pictures test *n.* A non-verbal test or subtest, often included in an **IQ test*, in which the respondent tries to identify or fill in a part that is missing from a picture of a familiar object, such as a pig without a tail or a revolver without a trigger.

incomplete-sentences test *n.* Another name for a **sentence completion test*.

incongruity of affect *See* AFFECT.

incorporation *n.* In **psychoanalysis*, a **defence mechanism* whereby a person mentally ingests or swallows another person, an **instinctual object*, or a **part object*. Its **instinctual aim* is characteristic of the **oral stage*, and it provides a model for **identification (2)* and **introjection*.

incremental validity *n.* In psychometrics, the degree to which a test improves on decisions that can be made from existing information, such as the **base* rate of the attribute being measured and other measures that are available. The term is also used to denote the **validity* of a test arising from successive refinements or improvements of it in the light of experience or evidence, usually including the removal or replacement of test items that turn out to be problematic or that yield different results from the others.

incubation *n.* One of the **problem-solving stages*, coming after preparation and before **insight (2)*, characterized by creative thinking while the problem is turned over in the mind, often unconsciously. [From Latin *incubare* to lie on, from *in* to or on + *cubare* to lie down, alluding to the incubation of eggs before they hatch]

incus *n.* The middle of the three small bones in the **middle ear*, transmitting sound vibrations from the malleus to the stapes. Referred to non-technically as the *anvil*. *Compare* MALLEUS, STAPES. [From Latin *incus* an anvil, from *incudere* to forge, alluding to its resemblance to a blacksmith's anvil]

independent assortment *n.* The law of independent assortment, the

second of **Mendel's laws*, stating that the separation at **meiosis (1)* of any pair of hereditary units for a **trait* or characteristic is not affected by the separation of any other pair, so that each unit is inherited independently of every other unit. This law had to be modified when **linkage* was discovered. Also called the *law of independent assortment of genes*. See also *DNA RECOMBINATION*, *SEGREGATION OF ALLELES*.

independent samples t test *n.* In inferential statistics, a version of the **t test* used for comparing means from two independent samples. Compare *RELATED SCORES T TEST*.

independent variable *n.* In **experimental design*, a variable that is varied by the experimenter independently of the **extraneous variables* in order to examine its effects on the **dependent variable*. In **multiple regression*, it is a variable that has a potential effect on the **dependent variable*. Also called an *experimental variable*. See also *INTERVENING VARIABLE*. *IV* abbrev.

indeterminacy principle *n.* Another name for the **uncertainty principle*.

index case *n.* Another name for a **proband*.

indicator variable *n.* In statistics, a variable with just two possible values, sometimes represented by the symbols 0 and 1, used (for example) to represent categorical variables in **regression analysis*.

indifference interval *n.* A time interval that, according to **Vierordt's law*, is neither systematically overestimated nor systematically underestimated, usually found by experiment to be in the region of 0.7 second, though varying from one person to another and from one occasion to another.

indifference, principle of *n.* Another name for the principle of **insufficient reason*.

indirect scaling *n.* In **psychophysics*, any scaling method, such as the **method of bisection*, in which an observer's judgement of stimulus magnitude is inferred rather than being simply estimated as in direct scaling or **magnitude estimation*.

indirect speech act *n.* An utterance whose communicative purpose is masked by its grammatical form. For example, the utterance *Would you like to set the table?* is grammatically a question, but it masks the speaker's real communicative purpose, which is not to enquire about the listener's likes or dislikes but to tell the listener to do something. *See also* *SPEECH ACT*.

indissociation *n.* The term used by the Swiss psychologist Jean Piaget (1896–1980) to refer to the failure of young children to differentiate themselves from their environments or objects from one another.

individual differences *n.* All of the ways in which people differ from one another, especially psychological differences. Included are all differences in **personality* and **intelligence*.

individual differences scaling *See* *INDSCAL*.

individual psychology *n.* The school of **psychoanalysis*, also called **Adlerian* psychoanalysis, founded in 1911 by the Austrian psychiatrist Alfred Adler (1870–1937). *See* *COMPENSATION*, *DIANA COMPLEX*, *FICTIONAL FINALISM*, *GUIDING FICTION*, *INFERIORITY COMPLEX*, *LIFE LIE*, *MASCULINE PROTEST*, *NEUROTIC CHARACTER*, *NEUROTIC FICTION*, *WILL TO POWER*.

individual test *n.* A test of **intelligence*, **personality*, or any other psychological attribute, designed to be administered to one respondent at a time. *Compare* *GROUP TEST*.

individuation *n.* The act or process of giving individuality to someone or something. In **analytical psychology* it is the process occurring by degrees over the lifespan whereby an individual achieves wholeness through the integration of **consciousness* and the **collective unconscious*, and it is symbolized by the **mandala*. In a key passage, Carl Gustav Jung (1875–

1961) described it as follows: ‘Individuation means becoming a single, homogeneous being, and, in so far as “individuality” embraces our innermost, last, and incomparable uniqueness, it also implies becoming one's own self. We could therefore translate individuation as “coming to selfhood” or “self-actualization” ’ (*Collected Works*, 7, paragraph 266). Jung borrowed the word from the German philosopher Arthur Schopenhauer (1788–1860), but it has been traced back to 16th-century alchemy. In [*neo-Freudian](#) theory, the German-born US psychoanalyst Erich Fromm (1900–80) used the term slightly differently to denote the gradual attainment by a growing child of awareness of being a particular, individual person. *Compare* [DEINDIVIDUATION](#). [From Latin *individuare* to single out, from *in-* into + *dividuus* divisible, from *dividere* to divide]

Indo-European *adj. n.* (Of, relating to, or belonging to) a family of languages spoken by almost half the world's population, descended from a common tongue called *Proto-Indo-European* that is believed to have existed in the fifth millennium BC and subsequently to have fragmented into Germanic, Italic, Celtic, Baltic, Slavic, Albanian, Greek, Armenian, Iranian, and Indic, and later still into many different languages, including English and all descendants from Greek, Latin, and Sanskrit. By working backwards, linguists have reconstructed much of the structure and vocabulary of Indo-European; thus the word for god is believed to have been *deiw-os* (cognate with Latin *deus* and Greek *theos*), the word for father *p'tēr-* (cognate with Latin and Greek *pater*), and hence the word for the patriarchal god of Indo-European religion *Dyeu p'ter-*, from which *Zeus pater* found its way into Greek, *Dyaus pitar* into Sanskrit, and *Jupiter* into Latin and then English. *See also* [GLOTTOCHRONOLOGY](#), [GRIMM'S LAW](#), [LEXICOSTATISTICS](#).

indole *n.* A crystalline substance C_8H_7N forming the basis of the indigo molecule, occurring naturally in coal tar, some plants such as jasmine, and the urine of civets and other mammals, also an important constituent of [*indoleamine](#). Also spelt *indol*. [From *indigo* a tropical plant formerly cultivated for its dark blue dye, also a source of indole + Latin *oleum* oil]

indole alkaloids *n.* A group of [*alkaloids](#) forming one of the major groups of [*hallucinogens](#) and [*psychedelic](#) drugs, including [*bufotenin](#), [*DMT](#), [*harmine](#), [*LSD](#), and [*psilocybin](#). *See also* [PHANTASTICANT](#).

*****ebook converter DEMO Watermarks*****

indoleamine *n.* Any of a group of **biogenic amines*, including **serotonin* and **tryptamine*, containing an **indole* ring with five members and an amine group (NH₂). [From *indole* + *amine*]

indoleamine hypothesis *n.* The conjecture that abnormalities in the metabolism of **indoleamines* are implicated in the aetiology of **depression*, **mania* (1), and other mental disorders.

INDSCAL *abbrev.* Individual differences scaling, one of the most powerful and popular methods of **multidimensional scaling*, first published in the journal *Psychometrika* in 1970 by the US psychometricians J(ohn) Douglas Carroll (1939–2011) and the Chinese-born computer scientist Jih-Jie Chang (born 1927), used for analysing several proximity matrices simultaneously.

induced colour *n.* A colour arising from **colour induction*. US *induced color*.

induced delusional disorder *n.* Another name for a **shared psychotic disorder* (*folie à deux*). Also called *induced psychotic disorder*.

induced motion *n.* Another name for **vection*; more generally, any illusion of movement of a stationary object caused by movement of its background or surrounding context.

induction *n.* 1. A form of reasoning, also called *empirical induction*, in which a general law or principle is inferred from particular instances that have been observed. Many people believe that this form of reasoning works in practice, and it is widely believed to form the basis of all empirical sciences, but the Scottish philosopher David Hume (1711–76) showed in *A Treatise of Human Nature* in 1739 that induction is logically invalid: from the premise *All swans that have been observed are white* it is not valid to conclude that *Therefore, all swans are white*. There is a missing premise, that *All swans have been observed*, which is not true and could never be true of any universal proposition in science that is supposed to apply throughout time and space. Hume pointed out that the uniformity of nature might justify induction, in the form of the premise *Future observations will resemble past*

observations, but this could be justified only by a question-begging appeal to induction itself, and in any event it is not true in general—for example, there are black swans in Australia. This apparent inconsistency is called the *problem of induction* or *Hume's problem*, and it is solved by the insight that empirical evidence is used to falsify rather than to confirm hypotheses. See also [FALSIFIABILITY](#), [GOODMAN'S PARADOX](#), [HEMPEL'S PARADOX](#), [HYPOTHETICO-DEDUCTIVE METHOD](#). Compare [DEDUCTION](#). **2.** A mathematical technique, also called *mathematical induction*, for proving that a statement or [*proposition \(1\)](#) is true in general, or (equivalently) that each of an infinite sequence of statements is true, by proving that the first statement in the sequence is true, and then that if any one of the statements is true it follows that the next one is also true. **3.** Indirect generation of a sensory experience without direct stimulation of the corresponding sensory receptors, by stimulation of adjacent or related sensory processes. See [COLOUR INDUCTION](#), [INDUCED MOTION](#), [VISUAL INDUCTION](#), [WARMTH CONTRAST](#). **4.** The name given by the Russian physiologist Ivan Petrovich Pavlov (1849–1936) to *positive induction*, in which the response to an excitatory [*conditioned stimulus](#) is increased if it is immediately preceded by an inhibitory one, and to *negative induction*, in which the response to an inhibitory conditioned stimulus is increased if it is immediately preceded by an excitatory one. **5.** The process whereby morphogenic differentiation is stimulated in a developing [*embryo](#) by [*Müllerian inhibiting substance](#), [*testosterone](#), or other hormones or substances. **6.** A formal process of introduction to membership of a group or organization. **7.** A shortened name for [*enzyme induction](#). **induce** *vb.* **inductive** *adj.* [From Latin *inducere* to lead in, from *in* in + *ducere*, *inductum* to lead + *-ion* indicating an action, process, or state]

inductive reasoning *n.* Another name for [*induction \(1, 2\)](#).

inductive statistics *n.* Another name for [*inferential statistics](#).

industrial/organizational psychology *n.* A field of applied psychology in which the results of basic and applied research into the well-being and efficiency of people in work is applied to problems arising in industry and in non-industrial organizations. Work in this field focuses on vocational guidance and selection, problems of work motivation and [*job satisfaction](#), absenteeism in organizations, improvement of communication

within organizations, design and implementation of training courses, teaching of social and human relations skills, improvement of promotion structures, evaluation of job performance, and problems of safety and welfare. Its major branches are **personnel psychology*, **ergonomics* or human factors psychology, and **organizational psychology*. It corresponds roughly to **occupational psychology*, the term often preferred in the UK and the rest of Europe, and it falls under the umbrella of **work psychology*. **I/O psychology** *abbrev.*

industry versus inferiority *n.* One of the crises in the developmental theory of the German-born **ego psychologist* Erik H. Erikson (1902–94). See DEVELOPMENTAL CRISES.

infantile amnesia *n.* The inability of human adults to retrieve genuine memories for events that occurred before about three years of age. Also called *childhood amnesia*. Faced with overwhelming evidence for this phenomenon, even the Austrian neurologist Sigmund Freud (1856–1939) was forced to accept it in his book *Three Essays on the Theory of Sexuality* (1905) (*Standard Edition*, VI, pp. 130–243, at pp. 174–6). See also FALSE MEMORY, FALSE MEMORY SYNDROME, PARAMNESIA (1), PIAGET KIDNAPPING MEMORY, SCREEN MEMORY.

infantile autism *n.* An alternative name for **autism spectrum disorder* when manifested during infancy. Compare CHILDHOOD AUTISM.

infantile sexuality *n.* In **psychoanalysis*, the sexual drive or **libido* in infants. See ANAL STAGE, ORAL STAGE.

infarct *n.* A localized area of dead tissue resulting from the interruption of its blood supply. When it occurs at multiple sites in the brain it can lead to **dementia*. Also called an *infarction*. See also VASCULAR DEMENTIA. [From Latin *infarctus* stuffed into, from *in* in or into + *farcire* to stuff]

infatuation *n.* Foolish or unreasoning passion; a type of love characterized by erotic passion but lacking other components. See LOVE. [From Latin *in* in + *fatuus* foolish]

inference *n.* Reasoning from premises to conclusions; or a conclusion arrived at by this process. When the premises are particular observations and the conclusion a general law or principle, then the mode of inference is called ***induction (1)**; when the premises are axioms, postulates, or assumptions and the conclusion a logical inference or theorem, then the mode of inference is called ***deduction**. **infer** *vb.* To make inferences. This word is sometimes used as a synonym for *imply* (as in *Her replies inferred that she disagreed*), but this is avoided in careful usage. [From Latin *inferre* to bring in, bring about, or deduce, from *in-* into + *ferre* to bear or carry]

inferential statistics *n.* Techniques for inferring conclusions about ***populations** on the basis of data from ***samples**. The major objective is usually to decide whether the results of research are statistically significant. Also called *inductive statistics*. See also **SIGNIFICANCE TEST**, **STATISTICAL INFERENCE**. Compare **DESCRIPTIVE STATISTICS**.

inferior *adj.* Lower in any respect; towards the bottom of a body, organ, or part, or situated below another homologous structure. Compare **SUPERIOR**. [From Latin *inferior* lower, from *inferus* low]

inferior colliculus *n.* Either of two hillock-shaped small bumps on the tectum (the roof of the midbrain), below and behind the superior colliculi, functioning as an intermediate nucleus for processing auditory signals before they are transmitted to the primary ***auditory cortex**. The four colliculi are collectively called the corpora quadrigemina. **inferior colliculi** *pl.* [From Latin *inferior* lower + *colliculus* a small hill, from *collis* a hill]

inferiority complex *n.* In the ***individual psychology** of the Austrian psychiatrist Alfred Adler (1870–1937) and his followers, a ***complex (2)** of emotionally toned ideas arising from repressed fear and resentment associated with real or imagined inferiority, resulting either in ***compensation**, in the form of pugnacity, or withdrawal into oneself. Adler introduced the concept in 1907 in a book translated as *Study of Organ Inferiority and its Psychical Compensation* (1917). In a later book *The Neurotic Constitution* (1926, original work 1912), he described it as follows: ‘The constitutional inferiority and similarly effective childhood situations give rise to a feeling of inferiority which demands a compensation in the
*****ebook converter DEMO Watermarks*****

sense of an enhancement of the self-esteem' (p. 111). In an article in 1935 Adler distinguished between natural feelings of inferiority and the inferiority complex proper.

inferior longitudinal fasciculus *n.* A bundle of nerve fibres in each cerebral hemisphere linking the *temporal lobe to the *occipital lobe. Compare SUPERIOR LONGITUDINAL FASCICULUS. [From Latin *inferior* lower + *longitudo* length, from *longus* long + *fasciculus* a little bundle, diminutive of *fasculus* a bundle]

inferior oblique muscle *n.* The lower of the two *oblique muscles attached externally to the eyeball.

inferior olivary nucleus *n.* Either of two wrinkled olive-shaped clumps of neurons in the upper part of the medulla oblongata, just below the pons, connected to the thalamus, cerebellum, and spinal cord, implicated in motor coordination. Also called an *inferior olivary complex* or an *inferior olive*. Compare SUPERIOR OLIVARY NUCLEUS. **ION** abbrev.

inferior rectus *n.* The lower of the four *rectus muscles attached externally to the eyeball.

inferior temporal cortex *n.* Another name for the *inferior temporal gyrus. **ITC** abbrev.

inferior temporal gyrus *n.* The lowest *gyrus running horizontally on the lateral (outer) surface of the *temporal lobe, implicated in visual pattern recognition. Also called the *inferior temporal cortex* (**ITC**) or *inferotemporal cortex*. **ITG** abbrev.

infinite regress *n.* An argument consisting of or implying an endless sequence of steps. An argument of this kind shows, for example, that *introspection cannot be a valid and complete source of self-knowledge, because it requires that it be possible to perform a mental act (such as remembering one's last birthday) while at the same time observing oneself doing it; but then the act of introspection is part of the mental process, and for

a complete understanding it would be necessary to observe the act of observation, and so on, which in this case is clearly impossible. This is an example of a *vicious* infinite regress: an infinite regress is vicious only if it leads to an absurd conclusion, and in other cases it is often unproblematic.

inflation of consciousness *n.* In **analytical psychology*, the expansion of a person's consciousness beyond its normal limits, arising through **identification* (2) with an **archetype* (2), the **persona* (1) or, in certain mental disorders, a famous person, resulting in an exaggerated sense of importance that is generally compensated for by feelings of inferiority. Carl Gustav Jung (1875–1961) described how it arises when the archetypal content ‘seizes hold of the psyche with a kind of primeval force and compels it to transgress the bounds of humanity. The consequence is a puffed-up attitude, loss of free will, delusion and enthusiasm for good and evil alike’ (*Collected Works*, 12, paragraph 563).

inflecting language *n.* A language such as Latin, German, or Arabic in which grammatical relationships are indicated by altering the internal structure of words, often by changing their endings. English has some features of an inflecting language, as is shown in the two sentences *I ask you* and *I asked you*. Also called a *synthetic language* or a *fusional language*. Compare AGGLUTINATIVE LANGUAGE, ISOLATING LANGUAGE.

influence, delusion of See DELUSION OF CONTROL.

information *n.* 1. **Knowledge* acquired by **learning* (2). 2. In **information theory*, a numerical quantity indicating the degree of uncertainty in a **signal*, such that if the signal occurs with probability p , then the information that it conveys, symbolized by H , is equal to $\log_2 (1/p)$, the units of measurement being binary digits or **bits*. See also BYTE, INFORMATION TECHNOLOGY, INFORMATION THEORY, NYBBLE. [From Latin *informare* to give form or shape to, from *in* into + *formare* to form, from *forma* a form or shape + *-ation* indicating a process or condition]

information processing *n.* Cognitive functioning or **cognition* interpreted with the help of concepts borrowed from computer science. It

includes all of the processes studied within **cognitive psychology*, such as **attention*, **perception*, **learning* (1, 2), **memory*, **thinking*, **problem solving*, **decision making*, and **language* (1). See ACT*, AUTOMATIC PROCESSING, BOTTOM-UP PROCESSING, CASCADE PROCESSING, COGNITIVE MISER, COGNITIVE PSYCHOLOGY, CONTROLLED PROCESSING, DISCRETE PROCESSING, DISTRIBUTED COGNITION, NEURAL NETWORK, PARALLEL DISTRIBUTED PROCESSING, STEREOTYPE, TOP-DOWN PROCESSING.

information technology *n.* The study or use of computers, telecommunication systems, and other devices for storing, retrieving, and transmitting **information* (2). See also INFORMATION THEORY. **IT** abbrev.

information theory *n.* A theory of **information* (2) in which the amount of information, symbolized by H , in a signal is defined as the smallest number of binary digits or **bits* that are required to encode it. If a signal specifies a choice of one of N equiprobable alternatives, then the amount of information that it contains is $H = \log_2 N$; hence, for example, if 16 people are equally likely to have committed a crime, a signal specifying the guilty person conveys $H = \log_2 16 = 4$ bits of information, which may be interpreted as four successive binary divisions of the set of suspects. As a second example, in a signal in which each letter of the English alphabet is equally probable, the information content of a single letter is $H = \log_2 26 = 4.70$ bits. A more general definition, applicable where the alternatives are not equiprobable, is given by the Wiener-Shannon formula $H = -\sum p_i \log_2 p_i$, where p_i is the probability of the i th alternative, and in the light of this formula information is sometimes defined as negative **entropy*. The theory was developed independently in the late 1940s and early 1950s by the English statistician and geneticist Ronald Aylmer Fisher (1890–1962) and the US mathematicians Norbert Wiener (1894–1964) and Claude E(lwood) Shannon (1916–2001), and it was Shannon's work that had the greatest influence in psychology. See also BYTE, INFORMATION TECHNOLOGY, NYBBLE.

informed consent *n.* Voluntary agreement by a patient to undergo a medical treatment or procedure, or by a research participant or subject to take part in an experiment or other research study, given in full knowledge of the nature of the procedure and its potential risks and benefits. It is

acknowledged in the ethical principles for research published by the American Psychological Association and the British Psychological Society that informed consent, while desirable, is sometimes either infeasible (as when the research participants lack the capacity to give it, through youth or mental disorder), or impractical (as when the nature of the investigation relies on deception). *See also* [ULYSSES CONTRACT](#).

infradian rhythm *n.* Any [*biological rhythm](#) with a period of less than a day. *See* [ALPHA WAVE](#), [BASIC REST–ACTIVITY CYCLE](#), [BETA WAVE](#), [DELTA WAVE](#), [GAMMA WAVE](#), [SENSORIMOTOR RHYTHM](#), [THETA WAVE](#). *See also* [BIOLOGICAL CLOCK](#), [CHRONOBIOLOGY](#), [ZEITGEBER](#). *Compare* [CIRCADIAN RHYTHM](#), [CIRCANNUAL RHYTHM](#), [ULTRADIAN RHYTHM](#). [From Latin *infra* under + *dies* a day]

infra-red *adj. n.* (Of or relating to) electromagnetic radiation with wavelengths longer than the longest radiation in the [*visible spectrum](#) but not as long as radio waves, hence within the range 750 nanometres to 1 millimetre, such radiation being perceived as heat. *See also* [INFRA-RED VISION](#). *Compare* [ULTRAVIOLET](#). **IR** *abbrev.* [From Latin *infra* below or under + English *red*]

infra-red vision *n.* A form of perception found in all snakes of the subfamily Crotalinae, the pit vipers, including rattlesnakes and pythons, in which [*infra-red](#) radiation emitted by warm objects such as prey animals is detected by a snake's pit organs, a pair of deep cavities in the sides of its head below its eyes.

infrasound *n.* A pressure wave of the same physical character as sound but with a frequency below the lower limit of the [*audibility range](#)—below about 16 hertz. Such waves are capable of travelling relatively great distances, and if intense enough, they can induce [*dysphoria](#) and can even damage internal organs of the body although they cannot be heard. African and Indian elephant families in the wild communicate with sounds that are partly infrasonic, ranging from 35 hertz down to 12 hertz. *Compare* [ULTRASOUND](#). **infrasonic** *adj.* [From Latin *infra* below or under + English *sound*]

infundibulum *n.* The funnel-shaped stalk connecting the [*pituitary gland](#)

*****ebook converter DEMO Watermarks*****

to the ***hypothalamus** at the base of the brain. [From Latin *infundibulum* a funnel, from *in* into + *fundere* to pour]

ingratiation *n.* A form of ***self-presentation** calculated to increase one's attractiveness in the eyes of another person. It was first investigated experimentally in the early 1960s by the US psychologist Edward Ellsworth Jones (1926–93), who observed three major classes of tactics commonly used by ingratiators who are motivated to win the favour of a target person: other-enhancement, in which the ingratiator flatters and compliments the target person; opinion conformity, in which the ingratiator pretends to share the target person's attitudes on important issues; and biased self-presentation, in which ingratiators of both sexes emphasize their most attractive qualities and play down their weak points. In addition, if circumstances allow, an ingratiator often renders favours to the target person. Research has revealed that such ingratiation tactics are often successful in eliciting liking, and that when they succeed, ingratiators often come to believe, presumably out of vanity, that they did not use any tactics. **ingratiate** *vb.* [From Latin *in* into + *gratia* favour]

inhalant *n.* Any volatile chemical substance that is inhaled, whether for medicinal or therapeutic purposes or as a street drug. *See also* **ALIPHATIC**, **INHALANT-RELATED DISORDERS**, **KETONE**, **NITRITE INHALANT**, **SOLVENT ABUSE**. [From *in-* into + Latin *halare* to breathe]

inhalant-related disorders *n.* ***Substance-related and addictive disorders** in ***DSM-5** induced by inhaling the ***aliphatic** and ***aromatic** hydrocarbons in petrol or gasoline, glue, paint, and some aerosols or, less commonly, the halogenated hydrocarbons in cleaning fluids and other volatile substances in ***esters**, ***ketones**, and ***glycols**. DSM-5 distinguishes between inhalant use disorder and inhalant intoxication. *See also* **SUBSTANCE-INDUCED DISORDERS**, **SUBSTANCE-RELATED AND ADDICTIVE DISORDERS**, **SUBSTANCE USE DISORDERS**. *See* **GLUE-SNIFFING**, **SOLVENT ABUSE**, **SUBSTANCE ABUSE**, **SUBSTANCE DEPENDENCE**, **SUBSTANCE-INDUCED DISORDERS**, **SUBSTANCE USE DISORDERS**.

inhibited orgasm *n.* Another name for ***female orgasmic disorder** and ***male orgasmic disorder**.

inhibited sexual desire *n.* Another name for **female sexual interest/arousal disorder* and **male hypoactive sexual desire disorder*.

inhibition *n.* **1.** The act or process of restraining or preventing something, or the state of being restrained or prevented. **2.** A stopping or checking of a physiological process, as when the action of a neuron, organ, or gland is interrupted by the action of a nerve impulse or a hormone. *See also* *INHIBITORY POSTSYNAPTIC POTENTIAL*. *Compare* *EXCITATION*. **3.** The weakening of a **conditioned response* by **extinction (2)* or an **unconditioned response* by **habituation (2)* or by the occurrence of a distracting stimulus. *See also* *RECIPROCAL INHIBITION*. *Compare* *EXCITATION*. **4.** A psychological state or condition characterized by lack of confidence and restriction of the range of **expressive behaviour*. *See also* *AVOIDANT PERSONALITY DISORDER*, *REACTIVE ATTACHMENT DISORDER*. **5.** In **psychoanalysis*, the unconscious restraint of a drive or impulse. *See also* *AIM-INHIBITION*. **inhibit** *vb.* [From Latin *inhibere*, *inhibitum* to restrain, from *habere* to have + *-ion* indicating an action, process, or state]

inhibition of inhibition *n.* Another name for **disinhibition*.

inhibition, proactive *See* *PROACTIVE INTERFERENCE*.

inhibition, retroactive *See* *RETROACTIVE INTERFERENCE*.

inhibitor *n.* A substance or gene that inhibits a specific process.

inhibitory *adj.* Tending to cause **inhibition (1, 2, 3, 4, 5)*. In neurophysiology, characteristic of **neurons* that restrain other neurons from firing, or **neurotransmitters* such as GABA, the action of which tends to prevent neurons from firing, or **synapses (1)* at which the transmission of nerve impulses tends to prevent postsynaptic neurons from firing. *See also* *INHIBITORY POSTSYNAPTIC POTENTIAL*. *Compare* *EXCITATORY*.

inhibitory postsynaptic potential *n.* A graded hyperpolarization or increase in the electrical potential across the membrane of a **postsynaptic neuron*, occurring in response to a signal transmitted across a **synapse (1)* by

a ***presynaptic** neuron and reducing the propensity of the postsynaptic neuron to initiate a nerve impulse. Also called *postsynaptic inhibition*. See also ACTION POTENTIAL, RESTING POTENTIAL. Compare EXCITATORY POSTSYNAPTIC POTENTIAL. **IPSP** abbrev.

inhibitory priming See PRIMING (1).

initial insomnia See INSOMNIA.

initial letter priming See PRIMING (1).

Initial Teaching Alphabet *n.* An alphabet containing 44 characters, each of which corresponds to a single sound or ***phoneme** of English, designed to simplify and facilitate the teaching of reading, with upper-case (capital) letters being written simply as larger versions of the lower-case letters. It was introduced in 1959 by the English educationalist Sir (Isaac) James Pitman (1901–85), not as a proposal to reform English spelling, but to help children learning to read. **ITA** abbrev.

initial values law *n.* In the study of drug effects, the notion that the effect of a drug on a measurable variable may depend on the level of that variable at the time of administration or, more generally, that the ***dose–response curve** of a drug may depend on the starting level of the effect variable. As an example, a central nervous system stimulant may have a strong positive effect on the arousal of a drowsy person but may have very little effect, or even a depressant effect, on a highly aroused person. In relation to behaviour, the law is also called the *rate-dependency effect*. See also METHYLPHENIDATE (RITALIN).

initiation codon *n.* Another name for a ***start codon**. Also called an *initiator codon*.

initiative versus guilt *n.* One of the crises in the developmental theory of the German-born ***ego psychologist** Erik H. Erikson (1902–94). See DEVELOPMENTAL CRISES.

injury feigning See [FACTITIOUS DISORDER](#), [MALINGERING](#).

inkblot test See [HOLTZMAN INKBLOT TECHNIQUE](#), [RORSCHACH TEST](#).

innate *adj.* Present in an organism from birth, hence inborn or congenital. Also, loosely, genetically determined rather than acquired by learning or attributable to environmental factors, though this meaning is avoided in careful usage, because a congenital characteristic is not necessarily genetic in origin. [From Latin *innatus* inborn, from *in* in or into + *nasci*, *natus* born]

innate idea *n.* An [*idea](#) that is inborn, rather than being learned through experience. The French philosopher René Descartes (1596–1650) believed the idea of God to be innate, and the German philosopher Gottfried Wilhelm Leibniz (1646–1716) believed that mathematical truisms such as $1 + 1 = 2$ are innate, but the British empiricist philosophers John Locke (1632–1704), George Berkeley (1685–1753), and David Hume (1711–76) rejected innate ideas in favour of the [*tabula rasa](#). The notion was revived by the Swiss psychologist Carl Gustav Jung (1875–1961) in his [*collective unconscious](#) and, in modified form, by the US linguist and philosopher (Avram) Noam Chomsky (born 1928) in his concepts of [*universal grammar](#) and the [*language acquisition device](#). See also [COLLECTIVE UNCONSCIOUS](#), [EMPIRICISM](#), [INNATE](#), [NATIVISM](#), [PSAMMETICHUS EXPERIMENT](#), [RATIONALISM](#) (1, 2). Compare [EMPIRICISM](#). [From Latin *innatus* born in, from *in* in or into + *natus* born, from *nasci* to be born + Greek *idea* a model, pattern, or form, from *idein* to see]

innate releasing mechanism *n.* In ethology, a hypothetical [*hard-wired](#) device in the [*central nervous system](#) of an animal that causes a [*sign stimulus](#) or [*releaser](#) to evoke [*fixed-action pattern](#). See also [VACUUM ACTIVITY](#). **IRM** *abbrev.*

inner ear *n.* The internal fluid-filled part of the [*ear](#) containing the [*cochlea](#) and the [*vestibular system](#), including the [*semicircular canals](#), separated from the middle ear by the round window (fenestra rotunda) and the oval window (fenestra ovalis). Also called the *internal ear* or *labyrinth*. See [EAR](#) (accompanying illustration). See also [SCALA](#). Compare [MIDDLE EAR](#), [OUTER EAR](#).

inner hair cell *n.* Any of approximately 3,500 **hair cells*, situated in the **organ of Corti*, specialized as **transducers* of sound waves into nerve impulses and believed to encode information about the frequency of sound. *Compare* *OUTER HAIR CELL*. **IHC** *abbrev.* [So called because they are further from the outside of the cochlea than are the outer hair cells]

inner nuclear layer *n.* A stratum of the **retina* containing the cell bodies of **amacrine cells*, **bipolar cells*, **horizontal cells*, and **interplexiform cells*.

inner plexiform layer *n.* A thin stratum separating the inner and middle layers of the **retina* and containing synaptic connections between **amacrine cells*, **bipolar cells*, and **ganglion cells*. *See also* *INTERPLEXIFORM CELL*. [From Latin *plexus* a network, from *plectere* to weave]

inner speech *n.* The mental use of words or language without physical articulation of speech sounds. *See also* *PHONOLOGICAL LOOP*.

innervate *vb.* **1.** To supply an organ, structure, or body part with nerves or with nerve impulses. **2.** To excite or stimulate a nerve. When used by the Austrian neurologist Sigmund Freud (1856–1939), the word always had this meaning. **innervation** *n.* [From Latin *in* in or into + *nervus* a nerve]

innervation ratio *n.* A number indicating the density of **innervation* (1) of a specified muscle by motor neurons, especially the average number of muscle fibres contacted by each motor neuron (the total number of muscle fibres contacted divided by the number of motor neurons), a low ratio being indicative of a lack of precise control, and a high ratio, greater precision of control.

inoculation theory *n.* A theory of resistance to **persuasion* according to which most ordinary attitudes and beliefs are more or less resistant to change through having been exposed to repeated mild attacks. The theory predicts that *cultural truisms* that most people have never heard being questioned, such as *It is a good idea to brush your teeth three times a day if possible*, should be more vulnerable to persuasion, and this counter-intuitive

prediction has been confirmed by experiments. The theory is based on the biological analogy of an organism that has been raised in a sterile, germ-free environment and that appears robust and healthy but is in reality vulnerable to infection, because it has not had the opportunity to develop defensive antibodies. Cultural truisms have also never been attacked, and defensive arguments have therefore never been developed, but their resistance to persuasion can be markedly increased by a process of inoculation, which involves exposing the recipients to relatively weak arguments against the truisms together with rebuttals that the recipients are either presented with or are required to think up for themselves. When the cultural truisms are later exposed to strong persuasive attacks, they turn out to be much more resistant to persuasion, even when the arguments used in the attacking messages are different from those presented in the inoculation procedure. The theory was formulated in 1964 by the US psychologist William J(ames) McGuire (1925–2007). *See also* [ATTITUDE CHANGE](#). [From Latin *inoculare*, *inoculatum* to implant, from *in* into + *oculus* an eye or a bud]

inositol *n.* A substance closely related to glucose that occurs in most body tissues, at high levels in people with [*mania \(1\)](#) and at low levels in people with [*depression](#). The richest dietary sources are fruits, nuts, beans, and grains. *Compare* [ANTIDEPRESSANT](#). [From Greek *is*, *inos* a sinew + *-ite* indicating a part of the body *-ol* denoting a compound containing a hydroxyl group, from (*alcoh*)*ol*]

insanity *n.* Another name for [*mental disorder](#), especially in legal contexts, where it refers specifically to conditions that impair one's ability to discharge one's legal responsibilities. *See also* [MCNAGHTEN RULES](#), [MENS REA](#). **insane** *adj.*

insanity of negation *n.* Another name for [*Cotard's syndrome](#).

insight *n.* **1.** Clear and deep understanding or perception. **2.** The process by which the meaning or significance of a pattern or the solution of a problem suddenly becomes clear, often accompanied by a [*eureka moment](#) or an [*aha experience](#). A famous and dramatic example is that of the ancient Greek mathematician and physicist Archimedes of Syracuse (?287–212 BC), who was asked by King Hiero II (308–216 BC) to determine whether his gold

*****ebook converter DEMO Watermarks*****

crown was alloyed with silver. Archimedes could not at first think how to perform such a test, but when getting into a bath that was full to its brim, he had an aha experience, realizing suddenly that a body heavier than water must displace its own volume of water when immersed, and that because silver is lighter than gold, a pound weight of gold/silver alloy must displace more water than a pound weight of gold, enabling the crown to be tested against a piece of pure gold of equal weight, whereupon (according to Vitruvius Pollio) he jumped out of the bath crying 'Eureka! Eureka!' (I've found it! I've found it!) and ran home naked to perform the experiment. 3. The capacity to understand oneself, especially the abnormal or pathological nature of aspects of one's behaviour or mental experience that result from a **mental disorder*; often used to distinguish **neurosis*, in which insight is typically present, from **psychosis* (1), in which it is typically absent. In **psychoanalysis*, conscious understanding of unconscious reasons for maladaptive behaviour is believed to be curative in itself. See also *ANTON'S SYNDROME*, *INTERPRETATION* (2), *PROBLEM-SOLVING STAGES*.

insomnia *n.* Inability to fall asleep or to maintain restful sleep, the condition usually being chronic. *Initial insomnia* (also called *sleep-onset insomnia*) is difficulty in falling asleep; *middle insomnia* is waking up in the middle of the night and having difficulty going back to sleep; and *terminal insomnia* is waking up at least two hours before one's normal waking time and being unable to fall asleep again. See also *DELAYED SLEEP-PHASE SYNDROME*, *DYSSOMNIAS*, *FATAL FAMILIAL INSOMNIA*, *INSOMNIA DISORDER*. Compare *HYPERSOMNIA*, *PSEUDOINSOMNIA*. [From Greek *insomnus* sleepless, from *in-* not + *somnus* sleep + *-ia* indicating a condition or quality]

insomnia disorder *n.* A **sleep-wake disorder* characterized by **insomnia*: either difficulty in falling asleep or maintaining sleep or early morning waking with difficulty in going back to sleep. In **DSM-5*, diagnostic criteria for the disorder require that the sleep difficulty causes significant distress or impairment in social, occupational, educational, academic, or other areas of life, occurs on at least three nights per week, has persisted for at least three months, and is not better explained by **narcolepsy* or another sleep-wake disorder, drug abuse, or medication. According to DSM-5, about 33 per cent of adults report some symptoms of insomnia and between 6 and 10 per cent meet the diagnostic criteria of the disorder.

inspection time *n.* An aspect of [*processing speed](#), usually measured with the help of [*visual masking](#). A test stimulus consisting of two vertical lines is exposed very briefly on each trial and is immediately followed by a masking stimulus. The task is to judge which line was shorter, and a person's inspection time is usually taken as the minimum exposure duration (up to the onset of the masking stimulus) required for a predetermined level of accuracy, such as 90 per cent correct responses. Inspection time is consistently though weakly correlated (approximately $r = -.30$) with psychometric measures of [*intelligence](#), especially with performance subtests. **IT** *abbrev.*

instinct *n.* 1. An [*innate](#) propensity to emit a relatively fixed [*response](#) to a stimulus. 2. Any natural and apparently innate drive or motivation, such as those associated with sex, hunger, and self-preservation. 3. In [*psychoanalysis](#), a dynamic force of biological origin, represented mentally by ideas and images having an emotional charge called [*cathexis](#), generating psychological pressure and directing a person towards its aim. Sigmund Freud (1856–1939) originally identified it with [*libido](#) but later (beginning with the publication of his book *Beyond the Pleasure Principle* in 1920) with both [*Eros](#) and [*Thanatos](#). The German word that Freud used was *Trieb*, which his translator James Strachey (1887–1967) rendered in English as *instinct*, but some scholars believe that *drive* would have been a better choice. Also called *instinctual drive* or simply *drive*. See also [INSTINCTUAL AIM](#), [INSTINCTUAL SOURCE](#), [INSTINCTUAL OBJECT](#). **instinctive** or **instinctual** *adj.* [From Latin *instinctus* roused, from *instinguere* to instigate]

instinct, component See [COMPONENT INSTINCT](#).

instinct, death See [DEATH INSTINCT](#), [THANATOS](#).

instinct, life See [EROS](#), [LIFE INSTINCT](#).

instinctive drowning response *n.* A pattern of involuntary behaviour occurring when a person is close to drowning, in the final minute before sinking underwater. It is very different from what most people expect and from the way drowning is depicted in fictional film and television

enactments, especially inasmuch as drowning people cannot shout for help, because oxygen is instinctively reserved for breathing, or wave their arms above the water line, because the arms are instinctively splayed out to maximize buoyancy. The response was first identified by the US psychologist and lifeguard Francesco A. Pia (born 1943), on the basis of video footage of many actual and near-drownings, and published in a training film entitled *On Drowning* in 1970 and an article in the *Journal of Physical Education* in 1974. **IDR** abbrev.

instinctual aim *n.* In **psychoanalysis*, behaviour or activity that an **instinct* (3) exerts pressure on a person to perform, performance of the behaviour resulting in resolution of internal tension. Sigmund Freud (1856–1939) introduced the distinction between the instinctual aim, the **instinctual object*, and the **instinctual source* in his book *Three Essays on the Theory of Sexuality* (1905). See also [AIM-INHIBITION](#).

instinctual component *n.* Another name for a **component instinct*.

instinctual drive *n.* Another name for **instinct* (3).

instinctual energy *n.* Energy associated with an **instinct* (3).

instinctual object *n.* In **psychoanalysis*, anything through which an **instinct* (3) seeks to attain its **instinctual aim*, including a person, a **part object*, or either of these in a person's fantasy. It is not necessarily a physical object but rather an object in the sense of a phrase such as *object of her desire*. Sigmund Freud (1856–1939) introduced the distinction between the **instinctual aim*, the instinctual object, and the **instinctual source* in his book *Three Essays on the Theory of Sexuality* (1905). See also [GOOD OBJECT](#), [OBJECT-CATHEXIS](#), [OBJECT-CHOICE](#), [OBJECT-RELATIONSHIP](#), [PRIMARY OBJECT](#), [SPLITTING OF THE OBJECT](#), [TRANSITIONAL OBJECT](#), [WHOLE OBJECT](#).

instinctual source *n.* In **psychoanalysis*, the particular internal origin of an **instinct* (3), being either the site of its origin, such as an **erotogenic zone*, including a sexual organ, or the physiological process assumed to occur at such a site and to be experienced as excitation. Sigmund Freud (1856–1939) introduced the concept in 1905 in his book *Three Essays on the Theory*
*****ebook converter DEMO Watermarks*****

of *Sexuality* and developed it fully in 1915 in an article on 'Instincts and their Vicissitudes' (*Standard Edition*, XIV, pp. 117–40, at pp. 123, 132). Compare INSTINCTUAL AIM, INSTINCTUAL OBJECT.

instrumental conditioning *n.* Another name for **operant conditioning*.

insufficient reason *n.* The principle introduced by the English mathematician and Presbyterian clergyman Thomas Bayes (1702–61), and championed by the French mathematician Pierre Simon Laplace (1749–1827), according to which we are entitled to consider two events as equally probable if we have no reason to consider one more probable than the other. It enables **uncertainty (2)* to be transformed into **risk (2)* and provides a justification for **prior probabilities (2)* in **Bayesian inference* in the absence of other grounds for estimating them. Its critics have shown that it leads to contradictions, and they deny that anything can be inferred from ignorance. Also called the principle of *indifference*.

insula *n.* The large pyramid-shaped structure in the limbic system of the brain that lies deep between the opercula or lips of the lateral sulcus of each cerebral hemisphere and that is exposed by retracting the temporal lobe. The anterior part functions as the cortical **pain* centre and also contains **mirror neurons* for emotion, and the posterior part is implicated in language functions. Also called the *island of Reil*. See also PAIN ASYMBOLIA. [From Latin *insula* an island]

insulin *n.* A polypeptide **hormone* that is secreted by the **islets of Langerhans* in the pancreas and that lowers the concentration of **glucose* in the blood. A deficiency of insulin leads to **diabetes* mellitus. See also HYPOGLYCAEMIA. [From Latin *insula* an island (referring to the islets of Langerhans) + *-in(a)* indicating an organic compound]

insulin shock *n.* A formerly popular method of treating **schizophrenia* and other disorders by injecting **insulin* into the bloodstream to induce **hypoglycaemia*, resulting in **coma*. Also called *insulin coma*.

integral attribute *n.* An **attribute* that is inherent in a **phenomenon*,
*****ebook converter DEMO Watermarks*****

without which the phenomenon cannot occur or exist. For example, ***amplitude** is an integral attribute of any sound, because without amplitude there can be no sound wave and therefore no sound, but ***frequency (1)** is not an integral attribute of sound, because ***noise (1)** is sound without any definite frequency. In the visual modality, ***lightness** is an integral attribute of colour, but ***saturation (1)** is not. *Compare* SEPARABLE ATTRIBUTE.

integral stimulus dimension *n.* An ***integral attribute** of any measurable aspect of a ***stimulus (1)**. *Compare* SEPARABLE STIMULUS DIMENSION.

integrative agnosia *n.* Intact ability to recognize elements of perceptual forms with impaired ability to integrate the elements into perceptual wholes. *See also* AGNOSIA.

intellect *n.* The faculty of reasoning and understanding, as distinct from feeling and wishing; a term used in general discourse for what in psychology is usually called ***intelligence**. In personality theory and psychometrics, another name for ***openness to experience**. [From Latin *intellectus* understanding, from *intellegere* to understand, from *inter* between + *legere* to choose]

intellectual developmental disorder *n.* Another term for ***intellectual disability**. **IDD** abbrev.

intellectual disability *n.* A term introduced in ***DSM-5** to refer to what was formerly called *mental retardation*, a ***neurodevelopmental disorder** characterized by arrested or incomplete mental development, with onset before the age of 18, including deficits in both intellectual and adaptive functioning. Diagnosis requires three criteria to be met: deficits in reasoning, problem solving, abstract thinking, or other intellectual functioning, confirmed by clinical assessment and ***intelligence testing** (specifically, ***IQ** below 70); failure to meet developmental standards of independence and social responsibility in such areas as interpersonal communication, self-care, home living, social skills, use of public amenities, self-direction, scholastic or academic performance, work, leisure, health, or safety; and onset of intellectual and adaptive deficits during the developmental period (before the

*****ebook converter DEMO Watermarks*****

age of 18). According to DSM-5, overall population ***prevalence** is about 1 per cent. According to the World Health Organization, an IQ between 50 and 70 is approximately indicative of mild mental intellectual disability, 35–50 moderate intellectual disability, 20–35 severe intellectual disability, and below 20 profound intellectual disability. Also called *intellectual developmental disorder*. See CEREBRAL GIGANTISM, CEREBRAL PALSY, CRETINISM, CRI DU CHAT, DOWN'S SYNDROME, FOETAL ALCOHOL SYNDROME, FRAGILE X SYNDROME, HURLER'S SYNDROME, IDIOT SAVANT, KLINEFELTER'S SYNDROME, LESCH–NYHAN SYNDROME, MACROCEPHALY, MICROCEPHALY, MILD MENTAL RETARDATION, MODERATE MENTAL RETARDATION, PHENYLKETONURIA, PROFOUND MENTAL RETARDATION, SEVERE MENTAL RETARDATION, TAY–SACHS DISEASE, WILLIAMS SYNDROME, ZOMBIE (2). See also AGENESIS OF THE CORPUS CALLOSUM, SAVANT. Compare BORDERLINE INTELLIGENCE. **ID** abbrev.

intellectualization *n.* In ***psychoanalysis**, a ***defence mechanism** involving excessive abstract thinking designed to block out disturbing emotions or conflicts, in therapy usually a device for evading the ***fundamental rule of psychoanalysis**. The concept was introduced by the Austrian-born British psychoanalyst Anna Freud (1895–1982) in her book *The Ego and the Mechanisms of Defence* (1937), her father never having used the term in writing.

intelligence *n.* Cognitive ability. In a symposium published in the *Journal of Educational Psychology* in 1921, fourteen of the world's leading authorities suggested definitions of intelligence, which included 'the ability to carry on abstract thinking' (Lewis Madison Terman, 1877–1956); 'the power of good responses from the point of view of truth or fact' (Edward Lee Thorndike, 1874–1949); and 'the capacity to inhibit an instinctive adjustment, the capacity to redefine the inhibited instinctive adjustment in the light of imaginably experienced trial and error, and the volitional capacity to realize the modified instinctive adjustment into overt behaviour to the advantage of the individual as a social animal' (Louis Leon Thurstone, 1887–1955). Since then, one of the most influential definitions was the one put forward in 1944 by the Romanian-born US psychologist David Wechsler (1896–1981): 'the aggregate or global capacity of the individual to act purposefully, to think rationally, and to deal effectively with his environment.' However, just as a triangle is defined simply as a plane figure

with three angles and three sides, ignoring its many other interesting and important but non-defining properties, good lexicographic practice suggests that it may be best to define intelligence simply as cognitive ability. *Factor-analytic studies by the US psychologist Robert J(effrey) Sternberg (born 1949) and others have suggested that the major components of intelligence as it is conceived by experts and lay people are verbal intelligence, problem solving, and practical intelligence; but during the 1990s some authorities began to consider *emotional intelligence as another form of intelligence. The standard index of intelligence is the *IQ score. See also A/S RATIO, CRYSTALLIZED INTELLIGENCE, EMOTIONAL INTELLIGENCE, ENCEPHALIZATION QUOTIENT, FLUID INTELLIGENCE, G, GUILFORD'S CUBE, INSPECTION TIME, INTELLECTUAL DISABILITY, INTELLIGENCE TEST, MULTIPLE INTELLIGENCES, NERVE CONDUCTION VELOCITY, n140, PRIMARY MENTAL ABILITIES, PROCESSING SPEED, PROGRESSION INDEX, p200, SOCIAL INTELLIGENCE, STRING LENGTH, TRIARCHIC THEORY OF INTELLIGENCE. [From Latin *intelligere* to understand, from *inter* between + *legere* to choose]

intelligence quotient See IQ.

intelligence test *n.* A test designed to measure *intelligence, often but not invariably an *IQ test.

intension *n.* The sum of properties by which the referent or referents of a given word or expression are determined, including both defining and non-defining properties; thus, *having interior angles equal to 180 degrees* is part of the intension of the word *triangle*, although it is not part of the definition of that concept, and *suckling its young* and *having a pouch* are both parts of the intension of the word *marsupial*. It is distinguished from the *extension* of a word, expression, or concept, which consists of all those entities to which the word or expression applies or that fall under the concept: the extension of *wife of King Henry VIII* is precisely the set {Catherine of Aragon, Anne Boleyn, Jane Seymour, Anne of Cleves, Catherine Howard, Catherine Parr}. The distinction between intension and extension, which is close to the distinction between *connotation (2) and *denotation (2), was introduced by the French theologians/logicians Antoine Arnauld (1612–94) and Pierre Nicole (1625–95) in the *Port Royal Logic* in 1662, where intension was called *comprehension*. **intensional** *adj.* [From Latin *intensus* stretched or

*****ebook converter DEMO Watermarks*****

given one's attention, from *intendere* to stretch forth or give one's attention to, from *in-* towards + *tendere* to stretch]

intentional forgetting *n.* Deliberately erasing something from memory. In **psychoanalysis*, forgetting something as a consequence of **repression*.

intentionality *n.* 1. According to the German psychologist and philosopher Franz Brentano (1838–1917), the property of mental experiences whereby they refer to objects or entities outside themselves: it is impossible to hear without hearing a sound, to believe without believing a statement or a proposition, to hope without hoping for something, to strive without striving for a goal, to feel joy without feeling joyful about something, and so on (these examples are all Brentano's). The concept was introduced by Brentano in 1874 in his book *Psychologie vom empirischen Standpunkt* (Book II, Chapter I, section 5, pp. 125ff.) to distinguish psychological from physical phenomena, which lack this property of outward-directedness. It is a key concept of **phenomenology*. See also ACT PSYCHOLOGY. 2. The property of an action that is performed deliberately rather than accidentally or without purpose. See also ACTION. **intentional** *adj.* [From Latin *intentus* aim or intent, from *intendere* to stretch forth or give one's attention to, from *in-* towards + *tendere* to stretch]

intention tremor *n.* A form of **tremor* characterized by fine rhythmic movements that tend to increase during voluntary movements, as in some cases of **alcohol dependence*, **cerebellar syndrome*, and **senile dementia*. Also called *movement tremor*. See also DELIRIUM TREMENS. Compare PARKINSONISM, RESTING TREMOR.

interaction effect *n.* In statistics, a pattern of data obtained from multifactorial **analysis of variance* (ANOVA) or **log-linear analysis* in which the effect of an **independent variable* or **factor* (1) varies across levels of another independent variable, or across combinations of levels of other independent variables or factors. When this occurs, variation in the **dependent variable* is not the result of a simple additive combination of the independent variables or factors. For example, suppose a well-practised skill is performed better in front of an audience than alone, whereas an unpractised

*****ebook converter DEMO Watermarks*****

skill is performed better alone than in front of an audience. In this case the independent variables or factors may be the audience condition and the level of practice, and the effect of the audience factor on the dependent variable varies across levels of the practice factor, leading to improved performance at one level of the practice factor (well practised) and worse performance at the other level (unpractised). In this case, performance is not a simple additive effect of audience condition and level practice. Interactions are notoriously difficult to interpret, and an **interaction graph* is usually helpful. A *main effect*, in contrast to an interaction effect, is a significant difference between two or more means; a *two-way interaction* is a significant difference between two or more *differences* between means (as in the above example, in which one difference is positive and the other negative); a *three-way interaction* is a significant difference between two or more differences between two or more differences between means, and so on, but after that it begins to become too complex to grasp or to depict graphically. Compare *MAIN EFFECT*.

interaction graph *n.* A diagram representing an **interaction effect* in multifactorial **analysis of variance* (ANOVA). For the simplest two-way interaction, the vertical axis represents scores on the **dependent variable*, the horizontal axis different levels of one **independent variable*, and each line on the graph a different level of another independent variable. If the lines are parallel, there is no interaction effect; if the lines cross or are non-parallel, then there is an interaction effect that can be tested for **statistical significance*.

interactionism *n.* 1. An approach to the **mind–body problem*, a form of **dualism* according to which events or processes in the mental and physical realms influence or interact with each other. See also *EPIPHENOMENALISM*. 2. An interpretation of the contributions of **personality* according to which human behaviour is dependent partly on internal personality factors, partly on external situational factors, and partly on interactions between the two. Compare *SITUATIONIST CRITIQUE*.

interaction process analysis *n.* A technique for studying interaction in small groups. Observers record the source and target of every expressive act and classify the acts into the following twelve categories: shows solidarity, shows tension release, agrees, gives suggestion, gives

*****ebook converter DEMO Watermarks*****

opinion, gives orientation, asks for orientation, asks for opinion, asks for suggestion, disagrees, shows tension, and shows antagonism. Analysis of protocols has revealed, among other things, two principal types of group leader, namely the task specialist and the social specialist, and leadership in groups is often shared between two people filling these roles. The technique was introduced in 1947 by the US social psychologist Robert Freed Bales (1916–2004) and described in his book *Interaction Process Analysis: A Method for the Study of Small Groups* (1950). Bales initially studied meetings of Alcoholics Anonymous, the effectiveness of which he was anxious to understand. **IPA** abbrev.

interaural intensity difference *n.* Another name for a ***sonic shadow**. Also called a *binaural intensity difference*. **IID** abbrev.

interaural time difference *n.* A generic name for both ***phase delay** or ***transient disparity**. Also called a *binaural time difference*. **ITD** abbrev.

interblob See **BLOB**.

intercorrelations *n.* The ***correlations** of several variables with one another.

interdependence theory *n.* A theory that seeks to analyse the causal determinants of ***dyadic** social behaviour by providing a systematic classification of certain key properties of interpersonal situations or interactions and of the individuals' responses to them. It was first proposed by the US social psychologists Harold H(arding) Kelley (1921–2003) and John W(alter) Thibaut (1917–86) in their book *The Social Psychology of Groups* (1959) and developed in *Interpersonal Relations: A Theory of Interdependence* (1978), and Kelley extended it further in an article in the *Journal of Personality and Social Psychology* in 1984. In the theory, the nature of the interdependence between two individuals depends on the manner in which each can influence what happens to the other during the course of the social interaction, and this is called 'outcome interdependence'. See **BEHAVIOUR CONTROL**, **FATE CONTROL**. **IT** abbrev. [From Latin *inter* between + *dependere* to hang from, from *de* from + *pendere* to hang + *entia* indicating an action, state, condition, or quality]

*****ebook converter DEMO Watermarks*****

interest inventory *n.* Any questionnaire designed to assess interests, including especially any **occupational interest inventory*. *See also* ALLPORT–VERNON–LINDZEY STUDY OF VALUES, KUDER PREFERENCE RECORD, STRONG–CAMPBELL INTEREST INVENTORY.

interference theory *n.* The proposition that forgetting is caused by **proactive interference* and **retroactive interference*. *Compare* DECAY THEORY.

interhemispheric fissure *n.* Another name for the **longitudinal fissure*. [From Latin *inter* between + English *hemisphere*]

interictal syndrome *n.* A condition sometimes observed in people with **temporal lobe epilepsy*, characterized by intense productiveness, often in writing or artistic work, between **convulsions*. Also called *Dostoevsky syndrome*. [From Latin *inter* between + *ictus* struck, from *icere* to strike + *-alis* of or relating to]

interleukin *n.* A group of peptides present in white blood cells or leucocytes, produced mainly by neuroglial cells, that play a part in the **immune system* by mobilizing **lymphocytes*. **interleukin-1** *n.* An interleukin produced by **macrophages* and **monocytes* that regulates immune responses by activating lymphocytes, and by playing a part in other reactions to infection and inflammation, and that increases sleep. **interleukin-2** *n.* An interleukin that is produced by helper **T lymphocytes*, after their activation by an **antigen*, and that in the presence of interleukin-1 stimulates the production of T lymphocytes carrying antigen-specific receptors and plays a part in the production of **B lymphocytes* and **macrophages*. It is used in the treatment of cancer and AIDS. **interleukin-3** *n.* A substance involved in the maturation of **stem cell* populations of **T lymphocytes*. [From Latin *inter* among + Greek *leukos* white, alluding to its presence among the white blood cells]

intermediary neuron *n.* Another name for an **interneuron*

intermetamorphosis *n.* A **delusional misidentification* in which a familiar person appears to change into someone else. *Compare* CAPGRAS

SYNDROME, FRÉGOLI SYNDROME. [From Latin *inter* between or among + Greek *meta* with or beside + *morphe* form + -osis indicating a process or state]

intermittent explosive disorder *n.* A *disruptive, impulse-control, and conduct disorder in *DSM-5 characterized by repeated outbursts of aggression, grossly out of proportion to the precipitating events or provocations, resulting in serious assaults or destruction of property. *See also* ROAD RAGE, ROID RAGE. *Compare* DISRUPTIVE MOOD DYSREGULATION DISORDER, OPPOSITIONAL DEFIANT DISORDER.

intermittent reinforcement *n.* Another name for *partial reinforcement.

internal auditory canal *n.* A passageway located in the *temporal bone and containing the *vestibulocochlear nerve that transmits impulses from the *inner ear to the brain. Also called the *internal meatus*. *Compare* EXTERNAL AUDITORY CANAL.

internal capsule *n.* Either of two neural pathways in the brain between the thalamus and the lenticular nucleus containing nerve fibres running from the thalamus to the left or right cerebral cortex and from the cerebral cortex to the thalamus, brainstem, and spinal cord. It is a common site for a *stroke.

internal consistency *n.* In psychometrics, an aspect of *reliability associated with the degree to which the items of a test measure the same *construct or *attribute. It is indexed by *Cronbach's alpha, the *Kuder–Richardson coefficient, or the *split-half reliability.

internal ear *n.* Another name for the *inner ear.

internal–external control of reinforcement *n.* Another name for *locus of control. **I–E** abbrev.

internal–external scale *n.* A 29-item questionnaire designed to measure *locus of control. The respondent chooses one statement that ‘I believe more strongly’ from each of the 29 pairs, 23 of the items measuring

locus of control and the remaining six being fillers unrelated to locus of control. A typical item from the scale is: *I believe more strongly that: (a) Whether I make a success of my life is entirely up to me; (b) Success is a matter of being lucky enough to be in the right place at the right time.* Another typical item is: *I believe more strongly that: (a) Pressure groups can influence government decisions; (b) The government is beyond the influence of the ordinary person.* In both examples, (a) indicates internal and (b) external locus of control. The scale was introduced in an article in the journal *Psychological Monographs* in 1966 by the US psychologist Julian B(ernard) Rotter (1916–2014). **I–E scale** abbrev.

internalization *n.* In **psychoanalysis*, absorbing a relationship or an **instinctual object* into one's mental apparatus, as when a child's relationship with an authoritarian father is internalized as the relationship between an **ego* and a strict **superego*. In **Kleinian* analysis the term is used more broadly as simply another name for **introjection*: fantasizing the absorption of a **whole object* or a **part object*. See also DEFENSIVE TECHNIQUE. **internalize** *vb.*

internal meatus *n.* Another name for the **internal auditory canal*. [From Latin *meatus* a course]

internal rectus *n.* Another name for the medial **rectus muscle* attached externally to the eyeball. See RECTUS MUSCLE.

internal reliability *n.* Another name for **internal consistency*.

internal sense *n.* A generic name for **kinaesthesia*, **proprioception*, and **interoception*.

internal validity *n.* The extent to which the conclusions of an empirical investigation are true within the limits of the research methods and subjects or participants used. See also VALIDITY. Compare ECOLOGICAL VALIDITY (1), EXTERNAL VALIDITY.

International Affective Picture System See IAPS in the main body

of the dictionary.

International Classification of Diseases See [ICD](#) in the main body of the dictionary.

international personality item pool See [IPIP](#) in the main body of the dictionary.

International Phonetic Alphabet *n.* A set of symbols, based on the Roman alphabet but supplemented with modified Roman letters and characters from other writing systems, designed for the representation of human speech sounds in all languages. The IPA, first published by the International Phonetic Association in 1888 and revised many times since then, is accepted as the standard phonetic alphabet almost universally except in the United States, where it is only slowly gaining acceptance. [IPA](#) *abbrev.*

internet addiction syndrome *n.* A condition resembling an [*impulse-control disorder](#), first identified in the US in 1994, initially as a joke, and not included in [*DSM-IV](#) or [*ICD-10](#), characterized by excessive or pathological internet surfing, indicated by such signs and symptoms as being preoccupied with the internet; recurrent dreams and fantasies about the internet; lying to family members or therapists to conceal the extent of time spent online; attempting repeatedly and unsuccessfully to cut down or to stop spending time online, and becoming restless or irritable while doing so; using the internet as an escape from worry or unhappiness; and jeopardizing a significant job, relationship, or educational opportunity by spending excessive time online. See also [DATAHOLIC](#), [INTERNET GAMING DISORDER](#). Compare [IMPULSE-CONTROL DISORDERS](#). **IAS** *abbrev.*

internet gaming disorder *n.* Included in [*DSM-5](#) as a ‘condition for further study’, this condition is characterized by recurrent internet game-playing, often with other players, with excessive preoccupation, [*withdrawal](#) symptoms, and other signs and symptoms leading to clinically significant impairment or distress. Compare [GAMBLING DISORDER](#), [INTERNET ADDICTION SYNDROME](#). **IGD** *abbrev.*

interneuron *n.* A neuron that is itself neither sensory nor motor but forms
*****ebook converter DEMO Watermarks*****

a synapse with an afferent and/or an efferent neuron and lies in the path of a **reflex arc*, its axon not projecting outside the structure in which its cell body is located. Also called an *internuncial neuron*, an *intrinsic neuron*, an *intermediary neuron*, or a *relay cell*. See also *REFLEX*. [From Latin *inter* between + Greek *neuron* a nerve]

internuncial *adj.* Interconnecting, of or relating to an **interneuron* interposed between two other neurons. [From Latin *inter* between + *nuntius* a messenger]

interoception *n.* Any form of sensation arising from stimulation of **interoceptors* and conveying information about the state of the internal organs and tissues, blood pressure, and the fluid, salt, and sugar levels in the blood. See also *INTERNAL SENSE*. Compare *EXTEROCEPTION*, *KINAESTHESIS*, *PROPRIOCEPTION*. [From *inter(i)o(r) (re)ception*]

interoceptor *n.* A **sensory receptor*, specialized for **interoception*, that transmits impulses from organs or tissues within the body, excluding receptors in the vestibular system and in the tendons, muscles, and joints (which are **proprioceptors*), but including other receptors in the internal organs, tissues, and blood vessels. See *AREA POSTREMA*, *BARORECEPTOR*, *BLOOD-FLOW RECEPTOR*, *GOLGI TENDON ORGAN*, *MUSCLE SPINDLE*, *ORGANUM VASCULOSUM LAMINA TERMINALIS*, *OSMORECEPTOR (2)*, *STRETCH RECEPTOR*, *SUBFORNICAL ORGAN*. Compare *EXTEROCEPTOR*, *PROPRIOCEPTOR*. **interoceptive** *adj.*

interpersonal trust scale *n.* A scale developed by the US psychologist Julian B(ernard) Rotter (1916–2014) for measuring the degree to which a person judges others to be believable or trustworthy.

interplexiform cell *n.* A type of cell in the **retina* that conveys signals across the middle layer from the **inner plexiform layer* to the **outer plexiform layer*, in the opposite direction to the rest of the neural information flow in the retina, and whose functions are poorly understood. [From Latin *inter* between *plexus* a network, from *plectere* to weave + *forma* a shape]

interposition *n.* The placement of something between other things; specifically (in psychology) one of the monocular cues of visual **depth*
*****ebook converter DEMO Watermarks*****

perception, an object that appears in front of and overlapping another object being perceived as closer than the object that it occludes. [From French *interposer* to interpose, from Latin *inter* between + French *poser* to place]

interpretation *n.* **1.** The act or process of explaining, elucidating, or clarifying, or the product of such activity. **2.** In ***psychoanalysis**, a process of decoding the latent meaning of a patient's speech and actions, thereby revealing ***unconscious** (1) conflicts, exposing the underlying wishes that maintain them, and allowing the patient to gain ***insight** (3). Sigmund Freud (1856–1939) first described it in 1900 in relation to dreams in his book *The Interpretation of Dreams* (*Standard Edition*, IV–V), where the ***latent content** of dreams is derived from its ***manifest content** through interpretation. See also **ACTIVE ANALYSIS**, **OVERINTERPRETATION**, **PASSIVE ANALYSIS**, **REDUCTIVE INTERPRETATION**, **RESISTANCE**, **THIRD EAR**, **WORKING THROUGH**. Compare **PSYCHOANALYTIC CONSTRUCTION**. **3.** In ***logic**, the allocation of specific meanings to the terms of a purely abstract or formal system. **interpret** *vb.* **interpretational** *adj.*

interquartile range *n.* In descriptive statistics, a measure of the degree of dispersion, variability, or scatter in a group of scores, defined as the difference between the third and the first ***quartiles**. Compare **PROBABLE ERROR**, **RANGE**, **SEMI-INTERQUARTILE RANGE**, **STANDARD DEVIATION**, **VARIANCE**. **IQR** *abbrev.*

inter-rater reliability *n.* A measure of the consistency of ratings, equal to the correlation between the ratings given by different raters of the same people or stimuli.

interrupted time-series design *n.* A ***quasi-experimental** research design similar to a ***one-group pretest–posttest design** except that instead of a single pretest and a single posttest, the data consist of a ***time series** in the form of a sequence of baseline measurements, followed by a change in the independent variable, usually called an intervention, and then a sequence of post-intervention measurements. Compare **NON-EQUIVALENT GROUPS DESIGN**.

intersex condition *n.* A condition in which a person displays a mixture of both male and female physical forms, reproductive organs, and sexual
*****ebook converter DEMO Watermarks*****

behaviour.

intersexuality *n.* Another name for **intersex condition*.

interspecific competition *n.* Competition between or among species. *Compare* *INTRASPECIFIC COMPETITION*. [From Latin *inter* between + *specificus* specific, from *species* appearance or kind, from *specere* to look]

interstimulus interval *n.* The time interval between the termination of one stimulus and the beginning of another. *Compare* *STIMULUS ONSET ASYNCHRONY*. **ISI** *abbrev.*

interstitial-cell-stimulating hormone *n.* Another name for **luteinizing hormone*, especially in males. **ICSH** *abbrev.* [From Latin *inter* within + *sistere* to stand]

intertectal commissure *n.* Another name for the **posterior cerebral commissure*. [So called because it lies between the two halves of the **tectum*]

interval of uncertainty *n.* In **psychophysics*, the range of stimulus differences that are detected between 25 per cent and 75 per cent of the time. **IU** *abbrev.*

interval scale *n.* A scale of measurement in which differences between values can be quantified in absolute terms but the zero point is fixed arbitrarily, familiar examples being Fahrenheit or Celsius temperature scales and calendar dates. In an interval scale, equal differences between scale scores correspond to equal differences in the **attribute* being measured, but there is no score corresponding to the total absence of the attribute. *See also* *MEASUREMENT LEVEL*, *METHOD OF EQUAL-APPEARING INTERVALS*, *SCALE*, *UNFOLDING TECHNIQUE*. *Compare* *ABSOLUTE SCALE*, *LOG-INTERVAL SCALE*, *NOMINAL SCALE*, *ORDINAL SCALE*, *RATIO SCALE*. [From Latin *intervallum* space between, from *inter* between and *vallum* a rampart]

intervening region *n.* In genetics, another name for an **intron*.

intervening variable *n.* In a formal model, a ***variable** whose value is determined by a specified manipulation or combination of ***independent variables** and/or other intervening variables, without any hypotheses about the existence of unobserved entities or processes, and that plays a part in explaining the value of a ***dependent variable**, although it has no factual content apart from the empirical relationships that it summarizes. A typical example is the concept of broad ***heritability** (h^2), which is defined as the ratio of genetic variance V_G to total phenotypic variance V_P , so that, formally, h^2 (broad) = V_G/V_P . Another example is that of the ***therapeutic ratio** of a drug, defined as the ratio of the ***median lethal dosage** (LD-50) to the ***median effective dosage** (ED-50). ***Hullian learning theory** has scores of intervening variables. The term was introduced in 1938 by the US psychologist Edward C(hace) Tolman (1886–1959), and the distinction between hypothetical constructs and intervening variables was first made explicit in 1948 by the US psychologists Kenneth MacCorquodale (1919–86) and Paul Everett Meehl (1920–2003)—see **HYPOTHETICAL CONSTRUCT**.

interview *n.* A structured meeting in which a person is questioned as part of a process of choosing among candidates for a position, or a journalistic or other form of enquiry; more specifically a method of data collection involving face-to-face or telephone questioning of subjects or respondents by the researcher. An interview may be relatively structured or unstructured. *See also* **DEPTH INTERVIEW**, **FOCUS GROUP**.

intestine *n.* The section of the ***alimentary canal** between the stomach and the anus. *See also* **LARGE INTESTINE**, **SMALL INTESTINE**. [From Latin *intestinum* gut, from *intestinus* internal]

intimacy versus isolation *n.* One of the crises in the developmental theory of the German-born ***ego psychologist** Erik H. Erikson (1902–94). *See* **DEVELOPMENTAL CRISES**.

intolerance of ambiguity *n.* A ***cognitive style** characterized by an inability to accept without discomfort situations or stimuli that allow alternative interpretations, and a preference for situations or stimuli that appear black and white to those that consist of shades of grey. It is often

considered as characteristic of [*authoritarianism](#). See also [AMBIGUITY AVERSION](#), [ELLSBERG PARADOX](#).

intonation *n.* The distinctive modulation of vocal pitch in speech, functioning like punctuation to signal grammatical structure, as for example in the utterance *It's big, isn't it*, in which a rising pitch would be used to indicate a question and a falling pitch an assertion, and used also to express attitudes or emotions such as sarcasm, puzzlement, or anger. **intonology** *n.* The study of intonation. [From Latin *intonare* to intone, from *in* in + *tonus* a tone + *-ation* indicating a process or condition]

intoxication *n.* The state of being inebriated or poisoned by a drug or other substance taken into the body. **intoxicant** *n.* Anything that causes intoxication. [From Latin *intoxicare* to poison, from *toxicum* a poison + *-ation* indicating a process or condition]

intracellular *adj.* Inside cells. [From Latin *intra* within + *cella* a room, from *celare* to hide]

intracellular fluid *n.* Fluid inside the cells of the body, separated from the extracellular fluid by semipermeable cell membranes. See also [OSMOSIS](#), [SODIUM PUMP](#). Compare [EXTRACELLULAR FLUID](#). **ICF** *abbrev.*

intracellular thirst *n.* A form of thirst arising from depletion of fluid within cells and triggered by [*osmoreceptors \(2\)](#), as after ingestion of salt, which accumulates in the extracellular fluid and creates [*osmotic pressure](#), forcing fluid out of the cell. Also called *osmometric thirst* or *osmotic thirst*. Compare [HYPOVOLAEMIC THIRST](#).

intraception *n.* Subjectivity and imagination. See [ANTI-INTRACEPTION](#), [F SCALE](#). [From Latin *intra* within + *capere*, *ceptum* to take + *-ion* indicating an action, process, or state]

intracortical *n.* Within the [*cerebral cortex](#). [From Latin *intra* within + *cortex* bark or outer layer + *-icalis* of, relating to, or resembling]

intracranial *n.* Inside the skull. [From Latin *intra* within + *cranium* a skull, from Greek *kranion* a skull]

intracytoplasmic sperm injection See **ICSI** in the main body of the dictionary. [From Latin *intra* within + Greek *kytos* a vessel + *plasma* a form + *-ikos* of, relating to, or resembling]

intrafusal *adj.* Of, relating to, or consisting of small muscle fibres, up to a dozen of which are enclosed in each ***muscle spindle** embedded within extrafusal muscle fibres of ***skeletal muscles**. They signal information about the degree of stretch of the muscle. Compare **EXTRAFUSAL**. [From Latin *intra* within + *fusus* a spindle]

intragenic region *n.* Another name for an ***intron**.

intralaminar nucleus *n.* Either of two tiny clusters of nerve cell bodies on each side of the dorsal thalamus that receive inputs from the cerebral hemispheres, brainstem, cerebellum, and spinal cord and that project to the striatum, being involved in higher motor control. [From Latin *intra* within + *lamina* a plate or layer, so called because they are contained within the internal layers of white matter in the thalamus]

intransitive preferences *n.* Preferences violating the condition that if one alternative is preferred to a second, and the second is preferred to a third, then the first should be preferred to the third. The following is the simplest example of intransitive preferences: *x* is preferred to *y*, *y* to *z*, and *z* to *x*. It is often interpreted as necessarily irrational, but it can arise from the aggregation of rational individual preferences into a group preference ranking, as in ***Condorcet's paradox**, and it can even arise plausibly in an individual's preferences from a ***lexicographic semiorder**, or when multiple ***attributes** are involved, as in a person who rates three similarly priced cars, *x*, *y*, and *z* on three equally important attributes as follows:

	<i>Speed</i>	<i>Comfort</i>	<i>Fuel Economy</i>
<i>x</i>	excellent	satisfactory	good
<i>y</i>	good	excellent	satisfactory
<i>z</i>	satisfactory	good	excellent

*****ebook converter DEMO Watermarks*****

This person evidently prefers x to y because it is better on two of the three equally valued attributes, y to z for the same reason, and z to x for the same reason. *See also* [ARROW'S IMPOSSIBILITY THEOREM](#), [CYCLIC PREFERENCES](#), [DECISION THEORY](#), [MONEY PUMP](#). *Compare* [TRANSITIVE PREFERENCES](#). [From Latin *in-* not + *transitivus* going over, from *transiens* going over, *transire* to pass over, from *trans* across + *ire* to go]

intraspecific competition *n.* Competition between or among organisms within a species. *Compare* [INTERSPECIFIC COMPETITION](#). [From Latin *intra* within + *specificus* specific, from *species* appearance or kind, from *specere* to look]

intrinsic light *n.* The impression of a dim cloud of light that is generated in complete darkness by the spontaneous activity of neurons in the visual system. Also called *dark light* or *idiorretinal light*.

intrinsic neuron *n.* Another name for an [*interneuron](#).

intrinsic nucleus *n.* Any of a number of clusters of nerve cell bodies within the [*thalamus](#) that do not relay information to the cortex but make connections with other thalamic nuclei.

intrinsic validity *n.* In psychometrics, a form of [*validity](#) that is said to exist when the test items necessarily or inherently measure the construct in question. For example, a test to measure children's ability to recognize and name letters of the alphabet has intrinsic validity if it involves presenting each of the letters in turn and asking the child to try to name it. The line between intrinsic validity on the one hand and [*face validity](#) or [*consensual validity](#) on the other is often blurred.

introjection *n.* In [*psychoanalysis](#), a [*defence mechanism](#) whereby an [*instinctual object](#) is symbolically, or in fantasy, absorbed by a person, or instinctual energy is turned inward, as when a depressed person turns aggression back on the self. The term was introduced in 1909 by the Hungarian psychoanalyst Sandor Ferenczi (1873–1933) in an article entitled ‘Introjection and Transference’, where he contrasts it with [*projection \(1\)](#): ‘Whereas the paranoiac expels from his ego the impulses that have become
*****ebook converter DEMO Watermarks*****

unpleasant, the neurotic helps himself by taking into the ego as large as possible a part of the outside world, making it the object of unconscious phantasies' (*First Contributions to Psycho-Analysis*, 1952, p. 43). See also [IDENTIFICATION \(2\)](#), [INCORPORATION](#), [INTERNALIZATION](#).

intron *n.* Any segment of [*DNA](#) that does not carry coded information about the synthesis of proteins and that is removed by [*snurps](#) before translation by [*messenger RNA](#), such segments interrupting the coding sequences in most DNA molecules. Also called an *intragenic region*, an *intervening region*, or (especially in reference to long introns) *junk DNA*. See also [REPETITIVE DNA](#). Compare [EXON](#). [From *intr(agenic) (regi)on* on the model of *codon*]

introspection *n.* A method of data collection in which observers examine, record, and describe their own internal mental processes and experiences. It can be traced back to the writings of the Greek philosopher Aristotle (384–322 BC), who described in his essay *On Memory* in his *Parva Naturalia* how the process of recalling *autumn* was preceded by related thoughts such as *milk*, *white*, *air*, *fluid*, and only then *autumn*. When psychology emerged as an independent empirical science in Germany in the 1880s, Wilhelm (Max) Wundt (1832–1920) and other experimental researchers regarded uncontrolled introspection as unreliable and introduced methods based on introspection by trained observers under experimental conditions. In 1913 the US psychologist John B(roadus) Watson (1878–1958) launched an attack on introspection, declaring that psychology ought to be confined to the prediction and control of overt behaviour, but he advocated the study of reasoning processes via think-aloud methods, on which modern techniques of [*protocol analysis](#) are based. See also [INFINITE REGRESS](#), [METACOGNITION](#), [PHENOMENOLOGY](#), [STRUCTURALISM \(2\)](#). Compare [FREE ASSOCIATION](#). **introspect** *vb.* [From Latin *intro-* towards the inside + *specere*, *spectum* to look + *-ion* indicating an action, process, or state]

introspectionism *n.* The doctrine that the fundamental research technique of psychology must be [*introspection](#).

introversion *n.* A predominant concern with one's own thoughts and feelings rather than the outside world and social interaction, characterized by

*****ebook converter DEMO Watermarks*****

***traits** such as reserve, passivity, and silence, the negative pole of one of the ***Big Five** personality factors, namely ***extraversion**. The term first appeared in the mid 17th century, in a purely descriptive sense of turning one's thoughts inwards in spiritual contemplation, and it was introduced in its modern psychological sense in 1910 by Carl Gustav Jung (1875–1961). Also called *introversion–extraversion* or *extraversion–introversion*. **introvert** *n.* A person prone to introversion. **introverted** *adj.* Characterized by introversion. [From Latin *intro* towards the inside or within + *vertere* to turn]

intrusion *n.* In linguistics, the insertion of a speech sound, especially in ***allegro speech**, between two syllables, neither of which contains the sound when the syllable is spoken in isolation, or the letter representing it in that position, such as the /r/ often heard in such phrases as *the idea(r) of it*, *law(r) and order*, *India(r) and Pakistan*, *visa(r) application*, and *the Shah(r) of Iran*. Compare **LINKING R**. **intrusive** *adj.*

intuition *n.* Immediate understanding, knowledge, or awareness, derived neither from perception nor from reasoning. Immediate knowledge of a ***concept** exists when a person can apply the concept correctly but cannot state the rules of its application; this form of intuition has been shown experimentally in studies of ***concept** formation. The Chomskyan notion of ***competence** (2), for example, implies intuitive knowledge of grammatical concepts. Immediate awareness of the truth of a ***proposition** (1) (*I have an intuition that I will win the lottery today*) is essentially an unjustified ***opinion**, in contradistinction to a ***belief** or an item of ***knowledge**. Compare **ATTUITION**. **intuitive** *adj.* [From Latin *intuitio* a contemplation, from *intueri* to gaze at, from *tueri* to look at]

intuitive physics *n.* Assumptions about the motion of objects that are commonly held but that sometimes violate the known laws of Newtonian mechanics, as in the following three examples. If a person drops a ball from an outstretched hand while walking briskly, then the ball will continue moving forward until it hits the ground approximately alongside the walker, but a majority of people who have been questioned believe that the ball will drop straight down and will hit the ground directly below the point at which it was released. If a stone is tied to a string and whirled around one's head, and the string suddenly breaks, then the horizontal motion of the stone will be a

*****ebook converter DEMO Watermarks*****

straight line at a tangent to its original circular path, but many people believe that it will continue along a curved path. If a bullet dropped from shoulder height takes about half a second to reach the ground, then the same bullet fired horizontally at shoulder height from a high-powered rifle will also take about half a second to reach the ground, but many people falsely believe that it will take much longer. Such misconceptions embedded in intuitive physics are believed to be influenced by the discredited medieval impetus theory of motion. Also called *naive physics*. See also [EXTRAMMISSION](#), [KNOWLEDGE REPRESENTATION](#).

intuitive type *n.* One of the subsidiary personality types in **analytical psychology*. See [FUNCTION TYPE](#).

invariable hue *n.* Any colour that is not markedly affected by changes in the brightness of illumination, notably the **psychological primary* colours. See also [BEZOLD–BRÜCKE PHENOMENON](#).

inventory *n.* Any list or schedule of items. In psychometrics, a **questionnaire* or checklist usually functioning as a self-report test of abilities, aptitudes, or intelligence. Tests designed to measure interests, attitudes, personality traits, preferences, and psychological attributes are also sometimes called inventories, but tests designed to measure abilities, aptitudes, and intelligence are usually called questionnaires. [From Latin *inventorium* a list of things found, from *invenire*, *inventum* to find or come upon, from *in* on + *venire* to come]

inverse square law *n.* The principle according to which the intensity of a wave, including a light wave or a sound wave, decreases in proportion to the square of the distance from its source.

invertibrate *n.* 1. Any animal without a backbone, comprising all those not classified as **vertebrates* (1). *adj.* 2. Without a backbone; hence, figuratively, weak, indecisive, or lacking in courage or conviction. [From Latin *in-* not + *vertebra* a spinal joint, from *vertere* to turn]

inverted Oedipus complex *n.* In **psychoanalysis*, sexual desire for the same-sex parent and hatred of the opposite-sex parent. See [OEDIPUS](#)
*****ebook converter DEMO Watermarks*****

COMPLEX.

inverted qualia *n.* A hypothetical state of affairs in which one person experiences **qualia* in the opposite way to another, as would be the case if one person always experienced as red those stimuli that another always experienced as green. The possibility of inverted qualia, and the apparent impossibility of knowing if they exist, have been used by philosophers to argue that mental experiences are not reducible to physical states or events.

inverting spectacles *n.* Eyeglasses incorporating **prisms* that have the effect of inverting the images projected on the retinas and the visual images seen by the wearer, first worn by the US psychologist George Malcolm Stratton (1865–1957) in an experiment performed in 1895 and published in the journal *Psychological Review* in 1897. Stratton wore the spectacles, which in that case inverted the visual field and also reversed left and right, continuously during waking hours for seven days, and towards the end of this time the world looked almost normal to him, a finding that refuted the view held by some people at the time that an inverted retinal image was necessary for perceiving the world the right way up. *See also* [PRISM ADAPTATION](#).

investigative psychology *n.* A branch of **criminological psychology* in which psychological principles are applied to the investigation of crimes and the apprehension of criminals, especially serial murderers and rapists. The pattern of behaviour of serial criminals sometimes enables an investigative psychologist to engage in **criminal profiling*.

in vitro *adj.* Of or relating to biological processes or experiments that occur outside the organism in artificial environments. *Compare* [IN VIVO](#). [Latin: in glass, alluding to test-tubes]

in vitro fertilization *n.* Fertilization of an **ovum* by a **spermatozoon* **in vitro* before implanting it in a woman's uterus. *See also* [ICSI](#) in the main body of the dictionary. **IVF** *abbrev.*

in vivo *adj.* Of or relating to biological processes or experiments that occur in living organisms. *Compare* [IN VITRO](#). [Latin: in living]

*****ebook converter DEMO Watermarks*****

in vivo desensitization See SYSTEMATIC DESENSITIZATION.

involuntary muscle *n.* Any muscle controlling automatic functions and not under voluntary control, usually (with the notable exception of ***cardiac muscle**) consisting of ***smooth muscle**. See also **MUSCLE**. Compare **VOLUNTARY MUSCLE**.

involutional depression *n.* A form of ***depression** occurring in both sexes during the ***menopause** or in middle life, with feelings of anxiety, futility, and guilt. Also called *involutional melancholia*. Compare **INVOLUTIONAL PSYCHOSIS**. [From Latin *involutum* rolled up, from *involvere* to roll up + *-ion* indicating an action, process, or state + *-alis* of or relating to]

involutional psychosis *n.* A variant form of ***involutional depression** accompanied by ***persecutory delusions**.

iodopsin *n.* The violet ***cone pigment** in the retina of the eye that was the first cone pigment studied chemically; also, a generic name for any cone pigment, though this sense is avoided in careful usage. Also called *visual violet*. [From *iodine* + Greek *ops* an eye + *-ine* indicating an organic compound, so called because the element iodine is violet in colour]

ion *n.* An electrically charged particle that is either a ***cation**, having lost one or more electrons and therefore carrying a positive electrical charge, or an ***anion**, having gained one or more electrons and therefore carrying a negative electrical charge. The movement of ions across cell membranes is the main mechanism of electrical signalling in the nervous system. See also **ACTION POTENTIAL**, **ION CHANNEL**. **ionization** *n.* The production of ions. **ionize** *vb.* To produce ions or turn into ions. [From Greek *ion* going, from *ienai* to go]

ion channel *n.* A pore in the ***cell membrane** of a neuron allowing passive flow across it of particular ***ions** or groups of ions when it opens in response to a specific stimulus, resulting in either ***depolarization** or ***hyperpolarization** of the neuron, ion channels being divided broadly into ***anion channels** and ***cation channels**. See also **ACTION POTENTIAL**, **CALCIUM**

CHANNEL, CHEMICALLY GATED ION CHANNEL, SODIUM CHANNEL, VOLTAGE-GATED ION CHANNEL.

ionizing radiation *n.* Radiation such as X-ray or gamma-ray radiation of sufficiently high energy to cause ionization.

ionophore *n.* A chemical compound capable of combining with an **ion* and transporting it across a biological membrane. *See also* ACTIVE TRANSPORT, CARRIER PROTEIN. [From *ion* + Greek *-phoros* carrying, from *pherein* to bear]

Iowa gambling task *n.* A decision task designed to simulate real-life decision making. On each trial the decision maker chooses a card from one of four decks, each choice resulting in a fixed gain of \$100 for any card from two of the decks or \$50 for any card from the other two, although the decision maker is not told this. For some cards, the decision maker also suffers a loss. Losses total \$1,250 for every ten cards in two of the decks and \$250 for every ten cards in the other two. These gains and losses are arranged so that two of the decks yield substantial expected losses and the other two substantial expected gains over every run of 10 cards, but there are sharp differences between short-term and long-term payoffs, small losses occurring relatively frequently in some decks and larger but less frequent losses occurring in others. The task was introduced by the Canadian neuroscientist Antoine Bechara (born 1961) and published with three colleagues in the journal *Cognition* in 1994, where it was shown that people with damage to the **prefrontal cortex*, in contrast to neurologically undamaged participants in their **control group*, performed badly, failing to consider the future consequences of their actions and being guided only by immediate prospects. *See also* SOMATIC MARKER HYPOTHESIS. **IGT** *abbrev.* [So-called because the researchers who developed it were at the University of Iowa at the time]

Iowa Manifest Anxiety Scale *n.* Another name for the **Manifest Anxiety Scale*.

IPIP *abbrev.* International personality item pool, a collaborative resource on the internet for the development of measures of **personality* and **individual differences*, introduced in 1996 by the US psychologist Lewis Robert Goldberg (born 1932). One of the most popular scales arising from it, the
*****ebook converter DEMO Watermarks*****

IPIP-NEO, available in long and short forms, is an inventory for measuring the [*Big Five](#), and many other IPIP scales are freely available.

iproniazid *n.* An [*antidepressant](#) drug, the first of the [*monoamine oxidase inhibitors](#) (MAOIs), originally developed in 1951 for the treatment of tuberculosis. Also called *Marsilid* (trademark). [From *i(so)niazid* an earlier compound used for treating tuberculosis + *pro(pyl)* indicating a compound containing the monovalent group C₃H₇]

ipsative *adj.* In psychometrics, a property of a multi-score measuring instrument in which responses that increase one of the scores necessarily reduce one or more of the others, so that the various scores must be interpreted relative to one another rather than in absolute terms. For example, the [*Edwards Personal Preference Schedule \(EPPS\)](#) measures 15 needs, but by endorsing items pertaining to certain needs, a respondent necessarily rejects items pertaining to others, and it is impossible to score high (or low) on all the needs. *Compare* [NORMATIVE \(2\)](#). [From Latin *ipso facto* by that very fact, so called because a high score on one scale by that very fact implies a lower score on another]

ipsilateral *adj.* On, pertaining to, or affecting the same side of the body. *Compare* [CONTRALATERAL](#). [From Latin *ipse* self + *lateralis* of or relating to a side, from *lateris* a side]

IQ *abbrev.* Intelligence quotient, an index of [*intelligence](#) having a [*normal distribution](#) with a mean of 100 and a [*standard deviation](#) of 15 (usually). As a consequence, about 68 per cent of IQ scores in a population fall between 85 (one standard deviation below the mean) and 115 (one standard deviation above the mean), about 95 per cent fall between 70 and 130, about 99.74 per cent between 55 and 145, and so on. The concept was first proposed in 1912 by the German psychologist (Louis) William Stern (1871–1938), who defined it as [*mental age \(MA\)](#) divided by actual or [*chronological age \(CA\)](#): $IQ = MA/CA$, and that is how it came to be called a quotient. In 1916 the US psychometrician Lewis M(adison) Terman (1877–1956) introduced the convention of multiplying the ratio by 100, to eliminate unwanted decimals and to express IQ as a percentage of chronological age, so that $IQ = (MA/CA) \times 100$, and this means that a score of 100 is average for the age

*****ebook converter DEMO Watermarks*****

group by definition. That definition was used until the Romanian-born US psychologist David Wechsler (1896–1981) introduced the modern statistical definition, sometimes called the **deviation IQ* because it is based on standard deviations, in 1939. *See also* [DEVELOPMENTAL QUOTIENT](#), [GENIUS](#), [NORM-REFERENCED TEST](#), [RATIO IQ](#). *Compare* [EMOTIONAL QUOTIENT](#), [SOCIAL QUOTIENT](#).

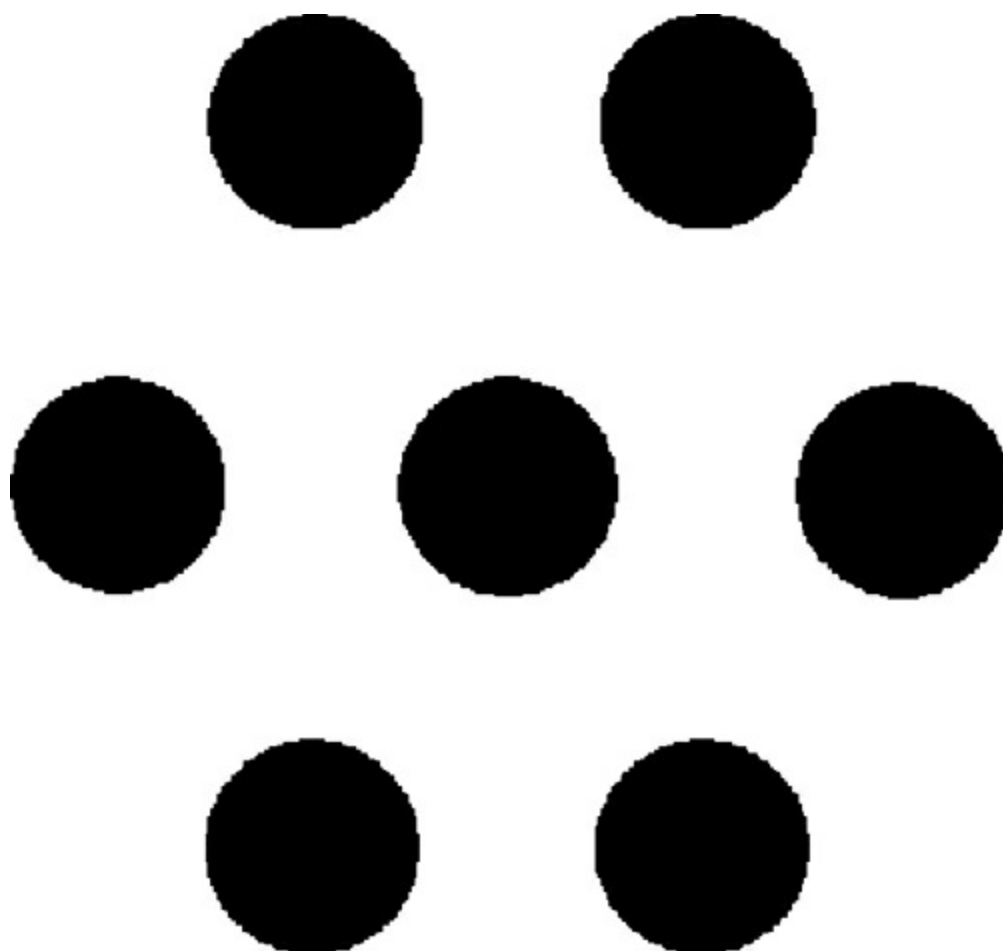
IQ test *n.* An **intelligence test* that yields **IQ* scores. *See also* [NORM-REFERENCED TEST](#).

iris *n.* The opaque contractile diaphragm suspended in **aqueous humour* between the cornea and the crystalline lens of the eye, surrounding and controlling the variable diameter of the **pupil*, attached around its rim to the **ciliary body*, its deeply pigmented appearance determining the colour of the eye, containing the *dilator pupillae* muscle that contracts the iris and thus dilates the pupil and the *sphincter pupillae* muscle that expands the iris and thus constricts the pupil. *See also* [GLAUCOMA](#). **irises** or **irides** *pl.* [From Greek *iris* a rainbow]

irkunii *See* [LATAH](#).

irradiation *n.* **1.** The act or process of treating something with electromagnetic waves or beams of particles. **2.** The name used in the literature of art criticism for what psychologists call **Mach bands*. **3.** A shortened name for the **irradiation illusion*. [From *ir-* intensifier + Latin *radiatus* rayed, from *radiare* to shine + *-ation* indicating a process or condition]

irradiation illusion *n.* Any visual illusion arising from the fact that light areas of an image tend to appear larger than dark areas (see [illustration](#)), a classic example being the **Helmholtz illusion*. *See also* [STAR ILLUSION](#).



Irradiation illusion. The diameter of the discs is the same as the distance between them.

irrational type *n.* One of the basic personality types in **analytical psychology*. See *FUNCTION TYPE*.

irritable bowel syndrome *n.* A chronic condition of recurrent abdominal pain, with constipation or diarrhoea, without any known organic cause and poorly understood. **IBS** *abbrev.*

irritable male syndrome *n.* A behavioural state of irritability and aggression in adult male members of seasonally breeding mammalian species following a decline in **testosterone* at the end of a mating season, also occurring in men when testosterone declines as a consequence of ageing or **stress*, with additional symptoms of **lethargy*, and **depression*. Age-related

testosterone decline in men is also called *androgen decline in the ageing male* (**ADAM**) or *ageing male syndrome* (**AMS**). See also **ANDROPAUSE**, **CLIMACTERIC**, **TESTOSTERONE REPLACEMENT THERAPY (TRT)**. [First used in an article by the English reproductive biologist Gerald A. Lincoln in the *Journal of Reproduction, Fertility and Development* in 2001, echoing the term *irritable bowel syndrome*]

irritable mood *n.* An irascible ***mood** (1) of angry impatience and hasty temper in which a person is easily annoyed or roused to anger or aggression.

Isakower phenomenon *n.* A type of ***hypnagogic image** in which a soft, doughy mass appears to be moving towards one's face. It was first reported in 1938 by the Austrian psychoanalyst Otto Isakower (1899–1972), who attributed it to a revival of the infantile experience of feeding at the mother's breast.

ischaemia *n.* Obstruction of the flow of blood to an organ or tissue of the body. Also spelt *ischemia*. **ischaemic** or **ischemic** *adj.* [From Greek *ischein* to restrain + *haima* blood + *-ia* indicating a condition or quality]

ischaemic pain *n.* Pain induced by applying a tourniquet to the arm just above the elbow to obstruct the flow of blood, then squeezing a hand-exercising device for a minute or two. When the exercising stops, pain begins to mount and typically becomes unbearable after about eight minutes. It is used in experimental studies of pain because it causes no permanent tissue damage. US *ischemic pain*. See also **ALGESIMETER**, **COLD PRESSOR PAIN**, **DOLORIMETER**.

I-self *n.* According to the pioneering the US psychologist William James (1842–1910) in his *Principles of Psychology* (1890), the self as it is experienced and as it acts in the world (the ***phenomenal self**), or the self as subject, in contradistinction to the ***Me-self**.

Ishihara test *n.* A popular test for the detection and characterization of ***colour-blindness** or ***colour deficiency**, consisting of a series of coloured plates each composed of small blobs of different colours closely packed together, each plate having a large numeral clearly visible to viewers with
*****ebook converter DEMO Watermarks*****

normal colour vision but invisible to those with a form of colour deficiency associated with that plate, the pattern of responses across the complete set of plates enabling the form of colour deficiency to be specified reasonably precisely. *See also* **PSEUDO-ISOCHROMATIC**. *Compare* **HOLMGREN TEST**, **STILLING TEST**. [Named after the Japanese ophthalmologist Shinobu Ishihara (1897–1963) who devised it]

island of Reil *n.* Another name for the ***insula**. [Named after the Dutch-born German physician Johann Christian Reil (1759–1813) who drew attention to it]

islets of Langerhans *n.* Groups of endocrine glands in the ***pancreas** that secrete ***insulin** and ***glucagon** into the bloodstream, and whose failure leads to ***diabetes** mellitus. Also called *islands of Langerhans*. [Named after the German pathologist Paul Langerhans (1847–88) who discovered them]

isocarboxazid *n.* A ***monoamine oxidase inhibitor** (MAOI), derived from ***hydrazine**, used as an ***antidepressant** drug. Also called *Marplan* (trademark).

isocortex *n.* Another name for the ***neocortex**. [From Greek *isos* equal or the same + Latin *cortex* bark or outer layer]

isogenic *adj.* Derived from the same source, as are organs derived from the same embryonic tissue. Also written *isogenous*. [From Greek *isos* equal or the same + *genein* to produce + *-ikos* of, relating to, or resembling]

isogloss *n.* A line on a map enclosing an area within which a particular linguistic ***feature** (1) is found. Various types of isogloss are distinguished: an *isophone* is a feature of pronunciation, an *isolex* an item of vocabulary, an *isomorph* a feature of word formation, and an *isoseme* a particular word meaning. [From Greek *isos* equal + *glossa* a tongue]

isolate *n.* 1. An individual cut off from other members of a group or community. In a ***sociogram**, an individual who is not chosen by any other group member. 2. An organism or group of organisms separated from a

specimen. [From Latin *insulatus* made into an island, from *insula* an island]

isolating language *n.* A language such as Chinese, Vietnamese, and Samoan in which words are invariable, there are no inflections or changeable endings, and grammatical relations are indicated by word order. English has some features of an isolating language, as shown by the two sentences *The burglar killed the woman* and *The woman killed the burglar*. Also called an *analytic language* or a *root language*. Compare [AGGLUTINATIVE LANGUAGE](#), [INFLECTING LANGUAGE](#).

isolating mechanism *n.* A topographic, ecological, physical, or psychological barrier that prevents breeding between two populations and thereby allows differentiation into distinct [*taxonomic](#) groups and that sometimes causes [*speciation](#) to occur.

isolation *n.* The act or process of separating or placing apart; in reproductive biology, the prevention of interbreeding between populations resulting from one or more [*isolating mechanisms](#).

isolation effect *n.* Another name for the [*von Restorff effect](#).

isolation of affect *n.* In [*psychoanalysis](#), a [*defence mechanism](#) in which [*emotion](#) is detached from an idea and rendered unconscious, leaving the idea bland and emotionally flat. It is especially important in [*obsessive–compulsive disorder](#), and in non-disordered people it most often occurs following a traumatic experience. The mechanisms by which the detachment is effected include repetitive intrusive thoughts and ritualistic behaviour. Sigmund Freud (1856–1939) expressed his ideas about isolation most clearly in his book *Inhibitions, Symptoms and Anxiety* (1926, *Standard Edition*, XX, pp. 77–175, at pp. 120–2). Also called *isolation*. See also [DECATHEXIS](#).

isoluminant *adj.* Having uniform light intensity, pertaining to visual stimuli in which shapes or forms are defined by variations in colour without any contrasts in [*lightness](#). If red and green stripes in motion on a television screen are adjusted so that they are isoluminant, then although the viewer can see that they have changed position from one moment to the next, the sensation of movement is either greatly reduced or entirely eliminated,
*****ebook converter DEMO Watermarks*****

because information about movement is processed by the colour-blind ***magnocellular system**; and for the same reason, binocular ***stereopsis** and the other binocular and monocular cues used for ***depth perception** do not function with isoluminant stimuli, which invariably appear flat and two-dimensional. Also called *equiluminant*. See also **DARK FOCUS**. **isoluminance** *n.* [From Greek *isos* equal or the same + Latin *lumen* light]

isomorphism *n.* **1.** A one-to-one correspondence between the elements of two or more sets or classes and between the sums or products of the elements of one set and the sums or products of the equivalent elements of the other set. A typical isomorphism exists between the Arabic numerals 1, 2, 3, 4, ... and the Roman numerals I, II, III, IV, ... **2.** A similarity in form or structure between two or more substances or entities, including abstract structures or problems that look superficially different but turn out, on analysis, to be different versions of the same problem. See also **BOOLEAN**. **3.** The doctrine of ***Gestalt psychology** according to which a mental experience such as a perception is invariably accompanied by a neurophysiological ***representation (1)** that is similar to it in structure. The idea can be traced to an article by the Austrian physicist, philosopher, and psychologist Ernst Mach (1838–1916) in the *Kaiserlichen Akademie der Wissenschaften* (1865): ‘Every psychical event corresponds to a physical event and vice versa. *Equal* psychical processes correspond to *equal* physical processes, *unequal* to *unequal* ones’ (p. 269 of the English translation published in 1965, italics in original). This notion was developed and imported into Gestalt psychology by the German psychologist Wolfgang Köhler (1887–1967), who asserted in his book *Gestalt Psychology* (1947) that ‘the principle of isomorphism demands that in a given case the organization of experience and the underlying physiological facts have the same structure’ (p. 301). See also **PRÄGNANZ**. **isomorph** *n.* Anything that exhibits isomorphism with something else. See also **ISOGLOSS**. **isomorphic** *adj.* Manifesting isomorphism. Also called *isophorphous*. [From Greek *isos* equal or the same + *morphe* a shape or form + *-ismos* indicating a state or condition]

isophonic contour *n.* Another name for an ***equal-loudness contour**. [From Greek *isos* equal or the same + *phonikos* of or relating to sound, from *phone* a voice or sound + *-ikos* of, relating to, or resembling]

isoquinoline *n.* Any of a number of nitrogenous bases that can be formed from catecholamines and indoleamines and that, when treated with formaldehyde gas, fluoresce under ultraviolet light, the wavelength of the emitted light depending on the specific catecholamine or indoleamine involved, providing a method of tracking these neurotransmitters in the nervous system. [From Greek *isos* equal or the same + *quinoline*, from Spanish *quina* kinchoma bark, from Quechua *kina* bark]

isotonia *n.* The state or condition of equal tone or tension in two or more muscles. See [ISOTONIC \(1\)](#). Compare [HYPERTONIA](#), [HYPOTONIA](#).

isotonic *adj.* **1.** Of, relating to, or comprising two or more muscles that are equally tense. Compare [HYPERTONIC \(1\)](#), [HYPOTONIC \(1\)](#). **2.** Of or relating to two or more solutions having equal concentration and hence exerting the same **osmotic pressure* as each other, such as a 0.9 per cent sodium chloride (salt) solution and the **intracellular fluid* of the body. See also [OSMOSIS](#). Compare [HYPERTONIC \(2\)](#), [HYPOTONIC \(2\)](#). [From Greek *isos* equal or the same + *tonos* tension + *-ikos* of, relating to, or resembling]

isotropic *adj.* Having the same properties in all directions or with respect to all axes. Compare [ANISOTROPIC](#). **isotropism** or **isotropy** *n.* [From Greek *isos* equal or the same + *tropos* a turn, from *trepein* to turn]

is-ought question See [NATURALISTIC FALLACY](#).

Issawi's law of social motion *n.* The following proposition: 'In any dispute, the intensity of feeling is inversely proportional to the value of the stakes at issue. That is why academic politics are so bitter.' It was first published by the Egyptian-born US economist Charles Philip Issawi (1916–2000) in his book *Issawi's Laws of Social Motion* (1973), although it had been formulated earlier by the US political scientist Wallace Stanley Sayre (1905–72), without written publication, and is also called *Sayre's law*.

item analysis *n.* In psychometrics, a set of techniques for determining the psychometric properties of test items, including the **discriminating power* of attitude scale items or the correlation of item scores with an external

criterion.

item bias *n.* In psychometrics, a form of **test bias* restricted to specific test items.

item characteristic curve *n.* Another name for an item response function. See *ITEM RESPONSE THEORY*.

item discrimination index *n.* In psychometrics, a measure of the extent to which test respondents who are known to be high on the attribute being measured exhibit different responses to a test item than people who are known to be low on the attribute. It is a measure of the **discriminating power* of the item.

Item Group Checklist *n.* A list of **signs (1)* and **symptoms* used in evaluating patients with mental disorders as part of the **SCAN* system. **IGC** *abbrev.*

item response curve *n.* Another name for an item response function. See *ITEM RESPONSE THEORY*.

item response theory *n.* An approach to the theory of psychological testing based on the assumption that the probability of a particular response to a test item is a joint function of one or more characteristics of the individual respondent and one or more characteristics of the test item. The relationship of these parameters to the probability of a particular response is defined by an *item response function*, and their values are estimated from the observable responses of respondents to the test item. It is the principal alternative to **classical test theory*. Also called *latent trait theory*. See also *RASCH SCALE*. **IRT** *abbrev.*

I-thou relation *n.* A term coined in 1923 by the Austrian theologian and philosopher Martin Buber (1878–1965) in his book *Ich und du* (I and Thou) to denote a relationship based on mutuality and reciprocity rather than utilitarian objectives.



Jacksonian epilepsy *n.* A form of **epilepsy* that is associated with abnormal neuronal activity in a localized area of the brain and that typically begins with spasmodic contractions in a finger, toe, or corner of the mouth and then spreads throughout the body, usually with loss of **consciousness*. Also called *focal epilepsy* or *focal seizure*. [Named after the English neurologist J(ohn) Hughlings Jackson (1835–1911) who studied it]

Jackson's principle *n.* The notion that deterioration of psychological functions through mental disorders or neurological impairments retraces in reverse the order of evolutionary development, so that the most recently evolved are the first to be lost. Also called *Jackson's law*. Compare *RIBOT'S LAW*. [Formulated by the English neurologist J(ohn) Hughlings Jackson (1835–1911)]

Jacobson's organ *n.* Another name for the **vomeronasal organ*. [Named after the Danish anatomist Ludvig Levin Jacobson (1783–1843) who discovered it]

Jacobson's progressive relaxation *n.* Another name for **progressive relaxation*. [Named after the US physician Edmund Jacobson (1888–1983) who introduced it in 1938]

jactation *n.* Jerky, convulsive bodily movements characteristic of severe fevers, some mental disorders, and neurological damage to the **subthalamic nucleus*. See also *BALLISM*. [From Latin *iactare* to throw + *-ation* indicating a process or condition]

jamais vu *n.* A form of [*paramnesia \(1\)](#) characterized by an erroneous belief of having never before seen or experienced something that one has in reality encountered before. *Compare* [DÉJÀ VU](#). [From French *jamais* never + *vu* seen]

James–Lange theory *n.* The proposition that [*emotions](#) are caused by bodily sensations. It was first propounded by the US psychologist William James (1842–1910) in the journal *Mind* in 1884 and most famously expounded in his *Principles of Psychology* (1890): ‘Our natural way of thinking...is that the mental perception of some fact excites the mental affection called the emotion, and that this latter state of mind gives rise to the bodily expression. My thesis, on the contrary, is that *the bodily changes follow directly the perception of the exciting fact, and that our feeling of the same changes as they occur IS the emotion*....We feel sorry because we cry, angry because we strike, afraid because we tremble’ (volume 2, p. 449, italics in original). The Danish physician Carl (Georg) Lange (1834–1900) independently put forward a somewhat similar theory in his book *Om Sindsbevægelser* in 1885, although Lange's theory places no emphasis on emotion as a mental state, equating emotion with the bodily (especially visceral) events themselves. The main problem with the theory, first pointed out in 1927 by the US physiologist Walter Bradford Cannon (1871–1945), is that the physiological changes accompanying qualitatively different emotions are often very similar. *See also* [COGNITIVE-APPRAISAL THEORY](#), [FACIAL FEEDBACK HYPOTHESIS](#). *Compare* [CANNON–BARD THEORY](#).

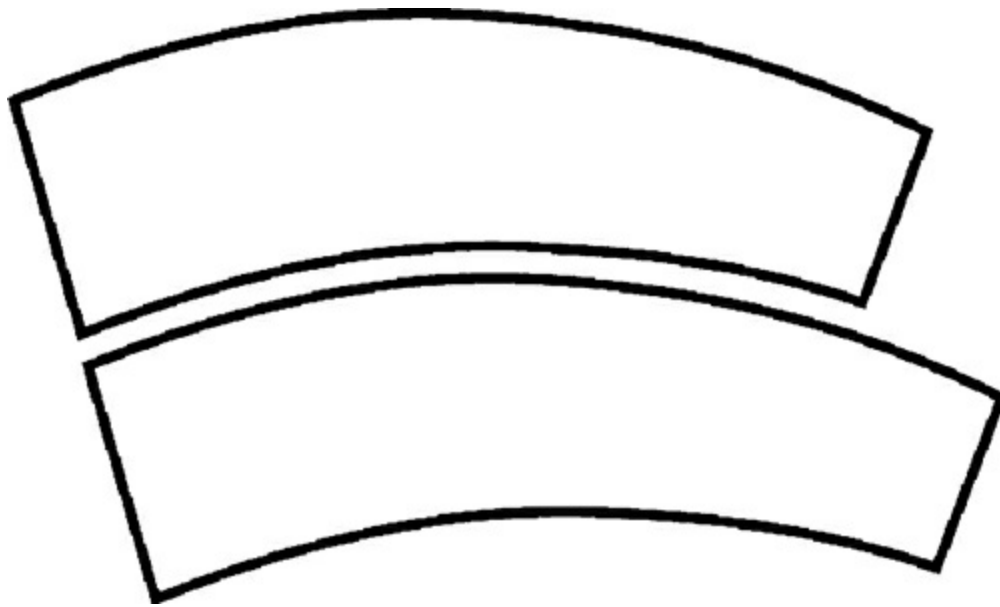
Japanese writing *See* [KANA](#), [KANJI](#).

jargon *n.* **1.** The specialized language associated with a particular profession or field of activity. *See also* [PSYCHOBABBLE](#), [REGISTER \(2\)](#). **2.** In developmental psychology, an unintelligible but well-articulated utterance of a child learning to speak. **3.** Meaningless gibberish. *See also* [JARGON APHASIA](#). [French *jargon*, origin obscure]

jargon aphasia *n.* A form of *fluent aphasia* characterized by a copious flow of unintelligible speech. Jargon-aphasic speech may be subdivided into semantic jargon, in which ordinary words are strung together to form unintelligible utterances, such as *automatic winding voice and the very very*
*****ebook converter DEMO Watermarks*****

recording, and phonemic jargon involving neologisms, such as *I've not norter with the verker*. See also [APHASIA](#).

Jastrow illusion *n.* A visual illusion in which two identical tapering annular or ring segments placed one above the other appear unequal in size (see [illustration](#)). [Named after the Polish-born US psychologist Joseph Jastrow (1863–1944) who first published it in 1891]



Jastrow illusion. The two figures are identical.

jealous delusional disorder *n.* A type of [*delusional disorder](#) in which the central theme of the [*delusion](#) is that the sexual partner is being unfaithful.

jealousy, morbid *n.* Another name for [*jealous delusional disorder](#).

Jerusalem syndrome *n.* A non-technical name for a condition occasionally affecting Jewish, Christian, and other pilgrim-tourists visiting Jerusalem who develop [*delusions](#) (usually transient) of being biblical personalities such as Jesus Christ, John the Baptist, or Mary Magdalene. The Argentine–Israeli psychiatrist Yair Carlos Bar-El (1937–2009) first identified and named the syndrome in 1982 and discussed it in articles in the journal *Comprehensive Psychiatry* in 1991 and the *British Journal of Psychiatry* in

*****ebook converter DEMO Watermarks*****

2000. Compare [STENDHAL SYNDROME](#).

jet lag *n.* A condition of fatigue and disorientation brought about by travelling across several time zones in a short period, especially in an eastward direction, resulting in a mismatch between exogenous temporal cues and endogenous [*circadian rhythms](#). See also [MELATONIN](#). **jet-lagged** *adj.*

jigsaw classroom *n.* A cooperative technique designed to reduce [*prejudice](#) and conflict in racially mixed groups of children. In the original research, children were arranged in six-member groups, and the day's lessons were divided into six sections, each section being assigned to a different child, with every child having essential information that, like a piece of a jigsaw puzzle, was necessary for completing the task and had to be learned and taught to other group members to achieve the common goal of receiving good marks. Evidence suggests that, compared to traditional classes, jigsaw groups tend to manifest less prejudice and stereotyping, increased liking among group members both within and across ethnic boundaries, increased self-esteem, better scholastic performance, and greater enjoyment of school. The US social psychologist Elliot Aronson (born 1932), working with several graduate students, introduced the technique to deal with racial conflict following the desegregation of schools in Austin, Texas in 1971 and published it initially in a book entitled *The Jigsaw Classroom* (1978) and an article in *Personality and Social Psychology Bulletin* (1979). Compare [ROBBERS CAVE EXPERIMENT](#).

Jimmy *n.* A nickname used by psychologists to refer to the best-selling textbook *Psychology: Briefer Course* (1892) by the US psychologist William James (1842–1910). His monumental two-volume *Principles of Psychology* appeared in 1890, after a gestation period of 12 years, and comments such as *You'll find it in James* were so common that the book gradually came to be known as *James*. When the abridged version appeared in 1892, it was immediately nicknamed *Jimmy*.

jinjinia bemar See [KORO](#).

jiryan See [DHAT](#).

job analysis *n.* In **personnel psychology*, the process of determining the characteristics of a job and the **attributes* required to perform it for purposes of selection and placement of employees, evaluation of employee productivity for purposes of promotion, and design of training programmes for employees. It usually begins with a *job description*—a detailed description, often agreed between management and workforce, of the work normally done by a person carrying out the job, including all relevant duties and responsibilities. The next step is the construction of a *job specification*—a record of the work that a person in the job ought ideally to do. The final step is the specification of a set of *job requirements*—skills, competencies, and qualifications needed by a person to perform the job satisfactorily. The list of job requirements may be viewed as a distillation of the personal factors that are important in carrying out the work.

Job Descriptive Index *n.* A scale used widely in **personnel psychology* to measure five major factors associated with **job satisfaction*: the nature of the work itself, wages and salaries, attitudes towards supervisors, relations with co-workers, and opportunities for promotion. **JDI** *abbrev.*

job satisfaction *n.* In **personnel psychology* and **industrial/organizational psychology* or **occupational psychology*, the degree to which employees are contented with their jobs. It tends to be low when experience in a job fails to live up to expectations, although the same work might produce higher levels of job satisfaction among employees with more realistic expectations. Low job satisfaction leads to high absenteeism and labour turnover, but the relationship between job satisfaction and productivity is not straightforward. *See also* **JOB DESCRIPTIVE INDEX**.

Jocasta complex *n.* In **psychoanalysis*, sexual desire of a mother for her son. *Compare* **OEDIPUS COMPLEX**. [Named after Jocasta, Queen of Thebes in Greek mythology, who married Oedipus without realizing that he was her son]

John Henry effect *n.* A tendency for members of the **control group* in certain experiments to adopt a competitive attitude towards the **experimental group*, thereby negating their status as controls. In an industrial setting, for
*****ebook converter DEMO Watermarks*****

example, if members of the experimental group are provided with a powerful new tool, members of the control group may treat this as a challenge and, using the old tool, may try to beat the experimental group members in productivity. [Named after John Henry, an enormously strong and hard-working African American railroad worker and folk tale hero of the late 19th century, possibly based on a real person]

joint *n.* A place where two things, especially bones, meet, allowing a hingelike movement. Also, a common street name for a hand-rolled cigarette containing **cannabis*. [Perhaps from *joint* American slang for penis, alluding to its appearance]

joint sense *n.* A form of **proprioception* and **kinaesthesia* mediated by receptors in the joints and stimulated by flexion. *See also* *GOLGI TENDON ORGAN*, *PACINIAN CORPUSCLE*.

Jost's law *n.* **1.** The proposition that if two learnt associations are of equal strength but of different durations, then repetition will increase the strength of the older one more than that of the more recent one. **2.** The proposition that if two learnt associations are of equal strength but of different durations, then the older one will decay more slowly than the more recent one. [Named after the German psychologist Adolph Jost (1874–1920) who propounded both laws in an article in the journal *Zeitschrift für Psychologie* in 1897]

Julesz stereogram *n.* Another name for a **random-dot stereogram*. [Named after the Hungarian-born US radar engineer and psychologist Bela Julesz (1928–2003) who invented it in 1960]

jumping gene *n.* A plasmid, transposon, or other fragment of DNA that can migrate to a gene locus from somewhere else, sometimes causing a mutation and disrupting normal gene function.

Jungian *adj.* Of or relating to the school of **psychoanalysis* founded in 1913 by the Swiss psychologist Carl Gustav Jung (1875–1961). *See* *ANALYTICAL PSYCHOLOGY*.

Jungian analysis *n.* A form of **psychoanalysis* based on **Jungian* theories or **analytical psychology*.

junk *n.* Rubbish. Also, a common street name for **heroin*. [From the obsolete word *jonke* useless old rope]

junk DNA *n.* Long sections of **DNA* that consist of highly repetitive non-coding **introns* and other DNA having no apparent effect on the **phenotype* but having important uses in **genetic fingerprinting*. See also REPETITIVE DNA.

junkie *n.* An informal name for a drug user, especially an injecting heroin user.

just noticeable difference *n.* Another name for a **difference threshold*. **jnd** *abbrev.*

just world hypothesis *n.* The widespread but false belief that the world is essentially fair, so that the good are rewarded and the bad punished. One consequence of this belief is that people who suffer misfortunes are assumed to deserve their fates: a person involved in a traffic accident must have been driving carelessly, a victim of burglary could not have taken adequate precautions, a woman who was raped must have acted provocatively and led her attacker on, and so on, and even the victims often blame themselves. This phenomenon, which is usually interpreted as a consequence of the **illusion of control*, was first identified and named by the Canadian psychologist Melvin J. Lerner (born 1929) in an article in the *Journal of Personality and Social Psychology* in 1965. See also BLAMING THE VICTIM, JUST WORLD SCALE.

Just World Scale *n.* A questionnaire designed to measure the extent to which the respondent believes in a just world. It contains statements such as *Basically, the world is a just place; When parents punish their children, it is almost always for good reasons; and By and large, people get what they deserve*. It was designed by the US psychologist Zick Rubin (born 1944) and the English-born US psychologist (Letitia) Anne Peplau (born 1945) and was

published by them in two articles in the *Journal of Social Issues* in 1973 and 1975. See also [JUST WORLD HYPOTHESIS](#).



kainic acid *n.* A neurotoxic amino acid that is found in the Japanese red alga or seaweed *Digenia simplex* and that acts as a powerful central nervous system **stimulant* by potentiating the neurotransmitter **glutamate*, causing destruction to postsynaptic cells with glutamate receptors. [From Japanese *kainin*-so red alga]

kairomone *n.* A **pheromone* or **allomone* that has a detrimental affect on the animal that emits it, for example, a chemical that attracts not only mates but also predators. [From Greek *kairos* opportunity + *horman* to stir up or urge on]

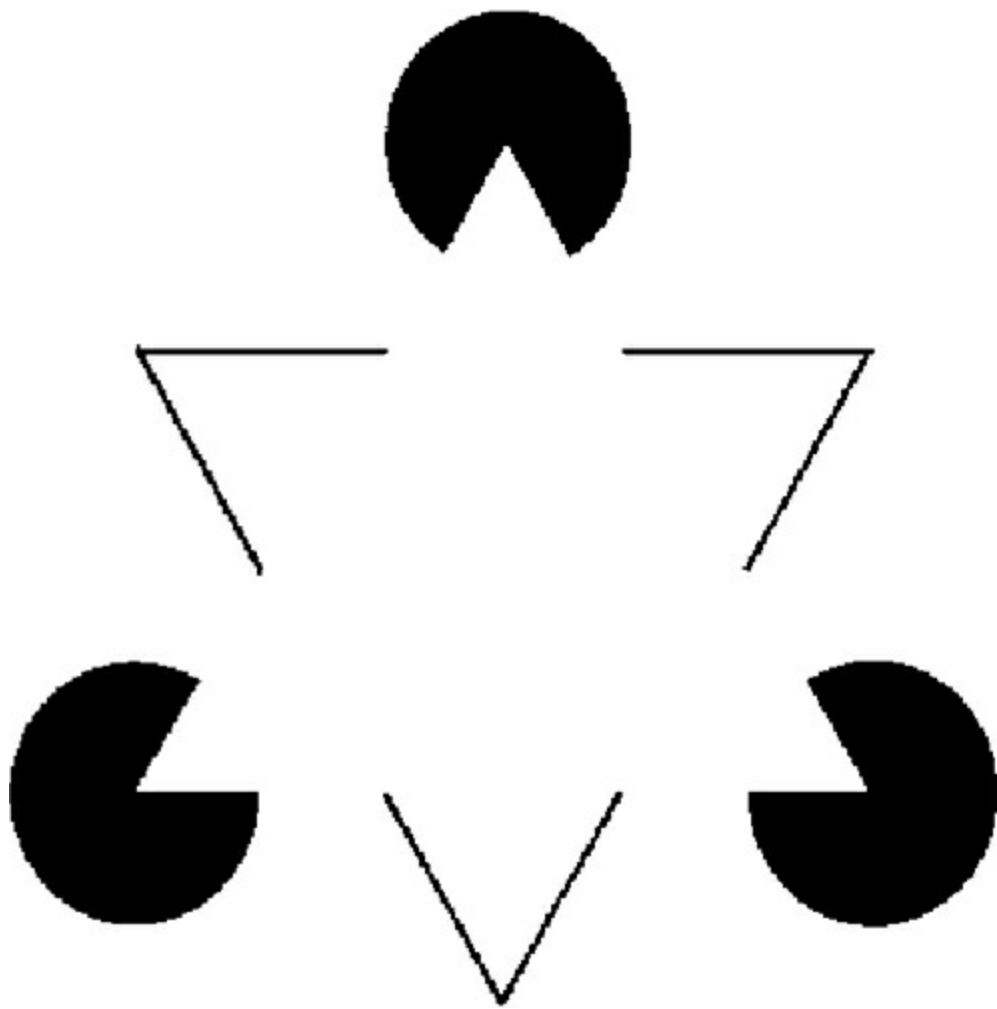
kakosmia See CACOSMIA.

Kamin blocking *n.* A phenomenon of **selective attention* that occurs in **classical conditioning*, in both human and animal learning of compound cues. The standard demonstration of the effect involves a learning phase in which an experimental group is exposed to a **conditioned stimulus* A (such as a tone), repeatedly paired with an **unconditioned stimulus* X (such as shock), and a **control group* is not exposed to this pairing; then both groups are exposed to a compound stimulus AB composed of A (tone) plus a second conditioned stimulus B (light), repeatedly paired with the same unconditioned stimulus X (shock). The outcome is that when both groups are tested for the strength of the learned association between B (light) and X (shock), which have been paired the same number of times in both groups, a weaker association is found in the experimental group than in the control group. [Named after the US psychologist Leon J. Kamin (born 1927) who first reported it in a book chapter published in 1968]

Kamin effect *n.* The finding that, after [*avoidance conditioning](#), an animal tested repeatedly shows a U-shaped performance curve, performing well at first, then performing much worse after about an hour, then finally performing well again after about two hours. [Named after the US psychologist Leon J. Kamin (born 1927) who discovered it]

kana *n.* A syllabic writing system, used in conjunction with [*kanji](#) in Japanese writing. It consists of two written forms: *hiragana*, used to express particles and grammatical distinctions, is based on Chinese cursive script and is widely used in newspapers and general literature, and *katakana*, an angular script based mainly on Chinese [*logographs](#), is used mainly for loan words and foreign words. See also [KANJI](#). [Japanese: literally borrowed or provisional characters, distinguishing them from kanji, regarded as real characters]

Kanizsa triangle *n.* A visual illusion of a triangle without a corresponding retinal image, induced by three dark [*Pac-Man](#) icons at the corners of an imaginary triangle, oriented to give the impression that they are discs with segments occluded by the vertices of the triangle (see [illustration](#)). The [*illusory contour](#) arises from processing that occurs in Area V2 of the [*visual cortex](#) of information sent there from the primary visual cortex. The other major example of form perception without a retinal image is [*anorthoscopic](#) vision. Compare [EHRENSTEIN'S BRIGHTNESS ILLUSION](#), [RANDOM-DOT STEREOGRAM](#). [Named after the Italian psychologist Gaetano Kanizsa (1913–93), born in Trieste when it was part of the Austro-Hungarian Empire, who discovered it in 1971]



Kanizsa triangle. A figure with illusory contours and no corresponding retinal image.

kanji *n.* The Japanese **logographic* writing system based mainly on Chinese logographs. A character in this system is also called a *kanji*. *See also* *KANA*. [From Chinese *han* Chinese + *zi* a character]

Kanner's syndrome *n.* An alternative name for **autism spectrum disorder*. [Named after the Austrian-born US child psychiatrist Leo Kanner (1894–1981) who first described it in 1943]

kappa effect *n.* A relation between perceived space and time, demonstrated most simply by placing three light sources *A*, *B*, and *C* at different positions, with *A* and *B* closer together than *B* and *C*, and then

flashing the lights successively in the dark, with equal time intervals between the three flashes, creating the **space–time illusion* that the time interval between *A* and *B* is shorter than that between *B* and *C*. Compare *TAU EFFECT*.

kappa statistic *n.* In statistics, an index of the degree of agreement between two raters classifying the same set of items, ranging from zero when agreement is no better than chance to 1 (except in certain special cases) when agreement is perfect. It is calculated by dividing the difference between the observed proportion of cases in which the raters agree and the proportion expected by chance by the maximum difference possible between the observed and expected proportions, assuming fixed row and column totals (marginals). The statistic was introduced by the US psychologist Jacob (Jack) Cohen (1923–98) in an article in the journal *Educational and Psychological Measurement* in 1960. Also called *Cohen’s kappa coefficient*. Symbol: *K*. See also *KENDALL COEFFICIENT OF CONCORDANCE*. [From *kappa* (*K*), the tenth letter of the Greek alphabet]

Kardos effect *n.* The appearance of a white surface as black when it is precisely covered by a small region of shadow and is viewed among a collection of brightly illuminated objects. If the screen that casts the shadow is adjusted so that its edge is visible on the white surface, then the whole of the white surface is immediately perceived as white and partly in shadow, but as soon as the shadow is returned to its original position to cover the whole of the white surface, the surface instantly reverts to its previous black appearance. This phenomenon, like its counterpart the **Gelb effect*, demonstrates that the lightness dimension of colour is not determined straightforwardly by physical light intensity but is subject to **context effects*, as are other dimensions of colour. See also *LIGHTNESS*, *LUMINANCE*. Compare *CHEQUER–SHADOW ILLUSION*, *LAND EFFECT*. [Named after the Hungarian psychologist Lajos (Ludwig) Kardos (1899–1985) who published his experiment in 1934]

karyotype *n.* 1. The number, size, shape, and general appearance of the **chromosomes* in a **somatic* cell of an organism; or a diagram or photograph of the complete set of chromosomes. *vb.* 2. To determine the karyotype of a cell. [From Greek *karyon* a kernel or nut + Greek *typos* a mark]

Kaspar Hauser experiment *n.* An experiment in which an animal is reared in isolation from members of its own species (conspecifics), for example, the experiments carried out in the 1950s by the British ethologist William H(oman) Thorpe (1902–86) in which birds were reared in isolation to determine which aspects of their songs are **innate*. See also [FERAL CHILD](#), [PSAMMETICHUS EXPERIMENT](#). [Named after Kaspar Hauser (?1812–33), a teenage boy who appeared mysteriously in Nuremberg in 1828 and was believed at first to be a feral child, having grown up virtually without human contact]

kat See [KHAT](#).

katakana See [KANA](#).

katasexualism *n.* A generic name for the **paraphilias* **necrophilia* and **zoophilia*. [From Greek *kata* down + English *sexualism*]

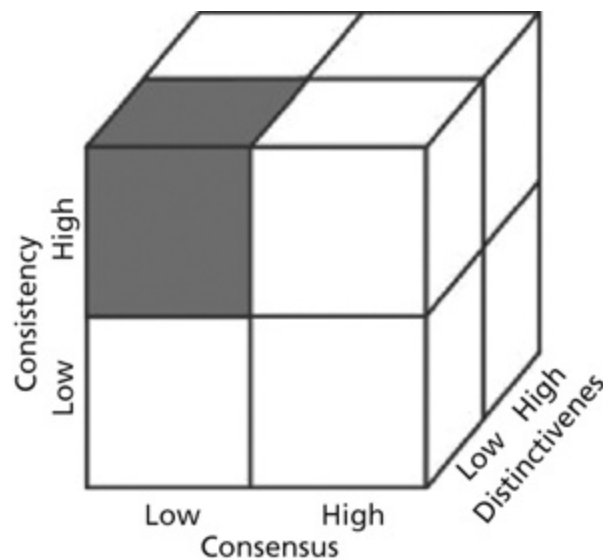
kava *n.* The aromatic pepper plant *Piper methysticum*, indigenous to the south Pacific islands of Fiji, Tonga, Vanuatu, and Samoa, or a drink prepared by grinding its roots and stems, mixing them with water, and sieving the resulting liquid. It induces euphoria, sedation, incoordination, and other effects, some of them possibly harmful. It is a traditional ceremonial drug in Fiji and elsewhere, and in the late 1990s a demand for it began to emerge in Western cultures. See also [SUBSTANCE ABUSE](#), [SUBSTANCE-RELATED AND ADDICTIVE DISORDERS](#). [From Polynesian (Tongan) *kava* bitter]

K complex *n.* A brief high-amplitude **EEG* wave occurring at approximately one-minute intervals during Stage II **NREM sleep*.

Keeler polygraph *n.* An instrument for recording changes in respiration rate, pulse rate, and blood pressure, used as a **lie detector* during interrogations. See also [POLYGRAPH](#). [Named after the US criminologist Leonarde Keeler (1903–49) who invented it]

Kelley's cube *n.* An influential contribution to **attribution theory*, formulated by the US psychologist Harold H(arding) Kelley (1921–2003) and

first published in the *Nebraska Symposium on Motivation* in 1967, according to which people integrate three types of information in explaining an observed item of behaviour: *consensus*, the proportion of other people who have performed the same behaviour, providing an estimate of how unusual the behaviour in question is; *consistency*, the extent to which the behaviour is typical of the past behaviour of the person in similar situations; and *distinctiveness*, the extent to which the behaviour is peculiar to the particular situation in which it occurred. For example, a person may observe a friend losing her temper in response to her mother criticizing her in public, and the observer may judge this behaviour to be low on consensus (unusual for people in general), high in consistency (typical of that woman in that type of situation), and low in distinctiveness (something that she does in many other situations as well). Each of the three variables can be judged to be high or low, leading to eight possible combinations, often depicted as a $2 \times 2 \times 2$ cube (see [illustration](#)). According to Kelley, observers tend to attribute behaviour to internal, dispositional causes within the actor when consensus is low, consistency is high, and distinctiveness is low, as in the example; conversely, observers tend to attribute behaviour to external, situational causes when consensus is high, consistency low, and distinctiveness high. Also called *Kelley's ANOVA model*. See also [ATTRIBUTION](#), [CAUSAL SCHEMA](#), [COVARIATION PRINCIPLE](#), [FUNDAMENTAL ATTRIBUTION ERROR](#), [SELF-SERVING BIAS](#).



Kelley's cube. The shaded cell indicates low consensus, high consistency, and low distinctiveness (see text).

Kendall coefficient of concordance *n.* In statistics, an index of the degree of agreement between several variables measured on an **ordinal scale* or transformed to **ranks*, ranging from 0 (no agreement) to 1 (complete agreement). It may be thought of as similar to **Kendall's tau* but suitable for measuring the association between more than two variables at a time. Symbol: *W*. See also *KAPPA STATISTIC*. [Named after the English statistician Maurice George Kendall (1907–83) who introduced it in 1948]

Kendall correlation coefficient *n.* Another name for **Kendall's tau*.

Kendall's tau *n.* In statistics, an index of the degree of association between two variables measured on an **ordinal scale* or transformed to **ranks*. Its computation involves examining every pair of items and counting the number of pairs that are similarly ranked (concordant) and the number differently ranked (discordant) relative to each other on the two variables, and the difference between the number of concordant and discordant pairs is then divided by the total number of pairs. See also *KENDALL COEFFICIENT OF CONCORDANCE*. [Named after the English statistician Maurice George Kendall (1907–83) who introduced it in 1938]

Kent–Rosanoff Free Association Test *n.* A popular **word-association test* consisting of 100 nouns, adjectives, and verbs selected by the US psychologist Grace H. Kent (1875–1973) and the Russian-born US psychologist Aaron J. Rosanoff (1878–1943) and published in the *American Journal of Insanity* in 1910. The words are all emotionally neutral, unlike some other word-association tests, and norms obtained by counting and classifying the associations given by 1,000 normal respondents are supplied.

kernel *n.* A basic form of sentence structure (simple, active, declarative) used as a starting point in some forms of **generative grammar*. [Old English *cyrnel* a little seed, from *corn* seed]

ketamine *n.* A drug closely related to **phencyclidine*, developed originally as an **anaesthetic* (1) and adopted as a street drug in the 1960s, often called *Special K*. See also *PHENCYCLIDINE-RELATED DISORDERS*. [From

ket(one) + amine]

ketone *n.* A chemical compound consisting of a carbonyl group joined to two like or unlike alkyl radicals and containing volatile substances that are **psychotropic* when inhaled. *See also* *INHALANT-RELATED DISORDERS*, *SOLVENT ABUSE*. [German *Keton*, from *Aketon* acetone]

keyword mnemonic *n.* Another name for the **peg-word mnemonic*.

khat *n.* An evergreen shrub *Catha edulis* native to Africa and Arabia that has **stimulant* effects when its leaves are chewed or used to make tea. [From Arabic *qat*]

khyâl cap *n.* A **culture-bound syndrome* included in **DSM-5*, found among Cambodians in Cambodia and the US, involving **panic attacks*, with dizziness, palpitations, shortness of breath, and cold hands and feet, accompanied by catastrophic thoughts and images that a wind-like substance (*khyâl*) will rise in the body causing serious bodily effects. [From Cambodian *khyâl cap* wind attacks]

Kiddie Mach *n.* A version of the **Mach scale* designed for children.

killer T cell *See* *T LYMPHOCYTE*.

kilocalorie *n.* Another name for a **Calorie*.

kinaesthesia *n.* The sensation that is stimulated by movements of the body or parts of the body and is mediated by **proprioceptors* in the **vestibular system* and in the muscles, tendons, and joints. The term is sometimes used as a synonym for **proprioception*, thus including sensations of position and orientation rather than just movement, but this ignores the etymology of the word and sacrifices a useful distinction, and the over-extended sense is therefore avoided in careful usage. US *kinesthesia*. Also called *kinaesthesia* or *kinesthesia*. *See* *JOINT SENSE*, *MUSCLE SENSE*, *STATIC SENSE*, *TENDON SENSE*. **kinaesthetic** or **kinesthetic** *adj.* [From Greek *kinein* to move + *aisthesis* sensation, from *aisthanesthai* to feel]

*****ebook converter DEMO Watermarks*****

kinaesthetic method *n.* **1.** A method of correcting faulty speech by teaching the learner to sense the differences between the sensations of movement of the vocal apparatus in correct and faulty speech. **2.** A technique for treating **reading disorder* by encouraging the reader to trace the outlines of letters and words. US *kinesthetic method*.

kindling *n.* A progressively increasing response of a group of neurons when exposed to a repetitive electrical stimulation of unchanging strength, sometimes leading to a **psychomotor* seizure or **convulsion*, a phenomenon mediated by neurons in the **hippocampus* and **amygdala*. [From Old Norse *kyndill* to set fire to or inflame, from Latin *candela* a candle]

kineme *n.* The most basic component of **kinesic* behaviour, distinguishing one kinesic signal or gesture from another. Compare *PHONEME*. [A blend of *kin(esic)* and *(phon)eme*]

kinemorph *n.* The smallest unit of **kinesic* behaviour having a distinctive function. Compare *MORPHEME*. [A blend of *kine(sic)* and *morph(eme)*]

kinephantom *n.* A misperception of visual movement such as occurs when viewing the **trapezoidal window* or **Pulfrich effect*. [From Greek *kinesis* movement, from *kineein* to move + *phantasma* an illusion, from *phantazein* to make visible, from *phainein* to show, from *phaein* to shine]

kinesics *n.* The study of the role of **gestures (1)* and other body movements in **non-verbal communication*. Gestures are often classified into **emblems* (gestures that substitute for words, such as waving the hand for ‘goodbye’ or putting a forefinger to the lips for ‘silence’); **illustrators* (gestures that accompany speech and depict what is being said, such as moving the hands apart to illustrate a description of a big fish); **adaptors* (gestures, usually involving self-touching, that help one to cope with emotional reactions, such as covering the eyes with shock or putting a hand over the mouth with surprise); and **regulators* (gestures that accompany speech and help to coordinate turn-taking, including raising a hand in the air to indicate that one has not finished speaking). In addition to these, **affect displays* are **facial expressions* that convey emotional states. Also called

body language. See also [AMIMIA](#), [APRAXIA](#), [ASEMIA](#), [COPROPAXIA](#), [ECHOPRAXIA](#), [KINEME](#), [KINEMORPH](#), [PARAMIMIA](#), [RETT'S DISORDER](#), [SEMIOTICS](#). **kinesic** *adj.* Of or relating to kinesics. [From Greek *kinesis* movement, from *kineein* to move]

kinetic depth effect *n.* A phenomenon, discovered by the German-born US psychologist Hans Wallach (1904–98) and co-workers in 1953, in which a moving two-dimensional shadow cast by a three-dimensional object such as a rod appears three-dimensional when the object is held obliquely and rotated about its centre, causing complex transformations that make the shadow appear to move in front and behind the surface on which it is cast. The three-dimensional effect disappears if the rod stops moving, or if it rotates in a plane perpendicular to the surface on which the shadow is cast, causing the shadow merely to lengthen and shorten as the rod rotates. It is closely related to the [*windmill illusion](#). *See also* [STRUCTURE FROM MOTION](#). **KDE** *abbrev.*

kingdom *n.* 1. A state or nation ruled by a king or queen. 2. Any of the highest [*taxonomic](#) groups into which nature is divided, traditionally the animal, vegetable, and mineral kingdoms, but now comprising animals, plants, fungi (which resemble plants but lack chlorophyll and do not grow by photosynthesis), protists (single-celled eukaryotic organisms such as protozoans), monera (single-celled prokaryotes such as bacteria), and viruses (subcellular organisms). Animal and plant kingdoms are further subdivided into phyla.

kinin *n.* Any of a group of [*polypeptides](#) functioning as local hormones, manufactured in the blood or tissues as and when needed, causing [*smooth muscles](#) to contract and blood vessels to dilate. Two important kinins found in human and animal tissue are [*cholecystokinin](#) and [*bradykinin](#). [From Greek *kineein* to move + *-in(e)* indicating an organic compound]

kinocilium *n.* A long hair with a bulbous tip that projects from every [*hair cell](#). In the [*vestibular system](#), in the [*macula](#) within the [*sacculle](#) in the [*membranous labyrinth](#) of the [*inner ear](#), it is embedded in a gelatinous matrix containing crystals of calcium carbonate that exert gravitation drag on it and on the shorter [*stereocilia](#). **kinocilia** *pl.* [From Greek *kineein* to move + Latin *cilium* an eyelash]

*****ebook converter DEMO Watermarks*****

kin selection *n.* A form of *[natural selection](#) involving *[altruism](#) shown by animals towards their siblings or other close relatives, thereby increasing their own *[inclusive fitness](#) indirectly by helping their relatives to propagate genes that they share. The concept was introduced by the British biologist William D(onald) Hamilton (1936–2000) in two articles in the *Journal of Theoretical Biology* in 1964. Compare [GROUP SELECTION](#). [From Old English *cynn* people belonging to the same family]

kinship, coefficient of See [COEFFICIENT OF CONSANGUINITY](#).

kinship study *n.* In behaviour genetics, a comparison of the correlations between relatives of different known degrees of genetic relatedness on a measurable *[trait](#) in order to estimate the *[heritability](#) of that trait, the assumption being that the higher the heritability of the trait the more closely will the correlations correspond to degrees of relatedness. For example, because children share on average half their genes with each parent and with each sibling, the highest correlation between such relatives that could be expected for a trait with very high heritability is .5, and a substantially lower correlation would suggest low heritability, but see [EMERGENESIS](#). Also called a *consanguinity study* or a *family study*. Compare [ADOPTION STUDY](#), [TWIN STUDY](#).

Kleine–Levin syndrome *n.* A rare disorder, restricted largely to adolescent boys, characterized by recurrent episodes of *[hypersomnia](#), *[asthenia](#), *[bulimia](#) (1), abnormally increased sexual drive, and sometimes *[psychotic](#) (1) symptoms such as *[hallucinations](#). Episodes last for days, weeks, or occasionally months, and they become less frequent and usually disappear after the age of 25. Also called *sleeping beauty syndrome*. **KLS** *abbrev.* [Named after the German psychiatrist Willi Kleine (1879–1961), who first described it in an article in the *Monatsschrift für Psychiatrie und Neurologie* in 1925 and the Russian-born US neurologist Max Levin (1901–74), who discussed it in an article in the *Archives of Neurology and Psychiatry* in 1929 and in the journal *Brain* in 1936, where he identified it as ‘a new syndrome’]

Kleinian *adj.* Of or relating to the school of *[psychoanalysis](#) founded by the British-based Austrian psychoanalyst Melanie Klein (1882–1960). See [COMBINED PARENT-FIGURE](#), [DEPRESSIVE POSITION](#), [GOOD BREAST](#), [GOOD OBJECT](#),
*****ebook converter DEMO Watermarks*****

IDEALIZATION, IMAGO (1), INTERNALIZATION, OBJECT RELATIONS, ORAL SADISTIC PHASE, PARANOID–SCHIZOID POSITION, PART OBJECT, PROJECTIVE IDENTIFICATION, REPARATION, SPLITTING OF THE OBJECT, WHOLE OBJECT. *See also* EARLY ORAL PHASE, OEDIPUS COMPLEX, ORAL SADISTIC PHASE, PENIS ENVY, PRIMARY NARCISSISM, SUPEREGO, THANATOS, URETHRAL EROTISM.

kleptolagnia *n.* A **paraphilia* characterized by recurrent sexually arousing fantasies, sexual urges, or behaviour involving stealing. *See also* KLEPTOMANIA. [From Greek *kleptein* to steal + *lagneia* lust]

kleptomania *n.* A **disruptive, impulse-control, and conduct disorder* in **DSM-5* characterized by repeated stealing of objects not needed for personal use or for their intrinsic value, with emotional tension before the commission of a theft, followed by pleasure, gratification, or relief after its completion, the behaviour being generally experienced as **ego-dystonic*. *See also* KLEPTOLAGNIA. [From Greek *kleptein* to steal + *mania* madness]

K-line *n.* In an associative **network model*, a connection that reactivates a memory. The term was introduced by the US cognitive scientist Marvin (Lee) Minsky (born 1927). [Abbreviation of *knowledge-line*]

Klinefelter's syndrome *n.* A disorder of males resulting from the presence of two or more **X chromosomes*, causing small testicles, female physical characteristics, long legs, and **intellectual disability*. Also called *XXY syndrome*. Compare TURNER'S SYNDROME, XXX SYNDROME, XYY SYNDROME. [Named after the US physician Harry Fitch Klinefelter (1912–90) who first described it in 1942]

klinokinesis *n.* Movement in which an organism travels in a straight line except when it encounters an unfavourable environment or an aversive stimulus, when it turns at random to remain in the favourable environment, the frequency of turning depending on the environmental variability and the direction or angular velocity of turning, which depends in turn on the intensity of the environmental stimulus. [From Greek *kleinein* to incline + *kinesis* movement]

Klüver–Bucy syndrome *n.* A syndrome resulting from bilateral
*****ebook converter DEMO Watermarks*****

damage to the ***temporal lobes** of the brain, characterized by increased and indiscriminate sexual activity, excessive oral behaviour, visual agnosia (see **AGNOSIA**), and ***hypermetamorphosis**. See also **HERPES SIMPLEX ENCEPHALITIS**. [Named after the US-based German psychologist Heinrich Klüver (1898–1979) and the US neurosurgeon Paul Clancy Bucy (1904–92) who first described the condition in monkeys following surgical removal of the temporal lobes]

klysmaphilia *n.* A ***paraphilia** characterized by recurrent sexually arousing fantasies, sexual urges, or behaviour involving enemas. [From Greek *klyσμα* an enema + *philos* loving, from *phileein* to love + *-ia* indicating a condition or quality]

knee-jerk reflex *n.* A non-technical name for the ***patellar reflex**.

Knobe effect *n.* An asymmetry in people's moral intuitions about the side-effects of an action intended to achieve a different goal, depending on whether the side-effects are good or bad. It was discovered by the US experimental philosopher Joshua (Michael) Knobe (born 1974) during his PhD research and first reported in the journal *Analysis* in 2003, using the following imaginary scenario. The vice-president of a company went to the chairman of the board and said, 'We are thinking of starting a new program. It will help us increase profits, but it will also harm the environment.' The chairman of the board answered, 'I don't care at all about harming the environment. I just want to make as much profit as I can. Let's start the new program.' They started the new programme. Sure enough, the environment was harmed. When Knobe presented this scenario to members of the public and asked them whether the CEO had intentionally harmed the environment, 82 per cent replied 'Yes'. But when the scenario was changed by substituting the phrase 'help the environment' for 'harm the environment' and 'the environment was helped' for 'the environment was harmed', and people were asked whether the CEO had intentionally helped the environment, only 23 per cent replied 'Yes'. The effect has been replicated many times, even with children, but its interpretation is controversial. Compare **TROLLEY PROBLEM**.

knobs-and-dials psychology *n.* An aspect of ***ergonomics** or human factors psychology concerned with the optimal design of human-machine

*****ebook converter DEMO Watermarks*****

interfaces, including the design and placement of instrument panels and controls, taking into account **population stereotypes* and findings from research into perception and other relevant areas of psychology. *See also* POPULATION STEREOTYPE.

knowing how *n.* Another name for **procedural knowledge*.

knowing that *n.* Another name for **declarative knowledge*.

knowledge *n.* Anything that is known. The three major classes of knowledge are **declarative knowledge* (knowing that), **procedural knowledge* (knowing how), and **acquaintanceship knowledge* (knowing people, places, and things). *See also* INFORMATION (1). *Compare* BELIEF, OPINION. [From Latin *noscere* to come to know]

knowledge representation *n.* The encoding and storage of **knowledge* in computational models of cognition. It is a major branch of **artificial intelligence* and is also studied in cognitive psychology, logic, computer science, and linguistics. The representation of informal and intuitive human knowledge is one of its major unsolved problems. *See also* ACT*, ANALOGUE (2), BINDING PROBLEM, CONCEPTUAL DEPENDENCY THEORY, CONNECTIONISM (1), FRAME (2), FRAME PROBLEM, FUZZY LOGIC, INTUITIVE PHYSICS, K-LINE, NEURAL NETWORK, NON-MONOTONIC REASONING, SYMBOLIC REPRESENTATION. **KR** *abbrev.*

Koffka–Korte laws *n.* Another name for **Korte's laws*. [Named after the German **Gestalt psychologist* Kurt Koffka (1886–1941) and his doctoral student Adolf Korte, who published them in the journal *Zeitschrift für Psychologie* in 1915 shortly before Korte died in World War I]

Kohlberg stage *n.* Any of the three stages of moral development, each divided into two levels, proposed by the US psychologist Lawrence Kohlberg (1927–87) on the basis of research in which he confronted children with stories that posed moral dilemmas. Kohlberg developed his theory in a series of investigations, beginning with his doctoral dissertation in 1958 and culminating in his book *Stages in the Development of Moral Thought and Action* (1969). *See* CONVENTIONAL MORALITY, POSTCONVENTIONAL MORALITY, *****ebook converter DEMO Watermarks*****

PRECONVENTIONAL MORALITY.

Kohnstamm effect *n.* A dramatic phenomenon of involuntary movement. Stand with one shoulder about a foot from a wall and, with your arm rigidly extended downwards, press the back of your hand hard against the wall for about two minutes. If you then stand away from the wall with your arm hanging loosely by your side, it will rise up into the air, spontaneously and involuntarily. A double-arm version of the effect can be produced by standing in an open doorway and pressing the backs of both hands against the door frame. The phenomenon has been exploited in preparing people for **hypnosis*, by deluding them into believing that they are responding involuntarily to a suggestion from the hypnotist for their arms to rise. The phenomenon has been interpreted as a **postural aftereffect*. Also called the *Kohnstamm phenomenon* or *Kohnstamm manoeuvre*. [Named after the German physician Oskar Kohnstamm (1871–1917) who drew attention to it]

Kohs Block Design Test *n.* A **psychometric* test in which the respondent has to arrange groups of 4, 9, or 16 multi-coloured blocks to copy patterns presented on test cards, designed originally to differentiate brain-damaged from psychiatric patients, later adapted as an **intelligence* subtest and incorporated into the **Wechsler scales*, the **Goldstein–Scheerer tests*, and other **IQ tests*. [Named after the US psychologist Samuel Calmin Kohs (1890–1984) who introduced it]

Kohutian *adj.* Of or relating to **self-psychology* and the theories of the Austrian-born US psychoanalyst Heinz Kohut (1913–81) and his followers. See *GRANDIOSE SELF*, *NARCISSISM*, *NARCISSISTIC PERSONALITY DISORDER*, *SELF-OBJECT*.

Kolmogorov's axioms *n.* Four propositions about **probabilities* from which all major theorems can be derived: (1) the probability of any event is equal to or greater than zero; (2) the probability of a certain event is 1; (3) if *E* and *F* are two mutually exclusive events (events that cannot both occur), then the probability of the disjunction (the probability of either *E* or *F* occurring) is equal to the sum of their individual probabilities: $P(E \text{ or } F) = P(E) + P(F)$; and (4) the probability of a conjunction of two events *E* and *F*

*****ebook converter DEMO Watermarks*****

(the probability that both *E* and *F* occur) is equal to the probability of *E* assuming that *F* occurs multiplied by the probability of *F*: $P(E \text{ and } F) = P(E|F)P(F)$. [Named after the Russian mathematician Andrei Nikolaevich Kolmogorov (1903–87) who formulated them in 1933]

Kolmogorov–Smirnov test *n.* In statistics, a **goodness of fit (1)* test to determine whether a single sample fits some theoretical distribution or whether two independent samples have been drawn from the same population (or populations with the same distribution). *See also* [CHI-SQUARE TEST](#), [INDEPENDENT SAMPLES T TEST](#). [Named after the Russian mathematicians Andrei Nikolaevich Kolmogorov (1903–87), who proposed the test in 1933, and Nikolai Vasilevich Smirnov (1900–66) who developed it further in 1939]

König bars *n.* A diagram depicting a set of bars subtending **visual angles* of 3 minutes (sixtieths of a degree), separated by distances of 1 minute, used for measuring **visual acuity*. *See also* [ACUITY GRATING](#). [Named after the German physiologist and psychologist Arthur König (1856–1901) who devised them]

koro *n.* A **culture-bound syndrome* included in CCMD-2 (the *Chinese Classification of Mental Disorders*, 2nd ed.), restricted mainly to male members of ethnic Chinese communities in southern and eastern Asia and elsewhere, sometimes occurring in localized **epidemics (1)*, characterized by sudden and intense anxiety that the penis is shrinking and is liable to retract into the abdomen, resulting in death. In an effort to prevent this from happening, afflicted men often hold on to their penises during the day and wear commercially available bamboo clamps while sleeping. A less common female variant of the syndrome, focused on fear of the nipples or vulva retracting, is also recognized. Also called *shook yong*, *shuk yang*, *suk yeong*, or *suo yang* in Chinese-speaking areas, *rok-joo* in Thailand, and *jinjinia bemar* or *jinjin* in north-eastern India. [From Malay *koro* to shrink]

Korsakoff's psychosis *n.* A **mental disorder* characterized by **amnesia*, especially an impairment in ability to retain newly acquired information, typically accompanied by confabulation—a tendency to invent explanations to cover areas of memory loss—but with other **cognitive* functions usually well preserved, in contrast to **dementia*. It is caused by a

*****ebook converter DEMO Watermarks*****

deficiency of thiamine (vitamin B₁) usually resulting from **alcohol dependence*. Also called *alcohol amnestic disorder* or *Korsakoff's syndrome*. See also *DORSOMEDIAL THALAMUS*. [Named after the Russian neuropsychiatrist Sergei Sergeievich Korsakoff (1854–1900) who first described it in 1887]

Korte's laws *n.* Laws governing the illusion of **apparent movement* when two stimuli are exposed in alternation. If *s* is the spatial distance between the stimuli, *t* is their exposure time (assumed to be the same for both stimuli), *i* is their intensity (assumed equal), and *p* the interstimulus interval or pause between exposures, then for critical values of *s*, *i*, and *t* yielding **optimal movement*, the four basic laws are as follows. (a) *s* increases as *i* increases, *p* and *t* remaining constant; (b) *i* decreases as *p* increases, *s* and *t* remaining constant; (c) *s* increases as *p* increases, *i* and *t* remaining constant; (d) *t* increases as *p* increases, *i* and *s* remaining constant. The laws apply approximately to **partial movement* and **phi movement* also. Also called *Koffka–Korte laws* on account of the supervision of Korte's (doctoral) work by the German **Gestalt psychologist* Kurt Koffka (1886–1941). See also *ALPHA MOVEMENT*, *BETA MOVEMENT*, *GAMMA MOVEMENT*, *DELTA MOVEMENT*, *PHI MOVEMENT*. [Named after the German Gestalt psychologist Adolf Korte who formulated the earliest version of them in the journal *Zeitschrift für Psychologie* in 1915, shortly before he died in World War I]

Krebs cycle *n.* A complex sequence of biochemical reactions in the **mitochondria* of living cells whereby acetyl coenzyme A, derived by **glycolysis* from **glucose*, which in turn is derived from the **metabolism* of amino acids, fatty acids, and carbohydrates in foodstuffs, is oxidized into carbon dioxide and water, with the release of minute quantities of stored energy in the form of **ATP*. Any interference with the Krebs cycle, as by swallowing a poison such as potassium cyanide, is fatal within minutes. See also *OXIDATIVE PHOSPHORYLATION*. Also called the *citric acid cycle* or the *tricarboxylic acid cycle*. [Named after the German-born British biochemist Hans Adolf Krebs (1900–81) who discovered it in 1934 and shared a Nobel prize for so doing in 1953]

Kretschmer constitutional type *n.* Any of the four basic body types, each associated with its own distinctive pattern of personality characteristics, in the theory propounded by the German psychiatrist Ernst
*****ebook converter DEMO Watermarks*****

Kretschmer (1888–1964) in his book *Körperbau und Charakter* (1948, Body Build and Character). See [ASTHENIC BODY TYPE](#), [ATHLETIC BODY TYPE](#), [DYSPLASTIC BODY TYPE](#), [PYKNIC BODY TYPE](#). Compare [SHELDON'S CONSTITUTIONAL PSYCHOLOGY](#).

Kruskal–Wallis 1-way analysis of variance *n.* In statistics, a test used with scores measured on an [*ordinal scale](#), or with data converted to [*ranks](#), to determine whether several independent samples are from populations with the same [*median](#). It is a non-parametric equivalent of one-way [*analysis of variance](#) (ANOVA). Also called *Kruskal–Wallis 1-way ANOVA*. [Named after the US statisticians William Henry Kruskal (1919–2005) and Wilson Allen Wallis (1912–98) who developed it in 1952]

K-selection *n.* A form of [*natural selection](#) that is typical of organisms in relatively stable, constant, and predictable ecological conditions in which rapid population growth is unimportant, and that is characterized by slow development, long life, large size, late reproduction, intensive parental care, and high learning capacity. See also [R–K CONTINUUM](#). Compare [R-SELECTION](#). **K-selected** *adj.* Selected for superiority in such environments.

Kuder Preference Record *n.* An [*occupational interest inventory](#) designed to measure the respondent's relative levels of interest in ten occupational areas: clerical, computational, art, music, social service, outdoor, science, persuasive, literary, mechanical. Each item of the scale consists of three activities from which the respondent selects the least liked and the most liked. **KPR** or **KPR-V** *abbrev.* [Named after the US psychologist George Frederic (Fritz) Kuder (1903–2000) who published it as a commercial test in 1960]

Kuder–Richardson coefficient *n.* In psychometrics, [*Cronbach's alpha](#) coefficient of reliability in the special case of a scale with pass/fail, yes/no, or other dichotomous test items. There are two slightly different versions based on different statistical assumptions: the Kuder–Richardson 20 formula and the Kuder–Richardson 21 formula, named after equation numbers in Kuder and Richardson's 1937 article. **K–R 20** or **K–R 21** *abbrev.* [Named after the US psychologists George Frederic (Fritz) Kuder (1903–2000) and Marion Webster Richardson (1891–1965) who introduced it in an

*****ebook converter DEMO Watermarks*****

article in the journal *Psychometrika* in 1937]

kufungisisa *n.* A [*culture-bound syndrome](#) found among the Shona people of Zimbabwe, included in [*DSM-5](#), supposedly caused by mulling over worries and upsetting memories and believed to cause [*anxiety](#), [*depression](#), and various bodily symptoms. [From Shona *kufungisisa* thinking too much]

Kuhnian *adj.* Of or relating to the ideas and writings of the US historian and philosopher of science Thomas S(amuel) Kuhn (1922–96), especially his distinction between [*normal science](#) and [*scientific revolution](#) and his doctrine of the [*paradigm](#) shift presented in his influential book *The Structure of Scientific Revolutions* (1962).

kula ring *n.* A ceremonial gift exchange among tribes in the western Pacific, practised alongside normal trading, functioning to establish and maintain friendly relations between islands. [From Melanesian *kula*]

Kuleshov experiment *See* [DIALECTICAL MONTAGE](#).

Kundt's rules *n.* The propositions that (a) a distance or space divided into parts looks greater than the same distance or space undivided; and (b) an attempt to bisect a line with one eye closed usually results in a division too close to the nasal side of the open eye. *See also* [FILLED-SPACE ILLUSION](#). [Named after the German physicist August Adolph Eduard Eberhardt Kundt (1838–94) who formulated them in the early 1860s]

kurtosis *n.* In statistics, a measure of the peakedness of a distribution indicating the degree to which a set of scores is concentrated around its mean. A distribution that is more concentrated about its mean than the [*normal distribution](#) is *leptokurtic*, one that is concentrated like the normal distribution is *mesokurtic*, and a distribution that is flatter than the normal distribution is *platykurtic*. *Compare* [SKEWNESS](#). [From Greek *kurtos* arched + *-osis* indicating a process or state]

kuru *n.* A human [*prion disease](#) affecting the nervous system, restricted to

the Fore highlanders of Papua New Guinea who used to practise a form of ritual cannibalism involving the eating of the brains of deceased relatives as an act of homage. It is characterized by *tremor, *ataxia, *dementia, and death usually within months of the onset of symptoms. [Native Fore word: literally, the trembles]

kymograph *n.* An early device consisting of a rotating drum covered with paper on which a tracking stylus records continuous measurements of blood pressure, heart rate, respiration, variations in the muscular action of the organs of speech, or other physiological data. [From Greek *kyma* a wave + *graphein* to write]



la belle indifférence *n.* An abnormal lack of concern about one's afflictions or disabilities, characteristic of some ***conversion disorders**. [French: literally beautiful indifference]

labelling theory *n.* An influential theory of ***deviance** (1), according to which a label attached to a person can function as a ***self-fulfilling prophecy**, profoundly influencing that person's behaviour. Classical labelling theory was first proposed by the US sociologist Edwin (McCarty) Lemert (1912–96) in a book entitled *Social Pathology: A Systematic Approach to the Theory of Psychopathic Behavior* (1951) and developed further by the US sociologist Thomas J(oel) Scheff (born 1929) in his book *Being Mentally Ill* (1966). The theory distinguishes between primary deviance, such as the ***hallucinations** and ***thought disorder** that are usually taken as symptoms of ***schizophrenia**, and those same experiences in a person who is aware of having been labelled as mentally ill. According to the theory, primary deviance is usually relatively brief and insignificant, but a person who becomes aware of the label begins to play the role of a mentally ill person, at first inadvertently and later often involuntarily, and this can have a profound influence. This theory arose from a rejection of the classic interpretation of deviance as behaviour violating an objective social norm. In labelling theory, deviance is not an attribute of a person or of behaviour but of the categorization or naming of behaviour by psychiatrists, courts, police, family members, and others. This is clear in the case of criminal deviance, because what is defined as criminal, and therefore who is labelled as a criminal, varies from one society to another and, even within a society, from one time to another. US *labeling theory*. See also **PYGMALION EFFECT**. [From Old French *label* a tag, cognate with German *Lappen* a flap]

labia majora *n.* The two outer folds surrounding the vaginal orifice of the female **vulva*. Compare LABIA MINORA. [From Latin *labia* lips + *majora* larger]

labia minora *n.* The two inner folds surrounding the vaginal orifice of the female **vulva*. Compare LABIA MAJORA. [From Latin *labia* lips + *minora* smaller or lesser]

labile affect (mood) See AFFECT.

labiodental *adj.* Of, relating to, or denoting a speech sound articulated with the lower lip touching the upper teeth, as in the initial **phonemes* in *fine* and *vine*. See also PLACE OF ARTICULATION. [From Latin *labium* a lip + *dens, dentis* a tooth + *-alis* of or relating to]

labiovelar *adj.* Of, relating to, or denoting a speech sound articulated with the back of the tongue against the soft palate and the lips rounded, as in the initial **phoneme* in the words *win*. See also PLACE OF ARTICULATION. [From Latin *labium* a lip + *velum* a veil]

labyrinth *n.* Any mazelike structure or network of interconnecting chambers, especially the system of cavities of the **inner ear*. See BONY LABYRINTH, DYNAMIC LABYRINTH, MEMBRANOUS LABYRINTH, STATIC LABYRINTH. See also VESTIBULAR SYSTEM. [From Greek *labyrinthos* a maze, especially in Greek mythology the huge maze in Crete that Daedalus built for King Minos to contain the Minotaur]

labyrinthine nystagmus *n.* A form of **nystagmus* resulting from damage to the **labyrinth*.

Lacanian *adj.* Of or relating to the approach to **psychoanalysis* adopted by the French psychoanalyst Jacques Lacan (1901–81). See FORECLOSURE, MIRROR PHASE. See also CONDENSATION, DEFERRED ACTION, DISPLACEMENT, PHALLUS.

lacrimator *n.* Another name for a **tear gas*. [From Latin *lacrima* a tear]

lacunar amnesia *n.* Another name for ***episodic amnesia**. [From Latin *lacuna* a hole or cavity]

Ladd-Franklin theory *n.* A speculative theory of colour vision according to which the first photoreceptors to evolve yielded only ***achromatic (1)** vision, receptors for blue and yellow evolved next, and receptors for red and green evolved most recently, the central area of the retina, where all colours are perceived, being the most evolutionarily advanced. [Named after the US psychologist and logician Christine Ladd-Franklin (1847–1930) who first published it in her book *Colour and Colour Theories* in 1929]

Lake Wobegon effect *n.* A tendency for most people to believe that they are above average in intelligence, sense of humour, diving ability, and similar traits. Although the effect arises from a ***self-serving bias**, the widespread belief that it is mathematically impossible for a majority to be above average is itself a fallacy. If four people score 8/10 on a test and one scores 3/10, then the average or ***mean** score in that five-person group is 7/10, and a majority are above average. The term was introduced by the US physician John Jacob Cannell (born 1948) in privately published reports in 1987 and 1988, commenting on the fact that all 50 US states reported elementary school results above the national average. Also called the *Lake Wobegon fallacy*. Also (mis)spelt *Lake Woebegon* and *Lake Woebegone*. Compare **UNREALISTIC OPTIMISM**. [Alluding to Lake Wobegon, ‘a place where all the women are strong, all the men are good-looking, and all the children are above average’ in a radio show entitled *A Prairie Home Companion*, created and hosted by the US writer Garrison Keillor (born 1942) and described in his novel *Lake Wobegon Days* (1985)]

lallation *n.* 1. A speech defect in which the ***phoneme** /l/ is substituted for /r/, as in *velly solly*. 2. Another name for ***pseudolalia**. [From Latin *lallare* to sing a lullaby + *-ation* indicating a process or condition]

laloplegia *n.* A form of ***aphasia** resulting from ***paralysis** of the muscles of the vocal tract and not those of the tongue. [From Greek *lalia* speech + *plege* stroke, from *plessein* to strike + *-ia* indicating a condition or quality]

lalorrhoea *n.* Another name for ***logorrhoea**. US *lalorrhea*. [From Greek *lalia* speech + *rhoia* a flow]

Lamarckism *n.* The theory of evolution, largely obsolete in biology but still relevant to social or cultural evolution (see **MEME**), according to which acquired characteristics resulting from adaptations to new environments may be inherited. See also **LYSENKOISM**, **NEO-LAMARCKISM**. Compare **DARWINIAN EVOLUTION**, **NEO-DARWINISM**. **Lamarckian** *adj.* [Named after the French naturalist Jean Baptiste Pierre Antoine de Monet Lamarck (1744–1829) who propounded it in his book *Philosophie Zoologique* (1809)]

lambda statistic *n.* Another name for the ***Goodman–Kruskal lambda**.

lambert *n.* A unit of light intensity or illumination, equal to one ***lumen** per square centimetre. **millilambert** *n.* 1/1,000 of a lambert. [Named after the German mathematician and physicist Johann H. Lambert (1728–77)]

Land effect *n.* A vivid impression of a full range of colours created from monochromatic light. The effect is produced by taking two black-and-white photographs of a coloured display such as a bowl of fruit, the first with a green filter over the camera lens and the second from the identical position with a red filter, and then superimposing images of the two resulting black-and-white transparencies on a screen with slide projectors, the first without any filter over its lens and the second with a red filter. Although in terms of absolute wavelength all the light falling on the screen and being reflected from it is red, pink, or white, apples look green, plums blue, bananas yellow, and so on, disproving the common misconception that the colour of an object in the visual field is fully explained by the wavelength of the light reflected from it. In reality, the visual system assigns colours according to the relative balance of short, medium, and long wavelengths across the whole visual field, so that light of a particular wavelength has no inherent colour in itself but may be perceived as any colour depending on the range of wavelengths in the surrounding visual field, and this is why the effect disappears if the screen is viewed in ***void mode**. See also **COLOUR CONSTANCY**, **CONE**, **RETINEX THEORY**. Compare **GELB EFFECT**, **KARDOS EFFECT**. [Named after the US physicist Edwin H(erbert) Land (1909–91), inventor of the Polaroid Land camera and president of the Polaroid Corporation, who discovered the effect and
*****ebook converter DEMO Watermarks*****]

published it in the *Proceedings of the National Academy of Sciences* in 1959 and in *Scientific American* magazine later in the same year]

Landmark Forum *n.* The official name, since 1984, for *est.

Landolt circle *n.* A circle with a tiny part of its circumference missing, easily perceived as a circle in spite of the fact that it is not a closed curve, illustrating the *closure grouping law and the phenomenon of *Prägnanz. It is used mainly to test *visual acuity, the respondent being shown a series of small differently oriented Landolt circles and asked to say where the gaps appear, choosing from alternatives such as twelve o'clock, three o'clock, six o'clock, and nine o'clock. Also called a *Landolt C*. [Named after the Swiss-born German physical chemist Hans Heinrich Landolt (1831–1910) who devised it]

langage *n.* A term introduced in 1915 by the Swiss linguist Ferdinand de Saussure (1857–1913) to denote the faculty of speech present in all human beings and acquired through heredity, which is divided into two major aspects, namely **langue* and **parole*, often said to correspond roughly to the *competence (2) and *performance (2) of the US linguist and philosopher (Avram) Noam Chomsky (born 1928), but there are important differences between *langue* and competence. [Old French *langage* language, from Latin *lingua* the tongue]

language *n.* 1. A conventional system of communicative sounds and sometimes (though not necessarily) written symbols capable of fulfilling the following hierarchy of functions suggested by the German-born Austrian psychologist Karl Bühler (1879–1963) and the Austrian-born British philosopher Karl Raimund Popper (1902–94): expressing a communicator's physical, emotional, or cognitive state; issuing signals that can elicit responses from other individuals; describing a concept, idea, or external state of affairs; and commenting on a previous communication. The concept of language is often interpreted loosely to embrace codes devised for specific purposes, as in expressions such as *programming languages*, and forms of communication that fulfil some but not all of the four listed functions, including *body language* and the *language of the bees* (see [WAGGLE DANCE](#)), neither of which can fulfil the fourth and highest function. 2. The particular

*****ebook converter DEMO Watermarks*****

system of verbal communication, such as the English language, that is used by a specific nation or people. [From Old French *langage*, from Latin *lingua* the tongue]

language acquisition device *n.* A hypothetical mechanism, based on **generative grammar*, introduced in 1964 by the US linguist and philosopher (Avram) Noam Chomsky (born 1928) to explain how children acquire internalized knowledge of grammar with remarkable speed on the basis of fragmentary and degenerate input data. The language acquisition device is assumed to be a biologically based innate capacity for language, independent of any specific **natural language*, that enables a child exposed to adult speech to implement certain general principles for discovering the grammatical rules of the specific language in question. Also called a *language acquisition system (LAS)*. See also *INNATE IDEA*. **LAD** abbrev.

language disorder *n.* In **DSM-5*, a **communication disorder* affecting the expression or understanding of **language*, requiring the following four criteria for diagnosis: persistent difficulty in using language, including reduced vocabulary, limited ability to structure sentences, and impairments in the ability to hold a conversation; language ability substantially below age norms, affecting social, academic, or occupational functioning; onset in early development; and the language difficulties not being attributable to **auditory* or **visual impairments*, motor dysfunction, **neurological* impairment, or general delay in development. See also *APHASIA*, *AUTISM SPECTRUM DISORDER*, *DYSARTHRIA*, *SELECTIVE MUTISM*.

Language Personality Sphere *n.* The set of 4,505 trait names with distinct meanings, located by an exhaustive dictionary search in 1936. The dictionary search located 17,953 **trait* names, but the number was reduced to 4,505 by eliminating synonyms. This study was carried out by the US psychologists Gordon W(illard) Allport (1897–1967) and Henry S(ebastian) Odbert (1909–95) and published in the journal *Psychological Monographs* in 1936. See also *HEXACO*, *16PF*.

langue *n.* A term introduced in 1915 by the Swiss linguist Ferdinand de Saussure (1857–1913) to denote language as an abstract communicative system or social institution that is the common possession of a particular

*****ebook converter DEMO Watermarks*****

speech community and is one of the two major aspects of **langage*, the other being **parole*. [French *langue* language]

lanugo *n.* Fine hair or down, especially the woolly covering of a human foetus at birth and the fluffy hair that often appears on the faces of people with **anorexia nervosa*. [From Latin *lanugo* down, from *lana* wool]

lapsus calami *n.* Another name for a **slip of the pen*. [From Latin *lapsus* an error + *calamus* a reedpen]

lapsus linguae *n.* Another name for a **slip of the tongue*. [From Latin *lapsus* an error + *lingua* a tongue]

lapsus memoriae *n.* Another name for a **slip of memory*. [From Latin *lapsus* an error + *memoria* a memory]

Largactil *n.* A proprietary name for the neuroleptic drug **chlorpromazine*, used in the treatment of schizophrenia. [Trademark, from *larg(e)* + *act(ion)* + Latin *-il(is)* indicating capability or relationship]

large intestine *n.* The section of the **alimentary canal* between the small intestine and the anus.

Laroxyl *n.* A proprietary name for the tricyclic antidepressant drug **amitriptyline*. [Trademark]

larynx *n.* The upper part of the windpipe, behind the Adam's apple, containing and protecting the **vocal folds*. Its non-technical name is the *voice box*. [From Greek *larynx* the throat]

Lashley jumping stand *n.* A device used to study visual discrimination in rats. It comprises a platform on which the rat is placed and two vertical cards, each containing a visual stimulus, towards which the rat jumps. If the rat chooses the right card, then a door swings open and the rat lands in a chamber and receives a food reward; if it chooses wrongly, it bumps against a fixed door and falls into a net below. [Named after the US

physiological psychologist Karl Spencer Lashley (1890–1958) who invented it]

latah *n.* A ***culture-bound syndrome** found mainly in Malaysian and Indonesian cultures, most often among middle-aged women, but reported occasionally in Thailand (where it is called *bah tschi* or *baah-ji*), the Philippines (*mali-mali* or *silok*), among the native Ainu people of Japan (*imu*), in Siberia (*amurakh*, *irkunii*, *ikota*, *olan*, *myriachit*, or *menkeiti*), and in southern Africa (*latah*), in which a person after experiencing a sudden fright or shock displays abnormal ***suggestibility**, accompanied by ***echolalia**, ***echopraxia**, and a state resembling a ***trance**. Also spelt *lattah*. [From Malay]

late luteal phase dysphoric disorder *n.* Another name for ***premenstrual dysphoric disorder**. **LLPDD** *abbrev.* [Referring to the ***luteal phase** of the menstrual cycle]

latency *n.* The interval between a ***stimulus** (1) and a ***response**. Also called *latent time*, *reaction time*, or *response latency*. [From Latin *latere* to lie hidden or to escape attention]

latency period *n.* In ***psychoanalysis**, a period of development from the dissolution of the ***Oedipus complex** at the end of the ***phallic stage** around 5 or 6 years of age until the ***genital stage** at puberty. It is characterized by a decrease in sexual activity, a decline in sexual investment in ***object relations**, and the emergence of emotions such as shame and disgust. Sigmund Freud (1856–1939) presented the concept in its fully developed form in 1924 in an article entitled ‘The Dissolution of the Oedipus Complex’ (*Standard Edition*, XIX, pp. 173–9). He attributed the term *latency period* to his friend, the German physician Wilhelm Fliess (1858–1928), and he used the term *period* rather than *stage* because no new organization of sexuality takes place at this time—it is not a turning point. *See also* **CASTRATION COMPLEX**.

latent content *n.* In ***psychoanalysis**, the underlying hidden meaning of a ***dream** (1) or other psychological phenomenon exposed by ***interpretation** (2) of the ***dreamwork**.

*****ebook converter DEMO Watermarks*****

latent homosexuality *n.* A form of *homosexuality that is not recognized as such by the person concerned but is *repressed and manifested indirectly through various *defence mechanisms, generally including *projection (1). *See also* SCHREBER CASE.

latent inhibition *n.* In *classical conditioning, the retardation of learning caused by repeated presentation of the *conditioned stimulus before the beginning of the conditioning process. **LI** *abbrev.*

latent learning *n.* Animal *learning (1) that occurs without any apparent *reinforcement (1, 2) or reward, as when a rat explores a maze and is later shown to have learned to find its way around it. In human learning, the phenomenon is called *incidental learning. Also called *passive learning*.

latent time *n.* Another name for *reaction time.

latent trait theory *n.* Another name for *item response theory.

latent variable *n.* Another name for a *construct.

lateral *adj. n.* Situated at the side or oriented towards the side; the opposite of *medial. In phonetics, (pertaining to) a consonant articulated with the tip of the tongue touching the *alveolar ridge, allowing the airstream to pass on one or both sides of this central obstruction. The initial phoneme in the English word *low* is a voiced lateral consonant, whereas the phoneme represented twice by *ll* in the name of the Welsh town *Llanelli* is a voiceless lateral consonant. [From Latin *lateralis* situated on the side, from *latus* the side]

lateral dominance *n.* Another name for *handedness (1) or *cerebral dominance.

lateral eye movement *n.* A deflection of gaze to the left or right, sometimes claimed to indicate an increase of activity in the contralateral *cerebral hemisphere, so that a person will tend to show a rightward deflection of gaze when preparing to answer a question requiring verbal

processing and a leftward deflection when thinking about a spatial problem.
LEM *abbrev.*

lateral fissure *n.* Another name for the ***lateral sulcus**.

lateral frontal cortex *n.* The left or right side of the ***prefrontal cortex**, specifically ***Brodmann areas** 4, 6, 44, 45, and 47, devoted to higher mental process including ***working memory**, problem solving, decision making, and planning. *See also* DORSOLATERAL PREFRONTAL CORTEX, FRONTAL LOBE, FRONTAL LOBE SYNDROME, PREFRONTAL CORTEX. **LFC** *abbrev.*

lateral funiculus *See* FUNICULUS.

lateral geniculate nucleus *n.* A peanut-sized structure at the side of each lobe of the ***thalamus**, receiving most of its input via the ***optic tract** from the opposite half of the visual field as represented on the ***retinas** of both eyes, these inputs preserving the ***centre-surround receptive fields** of the retinal ***ganglion cells** and being arranged in a ***topographic map** so that points close together on the retina are close together in the lateral geniculate nucleus, and relaying most of them to the ***primary visual cortex** (Area V1), where the topographic order is preserved. It contains six layers of cells, three receiving inputs from the left (L) eye alternating with three from the right (R) eye, in the order from top to bottom LRLRRL in the left geniculate or RLRLRL in the right geniculate, with the six maps of the visual field superimposed exactly. It also receives inputs from the primary visual cortex to which it projects and from the brainstem ***reticular formation**, affecting visual attention. Also called the *lateral geniculate body*. *See also* MAGNOCELLULAR SYSTEM, PARVOCELLULAR SYSTEM, PRETECTAL PATHWAY, RETINOTOPIC MAP. **lateral geniculate nuclei** *pl.* **LGN** *abbrev.* [From Latin *lateralis* situated on the side, from *latus* the side + *geniculatus* knee-shaped, from *geniculum* a little knee, diminutive of *genus* a knee]

lateral hypothalamic feeding centre *n.* One of the two parts of the ***appestat** on each side of the hypothalamus, stimulation of which increases eating and destruction of which inhibits eating. US *lateral hypothalamic feeding center*. Compare VENTROMEDIAL HYPOTHALAMUS.

lateral hypothalamic syndrome *n.* A constellation of signs and symptoms including **anorexia*, **aphagia*, and **adipsia* associated with lesions in the **lateral* hypothalamic feeding centres on both sides of the thalamus. *Compare* VENTROMEDIAL HYPOTHALAMIC SYNDROME.

lateral inhibition *n.* Suppression by a neuron of the response of a neighbouring neuron at the same level in a sensory system, such as the suppression by neurons receiving information from the OFF region of a **centre-surround receptive field* of neurons in the ON region if both regions are stimulated simultaneously. This phenomenon occurs in certain neural structures in which receptor cells are arranged to represent points along a **continuum*, as in the **retina* and the **organ of Corti*, and in which excitation at one point produces inhibition at adjacent points, leading to enhancement or sharpening of differences between neighbouring regions.

laterality *n.* The asymmetry in functions between the two **cerebral hemispheres*, including **handedness* (1) and language functions, the left hemisphere being dominant for language in approximately 90 per cent of people—over 95 per cent of right-handers and about 70 per cent of left-handers. Laterality of functions has been studied via cognitive deficits in people with unilateral brain damage and electrical brain stimulation, and through other specialized research techniques: **dichotic* listening studies, **dichaptic* techniques, **divided visual field* studies, **split-brain* preparations, **EEG* studies, examinations of **evoked potentials*, and **brain imaging* techniques. *See also* BROCA'S AREA, HEMISITY, SPINNING DANCER ILLUSION, WADA TEST, WERNICKE'S AREA.

lateral lemniscus *n.* Either of the two bands of nerve fibres in the **lemniscus* connecting the **cochlear nuclei* to the **inferior* colliculi and the **thalamus* on each side of the brain, involved in the processing of auditory signals. *Compare* MEDIAL LEMNISCUS, TRIGEMINAL LEMNISCUS.

lateral sulcus *n.* The deep horizontal cleft in the outside wall of each **cerebral hemisphere*, separating the frontal lobe and part of the parietal lobe from the temporal lobe. Also called the *fissure of Sylvius*, the *lateral fissure*, or the *Sylvian fissure*. *See also* INSULA, OPERCULUM.

lateral surface *n.* The surface of an organ or structure situated or oriented towards the side of the body, such as the outer surface of each cerebral hemisphere.

lateral thinking *n.* Creative [*problem solving](#), usually by reformulating the problem or viewing it from a fresh angle. It is contrasted with *vertical thinking*, which involves finding methods for overcoming obstacles in the chosen line of approach. The distinction was first made explicit by the Maltese-born British psychologist and author Edward (Francis Charles Publius) de Bono (born 1933) in his book *Lateral Thinking* (1970). It is well illustrated by the [*nine-dot problem](#).

lateral ventricle *See* [VENTRICLE](#).

late selection *n.* In the study of [*attention](#), the filtering out of unwanted information at a late stage in the process of information processing.

Latin square *n.* In statistics and experimental design, a square array of letters (or occasionally numbers or other symbols) such that no symbol occurs more than once in any row or column. The following is a 4×4 Latin square:

A B C D
B C D A
C D A B
D A B C

A *Latin square design* is a type of [*within-subjects design](#) in which research participants or subjects are allocated to treatment conditions according to a Latin square with as many rows or columns as there are treatment conditions in order to control for [*order effects](#). Usually equal numbers are assigned to each of the rows of a Latin square and are exposed to the treatments in the order of the letters in the row. *See also* [RANDOMIZED BLOCKS DESIGN](#). [So called because letters from the Roman alphabet are conventionally used to represent it]

lattah *See* [LATAH](#).

*****ebook converter DEMO Watermarks*****

laudanum *n.* Tincture (solution in alcohol) of [*opium](#), containing [*morphine](#) and [*codeine](#) as active ingredients, first prepared by the Swiss physician and alchemist Philippus Aureolus Paracelsus (1493–1541) and used as a [*narcotic analgesic](#). Formerly and more loosely, any medication containing opium as its main component. [Coined by Paracelsus, probably from *labdanum* or *ladanum* a juice obtained from rockroses, from Greek *ledon* a rockrose]

laughing gas *n.* A non-technical name for [*nitrous oxide](#). [So called because it sometimes induces giggling or laughter]

lavatory wall illusion *n.* A variant of the [*hollow squares illusion](#) and the [*Münsterberg illusion](#), created by an alternating arrangement of square two-tone tiles, each changing smoothly from light to dark along one axis, the effect being that the tiles appear misaligned and non-parallel. It was first reported in 1987 by the English optometrists J(oy) Margaret Woodhouse (born 1948) and Stephen P(hilip) Taylor (born 1951), who reproduced a photograph of a bathroom decorated with such tiles. *See also* [CAFE WALL ILLUSION](#).

law of comparative judgement *n.* The proposition that in any [*comparative judgement](#), the magnitude of the psychological or subjective difference corresponds to the relative frequency with which the stimuli are discriminated.

law of effect *n.* A proposition formulated by the US psychologist Edward Lee Thorndike (1874–1949) in his book *Animal Intelligence: Experimental Studies* (1911) as follows: ‘Of several responses made to the same situation, those which are accompanied or closely followed by satisfaction [are] more firmly connected with the situation...; those which are accompanied or closely followed by discomfort...have their connections with the situation weakened’ (p. 244). According to this law, responses that lead to reward tend to increase in strength, whereas those that lead to punishment tend to decrease in strength. The first part of the law has been amply corroborated by empirical studies and is one of the foundation stones of modern behaviourism. *See also* [ASSOCIATIONISM](#), [CONNECTIONISM \(2\)](#), [REINFORCEMENT \(1\)](#). *Compare* [LAW OF EXERCISE](#).

*****ebook converter DEMO Watermarks*****

law of exercise *n.* A proposition formulated in 1911 by the US psychologist Edward Lee Thorndike (1874–1949) according to which repetition tends to strengthen the association between a ***stimulus (1)** and a ***response**, making the response more likely to occur on the next presentation of the stimulus. *Compare* LAW OF EFFECT.

law of forgetting *See* FORGETTING LAW.

law of independent assortment *See* INDEPENDENT ASSORTMENT.

law of segregation *See* SEGREGATION OF ALLELES.

law of social impact *n.* A proposition introduced by the US psychologist Bibb Latané (born 1937) in an article in the journal *American Psychologist* in 1981, designed to explain ***social influence** effects, including ***persuasion**, ***conformity**, ***compliance**, and ***obedience**. It is usually expressed by the equation $T = f(SIN)$, where T is the magnitude of the impact, f indicates a function, S is the strength of the influence sources (for example, their ***credibility** in the case of attitude change), I is the immediacy of the influence sources (face-to-face communication being the most immediate and the print media the least immediate), and N is the number of influence sources. The analogy of electric lamps shining on a sheet of paper helps to explain the law: the amount of light reaching the paper is a function of the strength (wattage) of the lamps, the immediacy of the lamps (how close they are to the paper), and the number of lamps. The law embodies a ***multiplicative model**, because if S , I , or N is zero, the magnitude of the impact is zero.

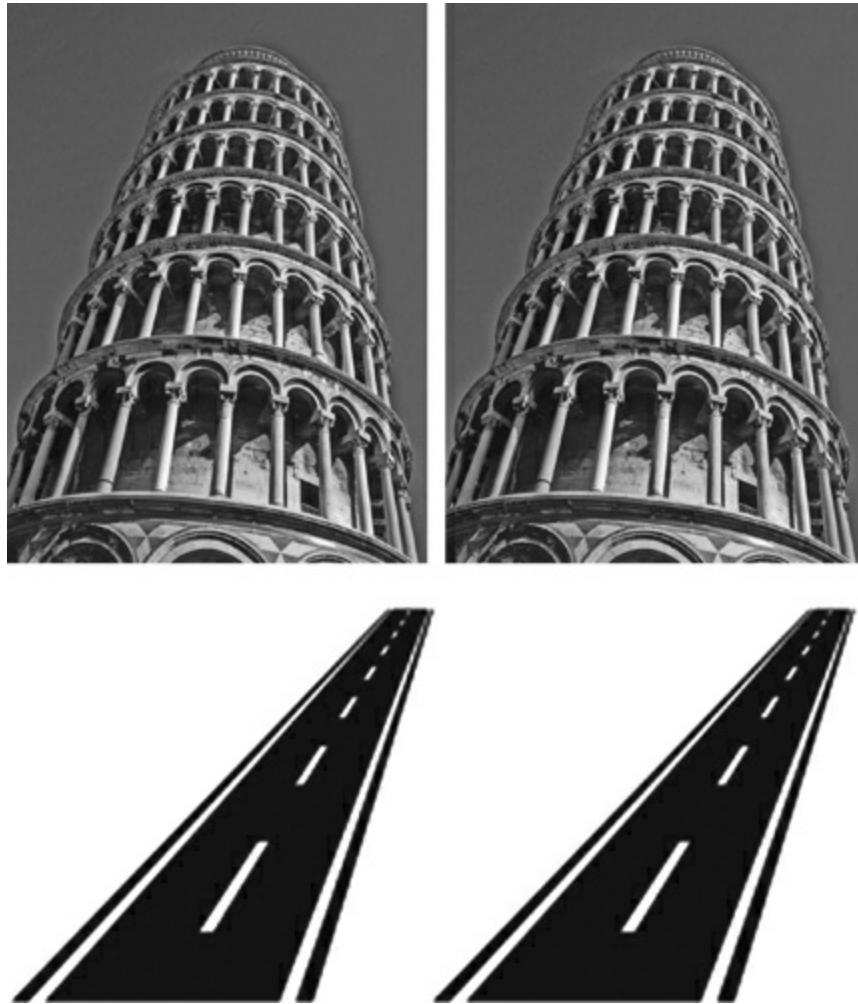
law of the excluded middle *See* EXCLUDED MIDDLE LAW.

lay personality theory *n.* Another name for an ***implicit personality theory**.

L-dopa *abbrev.* Laevo-dihydroxyphenylalanine, a substance that is synthesized in the body from tyrosine and is an immediate precursor of

***dopamine.** Dopamine cannot cross the ***blood–brain barrier**, but L-dopa can, therefore a synthetic form of L-dopa is used in the treatment of ***Parkinson’s disease**, which arises from a failure of dopamine production in the brain. Also called *levodopa*. See also **ANTIPARKINSONIAN**, **APHRODISIAC**, **DOPA**. [From *laevo-* indicating a left-handed form, from Latin *laevus* left + *d(ihydr)o(xy)p(henyl)a(lanine)*]

leaning tower illusion *n.* A visual illusion—specifically, a ***perspective illusion**—originally demonstrated with an image of the Leaning Tower of Pisa, photographed from below. When two identical copies of the image are placed side by side, the towers appear to lean away from each other (see **illustration**, top, overleaf.). This is caused by the fact that the visual system interprets the two images as parts of a single image. A single image of a pair of towers aligned with each other and photographed from below would converge towards the top, owing to ***linear perspective**, and the visual system would correct for this convergence so that the towers would be perceived as rising in parallel. In the illusion, the towers are in separate images and do not converge, but the visual system interprets them as parts of a single image, and automatic perspective correction therefore causes them to appear to diverge. In spite of its name, the same illusion is seen when identical images of any scene with strong perspective cues, such as two identical images of a road receding towards the horizon, are placed side by side (see **illustration**, bottom, overleaf). The illusion was discovered by the Canadian-based British neuroscientist Frederick A. A. Kingdom (born 1953) and two research associates at McGill University, and it was first published in the journal *Perception* in 2007. [So called because it causes one tower to appear to lean away from the other, and also because the Leaning Tower of Pisa was used to illustrate it.]



Leaning tower illusion. The two images of the Leaning Tower of Pisa (top), are identical and, amazingly, so are the two images of the road (bottom).

learned food/flavour/taste aversion See [FOOD AVERSION LEARNING](#).

learned helplessness *n.* An apathetic condition in an animal or a human being resulting from exposure to insoluble problems or inescapable physical or emotional stress, believed by some psychologists to underlie [*depression](#). The term was introduced in 1967 by the US psychologists J(ames) Bruce Overmier (born 1938) and Martin E. P. Seligman (born 1942) in an article in the *Journal of Comparative and Physiological Psychology*. Early experiments involved strapping experimental dogs into harnesses to prevent them escaping, and then exposing them to inescapable electric

shocks. When the dogs were later placed in a situation in which they had to respond to a warning signal by jumping over a low barrier in order to avoid further shocks, most became apathetic and listless and failed to learn this simple avoidance response, whereas a control group of dogs that had not been exposed to the inescapable shocks learned the avoidance response quickly and easily. Learned helplessness has been demonstrated in humans as well as animals, and Seligman and his followers believe that it reduces the motivation to solve problems, interferes with the ability to learn from experience, and produces depression. It is very occasionally spelt *learnt helplessness*, which is arguably preferable inasmuch as it avoids the implication that the helplessness is knowledgeable and well read. [So called because it is acquired by [*learning \(1\)](#)]

learning *n.* 1. Any lasting change in behaviour resulting from experience, especially [*conditioning \(1\)](#). 2. The act or process of acquiring knowledge or skill, or knowledge gained by study (*He had several university degrees and was a man of learning*).

learning curve *n.* A mathematical expression of the change in behaviour occurring as a function of practice, usually represented by a graph showing a measure of performance on the vertical axis and amount of learning, represented by trials or time, on the horizontal axis. The best example is a [*cumulative record](#). The concept was introduced by the US psychologist Louis Leon Thurstone (1887–1955) in an article entitled ‘The Learning Curve Equation’ in the journal *Psychological Monographs* in 1919. Also called a *practice curve*.

learning difficulties *n.* A term used by [*educational psychologists](#) in the UK since the 1980s to refer to [*intellectual disability](#); thus *moderate learning difficulties* corresponds approximately to moderate [*intellectual disability](#), *severe learning difficulties* to severe [*intellectual disability](#), and *profound learning difficulties* to [*profound mental retardation](#). Compare [LEARNING DISABILITY](#), [SPECIFIC LEARNING DISORDER](#).

learning disability *n.* A generic name for disorders characterized by substantial deficits in scholastic or academic skills, including [*reading disorder](#), [*mathematics disorder](#), and [*disorder of written expression](#). The

*****ebook converter DEMO Watermarks*****

term was introduced by the US special educator and psychologist Samuel A(lexander) Kirk (1904–96) in his book, *Educating Exceptional Children* (1962). The preferred term in *DSM-5 is *specific learning disorder. Also called *academic skills disorders* or *learning disorders*. See also SPECIFIC LEARNING DISABILITY. Compare LEARNING DIFFICULTIES. **LD** abbrev.

Learning Potential Assessment Device *n.* A device intended for *dynamic testing of children, adolescents, and adults for potential cognitive growth. It comprises a battery of 15 instruments designed to challenge the respondent's ability to use different cognitive operations (serialization, classification) in different *content domains (numerical, verbal, logico-deductive, and figural), while the examiner detects errors and helps the respondent to find ways to remedy them. **LPAD** abbrev.

least-effort principle See PRINCIPLE OF LEAST EFFORT.

least-significant difference test *n.* In statistics, a method of *multiple comparisons in which all possible *t tests between group means are performed without adjustment of the significance levels for the fact that multiple, non-independent comparisons are being made, and therefore without adequate protection against a *Type I error. Compare BONFERRONI CORRECTION, DUNCAN'S MULTIPLE RANGE TEST, NEWMAN–KEULS TEST, SCHEFFÉ TEST, TUKEY-HSD TEST.

least-squares method *n.* In statistics, a technique for estimating the value of an unknown quantity from a number of observations or scores, especially for finding the line or curve that best fits a set of data points, by finding the values that minimize the sum of the squared deviations of the observed scores from their expected values. The method was introduced in 1805 by the French mathematician Adrien-Marie Legendre (1752–1833).

lect *n.* A general term for any variety of a language that can be identified in a speech community. Compare ACROLECT, BASILECT, DIALECT, IDIOLECT, MESOLECT. [From Greek *legein* to speak]

Lee-Boot effect *n.* The suspension of *oestrous cycles in a group of females housed together in the absence of males of the same species or their
*****ebook converter DEMO Watermarks*****

***pheromones.** Compare **WHITTEN EFFECT**. [Named after the Dutch biologists S. van der Lee and L. M. Boot who first reported it in 1955]

left-sided apraxia *n.* An impairment of ability to carry out verbal requests with the left hand, resulting from damage to the ***corpus callosum**, preventing impulses from the left hemisphere, where language is processed, from reaching the right ***motor cortex**, where control of the left side of the body is located. Also called *callosal apraxia*, *sympathetic apraxia*, *unilateral limb apraxia*. See also **APRAXIA**, **DISCONNECTION SYNDROME**.

legasthenia *n.* A term introduced in 1916 (in the German form *Legasthenie*) by the Hungarian psychiatrist Paul Ranschburg (1870–1945) to denote specific ***reading disorder**. [From Latin *legere* to read + Greek *astheneia* weakness, from *a-* without + *sthenos* strength + *-ia* indicating a condition or quality]

legend, urban See **URBAN LEGEND**.

lek *n.* A small area of ground where certain species of birds such as grouse gather for ***courtship (1)** and ***display (1)**, or the behaviour that occurs at such a location, or the season during which such behaviour takes place. [From Old English *lacan* to frolic, perhaps from Swedish *leka* to play]

lemma *n.* **1.** In logic and mathematics, a preliminary ***proposition (1)** on which the proof of a subsequent proposition depends. **2.** In linguistics, a word in its ***citation form**, together with all its inflected forms, such as *do* together with *doing*, *does*, *did*, and *done*. **lemmatize** *vb.* [From Greek *lambanein* to take for granted]

lemniscus *n.* A band of ascending sensory nerve fibres connected to the thalamus, including the ***lateral lemniscus**, ***medial lemniscus** and ***trigeminal lemniscus**, the whole lemniscus being referred to non-technically as the *fillet*. Also called the *lemniscal system*. [From Greek *lemniskos* a ribbon]

lenis *adj.* Of or relating to a ***consonant** speech sound articulated with

relatively weak muscular tension of the organs of speech and breath pressure, such as the initial phonemes in *bee*, *die*, *go*, *vow*, *though*, and *zoo*. *See also* [CLIPPING](#). *Compare* [FORTIS](#). [From Latin *lenis* gentle]

lens *n.* A transparent structure, with one or more convex or concave surfaces, that [*refracts](#) light passing through it, causing either convergence or divergence of rays. The [*crystalline lens](#) of the [*eye](#) converges light rays on to the retina. *See also* [DIOPTRE](#), [REFRACTION](#). [From Latin *lens*, *lentis* a lentil, alluding to the shape of a biconvex lens]

lens illusion *See* [CURVATURE ILLUSION](#).

lens model *n.* A metaphor proposed by the Hungarian-born US psychologist Egon Brunswik (1903–55) to highlight the probabilistic relationships between, on the one hand, an [*ecological criterion](#), and on the other, the sensory [*cues](#) (2) of imperfect [*ecological validity](#) (2) that an organism uses to judge the ecological criterion, the cues being focused by cognitive processes like rays of light on to the ecological criterion. *See also* [BRUNSWIKIAN](#).

lenticular nucleus *n.* One of the [*basal ganglia](#) comprising the [*putamen](#) and the [*globus pallidus](#) in each cerebral hemisphere, implicated in the control of movement. Also called the *lentiform nucleus*. *See also* [CORPUS STRIATUM](#). [From Latin *lens*, *lentis* a lentil, alluding to its double-convex shape]

lento speech *n.* Slow, deliberate, careful speech lacking the features typical of rapid, casual, connected [*allegro speech](#). [Italian *lento* slow, from Latin *lentus* slow]

leptin *n.* A [*hormone](#) found in the bloodstream of humans and other mammals, encoded by the *ob* (obesity) gene, regulating the amount of food intake and fat deposited in the body. In strains of massively obese mice, it is not synthesized normally, but injections of leptin lead to reduced food intake and weight reduction in both normal and obese mice. It was discovered in mice and humans in 1994 by the US molecular geneticist Jeffrey Friedman (born 1954) and first reported and named in print by Friedman and several
*****ebook converter DEMO Watermarks*****

collaborators in the journal *Science* in 1995. Compare **GHRELIN**. [From Greek *leptos* thin, from *lepein* to peel]

leptokurtic See **KURTOSIS**.

Lerntest *n.* A collection of ***dynamic testing** procedures developed in Germany in the early 1990s, administered with repetitions, prompts, and systematic feedback. [From German *Lerntest* learning test, from *lern* learn + *Test* a test]

lesbian *n.* A ***homosexual** woman. **lesbianism** *n.* The practice of being a lesbian, also called *sapphism*. [From the name of the Greek island of Lesbos, home of the lyric poet Sappho, believed to have been a lesbian]

Lesch–Nyhan syndrome *n.* A hereditary disorder of purine metabolism, affecting young boys, transmitted by a ***sex-linked *recessive gene**, characterized by ***intellectual disability**, self-mutilation of lips and fingers by biting, and abnormal physical development, often leading to death. [Named after the US paediatricians Michael Lesch (1939–2008) and William L. Nyhan, Jr (born 1926), who first studied it]

lesion *n.* Any structural alteration of an organ or tissue of the body brought about by injury or disease. [From Latin *laesio* an injury, from *laedere* to hurt + *-ion* indicating an action, process, or state]

lesion experiment *n.* Another name for an ***ablation experiment**.

less-is-more effect *n.* A phenomenon in judgement and decision making when less knowledge in a particular domain enables one to make more accurate judgements than more knowledge. The effect was first reported and named by the US psychologist Daniel G(ray) Goldstein (born 1969) and the German psychologist Gerd Gigerenzer (born 1947) in a chapter on the ***recognition heuristic** in a book by Gigerenzer and several co-authors entitled *Simple Heuristics That Make Us Smart* in 1999 and in an article in the journal *Psychological Review* in 2002. They reported a study of German and US respondents who were asked, ‘Which city has the larger population:

San Diego or San Antonio?’ The German respondents had comparatively little relevant knowledge, but all of them had heard of San Diego, and about half of them had heard of San Antonio. Nevertheless, all German respondents arrived at the correct answer that San Diego has the larger population by using the recognition heuristic; whereas only two-thirds of the US respondents, who had far more relevant knowledge, answered correctly.

lethal dosage *n.* The minimum dosage of a drug required to kill an organism. **LD** *abbrev.* **lethal dosage 50** *n.* Another name for the **median lethal dosage*. See also THERAPEUTIC INDEX, THERAPEUTIC RATIO. Compare EFFECTIVE DOSAGE, TOXIC DOSAGE. **LD-50** or **LD₅₀** *abbrev.*

lethargy *n.* Lack of energy. See also ENCEPHALITIS LETHARGICA, HEBETUDE, IRRITABLE MALE SYNDROME, STUPOR, WATER INTOXICATION. [From Latin *lethargia* sluggishness, from Greek *lethargos* drowsy, from *lethe* oblivion]

letter-by-letter reading *n.* An alternative name for **spelling dyslexia*.

leucocyte *n.* Any of the various types of large white corpuscles of the blood and lymph in humans and other vertebrates, including **phagocytes* with granular cytoplasm and other immunologically active cells with clear cytoplasm. US *leukocyte*. Also called a *white blood cell* or *white blood corpuscle*. See also GRANULOCYTE, LYMPHOCYTE, MONOCYTE, STEM CELL. Compare ERYTHROCYTE. [From Greek *leucos* white + *kytos* a vessel]

leucotomy *n.* A shortened name for **frontal leucotomy*. Also spelt *leukotomy*.

leu-enkephalin See ENKEPHALIN.

leukocyte See LEUCOCYTE.

levelling *n.* 1. The tendency to perceive or to remember material in a form closer to a **good Gestalt* than is objectively the case, unimportant and incongruous details gradually disappearing over time, such alteration also occurring in **serial reproduction* and **rumour* transmission. Compare

[ASSIMILATION \(5\)](#), [SHARPENING](#). **2.** In the terminology of some forms of therapy and counselling, speaking frankly and openly (being level in the sense of straightforward). **3.** In linguistics, the gradual loss of linguistic distinctions, such as the loss of the distinction between the nominative and accusative forms of nouns in Old English, which have generally been levelled to a single form, although the distinction has been preserved in some pronouns (*I/me, he/him, she/her, they/them*) though not in *you*. US *leveling*.

level of aspiration See [ASPIRATION \(1\)](#). **LOA** abbrev.

level of measurement See [MEASUREMENT LEVEL](#).

levels of processing *n.* The depth with which incoming information is analysed and [*encoded](#), ranging from superficial processing of sensory [*features \(1\)](#) to semantic and conceptual processing, with deeper levels of processing leading to longer-lasting memories. According to this interpretation, incoming verbal information may be analysed in terms of its sensory and surface features but may also be processed at progressively deeper levels in terms of its [*phonemic](#), [*semantic](#), and [*conceptual](#) properties, the early sensory analyses being relatively automatic and effortless and the later deeper analyses requiring attention and effort. The concept was introduced in 1972 by the Canadian-based Scottish psychologist Fergus I(an) M(uirden) Craik (born 1935) and the Canadian-based Australian psychologist Robert S. Lockhart (born 1939). In 1975 Craik and the Estonian-born Canadian psychologist Endel Tulving (born 1927) published a classic experiment in which people first answered yes–no questions about a list of words and then tried to recall as many of them as possible. Some of the words were accompanied by questions asked about their visual appearance (*Is the word in lower case?* or *Is the word in upper case?*), others their sound (*Does the word rhyme with dog?* and so on), and still others their meaning (*Is it the name of an animal?* and so on). Recall was very poor for words that had been processed according to visual appearance, slightly better for words processed according to sound, and best by far for words processed according to meaning. This approach is sometimes seen as an alternative to the conventional model of three separate memory stores, namely [*sensory memory](#), [*short-term memory](#), and [*long-term memory](#). See also [ATTENUATION THEORY](#), [BOTTLENECK THEORY](#), [DEPTH OF PROCESSING](#), [DOMAINS OF PROCESSING](#)

*****ebook converter DEMO Watermarks*****

THEORY, ELABORATION, FLANKER COMPATIBILITY EFFECT, PROOF-READER'S ILLUSION (1, 2). **LOP** abbrev.

levodopa *n.* Another name for *L-dopa.

Lewinian *adj.* Of, relating to, or resembling the psychological approach of Kurt Lewin (1890–1947), a US psychologist born in a part of Germany that is now in Poland. See ACTION RESEARCH, APPROACH–APPROACH CONFLICT, FIELD THEORY, HODOLOGICAL SPACE, LIFE SPACE, T-GROUP, TOPOLOGICAL PSYCHOLOGY.

Lewy body *n.* A microscopic particle with a characteristic dark core and pale halo found abundantly in cortical neurons of people with *Lewy body dementia. [Named after the German-born US neurologist Frederick H. Lewy (1885–1950) who discovered the particle]

Lewy body dementia *n.* A form of *dementia, distinct from Alzheimer's disease, associated with *Lewy bodies in cortical neurons, especially in the *frontal lobes, characterized by rapid and unpredictable fluctuations in levels of cognitive functioning and extremely poor reactions to *neuroleptic (1) drugs.

lexeme *n.* The basic unit of semantic analysis, roughly equivalent to a word in the everyday sense but referring more precisely to the abstract unit postulated to underlie a set of grammatical variants such as *write*, *writes*, *writing*, *wrote* or *loud*, *louder*, *loudest*; the smallest unit of language with a distinctive meaning that cannot be inferred from the meanings of its component *morphemes. Many lexemes consist of single words (such as *game*, *castle*, or *sing*), but multi-word lexemes also exist (as in *kick the bucket*, meaning die). Also called a *lexical item*. [From Greek *lexis* a word, from *legein* to speak + a suffix on the model of *phoneme*]

lexical access *n.* The process by which a person retrieves items from a *lexicon (2). [From Greek *lexis* a word, from *legein* to speak]

lexical access time *n.* The time taken to retrieve information from a *lexicon (2).

lexical ambiguity *n.* The property of a word that has more than one meaning. In written language it arises from **homographs*, and in spoken language from **homonyms*. See also *POLYSEMY*.

lexical decision task *n.* An experimental task in which participants or subjects are required to decide as quickly as possible whether strings of letters are or are not words. **LDT** *abbrev.*

lexical word *n.* Another name for a **content word*.

lexicographic *adj.* Of, relating to or consisting of a method of arranging a set of items in the manner of a dictionary, by ordering them first according to one **attribute*, then according to a second, and so on. Thus the words *cab*, *dab*, *den*, and *fag* are lexicographically ordered, and so are the vectors (3, 1, 2), (4, 1, 2), (4, 5, 14), and (6, 1, 7), and the relation between the two systems of ordering can be seen by setting $a = 1$, $b = 2, \dots, z = 26$. Also called *lexical*, though this is liable to cause confusion and is avoided in careful usage, because this adjective usually refers to **lexemes* or words. See also *LEXICOGRAPHIC CHOICE*, *LEXICOGRAPHIC SEMIORDER*. [From Greek *lexikon* a dictionary, from *lexis* a word, from *legein* to speak + *graphein* to write + *-ikos* of, relating to, or resembling]

lexicographic choice *n.* Any method of **multi-attribute decision making* that is **lexicographic* inasmuch as the decision maker proceeds by first comparing the alternatives on the most important **attribute*, and if more than one alternative is best on the first attribute, the decision maker then compares them on the next most important attribute, and so on until just one alternative emerges as best or the list of attributes is exhausted without a definite first preference emerging. Suppose a decision maker has to choose between two travel agencies, namely A_1 offering a tour only to destination D_1 (Africa), and A_2 offering tours to both D_1 (Africa) and D_2 (the Far East). The decision maker is equally attracted by Africa and the Far East and is indifferent between the travel agencies. According to the conventional linear value-maximization model of decision making, the three alternatives A_1D_1 , A_2D_1 , A_2D_2 are equally valued and are therefore equally likely to be chosen; but it is intuitively obvious that most human decision makers would choose

*****ebook converter DEMO Watermarks*****

first between destinations D_1 and D_2 , because this attribute is most important, and only then between travel agencies A_1 and A_2 , and consequently the probability of choosing A_2D_2 would be greater than that of the other two alternatives. Also called *lexicographic decision making* or *lexical choice*, although the latter is avoided in careful usage, because it causes confusion with *lexical decision task*. See also [ELIMINATION BY ASPECTS](#), [LEXICOGRAPHIC SEMIORDER](#).

lexicographic semiorder *n.* A [*lexicographic](#) preference ordering applied to a set of elements differing on two or more [*attributes](#), at least one of which yields a [*semiorder](#). It is noteworthy because it can generate an [*intransitive preference](#) ordering from intuitively reasonable transitive preferences within each separate attribute. For example, suppose three job applicants x , y , and z are ranked according to aptitude test scores and interview performance, and interview performance is taken into account only if the difference in aptitude test score between two candidates is less than five points and is therefore considered to be negligible. Suppose that the data are as follows:

<i>Candidate Aptitude Interview</i>		
x	70	good
y	73	moderate
z	76	weak

Then x is preferred to y , y is preferred to z , and z is preferred to x . Also called a *lexical semiorder*, though this is apt to cause confusion.

lexicology *n.* The study of the development and present state of the [*lexicon \(1\)](#) of a language. [From Greek *lexis* a word, from *legein* to speak + *logos* word, discourse, or reason]

lexicon *n.* **1.** The entire vocabulary of a language, especially one that is listed alphabetically like a dictionary. English is believed to have the largest lexicon of any language: the *Oxford English Dictionary* (2nd ed.) defines more than 500,000 words. **2.** The entire vocabulary of an individual. The US psychologist George A(rmitage) Miller (1920–2012) estimated in 1991 that the average high-school graduate has a passive lexicon of about 60,000 words that are understood but not necessarily used. Also called a *mental lexicon*. **3.**

*****ebook converter DEMO Watermarks*****

A list of words relating to a particular subject. **lexical** *adj.* [From Greek *lexikon* a dictionary, from *lexis* a word, from *legein* to speak]

lexicostatistics *n.* A technique devised by the US linguists Morris Swadesh (1909–67) and Robert Benjamin Lees (1922–96) in the late 1940s for studying the vocabularies of languages, especially to trace historical links with other languages through ***glottochronology**. Using a list of 100 basic words (such as *I, you, not, tree, father, two*), the number of words in the two languages that are recognizably similar or cognate can be counted, and the fewer the cognate words, the longer they are assumed to have been separated: on average, two languages have 86 per cent in common after 1,000 years of separation. *See also* **INDO-EUROPEAN**. [From Greek *lexis* a word, from *legein* to speak + *statistics*]

liar paradox *n.* A profound and intractable though simple ***paradox** discovered by ancient Greek thinkers. Epimenides, the Cretan, says that all Cretans are liars; if he is telling the truth, then he must be a liar, and if he is lying, then he must be telling the truth. The simplest version of the paradox is the statement *This statement is false*; if it is true, then it must be false, and if it is false, then it must be true. The paradox was mentioned by St Paul in his epistle to Titus (1 : 12), although Paul evidently failed to grasp its point. *See also* **METALANGUAGE**.

liberation psychology *n.* An approach to ***social psychology** that attempts to reconstruct the discipline from a radical ideological perspective and place it at the service of the poor and oppressed by focusing on problems such as urban overcrowding, land reform, and violence. It was developed largely by the Salvadorean social psychologist and Jesuit priest Ignacio Martín Baró (1942–89) and was inspired by Marxism, psychoanalysis, some approaches to social psychology, and above all by liberation theology, the doctrine influential chiefly in Latin America that Christianity demands the overthrow of exploitative and oppressive social and political institutions. Its moral flavour and commitment to liberation distinguish it from other radical approaches to psychology, such as ***critical theory**. It has been influential mainly in Latin America and South Africa, but it also has followers among social psychologists in Europe, North America, and Australasia. **PSL** *abbrev.* (see etymology). [From Spanish *psicología social de la liberación*]

*****ebook converter DEMO Watermarks*****

liberty cap *n.* The slightly poisonous mushroom *Psilocybe semilanceata*, sometimes eaten as a ***hallucinogenic** drug. Also called *magic mushroom*. Its common street name is *mush*. See also **FLY AGARIC**. [So called because of its resemblance to the soft felt cap worn during the French Revolution as a symbol of liberty]

Libet's delay *n.* A period of approximately half a second between a person's skin being touched and the resulting conscious experience of being touched, although the brain receives the signal and responds to the stimulus with an ***evoked potential** after a little more than a hundredth of a second (15 milliseconds), and a ***reflex** response can occur within about a tenth of a second (100 milliseconds). In research with fully conscious patients during brain surgery under local anaesthetic, Libet found a half-second delay between the beginning of continuous electrical stimulation of the exposed ***somatosensory cortex** and the patient's report of a conscious sensation, such as a tingle in the right hand during electrical stimulation of a point in the left somatosensory cortex. In contrast, even a brief stimulus applied directly to the skin is consciously experienced, but not immediately—if it is followed within less than half a second by stimulation of the somatosensory cortex, then ***backward masking** stops the skin stimulus from being felt, confirming that the conscious experience of a skin stimulus is delayed by about half a second. According to Libet, the reason why we do not notice the half-second delay is that our conscious experiences of sensations are antedated to the time of the evoked potentials, creating the illusion that the sensations are almost immediate. Also called the *antedating of consciousness*, *backward referral of sensation*, *half-second delay in consciousness*, or *time delay in consciousness*. See also **READINESS POTENTIAL**. [Named after the US physiologist Benjamin Libet (1916–2007) who reported the delay first in an article in the journal *Perspectives in Biology and Medicine* in 1965 and subsequently in numerous publications, notably an article in the journal *Brain* in 1979 (co-authored with three colleagues) and in *Behavioral and Brain Sciences* in 1985]

libidinal regression See **REGRESSION (2)**.

libidinal stage *n.* In ***psychoanalysis**, any stage or phase of ***psychosexual development** when ***libido** is focused specifically on one
*****ebook converter DEMO Watermarks*****

***erotogenic zone** and in which one mode of ***object-relationship** predominates. Also called a *libidinal phase* or a *psychosexual stage*. See **ANAL STAGE**, **GENITAL STAGE**, **LATENCY PERIOD**, **ORAL STAGE**, **PHALLIC STAGE**, **POLYMORPHOUS PERVERSITY**. See also **FIXATION (2)**, **REGRESSION (2)**.

libido *n.* Sexual desire. In ***psychoanalysis**, the energy of the ***sexual instinct** as a component of the ***Eros**. Sigmund Freud (1856–1939) introduced the concept in his book *Three Essays on the Theory of Sexuality* (1905), in a passage added to the 1915 edition (*Standard Edition*, VII, pp. 130–243, at p. 217), and he expanded his explanation in his book *Group Psychology and the Analysis of the Ego* (1921), where he gave the following definition: ‘Libido is an expression taken from the theory of the emotions. We call by that name the energy, regarded as a quantitative magnitude, (though not at present actually measurable), of those instincts which have to do with all that may be comprised under the word “love”’ (*Standard Edition*, XVIII, pp. 69–143, at p. 90). Freud attributed the term to the book *Untersuchungen über die Libido sexualis* (1898, *Researches into the Sexual Libido*) by the German psychiatrist Albert Moll (1862–1939), but Freud had already used the word several times in letters (*Standard Edition*, I, pp. 173ff.) to his friend, the German physician Wilhelm Fliess (1858–1928), the earliest occurrence being in June 1894, several years before the publication of Moll’s book. See also **EGO LIBIDO**, **OBJECT LIBIDO**. Compare **DESTRUDO**, **MORTIDO**, **SELF-PRESERVATION INSTINCT**. **libidinal** *adj.* Of or relating to the libido. **libidinous** *adj.* Lustful, lascivious, or lewd. [From Latin *libido* desire or lust]

Librium *n.* A proprietary name for the benzodiazepine drug ***chlordiazepoxide**. [Trademark]

lie detector *n.* A type of ***polygraph** sometimes used in police interrogations to detect untrue or deceptive answers by recording involuntary stress-induced physiological responses, typically including changes in galvanic skin response (**GSR**), respiration rate, blood pressure, and heart rate. Responses to test questions relevant to the crime or matter at issue are compared with responses to unrelated control questions, and the most advanced polygraph lie detectors incorporate computer software, based on data from confirmed polygraph test results, designed to analyse the waveforms and eliminate subjectivity from their interpretation. The original

*****ebook converter DEMO Watermarks*****

polygraph lie detector was called the *Keeler polygraph*. Also called simply a *polygraph*. See also [BOGUS PIPELINE](#), [CHEVREUL PENDULUM](#), [WORD-ASSOCIATION TEST](#).

lie scale *n.* In psychometrics, a set of items included in a test to provide an indication of the extent to which the respondent has answered truthfully in other parts of the test. Some lie scales consist of repetitions of the same or closely similar items, to check for consistency of responses; others are made up of items to which certain responses may be assumed to be evidence of [*social desirability response set](#), or some other [*response bias](#), for example *I always smile at strangers in the street* (True) or *I never regret things that I have said* (True); and there are other more devious and subtle types of lie scales.

life instincts *n.* Another name for [*Eros](#).

life lie *n.* In [*individual psychology](#), a term introduced by the Austrian psychiatrist Alfred Adler (1870–1937) to denote the false belief, functioning as a means of evading responsibility, that one cannot achieve any of one's goals.

life space *n.* A term introduced in 1936 by the German–US psychologist Kurt Lewin (1890–1947) to refer to the psychological [*field](#), comprising the person *P* and the person's environment *E*, jointly determining the person's behaviour *B* at a given moment, this relation being expressed by the equation $B = f(P, E)$, certain regions of the life space having *valence* and thus being either attractive or repulsive to the person and determining *locomotion* from one region to another. See also [APPROACH–APPROACH CONFLICT](#), [APPROACH–AVOIDANCE CONFLICT](#), [AVOIDANCE–AVOIDANCE CONFLICT](#), [FIELD THEORY](#), [HODOLOGICAL SPACE](#), [LEWINIAN](#), [TOPOLOGICAL PSYCHOLOGY](#).

life table *n.* Another name for a [*mortality table](#).

ligand *n.* An atom, molecule, ion, or radical that binds with a central atom; more specifically, any such element that binds with a specific [*neuroreceptor](#). [From Latin *ligandum* binding, from *ligare* to bind]

light adaptation *n.* A form of **adaptation* (2) in which the visual system is adjusted for efficient response to light under conditions of strong illumination, including the constriction of the **pupil*, a rapid increase in the **absolute threshold* for vision, and the switch from the **scotopic* system to the **photopic* system. *See also* PURKINJE SHIFT. *Compare* DARK ADAPTATION. **light-adapted** *adj.* Of or relating to the eye or the visual system after it has undergone light adaptation.

lightness *n.* The **achromatic* (1) dimension of **colour*, ranging from black (0) to white (10) in the **Munsell* value scale of lightness, being one of the three major dimensions of colour together with **hue* and **saturation* (1). It is the psychological counterpart of physical **luminance*, but the fact that it does not correspond in a simple way to physical light intensity can be demonstrated by first noting the lightness of a television screen when the power is turned off—it is usually not very dark—and then switching on the power and observing that parts of the picture appear much darker and even pitch black, despite the fact that the transmitted images can only increase and never reduce the intensity of the light coming from any part of the screen. Also called *Munsell value* or *brightness*, although brightness is specifically related to luminance, which as explained above is a different though closely related physical property. *See also* GELB EFFECT, HERING GREY, KARDOS EFFECT.

lightness constancy *n.* The apparent stability of an object's **lightness* despite changes in illumination. Also called *brightness constancy* or *whiteness constancy*. *See also* PERCEPTUAL CONSTANCY.

lightness contrast *n.* The apparent darkening of an object or image when viewed against, alongside, or immediately after a lighter one, or an apparent lightening of an object or image juxtaposed with a darker one. Also called *brightness contrast*. *See also* CONTRAST (2), SIMULTANEOUS CONTRAST, SUCCESSIVE CONTRAST, VISUAL INDUCTION.

light reflex *n.* Another name for the **pupillary light reflex*.

likelihood function *n.* In statistics, the probability of obtaining a given set of observed scores in a random sample as a function of the **parameter(s)*

of the population from which the scores are drawn. *See also* [LIKELIHOOD RATIO \(1\)](#).

likelihood principle *n.* A hypothesis first proposed in 1866 by the German physiologist, physicist, and mathematician Hermann Ludwig Ferdinand von Helmholtz (1821–94) that a perception is inferred unconsciously to correspond to the most likely physical events or circumstances that could have produced the pattern of sensations that generated it. *Compare* [PRÄGNANZ](#).

likelihood ratio *n.* **1.** In statistics, the ratio of two [*likelihood functions](#) at a given value, especially the ratio of a likelihood function to the [*maximum likelihood](#), or in [*Bayesian inference](#), the ratio between (a) the probability of an observation or datum conditional on a hypothesis and (b) the probability of the same observation or datum conditional on an alternative hypothesis: $P(D | H_1)/P(D | H_2)$. **2.** In [*signal detection theory](#), the ratio (at a particular cutoff or criterion level of sensory activation) given by the probability of a response being due to signal plus noise divided by the probability of its being due to noise alone. Symbol: β .

likelihood ratio chi-square test *n.* A statistical test of association or [*goodness of fit \(1\)](#) that is based on the [*likelihood ratio \(1\)](#) and is thought by many statisticians to be preferable to the conventional Pearson [*chi-square test](#) for the simultaneous analysis of several overlapping associations in a multiple-classification table, because under certain conditions it has the property of [*additivity](#) of effects. The statistic, which is distributed like chi-square, is computed from the natural logarithms of observed and (in goodness of fit tests) expected frequencies. *Compare* [PEARSON CHI-SQUARE TEST](#).

Likert scale *n.* One of the most popular types of attitude scale, constructed by the method of [*summated ratings](#) in which a sample of respondents are given a large number of candidate statements about an attitude object (such as *Homosexuality is acceptable in today's society*, *Homosexuality should be outlawed*) to which they respond with their own attitudes by choosing one of the response categories attached to each item, for example, *strongly disagree*, *disagree*, *neutral*, *agree*, *strongly agree*. Items that are worded positively towards the attitude object, such as the first of the
*****ebook converter DEMO Watermarks*****

examples above, are assigned positively increasing scores to their response categories such as 0, 1, 2, 3, and 4, respectively, and for negatively worded items such as the second example the scoring is reversed (4, 3, 2, 1, 0). Each respondent's scores on all the candidate items are summed to yield a total score, the candidate items are then subjected to [*item analysis](#), and those with the highest discriminating power are retained for the final scale. [Named after the US sociologist and economist Rensis Likert (1903–81) who introduced it in an article in the *Archives of Psychology* in 1932]

liking scale *n.* A questionnaire designed to measure interpersonal liking, defined in terms of fondness and respect for the liked person and a feeling that the liked person is similar to oneself, the scale being specifically intended to distinguish liking from loving, which is measured by a [*romantic love scale](#). Both scales were constructed by the US psychologist Zick Rubin (born 1944) and published in the *Journal of Personality and Social Psychology* in 1970.

l'illusion de sosies *n.* Another name for [*Capgras syndrome](#). [From French *l'illusion* the illusion + *de* of + *sosies* doubles, from *Socias* in Greek mythology, the identity that Zeus persuaded Mercury to adopt to help him seduce Alcmene by impersonating her husband]

limbic system *n.* A ring of cortical and subcortical structures folded into the inner surface of the [*temporal lobe](#) surrounding the brainstem and bordering on the corpus callosum, including the [*amygdala](#), [*cingulate gyrus](#), [*fornix](#), [*hippocampus](#), [*parahippocampal gyrus](#), and [*septum pellucidum](#), implicated in basic emotions, hunger, sex, and memory. *See also* [PAPEZ CIRCUIT](#), [PLEASURE CENTRE](#). [From Latin *limbicus* bordering, from *limbus* a border]

limen *n.* Another name for a [*threshold](#). [From Latin *limen* a threshold]

limits, method of *See* [METHOD OF LIMITS](#).

Linda problem *n.* A classic problem of judgement. *See* [CONJUNCTION FALLACY](#). [Named after a fictitious bank teller called Linda]

linear model *n.* A mathematical model represented by a linear equation of the form $Y = b_1X_1 + b_2X_2 + \dots + b_nX_n$, or by a system of such linear equations. The relationship between the variables in a linear equation is a straight line when plotted on a graph. In ***multiple regression**, Y represents the estimated value of the ***dependent variable**, each of the X_i represents a ***predictor variable**, and the b_i are regression coefficients or weights. If they are expressed as ***standardized regression coefficients**, then they are represented by the Greek letter beta (β) instead of b and are called beta coefficients. *See also* **BOOTSTRAPPING**.

linear perspective *n.* One of the monocular cues of visual ***depth perception**, a form of ***perspective** closely related to ***aerial perspective** and ***texture gradient**, arising from the fact that an object of a fixed size subtends a smaller ***visual angle** when it is far away than when it is relatively close, so that parallel lines such as rail tracks appear to converge towards a ***vanishing point** at the horizon. *See also* **CARPENTERED WORLD**, **LEANING TOWER ILLUSION**.

linear regression *See* **REGRESSION ANALYSIS**.

line bisection test *n.* A simple test in which a person is asked to mark the approximate midpoint of a straight line. People with ***spatial neglect** perform badly on this test, tending to ignore part of the line and consequently to divide it too far towards the other side.

line graph *n.* A depiction of the relation between two ***variables** (in a *simple line graph*) with the horizontal and vertical axes representing the two variables, and points, connected with line segments representing values on these variables. A line graph showing the relationships between more than one pair of variables is called a *multiple line graph*. *See also* **ERROR BAR**. [From Latin *linea* a line or string + Greek *graphein* to write]

lingam *n.* The Hindu phallic symbol representing the god Shiva, associated with the powers of reproduction and dissolution. *See* **PHALLUS**. [From Sanskrit *linga* a mark or sexual characteristic]

linguistic competence *n.* Another name for ***competence (2)**.

*****ebook converter DEMO Watermarks*****

linguistic determinism *n.* The theory propounded originally by the US fire prevention officer and linguist Benjamin Lee Whorf (1897–1943) that language determines the way people perceive the world and think, rather than vice versa. Whorf argued that because the North American Hopi Indians have only one word (*masa'yataka*) for everything that flies, apart from birds, they do not perceive and conceptualize the distinctions between insects, aircraft, bats, and aviators that English-speakers do; and analogously, English-speakers do not perceive and conceptualize the distinctions between different kinds of snow that are distinguished in the language of the Inuit Eskimos, who have twelve separate words for specific kinds of snow (although only one word meaning snow in general), the popular myth that the Eskimos have hundreds of words for snow having originated in 1911 in the introduction by the German-born American anthropologist Franz Boas (1858–1942) to his *Handbook of North American Indian Languages*. The theory of linguistic determinism has been undermined by evidence such as that of the Dani tribesmen in Papua New Guinea, who have only two words for colours (usually translated as *light* and *dark*), but can distinguish between colours as well as people from Western cultures. *See also* [LINGUISTIC RELATIVITY](#), [POLYONYMY](#), [SAPIR–WHORF HYPOTHESIS](#).

linguistic performance *n.* Another name for [*performance \(2\)](#).

linguistic relativity *n.* The hypothesis first suggested by the German ethnologist Wilhelm von Humboldt (1767–1835) and reformulated in the 20th century by the US fire prevention officer and linguist Benjamin Lee Whorf (1897–1943) that people who speak different languages perceive reality and think differently, because categories and distinctions encoded in one language are not necessarily available in another. For example, the language of the North American Hopi Indians has no forms corresponding to English tenses and no words for conceptualizing time as a dimension; therefore, Whorf argued, it would be difficult for a Hopi and an English-speaking physicist to understand each other's thinking about time. *See also* [LINGUISTIC DETERMINISM](#), [SAPIR–WHORF HYPOTHESIS](#).

linguistics *n.* The scientific study of language, the major branches of which include [*phonetics](#), [*phonology](#), [*semantics](#), [*syntax](#), and [*pragmatics](#). *Compare* [PSYCHOLINGUISTICS](#).

*****ebook converter DEMO Watermarks*****

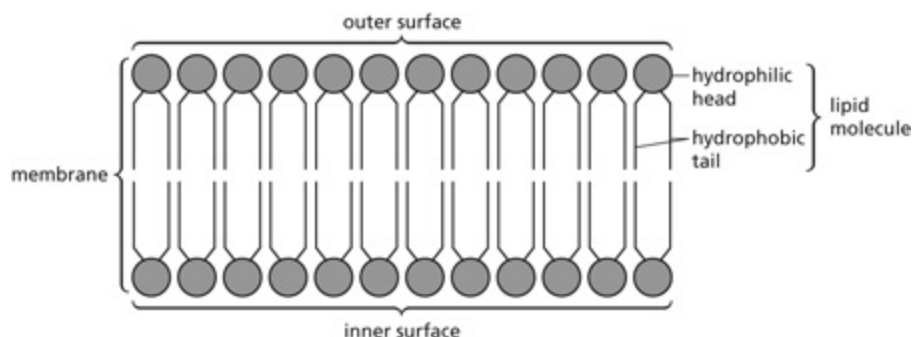
linguistic universals *n.* Linguistic features that are believed to be common to all **natural languages*. They are usually divided into three classes: **substantive universals*; **formal universals*; and **implicational universals*. *See also* CREOLE.

linkage *n.* In genetics, the occurrence of two **genes* close together on the same **chromosome*, so that they are unlikely to become separated during **crossing over* and tend to be inherited together. *See also* GENE MAPPING, INDEPENDENT ASSORTMENT.

linking r *n.* A type of **intrusion* in fluent speech, especially **allegro speech*, in which the phoneme /r/ is pronounced in such phrases as *the car in the photo* or *the floor of the House*, even by a non-**rhotic* speaker (such as one who uses **Received Pronunciation*) who does not normally pronounce the /r/ in *car* or *floor*. *Compare* INTRUSION.

lipid *n.* Any of a group of organic compounds, including especially fats and waxes that are esters of fatty acids, that together with carbohydrates and proteins are the principal constituents of living cells and are soluble in alcohol and other solvents but not in water. [From French *lipide*, from Greek *lipos* fat]

lipid bilayer *n.* A double layer of **amphipathic* lipid molecules that forms a **cell membrane* (see *illustration*).



Lipid bilayer

lipogram *n.* A written text from which a specific letter is absent

throughout. The most ambitious example is the 50,000-word novel *Gadsby* (1939) by Ernest Vincent Wright (1872–1939) in which the letter *e*, normally the most frequent in English, does not appear; this is a serious novel intended to present a different picture of the US from *The Great Gatsby* (1925) by (Francis) Scott (Key) Fitzgerald (1896–1940). A more recent novel entitled *A Void* (1995), a translation by the Scottish writer Gilbert Adair (1944–2011) of *La Disparation* (1969) by the French novelist Georges Perec (1936–82), also omits the letter *e* throughout. The accidental omission of letters or words from writing is called *lipography* or **haplography*. [From Greek *leipein* to omit + *gramma* a letter]

lipostatic theory *n.* A **homeostatic* theory of hunger according to which the brain monitors the level in the blood of free fatty acids that result from the metabolism of fat. A low level indicates that fat has not recently been metabolized, and this leads to a lessening of hunger, whereas a high level indicates recent fat metabolism and increases hunger. *Compare* *GLUCOSTATIC THEORY*. [From Greek *lipos* fat + *statikos* bringing to a standstill, from *histanai* to cause to stand or to weigh in a balance + *-itikos* resembling or marked by]

liquid *n.* A speech sound articulated by narrowing the mouth passage but allowing the airstream to escape without turbulence. In English, there are two liquids /l/ and /r/ as in the initial **phonemes* in the words *lung* and *rung*, and both are **approximants*. *See also* *MANNER OF ARTICULATION*.

Lissajous figure *n.* A curve traced out by a point moving in simple harmonic motion in two directions perpendicular to each other, the shape of the curve being determined by the relative frequencies and phases of the motion. If the motion is observed for some time on an oscilloscope screen, the direction of apparent rotation appears to reverse spontaneously. [Named after the French physicist Jules Antoine Lissajous (1822–80) who first constructed it]

lithium *n.* A soft, silvery, **alkaline* metal, lighter than any other yet discovered. *See also* *LITHIUM CARBONATE*. [From Greek *lithos* stone + Latin *-ium* indicating a metallic element]

lithium carbonate *n.* A salt of ***lithium**, used as a mood stabilizer in the treatment of acute ***manic episodes** and ***bipolar disorders** in general, by replacing sodium in body tissues, thereby affecting the permeability of their membranes. It curbs both manic and depressive episodes by stabilizing levels of the neurotransmitter ***glutamate** in the brain. It, or its close relative lithium citrate, is also used in the treatment of ***hypomanic episodes** and (more controversially and at best indirectly) ***depressive disorders**. Also called simply *lithium*. See also **ANTIMANIC**, **MOOD STABILIZER**, **ORPHAN DRUG**.

Little Hans *n.* In ***psychoanalysis**, the pseudonym of a 5-year-old boy with an irrational fear of horses (hippophobia) who was analysed by his father in 1906–8 with the advice of Sigmund Freud (1856–1939) and discussed in an article by Freud in a famous case study in 1909 entitled ‘Analysis of a Phobia in a Five-Year-Old Boy’ (*Standard Edition*, X, pp. 5–149), in which the phobia was traced to a ***castration complex**.

little thirty *n.* Specific personality ***traits** associated with the ***Big Five** personality factors. Each of the Big Five is described by six traits on which it loads most heavily, for example, ***extraversion** is associated with warmth, sociability, positive emotions, excitement-seeking, activity, and assertiveness. The little thirty is a finer-grained way of describing personality than the Big Five, which tend to obscure anomalies such as that of the ***passive–aggressive personality disorder**, which is characterized by high assertiveness but low warmth.

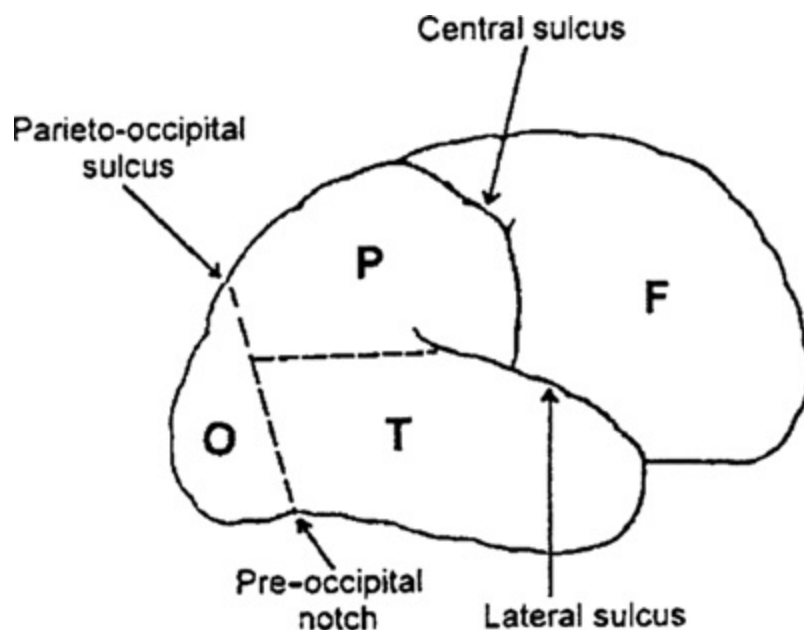
Lloyd Morgan's canon *n.* A frequently paraphrased doctrine propounded in 1894 by the British zoologist and geologist C(onwy) Lloyd Morgan (1852–1936) in his *Introduction to Comparative Psychology*: ‘In no case may we interpret an action as the outcome of the exercise of a higher psychical faculty, if it can be interpreted as the exercise of one which stands lower in the psychological scale’ (p. 53). It is an application of ***Ockham's razor**, implying as it does that psychology must seek the simplest explanations. Morgan was anticipated by the German psychologist Wilhelm (Max) Wundt (1832–1920) who wrote in 1863 in his *Vorlesungen über die Menschen- und Tierseele* (translated into English as *Lectures on Human and Animal Psychology*) that in psychological matters recourse should be had to ‘complex principles of explanation [only] when the simplest ones have

*****ebook converter DEMO Watermarks*****

proved inadequate' (p. 350 of the English translation).

loan translation *n.* A word or phrase borrowed from another language by translating its component parts separately and literally, as in the English word *superman* taken from the German *Übermensch*. Also called a *calque*.

lobe *n.* A structurally distinct and usually rounded part of any larger organ or body part. The four lobes of each **cerebral hemisphere* are the **frontal lobe*, the **parietal lobe*, the **temporal lobe*, and the **occipital lobe* (see *illustration*). [From Latin *lobus* a lobe, from Greek *lobos* an earlobe]



Lobes of the brain. F, frontal lobe; P, parietal lobe; O, occipital lobe; T, temporal lobe.

lobectomy *n.* Surgical excision of a lobe of an organ, especially excision of the prefrontal areas of the **frontal lobe* of the brain. *Compare* PREFRONTAL LEUCOTOMY. [From Greek *lobos* a lobe + *ectome* an excision, from *tome* a cut]

lobotomy *n.* 1. Surgical severing of one or more nerve fibres in the **frontal lobe* of the brain as a method of treating intractable **mental disorders*. More correctly called **frontal lobotomy* or **frontal leucotomy*. 2. Surgical removal or disconnection of a lobe of any organ. [From Greek *lobos* a lobe + *tome* a cut]

local feature *n.* A stimulus **feature* (1), such as an indentation in the outline of a visual image or a click in an auditory tone, that is characteristic of part of the stimulus rather than of the stimulus as a whole. *See also* NAVON FIGURE. *Compare* GLOBAL FEATURE.

localization *n.* 1. Determining the position of something. *See also* ECCENTRIC PROJECTION, EGOCENTRIC LOCALIZATION, SOUND LOCALIZATION. 2. Becoming characteristic of a particular region in attitudes or behaviour. 3. Restricting something to a particular region.

localization of function *n.* The specialization of different areas of the brain for different operations, activities, or processes. *Compare* EQUIPOTENTIALITY, MASS ACTION.

local processing *n.* *See* LOCAL FEATURE, NAVON FIGURE.

local sign *n.* Information from a **photoreceptor* in the eye indicating direction in space, or from a **touch receptor* indicating a specific point on the body.

loci, method of *See* METHOD OF LOCI.

lock-and-key theory *n.* Another name for the **stereochemical theory* of odour, so called because molecules with particular shapes are assumed to fit specific olfactory receptors as keys fit locks.

locked-in syndrome *n.* A condition resulting from bilateral destruction of the **medulla oblongata* or base of the **pons*, resulting in **paralysis* of all voluntary muscles except those of the eyes, with intact consciousness but loss of speech, and communication only through blinking or eye movements. Also called *pseudocoma*. *Compare* PERSISTENT VEGETATIVE STATE.

locomotor ataxia *n.* A form of **ataxia* resulting from syphilis, with slow degeneration of nerve fibres, muscular **atrophy*, and gradual loss of deep tendon reflexes. Also called *tabes dorsalis*. *Compare* GAIT ATAXIA.

locura *n.* A ***culture-bound syndrome** resembling a chronic ***psychosis** (1) found in several parts of Latin America and among Latino communities in the United States and elsewhere, with signs and symptoms such as ***incoherence**, ***psychomotor agitation**, auditory and visual ***hallucinations**, and sometimes outbursts of violent or aggressive behaviour. It is often interpreted as a form of ***schizophrenia**. [Spanish *locura* madness]

locus *n.* **1.** A specific place or region, especially the position occupied by a particular ***gene** or ***allele** on a ***chromosome**, as in a locus for eye colour. Also called a *gene locus*. **2.** In mathematics, a set of points satisfying a specified condition, such as all points whose distance from a fixed point P is a constant, or all points satisfying the equation $r^2 = x^2 + y^2$, where r is a constant, both of which conditions define a circle. **loci** *pl.* [From Latin *locus* a place]

locus coeruleus *n.* A small region on either side of the ***pons** containing neurons that secrete ***noradrenalin** (norepinephrine) and ***serotonin**, prominently implicated in anxiety and fear, and responsible for initiating ***REM sleep** after a period of slow-wave sleep. Also spelt *locus ceruleus*. See also **SUBCOERULEAR NUCLEUS**. [From Latin *locus* a place + *caelum* sky, referring to its deeply pigmented appearance]

locus of control *n.* A ***cognitive style** or personality ***trait** characterized by a generalized expectancy about the relationship between behaviour and the subsequent occurrence of ***reinforcement** (1) in the form of reward and punishment. People with *internal* locus of control tend to expect ***reinforcements** (1) to be the consequences of their own efforts or behaviour, whereas people with *external* locus of control expect them to be the consequences of chance, luck, fate, or the actions of powerful others. Between these two extremes lies a ***continuum** of intermediate cognitive styles. The concept was introduced by the US psychologist E. Jerry Phares (1928–2007) and first published in the *Journal of Abnormal and Social Psychology* in 1957. In an article in the journal *Psychological Monographs* in 1966, the US psychologist Julian B(ernard) Rotter (1916–2014) introduced the ***internal–external scale** to measure it. Also called *internal–external control of reinforcement*. See also **CORE SELF-EVALUATION**, **SOCIAL LEARNING**.

locutionary act *n.* The **speech act* of uttering a meaningful sentence. Compare *ILLOCUTIONARY ACT*, *PERLOCUTIONARY ACT*. [From Latin *locutio* an utterance, from *loqui* to speak]

logagnosia *n.* Another name for **Wernicke's aphasia*. Also called *logamnesia*. See *APHASIA*.

logic *n.* The branch of philosophy devoted to the study of valid arguments, or (equivalently) of consistent sets of beliefs, involving the application of rules of **inference* to draw valid conclusions from sets of **premises*. An argument is a set of statements purporting to provide a reason for believing a certain statement, and it is valid if its **counterexample set* is inconsistent. More specifically, a logic is any particular formal system of axioms and rules of inference, or the arrangement of elements in a computer designed to perform a specified computation; and more generally logic is any sound or valid method of argument or reasoning, or **rational* thinking as distinct from irrationality. See also *ANALYTIC STATEMENT*, *BICONDITIONAL*, *BOOLEAN*, *CONDITIONAL REASONING*, *DEONTIC LOGIC*, *FUZZY LOGIC*, *INTERPRETATION (3)*, *LEMMA (1)*, *LOGICAL ANALYSIS*, *LOGICAL POSITIVISM*, *MODAL LOGIC*, *MONOTONICITY*, *MOOD (3)*, *NEGATION (3)*, *PROPOSITIONAL CALCULUS*, *QUANTIFIER (1)*, *SENTENCE FUNCTOR*, *SYLLOGISM*, *SYNTHETIC STATEMENT*, *TRUTH FUNCTOR*, *TRUTH TABLE*. **logical** *adj.* [From Greek *logike* (*techne*) (art) of reason, from *logikos* of or relating to speech or reasoning, from *logos* word, discourse, or reason]

logical analysis *n.* In **logic*, the process of combining short sentences into longer sentences and then finding other sentences that mean the same as the sentences built up in this way. It is an activity somewhere between translating and paraphrasing, and it can be performed quite mechanically, according to strict rules. Some logicians believe that it uncovers the true underlying forms of the sentences that they analyse, whereas others believe that it is part of an enterprise to replace natural languages such as English with a new and more rational language. See also *PROPOSITIONAL CALCULUS*, *TRUTH TABLE*.

logical empiricism *n.* An influential approach to the philosophy of science, less radical than **logical positivism*, associated especially with the writings of three US philosophers of science, namely the German-born
*****ebook converter DEMO Watermarks*****

Rudolph Carnap (1891–1970), the Czechoslovakian-born Ernest Nagel (1901–85), and the German-born Hans Reichenbach (1891–1953), according to which the aim of research in both the natural and social sciences is the discovery and justification (testing) of general laws, a sharp distinction being drawn between the context of discovery and the context of justification. *See also* [EMPIRICISM](#), [FALSIFIABILITY](#).

logical positivism *n.* A largely obsolete philosophical doctrine that rejected metaphysics, theology, and ethics as meaningless and held that the only meaningful [*propositions](#) (1) are those consisting of elementary propositions that are either tautological or empirically verifiable. *See also* [CONFIRMATION BIAS](#), [EMPIRICISM](#), [FALSIFIABILITY](#), [HUME’S FORK](#), [OPERATIONALISM](#). *Compare* [LOGICAL EMPIRICISM](#), [POSITIVISM](#) (1).

log-interval scale *n.* A scale of measurement in which numbers are assigned so that ratios between values reflect ratios in the [*attribute](#) being measured, familiar examples being density (mass divided by volume) and fuel efficiency in miles per gallon or kilometres per litre. *See also* [MEASUREMENT LEVEL](#), [SCALE](#) (1). *Compare* [ABSOLUTE SCALE](#), [INTERVAL SCALE](#), [NOMINAL SCALE](#), [ORDINAL SCALE](#), [RATIO SCALE](#). [So called because the logarithms of the scale scores form an interval scale, the reason being that the ratio $\log(a/b) = \log a - \log b$]

log-linear analysis *n.* In statistics, a technique for analysing [*frequency](#) (2) data to investigate the relationships among the variables in a cross-tabulation by modelling the logarithm of the frequency in a cell as a function of [*main effect](#) and [*interaction effects](#). Unlike the [*chi-square test](#), log-linear analysis is capable of analysing the effects of more than one independent variable on a dependent variable and of estimating not only [*main effects](#) but also [*interaction effects](#). *See also* [MULTIWAY FREQUENCY ANALYSIS](#), [SATURATION](#) (2).

logogen *n.* A representation of a word or other verbal unit in long-term memory, activated by speech sounds, writing, or an object or event to which it refers. In [*tachistoscopic](#) word recognition, for which the concept was originally devised, each logogen has a resting activation level, and if it receives evidence that it corresponds to the stimulus presented, its activation

*****ebook converter DEMO Watermarks*****

level increases: for example, if the observer recognizes the first letter of the display as a *p*, then in the observer's long-term memory all the logogens beginning with *p* are slightly activated, and as further evidence accumulates, if the activation level of a logogen exceeds a certain threshold level (threshold levels being lower for more common verbal expressions), then the logogen 'fires' and the corresponding verbal unit is recognized. The term was introduced by the English cognitive psychologist John Morton (born 1933) in an article in the journal *Psychological Review* in 1969, and the theory has been modified several times since then by Morton and others. *Compare IMAGEN*. [From Greek *logos* a word + *genes* born]

logograph *n.* A representation of a complete **morpheme*, word, or phrase in a single character or symbol, as in the writing systems of China and Japan or internationally recognized symbols such as % for *per cent*, ÷ for *divided by*, @ for *at*, © for *copyright*, and so on. The great Chinese dictionary of K'ang Hsi (1662–1722) contains almost 50,000 logographs, but basic literacy in modern Chinese is usually assumed to require knowledge of some 2,000 basic logographs, and the Japanese Ministry of Education prescribes 1,850 characters as essential for everyday use, of which 881 are taught to elementary schoolchildren. Also called a *logogram*. *See also KANJI*. *Compare IDEOGRAPH, PICTOGRAPH*. **logographic** *adj.* [From Greek *logos* a word + *graphein* to write]

logography *n.* A system of writing based on **logographs*. *Compare PHONOGRAPHY*. **logographic** *adj.*

logorrhoea *n.* Excessive, uncontrollable talking or verbal diarrhoea. US *logorrhea*. Also called *lalorrhoea*. [From Greek *logos* a word + *rhoia* a flow]

logotherapy *n.* A form of **psychotherapy* developed by the Austrian psychiatrist Viktor E. Frankl (1905–97) that capitalizes on people's will to meaning (rather than their will to power or the will to pleasure), attempts to restore a sense of meaning by encouraging meaningful and creative activities and experiences of art, nature, and culture, and encourages self-acceptance and an appreciation of one's place in the world by a close study of one's attitudes to work, love, and life in general, using techniques such as **paradoxical intention* and **de-reflection*. [From Greek *logos* word,

*****ebook converter DEMO Watermarks*****

discourse, or reason + English *therapy*, intended to denote meaning-centred therapy]

Lomotil *n.* A proprietary name for a **narcotic* drug containing an antiperistaltic agent (diphenoxylate hydrochloride) and an anticholinergic agent (atropine sulphate), used in the treatment of diarrhoea and sometimes taken as a street drug for its psychotropic effects. [Trademark]

longitudinal fissure *n.* The long deep groove separating the two **cerebral hemispheres* of the brain. Also called the *interhemispheric fissure*, *principal sulcus*, *longitudinal sulcus*, or *sulcus principalis*. [From Latin *longitudo*, *longitudinis* length, from *longus* long]

longitudinal study *n.* A research design in which the same sample of research participants or subjects is examined repeatedly over an extended span of time, typically to investigate problems of developmental psychology. *See also* *PANEL STUDY*. *Compare* *CROSS-SECTIONAL STUDY*.

long-sightedness *n.* A non-technical name for **hyperopia*.

long-term memory *n.* A type of **memory* containing information that is stored for periods ranging from about 30 seconds to many decades, often differentiated into **episodic memory* for events and experiences and **semantic memory* for information about the world, although **perceptual memory* may not fall into either category. Also called *secondary memory*. *See also* *ACT**, *DECLARATIVE MEMORY*, *EPISODIC MEMORY*, *LEVELS OF PROCESSING*, *PROCEDURAL MEMORY*, *SEMANTIC MEMORY*, *WORKING MEMORY*. *Compare* *SENSORY MEMORY*, *SHORT-TERM MEMORY*. **LTM** *abbrev.*

long-term potentiation *n.* A process necessary for **consolidation* of certain types of memory traces, occurring prominently in the **hippocampus* but also in other brain regions, involving cells showing increased sensitivity to new stimulation as a result of prior excitation, believed to be based on **Hebb synapses*. It is promoted by **opiates*, **noradrenalin* (norepinephrine), and **dopamine*. **LTP** *abbrev.* [From Latin *potentia* power or force + *-ation* indicating a process or condition]

long-term store *n.* Another name for **long-term memory*. **LTS** *abbrev.*

look-and-say method *n.* Another name for the **whole-word method*.

looming *n.* Accelerating increase in the **angular size* of a visual image, usually indicating that an object is approaching the face and that a collision is imminent, eliciting reflex avoidance reactions in most animals, including humans even in early infancy, but triggering landing behaviour in flies and other insects. Also called *retinal expansion*.

loosening of associations *n.* A form of **thought disorder*, closely related to **cognitive derailment*, characterized by speech that shifts between topics only minimally related to one another, usually without the speaker being aware of the disconnectedness of the stream of ideas. *See also* **HOMONYM SYMPTOM**. *Compare* **DISORGANIZED SPEECH**, **DISORGANIZED THINKING**, **INCOHERENCE**.

lorazepam *n.* A **benzodiazepine* drug used as an **anxiolytic* and **sedative*. Also called *Ativan* (trademark).

lordosis *n.* Arching of the spine with a concave back and raised pelvis, a posture adopted by females of many animal species when sexually aroused. It is contrasted with kyphosis (hunchback curvature), or scoliosis (lateral curvature). [From Greek *lordos* bent back + *-osis* indicating a process or state]

lordosis quotient *n.* A standard index of the relative sexual receptivity of a female animal in the presence of males, given by the number of times the female adopts a posture of **lordosis* in a specified time period divided by the number of times a male mounts her.

loss aversion *n.* The observation that a loss generally has a greater subjective effect than an equivalent gain. *See* **PROSPECT THEORY**. *See also* **ENDOWMENT EFFECT**. *Compare* **RISK AVERSION**. **loss-averse** *adj.*

lost-letter technique *n.* An **unobtrusive measure* of attitudes in which

stamped addressed envelopes are scattered in public places, as if left by accident, the proportion being posted by members of the public and turning up at the addresses on the envelopes providing a crude index of attitudes in the community. For example, if half the envelopes are addressed to a pro-abortion organization and half to an anti-abortion organization, and if equal numbers of pro-abortion and anti-abortion envelopes are distributed but significantly more of the anti-abortion envelopes are returned, then it may be concluded that members of the community are more favourably disposed towards the anti-abortion than the pro-abortion cause. The technique was introduced by the US psychologist Stanley Milgram (1933–84) and colleagues in an article in the journal *Public Opinion Quarterly* in 1965.

loudness *n.* The experienced or subjective intensity of sound, corresponding to its **decibel* sound pressure level, its standard unit of measurement being the **phon*. Also called *volume*, though that word carries further connotations. *See also* *AMPLITUDE*, *DECIBEL*, *EQUAL-LOUDNESS CONTOUR*, *LOUDNESS LEVEL*, *RECRUITMENT (2)*, *VOLUME (2)*. **loud** *adj.*

loudness level *n.* In relation to any specified sound, the intensity level in **decibel* sound pressure level of a **pure tone* with a frequency of 1,000 hertz (about two octaves above Middle C) that is judged by the listener to be equivalent to it in loudness. *See also* *EQUAL-LOUDNESS CONTOUR*, *PHON*.

loudness matching *n.* In **psychophysics*, a procedure in which a listener adjusts the intensity of a tone until it seems equal in loudness to a comparison tone, used to map **equal-loudness contours*.

loudness recruitment *n.* Another name for **recruitment (2)*.

Lou Gehrig's disease *n.* Another name for **amyotrophic lateral sclerosis*. [Named after an American baseball player Henry Louis Gehrig (1903–41), known as the Iron Horse, who died of it]

love *n.* An intense feeling of fondness or attraction, deeper and stronger than liking, especially when associated with a romantic or sexual attachment to someone. According to a popular taxonomy proposed by the Canadian sociologist John Alan Lee (1933–2013) in *The Colors of Love: An*
*****ebook converter DEMO Watermarks*****

Exploration of the Ways of Loving (1973), there are three primary and three secondary types of love that blend into different shades like colours, the three primary types being *eros* (erotic or passionate love), *ludus* (ludic or playful love), and *storge* (storgic or friendly/affectionate love), and the three secondary types *pragma* (pragmatic or utilitarian love, a combination of ludus and storge), *mania* (manic or obsessive/possessive love, a combination of eros and ludus), and *agape* (agapic or brotherly love, an altruistic or selfless combination of eros and storge). According to the *triangular theory* of love proposed in 1986 by the US psychologist Robert J(effrey) Sternberg (born 1949), there are three basic components of love, namely *passion* (sexual desire), *intimacy* (confiding and sharing feelings), and *commitment* (intention to maintain the relationship), different combinations of the three components yielding eight basic types: *non-love* (none of the three components present), *infatuated love* (passion only), *liking/friendship* (intimacy only), *empty love* (commitment only), *romantic love* (passion and intimacy), *companionate love* (intimacy and commitment), *fatuous love* (passion and commitment), and *consummate love* (passion, intimacy, and commitment). See also [ATTACHMENT THEORY](#), [EROS](#), [GENITAL LOVE](#), [LIBIDO](#). Compare [ROMANTIC LOVE SCALE](#).

love, genital See [GENITAL LOVE](#).

love scale See [ROMANTIC LOVE SCALE](#).

lowball technique *n.* A technique for eliciting [*compliance](#) that is most often used in commercial transactions. A customer is first induced to agree to purchase an item by being quoted an unrealistically low price. Before the deal is completed, the salesperson claims to have discovered a mistake and tells the customer that the sale can go ahead only at a much higher price. Having made a commitment, the customer is more likely to agree than if the true price were revealed at the outset. The technique was named and first studied experimentally in 1978 by the US social psychologist Robert B(eno) Cialdini (born 1945), who discovered it while being trained as a car salesman. Cialdini and several colleagues performed a field experiment in which they first tried to persuade students to agree to volunteer to serve as experimental participants, and 56 per cent agreed. They then told the volunteers that the study was scheduled for 7 a.m., and the volunteers were given the

*****ebook converter DEMO Watermarks*****

opportunity to withdraw, but none did so, and 95 per cent of them actually turned up at the appointed time. However, when a control group were asked to participate and were told the unsocial timing of the experiment up front, only 24 per cent agreed to participate. *See also* [DOOR-IN-THE-FACE TECHNIQUE](#), [FOOT-IN-THE-DOOR TECHNIQUE](#). **lowballing** *vb.* Using the lowball technique. [From *lowball* in baseball, a ball pitched to pass over the plate below the level of the batter's knees, alluding to a quoted price or estimate that is deceptively or misleadingly low]

lower threshold *n.* The lesser of the two thresholds determined by the **method of limits*.

low-pass filter *See* [BAND-PASS FILTER](#).

low vowel *n.* Another name for an **open vowel*.

LSD *abbrev.* Lysergic acid diethylamide, a crystalline compound first synthesized from lysergic acid in 1943 and since the 1960s widely used as a street drug. It acts as a **serotonin *agonist* (3) and has powerful **hallucinogenic* and **psychedelic* effects that can mimic **psychotic* (1) states. Its most common street name is *acid*. *See also* [HALLUCINOGEN-RELATED DISORDERS](#), [PHANTASTICANT](#).

lucid dream *n.* A **dream* (1) in which the dreamer is aware of being asleep and dreaming and is sometimes able to control the course of events in the dream. [From Latin *lucidus* clear, from *lucere* to shine, from *lux* light]

luciferase *n.* An enzyme that is present in all **bioluminescent* organisms and that reacts with **luciferin*, producing light as the luciferin returns to its ground state after enzymatic oxidation. [From Latin *lucifer* light-bearer + Greek *-ase* denoting an enzyme, from *diastasis* separation]

luciferin *n.* A chemical compound involved in **bioluminescence*, present in certain organisms such as deep-sea fishes, fireflies, and glow-worms. It is oxidized by the enzyme **luciferase* and emits light on decaying to its ground state. [From Latin *lucifer* light-bearer + *-in(a)* indicating an organic

compound]

Luckiesh illusion *n.* A more appropriate name for what is usually called the ***Sander parallelogram**. [First published by the US lighting engineer and psychologist Matthew Luckiesh (1883–1967) in his book *Visual Illusions: Their Causes, Characteristics and Applications* (1922, p. 58)]

ludic love *n.* A primary type of ***love** that is playful and flirtatious. *Compare* AGAPIC LOVE, EROTIC LOVE, MANIC LOVE, PRAGMATIC LOVE, STORGIC LOVE. [From Latin *ludere* to play + *-ikos* of, relating to, or resembling]

lumen *n.* **1.** A unit of ***luminous intensity**, equal to the ***luminous flux** emitted or reflected in a solid angle of one steradian (a stereo radian or solid angle with its vertex at the centre of a sphere cutting off an area of the sphere's surface equal to the square of its radius) by a point source having a uniform intensity of one ***candela**. *See also* BRIL, FOOT-CANDLE. **Im abbrev.** **2.** A cavity within an organ, such as any of the hollows within the ***central nervous system** filled with cerebrospinal fluid, including the cerebral ***ventricles** and the ***central canal** of the spinal cord. [From Latin *lumen* light or aperture]

Luminal *n.* A proprietary name for the barbiturate drug ***phenobarbital** (phenobarbitone). [Trademark]

luminance *n.* The amount of light per unit area emitted or reflected by an object or surface, hence the intensity of the emitted or reflected light, giving rise to the visual sensation of ***brightness** or ***lightness**, its standard measure being in ***candelas** per square metre. *See also* CONTRAST RATIO, GELB EFFECT, KARDOS EFFECT, REFLECTANCE, TROLAND. *Compare* LUMINOSITY, LUMINOUS FLUX, LUMINOUS INTENSITY. **L abbrev.**

luminosity *n.* The perceived ***brightness** or ***lightness** of an object or surface emitting or reflecting light, corresponding to its physical ***luminance**.

luminosity coefficient *n.* Any of the weights attached to a wavelength in the ***luminous efficiency function**.

luminosity curve *n.* A graph depicting the intensity of light that is required at each point in the visible spectrum for the colours to appear equally bright, a **photopic luminosity curve* being required for vision in bright light and a **scotopic luminosity curve* for vision in dim light.

luminous efficiency function *n.* A function that predicts the perceived **brightness* of light as a weighted combination of its component wavelengths, the weights or luminosity coefficients being derived from averaged **luminosity curves* of representative viewers. A *photopic luminous efficiency function* is required for cone-mediated vision in bright light and a *scotopic luminous efficiency function* for rod-mediated vision in dim light.

luminous flux *n.* A measure of the rate of emission or reflection of light from an object or surface, its standard unit of measurement being in **lumens*. Symbol: Φ . Compare LUMINANCE, LUMINOUS INTENSITY.

luminous intensity *n.* The amount of light per unit area emitted or reflected by an object or surface, expressed in terms of **luminous flux* per steradian (a stereo radian or solid angle with its vertex at the centre of a sphere cutting off an area of the sphere's surface equal to the square of its radius), its standard unit of measurement being the **candela*. See also PHOTOMETER. Compare LUMINANCE, LUMINOUS FLUX. **I** abbrev.

lunacy *n.* An obsolete term for any severe **mental disorder*, thought to be associated with phases of the moon. Empirical studies have consistently failed to find any significant correlation between phases of the moon and admissions to mental hospitals, suicides, or any other objective index of mental disorder. **lunatic** *n.* One afflicted with lunacy. [From Latin *luna* the moon]

lunatic asylum *n.* An obsolete term for a mental hospital.

lunatic fringe *n.* An abusive term for people who adopt or support views that others consider extreme or fanatical.

luteal phase *n.* The second phase of the **oestrous cycle* or **menstrual*

cycle, characterized by the formation of the ***corpus luteum** and secretion of ***progesterone** from it. In the absence of pregnancy, it culminates in a rapid fall in progesterone and the onset of ***menstruation**, which in turn is followed by the ***follicular phase**. Also called the *secretory phase*. See also **LATE LUTEAL PHASE DYSPHORIC DISORDER**, **LUTEINIZING HORMONE RELEASING HORMONE**. Compare **FOLLICULAR PHASE**, **MENSTRUAL PHASE**. [Named after the corpus luteum]

luteinizing hormone *n.* A gonadotrophic hormone secreted by the anterior pituitary. In females, it stimulates ***ovulation** and the formation of the ***corpus luteum**; in males it stimulates ***androgen** secretion. Also called *interstitial-cell-stimulating hormone (ICSH)*, especially in males. See also **LUTEINIZING —HORMONE RELEASING HORMONE**, **OESTROUS CYCLE**. Compare **FOLLICLE-STIMULATING HORMONE**. **LH** abbrev. [From Latin *luteum* egg yolk, from *luteus* yellow]

luteinizing hormone releasing hormone *n.* A ***releasing hormone** that is secreted by the hypothalamus in response to a ***biological clock** at the beginning of a woman's ***menstrual cycle** and that in turn stimulates the pituitary gland to secrete ***luteinizing hormone**. Also called *gonadotrophin-releasing hormone* **LH-RH** abbrev.

luteotrophic hormone *n.* Another name for ***prolactin**. Also spelt *luteotropic hormone*. Also called *luteotrophin* (or *luteotropin*). **LTH** abbrev. [From Latin *luteum* egg yolk, from *luteus* yellow + *trophe* nourishment]

Luvox *n.* A proprietary name for the antidepressant drug ***fluvoxamine**. [Trademark]

lux *n.* The standard SI unit of ***illuminance** or illumination, equal to 1 ***lumen** per square metre, equivalent to 0.0929 foot-candle. [From Latin *lux* light]

lycanthropy *n.* 1. The magical transformation of a person into a wolf. 2. A ***delusion** that one is a wolf. Cases have been traced back to Nebuchadnezzar II (605–562 BC), King of Babylon, who was apparently so deluded. [From Greek *lykos* a wolf + *anthropos* a person]

lymph *n.* The pale yellow fluid, consisting chiefly of a liquid similar to blood plasma and white blood cells or leucocytes, that is collected from body tissues and transported through a network of capillary vessels called the lymphatic system before flowing passively into the bloodstream through the thoracic duct. [From Latin *lympa* water, cognate with Greek *nymphē* a nymph]

lymphocyte *n.* Any of a group of **leucocytes*, including **B lymphocytes* and **T lymphocytes*, that are present in the blood and lymph and that play an important part in the **immune system*. *See also* GRANULOCYTE, MONOCYTE. [From Latin *lympa* water + Greek *kytos* a vessel]

Lysenkoism *n.* A form of **neo-Lamarckism*, based on the assumption that acquired characteristics can be passed on by heredity. It seriously handicapped Soviet biology and agricultural production from 1948 until the death of Stalin in 1953. [Named after the Ukrainian geneticist and agronomist Trofim Denisovich Lysenko (1898–1976) who propounded it in his book *Agrobiology* in 1948, which earned him the Stalin Prize in 1949]

lysergic acid diethylamide *See* LSD.

lysosome *n.* Any of the tiny particles containing digestive enzymes that are present in the cytoplasm of most cells, contained within membranes to prevent self-digestion of the cells. *See also* RETROGRADE TRANSPORT. [From Greek *lysis* loosening + *soma* a body]



mace *n.* A spice prepared by grinding the dried, reddish, fleshy outer covering of the nutmeg. Not to be confused with ***Mace**. See **MYRISTIN**. [From Latin *macir* mace]

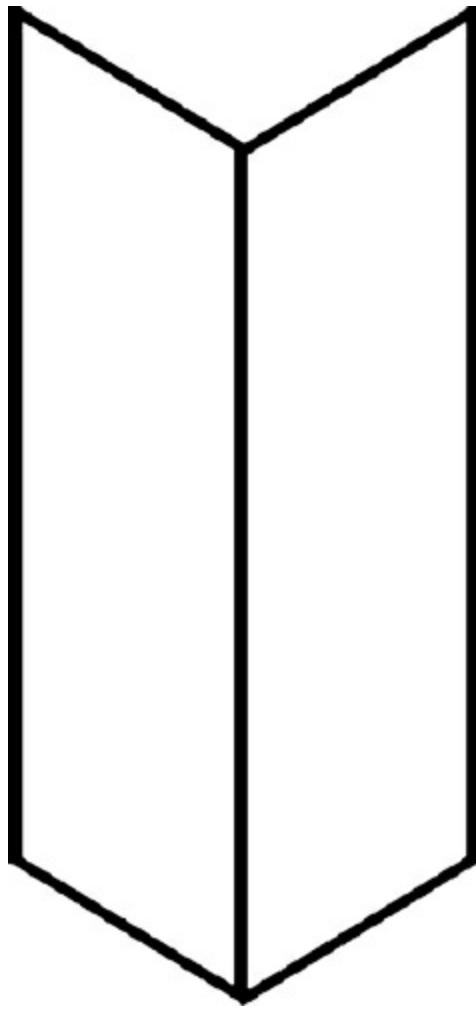
Mace *n.* A liquid that, when sprayed in a person's face, acts as a type of ***tear gas**, causing temporary blindness, dizziness, immobilization, and sometimes nausea, and that is used as an ***incapacitant** for personal defence and crowd control. Not to be confused with ***mace**. Compare **BZ GAS**, **CN GAS**, **CS GAS**, **PEPPER SPRAY**. [Trademark]

Mach band *n.* An illusory light or dark strip along the edge of a blurred contour between light and dark areas of an image, the strip on the light side being lighter than the light area of the image and the strip on the dark side darker than the dark area, familiar examples being the light and dark strips that can be seen at the outer and inner edges, respectively, of a blurred shadow cast by the sun or by a table lamp. Such bands have been incorporated deliberately into paintings by artists such as the French neo-impressionist and pointillist Georges Seurat (1859–91), and the phenomenon is called *irradiation* in the literature of art criticism. See also **CRAIK–O'BRIEN EFFECT**. [Named after the Austrian physicist, philosopher, and psychologist Ernst Mach (1838–1916) who first drew attention to the phenomenon in 1865]

Machiavellianism *n.* A strategy of social conduct that involves manipulating others for personal advantage, often to the detriment of the people being thus exploited. The concept was introduced by the US psychologists Richard Christie (1918–92) and Florence L. Geis (1933–93) in

a book chapter in 1968 and discussed in their edited book *Studies in Machiavellianism* (1970), and it is sometimes interpreted as a personality trait. In an experiment in which groups of three players had to reach agreements as to how to divide \$10 among themselves, people who had scored high on the ***Mach scale** tended to end up with significantly more money (\$5.57 on average) than low scorers (\$1.29 average), the chance expectation, had Machiavellianism been unrelated to outcomes, being \$3.33, and other evidence has accumulated to show that high scorers have a propensity to manipulate others to their own advantage, often by lying and cheating. [Named after the Florentine statesman and political philosopher Niccolò Machiavelli (1469–1527) who advocated manipulative political behaviour in his posthumous book *Il Principe* (The Prince, 1532)]

Mach illusion *n.* A visual illusion consisting of an ambiguous line drawing of a folded sheet of paper (see [illustration](#)). *See also* [AMBIGUOUS FIGURE](#). [Named after the Austrian physicist, philosopher, and psychologist Ernst Mach (1838–1916) who published it in 1866]



Mach illusion. It can be seen as either the inside or the outside of a fold.

machine intelligence *n.* Another name for **artificial intelligence*.

Machover Draw-a-Person Test See [DRAW-A-PERSON TEST](#).

Mach scale *n.* A questionnaire designed to measure **Machiavellianism* as a personality trait. It contains items such as the following (agreement indicating high Machiavellianism): *The best way to handle people is to tell them what they want to hear*; *Anyone who completely trusts anyone else is asking for trouble*; and *It is safest to assume that all people have a vicious streak that will come out when it is given a chance*. The scale also contains items such as the following, agreement with which indicates low

Machiavellianism: *When you ask someone to do something for you, it is best to give the real reasons, rather than giving reasons that might carry more weight; One should take action only when sure it is morally right; and There is no excuse for lying to someone.* People who score high on the scale are called *high Machs* and people who score low are called *low Machs*. The scale was introduced in a book chapter in 1968 by the US psychologists Richard Christie (1918–92) and Florence L. Geis (1933–93) and discussed in their edited book *Studies in Machiavellianism* (1970). A version of the scale for use with children is called the *Kiddie Mach*. Also called the *Machiavellianism scale*.

macrocephaly *n.* Congenital enlargement of the head without increased intracranial pressure (*compare* **HYDROCEPHALUS**), resulting in some degree of ***intellectual disability**. **macrocephalic** *adj.* [From Greek *makros* large + *kephale* head]

macroevolution *n.* A relatively slow change brought about by ***natural selection**, leading to the emergence of a ***genus**, ***family (2)**, ***order (3)**, or ***class (2)** of organisms. *Compare* **MICROEVOLUTION**. [From Greek *makros* large + English *evolution*]

macroglia *n.* A generic name for three types of ***neuroglia** found in the central nervous system, namely ***astrocytes**, ***ependymal cells**, and ***oligodendrocytes**. *See also* **GLIA**. *Compare* **MICROGLIA**. [From Greek *makros* large + *glia* glue]

macromania *n.* An unusual name for ***megalomania**. [From Greek *makros* large + *mania* madness]

macrophage *n.* A large ***phagocytic** ***leucocyte** that is abundantly present in the blood, lymph, and connective tissues of most body organs and that ingests invading micro-organisms and scavenges damaged cells and cellular debris. *See also* **STEM CELL**. [From Greek *makros* large + *phagein* to eat]

macropsia *n.* Visual perception of objects as larger than they really are, usually resulting from damage to the ***retinas**, ***epilepsy**, or a ***somatic**
*****ebook converter DEMO Watermarks*****

symptom disorder. Also called *macropsy*. Compare **MICROPSIA**. [From Greek *makros* large + *opsis* sight, from *ops* an eye + *-ia* indicating a condition or quality]

macula *n.* A patch or spot, especially the patch of ***hair cells** aligned approximately horizontally in the ***utricle** and approximately vertically in the ***saccul** when the head is upright, projecting into the gelatinous otolith membrane in the ***vestibular system**. Also an abbreviated name for the ***macula lutea** of the retina. **maculae** *pl.* [From Latin *macula* a spot or stain]

macula lutea *n.* A small yellowish oval-shaped area in the centre of the ***retina**, where ***cones** are especially plentiful and vision most distinct, located 2 millimetres from the ***optic nerve**, containing the ***fovea**. Also called the *yellow spot*. See also **ARAGO PHENOMENON**, **COLOUR ZONE**. **maculae luteae** *pl.* **macular** *adj.* [From Latin *macula* spot + *lutea* yellow]

Madame Butterfly fantasy *n.* A recurrent ***daydream** that a departed loved one will return, found most often in 5–8-year-old children of divorced parents who fantasize about the absent parent returning. [Named after the eponymous heroine of Puccini's opera, *Madame Butterfly*]

mad cow disease *n.* A non-technical name for ***BSE**.

magazine training *n.* In experimental research with an animal in a ***Skinner box**, a preparatory process during which food is delivered without the animal having to press a lever, peck a key, or make any other response. Its purpose is to accustom the animal to the sound and sight of the food being delivered from the magazine to the food hopper so that this does not cause disturbance during the subsequent learning process.

Magendie's foramen *n.* The central opening in the roof of the fourth cerebral ***ventricle**, interconnecting with the ***subarachnoid** space. [Named after the French physiologist François Magendie (1783–1855) + Latin *foramen* a hole, from *forare* to bore or pierce]

Maggie illusion *n.* Another name for the ***Margaret Thatcher illusion**.

magical number seven *n.* A general limitation on human information processing capacity, according to a classic article in the journal *Psychological Review* in 1956 entitled ‘The Magical Number Seven Plus or Minus Two: Some Limits on Our Capacity for Processing Information’ by the US psychologist George A(mritage) Miller (1920–2012), who assembled evidence suggesting that the human mind has a span of absolute judgement that can distinguish about seven distinct categories, a span of **short-term memory* for about seven items, and a **span of apprehension* or attention that can encompass about six items at a time. *See also* [CHUNKING](#), [DYNAMIC MEMORY SPAN](#), [ICONIC STORE](#), [SUBITIZE](#).

magical thinking *n.* **Thinking* that one's thoughts on their own can bring about effects in the world or that thinking something amounts to doing it.

magic mushroom *n.* Any of a number of mushrooms containing substances that are taken as **psychedelic* or **hallucinogenic* drugs, notably the **fly agaric* mushroom *Amanita muscaria* and the **liberty cap* mushroom *Psilocybe semilanceata*. *See also* [TEONANACTYL](#).

Magnan sign *n.* A name given to **formication* when it occurs as a **withdrawal* symptom in cocaine users. Also called the *cocaine bug*. [Named after the French physician Valentin Magnan (1835–1916) who first described it in a co-authored article in 1889]

magnetic resonance imaging *See* [MRI](#).

magnetic sense *n.* A capacity possessed by some species of bacteria, bees, snails, birds, and fishes to detect the Earth's magnetic field, which acts as an aid to navigation. The navigation of European robins (*Erithacus rubecula*) can be altered by superimposing an artificial magnetic field, and homing pigeons with magnets attached to their heads become disoriented when the sky is overcast and they cannot use the sun as a compass. This sense modality has been most extensively studied in the rainbow trout, which can be conditioned to press a bar for food whenever it detects one magnetic field rather than another, and nerve impulses in response to magnetic fields

have been detected in its **trigeminal nerve*, which branches over the front of its head. The magnetic sense organ is believed to contain crystals of magnetite or loadstone, the mineral first used by humans to construct compasses. Chains of these crystals have been located in a discrete layer of the rainbow trout's snout, and they move when the fish changes its orientation to the Earth's magnetic field. Also called the *electromagnetic sense*. Compare ELECTRORECEPTOR.

magnetoencephalography *n.* A method of **brain* imaging through the recording of magnetic fields induced by the electrical activity of brain cells. **MEG** *abbrev.* [From Greek *magnetis* (*lithos*) magnesian (stone) + *enkephalos* the brain, from *en* in + *kephale* the head + *graphein* to write]

magnitude estimation *n.* A scaling method used in **psychophysics* in which an observer assigns numbers to a **variable* stimulus according to its apparent intensity, often after being presented with a **standard stimulus* and told what number to assign to it, as when an observer is told that a standard light stimulus should be assigned a brightness rating of 10 and the variable stimulus should be assigned numbers in relation to it. See also CROSS-MODAL MATCHING, DIRECT SCALING. Compare MAGNITUDE PRODUCTION.

magnitude matching *n.* An application of **cross-modal matching* in **psychophysics* designed to take account of different people's sensory sensitivity in a particular modality by comparing it with a sensation in a different modality. For example, groups of normal tasters and **supertasters* typically rate Coca-Cola slightly above the midpoint on a scale from zero to maximum sweetness, inviting the misleading interpretation that their taste sensations are similar. If both groups are then asked to match the taste sensation to the loudness of a tone, normal tasters typically choose a loudness of about 80 **decibels*, whereas supertasters choose about 90–100 decibels (twice to three times as loud), indicating that supertasters experience double to triple the sweetness of normal tasters.

magnitude production *n.* A **psychophysical* technique in which an observer adjusts a **variable stimulus* until it stands in some prescribed relation of magnitude to a **standard stimulus*, as when an observer adjusts a sound stimulus until it appears equal in loudness, twice as loud, or half as

*****ebook converter DEMO Watermarks*****

loud as a comparison sound. Also called the *production method*. See also [CROSS-MODAL MATCHING](#). Compare [MAGNITUDE ESTIMATION](#).

magnocellular nucleus *n.* A nucleus in the [*medulla oblongata](#), connected to the [*subcoerulear nucleus](#), responsible for [*REM atonia](#). [From Latin *magnus* large + *cella* a room, from *celare* to hide, alluding to the fact that it contains large cells]

magnocellular system *n.* The earlier evolved of the two major visual pathways, originating in large [*ganglion cells](#) in the [*retina](#), projecting to the bottom two layers of the [*lateral geniculate nucleus](#) that contain neurons with large cell bodies, and thence to layer 4C α of the [*primary visual cortex](#) (Area V1). It is characterized by colour-blindness, rapidly conducting axons responsible for perception of movement, high contrast-sensitivity responsive to small differences in brightness, and low resolution. Magnocellular neurons carry information about movement and depth but not colour, whereas some [*parvocellular](#) neurons carry high-resolution information about shape and others low-resolution information about colour and shades of grey. Also called the *magno system*. See also [M CELL \(Y CELL\)](#), [MT](#), [PARASOL CELL](#). Compare [PARVOCELLULAR SYSTEM](#). **M system** *abbrev.* [From Latin *magnus* large + *cella* a room, from *celare* to hide]

main effect *n.* In statistics, in data obtained from an [*analysis of variance](#) ([ANOVA](#)) or the transformed scores of a [*log-linear analysis](#), the mean change in scores resulting from a change in the level of a single independent variable or factor, averaged over all combinations of levels of the other factor(s). Compare [INTERACTION EFFECT](#).

mainline *vb.* In drug-culture slang, to inject a drug intravenously (into a vein). Compare [SKIN-POP](#).

maintenance behaviour *n.* Behaviour carried out by an animal for basic subsistence, including searching for food, finding or constructing suitable shelter, and mating. US *maintenance behavior*.

maintenance rehearsal *n.* The simple repetition (without elaboration) of items that need to be remembered in order to prevent them fading from
*****ebook converter DEMO Watermarks*****

***short-term memory**, as when a person repeats a telephone number over and over while searching for a pen and paper to write it down. It develops spontaneously in children at 6–7 years of age. *See also* **PHONOLOGICAL LOOP**, **REHEARSE (2)**. *Compare* **ELABORATIVE REHEARSAL**.

major affective disorders *n.* A generic name sometimes used to cover ***major depressive disorder** and ***bipolar disorders**.

major depressive disorder *n.* A ***depressive disorder** in ***DSM-5** characterized by one or more ***major depressive episodes** without any history of ***manic**, ***mixed**, or ***hypomanic** episodes. Up to 15 per cent of people with severe major depressive disorder commit suicide each year. Also called *major depression*. *See also* **ANTIDEPRESSANT**, **COGNITIVE THERAPY**, **INOSITOL**, **MHPG**. *Compare* **DYSTHYMIC DISORDER**, **PERSISTENT DEPRESSIVE DISORDER**. **MDD** *abbrev.*

major depressive episode *n.* A ***mood** episode, lasting at least two weeks, characterized by five or more of the following symptoms, including at least one of the first two, for at least two weeks: depressed mood or ***depression** most of the day, almost every day (possibly manifested as irritability in children and adolescents); markedly diminished interest or pleasure in almost all activities for most of the day; loss of appetite or a marked increase in appetite almost every day, leading to significant weight loss or gain; ***insomnia** (especially middle or terminal insomnia) or ***hypersomnia**; ***psychomotor agitation** (manifested by such behaviour as hand-wringing) or ***psychomotor retardation** (manifested by slowness of movement or speech); fatigue or loss of energy (***asthenia**); feelings of worthlessness or excessive or inappropriate guilt; indecisiveness or diminished ability to think or concentrate; recurrent thoughts of death or suicide. At some time in their lives, 5–10 per cent of men and 10–20 per cent of women in the US, the UK, and comparable industrialized countries experience a major depressive episode.

major epilepsy *n.* A form of ***epilepsy** in which ***tonic–clonic** convulsions occur. Formerly called *grand mal epilepsy*.

majority preference cycle *See* **CONDORCET'S PARADOX**.

*****ebook converter DEMO Watermarks*****

major solution *n.* In the **neo-Freudian* theory of the German-born US psychoanalyst Karen Horney (1885–1952), the repression of aspects of one's self that are in conflict with one's **idealization* of oneself.

major tranquillizer *n.* An obsolescent name for a **neuroleptic* (1) drug. US *major tranquilizer*. Compare MINOR TRANQUILLIZER.

Makaton *n.* A simplified **sign language*, based on **British Sign Language* but internationally recognized, specifically designed for people with **learning* difficulties of all kinds and their parents and carers, developed in 1972–3 at Botley's Park Hospital in Surrey, England, by the English speech therapist Margaret Walker (born 1938), and revised in 1976, the revised version containing approximately 350 signs and associated words. [Formed from the initial letters of the first names of its inventor, Margaret Walker, and the two psychiatric hospital visitors who assisted in its development, Kathy Johnston and Tony Cornforth]

Make-a-Picture-Story Test *n.* A **projective test* devised by the US psychologist Edwin S. Shneidman (1918–2009) and first published in 1947, often described as a cousin of the **TAT*, consisting of a series of background pictures—a living room, a street, a bridge, and so on—together with 67 human and animal cutout figures, the respondent's task being to place one or more of the figures on a background and then to tell a story about the resulting picture. **MAPS** *abbrev.*

maladi moun *n.* A **culture-bound syndrome* included in **DSM-5*, found among Haitian communities, involving a belief that illnesses such as **depression* or **psychosis*, or that academic failure or problems of daily living, especially when these have followed economic, occupational, or other successes or gains, have been caused by the envy and hatred of enemies. Compare MAL DE OJO. [From Haitian creole *maladi moun* humanly caused illness]

maladjustment *n.* Failure to deal adequately with problems of adaptation to physical, emotional, social, economic, or occupational circumstances, events, or experiences, generally leading to coping difficulties

or symptoms of **stress* (1).

malapropism *n.* The unintentional replacement of a word with another word of similar sound, especially when the effect of the error is humorous, as in the phrase *expletive delighted* instead of *expletive deleted*. Compare *CATACHRESIS* (a more general term). [Named after Mrs Malaprop in Sheridan's play, *The Rivals* (1775), from French *mal à propos* out of place or inappropriate]

mal de ojo *n.* A **culture-bound syndrome*, sometimes referred to in English as the *evil eye*, widespread throughout Mediterranean cultures and Latino communities in other parts of the world, to which children are supposed to be especially vulnerable, believed to be caused by a malignant look or glance from a malevolent person, leading to insomnia, crying without provocation, diarrhoea, vomiting, and fever. Compare *MALADI MOUN*. [From Spanish *mal* illness + *de* of + *ojo* an eye]

mal de pelea *n.* A variant name for **amok* in Puerto Rico. [From Spanish *mal* illness + *de* of + *pelea* tussle or quarrel]

male hypoactive sexual desire disorder *n.* One of the **sexual dysfunctions* in **DSM-5*, characterized by persistent or recurrent absence or deficiency of sexual fantasy and desire in men, for at least six months, causing significant distress or problems of interpersonal interaction. It is not diagnosed if it is attributable to a drug or another medical condition. Compare *PERSISTENT SEXUAL AROUSAL SYNDROME*. [From Greek *hypo* under + Latin *activus* in a state of action, from *actus* a doing + *-ivus* tending]

male menopause See *ANDROPAUSE*, *CLIMACTERIC*, *IRRITABLE MALE SYNDROME*.

male mouse effect *n.* Another name for the **Whitten effect*.

male orgasmic disorder *n.* A term used in **DSM-IV* for what DSM-5 separated into **delayed ejaculation* and **premature (early) ejaculation*.

mali-mali See **LATAH**.

malinger *n.* Intentional feigning or exaggeration of physical or psychological symptoms, motivated by external incentives such as avoidance of work or military service, receipt of financial compensation, evasion of criminal prosecution, or procurement of prescription drugs. See also **STENGER TEST**. Compare **COMPENSATION NEUROSIS**, **FACTITIOUS DISORDER**, **MUNCHAUSEN SYNDROME**, **SOMATIC SYMPTOM DISORDER**. **malinger** *vb.* [From French *malindre* sickly, perhaps from *mal* badly + Old French *haingre* feeble]

malleus *n.* The outermost and largest of the three small bones in the ***middle ear**, connected to the ***tympanic membrane** and capable of transmitting sound vibrations to the incus. Referred to non-technically as the *hammer*. Compare **INCUS**, **STAPES**. [From Latin *malleus* a hammer, alluding to its resemblance to a blacksmith's hammer]

mal puesto *n.* A name for ***rootwork** in Spanish-speaking communities of the Caribbean and the southern United States, where it is also called *brujería*. [Spanish *mal puesto* badly placed, from *mal* badly + *poner* to place]

mamillary body *n.* An alternative spelling of *mammillary body*.

mammary gland *n.* The distinctive milk-producing ***exocrine gland** of mammals, consisting in humans of a network of tubes and cavities feeding the external nipple of the breast. [From Latin *mamma* a breast]

mammillary body *n.* Either of two small rounded protrusions from the back of the ***hypothalamus**, forming the terminal pillars of the ***fornix**, implicated in emotion, sexual arousal, and memory. Also spelt *mamillary body*. [From Latin *mammilla* a nipple, diminutive of *mamma* a breast]

mammillothalamic tract *n.* A bundle of nerve fibres connecting the ***mammillary bodies** to the ***thalamus**.

mana *n.* A Melanesian and Polynesian word (also found in Maori), imported into ***analytical psychology** by Carl Gustav Jung (1875–1961),

*****ebook converter DEMO Watermarks*****

denoting a supernatural life force, normally originating from the head or the spirit world, that can be concentrated in other people or objects and inherited and transmitted between people, and that confers high social status and ritual power.

mand *n.* In the writings of the US psychologist B(urrhus) F(rederic) Skinner (1904–90), a verbal utterance that makes a demand and is reinforced by fulfilment of the demand, a typical example being *Please shut the door*. Compare TACT (2). [From (*de*)mand]

mandala *n.* In Hindu and Sanskrit art, a design, usually circular in form, symbolizing the universe. A version of it, comprising a circle divided into four equal sectors (or a circle inscribed in a square, or a square inscribed in a circle), was imported into *analytical psychology by Carl Gustav Jung (1875–1961) as a symbol of the self as a psychic unity, which can appear in dreams or paintings during *Jungian analysis. See also INDIVIDUATION. [From Sanskrit *mandala* a circle]

mania *n.* 1. A *mood disorder characterized by *manic episodes. See also ANTIMANIC, HYPERMANIA, HYPOMANIC EPISODE, INOSITOL. 2. An obsessional preoccupation with a particular idea or activity. See also DANCING MANIA, DIPSOMANIA, DRAPETOMANIA, EGOMANIA, EROTOMANIA, GRAPHOMANIA, KLEPTOMANIA, MEGALOMANIA, MONOMANIA, MONOPEDE MANIA, NECROMANIA, NYMPHOMANIA, PORNOGRAPHOMANIA, PYROMANIA, RHINOTILLEXOMANIA, THANATOMANIA, TRICHOTILLOMANIA. **maniac** *n.* A person with a mania (1). See also LOVE. **manic** *adj.* Of or pertaining to mania (1). **maniacal** *adj.* Of, pertaining to, or resembling a maniac. [From Greek *mania* madness]

manic–depressive psychosis *n.* Another name for *bipolar disorder. Also called *manic–depressive disorder* or *manic–depressive reaction*. **MDP** abbrev.

manic episode *n.* A *mood episode lasting at least one week, characterized by continuously elevated, expansive, or irritable mood, sufficiently severe to cause marked impairment in social or occupational functioning or to require hospitalization, during which there may be inflated *self-esteem or *grandiose ideas or actions, decreased need for sleep (almost

*****ebook converter DEMO Watermarks*****

invariably), increased talkativeness, **flight of ideas*, distractibility, increased goal-oriented activity, **psychomotor agitation*, and risky pleasure-seeking activities such as spree shopping, sexual indiscretions, or imprudent financial investments. *See also* *ANTIMANIC*, *INOSITOL*. *Compare* *MAJOR DEPRESSIVE EPISODE*, *MIXED EPISODE*. [From Greek *mania* madness]

manic love *n.* A secondary form of **love* that is obsessive and/or possessive, often being associated with jealousy, and is a combination of **erotic love* and **ludic love*. *Compare* *AGAPIC LOVE*, *PRAGMATIC LOVE*, *STORGIC LOVE*.

Manifest Anxiety Scale *n.* A questionnaire designed to measure the personality trait of overt or conscious anxiety, developed by the US psychologist Janet A. Taylor (born 1923, later called Janet Taylor Spence) from the pool of items used in the **MMPI*, and published by her in the *Journal of Abnormal and Social Psychology* in 1953. Also called the *Taylor Manifest Anxiety Scale* or the *Iowa Manifest Anxiety Scale*. **MAS** abbrev.

manifest content *n.* In **psychoanalysis*, the narrative substance of a **dream* (1) as it is recalled by the dreamer, in contradistinction to the **latent content* that may be exposed by **interpretation* (2) of the **dreamwork*.

manner of articulation *n.* The way in which the airstream, usually from the lungs, is interfered with in order to produce a speech sound. In English, there are five or six manners of articulation: **plosive*, **fricative*, **affricate*, **nasal* (2), **liquid*, and **semivowel*, the last two usually being combined as **approximant*. *See also* *ARTICULATION*.

Mann–Whitney U test *n.* In statistics, a widely used **distribution-free test*, more powerful than the **median test*, of the null hypothesis that two independent samples come from the same population. The distribution-dependent alternative is the **independent samples t test*. [Named after the Austrian-born US mathematician Henry Berthold Mann (1905–2000) and the US statistician D(onald) Ransom Whitney (1915–2001) who jointly published the test in 1947]

Mantel–Haenszel chi-square *n.* In statistics, an index of linear
*****ebook converter DEMO Watermarks*****

association between the row and column variables in a cross-tabulation, calculated by multiplying the [*product-moment correlation coefficient](#) by one less than the number of scores. [Named after the US biostatistician Nathan Mantel (1919–2002) and epidemiologist William Haenszel (1910–98) who published it in 1959]

map distance *n.* A measure of the relative distance or separation of two [*gene](#) loci in terms of the percentage of progeny inheriting one but not the other. It ranges from zero to 100, thus 10 map units represents ten per cent [*discordant](#) progeny, 15 map units represents fifteen per cent discordant progeny, and so on.

Marbe's law *n.* The proposition that the higher the population frequency of a particular response to an item in a [*word-association test](#), the shorter the [*response latency](#) when that response is given by an individual respondent. Also called the *Marbe-Thumb law*. [Named after the French-born German psychologist Karl Marbe (1869–1953) who formulated it in 1901]

Margaret Thatcher illusion *n.* The natural appearance of an inverted image of a human face in which the eyes (with their eyebrows) and mouth are inverted relative to the face, although the image appears grotesquely hideous when the face as a whole is viewed the right way up, so that only the eyes and mouth are inverted (see [illustration](#)). The illusion of normality in the inverted image is believed to be due to the [*differential inversion effect](#) and the associated difficulty of recognizing configurational incongruities in an inverted face. Also called the *Maggie illusion* or the *Thatcher illusion*. [So called because the British psychologist Peter G. Thompson (born 1950) who discovered it in 1980 originally used a photograph of the newly installed UK Prime Minister Margaret Thatcher (1925–2013)]



Margaret Thatcher illusion. The inverted face looks almost normal, but it becomes grotesquely hideous when turned the right way up.

marginal consciousness *n.* The portion of consciousness that is not the focus of **attention* and of which one is only dimly aware.

marginals *n.* In statistics, the row and column totals of a cross-tabulation.

margin of attention *n.* Another name for **marginal consciousness*.

margin of consciousness *n.* Another name for **marginal consciousness*.

marijuana *n.* The cut and dried upper leaves, flowering tops, and young stems of the female **cannabis* plant, rolled into cigarettes and smoked as a psychotropic drug. [From Mexican Spanish *marihuana*, from Portuguese *mariguango* intoxicant]

*****ebook converter DEMO Watermarks*****

marital therapy *n.* Any form of **psychotherapy* aimed at treating problems of married couples. *Compare* COUPLES THERAPY.

marketing orientation *n.* In **neo-Freudian* theory, a term used by the German-born US psychoanalyst Erich Fromm (1900–80) to denote a category of people who consider their personalities as commodities to be bought and sold and who mould themselves to fit whatever qualities are demanded by others, with consequent superficiality and lack of individuality. *Compare* EXPLOITATIVE ORIENTATION, HOARDING ORIENTATION, PRODUCTIVE ORIENTATION, RECEPTIVE ORIENTATION.

marketing research *n.* Research designed to estimate the size and location of markets or the cost of products or services, distinguished in careful usage from **market research*.

market research *n.* A form of **survey research* into the attitudes, opinions, and behaviour of consumers towards products and services, distinguished in careful usage from **marketing research*. *See also* MYSTERY CUSTOMER RESEARCH.

Marplan *n.* A proprietary name for the antidepressant drug **isocarboxazid*. [Trademark]

marriage counselling *n.* A form of **counselling* offered to people with marital or relationship problems. US *marriage counseling*. Also called *marital counselling* (US *marital counseling*), *marriage guidance*, or *marriage guidance counselling* (US *marriage guidance counseling*).

Marr's computational theory of vision *See* 2½-D SKETCH, 3-D MODEL DESCRIPTION, PRIMAL SKETCH. *See also* COMPUTATIONAL THEORY, GENERALIZED CONE.

marshmallow test *n.* An experimental test devised by the Austrian-born US psychologist Walter Mischel (born 1930) to examine some features and consequences of **deferred gratification*, first published in an article in the *Journal of Abnormal and Social Psychology* in 1958. Children aged between

7 and 9 years in the original experiment, or generally between 4 and 6 years in later research, are given a choice between a small, immediate reward (such as one marshmallow) and a larger, delayed reward (such as two marshmallows). *[Longitudinal studies](#) have shown that delayed gratification in children, defined as waiting 15 minutes for the larger reward, is highly predictive of academic success in terms of *[Scholastic Assessment Test](#) scores and of cognitive and emotional coping in adolescence. Follow-up studies have shown that waiting for the larger reward in childhood predicts higher educational achievement, higher sense of self-worth, better ability to cope with stress, less cocaine/crack use in adulthood, and lower body mass. Also called the *Stanford marshmallow test*, because key experiments in the 1970s were conducted at Stanford University in California. [From English *marsh mallow*, the plant *Althaea officinalis*, indigenous to Africa, that grows in salt marshes, the roots of which have been used to make marshmallow treats since ancient Egyptian times]

Marsilid *n.* A proprietary name for the antidepressant drug *[iproniazid](#). [Trademark]

Martha Mitchell effect *n.* A misinterpretation of a person's justified belief as a *[delusion](#), often by a psychiatrist, clinical psychologist, or general practitioner. The term was introduced in 1988 by the English-born US psychologist Brendan A(rnold) Maher (1924–2009) in a chapter in a book entitled *Delusional Beliefs* that he co-edited. [Named after Martha Beall Mitchell (1918–75), wife of the US Attorney General John Mitchell at the time of the Watergate scandal in 1972, who accused the White House of using her husband as a scapegoat to protect President Richard Nixon. She was widely believed to be deluded, although her allegations were eventually vindicated]

masculine protest *n.* In *[individual psychology](#), a term introduced by the Austrian psychiatrist Alfred Adler (1870–1937) to denote a cluster of personality traits in either sex arising as overcompensations for feelings of inferiority and rejection of the feminine role. In later writings, Adler and his followers used the term more specifically to denote the rejection by women of the feminine role. Adler used the term for the first time in a paper read to the Viennese Psychoanalytic Society in 1911, and he developed and modified

*****ebook converter DEMO Watermarks*****

the concept further in his book *Individual Psychology* (1924), where he identified it as the main source of **neuroses*. See also [DIANA COMPLEX](#), [GENDER DYSPHORIA](#).

masculinity–femininity scale *n.* Any scale designed to measure this dimension of personality, including the masculinity–femininity scale of the **MMPI*.

masculinizing hormone *n.* A **hormone* that causes masculine **traits* to develop in an embryo. See [MÜLLERIAN INHIBITING SUBSTANCE](#), [TESTOSTERONE](#).

masked depression *n.* A form of **depression* that is disguised or concealed behind **affective flattening*, a different **mood* (1) such as irritability, or some other symptom.

masking *n.* The blocking or suppression of the perception of a stimulus, often called the *test stimulus*, by the presentation of another stimulus, called the *masking stimulus*. Complete masking occurs when the test stimulus is not perceived, and partial masking occurs when its **absolute threshold* is raised or its perceived intensity is reduced by the masking stimulus. The masking effect arises from swamping of the neural activity evoked by the test stimulus and/or suppression of the neural activity that test stimulus would have evoked if presented alone. See also [AUDITORY MASKING](#), [BACKWARD MASKING](#), [BINAURAL UNMASKING](#), [BRIGHTNESS MASKING](#), [CENTRAL MASKING](#), [CRITICAL BAND](#), [DICHOPTIC MASKING](#), [INSPECTION TIME](#), [METACONTRAST](#), [PARACONTRAST](#), [PATTERN MASKING](#), [PERKY PHENOMENON](#), [SUBLIMINAL PERCEPTION](#), [VISUAL MASKING](#).

masochism *n.* Another name for **sexual masochism*. The term is also used loosely to denote extreme self-damaging behaviour not accompanied by sexual gratification. **masochistic** *adj.* [Named after the Austrian historian and novelist Leopold von Sacher-Masoch (1836–95) who wrote about it, notably in his novel *Venus im Pelz* (1870), translated into English as *Venus in Furs* (1902), in which the heroine Wanda subjects the narrator to sexually stimulating suffering]

masochistic personality *n.* Another name for **self-defeating personality disorder*. It is misleading in view of the fact that no **paraphilia*
*****ebook converter DEMO Watermarks*****

resembling [*sexual masochism](#) is involved.

mass action *n.* The doctrine propounded by the US physiological psychologist Karl Spencer Lashley (1890–1958) that the [*cerebral cortex](#) functions as a coordinated unit, with large areas being involved in all complex functions, and that consequently, within limits, the degree of deficit resulting from a localized lesion depends on the amount of cortex rather than the specific region affected. This doctrine is now known to have many exceptions, [*localization of function](#) being common in the cerebral cortex. *See also* [EQUIPOTENTIALITY](#).

massage therapy *n.* Manual manipulation of soft tissue to promote physical and mental health and well-being. Forms of massage therapy can be traced back to ancient Chinese, Egyptian, Greek, Roman, Hindu, and Japanese civilizations. Modern forms are based on techniques popularized in the 19th century by the Swedish medical-gymnastic practitioner Per Henrik Ling (1776–1839). *See also* [ROLFING](#). **MT** *abbrev.* [From French *masser* to rub, from Greek *massein* to knead]

massa intermedia *n.* A [*commissure](#), not present in all human (especially male) brains, connecting the [*thalamus](#) in one cerebral hemisphere with its counterpart in the other. [From Latin *massa* a mass + *inter* between + *media* the middle]

massed practice *n.* Learning that takes place in a single block rather than being divided into sessions separated by rest intervals or gaps, generally leading to inferior recall, after a delay, relative to [*distributed practice](#). *See also* [REMINISCENCE \(2\)](#).

mast cell *n.* A type of cell that is present in connective tissue and that responds to inflammation and allergens by releasing [*histamine](#) and [*serotonin](#). *See also* [AXON REFLEX](#). [Coined in 1879 by the German bacteriologist and immunologist Paul Ehrlich (1854–1915) from German *Mast* a fattening]

masturbation *n.* Sexual stimulation of the genitals, either one's own or another person's. *See also* [AUTO-EROTIC](#). **masturbate** *vb.* [From Latin
*****ebook converter DEMO Watermarks*****]

masturbari to masturbate, of unknown origin, formerly believed to derive from *manus* a hand + *stuprare* to have sexual intercourse]

matched guise *n.* A research technique in which a bilingual or bidialectal person speaks the same words in two or more different languages or speech styles in order to compare listeners' responses while controlling for the effects of other factors.

matching bias *n.* In the **Wason selection task*, a tendency to focus attention on evidence containing the letters and numbers mentioned in the rule. Compare [CONFIRMATION BIAS](#).

Matching Familiar Figures Test *n.* An instrument designed to measure **reflection–impulsivity* by requiring the respondent to select repeatedly from several alternative figures the one that matches a standard. The number of errors and the time required to complete the test are recorded, and people with below-median errors and above-median response times are classified as *reflective*; people with above-median errors and below-median response times *impulsive*; people with below-median errors and below-median response times *quick*; and people with above-median errors and above-median response times *slow*. The test was developed in 1966 by the US psychologist Jerome Kagan (born 1929). **MFFT** *abbrev.*

matching to sample *n.* A task in which a person or animal is presented with a series of trials, on each of which the task is to choose a test stimulus that is the same as a sample stimulus, the sample stimulus being presented simultaneously with the test stimulus in *simultaneous matching to sample*, or some time before the test stimulus in *delayed matching to sample*. In *generalized matching to sample*, the several different matching tasks are presented in sequence, and the increase in speed of learning across the series of tasks is measured.

materialism *n.* An approach to the **mind–body problem* according to which only the physical realm is real and mental phenomena are merely functions or aspects of it. See also [DOUBLE-ASPECT THEORY](#), [IDENTITY THEORY](#), [MONISM](#).

maternal deprivation *n.* Inadequate mothering, whether delivered by the mother or another primary carer, during the first six months of life, leading to a failure of attachment, or more generally inadequate mothering during the first five years of life. The concept was introduced by the English psychiatrist (Edward) John (Mostyn) Bowlby (1907–90) who argued in his book *Child Care and the Growth of Love* (1953) that it could seriously affect the child's development and lead to psychological problems and juvenile delinquency. Early research tended to support the theory, but subsequent research suggested that the adverse effects were often caused by other factors that tend to accompany maternal deprivation, such as physical neglect. *See also* ANACLOTIC DEPRESSION, ATTACHMENT THEORY, HOSPITALISM, SEPARATION ANXIETY, SEPARATION ANXIETY DISORDER.

maternal inheritance *n.* Inheritance of characteristics through genes that are carried by *mitochondrial DNA, or by DNA in *plasmids in the cytoplasm outside the cell nucleus, and that are transmitted exclusively through the female line, because only the mother's ovum contributes cytoplasm to the *zygote.

mathematical induction *n.* Another name for *induction (2).

mathematics disorder *n.* A *specific learning disorder characterized by substantially below-average mathematical ability for the given age, intelligence, and education; the *deficit interfering substantially with scholastic or academic achievement or everyday life and not being due merely to a sensory deficit.

matriarchy *n.* Literally, a community of related families under the authority of a female head called a *matriarch*; applied more generally to any form of social organization in which women have predominant power, there being controversy as to whether a matriarchy has ever existed, although there is no doubt that *matrilineal societies have existed. *Compare* PATRIARCHY.
matriarchal *adj.* [From Latin *mater*, *matris* a mother + Greek *arche* a rule]

matrilineal *adj.* Of or relating to descent, kinship, or inheritance through the female line, as occurs in some non-western societies. *Compare*

PATRILINEAL. [From Latin *mater*, *matris* a mother + *linea* a line]

matrist *n.* A person whose ***personality** is modelled on or strongly influenced by his or her mother. *Compare* **PATRIST**. [From Latin *mater*, *matris* a mother + *-ista*, *-istes* indicating a person who performs an action or function]

matrix *n.* In mathematics, any rectangular array or elements, usually numbers. [From Latin *matrix* womb or female animal used for breeding, from *mater* mother]

maturation *n.* The process of growing or ripening towards a fully developed state. [From Latin *maturus* ripe + *-ation* indicating a process or condition]

Maudsley Personality Inventory *n.* A questionnaire designed to measure two major dimensions of personality, namely ***extraversion** and ***neuroticism**, according to the theory of personality of the German-born British psychologist Hans J(ürgen) Eysenck (1916–97), first propounded in his books *Dimensions of Personality* (1947) and *The Scientific Study of Personality* (1952). Eysenck published the test initially in the journal *Rivista di Psicologia* in 1956. Later versions of it were called the ***Eysenck Personality Inventory** and the ***Eysenck Personality Questionnaire**. **MPI** *abbrev.* [Named after the Maudsley Hospital in Denmark Hill, south London, where Eysenck worked, and which in turn is named after the English psychiatrist Henry Maudsley (1835–1918) who founded it]

maximin *n.* In decision theory and game theory, an alternative or ***strategy** (2) that ensures the best of the worst possible payoffs, thereby *maximizing* the *minimum* possible payoff. Thus if there are three available alternatives, and if the worst that can happen is a small loss if the first alternative is chosen, a medium loss if the second alternative is chosen, and a large loss if the third alternative is chosen, then the first alternative is the maximin alternative irrespective of what other payoffs are possible. *See also* **ELLSBERG PARADOX**, **MINIMAX**, **MODIFIED ELLSBERG PARADOX**.

maximum likelihood *n.* In statistics, the probability of obtaining a
*****ebook converter DEMO Watermarks*****

given set of observed scores in a random sample of a population maximized over the possible values of the **parameter(s)* of the population from which the scores are drawn; also, a method of estimation used in **multiple regression* and elsewhere based on this concept, introduced in 1912 by the English statistician and geneticist Ronald Aylmer Fisher (1890–1962).

Maxwell disc *n.* A rotating disc on to which radially slit and overlapping discs of paper, cardboard, or plastic can be mounted to divide the surface into sectors of different colours for investigating **colour mixing*. US *Maxwell disk*. Also called a *colour wheel*. See also *ASSOCIATIONISM*, *TALBOT'S LAW*. [Named after the Scottish physicist James Clerk Maxwell (1831–79) who invented it and published it in 1855]

maze *n.* A network of passages and blind alleys, either a simple **T-maze* or a more intricate labyrinth, introduced into psychology in an article in the *American Journal of Psychology* in 1901 by the US psychologist Willard Stanton Small (1870–1943) for studying animal learning and behaviour, a reward usually being provided for an organism that solves the maze and finds the goal box. Small constructed his original maze, which he used for studying ‘the mental processes of the rat’, as an exact replica in miniature of the famous garden maze at Hampton Court in Richmond-upon-Thames, England. [From Old English *amasian* to amaze]

McCarthy Scales of Children's Abilities *n.* A set of scales for measuring the development of intellectual abilities of children between 2½ and 8½ years of age, divided into verbal ability, perceptual ability, quantitative ability, memory, and motor ability, also providing a score for general cognitive ability based on pooling the other scores. [Named after the US developmental psychologist Dorothea McCarthy (1906–74) who introduced them]

McCollough effect *n.* A visual illusion that is seen by a viewer who stares for half a minute or more at two differently oriented and differently coloured grating patterns, such as vertical red and black stripes and horizontal green and black stripes, shifting attention back and forth between the two, and then looks at a figure containing a grating of vertical black and white stripes and a grating of horizontal black and white stripes. The white areas of

*****ebook converter DEMO Watermarks*****

the black and white gratings appear tinged with the **complementary colours* of the corresponding (vertical or horizontal) coloured gratings, so that the vertical white stripes appear pale green and the horizontal white stripes pink. The fact that the illusory colours depend on the particular black and white grating patterns shows that they cannot be explained by depletion of pigment or any other gross retinal process. *See also* *CONTINGENT AFTEREFFECT*. [Named after the US psychologist Celeste F(aye) McCollough (born 1926) who first reported the illusion in the journal *Science* in 1965]

M cell *abbrev.* A type of ganglion cell belonging to the **magnocellular system*. Also called a *Y cell*. *Compare* *P CELL*.

McGurk effect *n.* A phenomenon that occurs when a speech sound does not match the shape of the lips producing it, as when a sound corresponding to the usual pronunciation of the word *gay* is dubbed on to a video image of a person uttering the word *bay*, causing the listener to hear a word intermediate between the two (*day*). This effect shows that the visual channel conveys important information not just to deaf people but also to listeners with normal hearing. [Named after the Scottish psychologist Harry McGurk (1936–98) who co-authored the first article on it, entitled ‘Hearing Lips and Seeing Voices’ in the journal *Nature* in 1976]

McNaghten rules *n.* A set of rules, established in English law in *Regina v. McNaghten* (1843) and followed in many jurisdictions throughout the world, according to which legal proof of **insanity*, and thus lack of criminal responsibility, requires evidence that the accused either did not know what he or she was doing or was incapable of understanding that what he or she was doing was wrong. Also spelt *McNaughten rules* or *M’Naghten rules*. *See also* *MENS REA*. [Established by the House of Lords following the case of *R v. McNaghten* (1843) in which the defendant, Daniel McNaghten, shot and killed the private secretary of the British Prime Minister Sir Robert Peel but was found to have been of unsound mind at the time]

McNemar test *n.* In statistics, a **distribution-free test* of the significance of changes, especially applicable to before–after designs of the effects of particular treatments in which scores are dichotomous and measurement is made on a **nominal scale* or an **ordinal scale*. It tests the **null hypothesis*

*****ebook converter DEMO Watermarks*****

that unlike pairs of responses (0, 1) and (1, 0) are equally likely. [Named after the US psychologist and statistician Quinn McNemar (1900–86) who developed it in 1947]

MDA *abbrev.* Methyl-dioxy amphetamine, a synthetic **designer drug* derived from **amphetamine*. *See also* AMPHETAMINE-RELATED DISORDERS, EMPATHOGEN, SUBSTANCE-RELATED AND ADDICTIVE DISORDERS.

MDMA *abbrev.* 3,4-methylene-dioxy-methamphetamine, a central nervous system **stimulant* and **designer drug* commonly called **ecstasy* (2).

mean *n.* Short for **arithmetic mean*: in descriptive statistics, the **average* value, calculated for a finite set of scores by adding the scores together and then dividing the total by the number of scores. *See also* GEOMETRIC MEAN, HARMONIC MEAN, LAKE WOBEGON EFFECT, TRIMMED MEAN. *Compare* MEDIAN, MODE. **M** *abbrev.* **mean** *adj.* [From Old French *moien*, from Latin *medius* middle]

mean error method *n.* Another name for the **method of average error*.

mean length of utterance *n.* The mean or average number of **morphemes* or words in a sample of speech, often used as a crude index of the level of linguistic development of a child. **MLU** *abbrev.*

mean lethal dosage *n.* Another name for the **median lethal dosage* (LD-50).

means-end analysis *n.* A cognitive **heuristic* implemented by the **General Problem Solver* to deal with practical problems when the **problem space* is too large for exhaustive search to be used. The problem space is represented by an initial state (such as the starting position in a game of chess), a goal state (such as checkmating the opponent), and all possible intervening states that are achieved by actions involving the application of operators (such as chess moves) to existing states. If there is an action that immediately solves the problem, then it is implemented immediately; if not, the problem solver establishes the subgoal of maximally reducing the

difference between the current state and the goal state; if an action can be found to achieve this subgoal, then it is implemented immediately; if not, the problem solver establishes the sub-subgoal of removing the constraints on achieving the subgoal; and so on. *See also* [GENERAL PROBLEM SOLVER](#).

mean square *n.* In statistics, the [*arithmetic mean](#) of the squared [*deviation scores](#) in a data set, used as an estimate of variance in [*analysis of variance \(ANOVA\)](#). *See also* [SUM OF SQUARES](#).

measurement *n.* The systematic assignment of numbers to represent quantitative [*attributes](#) of objects or events. The US psychologist S(tanley) S(mith) Stevens (1906–73) defined measurement in an article in the journal *Science* in 1946 and in an influential chapter in his *Handbook of Experimental Psychology* as ‘the assignment of numerals to objects or events according to rules’, and this definition is repeated in many textbooks, but it is avoided by many experts because it ignores a crucial (defining) aspect of measurement, namely its connection with quantity or magnitude, and because it includes rule-governed assignments of numbers that do not represent quantities or magnitudes, such as the assignment of telephone numbers to subscribers or of ISBN numbers to books. *See also* [AXIOMATIC MEASUREMENT THEORY](#), [CONJOINT MEASUREMENT THEORY](#), [MEASUREMENT LEVEL](#), [MEASUREMENT MODEL](#), [SCALE \(1\)](#). [From Latin *mensura* a measure, from *metiri* to measure]

measurement level *n.* The type of measurement scale used for generating scores, which determines the permissible transformations that can be performed on the scores without changing their relationship to the [*attributes](#) being measured. For example, it is meaningless to calculate the mean of a collection of telephone numbers, because the level of measurement involved in the numbers (a nominal scale) renders the operations of addition and division meaningless. Level of measurement is not a property of the data themselves, but of the data and their interpretation considered together: the same scores can represent different levels depending on their interpretation. Among the most important measurement levels, with separate entries, are the following, arranged from lowest to highest level of measurement: [*nominal scale](#), [*ordinal scale](#), [*interval scale](#), [*ratio scale](#), [*absolute scale](#). Another, at the same level as the interval scale, is the [*log-interval scale](#). *See also* [MEASUREMENT](#), [SCALE \(1\)](#).

*****ebook converter DEMO Watermarks*****

measurement model *n.* The relationship that is believed or assumed to exist between numerical scores recorded as data in an empirical investigation and the **attribute* that is being measured. *See also* MEASUREMENT, MEASUREMENT LEVEL, MODEL.

mechanism of defence *See* DEFENCE MECHANISM.

mechanoreceptor *n.* A type of **sensory receptor* that converts kinetic energy from mechanical stimulation including touch, pressure, vibration, acceleration, or gravity into nerve impulses, such receptors being either **touch receptors* in the **skin*, **auditory receptors* in the **organ of Corti*, or receptors that respond to mechanical stimulation in the **vestibular system*. [From Greek *mechane* a machine + Latin *recipere*, *receptum* to receive, from *re-* back + *capere*, *ceptum* to take]

Mecholyl *n.* A proprietary name for the parasympathomimetic drug **methacholine*. [Trademark]

MED-50 *abbrev.* The dosage of a drug that produces a specified effect in 50 per cent of the population. Also called the *median effective dosage* or *ED-50*. *See also* EFFECTIVE DOSAGE, THERAPEUTIC INDEX, THERAPEUTIC RATIO.

medial *adj.* Situated in the middle or oriented towards the midline; the opposite of **lateral*. [From Latin *medialis* of or relating to the middle, from *medius* the middle]

medial forebrain bundle *n.* A tract of nerve fibres on each side of the **hypothalamus* involved in the control of hunger and predatory aggression, and functioning more generally as a major reward centre through the action of the catecholamines **dopamine* and **noradrenalin* (norepinephrine). *See also* PLEASURE CENTRE, QUIET-BITING ATTACK. **MFB** *abbrev.* [From Latin *medialis* situated in the middle, from *medius* the middle + English *forebrain*]

medial geniculate nucleus *n.* A structure at the back of each lobe of the **thalamus*, close to the lateral geniculate nucleus, that receives inputs from the **inferior colliculus* and relays them to the primary **auditory cortex*.

Also called the *medial geniculate body*. **medial geniculate nuclei** *pl.* **MGN** *abbrev.* [From Latin *medialis* situated in the middle, from *medius* the middle + *geniculatus* knee-shaped, from *geniculum* a little knee, diminutive of *genus* a knee]

medial lemniscus *n.* Either of the two bundles of nerve fibres of the ***lemniscus** ascending through the medulla oblongata and pons and continuing to the somatosensory cortex in each cerebral hemisphere. *Compare* **LATERAL LEMNISCUS**, **TRIGEMINAL LEMNISCUS**.

medial rectus *n.* One of the four ***rectus muscles** attached externally to the eyeball.

medial surface *n.* The surface of an organ or structure situated or oriented towards the midline of the body, such as the inner surface of each ***cerebral hemisphere**, exposed only by a ***midsagittal section** dividing the brain through its longitudinal fissure. *See also* **SAGITTAL SECTION**.

medial temporal lobe *n.* The inner surface of the ***temporal lobe**, including the ***hippocampal formation**, the ***parahippocampal gyrus**, and the ***entorhinal cortex**, all of which have important ***memory** functions. Also called the *medial temporal cortex*. *See also* **DEFAULT MODE NETWORK**. **MTL** *abbrev.*

median *n.* In descriptive statistics, a measure of ***central tendency** that is the middle value of the set of scores arranged in order of magnitude, or the mean of the two middle scores if there is an even number of scores and therefore no single middle score. *Compare* **MEAN**, **MODE**. **median** *adj.* [From Latin *medius* middle]

median effective dosage *n.* The dosage that produces a specified effect in 50 per cent of the population. *See also* **EFFECTIVE DOSAGE**, **THERAPEUTIC INDEX**, **THERAPEUTIC RATIO**. *Compare* **MEDIAN LETHAL DOSAGE**, **MEDIAN TOXIC DOSAGE**, **MINIMUM EFFECTIVE DOSAGE**, **MINIMUM LETHAL DOSAGE**, **MINIMUM TOXIC DOSAGE**. **ED-50** or **ED₅₀** *abbrev.*

median eminence *n.* A swelling at the base of the **hypothalamus*, immediately above the infundibulum, secreting hormones into the **hypothalamic–hypophyseal portal system*. [From Latin *medius* the middle + *eminentia* a prominence]

median lethal dosage *n.* The dosage of a drug or other substance that kills 50 per cent of experimental animals in a specified time. Also called the *mean lethal dosage*. *See also* LETHAL DOSAGE, THERAPEUTIC INDEX, THERAPEUTIC RATIO. *Compare* MEDIAN EFFECTIVE DOSAGE, MEDIAN TOXIC DOSAGE, MINIMUM EFFECTIVE DOSAGE, MINIMUM LETHAL DOSAGE, MINIMUM TOXIC DOSAGE. **LD-50** or **LD₅₀** *abbrev.*

median plane *n.* Another name for the **midsagittal plane*.

median section *n.* Another name for the **midsagittal section*.

median temporal gyrus *n.* Another name for the **middle temporal gyrus*.

median test *n.* In statistics, a **distribution-free test* of the null hypothesis that two or more independent samples come from populations with the same **median*. *See also* MANN–WHITNEY *U* TEST.

median toxic dosage *n.* The quantity of a drug or other substance that produces signs or symptoms of toxicity in 50 per cent of human or animal experimental subjects in a specified time. Also called the *mean toxic dosage*. *See also* THERAPEUTIC INDEX, THERAPEUTIC RATIO, TOXIC DOSAGE. *Compare* MEDIAN EFFECTIVE DOSAGE, MEDIAN LETHAL DOSAGE, MINIMUM EFFECTIVE DOSAGE, MINIMUM LETHAL DOSAGE, MINIMUM TOXIC DOSAGE. **TD-50** or **TD₅₀** *abbrev.*

mediating variable *n.* A **variable*, the value of which is determined by one or more **independent variables* and/or other mediating variables and that in turn affects the value of a **dependent variable* not directly affected by the independent variables. For example, the independent variable wealth has a measurable effect on the dependent variable life expectancy inasmuch as wealthy people tend to live longer than poor people, and the effect is indirect,

*****ebook converter DEMO Watermarks*****

one mediating variable that plays a part being medical care: wealthy people tend to receive more and better medical care than poor people, and this in turn increases life expectancy. The chain of causation is thus wealth → medical care → life expectancy, and medical care is a mediating variable. Often confused with **intervening variable*. [From Latin *mediare*, *mediatum*, to be in the middle, from *medius* the middle]

medical psychology *n.* A branch of **applied psychology* devoted to psychological problems arising in the practice of medicine, including psychological aspects of pain, terminal illness, bereavement, disability, and reactions to medical advice. It overlaps to some extent with **health psychology*.

medical student syndrome *n.* A form of **hypochondria* in medical students, occasionally developing into full-blown **somatic* symptom disorder, characterized by anxiety about having one or more (often several) of the disorders that are being studied. It often occurs as students begin studying mental disorders, when they begin to believe that they are suffering from the disorders that they are reading about in textbooks, and in this form it is also found among psychology students. Also called *medical student hypochondria*. **MSS** abbrev.

meditation See *TRANSCENDENTAL MEDITATION*.

medulla *n.* The internal part of any structure or organ, such as the adrenal medulla. Usually short for the **medulla oblongata*, though this abbreviation is avoided in careful usage whenever its meaning is ambiguous. **medullae** or **medullas** *pl.* [From Latin *medulla* marrow or innermost part]

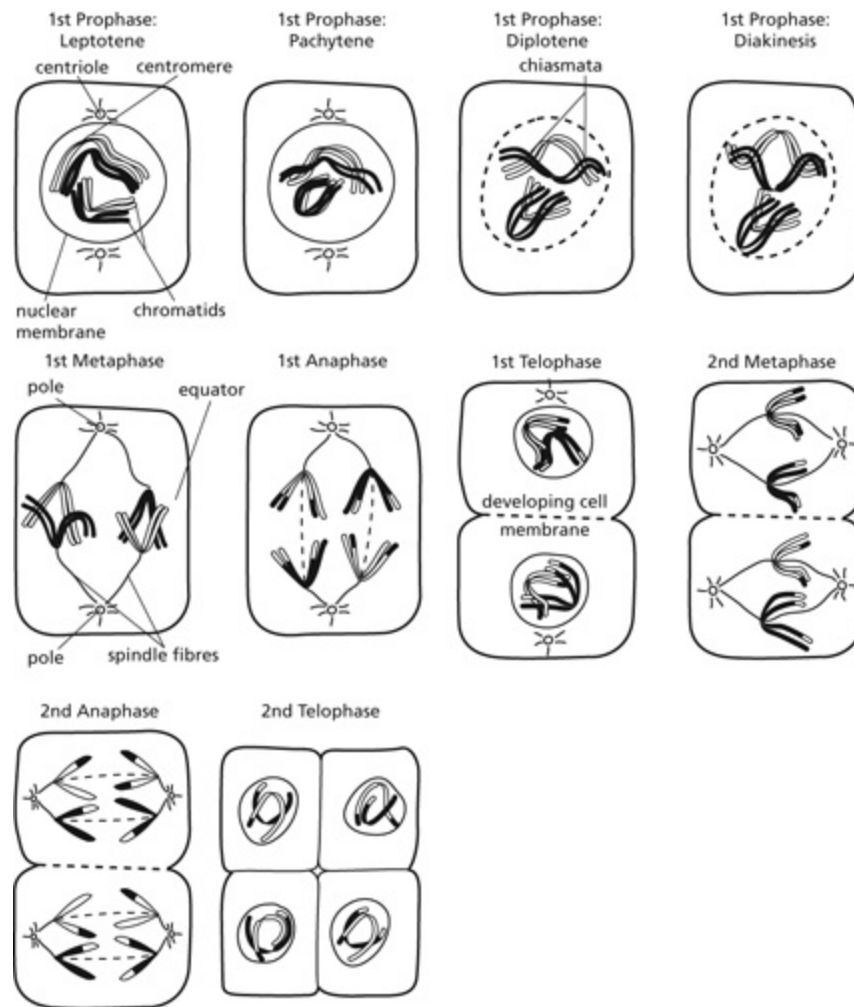
medulla oblongata *n.* The lower, tapering part of the **brainstem*, attached to the spinal cord, involved in the control of vegetative processes such as heartbeat, blood pressure, breathing, and consciousness. Often shortened to *medulla*, though this is avoided in careful usage whenever ambiguity would result (see *MEDULLA*). See also *LOCKED-IN SYNDROME*. **medullae oblongatae** or **medulla oblongatas** *pl.* **medullary**, **medullar**, or **bulbar** *adj.* [From Latin *oblongus* elongated, from *longus* long]

medulloblastoma *n.* A quick-growing malignant brain tumour, usually originating in the ***cerebellum**, most common in children (especially boys) between 5 and 9 years old, responsive to radiotherapy but with poor long-term prognosis. Its name does not refer to the medulla oblongata. [From *medulla* + *blastos* a bud + *-oma* indicating a tumour]

megalomania *n.* A pathological condition of ***grandiose delusions**. Also called *macromania*. [From Greek *megas* great + *mania* madness]

megavitamin therapy *n.* Another name for ***orthomolecular therapy**.

meiosis *n.* **1.** A form of cell division such as that of ***gametes** in sexually reproducing species in which the nucleus divides into four daughter nuclei each containing half the ***chromosomes** of the parent nucleus (see *illustration*). It consists of two successive divisions: during the first, ***homologous chromosomes** pair up, exchange genetic material by ***crossing over**, then during the *anaphase* part of the cycle move apart by ***disjunction (1)** to form separate ***haploid** nuclei; during the second phase these daughter nuclei divide by ***mitosis** (with a further anaphase), producing four haploid cells. Also called *reduction division*. Compare **MITOSIS**. **2.** A figure of speech characterized by understatement or litotes. **meiotic** *adj.* [From Greek *meiosis* diminution, from *meion* less + *-osis* indicating a process or state]



Meiosis. Stages in a cell containing two pairs of homologous chromosomes.

Meissner's corpuscle *n.* An egg-shaped ***sensory receptor** in hairless ***skin**, found most abundantly in the finger pads but also present in the skin of the inner forearm, foot, breast nipple, and lips, containing a single nerve fibre that spirals around the interior of the capsule and ends in a globular mass, sensitive to vibration when moving over textured or embossed surfaces. Also called a *tactile corpuscle* or a *Wagner–Meissner corpuscle*. Compare **FREE NERVE ENDING**, **GOLGI TENDON ORGAN**, **MERKEL CELL**, **PACINIAN CORPUSCLE**, **RUFFINI CORPUSCLE**. [Named after the German anatomist Georg Meissner (1829–1905) who discovered it]

mel *n.* A unit of subjective ***pitch**, arbitrarily anchored so that a 1,000-hertz

tone at 40 decibels has a value of 1,000 mels by definition, other values being determined by **fractionation*, the resulting graph of pitch in mels as a function of frequency in hertz usually being approximately S-shaped. [From Greek *melos* a song]

melancholia *n.* A severe form of **depression*; more specifically, a **major depressive episode*. **involutional melancholia** *n.* Another name for **involutional depression*. [From Greek *melas* black + *chole* bile + *-ia* indicating a condition or quality, referring to the ancient doctrine of the four **temperaments*, according to which depression was attributed to an excess of black bile]

melanocyte-stimulating hormone *n.* A polypeptide **hormone* that is secreted by the **anterior pituitary* and that controls the degree of colouring in pigmented cells. **MSH** *abbrev.* [From Greek *melas*, *melanos* black + *kytos* a vessel or hollow]

melatonin *n.* The **hormone* *N*-acetyl-5-methoxytryptamine secreted by the **pineal gland* only at night (hence sometimes called the Dracula hormone), lightening skin pigment in some organisms such as tadpoles, though apparently not in humans, affecting sexual development by inhibiting development of gonads in males and the oestrous cycle in females, perhaps promoting sleep (thus used for treating **jet lag*), and probably fulfilling other unknown functions. [From Greek *mela(s)* black + English *(sero)tonin*, alluding to its ability to lighten melanocytes]

Mellaril *n.* A proprietary name for the neuroleptic drug **thioridazine*. [Trademark]

melodic constancy *n.* A form of **perceptual constancy* according to which a melody or tune tends to remain recognizably the same when it is played in another key with entirely different notes (see *GESTALTQUALITÄT*), at a different tempo (speed), or on another instrument with entirely different **timbre*. See also *GESTALT*.

melodic paradox *n.* A phenomenon in the perception of musical tones that are clearly defined in terms of pitch class (the twelve notes of the octave
*****ebook converter DEMO Watermarks*****

that are normally labelled C, C#, D,..., B) but are ambiguous as regards the octaves to which they belong, each tone being composed of equal [*sinusoidal](#) waves from octaves spanning the auditory range. Using such ambiguous tones, if a sequence of chords (tones sounded together simultaneously) such as B with D, then A with E, then G with F, are presented to listeners, then the listeners clearly perceive the sequence as either converging or diverging in contrary motion, although the sequence could be either converging or diverging depending on the octaves to which the notes belong, and the stimulus tones lack the cues required to determine octave pitch. It is a surprising phenomenon rather than a true [*paradox](#). It was first reported by the US psychologist Roger N(ewland) Shepard (born 1929) in an article in the *Journal of the Acoustical Society of America* in 1964. See also [AUDITORY ILLUSION](#). Compare [SEMITONE PARADOX](#), [TRITONE PARADOX](#).

member *n.* A constituent part of a whole, especially a limb, an individual who belongs to a group or organization, or a political representative in a parliament. The term is used in [*Gestalt psychology](#) in preference to *part*, which has connotations of separateness denied by Gestalt theory. See also [MEMBERSHIP CHARACTER](#). [From Latin *membrum* a limb, member, or part]

membership character *n.* Any [*attribute](#) by which a [*member](#) (in the [*Gestalt](#) sense) is recognized as belonging to a whole; specifically, any attribute of an element that results directly from its belonging to a Gestalt.

membrana tympani *n.* Another name for the [*tympanic membrane](#). [From Latin *membrana* a membrane + *tympanum* a drum]

membrane *n.* A thin film, skin, or layer of (usually) fibrous tissue that covers, lines, or connects biological organs or cells. See also [CELL MEMBRANE](#), [MEMBRANE POTENTIAL](#), [OSMOSIS](#), [SEMIPERMEABLE MEMBRANE](#), [SKIN](#). **membranous** *adj.* Of or relating to a membrane. [From Latin *membrana* skin covering a body part, from *membrum* a member]

membrane potential *n.* The difference in electrical voltage across the membrane of a living cell, controlled by a [*sodium pump](#) and momentarily reversed in a [*neuron](#) when it transmits a nerve impulse. See also [ACTION POTENTIAL](#), [CELL MEMBRANE](#), [DEPOLARIZATION](#), [RESTING POTENTIAL](#).

*****ebook converter DEMO Watermarks*****

membranous labyrinth *n.* The system of ducts, filled with *endolymph, suspended within the three *semicircular canals of the *bony labyrinth in the inner ear, containing the *vestibular system. See also LABYRINTH.

meme *n.* A self-replicating cultural element or pattern of behaviour, analogous to a gene but passed from one individual to another by imitation rather than genetic transmission. Memes are subject to inheritance and evolution through a form of *natural selection according to their likelihood, relative to the alternatives available in the meme pool, of being reproduced or of multiplying. Typical examples are tunes, ideas, beliefs, catch-phrases, stories, hairstyles, clothing fashions, recipes, inventions, skills, traditions, and theories. Whereas genes propagate themselves in a gene pool by migrating from one body to the next, memes propagate themselves in a meme pool by migrating from one brain to the next; but unlike genes, memes are subject to *Lamarckian inheritance, because acquired characteristics can be incorporated into a meme and passed on. See also RUMOUR, SMALL WORLD PHENOMENON. **memeplex** *n.* (Contraction of *meme complex*), a collection of mutually adapted memes that tend to be transmitted together, such as those constituting a religion or political ideology. **meme pool** *n.* The sum total of all memes in a population at a given time. Compare GENE POOL. **memetic** *adj.* Of, relating to, or consisting of a meme or memes. **memetic engineering** *n.* Deliberate and systematic manipulation of memes or memeplexes, as in education, psychotherapy, advertising, or brainwashing. Compare GENETIC ENGINEERING. **memetics** *n.* The science of memes. [From Greek *mimema* something that is imitated, from *mimēsthai* to imitate, coined in 1976 by the British ethologist Richard Dawkins (born 1941) to sound like *gene* and to be reminiscent of *memory* and French *même* same, because memes are sustained and replicated by memory and imitation]

MEM 1414 *abbrev.* Memory 1414, a *smart drug developed in the 1990s that inhibits *phosphodiesterase type 5 and thereby reduces the metabolism of *cyclic AMP and increases the prevalence of *CREB in neurons in the brain. [Abbreviation of *memory 1414*, an arbitrary name used by pharmacologists during the development and testing of the drug]

memory *n.* The psychological function of preserving information,
*****ebook converter DEMO Watermarks*****

involving the processes of **encoding*, **storage*, and **retrieval*. Human memory consists of a series of interconnected systems serving different functions, one of the most basic divisions being into **declarative memory* for factual information about the world and **procedural memory* for information about how to carry out sequences of operations; another basic division being between **long-term memory* for information stored for more than a few seconds, **short-term memory* for temporary storage of information for briefer periods, and **sensory memory* (including the **iconic store*) for very brief storage of visual and possibly other sensory information; and a third basic division being into **episodic memory* for events and experiences and **semantic memory* for information about the world, although **perceptual memory* may not fall into either category. The power of the chemical senses to reawaken distant memories is discussed under **redintegration*. See also AMNESIA, BLOCKING MEMORY, CONFABULATION, CONSTRUCTIVE MEMORY, CUED RECALL, DEFERRED ACTION, DUAL-CODE THEORY (2), DUAL-PROCESS MODEL, ENCODING SPECIFICITY, FREE RECALL, HÖFFDING STEP, HYPERTHYMESIA, LEVELS OF PROCESSING, MEMORY DRUM, MEMORY OPERATING CHARACTERISTIC, MEMORY ORGANIZATION PACKET, MEMORY TRACE, METHOD OF SAVINGS, MNEMONIC, RECALL, RECOGNITION, REPRESENTATIONAL MOMENTUM, SCREEN MEMORY, STATE-DEPENDENT MEMORY, TIP-OF-THE-TONGUE PHENOMENON, UGLY SISTER EFFECT, WORKING MEMORY. [From Latin *memoria* memory, from *memor* mindful]

memory drum *n.* A rotating cylinder on to which may be attached a list of words, nonsense syllables, or other items that are visible one at a time for a fixed time period through a hole in a screen. Before the advent of desktop computers, it was widely used to study **memory*.

memory operating characteristic *n.* A **receiver operating characteristic* applied to experimental data from **recognition* experiments. **Target items* correctly recognized are counted as **hits*, and non-target items incorrectly identified as target items are counted as **false alarms* (2). Also written *memory-operating characteristic*. See also SIGNAL DETECTION THEORY. **MOC** *abbrev.*

memory organization packet *n.* A collection of **scripts* (3) relating to a particular class of situations, such as shopping or going to the cinema, enabling a person to exhibit appropriate behaviour without having to think

*****ebook converter DEMO Watermarks*****

about it. Each memory organization packet is assembled from existing scripts, and different packets often have scripts in common: shopping and going to the cinema, for example, both include a script for paying for goods and services. The inclusion of an inappropriate script in a packet can cause interaction problems, as when a husband treats his wife like a waiter in a restaurant. **MOP** *abbrev.*

memory span *n.* The number of items, such as words, numbers, or letters, that a person can recall immediately after presentation. It is a measure of the capacity of **short-term memory*. *Compare* DYNAMIC MEMORY SPAN.

memory trace *n.* A physiological alteration or process occurring in the nervous system and underlying the storage of a **memory*. Also called a *trace*, an *engram*, or a *neurogram*. *See also* HÖFFDING STEP.

menarche *n.* A female's first **menstruation* when she reaches puberty. [From Greek *men* month + *arche* beginning]

Mendelian *adj.* Of or relating to a form of genetics or a mechanism of inheritance through pairs of non-blending discrete hereditary factors, now called genes, one member of each pair being inherited from each parent. *See also* MENDEL'S LAWS, NON-MENDELIAN GENE. *Compare* BLENDING INHERITANCE.

Mendel's laws *n.* Three major principles of heredity proposed by Mendel on the basis of his breeding experiments with peas and other plants, the first of which is the law of **segregation of alleles*, the second the law of **independent assortment*, and the third the proposition that some alleles show **dominance* (genetic) over others. *Compare* NON-MENDELIAN GENE. [Named after the Austro-Hungarian Augustinian monk Gregor Johann Mendel (1822–84) who published them in 1865 in an article in the *Proceedings of the Natural Science Society of Brunn* that was neglected by biologists for 35 years]

meninges *n. pl.* The three **membranes* covering the brain and spinal cord. *See* ARACHNOID MEMBRANE, DURA MATER, PIA MATER. **meninx** *sing.* [From Greek *meninx*, *meningos* a membrane]

meningioma *n.* A tumour of the meninges of the brain or, rarely, of the spinal cord. [From Greek *meninx*, *meningos* a membrane + *-oma* indicating a tumour]

meningitis *n.* Inflammation of the meninges. [From Greek *meninx*, *meningos* a membrane + *-itis* inflammation]

meninx *n.* The singular of ***meninges**. [From Greek *meninx* a membrane]

menkeiti See [LATAH](#).

menopause *n.* The natural cessation of a woman's ***menstrual cycle** occurring usually between 45 and 50 years of age. Also called the *change of life* or *climacteric*. Compare [ANDROPAUSE](#). [From Greek *men* a month + *pausis* a halt]

menses *n.* Another name for ***menstruation** or menstrual periods. [From Latin *menses* months, from *mensis* a month]

mens rea *n.* A legal term denoting criminal intent and knowledge of the wrongness of a criminal act, the criminal act itself being called the ***actus reus**. For a defendant to be convicted of a crime, both an actus reus and a mens rea must normally be proved. See also [INSANITY](#), [McNAGHTEN RULES](#). [From Latin *mens* mind + *rea* guilty]

menstrual cycle *n.* The monthly ***oestrous cycle** in a woman or other female primate, consisting of the ***follicular phase**, the ***luteal phase**, and the ***menstrual phase**. See also [PHEROMONE](#). [From Latin *menstruus* monthly, from *mensis* a month + Greek *kyklos* a circle or cycle]

menstrual phase *n.* The third and last of the three phases of the ***menstrual cycle**, characterized by ***menstruation**. Compare [FOLLICULAR PHASE](#), [LUTEAL PHASE](#).

menstrual synchrony See [WHITTEN EFFECT](#).

menstruation *n.* The *vaginal discharge from the uterus of a non-pregnant woman occurring monthly from puberty to the *menopause as the final phase of the *menstrual cycle, containing blood and cellular debris from the shedding of the endometrium (the *mucous membrane lining the uterus).
menstruate *vb.*

mental age *n.* A child's performance on a test of mental ability expressed as the average age of children who achieved the same level of performance in a standardization sample. Thus a 10-year-old child who achieves the same score as the average 12-year-old child in a standardization sample has a mental age of 12. The concept was introduced in 1905 by the French psychologists Alfred Binet (1857–1911) and Théodore Simon (1873–1961). See also BINET–SIMON SCALE, IQ. Compare CHRONOLOGICAL AGE, SOCIAL AGE.
MA *abbrev.*

mental chemistry *n.* In the doctrine of *associationism, an idea introduced by the English philosopher John Stuart Mill (1806–73) to replace the *mental mechanics* of his father, the Scottish philosopher James Mill (1773–1836). The idea was borrowed from chemistry, in which compounds often have properties that are qualitatively different from the elements of which they are composed, a familiar example being water, the properties of which are not found in its constituent elements hydrogen or oxygen, which are both gases. According to John Stuart Mill, simple ideas combine to form complex ideas that are qualitatively different from their constituent elements, as when, according to the *contiguity law, the idea of whiteness arises from the association of several different colours seen in rapid succession on a *Maxwell disc, as the English physicist and mathematician Sir Isaac Newton (1642–1727) had demonstrated in his *Opticks* in 1704.

mental defective *n.* An obsolescent term for a person manifesting *intellectual disability.

mental deficiency *n.* Another name for *intellectual disability.

mental disorder *n.* According to *DSM-5, a *syndrome characterized by clinically significant disturbance in cognition, emotional regulation, or

behaviour that reflects a dysfunction in the psychological, biological, or developmental processes underlying mental functioning. Mental disorders are usually associated with distress or disability in social, occupational, or other areas of functioning. According to [*ICD-10](#), a mental disorder is a clinically recognizable collection of symptoms or behaviour associated in most cases with distress or interference with personal functions. A deviant pattern of behaviour, whether political, religious, or sexual, or a conflict between an individual and society is not a mental disorder unless it is symptomatic of a dysfunction in the individual.

mental handicap *n.* An obsolescent term for [*intellectual disability](#).

mental illness *n.* Another name for [*mental disorder](#), with medical connotations that some consider misleading or tendentious.

mental image *n.* Another name for an [*image \(3\)](#).

mental imagery *See* [IMAGERY](#).

mental lexicon *n.* Another name for a [*lexicon \(2\)](#).

mental map *n.* Another name for a [*cognitive map](#).

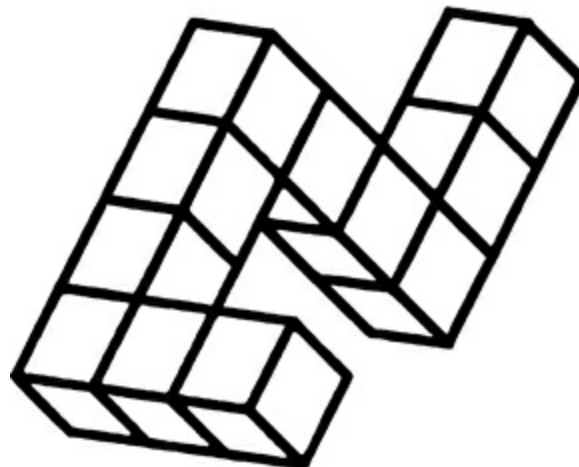
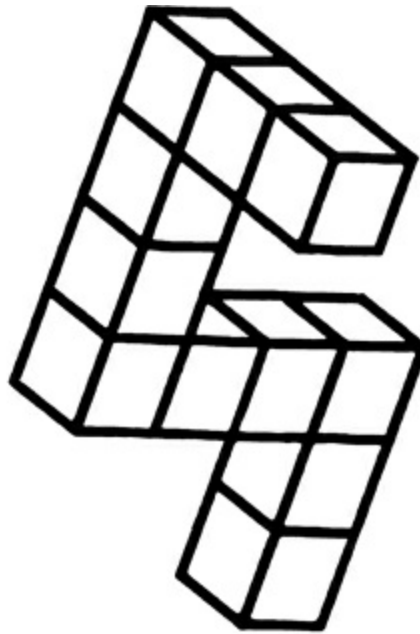
mental model *n.* An internal representation having—in some abstract sense—the same structure as the aspect or portion of external reality that it represents, such as the [*3-D model description](#) that the English psychologist David Courtenay Marr (1945–80) posited as the basis of visual perception. According to a theory put forward in 1983 by the British psychologist Philip N(icholas) Johnson-Laird (born 1936), people need to construct mental models in order to carry out deductive and inductive reasoning on the basis of [*propositions \(1\)](#), which are not themselves mental models but generally give rise to mental models. For example, the proposition *Alex is to the left of Bernie, and Bernie is to the left of Charlie* may give rise to a mental model in which three men are standing in a row, with Alex to the left of Charlie; but a different mental model would have them arranged anticlockwise around a table, in which case Alex is to the right of Charlie—and in some mental

models they could even be three women. According to some researchers, mental models are required to comprehend **discourse*, to have a **body image*, and even to experience **consciousness*. The concept was suggested in 1943 by the Scottish experimental psychologist Kenneth J(ames) W(illiams) Craik (1914–45) in his book *The Nature of Explanation*. See also *MENTAL ROTATION*. Compare *FRAME (2)*, *SCHEMA*.

mental operation *n.* In the writings of the Swiss psychologist Jean Piaget (1896–1980) and his followers, a mental procedure that can be carried out in reverse. Also called an *operation*. See *CONCRETE OPERATIONS*, *FORMAL OPERATIONS*, *PRE-OPERATIONAL STAGE*.

mental retardation *n.* A term used in **DSM-IV* but replaced in **DSM-5* by **intellectual disability*. **MR** *abbrev.*

mental rotation *n.* The imagined turning of a form or shape from one orientation in space to another, believed to involve the mental image passing through all intermediate positions. The original study of this process by the US psychologist Roger N(ewland) Shepard (born 1929) and his student Jacqueline Ann Metzler (born 1949), published in the journal *Science* in 1971, used stimuli consisting of pairs of computer-generated perspective drawings of three-dimensional objects, each constructed by joining ten cubical blocks face to face to form an arm-like structure with three right-angle bends (see *illustration*). People were asked to decide as quickly as possible whether each pair depicted identical structures in different orientations or mirror-image **enantiomorphs*, and mean response times in recognizing identical structures to be identical were found to increase linearly in almost exact proportion to their angular difference in orientation, from approximately one second for pairs in the same orientation to approximately 4.4 seconds for the maximum angular rotation of 180 degrees, suggesting that the viewers had to mentally rotate one shape through intermediate positions until its orientation matched that of the other shape in order to check for similarity. Men tend to perform significantly better at this task than women. The novel *Dirk Gently's Holistic Detective Agency* (1987) by the English novelist Douglas (Noel) Adams (1952–2002) is devoted largely to the mental rotation of a sofa that has become stuck on a stairway landing. See also *COGNITIVE PENETRABILITY*, *MENTAL MODEL*, *MIRROR REVERSAL PROBLEM*.



Mental rotation. Are the top and bottom objects the same apart from their orientation?

mental set *n.* Another name for a **set (2)*.

mental status examination *n.* An assessment of a person's mental condition, typically covering appearance (visible signs of disorder, weight, dress, hygiene, grooming, sociability, motor activity); mood (facial expression, emotional responses); speech and thought (content and form, language); neuropsychological signs and symptoms (history of neurological signs and symptoms, sensation and localization, **apraxia* and **dyspraxia*,

*****ebook converter DEMO Watermarks*****

attention and concentration, time and place orientation, memory, general intellectual functioning, judgement and insight); and personality (*[defence mechanisms](#) and recent changes in personality). *See also* [MENTAL STATUS EXAMINATION REPORT](#). *Compare* [MINI-MENTAL STATE EXAMINATION](#). **MSE** *abbrev.*

Mental Status Examination Report *n.* A structured assessment of a person's mental condition, based on a multiple-choice *[mental status examination](#), used in several US states as part of an automated system of clinical records. **MSER** *abbrev.*

mental subnormality *n.* An obsolescent term for *[intellectual disability](#).

mental test *n.* Any instrument designed to measure intelligence or any other mental ability or aptitude.

mental time travel *n.* The act or process of recalling past events or envisioning future events. *See also* [AUTONOETIC](#). **MTT** *abbrev.*

meow meow *n.* A street name for *[mephedrone](#). Also spelt *miaow miaow*. [Coined soon after it began to be marketed online in 2009, based on the abbreviation MM-CAT of its chemical name, alluding to the fact that cats meow]

meperidine *n.* Meperidine hydrochloride, a synthetic white crystalline *[narcotic analgesic](#) drug with a *[morphine](#)-like action, used as an *[analgesic](#) and *[sedative](#). Also called *pethidine* or *Demerol* (trademark). *See also* [OPIOID-RELATED DISORDERS](#). [From *me(thyl)* the alkyl radical CH₃ derived from methane by removal of one hydrogen atom, from Greek *methy* wine + *hyle* wood + (*pi*)*peridine*]

mephedrone *n.* A synthetic *[stimulant drug](#) and *[euphoriant](#) 4-methylmethcathinone (4-MM-CAT) or 4-methylephedrone, closely related to *[amphetamine](#), first manufactured in 2007, supplied as a white powder to be snorted through the nostrils or as pills to be swallowed, and often sold as

plant food. Street name: *meow meow*. Formula $C_{11}H_{15}NO$. Often confused with **methadone*. [A contraction of the chemical name of the variant *m(ethyl)ephedrone*]

meprobamate *n.* A bitter-tasting **carbamate* that acts as a central nervous system **depressant* and is used as a sedative and muscle relaxant, the best known of the class of **propanediols*. See also *SEDATIVE-, HYPNOTIC-, OR ANXIOLYTIC-RELATED DISORDERS*. Also called *Miltown* (trademark). **MPB** *abbrev.* [From *me(thyl)* the alkyl radical CH_3 derived from methane by removal of one hydrogen atom, from Greek *methy* wine + *hyle* wood + *pro(pyl)* + (*dicar*)*bamate*]

mere exposure effect *n.* The tendency for repeated exposure to a stimulus to be sufficient to enhance an observer's liking for it or attitude towards it. The effect was first referred to by the German philosopher, physician, psychologist, and mystic Gustav Theodor Fechner (1801–87) in *Vorschule der Aesthetik* (1876, pp. 240–3), and the US psychologist William James (1842–1910) independently rediscovered it and discussed it in *Principles of Psychology* (1890, volume 2, p. 672), but the first quantitative investigation of it was carried out by the US-based Polish psychologist Robert B(oleslaw) Zajonc (1923–2008) and published in the journal *Psychological Monographs* in 1968. Zajonc examined **antonym* pairs and found that the positively toned words were more frequent in the language according to word counts than negatively toned words: *happiness* occurs more than 15 times as frequently in written English as *unhappiness*, *beauty* 41 times as frequently as *ugliness*, *love* almost 10 times as frequently as *hate*, and so on, and similar relationships between frequency and favourability have been found in French, German, Spanish, Russian, Urdu, and other languages. Zajonc also reported experimental evidence using pseudo-Turkish nonsense words such as *iktitaḡ* and diagrams resembling Chinese **logographs*. Participants were exposed to different stimuli different numbers of times, and they then guessed the degree of favourability of the meanings of these items. The results showed almost linear relationships between (log transformed) exposure frequency and rated favourability. See also *POLLYANNA EFFECT*, *PREFERENCE-FEEDBACK HYPOTHESIS*. Compare *NAME–LETTER EFFECT*.

Merkel cell *n.* A touch receptor deep in the skin, and in the mucous membrane of the mouth, with a flattened or slightly cupped body and a large modified epithelial ending, especially sensitive to the edges of objects held in the hand or mouth. Also called a *Merkel corpuscle*, *Merkel disc*, or *Merkel–Ranvier corpuscle*. Compare [FREE NERVE ENDING](#), [GOLGI TENDON ORGAN](#), [MEISSNER’S CORPUSCLE](#), [PACINIAN CORPUSCLE](#), [RUFFINI CORPUSCLE](#). [Named after the German anatomist Friedrich Sigmund Merkel (1845–1919) who discovered it in 1880]

Merkel’s law *n.* In **psychophysics*, the proposition that equal differences in the magnitude of a sensation correspond to equal differences in the intensity of the stimulus causing it. It was not well corroborated by subsequent experimental tests. The term *Merkel’s law* is also an arguably preferable name for **Hick’s law*, because it was first formulated by Merkel. See also [PSYCHOPHYSICAL FUNCTION](#). Compare [FECHNER’S LAW](#), [POWER LAW](#). [Named after the German psychologist Julius Merkel (1834–1900) who formulated it in 1888]

merocrine *adj.* Of or relating to glands such as sweat glands that produce secretions without undergoing degeneration. Compare [APOCRINE](#), [HOLOCRINE](#). [From Greek *meros* part or share + *krinein* to separate]

Merrill-Palmer scale *n.* A scale for measuring mental abilities in preschool children from 18 months to 6 years of age (in the Merrill-Palmer Scale of Mental Tests), or 3 to 5 years of age (in the revised version, called the Extended Merrill-Palmer Scale), designed to provide a broader assessment than can be gained from a conventional IQ test. The Merrill-Palmer Scale of Mental Tests, introduced originally in 1926, comprises 93 tasks, grouped into clusters labelled Language, All-or-None, Form Board and Picture, and Motor Coordination, and grouped into six-month age ranges. The Extended Merrill-Palmer Scale comprises 16 tasks grouped into Semantic Production, Figural Production, Semantic Evaluation, and Figural Evaluation, based on Guilford’s structure-of-intellect model. See also [GUILFORD’S CUBE](#). [Named after the Merrill-Palmer School in Detroit, Michigan, where the scale was developed in 1931 by the US psychologist Rachel Stutsman (later Rachel Stutsman Ball, 1894–1980). The school was endowed by and named after Lizzie Pitts Merrill-Palmer (1838–1916), wife of the US Senator and
*****ebook converter DEMO Watermarks*****]

Ambassador to Spain Thomas Witherell Palmer (1830–1913)]

mescaline *n.* A ***psychotropic alkaloid**, chemically related to ***adrenalin** (epinephrine), derived from the flowering heads of the mescal or peyote cactus *Lophophora williamsii* native to Mexico and the south-western US, used for religious ceremonies in some Native American cultures, usually eaten or dissolved in a drink, acting as a central nervous system ***stimulant** causing pupil dilation and palpitations, together with ***psychedelic** and ***hallucinogenic** effects and feelings of ***euphoria**. Also called *peyote*. See also **PHANTASTICANT**. [From Spanish *mezcal*, from Nahuatl *mexcalli* mescal liquor, from *metl* the tropical American agave plant + *ixcalli* a stew or concoction]

Me-self *n.* According to the pioneering the US psychologist William James (1842–1910) in his *Principles of Psychology* (1890), all that one knows about oneself, or the self as object, in contradistinction to the ***I-self**.

mesencephalic locomotor region *n.* An area of the ***reticular formation** in the mesencephalon or midbrain that, when stimulated, generates alternating limb movements normally seen in walking or running.

mesencephalon *n.* A technical name for the ***midbrain**, especially in a developing embryo. Compare **PROSENCEPHALON**, **RHOMBENCEPHALON**. [From Greek *mesos* middle + *enkephalos* the brain, from *en* in + *kephale* the head]

mesmerism *n.* An obsolete term for ***animal magnetism** or ***hypnosis**. [Named after the Viennese physician Franz Anton Mesmer (1734–1815) who practised animal magnetism, though not hypnosis, in the 1770s]

mesocortex *n.* The five-layered cortex found mainly in the ***cingulate gyrus**, which evolved in humans earlier than most of the ***cerebral cortex** but not as early as the ***archaecortex**. See also **NEOCORTEX**, **PALAEOCORTEX**. [From Greek *mesos* middle + Latin *cortex* bark or outer layer]

mesocortical system *n.* A system of ***dopamine**-secreting neurons with cell bodies in the ***ventral tegmental area** of the midbrain

(mesencephalon) and terminal boutons in the **cerebral cortex*, involved in experiences of pleasure and reward. *See also* *MESOLIMBIC SYSTEM*, *MESOTELENCEPHALIC PATHWAY*.

mesoderm *n.* The middle germ layer of a human or animal **embryo*, from which the muscles, blood, bone, and connective tissue are formed. *Compare* *ECTODERM*, *ENDODERM*. [From Greek *mesos* middle + *derma* skin]

mesokurtic *See* *KURTOSIS*.

mesolect *n.* A speech style intermediate between the **acrolect* and the **basilect* within a speech community. *See also* *DIALECT*, *IDIOLECT*, *LECT*. [From Greek *mesos* middle + *legein* to speak]

mesolimbic system *n.* A system of **dopamine*-secreting neurons with cell bodies in the **ventral tegmental area* of the midbrain (mesencephalon) and terminal boutons in the **limbic system*, widely believed to be the ultimate common pathway for experiences of pleasure and reward in the brain. *See also* *MESOCORTICAL SYSTEM*, *MESOTELENCEPHALIC PATHWAY*.

mesomorph *n.* A muscular physique or body build, believed by the US psychologist William H(erbert) Sheldon (1899–1977) and followers of his **constitutional psychology* to be associated with such personality characteristics as extraversion and aggressiveness. *Compare* *ECTOMORPH*, *ENDOMORPH*. **mesomorphic** *adj.* **mesomorphy** *n.* The state or condition of being a mesomorph. [From Greek *mesos* middle + *morphe* a form or shape]

mesopic *adj.* Of or relating to vision that is intermediate between **photopic* and **scotopic* vision and is mediated by both **rods* and **cones*. [From Greek *mesos* middle + *ops* an eye + *-ikos* of, relating to, or resembling]

mesotelencephalic pathway *n.* A major **dopamine* pathway in the brain that includes the **nigrostriatal bundle* and parts of the **telencephalon*, portions of which are involved in experiences of pleasure and reward. *See also* *MESOCORTICAL SYSTEM*, *MESOLIMBIC SYSTEM*. [From Greek *mesos* middle +

telos end + *enkephalos* the brain, from *en* in + *kephale* the head]

messenger RNA *n.* A short-lived form of ***RNA** found in all cells, functioning as a template for ***protein** synthesis by transcribing genetic information from ***DNA** and carrying the information to a ***ribosome**, where the specified ***proteins** are then synthesized. *See also* **SNURP**. *Compare* **TRANSFER RNA**. **mRNA** *abbrev.*

meta-analysis *n.* A set of techniques for combining the results of a number of research studies and analysing them statistically as a single data set. The US statistician and psychologist Gene V. Glass (born 1940), who introduced the term in an article in the journal *Educational Researcher* in 1976, defined it as ‘the statistical analysis of a large collection of results from individual studies for purposes of integrating the findings’ (p. 3). Often confused with ***metanalysis**. *See also* **EFFECT SIZE**, **FILE DRAWER PROBLEM**. [From Greek *meta* among, beside, after + English *analysis*]

metabolism *n.* The sum total of biological processes occurring in a living organism that result in growth and energy production, more specifically the processes of ***anabolism** whereby foods are converted into body cells and ***catabolism** whereby substances are broken down to release energy. *See also* **AEROBIC**, **ANAEROBIC**, **BASAL METABOLIC RATE**, **KREBS CYCLE**. **metabolic** *adj.* **metabolite** *n.* A substance produced by metabolism. **metabolize** *vb.* To cause to be changed by metabolism. [From Greek *metabole* change, from *meta* among, with, or beside + *ballein* to throw]

metachrosis *n.* The ability of chameleons and certain other reptiles and fishes to change colour by expanding and contracting specialized pigment cells on the outsides of their bodies. [From Greek *meta* beside + *chrosis* colouring, from *chros* colour + *-osis* indicating a process or state]

metacognition *n.* Knowledge and beliefs about one’s own cognitive processes, an important class of metacognition being ***metamemory**. The term is also sometimes applied to regulation of cognitive functions, including planning, checking, or monitoring, as when one plans one’s cognitive strategy for memorizing something, checks one’s accuracy while performing mental arithmetic, or monitors one’s comprehension while reading, and these

*****ebook converter DEMO Watermarks*****

forms of metacognition are called *metacognitive regulation* in contradistinction to *metacognitive knowledge*. Writings on metacognition can be traced back at least as far as *De Anima* and the *Parva Naturalia* of the Greek philosopher Aristotle (384–322 BC), and the phenomenon was brought to prominence during the 1970s largely by the US psychologist John H(urley) Flavell (born 1928), who focused attention especially on developmental aspects of metacognition. In an influential article in the journal *Psychological Review* in 1977, the US psychologists Richard E. Nisbett (born 1941) and Timothy D. Wilson (born 1951) summarized a range of evidence suggesting that people are often unaware of the factors influencing their own choices, evaluations, and behaviour, and that the verbal reports that they give when questioned are often quite erroneous and misleading. *See also* [REALITY MONITORING](#). [From Greek *meta* beside or beyond + English *cognition*]

metacontrast *n.* A type of [*backward masking](#) in which the test stimulus and masking stimulus do not overlap spatially in the visual field. The term is often applied to visual masking by a non-overlapping figure irrespective of the temporal order of test stimulus and masking stimulus, but in careful usage the term [*paracontrast](#) is used when the test stimulus precedes the masking stimulus. *See also* [MASKING](#), [VISUAL MASKING](#). *Compare* [PARACONTRAST](#). [From Greek *meta* beyond + Latin *contra* against + *stare* to stand]

metalanguage *n.* A language used to refer to statements made in another language, called in this context the [*object language](#). If the statements being referred to are in French and the statements referring to them are in English, for example, then the distinction between object language (French) and the metalanguage (English) is clear, but if object language and metalanguage are both expressed in English, or both in a formal language such as the [*predicate calculus](#), then confusion can arise. Quotation marks can sometimes help, as in the sentence ‘*Snow is white*’ is true if and only if snow is white, in which the statement belonging to the object language is enclosed in quotation marks. Many paradoxes, including debatably the [*liar paradox](#), arise from a failure to distinguish object language from metalanguage: expressions involving *true* and *false*, when applied to a sentence, must always be expressed in a metalanguage and not in the object language of the sentence. The ideas behind the concept of a metalanguage are traceable to an article ‘On Denoting’ by the Welsh philosopher Bertrand (Arthur William)

Russell (1872–1970) in the journal *Mind* in 1905, and the concept was fully developed by the Polish logician and mathematician Alfred Tarski (1902–83) in his monograph *Der Wahrheitsbegriff in den formalisierten Sprachen* (The Concept of Truth in Formalized Languages) in 1933.

metamemory *n.* Knowledge or beliefs about one's own memory, its strengths and weaknesses, whether one has remembered particular items, and so on. The word is also used to denote regulation or control of memory, as described under ***metacognition**. See also **MNEMONIC**, **REALITY MONITORING**. [From Greek *meta* beside or beyond + English *memory*]

metamer *n.* Either of a pair of colours that appear identical but have different spectral compositions and are therefore composed of different wavelengths. A mixture of two non-complementary colours produces a colour that appears identical to a pure colour intermediate on the ***colour circle** between the component colours of the mixture but that has a different spectral composition from the pure colour. [From Greek *meta* beside + English (*iso*)*mer*, from Greek *isos* equal or the same + *meros* a part]

metameric match *n.* A comparison colour that a viewer considers identical to both members of a pair of ***metamers**.

metametric pair *n.* Two colours that are ***metamers** of each other.

metanalysis *n.* The formation of a new word through a mistaken analysis of a boundary between existing words. A typical example is the word *adder*, derived from Middle English *naddre* through people mishearing the phrase *a naddre* as *an adder*. A second example is the word *apron*, derived from a mistaken division into *an apron* of the Middle English *a napron*, from Old French *naperon* a little cloth, from Latin *nappa* a napkin. Often confused with ***meta-analysis**. Compare **BACK FORMATION**, **FOLK ETYMOLOGY (2)**. [From Greek *meta* beside or beyond + English *analysis*]

metaphase *n.* The second phase of ***mitosis**, during which the ***nuclear spindles** are formed and the ***chromosomes** attach themselves to the equator of the spindles by their ***centromeres**. [From Greek *meta* beside + *phasis* an aspect, from *phainein* to show]

*****ebook converter DEMO Watermarks*****

metaphor *n.* A [*figure of speech](#) in which a word or phrase is stated to mean something that it resembles but does not literally denote, as in *Life is just a bowl of cherries* (song title) or *Life is just a bowl of cheerios* (graffito). See also [CONDENSATION](#). Compare [SIMILE](#). [From Greek *meta* beside or beyond + *pherein* to carry]

metapsychology *n.* The study of the underlying conceptual questions or principles of psychology. The term was first used in [*psychoanalysis](#) by Sigmund Freud (1856–1939) to denote his own theory of psychology, especially its more abstract conceptual assumptions, in a letter to his friend, the German physician Wilhelm Fliess (1858–1928) in 1898 (*Standard Edition*, I, p. 274), and later given the following definition in his article on ‘The Unconscious’ (1915): ‘I propose that when we have succeeded in describing a psychical process in its dynamic, topographical and economic aspects, we should speak of it as a *metapsychological* presentation’ (*Standard Edition*, XIV, pp. 166–215, at p. 181). See also [DYNAMIC](#), [ECONOMIC](#), [TOPOGRAPHY](#). [From Greek *meta* among, beside, after + English *psychology*]

metathetic stimulus dimension *n.* Any stimulus dimension that can vary continuously and in so doing produce discrete or qualitative changes in perception, the standard example being the wavelength or frequency of visible light, which produces qualitatively different hues or colours as it varies continuously, whereas sound produces continuous or quantitative perceptual changes. Compare [PROTHETIC STIMULUS DIMENSION](#). See also [CATEGORICAL PERCEPTION](#). [From Greek *metathetikos* able to change, from *meta* beside + *tithenai* to place + *-ikos* of, relating to, or resembling]

metatrait *n.* A measure of the relevance of a [*trait](#) to a person, indicated by the consistency or lack of scatter (measured by the [*standard deviation](#)) of the individual’s responses to a set of personality scale items designed to measure it. Thus, for example, a person may score high on a scale to measure [*conscientiousness](#) but low on the corresponding conscientiousness metatrait, given a high inter-item standard deviation of responses to the component scale items. That would imply that the conscientiousness trait has low relevance to that person, and therefore that the high trait score is less predictive of conscientious behaviour across situations than a similar scale score in a person with a higher metatrait score. Metatrait scores have been

*****ebook converter DEMO Watermarks*****

shown to mediate the relation between total trait scores and behaviour and to be stable over time. The term was introduced by the US psychologists Roy F. Baumeister (born 1953) and Dianne M. Tice (born 1960) in an article in the *Journal of Personality* in 1988. [From Greek *meta* among + Old French *trait* a drawing or a stroke of the pen in a picture, from Latin *trahere*, *tractum* to draw]

metencephalon *n.* A part of the **rhombencephalon* hindbrain or of an embryo that develops later into the **cerebellum* and **pons*. Compare *EPENCEPHALON*. [From Greek *meta* among, with, or beside + *enkephalos* the brain, from *en* in + *kephale* the head]

met-enkephalin See *ENKEPHALIN*.

meth *n.* A common street name for **methamphetamine*.

methacholine *n.* A **parasympathomimetic* drug that mimics **acetylcholine* at **muscarinic receptor* sites. Also called *Mecholyl* (trademark). See also *CHOLINOMIMETIC*. [From *meth(yl)* the alkyl radical CH₃ derived from methane by removal of one hydrogen atom, from Greek *methy* wine + *hyle* wood + *a(cetyl)choline*]

methadone *n.* A synthetic **narcotic analgesic* with similar effects to **morphine* but believed by some to be less harmful, often used as a replacement for **heroin* in the treatment of heroin dependency. Often confused with **mephedrone*. Also called *Dolophine* (trademark). See also *CROSS-DEPENDENCE*, *OPIOID-RELATED DISORDERS*. [From *(di)meth(yl)* + *a(mino)* + *d(iphenyl)* + Greek *-one* indicating a chemical compound that is a ketone, from *-one* a feminine name suffix]

methamphetamine *n.* A drug that is closely related to **amphetamine* and that has a long-lasting action, used as a central nervous system **stimulant* and appetite suppressant. Common street names for it include *crank*, *crystal*, *crystal meth*, *meth*, and *speed* (more properly reserved for **amphetamine*). See also *AMPHETAMINE-RELATED DISORDERS*, *ICE*, *YABA*. [From *meth(yl)* the alkyl radical CH₃ derived from methane by removal of one hydrogen atom, from

Greek *methy* wine + *hyle* wood + English *amphetamine*]

methaqualone *n.* A central nervous system **depressant* that is used as a sedative and a hypnotic drug. Also called *Quaalude* (trademark). [From its chemical name *meth(yl)* the alkyl radical CH₃ derived from methane by removal of one hydrogen atom, from Greek *methy* wine + *hyle* wood + *qu(in)a(zo)l(ine)* + *-one* indicating a ketone, from *-one* a feminine name suffix]

method of absolute judgement *n.* In **psychophysics*, a procedure in which judgements are made without any explicit standards of comparison, as when an observer is asked to rate a sound for loudness on a scale from 0 to 100. Also called the *method of single stimuli*. Compare *METHOD OF COMPARATIVE JUDGEMENT*.

method of adjustment *n.* Another name for the **method of average error*.

method of average error *n.* One of the three classical methods of **psychophysics* introduced in 1860 by the German philosopher, physician, psychologist, and mystic Gustav Theodor Fechner (1801–87) for determining **difference thresholds*. It involves repeatedly adjusting a **variable stimulus* until it appears equal (or stands in some other prescribed relation of magnitude) to a **standard stimulus*, a difference threshold being calculated as the **probable error* of the adjustment—the absolute error exceeded in 50 per cent of such matches. Also called the *method of adjustment*, *method of mean error*, or *method of reproduction*. Compare *METHOD OF CONSTANT STIMULI*, *METHOD OF LIMITS*.

method of bisection *n.* In **psychophysics*, a technique for measuring sensations on an **interval scale* by having the observer repeatedly select or adjust a stimulus until it appears to be exactly half-way between two others. It is a form of the **method of equal-appearing intervals*. See also *INDIRECT SCALING*.

method of comparative judgement *n.* In **psychophysics*, a

procedure in which a **variable stimulus* is judged in relation to a **standard stimulus*. See also COMPARATIVE JUDGEMENT, DIFFERENCE THRESHOLD, LAW OF COMPARATIVE JUDGEMENT. Compare METHOD OF ABSOLUTE JUDGEMENT.

method of constant stimuli *n.* One of the three classical methods of **psychophysics* introduced in 1860 by the German philosopher, physician, psychologist, and mystic Gustav Theodor Fechner (1801–87) for determining **absolute thresholds* and **difference thresholds*. It involves presenting **variable* stimuli in random order and determining the smallest intensity that can be detected in the case of an absolute threshold or the smallest difference from a **standard stimulus* that can be detected in the case of a difference threshold, the criterion used nowadays usually being correct detection or discrimination on 75 per cent of presentations, although other percentages are sometimes used. See also METHOD OF EQUAL AND UNEQUAL CASES. Compare METHOD OF AVERAGE ERROR, METHOD OF LIMITS.

method of equal and unequal cases *n.* In **psychophysics*, a version of the **method of constant stimuli* in which a **difference threshold* is determined by presenting stimuli in pairs and requiring the observer to decide in each case whether they are the same or different.

method of equal-appearing intervals *n.* Any method of **psychophysical scaling* in which an observer adjusts the differences between stimuli, or chooses stimuli from a set, so that the differences between the magnitudes of the stimuli appear equal, thereby producing an **interval scale*. A **Thurstone scale* is a special form of equal-appearing interval scale. See also METHOD OF BISECTION.

method of gradation *n.* Any method of **psychophysics* in which an observer's judgement is determined by a succession of increasingly narrow approximations, a typical example being the **method of limits*.

method of limits *n.* One of the three classical methods of **psychophysics* introduced in 1860 by the German philosopher, physician, psychologist, and mystic Gustav Theodor Fechner (1801–87) for determining **absolute thresholds* and **difference thresholds*. It involves the presentation of an ascending series in which the intensity of a **variable stimulus* is
*****ebook converter DEMO Watermarks*****

increased by predetermined steps until it can be perceived on 50 per cent of presentations (for an absolute threshold determination) or until a difference between it and a **standard stimulus* can be perceived on 50 per cent of presentations (for a difference threshold), and a descending series in which the intensity is reduced by corresponding steps until the stimulus or the difference can be perceived on only 50 per cent of presentations. The threshold from the ascending series is called the *upper threshold* and is usually higher than the threshold from the descending series, called the *lower threshold*, and when a single threshold is required it is usually taken as the midpoint between the upper and lower thresholds. Compare [METHOD OF AVERAGE ERROR](#), [METHOD OF CONSTANT STIMULI](#).

method of loci *n.* A technique for memorizing lists of items, first introduced in about 500 BC by the poet Simonides of Ceos (556–468 BC). See [MNEMONIC](#).

method of mean error *n.* Another name for the **method of average error*.

method of paired comparisons *n.* In **psychophysics*, a method of scaling in which pairs of stimuli are presented, every stimulus in the set being paired with every other stimulus, a judgement being made in each case as to which of the two is greater with regard to the **attribute* being scaled (for example, which is heavier, brighter, or preferable). Provided the judgements satisfy certain assumptions, an **ordinal scale* is established. The technique is practical only if the number of stimuli is relatively small, because the number of pairs in a set of n stimuli is $n!/2(n-2)!$ and hence for $n = 8$ there are 28 pairs, for $n = 10$ there are 45 pairs, for $n = 20$ there are 190 pairs, for $n = 50$ there are 1,225 pairs, and so on. See also [UNFOLDING TECHNIQUE](#).

method of reproduction *n.* Another name for the **method of average error*.

method of savings *n.* A technique for studying **memory* by measuring the amount of time or the number of trials required to learn a certain amount of information or a certain skill and then determining how much less time or how many fewer trials are required to relearn the material or skill to the same

*****ebook converter DEMO Watermarks*****

standard after a period of forgetting, the reduction providing an index of the extent of the original learning.

method of single stimuli *n.* In **psychophysics*, a procedure in which judgements are made without explicit standard of comparison, as when an observer is asked to rate a sound for loudness on a scale from 0 to 100. Also called the *method of absolute judgement*.

methyl atropine *n.* A form of **atropine*, biochemically modified by the addition of a methyl radical, leaving the molecule with a positive charge and rendering it incapable of crossing the **blood-brain barrier*, so that it blocks peripheral acetylcholine neuroreceptors but allows brain acetylcholine systems to function normally. *Compare* METHYL SCOPOLAMINE. [From *methyl* the alkyl radical CH₃ derived from methane by removal of one hydrogen atom, from Greek *methy* wine + *hyle* wood + English *atropine*]

methylphenidate *n.* Methylphenidate hydrochloride, an analogue of **amphetamine*, being a mild central nervous system **stimulant drug* that blocks the reuptake of **noradrenalin* and **dopamine* and is often prescribed in the treatment of attention-deficit/hyperactivity disorder (*ADHD*) in children and narcolepsy in adults. Commonly called *Ritalin* (trademark). *See also* AMPHETAMINE-RELATED DISORDERS, INITIAL VALUES LAW. [From *methyl* + *phen(yl)* + (*piper*)*id(ine)* + (*acet*)*ate*]

methylphenylpyridine *n.* The chemical name of **MPP⁺*.

methylphenyltetrahydropyridine *n.* The chemical name of **MPTP*.

methyl scopolamine *n.* A form of **scopolamine*, biochemically modified by the addition of a methyl radical, leaving the molecule with a positive charge and rendering it incapable of crossing the **blood-brain barrier*, so that it blocks peripheral acetylcholine neuroreceptors but allows brain acetylcholine systems to function normally. *Compare* METHYL ATROPINE. [From *methyl* the alkyl radical CH₃ derived from methane by removal of one hydrogen atom, from Greek *methy* wine + *hyle* wood + English *scopolamine*]

methylxanthine *n.* Another name for a **xanthine*.

metonymy *n.* A **figure of speech* in which a word denoting an **attribute* comes to be substituted for the thing referred to, as in the phrase *the crown*, denoting the king or queen, or *the bench*, denoting a collection of judges or magistrates. *See also* *DISPLACEMENT*. *Compare* *SYNECDOCHE*. [From Greek *meta* beside + *onoma* a name]

Metrazol *n.* A proprietary name for the stimulant drug **pentylene tetrazol*. [Trademark, from (*penta*)*met*(*hylene*) + (*tet*)*razol*(*e*)

MHPG *abbrev.* 3-Methoxy-4-hydroxyphenylethylene glycol, a metabolite of **dopamine* and **noradrenalin* (norepinephrine) that is believed to be a biochemical marker for the diagnosis of depression.

mianserin *n.* A **tetracyclic antidepressant* drug, used to treat **depression*, especially when it is accompanied by a **sleep–wake disorder*, and other disorders of which depression is a feature.

miaow miaow *n.* *See* *MEOW MEOW*.

Michelangelo phenomenon *n.* A pattern of relationship interdependence in which close partners influence each other's dispositions, values, and behavioural patterns in such a manner as to bring both people closer to their **ideal selves*. The concept was introduced by the US psychologist Stephen Michael Drigotas (born 1966) and several collaborators in an article in the *Journal of Personality and Social Psychology* in 1999 reporting the results of four experiments designed to elucidate the phenomenon. [Named after the Italian sculptor Michelangelo Buonarroti (1475–1564) who is said to have conceived of sculpture as a process of bringing out figures already hidden in stone by chipping away the excess]

microcephaly *n.* A congenital condition characterized by an abnormally small head and underdeveloped brain, resulting in some degree of **intellectual disability*. **microcephalic** *adj.* [From Greek *mikros* small + *kephale* head]

microelectrode *n.* A fine insulated wire with an extremely narrow tip, usually between one-half and five microns (micrometres or millionths of a metre) in diameter, that when inserted close enough to a ***neuron** can detect its individual electrical signals or can be used to stimulate the neuron. [From Greek *mikros* small + *elektron* amber (in which electricity was first observed) + *hodos* a way]

microevolution *n.* A relatively rapid change in a species or subspecies brought about by ***natural selection** operating intensively on a characteristic or characteristics. *Compare* **MACROEVOLUTION**. [From Greek *mikros* small + English *evolution*]

microfilament *n.* A slender threadlike structure containing ***actin** that is abundantly present in ***muscle** tissue. [From Greek *mikros* small + Latin *filum* a thread, from *filare* to spin]

microglia *n.* A type of ***neuroglial** cell found in the central nervous system, more abundant in ***grey matter** than in ***white matter**, functioning as a ***phagocyte**, scavenging dead or damaged cells or encircling them, and proliferating when the brain is injured or infected. *See also* **GLIA**. *Compare* **MACROGLIA**. [From Greek *mikros* small + *glia* glue]

micropsia *n.* A condition, caused either by a lesion in the retina or by a neurological disorder, in which everything in the ***visual field** appears smaller than normal. Also called *micropsy*. *See also* **CHARLES BONNET SYNDROME**. *Compare* **MACROPSIA**. [From Greek *mikros* small + *opsis* sight, from *ops* an eye + *-ia* indicating a condition or quality]

microsaccade *n.* One of the forms of ***physiological nystagmus**, consisting of a tiny ***saccade**, usually through a visual angle between 1 and 2 minutes of arc (sixtieths of a degree), occurring in random directions three or four times a second while an observer fixates an object visually, necessary to prevent the visual image from disappearing, as an artificially ***stabilized retinal image** does after about a second. *See also* **OCULAR DRIFT**, **OCULAR TREMOR**. [From Greek *mikros* small + French *saccade* a jerk, from Old French *saquer* to pull]

microsleep *n.* A very brief period of sleep, occurring without awareness in a person who is apparently awake, often associated with fatigue or alcohol intoxication.

microsome *n.* Any of the small fragments that can be isolated from biological cells by centrifugal action. They consist of ***ribosomes** with scraps of ***endoplasmic reticulum** attached to them. [From Greek *mikros* small + *soma* a body]

microspecies *n.* A taxonomic category below the level of a ***species**, hence a race, subspecies, or variety. [From Greek *mikros* small + Latin *species* appearance or kind, from *specere* to look]

microtome *n.* An instrument for cutting thin slices of brain tissue or other material for microscopical examination. **microtomy** *n.* The slicing of sections with a microtome. [From Greek *mikros* small + *tome* a cut]

microtubule *n.* Any of the comparatively rigid, hollow protein tunnels, with an outside diameter of approximately 25 nanometres and an inside diameter of approximately 14 nm, up to several millimetres in length, forming part of the ***cytoskeleton** within the cytoplasm of almost all cells, including ***neurons**, where such tunnels are involved in ***anterograde transport** and ***retrograde transport** within ***axons** and ***dendrites**. The molecules of *tubulin*, the protein of which it is composed, can exist in at least two different geometrical configurations, in one of which it bends about 30 degrees from the direction of the microtubule, enabling movement to occur, for example during ***mitosis**, and possibly encoding and transmitting signals within the cell like a ***cellular automaton**. The ***cilia** of ***paramecia** consist of bundles of microtubules. *See also* **NEUROFIBRIL**, **PARAMECIUM**. [From Greek *mikros* small + Latin *tubulus* a little pipe, diminutive of *tubus* a pipe]

midbrain *n.* The middle part of the brain, connecting the diencephalon to the hindbrain, including the ***tectum**, ***tegmentum**, ***cerebral peduncles** and the ***aqueduct of Sylvius**, also called the *mesencephalon*, especially in a developing embryo. *Compare* **FOREBRAIN**, **HINDBRAIN**.

middle commissure *n.* A band of grey matter connecting the two *thalami across the third *ventricle of the brain. *See also* COMMISSURE.

middle ear *n.* The sound-transmitting intermediate part of the ear, filled with air and containing the *malleus, *incus, and *stapes, separated from the outer ear by the *tympanic membrane and from the inner ear by the *round window (fenestra rotunda) and *oval window (fenestra ovalis). *See also* EUSTACHIAN TUBE.

middle insomnia *See* INSOMNIA.

middle temporal gyrus *n.* The middle of the three gyri on the lateral surface of each *temporal lobe, running horizontally between the superior temporal gyrus (temporal operculum) and the inferior temporal gyrus, occupied at its posterior extremity by Area V5 of the *visual cortex, which is responsible for visual perception of motion. Also called the *median temporal gyrus* or the *middle temple*. **MT** abbrev.

midget cell *n.* A small retinal *ganglion cell in the *parvocellular system, with a *centre-surround receptive field, its centre receiving input from only one of the three types of *cone (blue, green, or red) and the surround from the other two types of retinal cones. *Compare* PARASOL CELL.

midsagittal plane *n.* A *sagittal plane passing through the middle of an organ or organism, dividing it into equal right and left halves.

midsagittal section *n.* A *sagittal section dividing an organ or organism down the middle into left and right halves. In the case of the brain it exposes the *medial surfaces of the cerebral hemispheres. Also called the *median section*. *See* SAGITTAL SECTION.

mid vowel *n.* A *vowel (see the diagram accompanying that entry) produced at a position in the vocal tract that is mid-way between the position of a *close vowel and that of an *open vowel, such as the initial vowel in the word *about* (a *schwa) or the vowel in *get*.

Mignon delusion *n.* The delusion that the parents who brought one up are not one's natural parents and that one really belongs to a more distinguished family. [Named after a character of mysterious origins in Goethe's novel *Wilhelm Meister*, and the eponymous heroine of the opera *Mignon* based on it, who pines away and dies without her longings being fulfilled]

migraine *n.* A recurrent headache originating on one side of the head, characterized by severe throbbing pain and an aversion to bright light, sometimes preceded or accompanied by visual disturbances or prodromal **auras* (2) such as **scotomas* or **phosphenes*, nausea, vomiting, sweating, chills, and exhaustion. *See also* **MÖBIUS SYNDROME**. [From Greek (*he*)*mi* half + *kran*(ion) skull]

migration *n.* The movement from one region, place, or country to another, including the seasonal movement of a population of animals to a different environment, most common in certain species of birds (such as Arctic terns, which migrate annually 17,600 km between their breeding ground in the Arctic circle and the Antarctic), but observed also in mammals (such as porpoises), fish (such as eels, salmon), and some insects. *See also* **POPULATION GENETICS**.

mild cognitive impairment *n.* A condition characterized by slight **amnesia* without **dementia* or other forms of **cognitive impairment*, often a precursor of **Alzheimer's disease*. It may be diagnosed in a patient who complains of memory loss, and has demonstrable memory impairment compared to other people of similar age, but is capable of carrying out normal activities of daily life, has normal general cognitive functioning, and does not meet the criteria for the diagnosis of dementia. Approximately 80 per cent of people with the condition develop Alzheimer's disease within 10 years. Also called *cognitive impairment no dementia* (**CIND**). *See also* **CLOCK DRAWING TEST**, **MINI-MENTAL STATE EXAMINATION**. **MCI** *abbrev.*

mild mental retardation *n.* An obsolescent term for a level of **intellectual disability* associated with an **IQ* approximately between 50 and 69 (in adults, **mental age* from 9 to 12 years), equivalent to the educational category of educable mentally retarded. Sometimes called *feeble-mindedness*
*****ebook converter DEMO Watermarks*****

or *mild mental subnormality*.

Milgram experiment *n.* A famous experimental procedure introduced in 1963 by the US psychologist Stanley Milgram (1933–84) to study obedience to authority. See [OBEDIENCE](#).

milieu therapy *n.* A form of [*psychotherapy](#), usually conducted in a hospital or other facility that can function as a [*therapeutic community](#) and provide a stable environment, in which personal growth and behaviour change may be promoted through interaction of individuals within the total therapeutic environment. See also [GROUP THERAPY](#).

Miller Analogies Test *n.* A [*psychometric](#) test designed to select entrants to graduate schools in the United States. It comprises 120 verbal analogy items of the type *Fish is to water as bird is to?* It is the most widely used test for graduate school entry after the [*Graduate Records Examination](#). **MAT** *abbrev.* [Named after the US psychologist Wilford Stanton Miller (1883–1960) who developed it in 1923]

Mill Hill Vocabulary scale *n.* An [*intelligence test](#) designed to measure verbal intelligence, consisting of a list of 88 words divided into two sets of 44, published by the English psychologist John C(arlyle) Raven (1902–70) in its original form in 1944 as a companion to [*Raven's Progressive Matrices](#). The respondent's task is to explain the meanings of the words or (in an alternative form of presentation) to select the correct synonym for each word from a list of six alternatives provided. Most children with a [*mental age](#) of 5 years can explain the meanings of the first few words (*cap, loaf, unhappy*), and between the ages of 5 and 16 children of average intelligence can usually define about three additional words per year. The most difficult words in the list, which only a small minority of adults can define, include *recondite, exiguous, and minatory*. The [*correlation](#) between scores on the Mill Hill Vocabulary scale and Raven's Progressive Matrices is approximately .75, notwithstanding the utterly different ways in which the two tests measure intelligence. **MHV** *abbrev.* [Named after the Mill Hill Emergency Hospital in London, the wartime location of the Maudsley Hospital, where it was developed]

millimicron *n.* Another (obsolescent) name for a **nanometre*.

Miltown *n.* A proprietary name for the depressant drug **meprobamate*.
[Trademark]

mimesis *n.* Imitation or **mimicry*. **mimetic** *adj.* Imitative; of or relating to mimesis. [From Greek *mimesis* imitation, from *mimeisthai* to imitate]

mimicry *n.* Imitation or **mimesis*; more specifically the deceptive resemblance of one animal species to another to protect it from **predators*, common especially among butterflies and other insects. *See also* **BATESIAN MIMICRY**, **MÜLLERIAN MIMICRY**. [From Greek *mimos* a mime]

mind-blindness *n.* A specific inability to appreciate other people's mental states. The term was first used in its modern sense in 1990 by the British psychologist Simon Baron-Cohen (born 1958), although the German physiologist Hermann Munk (1839–1912) introduced it (in the German form *Seelenblindheit*) in an article in the *Archiv für Anatomie und Physiologie* in 1878 to denote a loss of ability to grasp the meaning of visual stimuli without loss of the ability to see. Munk had observed this condition in a dog with a limited lesion in the **occipital* cortex. *See* **THEORY OF MIND**. **mind-blind** *adj.*

mind-body problem *n.* The philosophical problem, usually attributed to the French philosopher René Descartes (1596–1650) of explaining the apparent interaction of mental and physical events, which appear to belong to two quite separate realms of existence, as when a (mental) wish gives rise to a (physical) bodily movement or a (physical) pinprick to a (mental) sensation of pain. The problem was appreciated by Descartes only after he received a letter in 1643 from Princess Elizabeth of Bohemia (1596–1662), the daughter of King James I of England and VI of Scotland, pointing it out. *See also* **CARTESIAN DUALISM**, **DOUBLE-ASPECT THEORY**, **DUALISM**, **EPIPHENOMENALISM**, **IDENTITY THEORY**, **INTERACTIONISM (1)**, **MATERIALISM**, **MONISM**, **NEUTRAL MONISM**, **PSYCHOPHYSICAL PARALLELISM**.

mindfulness *n.* Heedfulness or awareness. In some forms of **psychotherapy* and **counselling psychology*, lucid awareness of events and

experiences. This usage is borrowed from the Buddhist tradition of ***transcendental meditation**, in which the state of mindfulness is likened to a polished mirror that simply reflects what passes before it, unbiased by conceptual thought. Such heightened mental receptivity, including increased sensitivity to the environment, greater openness to new information, new ways of structuring perception, and enhanced awareness of different problem-solving perspectives, is believed to facilitate insight, revealing reality with increased clarity, and is claimed to produce psychological and health benefits. The concept was brought to prominence in psychology by the US psychologist Ellen J. Langer (born 1947), first in an article co-authored with two colleagues in the *Journal of Experimental Social Psychology* in 1974, and later a book entitled *Mindfulness* published in 1989. *See also* **ACCEPTANCE AND COMMITMENT THERAPY**, **ATTENTION**, **CONTROLLED PROCESSING**, **DIALECTICAL BEHAVIOUR THERAPY**, **MINDFULNESS-BASED COGNITIVE THERAPY**, **MORITA THERAPY**. *Compare* **MINDLESSNESS**. **mindful** *adj.* [From a translation of the word *sati* in the ancient Indian language Pali, meaning to remember or to have presence of mind, from Old English *gemynd* mind + *-ful* full + *-nes* indicating a state, condition, or quality]

mindfulness-based cognitive therapy *n.* A therapeutic method based on ***cognitive behaviour therapy**, incorporating ideas associated with ***mindfulness**, designed to prevent recurrence of episodes of ***major depressive disorder**. The mindfulness element trains clients to notice automatic cognitive processes that have triggered depressive episodes in the past and to alter their reactions to be more reflective. It was developed by the Polish-born Canadian psychologist Zindel V(ictor) Segal (born 1956) and the British clinical psychologists J(ohn) Mark G(ruffydd) Williams (born 1952) and John D(ouglas) Teasdale (born 1944) and published in a book entitled *Mindfulness-Based Cognitive Therapy for Depression* in 2002 and an article in the *Journal of Consulting and Clinical Psychology* in 2004. **MBCT** *abbrev.*

mindlessness *n.* A state of reduced cognitive activity, with ***automatic processing** of environmental cues. *Compare* **MINDFULNESS**. **mindless** *adj.* [From Old English *gemynd* mind + *-leas* lacking + *-nes* indicating a state, condition, or quality]

mind-reading *n.* The act or process of discerning another person's thoughts, as in **telepathy* or in the everyday functioning of a **theory of mind*. Compare *MIND-BLINDNESS*. **mind-reader** *n.* One who engages in mind-reading.

mineralocorticoid *n.* Any **corticosteroid* that maintains the body's electrolyte and fluid balance, especially by promoting the retention of sodium in the kidney tubules, the most significant one in humans being **aldosterone*. See also *ZONA GLOMERULOSA*. Compare *GLUCOCORTICOID*. [From *mineral* + *cortico(steroid)*]

miniature end-plate potential *n.* A small variation in the electrical potential across the membrane of a resting muscle cell, below the threshold required to trigger a contraction of the muscle fibre, caused by the release of a small quantity of **acetylcholine* by a **motor neuron* at the **motor end plate*. Compare *END-PLATE POTENTIAL*. **MEPP** *abbrev.*

minimal audible angle See *MINIMUM AUDIBLE ANGLE*.

minimal audible field See *MINIMUM AUDIBLE FIELD*.

minimal audible pressure See *MINIMUM AUDIBLE PRESSURE*.

minimal brain dysfunction *n.* Another name for **attention-deficit/hyperactivity disorder*. Also called *minimal cerebral dysfunction* (or *damage*). **MBD** *abbrev.*

minimal group situation *n.* An experimental procedure in which mere **social categorization* elicits intergroup discrimination. It was introduced in 1970 and 1971 in articles in *Scientific American* magazine and the *European Journal of Social Psychology* respectively by the British-based Polish psychologist Henri Tajfel (1919–82) and several colleagues, who performed the following experiment with a group of 64 schoolboys who knew one another very well. The boys were divided into two groups on arbitrary and insignificant criteria and were then presented with a series of two-row matrices, on each of which they were asked to choose a column specifying

amounts of money to be assigned to two members of their own group (ingroup choices), two members of the other group (outgroup choices), or one member of their own group and one member of the other group (intergroup choices). The boys did not know the identity of the individuals who were affected by their choices but only which groups they belonged to, and their own interests were not affected by their choices, because no one could know their choices. Nevertheless, when they made intergroup choices, a large majority of the boys gave slightly more money to members of their own group than to members of the other group, even when they could have chosen columns in which members of their own group would have got more in absolute terms but the other group would have done even better. In contrast, when they made ingroup choices or outgroup choices, they tended to select columns that distributed the money with maximum fairness. This effect has been replicated with children and adults of both sexes in many different countries. Also called the *minimal group paradigm*, and often confused with the [*minimal social situation](#). See also [SOCIAL IDENTITY THEORY](#).

minimal pair *n.* A pair of words that differ in only one speech sound but have distinct meanings, thus establishing that the speech sounds in question are different [*phonemes](#). For example, the fact that *cap* and *cab* have different meanings establishes that /p/ and /b/ are different phonemes in English. In English, /r/ and /l/ give distinct meanings to minimal pairs (such as *row* and *low*) and are therefore distinct phonemes, whereas in Japanese they do not and are therefore [*allophones](#), which explains why they are often confused by native Japanese speakers of English. See also [ACOUSTIC CUE \(1\)](#), [ACQUIRED SIMILARITY](#), [DISTINCTIVE FEATURE](#), [NEUTRALIZATION](#).

minimal social situation *n.* An interactive decision in which each decision maker is ignorant of the interactive nature of the decision and even of the existence of another decision maker whose actions affect the outcomes, first investigated by the US psychologist Joseph B(oleslaus) Sidowski (born 1925) and his colleagues and published in the *Journal of Abnormal and Social Psychology* in 1956 and the *Journal of Experimental Psychology* in 1957. In the original experiment, pairs of participants or subjects were seated in separate rooms, unaware of each other's existence, with electrodes attached to their bodies, each individual operating an apparatus with a pair of buttons labelled *L* and *R* and a digital display showing the cumulative number

of points scored. They pressed one button at a time as often as required with the twin goals of obtaining rewards (points) and avoiding punishments (electric shocks). The rewards and punishments were arranged according to a *mutual fate control* payoff structure such that whenever either individual pressed *L*, the other was rewarded with points, and whenever either pressed *R*, the other was punished with electric shock; but a choice had no direct effect on the individual who made it. As Sidowski and his colleagues were the first to demonstrate, in such situations people generally learn to coordinate their choices to their mutual benefit, although they are unaware of their interdependence, and in the long run pairs often settle down to choosing *L* on every occasion. The minimal social situation is often confused with the **minimal group situation*. See also WIN–STAY, LOSE–SHIFT STRATEGY.

minimax *n.* In two-person game theory, a **strategy* (2) that *minimizes* the maximum payoff to the co-player. In a two-person **zero-sum game*, it is equivalent to a **maximin* strategy, because each player's gains are the co-player's losses.

minimax theorem *n.* A fundamental result in **game theory*, establishing that every finite, strictly competitive (two-person **zero-sum*) game has what later came to be called a **Nash equilibrium*, provided that **mixed strategies* may be used, and that the corresponding strategies are **minimax* strategies. The theorem was first proved by the Hungarian-born US mathematician John von Neumann (1903–57) and published in the journal *Mathematische Annalen* in 1928.

Mini-Mental State Examination *n.* A brief, easily administered, and simply scored psychological test designed to screen for mental impairment, especially in the elderly, first published by the US psychiatrists Marshal F(rank) Folstein (born 1941), Susan Folstein (born 1944), and Paul R(odney) McHugh (born 1931) in the *Journal of Psychiatric Research* in 1975. It was based on a test developed by the British psychiatrist John Hinton (born 1926) and the British psychologist Eileen Withers, published in the *British Journal of Psychiatry* in 1971, based on 'most of the commonly used tests' in existence at that time, traceable back to the German neurologist Alois Alzheimer (1864–1915). It consists of the following 11 questions: What is the year, season, month, date, day of the week? (5 points). Where are we

*****ebook converter DEMO Watermarks*****

(state/country, county/province, city, hospital/place, floor/street)? (5 points). Remember these and name them after me: *apple, penny, table* (3 points). Subtract 7 from 100, then subtract 7 from the answer, and so on five times, or spell the word *world* backwards (5 points). What are the three words I asked you to remember earlier? (3 points). Name these (pointing to a watch and a pen) (2 points). Repeat the following exactly: *No ifs, ands, or buts* (1 point). Take this sheet of paper in your right hand, use both hands to fold it in half, and then put it on the floor (3 points). Read and follow the command on this paper: CLOSE YOUR EYES (1 point). Write down any sentence of your choice (1 point). Copy this diagram (two overlapping pentagons) (1 point). The test is sensitive in detecting moderate or severe ***dementia** and predicting the development of ***Alzheimer's disease**, scores below 21 being associated with an increased risk of developing dementia. Out of a maximum possible score of 30, less than 24 is considered abnormal, 18–23 indicates ***mild cognitive impairment**, and less than 18 severe dementia. Also called the *Folstein Mini-Mental State Examination*. Compare **MENTAL STATUS EXAMINATION**. **MMSE** abbrev.

minimum audible angle *n.* A measure of the ***acuity** of binaural ***sound localization** in the horizontal plane, equal to the smallest difference in the direction of two sound sources that can be reliably detected. In humans it is usually in the region of two degrees under ideal conditions, whereas in the barn owl, which relies entirely on its hearing to locate fieldmice and other prey in total darkness, it is close to one degree in both the horizontal and vertical dimensions, more acute than that of any other species whose hearing has been tested. Also called the *minimal audible angle*. **MAA** abbrev.

minimum audible field *n.* The smallest sound intensity that can be detected reliably by a listener facing the sound source under ideal listening conditions. Also called the *minimal audible field*. See also **ACUITY**. **MAF** abbrev.

minimum audible pressure *n.* The sound pressure on the tympanic membrane corresponding to the ***minimum audible field**. Also called the *minimal audible pressure*. See also **ACUITY**. **MAP** abbrev.

minimum effective dosage *n.* The smallest dosage of a particular

*****ebook converter DEMO Watermarks*****

drug that produces a specified effect in an organism. Also called *minimal effective dosage*. See also [EFFECTIVE DOSAGE](#), [THERAPEUTIC INDEX](#), [THERAPEUTIC RATIO](#). Compare [MEDIAN EFFECTIVE DOSAGE](#), [MEDIAN LETHAL DOSAGE](#), [MEDIAN TOXIC DOSAGE](#), [MINIMUM LETHAL DOSAGE](#), [MINIMUM TOXIC DOSAGE](#). **MED** abbrev.

minimum lethal dosage *n.* The smallest dosage of a drug that kills an experimental animal. Also called *minimal fatal dosage*. See also [LETHAL DOSAGE](#), [THERAPEUTIC INDEX](#), [THERAPEUTIC RATIO](#). Compare [MEDIAN EFFECTIVE DOSAGE](#), [MEDIAN LETHAL DOSAGE](#), [MEDIAN TOXIC DOSAGE](#), [MINIMUM EFFECTIVE DOSAGE](#), [MINIMUM TOXIC DOSAGE](#). **MLD** abbrev.

minimum separable *n.* A measure of [*visual acuity](#), usually determined with an [*acuity grating](#), equal to the [*visual angle](#) corresponding to the finest grating in which separate bars can be distinguished. A person with normal 20/20 vision according to the [*Snellen fraction](#) has a minimum separable of approximately 1/60 of a degree or one minute of arc. Compare [MINIMUM VISIBLE](#).

minimum toxic dosage *n.* The smallest dosage of a drug that produces signs or symptoms of toxicity in an organism. Also called *minimal toxic dosage*. See also [THERAPEUTIC INDEX](#), [THERAPEUTIC RATIO](#), [TOXIC DOSAGE](#). Compare [MEDIAN EFFECTIVE DOSAGE](#), [MEDIAN LETHAL DOSAGE](#), [MEDIAN TOXIC DOSAGE](#), [MINIMUM EFFECTIVE DOSAGE](#), [MINIMUM LETHAL DOSAGE](#). **MTD** abbrev.

minimum visible *n.* A measure of [*visual acuity](#) in terms of the [*visual angle](#) subtended by the finest hairline that can be reliably detected. Under ideal viewing conditions it is in the region of one-half of one second of arc or about 1/7,000 of a degree. Compare [MINIMUM SEPARABLE](#).

Minnesota Multiphasic Personality Inventory See [MMPI](#).

minor depressive disorder *n.* A term used to denote subthreshold cases of [*major depressive disorder](#). Also called *dysthymic disorder*.

minor epilepsy *n.* A form of [*epilepsy](#) characterized by [*absences](#), without [*convulsions](#). Formerly called *petit mal epilepsy*.

minority social influence *n.* A form of **social influence* in which the deviant subgroup rejects the established group **norm* (1, 2) and persuades the majority to the minority attitude, opinion, belief, or behaviour pattern, thereby changing the norm. The concept was introduced by the Romanian-born French social psychologist Serge Moscovici (born 1925) in his book *Social Influence and Social Change* (1976), in which he argued that the conflict caused by minorities is a force for innovation. Minorities are most influential when they are consistent, consensual, and in line with the underlying values of the group.

minor tranquillizer *n.* An obsolescent name for an **anxiolytic*. US *minor tranquilizer*. Compare MAJOR TRANQUILLIZER.

miracle berry *n.* The fruit of the tropical African tree *Synsepalum dulcificum* that contains the protein **miraculin*. Also called the *miraculous fruit* or *miraculous berry*.

miraculin *n.* A protein found in the **miracle berry* that alters the taste buds, causing bland or acid foods eaten after it to taste sweet. Compare MONOSODIUM GLUTAMATE. [From *miracul(ous)* + *-in(e)* indicating an organic compound]

mirror drawing *n.* Tracing shapes such as stars and circles with a pencil while the writing hand and the shapes are screened from sight but can be viewed via a reflection in a mirror. The discovery in 1960 that the ability to learn such automatic skilled movements is not impaired by bilateral **temporal lobe* lesions, whereas memories requiring conscious cognitive processes are abolished by such lesions, gave the first hint of the existence of two distinct types of learning systems involving **declarative knowledge* and **non-declarative knowledge*.

mirror focus *n.* A region of abnormal electrical activity in the cerebral cortex, corresponding to a region in the opposite cerebral hemisphere that has been stimulated to produce a focal epileptic **seizure*, or an abnormal region of the cerebral cortex developing in response to a **lesion* in the corresponding region of the opposite cerebral hemisphere.

mirror neuron *n.* A ***neuron** that is activated when a person performs a certain action or has a certain experience and also when the person observes someone else performing the same action or having the same experience. Mirror neurons provide internal representations of other people's actions, intentions, and emotions, and were first discovered in the brains of macaque monkeys in the early 1990s at the University of Parma in Italy by the Ukrainian-born neurologist Giacomo Rizzolatti (born 1937) and several colleagues and the findings published in the journal *Experimental Brain Research* in 1992. In humans, ***brain imaging** studies have suggested that mirror neurons responsive to observed bodily movements are located in the ***superior temporal sulcus** and that others are present in the inferior gyrus of the ***parietal lobe** and of the ***motor cortex**. Mirror neurons that respond to emotions or pain being experienced by others have been found in the ***insula** and ***cingulate gyrus**. Mirror neurons provide direct and immediate understanding of actions and emotions and are believed to be implicated in ***social cognition**, ***social learning**, ***skill learning**, ***language**, ***empathy**, and ***theory of mind**. Dysfunctional mirror neurons may explain the primary symptoms of ***autism**. See also **MU WAVE**. [So called because these neurons reflect in an individual's brain actions performed or emotions experienced by another]

mirror phase *n.* In ***psychoanalysis**, a concept introduced in 1936 by the French psychoanalyst Jacques Lacan (1901–81) to denote the stage of human development between 6 months and 18 months, when the infant, though still helpless, is capable of recognizing its body as a unity and imagining a state of being able to master it. According to Lacan, this phase forms the basis on which the ***ego** develops, and it is called the mirror phase because it is evidenced by the infant's jubilant response to its own mirror reflection, with which it is believed to identify.

mirror reversal problem *n.* The problem of explaining why a mirror appears to reverse left and right but not up and down. This question, often loosely labelled a ***paradox**, has been discussed ever since the Greek philosopher Plato (?427–?347 BC) answered it incorrectly in his dialogue *Timaeus*. According to a widely accepted explanation in *The Ambidextrous Universe* (1964) by the best-selling US science writer Martin Gardner (1914–2010), the fact that the image appears behind the mirror causes the viewer to

*****ebook converter DEMO Watermarks*****

perform a ***mental rotation** of it, using the vertical axis of rotation because the human body is nearly left-right symmetrical and this is therefore the easiest mental rotation to perform; but this explanation fails because mental rotation is too slow to account for the phenomenon and because it relies on an awareness that what is seen is a mirror image, whereas the apparent left-right reversal is experienced as usual by a viewer who lacks this awareness. Others have offered explanations based on the fact that we have a pair of horizontally separated eyes; but the apparent reversal is unaffected by closing one eye. Further fallacious explanations have relied on physics or linguistics (the ambiguity of the words *left* and *right*). The correct solution to the problem, first published by the English psychologist Richard L(angton) Gregory (1923–2010) in his book *Mirrors of the Mind* in 1997, with an added discussion of faces in 1999, is surprisingly simple. A mirror does not reverse left and right or top and bottom, but in order to see the reflection of an object we have to rotate it physically to face the mirror, and we usually perform this rotation about the horizontal axis, therefore the image appears left-right reversed because the object is indeed left-right reversed relative to the orientation of the reflected image. If, instead, we turned an object over about its horizontal axis to face a mirror, then its reflection would appear upside-down but not left-right reversed. Mirror images of our own faces appear left-right reversed for the same reason: to look in a mirror, we turn horizontally through 180 degrees relative to the reflected image we are about to produce; we cannot face the same way as the reflected image, because then we would be facing away from the mirror. *See also* **ENANTIOMORPH**.

mirror writing *n.* Handwriting that runs backwards and looks normal when viewed in a mirror. It is sometimes deliberate, a famous exponent being the Italian artist and polymath Leonardo da Vinci (1452–1519), but unintentional mirror writing is more common in young children and brain-damaged adults, and as a frequent transient symptom following left-hemisphere ***stroke**, about a quarter of patients experiencing it. Contrary to popular belief, it is not more common in left-handed than right-handed people and is not related to intelligence in neurologically undamaged people. Also called *palingraphia*.

misandry *n.* Hatred of men. *See also* **ANDROPHOBIA** in Appendix I.
misandrist *n. adj.* One who hates men; of or relating to hatred of men. [From

Greek *misos* hatred + *andros* of a man, from *aner* a man]

misidentification disorders See [DELUSIONAL MISIDENTIFICATION](#).

misinformation effect *n.* Another name for the [*eyewitness misinformation effect](#).

mismatch *n.* An incorrect pairing of a word and a [*concept](#), usually by a child during the course of language development, as when a child calls a toy drum a car. It is seldom possible to trace the source of such misnomers. See also [CONCEPT FORMATION](#). Compare [OVEREXTENSION](#), [OVERGENERALIZATION](#), [UNDEREXTENSION](#).

miss *n.* A failure to hit a target; hence, especially in [*signal detection theory](#), a failure to detect a signal when it is present. Also called a *false negative*. See also [RECEIVER OPERATING CHARACTERISTIC](#). Compare [CORRECT REJECTION](#), [FALSE ALARM \(2\)](#), [HIT](#).

missing fundamental illusion *n.* An [*auditory illusion](#) of pitch perception that arises if the set of [*overtones](#) or harmonics associated with a certain [*fundamental frequency](#) are presented to a listener without the fundamental frequency: the listener perceives the sound as having the pitch of the fundamental although the fundamental frequency is not present in the sound. See also [COMBINATION TONE](#), [OTOGENIC TONE](#).

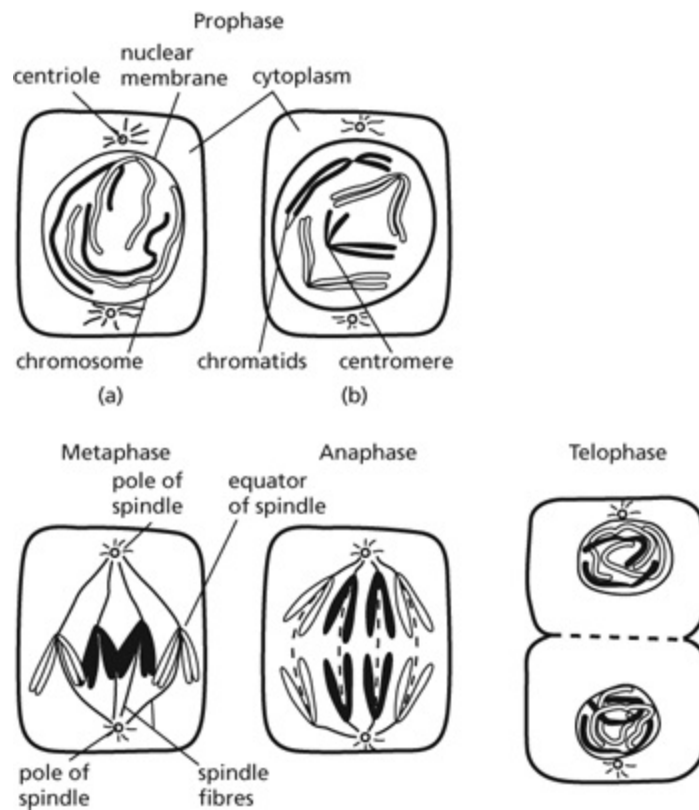
mitochondrial DNA *n.* A form of [*DNA](#) found in [*mitochondria](#), having its own genetic code, slightly different from the universal code of nuclear DNA and subject to variation between species, encoding subunits of vital respiratory enzymes. It is inherited only from mothers, because only the mother's ovum contributes cytoplasm to the [*zygote](#), it consists of several loops, each containing 37 genes, and it is present in every mitochondrion. Mutations in mitochondrial DNA caused by [*free radicals](#) have been linked to ageing and to several chronic degenerative diseases of the muscles and brain, including [*dystonia](#), [*Alzheimer's disease](#), and [*diabetes mellitus](#). Comparisons of harmless mutations or changes in [*introns](#) that have accumulated, apparently at a fairly constant rate, in the mitochondrial DNA of people from around the world have been used to trace the prehistoric

*****ebook converter DEMO Watermarks*****

migrations of populations from the emergence of **Homo sapiens* in Africa about 150,000 years ago. Mitochondrial DNA is also used in **genetic fingerprinting* when nuclear DNA cannot be extracted in sufficient quantity, as often occurs when DNA is taken from solid bone, tooth fragments, hair, or faeces, rather than from blood, saliva, or semen. *See also* EVE, EVOLUTIONARY CLOCK, MATERNAL INHERITANCE, NON-MENDELIAN GENE, PARSIMONY PRINCIPLE, PLASMAGENE. *Compare* PLASMID. **mtDNA** *abbrev.*

mitochondrion *n.* Any of the tiny (from two to five micrometres long) bean-shaped bodies that are evolutionarily descended from a free-living bacterium and are present in the cytoplasm of every cell, in large numbers in cells with heavy energy demands, releasing through the **Krebs cycle* most of the energy that cells, tissues, and organs of the body require to function. *See also* CRISTA, MITOCHONDRIAL DNA, PLASMAGENE. **mitochondria** *pl.* **mitochondrial** *adj.* [From Greek *mitos* a thread + *chondros* cartilage, as the German biologist Carl Benda (1857–1933) mistakenly thought it was when he named mitochondria in 1898]

mitosis *n.* A form of **cell division* of **somatic cells* in which each of the daughter nuclei contains the same number of **chromosomes* as the parent nucleus, this being the normal form of cell division except for the formation of **gametes* (see *illustration*). During *prophase* the nuclear membrane disappears and the chromosomes divide lengthwise into **chromatids*, which become the chromosomes of the daughter cells; during *metaphase* **nuclear spindles* are formed, and the chromosomes attach themselves to the equator of the spindles by their **centromeres*; during *anaphase* the newly duplicated chromosomes separate and migrate to opposite ends of the spindles; and during the final *telophase* the cell pinches in the middle and a nuclear membrane forms around the chromosomes at each end. The movements taking place during mitosis are controlled by the cell's **cytoskeleton*, and especially by movements of **microtubules*. *Compare* MEIOSIS (1). **mitotic** *adj.* **mitotic clock** *See* TELOMERE. [From Greek *mitos* a thread + *-osis* indicating a process or state]



Mitosis. The stages of mitosis in a cell containing two pairs of homologous chromosomes.

mitral cell *n.* A type of **pyramidal cell* that is found abundantly in the **olfactory bulbs* and that receives inputs from the olfactory receptors and sends information to other parts of the brain. [*Mitral* mitre-shaped, from Latin *mitra* a turban]

Mitwelt *n.* In **phenomenology* and **existentialism*, the social environment as it is experienced. *See also* EXISTENTIAL ANALYSIS, EXISTENTIAL THERAPY. *Compare* EIGENWELT, UMWELT. [From German *mit* with + *Welt* world]

mixed episode *n.* A **mood episode* lasting at least one week during which the criteria of both **manic episode* and **major depressive episode* are met.

mixed-motive game *n.* In **game theory*, any game in which the players' preferences among the outcomes are partly coincident and partly

opposed, motivating the players both to cooperate and to compete, as in the ***Prisoner's Dilemma game**. A player in a mixed-motive game has to contend with an *intrapersonal*, psychological conflict arising from this clash of motives in addition to the *interpersonal* conflict of the game. At an abstract level, a mixed-motive game can be distinguished from a zero-sum game by the fact that the sum of the payoffs differs from one outcome to another, so that it is not the case that what one player gains the other(s) must necessarily lose. Mixed-motive games are therefore sometimes called *variable-sum* or *non-zero-sum* games. Compare **ZERO-SUM GAME**.

mixed strategy *n.* In ***game theory**, a strategy that is chosen with a randomizing device, by assigning a certain probability to each pure strategy. For example, in the children's game of *handy-dandy*, mentioned by Shakespeare in *King Lear* (I.iv.94), one player conceals a small object in one fist and the second player guesses left or right. The first player wins if the guess is wrong, and the second if it is right. Any player who chooses according to any deliberate procedure risks being outguessed by the opponent, and for both players, the game-theoretic solution is a randomized 50–50 mixed strategy that assigns equal probabilities to left and right. See also **MINIMAX THEOREM**.

mixed transcortical aphasia See **APHASIA**.

mixture suppression *n.* A phenomenon of ***olfaction** in which the strength of an odour is reduced by the simultaneous presence of a different odour.

MMPI *abbrev.* The Minnesota Multiphasic Personality Inventory, one of the most widely used paper-and-pencil tests of personality, especially in the US, consisting of 566 (originally 504, later 550) statements, including 16 that are repeated, to which the respondent answers *True or mostly true* (T), *False or not usually true* (F), or *Cannot say* (?), typical items being similar to the following: *I feel contented most of the time*; *I have never had a fainting spell*, and *I believe I am cursed*. The instrument provides scores on 10 clinical scales: Hypochondriasis (Hs), Depression (D), Hysteria (Hy), Psychopathic deviate (Pd), Masculinity–femininity (Mf), Paranoia (Pa), Psychasthenia (Pt), Schizophrenia (Sc), Hypomania (Ma), and Social introversion (Si). In

*****ebook converter DEMO Watermarks*****

addition there are four validity (test-taking attitude) scales: a score for the number of questions left unanswered (?); a Lie scale (L) containing items describing socially desirable but unlikely behaviour, such as *I always tell the truth* (True); an Infrequency scale (F) of items answered in the keyed direction by ten per cent or less of normal people, such as *I see things, animals, or people around me that others do not see* (True); and a Correction factor (K) reflecting defensiveness in admitting to problems, containing items such as *At times I feel like swearing* (False). Numerous other scales have been derived from the MMPI test items. The MMPI was developed and first published in 1942 by the US clinical psychologist Starke Rosecrans Hathaway (1903–84) and the US neuropsychiatrist John Charnley McKinley (1891–1950); a revised version, called *MMPI-2*, was issued in 1989.

mneme *n.* The capacity to retain the aftereffects of an experience or stimulus. **mnemic** *adj.* Of or relating to mneme. *See also* **MNEMIC SYMBOL**. [From Greek *mnemon* mindful, from *mnasthai* to remember]

mnemic symbol *n.* In **psychoanalysis*, a **hysterical* symptom arising from a memory of a trauma or a conflict that has been repressed. In a key passage in an article on ‘The Neuro-Psychoses of Defence’ (1894), Sigmund Freud (1856–1939) described it as follows: ‘By this means the ego succeeds in freeing itself from the contradiction; but instead, it has burdened itself with a mnemic symbol which finds a lodgement in consciousness, like a sort of parasite, either in the form of an unresolvable motor innervation or as a constantly recurring hallucinatory sensation’ (*Standard Edition*, III, pp. 45–61, at p. 49).

mnemon *n.* A basic unit of memory, or the minimum physical change in the nervous system that encodes a memory. The term was introduced by the US neurobiologist Arthur Cherkin (1913–87) in an article in the *Proceedings of the National Academy of Sciences of the United States of America* in 1966, in which he said: ‘Mnemons are assumed to be relatively stable, with a half life of 10^7 seconds (4 months) or more.’ [From Greek *mneme* memory, from *mnasthai* to remember]

mnemonic *adj. n.* (Of or relating to) a technique used to aid memory, such as the *rhyming method* familiar to most English-speaking people in the

*****ebook converter DEMO Watermarks*****

mnemonic *Thirty days hath September...* for remembering how many days there are in each month, or the *acronym method* known by most musicians in the mnemonic *Every Good Boy Deserves Favour* for remembering the five lines of the treble clef in musical notation (E, G, B, D, F). The English physicist Sir James (Hopwood) Jeans (1877–1946) suggested the following *word-length mnemonic* for remembering the first 15 digits of the transcendental number π , represented by the number of letters in each successive word: *How I want a drink, alcoholic of course, after the heavy chapters involving quantum mechanics*, yielding $\pi = 3.14159265358979$. In the same spirit, a US correspondent to *Scientific American* magazine suggested the following word-length mnemonic for the first 10 digits of the transcendental number e : *To express e, remember to memorize a sentence to simplify this*, yielding $e = 2.7182818284$. The use of mnemonics can be traced to ancient Greece, where, in about 500 BC, the poet Simonides of Ceos (556–468 BC) invented the *method of loci*, a useful and effective technique for memorizing collections of items such as shopping lists: the items are visualized at specific locations in a familiar building, and they are recalled by revisiting the locations in a systematic tour round the building carried out in one's imagination. A similar but more flexible and even more effective technique—the method of choice of serious [*mnemonists](#) and professional memory performers—is the [*peg-word mnemonic](#). **mnemonics** *n.* The practice of using mnemonic techniques. [From Greek *mnemonikos* mnemonic, from *mneme* memory, from *mnasthai* to remember + *-ikos* of, relating to, or resembling]

mnemonist *n.* A person who uses [*mnemonics](#). Research has shown that most if not all professional memory performers use mnemonics. One of the most phenomenal and most thoroughly investigated of mnemonists, the Russian man usually referred to as S (actually called Shereshevskii), studied in depth by the Russian neuropsychologist Alexandr Romanovich Luria (1902–77) and described in his book *The Mind of a Mnemonist* (1968), relied heavily on mnemonics, including the method of loci. See also [HYPERTHYMESIA](#). Compare [HYPERMNESIA](#).

mobbing *n.* The coordinated activity of a large number of birds or other small animals in harassing or driving away a [*predator](#).

Möbius syndrome *n.* A rare neurological disorder caused by a defect in the prenatal development of the motor nuclei of the cranial nerves and characterized by loss of control of facial muscles, resulting in an inability to express emotion through **facial expression* and in most cases a diminished ability to interpret emotion in other people's faces, often associated with oculomotor dysfunction and periodic **migraine* headache. Also called *congenital facial diplegia*, *congenital oculofacial paralysis*, *nuclear agenesis*. Compare *BELL'S PALSY*. [Named after the German neurologist Paul Julius Möbius (1853–1907) who first described it in 1884]

modafinil *n.* The generic name of a quick-acting **stimulant drug*, prescribed for the treatment of **narcolepsy*, more generally used to promote daytime wakefulness and sometimes as a **performance enhancer*. It was first introduced in France in 1986 and later marketed in the UK and the US under the proprietary name *Provigil*. Formula $C_{15}H_{15}NO_2S$.

modal completion *n.* Perceptual **filling-in* in which the completed regions of the image are perceptually similar to the rest of the image, having the same properties or modes, such as linearity or brightness. This type of perceptual completion, resulting in the formation of visible surfaces and/or contours in image regions where these properties are not specified locally, is apparent, for example, in the **illusory contours* and uniform brightness of a **Kanizsa triangle*. See also *ARTIFICIAL SCOTOMA*. Compare *AMODAL COMPLETION*. [From Latin *modus* a measure or manner + *-alis* of or relating to]

modality See *SENSORY MODALITY*.

modality effect *n.* Any effect of the presentation of information via different **sensory modalities*, one example being the superior immediate recall of simple verbal information presented in the auditory rather than the visual modality, although the effect is restricted to the terminal part of the message, and another example being the superior long-term recall of complex verbal information presented via the visual rather than the auditory modality. See also *CROSS-MODAL TRANSFER*.

modal logic *n.* The logic of necessity and possibility, first developed in

1912 by the US logician and philosopher C(larence) I(rving) Lewis (1883–1964), in which a *modal proposition* is a [*proposition \(1\)](#) that asserts something to be necessarily or possibly true, and a *modal syllogism* is a [*syllogism](#) in which at least one of the premises is a modal proposition or statement. If *p* is a proposition, then *p* is *possible* means the same as *it is not necessary that not-p*, and *p* is *contingent* means the same as *it is not necessary either that p or that not-p*. See also [CATEGORICAL SYLLOGISM](#), [DEDUCTIVE REASONING](#), [DEONTIC LOGIC](#), [EPISTEMIC REASONING](#), [POSSIBLE WORLD](#). [From Latin *modus* a measure or manner + *-alis* of or relating to]

modal verb *n.* An auxiliary verb that modifies a main verb, expressing necessity or possibility. In English, the modal verbs are *can*, *could*, *may*, *might*, *will*, *would*, *shall*, *should*, *must*, *ought*, and sometimes *dare*, *need*, and *used to*.

mode *n.* In descriptive statistics, a measure of [*central tendency](#) that is the most frequently occurring score or scores among a collection of scores. Compare [MEAN](#), [MEDIAN](#). **modal** *adj.* Of or relating to a (or the) mode. [From Latin *modus* measure]

model *n.* A deliberately simplified and usually idealized and imaginary [*representation \(1\)](#) of a [*phenomenon](#), with fundamental properties that are explicitly defined (or physically built) and from which other properties can be deduced by logical reasoning (or by empirical observation if the model is a physical object). Inferences from the model apply only to the model and not necessarily to the reality that it purports to represent, but if the model captures the important features of the phenomenon, then such inferences may apply also to the phenomenon itself. Among the most successful abstract models in the history of science are Euclid's geometry, which models spatial relationships, and Newton's theory of mechanics, which models the interaction of physical objects and forces operating on them. See also [ADDITIVE MODEL](#), [CONSTRUCT](#), [LINEAR MODEL](#), [MEASUREMENT MODEL](#), [MULTIPLICATIVE MODEL](#), [QUADRATIC MODEL](#). Compare [HYPOTHESIS](#), [THEORY](#).

modelling *n.* A technique of [*behaviour therapy](#) in which the client or patient learns appropriate patterns of behaviour by imitating another person demonstrating the target behaviour either live or on video; often used in

*****ebook converter DEMO Watermarks*****

*assertiveness training. US *modeling*.

moderate mental retardation *n.* An obsolescent term for a level of *intellectual disability associated with *IQ approximately between 35 and 50 (in adults, *mental age from 6 to under 9 years), equivalent to the educational category of trainable mentally retarded. Also called *moderate mental subnormality*.

modern racism *n.* Covert or symbolic opposition to policies or practices designed to help a specific racial group, arising from negative *affect towards members of that group. It is distinguished from overt prejudice, discrimination, stereotyping, or condescension on the basis of race (*racialism), and also from overt belief in the intrinsic superiority of one particular race (*racism). The term was introduced in an article by the US social psychologist John B(arnard) McConahay (1936–98) and two colleagues in the *Journal of Conflict Resolution* in 1981. These researchers deliberately replaced an earlier term *symbolic racism* in order to emphasize the presumed emergence of the phenomenon in the second half of the 1960s in the wake of the US civil rights movement, when overt *racism, including support for laws against racial mixing and belief in the innate inferiority of black people, became unfashionable. It is measured by instruments such as the Modern Racism Scale, a *non-reactive measure of racist attitudes developed by McConahay and his colleagues, in which agreement with such statements as *Discrimination against blacks is no longer a problem in the US* and disagreement with statements such as *It is easy to understand the anger of black people in America* are taken to be indicative of modern racism. See also IMPLICIT ASSOCIATION TEST. [From Latin *modernus* contemporary, from *modo* just recently + English *racism*]

modified Ellsberg paradox *n.* A version of the *Ellsberg paradox in which the failure of *expected utility theory and of *subjective expected utility theory is especially clear. Two urns are each filled with white, red, and green balls. Urn A contains 50 white balls, 25 red balls, and 25 green balls; Urn B contains 50 white balls and 50 red and green balls, the ratio of red to green balls being unknown. You are offered a choice between the following three bets, each of which carries the same prize if you win.

X: You draw a ball at random from Urn A, and you win the prize if it is white or red.

Y: You draw a ball at random from Urn B, and you win the prize if it is white or red.

Z: You draw a ball at random from Urn B, and you win the prize if it is white or green.

Most people prefer X. In X, the probability of winning the prize is obviously .75, whereas in Y or Z the probability could be as low as .50 or as high as 1.00, depending on the unknown proportions of red and green balls. If the decision maker's subjective probability of drawing a red ball from Urn B is p , then the preference for X over Y implies that $.75 > .50 + p$, which means that $p < .25$. But if $p < .25$, then the probability q of drawing a green ball from Urn B must be greater than .25, and the decision maker should therefore prefer Z to X, because $.75 < .50 + q$. The usual preference of X over both Y and Z violates the axioms of expected utility theory, though it is consistent with Ellsberg's suggestion that human decision makers use **maximin* strategies in choices involving **uncertainty* (2). See also [RISK AVERSION](#). Compare [ALLAIS PARADOX](#), [COMMON RATIO EFFECT](#), [ST PETERSBURG PARADOX](#). [Named after the US political analyst Daniel Ellsberg (born 1931) who published the original version of the paradox in the *Quarterly Journal of Economics* in 1961]

modified LSD test *n.* In statistics, the modified least significant difference test, another name for a Bonferroni *t* test. See [BONFERRONI CORRECTION](#).

modifier gene *n.* Any gene that affects the **phenotypic* expression of another gene. See also [REGULATOR GENE](#).

modularity of mind *n.* The notion that cognitive processes are controlled by subsystems that operate as distinct units and with a significant degree of independence from one another. This notion can be traced to the Greek philosopher Aristotle (384–322 BC), who discussed a division of mental functions in *De Anima*; it formed the basis of the pseudoscience of **phrenology*, and in more recent times it has been chiefly associated with the writings of the US philosopher Jerry Alan Fodor (born 1935), especially his

*****ebook converter DEMO Watermarks*****

book *The Modularity of Mind* (1983).

modulation transfer function *n.* Another name for the **contrast sensitivity function*. **MTF** *abbrev.*

modulator *n.* Anything that modulates; in visual perception a hypothetical retinal **ganglion cell* that transmits discrete sensations of colour and regulates the responses of **dominator* cells.

modus ponens *n.* Any argument taking the form: *If p, then q; p; Therefore, q.* For example, *If it is Sunday, then the restaurant is closed; It is Sunday; Therefore, the restaurant is closed.* Such an argument is logically valid. *See also* *AFFIRMING THE ANTECEDENT*. *Compare* *MODUS TOLLENS*. [Latin: mood that affirms]

modus tollens *n.* Any argument taking the form: *If p, then q; Not-q; Therefore not-p.* For example, *If it is Sunday, then the restaurant is closed; The restaurant is not closed; Therefore, it is not Sunday.* Such an argument is logically valid. *See also* *DENYING THE CONSEQUENT*. *Compare* *MODUS PONENS*. [Latin: mood that denies]

molecular biology *n.* The study of biological molecules, especially **proteins* and **nucleic acids*.

molecular genetics *n.* The study of structure and function of the molecules of **genes* and **chromosomes*.

molecular imprinting *See* *GENETIC IMPRINTING*.

Molyneux's question *n.* The question regarding how the world would look to a person who acquired the gift of sight late in life, and in particular whether such a person would at first be able to distinguish a globe (ball) from a cube by sight alone. The English philosopher John Locke (1632–1704), a proponent of **empiricism*, hypothesized in 1690 that the answer was no: 'For, though he has obtained the experience of how a globe, how a cube affects his touch, yet he has not yet obtained the experience that what affects

his touch so or so must affect his sight so or so' (*Essay Concerning Human Understanding*, Book 2, Chapter 9, section 8), but research into [*cross-modal transfer](#) in the 1960s proved him wrong. [Named after the Irish philosopher, astronomer, and politician William Molyneux (1656–98), referred to by Locke as 'the learned and worthy Mr Molineux' *[sic]*, who first posed the question to Locke in 1688]

momentum, representational See [REPRESENTATIONAL MOMENTUM](#).

monad *n.* Literally, a group of one, but more usually denoting a fundamental or indivisible metaphysical unit. According to the German rationalist philosopher and mathematician Gottfried Wilhelm von Leibniz (1646–1716), it is an elementary indestructible element, not belonging to ordinary space, of which reality is composed. See also [ENTELECHY](#). **monadic** *adj.* Of or relating to monads, or (in logic and mathematics) having only one term. [From Greek *monas*, *monados* a unit, from *monos* alone]

Mona Lisa smile *n.* See [HYBRID IMAGE](#).

monaural *adj.* Of, relating to, or involving the use of one ear. Compare [BINAURAL](#). [From Greek *monos* alone or single + Latin *auris* an ear + *-alis* of or relating to]

money pump *n.* A pattern of intransitive or [*cyclic preferences](#) causing a decision maker to be willing to pay repeated amounts of money to have these preferences satisfied without gaining any benefit. The simplest example is a person who evaluates three commodities *x*, *y*, and *z* and prefers *x* to *y*, *y* to *z*, and *z* to *x*. A person may, for example, prefer one lawnmower *x* to another *y* because it is larger, and may prefer *y* to *z* for the same reason, but may prefer *z* to *x* because *x* would be extremely difficult to take to a repair shop if it were to break down. If the person owns *x*, then a salesman could offer to replace it with *z* in return for a fee (there must be *some* price that a person who prefers *z* to *x* is willing to pay for this improvement), then the salesman could offer to replace *z* with *y* for a fee, then to replace *y* with *x* for a fee, and so on indefinitely or until the money runs out. The concept was introduced by the English philosopher, mathematician, and economist Frank (Plumpton) Ramsey (1903–30) and published posthumously in 1931. Also called a

*****ebook converter DEMO Watermarks*****

**Dutch book*, especially when the price of each replacement is reduced until the person is willing to pay for it. *See also* [DECISION THEORY](#), [INTRANSITIVE PREFERENCES](#).

mongolism *n.* An obsolete name for **Down's syndrome*. [Referring to the supposed resemblance of people with the disorder to Mongolians, a comparison now considered offensive]

monism *n.* Any approach to the **mind-body problem* according to which there is no essential difference between the mental and physical realms. *See also* [DOUBLE-ASPECT THEORY](#), [IDENTITY THEORY](#), [MATERIALISM](#), [NEUTRAL MONISM](#). [From Greek *monos* single or alone]

monoamine *n.* An **amine* such as **adrenalin* (epinephrine), **noradrenalin* (norepinephrine), **serotonin*, or **dopamine* containing only one amino group (NH₂).

monoamine oxidase *n.* An **enzyme* that is located between the outer and inner membranes of **mitochondria* in almost all tissues and that metabolizes **monoamines*, notably **catecholamines*, within neurons. *See also* [MONOAMINE OXIDASE INHIBITOR](#). *Compare* [CATECHOL-O-METHYL-TRANSFERASE \(COMT\)](#). **MAO** *abbrev.* [From Greek *monos* single or alone + English *amine* + *oxid(ation)* + Greek *-ase* denoting an enzyme, from *diastasis* separation]

monoamine oxidase inhibitor *n.* Any of a group of **antidepressant* drugs that inhibit the action of the intracellular enzyme **monoamine oxidase* in neurons of the central nervous system, thereby slowing the metabolism of neurotransmitters such as **adrenalin* (epinephrine), **noradrenalin* (norepinephrine), and **dopamine* and allowing their concentrations to increase at the **synapses (1)*. When taken with foods containing **tyramine* or **dopa*, it produces acute hypertension. Also called a *psychoenergizer*. *See* [IPRONIAZID](#), [ISOCARBOXAZID](#), [PHENELZINE](#), [ST JOHN'S WORT](#), [TRANLYCYPROMINE](#). *See also* [CHEESE EFFECT](#). *Compare* [SELECTIVE SEROTONIN REUPTAKE INHIBITOR \(SSRI\)](#), [TETRACYCLIC ANTIDEPRESSANT](#), [TRICYCLIC ANTIDEPRESSANT](#). **MAOI** or **MAO inhibitor** *abbrev.*

monoblepsis *n.* A condition in which vision is clearer when one rather than both eyes are used. Also called *monoblepsia*. [From Greek *monos* alone or single + *blepsis* sight]

monochromatic *adj.* All of one colour, or pertaining to light consisting of a single wavelength. [From Greek *monos* alone or single + *chroma*, *chromatos* a colour + *-ikos* of, relating to, or resembling]

monochromatism *n.* A form of **colour-blindness* characterized by **monochromatic* vision in which all colours are perceived as different shades of the same colour. Also called *monochromasy*. Compare *ACHROMATOPSIA*.
monochromat or **monochromate** *n.* A person with monochromatism.

monoclonal antibody *n.* An **antibody*, produced by a single **clone* (1) of **B lymphocytes* fused with malignant tumour cells and grown in a culture, consisting of a population of identical molecules all specific for a single **antigen* and capable of proliferating indefinitely to produce unlimited copies of itself; widely used in biotechnology, genetic engineering, and the diagnosis of disorders. [From Greek *monos* single or alone + English *clone*]

monocular *adj.* Of, relating to, or involving the use of only one eye. Also called *uniocular*. Compare *BINOCULAR*, *DICHOPTIC*. [From Greek *monos* alone or single + Latin *oculus* an eye]

monocular cue *n.* Any of the visual **cues* (2) functioning as indications or hints of distance that contribute towards visual **depth perception* and that do not depend on integration of information from both eyes. See also *ACCOMMODATION* (1), *AERIAL PERSPECTIVE*, *CHIAROSCURO*, *ELEVATION IN THE VISUAL FIELD*, *INTERPOSITION*, *LINEAR PERSPECTIVE*, *MONOCULAR PARALLAX*, *RELATIVE SIZE*, *SFUMATO*, *TEXTURE GRADIENT*. Compare *BINOCULAR CUE*.

monocular parallax *n.* One of the monocular cues of visual **depth perception*, depending on the fact that movement of the head produces relatively large apparent displacement of nearby objects in the opposite direction and relatively small displacement of distant objects in the same direction. Also called *motion parallax* or *movement parallax*. See also *MOTION*

PERSPECTIVE, PARALLAX, REDUCTION SCREEN. *Compare* BINOCULAR PARALLAX.

monocyte *n.* A giant **leucocyte* with a round nucleus, playing a part in the immune system as a **phagocyte* by consuming foreign or malfunctioning cells. *See also* GRANULOCYTE, LYMPHOCYTE, STEM CELL. [From Greek *monos* single + *kytos* a vessel]

monogamy *n.* The custom or practice of having only one spouse at a time or, in animals, of having only one mate during a breeding season. *Compare* POLYGAMY. [From Greek *monos* single + *gamos* marriage]

monogenic inheritance *n.* Inheritance of a characteristic through a single **gene*, such as occurs in the inheritance of haemophilia or phenylketonuria. *See also* QUALITATIVE INHERITANCE. *Compare* POLYGENIC INHERITANCE, QUANTITATIVE INHERITANCE. [From Greek *monos* single + German *Gen* a gene, from Greek *genein* to produce]

monomania *n.* Pathological preoccupation with a single idea or fanatical devotion to a single activity. [From Greek *monos* single + *mania* madness]

monopede mania *n.* Another name for **acrotomophilia*.

monopedophilia *n.* Another name for **acrotomophilia*.

monophthong *n.* A single vowel sound with no detectable change within it, such as the vowel sounds in *seat*, *set*, *sat*, *coot*, *caught*, *cot*, and *cut*. *Compare* DIPHTHONG, TRIPHTHONG. [From Greek *monos* one + *phthongos* a sound]

monoplegia *n.* Paralysis of one limb or a single muscle group, usually as a result of a lesion in a **motor nerve*. *Compare* DIPLEGIA, HEMIPLEGIA, OPHTHALMOPLÉGIA, PARAPLEGIA, QUADRIPLEGIA, TRIPLEGIA. **monoplegic** *adj.* [From Greek *monos* single + *plege* a blow + *-ia* indicating a condition or quality]

monopolar neuron *n.* Another name for a **unipolar neuron*. Also called

a *monopolar cell*.

monoptic *adj.* 1. Having one eye. 2. Of or relating to the (usually successive) presentation of different stimuli to the same eye. *Compare* **DICHOPTIC**, **MONOCULAR**. [From Greek *monos* alone or single + *optikos* of or relating to vision, from *optos* visible, from *ops* an eye]

monosemy *n.* The property of a word of having only one meaning. *Compare* **POLYSEMY**. [From Greek *monos* one + *sema* a sign]

monosodium glutamate *n.* A white crystalline flavour enhancer that is often added to foods in restaurants and supermarkets and that, on its own, elicits all four primary taste sensations, namely sweet, sour, salty, and bitter. It intensifies the taste of food to which it is added and may have a distinctive taste of its own called **umami*. Formula: $\text{NaC}_5\text{H}_8\text{O}_4$. Also called *sodium glutamate*. *Compare* **MIRACULIN**. **MSG** *abbrev.* [So called because it is the sodium salt of glutamic acid]

monosomy X *n.* Another name for **Turner's syndrome*.

monosynaptic reflex *n.* A reflex involving just one **synapse* (1) between a sensory neuron and a motor neuron, without the involvement of any **interneurons*. **Stretch reflexes* are the only monosynaptic reflexes in humans. Strictly speaking the term is a misnomer and is avoided in careful usage, because there must also be a synapse between the motor neuron and the muscle, hence any reflex necessarily involves at least two synapses. Also called a *single-synapse reflex*. *Compare* **POLYSYNAPTIC REFLEX**. [From Greek *monos* single + *syn* together + *haptein* to fasten]

monotonic *adj.* The property of a sequence or a function of consistently increasing in value or staying the same, or of consistently decreasing in value or staying the same. Also called a *monotone* sequence or function. *See also* **MONOTONICITY**. [From Greek *monos* single, solitary, or alone + *tonos* a tone + *-ikos* of, relating to, or resembling]

monotonicity *n.* The property of being **monotonic*. In **logic*, it refers to

the fact that a valid argument cannot be made invalid, nor an invalid argument made valid, by adding new [*premises](#). More precisely, monotonicity in logic is the property of obeying the [*extension theorem](#) of semantic entailment. *See also* [NON-MONOTONIC REASONING](#).

monozygotic *adj.* Developed from one [*zygote](#). Compare [DIZYGOTIC](#). **MZ** *abbrev.* [From Greek *monos* single + *zygotos* yoked, from *zygon* a yoke + *-itikos* resembling or marked by]

monozygotic twins *n.* Twins that are [*monozygotic](#), being formed when a single [*ovum](#) or egg is fertilized by a single [*spermatozoon](#) and then splits and develops into two separate individuals sharing identical genes. The relative frequency of monozygotic twins is quite stable at about 1 pair per 250 births. Also called *identical twins*, but this is avoided in careful scientific usage, because they are never identical, having been influenced by environmental as well as genetic factors. *See also* [TWIN STUDIES](#). Compare [DIZYGOTIC TWINS](#).

Monte Carlo method *n.* Any of a range of heuristic techniques of statistical analysis, used especially when an [*algorithm](#) or formula is unavailable, in which the phenomenon or process of interest is simulated, usually on a computer, by the generation of random numbers. For example, to estimate the probability of five heads in five successive coin tosses, an analyst unfamiliar with the [*binomial test](#) could simulate five coin tosses thousands of times on a computer and count the proportion that consist of five heads. This would amount to performing a [*randomization test](#). [Named by its pioneer, the Hungarian-born US mathematician John von Neumann (1903–57), after the casino at Monte Carlo where randomization determines outcomes]

Monty Hall problem *n.* A problem of decision making and probability judgement, and a veridical [*paradox](#), first presented and named by the US biostatistician Steve Selvin (born 1941) in two letters in the journal *American Statistician* in 1975 and subsequently popularized by the US columnist Marilyn vos Savant (born 1946) in *Parade* magazine in September 1990. The solution is so difficult to believe that, when it was first published, many people, including university professors of statistics and even the world-

*****ebook converter DEMO Watermarks*****

famous Hungarian mathematician Paul Erdős (1913–96) initially refused to accept it. In the simplest version, a game show host invites you to choose among three doors, behind just one of which is a car. After your initial choice, the host, who knows where the car is, opens another door, always one that has no car behind it, and invites you to switch your choice to the remaining unopened door if you wish. The problem is, should you switch? Surprisingly, switching doubles your probability of winning the car from $1/3$ to $2/3$. The reason is that there is one chance in three that the car is behind your originally chosen door, and accepting the invitation to switch wins the car if your original choice was wrong. The probability that your original choice was wrong is $2/3$, and if it was wrong, then you are certain to win the car if you switch. In many descriptions of the problem, there is a car behind one of the doors and a goat behind each of the others. The probabilistic phenomenon underlying the problem can be traced to Bertrand's box paradox, first discussed by the French mathematician Joseph (Louis François) Bertrand (1822–1900) on pages 3–4 of his book *Calcul des Probabilités* in 1889. Also called the *Monty Hall dilemma*. See also [PRINCIPLE OF RESTRICTED CHOICE](#). [Named after the Canadian-born US entertainer Monty Hall (born Monte Halperin, 1921) who hosted the television game show *Let's Make a Deal* in which the problem was first noticed]

mood *n.* **1.** A temporary but relatively sustained and pervasive affective state, often contrasted in psychology and psychiatry with a more specific and short-term **emotion*. See also [AFFECT](#), [DEPRESSION](#), [DYSPHORIC MOOD](#), [ELEVATED MOOD](#), [EUTHYMIC MOOD](#), [EXPANSIVE MOOD](#), [IRRITABLE MOOD](#). **2.** In linguistics, a category of verb expressing a mode or manner of action or being, typical grammatical moods being indicative, subjunctive, and imperative. **3.** In logic, the form of a **syllogism*, depending on the nature of its three constituent **propositions* (1). [Sense 1 from Old English *mod* mind or feeling; senses 2 and 3 from Latin *modus* manner]

mood-congruent *adj.* Of or relating to a **delusion* or **hallucination* whose content is consistent with the depressed or manic mood of the person experiencing it. Compare [MOOD-INCONGRUENT](#).

mood-dependent memory *n.* A form of **state-dependent memory* associated with effects of moods or emotional states during learning and

*****ebook converter DEMO Watermarks*****

recall.

mood disorders *n.* A class of [*mental disorders](#) with disturbance of [*mood \(1\)](#) as the predominant feature. This term was used in [*DSM-IV](#) but not in DSM-5. See [BIPOLAR DISORDERS](#), [CYCLOTHYMIC DISORDER](#), [DEPRESSIVE DISORDER](#), [MANIA \(1\)](#), [MOOD EPISODES](#), [SEASONAL AFFECTIVE DISORDER \(SAD\)](#), [SUBSTANCE-INDUCED DISORDERS](#), [UNIPOLAR DEPRESSION](#). See *also* [SCHIZOAFFECTIVE DISORDER](#).

mood episodes *n.* A class of [*mental disorders](#) comprising [*depressive episode](#), [*major depressive episode](#), [*manic episode](#), [*mixed episode](#), and [*hypomanic episode](#).

mood-incongruent *adj.* Of or relating to a [*delusion](#) or [*hallucination](#) whose content is inconsistent with the depressed or manic mood of the person experiencing it. Compare [MOOD-CONGRUENT](#).

mood stabilizer *n.* Any drug, such as [*lithium carbonate](#), that is used in the treatment of [*bipolar disorders](#). Compare [ANTIMANIC](#).

moon illusion *n.* A visual illusion that causes the moon to appear relatively larger when it is near the horizon than when it is at its zenith, although in both cases it subtends the same [*visual angle](#) of about one-half of a degree or 30 minutes of arc. The illusion has never been satisfactorily explained. The earth's atmosphere does not act like a lens, enlarging the image near the horizon, as many people believe; we can easily measure the size of the image at different heights, and this confirms that the image size remains constant. Many textbooks and articles suggest that the [*Ebbinghaus illusion](#) makes the moon look larger when it is close to tiny trees and houses near the horizon, or that the [*Ponzo illusion](#) might make it look larger when the surrounding landscape provides [*linear perspective](#) cues; but the illusion is visible even from ships at sea, where no such cues are visible near the horizon. Furthermore, any explanation needs to account for the fact that the illusion disappears if one views the moon upside-down, by bending over and peering through one's legs. The sun is much larger than the moon but by remarkable coincidence almost identical to it in [*angular size](#), fitting behind the moon almost perfectly in a total eclipse, and it is also subject to the moon

*****ebook converter DEMO Watermarks*****

illusion, appearing much larger shortly after sunrise or shortly before sunset than at its zenith. The illusion first appeared in print in the *Meteorology* of the Greek philosopher Aristotle (384–322 BC), who described its effect on the sun and stars but oddly omitted to mention the moon: ‘The sun and stars seem bigger when rising and setting than on the meridian’ (Book 3, Chapter 4, Bekker edition, p. 373b). Also called the *celestial illusion*, especially when referring to the illusion in a stimulus other than the moon. See also [EMMERT’S LAW](#), [HORIZONTAL–VERTICAL ILLUSION](#), [PERSPECTIVE ILLUSION](#), [SIZE–DISTANCE INVARIANCE](#), [VISUAL ANGLE](#).

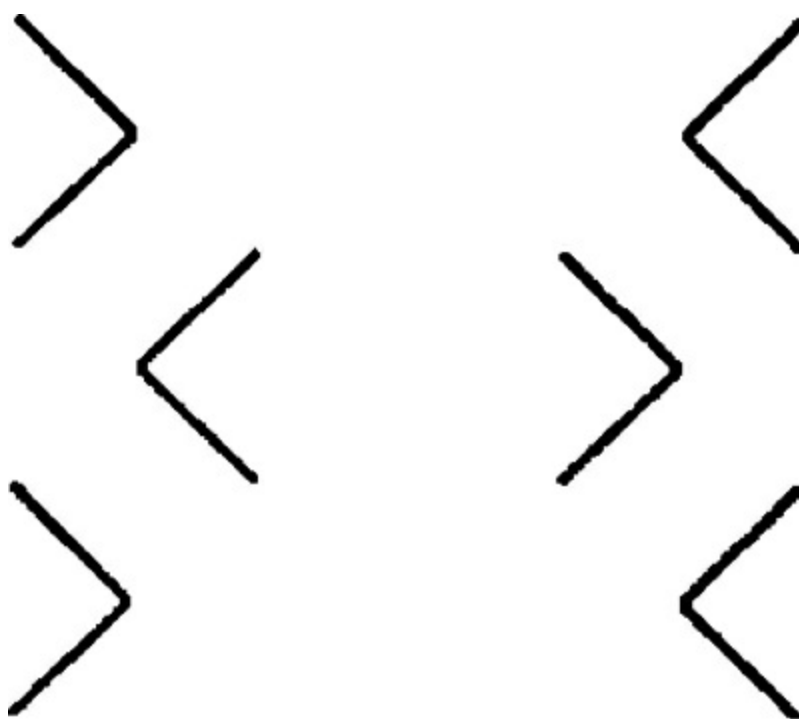
moral development *n.* The formation and maturation of a sense of right and wrong in children in the normal course of cognitive development. See also [KOHLBERG STAGE](#).

morbid jealousy *n.* Another name for [*jealous delusional disorder](#).

Morgan–Murray Thematic Apperception Test *n.* The original name by which the [*TAT](#) was generally known prior to 1943.

Morgan’s canon See [LLOYD MORGAN’S CANON](#).

Morinaga misalignment illusion *n.* A visual illusion in which three or more arrowheads, some pointing to the left and some to the right, aligned with their apexes or tips in vertical straight lines, appear to be out of alignment, with the left-pointing apexes further to the left than the right-pointing ones. Pairs of arrowheads can be constructed such that the apparent misalignment is opposite to what would be expected from the [*Müller-Lyer illusion](#) (see [illustration](#)). [Named after the Japanese Gestalt psychologist Shiro Morinaga (1908–64) who first drew attention to it in 1941]



Morinaga misalignment illusion. The distance between each of the three pairs of arrowheads is identical, and their apexes are vertically aligned.

Morita therapy *n.* A form of **psychotherapy*, used especially to treat **hypochondriasis* or **somatic* symptom disorder. It begins with 4–7 days of absolute bed rest without reading, talking, or other active pursuits, to be followed by a programme of progressively difficult or demanding work, usually in a communal setting. It is based on Buddhist beliefs and the concept of **mindfulness*. [Named after the Japanese psychiatrist Shoma Morita (1874–1938) who originated it]

morning glory *n.* Any of a number of tropical plants of the family Convolvulaceae, including the Mexican vine *Rivea corymbosa* containing the **psychedelic* and **hallucinogenic* drug **ololiuqui*. [So called because its trumpet-shaped flowers close in the late afternoon]

moron *n.* An obsolete term for a person with moderate **intellectual disability*; also, an abusive term for a person of low intelligence. **moronic** *adj.* [From Greek *moros* foolish]

Moro reflex *n.* A form of the [*startle reflex](#) displayed by infants up to about 12 months of age, elicited by making a sudden loud noise or raising the infant's head slightly and allowing it to drop back on to a pillow, consisting of flexion (bending) of the legs, drawing the arms across the chest, and usually a brief cry. It is often absent in premature babies, and it is sometimes used to test infants for deafness. Also called the *embrace reflex*. [Named after the German paediatrician Ernst Moro (1874–1951) who first drew attention to it]

morpheme *n.* The smallest distinctive unit of a language having a definite grammatical function. For example, *unhappiness* contains three morphemes: *un-* (a morpheme denoting negation) + *happi* (happy) + *-ness* (a morpheme denoting a state); and *Helen's brother is crying* contains six: *Helen* + *'s* (a morpheme denoting possession) + *brother* + *is* + *cry* + *ing* (a morpheme indicating the present participle). See also [ALLOMORPH](#), [BOUND FORM](#), [PSEUDOMORPHEME](#). Compare [KINEMORPH](#). [From Greek *morphe* form + a suffix on the model of *phoneme*]

morphine *n.* A bitter crystalline [*alkaloid](#), being a [*narcotic](#) analgesic extracted from [*opium](#), in which it occurs in amounts up to 15 per cent, used as a [*narcotic analgesic](#) and [*sedative](#). See also [ADDICTION](#), [DEPENDENCE \(2\)](#), [OPIOID-RELATED DISORDERS](#), [SUBSTANCE DEPENDENCE](#), [SUBSTANCE-INDUCED DISORDERS](#), [SUBSTANCE-RELATED AND ADDICTIVE DISORDERS](#), [SUBSTANCE USE DISORDERS](#). [From Greek *Morph(eus)* the god of sleep and dreams + *-ine* indicating an organic compound]

morphology *n.* **1.** A branch of biology devoted to the form and structure of organisms. **2.** The study of the form and structure of words, especially in terms of [*morphemes](#). **morphological** *adj.* [From Greek *morphe* form + *logos* word, discourse, or reason]

mortality table *n.* An actuarial table showing people's life expectancies and death rates depending on demographic factors such as sex, age, and occupation, used for calculating life insurance premiums.

mortido *n.* In [*psychoanalysis](#), a term coined by the Austrian physician

Paul Federn (1871–1950) to denote the form of energy associated with **Thanatos*, intended as a counterpart to **libido*. See also *DESTRUDO*. [From Latin *mors*, *mortis* death + *-ido* on the model of *libido*]

morula *n.* A solid ball of cells that results from the cleavage of a **zygote* or fertilized ovum and that later develops into a **blastocyst*. See also *EMBRYO*, *FOETUS*. [From Latin *morula* a little mulberry, diminutive of *morum* a mulberry]

mosaic *n.* An organism composed of two or more genetically distinct tissue types or created by combining genes from two or more different species. Also called a *chimera*. [From Latin *mosaicus* a mosaic, from Greek *mousoios* of the Muses, from *mousa* a Muse + *-ikos* of, relating to, or resembling]

Moses illusion *n.* A **cognitive illusion* induced by a question such as: ‘How many animals of each kind did Moses take on the Ark?’ A substantial proportion of people (roughly 50 per cent) answer ‘two’ rather than ‘none’, and feel confident about their answer, even when they are given unlimited time to think about it, in spite of the fact that they know that it was Noah and not Moses who took animals on to the Ark. The illusion depends primarily on the **semantic* similarity between the names *Noah* and *Moses* and possibly also on their **phonological* similarity (two syllables, similar stress patterns, the same vowel in the stressed syllable, and so on). It is not explained by the respondent mishearing the question, because people make Moses mistakes even after correctly reading the question aloud, nor is it explained by the misdirection created by the words ‘how many’, because the illusion persists, though it is slightly reduced, when respondents are asked to respond ‘True’ or ‘False’ to the statement: ‘Moses took two animals of each kind on the Ark’. The illusion was first reported in an article by the US psychologists Thomas D(avid) Erickson (born 1956) and Mark E(dward) Mattson (born 1957) in the *Journal of Verbal Learning and Verbal Behavior* in 1981. Compare *YOLK PHENOMENON*. [Named after Moses, the Hebrew prophet who, according to the Old Testament, led the Israelites out of Egypt to the Promised Land and handed down laws revealed to him by God]

Moses test of extreme reaction *n.* In statistics, a **distribution-free*

*****ebook converter DEMO Watermarks*****

***non-parametric** test of the difference between two independent groups in the extremity of scores (in both directions) that the groups contain. Scores from both groups are pooled and converted to ***ranks**, and the test statistic is the span of scores (the range plus 1) in one of the groups chosen arbitrarily. An exact probability is computed for the span and then recomputed after dropping a specified number of extreme scores from each end of its range. [Named after the US statistician Lincoln Ellsworth Moses (1921–2006) who introduced it in 1952]

mossy fibre *n.* One of the two types of ***afferent** neurons conveying signals to the ***cerebellum**, projecting from sites other than the inferior olivary nuclei on to tiny ***granule cells** in the cerebellar cortex, situated immediately under the layer of ***Purkinje cells** with which the granule cells form many synapses, each mossy fibre indirectly exciting many Purkinje cells. US *mossy fiber*. Compare CLIMBING FIBRE. [So called because of its appearance]

mother complex *n.* In ***psychoanalysis**, ***ambivalence** in a girl's feelings towards her mother, being one of the elements of the ***Oedipus complex**. See also COMPLEX (2).

motherese *n.* A popular alternative name for ***caretaker speech**, misleading because it is used also by fathers when talking to young children, although fatherese tends to be more intense and demanding. Even *parentese* is too restrictive a term, because the major features of motherese have been observed in the speech of unrelated adults and of older children talking to younger siblings. Also called *child-directed speech* or (ambiguously) *baby talk*. [From *mother* + *-ese* indicating style]

mother, phallic See PHALLIC WOMAN.

motile *adj.* 1. Exhibiting or capable of motion. *n.* 2. A person whose characteristic style of mental imagery is motor rather than visual, auditory, or tactile, taking the form of feelings of motion such as limb movements or muscular movements associated with the pronunciation of words. Compare AUDILE (2), TACTILE (2), VISUALIZER.

motion aftereffect *n.* An illusion of movement resulting from prolonged perception of motion in the opposite direction, as occurs with the **Plateau spiral* or the **waterfall illusion*. Also called a *movement aftereffect*. **MAE** abbrev.

motion capture *n.* A phenomenon of **apparent movement* in which a target image moving in one direction against a background of randomly moving elements causes those elements to appear to be moving in the same direction as the target.

motion detector *n.* Another name for a **direction-sensitive neuron*.

motion-induced blindness *n.* A tendency for a stationary or slowly moving stimulus to disappear from sight when viewed against a pattern of moving elements. In a standard demonstration of this phenomenon, three stationary or slowly moving yellow dots are viewed against a background of rotating blue dots or other shapes, and the yellow dots tend to disappear, singly or together, for several seconds at a stretch. The phenomenon is a form of **simultanagnosia* and may be related to **change blindness*, **inattentional blindness*, the **Cheshire Cat effect*, and the **Troxler effect*. It was discovered by the Israeli neuroscientist Yoram Bonne (born 1959) and first published in an article in the journal *Nature* in 2001 by Bonne and two colleagues, who pointed out that it could have serious consequences if, for example, moving traffic in a driver's field of vision induces temporary blindness to the tail-lights of a car in front. **MIB** abbrev.

motion parallax *n.* Another name for **monocular parallax*.

motion perspective *n.* A term used by the US psychologist James Jerome Gibson (1904–79) to denote the **optical flow* pattern in the visual field resulting from **monocular parallax*. See also **DIRECT PERCEPTION**.

motion sickness *n.* A debilitating condition brought about by **passive movement* or the illusory perception of passive movement, characterized by pallor, vertigo, hyperventilation, nausea, and sometimes vomiting. It is often associated with vehicular transport, people suffering from it being described

as being *airsick*, *carsick*, or *seasick*, and **antihistamine* drugs or **scopolamine* are often prescribed for its prevention. See also SENSORY CONFLICT THEORY.

motivated error *n.* Another name for a **parapraxis*.

motivation *n.* A driving force or forces responsible for the initiation, persistence, direction, and vigour of goal-directed behaviour. It includes the biological **drives* such as hunger, thirst, sex, and self-preservation, and also social forms of motivation such as **need* for achievement and **need* for affiliation. **motivational** *adj.* [From Latin *motivus* moving, from *motus* moved, from *movere* to move + *-ation* indicating a process or condition]

motivational research *n.* An approach to the study of consumer behaviour, especially advertising and marketing, based loosely on assumptions and concepts of **dynamic psychology* in general and **psychoanalysis* in particular. It seeks to uncover the unconscious motives through the use of **naturalistic observation*, **focus groups*, **depth interviews*, and **projective tests*, and it tends often to focus on sexual factors. It was pioneered in the 1930s by the Austrian-born US psychologist Ernest Dichter (1907–91), one of whose early claims was that, for a woman, baking a cake unconsciously symbolizes having a baby, and that ready-mix cakes, which did not sell as well as expected when they were first introduced, could be made more appealing to housewives by allowing them to add the basic ingredient that they expect to contribute when having a baby, namely a fresh egg. Motivational research has attracted criticism from psychologists and others and was scathingly attacked by the Canadian-born US economist John Kenneth Galbraith (1908–2006) in the first edition of *The Affluent Society* (1958). See also SUBLIMINAL PERCEPTION. **MR** abbrev.

motoneuron *n.* The unit formed by a **motor neuron* or **efferent* neuron and the muscle fibre to which it is connected. Also called a *motor unit*. [A term coined by the British neurophysiologist Sir Charles Scott Sherrington (1857–1952) from *moto(r)* + *neuron*]

motor aphasia See APHASIA.

motor apraxia *n.* Another name for **ideomotor apraxia*. See *APRAXIA*.

motor area *n.* Any area of the **cerebral cortex* responsible for the initiation, coordination, or regulation of nerve impulses transmitted to muscles or glands, especially the areas of the **motor cortex*.

motor cortex *n.* Areas in the **cerebral cortex*, namely the primary motor cortex, premotor cortex, supplementary motor area, and frontal eye field, devoted to the control of bodily movements. The primary motor cortex occupies the **precentral gyrus* immediately in front of the **central sulcus*, directly opposite the primary somatosensory cortex, containing in each cerebral hemisphere an inverted representation of the opposite side of the body with the hand and tongue disproportionately overrepresented. The premotor cortex, in front of the primary motor cortex, is about six times as large as the primary motor cortex and is concerned with postural coordination and execution of movements controlled by visual or tactile feedback. The supplementary motor area (*SMA*), still further forward in the frontal lobe, is concerned with the coordination of preplanned or preprogrammed movements. The frontal eye field, immediately in front of the area where the head is represented in the premotor cortex, is responsible for voluntary **saccadic* eye movements, as when tracking moving images or reading. See *also* *MIRROR NEURON*, *MU WAVE*, *SENSORIMOTOR CORTEX*. [From Latin *motor* a mover, from *motus* moved, from *movere* to move]

motor disorders *n.* An umbrella term in **DSM-5* for a group of **neurodevelopmental disorders* affecting physical movement. See *DEVELOPMENTAL COORDINATION DISORDER*, *STEREOTYPIC MOVEMENT DISORDER*, *TIC DISORDERS*.

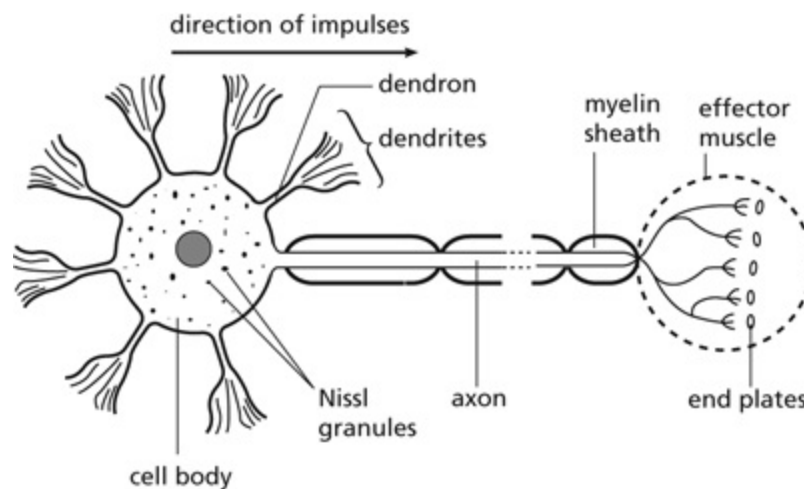
motor dissociative disorders See *DISSOCIATIVE MOVEMENT DISORDERS*.

motor end plate *n.* The flattened **neuromuscular junction* at which the **bouton* of a **motor neuron* synapses with the squad of muscle fibres that it innervates.

motor nerve *n.* Any of a number of nerves comprising the axons of

***motor neurons** that transmit signals from the ***motor cortex** or ***spinal cord** to the muscles and glands.

motor neuron *n.* Any of the nerve cells of the ***peripheral nervous system** that transmit signals from the ***motor cortex** or the ***spinal cord** to the muscles or glands (see [illustration](#)). Also called an *efferent neuron*. See [ALPHA MOTOR NEURON](#), [GAMMA MOTOR NEURON](#), [RENSHAW CELL](#). Compare [MOTONEURON](#). [From Latin *motor* a mover, from *motus* moved, from *movere* to move]



Motor neuron

motor neuron disease *n.* A progressive, degenerative, and ultimately fatal disease of the ***motor neurons** affecting approximately 10 people per 100,000, resulting in gradual weakening and wasting of muscles and death usually from respiratory failure after 2–5 years, the cause of the disease being unknown but assumed to be a virus or environmental toxin. See also [AMYOTROPHIC LATERAL SCLEROSIS](#). **MND** *abbrev.*

motor set *n.* A temporary readiness for a particular muscular movement. See also [AUFGABE](#), [SET \(2\)](#).

motor skills disorder *n.* A group of ***mental disorders** associated with motor skills, by far the most prominent being ***developmental coordination disorder**, characterized by ***deficits** in activities involving motor coordination.

motor unit *n.* Another name for a **motoneuron*.

movement aftereffect *n.* Another name for **motion aftereffect*.

movement detector *n.* Another name for a **direction-sensitive neuron*.

movement disorders *n.* Disorders of voluntary movements, including all the **apraxias*, **dissociative movement disorders*, and **stereotypic movement disorder*.

movement illusion *n.* Any misperception of movement, notably any of the phenomena of **apparent movement*, including **alpha movement*, **beta movement*, **delta movement*, **flash-lag effect*, **gamma movement*, **hollow-face illusion*, **optimal movement*, **partial movement*, **phi movement*, **Pinna–Brelstaff illusion*, **random-dot kinematogram*, **representational momentum*. *See also* AUDIOGYRAL ILLUSION, AUTOKINETIC EFFECT, KINETIC DEPTH EFFECT, LISSAJOUS FIGURE, MOTION CAPTURE, OCULOGYRAL ILLUSION, OUCHI ILLUSION, PHANTOM GRATING, PLATEAU SPIRAL, RANDOM-DOT KINEMATOGAM, ROTATING HEAD ILLUSION, SENSORY SALTATION, SPINNING DANCER ILLUSION, TERNUS PHENOMENON, VECTION, WAGON WHEEL ILLUSION, WATERFALL ILLUSION, WINDMILL ILLUSION.

movement parallax *n.* Another name for **monocular parallax*.

movement perception *n.* The perception of motion, processed by the **magnocellular system*, which can be shown through **isoluminant* displays to be totally colour-blind. *See also* DIRECTION-SENSITIVE NEURON.

movement tremor *n.* Another name for **intention tremor*.

moving average *n.* In statistics, a sequence of numbers consisting of the averages of successive subsequences of a sequence of numbers, often computed from **time series* to smooth out short-term fluctuations and make underlying trends clearer. For example, the three-term moving average of the sequence 1, 7, 4, 10, 4 is obtained by taking the mean of the first three numbers, then the mean of the second, third, and fourth, then the mean of the

third, fourth and fifth, yielding 4, 7, 6, which is much smoother. More generally, especially in **time-series analysis*, a moving average is a sequence of numbers consisting of *weighted* sums of successive subsequences of a sequence of numbers, whether or not the weights sum to unity as they do for simple averages. See also *ARIMA*, *WHITE NOISE*.

Mozart effect *n.* A finding, first reported in 1991 by the French otolaryngologist Alfred A. Tomatis (1920–2001) in a book entitled *Pourquoi Mozart?* (Why Mozart?), and then supported in an article in the journal *Nature* in 1993, that listening to compositions by Mozart increases scores on tests of spatial ability for a short while. In the original experiment, college students were given various tests after experiencing each of the following for ten minutes: listening to Mozart's sonata for two pianos in D major K488, listening to a relaxation tape, or silence. Performance on the paper-folding subtest of the **Stanford–Binet intelligence scale* was significantly better after listening to Mozart than after the other two treatments, but the effect dissipated after about 15 minutes, and other (non-spatial) tasks were unaffected. The finding has been contested by other researchers and has been widely misinterpreted to imply that listening to Mozart (or listening to classical music) increases one's intelligence. Several independent research studies have shown that children who receive extensive training in musical *performance* achieve significantly higher average scores on tests of spatial ability, but that long-term consequence is not the Mozart effect. [Named after the Austrian composer Wolfgang Amadeus Mozart (1756–91)]

MPP⁺ *abbrev.* Methylphenylpyridine, a substance that is produced in the body from **MPTP* and that selectively destroys neurons in the **substantia nigra*, causing **Parkinson's disease*.

MPPP *abbrev.* 1-Methyl-4-phenyl-4-propionoxy-piperidine, a **designer drug* similar to **pethidine* (meperidine) and often described as synthetic heroin. It is often contaminated with **MPTP*.

MPTP *abbrev.* 1-Methyl-4-phenyl-1,2,3,6-tetrahydropyridine, a substance that is found as a contaminant in some **designer drugs*, notably **MPPP*, and is converted in the body to **MPP⁺*, causing **Parkinson's disease*.

MRI *abbrev.* Magnetic resonance imaging, a non-invasive method of [*brain imaging](#) or examination of other body organs by recording the responses to radio waves, or other forms of energy, of different kinds of molecules in a magnetic field. An MRI machine is a cylindrical magnet, large enough to contain a human body, producing a constant magnetic field in which protons (subatomic charged particles) spin like tops. A pulse of energy causes the spinning particles to tilt momentarily and then to regain their original orientations, giving up a detectable amount of energy as they do so. Different tissues emit different amounts of energy in response to the pulses, and the tissues that emit the greatest energy appear as the brightest regions in the resulting MRI scan. A series of two-dimensional slices are combined by a computer into a three-dimensional image. MRI can be used for imaging brain structure or (indirectly) brain function. When it is used to provide a dynamic picture of oxygen metabolism during specific mental activities it is called functional MRI or fMRI; this involves imaging blood oxygenation, which is of interest because it correlates with levels of neuronal activity in specific brain regions. Thus, fMRI monitors blood-oxygen-level-dependent ([BOLD](#)) neural activity in the brain. *See also* [NUCLEAR MAGNETIC RESONANCE](#).

MT *abbrev.* Median or middle temporal, another name for Area V5 of the [*visual cortex](#), receiving inputs chiefly from the [*magnocellular system](#), concerned mainly with movement perception. Also called MT/V5. *See also* [MASSAGE THERAPY](#).

mucous membrane *n.* A thin sheet of tissue consisting of a surface layer of [*epithelial](#) tissue and a deeper layer of connective tissue covering or lining the cavities and canals of the body that open to the outside, including the mouth, nose, digestive tract, genito-urinary tract, and uterus, secreting mucus and absorbing water, salts, and other solutes. *See also* [COMMON CHEMICAL SENSE](#). [From Latin *mucus* slime + *membrana* a skin or parchment]

MUD *abbrev.* Multi-user dungeon or multiuser dimension, a class of [*virtual reality](#) constructions accessible simultaneously by several users via the internet, allowing the playing of fantasy adventure games involving simulated interaction, combat, traps, puzzles, and magic, originally developed at the University of Essex in England in the early 1980s. Also written *mud*, and also used as a verb, meaning to play MUD. *See also* [TELEDILDONICS](#).

*****ebook converter DEMO Watermarks*****

[Named after the prototype fantasy game *Dungeons and Dragons*]

muddy children problem *n.* A logical problem illustrating that all members of a group may know a **proposition (1)* to be true without that proposition being **common knowledge* in the group. Suppose that all children in a classroom can see one another's foreheads but not their own, and that exactly two of them have muddy foreheads. The teacher asks all those who know they have muddy foreheads to put up their hands. The two muddy children, who are assumed to be perceptive, intelligent, and honest, have no reason to own up. The teacher then repeats the request a second time, and the two muddy children still have no reason to own up. Now suppose that the teacher had first announced to the class as a whole that at least one child in the class is muddy, turning a proposition that every child already knows to be true—because every child can see at least one muddy child—into an item of common knowledge. When the teacher asked all those with muddy foreheads to put up their hands, the two muddy children would not own up the first time the question was asked, but they would both own up when it was repeated a second time, because at that point each would realize that the failure of the other muddy child to own up the first time implied that there must be two muddy children in the class. It can be proved that if n of the children are muddy, then they will all own up when the question is asked for the n th time. The problem is sometimes cast in terms of a group in which some members have cheating spouses that the others all know about, and it is also called the *unfaithful wives problem* or the *cheating husbands problem*. It is a classic problem in **epistemic reasoning*.

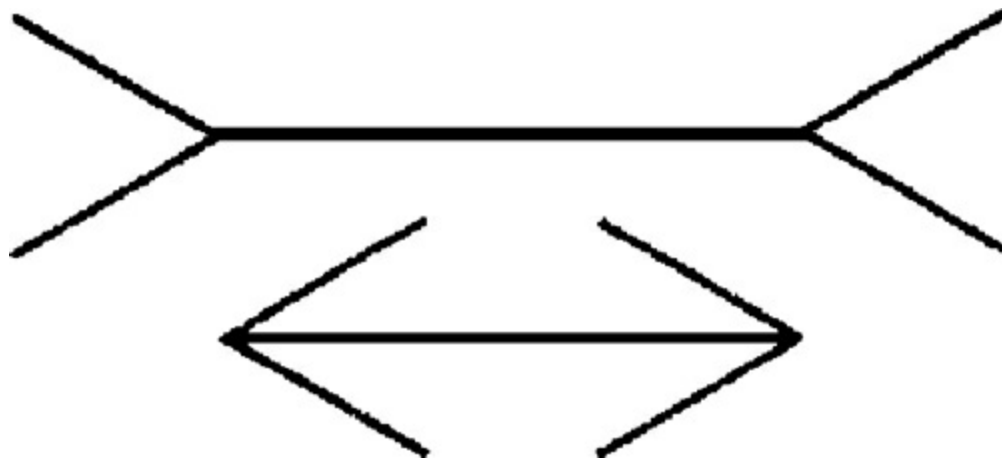
muina See *BILIS*.

Müllerian duct *n.* Either of the pair of ducts that are present in a human embryo, alongside the pair of **Wolffian ducts*, and that in a female develop by default into Fallopian tubes, uterus, and the upper part of the vagina, and in a male atrophy and disappear under the influence of **Müllerian inhibiting substance* secreted by the embryonic testes while the Wolffian ducts develop into the male internal sex organs. Also called the *Müllerian system*. [Named after the German physiologist Johannes Peter Müller (1801–58) who discovered them]

Müllerian inhibiting substance *n.* A [*hormone](#) that is produced by the [*testes](#) of a male embryo and that inhibits the development of the [*Müllerian ducts](#) into Fallopian tubes, uterus, and the upper part of the vagina. Also called *anti-Müllerian hormone* ([AMH](#)) or *Müllerian regression hormone* ([MRH](#)). See also [MASCULINIZING HORMONE](#). **MIS** abbrev.

Müllerian mimicry *n.* A form of [*mimicry](#) in which two or more organisms that are harmful or unpalatable to a [*predator](#) resemble one another in shape or coloration and thereby jointly deter predation. Compare [BATESIAN MIMICRY](#). [Named after the German zoologist Johann Friedrich Theodor (Fritz) Müller (1821–97) who first described it]

Müller-Lyer illusion *n.* The best known of all visual illusions, in which a line with inward-pointing arrowheads appears shorter than a line of the same length with reversed or outward-pointing arrowheads (see [illustration](#)). See also [CARPENTERED WORLD](#), [MORINAGA MISALIGNMENT ILLUSION](#), [STAR ILLUSION](#), [ZANFORLIN ILLUSION](#). [Named after the German sociologist and psychologist Franz Carl Müller-Lyer (1857–1916) who discovered the illusion and published 15 versions of it in the journal *Zeitschrift für Psychologie* in 1889]



Müller-Lyer illusion. The horizontal lines are equal in length.

multi-attribute decision making *n.* Decisions made from sets of alternatives that vary on a number of attributes, aspects, or criteria. Familiar examples include choosing a house by comparing alternatives according to price, location, and number of rooms; selecting a marriage partner by

*****ebook converter DEMO Watermarks*****

comparing suitors on attributes such as physical attractiveness, intelligence, and sense of humour; and hiring an employee by comparing candidates on various qualifications. According to the standard linear additive value-maximization model, the decision maker simply weights the attributes according to their perceived importance, then sums the weights, then finally chooses the alternative with the highest aggregate weight; but there is evidence to suggest that human decision makers do not always behave according to this model. Also called *multi-attribute choice* or *multiple-criteria decision making* or *choice*. See [ELIMINATION BY ASPECTS](#), [LEXICOGRAPHIC CHOICE](#), [LEXICOGRAPHIC SEMIORDER](#). **MADM** *abbrev.*

multidimensional scaling *n.* In statistics, a form of statistical data analysis for analysing similarities and dissimilarities among a collection of elements (organisms, objects, or events) in order to identify and model the dimensional structure underlying the elements, including the number of underlying dimensions, the location of each element on the dimensions, and the nature of the dimensions. The input data are usually represented by a *proximity matrix* showing the degree of similarity between every pair of elements. Multidimensional scaling has been likened to reconstructing a map of an unknown country from information about the distances between pairs of its towns and cities. See also [INDSCAL](#). Compare [CLUSTER ANALYSIS](#), [FACTOR ANALYSIS](#). **MDS** *abbrev.*

multifactorial analysis *n.* Any form of **analysis of variance* involving more than one **independent variable*. See also [REPEATED-MEASURES ANALYSIS OF VARIANCE](#).

multifactorial inheritance *n.* Inheritance of characteristics that are determined by multiple genes.

multiframe task *n.* A **visual search* task in which different groups of stimuli are presented in successive displays. Compare [SINGLE-FRAME TASK](#).

multi-infarct dementia *n.* Another name for **vascular dementia*. **MID** *abbrev.*

multimodal therapy *n.* An approach to **psychotherapy*, developed in
*****ebook converter DEMO Watermarks*****

1972 by the South African-born US psychologist Arnold A(llan) Lazarus (1932–2013), based partly on **behaviour therapy*, but more eclectic in its range of techniques and more concerned with the unique requirements of particular cases, the functional character of symptoms, and the importance of cognitive factors. *See also* [BASIC-ID](#). **MMT** *abbrev.*

multiple-choice *adj.* In psychometrics, pertaining to a question that is accompanied by two or more **response categories* of which the respondent chooses one. A multiple-choice questionnaire, made up of such questions, can be scored automatically. *Compare* [FREE RESPONSE](#).

multiple comparisons *n.* In statistics, tests of the significance of pairwise differences between more than two means, often conducted after **analysis of variance*. Significance tests designed for comparisons between just one pair of means cannot be used for this purpose without violating the assumptions of the tests, because if three comparisons are made between three means, for example, then even if the data were completely random, the probability that one of the comparisons would be significant at $p < .05$ by chance alone would be greater than .05, because there would be three ways in which this could happen: Mean 1 could be significantly different from Mean 2, Mean 1 from Mean 3, or Mean 2 from Mean 3. This means that there would be inadequate protection against a **Type I error*. Various specialized procedures have therefore been devised for handling multiple comparisons. *See also* [BONFERRONI CORRECTION](#), [DUNCAN'S MULTIPLE RANGE TEST](#), [LEAST-SIGNIFICANT DIFFERENCE TEST](#), [NEWMAN-KEULS TEST](#), [SCHEFFÉ TEST](#), [TUKEY-HSD TEST](#). *Compare* [A PRIORI TEST](#).

multiple correlation coefficient R *n.* In statistics, an index of how well a **dependent variable* can be predicted from a linear combination of **independent variables*. It ranges from 0 (zero multiple correlation) to 1 (perfect multiple correlation), and the value of R^2 is the **coefficient of determination*. *See also* [REGRESSION ANALYSIS](#).

multiple determination *n.* In **psychoanalysis*, another name for **overdetermination*.

multiple intelligences *n.* An interpretation of **intelligence* put
*****ebook converter DEMO Watermarks*****

forward by the US psychologist Howard (Earl) Gardner (born 1943) in his book *Frames of Mind: The Theory of Multiple Intelligences* (1983, 1993), taking account of abilities of gifted people and virtuosos or experts in various domains, abilities valued in different cultures, and abilities of individuals who have suffered brain damage. In addition to the linguistic, logical–mathematical, and spatial abilities incorporated in conventional interpretations of intelligence, Gardner’s taxonomy includes *musical intelligence* (used in musical appreciation, composition, and performance), *bodily-kinaesthetic intelligence* (used in sport, dancing, and everyday activities requiring dexterity), *interpersonal intelligence* (used in relating to others, interpreting social signals, and predicting social outcomes), and *intrapersonal intelligence* (used in understanding and predicting one’s own behaviour). In 1997 Gardner added *naturalist intelligence* (used in discriminating among plants, animals, and other features of the natural world, and in classifying objects in general) as an eighth intelligence and *spiritual intelligence* and *existential intelligence* as ‘candidate’ intelligences. Critics have argued that some of these abilities are better interpreted as special talents than as aspects of intelligence. See also [CREATIVITY](#). Compare [GUILFORD’S CUBE](#).

multiple linear regression analysis See [MULTIPLE REGRESSION](#).

multiple line graph See [LINE GRAPH](#).

multiple personality disorder *n.* Another name for **dissociative identity disorder*. **MPD** *abbrev.*

multiple range test *n.* In statistics, a procedure for making **multiple comparisons*, that is, for comparing all possible pairs of a set of group means. See also [DUNCAN’S MULTIPLE RANGE TEST](#).

multiple regression *n.* Multiple linear regression analysis, a statistical method for analysing the joint and separate influences of two or more **predictor variables* (also called **independent variables*) on a **dependent variable*, usually through a **linear model*. It is a generalization of bivariate **regression analysis*. The form of a multiple regression equation for *k* independent variables is a weighted sum:

*****ebook converter DEMO Watermarks*****

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_k X_k$$

where Y is the *predicted* score on the dependent variable, each X_i is one of the predictor variables, β_0 is the intercept indicating the value of Y when all of the predictor variables are equal to zero, and each β_i is a ***standardized regression coefficient** indicating the relative importance of the corresponding independent variable in determining the predicted value of the dependent variable. See also [BETA COEFFICIENT](#), [CROSS-VALIDATION \(2\)](#), [DISCRIMINANT FUNCTION ANALYSIS](#).

multiple sclerosis *n.* A chronic progressive autoimmune disease, triggered by bacteria that mimic the molecular structure of ***myelin**, causing the immune system to attack both the bacteria and normal myelin. It is associated with patchy deterioration of the myelin sheath surrounding neurons in the ***white matter** of the ***central nervous system** and is characterized by muscle weakness or ***paresis**, especially in the legs, clumsiness, numbness or ***paraesthesia**, ***diplopia**, ***scotoma**, and ***tremor**. See also [BSE](#). Compare [CHARCOT–MARIE–TOOTH SYNDROME](#). **MS** abbrev. [From Greek *sklerosis* a hardening, from *skleros* hard + *-osis* indicating a process or state]

multiplicative model *n.* Any statistical or mathematical model in which an effect can be expressed as a weighted product of ***independent variables**, so that if any of the independent variables is zero, then the value of the dependent variable is also zero, because any number multiplied by zero is zero. In ***axiomatic measurement theory**, multiplicative models are divided into those that can be converted into additive models by means of monotonic transformations of their independent and dependent variables and those that cannot, only the latter being considered fundamentally non-additive. Compare [ADDITIVE MODEL](#).

multipolar neuron *n.* A ***neuron** with more than one ***neurite**, invariably a single ***axon** and one or more ***dendrites**, projecting from its ***soma** (1). Also called a *multipolar cell*. Compare [BIPOLAR CELL](#), [UNIPOLAR NEURON](#).

multi-rater feedback *n.* Another name for ***360-degree feedback**. Also

called *multi-source feedback* or *multi-source assessment*.

multistage cluster sampling *n.* A form of **cluster sampling* involving drawing a cluster sample in two or more successive stages. For example, to survey hospital patients throughout a country, a survey researcher might select a sample of hospitals randomly, then within each hospital select a single ward randomly, then select individual patients from each ward randomly.

multitrait–multimethod matrix *n.* A method of interpreting **construct validity* in terms of the **convergent validity* and **discriminant validity* of several different methods of measuring several different psychological **attributes* or **traits*. It consists of a matrix (a rectangular table) of correlations between two or more theoretically distinct traits, each measured by two or more different methods. For example, the traits might be extraversion and conscientiousness, assumed on theoretical grounds to be distinct (see **BIG FIVE**), and each of these traits might be measured by three methods, namely a multiple-choice test, a projective test, and peer ratings; this would produce a matrix with two rows and three columns. The figures along the main diagonal of the matrix, called *monotrait–monomethod* scores, are estimates of the **validity coefficients* of the six measures, and for the measurements to be considered satisfactory they should be the highest in the matrix. Correlations between measures of the same trait by different methods, called *monotrait–heteromethod* scores, provide data about the **convergent validity* of the measures, on the assumption that if they validly measure the same trait they should correlate with each other, and for the measurements to be considered satisfactory these scores should be reasonably high. Correlations between different traits measured by the same method, called *heterotrait–monomethod* scores, provide evidence of the degree to which the results are due to a methods factor, irrespective of what is being measured, and if measures of theoretically different traits, using the same method, do not correlate highly with one another, this constitutes evidence of **discriminant validity*. Finally, correlations between different traits measured by different methods, called *heterotrait–heteromethod* scores, are generally the lowest in the matrix, and they should not be higher than the validity coefficients in their own rows or columns. The technique was introduced by the US psychologists Donald T(homas) Campbell (1916–96) and Donald

*****ebook converter DEMO Watermarks*****

W(inslow) Fiske (1916–2003) in an article in the journal *Psychological Bulletin* in 1959. **MTMM** abbrev.

multi-user dungeon See **MUD**.

multivariate analysis of variance *n.* A statistical procedure that is closely related to ***analysis of variance (ANOVA)** and that determines the significance of differences among several group means, but unlike the standard (univariate) analysis of variance analyses more than one ***dependent variable** simultaneously. **MANOVA** abbrev.

multivariate statistics *n.* The branch of statistics devoted to investigating the influence of one or more ***independent variable** acting on more than one ***dependent variable**. The *multi-* in the name refers to the multiplicity of dependent variables. See also **MULTIVARIATE ANALYSIS OF VARIANCE (MANOVA)**. Compare **BIVARIATE STATISTICS**, **UNIVARIATE STATISTICS**.

multiway frequency analysis *n.* Statistical analysis of frequency data involving more than one ***independent variable** and a ***dependent variable**, the most common technique being ***log-linear analysis**.

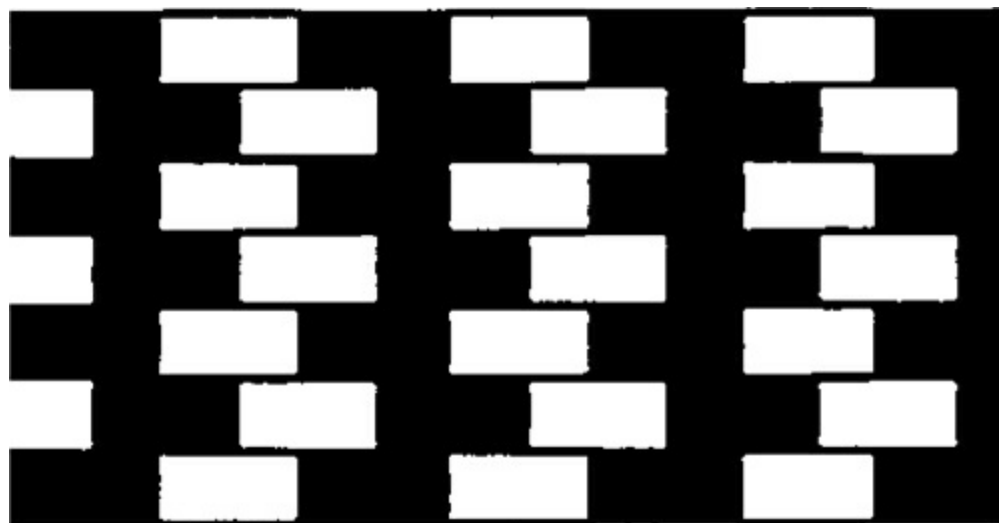
Munchausen by proxy syndrome *n.* Another name for ***factitious disorder imposed on another**; named after the disorder of ***Munchausen syndrome**, but not itself a mental disorder or syndrome according to the British paediatrician (Samuel) Roy (later Sir Roy) Meadow (born 1933) who named it in 1977. Also called *Münchhausen syndrome by proxy*. **MBPS** abbrev.

Munchausen syndrome *n.* Another name for ***factitious disorder**. Also spelt *Münchhausen syndrome*, especially in continental Europe, and more correctly in terms of its etymology. Also called *pathomimicry*. See also **COUVADE**, **MUNCHAUSEN BY PROXY SYNDROME**. Compare **COMPENSATION NEUROSIS**, **MALINGERING**, **PSEUDOLOGIA FANTASTICA**. [First described and named, with the misspelling that has been widely adopted, by the British physician Richard (Alan John) Asher (1912–69) in a three-page article in the *Lancet* in 1951, alluding to Baron Münchhausen, a teller of tall stories in the fiction of the German novelist Rudolf Erich Raspe (1737–94), published in 1785, based on
*****ebook converter DEMO Watermarks*****]

a real Baron Münchhausen (1720–97) who served in the Russian army fighting against the Turks and is said to have recounted extravagant tales of his prowess]

Munsell colour system *n.* A method of specifying colours in terms of the three dimensions of **hue*, **lightness*, and **saturation* (1), standardized to the **CIE colour system* and defined to theoretical limits in 1943, the *Munsell hue* scale containing five principal hues (red, yellow, green, blue, purple) and five intermediate hues (yellow–red, green–yellow, blue–green, purple–blue, red–purple); the *Munsell value* scale containing ten steps of lightness from black (zero) to white (10); and the *Munsell chroma* scale showing fourteen steps of saturation from the equivalent neutral grey (zero) to the most saturated level (14). US *Munsell color system*. [Named after the US inventor Albert Henry Munsell (1858–1918) who developed it in 1915]

Münsterberg illusion *n.* A visual illusion created by a pattern of alternating columns of staggered light and dark rectangles whose rows are horizontally aligned but appear non-horizontal and non-parallel (see [illustration](#)). Also called the *café wall illusion*, the *eccentric chessboard figure* (its original name), the *shifted checkerboard figure*, or the *Münsterberg figure*. See also [HOLLOW SQUARES ILLUSION](#), [LAVATORY WALL ILLUSION](#). [Named after the German-born US psychologist Hugo Münsterberg (1863–1916) who published it in 1894 and 1897]



Münsterberg illusion. The figure is composed of rectangles in perfect horizontal alignment.

muscarine *n.* A toxic [*alkaloid](#) drug, chemically related to [*choline](#), that was originally derived from the [*fly agaric](#) mushroom *Amanita muscaria*, and that mimics [*acetylcholine](#) at certain receptor sites in the parasympathetic and central nervous systems, stimulating smooth muscle activity. When ingested it causes abdominal contractions, evacuation of bowels and bladder, constricted pupils, blurred vision, sweating, salivation, bradycardia, and decreased respiration. Formula: $C_8H_{19}NO_3$. *See also* [CHOLINOMIMETIC](#), [MUSCARINIC RECEPTOR](#), [PARASYMPATHOMIMETIC](#). [From Latin *muscar(ius)* of flies, from *musca* a fly + *-ine* indicating an organic compound]

muscarinic receptor *n.* One of two types of [*neuroreceptors](#) for [*acetylcholine](#) found in the central nervous system and the parasympathetic branch of the peripheral nervous system, stimulated by [*muscarine](#) and inhibited by [*atropine](#). The smooth muscles that are target organs of the autonomic nervous system (such as the pupils, blood vessels, and glands) use muscarinic receptors. Also called a *muscarinic cholinceptor*. *Compare* [NICOTINIC RECEPTOR](#). [From Latin *muscarius* the alkaloid poison muscarine found in some mushrooms, so named because muscarine mimics acetylcholine at such a site]

muscimol *n.* A [*hallucinogenic](#) plant alkaloid found in the [*fly agaric](#) mushroom that binds to [*GABA receptor complex](#) in the brain. [From Latin *musca* a fly + English *molecule*]

muscle *n.* Contractile tissue composed of bundles of elongated cells, some with multiple nuclei, by which movement of organs and parts of the body is effected; or a structure such as the biceps consisting of muscle tissue. The three main types of muscle tissue are [*cardiac muscle](#), [*smooth muscle](#), and [*striped muscle](#). *See also* [ACTIN](#), [ACTOMYOSIN](#), [CREATINE](#), [EXTRAFUSAL](#), [FAST-TWITCH FIBRE](#), [GOLGI TENDON ORGAN](#), [INTRAFUSAL](#), [INVOLUNTARY MUSCLE](#), [MINIATURE END-PLATE POTENTIAL](#), [MOTOR END PLATE](#), [MUSCLE SPINDLE](#), [MYOFIBRIL](#), [MYOSIN](#), [PHOSPHOCREATINE](#), [SARCOMERE](#), [SKELETAL MUSCLE](#), [SLOW-TWITCH FIBRE](#), [TONUS](#), [VOLUNTARY MUSCLE](#). **muscular** *adj.* [From Latin *musculus* a little mouse, diminutive of *mus* a mouse, alluding to the supposed resemblance of some muscles to mice]

*****ebook converter DEMO Watermarks*****

muscle dysmorphia *n.* A form of ***body dysmorphic disorder**, primarily affecting men but also occasionally women, characterized by pathological concern about being physically puny or insufficiently muscular. People with this disorder typically wear baggy clothes to disguise their body shapes, lift weights, follow strict diets, exercise compulsively, and sometimes take ***anabolic steroids** in an effort to increase their muscle development, and in severe cases, social and occupational activities are impaired. The term was introduced by US psychiatrist Harrison G. Pope, Jr (born 1947) and several colleagues in an article in the journal *Psychosomatics* in 1997. Sometimes called *reverse anorexia nervosa*, because individuals with muscle dysmorphia typically perceive themselves as small even when they are actually large and muscular. *See also* **ADONIS COMPLEX**, **BIGOREXIA**. *Compare* **ANOREXIA NERVOSA**. [From Latin *musculus* a little mouse, diminutive of *mus* a mouse, alluding to the supposed resemblance of some muscles to mice, + Greek *dys-* bad or abnormal + *morphe* form + *-ia* indicating a condition or quality]

muscle relaxant *n.* Any drug that causes relaxation of ***striated muscles**, apart from the heart muscle.

muscle sense *n.* A form of ***proprioception** and ***kinaesthesia** mediated by ***sensory receptors** in the muscles and stimulated by contraction. The term is also used non-technically to denote proprioception or kinaesthesia in general, but this is avoided in careful usage. *See also* **GOLGI TENDON ORGAN**, **MUSCLE SPINDLE**.

muscle spindle *n.* Any of the stretch receptors composed of ***intrafusal** fibres, up to one centimetre long, that are embedded in ***skeletal muscles** and oriented in parallel with the ***extrafusal** muscles to generate ***action potentials** whenever the muscles stretch. *See also* **IA FIBRE**. *Compare* **GOLGI TENDON ORGAN**. [So called because of its shape, tapering at each end]

muscular dystrophy *n.* A hereditary disease caused by a mutant gene on the ***X chromosome**, characterized by progressive wasting of muscle tissue, the most common form being ***Duchenne muscular dystrophy**. *Compare* **CHARCOT–MARIE–TOOTH SYNDROME**. [From Greek *dys-* bad or abnormal + *trophe* nourishment]

*****ebook converter DEMO Watermarks*****

mush *n.* A street name for the **liberty cap* mushroom. [Abbreviation of *mushroom* and also descriptive of the psychological state that it induces]

music therapy *n.* A form of **psychotherapy* in which clients or patients are encouraged to express their feelings and inner conflicts through music.

mutagen *n.* Any substance or other agent, including X-rays and other forms of **ionizing radiation*, that can cause genetic **mutations*. *See also* *TERATOGEN*. [From *muta(tion)* + Greek *genein* to produce]

mutant *n.* 1. An organism or gene that has undergone genetic **mutation*. *adj.* 2. Of, relating to, undergoing, or resulting from genetic mutation. [From Latin *mutare* to change]

mutation *n.* A change in the **genes* or **chromosomes* of a cell, capable of being transmitted to offspring as a **heritable* alteration of the organism, including a change in an **intron*. *See also* *BACK MUTATION*, *CIS–TRANS COMPLEMENTATION TEST*, *DELETION* mutation, *FRAMESHIFT MUTATION*, *HOT SPOT*, *JUMPING GENE*, *MUTAGEN*, *NEUTRAL MUTATION*, *NONSENSE MUTATION*, *POINT MUTATION*, *REVERSION*, *SALTATION (2)*, *SILENT MUTATION*. [From Latin *mutare*, *mutatus* to change + *-ation* indicating a process or condition]

mutism *n.* A refusal or inability to speak although the organs of speech are undamaged. Also called *aphrasia*. *See* *SELECTIVE MUTISM*. [From Latin *mutus* silent]

mutual gaze *n.* The event of two people simultaneously looking at each other in the vicinity of each other's eyes. Also called *eye contact*. *See also* *GAZE*.

mu wave *n.* An **EEG* wave, with a frequency of 8–13 hertz near the **motor cortex*, that tends to be suppressed when an individual performs a voluntary muscle movement or forms an intention to make such a movement. It is also blocked when a person watches someone else performing a voluntary action, and this effect is attributed to activity of **mirror neurons*.

Also called the *wicket rhythm*. [Named after the 12th letter of the Greek alphabet (M or μ)]

myalgic encephalomyelitis *n.* A severe form of ***chronic** fatigue syndrome accompanied by myalgia (muscle pain). For the disorder to be diagnosed, four or more of the following symptoms must also occur persistently or recurrently for at least six months after (and not before) the onset of the disorder: severe impairment of short-term memory or concentration, sore throat, tender lymph nodes, muscle pain, multiple joint pain without swelling or redness, unfamiliar types of headaches, unrefreshing sleep, and discomfort lasting more than 24 hours following physical exertion. *See also* **POST-VIRAL FATIGUE SYNDROME**. *Compare* **ENCEPHALOMYELITIS**. **ME** *abbrev.* [From Greek *mys* a muscle + *algos* pain + *-ikos* of, relating to, or resembling + *encephalos* a brain + *myelos* the spinal cord + *-itis* inflammation]

myasthenia gravis *n.* A chronic and progressive disease in which the muscles, especially those of the head and face, gradually become weak and easily fatigued. [From Greek *mys* a muscle + *astheneia* weakness, from *a-* without + *sthenos* strength + Latin *gravis* grave]

myelencephalon *n.* A part of the ***rhombencephalon** or hindbrain of an embryo that develops later into the ***medulla oblongata**. [From Greek *myelos* marrow or spinal cord + *enkephalos* the brain, from *en* in + *kephale* the head]

myelin *n.* White lipid-based tissue produced by ***oligodendrocytes** in the central nervous system and by ***Schwann cells** in the peripheral nervous system, forming a protective covering called a myelin sheath around the neural ***axons**. Damage to the myelin sheath is found in neurological disorders such as ***multiple sclerosis**. *See also* **NEUROLEMMA**. **myelinated** *adj.* Having a myelin sheath. [From Greek *myelos* marrow or spinal cord + *-in(e)* indicating an organic compound]

Myers–Briggs Type Indicator *n.* One of the most popular personality questionnaires, especially in commercial and industrial contexts, designed to implement the theory of ***function types** first suggested in 1923 by the Swiss psychologist Carl Gustav Jung (1875–1961). It contains 126

*****ebook converter DEMO Watermarks*****

items in its standard form (G) and 132 in its advanced form (K), all the items being concerned with preferences and inclinations, and it measures four bipolar dimensions: extraversion (E) versus introversion (I), sensing (S) versus intuition (N), thinking (T) versus feeling (F), and judging (J) versus perceiving (P). These four dimensions are combined to yield 16 types, each characterized by a different score pattern represented by a four-letter type description: ESTJ, ESTP,..., INFP. *See also* [COGNITIVE STYLE](#), [TEMPERAMENT THEORY](#). **MBTI** *abbrev.* [Named after the US novelist and playwright Isabel McKelvey Myers (1897–1980) and her mother, the self-taught US psychologist Katharine Elizabeth Briggs (1875–1968), who jointly introduced the earliest version of it in 1943]

myoclonic *adj.* Of, relating to, or resembling an involuntary contraction of the skeletal muscles, such as occurs in a [*convulsion](#). [From Greek *mys* a muscle + *klonos* contraction]

myofibril *n.* Any of the long contractile cells with multiple nuclei of which [*striped muscle](#) is composed. *See* [ACTIN](#), [MYOSIN](#). [From Greek *mys*, *myos* a muscle + Latin *fibrilla* a little fibre, diminutive of *fibra* a fibre]

myopia *n.* Short-sightedness or difficulty in seeing distant objects clearly, caused by an excessively elongated eyeball in which light rays entering the eye are focused in front of the retina. Also called *brachymetropia* or *near-sightedness*. *See also* [ANOMALOUS MYOPIA](#). *Compare* [EMMETROPIA](#), [HYPEROPIA](#), [PRESBYOPIA](#). **myope** or **myops** *n.* A short-sighted person. **myopic** *adj.* Short-sighted. [From Greek *myops* short-sighted, from *myein* to close + *ops* an eye + *-ia* indicating a condition or quality]

myosin *n.* A protein that reacts with [*actin](#) to form the contractile protein [*actomyosin](#) in muscles and that is also present in other body cells. [From Greek *mys* a muscle + *-in(e)* indicating an organic compound]

myostatic reflex *n.* Another name for a [*stretch reflex](#). *See also* [DEEP TENDON REFLEX](#). [From Greek *mys* a muscle + *statikos* bringing to a standstill, from *histanai* to cause to stand or to weigh in a balance + *-itikos* resembling or marked by]

myotonia *n.* Prolonged spasm or rigidity of a muscle. See [CATALEPSY](#), [CEREA FLEXIBILITAS](#), [CLASP-KNIFE RIGIDITY](#), [COGWHEEL RIGIDITY](#). **myotonic** *adj.* [From Greek *mys* a muscle + *tonos* tension, from *teinein* to stretch + *-ia* indicating a condition or quality]

myriachit *n.* The name usually given to the version of [*latah](#) found in Siberia. [From Russian *myriachit* to fool or play the fool]

myristin *n.* A whitish solidified [*ester](#) found in many vegetable fats and oils, especially oil of nutmeg; specifically glyceryl trimyristate, formula: $(C_{14}H_{27}O_2)_3C_3H_5$. Also, a [*psychedelic](#) and [*hallucinogenic](#) drug obtained from [*nutmeg](#) or [*mace](#). [From Latin *Myristica fragrans*, the tropical evergreen tree the seeds of which contain nutmeg, from *myristicus* fragrant, from Greek *myron* an ointment or perfume + *-in(e)* indicating an organic compound]

mystery customer research *n.* A technique of [*market research](#), popular in the US and the UK since the 1990s, in which specially trained assessors called *mystery shoppers* (in the retail industry) or more generally *mystery customers* visit stores, restaurants, banks, or other businesses in which service quality is to be appraised and, posing as ordinary customers, check the attainment of service standards drawn up in consultation with the client company. Examples of service standards that might be assessed include the following: *Did the cashier deal with me courteously? Did the sales assistant check that I had the right size garment? Was a pool table provided in the pub? Was I served within two minutes? Did the bank teller smile? Were the ashtrays emptied regularly?* From the results of such a survey, the standard attained by a client company can be compared with that of its competitors. [So called because of the secrecy regarding which customers are assessors]

myth, urban See [URBAN LEGEND](#).



naive participant *n.* In research methodology, a participant or subject who has no previous experience of the procedure, or one who is unaware of the purpose of the research or the hypothesis being tested. In research involving **confederates*, the term is used to denote a participant who is not one of the confederates.

naive physics *n.* Another name for **intuitive physics*.

naive realism *n.* The philosophical doctrine that perception of a physical object is direct awareness of the object itself rather than of a **representation* (1) of it, a view that is seriously challenged and in the opinion of many philosophers refuted by **perceptual illusions* in general and **visual illusions* in particular.

naive subject *See* NAIVE PARTICIPANT.

nalorphine *n.* A white crystalline compound, derived from morphine by substituting an allyl group (C₃H₅) for a methyl group (CH₃), used as a respiratory stimulant and **narcotic *antagonist* (3) in the treatment of narcotic poisoning and **opioid-related disorders*, also used to detect morphine addiction quickly through the short-lived **withdrawal* reaction that it elicits from a morphine addict. *Compare* NALOXONE, NALTREXONE. [From its chemical name *N-al(lyl)n(or)(mor)phine*]

naloxone *n.* A potent, short-acting **narcotic *antagonist* (3) that acts by binding to the **opiate *neuroreceptors* on cells, often used for treating acute narcotic overdose and **opioid-related disorders*. *Compare* NALORPHINE,

*****ebook converter DEMO Watermarks*****

NALTREXONE. [From its conventional chemical name *N-al(lylnor)ox(ymorph)one*]

naltrexone *n.* A long-acting **narcotic* antagonist that blocks the action of **opiates*, including the **euphoria* that they induce, and that is thus used in the treatment of narcotic overdose and **opioid-related disorders*. *Compare* NALORPHINE, NALOXONE. [A blend of *naloxone* and *Trexan* a trademark]

name–letter effect *n.* A tendency to evaluate letters in one's name more favourably than other letters. This has a small but significant influence on people's choices, including where they choose to live and whom they choose to marry. The effect was discovered by the Belgian psychologist Jozef M. Nuttin (1933–2014) and first named in the title of an article he published in the *European Journal of Social Psychology* in 1985. In a large-scale study of a sample of 582,007 full-time employees in Belgian private companies published in the journal *Psychological Science* in 2008, researchers compared the initial letters of employees' and employing companies' names and found the frequency of matches to be higher than chance expectation for every letter of the alphabet apart from X. *Compare* MERE EXPOSURE EFFECT. **NLE** *abbrev.*

NANC *abbrev.* Non-**adrenergic*, non-**cholinergic*, of or relating to peripheral nerve fibres whose neurotransmitter is neither adrenalin nor acetylcholine.

nandrolone *n.* An **anabolic steroid* with tissue-building properties and a weak **androgenic* action, closely related to **testosterone*, prescribed for the treatment of osteoporosis (brittle bones) and female breast cancer, and used to stimulate growth, weight gain, and production of red blood cells. It is frequently abused by athletes as a **performance* enhancer. Formula $C_{18}H_{26}O_2$. **nandrolone decanoate** *n.* A synthetic **androgen* and one of the most common forms of nandrolone. Formula: $C_{28}H_{44}O_3$. **nandrolone phen(yl)propionate** *n.* An **anabolic steroid* and widely used form of nandrolone. Formula: $C_{27}H_{34}O_3$. [Shortened from its chemical name *19-norandrostenolone*]

nanometre *n.* One billionth of a metre (10^{-9} metre, or one millionth of a

millimetre), used mainly for expressing wavelengths of light and other electromagnetic radiation. The ***visible spectrum** extends from approximately 390 nanometres at the violet end of the spectrum to 740 nanometres at the red end. US *nanometer*. Also (formerly) called a *millimicron*. Compare **ANGSTROM**. **nm** abbrev. [From Greek *nanos* a dwarf + *metron* a measure]

narcissism *n.* Self-love, or sexual gratification obtained by contemplating oneself. In ***psychoanalysis**, ***cathexis** of the ***ego** by ***sexual instincts**, as occurs in ***homosexuality**, according to Sigmund Freud (1856–1939) in his book *Three Essays on the Theory of Sexuality* (1905, *Standard Edition*, VII, pp. 130–243, at p. 145*n*). Freud later formed the view that it is a normal ***psychosexual stage** of development, between stages of ***auto-erotism** and ***object libido**, and in 1914 he published an entire article entitled ‘On Narcissism: An Introduction’ (*Standard Edition*, XIV, pp. 73–102) in which he expounded at length his theory at that time. The Austrian-born US psychoanalyst Heinz Kohut (1913–81) viewed narcissism as a natural part of development, but the British-based Austrian psychoanalyst Melanie Klein (1882–1960) and her followers questioned Freud’s theory, arguing that ***object-relationships** are evident from the earliest stages of sucking. The concept of narcissism was originally introduced in 1898 by the English sexologist Havelock Ellis (1859–1939) in an article entitled ‘Auto-erotism: A Psychological Study’. See also **EGO LIBIDO**, **GRANDIOSE SELF**, **NARCISSISTIC NEUROSIS**, **NARCISSISTIC OBJECT-CHOICE**, **NARCISSISTIC PERSONALITY DISORDER**, **PRIMARY NARCISSISM**, **SECONDARY NARCISSISM**. Compare **OBJECT RELATIONS**. **narcissistic** *adj.* [Named after *Narkissos*, a beautiful youth in Greek mythology who pined away for love of his own reflection in a pool and was punished by being transformed into the flower that bears his name]

narcissistic libido *n.* Another name for ***ego** libido.

narcissistic neurosis *n.* In ***psychoanalysis**, a category of ***psychoneuroses** that Sigmund Freud (1856–1939) distinguished from the ***transference** neuroses. In an article ‘On Narcissism: An Introduction’ (1914, *Standard Edition*, XIV, pp. 73–102), he described its salient characteristic to be the turning of ***libido** from external ***instinctual objects** on to the ***ego**, and he identified it with ***paraphrenia**. The concept lost popularity among psychoanalysts after the Second World War. See also **DECATHEXIS**, **NARCISSISM**,

*****ebook converter DEMO Watermarks*****

NARCISSISTIC PERSONALITY DISORDER.

narcissistic object-choice *n.* In **psychoanalysis*, a type of **object-choice* in which one chooses a love-object according to characteristics that the person shares with oneself. Sigmund Freud (1856–1939) introduced this concept in 1911 in an article ‘Psycho-analytic Notes on an Autobiographical Account of a Case of Paranoia (Dementia Paranoides)’ (*Standard Edition*, XII, pp. 9–82, at pp. 60–1) and developed it fully in 1914 in an article ‘On Narcissism: An Introduction’ (*Standard Edition*, XIV, pp. 73–102, at pp. 88–91), citing the fact that homosexuals take themselves as models in object-choices as ‘the strongest of the reasons that have led us to adopt the hypothesis of narcissism’ (p. 88). *See also* [NARCISSISM](#). *Compare* [ANACLITIC OBJECT-CHOICE](#).

narcissistic personality disorder *n.* A **personality disorder* in **DSM-5* characterized by **grandiose ideas or actions*, beginning by early adulthood, indicated by such signs and symptoms as self-importance and boastfulness; preoccupation with fantasies of unlimited success, power, beauty, or other desirable attributes; self-image as someone who should associate only with high-status people or institutions; excessive need for admiration; unreasonable expectations of favourable treatment; interpersonal exploitativeness; lack of empathy; envy; and patronizing arrogance. The term was introduced by the Austrian-born US psychoanalyst Heinz Kohut (1913–81). *See also* [GRANDIOSE SELF](#), [NARCISSISM](#). **NPD** *abbrev.*

narcoanalysis *n.* A technique of **psychotherapy* in which an attempt is made to bring out repressed emotions in an altered state of consciousness induced by narcotic drugs (usually short-acting **barbiturates*), originally used in the treatment of mental disorders in military personnel. Also called *narcosynthesis*. *Compare* [NARCOSYNTHESIS](#), [NARCOTHERAPY](#). [A blend of *narco(tic)* and *(psycho)analysis*]

narcolepsy *n.* One of the **sleep–wake disorders* in **DSM-5*, in which sudden and unpredictable lapses occur from wakefulness directly into **REM sleep* or from wakefulness into paralysis and **atonia* without loss of consciousness. It is characterized by frequent, involuntary episodes of refreshing sleep, together with either **cataplexy* (1) or recurrent intrusions of

*****ebook converter DEMO Watermarks*****

***REM sleep** during the transition between sleep and wakefulness, accompanied by ***hypnopompic images**, ***hypnagogic images**, or ***sleep paralysis**. It is believed to be caused by a malfunction of the mechanisms in the ***subcoerulear nuclei** or ***magnocellular nuclei** responsible for ***REM atonia**. Compare CATAPLEXY (1), KLEINE–LEVIN SYNDROME, HYPERSOMNIA, PRIMARY HYPERSOMNIA. [From Greek *narke* numbness or torpor + *lepsis* a seizure, from *lambanein* to seize]

narcosis *n.* Drug-induced loss of ***consciousness**. [From Greek *narke* numbness or torpor + *-osis* indicating a process or state]

narcosynthesis *n.* Another name for ***narcoanalysis**, especially when the explicit goal is the reintegration of the patient's ***personality**. Compare NARCOTHERAPY. [A blend of *narco(tic)* and *syntheses*]

narcotherapy *n.* Psychotherapy conducted with the help of narcotic drugs (usually short-acting ***barbiturates**); also, treatment of mental disorders by prolonged ***narcosis**. Compare NARCOANALYSIS, NARCOSYNTHESIS.

narcotic *adj. n.* (Of or relating to) a class of drugs that produce ***narcosis**, or at least drowsiness, torpor, and numbness, and are sometimes prescribed medicinally as ***analgesics** (1), ***anaesthetics** (1), or ***hypnotics** (2) and sometimes taken as street drugs, high dosages leading to depressed respiration, convulsions, coma, and death, and prolonged use often resulting in addiction or ***dependence** (2). The word is often misapplied, even by government agencies, to addictive drugs in general, excluding alcohol but including stimulant drugs such as cocaine or amphetamine, or to illegal drugs in general, including cannabis and LSD, whether or not they have narcotic or depressant effects, but such abuses of language are avoided in careful usage. See CODEINE, FENTANYL, HEROIN, HYDROMORPHONE, LOMOTIL, METHADONE, MORPHINE, NALORPHINE, OPIUM, OXYCODONE, OXYMORPHONE, PAREGORIC, PENTAZOCINE, PETHIDINE (MEPERIDINE), PHENAZOCINE, PROPOXYPHENE. See also NARCOTIC ANALGESIC, NARCOTIC ANTAGONIST, OPIATE, OPIOID-RELATED DISORDERS, SUBSTANCE ABUSE, SUBSTANCE-RELATED AND ADDICTIVE DISORDERS. Compare NALOXONE, NALTREXONE, TRANQUILLIZER. **narcotize** *vb.* To place a person or an animal under the influence of a narcotic drug. [From Greek *narkotikos* of or relating to numbness, from *narke* numbness or torpor + *-ikos* of, relating to, *****ebook converter DEMO Watermarks*****]

or resembling]

narcotic analgesic *n.* Any ***narcotic** such as ***morphine** that is used as an ***analgesic** (1) in cases of severe pain and is sometimes taken as a street drug. See DOVER'S POWDER, FENTANYL, HEROIN, HYDROMORPHONE, LAUDANUM, MEPERIDINE, METHADONE, MORPHINE, OXYCODONE, OXYMORPHONE, PAREGORIC, PENTAZOCINE, PETHIDINE (MEPERIDINE), PHENAZOCINE, PROPOXYPHENE. See also CODEINE (a mildly narcotic analgesic).

narcotic antagonist *n.* Any drug such as ***nalorphine**, ***naloxone**, or ***naltrexone** that binds to the ***neuroreceptor** sites of the ***opiates** in the ***central nervous system** and thereby blocks their action. Also called an *opioid antagonist*. See also ANTAGONIST (3).

narrative psychology *n.* A variant of ***social constructionist psychology**, introduced by the US psychologist Theodore R(oy) Sarbin (1911–2005) in a book entitled *Narrative Psychology: The Storied Nature of Human Conduct* (1986), that studies how people deal with experience by creating and responding to stories. Sarbin argued that people organize their thinking, perceiving, imagining, interaction, and decision making according to the narrative structure of human experience. [From Latin *narrare* to recount]

narrative psychotherapy *n.* A form of ***psychotherapy** in which individuals, couples, or families are encouraged to reinterpret their lives in terms of more beneficial stories.

narrow heritability See HERITABILITY.

nasal *adj.* 1. Of or relating to the ***nose**. *n.* 2. In phonetics, a ***consonant** speech sound articulated by obstructing the mouth passage completely while allowing the airstream to pass through the nose, as in the final ***phonemes** in the words *sum*, *sun*, and *sung*. See also MANNER OF ARTICULATION.

nasal epithelium *n.* Another name for the ***olfactory epithelium**.

nasal hemianopia *n.* Loss of vision of one nasal field (the right field of the left eye or the left field of the right eye) resulting from damage to the lateral region of the **optic chiasm*. Also called *nasal hemianopsia*. See also *HEMIANOPIA*. [So called because the affected area lies on the side nearest the nose]

nasal retina *n.* The half of the retina of each eye that is nearest to the nose and from which nerve fibres are projected to the opposite cerebral hemisphere after crossing over in the **optic chiasm*. Compare *TEMPORAL RETINA*.

Nash equilibrium *n.* In game theory, a profile of **strategy* (2) choices such that every player's strategy is a best reply to the strategies chosen by the other players. Given the strategies chosen by the other players (or, if there is only one, the strategy chosen by the other player), a best reply is a strategy that gives the player choosing it at least as good a payoff as any other strategy. A key property of a Nash equilibrium is that no player has any incentive to deviate unilaterally from it, so that it gives the players no cause to regret their strategy choices when the other players' choices are revealed. It is a basic tenet of game theory that a **rational* solution to any game must be a Nash equilibrium, but many games have multiple Nash equilibria. Also called an *equilibrium point* or an *equilibrium*. See also *MINIMAX THEOREM*. [Named after the US mathematician John F(orbes) Nash (born 1928) who introduced it in articles in the *Proceedings of the National Academy of Sciences* in 1950 and the *Annals of Mathematics* in 1951]

National Intelligence Test *n.* A civilian version of the **Army Alpha and Beta tests*, published in 1919 by the US psychologist Robert Mearns Yerkes (1876–1956), and widely used in schools, universities, and commercial firms.

nativism *n.* The doctrine that the mind contains knowledge that is not derived from the senses; more generally, the theory that the mind and its capacities are innately determined, or any theory emphasizing heredity or biological constitution as determinants of perceptions, attitudes, personality, or behaviour. See also *INNATE IDEA*, *RATIONALISM* (1, 2). Compare *EMPIRICISM*.

NATO phonetic alphabet *n.* The standard list of words used to identify letters of the alphabet unambiguously in police and maritime communications, air traffic control, and military contexts: Alpha, Bravo, Charlie, Delta, Echo, Foxtrot, Golf, Hotel, India, Juliet, Kilo, Lima, Mike, November, Oscar, Papa, Quebec, Romeo, Sierra, Tango, Uniform, Victor, Whiskey, X-ray, Yankee, Zulu. [Named after NATO, the North Atlantic Treaty Organization, which standardized it]

natural category *n.* **1.** A category imposed by the sense organs, such as the class of visual sensations giving rise to the sensation of blue or the class of taste sensations giving rise to the sensation of saltiness, in contradistinction to an artificially chosen category. **2.** Another name for a **basic-level category*, but this is avoided in careful usage.

naturalistic fallacy *n.* The mistake of deriving what ought to be from what is, or occasionally vice versa. It was named and discussed at length by the English philosopher G(eorge) E(dward) Moore (1873–1958) in his book in *Principia Ethica* (1903), without reference to what came to be regarded as the basic authority, namely *A Treatise of Human Nature* (1739) by the Scottish philosopher David Hume (1711–76): ‘In every system of morality that I have hitherto met with...I am surprised to find, that instead of the usual copulations of propositions, *is*, and *is not*, I meet with no proposition that is not connected with an *ought*, or an *ought not*. This change is imperceptible; but is, however, of the last consequence’ (Book III, part 1, section 1). [So called because examples usually centre on what is natural, as in the argument that it is right to eat meat because human beings have always naturally done so]

naturalistic observation *n.* A research method involving the passive observation of behaviour in naturally occurring situations, rather than any active intervention from the researcher such as occurs in an **experiment*. See also OBSERVATIONAL STUDY.

natural language *n.* A language that has evolved spontaneously within a community and that has native speakers. See also LANGUAGE (1). Compare ARTIFICIAL LANGUAGE.

natural-level category *n.* Another name for a **basic-level category*. Also called a *natural-level concept*.

natural selection *n.* The basic mechanism of **evolution* whereby those individuals in a population that are best adapted to the environment survive and produce more offspring than others, thereby altering the composition of the population and eventually the characteristics of the **species*. The term was introduced by the English naturalist Charles (Robert) Darwin (1809–82) in his book *The Origin of Species by Means of Natural Selection or the Preservation of Favoured Races in the Struggle for Life* (1859). See also APOSTATIC SELECTION, BLIND WATCHMAKER, CANALIZING SELECTION, COUNTERACTING SELECTION, DARWINIAN EVOLUTION, DIRECTIONAL SELECTION, DISRUPTIVE SELECTION, FREQUENCY-DEPENDENT SELECTION, GROUP SELECTION, KIN SELECTION, *K*-SELECTION, MEME, REINFORCING SELECTION, R-SELECTION, SELECTION PRESSURE, SELFISH GENE, SEXUAL SELECTION, STABILIZING SELECTION.

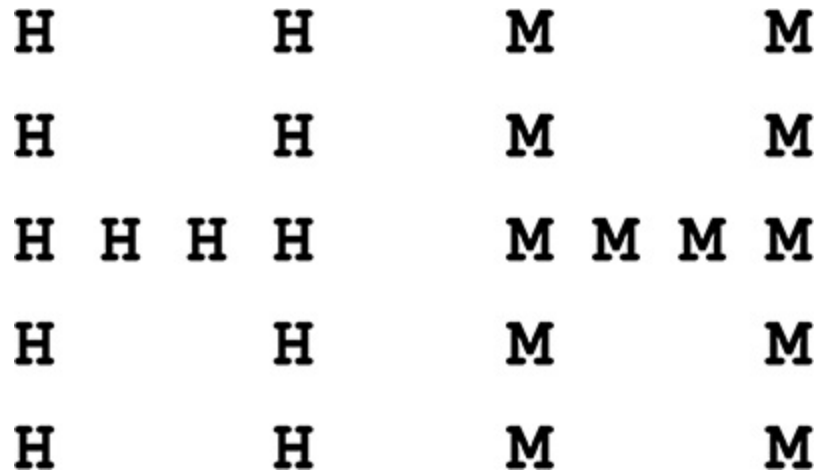
nature–nurture controversy *n.* The debate about the relative contributions of heredity and environment to a psychological characteristic, such as **intelligence*. The juxtaposition of the words *nature* and *nurture* in this sense was introduced by the English schoolmaster Richard Mulcaster (1531–1611), though the phrase had already been used in Greek by the philosopher Socrates (469–399 BC). It became popular in psychology after being adopted by the English explorer, amateur scientist, and psychologist Sir Francis Galton (1822–1911). See also HERITABILITY, NURTURE.

Navane *n.* A proprietary name for the neuroleptic drug **thiothixene*. [Trademark]

Navon figure *n.* A compound image composed of smaller images, typically a large letter of the alphabet composed of smaller letters (see *illustration*), used to study global and local cognitive processing. If the large figure has the same shape as its component elements, then the figure is congruent, because the **global feature* and the **local features* are the same; otherwise the figure is incongruent. Human observers generally identify the global features of incongruent Navon figures more quickly than the local features, perceiving a letter H composed of small M letters initially as an H rather than a collection of Ms (this is called the *global advantage*), but people

*****ebook converter DEMO Watermarks*****

with **simultanagnosia* display impaired global processing and have difficulty identifying global features, and non-human **primates*, such as capuchin monkeys, generally display a local advantage, identifying local features more quickly. Compare *HYBRID IMAGE*. [Named after the Israeli cognitive psychologist David Navon (born 1943) who introduced the idea in an article in the journal *Cognitive Psychology* in 1977]



Navon figure. The figure on the left is congruent and the one on the right is incongruent.

near-death experience *n.* An episode with characteristic cognitive and emotional features sometimes experienced by people close to death, typically involving a sensation of moving through a tunnel, feeling unnaturally calm, an **out-of-body experience*, and sometimes mystical or religious feelings. The term was introduced in 1975 by the US parapsychologist Raymond Moody (born 1944) in his book *Life After Life*: ‘During the past few years I have encountered a large number of persons who were involved in what I shall call “near-death experiences”’ (p. 18). **NDE** *abbrev.*

nearest neighbour method *n.* In statistics, any technique of **cluster analysis* in which the distance between two clusters is defined as the distance between their two closest members. Also called *single-linkage clustering*.

near point *n.* The closest point to the eye at which an object or image can be focused on the retina with maximum **accommodation* (1) of the crystalline lens. It is about 10 centimetres (4 inches) in infancy, 25

centimetres (10 inches) in adulthood if vision is normal, and 33 centimetres (13) inches in old age. *See also* [RANGE OF ACCOMMODATION](#). *Compare* [FAR POINT](#).

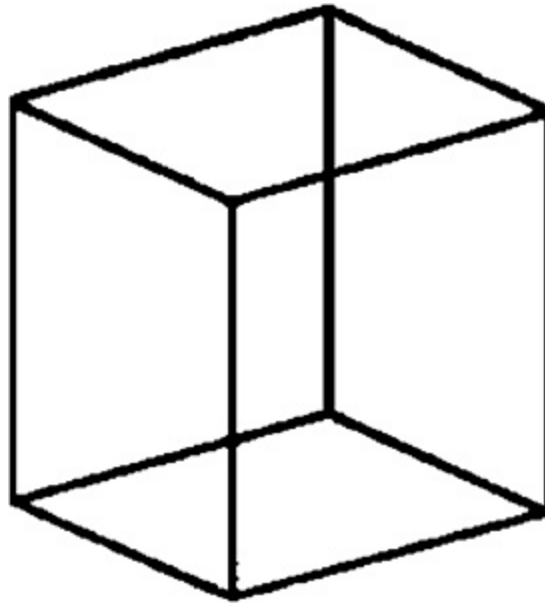
near sense *n.* Any of the senses such as touch or taste that are mediated by [*proximoreceptors](#) and that require close proximity between the perceiver and the object or event being perceived. *Compare* [FAR SENSE](#).

near-sightedness *n.* A non-technical name for [*myopia](#).

near vision *n.* Close-up viewing, usually defined for objects less than 2 feet or about 60 centimetres from the eyes. *See also* [ACCOMMODATION \(1\)](#), [ACCOMMODATION REFLEX](#), [CILIARY REFLEX](#), [HYPEROPIA](#), [PARASYMPATHETIC NERVOUS SYSTEM](#), [PRESBYOPIA](#). *Compare* [FAR VISION](#).

nebbies *n.* A street name for the barbiturate drug [*pentobarbital](#) (pentobarbitone).

Necker cube *n.* A simple line drawing of a transparent cube that, when viewed continuously, appears to alternate between two different spatial orientations, a classic example of an [*ambiguous figure](#) and more specifically of [*perspective](#) reversal (see [illustration](#)). [Named after the Swiss mineralogist Louis Albert Necker (1786–1861) who in 1832 reported his observation that line drawings of crystals appeared to reverse spontaneously]



Necker cube. The figure alternates spontaneously between two perspectives of the cube.

necromania *n.* A pathological preoccupation with dead bodies, or another name for ***necrophilia**. [From Greek *nekros* a dead body + *mania* madness]

necrophilia *n.* A ***paraphilia** characterized by recurrent sexually arousing fantasies, sexual urges, or behaviour involving intercourse with dead bodies. *Compare* **BIOPHILIA**. **necrophiliac** *n.* A person with necrophilia. [From Greek *nekros* a dead body + *philos* loving, from *phileein* to love + *-ia* indicating a condition or quality]

need *n.* 1. A lack of something that is required for survival. 2. A motivational state resulting from the lack of something that an organism requires or desires, also called a *drive*. 3. In the ***personology** of the US psychologist Henry Alexander Murray (1893–1988), a general course of action or behavioural tendency. *See also* **EDWARDS PERSONAL PREFERENCE SCHEDULE**, **NEED-PRESS**, **PRESS**.

need complementarity hypothesis *n.* The proposition that people tend to be attracted to others who have complementary needs to their own, a person with a high need for dominance, for example, being attracted to a person with a high need for submission, and vice versa. The theory was

*****ebook converter DEMO Watermarks*****

proposed in 1958 by the US sociologist Robert Francis Winch (1911–77) in a book entitled *Mate-Selection: A Study of Complementary Needs*. Despite its superficial plausibility, the theory has received only weak and inconsistent empirical support. Also called the *complementarity hypothesis*. Compare [ATTITUDE SIMILARITY HYPOTHESIS](#).

need for achievement *n.* A social form of [*motivation](#) involving a competitive drive to meet standards of excellence, traditionally measured with a projective test such as the [*TAT](#). The concept was introduced by the US psychologist Henry Alexander Murray (1893–1988) in his book *Explorations in Personality* (1938). Also called *achievement motivation*. **N Ach** or **nAch** *abbrev.*

need for affiliation *n.* A social form of [*motivation](#) involving a need to seek out and enjoy close and cooperative relationships with other people, and to adhere and remain loyal to a friend. The concept was introduced by the US psychologist Henry Alexander Murray (1893–1988) in his book *Explorations in Personality* (1938). Also called *affiliation need*. **N Aff** or **nAff** *abbrev.*

need-hierarchy theory *n.* The proposition put forward by the US psychologist Abraham Maslow (1908–70) in his book *Motivation and Personality* (1954, 1970) that human needs fall into five categories that form the following hierarchy. The strongest and most imperative are the *physiological needs* for food, water, oxygen, and sex; if the physiological needs are gratified, the *needs for safety* emerge, and the person begins to seek out safe environments; next to emerge are *needs for love and belonging*, and the person yearns for a friend, a lover, a place in a group; then *needs for esteem* come to the fore, and the person seeks self-respect, respect from others, status, and achievement; then last, and usually only if all the others have been reasonably well satisfied, there emerges a need for [*self-actualization](#).

need-press *n.* In the [*personology](#) of the US psychologist Henry Alexander Murray (1893–1988), a [*need](#) (3) evoked by environmental circumstances, such as a poor person's need for money or a lonely person's need for affiliation. Also called a *press-need*. See also [PRESS](#).

neencephalon *n.* Another name for the ***neocortex**.

negation *n.* **1.** The contradiction, or denial, or reversal of something, or the act or process of contradicting. **2.** In ***psychoanalysis**, a process whereby one continues to defend oneself against a formerly ***repressed** wish, thought, or feeling that has come to consciousness by disavowing or disowning it, as when a patient says during therapy ‘You might expect me to have felt angry with him, but I never felt any anger’. Sigmund Freud (1856–1939) expounded his theory in an article entitled ‘Negation’ in 1925, where he asserted somewhat cryptically: ‘Only one consequence of the process of negation is undone—the fact, namely, of the ideational content of what is repressed not reaching consciousness. The outcome of this is a kind of intellectual acceptance of the repressed, while at the same time what is essential to the repression persists’ (*Standard Edition*, XIX, pp. 235–9, at pp. 235–6). Some psychoanalysts consider it as a ***defence mechanism**. Also called *disavowal*. **3.** In ***logic**, the operator that reverses the meaning of a proposition *p*, or the resulting proposition *not-p* that is true precisely when *p* is false and vice versa.

negative adaptation *n.* A gradual diminution in sensitivity of a ***sensory** receptor or neuron resulting from prolonged or repeated stimulation.

negative afterimage *n.* **1.** An ***afterimage** in which the lightness contrasts are reversed, light areas of the original stimulus appearing dark and dark areas appearing light. *See also* **COMPLEMENTARY AFTERIMAGE**. *Compare* **POSITIVE AFTERIMAGE**. **2.** Another name for a ***complementary afterimage**, though this usage undermines an important distinction and is avoided in careful usage.

negative capability *n.* Suspension of critical rationality coupled with calm and unquestioning acceptance of uncertainty and doubt. The term, frequently used in British ***psychoanalysis** to describe an attitude adopted by some analysts, is taken from a letter of the English poet John Keats (1795–1821) to his younger brother Tom, who was dying of consumption: ‘Negative Capability, that is, when a man is capable of being in uncertainties, mysteries, doubts, without any irritable reaching after fact or reason’ (letter dated 21 December 1817).

*****ebook converter DEMO Watermarks*****

negative feedback See [FEEDBACK](#).

negative induction See [INDUCTION](#) (4).

negative Oedipus complex See [OEDIPUS COMPLEX](#).

negative practice *n.* A form of [*paradoxical therapy](#) in which the patient or client is enjoined to practise the very behaviour that needs to be eliminated. The US psychologist Knight Dunlap (1875–1949) introduced it in an article entitled ‘A revision of the Fundamental Law of Habit Formation’ in the journal *Science* in 1928, in which he reported: ‘The first opportunity which occurred for the testing of this method lay in an idiosyncrasy of my own in typewriting. For some years I have been annoyed, when typing rapidly, by an occasional transposition of the letters of a word, the word “the” being especially troublesome, so that in reading over a manuscript of my own typing I would sometimes find two, three or more of these transpositions into “hte.”...I now proceeded to try the typing of “hte” voluntarily, as a means of destroying it. I set to work deliberately and wrote about half a page, single spaced, of the “hte” combination, with the futuristic thought that this was a “word” that I would not write in the future (unless deliberately or voluntarily). Somewhat over a week later, I followed this with a second “practice period,” writing less than a third of a page. This was over three months ago. Since that time I have typed many pages, some rapidly, but have not found on reading them over a single case of “hte”!’ (vol. 67, p. 361). Dunlap developed his theory further in an article in *Scientific Monthly* in 1930 and in a book entitled *Habits: Their Making and Unmaking* (1932, pp. 94–6, 163–4, 313–14). See also [PARADOXICAL INTENTION](#).

negative priming *n.* Increased reaction time (slower responding) to a stimulus resulting from attention recently having been focused on stimuli belonging to a different class. It is a form of inhibitory [*priming \(1\)](#) arising from the suppression of irrelevant internal representations. For example, if someone is presented with a picture of a green owl and a red cat and is asked to name the red object, internal representations activated by the green owl will tend to be inhibited, causing increased reaction time in an immediately following task requiring rapid identification of a bird or something green.

*****ebook converter DEMO Watermarks*****

negative reference group *n.* A ***reference group** that an individual disapproves of and uses as a standard representing opinions, attitudes, or behaviour patterns to avoid. *Compare* **POSITIVE REFERENCE GROUP**.

negative reinforcement *n.* In ***operant** conditioning, the strengthening of a response as a consequence of its being followed by the cessation or avoidance of an aversive stimulus. *See* **AVOIDANCE CONDITIONING**, **ESCAPE CONDITIONING**. *Compare* **PUNISHMENT**.

negative symptoms *n.* In the diagnosis of ***schizophrenia**, symptoms such as ***affective flattening**, ***alogia**, and ***avolition**. *Compare* **POSITIVE SYMPTOMS**.

negative therapeutic reaction *n.* A temporary worsening of symptoms as a result of treatment. Sigmund Freud (1856–1939) described this phenomenon in his book *The Ego and the Id* (1923): ‘Every partial solution that ought to result, and in other people does result, in an improvement or a temporary suspension of symptoms produces in them for the time being an exacerbation of their illness; they get worse during the treatment instead of getting better’ (*Standard Edition*, XIX, pp. 12–66, at p. 49). Freud attributed it to ***resistance** and to the patient’s preference for suffering over being cured.

negative transfer *n.* A form of ***transfer of training** in which learning or performance of a task is impaired by training on a different but related task, as when a spell of driving on the right-hand side of the road temporarily impairs one’s ability to drive on the left, or vice versa. Transfer tends to be negative when the two tasks involve similar stimuli and different responses. *See also* **PROACTIVE INTERFERENCE**, **RETROACTIVE INTERFERENCE**. *Compare* **POSITIVE TRANSFER**.

negative transference *n.* In ***psychoanalysis**, hostility on the part of the patient towards the analyst, interpreted as ***displacement** of hostility towards other significant figures, especially parents. *See also* **TRANSFERENCE**. *Compare* **POSITIVE TRANSFERENCE**.

negativism *n.* 1. Refusal to do what is suggested or advised or a tendency to do the opposite, a symptom of some forms of **schizophrenia* and **catatonia*. 2. An attitude of unconstructive criticism. **negativistic** *adj.* [From Latin *negare* to deny + Greek *-ismos* indicating a state or condition]

negativistic personality disorder *n.* Another name for **passive-aggressive personality disorder*.

neglect dyslexia *n.* A type of **dyslexia* in which either the initial parts of words are misread (left neglect dyslexia) or the terminal parts of words are misread (right neglect dyslexia), the errors not being simple deletions but typically guesses of real though incorrect words with approximately the right number of letters.

Nembutal *n.* A proprietary name for the barbiturate drug **pentobarbital* (pentobarbitone). [Trademark]

nemesism *n.* Frustration expressed as aggression turned inward against the self. **nemesistic** *adj.* [From *Nemesis* the Greek goddess of vengeance]

NEO *abbrev.* **Neuroticism*, **extraversion*, **openness to experience*: a questionnaire designed to measure the **Big Five* personality factors, namely those three plus **agreeableness*, and **conscientiousness*. The original NEO Five-Factor Inventory (**NEO-FFI**), constructed by the US psychologists Paul T. Costa (born 1942) and Robert R. McCrae (born 1949) and first published in the journal *Psychological Assessment* in 1992, comprised 60 items, and the subsequent longer version, called the NEO Personality Inventory-Revised (**NEO-PI-R**) comprises 243 items. *See also* *IPIP*.

neobehaviourism *n.* Any form of **behaviourism* coming after that of the founding father, the US psychologist John B(roadus) Watson (1878–1958), the most influential being that of the US psychologist B(urrhus) F(rederic) Skinner (1904–90). Most neobehaviourists, while agreeing with Watson that psychology should be restricted to the study of overt behaviour, have accepted the existence of hidden psychological processes that can be inferred from behaviour. US *neobehaviorism*. **neobehaviourist** or **US**

neobehaviorist *adj. n.* (Of or relating to) one who advocates or practises neobehaviourism.

neo-catastrophism *See* CATASTROPHISM (1).

neocerebellum *n.* The most recently evolved functional part of the ***cerebellum**, comprising the lateral areas of the cerebellar hemispheres, receiving inputs from the ***pons** and projecting to the ***motor cortex** also via the pons. Lesions in this area lead to ipsilateral (same side of the body) incoordination of movements, especially in the upper limbs, ***adiadochokinesia**, ***intention tremor**, and ***dysarthria**. *See also* CEREBELLAR SYNDROME. *Compare* SPINOCEREBELLUM, VESTIBULOCEREBELLUM. [From Greek *neos* new + Latin *cerebellum* a little brain, diminutive of *cerebrum* a brain]

neocortex *n.* The most recently evolved part of the ***cerebral** cortex, composed of six layers of cells, including the ***lateral** surfaces of the frontal, parietal, temporal, and occipital lobes. The older parts of the cerebral cortex, all with fewer than six layers and collectively called the allocortex, are the palaeocortex or olfactory cortex at the front of each temporal lobe, the mesocortex mainly in the cingulate gyrus, and the archaecortex mainly in the hippocampus, which is the oldest of all. In humans, over 90 per cent of the cerebral cortex is neocortex (*see also* PROGRESSION INDEX). Also called *isocortex*, *neencephalon*, or *neopallium*. [From Greek *neos* new + Latin *cortex* bark or outer layer]

neo-Darwinism *n.* A modern version of ***Darwinian evolution** that emerged in the 1920s and 1930s, incorporating the processes of ***gene** transmission and ***mutation** that were unknown to Darwin, and denying the possibility (which Darwin accepted) of the inheritance of acquired characteristics. *See also* DARWINIAN EVOLUTION. *Compare* LAMARCKISM, LYSENKOISM, NEO-LAMARCKISM.

neodissociation theory *n.* A leading interpretation of ***hypnosis**, first proposed in 1973 in an article in the journal *Psychological Review* by the US psychologist Ernest R(ophiequit) Hilgard (1904–2001), according to which hypnosis involves a form of divided consciousness, as in ***hypnotic** analgesia, when a hypnotized person is unaware of the pain being caused by a stimulus

*****ebook converter DEMO Watermarks*****

that would normally be painful but the **hidden observer* is aware of the pain; or in **hypnotic* amnesia, in which a person who has recently been hypnotized is unable to recall what happened during the hypnotic session. It is called *neodissociation* theory to distinguish it from **dissociation* theory. *See also* DISSOCIATION.

neo-Freudian *adj. n.* (Of or relating to) any of the theorists in the US who reformulated **psychoanalysis* on a more sociological and humanistic basis, notably the German-born US psychoanalysts Karen Horney (1885–1952), Erich Fromm (1900–80), and Erik H. Erikson (1902–94), and the US psychiatrist Harry Stack Sullivan (1892–1949).

neo-Lamarckism *n.* A modern version of **Lamarckism* based on the assumption that genetic changes can be brought about by environmental factors and that **natural selection* operates on acquired characteristics. *See also* LYSENKOISM. **neo-Lamarckian** *adj.*

neologism *n.* A newly coined word or phrase or a new meaning given to an established word or phrase. [From Greek *neos* new + *logos* a word]

Neonatal Behavioral Assessment Scale *n.* A simple and straightforward system for assessing newborn infants by examining their reactions to 27 types of stimuli, including a pinprick, a rattle, a light, a moving ball, the sound of a bell, and so on. It was introduced in 1969 by the US paediatrician T(homas) Berry Brazelton (born 1918) in his book *Infants and Mothers: Differences in Development*, and it is capable of detecting a wide range of abnormalities. Also called the *Brazelton assessment*.

neonate *n.* A newborn baby up to four weeks old. **neonatal** *adj.* [From Greek *neos* new + Latin *natus* born]

neopallium *n.* Another name for the **neocortex*. [From Latin *neo* new + *pallium* a cloak]

neostriatum *n.* The more recently evolved part of the **corpus striatum*, consisting of the **caudate* nucleus and **putamen* (and excluding the globus

pallidus). Compare [PALAEOSTRIATUM](#). **neostriata** or **neostriatums** *pl.*

neoteny *n.* Persistence in the adult form of attributes of the foetal form, or attributes that were confined to the foetal form in ancestors, such as the tadpole form of the mature adults of some amphibian species, or the lack of body hair in humans. **neotenous** *adj.* [From Greek *neos* new + *teinein* to stretch]

neothalamus *n.* The most recently evolved parts of the [*thalamus](#) comprising the lateral group of nuclei that function as relay stations for sensory and optic projections to the cerebral cortex. [From Greek *neos* new + *thalamos* an inner room or chamber, from *thalos* a vault]

nepetalactone *n.* A chemical compound, mildly sedative to humans but strongly [*psychotropic](#) to most cats, first isolated in 1941 in [*catnip](#). Formula: C₁₀H₁₄O₂. [From Latin *nepeta* catnip + English *lactone* an organic compound with carbon atoms forming part of a ring, from Latin *lac*, *lactis* milk + *-one* indicating a chemical compound, from *-one* a feminine name suffix]

nephron *n.* Any of the tiny tubules of the kidney that filter blood to produce urine. [From Greek *nephros* a kidney]

nerfiza See [NERVIOS](#).

Nernst heat theorem *n.* The third law of [*thermodynamics](#), according to which as a homogeneous system approaches a temperature of absolute zero its [*entropy](#) tends to zero. [Named after the German physical chemist Walther Hermann Nernst (1864–1941) who formulated it in 1906]

nerve *n.* A cordlike band of [*axon](#) fibres that transmits impulses of sensation (if it is an [*afferent](#) nerve) or movement (if it is an [*efferent](#) nerve) between a sensory receptor and the central nervous system, or between the central nervous system and a muscle or gland. It is often confused with a [*neuron](#), which has a soma and only one axon. See [CRANIAL NERVE](#), [SPINAL NERVE](#). [From Latin *nervus* a nerve, from Greek *neuron* a nerve]

nerve cell *n.* A **neuron*.

nerve conduction velocity *n.* A neural measure of **processing speed* proposed in 1992 by the US psychologist Arthur R(ober) Jensen (1923–2012), obtained by dividing a person's head length (distance from the eye to the **primary visual cortex*) by the latency of an early component of the visual **evoked potential*, usually N70 or P100. It yields consistent though small correlations with psychometric measures of **intelligence*. **NCV** *abbrev.*

nerve deafness *n.* Another name for **sensorineural deafness*.

nerve ending *n.* The terminal part of a **nerve*, usually consisting of an **end organ*, but *see also* **FREE NERVE ENDING**.

nerve fibre *n.* An **axon*. US *nerve fiber*. *See* **ALPHA FIBRE**, **ASSOCIATION FIBRE**, **C FIBRE**, **CLIMBING FIBRE**, **DELTA FIBRE**, **GAMMA FIBRE**, **IA FIBRE**, **IB FIBRE**, **II FIBRE**, **MOSSY FIBRE**.

nerve gas *n.* Any gas, especially an **organophosphate *anticholinesterase* agent such as **sarin* (isopropyl methylphosphonofluoridate) or the more potent agent **VX*, that may be used as a chemical weapon and that, if absorbed through the skin or inhaled, occupies the active sites of **acetylcholinesterase* molecules and thereby interferes with the enzyme's ability to break down the neurotransmitter **acetylcholine* after nerve impulses, causing the neurotransmitter to accumulate at the **synapses* (1) between motor nerve fibres and muscles, and leading to muscle cramps and asphyxia. Also called a *nerve agent*. *See also* **NEUROTOXIN**.

nerve growth factor *n.* A substance that is produced by **smooth muscles* and other tissues stimulated by neurons and is necessary for the maintenance of sympathetic and sensory neurons. *See also* **APOPTOSIS**. **NGF** *abbrev.*

nerve impulse *n.* An electrical impulse travelling along an **axon* when a **neuron* is stimulated, also called an *action potential*. *Compare* **GRADED POTENTIAL**.

nervios *n.* A ***culture-bound syndrome** widespread throughout Latin America and among Latino communities in the United States and elsewhere, also found in Egypt (where it is called *nerfiza*) and Greece (*nevra*), characterized by chronic ***anxiety** and sorrowfulness, interpreted as a general state of vulnerability to ***psychosocial stressors** brought about by personal or family difficulties, with a broad range of signs and symptoms, commonly including ***anorexia**, ***dyssomnias**, headaches, irritability, stomach upsets, tearfulness, loss of concentration, ***tremor**, ***paraesthesia**, and dizziness or ***vertigo**. [Spanish *nervios* nerves, from Latin *nervus* a nerve]

nervous *adj.* 1. Of, relating to, or consisting of nerves or nerve fibres. 2. Apprehensive, agitated, or timid.

nervous breakdown *n.* A non-technical term for any severe ***mental disorder** involving a marked impairment in functioning and impaired ***reality testing**.

nervous system *n.* The sensory and control system enabling ***neurons** to communicate with one another in most animals, consisting in humans of the ***brain**, ***spinal cord**, and ***nerves**. It is divided anatomically into the ***central nervous system** and the ***peripheral nervous system**, and functionally into the ***autonomic nervous system** and the ***somatic nervous system**. The autonomic nervous system is further subdivided into the ***sympathetic nervous system** and the ***parasympathetic nervous system**. The other major intercellular communication system is the ***endocrine system**. These are not the only sensory and control systems: see **PARAMECIUM**. See also **ENDOCRINE GLANDS**.

net benefit index *n.* In ***cost–benefit analysis**, the difference between total present benefits (*B*) and total present costs (*C*) given by the formula $B - C$, a project being more worthwhile the higher the index. Compare **BENEFIT–COST RATIO**.

net reaction potential *n.* In ***Hullian learning theory**, the strength of the propensity of the organism to respond after subtracting inhibitory factors from the ***generalized reaction potential**. $s\bar{E}_R$ abbrev.

network model *n.* Any ***model** consisting of a collection of units, each joined to one or more other units that it may excite or inhibit. See **ACT***, **CONNECTIONISM (1)**, **NEURAL NETWORK**, **PARALLEL DISTRIBUTED PROCESSING**.

neural *adj.* Of, relating to, or resembling ***neurons** in the nervous system.

neural adaptation *n.* Another name for ***field** adaptation.

neural computer *n.* Another name for a ***neurocomputer**.

neural Darwinism *n.* The proposition that synaptic connections in the nervous system are shaped by competition, only those that turn out to be relatively useful surviving, the others disappearing through ***apoptosis** or neural ***pruning**. [So called by analogy with the competitive struggle for existence between organisms in Darwinian evolution]

neuralgia *n.* Intermittent paroxysmal pain following the course of a nerve, often caused by neural damage or malfunction. [From Greek *neuron* a nerve + *algos* pain + *-ia* indicating a condition or quality]

neural network *n.* A system of interconnected ***neurons**, as in the brain or nervous system, or (especially in cognitive science and artificial intelligence) an analogous system of interconnected ***neurochips** constituting a ***neurocomputer** designed to simulate the human brain, or a design for such a system. According to neural network theorists, mental experiences arise from the interaction of many interconnected computing units (or neurons), each in a specified state of activation (or firing rate), and each having the capacity to affect others by either excitatory or inhibitory connections (or synapses), the entire system being activated by a stimulus that affects a subset of the units, activation then propagating through the network until an equilibrium state of minimum energy is attained. The concept of a neural network was foreshadowed by the US psychologist William James (1842–1910) in his *Principles of Psychology* (1890, volume 2, pp. 563–6), and the first neural logic circuit based on a binary code was proposed in 1938 by the Russian-born US mathematical biologist Nicolas Rashevsky (1899–1972). The first detailed neural network was developed in 1943 by the US

neurophysiologist Warren S(turgis) McCulloch (1898–1968) and the self-taught US logician Walter Pitts (1923–69), but that early version lacked the ability to learn, which was introduced in 1948 in an article on ‘Intelligent Machinery’ by the English mathematician Alan Mathison Turing (1912–54) and independently in 1949 by the Canadian psychologist Donald O(lding) Hebb (1904–85). The concept of the neural network became popular only after the publication in 1981 of a connectionist model of human memory developed by the US cognitive scientist James L(oyd) McClelland (born 1948). Still more advanced neural networks often make use of **fuzzy logic*. Also called an *artificial neural network* (drawing attention to the fact that it consists of artificial rather than natural structures) or a *neural net*. See also CONNECTIONISM (1), NETWORK MODEL, PARALLEL DISTRIBUTED PROCESSING, PERCEPTRON, SPREADING ACTIVATION. ANN, CNN, or PDP-CNN abbrev.

neurasthenia *n.* A **mental disorder* characterized by persistent and distressing complaints of exhaustion following expenditure of insignificant amounts of mental or physical effort, including the performance of everyday tasks, with such additional signs and symptoms as muscular aches and pains, **tension headaches*, **dyssomnia*, restlessness, and irritability. The word was coined by the US physician George Beard (1839–83) in his book *American Nervousness: Its Causes and Consequences* (1881). See also ACTUAL NEUROSIS, ASTHENIA. [From Greek *neuron* a nerve + *astheneia* weakness, from *a-* without + *sthenos* strength + *-ia* indicating a condition or quality]

neurilemma *n.* A variant spelling of **neurolemma*.

neurite *n.* A **process* (2) of a **neuron*, whether an **axon* or a **dendrite*. [From Greek *neur(on)* a nerve + *-ite(s)* indicating a part of an organ or biological structure]

neurobiology *n.* The study of the anatomy, physiology, biochemistry, and development of the **nervous* system, including the biochemical and cell biological basis of brain functioning. [From Greek *neuron* a nerve + *bios* life + *logos* word, discourse, or reason]

neuroblast *n.* An embryonic nerve cell. [From Greek *neuron* a nerve + *blastos* a bud]

*****ebook converter DEMO Watermarks*****

neurochip *n.* A computer microchip used in an electronic *neural network.

neurocognitive disorder due to HIV infection *n.* A *neurocognitive disorder in *DSM-5 associated with *HIV dementia.

neurocognitive disorder due to Huntington's disease *n.* A *neurocognitive disorder in *DSM-5 associated with *Huntington's disease.

neurocognitive disorder due to Parkinson's disease *n.* A *neurocognitive disorder in *DSM-5 associated with *Parkinson's disease.

neurocognitive disorder due to prion disease *n.* A *neurocognitive disorder in *DSM-5 associated with *prion diseases, including *Creutzfeldt–Jakob disease, *fatal familial insomnia (FFI), *Gerstmann–Sträussler–Scheinker syndrome (GSS), and *kuru.

neurocognitive disorder due to traumatic brain injury *n.* A *neurocognitive disorder in *DSM-5 associated with *traumatic brain injury.

neurocognitive disorders *n.* An umbrella term introduced in *DSM-5 to bring together *delirium, *dementia, *frontotemporal neurocognitive disorder, and other disorders, including those due to *Alzheimer's disease, *HIV dementia, *Huntington's disease, *Lewy body dementia, *prion disease, *Parkinson's disease, *traumatic brain injury, *vascular dementia, substance/medication use, and other medical conditions. For each of these subtypes, DSM-5 distinguishes between major and mild neurocognitive disorders: a major disorder requires significant cognitive decline or impairment (in attention, executive function, learning, memory, language, perceptual–motor activity, or social cognition) and interference with independent everyday activities; a mild neurocognitive disorder requires evidence of modest cognitive decline or impairment, and independent everyday activities must require special effort or compensation; and in both major and mild neurocognitive disorders, the condition must not consist solely of delirium and must not be better explained by another mental disorder. **NCD** *abbrev.*

neurocognitive disorder with Lewy bodies *n.* A *neurocognitive disorder in *DSM-5 associated with *Lewy body dementia.

neurocomputer *n.* An electronic computer that uses a *neural network to mimic or simulate the operation of the human brain. Also called a *neural computer*. See also CONNECTIONISM (1). [From Greek *neuro(n)* a nerve + English *computer*]

neurodevelopmental disorders *n.* A term introduced in *DSM-5 for a group of *mental disorders with onset in the developmental period (up to 18 years of age), most commonly manifesting in early development, characterized by developmental deficits that cause problems in personal, social, academic, or occupational functioning, and frequently co-occurring with other disorders in the same group. See ATTENTION-DEFICIT/HYPERACTIVITY DISORDER, AUTISM SPECTRUM DISORDER, COMMUNICATION DISORDERS, DEVELOPMENTAL COORDINATION DISORDER, INTELLECTUAL DISABILITY, SPECIFIC LEARNING DISORDER, STEREOTYPIC MOVEMENT DISORDER, TIC DISORDERS.

neuroeconomics *n.* An interdisciplinary field, combining experimental and behavioural economics with aspects of *cognitive psychology, *social psychology, *neuroscience, and also ideas and techniques of evolutionary biology, computer science, and mathematics, to study *decision making and experimental *games (1).

neuroendocrine *adj.* Of or relating to certain functions that are under dual control of the *nervous system and the *endocrine glands. The term has become popular as it has become increasingly apparent that the endocrine system cannot be considered separately from the nervous system, because the same chemical compound (for example, noradrenalin) can function both as a neurotransmitter and as a hormone. [From Greek *neuron* a nerve + *endon* within + *krinein* to separate]

neuroendocrine cell *n.* A cell that is a true *neuron, with axon and dendrite(s), and also a true *endocrine gland, secreting a hormone into the bloodstream. Such cells are found especially in the hypothalamus, secreting hormones that in turn affect secretions of the pituitary gland.

neuroendocrine system *n.* The *nervous system and the *endocrine glands considered as a functional unit.

neuroendocrinology *n.* The study of the interaction of the *nervous system, especially the brain, and the *endocrine system, especially the *HPA axis.

neuroergonomics *n.* The study of brain and behaviour at work; an interdisciplinary field with roots in *neuroscience and *ergonomics, devoted to the study of the neural bases of *perception, *cognition, and *human performance in relation to systems and technologies in the workplace, including computers and vehicles such as aircraft, cars, trains, and ships. The term was coined in 1998 by the Indian-born US psychologist Raja Parasuraman (born 1950) in a web page entitled *Neuroergonomics: The Study of Brain and Behavior at Work*. [A blend of *neuroscience* and *ergonomics*]

neurofibril *n.* Any of the fibres composed chiefly of *neurofilaments and *microtubules, forming a cross-hatched pattern of the *cytoskeleton within the cell body of a neuron and extending longitudinally along its axon and dendrites. [From Greek *neuron* a nerve + *fibrilla* a small fibre]

neurofibrillary tangle *n.* A knotty mass of *neurofibrils and insoluble fibres composed chiefly of breakdown products of the tau protein, occurring in the brains of most people over 70 years old and found abundantly in the hippocampi and amygdalae of patients with *Alzheimer's disease and other disorders. *See also* AMYLOID PLAQUE, PROGRESSIVE SUPRANUCLEAR PALSY. **NFT** *abbrev.*

neurofilament *n.* Any of the minute threadlike fibres found in all parts of a neuron, with side-arms that keep them apart and evenly spaced. *See also* MICROTUBULE, NEUROFIBRIL. [From Greek *neuron* a nerve + *filum* a thread]

neurogenesis *n.* The growth of new *neurons to replace damaged ones. Throughout most of the 20th century, neuroscientists believed that this regenerative capacity was absent from the *central nervous system and that it occurred only in the *peripheral nervous system, but it was discovered

shortly before the end of the century that neural ***stem cells** in the ***ventricles** and the ***hippocampus** of the brain divide and proliferate, and that some of them migrate to other areas of the brain such as the ***olfactory bulbs** to form new neurons. Techniques to stimulate neurogenesis may help in the treatment of ***stroke** patients and people with ***Alzheimer's disease** and other neurodegenerative disorders. [From Greek *neuron* a nerve + *genesis* birth]

neuroglia *n.* The web of non-neural cells forming the connecting tissue that surrounds and supports ***neurons** in the ***nervous** system, outnumbering neurons by about 10 to 1, and divided into ***macroglia** and ***microglia**. Also called *glia* for short. Often mistakenly assumed to be a plural of *neuroglion* (a spurious ***back formation**), but in fact singular like the phrase *nerve glue*. See also **ASTROCYTE**, **EPENDYMAL CELL**, **GLIOSIS**, **OLIGODENDROCYTE**, **SATELLITE CELL**, **SCHWANN CELL**. **neuroglial** *adj.* [Coined in 1846 by the German pathologist Rudolf Ludwig Karl Virchow (1821–1902) from Greek *neuron* a nerve + *glia* glue]

neurogram *n.* Another name for an ***engram** or a ***memory** trace. [A blend of *neural* and *engram*]

neurohormone *n.* A ***hormone** such as ***noradrenalin** (norepinephrine) or ***serotonin** that is produced by specialized cells in the nervous system rather than endocrine glands and that functions as a chemical messenger, interacting with a variety of cell types, in contrast to other ***neurotransmitters** that interact only with neurons, muscles, and glands. Also called a *neurohumour* (US *neurohumor*). Compare **HORMONE**. [From Greek *neuron* a nerve + English *hormone*]

neurohumour *n.* Another name for a ***neurohormone**. US *neurohumor*. [From Greek *neuron* a nerve + Latin *umere* to be moist]

neurohypophysis *n.* The posterior lobe of the hypophysis (pituitary gland), usually called the ***posterior** pituitary. Compare **ADENOHYPOPHYSIS**. [From Greek *neuron* a nerve + *hypophysis* an attachment underneath, from *hypo* under + *phyein* to grow]

neuroimaging *n.* Another name for ***brain** imaging.

*****ebook converter DEMO Watermarks*****

neurolemma *n.* The external ***myelin** sheath of a neuron in the peripheral nervous system, made up of chains of ***Schwann cells**. Also spelt *neurilemma*. Also called an *axolemma*. [From Greek *neuron* a nerve + *eilema* a covering]

neuroleptic *n.* 1. Any of the ***dopamine** antagonist drugs, including any of the ***phenothiazines**, ***butyrophenones**, ***dibenzodiazepines**, or ***thioxanthenes**, that are used in the treatment of ***psychoses**. Also called an *antipsychotic drug* or a *major tranquillizer*. See also **ATYPICAL ANTIPSYCHOTIC**, **FENTANYL**, **NEUROLEPTIC-INDUCED**. *adj.* 2. Capable of affecting the brain or nervous system, especially by reducing the activity of neurons. [Adopted at the Second International Congress of Psychiatry in 1957, from Greek *neuron* a nerve + *lepsis* a taking hold or seizure + *-ikos* of, relating to, or resembling]

neuroleptic-induced *adj.* Of or relating to mental disorders or signs and symptoms induced as side-effects of ***neuroleptic (1)** medication, including neuroleptic-induced ***parkinsonism**, neuroleptic malignant syndrome (severe ***myotonia** and elevated temperature), ***tardive dyskinesia**, ***extrapyramidal syndrome**, ***akinesia**, ***dystonia**, acute ***akathisia**, ***amnesia**, dry mouth, blurred vision, difficulty urinating, or constipation.

neuro-linguistic programming *n.* A form of ***psychotherapy** and a model of interpersonal communication in the tradition of ***humanistic psychology**, based on elements of ***transformational grammar** and preferred sensory representations for learning and self-expression, introduced by the US trainer Richard (Wayne) Bandler (born 1950) and the US linguist and psychologist John Grinder (born 1940), first published in 1975 in books entitled *The Structure of Magic and Patterns of the Hypnotic Techniques of Milton H. Erickson*. It focuses chiefly on the relationship between successful patterns of behaviour and the patterns of thought and other subjective experiences underlying them, and the associated psychotherapy seeks to educate people in self-awareness and effective communication, and to change their patterns of thought and behaviour. The term *neuro-linguistic programming* first appeared in print in 1976 as the title of a book by Grinder, Bandler, and the US psychotherapist Virginia Satir (1916–88). **NLP** *abbrev.* [From Greek *neuron* a nerve + Latin *lingua* a tongue + *icus* of, relating to, or resembling + *pro* before + Greek *gramma* a letter from *graphein* to write]

*****ebook converter DEMO Watermarks*****

neurolinguistics *n.* The study of **language (1)* through an analysis of **deficits* and **impairments* of language function resulting from **neurological* damage. See *COGNITIVE NEUROPSYCHOLOGY*.

neurology *n.* The study of the **nervous* system; the branch of medicine concerned with disorders of the nervous system. **neurological** *adj.* [From Greek *neuron* a nerve + *logos* word, discourse, or reason]

neurolymph *n.* Another name for **cerebrospinal* fluid. [From Greek *neuron* a nerve + Latin *lympa* water]

neurometrics *n.* A group of techniques involving measurements of the activity of neurons in the nervous system, including **EEG*, **evoked potentials (EPs)*, and **event-related potentials (ERPs)*. [From Greek *neuron* a nerve + *metron* measure + *-ikos* of, relating to, or resembling]

neuromodulation *n.* Alteration in the number or sensitivity of **neuroreceptor* sites on **postsynaptic* neurons caused by exposure to a chemical substance. It is one of the mechanisms of drug **tolerance (3)*. See also *NEUROMODULATOR*.

neuromodulator *n.* A chemical substance that amplifies or dampens the activities of neurons but is not a **neurotransmitter*. See also *NEUROMODULATION*. [From Greek *neuron* a nerve + English *modulator*, from Latin *modulari*, *modulatus* to regulate]

neuromuscular junction *n.* A synapse between a terminal bouton of a neural axon and a squad of muscle fibres, normally situated at a **motor end plate*.

neuron *n.* A nerve cell specialized to transmit nerve impulses in the form of **action potentials*, the basic functional unit of the **nervous* system, normally consisting of a cell body or soma together with **dendrites* receiving signals from other neurons via **synapses (1)*, typical neurons being involved in 1,000–10,000 synapses, and an **axon* ranging in length from 3 micrometres to more than a metre, often splitting into many branches near its

end, transmitting signals away from the soma to one or more other neurons, a muscle, or a gland. Often confused with a **nerve*, which has no cell bodies or somata and is made up of bundles of axons. Also spelt *neurone*. See *BASKET CELL*, *BETZ CELL*, *BIPOLAR CELL*, *GOLGI CELL*, *GRANULE CELL*, *HORIZONTAL CELL*, *INTERNEURON*, *MERKEL CELL*, *MIRROR NEURON*, *MITRAL CELL*, *MOTOR NEURON*, *MULTIPOLAR NEURON*, *NON-OPPONENT CELL*, *OPPONENT CELL*, *PACEMAKER NEURON*, *PURKINJE CELL*, *PYRAMIDAL CELL*, *RENSHAW CELL*, *SENSORY NEURON*, *SPINDLE CELL*, *SPIRAL GANGLION CELL*, *STELLATE CELL*, *UNIPOLAR NEURON*. See also *CYTOSKELETON*, *MICROTUBULE*, *POSTSYNAPTIC*, *PRESYNAPTIC*. **neuronal** *adj.* [Greek *neuron* a nerve]

neuronal oscillator *n.* The neural circuitry underlying the execution of any rhythmic activity, such as walking or running, chewing, or (in airborne species) flying.

neuronal transplantation See *FOETAL BRAIN TRANSPLANTATION*.

neuron receptor site *n.* Another name for a **neuroreceptor*.

neuropathic *adj.* Of or related to disorders of the **nervous* system.

neuropath *n.* A person suffering from or predisposed to **neuropathy*.

neuropathy *n.* Disease or disorder of the nervous system. [From Greek *neuron* a nerve + *pathos* suffering + *-ikos* of, relating to, or resembling]

neuropathology *n.* The study of disorders of the **nervous* system.

neuropathological *adj.* [From Greek *neuron* a nerve + *pathos* suffering + *logos* word, discourse, or reason]

neuropathy *n.* Any disorder of the **nervous* system. [From Greek *neuron* a nerve + *pathos* suffering]

neuropeptide *n.* A **peptide* produced in the **nervous* system and functioning either as a **neurotransmitter* or as a **hormone*. [From Greek *neuron* a nerve + *peptein* to digest]

neurophysiology *n.* The study of the working of the nervous system.

neuropil *n.* A dense network of unmyelinated neurons and glia found in areas of concentrated nervous tissue at various sites in the central nervous system, especially in the ***reticular formation**, where it is interwoven with myelinated nerve fibres, and other parts of the brain. [From Greek *neuron* a nerve + *pilos* hair or felt]

neuropsychiatry *n.* The branch of medicine dealing with ***mental disorders** and disorders of the ***nervous** system; a generic name for ***psychiatry** and ***neurology**.

neuropsychanalysis *n.* A movement founded in London in June 2000 'to promote inter-disciplinary work between the fields of psychoanalysis and neuroscience'. A journal entitled *Neuropsychanalysis* was established in 2013 with the goal of creating a dialogue between psychoanalytic and neuroscience perspectives on the mind. [From Greek *neuron* a nerve + *psyche* + mind + *analysis* dissolution, from *ana-* up + *lysis* loosening, from *lyein* to loosen]

neuropsychology *n.* The interface between ***neurology** and ***psychology**; the study of the effects of disorders of the brain and nervous system on behaviour and mental experience.

neuropsychosis *n.* Another name for a ***psychoneurosis**.

neuroreceptor *n.* A site on the surface or inside a neuron to which a ***neurotransmitter**, a ***hormone**, or a ***psychotropic** drug may bind, either exciting or inhibiting ***action potentials**. Also called a *neuron receptor site* a *receptor site*, or simply a *receptor*.

neuroregulator *n.* A general term for any of the substances that affect neuronal activity, including a ***neurotransmitter**, ***neuromodulator**, or ***neurohormone**.

neuroscience *n.* An interdisciplinary field of study concerned with the anatomy, physiology, and biochemistry of the ***nervous** system and its effects on behaviour and mental experience. [From Greek *neuron* a nerve + English

science, from Latin *scientia* knowledge, from *scire* to know]

neurosis *n.* An imprecise term for a relatively mild **mental disorder* with predominantly distressing symptoms and without loss of **insight* (3) or **reality testing*, and without apparent **organic *aetiology*, including anxiety neurosis (see *GENERALIZED ANXIETY DISORDER*); depersonalization neurosis (see *DEPERSONALIZATION/DEREALIZATION DISORDER*); depressive neurosis (see *DYSTHYMIC DISORDER*); hysterical neurosis, conversion and dissociative types (see *CONVERSION DISORDER*, *DISSOCIATIVE DISORDERS*, *HISTRIONIC PERSONALITY DISORDER*); obsessive–compulsive neurosis (see *OBSESSIVE–COMPULSIVE DISORDER*); and phobic neurosis (see *PHOBIA*). The word was coined in 1777 by the Scottish physician William Cullen (1710–90) in a medical treatise entitled *First Lines of the Practice of Physic*. See also *ACTUAL NEUROSIS*, *CHOICE OF NEUROSIS*, *FAILURE NEUROSIS*, *FAMILY NEUROSIS*, *PSYCHONEUROSIS*. Compare *PSYCHOSIS* (1). **neuroses** *pl.* [From Greek *neuron* a nerve + *-osis* indicating a process or state]

neurosis, actual See *ACTUAL NEUROSIS*.

neurosurgery *n.* A branch of surgery devoted to treating disorders of the brain, spinal cord, and other parts of the **nervous* system. Compare *PSYCHOSURGERY*.

neurotic *adj.* 1. Of or pertaining to a **neurosis*. *n.* 2. A person afflicted with a **neurosis*.

neurotic anxiety *n.* In **psychoanalysis*, a form of **anxiety* arising from fear of losing control of the instincts of the **id*. Compare *REALISTIC ANXIETY*.

neurotic character *n.* In **individual psychology*, a term introduced by the Austrian psychiatrist Alfred Adler (1870–1937) to denote the personality characteristics that protect a person from feelings of inferiority. See also *NEUROTIC FICTION*.

neurotic depression *n.* Another name for **dysthymic disorder*.

neurotic fiction *n.* In the **individual psychology* of the Austrian psychiatrist Alfred Adler (1870–1937) and his followers, a person's **self-image* that is unrealistic and false, serving to reduce anxiety about the self. *See also* GUIDING FICTION.

neuroticism *n.* A psychological condition or state characterized by **neurosis*. Also, one of the **Big Five* personality factors, ranging from one extreme of neuroticism, including such **traits* as nervousness, tenseness, moodiness, and temperamentality, to the opposite extreme of emotional stability. *See also* ALPHA PERSONALITY FACTOR, CORE SELF-EVALUATION, GENERAL FACTOR OF PERSONALITY.

neurotic paradox *n.* The persistence of **neurotic* (1) symptoms or behaviour despite their distressing qualities and the desire of the afflicted person to be rid of them. For example, a man with **obsessive–compulsive disorder* may wash his hands many times a day until they bleed, and may consider this behaviour unnecessary and maladaptive, or even ridiculous, yet feel compelled to continue doing it, and this appears paradoxical.

neurotic solution *n.* In the **neo-Freudian* theory of the German-born US psychoanalyst Karen Horney (1885–1952), a method of dealing with a conflict by **repression*.

neurotoxin *n.* Any substance such as **6-hydroxydopamine*, **ibotenic acid*, **kainic acid*, **saxitoxin*, or **tetrodotoxin* that is poisonous to neurons or that interferes with their electrochemical functioning. The venom of many poisonous snakes, spiders, and scorpions contains neurotoxins. *See also* NERVE GAS. **neurotoxic** *adj.* [From Greek *neuron* a nerve + *toxikon* arrow-poison, from *toxon* a bow]

neurotransmitter *n.* Any of about 50 chemical substances, usually a small **amine* or a **peptide* but also a substance such as the gas **nitric oxide*, by which a neuron communicates with another neuron or with a muscle or gland via a **synapse* (1). In the central nervous system **glutamate* is the main excitatory neurotransmitter and **GABA* the main inhibitory one; in the peripheral nervous system **acetylcholine* is predominant for **motor neurons*

and glutamate for **sensory* neurons. **Dopamine* functions as a neurotransmitter mainly in the midbrain, **noradrenalin* (norepinephrine) mainly in the peripheral nervous system and in the pons and medulla oblongata, and **serotonin* mainly near the midline of the brainstem. Other important neurotransmitters include **adenosine*, **adrenalin* (epinephrine), **aspartic acid*, **glutamic acid*, **histamine*, **oxytocin*, **substance P*, and **vasopressin*. See also *EXCITATORY POSTSYNAPTIC POTENTIAL*, *INHIBITORY POSTSYNAPTIC POTENTIAL*, *ISOQUINOLINE*. Compare *FALSE NEUROTRANSMITTER*, *NEUROHORMONE*, *NEUROMODULATOR*. **neurotransmission** *n.* The communication of nerve impulses across a **synapse* (1).

neurotropic virus *n.* Any of a number of viruses that have a strong affinity for neurons in the central nervous system, as contrasted with pantropic viruses, which attack body tissues indiscriminately. [From Greek *neuron* a nerve + *tropos* a turn, from *trepein* to turn]

neutral colour *n.* Another name for an **achromatic* (1) colour. US *neutral color*.

neutral grey *n.* Another name for an **achromatic* (1) colour. US *neutral gray*.

neutralization *n.* The process by which two **phonemes*, which by definition have the power to distinguish **minimal pairs*, can become indistinguishable. For example, in English /p/ and /b/ are different phonemes, as can be seen in the different meanings of *pan* and *ban* or *cap* and *cab*, but following /s/ this opposition is neutralized, and from a phonetic point of view *span* could just as well be written *sban*. See also *ACOUSTIC CUE* (1).

neutralization of libido *n.* In **psychoanalysis*, the expression of **libido* in non-sexual activities, such as artistic creation.

neutral monism *n.* An approach to the **mind–body problem* that is a version of **monism*, asserting that the mental and the physical are both constructs of the same elements that are in themselves neither mental nor physical.

neutral mutation *n.* A **mutation* that is neither advantageous nor disadvantageous in terms of **Darwinian fitness* but can lead to **genetic drift* and contribute to **genetic polymorphism*. A **silent mutation* is one kind of neutral mutation.

nevra See *NERVIOS*.

Newcomb's problem *n.* One of the most difficult problems of logic and decision making. On the table is a transparent box containing \$1,000 and an opaque box containing either \$1 million or nothing. A decision maker has the choice of taking either the opaque box only or both boxes. The decision maker is told, and believes, that a predictor of human behaviour, such as a sophisticated computer programmed with psychological information, has already put \$1 million in the opaque box if and only if it has predicted that the decision maker will take only that box, and not the transparent box as well, and the decision maker knows that the predictor is correct in most cases (95 per cent of cases, say, although the exact figure is not critical). Both strategies can apparently be justified by simple and apparently irrefutable arguments: **expected utility* theory supports the strategy of taking the opaque box only, but the strategy of taking both boxes is a strongly **dominant alternative/strategy*. Also called *Newcomb's paradox*. See also *SURE-THING PRINCIPLE*. [Named after the US theoretical physicist William A(drian) Newcomb (1927–99) who discovered it in 1960 while pondering the paradox of the Prisoner's Dilemma game, although it was first published in 1969 in a book chapter by the US philosopher Robert Nozick (1938–2002), who commented in a footnote: 'It is a beautiful problem. I wish it were mine.']

Newman-Keuls test *n.* In statistics, a method of **multiple comparisons* in which the group means are ranked from smallest to largest, and then the statistic that is used to test for a significant difference between a pair of means is computed on the basis of the number of steps between the two means in the rank order. Also called *Student-Newman-Keuls procedure*. Compare *BONFERRONI CORRECTION*, *DUNCAN'S MULTIPLE RANGE TEST*, *LEAST-SIGNIFICANT DIFFERENCE TEST*, *SCHEFFÉ TEST*, *TUKEY-HSD TEST*. [Named after the English statistician Dennis Newman (1916–88) who published a preliminary article on the test in the journal *Biometrika* in 1939 and the Dutch statistician Matthijs Keuls who developed it further in an article in the journal *Euphytica*

*****ebook converter DEMO Watermarks*****

in 1952]

new-variant Creutzfeldt–Jakob disease See CREUTZFELDT–JAKOB DISEASE.

next-in-line effect *n.* Impaired recall for an event immediately preceding an anticipated public performance. The effect was first reported in 1973 by the US graduate student Malcolm Brenner (born 1946), who performed an experiment in which a group of participants sat around a circular table taking turns reading words aloud, trying to remember as many words as possible. After going round the table several times, so that each participant had read out several words and there were many more read out by others to remember, the participants' recall was tested. Relative to a control condition in which participants merely listened, recall tended to be best for the words that the participants had read out themselves (the ***von Restorff effect**) and worst for the words immediately preceding the words that they had read out (the next-in-line effect). The effect is believed to be due to both attention distraction and ***retrograde amnesia**. See also AUDIENCE EFFECT.

N400 *n.* A single sustained negative ***evoked potential** occurring when a person encounters an unexpected or incongruous word when reading a sentence such as *He spread the warm bread with socks*, in which the N400 potential would be elicited by the final word. It is specifically associated with language processing in the brain, and its name alludes to the fact that its peak occurs about 400 milliseconds after the unexpected stimulus, with onset at about 200 milliseconds and offset at about 500 milliseconds. It was first reported in an article in the journal *Science* in 1980. [From *n(egative) 400 milliseconds*]

nibble See NYBBLE.

nicotine *n.* A colourless, oily, toxic liquid that turns yellow on exposure to air and light and is the principal ***alkaloid** in tobacco, being ingested when tobacco is smoked, chewed, or snuffed. It is a powerful central nervous system ***stimulant**, mimicking ***acetylcholine** at certain neuroreceptor sites in both sympathetic and parasympathetic divisions of the autonomic nervous system, triggering the release of ***dopamine** and ***noradrenalin**

*****ebook converter DEMO Watermarks*****

(norepinephrine) and stimulating the release of **vasopressin*. Prolonged tobacco use often leads to nicotine **dependence* (2) or **addiction*. *See also* CHOLINOMIMETIC, NICOTINE-RELATED DISORDERS, NICOTINIC RECEPTOR. [French, from Latin *herba nicotiana* Nicot's plant, named after the 16th-century French diplomat Jaques Nicot (1530–1600) who supplied tobacco to Catherine de Medici and introduced it into France in 1560 + *-ine* indicating an organic compound]

nicotine-related disorders *n.* **Substance-related and addictive disorders* induced by consuming **nicotine*. *See* SUBSTANCE ABUSE, SUBSTANCE DEPENDENCE, SUBSTANCE-INDUCED DISORDERS, SUBSTANCE USE DISORDERS.

nicotinic receptor *n.* One of two types of receptors for **acetylcholine* found in the central nervous system and in motor neurons controlling skeletal muscles, stimulated by **nicotine* and inhibited by **curare*. Nicotinic receptors are used by the striped voluntary muscles, and slightly different types of nicotinic receptors are found at the autonomic ganglia, relaying both sympathetic and parasympathetic signals. Also called a *nicotinic cholinceptor*. *Compare* MUSCARINIC RECEPTOR. [So named because nicotine mimics acetylcholine at such a site]

nictitating membrane *n.* A thin membrane beneath the eyelids of birds, reptiles, and some mammals such as cats and rabbits that can be drawn across the eye. Also (non-technically) called a *third eyelid*. [From Latin *nictitare* to wink repeatedly, from *nictare* to wink]

night blindness *n.* A non-technical name for **nyctalopia*.

nightmare *n.* 1. A terrifying or extremely upsetting **dream* (1), or figuratively an event or experience resembling such a dream. 2. An evil spirit believed to torment and suffocate sleepers. *See also* NIGHTMARE DISORDER. [From *night* + Old English *maere* an evil spirit or incubus]

nightmare disorder *n.* A **parasomnia* in **DSM-5* characterized by recurrent awakening from sleep, alert and oriented but with vivid recall of long and extremely frightening **nightmares* (1). *Compare* SLEEP TERRORS.

nightshade *n.* Any of a number of plants including the ***deadly nightshade** *Atropa belladonna*.

night terrors *n.* Another name for ***sleep terrors**. Also called *pavor nocturnus*.

night vision *n.* A non-technical name for ***scotopia**.

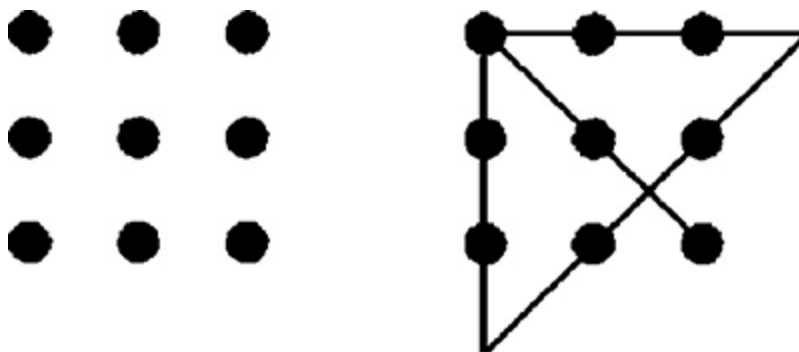
nigrostriatal bundle *n.* A bundle of ***dopaminergic** nerve fibres in each cerebral hemisphere, originating in the ***substantia nigra** and terminating in the ***striatum** in the same hemisphere. *See also* MESOTELENCEPHALIC PATHWAY. **NSB** *abbrev.*

nihilism *n.* In its most extreme form, denial of reality; more generally, denial of objective truth, or radical philosophical scepticism. The word was first used by the Russian novelist and dramatist Ivan Sergeyevich Turgenev (1818–83) in his novel *Fathers and Sons* (1862) to describe the world-view of radical and disillusioned members of the Russian intelligentsia, epitomized by his character Bazarov, who rejected traditional values and sought to destroy all established systems. *See also* COTARD’S SYNDROME, NIHILISTIC DELUSION. **nihilist** *n.* A person who espouses nihilism. **nihilistic** *adj.* [From Latin *nihil* nothing + Greek *-ismos* indicating a state or condition]

nihilistic delusion *n.* A ***delusion** that nothing exists, or that a significant aspect of the self (such as one’s brain or the outside world) does not exist. *See* COTARD’S SYNDROME, NIHILISM.

nine-dot problem *n.* A ***reasoning** problem in which the task is to connect nine dots, arranged in a square, by four straight lines drawn without lifting the pen from the paper and without retracing any lines (see *illustration*). If symmetric solutions are considered equivalent, then it is a ***well-defined problem**, and it should be easy, because there are only a few possibilities to try, but it is difficult in practice for psychological reasons. Fewer than 5 per cent of undergraduate students manage to solve it in two minutes, and most are convinced by then that no solution exists. It is often used to illustrate ***lateral** thinking and is a perfect example of ‘thinking

outside the box'. It was first discussed by the US psychologist Norman R(aymond) F(rederick) Maier (1900–1977) in an article in the *Journal of Comparative Psychology* in 1930. See also [PROBLEM SOLVING](#).



Nine-dot problem. On the left are shown nine dots to be connected by four straight lines, without lifting the pen from the paper and without retracing any lines. The solution, shown on the right, should be easy but is very hard in practice.

nirvana principle *n.* In **psychoanalysis*, the tendency for the quantity of energy in the mental apparatus to reduce to zero. Sigmund Freud (1856–1939) introduced the concept in 1920 in his book *Beyond the Pleasure Principle* (*Standard Edition*, XVIII, pp. 7–64, at pp. 55–6). In 1924, in an article on ‘The Economic Problem in Masochism’, he defined it ambiguously as the principle of the mental apparatus ‘of extinguishing, or at least of maintaining at as low a level as possible, the quantities of excitation flowing into it’ (*Standard Edition*, XIX, pp. 159–70, at pp. 159–60). The term itself, which Freud attributed to the British psychoanalyst Barbara Low (1877–1955), relates to Buddhism and Hinduism, in which nirvana is the longed-for release from the cycle of reincarnation, attained by the extinction of all desires and individual existence. See also [BOUND ENERGY](#), [FREE ENERGY](#), [THANATOS](#). Compare [PRINCIPLE OF CONSTANCY](#). [From Sanskrit *nirvana* extinction or a blowing out, from *nir-* out + *vati* it blows]

Nissl body *n.* Any of the large granular structures consisting of clumps of **endoplasmic reticulum* in the **cytoplasm* of neurons. [Named after the German neurologist Franz Nissl (1860–1919)]

Nissl granule *n.* Any of the small grains now identified as **ribosomes* in the **endoplasmic reticulum* of a **Nissl body*. Also called a *Nissl substance* or

*****ebook converter DEMO Watermarks*****

chromatin granule.

Nissl stain *n.* A histological stain, usually using methylene blue or cresyl violet, that affects mainly ***Nissl bodies**, exposing neuron cell bodies but not their axons and dendrites. *Compare* **GOLGI STAIN**.

nitric oxide *n.* A gas with ***free-radical** chemical properties that functions as a ***neurotransmitter** in the brain, believed to be involved in ***long-term potentiation**, and is also released in response to sexual stimulation, activating ***cyclic GMP** in the penis and causing vasodilation (expansion of blood vessels) in the ***corpora cavernosa** and ***corpus spongiosum**. It should not be confused with ***nitrous oxide** (N₂O), the chemically stable laughing gas that is used as an anaesthetic. Formula: NO. *See also* **GINSENG**.

nitrite inhalant *n.* Any amyl, butyl, or isobutyl nitrite that is inhaled as a drug, causing peripheral vasodilation and a temporary reduction in oxygen supply to the brain, leading to mild ***euphoria**, a change of time perception, relaxation of smooth muscles, and in some people an intensification of sexual sensations. Known colloquially as *poppers*. *See also* **AMYL NITRITE**, **INHALANT-RELATED DISORDERS**, **SUBSTANCE ABUSE**, **SUBSTANCE-RELATED AND ADDICTIVE DISORDERS**.

nitrogenous base *n.* Any ***base (1)** containing nitrogen, specifically three found in both DNA and RNA (***adenine**, ***guanine**, and ***cytosine**), one found only in DNA (***thymine**), and one found only in RNA (***uracil**). *See also* **PURINE**, **PYRIMIDINE**.

nitrous oxide *n.* A gas that is used as an ***anaesthetic (1)**, especially in dentistry, and that when inhaled causes rapid intoxication, characterized by loss of sensation, light-headedness, and a floating sensation, sometimes accompanied by laughter, such effects disappearing a few minutes after the inhalation is stopped. Also called *laughing gas*. Often confused with ***nitric oxide** (NO), a chemically unstable gas that functions as a neurotransmitter. Formula: N₂O. *See also* **SUBSTANCE ABUSE**, **SUBSTANCE-RELATED AND ADDICTIVE DISORDERS**.

nocebo effect *n.* Ill-health, or a feeling of ill-health, caused by an expectation of harm or injury from a substance or treatment that, without the expectation, would be harmless, an extreme example being ***voodoo death**. The term was introduced in the 1990s as a counterpart of the ***placebo** effect. *See also* **BASKERVILLE EFFECT**, **SELF-FULFILLING PROPHECY**. [From Latin *nocebo* I shall harm, from *nocere* to harm]

nociceptive *adj.* Sensitive to or causing ***pain**. **nociception** *n.* Pain perception. **nociceptor** *n.* Another name for a ***pain** receptor. [From Latin *nocere* to injure + English *(re)ceptive*]

nocireceptor *n.* Another name for a ***pain** receptor.

noctambulation *n.* Another name for ***sleepwalking**. Also called *noctambulism* or *somnambulism*. **noctambulate** *vb.* [From Latin *nox*, *noctis* night + *ambulare* to walk + *-ation* indicating a process or condition]

Noctec *n.* A proprietary name for the depressant drug ***chloral hydrate**. [Trademark]

nocturia *n.* A form of ***enuresis** involving inability to hold urine while asleep, resulting in bedwetting or repeated nocturnal visits to the bathroom and disrupted sleep. [From Latin *nox*, *noctis* night + Greek *ouron* urine + *-ia* indicating a condition or quality]

nocturnal *adj.* Occurring or active during the night or nightly. *Compare* **DIURNAL**. [From Latin *nocturnalis* nocturnal, from *nox*, *noctis* night]

nocturnal myoclonus *n.* The technical name for night cramps. [From Greek *mys* a muscle + *klonos* contraction]

node *n.* 1. Any natural anatomical swelling or bulge. 2. Any point in a ***network model** or graph where lines or pathways intersect or branch, especially (in cognitive psychology) an element representing a concept in a semantic network of relations between nodes (relations such as *x is a member of y* or *x is an attribute of y*), each node being linked to certain other nodes in

the network. *See also* [ACT*](#), [CLOSED NODE](#), [FAN EFFECT](#), [OPEN NODE](#). [From Latin *nodus* a knot]

node expansion *n.* Examining the successor nodes to a [*node \(2\)](#) in a network.

node of Ranvier *n.* Any of the gaps that occur at regular intervals along the [*myelin](#) sheath of a myelinated nerve fibre, exposing the [*axon](#). Also called *Ranvier's node*. *See also* [SALTATION \(1\)](#). [Named after the French histologist Louis-Antoine Ranvier (1835–1922) who drew attention to them]

nodulus *n.* A small [*node \(1\)](#).

noesis *n.* The act or process of [*thinking](#) or [*perceiving](#), the functioning of intellect, or the exercise of [*reason](#). [From Greek *noesis* thought, from *noein* to think]

noise *n.* **1.** Any unwanted or disturbing sound, or any sound without any definite frequency or pitch. *See also* noise (2). *Compare* [TONE \(1\)](#). **2.** Random disturbances in any communication channel in addition to the [*signal](#) that is being transmitted, or more generally any random component in a [*time series](#) that degrades its periodicity. *See* [COLOURED NOISE](#), [FROZEN NOISE](#), [PINK NOISE](#), [WHITE NOISE](#). *See also* [DECIBEL](#), [SIGNAL DETECTION THEORY](#), [SIGNAL-TO-NOISE RATIO](#). [From Latin *nausea* the sensation of being about to vomit]

nominal aphasia *See* [APHASIA](#).

nominalism *n.* In scholastic philosophy, the doctrine propounded by the English philosopher William of Ockham (?1285–?1349) and others that only individual things exist and that universal concepts such as redness have no independent existence beyond being mere names. In modern philosophy, an interpretation of general concepts such as redness in terms of the mutual resemblance of the specific things to which they apply. *Compare* [ESSENTIALISM](#). **nominalist** *adj.* [From Latin *nominalis* of a name, from *nomen* a name + *-alis* of or relating to]

nominal scale *n.* A discrete form of data classification in which items are not quantified or even arranged in order but are merely allocated to different (often numbered) categories as, for example, in assigning numbers to categories of books in a library classification system. In nominal scaling, the numbers serve only as names for the categories to which the items belong. *See also* [MEASUREMENT LEVEL](#), [SCALE \(1\)](#). *Compare* [ABSOLUTE SCALE](#), [INTERVAL SCALE](#), [LOG-INTERVAL SCALE](#), [ORDINAL SCALE](#), [RATIO SCALE](#). [From Latin *nomen* a name]

nomorative determinism *n.* The notion that people's names can influence their career choices and other aspects of their lives. Carl Gustav Jung (1875–1961) gave several examples in an article on [*synchronicity](#) published in 1952. A study by the Canadian psychologist Ernest L(awrence) Abel (born 1943) published in the journal *Names* in 2010 compared doctors and lawyers whose first or last names began with three-letter combinations representative of their professions, such as *Doc* or *Law*, and found a significant relationship between names and professions; also, initial letters of physicians' last names were significantly related to their sub-specialty, men called *Raymond* being significantly more likely to be radiologists than dermatologists, for example. *See also* [APTRONYM](#). [Coined in an article in the British magazine *New Scientist* in 1994, citing a book on polar exploration by Daniel Snowman and an article on incontinence in the *British Journal of Urology* in 1977 by the urologists J. W. Splatt and D. Weedon]

nomological network *n.* A lawful pattern of interrelationships that exists between [*hypothetical constructs](#) and observable [*attributes](#) and that guides a researcher in establishing the [*construct](#) validity of a psychological test or measure. According to the US psychologists Lee J(oseph) Cronbach (1916–2001) and Paul Everett Meehl (1920–2003), who introduced the concept in an article in the journal *Psychological Bulletin* in 1955, a nomological network includes a theoretical framework for what is being measured, specifying linkages between different hypothetical constructs, between different observable attributes, and between hypothetical constructs and observable attributes. Qualitatively different measurement operations may be said to measure the same attributes if their locations in the nomological network link them to the same hypothetical construct variable. Also called a *nomological net*. *Compare* [TRAIT VALIDITY](#). [From Greek *nomos*

*****ebook converter DEMO Watermarks*****

a law + *logos* word, discourse, or reason + Latin *-icalis* of, relating to, or resembling]

nomological validity *n.* In psychometrics, a form of **validity* established via a **nomological network*.

nomothetic *adj.* Of or relating to the general case, especially in relation to the search for general laws or **traits* in the study of **personality*. The term was coined in 1904 by the German philosopher Wilhelm Windelband (1848–1915). *See also* ECOLOGICAL FALLACY. *Compare* IDIOGRAPHIC. [From Greek *nomothetes* a lawgiver, from *nomos* a law + *titheneai* to set + *-ikos* of, relating to, or resembling]

non-adaptive *adj.* In genetics and evolutionary theory, pertaining to any gene that, relative to its alleles, reduces an organism's fitness.

non-additivity *See* ADDITIVITY.

non-classical receptive field *See* RECEPTIVE FIELD.

non-competitive antagonist *n.* An **antagonist* (3) drug that depresses the effect of the **agonist* (3) by acting at different **neuroreceptor* sites. *Compare* COMPETITIVE ANTAGONIST.

non compos mentis *n.* Not of sound mind; incapable of managing one's own affairs. [Latin: not in control of one's mind]

non-Darwinian evolution *n.* Changes in the relative frequencies of genes in a population resulting not from natural selection but from **neutral mutation*. Also called *genetic drift* or *random drift*. *Compare* DARWINIAN EVOLUTION, NATURAL SELECTION. [So called because the Darwinian mechanism of natural selection does not drive it]

non-declarative knowledge *n.* Knowledge that does not involve awareness and understanding of factual information about the world, including especially **procedural knowledge*. *See also* NON-DECLARATIVE

MEMORY. Compare DECLARATIVE KNOWLEDGE.

non-declarative memory *n.* Memory for *non-declarative knowledge, involving memory systems that do not draw on the individual's general knowledge. See also MIRROR DRAWING, PROCEDURAL MEMORY.

non-directional test See DIRECTIONAL TEST.

non-directive therapy *n.* Another name for *client-centred therapy.

non-discrimination point See POINT OF SUBJECTIVE EQUALITY.

non-disjunction *n.* The failure of paired *chromosomes to separate and move to opposite poles during *mitosis or *meiosis (1).

N140 *abbrev.* The first major negative deflection in an *event-related potential or an *average evoked potential, occurring about 140 milliseconds after the onset of the stimulus. Some researchers have claimed that either its magnitude, or the acuteness of the angle between the N140 and the *P200, correlates with *IQ, but empirical findings are inconsistent. Also called the *N140 potential* or *N140 wave*. Compare STRING LENGTH. [From *n(egative) 140 (milliseconds)*]

non-epileptic seizure *n.* An alternative name for a *pseudoseizure, so-called because it is not associated with *epilepsy. Also called a *non-epileptic convulsion*.

non-equivalent groups design *n.* A *quasi-experimental research design in which the investigator does not manipulate the *independent variable but compares existing groups that differ on it. In this research design, the groups may differ in many other ways apart from the independent variable being investigated, and this limits the confidence with which the results can be attributed to the independent variable. See also ONE-GROUP PRETEST–POSTTEST DESIGN, INTERRUPTED TIME-SERIES DESIGN.

non-essential amino acids See AMINO ACID.

*****ebook converter DEMO Watermarks*****

non-fluent aphasia *See* [APHASIA](#).

non-identical twins *n.* A non-technical name for [*dizygotic](#) twins.

non-Mendelian gene *n.* Any gene that does not conform to a [*Mendelian](#) mechanism of inheritance or is not inherited in accordance with [*Mendel's laws](#), notably the genes encoded in [*mitochondrial DNA](#) and in [*plasmids](#).

non-metric analysis *n.* In statistics, an approach to [*multidimensional scaling](#) in which analysis is performed on qualitative rather than quantitative dissimilarities.

non-monotonic reasoning *n.* Any of a number of systems of reasoning that violate the principle of [*monotonicity](#). Formalizations of non-monotonic reasoning are designed to capture some of the features of common-sense reasoning. The canonical example consists of the two [*premises](#) *Birds fly* and *Tweety is a bird* together with the conclusion *Tweety can fly*. In this example, *Birds fly* is interpreted to mean *Normally, birds fly*, or *Typically, birds fly*, or *If x is a bird, then assume by default that x flies*: it is a default assumption that we adopt provisionally, in the absence of information that might override it. An additional premise that Tweety is a penguin, or an ostrich, or an emu, or is coated in heavy crude oil, or is dead, would render the conclusion invalid. This form of reasoning is non-monotonic because it violates the [*extension theorem](#) of semantic entailment in propositional calculus, so that additional premises can negate conclusions derived from a smaller set of premises. Also called *non-monotonic logic*, but this is avoided in careful usage, because it violates monotonicity, which is a fundamental principle of logic. *See also* [DEFAULT REASONING](#), [KNOWLEDGE REPRESENTATION](#). [From Greek *monos* single + *tonos* a tone + *-ikos* of, relating to, or resembling]

Nonne's syndrome *n.* Another name for [*cerebellar syndrome](#). [Named after the German neurologist Max Nonne (1861–1959) who studied and wrote about it]

non-opponent cell *n.* A type of neuron in the *[lateral geniculate nucleus](#) that is excited or inhibited by light of widely differing different wavelengths. Also called a *non-opponent neuron*. Compare [OPPONENT CELL](#).

non-paralytic strabismus *n.* A hereditary form of *[strabismus](#) characterized by an inability to use both eyes together, so that objects or images have to be fixated with one eye or the other. A person with *alternating strabismus* tends to alternate fixation between the eyes, the eyes taking turns of approximately a second each as long as the object is fixated, whereas a person with *monocular* or *non-alternating strabismus* fixates continuously with one eye, the other eye often becoming blind as a result of disuse. See also [AMBLYOPIA EX ANOPSIA](#). Compare [PARALYTIC STRABISMUS](#).

non-parametric statistics *n.* A branch of statistics that does not rely on assumptions about the parameters of the distributions from which scores are drawn and usually deals with data measured on *[ordinal scales](#) or *[nominal scales](#) to which arithmetic operations like addition and multiplication cannot meaningfully be applied. The term was introduced in 1942 by the Polish-born US statistician Jacob Wolfowitz (1910–81). Compare [DISTRIBUTION-FREE TEST](#). [From Latin *non* not + Greek *para* beside or beyond + Greek *metron* measure + English *statistics*]

non-probability sample *n.* Any sample drawn by a technique that does not involve randomization, so that the probabilities of inclusion of members of the population or subgroups within it are not equal. See [ACCIDENTAL SAMPLE](#), [CONVENIENCE SAMPLE](#), [OPPORTUNITY SAMPLE](#), [QUOTA SAMPLE](#), [SELF-SELECTED SAMPLE](#), [SNOWBALL SAMPLE](#). Compare [CLUSTER SAMPLE](#), [PROBABILITY SAMPLE](#), [RANDOM DIGIT DIALLING](#), [SIMPLE RANDOM SAMPLE](#), [STRATIFIED RANDOM SAMPLE](#).

non-rapid eye movement sleep arousal disorder *n.* A *[parasomnia](#) introduced in *[DSM-5](#) characterized by recurrent partial awakening from sleep, usually during the first third of the night, accompanied by either *[sleepwalking](#) or *[sleep terrors](#), with little or no memory of dreaming and amnesia for these episodes. Compare [RAPID EYE MOVEMENT SLEEP BEHAVIOUR DISORDER](#).

non-reactive measure *n.* Any measure of behaviour that is not influenced by awareness on the part of the participants or subjects that their behaviour is being observed or measured. In general, ***unobtrusive measures** are considered non-reactive, and some other techniques, such as ***randomized response**, are also intended to be non-reactive. *See also* **REACTIVITY**.

non-regressiveness bias *n.* A tendency to make insufficient allowance for ***regression** towards the mean when predicting from an imperfectly reliable predictor. Suppose that a student is described by a tutor as being much more intelligent, hard-working, and self-confident than the average student on the course. (a) What percentage of students on the course would you expect to be described even more favourably by the tutor? (b) What percentage of students on the course would you predict to obtain a higher aggregate mark or grade point average? There is more uncertainty about (b) than (a), because a tutor's ratings are an imperfectly reliable predictor of academic performance, and your prediction (b) should therefore be more regressive, and hence closer to 50 per cent, than your expectation (a). In practice, most people show little or no difference between the two percentages, and this is usually interpreted as being due to their use of the ***representativeness heuristic**, in which evaluation and prediction coincide. *Compare* **REGRESSION FALLACY**.

non-REM sleep *See* **NREM SLEEP**.

non-reversal shift *n.* A form of ***serial learning (2)** in which the set of stimuli is changed, but the rewarded and non-rewarded items are not simply interchanged, a typical example being an experiment in which organisms are trained to choose the round rather than the square containers, irrespective of their colours, and are then presented with stimulus sets in which the reward is associated with the yellow rather than the blue containers irrespective of their shapes. *Compare* **HABIT REVERSAL**.

nonsense codon *n.* Another name for a ***stop codon**. [So called because it does not specify any amino acid but is none the less a ***codon**]

nonsense mutation *n.* Any ***mutation** that produces one of the ***stop**

codons, causing premature termination of protein synthesis by the gene in which it occurs. [So called because a stop codon is also called a nonsense codon]

nonsense syllable *n.* A *CVC trigram that forms a meaningless non-word (such as *KEB*) rather than a meaningful word (such as *DOG*). It was introduced into psychology in about 1878 by the German psychologist Hermann von Ebbinghaus (1850–1909) for studying memory. Ebbinghaus had begun by experimenting with fragments of poetry but had found that they aroused mental associations, influencing their ease of learning, so he constructed lists of nonsense syllables, which provided material that was relatively homogeneous, evoked few mental associations, and could easily be broken into objectively equal units for quantitative research, and he reported his results in his book *Über das Gedächtnis* (On Memory) in 1885. *See also* ASSOCIATION VALUE, CONSONANT TRIGRAM.

nonsense syndrome *n.* Another name for *Ganser syndrome.

non-spectral colour *n.* Any colour that does not occur in the *visible spectrum and that cannot be produced by light of a single wavelength, for example purple, which can be generated only by a mixture of red and blue (see COMPLEMENTARY COLOURS). US *non-spectral color*. Also called an *extra-spectral colour/hue* or *extraspectral color/hue*. Compare SPECTRAL COLOUR.

non-taster *See* PROPYLTHIOURACIL, PTC.

non-verbal communication *n.* Any form of communication apart from *language (1), including *paralanguage (non-verbal aspects of speech), *facial expression, communicative *gaze and *eye contact, *kinesics (gestures and other communicative bodily movements), and *proxemics (communicative use of personal space). *See also* CLEVER HANS, EQUILIBRIUM HYPOTHESIS, EXPRESSIVE BEHAVIOUR, SEMIOTICS, SOCIAL SKILLS TRAINING. **NVC** *abbrev.*

non-verbal test *n.* In psychometrics, any test that does not require language skills on the part of the respondent, including *intelligence tests that do not depend on any knowledge of language or linguistic skills, such as

*****ebook converter DEMO Watermarks*****

*Raven's Progressive Matrices, the *Cattell Culture-Fair Test, and other psychometric tests such as the *Porteus Maze Test. *See also* CULTURE-FAIR.

non-zero-sum game *n.* Another name for a *mixed-motive game. [So called because the sum of the payoffs to the players is not zero in every outcome of the game]

nootropic *adj.* Affecting the intellect or enhancing cognitive performance. *See* SMART DRUG. [From Greek *nous* intellect + *tropos* a turn, from *trepein* to turn + *-ikos* of, relating to, or resembling]

noradrenalin *n.* A *biogenic amine and one of the *catecholamine hormones, chemically related to *adrenalin and crucial to the maintenance of alertness, drive, and motivation, synthesized from tyrosine in the presence of the cofactor vitamin C, and secreted by the *chromaffin cells of the adrenal medulla, widely distributed between the brainstem and most areas of the cerebral cortex, stimulating the heart muscle to contract, the blood vessels to constrict, the bronchial tracts of the lungs to dilate, and the contractile strength of the skeletal muscles to increase, also functioning as an important *neurotransmitter in the sympathetic nervous system and in the central nervous system mainly through circuits originating in the *locus coeruleus of the pons and projecting to many areas of the brain, levels of noradrenalin often being significantly reduced in people with depression or attempting suicide. Formula: $(\text{HO})_2\text{C}_6\text{H}_3\text{CH}(\text{OH})\text{CH}_2\text{NH}_2$. Also spelt *noradrenaline*. Also, especially in US, called *norepinephrine* (NE). **NA** *abbrev.* [From *nor(mal)* + *adrenalin*]

noradrenalin reuptake inhibitor *n.* A drug that slows or prevents the metabolism or absorption of *noradrenalin (norepinephrine). US *norepinephrine reuptake inhibitor*. *See* ATOMOXETINE.

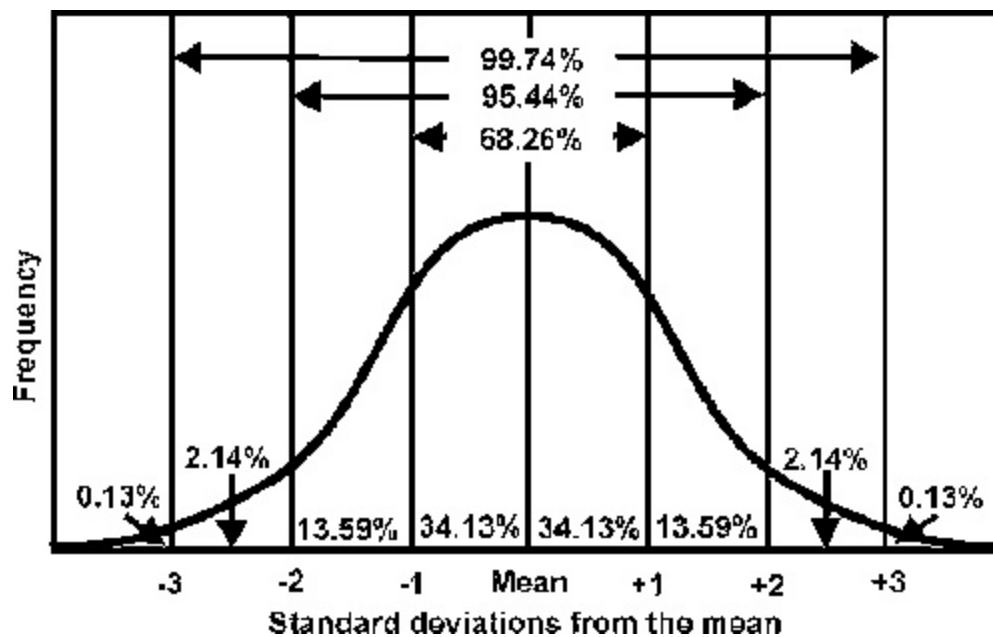
noradrenergic *adj.* Releasing *noradrenalin (norepinephrine); also activated by or responding to noradrenalin, this extended usage being widespread but consistently rejected by the English physiologist Sir Henry Hallet Dale (1875–1968), who coined the suffix *-ergic*, and by many other authorities. The term applies especially to nerve fibres such as those of the

***sympathetic nervous system** or the ***locus coeruleus** and many other areas in the central nervous system that use noradrenalin as their ***neurotransmitter**. Compare **ADRENERGIC**, **CHOLINERGIC**, **DOPAMINERGIC**, **GABAERGIC**, **SEROTONERGIC**. [From *noradrenalin* + Greek *ergon* work + *-ikos* of, relating to, or resembling]

norepinephrine *n.* Another name for ***noradrenalin**, especially in US usage. **NE** abbrev. [From *nor(mal)* + Greek *epi* on + *nephros* a kidney + *-ine* indicating an organic compound]

norm *n.* **1.** A generally accepted standard of behaviour within a society, community, or group. See also **SOCIAL INFLUENCE**. **2.** A typical or most common value, pattern, state, condition, or event. In ***psychometrics**, an average score on a test determined by applying the test to a standardization sample. See also **STANDARDIZED TEST**. [From Latin *norma* a carpenter's square or a rule]

normal distribution *n.* In statistics, a symmetrical, bell-shaped ***probability** distribution, also called the *Gaussian distribution*, the *normal curve*, or colloquially the *bell curve*, with the most probable scores concentrated around the ***mean** (average) and progressively less probable scores occurring further from the mean (see **illustration**). In this distribution, 68.26 per cent of scores fall within one ***standard deviation** on either side of the mean, 95.44 per cent within two standard deviations, and 99.74 within three standard deviations. For a reason explained by the ***central limit theorem**, the normal distribution approximates the observed ***frequency** distribution of many psychological and biological variables and is by far the most widely used probability distribution in inferential statistics. See also **DEVIATION IQ**. **normally distributed** *adj.* Distributed according to the normal distribution. [From Latin *norma* a carpenter's square or a rule + *-alis* of or relating to]



Normal distribution. Showing the percentages of observations occurring within various distances from the mean, measured in standard deviations.

normal probability plot *n.* In statistics, a graph used to detect departures from normality in a set of scores whose cumulative proportion at various points is plotted against the expected cumulative proportion based on the **normal distribution* of **standardized* (1) scores. The points should fall close to a straight line if the scores are a sample from a normal distribution. See also [DETRENDED NORMAL PLOT](#).

normal science *n.* According to an influential idea first presented by the US historian and philosopher of science Thomas S(amuel) Kuhn (1922–96) in his book *The Structure of Scientific Revolutions* (1962), a period in the development of any scientific discipline in which there is general acceptance and agreement as to the basic concepts, and steady cumulative progress is made. See also [KUHNIAN](#), [PARADIGM SHIFT](#), [SCIENTIFIC REVOLUTION](#).

normative *adj.* 1. Prescribing or establishing **norms* (1) or standards; prescriptive. For example, **decision theory* and classical **game theory* are normative inasmuch as they seek to prescribe how rational decision makers ought to choose in order to optimize their own interests. Such theories are sometimes contrasted with *descriptive* or *positive* theories that seek to explain
 *****ebook converter DEMO Watermarks*****

and predict the behaviour of actual agents. In an edited book entitled *Decision Making: Descriptive, Normative, and Prescriptive Interactions* (1988), the US decision theorists David E. Bell (born 1949) and Howard Raiffa (born 1924) and the US-based Israeli psychologist Amos Tversky (1937–96) distinguished a third category of *prescriptive* theories that offer advice as to how to act, given our acknowledged cognitive limitations, but some other authorities (and Tversky himself) consider them to be essentially normative theories. **2.** Of or relating to data providing **norms* (2) or average scores, as in the standardization of a psychological test. *Compare* *IPSATIVE*. [From Latin *norma* a carpenter's square or a rule + *-ivus* indicating a tendency, inclination, or quality]

normative reference group *See* *REFERENCE GROUP*.

norm-referenced test *n.* A test that measures an **attribute* of a respondent relative to **norms* (2) derived from a standardization sample rather than by reference to any predefined absolute standard. Modern **IQ* tests are among the best known examples of norm-referenced tests. *Compare* *CRITERION-REFERENCED TEST*, *DOMAIN-REFERENCED TEST*.

nose *n.* The organ of **olfaction* and entrance to the respiratory tract, its smaller external portion protruding from the front of the face and its larger internal portion lying over the roof of the mouth, divided into two hair-lined mucous membranes separated by a nasal septum and containing the **olfactory receptors*. *See also* *COMMON CHEMICAL SENSE*, *DIRHINIC*, *VOMERONASAL ORGAN*.

nose-picking mania *See* *RHINOTILLEXOMANIA*.

nosology *n.* The classification of disorders, or more generally the study of disorders. [From Greek *nosos* a disorder + *logos* word, discourse, or reason]

N-person Prisoner's Dilemma *n.* The first and most fundamental type of multi-person **social dilemma*, a generalization of the **Prisoner's Dilemma game* to include more than two players, discovered simultaneously and independently in 1973 by the US psychologist Robyn Mason Dawes (1936–2010), the US mathematician Henry J. Hamburger (born 1940), and
*****ebook converter DEMO Watermarks*****

the US economist Thomas C. Schelling (born 1921). It is an interactive decision involving three or more players who each face a choice between a cooperative **strategy* (2) labelled *C* and a non-cooperative or defecting strategy labelled *D*. The **payoff* structure is such that *D* is a **dominant strategy* for each player in the sense that each player obtains a better payoff by choosing *D* than *C* no matter how many of the other players choose *C*; but the outcome if all players choose their dominated *C* strategies is preferable from every player's point of view to the outcome if everyone chooses *D*. Apart from the Prisoner's Dilemma game, which is a special (two-person) case, the simplest example is the three-person game in which, if three players choose *C*, then each gets a payoff of 3; if two players choose *C*, then each *C*-chooser gets 2 and the *D*-chooser gets 4; if one player chooses *C*, then the *C*-chooser gets 1 and each *D*-chooser gets 3; and if no player chooses *C*, then each *D*-chooser gets 2. See also *SURE-THING PRINCIPLE*. **NPD** abbrev.

NREM sleep abbrev. Non-rapid-eye-movement sleep, in which four progressively deepening stages can be distinguished by **EEG* measurements: Stage I NREM sleep, without **delta waves*, is the stage of transition between wakefulness and sleep, and it occupies about 5 per cent of sleeping time in healthy adults; Stage II NREM sleep, with delta waves 20 per cent of the time, is characterized by **sleep* spindles and **K complexes*, and it occupies about 50 per cent of normal adult sleeping time; and Stages III and IV NREM sleep, or **slow-wave sleep*, with delta waves more than 50 per cent of the time, are the deepest levels, and they occupy about 10–20 per cent of normal adult sleeping time. Also called *quiet sleep* or *synchronized (S) sleep*. See also *SLEEP*. Compare *REM SLEEP*.

nuclear agenesis *n.* Another name for **Möbius syndrome*.

nuclear family *n.* The basic family unit consisting of a mother and father with their immediate children. Compare *EXTENDED FAMILY*. [From Latin *nux*, *nucis* a nut]

nuclear magnetic resonance *n.* A phenomenon that occurs when the nuclei of molecules resonate during exposure to high-frequency (usually radio-wave) radiation in a strong magnetic field. In strong magnetic fields, certain protons (subatomic particles) spin like tops, and pulses of radiation

*****ebook converter DEMO Watermarks*****

cause them to tilt momentarily and then to regain their original orientations, giving off detectable amounts of energy as they do so. Different molecules absorb different frequencies of the radiation as the protons tilt, depending on the magnetic properties of their nuclei, and from the precise frequencies of radiation that they absorb, information concerning the bonds between their atoms can be deduced, thus enabling the structure of the material to be determined. Magnetic resonance imaging or ***MRI**, one of the techniques of ***brain** imaging, is based on this phenomenon. **NMR** *abbrev.*

nuclear self *n.* In ***self-psychology**, the initial organization of the self that emerges in the second year of life.

nuclear spindle *n.* A spindle-shaped structure, formed from ***microtubules**, that draws the newly duplicated ***chromosomes** apart during ***mitosis** and ***meiosis** (1). Also called a *spindle*.

nucleic acid *n.* A generic name for several complex compounds, especially ***DNA**, ***RNA**, ***messenger RNA**, and ***transfer RNA**, that play important roles in living cells. *See also* **NUCLEOTIDE**. [From Latin *nucleus* a kernel, from *nux*, *nucis* a nut, so called because they are found in the nuclei of cells]

nucleoplasm *n.* The ***protoplasm** in the ***nucleus** (1) of a cell. [From Latin *nucleus* a kernel + *plasma* a form]

nucleotide *n.* A basic building block of ***DNA** or ***RNA**, consisting of a ***base** (1) linked to a sugar (***deoxyribose** or ***ribose** respectively) and a ***phosphate**, long chains of such units constituting ***nucleic acids**. [From Latin *nucleus* a kernel, from *nux*, *nucis* a nut + *-ide* indicating membership of a particular group of chemical compounds]

nucleotide sequence *n.* Another name for a ***DNA** sequence or an equivalent sequence of RNA.

nucleus *n.* 1. The spherical or egg-shaped compartment in the ***protoplasm** of a cell, enclosed in a membrane, containing the chromosomes and other

important structures that determine the behaviour of the cell. *See also* [EUKARYOTE](#), [PROKARYOTE](#). **2.** More generally, the central or core part or element of any structure, especially an anatomically or functionally distinct area of [*grey matter](#) containing a collection of [*neuron](#) cell bodies. *See* [CAUDATE NUCLEUS](#), [DENTATE NUCLEUS](#), [INFERIOR OLIVARY NUCLEUS](#), [LATERAL GENICULATE NUCLEUS](#), [LENTICULAR NUCLEUS](#), [MEDIAL GENICULATE NUCLEUS](#), [NUCLEUS ACCUMBENS](#), [NUCLEUS BASALIS OF MEYNERT](#), [NUCLEUS CUNEATUS](#), [NUCLEUS GIGANTOCELLULARIS](#), [NUCLEUS GRACILIS](#), [RAPHE NUCLEI](#), [SUBTHALAMIC NUCLEUS](#), [SUPERIOR OLIVARY NUCLEUS](#), [SUPRACHIASMATIC NUCLEUS](#). **nuclei** *pl.* [From Latin *nucleus* a kernel, from *nux*, *nucis* a nut]

nucleus accumbens *n.* Either of two clusters of neuron cell bodies and [*opiate](#) receptors in the basal forebrain near the septum pellucidum, where [*dopamine](#)-secreting neurons originating in the [*ventral](#) tegmental area terminate. This dopamine pathway is thought to be involved in reward and [*reinforcement \(1\)](#) and appears to be implicated in most if not all [*addictions](#). It is also involved in attention. Also called the *accumbens nucleus*. *See also* [INCENTIVE—SENSITIZATION THEORY](#).

nucleus basalis of Meynert *n.* Either of two small regions in the forebrain with a high concentration of [*cholinergic](#) neurons that undergoes profound cell loss in [*Alzheimer's disease](#). **nbM** *abbrev.* [Named after the German neurologist and psychiatrist Theodor Hermann Meynert (1833–92) who drew attention to it]

nucleus cuneatus *n.* Either of two areas of the [*medulla](#) oblongata where the left or right [*fasciculus](#) cuneatus terminates, functioning as a relay station for somatosensory information. Also called the *cuneate nucleus*. [From Latin *cuneatus* wedge-shaped, from *cuneus* a wedge]

nucleus gigantocellularis *n.* Either of two clusters of neurons in the [*pons](#) that are thought to generate [*PGO spikes](#) during [*REM sleep](#). [From Latin *gigantis* a giant + *cellularis* of cells, from *cellula* a cell, from *cella* a room]

nucleus gracilis *n.* Either of two areas of the [*medulla](#) oblongata where the [*fasciculus](#) gracilis terminates. Also called the *gracile nucleus*. [From

*****ebook converter DEMO Watermarks*****

Latin *gracilis* slender]

NUD*IST *abbrev.* Non-numerical unstructured data indexing, searching, and theory-building, a popular software package for the analysis of textual data in **qualitative research*.

nuisance variable *n.* Another name for an **extraneous variable*.

null hypothesis *n.* In **inferential statistics*, the provisional hypothesis that there is no difference or no relationship and that the observed experimental results can therefore be attributed to chance alone. If the statistical test rejects the null hypothesis, then the **alternative hypothesis* may be accepted and the effect that has been observed may be considered statistically significant. The term was introduced by English statistician and geneticist Ronald Aylmer Fisher (1890–1962) on page 18 of his book *The Design of Experiments*. See also *SIGNIFICANCE TEST*. [From Latin *nullus* none, from *ne* not + *ullus* any + *hypo* under + *thesis* a placing, from *tithenai* to place]

null hypothesis significance testing *n.* The process of applying a **significance* test. **NHST** *abbrev.*

number-completion test *n.* A type of **intelligence* test item or subtest in which the respondent has to find a number to complete a sequence of numbers. A typical example is: *What is the missing number in the following sequence? 0, 2, 8, 18,...* Although there is always an infinity of mathematically justifiable answers, the ‘correct’ answer in this case is 32, because the steps between adjacent numbers are 2, 6, 10, which are alternate even numbers, so the step between 18 and the missing step should be 14, making the missing number 32. See also *COMPLETION TEST*. Also called a *number sequence*, a *number series*, a *sequence completion*, or a *series completion*.

number sequence *n.* Another name for a **number-completion test*. Also called a *number series*.

numerical rating scale *n.* Any [*rating scale](#) in which the [*response](#) categories are identified by numbers, such as a scale from -3 to +3 or from 0 to 10. The main alternatives are rating scales with unlabelled response categories, indicated by a row of boxes, dashes, or other symbols; [*verbal rating scales](#), and [*graphic rating scales](#).

numeric variable *n.* In statistics and measurement theory, any [*variable](#) whose values are numbers. *Compare* [STRING VARIABLE](#).

numinosum *n.* In [*analytical psychology](#), a type of involuntary mystical or religious experience described by Carl Gustav Jung (1875–1961) in 1937 as ‘a dynamic agency or effect not caused by an arbitrary act of will. On the contrary, it seizes and controls the human subject, who is always rather its victim than its creator. The *numinosum*—whatever its cause may be—is an experience of the subject independent of his will’ (*Collected Works*, 11, paragraph 6). [From Latin *numen* divine will or a nod (indicating a command), from *nuere* to nod + *-osus* having or characterized by]

Numorphan *n.* A proprietary name for the narcotic analgesic drug [*oxymorphone](#). [Trademark]

nurture *n.* The sum total of all [*environmental](#) factors that contribute to the physical and psychological characteristics of an individual, including upbringing or rearing. It is often contrasted with *nature*: the genetic factors that contribute to an individual’s characteristics. *See* [NATURE–NURTURE CONTROVERSY](#). [From Latin *nutrire* to nourish]

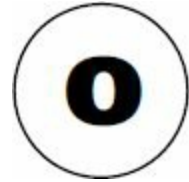
nutmeg *n.* The hard, round, seed of a tropical tree, or a spice prepared from it. *See* [MYRISTIN](#). [From Latin *nux* nut + *muscus* musk]

nybble *n.* A measure of [*information \(2\)](#) equivalent to four [*bits](#). It suffices to represent a decimal digit. Also spelt *nibble*, though this is avoided in careful usage and is to be deprecated, because it obscures the pleasing analogy with *byte*. *Compare* [BYTE](#). [An arbitrary formation based on *nibble*, alluding to the fact that it is half a *byte*]

nyctalopia *n.* A form of partial blindness characterized by poor vision in dim light or at night, resulting from inadequate synthesis of **rhodopsin*, or from **vitamin A* deficiency, retinal degeneration, or a congenital defect. Also called *night blindness*. Compare *HEMERALOPIA*. [From Greek *nyx*, *nyktos* night + *alaos* blind + *ops* an eye + *-ia* indicating a condition or quality]

nymphomania *n.* A psychological condition of women characterized by uncontrollable sexual desire and an inability to have lasting sexual relationships. Compare *SATYRIASIS*. **nymphomaniac** *n.* A woman who displays nymphomania. [From Greek *nymphē* a bride or nymph + *mania* madness]

nystagmus *n.* Spasmodic involuntary eye movements. Also called *ocular nystagmus*. See *CALORIC NYSTAGMUS*, *CENTRAL NYSTAGMUS*, *LABYRINTHINE NYSTAGMUS*, *OPTOKINETIC NYSTAGMUS*, *PHYSIOLOGICAL NYSTAGMUS*, *POST-ROTATIONAL NYSTAGMUS*, *VESTIBULAR NYSTAGMUS*. See also *BÁRÁNY TEST*, *REAFFERENCE*. [From Greek *nystagmos* drowsiness, from *nystazein* to nap]



obedience *n.* A form of **social influence* in which a person yields to explicit instructions or orders from an authority figure. Experimental research into this phenomenon was pioneered by the US psychologist Stanley Milgram (1933–84) who conducted a series of experiments, the first of which was published in the *Journal of Abnormal and Social Psychology* in 1963, in which approximately two-thirds of participants administered what they believed to be extremely painful and possibly lethal electric shocks to an innocent victim when instructed to do so by an authoritative experimenter. *See also* LAW OF SOCIAL IMPACT, STANFORD PRISON EXPERIMENT. *Compare* COMPLIANCE, CONFORMITY.

obesity hypoventilation syndrome *n.* *See* PICKWICKIAN SYNDROME, SLEEP-RELATED HYPOVENTILATION. **OHS** *abbrev.*

ob gene *n.* A **gene* that encodes **leptin*. [From *ob(esity) gene*]

object assembly test *n.* A type of **intelligence* test item or subtest in which the respondent tries to fit a number of shapes together to form a recognizable object.

object blindness *n.* A form of **agnosia* characterized by an inability to identify objects that are clearly perceived.

object-cathexis *n.* In **psychoanalysis*, the investment of **libido* in an **instinctual object*.

object-choice *n.* In **psychoanalysis*, the action of selecting a person or a

*****ebook converter DEMO Watermarks*****

type of person as a love-object. The element *object* refers not to an inanimate thing but to an **instinctual object*. See ANACLITIC OBJECT-CHOICE, NARCISSISTIC OBJECT-CHOICE, OEDIPUS COMPLEX. See also GOOD OBJECT, INSTINCTUAL OBJECT, PART OBJECT, SPLITTING OF THE OBJECT, TRANSITIONAL OBJECT, WHOLE OBJECT.

object constancy *n.* The tendency for an object to retain its perceived identity and form despite being briefly occluded or altered in appearance because of a change in orientation, distance, illumination, or movement. See also PERCEPTUAL CONSTANCY, PHENOMENAL REGRESSION.

object instinct *n.* In **psychoanalysis*, a type of instinct that is concerned with relations to an external object, distinguished by Sigmund Freud (1856–1939) in his early (1910–15) classification from an **ego* instinct, which is a **self-preservation instinct*. Freud introduced the concept (though not yet the term) in 1910 in an article on ‘The Psycho-Analytic View of Psychogenic Disturbance of Vision’ (*Standard Edition*, XI, pp. 211–18, at pp. 214–15). After 1920, he recognized two varieties of object instincts, namely libidinal instincts, driven by **Eros* (the life instincts), and destructive instincts, driven by **Thanatos* (the death instinct).

objective psyche *n.* In **analytical psychology*, another name for the **collective unconscious*, so called because it is not personal and therefore not subjective. Carl Gustav Jung (1875–1961) introduced this term (*Collected Works*, 7, paragraph 103*n*).

object language *n.* A language being referred to in a **metalanguage*. The sentence ‘*Snow is white*’ *if and only if snow is white* is expressed in a metalanguage, and the sentence that it contains, enclosed in quotation marks, belongs to the object language. Such an object language may be a metalanguage relative to a third language.

object libido *n.* In **psychoanalysis*, **libido* involved in the **cathexis* of an external **instinctual object*, in contradistinction to **ego* libido, which is libido involved in the cathexis of oneself. According to Sigmund Freud (1856–1939), object libido decreases as ego libido increases, and vice versa. Freud expounded these ideas in 1914 in his article ‘On Narcissism: An Introduction’ (*Standard Edition*, XIV, pp. 73–102, at pp. 77–81). See also

*****ebook converter DEMO Watermarks*****

NARCISSISM.

object loss *n.* In **psychoanalysis*, loss of an **instinctual object*, such as the loss of a loved one or of a relationship with a loved one.

object of instinct *See* INSTINCTUAL OBJECT.

object, part *See* PART OBJECT.

object permanence *n.* A cognitive ability associated with **working memory*, first identified by the Swiss psychologist Jean Piaget (1896–1980). To test for this ability in a child, the child is shown two boxes, one of which contains a toy, then the boxes are closed and the child is deliberately distracted for a short while, and the child is asked to choose the box containing the toy. After several correct choices, the toy is transferred to the other box while the child watches, and further trials are carried out to determine whether the child is able to switch responses in accordance with the updated information. This ability, and the ability to perform **delayed-response tasks*, depends on maturity of the **prefrontal cortex*: in children under about 8 months this area is not fully developed, and they perform poorly on such tasks, behaving as though ‘out of sight is out of mind’, as do monkeys with surgical lesions in the prefrontal cortex.

object recognition *n.* The identification of something as a particular object (such as one’s own jacket) or as a member of a particular class of objects (such as a tabby-cat) in spite of wide variations in the precise pattern of sensory stimulation, which depends on the angle from which it is viewed, lighting conditions, distance, and so on. *Compare* PATTERN RECOGNITION.

object relations *n.* In **psychoanalysis*, the emotional bonds that people form with **instinctual objects*, in contradistinction to interest in and love of oneself. It is given expression through capacity to form loving relationships with other people, any such bond being called an **object-relationship*. The concept is associated with the work of the British-based Austrian psychoanalyst Melanie Klein (1882–1960) as set forth in her books *The Psycho-Analysis of Children* (1932) and *Contributions to Psycho-Analysis, 1921–1945* (1948), and her followers. *See* DEFENSIVE TECHNIQUE, KLEINIAN, *****ebook converter DEMO Watermarks*****

SCHIZOID PERSONALITY, WINNICOTTIAN. *See also* OBJECT INSTINCT, OBJECT-RELATIONS THEORY. *Compare* NARCISSISM.

object-relationship *n.* In *psychoanalysis, a relationship experienced, or an emotion directed, by the *ego towards an *instinctual object. Barely mentioned in the writings of Sigmund Freud (1856–1939), it has played a central role in the theories of later psychoanalysts such as the British-based Hungarian psychiatrist Michael Balint (1896–1970), who pointed out in his book *Primary Love and Psychoanalytic Technique* (1952) that it is virtually the only concept in classical psychoanalysis that does not refer to the individual in social isolation, and the Austrian psychoanalyst René A(rpad) Spitz (1887–1974), who made a similar observation. *See also* FIXATION (2), LIBIDINAL STAGE, OBJECT INSTINCT, PRIMARY IDENTIFICATION, OBJECT-RELATIONS THEORY, PRIMARY OBJECT.

object-relations theory *n.* A theory of *object relations developed in the UK by the British-based Austrian psychoanalyst Melanie Klein (1882–1960), the English psychoanalyst Donald Woods Winnicott (1896–1971), the Scottish psychoanalyst W. Ronald D. Fairbairn (1889–1964), the British-based Hungarian psychiatrist Michael Balint (1896–1970), and others. Also called *object theory*.

object superiority effect *n.* Another name for the *configural superiority effect.

object theory *n.* Another name for *object-relations theory.

object, transitional *See* TRANSITIONAL OBJECT.

oblique décalage *See* DÉCALAGE.

oblique effect *n.* A visual defect in which slanted lines or edges are harder to see than horizontal or vertical lines or edges. [From Latin *obliquus* slanting]

oblique muscle *n.* A muscle attached at an oblique angle to the structure

that it controls, especially two of the **extra-ocular muscles* that are attached externally to each eyeball and that roll the eyeball about the visual axis, namely the *superior oblique muscle* that passes through an eyelet above the eyeball and works like a pulley and the *inferior oblique muscle* that is wrapped at an angle round the bottom of the eyeball. *See also* [CYCLOPHORIA](#), [DIPLOPIA](#), [RECTUS MUSCLE](#), [TROCHLEAR NERVE](#).

obliviscence *n.* Forgetfulness or forgetting. Also spelt *oblivescence*. *Compare* [REMINISCENCE](#) (2). [From Latin *oblivisci* to forget]

observational study *n.* A research methodology most often used in certain areas of **social psychology*, **developmental psychology*, and **ethology* in which the investigator records behaviour as far as possible without influencing it. An observational **field* study is conducted in a naturally occurring situation (*compare* [NATURALISTIC OBSERVATION](#)), and an observational laboratory study is carried out in an artificial laboratory environment.

obsession *n.* A recurrent and persistent thought, impulse, or idea that causes significant distress, is experienced as intrusive or inappropriate (**ego-dystonic*), is not merely an exaggerated worry about a genuine problem, and is recognized by the afflicted person as internally generated. *See also* [GRÜBELSUCHT](#), [OBSESSIONAL TECHNIQUE](#), [OBSESSIVE–COMPULSIVE DISORDER](#). *Compare* [COMPULSION](#). **obsess** *vb.* **obsessional** or **obsessive** *adj.* [From Latin *obsessus* besieged, from *ob* in front + *sidere* to sit + *-ion* indicating an action, process, or state]

obsessional neurosis *n.* Another name for an **obsessive–compulsive disorder*. The term was introduced in German (*Zwangsneurose*) by Sigmund Freud (1856–1939) in an article on ‘Heredity and the Aetiology of the Neuroses’ (1896): ‘I was obliged to begin my work with a nosolographic innovation. I found reason to set alongside of hysteria the obsessional neurosis as a self-sufficient and independent disorder’ (*Standard Edition*, III, pp. 143–56, at p. 146). *See also* [TRANSFERENCE NEUROSIS](#).

obsessional technique *n.* In **psychoanalysis*, one of the four **defensive techniques* proposed by the Scottish psychoanalyst W. Ronald D.

*****ebook converter DEMO Watermarks*****

Fairbairn (1889–1964). It involves **internalization* of both the **good object* and the bad object, causing the obsessional person to consider bad objects as alien internal forces that need to be controlled. *See also* *SPLITTING OF THE OBJECT*. *Compare* *HYSTERICAL TECHNIQUE*, *PARANOID TECHNIQUE*, *PHOBIC TECHNIQUE*.

obsessive–compulsive disorder *n.* An **anxiety disorder* in **DSM-5* characterized by either **obsessions* or **compulsions* that the afflicted person attempts to ignore or suppress, causing significant distress, wasting significant amounts of time, or markedly interfering with everyday life, occupational or academic performance, or social interaction. Also called *anankastic neurosis*, *obsessive–compulsive neurosis*. *See also* *DEFUSION OF INSTINCTS*, *ISOLATION OF AFFECT*, *OBSessional NEUROSIS*, *OBSessional TECHNIQUE*, *PARADOXICAL INTENTION*, *RAT MAN*. *Compare* *OBSessive–COMPulsive PERSONALITY DISORDER*. **OCD** *abbrev.* [From Latin *obsessus* besieged, from *ob* in front + *sidere* to sit + *compulsare* to compel frequently or habitually, from *compellere* to compel]

obsessive–compulsive personality disorder *n.* A **personality disorder* in **DSM-5* characterized by a pervasive pattern of preoccupation with orderliness, perfectionism, and control, at the cost of flexibility, openness, and efficiency, beginning by early adulthood and indicated by such signs and symptoms as excessive preoccupation with details, rules, and order; perfectionism that interferes with task completion; excessive devotion to work at the expense of leisure; excessive conscientiousness and scrupulousness; tendency to hoard worthless objects; reluctance to delegate tasks to others; thrifty or stingy attitude towards money; rigidity and stubbornness. The absence of true **obsessions* or **compulsions* makes this condition easily distinguishable from **obsessive–compulsive disorder*, despite the similarity of their names, and also suggests that *obsessive–compulsive personality disorder* is a misnomer. Also called *anankastic personality disorder*. *See also* *ANAL CHARACTER*, *ANAL TRIAD*.

obstacle sense *n.* Another name for **facial vision*.

obstructive sleep apnoea hypopnoea *n.* A **breathing-related sleep disorder* in **DSM-5* involving **sleep apnoea* or **hypopnoea* in which

*****ebook converter DEMO Watermarks*****

the recurrent episodes of breathing cessation or diminution during sleep are associated with obstruction to the upper airway and are followed by loud snores or gasps as breathing resumes. Sleep is unrefreshing and the condition is accompanied by daytime sleepiness or ***hypersomnia**. US *obstructive sleep apnea hypopnea*. Compare CENTRAL SLEEP APNOEA, PICKWICKIAN SYNDROME. **OSAH** abbrev.

obstruent *n.* A ***consonant** involving substantial obstruction of the airstream through the ***vocal tract**. All ***plosives**, ***fricatives**, and ***affricates** are obstruents; ***nasals** (2) and ***approximants** are not. [From Latin *obstruere* to obstruct, from *ob* in the way of + *struere* to pile up]

Occam's razor *n.* A variant spelling of ***Ockham's razor**. The latter spelling is preferable, because the village in Surrey, England, from which its name is derived is called Ockham, believed to derive from *ock* an oak, and *ham* a village or hamlet.

occipital *adj.* Of or relating to the back of the head, which is called the occiput. [From Latin *ob* against + *caput* the head]

occipital bone *n.* The saucer-shaped bone that forms the back of the skull.

occipital lobe *n.* The ***lobe** at the back of each cerebral hemisphere, separated on its lateral or outer surface from the parietal lobe and temporal lobe by an imaginary line from the top of the ***parieto-occipital sulcus** to the ***pre-occipital notch** and on its medial surface by the ***parieto-occipital sulcus**. It is devoted almost entirely to vision and contains the ***primary visual cortex** (Area V1) in the gyri on both sides of the ***calcarine sulcus**. See also LOBE.

occupational health psychology *n.* A field of ***applied psychology**, at the interface of ***occupational psychology** and ***health psychology**, concerned with the application of psychology to improving the quality of work experience and with the protection and promotion of the health, safety, and well-being of people in work. It emerged as an independent field in the late 1990s. **OHP** abbrev.

*****ebook converter DEMO Watermarks*****

occupational interest inventory *n.* Any questionnaire designed to measure respondents' likes and dislikes for the types of activities involved in different jobs. See [KUDER PREFERENCE RECORD](#), [STRONG–CAMPBELL INTEREST INVENTORY](#), [STRONG VOCATIONAL INTEREST BLANK](#). See also [ALLPORT–VERNON–LINDZEY STUDY OF VALUES](#), [INTEREST INVENTORY](#).

Occupational Personality Questionnaire *n.* A *self-report questionnaire designed to measure personality and motivational characteristics relevant to work situations in the areas of relationships with people, thinking style, feelings and emotions, and social desirability. It was developed in 1984 by the British psychologists Peter Saville (born 1946) and Roger Holdsworth (1935–2011) and colleagues and adapted for use in the US and other countries. **OPQ** *abbrev.*

occupational psychology *n.* A field of applied psychology in which the results of psychological research are applied to all problems related to people in work and unemployment, including vocational guidance and selection, problems of work motivation and job satisfaction, absenteeism, design and implementation of training courses, teaching of social and human relations skills, improvement of promotion structures, evaluation of job performance, and problems of safety and welfare. Its major branches are *personnel psychology, *ergonomics or human factors psychology, and *organizational psychology. It corresponds roughly to *industrial/organizational psychology, the term usually preferred in the US, and it falls under the umbrella of *work psychology. See also [OCCUPATIONAL HEALTH PSYCHOLOGY](#).

occupational therapy *n.* A method of treating a *mental disorder or a *general medical condition by a programme of useful or productive work. **OT** *abbrev.*

oceanic feeling *n.* In *psychoanalysis, a term suggested by the French novelist, dramatist, and essayist Romain Rolland (1866–1944) to Sigmund Freud (1856–1939), who discussed it as a basis of religion in his book *Civilization and its Discontents* (1930, *Standard Edition*, XXI, pp. 64–145 at pp. 64–5, 72). It is a transcendental sense of a limitless and indissoluble bond between oneself and the external world that Freud believed to underlie
*****ebook converter DEMO Watermarks*****

religious sentiments (which he could not discover in himself). *See also* [PEAK EXPERIENCE](#).

Ockham's razor *n.* The principle of economy of explanation according to which entities (usually interpreted as assumptions) should not be multiplied beyond necessity (*Entia non sunt multiplicanda praeter necessitatem*), and hence simple explanations should be preferred to more complex ones. Another version of the principle attributed to Ockham is that 'What can be explained by the assumption of fewer things is vainly explained by the assumption of more things'. Because it is useful in so many fields, the English psychologist Richard L(angton) Gregory (1923–2010) referred to it in 1999 as an 'eclectic razor'. Also spelt *Occam's razor*. *See also* [LLOYD MORGAN'S CANON](#). [Named after the English philosopher William of Ockham (?1285–?1349), so called because he was born in the English village of Ockham, near Guildford, Surrey, perhaps the most influential of the later medieval philosophers, although the words attributed to him are not found in any of his surviving works]

ocnophil *n.* A person who avoids dangerous or unfamiliar situations and tends to lean on other people and objects for security when feeling threatened. *Compare* [PHILOBAT](#). [From Greek *oknos* hesitation, from *oknein* to hesitate + *philos* loving, from *phileein* to love]

octave *n.* The interval between two tones, one of which is twice the frequency or pitch of the other; also, a name for all the tones contained within that interval. An octave contains twelve **semitones*. [From Latin *octavus* eighth, from *octo* eight]

ocular apraxia *See* [APRAXIA](#).

ocular convergence *n.* The turning inwards of the eyes in order to fixate an object or image that is closer than the previous fixation point, also called simply *convergence*. It is one of two binocular cues of visual **depth perception*, in which kinaesthetic information about the degree of ocular convergence indicates the distance of objects being fixated. *See also* [ACCOMMODATION REFLEX](#), [HOROPTER](#), [OCULOMOTOR CUE](#), [REDUCTION SCREEN](#), [VERGENCE](#). *Compare* [OCULAR DIVERGENCE](#). [From Latin *convergere* to bend

*****ebook converter DEMO Watermarks*****

together, from *con-* together + *vergere* to incline]

ocular divergence *n.* The turning outwards of the eyes in order to fixate an object or image that is further away than the previous fixation point, also called simply *divergence*. See also [HOROPTER](#), [VERGENCE](#). Compare [OCULAR CONVERGENCE](#). [From Latin *divergere* to move apart, from *di-* apart + *vergere* to incline]

ocular dominance *n.* The degree to which a [*binocular](#) cell located in the [*visual cortex](#) and receiving inputs from both eyes responds primarily to one eye or the other, usually measured on a seven-point scale in which 1 indicates responsivity to inputs from the left eye only, 4 indicates equal responsivity to inputs from both eyes, and 7 indicates receptivity to inputs from the right eye only. See also [OCULAR-DOMINANCE COLUMN](#).

ocular-dominance column *n.* Any of the alternating slabs of cells perpendicular to the surface of the [*primary visual cortex](#) (Area V1), approximately half a millimetre wide and extending through all six cortical layers, appearing after special staining procedures as orderly stripes, with all the cells in a slab responding mainly to inputs from the same eye, and in layer 4C, which receives inputs directly from the [*lateral geniculate nuclei](#), responding only to inputs from the dominant eye for that particular slab. The anatomical basis of this alternation is that each axon from the lateral geniculate nucleus, after ascending through the deep layers of the cortex, terminates in layer 4C in two or three half-millimetre wide clusters of synaptic endings, such clusters being separated by half-millimetre gaps that are occupied by clusters of synaptic endings of axons from the other eye, resulting in an orderly alternation of left and right dominance columns. Also called an *eye-dominance column*. See also [OCULAR DOMINANCE](#). Compare [ORIENTATION COLUMN](#).

ocular drift *n.* One of the forms of [*physiological nystagmus](#), consisting of a random movement of the eyes through a [*visual angle](#) of up to 5 minutes of arc (sixtieths of a degree). Such movements occur while an observer fixates an object and are necessary to prevent the visual image from disappearing, as an artificially [*stabilized retinal image](#) does after about a second. See also [MICROSACCADE](#), [OCULAR TREMOR](#).

*****ebook converter DEMO Watermarks*****

ocular nystagmus *n.* Another name for **nystagmus*.

ocular pursuit movement *n.* Another name for a **pursuit movement*.

ocular tremor *n.* One of the forms of **physiological nystagmus*, consisting of a continuous high-frequency **tremor* with a frequency between about 60 and 120 hertz and an amplitude of about 30 seconds of arc (1/120 of a degree) that is present when the gaze is fixated on a stationary object or image. *See also* *MICROSACCADE*, *OCULAR DRIFT*.

oculogyral illusion *n.* A visual illusion of motion that arises when a person's body rotates in darkness together with a small light rotating at the same velocity as the body. The impression is created of the light moving horizontally with respect to the body, as adaptation of the **vestibular system* causes the person to underestimate the velocity of the body's rotation. [From Latin *oculus* the eye + *gyrus* a circle + *-alis* of or relating to]

oculomotor apraxia *See* *APRAXIA*.

oculomotor cue *n.* **Kinaesthetic* information about **ocular convergence* received from the **extra-ocular muscles* of the eyes, providing a **cue* (2) for visual **depth perception*. [From Latin *oculus* the eye + *motor* a mover, from *movere*, *motus* to move]

oculomotor nerve *n.* Either of the third pair of **cranial nerves*, arising from the **superior* colliculus and supplying some of the **extra-ocular muscles*, the ciliary muscles that increase the convexity of the lens for **near vision*, and the sphincter muscle of the **pupil*. Paralysis of this nerve causes pupil dilation and divergent squint. *See also* *ARGYLL ROBERTSON PUPIL*, *PTOSIS*. [From Latin *oculus* the eye + *motor* a mover, from *movere* to move]

oddity problem *n.* A discrimination task in which an organism learns to select from a set of stimuli the one that differs from all of the others. It was first used in psychology in an experiment carried out by the US psychologist Andrew Janeway Kinnaman (1863–1928) and reported in the *American Journal of Psychology* in 1902 in which food was hidden in a coloured

beaker and presented to macaque monkeys among four grey beakers carefully matched for brightness with the coloured beaker, and the monkeys learned to choose the coloured beakers quickly and easily, which established their ability to perceive colours. See also [DIMENSION-ABSTRACTED ODDITY](#), [GENERALIZED ODDITY PROBLEM](#).

odd-one-out test *n.* A type of [*intelligence](#) test item or subtest in which the respondent has to choose which of several alternatives is the odd one out. A typical (difficult) example is: *Which of the following is the odd one out? DET, DIS, EOJ, EOZ, NEK.* Although various choices could be justified, the 'correct' answer to this item is *EOZ*, because this is an abbreviated female name written backwards, and all the others are abbreviated male names written backwards.

odor See [ODOUR](#).

odorimetry *n.* The measurement of the characteristics of [*odours](#). Also called *olfactometry*. See also [CROCKER–HENDERSON SYSTEM](#), [HENNING'S PRISM](#), [OLFACTIE](#), [STEREOCHEMICAL THEORY](#), [ZWAARDEMAKER OLFACTOMETER](#), [ZWAARDEMAKER SMELL SYSTEM](#).

odour *n.* The property of an aromatic substance associated with its characteristic smell, scent, fragrance, or aroma, perceived through the [*olfactory receptors](#) in the [*nose](#). US *odor*. See [OLFACTION](#). See also [CROCKER–HENDERSON SYSTEM](#), [CROSS-ADAPTATION](#), [FLAVOUR](#), [HENNING'S PRISM](#), [MIXTURE SUPPRESSION](#), [ODORIMETRY](#), [ODOUR ADAPTATION](#), [ODOUR CONSTANCY](#), [ODOUR HALLUCINATION](#), [STEREOCHEMICAL THEORY](#), [ZWAARDEMAKER SMELL SYSTEM](#). [From Latin *odor* a smell or odour]

odour adaptation *n.* A temporary reduction in sensitivity to an odour following prolonged exposure to it, the phenomenon that causes workers in noisome factories to be oblivious of the stench, except for a short while after they first arrive for work, and that makes people in general insensitive to their own body odours. US *odor adaptation*.

odour constancy *n.* The tendency for the perceived intensity of an odour to remain the same despite differences in the volume of air being
*****ebook converter DEMO Watermarks*****

drawn into the nose and therefore the amount of stimulation of the olfactory receptors. US *odor constancy*. See also [PERCEPTUAL CONSTANCY](#).

odour hallucination *n.* An odour experienced in the absence of any [*olfactory](#) stimulus, often a symptom of a neurological disorder. US *odor hallucination*. See also [HALLUCINATION](#).

odour prism *n.* Another name for [*Henning's prism](#). US *odor prism*.

odour square *n.* Another name for the [*Crocker–Henderson system](#). US *odor square*.

Oedipal phase *n.* Another name for the [*phallic stage](#), during which the [*Oedipus complex](#) is assumed to develop. According to Sigmund Freud (1856–1939), girls develop [*penis](#) envy during this phase.

Oedipus complex *n.* In [*psychoanalysis](#), an organized collection of loving and hostile feelings of a child towards its parents, reaching its peak during the [*phallic stage](#) between 3 and 5 or 6 years of age, dissolving with the onset of the [*latency](#) period, and then re-emerging during the [*genital stage](#), after which it is mastered with greater or lesser success through mature [*object-choices](#). It manifests itself in its *positive* form as a sexual desire for the opposite-sex parent and a jealous hatred of the same-sex parent, in its *negative* (or *inverted*) form as a desire for the same-sex parent and hatred of the opposite-sex parent, and in its *complete* form as a blend of the positive and negative forms. Sigmund Freud (1856–1939) introduced the term in 1910 in an article entitled ‘A Special Type of Choice of Object Made by Men’ (*Standard Edition*, XI, pp. 165–75, at p. 171), and in a note added in 1920 to his book *Three Essays on the Theory of Sexuality* (1905) he asserted the universality of the complex: ‘Every new arrival on this planet is faced with the task of mastering the Oedipus complex’ (*Standard Edition*, VII, pp. 130–243, at p. 226n); but he never fully clarified his views regarding the nature of the complex in girls, and in an article on ‘Female Sexuality’ in 1931, he wrote: ‘It is only in the male child that we find the fateful combination of love for one parent and simultaneous hatred for the other as a rival’ (*Standard Edition*, XXI, pp. 225–43, at p. 229). The British-based Austrian psychoanalyst Melanie Klein (1882–1960) deviated from Freud in dating the

*****ebook converter DEMO Watermarks*****

onset of the complex to the first year of life. *See also* [CASTRATION COMPLEX](#), [COMPLEX \(2\)](#), [ELECTRA COMPLEX](#), [FATHER COMPLEX](#), [MOTHER COMPLEX](#), [PHALLUS](#), [SUPEREGO](#). *Compare* [JOCASTA COMPLEX](#), [ORESTES COMPLEX](#). [Named after the Greek legendary figure Oedipus, who killed his father Laius, married his mother Jocasta, and then blinded himself when the truth about his parenthood emerged, as recounted most famously in the play *Oedipus Rex* by Sophocles]

Oedipus effect *n.* In psychology and the social sciences, the effect of a prediction on the predicted event, the prediction either causing or preventing the event that it predicts, or more generally the influence of an item of information on the situation to which the information refers. The term was coined by the Austrian-born British philosopher Karl R(aimund) Popper (1902–94) in his book *The Poverty of Historicism* (Chapter 1, section 5, p. 13) in 1957, based on a journal article in 1944, and from it he deduced that ‘*exact and detailed* scientific social predictions are therefore impossible’ (1957, p. 14, italics in original). *See* [SELF-DEFEATING PROPHECY](#), [SELF-FULFILLING PROPHECY](#). *See also* [EXPERIMENTER EXPECTANCY EFFECT](#), [PYGMALION EFFECT](#), [UNEXPECTED HANGING PARADOX](#). [So called because the Greek legendary figure Oedipus killed his father, whom he had never seen before, as a direct result of the prophecy that had caused his father to abandon him]

oesophagus *n.* The section of the [*alimentary](#) canal between the [*pharynx](#) and the [*stomach](#). US *esophagus*. Also called the *gullet*. [From Greek *oisein* to be carried, from *pherein* to carry + *phagein* to eat]

oestradiol *n.* A potent [*oestrogenic](#) [*steroid](#) [*sex](#) hormone secreted by the [*ovaries](#), a synthetic form of which is used to treat oestrogen deficiency, especially in menopausal women, and breast cancer. US *estradiol*. *Compare* [OESTRONE](#). [From Latin *oestrus* a gadfly or frenzy + English *diol* a compound containing two hydroxyl groups, from Greek *dis* twice + English *-ol* denoting a compound containing a hydroxyl group, from (*alcoh*)*ol*]

oestrogen *n.* Any of a group of steroid hormones that are secreted by the ovaries during the female [*oestrous cycle](#) and that stimulate the development of female [*secondary sexual characteristics](#). US *estrogen*, *estrogenic*. *See also* [DHEA](#), [STILBOESTROL](#). *Compare* [TESTOSTERONE](#). **oestrogenic** *adj.* [From Latin *oestrus* a gadfly or frenzy, from Greek *oistros* a gadfly + Greek *genes*

*****ebook converter DEMO Watermarks*****

born or produced]

oestrone *n.* An **oestrogenic* hormone secreted by the ovaries and found in the urine of pregnant females, having similar action and uses to **oestradiol*. US *estrone*. [From Latin *oestrus* a gadfly or frenzy + *-one* indicating a ketone, from Greek *-one* a feminine name suffix]

oestrous cycle *n.* The **feedback*-controlled cycle of changes in the reproductive organs of many female mammals, consisting of a **follicular phase* and a **luteal phase*. It includes the menstrual cycle in women (and many female **anthropoid* apes), in whom there is also a **menstrual phase*. The anterior pituitary initially releases **follicle-stimulating hormone*; this causes the ovary to produce **oestrogen*; the oestrogen acts on the hypothalamus to inhibit further release of follicle-stimulating hormone and to stimulate the release of **luteinizing hormone* instead by the anterior pituitary; this hormone triggers **ovulation* and causes the ovary to produce **progesterone*; when this hormone reaches the hypothalamus it inhibits further release of luteinizing hormone, thereby completing the cycle. US *estrous cycle*. See also *MENSTRUAL CYCLE*, *PHEROMONE*. [From Latin *oestrus* a gadfly or frenzy, from Greek *oistros* a gadfly + *kyklos* a circle or cycle]

oestrus *n.* The cyclically recurring period of fertility and sexual receptivity associated with the **oestrous cycle* in most female mammals. In humans, fertility fluctuates but the effect on receptivity is a matter of controversy. US *estrus*. [From Latin *oestrus* a gadfly or frenzy, from Greek *oistros* a gadfly]

off-centre cell *n.* A type of retinal **ganglion* cell having a **centre-surround receptive field* consisting of a central OFF area, in which stimulation tends to suppress neural responses by **lateral* inhibition, and a surrounding ON area, in which stimulation tends to excite neural responses, so that the strongest response occurs when only the surrounding ring is stimulated. US *off-center cell*. Compare *ON-CENTRE CELL*.

offender counselling *n.* A form of **counselling* offered to people with criminal convictions. US *offender counseling*.

Ohm's acoustic law *n.* The proposition that the human auditory system
*****ebook converter DEMO Watermarks*****

responds to a complex sound by generating sensations of the separate components of the sound rather than a sensation of a single integrated sound; thus when we listen to an orchestra we hear the separate instruments although the ears receive only a single complex sound wave. *See also* [FOURIER ANALYSIS](#). [Named after the German physicist Georg Simon Ohm (1784–1854) who formulated it in 1843]

olan *See* [LATAH](#).

olanzapine *n.* An [*atypical antipsychotic](#) drug that blocks both [*dopamine](#) receptors and (more strongly) [*serotonin](#) receptors in the brain and is used in the treatment of [*schizophrenia](#) and other [*psychotic \(1\)](#) disorders. *See also* [DOPAMINE ANTAGONIST](#). Also called Zyprexa (trademark).

old woman/young girl figure *n.* Another name for the [*young girl/old woman figure](#).

olfactie *n.* In [*psychophysics](#), the smallest unit of odour intensity that can be detected reliably, expressed in terms of the tube length in the [*Zwaardemaker olfactometer](#). *See also* [DIFFERENCE THRESHOLD](#), [ODORIMETRY](#).

olfaction *n.* The sense of smell or the act or process of smelling, occurring when molecules of an aromatic substance are drawn into the upper nasal cavity and are captured by [*olfactory receptor](#) neurons that are specialized for specific kinds of [*odours](#) and that respond by generating nerve impulses and transmitting them to the [*olfactory bulbs](#), the type or types of activated neurons indicating the quality of the odour and the number of activated neurons indicating its intensity, the input pattern being analysed in the olfactory bulbs and transmitted directly to the [*olfactory cortex](#) and the [*amygdala](#), and from there to the [*entorhinal cortex](#), where information from disparate sensory receptors is integrated. It is more effective than any other sense in reawakening memories from the distant past, especially the emotions associated with past experiences, though the literary passage most often cited in support of this phenomenon, quoted under [*redintegration](#), actually refers to taste rather than smell. *See* [CHEMORECEPTOR](#), [OLFACTORY BULB](#), [OLFACTORY CORTEX](#), [OLFACTORY EPITHELIUM](#), [OLFACTORY LOBE](#), [OLFACTORY NERVE](#), [OLFACTORY TRACT](#), [RHINENCEPHALON](#). *See also* [CROCKER–HENDERSON SYSTEM](#), [CROSS-*****ebook converter DEMO Watermarks*****](#)

ADAPTATION, FLAVOUR, HENNING'S PRISM, MIXTURE SUPPRESSION, NOSE, ODORIMETRY, ODOUR, ODOUR ADAPTATION, ODOUR CONSTANCY, ODOUR HALLUCINATION, OLFACTORY ACUITY, OSMORECEPTOR (1), PAROSMIA, PHEROMONE, STEREOCHEMICAL THEORY, VOMERONASAL ORGAN, ZWAARDEMAKER SMELL SYSTEM.
olfactory *adj.* Of or relating to the sense of smell. [From Latin *olfacere* to smell, from *olere* to smell + *facere*, *factum* to make + *-ion* indicating an action, process, or state]

olfactology *n.* The study of smells and of **olfaction*.

olfactometry *n.* The measurement of **olfactory acuity* and of the characteristics of odours. Also called *odorimetry*.

olfactory acuity *n.* Keenness or sharpness of the sense of smell. See OLFACTION, ACUITY.

olfactory bulb *n.* The slightly enlarged front end of the **olfactory tract*, resembling a match head projecting from the front lower margin of each cerebral hemisphere, receiving nerve impulses from the olfactory receptors and sending impulses via the **olfactory nerve* directly to the **olfactory cortex* and the **amygdala*, unique among sensory pathways in bypassing the thalamus entirely. See also OLFACTION.

olfactory cortex *n.* The **piriform cortex* in the anterior temporal lobes and the hippocampal convolution, concerned mainly with the sense of smell, connected directly to the **amygdala*, which controls the experience and expression of emotion, and the **hippocampus*, which is responsible for the **consolidation* of long-term memory. See also OLFACTION.

olfactory epithelium *n.* The **mucous membrane* in the upper nasal cavity where the **olfactory receptors* are situated. Also called the *nasal epithelium*. See also OLFACTION.

olfactory lobe *n.* Another name for the rhinencephalon, part of the forebrain in each cerebral hemisphere containing the **olfactory bulb*, **olfactory tract*, and **olfactory cortex*, concerned largely with the sense of

smell, but in humans also with **emotions*. See also OLFACTION.

olfactory nerve *n.* Either of the first pair of **cranial nerves*, supplying the organ of smell and unusual among sensory pathways in being connected via the **olfactory tract* directly to the brain from the **olfactory bulb*. See also OLFACTION.

olfactory receptor *n.* A type of **sensory* receptor that is associated with **olfaction* and that responds to aromatic substances drawn into the upper nasal cavity, where molecules bind to **bipolar* neurons in the **olfactory epithelium*, specialized for specific kinds of **odours*, whose **axons* are part of the **olfactory nerve*, and the bipolar neurons respond by generating nerve impulses and transmitting them to the **olfactory bulbs*. Also called an *osmoreceptor*, though that usage is ambiguous.

olfactory tract *n.* A band of nerve fibres clearly visible on the bottom of each cerebral hemisphere, resembling a long matchstick extending back from the **olfactory bulb* to the **olfactory cortex* and the **amygdala*. See also OLFACTION.

oligodendrocyte *n.* A type of **neuroglial* cell with few **dendrites* and few branches, responsible for wrapping **myelin* sheaths around **axons* in the **central nervous system*. Also called *oligodendroglia*. Compare SCHWANN CELL. [From Greek *oligos* few or little + *dendron* a tree + *kytos* a vessel]

oligophrenia *n.* An old-fashioned term for **intellectual disability*. See also PHENYLPYRUVIC OLIGOPHRENIA. [From Greek *oligos* little or few + *phren* mind, originally midriff, the supposed seat of the soul + *-ia* indicating a condition or quality]

olivary nucleus See INFERIOR OLIVARY NUCLEUS, SUPERIOR OLIVARY NUCLEUS.

ololiuqui *n.* A **psychedelic* and **hallucinogenic* drug obtained from the seeds of the **morning glory* plant *Rivea corymbosa*. [From Nahuatl *ololiuhqui* one that covers, from *ololoa* to cover, alluding to the fact that the plant is a clinging vine]

omega process *n.* In **psychoanalysis*, a term used by Sigmund Freud (1856–1939) to denote any function of the **perception–consciousness system*. Also called a *W process* or a *Pcpt–Cs process*.

ommatidium *n.* Any of the simple eyes that make up the **compound eye* of insects and some crustaceans, consisting typically of an external corneal lens beneath which is a crystalline **cone* and a fourfold **rod* called a *rhabdom* attached to a **photoreceptor* and enclosed in a dark pigment. *Compare* *EYE*. **ommatidia** *pl.* [Latin *ommatidium*, from Greek *ommatidion*, from *omma* an eye]

omnivore *n.* An animal that eats both flesh and plants; more generally, a person or animal with indiscriminate eating habits. *Compare* *CARNIVORE*, *HERBIVORE*. **omnivorous** *adj.* [From Latin *omnis* all + *vorare* to devour]

onanism *n.* Another name for **coitus interruptus* or (less correctly) **masturbation*. [Named after Onan in *Genesis* 38:9 who deliberately spilled his seed on the ground when having intercourse with his brother's wife]

on-centre cell *n.* A type of retinal **ganglion* cell having a **centre-surround receptive field* consisting of a central ON area, in which stimulation tends to excite neural responses, and a surrounding OFF area, in which stimulation tends to suppress neural responses by **lateral* inhibition, so that the strongest response occurs when only the central region is stimulated. US *on-center cell*. *Compare* *OFF-CENTRE CELL*.

Ondine's curse *n.* A rare genetic disorder of the **central nervous system* leading to failure of automatic breathing control while asleep, with normal breathing while awake. The term was first used in an article in the journal *Clinical Research* in 1962 by the US anaesthesiologist John W(endell) Severinghaus (born 1922) and a colleague, alluding to the play *Ondine* (1939) by the French dramatist (Hippolyte) Jean Giraudoux (1882–1944), in which Ondine's unfaithful husband develops a condition in which his body stops performing automatic functions, although Ondine does not curse him or wish him harm. Near the beginning of the play (I.vi), Ondine says: 'I will be your shoes, my husband, I will be your breath'; and near the end (III.vi), as

he approaches death, he describes his condition: 'Since you went away, everything that my body used to do by itself I have to command it to do.... If I stop concentrating for a moment, I shall forget to hear, to breathe.' A gene responsible for the disorder, named Thox2B, was discovered by French researchers in 2003. Also called *obesity hypoventilation syndrome* (*OHS*). Compare CENTRAL SLEEP APNOEA, OBSTRUCTIVE SLEEP APNOEA HYPOPNOEA. [From *ondine*, a water nymph, from Germanic and Scandinavian mythology (spelt *Undine*), from Latin *undina* a water-spirit, from *unda* a wave]

one-group pretest-posttest design *n.* One of the most frequently used *quasi-experimental research designs in which a single group of research participants or subjects is pretested, given some treatment or *independent variable manipulation, then posttested. If the pretest and posttest scores differ significantly, then the difference may be attributed to the independent variable, but because the research design is not strictly experimental and there is no control group, this inference is uncertain, and the difference may be due to *extraneous variables such as *order effects or *regression towards the mean. See also INTERRUPTED TIME-SERIES DESIGN, NON-EQUIVALENT GROUPS DESIGN.

oneiric *adj.* Of or relating to dreams. **oneirocritic** *n.* A dream-interpreter. **oneirocriticism** *n.* Dream interpretation. **oneirodynia** *n.* Troubled sleep. **oneiromancy** *n.* Divination through dream-interpretation. **oneiroscopy** *n.* Examination of dreams. [From Greek *oneiros* a dream]

oneirophrenia *n.* A dreamlike state of consciousness. Also called *oneirism*. [From Greek *oneiros* a dream + *phren* mind, originally midriff, the supposed seat of the soul + *-ia* indicating a condition or quality]

one-sample t test *n.* In statistics, a version of the *related scores *t* test to evaluate the significance of the departure of the mean of a single sample of scores from some specified value. See also *T TEST*.

1-tailed probability *n.* In *inferential statistics, the probability of obtaining a result as extreme as the one observed, and in the same direction, if the *null hypothesis is true. If the probability is small (by convention, often less than $p < .05$), then the null hypothesis may be rejected. Compare 2-

*****ebook converter DEMO Watermarks*****

TAILED PROBABILITY. [The name refers to one tail of the relevant **probability* distribution]

1-tailed test *n.* In **inferential statistics*, a test of the significance of a departure from the **null hypothesis* in one direction only, so that a departure in the opposite direction, no matter how large, is attributed to chance. In a *2-tailed test*, a departure from the null hypothesis in either direction results in its rejection. Also called a *directional test*. See also **1-TAILED PROBABILITY**.

one-way analysis of variance See **ANALYSIS OF VARIANCE (ANOVA)**.

one-way screen *n.* A sheet of glass or other transparent material that both reflects and transmits light. If the area on one side of the screen is brightly lit and the area on the other dimmed, then it is possible to see through the screen from the dimmed side but not from the bright side. This device is used for research in which it is useful to be able to observe people without being observed. If the screen is made of half-silvered glass, then it is often called a *one-way mirror*.

ongoing time disparity *n.* Another name for **phase* delay. Also called *ongoing disparity*.

online counselling See **ONLINE THERAPY**.

online therapy *n.* Psychotherapy conducted over the internet by e-mail, video phone, or internet phone. Also called *e-counselling* (US *e-counseling*) or *e-therapy*. [From *online* + Greek *therapeuein* to heal or take care of, from *theraps* an attendant]

onomastics *n.* The study or science of names and naming. It is usually divided into *anthroponomastics*, the study of personal names, and *toponomastics* or *toponymy*, the study of place names, but onomastics is often interpreted loosely as the study of personal names. [From Greek *onoma* name]

onomatopoeic theory *n.* A theory of the origins of language,

according to which words originated as imitations of natural sounds in the environment. US *onomatopoeic theory*. Also (dismissively) called the *bow-wow theory* or *ding-dong theory*. [From *onomatopoeia* the formation of words that are imitative of the sounds of the concepts designated]

ontogeny *n.* The sequence of development of an individual organism as distinguished from the evolution of a **species* or other **taxonomic* group. Also called *ontogenesis*. Compare *PHYLOGENY*. **ontogenetic** or **ontogenic** *adj.* [From Greek *on*, *ontos* being, present participle of *einai* to be + *genes* born]

ontology *n.* The branch of metaphysics devoted to the study of the nature of being or existence or the essence of things, including the distinction between reality and appearance and whether mathematical entities exist outside of people's minds. [From Greek *on*, *ontos*, the present participle of *einai* to be + *logos* word, discourse, or reason]

onychophagia *n.* Nail biting. [From Greek *onyx*, *onychos* a nail or claw + *phagein* to consume + *-ia* indicating a condition or quality]

open-ended question *n.* A question framed in such a way as to encourage a full expression of an opinion rather than merely a yes/no answer or otherwise constrained response. An open-ended question allows the respondent to answer freely, without having to select an answer from a predetermined set or **response* categories. Such questions are commonplace in **qualitative research*, although responses to them present formidable problems of data analysis. In interviews or informal conversations, open-ended questions such as *What do you feel about X?* are more effective than **closed questions* in initiating interactions or encouraging discussion. Also called an *open question*.

open-field test *n.* A procedure for measuring the activity of a rat or other small animal by placing it in an enclosed area of floor space, divided into squares, and counting the number of squares that it crosses in a specified time period.

open-loop control *n.* In **cybernetics*, a control process in which there is no **feedback* of the system's output to its input, such control being
*****ebook converter DEMO Watermarks*****

characteristic of **ballistic movements*, **action slips*, and some forms of **automatic processing*. *Compare* CLOSED-LOOP CONTROL.

openness to experience *n.* One of the **Big Five* personality factors, characterized at the one extreme by such **traits* as imagination, curiosity, and creativity, and at the other by shallowness and imperceptiveness. Also called *intellect*. *See also* BETA PERSONALITY FACTOR, GENERAL FACTOR OF PERSONALITY.

open node *n.* A **node* (2) that is awaiting processing. *Compare* CLOSED NODE.

open study *n.* A research design in which both the experimenter and the research participants or subjects know the purpose of the study and which experimental treatment has been applied to which individuals. *Compare* DOUBLE-BLIND STUDY, SINGLE-BLIND STUDY.

open vowel *n.* A **vowel* (see the diagram accompanying that entry) produced at a low position in the mouth with the tongue low in the mouth and the jaw lowered, such as the vowels in *father* and *lot*, or the first element of the **diphthongs* in *price* and *mouth*, which is the same as the vowel in the German *Mann*. Also called a *low vowel*. *Compare* CLOSE VOWEL, MID VOWEL.

operant *n.* Any **response* by an organism that is not directly caused by a **stimulus* (7) but is freely **emitted behaviour*.

operant conditioning *n.* One of the two major forms of **conditioning* (1), the **learning* (1) process whereby the relative frequency of a **response* increases as a result of reward or **reinforcement* (1) that is contingent on the response being emitted. Also called *instrumental learning*, *respondent conditioning*, or *Skinnerian conditioning*. *See also* APPLIED BEHAVIOURAL ANALYSIS, AVOIDANCE CONDITIONING, BEHAVIOURISM, CUMULATIVE RECORD, ESCAPE CONDITIONING, REINFORCEMENT SCHEDULE, SECONDARY REINFORCEMENT, SHAPING (1), SKINNER BOX.

operating characteristic *See* MEMORY OPERATING CHARACTERISTIC, RECEIVER OPERATING CHARACTERISTIC.

operation See MENTAL OPERATION.

operational definition *n.* A definition of a concept couched in terms of the operations or procedures by which it may be observed, measured, or distinguished from other things, a standard example being ‘intelligence is what intelligence tests measure’. See also OPERATIONALISM.

operationalism *n.* A largely abandoned doctrine of *logical positivism, propounded by the US philosopher of science Percy Williams Bridgman (1882–1961) in his book *The Logic of Modern Physics* (1927), according to which concepts derive their meaning solely from the operations through which they are observed so that, for example, intelligence is defined as whatever intelligence tests measure. Also called *operationism*. See also OPERATIONAL DEFINITION. **operationalistic** *adj.* Of or relating to operationalism. **operationalize** *vb.* To make operational or to formulate an *operational definition of something.

operational research *n.* A mathematically based approach to corporate decision making using techniques of optimization, dynamic programming, control theory, computer simulation, and statistical analysis. The term was coined and the technique introduced during the Second World War when scientific planning and management of military operations were first implemented. Also (especially in the US) called *operations research*. See also MONTE CARLO METHOD. **OR** *abbrev.*

operational stage *n.* A general term for *concrete operations and *formal operations.

operator (gene) See GENE OPERATOR.

operatory stage *n.* Another name for an *operational stage. See CONCRETE OPERATIONS, FORMAL OPERATIONS.

operculum *n.* Any outer covering or lid of a structure in a living organism, such as one of the flaps covering the gill slits in a fish, and especially the parietal operculum and the temporal operculum that are the

upper and lower lips of the ***lateral** sulcus in each cerebral hemisphere of the brain. **opercula** or **operculum** *pl.* [From Latin *operculum* a lid, from *operire* to cover]

operon *n.* A group of adjacent ***structural genes** that are transcribed into a single molecule of ***RNA** and that function as a unit under the control of a single ***gene** operator. [From *operate*, on the model of *codon*]

ophthalmic *adj.* Of or relating to the ***eye**. **ophthalmologist** *n.* A medical practitioner specializing in disorders of the ***eye**. **ophthalmology** *n.* The branch of medicine concerned with disorders of the ***eye**. **ophthalmoscope** *n.* An instrument for examining the interior of the ***eye**, comprising a light, a mirror perforated by a hole through which the examiner looks, and a rotating disc for positioning lenses of varying strengths in front of the hole. [From Greek *ophthalmos* an eyeball, from *op(sethai)* to see + *thal(a)m(os)* an inner room or chamber, from *thalos* a vault + *-ik(os)* of, relating to, or resembling]

ophthalmoplegia *n.* Paralysis of the ***extra-ocular muscles**. Compare DIPLEGIA, HEMIPLEGIA, MONOPLEGIA, PARAPLEGIA, QUADRIPEGIA, TRIPLEGIA. **ophthalmoplegic** *adj.* [From Greek *ophthalmos* an eye + *plege* a blow + *-ia* indicating a condition or quality]

opiate *n.* Any of a group of chemical substances that contain ***opium** or an ***alkaloid** of opium and that tend to have ***narcotic** effects and are sometimes used as ***analgesics** (1), ***anaesthetics** (1), or cough suppressants. Also called *opioids*, especially when referring to the ***endogenous opioids** produced naturally in the brain. See HEROIN, MORPHINE. See also NUCLEUS ACCUMBENS, OPIOID ANTAGONIST, OPIOID-RELATED DISORDERS. [From Latin *opium* poppy juice, from Greek *opion* diminutive of *opos* sap]

opinion *n.* A ***proposition** (1) that is accepted as true without compelling grounds, therefore falling short of being a ***belief** and far short of constituting ***knowledge**. **opine** *vb.*

opinion leader *n.* An individual belonging to a small minority in any community who tend to respond to messages in the mass media and to have a disproportionate effect on public opinion and behaviour through face-to-face
*****ebook converter DEMO Watermarks*****

communication with many friends, relatives, and acquaintances and by setting behavioural examples. See [TWO-STEP FLOW](#).

opioid See [OPIATE](#).

opioid antagonist *n.* Any drug such as [*nalorphine](#), [*naloxone](#), or [*naltrexone](#) that binds to the neuroreceptor sites of the [*opiates](#) in the central nervous system and thereby blocks their action. Also called a *narcotic antagonist*. See also [ANTAGONIST \(3\)](#).

opioid-related disorders *n.* [*Substance-related and addictive disorders](#) in [*DSM-5](#) induced by consuming [*opiates](#) or opioids, including natural opiates such as [*morphine](#), semi-synthetic compounds such as [*heroin](#), and fully synthetic compounds with morphine-like effects such as [*codeine](#), [*methadone](#), and [*meperidine](#). DSM-5 distinguishes between opioid use disorder, opioid intoxication, and opioid withdrawal. See also [SUBSTANCE ABUSE](#), [SUBSTANCE DEPENDENCE](#), [SUBSTANCE-INDUCED DISORDERS](#), [SUBSTANCE-RELATED AND ADDICTIVE DISORDERS](#), [SUBSTANCE USE DISORDERS](#).

opium *n.* A [*narcotic](#) drug extracted as a bitter-tasting, yellow–brown milky juice from the unripe seed pods of the opium poppy *Papaver somniferum*, containing [*alkaloids](#) such as [*morphine](#) and [*codeine](#), used medicinally to induce [*analgesia](#), also smoked as an intoxicant with euphoric effects, often leading to [*dependence \(2\)](#). See also [DOVER’S POWDER](#), [LAUDANUM](#), [OPIATES](#), [OPIOID-RELATED DISORDERS](#), [PAREGORIC](#), [SUBSTANCE DEPENDENCE](#). [From Latin *opium* poppy juice, from Greek *opion* diminutive of *opos* vegetable juice or sap]

Oppel illusion *n.* Another name for the [*filled-space illusion](#). [Named after the German physicist Johann Joseph Oppel (1815–94) who first reported it in 1860–61]

Oppel–Kundt illusion *n.* Another name for the [*filled-space illusion](#). Also called the *Oppel illusion*. [So called because it was first described in 1860–61 by the German physicist Johann Joseph Oppel (1815–94) and further investigated in 1863 by the German physicist August Adolph Eduard Eberhardt Kundt (1838–94)]

*****ebook converter DEMO Watermarks*****

opponent cell *n.* A type of neuron in the *lateral geniculate nucleus that responds maximally to light of one particular range of wavelengths and is maximally inhibited by light of a different range of wavelengths. Also called an *opponent neuron*. Compare NON-OPPONENT CELL. [From Latin *opponere* to oppose, from *ob* against + *ponere* to place]

opponent-process theory *n.* The theory of colour vision put forward by the German psychologist and physiologist Ewald Hering (1834–1918), or any of its more recent variants, according to which there are three classes of bipolar *photoreceptors or visual *afferent neurons responding to white versus black, red versus green, and blue versus yellow differences in visible light. Physiological research has shown this theory to be essentially correct for stages of the visual system after the initial receptor stage, whereas the *trichromatic theory, according to which colour vision depends on three types of receptors responsive to the *primary colours (1), is essentially correct at the receptor level. Also called the *tetrachromatic theory*. See also ACHROMATIC SYSTEM, BLUE–YELLOW CELL, RED–GREEN CELL.

opportunity sample *n.* A *non-probability sample comprising a pre-existing serviceable group, such as the children on a school outing or the patients on a hospital ward. See also ACCIDENTAL SAMPLE, CONVENIENCE SAMPLE, QUOTA SAMPLE, SELF-SELECTED SAMPLE, SNOWBALL SAMPLE. Compare CLUSTER SAMPLE, PROBABILITY SAMPLE, RANDOM DIGIT DIALLING, SIMPLE RANDOM SAMPLE, STRATIFIED RANDOM SAMPLE.

opposites test *n.* Another name for an *antonym test.

oppositional defiant disorder *n.* In *DSM-5, a *disruptive, impulse-control, and conduct disorder of childhood characterized by recurrent negativistic, defiant, disobedient, or hostile behaviour towards authority figures, including such signs and symptoms as temper tantrums, arguing with adults, actively defying rules, deliberately annoying people, unfairly blaming others for mistakes or misbehaviour, being touchy or easily annoyed, angry, resentful, spiteful, or vindictive, with the pattern of behaviour leading to significant impairment in social, academic, or occupational functioning. Compare DISRUPTIVE MOOD DYSREGULATION DISORDER, INTERMITTENT EXPLOSIVE DISORDER. **ODD** abbrev.

*****ebook converter DEMO Watermarks*****

opsin *n.* A protein that is one of the two constituents of ***rhodopsin**. See also **RETINENE**. [A ***back formation** from *rhodopsin*, as if it were the opsin of the r(h)ods]

optacon *n.* An electronic aid for blind people that transforms a pattern of light-intensity differences into a pattern of vibrations that can be felt by the fingertips, making possible such activities as reading printed text. Compare **BRILLE**, **OPTOHAPT**. [Coined from Greek *optikon* neuter of *optikos* of or relating to vision, modified to avoid *opticon*, a word already in use for an enlargement of the optic lobe in an insect brain associated with its compound eye]

optic agnosia See **AGNOSIA**.

optical character recognition *n.* The process whereby a device called an *optical character reader* scans printed characters, or occasionally and less successfully handwriting, performs some form of ***template matching** to identify letters, numbers, or other characters, and inputs the information to a computer or other storage system. See also **PANDEMONIUM (1)**. **OCR** *abbrev.*

optical flow *n.* The instantaneous velocity of points in a retinal image or visual field, resulting either from movements of objects or images in the visual field or from movements of the head or eyes. Also called *optic flow*.

optical illusion *n.* Another name for a ***visual illusion**.

optic apraxia See **APRAXIA**.

optic ataxia *n.* A form of ***ataxia** involving a selective inability to integrate information about the position of an object from ***proprioceptive** information about the position of one's hand or arm. See **BÁLINT'S SYNDROME**. [From Greek *a-* without + *taxis* order + *-ia* indicating a condition or quality]

optic chiasm *n.* An area at the bottom of the brain immediately below

the hypothalamus where ***decussation** (partial decussation in humans and other animals with forward-pointing eyes and therefore overlapping visual fields) of the ***optic nerve** fibres occurs, with approximately half the fibres from each eye (the fibres from the ***nasal** retina of each eye) crossing over to the opposite ***cerebral** hemisphere. The effect of this is that images from the left visual field of both eyes are transmitted to the right cerebral hemisphere and images from the right visual field to the left cerebral hemisphere, enabling information from corresponding points in the visual fields of the eyes to come together in the visual cortex for binocular depth perception. In animals such as rabbits with much smaller overlap of visual fields, almost all the fibres are crossed. Also called the *optic chiasma*. See also **BINOCULAR CELL**. [From Greek *optikos* optic, from *optos* seen + *chiasma* a cross, named after the shape of the upper-case letter chi (X)]

optic disc *n.* Another name for the ***blind spot (1)**. US *optic disk*.

optic nerve *n.* Either of the second pair of ***cranial nerves**, carrying the entire output of the visual receptors in the retina, consisting of the axons of retinal ***ganglion** cells, passing through the ***optic chiasm** and terminating chiefly in one of the ***lateral** geniculate nuclei. Some fibres of the optic nerve terminate in the ***suprachiasmatic nucleus** of the hypothalamus, which is implicated in the control of biological rhythms, and some travel by the ***pretectal pathway** and terminate in the pretectal nuclei. See also **OPTIC TRACT**.

optic radiation *n.* A fibre of the visual system projecting from the ***lateral** geniculate nucleus to the ***visual cortex**.

optic tectum *n.* Part of the ***tectum** at the base of the pons in the roof of the midbrain containing the two ***superior** colliculi involved in visual orienting and localizing behaviour. [From Greek *optikos* optic, from *optos* seen + Latin *tectum* a roof or canopy]

optic tract *n.* The part of each ***optic nerve** between the ***optic chiasm** and the ***lateral** geniculate nucleus. See also **OPTIC RADIATION**, **TECTAL PATHWAY**.

optimal foraging *n.* Searching for food using strategies that are most efficient or cost-effective in terms of minimizing metabolic energy or
*****ebook converter DEMO Watermarks*****

maximizing **Darwinian fitness*, a phenomenon that has been demonstrated empirically in various species of animals although it is not a necessary prediction of the theory of evolution by **natural selection*, which does not require that optimality ever be attained.

optimal movement *n.* A form of **apparent movement*, indistinguishable from real movement, that occurs when two visual stimuli a few centimetres apart are presented in an alternating pattern with an interstimulus interval too long for the stimuli to appear simultaneous or for **partial movement* to occur but not long enough for **phi movement* or the disappearance of apparent movement and the veridical perception of the stimuli simply alternating. In optimal movement, a single stimulus appears to move smoothly and continuously back and forth across the space between the two actual stimuli. Also called *beta movement*, *stroboscopic movement*, or *optimal motion*. Often misleadingly called the *phi phenomenon*, a term that in careful usage is reserved for the phenomenon of **phi movement*. See also KORTE'S LAWS.

optimism, unrealistic See UNREALISTIC OPTIMISM.

optional stopping *n.* In sequential data collection, halting the process in the light of the data collected up to that point, as when a researcher continues collecting scores just until the data support the hypothesis under investigation. This procedure is unacceptable, and it undermines the validity of any statistical tests that are later performed on the data.

optogram *n.* An image fixed or imprinted on the retina by the photochemical action of light on **rhodopsin*. [From Greek *optikos* of or relating to vision, from *optos* seen, from *ops* an eye + *gramme* a line]

optohapt *n.* An electronic device for blind people that converts printed text into vibrations that are transmitted to various locations on the body. Also called an *optophone*. Compare BRAILLE, OPTACON, TELETACTOR (for deaf people). [Named by the US psychologist Frank A(rthur) Geldard (1904–84) who, with several colleagues, developed it in 1966, from Greek *optos* seen, from *ops* an eye + *haptēin* to touch]

optokinetic nystagmus *n.* A form of **nystagmus* characterized by smooth tracking movements of the eyes interspersed with **saccades*, enabling an object or image moving across the visual field to be perceived more or less continuously. **OKN** *abbrev.* [From Greek *optos* seen + *kinetikos* of or relating to motion, from *kineein* to move + *nystagmos* nystagmus, from *nystazein* to nap]

oral *adj.* Of or relating to the mouth, or expressed in spoken rather than written form (as in an *oral agreement* or an *oral examination*). Compare **PARENTERAL**. [From Latin *os, oris* the mouth]

oral-aggressive character *n.* In **psychoanalysis*, a personality type resulting from **fixation* (2) at the **oral* sadistic phase and **sublimation* of the impulses of that phase in later life. It is characterized by aggressiveness, exploitativeness, ambition, and envy. Also called an *oral-aggressive personality*.

oral apraxia *n.* A syndrome characterized by a reduced ability or inability to produce, on command, voluntary movements of the mouth, such as sticking the tongue out or opening the mouth, although these movements may be produced without difficulty in natural circumstances such as eating and drinking. See also **APRAXIA**. [From Latin *os, oris* the mouth]

oral character *n.* In **psychoanalysis*, a personality pattern determined by **fixation* (2) in early childhood at the **oral* stage, such a person being extremely dependent on others for maintenance of self-esteem and tending to relieve stress and depression by eating, drinking, talking, or smoking. Also called the *oral personality* or *oral-passive character*. See also **ORAL-AGGRESSIVE CHARACTER**, **ORAL DEPENDENCE**.

oral dependence *n.* In **psychoanalysis*, marked reliance on other people resulting from **fixation* (2) at the **oral* stage.

oral erotism *n.* In **psychoanalysis*, sensuous pleasure derived from stimulation of the mouth and lips by kissing, smoking, eating, drinking, talking, engaging in **fellatio* or **cunnilingus*, or playing a wind instrument,

and focusing of **libido* on the mouth during the **oral* stage. Also called *oral eroticism*. **oral-erotic** *adj.*

oral-incorporative phase *n.* Another name for the **early oral phase*.

oral-passive character *n.* Another name for the **oral* character. Also called the *oral-passive personality*.

oral primacy *n.* In **psychoanalysis*, the phenomenon of **libido* being focused first on the mouth and lips.

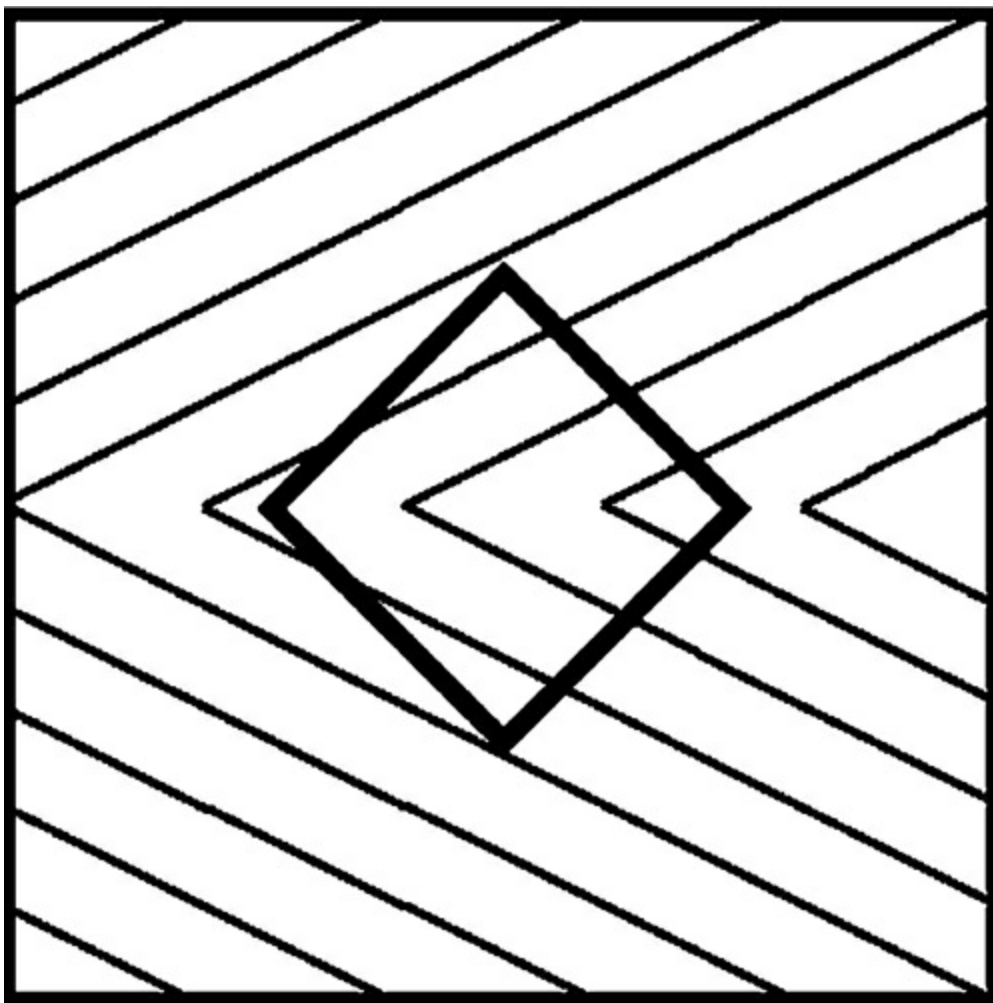
oral sadistic phase *n.* The second of the two phases of the **oral* stage, corresponding to the teething period, according to a subdivision suggested in 1924 by the German psychoanalyst Karl Abraham (1877–1925) in his book *Versuch einer Entwicklungsgeschichte der Libido* (A Study of the Developmental History of the Libido). It is characterized by biting, in contrast to the **early oral phase*, which is characterized by sucking. In a chapter in a co-authored book *Developments in Psycho-Analysis* in 1952, the British-based Austrian psychoanalyst Melanie Klein (1882–1960) rejected Abraham's distinction between the early sucking and later biting phases of the oral stage, and she declared the oral stage to be sadistic from the start: 'aggression forms part of the infant's earliest relation to the breast, though it is not usually expressed in biting at [the early] stage'. Also called the *oral sadistic stage* or the *cannibalistic stage*. See also [ORAL-AGGRESSIVE CHARACTER](#).

oral stage *n.* In **psychoanalysis*, the first **libidinal stage* of **psychosexual development*, occupying the first year of life, during which **libido* is focused on the mouth and lips, as they are stimulated during feeding, through which the **object-relationship* is expressed, the loving relationship towards the mother being experienced through ideas of eating and being eaten. During this stage, the **instinctual source* is the oral zone, the **instinctual object* is food, and the **instinctual aim* is **incorporation*. Sigmund Freud (1856–1939) had not developed this concept when the first edition of his book *Three Essays on the Theory of Sexuality* appeared in 1905, but the revised edition of 1915 included a full and detailed exposition of the theory. See [EARLY ORAL PHASE](#), [ORAL SADISTIC PHASE](#). See also [ANAL STAGE](#),

*****ebook converter DEMO Watermarks*****

GENITAL STAGE, LATENCY PERIOD, ORAL—AGGRESSIVE CHARACTER, ORAL CHARACTER, PHALLIC STAGE, POLYMORPHOUS PERVERSITY. Also called the *oral phase*.

Orbison illusion *n.* A visual illusion caused by overlaying a simple geometric figure such as a circle or a square on a pattern of concentric circles or radiating lines, the effect being to distort the apparent shape of the figure (see [illustration](#)). It is closely related to [*Ehrenstein's square illusion](#) and the [*Ponzo illusion](#). [Named after US psychologist William Dillard Orbison (1911–52) who first drew attention to it in 1939]



Orbison illusion. The inner square and the bounding square both appear distorted.

orbitofrontal cortex *n.* The area of the [*prefrontal cortex](#) at the base of the anterior frontal lobes. [From Latin *orbis* a circle, alluding to the bony

*****ebook converter DEMO Watermarks*****

cavities of the eye sockets]

order *n.* **1.** An arrangement or sequence of objects or elements; or an established or customary social system or structure, especially a social hierarchy. **2.** A command or instruction issued by a person in a position of authority over another. **3.** In biology, a **taxonomic* group into which a **class* (2) is divided, containing one or more **families* (2). Thus the class of Mammalia (mammals) includes the orders Carnivora and Primates, each of which is divided into families. [From Latin *ordo* an order]

ordered recall *n.* A test of **short-term memory* in which the respondent is presented with a sequence of items, usually numbers, and then tries to repeat them back in the same order. The **Wechsler scales* include both ordered recall and **backward span* subtests.

order effect *n.* In research methods, any **extraneous variable* arising from the serial order in which the procedures are administered or the measurements taken, for example fatigue (which may lead to a decline in performance on later measurements) or learning and practice (which may lead to improved performance on later measurement). *See also* COUNTERBALANCING (1), LATIN SQUARE, ONE-GROUP PRETEST–POSTTEST DESIGN.

ordinal scale *n.* A scale of measurement in which data are arranged in order of magnitude but there is no standard measure of degrees of difference between them, for example a ranking of tennis players. *See also* MEASUREMENT LEVEL, RANK, SCALE (1), UNFOLDING TECHNIQUE. *Compare* ABSOLUTE SCALE, INTERVAL SCALE, LOG-INTERVAL SCALE, NOMINAL SCALE, RATIO SCALE. [From Latin *ordinalis* of the order in a sequence, from *ordo* a row or order]

orectic *adj.* Of or relating to appetite or desire. **orexis** *n.* Appetite or desire. [From Greek *orexis* appetite, from *oregein* to reach for]

Orestes complex *n.* In **psychoanalysis*, a son's desire to kill his mother. *Compare* OEDIPUS COMPLEX. [Named after Orestes in Greek mythology, the son of Agamemnon and Clytemnestra, who killed his mother and her lover in revenge for the murder of his father]

organelle *n.* A specialized structure such as a [*mitochondrion](#), having a particular function or group of functions within a cell. [From Latin *organella* a little organ, diminutive of *organum* an organ]

organ erotism *n.* In [*psychoanalysis](#), the focusing of [*libido](#) in specific organs at different stages or phases of development. Also called *organ eroticism* or *organ libido*. See [ANAL EROTISM](#), [ORAL EROTISM](#), [PHALLIC EROTISM](#), [URETHRAL EROTISM](#).

organic affective disorders *n.* Another name for organic [*mood disorders](#). See [ORGANIC DISORDERS](#).

organic brain syndrome *n.* Another name for an [*organic disorder](#). **OBS** *abbrev.*

organic disorders *n.* Disorders involving a physical [*lesion](#) in an organ or body part. An organic mental disorder is one involving disease, dysfunction, or damage affecting the brain, arising from a primary brain disorder or injury, a disorder in another part of the body with secondary effects in the brain, or the effects of a toxic substance. Included in this category are various forms of [*dementia](#), [*cerebral arteriosclerosis](#), organic [*affective disorders](#), organic [*anxiety disorder](#), organic [*catatonic disorder](#), organic [*delusional disorder](#), organic [*dissociative disorder](#), [*organic hallucinosis](#), organic [*mood disorder](#), organic [*personality disorder](#), [*postencephalitic syndrome](#), [*postconcussional disorder](#), [*traumatic brain injury](#). Also called *organic brain syndromes (OBS)*. [From Greek *organikos* of or pertaining to an organ, from *organon* an implement, or an organ from *ergein* to work]

organic hallucinosis *n.* A [*mental disorder](#) of persistent or recurrent [*hallucinations](#) occurring in clear consciousness, sometimes not recognized by the hallucinator as such, arising as a consequence of an [*organic disorder](#). See also [ALCOHOL HALLUCINOSIS](#), [HALLUCINOSIS](#).

organic mental disorders See [ORGANIC DISORDERS](#). Compare [PSYCHOGENESIS](#).

organism *n.* Any living thing, including a human or other animal, a plant, a fungus, a protist, a bacterium, or a virus. *See also* [KINGDOM \(2\)](#). [From *organize*]

organizational psychology *n.* The field of applied psychology devoted to the structures and functions of organizations and the activities of the people within them. It is applied not only in industrial organizations, but also in schools, hospitals, prisons, military units, and other non-industrial organizations. It focuses on such psychological problems as job satisfaction, employee attitudes and motivation, and their effects on absenteeism, labour turnover, and organizational productivity and efficiency. *See also* [INDUSTRIAL/ORGANIZATIONAL PSYCHOLOGY](#).

organization, Gestalt principle of *n.* Another name for a Gestalt *grouping law.

organized crime *n.* 1. A crime that is premeditated and carefully planned, usually leaving little forensic evidence at the crime scene, perpetrated by an offender who knows right from wrong and tends to lack remorse. It is contrasted with a *disorganized crime* that is usually unplanned, often leaves forensic evidence at the scene, and tends to be perpetrated by an offender who is young, under the influence of alcohol or drugs, often remorseful, and sometimes mentally disordered. The distinction was first drawn in the late 1970s by the Behavioral Science Unit that was set up by the FBI in 1974 to study serial homicide and rape cases. More recent research suggested that serial offenders tend to resemble one another in the organized aspects of their behaviour and differ most strikingly in the disorganized aspects. *See also* [CRIMINAL PROFILING](#). 2. Crime that is planned and carried out systematically and on a large scale; also a collective label for the people who perpetrate this kind of crime. [From French *organiser* to give structure to, from Latin *organizare* to accompany on the organ, from *organum* an organ + *-izare* from Greek *-izein* to cause to become]

organ libido *n.* Another name for *organ erotism.

organ neurosis *n.* A term used in *psychoanalysis to denote a

*psychosomatic disorder.

organ of Corti *n.* A spiral structure within the *cochlea of the inner ear, containing the *basilar membrane in which are situated *hair cells that convert sound waves into nerve impulses. Also called *Corti's organ*. [Named after the Italian anatomist Alfonso Corti (1822–76) who was the first to describe the structure of the inner ear in detail in 1851]

organ of Golgi *n.* Another name for a *Golgi tendon organ. [Named after the Italian cytologist Camillo Golgi (1843–1926) who gave the first complete description of it in 1880]

organophosphate *n.* Any of a group of *anticholinesterase compounds used as insecticides and pesticides that cause irreversible suppression of *cholinesterase. Also called an *organophosphorus compound*. See also NERVE GAS, ORGANOPHOSPHATE POISONING. **OP** abbrev. [From *organo-* indicating a compound containing an organic group + *phosphate*]

organophosphate poisoning *n.* A condition resulting from exposure to *organophosphates, with signs and symptoms such as amnesia, anxiety, depression, aphasia, and asthenia. See also GULF WAR SYNDROME, NERVE GAS. Compare CHRONIC FATIGUE SYNDROME.

organum vasculosum lamina terminalis *n.* A structure bordering the third *ventricle of the brain, believed to contain receptors for *angiotensin II and thus to play a part in *hypovolaemic thirst. **OVL** abbrev. [Latin: vascular organ end plate]

orgasm *n.* The culminating phase of the *sexual response cycle in which sexual pleasure reaches a peak with release of tension and rhythmic contraction of the *perineal muscles and sex organs, accompanied in the male by a sensation of ejaculatory inevitability followed by *ejaculation (1) of semen and contraction of the anal sphincter, and in the female by contractions of the wall of the *vagina and the anal sphincter. See also DE-REFLECTION, DELAYED EJACULATION, FEMALE ORGASMIC DISORDER, IMPOTENCE (2), ORGASMATRON, ORGASMIC DYSFUNCTION DEVICE, ORGONE THERAPY, PERSISTENT SEXUAL AROUSAL SYNDROME, PREMATURE (EARLY) EJACULATION, REFRACTORY PERIOD, SEXUAL
*****ebook converter DEMO Watermarks*****

DYSFUNCTIONS, SEXUAL RESPONSE CYCLE. **orgasmic** *adj.* Of or relating to an orgasm. **orgasmic phase** *n.* The third phase of the *sexual response cycle, when orgasm occurs. [From Greek *orgasmos* a swelling]

orgasmatron *n.* A facetious name for an *orgasmic dysfunction device, inspired by an orgasm-inducing contraption in the film *Sleeper* (1973) directed by the US film director Woody Allen (born 1935). *See also* **ORGASMIC DYSFUNCTION DEVICE**, **ORGONE THERAPY** [From Greek *orgasmos* a swelling + *-tron* denoting an instrument, from *arotron* a plough]

orgasmic dysfunction device *n.* An electrical *spinal cord stimulator used to induce *orgasm in women with *orgasmic dysfunctions. In 1998, the US anaesthesiologist T. Stuart Meloy (born 1958) stumbled on a mid-spinal area associated with orgasmic response while implanting electrodes under local anaesthetic in the spine of a female patient to relieve chronic back pain. When he placed the electrodes in a particular position, she exclaimed: 'You're going to have to teach my husband how to do that.' Also (facetiously) called an *orgasmatron*.

orgasmic dysfunctions *n.* Another name for *female orgasmic disorder, *delayed ejaculation, and *premature (early) ejaculation. Also called *orgasm disorders* or *orgasmic disorders*. *See also* **IMPOTENCE** (2).

orgasmic impotence *See* **IMPOTENCE** (2).

orgone therapy *n.* A form of *psychotherapy and a treatment for cancer and other physical ailments devised by the Austrian (later US-based) psychiatrist Wilhelm Reich (1897–1957), first described briefly though not named in his book *The Function of the Orgasm* (1942), then more fully in *The Cancer Biopathy* (1948) and *Character Analysis* (3rd ed., 1949). Physical orgone therapy involved an orgone accumulator or box designed to concentrate naturally occurring orgone energy believed to permeate the atmosphere. Reich believed that orgasms regulate bio-energy levels and were necessary for maintenance of mental and physical health. Also called *Reichian therapy*. *See also* **BODY THERAPIES**. [Coined as a blend of *org(asm)* and (*horm*)one]

orientation column *n.* A slender slab, extending through the full thickness of the **primary visual cortex* (Area V1), consisting of cells that are selectively responsive to stimuli oriented at a particular angle in their **receptive fields*, the specific angle changing from one orientation column to the next by a regular amount of 10 degrees clockwise or anticlockwise for every horizontal movement of 0.05 millimetre, or a full circuit of 180 degrees per millimetre (approximately). With appropriate biochemical staining, orientation columns in the primary visual cortex of an organism being stimulated by parallel stripes oriented at a particular angle show up as a complex but regular configuration of 1-millimetre stripes unrelated to the pattern of **ocular-dominance columns*.

orientation-specific cell *n.* A general term for a **simple cell*, **complex cell*, or **hypercomplex cell* that responds selectively to stimuli oriented at a specific angle in its **receptive field*. Also called an *orientation-selective cell*. See also *TWISTED-CORD ILLUSION*.

orienting response *n.* The characteristic behavioural and physiological **response* to a novel or potentially threatening stimulus, including focusing attention on the source of the stimulus, turning the head and body towards it, and arousal of the **reticular activating system* and the **sympathetic nervous system*. Also called the *orienting reaction* or *orienting reflex*. See also *TASK-POSITIVE NETWORK*. [From Latin *oriens*, *orientis* rising, present participle of *oriri* to rise]

orphan drug *n.* A potentially useful drug that the major pharmaceutical companies are unwilling to market or promote, typical examples being **inositol*, **lithium carbonate*, and **St John's wort*, none of which can be patented because they occur naturally.

orthodromic *adj.* Of or relating to a nerve impulse conducted in the normal direction, from the axon hillock towards the axon terminal. Compare *ANTIDROMIC*. [From Greek *orthos* right + *dromos* a course or run + *-ikos* of, relating to, or resembling]

orthographic agraphia See *AGRAPHIA*.

orthography *n.* **1.** Correct spelling or the principles underlying spelling. Compare *CACOGRAPHY*. **2.** A system of writing. [From Greek *orthos* straight, right + *graphein* to write]

orthomolecular therapy *n.* An approach to the treatment of **mental disorders* based on the doctrine that every disorder can be alleviated with a specific chemical substance. The approach was developed by the Nobel prizewinning US chemist Linus (Carl) Pauling (1901–94). Also called *megavitamin therapy*, *orthomolecular psychiatry*, *vitamin therapy*. [From Greek *orthos* right + English *molecular*]

orthopsychiatry *n.* An approach to **psychiatry* that emphasizes preventive techniques and collaboration between psychiatry, psychology, social work, and other behavioural, social, and clinical sciences. [From Greek *orthos* right + English *psychiatry*]

oscillating figure *n.* Another name for an **ambiguous figure*.

oscillopsia *n.* Chaotic eye movements occurring involuntarily and causing perceived objects to appear to sway or bounce about. [From Latin *oscillare* to swing, from *oscillum* a swing + Greek *opsis* sight, from *ops* an eye + *-ia* indicating a condition or quality]

osmometric thirst *n.* Another name for **intracellular* thirst. [From *osmosis* + Greek *metron* a measure]

osmoreceptor *n.* **1.** Another name for an **olfactory receptor*. **2.** A type of neuron located primarily in the **preoptic nuclei* at the front of the hypothalamus, sensitive to cellular dehydration, able to signal changes in **osmotic pressure*, triggering **intracellular* thirst, and also monitoring concentrations of substances in the blood and regulating the secretion of **vasopressin*. [A blend of Greek *osme* a smell (sense 1) or English *osmosis* (sense 2) + English *receptor*]

osmosis *n.* The diffusion of a solvent such as water across a **semipermeable membrane* from the side where the solution is less

concentrated to the side where it is more concentrated until the concentration and the ***osmotic pressure** on both sides is equalized. *See also* **CELL MEMBRANE**. *Compare* **DIALYSIS**. **osmotic** *adj.* [From Greek *osmos* thrust or impulse + *-osis* indicating a process or state]

osmotic pressure *n.* The pressure exerted by a solution through the motion of its molecules, measured according to the pressure required to prevent ***osmosis** of the pure solvent into it. *See also* **HYPERTONIC (2)**, **HYPOTONIC (2)**, **ISOTONIC (2)**, **OSMORECEPTOR (2)**, **SODIUM PUMP**.

osmotic thirst *n.* Another name for ***intracellular** thirst.

osphresiologia *n.* A ***paraphilia** characterized by recurrent sexually arousing fantasies, sexual urges, or behaviour involving smells. *See also* **RENIFLEUR**. [From Greek *osphresis* a smell + *lagneia* lust]

osphresis *n.* Another name for ***olfaction**. **osphretic** *adj.* Capable of being smelled. [From Greek *osphresis* sense of smell]

osseous labyrinth *n.* Another name for the ***bony labyrinth**. [From Latin *osseus* bony, from *os* a bone]

ossicle *n.* Any of the three tiny bones in the ***middle ear**, the ***malleus** (hammer), ***incus** (anvil), or ***stapes** (stirrup). [From Latin *ossiculum* a little bone, from *os* a bone]

Othello syndrome *n.* Morbid and irrational jealousy or, if sufficiently severe, ***jealous delusional disorder**. [Named after Shakespeare's play *Othello* and the eponymous character whose sexual jealousy leads him to murder his innocent wife]

other, significant *See* **SIGNIFICANT OTHER**.

otic *adj.* Of or relating to the ear. [From Greek *otikos* of or relating to the ear, from *ous*, *otos* an ear + *-ikos* of, relating to, or resembling]

otitis *n.* Inflammation of the ear, sometimes causing deafness. **otitis externa** *n.* Inflammation of the external canal or the pinna of the outer ear, causing itching, weeping or discharge, and sometimes hearing loss and pain, often related to anxiety or stress. **otitis media** *n.* Inflammation of the middle ear, generally causing hearing loss and pain, a common affliction of childhood. [From Greek *ous* an ear + *-itis* indicating an inflammation]

otoconium *n.* Another name for an ***otolith**. **otoconia** *pl.* [From Greek *ous*, *otos* an ear + *konis*, *konia* ashes, alluding to their appearance when viewed without magnification]

otogenic tone *n.* A ***tone** (1) that is not present in the sound wave entering the ear but is generated by the ear or the auditory system itself. *See also* COMBINATION TONE, MISSING FUNDAMENTAL ILLUSION. [From Greek *ous*, *otos* an ear + *genes* born or produced + *-ikos* of, relating to, or resembling]

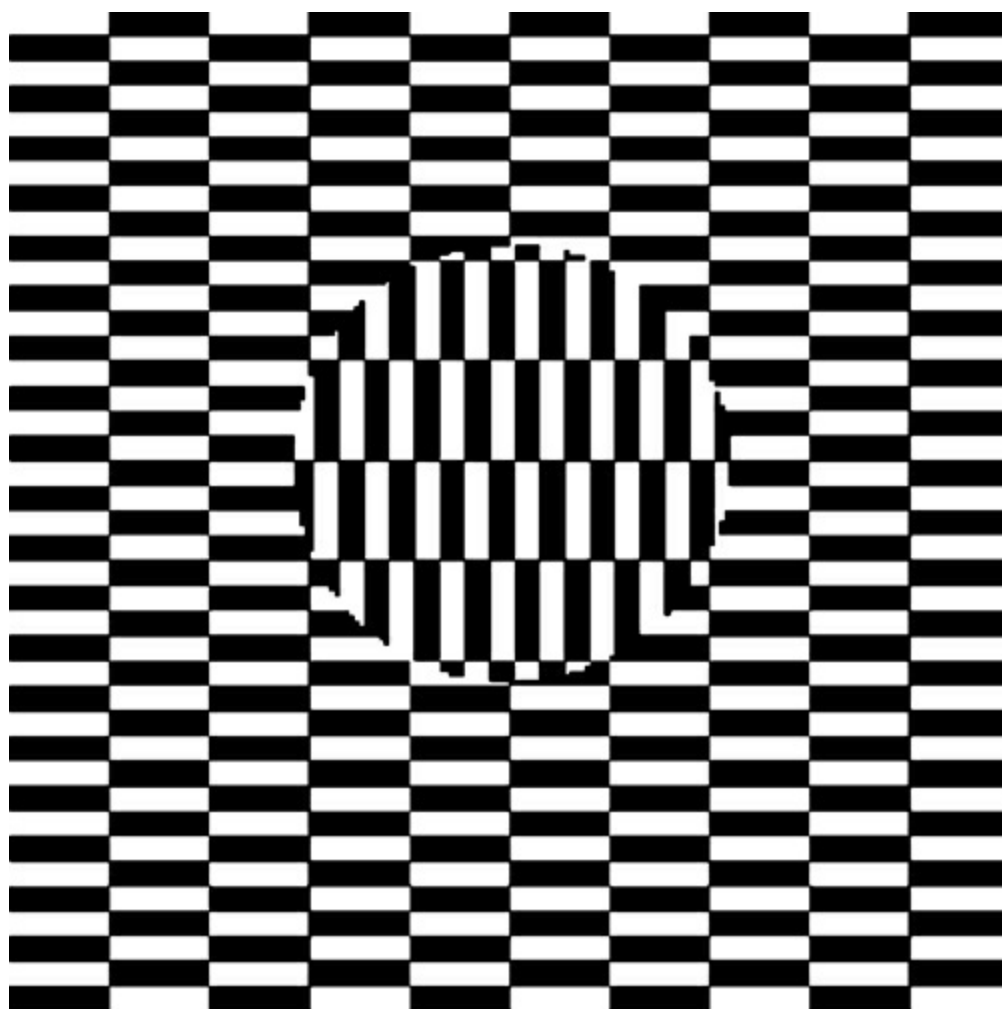
otolith *n.* Any of the tiny crystals of calcium carbonate, with a density of 2.95 grams per cubic centimetre, almost three times the density of water, in the ***utricle** and ***sacculle** within the ***vestibular system** of a vertebrate animal, playing an important part in the vestibular system of the inner ear, responsive to linear acceleration, and partly responsible for the sense of balance and orientation. Linear acceleration of the head causes the ***hair cells** embedded in the *otolith receptor* to move with it, but the dense otoliths resist acceleration and tend to hold the gelatinous membrane stationary, causing the hair cells that protrude into the membrane to bend backwards and trigger adjacent neurons to transmit nerve impulses to the brainstem and cerebellum. The otolith organs are also responsive to gravity, which according to the general theory of relativity formulated by the German-born US physicist Albert Einstein (1879–1955) is equivalent to accelerating an object upwards at 9.8 metres per second squared. Also called a *statolith*. *See also* SACCULE, STATOCYST. *Compare* ENDOLYMPH. [From Greek *ous*, *otos* an ear + *lithos* a stone]

otology *n.* The study of the ear, including prevention, diagnosis, and treatment of its disorders. **otologist** *n.* A physician who specializes in otology. [From Greek *ous*, *otos* an ear + *logos* word, discourse, or reason]

otosclerosis *n.* A hereditary disorder of the middle ear, usually appearing before age 30 years, affecting twice as many women as men and often worsening during pregnancy. When it occurs, parts of the ***bony labyrinth** become irregularly ossified and the ***stapes** (stirrup) becomes immobilized, causing tinnitus and then deafness. [From Greek *ous*, *otos* an ear + *sklerosis* a hardening, from *skleros* hard + *-osis* indicating a process or state]

ototoxic *adj.* Damaging to the ***vestibulocochlear nerve** or the organs of hearing or balance, characteristic of drugs including ***aspirin**, ***quinine**, and many antibiotics if taken in excess. **ototoxic deafness** *n.* Deafness caused by ototoxic drugs. *See also* **SENSORINEURAL DEAFNESS**. [From Greek *ous*, *otos* an ear + *toxikon* arrow-poison, from *toxon* a bow + *-ikos* of, relating to, or resembling]

Ouchi illusion *n.* A visual illusion in which a chequered pattern of small black and white rectangles, containing a circular region in which the rectangles are oriented at right angles to those in the rest of the figure, creates an impression of relative motion when the whole pattern is moved (see **illustration**), the illusion being caused by the excitation of spatially overlapping ON and OFF regions of ***centre-surround receptive fields** of retinal neurons. Also spelt *Ōuchi illusion*. Compare **PINNA-BRELSTAFF ILLUSION**. [Named after the Japanese graphic artist Hajime Ōuchi who first published it in a book of graphic designs in 1973]



Ouchi illusion. An illusion of relative motion, most vividly seen if the image is moved slowly from side to side or in a circle.

Ouija board *n.* A board marked with letters of the alphabet, used in **parapsychology* to spell out answers to questions with a pointer or inverted glass held by the fingertips of a group of participants, the answers supposedly coming from the spirits of dead people. [From French *oui* yes + German *ja* yes]

outbreeding *n.* Producing offspring through mating between parents that are not closely related. Also called *exogamy*.

outer ear *n.* The sound-collecting part of the **ear*, comprising the **pinna*

and the **external auditory canal*, separated from the middle ear by the **tympanic membrane*. Also called the *external ear*. Compare *INNER EAR*, *MIDDLE EAR*.

outer hair cell *n.* Any of approximately 25,000 **hair cells* in the **organ of Corti*, specialized as **transducers* of sound waves into nerve impulses and sensitive to low sound levels, easily damaged by loud noise (over 85 decibels), and probably involved in encoding information about the loudness of sounds. Compare *INNER HAIR CELL*. **OHC** *abbrev.* [So called because they are nearer to the outside of the cochlea than are the inner hair cells]

outer nuclear layer *n.* A stratum of the **retina* containing the cell bodies of the **photoreceptors*. [So called because the nuclei of the rods and cones are situated there]

outer plexiform layer *n.* A thin stratum of the **retina*, separating the middle and outer retinal layers, within which the **photoreceptors* terminate and make synaptic connections with **bipolar* cells and **horizontal cells*. See also *INTERPLEXIFORM CELL*. [From Latin *plexus* a network, from *plectere* to weave]

outlier *n.* In statistics, an extreme score that is widely separated from the rest of the scores and raises the possibility of an error in measurement, recording, or data entry.

out-of-body experience *n.* A form of **depersonalization* characterized by a sense of detachment from one's body and perception of oneself from a distance, usually from above. It is often associated with sleep deprivation, some forms of drug intoxication, or mental disorders such as **schizophrenia* and certain **dissociative disorders*. It is sometimes (and perhaps generally) triggered by **sleep* paralysis. The term was introduced in 1968 by the US journalist and psychic Susy Smith (1911–2001) in the title of her book *Out-of-Body Experiences for the Millions*. See also *NEAR-DEATH EXPERIENCE*. **OBE** or **Oobe** *abbrev.*

out-of-level testing *n.* In psychometrics, administering a test that is designed for a different age of grade level from that of the respondent.

*****ebook converter DEMO Watermarks*****

outplacement counselling *n.* A form of **counselling* offered to people facing redundancy from work. US *outplacement counseling*.

oval window *n.* An opening in the wall of the **middle ear*, leading to the **inner ear*, containing the footplate of the **stapes*, which transmits vibrations to the **cochlea*. Also called the *fenestra ovalis*. See also *ROUND WINDOW*. [So called because of its elliptical shape]

ovarian follicle *n.* Another name for a **Graafian follicle*.

ovary *n.* Either of the two female sex glands or gonads that secrete sex hormones such as **oestrogen*, **progesterone*, and **oestrone* into the bloodstream and release **ova*. Compare *TESTIS*. **ovarian** *adj.* [From Latin *ovarium* an egg-container, from *ovum* an egg]

overanxious disorder *n.* A childhood **anxiety disorder*, not included in the **DSM-5* classification, corresponding to **generalized anxiety disorder* in adults, in which anxiety is focused on such matters as personal appearance, health, and academic or sporting achievement at school.

overattribution bias *n.* Another name for the **fundamental attribution error*.

overconfidence effect *n.* Unwarranted belief in the correctness of one's judgements or beliefs. Many studies have used general knowledge quiz questions to which respondents give answers and also confidence ratings indicating their estimates of their probability of being correct, from 0 per cent certain to 100 per cent certain. Average estimates of probability of being correct—confidence ratings—tend to be much higher than average percentages of responses that turn out actually to be correct. For moderately difficult items, average confidence ratings tend to be around 90 per cent when approximately 65 to 70 per cent of the answers are correct, and to approach 100 per cent when approximately 80 per cent of the answers are correct. **Anchoring and adjustment* may account for the effect, and **hindsight bias* is closely related to it. Research in this area can be traced to 1957 and was revived in the late 1970s following extensive research by the US

psychologists Sarah C. Lichtenstein (born 1933) and Baruch Fischhoff (born 1946). *See also* [DEPRESSIVE REALISM](#), [HARD—EASY EFFECT](#). *Compare* [UNREALISTIC OPTIMISM](#).

overcorrection *n.* Another name for [*hypercorrection](#).

overdetermination *n.* In [*psychoanalysis](#), a characteristic of dreams, symptoms, and other psychological phenomena of manifesting their causative factor more than once or providing more than one outlet for a wish or need. In his book *The Interpretation of Dreams* (1900), Sigmund Freud (1856–1939) described it as follows: ‘Each of the elements of the dream’s content turns out to have been “over-determined”—to have been represented in the dream-thoughts many times over’ (*Standard Edition*, IV–V, at p. 283). Overdetermination is a consequence of [*condensation](#). Also called *multiple determination*. *See also* [OVERINTERPRETATION](#), [PSYCHICAL DETERMINISM](#).
overdetermined *adj.*

overdominance *n.* A phenomenon associated with certain [*heritable *traits](#) in which a [*heterozygote](#) has a phenotype that is more extreme on some measurable dimension than either of the corresponding [*homozygotes](#). Also called *superdominance*. *See also* [DOMINANCE \(GENETIC\)](#). *Compare* [FILIAL REGRESSION](#), [REGRESSION TOWARDS THE MEAN](#).

overextension *n.* The interpretation of a word, usually by a child during the course of language development in the second or third year, to denote more than it normally denotes, as when a child understands the word *daddy* to denote all men, or *cat* to denote all animals. *See also* [CONCEPT FORMATION](#). *Compare* [MISMATCH](#), [OVERGENERALIZATION](#), [UNDEREXTENSION](#).

overflow response *n.* Another name for [*vacuum activity](#).

overgeneralization *n.* In language acquisition, the extension of a grammatical rule beyond its range of applicability in standard usage, as in the use by a child of such formations as *foots* instead of *feet* and *goed* instead of *went*, or in response to a request to behave, *I am being have* instead of *I am behaving*. *Compare* [MISMATCH](#), [OVEREXTENSION](#), [UNDEREXTENSION](#).

overinclusiveness *n.* The use of a concept to encompass too broad a range of items, indicating an inability to preserve conceptual boundaries, so that distantly associated items become incorporated into concepts, making them abstract and obscure. It is characteristic of **thought disorder* in **schizophrenia*.

overinterpretation *n.* Deriving more meaning than the information warrants. In **psychoanalysis*, it denotes an additional **interpretation*, especially of a dream, following one that has already proved to be illuminating, the additional interpretations sometimes being worthwhile and sometimes not. In a key passage in his book *Introductory Lectures on Psycho-Analysis* (1916–17) Sigmund Freud (1856–1939) described it thus: ‘The achievements of condensation can be quite extraordinary. It is sometimes possible by its help to combine two quite different latent trains of thought into one manifest dream, so that one can arrive at what appears to be a sufficient interpretation of a dream and yet in doing so can fail to notice a possible “over-interpretation” ’ (*Standard Edition*, XV–XVI, at p. 173). But in a famous passage in his book *The Interpretation of Dreams* (1900), he wrote: ‘There is often a passage in even the most thoroughly interpreted dream which has to be left obscure; this is because we become aware during the work of interpretation that at that point there is a tangle of dream-thoughts which cannot be unravelled and which moreover adds nothing to our knowledge of the content of the dream. This is the dream’s navel, the spot where it reaches down into the unknown’ (*Standard Edition*, IV–V, at p. 525). See also *OVERDETERMINATION*. **overinterpreted** *adj.*

overjustification *n.* Rewarding a person for performing a task that the person considers adequately rewarded or worth doing for its own sake, often resulting in a reduction in the person’s liking for the task. Also called *oversufficient justification*.

overlearning *n.* Additional learning carried out after a skill has been learned to a high criterion. Although the skill does not improve as a result of overlearning, its long-term retention is generally improved and its vulnerability to distractors such as the **audience effect* is generally reduced, as professional musicians and other performing artists are aware. See also *OVERTRAINING EXTINCTION EFFECT*, *OVERTRAINING REVERSAL EFFECT*. **overlearn** *vb.*

*****ebook converter DEMO Watermarks*****

overregularization *n.* A form of language, sometimes generated by children, in which grammatical rules are extended to irregular cases where they do not apply, leading to expressions such as *I eated my ice cream*. Also called *overregulation*.

overshadowing *n.* In **classical conditioning*, the following phenomenon, first described by the Russian physiologist Ivan Petrovich Pavlov (1849–1936) on page 141 of his book *Conditioned Reflexes* (1927). If a response has been conditioned to a compound **conditioned stimulus (CS)* consisting of two components, one more intense or **salient (1)* than the other, then test trials with each component on its own reveal conditioning to the more salient component but not to the less salient. Although the weaker component functions as an adequate CS when the organism is conditioned with it alone, in a compound with the stronger component it is completely overshadowed. For example, in conditioning a dog to salivate, if one component is a loud bell and the other is a dim light, and if the **unconditioned stimulus* is food, then, after conditioning, only the loud bell presented alone will elicit the conditioned response of salivation. Similar overshadowing, though not always in such an extreme form, occurs in a wide variety of learning processes in both classical and **operant conditioning*. This phenomenon is not directly related to **verbal overshadowing*. **overshadow** *vb.* [Translated from the Russian *zatmevayet* overshadowing or rendering insignificant in comparison]

oversufficient justification *n.* Another name for **overjustification*.

overtone *n.* A component of a **complex* tone, having a frequency that is an integral multiple of the **fundamental frequency*. The *first overtone*, also called the *second harmonic*, has twice the frequency of the fundamental and is therefore an **octave* higher; the *second overtone* or *third harmonic* has three times the frequency of the fundamental; and so on. Also called a *harmonic*. See also *MISSING FUNDAMENTAL ILLUSION*.

overtraining *n.* The continuation of **conditioning (1)* beyond the point at which the organism shows no further increase in response rate. See also *OVERLEARNING*. **overtrain** *vb.*

overtraining extinction effect *n.* The tendency for an animal that has been subjected to **overtraining* to show more rapid **extinction* (2) than one that has not been overtrained. **OEE** *abbrev.*

overtraining reversal effect *n.* The tendency for an animal that has been subjected to **overtraining* and is then presented with a **habit* reversal learning task to learn to reverse its responses more quickly than an animal that has not been overtrained. **ORE** *abbrev.*

overvalued idea *n.* An irrational and sustained belief, not generally accepted by members of the culture or subculture of the person who holds it, falling short of being a **delusion* inasmuch as the person is willing to entertain the possibility of its falsity.

ovulate *vb.* To release an **ovum* from the **ovary*. **ovulation** *n.* See **OESTROUS CYCLE**. [From Latin *ovulum* a little egg, diminutive of *ovum* an egg]

ovum *n.* An unfertilized female gamete or egg. Compare **ZYGOTE**. *ova* *pl.* [From Latin *ovum* an egg]

oxidative metabolism See **OXIDATIVE PHOSPHORYLATION**.

oxidative phosphorylation *n.* The process whereby energy released by oxidation is used to synthesize the energy-storing molecule **ATP*. Also called *oxidative metabolism*. See also **KREBS CYCLE**. [From *oxidation* + *phosphorus*, alluding to the fact that ATP is a phosphate, + *-ation* indicating an action, process, state, condition, or result]

oxycodone *n.* Oxycodone terephthalate, a **narcotic* analgesic that is sometimes used as a street drug. Also called *Percodan* (trademark).

oxymethalone *n.* A synthetic **anabolic steroid* used in the treatment of osteoporosis and anaemia, as well as in stimulating muscle growth in undernourished or underdeveloped patients, and often used by bodybuilders and athletes. Also (more correctly) spelt *oxymethylone*. Formula: $C_{21}H_{32}O_3$. [From its systematic name (17 β -hydr)oxymethyl(ene-17 α -methyl-3-

*****ebook converter DEMO Watermarks*****

androstan)one]

oxymoron *n.* A ***figure of speech** involving the combination of semantically contradictory elements, thus forcing a figurative interpretation, as in Milton's *living death* or, according to some, *British intelligence*.
oxymoronic *adj.* [From Greek *oxys* sharp + *moros* stupid]

oxymorphone *n.* Oxymorphone hydrochloride, a ***narcotic** analgesic drug, prescribed for moderate or severe pain and as a preoperative medication. Also called *Numorphan* (trademark).

oxytocin *n.* A ***hormone** and ***neurotransmitter** alphahypophame (formula: $C_{43}H_{66}N_{12}O_{12}S_2$), with a chemical structure similar to ***vasopressin**, secreted by the ***posterior pituitary** and also manufactured synthetically. In females it is secreted during and after childbirth and in response to sucking of the breast, stimulating lactation and contractions of the muscles of the uterus, and in males it is implicated in the ejaculatory response during sexual activity. It tends to increase social and maternal bonding, in-group trust and empathy, and rejection of outsiders. It was discovered in 1906 by the English pharmacologist Sir Henry Hallett Dale (1875–1968). **OT** abbrev. [From Greek *oxys* sharp + *tokos* birth, alluding to the fact that it induces uterine contractions]



pacemaker neuron *n.* Any of a number of different nerve cells in the autonomic nervous system that trigger regular cyclic activities, such as heartbeat, breathing, and EEG waves. The ***suprachiasmatic nucleus** is thought to have a role in regulating them. *See also* **BIOLOGICAL CLOCK**, **BIOLOGICAL RHYTHM**.

pachymeninx *n.* Another name for the ***dura mater**. [From Greek *pachys* thick + Greek *meninx* a membrane]

Pacinian corpuscle *n.* A type of sensory nerve ending, the size and colour of a grain of rice, attached to the end of a single nerve fibre in the ***skin** and joints, abundantly present along the sides of the fingers, in the palms, and in the joints, sensitive to pressure and vibration. Also called a *Pacinian body*, *Pacini's corpuscle*, or a *Vater–Pacini corpuscle*. *See also* **PALLAESTHESIA**. *Compare* **FREE NERVE ENDING**, **GOLGI TENDON ORGAN**, **MEISSNER'S CORPUSCLE**, **MERKEL CELL**, **RUFFINI CORPUSCLE**. [Named after the Italian anatomist Filippo Pacini (1812–83) who rediscovered it in the fingers in 1835 and gave a full description of it in 1840, although the German anatomist Abraham Vater (1684–1751) had discovered it some time prior to 1741]

Pac-Man *n.* A shape consisting of a circular disc with a missing segment, used as an icon in an electronic computer game in which the player's task is to guide the icon through a maze while devouring other icons and eluding attacks; also, because of its resemblance in shape, the name given to the symbol used at each vertex of a ***Kanizsa triangle** to create illusory contours. Also spelt *PacMan*, *Pacman*, or *pacman*. [Trademark]

paedophilia *n.* A ***paraphilia** characterized by recurrent, intense sexual fantasies, urges, or behaviour involving sexual activity with prepubescent girls or boys. US *pedophilia*. See also **PAEDOPHILIC DISORDER**. Compare **GERONTOPHILIA**. **paedophile** *n.* A person who manifests paedophilia. US *pedophile*. [From Greek *pais*, *paidos* a boy or child + *philos* loving, from *philein* to love + *-ia* indicating a condition or quality]

paedophilic disorder *n.* A ***paraphilic disorder** in ***DSM-5** characterized by intense, recurrent sexual arousal from sexual activity with a child who has not yet reached ***puberty**, or associated fantasies or urges over a period of at least six months. To meet the diagnostic criteria, the individual must either have acted out this behaviour, or the fantasies or urges must have caused marked distress or interpersonal problems. US *pedophilic disorder*. See also **PAEDOPHILIA**.

pagophagia *n.* A form of ***pica** characterized by the eating of ice. [From Greek *pagos* ice + *phagein* to consume + *-ia* indicating a condition or quality]

pain *n.* An unpleasant sensation usually caused by noxious stimulation of sensory nerve endings, defined in the *Classification of Nursing Diagnoses* of the North American Nursing Diagnosis Association as a state in which severe discomfort or an unpleasant sensation is experienced and signalled by the following: verbal and non-verbal communication, including self-protective behaviour; narrowed attentional focus evidenced by altered time perspective, social withdrawal, or impaired thought processes; distraction behaviour such as moaning, crying, pacing, restlessness; a facial expression of pain characterized by dull and lustreless eyes, a beaten appearance, and fixed or scattered facial movements or grimaces; alteration of muscle tone ranging from listlessness to rigidity; and autonomic responses such as increased blood pressure and pulse rate, pupil dilation, and increased or decreased respiration rate. See **ACUTE PAIN**, **ANALGESIA**, **CHRONIC PAIN**, **COLD PRESSOR PAIN**, **ISCHAEMIC PAIN**, **PAIN RECEPTOR**, **REFERRED PAIN**, **SUBSTANCE P**. See also **ADAPTATION (2)**, **ALGESIMETER**, **AUDIOANALGESIA**, **C FIBRE**, **CINGULATE GYRUS**, **DELTA FIBRE**, **DOLORIMETER**, **ENDORPHIN**, **ENKEPHALIN**, **FLEXION REFLEX**, **FREE NERVE ENDING**, **GATE-CONTROL THEORY**, **INSULA**, **NEURALGIA**, **PAIN ASYMBOLIA**, **PEPTIDE**, **PERIAQUEDUCTAL GREY MATTER**, **PHANTOM LIMB**, **PROTAGLANDIN**, **SOMATOSENSORY CORTEX**, **SPINORETICULOTHALAMIC SYSTEM**, **SPINOTHALAMIC TRACT**, **SUBSTANTIA GELATINOSA**,

*****ebook converter DEMO Watermarks*****

THERMAL GRILL ILLUSION, VASOPRESSIN. **painful** *adj.* [From Latin *poena* punishment or grief, from Greek *poine* penalty]

pain asymbolia *n.* A condition caused by a lesion in the **insula* resulting in stimuli that normally cause pain being perceived but not experienced as unpleasant and not causing suffering. Its existence shows that the unpleasant feeling of pain is not merely a perception of tissue damage. [From English *pain* + Greek *a-* without + *symbolon* a token, from *syn* together + *ballein* to throw]

pain disorder *n.* In **DSM-IV*, a **somatoform disorder* characterized by pain, causing clinically significant distress or impairment in social, occupational, or other important areas of functioning, with psychological factors judged to play an important role in the onset or maintenance of the pain. This condition was relabelled **somatic symptom disorder* in DSM-5. Compare FACTITIOUS DISORDER, MALINGERING.

pain principle *n.* In **psychoanalysis*, the initial form of **Thanatos*, when the destructive instinct is turned on oneself.

pain receptor *n.* Any of the **free nerve endings* located throughout the body that function as **sensory* receptors, transmitting sensations of **pain* in response to noxious stimulation, one type (the *monomodal nociceptor*) being a thinly myelinated **delta fibre* that responds to severe mechanical deformation, the other (the *polymodal nociceptor*) being a **C fibre* that responds to mechanical deformation, excessive heat or cold, and irritant chemical stimulation, and is responsible for the **axon* reflex. In the epidermis and dermis of the skin and in the mucous membranes, any form of stimulation, if intense enough, can stimulate pain receptors, whereas in the viscera only severe mechanical deformation and certain chemicals are adequate stimuli for pain receptors. **Referred pain* arises only from stimulation of deep-lying pain receptors in viscera, joints, and muscles, and never from pain receptors in the skin. See also SUBSTANCE P.

paired-associate learning *n.* Learning connections between pairs of items, usually words, until one member of the pair elicits recall or recognition of the other. For example, the learner may be presented with a list of pairs

*****ebook converter DEMO Watermarks*****

such as *green—box, long—rope, heavy—stone*, and so on, and recall may be tested by listing the first member of each pair with a list of alternatives, for example *green—apple/box/dress/paper*, the learner trying to recognize the correct alternative. Such memory is called *associative memory*. See also [SERIAL ANTICIPATION METHOD](#). **PA** or **PAL** abbrev.

paired comparisons See [METHOD OF PAIRED COMPARISONS](#).

paired samples t test *n.* Another name for the **related scores t test*.

palaeocortex *n.* The three-layered **olfactory cortex* that evolved in humans earlier than most of the human cerebral cortex but not as early as the archaecortex. The word is sometimes used loosely for any part of the cerebral cortex that is not **neocortex*. US *paleocortex*. Also called the *paleencephalon*. See also [PIRIFORM CORTEX](#). Compare [NEOCORTEX](#), [MESOCORTEX](#). [From Greek *palaios* old + Latin *cortex* bark or outer layer]

palaeostriatum *n.* The **globus pallidus*, which is the phylogenetically older part of the **corpus striatum*. US *paleostriatum*. Compare [NEOSTRIATUM](#). [From Greek *palaios* old + *striatus* streaked, from *stria* a furrow or a flute of a column]

palatal *adj.* Of or relating to speech sounds articulated with the front body of the tongue raised towards the hard palate, as in the initial **phoneme* in the word *yes*. See also [PLACE OF ARTICULATION](#).

palato-alveolar *adj.* Of or relating to speech sounds articulated with the tip of the tongue against the **alveolar* ridge and hard palate (usually with some lip rounding), as in the initial **phonemes* in the words *chin*, *judge*, and *shin*, and the second phoneme in *azure*. See also [PLACE OF ARTICULATION](#). [From *palate* + Latin *alveolus* a small depression, referring to the tooth sockets]

paleencephalon *n.* Another name for the **palaeocortex*. [From Greek *palaios* old + *enkephalos* the brain, from *en* in + *kephale* the head]

pa-leng *n.* A [*culture-bound syndrome](#) found in China and southeast Asia, characterized by pathological fear of cold (frigophobia) and of wind (anemophobia), believed to produce fatigue, impotence, and death. Also called *frigophobia*. [From Chinese *pa* fear + *leng* cold or the cold season]

paleocortex See [PALAEOCORTEX](#).

paleostriatum See [PALAEOSTRIATUM](#).

palilalia *n.* A speech abnormality symptomatic of some forms of [*tic](#) disorder and other mental disorders, characterized by repetition of words or speech fragments with a characteristic acceleration during each cluster of repeated speech. Compare [ECHOLALIA](#). [From Greek *palin* back or again + *lalia* speech]

palinacousis *n.* Hearing voices repeating words that were spoken a short while earlier, or a similar repetition of other types of sounds, a rare neurological symptom of damage to the temporal lobe. [From Greek *palin* again + *akousis* hearing, from *akouein* to hear]

palingenesis *n.* 1. Another name for [*recapitulationism](#). 2. In theology, spiritual rebirth through reincarnation or transmigration of souls into other bodies. [From Greek *palin* again + *genesis* birth]

palingraphia *n.* Mirror writing. [From Greek *palin* back or again + *graphein* to write + *-ia* indicating a condition or quality]

pallaesthesia *n.* Sensation of vibration transmitted through the [*skin](#) and bones. US *pallesthesia*. Also called *palmaesthesia* or *palmesthesia*. See also [MEISSNER'S CORPUSCLE](#), [PACINIAN CORPUSCLE](#), [VIBRATION RECEPTOR](#), [VIBRATORY SENSE](#). Compare [PALLANAESTHESIA](#). [From Greek *pallein* to shake + *aisthesis* feeling + *-ia* indicating a condition or quality]

pallanaesthesia *n.* Diminished or non-functional [*pallaesthesia](#). US *pallanesthesia*. Also called *palmanaesthesia* or *palmanesthesia*. [From Greek *pallein* to shake + *an-* without + *aisthesis* feeling + *-ia* indicating a condition]

or quality]

pallidum *n.* An abbreviated name for the **globus pallidus*. [From Latin *pallidus* pale]

palmaesthesia *n.* Another name for **pallaesthesia*. US *palmesthesia*.

palmanaesthesia *n.* Another name for **pallanaesthesia*. US *palmanesthesia*. [From Greek *palmos* vibration + *aisthesis* feeling + *-ia* indicating a condition or quality]

palpitation *n.* Abnormally rapid or pounding heartbeat. [From Latin *palpitare* to throb, from *palpare* to stroke + *-ation* indicating a process or condition]

palsy *n.* A **paralysis* of the skeletal muscles of the body, as in **cerebral palsy*. See *BELL'S PALS**Y*, *CEREBRAL PALS**Y*, *MÖBIUS SYNDROME*, *PARKINSON'S DISEASE*, *PROGRESSIVE SUPRANUCLEAR PALS**Y*, *PSEUDOBULBAR PALS**Y*. [A corruption of *paralysis*]

pancreas *n.* An elongated organ, situated behind the stomach, containing the **islets of Langerhans* that secrete **insulin* and **glucagon* into the bloodstream and digestive enzymes into the duodenum. **pancreatic** *adj.* [From Greek *pan-* all + *kreas* flesh]

pandemic *n.* 1. Any disorder occurring in a wide area, in many populations, or universally. Compare *EPIDEMIC (1)*. *adj.* 2. In **epidemiology*, of or relating to a pandemic (1). Compare *ENDEMIC*, *EPIDEMIC (2)*. [From Greek *pandemos* universal, from *pan* all + *demos* the people + *-ikos* of, relating to, or resembling]

Pandemonium *n.* 1. In **artificial intelligence*, an **optical character recognition* system that operates in successive stages, by first checking for **features (1)* of the letter such as diagonal lines (as in *X* or *K*); then the output is fed to letter detectors that have been activated in the first stage and that match the letter shape to their templates; and finally recognition is achieved by identifying the letter detector that is most strongly activated. 2. Any very

noisy or disorderly state of affairs. [Named after *Pandemonium*, the capital of Hell in Milton's *Paradise Lost*, from Greek *pas*, *pan* all + *daimon* a spirit]

panel study *n.* A research method in which a sample of research participants or subjects is followed over an extended period of time in order to monitor changes in judgements, attitudes, opinions, developmental changes, or other variables of interest. *See also* [LONGITUDINAL STUDY](#).

pangram *n.* A sentence containing every letter of the alphabet, sometimes used for teaching writing or keyboard skills. The most familiar example in English is the 37-letter typists' sentence: *The quick brown fox jumped over the lazy dogs*. A 26-letter pangram in which each letter occurs just once is: *Jump dogs! Why vex Fritz Blank QC?*, but the use of personal names and abbreviations renders it imperfect, though easily memorable. Only a handful of perfect pangrams (26 letters, without abbreviations, acronyms, contractions, proper nouns, or Roman numerals) are known in English. The most meaningful is *Veldt jynx grimps waqf zho buck* (which means grassland wryneck causes charitable-land hybrid cattle buck to mount), and the words can all be found in large dictionaries, such as the *Oxford English Dictionary* (unabridged): *veldt* is open grassland in South Africa, a *jynx* is a wryneck bird, to *grimp* is to cause something or someone to mount, *waqf* is land given to a religious institution for charitable purposes in Islamic countries, a *zho* is a hybrid bovine animal bred from a yak bull and a common cow, and a *buck* is a male member of a species. [From Greek *pan* all + *gramma* a letter]

panic attack *n.* A period during which there is a sudden onset of intense terror, fear, or apprehension, accompanied by signs and symptoms such as a feeling of impending doom, [*thanatophobia](#), fear of going insane, shortness of breath, smothering or choking sensations, increased heart rate and [*palpitation](#), chest pain or discomfort, dizziness, trembling, sweating, and nausea. Panic attacks occur in several [*anxiety](#) disorders, including [*panic disorder](#), [*agoraphobia](#), [*social anxiety disorder](#), and [*specific phobia](#), and they may also occur in [*post-traumatic stress disorder](#).

panic disorder *n.* An [*anxiety](#) disorder in [*DSM-5](#) characterized by recurrent, unexpected [*panic attacks](#), followed by persistent apprehension about further attacks, concern about the possible effects of the attacks (such

*****ebook converter DEMO Watermarks*****

as having a heart attack or going insane), or a significant alteration in behaviour brought about by the attacks (such as resigning from a job). Panic disorder may occur with or without **agoraphobia*. **PD** *abbrev.*

pansexualism *n.* The doctrine that all mental activity arises from the sexual instinct, a term often used to describe **psychoanalysis*, although even in its early (pre-1920) form, before the introduction of **Thanatos*, the conception of the life instincts in **Eros* was not restricted to the sexual drive. [From Greek *pantos* all + English *sexualism*]

pantheism *n.* Belief in nature, the universe, or the order and lawfulness of everything that happens as representations (usually metaphorical) of God. Compare *AGNOSTICISM*, *ATHEISM*, *DEISM*, *THEISM*. **pantheist** *n.* One who espouses pantheism. **pantheistic** or **pantheistical** *adj.* [From Greek *pan* all + *theos* a god + *-ismos* indicating a state or condition]

panting centre *n.* A region of the hypothalamus that when stimulated quickens the rate of breathing. US *panting center*. [From Old French *pantaisier* to pant, from Greek *phantasioun* to have visions, from *phantasia* a fantasy, from *phantazein* to make visible, from *phainein* to show, from *phaein* to shine]

Panum phenomenon See *PANUM'S LIMITING CASE*.

Panum's fusion area *n.* An area of space, surrounding the **horopter* for a given degree of **ocular convergence*, within which different points projected on to the left and right retinas result in **binocular* fusion, producing a sensation of visual depth, and points lying outside the area result in **diplopia*. It is really a volume rather than an area, because it is a three-dimensional shape with a curved surface. Near the fovea, the maximum binocular disparity resulting in binocular fusion corresponds to a **visual angle* of about 10 minutes of arc or 1/6 of one degree. **PFA** *abbrev.* [Named after the Danish physician and physiologist Peter Ludvig Panum (1820–85) who first described it in 1858]

Panum's limiting case *n.* A visual sensation of three-dimensional depth that occurs when two lines or other elements are presented, one to each
*****ebook converter DEMO Watermarks*****

eye, at positions allowing ***binocular** fusion to occur, and at the same time a third is presented to one of the eyes at a different position, generating a perception in which the fused line appears nearer than the single line. The explanation, and the reason for its being called a limiting case, is that it mimics the stimulus pattern that occurs when two objects at different distances are viewed from such an angle that one of the objects is hidden behind the other from the vantage point of one eye whereas the other eye sees both of them. Also called the *Panum phenomenon* or the *Wheatstone–Panum limiting case*. See also **PANUM'S FUSION AREA**, **STEREOPSIS**. [Named after the Danish physician and physiologist Peter Ludvig Panum (1820–85) who rediscovered it in 1858, although the English physicist and inventor Sir Charles Wheatstone (1802–75) had already discovered and reported it in 1838]

Papez circuit *n.* A neural pathway closely associated with emotional experiences, including many of the structures of and around the limbic system, running from the ***thalamus** through the ***cingulate gyrus**, ***entorhinal cortex**, ***hippocampus**, ***septum pellucidum**, ***hypothalamus**, and ***mammillary bodies**, before returning to the thalamus. [Named after the US neuroanatomist James W. Papez (1883–1958) who first described it in 1937]

papilla *n.* A small nipple-shaped protuberance, including any of the lingual papillae situated chiefly within pits in the surface of the ***tongue** but also on the soft palate, throat, pharynx, and insides of the cheeks, most papillae being studded with ***taste** buds around their bases. Approximately 12 ***circumvallate papillae** are concentrated at the back of the tongue, numerous ***fungiform papillae** and ***filiform papillae** in the middle and front of the tongue, and pairs of ***foliate papillae** on the sides of the back part of the tongue, the only ones without taste buds being filiform papillae. **papillae** *pl.* [From Latin *papilla* a nipple, diminutive of *papula* a pimple]

paracentral vision *n.* Vision arising from images falling in the parafoveal area of the retina immediately surrounding the ***fovea**. [From Greek *para* beside or beyond + *kentron* a sharp point]

parachlorophenylalanine *n.* A substance that inhibits the activity of ***tryptophan** hydroxylase and is used as a drug to reduce levels of ***serotonin**

*****ebook converter DEMO Watermarks*****

in the brain. **p-CPA** or **PCPA** *abbrev.*

parachromatopsia *n.* Partial or incomplete **colour-blindness*. Compare **ACHROMATOPSIA**. [From Greek *para* beside + *chroma* colour + *ops* an eye + *-ia* indicating a condition or quality]

paracontrast *n.* A type of **forward masking* in which the test stimulus and masking stimulus do not overlap spatially. See also **MASKING**, **VISUAL MASKING**. Compare **METACONTRAST**. [From Greek *para* beside + Latin *contra* against + *stare* to stand]

paracusia *n.* Disordered hearing. Also spelt *paracousia*. Also called *paracusis* or *paracousis*. **paracusic** *adj.* [From Greek *para* beside + *akousis* hearing, from *akouein* to hear + *-ia* indicating a condition or quality]

paradigm *n.* 1. A pattern, stereotypical example, model, or general conceptual framework within which theories in a particular area of research are constructed. See also **PARADIGM SHIFT**. 2. (Originally) the set of inflected forms of a word, or a table displaying these forms, such as the conjugation of the regular French verb meaning to speak: *je parle, tu parles, il parle, nous parlons, vous parlez, ils parlent*. **paradigmatic** or **paradigmatical** *adj.* [From Greek *para* beside or beyond + *deiknynai* to show]

paradigm shift *n.* According to a doctrine propounded by the US historian and philosopher of science Thomas S(amuel) Kuhn (1922–96) in his book *The Structure of Scientific Revolutions* (1962), a rapid change, marking the culmination of a **scientific revolution*, from one **paradigm (1)* to another, such as occurred in physics when Einstein's theory replaced Newton's in 1916. See also **KUHNIAN**, **NORMAL SCIENCE**.

paradox *n.* An apparently sound argument yielding either a contradiction or a *prima facie* absurdity. The US philosopher and logician Willard Van Orman Quine (1908–2000), in an article in the journal *Scientific American* in 1962, introduced a threefold classification into *veridical paradoxes*, whose conclusions are true, such as **Hempel's paradox*; *falsidical paradoxes*, whose conclusions are false, such as the **unexpected hanging paradox* or the **sorites* paradox; and *antinomies*, whose conclusions are mutually

*****ebook converter DEMO Watermarks*****

contradictory, such as **Russell's paradox*, the **liar paradox*, or **Grelling's paradox*. The term is also used more loosely for any argument that yields a surprising conclusion, or even for a fact or phenomenon that seems surprising, but the latter is avoided in careful usage. *See also* *ALLAIS PARADOX*, *AUBERT–FLEISCHL PARADOX*, *BARBER'S PARADOX*, *CONDORCET'S PARADOX*, *DURATION ESTIMATION PARADOX*, *ELLSBERG PARADOX*, *FECHNER'S PARADOX*, *GÖDEL'S THEOREM*, *GOODMAN'S PARADOX*, *MELODIC PARADOX*, *METALANGUAGE*, *MIRROR REVERSAL PROBLEM*, *MODIFIED ELLSBERG PARADOX*, *MONTY HALL PROBLEM*, *NEUROTIC PARADOX*, *NEWCOMB'S PROBLEM*, *PARADOXICAL INJUNCTION*, *PARADOXICAL INTENTION*, *PARADOXICAL THERAPY*, *PRISONER'S DILEMMA GAME*, *SEMITONE PARADOX*, *SIMPSON'S PARADOX*, *SKAGGS–ROBINSON PARADOX*, *SOCIOLOGY OF KNOWLEDGE*, *SORITES PARADOX*, *ST PETERSBURG PARADOX*, *TRITONE PARADOX*. **paradoxical** *adj.* [From Greek *paradoxos*, beyond belief, from *para* beyond + *doxa* a belief]

paradoxical cold *n.* A sensation of coldness that is experienced when a warm stimulus touches a **cold spot* on the skin. *Compare* *PARADOXICAL HEAT*, *PARADOXICAL WARMTH*.

paradoxical heat *n.* A sensation of intense heat that is experienced in the absence of a hot stimulus if an area of the skin containing both **cold spots* and **warm spots* is stimulated with a *heat grill* of closely packed alternating warm and cold bars. *Compare* *PARADOXICAL COLD*, *PARADOXICAL WARMTH*.

paradoxical injunction *n.* An instruction to do something that is rendered impossible by the instruction itself, as in *Do not think of a giraffe!*

paradoxical intention *n.* A technique of **logotherapy* and **behaviour therapy*, used in the treatment of **obsessive–compulsive disorder*, in which the client or patient deliberately and repeatedly rehearses a habit or unwanted pattern of thought or behaviour, with the aim of developing a less fearful attitude towards it, gaining control over it, or bringing about its elimination or **extinction* (2). Also called *negative practice*. *See also* *PARADOXICAL THERAPY*.

paradoxical sleep *n.* Another name for **REM sleep*. **PS** *abbrev.* [So called because its characteristic EEG pattern is similar to that of the waking
*****ebook converter DEMO Watermarks*****]

state, but the sleeper is none the less especially difficult to awaken]

paradoxical therapy *n.* Any form of [*psychotherapy](#) involving techniques that appear on the surface to contradict the goals of the treatment, such as [*negative practice](#) and [*paradoxical intention](#).

paradoxical warmth *n.* A sensation of warmth that is experienced when a cold stimulus touches a [*warm spot](#) on the skin. *Compare* [PARADOXICAL COLD](#), [PARADOXICAL HEAT](#).

paradox of voting *n.* Another name for [*Condorcet's paradox](#).

paraesthesia *n.* An abnormal sensation such as tingling, burning, prickling, pins and needles, or numbness in an area of the skin or a part of the body. US *paresthesia*. *See also* [ACROPARAESTHESIA](#), [DYSAESTHESIA](#). [From Greek *para* beside or beyond + *aisthesis* sensation + *-ia* indicating a condition or quality]

parafovea *n.* The area of the retina immediately surrounding the [*fovea](#). *See also* [PARACENTRAL VISION](#). **parafoveal** *adj.* [From Greek *para* beside or beyond + Latin *fovea* a pit]

parageusia *n.* Abnormal taste sensation. *See* [AGEUSIA](#), [CACOGEUSIA](#), [DYSGEUSIA](#), [HYPERGEUSIA](#), [HYPOGEUSIA](#), [TASTE BLINDNESS](#). [From Greek *para* beside or beyond + *geusis* taste + *-ia* indicating a condition or quality]

paragraphia *n.* Habitual writing of a different letter, syllable, or word from the one intended, usually caused by a brain lesion. [From Greek *para* beside + *graphein* to write + *-ia* indicating a condition or quality]

parahippocampal gyrus *n.* The gyrus of the cerebral cortex immediately adjacent to the [*hippocampus](#), considered as part of the [*limbic system](#). It receives a constant stream of information from the association areas that it transmits to the hippocampus, mainly via the entorhinal cortex, for consolidation in long-term memory, and it is also involved in the control of aggression. *See also* [DEFAULT MODE NETWORK](#), [ENTORHINAL CORTEX](#).

paralanguage *n.* The non-verbal aspects of speech that convey information to listeners, including **accent* (1), **loudness*, **pitch*, **rhythm*, **tempo*, **timbre*. See also NON-VERBAL COMMUNICATION, PROSODY. [From Greek *para* beside or beyond + English *language*]

paraldehyde *n.* A colourless strong-smelling liquid obtained from **acetaldehyde* and sulphuric acid that acts as a central nervous system **depressant* and is used as a **sedative–hypnotic* drug. Formula C₆H₁₂O₃. [From Greek *para* beside or beyond + English *aldehyde*, from Latin *al(cohol) dehyd(rogenatum)* dehydrogenated alcohol]

paralexia *n.* A disordered or defective form of reading in which words or syllables are meaninglessly transposed. [From Greek *para* beside or beyond + *lexis* a word]

paralinguistics *n.* The study of **paralanguage*.

parallax *n.* Apparent movement of an object resulting from a change in the vantage point from which it is viewed. See also BINOCULAR PARALLAX, MONOCULAR PARALLAX. [From Latin *parallaxis* parallax, from Greek *parallassein* to change, from *para* beside or beyond + *allassein* to alter, from *allos* another]

parallel distributed processing *n.* A model of **knowledge* representation and **information* processing according to which items of knowledge are represented by patterns of connections of varying strengths between locations within a **network model*, information processing taking the form of parallel processing of collections of activated connections. The term is almost synonymous with **connectionism* (1). See also BACK-PROPAGATION ALGORITHM, CASCADE PROCESSING, CONTENT-ADDRESSABLE MEMORY, DELTA RULE, DISTRIBUTED NETWORK MODEL, GRADIENT DESCENT, HEBBIAN RULE, HILL CLIMBING, NEURAL NETWORK, TEACHER UNIT. Compare DISTRIBUTED COGNITION. **PDP** abbrev.

parallel fibre *n.* Any of the axon branches arising from **granule cells* that run horizontally near the cortical surface of the **cerebellum* and synapse

on [*Purkinje cells](#). US *parallel fiber*.

parallel-form reliability *n.* Another name for [*equivalent-form reliability](#).

parallel forms *n.* In psychometrics, [*alternative forms](#) of a test that have similar [*means](#), [*standard deviations](#), and [*correlations](#) with other tests. Also called *equated forms*.

parallelism *n.* Another name for [*psychophysical parallelism](#).

parallelogram illusion *n.* Another name for the [*Sander parallelogram](#).

parallel processing *n.* Computational processing in which a process is split into subunits that are executed simultaneously by independent processing units. *See also* [CASCADE PROCESSING](#), [CONNECTIONISM](#), [DISCRETE PROCESSING](#), [PARALLEL DISTRIBUTED PROCESSING](#). *Compare* [SERIAL PROCESSING](#).

paralysis *n.* An impairment or loss of function of one or more voluntary muscles, usually resulting from a disorder of the muscle, a neurological disorder, or a mental disorder. [From Greek *para* beside or beyond + *lysis* a loosening]

paralysis agitans *n.* Another name for [*Parkinson's disease](#).

paralytic strabismus *n.* A form of [*strabismus](#) associated with a malfunction of the ocular muscles resulting from a neurological or muscular disorder or dysfunction. *Compare* [NON-PARALYTIC STRABISMUS](#).

paramecium *n.* A freshwater, single-celled creature having a bean-shaped body covered with [*cilia](#) that are used for swimming, the cilia being composed of bundles of [*microtubules](#). It moves about, avoiding obstacles by swimming round them, darts for bacterial food, retreats from danger, turns itself round to escape if enclosed in a glass tube, and is probably capable of learning from experience, according to the results of experiments dating back

to 1908, though some authorities have disputed that it is capable of true learning. Yet it has no **nervous* system, its single cell not even being a **neuron*, which proves that rather complex behaviour can occur without a nervous system. See also *CYTOSKELETON*. **paramecia** *pl.* [From Greek *paramekes* elongated, from *para* beside or beyond + *mekos* length]

parameter *n.* In statistics, a property of a **population* distribution, such as the population mean or population standard deviation, as distinct from a property of a **sample*. [From Greek *para* beside or beyond + *metron* a measure]

parametric statistics *n.* A branch of statistics that makes assumptions about the **parameters* of the distributions from which the data are drawn, often including the assumption that variables conform to the **normal distribution*. It deals mainly with data measured on interval or ratio scales that are suitable for the application of ordinary arithmetic operations such as addition and multiplication, so that parameters such as the **mean* and **standard deviation* can be meaningfully defined. Compare *DISTRIBUTION-FREE TEST*, *NON-PARAMETRIC STATISTICS*.

paramimia *n.* A form of **apraxia* in which there is an impairment in the ability to imitate **gestures* (1). [From Greek *para* beside or beyond + *mimos* a mime, from *mimesis* imitation + *-ia* indicating a condition or quality]

paramnesia *n.* 1. A belief that one is recalling events or experiences that never really occurred. See also *EXPERIMENTALLY INDUCED FALSE MEMORY*, *FALSE MEMORY*, *FALSE MEMORY SYNDROME*, *REALITY MONITORING*. 2. Any disorder of memory involving misremembering rather than failing to remember, including **déjà vu* and **jamais vu*. [From Greek *para* beside + *mnasthai* to remember + *-ia* indicating a condition or quality]

paramnesia, reduplicative See *REDUPLICATIVE PARAMNESIA*.

paranoia *n.* Another name for **delusional disorder* or, more generally, any mental disorder characterized by **delusions*, including **paranoid* personality disorder, **paranoid* schizophrenia, or **shared psychotic disorder*. See also *PARANOID TECHNIQUE*, *SCHREBER CASE*. [From Greek *paranoia* frenzy, from *para* *****ebook converter DEMO Watermarks*****]

beside + *nous* intellect or sense + *-ia* indicating a condition or quality]

paranoia querulans *n.* A form of **paranoia* or **delusional disorder* associated with incessant litigious actions intended to obtain legal remedies for perceived wrongs that appear trivial or insignificant to others. Also called *Querulantenwahn*. [From **paranoia* + Latin *querulus* complaining or peevish, from *queri* to complain]

paranoia scale See *MMPI*.

paranoid *adj.* Of, relating to, characterized by, or resembling **paranoia* or **delusional disorder*.

paranoid disorder See *DELUSIONAL DISORDER*, *PARANOIA*, *PARANOID PERSONALITY DISORDER*, *PARANOID SCHIZOPHRENIA*, *SHARED PSYCHOTIC DISORDER*.

paranoid disorder, shared See *SHARED PSYCHOTIC DISORDER*.

paranoid ideation *n.* Suspicious ideas and beliefs falling short of **delusions* that one is being harassed, persecuted, or treated unfairly.

paranoid personality disorder *n.* A **personality* disorder in **DSM-5* characterized by **paranoid* ideation, indicated by such signs and symptoms as unwarranted suspicion of being exploited, harmed or plotted against; unjustified doubts about the trustworthiness of friends and associates; reluctance to confide in others because of unwarranted fear of the information being maliciously exploited; tendency to interpret innocent remarks or events as demeaning or threatening; persistent bearing of grudges for past insults, injuries, or slights; tendency to perceive personal attacks that are not apparent to others; tendency to become angry, and to counterattack; and harbouring of unjustified suspicions about the faithfulness of sexual partners. Compare *DELUSIONAL DISORDER*, *PARANOID SCHIZOPHRENIA*.

paranoid-schizoid position *n.* In **Kleinian* analysis, a mode of **object relations* occurring during the first 4 months of life, before the **depressive position*, recurring occasionally in later childhood and adulthood,

and becoming dominant in states of ***paranoid** personality disorder and ***schizophrenia**. It is characterized by ***ambivalence** arising from the coexistence of aggressive and libidinal drives directed at an ***instinctual object**, namely the mother's breast, that is a ***part object** and is split into a *good object* and a *bad object*, because it both gratifies and frustrates, and because it evokes emotions of love and hate. The concept was introduced in 1932 by the British-based Austrian psychoanalyst Melanie Klein (1882–1960) and fully developed in a contribution to a co-authored book in 1952 on ‘Some Theoretical Conclusions Regarding the Emotional Life of the Infant’, where she explained her preference for the word *position* to *stage* or *phase*: ‘these groupings of anxieties and defences, although arising first during the earliest stages, are not restricted to them but occur and recur during the first years of childhood and under certain circumstances in later life’ (*Developments in Psycho-Analysis*, p. 236). Also called the *paranoid position*, the element *schizoid* being added to allude to the splitting of the object that it involves.

paranoid schizophrenia *n.* One of the major types of ***schizophrenia**, the essential feature being the presence of prominent ***delusions** or ***auditory hallucinations** involving ***paranoid** ideation in the context of otherwise normal ***cognition** and ***affect**. Compare DELUSIONAL DISORDER, PARANOID PERSONALITY DISORDER.

paranoid technique *n.* In ***psychoanalysis**, one of the four ***defensive techniques** proposed by the Scottish psychoanalyst W. Ronald D. Fairbairn (1889–1964). It involves ***internalization** of the ***good object** and ***externalization** of the bad object, causing the paranoid person to feel persecuted by external forces. See also SPLITTING OF THE OBJECT. Compare HYSTERICAL TECHNIQUE, OBSESSIONAL TECHNIQUE, PHOBIC TECHNIQUE.

paranormal *adj.* Beyond the normal; supernatural or inexplicable by the laws of science or reason. See also PARAPSYCHOLOGY. Also called *psychic* or *psychical*. [From Greek *para* beside or beyond + English *normal*, from Latin *normalis* conforming to a carpenter's square or rule, from *norma* a carpenter's square or a rule + *-alis* of or relating to]

paranostic gain *n.* Another name for ***primary gain**. [From Greek *para*

*****ebook converter DEMO Watermarks*****

beside or beyond + *nosos* a disorder]

paraphasia *n.* A form of **aphasia* characterized by the habitual substitution of one word for another. [From Greek *para* beside or beyond + English *aphasia*]

paraphemia *n.* Disordered speech, characterized by misuse of **phonemes* and words. [From Greek *para* beside or beyond + *pHEME* speech, from *phanai* to speak]

paraphilias *n.* Abnormal sexually arousing fantasies, sexual urges, or behaviour involving non-human objects, children, or other non-consenting sexual partners, or suffering or humiliation of oneself or a sexual partner. See ACROTOMORPHILIA, APOTEMNOPHILIA, AUTOGYNEPHILIA, BESTIALITY (1), COPROPHILIA, EPHEBOPHILIA, EXHIBITIONISM (1), FETISHISM, FETISHISTIC TRANSVESTISM, FROTTEURISM, GERONTOPHILIA, HYPOXYPHILIA, KATASEXUALISM, KLEPTOLAGNIA, KLYSMAPHILIA, NECROPHILIA, OSPHRESIOLAGNIA, PAEDOPHILIA, RENIFLEUR, SCOPOPHILIA, SEXUAL MASOCHISM, SEXUAL SADISM, TELEPHONE SCATALOGIA, UROPHILIA, VOYEURISM, ZOOPHILIA. Paraphilias that meet certain diagnostic criteria are **paraphilic disorders*: See also EXHIBITIONISTIC DISORDER, FETISHISTIC DISORDER, FROTTEURISTIC DISORDER, PAEDOPHILIC DISORDER, SEXUAL MASOCHISM DISORDER, SEXUAL SADISM DISORDER, TRANSVESTIC DISORDER, VOYEURISTIC DISORDER. Also called *sexual deviations*. Formerly called *sexual perversions* or *perversions*. **paraphiliac** *n.* A person with a paraphilia. [From Greek *para* beside or beyond + *philos* loving, from *phileein* to love + *-ia* indicating a condition or quality]

paraphilic disorders *n.* A group of **mental disorders* in **DSM-5* characterized by **paraphilias*. See EXHIBITIONISTIC DISORDER, FETISHISTIC DISORDER, FROTTEURISTIC DISORDER, PAEDOPHILIC DISORDER, SEXUAL MASOCHISM DISORDER, SEXUAL SADISM DISORDER, TRANSVESTIC DISORDER, VOYEURISTIC DISORDER.

paraphobia *n.* An irrational fear of some object, activity, or situation, falling below the threshold of being labelled a true **phobia*. [From Greek *para* beside or beyond + *phobos* fear + *-ia* indicating a condition or quality]

paraphrenia *n.* A term introduced in 1904 by the German psychiatrist Emil Kraepelin (1856–1926) to denote chronic ***delusional disorder** without intellectual deterioration or ***dementia**. *See also* **NARCISSISTIC NEUROSIS**. [From Greek *para* beside or beyond + *phren* mind, originally midriff, the supposed seat of the soul + *-ia* indicating a condition or quality]

paraplegia *n.* Paralysis of the lower limbs, usually as a result of lesions in the middle or lower part of the spinal cord. *Compare* **DIPLEGIA**, **HEMIPLEGIA**, **MONOPLEGIA**, **OPHTHALMOPLEGIA**, **QUADRIPLEGIA**, **TRIPLEGIA**. **paraplegic** *adj.* [From Greek *para* beside or beyond + *plege* a blow + *-ia* indicating a condition or quality]

parapraxis *n.* In ***psychoanalysis**, a minor error in speech or action, such as a ***slip of the tongue**, a ***slip of the pen**, an ***action slip**, or a ***slip of memory**. In his book *The Psychopathology of Everyday Life* (1901, *Standard Edition*, VI), Sigmund Freud (1856–1939) advanced the theory that such errors are not random but often represent fulfilments of unconscious wishes, and the book is crammed with anecdotal examples. Parapraxes can be analysed for possible clues to repressed thoughts and desires by a method similar to ***dream** analysis. Freud's original German word for this phenomenon was *Fehlleistung*, combining two ordinary words and meaning simply a faulty performance. Also called a *motivated error*, and (colloquially) a *Freudian slip*. *See also* **ACTING OUT (2)**, **DÉJÀ VU**, **MOSES ILLUSION**, **YOLK PHENOMENON**. **parapraxes** *pl.* [From Greek *para* beside or beyond + *praxis* a deed, from *prassein* to do]

parapsychology *n.* The study of apparently ***paranormal** psychological phenomena or ***psi** phenomena, especially ***extra-sensory perception** (telepathy, clairvoyance, and precognition) and ***psychokinesis**. Also called *psychical research*. *See also* **FILE DRAWER PROBLEM**, **OUIJA BOARD**, **PSI**, **PSI-MISSING**. **parapsychological** *adj.* **parapsychologist** *n.* One who practises or studies parapsychology. [From Greek *para* beside or beyond + English *psychology*]

parasitosis *n.* Infestation with parasites; also, figuratively, another name for ***formication**.

parasol cell *n.* A large retinal *ganglion cell in the *magnocellular system, with a *centre-surround receptive field, receiving input from all three types of retinal *cones. *Compare* MIDGET CELL.

parasomnias *n.* An umbrella term for abnormal physiological or psychological reactions associated with sleep or the transition between wakefulness and sleep, causing significant distress or impairment in social, occupational, or other important areas of functioning. In *DSM-5 they form a subcategory of *sleep–wake disorders, including *non-rapid eye movement sleep arousal disorder, *nightmare disorder, *rapid eye movement sleep behaviour disorder, and *restless legs syndrome. *See also* BRUXISM, CENTRAL SLEEP APNOEA, OBSTRUCTIVE SLEEP APNOEA HYPOPNOEA, PAVOR DIURNUS, PAVOR NOCTURNUS, SEXSOMNIA, SLEEP APNOEA. *Compare* DYSSOMNIAS. [From Greek *para* beside or beyond + *somnus* sleep]

parasuicide *n.* A deliberate self-inflicted injury or poisoning resembling a suicide attempt but probably not intended to be successful. The term was introduced by the British psychiatrist Norman Kreitman (1927–2012) and three co-authors in the heading of a letter in the *British Journal of Psychiatry* in 1969. **parasuicidal** *adj.* [From Greek *para* beside + English *suicide*]

parasympathetic nervous system *n.* One of the two major subdivisions of the *autonomic nervous system whose general function is to conserve metabolic energy, acting in opposition to and with more specificity than the *sympathetic nervous system by slowing pulse rate, stimulating the smooth muscles of the alimentary canal (*see* PERISTALSIS), promoting secretion of salivary and intestinal juices and voiding of urine, constricting the pupils, and preparing the eyes for *near vision. *See also* CHOLINERGIC. *Compare* SYMPATHETIC NERVOUS SYSTEM. **PNS** *abbrev.* [From Greek *para* beside + *syn* with + *pathos* suffering]

parasympatholytic *adj. n.* (Of, relating to, or having an effect similar to) a drug such as *atropine or *scopolamine that acts against or inhibits the activity of the *parasympathetic nervous system, usually by blocking *muscarinic receptors. *Compare* PARASYMPATHOMIMETIC, SYMPATHOLYTIC. [From *parasympathetic* + Greek *lysis* loosening + *-ikos* of, relating to, or resembling]

*****ebook converter DEMO Watermarks*****

parasympathomimetic *adj. n.* (Of, relating to, or having an effect similar to) a drug such as **carbachol*, **methacholine*, or **muscarine* that mimics or increases the activity of **acetylcholine*, the major neurotransmitter of the **parasympathetic nervous system*, with effects such as constriction of the pupils of the eyes and preparation for close-up vision, salivation, slowing of the heart, secretion of gastric juices, and voiding of urine. *Compare* PARASYMPATHOLYTIC, SYMPATHOMIMETIC. *See also* CHOLINERGIC. [From Greek *para* beside + *syn* with + *pathos* suffering + *mimetes* an imitator + *-ikos* of, relating to, or resembling]

parathyroid gland *n.* Any of the small ovoid endocrine glands, usually four in number, attached to the sides of the thyroid gland at the base of the neck. They secrete **parathyroid hormone* into the bloodstream. [From Greek *para* beside + *thyreoeides* a door-shaped shield, from *thyra* a door + *eidos* form]

parathyroid hormone *n.* A hormone secreted by the **parathyroid glands* that increases the level of **calcium* and **phosphate* in the blood and whose action is regulated by **calcitonin* secreted by the thyroid glands. **PTH** *abbrev.*

paraventricular nucleus *n.* A cluster of neurons at the back of each side of the hypothalamus, synthesizing **vasopressin* and **oxytocin* and transporting them through their axons to the **posterior* pituitary. [From Greek *para* beside + Latin *ventriculus* a little belly, diminutive of *venter*, *ventris* a belly, alluding to its location near the walls of the third ventricle]

paregoric *n.* A **narcotic* analgesic containing **opium*, formerly prescribed in the treatment of coughing and diarrhoea in children. [From Greek *paregoreein* to exhort or comfort, from *para* beside + *agoreuein* to speak publicly, from *agora* an assembly or marketplace + *-ikos* of, relating to, or resembling]

parental investment *n.* Any contribution that a parent makes towards an individual offspring that increases the offspring's chances of survival and reproduction at the cost of the parent's ability to contribute to other offspring,

*****ebook converter DEMO Watermarks*****

including producing sex cells and later feeding and guarding the young. According to the US biologist Robert L. Trivers (born 1943), who introduced the term into ethology in 1972, in species in which females provide more parental investment than males, males compete among themselves for female mates, and females are vulnerable to mate desertion. *See also* [BATEMAN'S PRINCIPLES](#), [SEXUAL SELECTION](#). **PI** *abbrev.*

parenteral *adj.* By a route other than the mouth or alimentary canal, referring to the mode of administration of a drug, usually implying administration by injection. *Compare* [ORAL](#). [From Greek *para* beside + *enteron* the alimentary canal or gut]

parent-figure, combined *See* [COMBINED PARENT-FIGURE](#).

paresis *n.* Partial **paralysis*, as in **general paralysis (paresis) of the insane*. [From Latin *paresis* relaxation, from *para* beside or beyond + *hienai* to release]

paresthesia *See* [PARAESTHESIA](#).

Pareto-optimal *adj.* Of or relating to a distribution of **payoffs* such that any redistribution that benefited one individual would be detrimental to one or more others. **Pareto optimality** *n.* **Paretian** *adj.* Of, relating to, or having the property of Pareto optimality. [Named after the French-born Italian economist and sociologist Vilfredo Pareto (1848–1923) who introduced the concept in his mathematical treatment of income distribution]

parietal lobe *n.* The upper **lobe* on the side of each cerebral hemisphere, separated on its lateral or outer surface from the frontal lobe by the **central sulcus*, from the temporal lobe by the **lateral sulcus* and an imaginary line extending it horizontally towards the occipital lobe, and from the occipital lobe by an imaginary line from the top of the **parieto-occipital sulcus* to the **pre-occipital notch*. The right parietal lobe is especially involved in appreciation of spatial relationships. Lesions in either hemisphere in the somatosensory association area (*see* somatosensory cortex) can result in **astereognosis*, and lesions in the parietal operculum immediately above the lateral sulcus can lead to **spatial neglect*. *See also* [APHASIA](#), [AUTOTOPAGNOSIA](#),
*****ebook converter DEMO Watermarks*****

GERSTMANN SYNDROME, LOBE, MIRROR NEURON, OPERCULUM. [From Latin *parietalis* of a wall, from *paries* a wall]

parietal operculum *See* OPERCULUM.

parieto-occipital sulcus *n.* A **sulcus* towards the back of each cerebral hemisphere on its **medial* surface (hence not visible on the outside), marking the boundary between the parietal lobe and the occipital lobe.

parkinsonism *n.* Mild regular **resting tremor* of the limbs, head, jaw, mouth, or lip (the so-called *rabbit syndrome*), characteristic of **Parkinson's disease* but associated also with other neurological disorders, with oscillations of 3–6 hertz, exacerbated by cold, fatigue, or strong emotion, usually suppressed during voluntary movements and sleep. *See also* ANTIPARKINSONIAN, NEUROLEPTIC-INDUCED, POSTURAL TREMOR. *Compare* INTENTION TREMOR. [Named after Parkinson's disease]

Parkinson's disease *n.* A progressive, degenerative neurological disorder affecting 2 per cent of people over 65 in the developed world, associated with malfunction (usually resulting from damage caused by **free radicals* but occasionally due to a genetic mutation) of neurons that produce **dopamine* in the **substantia nigra* and the extended projections into the **striatum*, which in turn relays signals to the higher motor centres of the brain. The disease is characterized by **parkinsonism*, often occurring first in one hand, where it resembles pill-rolling movements of the thumb and forefinger, masklike facial expression, shuffling gait or **festination*, **cogwheel rigidity* of muscles and difficulty rising from a sitting position, shrinkage of handwriting, **bradykinesia* or **akinesia*, drooling, profuse sweating, lability of **affect*, and defective judgement. Also called *paralysis agitans*. *See also* AMANTADINE, ANTIPARKINSONIAN, FOETAL BRAIN TRANSPLANTATION, L-DOPA, MPP⁺, PROGRESSIVE SUPRANUCLEAR PALSY. **PD** *abbrev.* [Named after the English surgeon James Parkinson (1755–1824) who first described it in 1817 and called it the shaking palsy]

Parlodel *n.* A proprietary name for the dopamine agonist **bromocriptine*. [Trademark]

Parlyaree See [POLARI](#).

parole *n.* A term introduced in 1915 by the Swiss linguist Ferdinand de Saussure (1857–1913) to denote language as manifested in concrete utterances of particular speakers. *Parole* is seen as one of the two major aspects of **langage*, the other being **langue*, and it is analogous to the concept of **performance* (2). [Old French *parole* speech]

paronomasia *n.* Any form of word-play, especially a pun. [From Greek *para* beside or beyond + *onoma* a name + *-ia* indicating a condition or quality]

parosmia *n.* Any abnormality in **olfaction* or the sense of smell. See [ANOSMIA](#), [CACOSMIA](#), [DYSOSMIA](#), [HYPEROSMIA](#), [HYPOSMIA](#), [SPECIFIC ANOSMIA](#). [From Greek *para* beside or beyond + *osme* a smell + *-ia* indicating a condition or quality]

parotid gland *n.* A large salivary gland situated in the oral cavity just below and in front of each ear. [From Greek *para* beside + *ous*, *otos* an ear]

paroxetine *n.* An antidepressant drug with anxiolytic effects belonging to the group of **selective serotonin reuptake inhibitors* ([SSRIs](#)), used especially to treat **social anxiety disorder* and shyness in general. Also called *Paxil* or *Seroxat* (trademarks).

parsimony principle *n.* The proposition that closely related organisms, having diverged comparatively recently in evolutionary history, have fewer differences in their **DNA* than more distantly related organisms. See also [MITOCHONDRIAL DNA](#).

parthenogenesis *n.* A form of reproduction in some insects from a female **gamete* without fertilization by a male gamete. Distinguished in careful usage from **asexual reproduction*, in which gametes are not formed. Compare [SEXUAL REPRODUCTION](#). **parthenogenetic** or **parthenogenic** *adj.* [From Greek *parthenos* a virgin + *genesis* birth]

partial correlation *n.* In statistics, a *correlation between two variables with the effect of a third variable controlled or *partialled out*. For example, if *x*, *y*, and *z* represent the heights, weights, and ages of children, respectively, then a significant positive correlation between *x* and *y* may be due in part to the correlation of each of these variables with *z*. A partial correlation coefficient between *x* and *y* with *z* partialled out, written $r_{xy.z}$, shows the degree of linear relationship between height and weight irrespective of age.

partial instinct *n.* Another name for a *component instinct.

partial movement *n.* A form of *apparent movement that occurs when two visual stimuli a few centimetres apart are presented in an alternating pattern with an interstimulus interval too long for the stimuli to appear simultaneous but not long enough for *optimal movement, *phi movement, or the disappearance of apparent movement and the veridical perception of the stimuli simply alternating. In partial movement, the first stimulus appears to move part of the distance towards the second and then to disappear, then the second stimulus appears in the space between the two stimuli and moves towards its own location, then this cycle is repeated in the opposite direction, and so on. Also called *partial motion*. See also KORTE'S LAWS.

partial reinforcement *n.* In *operant conditioning, any *reinforcement schedule in which the organism is not rewarded after every response. Also called *intermittent reinforcement*. See also PARTIAL REINFORCEMENT EFFECT. Compare CONTINUOUS REINFORCEMENT. **PR** abbrev.

partial reinforcement effect *n.* The finding that responses established by *partial reinforcement are more resistant to *extinction (2) than responses established by continuous reinforcement. **PRE** abbrev.

partial tone *n.* Any *pure tone that is a component of a *complex tone. Also called a *partial*. See also FOURIER ANALYSIS.

participant observation *n.* A research methodology in which the investigator participates in the activities of a group while recording the behaviour of the other group members. See also ETHNOMETHODOLOGY,

NATURALISTIC OBSERVATION, OBSERVATIONAL STUDY.

participant (research or experimental) *n.* Another name for a *subject (research or experimental) or volunteer.

participation mystique *n.* In *analytical psychology, a term introduced in 1912 by Carl Gustav Jung (1875–1961) to denote a form of *projective identification in which a person gains influence over another. Jung borrowed the term from the French anthropologist Lucien Lévy-Bruhl (1857–1939) who used it to denote a phenomenon whereby people identify themselves with a physical object such as a holy artefact or a *totem. [French: literally mystical involvement]

participatory action research *n.* A form of *action research in which the researchers and the people being studied collaborate in defining the research problem, choosing the research methodology and method of data analysis, and disseminating the findings. **PAR** *abbrev.*

particular complex *n.* In *psychoanalysis, a *complex (2) that is peculiar to an individual and, unlike the *Oedipus complex, for example, is not universal.

particulate inheritance *n.* Inheritance of discrete characteristics through factors now identified as *genes, in contrast to the discredited doctrine of *blending inheritance.

partile *n.* In statistics, one of a number of scores that divide a distribution into equal parts, the most common being the *decile, *percentile, and *quartile.

part instinct *n.* Another name for a *component instinct.

part object *n.* In *Kleinian analysis, any part of a person that serves as an *instinctual object satisfying another person's sexual *instinct (3), the first instance in human development being the mother's breast. *See also* GOOD OBJECT, INSTINCTUAL OBJECT, OBJECT RELATIONS, PARANOID–SCHIZOID POSITION,

SPLITTING OF THE OBJECT. *Compare* WHOLE OBJECT.

parvocellular system *n.* The more recently evolved of the two major visual pathways, originating in small **ganglion* cells in the **retina*, projecting to the uppermost four layers of the **lateral* geniculate nucleus that contain neurons with small cell bodies, and terminating in layer 4C β of the **primary visual cortex* (Area V1). It is characterized by colour-sensitivity, slowly conducting axons, low contrast sensitivity, and high resolution of fine detail. Parvocellular neurons that project on to interblobs between the **blobs* in layers 1 and 2 of the primary visual cortex carry high-resolution information about shape, and parvocellular neurons that project on to blobs carry lower-resolution information about colour and shades of grey but not about shape, movement, or depth, whereas **magnocellular neurons* carry information about movement and depth but not colour. Also called the *parvo system*. *See also* MIDGET CELL, P CELL (X CELL), W CELL. *Compare* MAGNOCELLULAR SYSTEM. **P system** *abbrev.* [From Latin *parvus* small + *cella* a room, from *celare* to hide]

Pascal's wager *n.* The argument that it is in one's rational self-interest to assume that God exists, because however small the probability is that God does indeed exist, provided that it is not zero, the infinite gain from belief and the infinite punishment from disbelief outweigh any advantage of disbelief if God does not exist. In modern terms, the argument purports to show that the **expected utility* of assuming that God exists must be greater than the expected utility of believing that God does not exist. The argument was formulated by the French philosopher, mathematician, and physicist Blaise Pascal (1623–62) and published posthumously in *Pensées* (1670): ‘God is or he is not....What is your wager?...Let us weigh the gain and the loss in choosing “heads” that God is....If you gain, you gain all. If you lose, you lose nothing. Wager, then, unhesitatingly that he is’ (Thought 233). Critics have claimed that there are not merely two possibilities—that the Christian God exists or does not exist—but an infinite number, and that this undermines the argument. *See also* RATIONAL CHOICE THEORY.

passing stranger effect *n.* Another name for the **ancient mariner effect*.

passive-aggressive personality disorder *n.* A [*personality disorder](#) (not included in the [*DSM-5](#) classification) characterized by a pervasive pattern of [*negativism](#) (1), with passive resistance, complaints of being misunderstood, sullenness and argumentativeness, unreasonable scorn for authority, envy and resentment, alternation between hostile defiance and contrition, and general discontentment. People with the disorder tend to obtain high scores on measures of assertiveness and low scores on measures of warmth. Also called *negativistic personality disorder*. See also [LITTLE THIRTY](#).

passive analysis *n.* A style of [*psychoanalysis](#) in which the analyst offers a minimum of [*interpretations](#) (2).

passive avoidance conditioning *n.* Learning to abstain from a particular response in order to avoid a punishing or aversive stimulus. Also called *passive avoidance learning*. Compare [ACTIVE AVOIDANCE CONDITIONING](#), [ESCAPE CONDITIONING](#). See also [AVOIDANCE CONDITIONING](#).

passive-dependent personality disorder *n.* Another name for [*dependent personality disorder](#).

passive learning *n.* Another name for [*incidental learning](#) and [*latent learning](#).

passive movement *n.* Movement of an organism resulting from external force and not from the organism's own locomotion or muscular activity, as when a person is transported in a vehicle. Also called *passive motion*. See also [MOTION SICKNESS](#), [VECTION](#).

passive tremor *n.* Another name for [*resting tremor](#).

passive vocabulary *n.* The set of words that a person can understand. Compare [ACTIVE VOCABULARY](#).

pastoral counselling *n.* A form of [*counselling](#) given by ministers of religion to help members of their congregations with emotional problems. US

pastoral counseling.

patellar reflex *n.* A ***deep tendon reflex** elicited by tapping the tendon immediately below the knee-cap, normally resulting in contraction of the quadriceps muscle and extension of the leg in a kicking movement. Lesions in the ***pyramidal tract** are associated with a hyperactive patellar reflex. Also called the *knee-jerk reflex* or the *quadriceps reflex*. See also **STRETCH REFLEX**. [From Latin *patella* a small dish, diminutive of *patina* a dish or pan, alluding to the shape of the knee-cap]

paternity uncertainty *n.* A principle in ***evolutionary psychology** according to which, throughout the animal kingdom, a mother always knows when a child is hers, but a father is never certain that another male did not fertilize the female's egg and that the child is not his and therefore does not carry his genes. Whenever a male spends time and effort raising offspring, there is a possibility that he is wasting energy from an evolutionary point of view, because he may be helping to transmit another male's genes, rather than his own, to the next generation. Consequently, parental investment has more certain payoffs for mothers than for fathers, and the tendency for greater female investment in care of offspring may be a result of natural selection. [From Latin *paternitas* paternity, from *pater* father]

path analysis See **PATH DIAGRAM**.

path diagram *n.* A graphic representation of a causal ***model** derived from a ***correlational study**, showing the strengths of hypothesized ***causal** effects of certain variables on certain other variables. The results of ***multiple regression**, ***structural equation** models, and simple ***analysis** of covariance structures are often depicted by path diagrams, and such analyses are therefore called *path analysis*.

pathergasia *n.* A physical defect or abnormality that limits a person's capacity for psychological adjustment. [From Greek *pathos* suffering + *ergasia* work or business]

pathetic fallacy *n.* Attributing to inanimate objects feelings, dispositions, and reactions that can be manifested only by animate creatures
*****ebook converter DEMO Watermarks*****

or human beings, as when a person accuses a computer of being vindictive for deleting an important file. It is a mistake rather than a fallacy, because it does not arise from any invalid form of reasoning. The term was first used in 1843 by the English author and art critic John Ruskin (1819–1900) in Volume 3, part iv, chapter xii, section 5 of his book *Modern Painters*. Compare [ANTHROPOMORPHISM](#). [From Latin *patheticus* sensitive, from Greek *pathetikos* sensitive, from *pathos* suffering, related to *penthos* sorrow]

pathetic nerve *n.* Another name for the [*abducens nerve](#) (the sixth cranial nerve).

pathogenesis *n.* The [*aetiology](#) of a disorder. **pathogenic** *adj.* Capable of causing a disorder or disease. [From Greek *pathos* suffering + *genes* born]

pathognomonic *adj.* Of or relating to a group of [*signs \(1\)](#) and [*symptoms](#) that are indicative of a specific disorder. [From Greek *pathos* suffering + *gnomon* a judge or index + *-ikos* of, relating to, or resembling]

pathological fire-setting *n.* Another name for [*pyromania](#).

pathological gambling *n.* An [*impulse-control disorder](#) characterized by persistent and maladaptive gambling, indicated by such signs and symptoms as being preoccupied with gambling; needing increasing amounts of money to achieve the desired level of excitement; attempting repeatedly and unsuccessfully to cut down or to stop gambling; becoming restless or irritable while desisting from gambling; using gambling as an escape from worry or unhappiness; attempting to recoup gambling losses by further gambling; lying to family members or therapists to conceal the extent of gambling; committing illegal acts such as fraud or theft to finance gambling; jeopardizing a significant job, personal relationship, or educational opportunity by gambling; or relying on others to relieve financial crises caused by gambling. See also [GAMBLING DISORDER](#).

pathological hair-pulling *n.* Another name for [*trichotillomania](#).

pathological stealing *n.* Another name for [*kleptomania](#).

pathomimicry *n.* A less common name for ***factitious disorder** or ***Munchausen syndrome**. [From Greek *pathos* suffering + *mimos* a mime]

patient *n.* A person receiving medical, surgical, or other forms of treatment for a disorder or illness. Also called a *client*, especially when the treatment is not medical or surgical.

patriarchy *n.* Literally, a community of related families under the authority of a male head called a *patriarch*; applied more generally to any form of social organization in which men have predominant power. *Compare* **MATRIARCHY**. **patriarchal** *adj.* [From Greek *pater*, *patris* father + Greek *arche* a rule]

patrilineal *adj.* Of or relating to descent, kinship, or inheritance through the male line, as in most Western societies. *Compare* **MATRILINEAL**. [From Latin *pater*, *patris* a father + *linea* a line]

patrist *n.* A person whose ***personality** is modelled on or strongly influenced by his or her father. *Compare* **MATRIST**. [From Latin *pater*, *patris* a father + *-ista*, *-istes* indicating a person who performs an action or function]

pattern discrimination *n.* Distinguishing consistently between two or more patterns, or consistently making different responses to them.

pattern-induced flicker colour *n.* A colour produced by ***Benham's top**. US *pattern-induced flicker color*. Also called a *Fechner–Benham colour* or a *subjective colour*. **PIFC** *abbrev.*

patterning *n.* A method of retraining brain-injured children who have suffered disruption of sensory-motor functions by guiding them through developmental sequences of behaviour, starting with early behavioural patterns such as crawling, the object being to enable undamaged brain tissue to take over the functions previously controlled by tissue that has become non-functional.

pattern masking *n.* ***Visual masking** using a differentiated image as a

masking stimulus. *See also* [INSPECTION TIME](#). **pattern masking by noise** *n.* Pattern masking using a masking stimulus that consists of visual [*noise \(2\)](#) in the form of a random array of light and dark areas. **pattern masking by structure** *n.* Pattern masking using a masking stimulus that consists of an array of light and dark areas each of which is similar to an element of the test stimulus.

pattern recognition *n.* Identification of a pattern as the same as one previously encountered despite modifications, as when a printed character or symbol is presented in a different font, colour, or size, or is viewed from a different angle. *See also* [PERCEPTRON](#). *Compare* [OBJECT RECOGNITION](#).

Pavlovian conditioning *n.* Another name for [*classical conditioning](#). [Named after the Russian physiologist Ivan Petrovich Pavlov (1849–1936) who introduced it in 1923]

Pavlov strategy *n.* Another name for the [*win–stay, lose–shift strategy](#), so-called on account of its mindless, reflexive character (*see* [PAVLOVIAN CONDITIONING](#)).

pavor diurnus *n.* A daytime counterpart of pavor nocturnus or [*sleep terrors](#); a form of sleep terrors associated with daytime sleep, usually in children. [From Latin *pavor* fear or dread + *diurnus* of the day]

pavor nocturnus *n.* Another name for [*sleep terrors](#). Also called *night terrors*. [From Latin *pavor* fear or dread + *nocturnus* of the night]

Paxil *n.* A proprietary name for the antidepressant drug [*paroxetine](#). [Trademark]

payoff *n.* A gain or loss resulting from a particular action or event, especially (in [*game theory](#)) a gain or loss of [*utility \(1\)](#) associated with the outcome of a strategic [*game \(1\)](#).

P cell *abbrev.* A type of ganglion cell belonging to the [*parvocellular system](#). Also called an *X cell*. *See also* [MIDGET CELL](#). *Compare* [M CELL](#).

P consciousness See PHENOMENAL CONSCIOUSNESS.

Pcpt–Cs process *n.* In *psychoanalysis, a term used by Sigmund Freud (1856–1939) to denote any function of the *perception–consciousness system. Also called a ω process or a *W process*.

Peabody Picture Vocabulary Test *n.* A multiple-choice test, suitable for children from 2½ to 18 years of age, designed to measure the respondent's receptive vocabulary, generally interpreted as verbal intelligence. It is untimed but takes 15 minutes or less to administer, it is issued in two parallel forms, and like a standard IQ test it yields scores on a scale with a *mean of 100 and a *standard deviation of 15. Administration of the test requires no reading by the respondent: the examiner reads aloud a series of stimulus words, and in each case the respondent selects a picture corresponding to the word from a set of four alternatives, the words being arranged within the test in ascending order of difficulty. The test was developed by the Canadian-born psychologist Lloyd M. Dunn (1917–2006) and published in 1959, and a revised version (with the suffix *-Revised*) was issued in 1981. **PPVT** or **PPVT-R** *abbrev.* [So called because it was constructed at George Peabody College in Nashville, Tennessee, by the Canadian special education researcher Lloyd M. Dunn (1917–2006) and his wife Leota M. Dunn (1917–2001)]

peace pill *n.* A common street name for the depressant drug *phencyclidine. Also spelt *PC pill*.

peak clipping *n.* A common form of distortion in telephones and other auditory transmission systems in which the peaks of the waveform are flattened off—to only one or two per cent of their original height in severe peak clipping—transforming the waveform into a sequence of rectangular pulses. When applied to speech it has surprisingly little effect on its intelligibility, 80 or 90 per cent of words still being correctly interpreted by listeners when the clipping is severe.

peak experience *n.* An *altered state of consciousness resembling a form of *oceanic feeling, in which a person experiences an ecstatic

dissolution of the usual bonds of space and time and an attitude of wonderment and awe. The concept was introduced by the US psychologist Abraham Maslow (1908–70) in his book *Religions, Values, and Peak-Experiences* (1964, pp. 59–68).

peak shift *n.* A phenomenon of ***discrimination** learning, when an animal has learnt to distinguish between a positive and a negative stimulus lying on the same stimulus dimension, such as light stimulus associated with reward and a dark stimulus not associated with reward. If the animal is then tested with a variety of stimuli spanning the stimulus dimension (in this example, stimuli of various shades of lightness), it responds maximally not to the original positive stimulus but to a stimulus further from the negative stimulus (a stimulus even lighter than the original positive stimulus).

Pearson chi-square test *n.* Another name for the ***chi-square test** when the Pearson formula is used. *Compare* **LIKELIHOOD RATIO CHI-SQUARE TEST**. [Named after the English statistician Karl Pearson (1857–1936) who developed it in 1900]

Pearson's correlation coefficient *See* **PRODUCT–MOMENT CORRELATION COEFFICIENT**.

pecking order *n.* A ***dominance** hierarchy within a flock of poultry in which each bird is able to peck without retaliation only those lower in the hierarchy and is liable to be pecked only by those above. There are usually separate pecking orders for males and females, with all the males dominating all the females, and the highest-ranked (alpha or α) male, often with the largest comb (itself determined by high ***testosterone** level), dominating all the others but in practice pecking only his nearest rivals. Also called a *peck order*. *Compare* **HOOK ORDER**. [A literal translation of the German *Hackordnung*, the name given to it in 1922 by the Norwegian zoologist Thorleif Schjelderup-Ebbe (1894–1976) following his pioneering study of domestic hens]

PEC scale *abbrev.* A scale to measure political and economic conservatism of attitudes first published by the German philosopher, sociologist, and psychologist Theodor W(iesengrund) Adorno (1903–69) and
*****ebook converter DEMO Watermarks*****

several colleagues in the book *The Authoritarian Personality* (1950). See also [AUTHORITARIANISM](#).

pederasty *n.* Sex between a man and a boy, especially involving anal intercourse. [From Greek *pais*, *paidos* a boy + *erastes* a lover]

pedophilia *n.* An alternative spelling, especially in the US, of [*paedophilia](#).

peduncle *n.* Any stalklike structure, especially a bundle of white nerve fibres in the brain. See [CEREBELLAR PEDUNCLE](#), [CEREBRAL PEDUNCLE](#). **peduncular** *adj.* [From Latin *pedunculus* a corruption of *pediculus* a little foot, from *pes*, *pedis* a foot]

peeping Tom *n.* Another name for a [*voyeur](#). [Named after a 13th-century English legend according to which Lady Godiva rode naked through the marketplace of Coventry in response to a promise from her husband, Leofric, Earl of Mercia, that he would reduce taxes if she did so. In a later version of the legend, all the townspeople averted their eyes except a tailor called Tom, who was struck blind for his sin]

pegboard test *n.* A test of perceptual–motor skill in which pegs have to be inserted into holes as quickly as possible.

peg-word mnemonic *n.* A flexible and effective [*mnemonic](#) for memorizing long lists of items in a specific numerical sequence by forming mental associations with a list of words that are already known or can be generated to order. A popular set of peg-words, easy to remember because they rhyme with the names of the first ten natural numbers, is: one is a *bun*, two is a *shoe*, three is a *tree*, four is a *door*, five is a *hive*, six is *sticks*, seven is *heaven*, eight is a *gate*, nine is *wine*, ten is a *hen*. To memorize the ten commandments, one might form vivid mental images such as these: (1) a *bun* inscribed with *One God* in icing; (2) a *shoe* decorated with *graven images* of gods, animals, and fishes; (3) a *tree* into which children have climbed and are loudly *taking God's name in vain*; (4) a *door* hung with a calendar showing the *Sabbath days* blacked out; (5) a *hive* being presented to *honour one's father and mother*; (6) *sticks* being used to *kill* someone; (7) *heaven* up

*****ebook converter DEMO Watermarks*****

above, with a sign *No Adultery* written in the clouds; (8) a *gate* with a thief climbing over it to *steal* something; (9) a *wine* bottle sticking out of the pocket of a witness giving *false testimony* in court; (10) a *hen* being *coveted* by a neighbour over a garden fence. When the time comes to recall them, *bun* should bring back the image of the inscription *One God*, *shoe* should remind one of the graven images decorating it, and so on. For lists of unlimited length, the standard system used by experts is to generate peg-words from numbers by using a technique introduced in 1634 by the French mathematician Pierre Hérigone (1580–1643) in which each of the ten digits has one or more consonants assigned to it, and then words lending themselves to vivid images are formed from numbers by inserting vowels freely. In the modern version of the Hérigone code, 1 is associated with *t* or *d*; 2 with *n*; 3 with *m*; 4 with *r*; 5 with *l*; 6 with *ch*, *j*, or *sh*; 7 with *k*, hard *c*, or hard *g*; 8 with *f* or *v*; 9 with *p* or *b*; and 0 with *s* or *z*. The peg-word for the number 1 might be *toe*, 31 might be *mat*, and 131 might be *tomato*, and so on. The system is also useful for memorizing numbers, such as 1879, the year in which the world's first psychological laboratory was opened in Leipzig, which might be translated into a mental image of a *dove cup*—a trophy cup engraved with an image of the dove of peace to commemorate the event; but one's own images always work best, especially if they are more bizarre than that. Also called *keyword mnemonic*. See also [MNEMONIST](#).

pellagra *n.* A disease that is caused by dietary deficiency of niacin or nicotinic acid, a member of the [*vitamin B](#) complex contained in milk, liver, yeast, and other foods, and that results in wasting of the body, itching and scaling of the skin, inflammation of the mouth, diarrhoea, and [*intellectual disability](#). [From Italian *pelle* skin + *agra* rough, or Latin *pellis* skin + Greek *agra* seizure]

penetrability, cognitive See [COGNITIVE PENETRABILITY](#).

penetrance *n.* The degree to which a [*gene](#) is expressed in the [*phenotype](#), often indexed by the proportion of organisms with the specified genotype who show the characteristic. See also [DOMINANCE \(GENETIC\)](#).

penile plethysmograph *n.* An instrument for recording changes in the volume of the [*penis](#), generally used to study sexual responses of men to

*****ebook converter DEMO Watermarks*****

various stimuli. *See also* [PLETHYSMOGRAPH](#). [From *penis* + Greek *plethysmos* enlargement + *graphein* to write]

penis *n.* The external male sexual organ, in humans and other mammals also used for excretion of urine. *See also* [PHALLUS](#), [WOLFFIAN DUCT](#). *Compare* [CLITORIS](#). **penile** *adj.* [Latin *penis* originally a tail]

penis dentata *n.* A fantasy of a toothed penis encountered in some women with neurotic sexual fears. *See also* [VAGINA DENTATA](#). [From Latin *penis* originally a tail + *dentata* toothed, from *dens*, *dentis* a tooth]

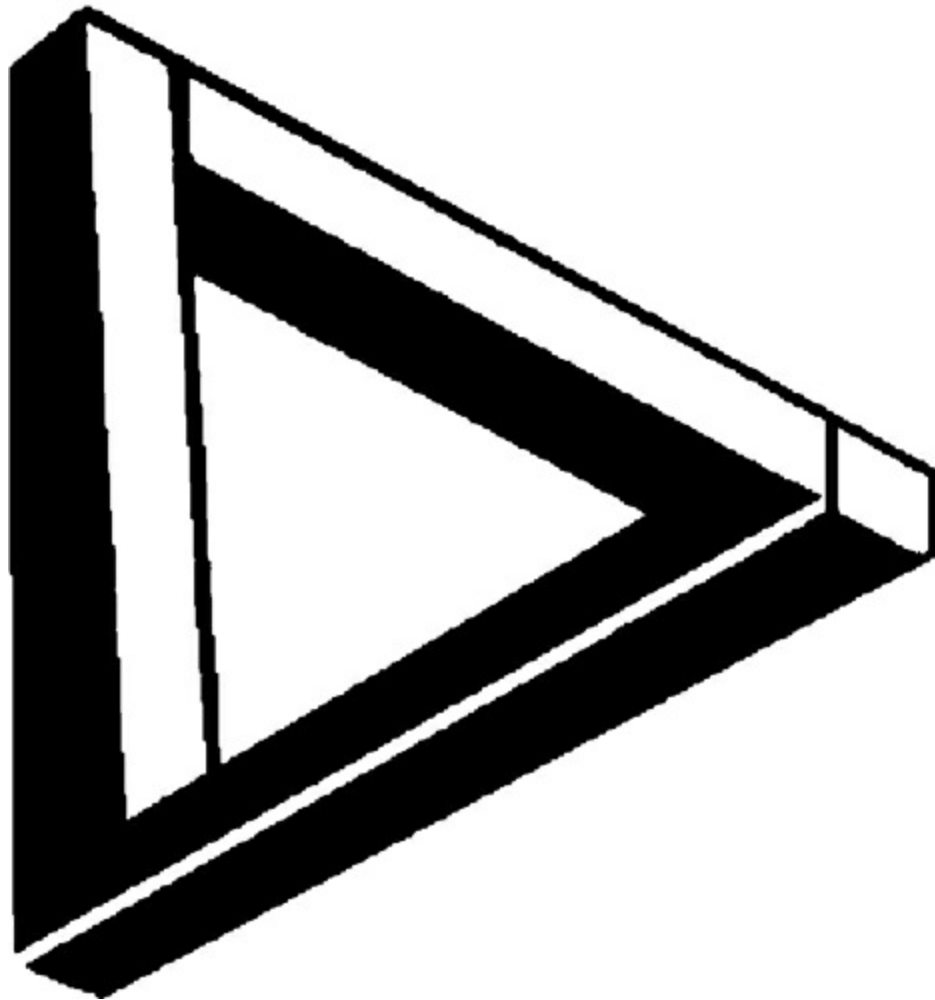
penis envy *n.* In [*psychoanalysis](#), a key aspect of female psychology, originating in a girl's discovery of the anatomic differences between the sexes, causing her to feel deprived, and later, during the [*Oedipal phase](#), to develop a desire for a penis, manifested symbolically as a desire to have a child or to possess a penis in sexual intercourse. Sigmund Freud (1856–1939) introduced the concept in 1914 in connection with the [*castration complex](#) in girls in his article 'On Narcissism: An Introduction' (*Standard Edition*, XIV, pp. 73–102, at p. 92) and developed it further in an article in 1917 'On the Transformations of Instinct, as Exemplified in Anal Erotism' (*Standard Edition*, XVII, pp. 127–33). The concept was rejected by the German-born US psychoanalyst Karen Horney (1885–1952) and the Welsh psychoanalyst Ernest Jones (1879–1958), among others, and was given less prominence by the British-based Austrian psychoanalyst Melanie Klein (1882–1960). *See also* [PHALLIC STAGE](#).

Penrose staircase *n.* Another name for the [*staircase illusion](#).

Penrose triangle *n.* An [*impossible figure](#) of a solid triangular frame that could not exist in actual space although each of its corners, considered on its own, is feasibly constructed (see [illustration](#)). Also called an *impossible triangle* or a *tribar*. The first recognizable version of it was depicted in 1934 as an impossible arrangement of nine cubes by the Swedish artist Oscar Reutersvärd (1915–2001) and was used as a design for a postage stamp issued in Sweden in 1982. [Named after the English psychologist/geneticist Lionel S. Penrose (1898–1972) and his mathematical physicist son Roger Penrose (born 1931) who, unaware of Reutersvärd's earlier work, published a

*****ebook converter DEMO Watermarks*****

version of it in 1958]



Penrose triangle

pentazocine *n.* A synthetic **opiate* drug, being a **narcotic* analgesic that is less addictive than morphine and is sometimes taken as a street drug. Also called *Talwin* or *Fortral* (trademark). Formula: $C_{19}H_{27}NO$. Compare *PHENAZOCINE*. [From Greek *pente* five + *azocine* a chemical compound]

pentobarbital *n.* Pentobarbitone sodium, a short-acting **barbiturate* drug and central nervous system **depressant*, used as a sedative and hypnotic, and sometimes taken as a street drug. Also called *Nembutal* (trademark) or *pentobarbitone*. Street names include *nebbies*, *yellow bullets*. Formula: $C_{11}H_{17}N_2O_3Na$. [From Greek *pente* five + *barbit(uric) acid* + *-al* indicating a

*****ebook converter DEMO Watermarks*****

pharmaceutical product]

pentobarbitone *n.* See [PENTOBARBITAL](#).

Pentothal *n.* Sodium Pentothal, a proprietary name for the barbiturate drug [*thiopental](#) sodium (thiopentone sodium). See also [TRUTH DRUG](#). [Trademark]

pentylene tetrazol *n.* A synthetic, white, crystalline, bitter-tasting drug that functions as a central nervous system [*stimulant](#) by reducing the recovery time of neurons following [*action potentials](#), this effect being brought about by increasing the permeability of the neurons' cell membranes to potassium. Also called *Metrazol* (trademark). [From its chemical name *pent(ameth)ylene tetrazol(e)*]

Pepper's ghost *n.* A spectral image produced by a large sheet of clear glass positioned at an angle, allowing people and objects to be seen through it while an image of a person situated elsewhere, if brightly lit, is simultaneously reflected from it. It was used in Victorian theatre productions to project an image of an actor from a well beneath the front of the stage, the lighting on the actor being brightened or dimmed to make the image appear or disappear, the image itself having the quality of an apparition through which other actors on the stage could walk. The device is often wrongly described as being made from half-silvered glass. It should, perhaps, be called *Dircks's ghost* (see [ETYMOLOGY](#) immediately below). [Named after the English analytical chemist John Henry Pepper (1821–1900) who improved it and was the first to demonstrate it in public at the Royal Polytechnic in London in 1862, although it had been invented earlier that year by the retired English civil engineer and patent agent Henry Dircks (1806–73) and was patented jointly by Pepper and Dircks in 1863]

pepper spray *n.* Oleoresin capsicum ([OC](#)), a mixture of the resin and essential oil of the cayenne pepper plant, developed in the 1980s as a dog repellent and later adapted for personal defence and crowd control, sprayed as an aerosol causing immediate but temporary inflammation (rather than irritation as with other [*incapacitants](#)) of the mucous membranes of the eyes, nose, throat, and lungs, with accompanying pain, blindness, and breathing

*****ebook converter DEMO Watermarks*****

difficulty. Compare [BZ GAS](#), [CN GAS](#), [CS GAS](#), [MACE](#), [TEAR GAS](#).

pepsin *n.* Any of a group of digestive enzymes produced in the stomach in the inactive form pepsinogen and activated by the presence of acids to contribute to digestion by breaking down proteins into their component amino acids. Also spelt *pepsine*. See also [GASTRIC GLAND](#). **peptic** *adj.* Of or relating to pepsin or digestion. [From Greek *peptein* to digest]

peptide *n.* Any chemical compound of two or more [*amino acids](#) linked by chemical bonds between their respective amino and carboxyl groups, including a substance such as an [*endorphin](#) that regulates various bodily functions and plays an important part in the experience of [*pain](#). See also [POLYPEPTIDE](#). [From Greek *peptein* to digest]

peptide hormone *n.* Any [*hormone](#) that is a [*peptide](#) or [*polypeptide](#), in contrast to a [*steroid](#) hormone; the hormones of the hypothalamus and most of the endocrine glands being peptide hormones, apart from those of the adrenal cortex, testes, and ovaries, which are steroid hormones. Many peptide hormones function also as [*neurotransmitters](#).

perceive *vb.* To become aware or gain knowledge of something through the senses, or to comprehend or grasp a stimulus. See also [PERCEPTION](#). [From Latin *percipere* to seize thoroughly, from *per* thoroughly + *capere* to grasp]

percentile *n.* Any of the 100 equal groups into which a distribution of scores can be divided, or the value of a variable such that a specified percentage of scores, arranged in order of magnitude, fall below that value, the 95th percentile, for example, being the value of the variable such that 95 per cent of the other scores fall below that value. The 25th, 50th, and 75th percentiles are also [*quartiles](#), and the 50th percentile is the [*median](#) of any distribution. A percentile is also called a *centile*. See also [PARTILE](#). Compare [DECILE](#), [QUARTILE](#). [From Latin *per centum* out of every hundred]

percept *n.* The mental representation of something that is [*perceived](#), an object or image as perceived by the senses rather than the physical stimulus that generates it, distinct from both the [*proximal](#) stimulus and the [*distal](#) stimulus. See also [PERCEPTION](#).

*****ebook converter DEMO Watermarks*****

perception *n.* The act, process, or product of **perceiving*, the ability or capacity to perceive, or a particular way of perceiving (*Newspapers influenced the public's perception of Princess Diana*). In psychology, a distinction is conventionally drawn between **sensation*, the subjective experience or feeling that results from excitation of **sensory* receptors, and perception, sensory experience that has been interpreted with reference to its presumed external stimulus object or event, this distinction having first been made in 1785 by Thomas Reid (1710–96), founder of the Scottish school of psychological philosophy, who pointed out that the agreeable fragrance of a rose is merely a sensation inasmuch as it can be experienced without thinking of a rose or of any other object, whereas the perception of a rose or of anything else always refers to the external object that is its cause. *Compare APPERCEPTION.* **perceive** *vb.* To engage in perception. **perceptual** *adj.* Of or relating to perception. [From Latin *percipere*, *perceptum* to perceive, from *per* through or thoroughly + *capere*, *ceptum* to take + *-ion* indicating an action, process, or state]

perception–consciousness system *n.* In the **psychoanalysis* of Sigmund Freud (1856–1939), a subsystem of the mental apparatus characterized by **consciousness*, receiving input from the outside world via the **sensory* receptors and from the **preconscious* via the activation of memories, and playing a dynamic role in avoidance of unacceptable thoughts or ideas and control of the **pleasure principle*. In *An Outline of Psycho-Analysis* (1938), Freud considered the existence of this system to be ‘a fact without parallel, which defies all explanation or description....Nevertheless, if anyone speaks of consciousness we know immediately and from our most personal experience what is meant by it’ (*Standard Edition*, XXIII, pp. 144–207, at p. 157). **ω** or **W** or **Pcpt–Cs** *abbrev.*

perceptron *n.* In **artificial intelligence*, a pattern-recognition machine into which distinctive **features* (1) of a target pattern are input with weights reflecting their relative importance. The machine is programmed to signal a decision that the target pattern is present whenever the sum of the weights of features in a test pattern presented to it exceeds a critical level, and a process of learning takes place as the weights of features present in a test pattern are increased after every **hit* and decreased after every **false negative*. The first version was introduced in an article in the journal *Psychological Review* in

*****ebook converter DEMO Watermarks*****

1958 by the US psychologist Frank Rosenblatt (1928–71) and is an early example of a **neural* network. *See also* [COMPUTER VISION](#), [PATTERN RECOGNITION](#). [From Latin *percipere*, *perceptum* to perceive, from *per* through + *capere*, *ceptum* to take + Greek *-tron* denoting an instrument, from *arotron* a plough]

perceptual completion *n.* Another name for **filling-in*. *See* [AMODAL COMPLETION](#), [MODAL COMPLETION](#).

perceptual constancy *n.* The tendency for a perceived object or a perceptual quality to appear the same when the pattern of sensory stimulation or **proximal* stimulus alters through a change in orientation, distance, illumination, or some other extraneous influence or factor. *See* [COLOUR CONSTANCY](#), [LIGHTNESS CONSTANCY](#), [MELODIC CONSTANCY](#), [OBJECT CONSTANCY](#), [ODOUR CONSTANCY](#), [PERSON CONSTANCY](#), [POSITION CONSTANCY](#), [SHAPE CONSTANCY](#), [SIZE CONSTANCY](#), [VELOCITY CONSTANCY](#), [WORD CONSTANCY](#). *See also* [BRUNSWIK RATIO](#), [LAND EFFECT](#), [PHENOMENAL REGRESSION](#), [RETINEX THEORY](#), [SHAPE–SLANT INVARIANCE](#), [TEMPLATE MATCHING](#), [THOULESS RATIO](#).

perceptual cycle *n.* A term introduced by the German-born US psychologist Ulrich (Richard Gustav) Neisser (1928–2012) for (a) the set of cognitive **schemata* that direct perceptual processes, (b) the perceptual responses through which perceptual information is sampled, and (c) the physical stimuli that give rise to perception, the assumption being that a cyclic **feedback* mechanism causes a change in (c) to lead to a change of (a), which in turn leads to a change in (b), which affects (c), and so on indefinitely. Also called the *cyclic model of perception*. *See also* [CONSTRUCTIVISM](#).

perceptual defence *n.* The process by which stimuli that are potentially threatening, offensive, or unpleasant are either not perceived or are distorted in perception, especially when presented as brief flashes in a **tachistoscope*. US *perceptual defense*.

perceptual differentiation *n.* The process by which exposure to a range of stimuli belonging to a particular class increases one's ability to discriminate between them.

*****ebook converter DEMO Watermarks*****

perceptual field *n.* A general term for the **visual field* or the analogous range of stimuli available to any other sense organ. *Compare* RECEPTIVE FIELD.

perceptual illusion *n.* A misperception of a stimulus object, event, or experience, or a stimulus that gives rise to such a misperception or misconception; more generally any misleading, deceptive, or puzzling stimulus or the perceptual experience that it generates. *See* AUDITORY ILLUSION, TACTILE ILLUSION, VISUAL ILLUSION. *See also* CONSTANT ERROR, NAIVE REALISM. [From Latin *illusio*, *illusionis* deceit, from *illudere* to mock or make sport with, from *ludere* to play]

perceptual memory *n.* Long-term memory for visual, auditory, and other perceptual information, including memory for people's faces and voices, the appearance of buildings, familiar tunes, the flavours of particular foods and drinks, and so on. Stored information of this type does not fall into the category of **episodic memory*, and it is therefore often included in **semantic* memory, but this is avoided in careful usage because it is not (and in some cases cannot be) encoded in words. It should not be confused with **sensory* memory.

perceptual-motor skill *n.* Any ability or capacity involving the interaction of **perception* and voluntary movement, typical examples being the ability to type and the ability to play a ball game.

perceptual schema *n.* A structured internal **representation* (1) of an object or image acquired through perception. *See also* SCHEMA.

perceptual sensitization *n.* An abnormally lowered threshold for the perception of certain stimuli, tending to result in **false alarms* (2). Also called *perceptual vigilance*.

perceptual set *n.* A temporary readiness or predisposition to perceive in a particular way. *See also* AUFGABE, EINSTELLUNG, SET (2).

perceptual speed *n.* A skill involving the rapid identification of matching items, incorporated into many IQ tests, women tending to

outperform men on measures of this skill.

perceptual vigilance *n.* Another name for **perceptual sensitization*.

percipient *adj.* 1. Perceptive, observant, or able to perceive. *n.* 2. A person, organism, or machine that perceives. [From Latin *percipiens* observing, from *percipere* to perceive, from *per* through or thoroughly + *capere* to take]

Percodan *n.* A proprietary name for a drug containing the narcotic analgesic **oxycodone* that is sometimes taken as a street drug. [Trademark]

perdeviation effect *n.* A form of **adaptation* (2) to an eccentric body posture held for some time, the sensation gradually developing that the posture is normal. *See also* *KOHNSTAMM EFFECT*, *POSTURAL AFTEREFFECT*. [From Latin *per* through or thoroughly + *de* from + *via* a way + *-ation* indicating a process or condition]

perdida del alma *n.* Another name for **susto*. [From Spanish *perdida* loss + *del* of + *alma* soul]

peregrinating patient *n.* Another name for a person with **Munchausen syndrome*.

perfect pitch *n.* Another name for **absolute pitch*, but a term that is avoided in careful usage. Absolute pitch could never be exact, because the **frequency* (1) of a sound wave is a continuous variable, and differences in frequency can be arbitrarily small.

perforant pathway *n.* A major tract of afferent nerve fibres from the **entorhinal cortex* to the **hippocampus*. [From Latin *per* through + *forare* to bore]

performance *n.* 1. The act or process of carrying out a sequence of behaviour, especially the presentation of a dramatic role or piece of music. 2. In linguistics, especially in **generative grammar* and **transformational*

grammar, a term introduced by the US linguist and philosopher (Avram) Noam Chomsky (born 1928) to denote the specific utterances of a native speaker of a language, including hesitations, false starts, and speech errors, in contrast to their underlying ***competence** (2). It is analogous to the concept of ***parole**. Also called *linguistic performance*.

performance anxiety *n.* A form of ***anxiety** preceding or accompanying participation in a musical, theatrical, sporting, or other activity involving public self-presentation before an audience. Also called *stage fright*. See also AUDIENCE EFFECT, BETA-BLOCKER, DRIVE THEORY OF SOCIAL FACILITATION.

performance enhancer *n.* Any drug or treatment that improves an athlete's level of achievement. Among the drugs that have been used for this purpose are ***anabolic steroids**, ***creatine**, ***erythropoietin**, ***testosterone**, ***growth hormone**, ***stimulant drugs**, ***beta-blockers**, and ***smart drugs**. Also called a *performance-enhancing drug*.

performance, human See HUMAN PERFORMANCE.

performance operating characteristic *n.* A graph showing the performance of one task plotted against the performance of a different task, when both tasks are performed at the same time. In general, it shows a trade-off, with relatively good performance on one task being associated with relatively poor performance on the other. See also ATTENTION OPERATING CHARACTERISTIC. **POC** abbrev.

performance test *n.* In psychometrics, any ***non-verbal test** of aptitude, ability, or intelligence.

periaqueductal grey matter *n.* An area surrounding the ***cerebral** aqueduct in the pons and thalamus. It contains opiate ***neuroreceptors** and neurons that release ***endorphins** and is thus implicated in the sensation and suppression of ***pain**, and it is also implicated in the control of aggression and in female sexual behaviour. US *periaqueductal gray matter*. **PAG** abbrev. [From Greek *peri* around + Latin *aqua* water + *ductus* a leading, from *ducere*, *ductus* to lead]

*****ebook converter DEMO Watermarks*****

periglomerular cell *n.* A type of horizontally oriented cell in an **olfactory bulb* responsible for lateral interactions within the bulb. [From Greek *peri* around + Latin *glomerulus* a little ball, diminutive of *glomus* a ball]

perikaryon *n.* The part of a cell surrounding the **nucleus* (1). Also called the *cytoplasm*. [From Greek *peri* around + *karyon* a kernel]

perilymph *n.* The fluid contained within the **scala* tympani and the **scala* vestibuli in the space between the membranous labyrinth and bony labyrinth of the **inner ear*. Compare *ENDOLYMPH*. [From Greek *peri* around + Latin *lympa* water, alluding to the fact that it lies outside the membranous labyrinth, unlike endolymph]

perimetry *n.* Mapping the limits of the **visual field* for stimuli of various kinds (especially colours) with a *perimeter*, a device consisting of a light stimulus on the end of an adjustable arm that moves to various positions while the person being tested maintains a steady fixation on a point immediately ahead and reports visual sensations, the resulting map of the visual field being projected on to the inside of a spherical surface. [From Greek *perimetros* a boundary, from *peri* around + *metron* a measure]

perineal *adj.* Of or relating to the perineum (or perinaeum), the diamond-shaped part of the body between the genital organs and the anus. [From Greek *perinaion* the perineum, from *peri* around + *inein* to empty out]

perineural *adj.* Of or relating to the connective tissue that forms a sheath around a bundle of nerve fibres. Also written *perineurial* or *perineuronal*.
perineurium *n.* [From Greek *peri* around + *neuron* a nerve]

peripheral dyslexia *n.* Another name for **visual word-form dyslexia*.

peripheral nerve *n.* Any nerve belonging to the **peripheral nervous system*.

peripheral nervous system *n.* All of the **nervous* system outside the

brain and spinal cord, including the **cranial nerves* apart from the **optic nerves* (the second pair of cranial nerves), the **spinal nerves*, and the **autonomic* nervous system. *Compare* CENTRAL NERVOUS SYSTEM. **PNS** *abbrev.*

peripheral vision *n.* Perception of stimuli that are not being fixated directly and are projected on to the retina outside the **macula* lutea. *See also* ARAGO PHENOMENON. *Compare* CENTRAL VISION.

peristalsis *n.* Travelling waves of involuntary contractions along the **alimentary* canal, controlled by the parasympathetic nervous system, causing food and waste products to move down it; also similar contractions in other tubular organs. **peristaltic** *adj.* [From Greek *peristellein* to wrap around, from *peri* around + *stellein* to press together]

Perky phenomenon *n.* The act or process of mistaking a physical stimulus for an image of imagination, an effect first demonstrated in a group of viewers who were instructed to stare fixedly at a mark on a ground glass screen and to imagine a red tomato as vividly as possible while a very faint (sub-threshold) and slightly blurred image of a red tomato was back-projected on to the screen and its illumination gradually increased until the observer reported experiencing an image of a tomato, the procedure then being repeated with images of a blue book, a banana, an orange, a leaf, and a lemon, whereupon the observers all mistook the visual stimuli for images of imagination, and not one of them realized that light stimuli were being projected on to the screen. In almost all cases the observers reported the images only after the illumination had been increased well above the threshold at which the stimuli were perceived by a control group of viewers who were not vividly imagining the objects, therefore the phenomenon is interpreted by some authorities as a type of **visual masking* by imaginary mental images, the perception of stimuli apparently being partially suppressed by vividly imagined visual images. [Named after US psychologist Cheves West Perky (1874–1940) who first reported it in 1910, while she was a postgraduate student under the English psychologist Edward Bradford Titchener (1867–1927) at Cornell University]

perlocutionary act *n.* The effect of a **speech act* on a listener. An **illocutionary act* may not produce the intended perlocutionary act on the part

*****ebook converter DEMO Watermarks*****

of the listener, as when a threat fails to induce fear. Compare [LOCUTIONARY ACT](#). [From Latin *per* through + *locutio* an utterance, from *loqui* to speak]

perphenazine *n.* A [*neuroleptic \(1\)](#) drug belonging to the class of [*phenothiazines](#), used in the treatment of anxiety, tension, and agitation in [*schizophrenia](#) and other [*psychotic \(1\)](#) disorders and in the control of nausea, vomiting, and hiccups. Also called *Trilafon* (trademark). [A blend of *piperazine* and *phene* an old name for benzene, from Greek *phainein* to show, alluding to its use in manufacturing illuminating gas]

persecution complex *n.* A [*delusion](#) or fear that others are plotting or conspiring to cause one harm. See [PERSECUTORY DELUSION](#). [From Latin *persecutor* a pursuer, from *persequi* to take revenge on, from *per-* thoroughly + *sequi* to follow]

persecution, delusion of See [PERSECUTORY DELUSION](#).

persecutory delusion *n.* A [*delusion](#) of being conspired or plotted against, cheated, spied on, stalked, poisoned, drugged, slandered, harassed, or obstructed. Also called a *persecution complex*.

persecutory delusional disorder *n.* A type of [*delusional disorder](#) in which the central delusion is a [*persecutory delusion](#).

perseveration *n.* **1.** The continuance or recurrence of a sensation, impression, or idea during subsequent activity; the automatic repetition of an action, utterance, thought, or other form of behaviour; or the difficulty experienced in switching from one pattern of behaviour or method of working to another. **2.** Meaningless or pointless repetition of words, phrases, ideas, or actions, characteristic of some forms of [*thought disorder](#) and some neurological disorders such as [*frontal lobe](#) syndrome. [From Latin *perseverare* to remain steadfast or to persist, from *per* through or thoroughly + *severus* strict + *-ation* indicating a process or condition]

persistent (chronic) motor or vocal tic disorder *n.* A [*tic disorder](#) in [*DSM-5](#) characterized by the presence of either motor tics or

vocal tics, but not both, and apart from that sharing the features of *Tourette's disorder.

persistent depressive disorder *n.* A *depressive disorder introduced in *DSM-5 for a condition characterized by feelings of *depression on most days, lasting for at least two years, or at least one year for children and adolescents, accompanied by poor appetite or overeating, *insomnia or *hypersomnia, *fatigue or lack of energy, low *self-esteem, poor concentration, or feelings of hopelessness, the symptoms falling short of *major depressive disorder. Compare BIPOLAR DISORDERS, CYCLOTHYMIC DISORDER, DYSTHYMIA.

persistent sexual arousal syndrome *n.* A rare *sexual dysfunction of unknown *aetiology causing unwanted and intrusive physiological responses characteristic of sexual arousal, without conscious sexual excitement or desire, triggered by sexual or nonsexual stimuli, persisting for hours to days and not subsiding in response to *orgasm. It was discovered and named by the US psychiatrists Sandra R(isa) Leiblum (born 1943) and Sharon G. Nathan (born 1943) in an article in the *Journal of Sexual and Marital Therapy* in 2001. Compare FEMALE ORGASMIC DISORDER, MALE HYPOACTIVE SEXUAL DESIRE DISORDER. **PSAS** abbrev.

persistent vegetative state *n.* A generally irreversible condition resulting from severe brain damage in which a person is alive, has spontaneous breathing, heartbeat, and sleep–wake cycle, but is incapable of voluntary movement and is judged to lack conscious awareness. People in such a state can make spontaneous movements such as swallowing, smiling, crying, grasping, and moaning, and in rare cases may briefly follow moving objects with their eyes or turn towards loud sounds, but these movements are always reflexive and not purposeful. Also called *persistent vegetative syndrome* or (especially if it has not persisted for long) a *vegetative state*. Compare LOCKED-IN SYNDROME. **PVS** abbrev.

persona *n.* 1. In *analytical psychology, the mask or face that a person presents to the world, often derived from a sense of gender identity (as when a woman plays the role of a loyal wife), or a stage of development (a rebellious adolescent), or an occupation (as in a trustworthy doctor), and over

*****ebook converter DEMO Watermarks*****

the lifespan a person may adopt various different personas derived from ***archetypes** (2). Carl Gustav Jung (1875–1961) believed that a persona can become pathological if a person identifies too closely with it, causing it to stifle awareness of anything beyond the social role and reducing the person's ability to adapt to changing circumstances. **2.** A character in a play or other work of fiction, as in *dramatis personae*, a list of characters. **3.** An assumed identity. **personas** or **personae pl.** [From Latin *persona* an actor's mask]

personal construct theory *n.* A theory of personality, formulated by the US psychologist George A(lexander) Kelly (1905–67) and published in his book *The Psychology of Personal Constructs* (1955), according to which people think like incipient scientists in construing their worlds, constantly formulating hypotheses and testing their predictions against experience. The fundamental postulate of the theory is that ‘a person's processes are psychologically channelized by the ways in which he anticipates events’ (Vol. 1, p. 46), and this postulate is extended by eleven corollaries, including the individuality corollary: ‘Persons differ from each other in their construction of events’ (p. 55), and the dichotomy corollary: ‘A person's construction system is composed of a finite number of dichotomous constructs’ (p. 59), a dichotomous construct being a way of construing reality such that any pair of elements of experience may be classified as being either similar or different. Personal constructs are elicited and studied with the help of the ***Repertory Grid Test**. The theory interprets emotion as follows: *threat* is an awareness of an imminent comprehensive change in one's core constructs when they appear inadequate; *anxiety* is an awareness of the existence of important elements that lie outside the range of convenience of one's construct system; *guilt* is an awareness of being dislodged from one's core role structure; and *hostility* is an effort to extort validation evidence in favour of a social prediction that has already failed. Two treatment techniques based on personal construct theory are ***fixed-role therapy** and ***personal construct therapy**. **PCT** *abbrev.*

personal construct therapy *n.* A technique of ***psychotherapy** based on the ***personal construct theory** of the US psychologist George A(lexander) Kelly (1905–66) in which the client or patient is encouraged to formulate hypotheses and try out new constructs for interpreting experience. *Compare* **COGNITIVE THERAPY**, **FIXED-ROLE THERAPY**.

Personal Data Sheet *n.* The first ***personality** questionnaire of significance ever devised, and the first to be administered to large numbers of respondents, designed to measure maladjustment or neurosis, described as 'emotional fitness for warfare' but completed too late to be used in the First World War, constructed by the US psychologist Robert S(essions) Woodworth (1869–1962) and published in the journal *Psychological Bulletin* in 1919. It consists of 116 yes/no questions, many of them based on common neurotic symptoms (such as *Do you feel low-spirited most of the time? Do you ever feel an awful pressure in or about your head? Did you have a happy childhood?*) and only items that were answered in the keyed direction by fewer than 25 per cent of a control group of normal respondents were included in the final test. Compare **BERNREUTER PERSONALITY INVENTORY**.

personal equation *n.* A person's characteristic ***reaction time**, or a correction for it, first investigated after an incident in which Neville Maskelyne (1732–1811), the eighth Astronomer Royal at Greenwich, reported in 1799 that he had found discrepancies averaging 0.8 second between his own observations of the transit times of stars across a hair-line, measured by counting the ticks of a pendulum clock, and those of his assistant, whom he had therefore fired, but in 1820 the German astronomer and mathematician Friedrich Wilhelm Bessel (1784–1846) followed up this report and discovered that even skilled astronomers vary consistently in the transit times that they report, and on the basis of this finding he introduced the personal equation for calibrating individuals to reflect these differences in what later came to be called reaction time. See also **PRIOR ENTRY LAW**.

personality *n.* The sum total of the behavioural and mental characteristics that are distinctive of an individual. Also, informally, the personal qualities that make a person socially popular, as in *Princess Diana had a lot of personality*, but this sense is avoided in careful psychological usage. See also **ALPHA PERSONALITY FACTOR**, **BERNREUTER PERSONALITY INVENTORY**, **BETA PERSONALITY FACTOR**, **BIG FIVE**, **CHARACTER**, **EYSENCK PERSONALITY INVENTORY**, **EYSENCK PERSONALITY QUESTIONNAIRE**, **GENERAL FACTOR OF PERSONALITY**, **IMPLICIT PERSONALITY THEORY**, **INTERACTIONISM (2)**, **IPIP**, **LANGUAGE PERSONALITY SPHERE**, **MAUDSLEY PERSONALITY INVENTORY**, **OCCUPATIONAL PERSONALITY QUESTIONNAIRE**, **PERSONALITY DISORDERS**, **SITUATIONIST CRITIQUE**. [From Latin *personalitas* personality, from *personalis* of or relating to a person, from

*****ebook converter DEMO Watermarks*****

persona an actor's mask]

personality disorders *n.* An umbrella term for a category of **mental disorders* in **DSM-5*, with onset in adolescence or early adulthood, characterized by pervasive, inflexible, and enduring patterns of cognition, affect, interpersonal behaviour, or impulse control that deviate markedly from culturally shared expectations and lead to significant distress or impairment in social, occupational, or other important areas of functioning and are not due to drugs or other medical conditions. See ANTISOCIAL PERSONALITY DISORDER, AVOIDANT PERSONALITY DISORDER, BORDERLINE PERSONALITY DISORDER, DEPENDENT PERSONALITY DISORDER, HISTRIONIC PERSONALITY DISORDER, NARCISSISTIC PERSONALITY DISORDER, OBSESSIVE—COMPULSIVE PERSONALITY DISORDER, PARANOID PERSONALITY DISORDER, SCHIZOID PERSONALITY DISORDER, SCHIZOTYPAL (PERSONALITY) DISORDER. Also called *character disorders*. See also DISSOCIAL PERSONALITY DISORDER, INADEQUATE PERSONALITY, PASSIVE—AGGRESSIVE PERSONALITY DISORDER SELF-DEFEATING PERSONALITY DISORDER. **PD** abbrev.

personality inventory *n.* A **questionnaire* designed to measure one or more personality characteristics, usually **traits*.

personality, multiple (split) See DISSOCIATIVE IDENTITY DISORDER.

personal space *n.* The area round a person's or an animal's body into which other people or **conspecifics* (1) may not normally intrude without provoking a negative reaction. In special circumstances, such as crowded situations, contact sports, or sexually intimate interactions, invasions of personal space need not cause negative reactions. See also PROXEMICS.

personal unconscious *n.* In **analytical psychology*, another name for the **unconscious* (2), introduced by Carl Gustav Jung (1875–1961) to distinguish it from the **collective unconscious*.

person-centred therapy *n.* Another name for **client-centred therapy*. US *person-centered therapy*.

person constancy *n.* A form of **perceptual constancy* through which a

familiar person tends to remain recognizably the same individual in spite of large variations in such factors as clothes, hairstyle, and facial expression.

personification *n.* The attribution of human characteristics to non-human entities, as when the dying English television dramatist Dennis (Christopher George) Potter (1935–94) named his cancer Rupert, after a media mogul whom he hated; or a **figure of speech* in which a non-human entity is referred to as though it were human, as in the phrases *merciful death* and *angry thunder*.

personnel psychology *n.* A branch of **occupational psychology* or **industrial/organizational psychology* devoted to **job analysis*, **job satisfaction*, personnel selection and placement, and training of employees in industry. *See also* [ERGONOMICS](#).

personology *n.* In **psychoanalysis*, a term introduced by the South African statesman and philosopher Jan Christiaan Smuts (1870–1950) in his book *Holism and Evolution* (1926, p. 262) and adopted by the US psychologist Henry Alexander Murray (1893–1988) to denote a theory of personality and social behaviour in which a person's needs and personality are considered as an integrated whole. *See also* [EDWARDS PERSONAL PREFERENCE SCHEDULE](#), [NEED \(3\)](#), [NEED-PRESS](#), [PRESS](#), [TAT](#).

person perception *n.* The area of social psychology concerned with how people perceive one another, factors such as **impression formation* and **attribution* operating in addition to the normal processes of perception. *See also* [ATMOSPHERE EFFECT](#), [BALANCE THEORY](#), [DUAL-PROCESS MODEL](#), [HALO EFFECT](#), [IMPLICIT PERSONALITY THEORY](#), [SOCIAL PERCEPTION](#), [TRAIT CENTRALITY](#).

perspective *n.* A point of view or way of regarding something; specifically, the appearance of objects relative to their distance from the viewer, or the effects of distance on their appearance, including especially **aerial perspective*, **linear perspective*, and **texture gradient*. [From Latin *ars perspectiva* the art of perspective, from *perspicere*, *perspectum* to inspect thoroughly, from *per* through + *specere* to see + *-ivus* indicating a tendency, inclination, or quality]

perspective illusion *n.* Any illusion in the perception of **perspective*. See AMES ROOM, CORRIDOR ILLUSION, HORIZONTAL–VERTICAL ILLUSION, LEANING TOWER ILLUSION, MOON ILLUSION, NECKER CUBE, PONZO ILLUSION, SCHRÖDER STAIRCASE, SCRIPTURE'S BLOCKS, TEACUP ILLUSION, TRAPEZOIDAL WINDOW, TURNING THE TABLES ILLUSION.

perspective reversal *n.* A phenomenon that occurs while viewing certain **ambiguous figures* such as the **Necker cube*, **Schröder staircase*, or **Scripture's blocks*, in which a change occurs in the apparent spatial orientation of the depicted object. Also called *alternating perspective* or *reversible perspective*. See NECKER CUBE, SCHRÖDER STAIRCASE, SCRIPTURE'S BLOCKS.

persuasion *n.* The process by which **attitude* change is brought about, usually by the presentation of a message containing arguments in favour or against the person, object, or issue to which the attitude applies. See also ELABORATION LIKELIHOOD MODEL, FORCED COMPLIANCE, INOCULATION THEORY, LAW OF SOCIAL IMPACT, REACTANCE, RHETORIC (1), SLEEPER EFFECT, SOCIAL INFLUENCE.

pervasive developmental disorder *n.* In the classification of **DSM-IV*, **mental disorders* characterized by severe and extensive impairment in the development of social interaction and communication skills or by the presence of stereotyped behaviour, interests, and activities. See AUTISM SPECTRUM DISORDER, DEVELOPMENTAL DISORDER. Compare SPECIFIC DEVELOPMENTAL DISORDER.

perversion *n.* An obsolescent term, often considered offensive nowadays, for a **paraphilia*. **pervert** *n.* One who practises a perversion. [From Latin *per-* wrongly + *vertere* to turn]

Pervitin See YABA.

pethidine *n.* Meperidine hydrochloride, a synthetic, white, crystalline, **narcotic* analgesic drug with a morphine-like action, used as a narcotic analgesic and sedative. US *meperidine*. Also called *Demerol* (trademark). See also MPPP, OPIOID-RELATED DISORDERS. [A blend of *piperidine* and *methyl*]

*****ebook converter DEMO Watermarks*****

petit mal seizure *n.* An obsolescent name for an **absence*. [From French *petit mal* little illness]

PET scan *abbrev.* Positron emission tomography scan, a non-invasive technique of **brain* imaging that monitors **regional cerebral blood flow* in the brain by recording the emission of gamma rays when radioactively labelled **glucose* or some other substance introduced into the bloodstream is metabolized by neurons as they are activated. The radioactive atoms used in a PET scan emit subatomic particles called positrons (positive electrons), which collide with their negatively charged counterparts, namely electrons. The two particles annihilate each other and emit two gamma rays that radiate in opposite directions and can be recorded by a ring of detectors round the person's head and traced back to their point of origin. A PET scan is expensive, requiring an onsite cyclotron because of the short half-life of the radioactive materials produced, but it provides a dynamic record, usually colour-coded, of brain activity and can also be used to study other organs such as the heart and lungs. *Compare* *RADIOISOTOPE SCAN*, *SPECT SCAN*.

peyote *n.* Another name for **mescaline* or the cactus from which it is extracted. [Mexican Spanish, from Nahuatl *peyotl*]

P50 *n.* An **evoked potential* in response to a brief **auditory *stimulus* such as a click, occurring about 50 milliseconds after the stimulus. The P50 response usually decreases if the stimulus is repeated many times, and this is usually attributed to **habituation*, but many people with **schizophrenia* manifest abnormally persistent P50 responses, suggesting an impaired ability in such people of the brain to habituate to sensory stimulation. Also called the *P50 potential* or *P50 wave*. [From *p(ositive) 50 (milliseconds)*]

PGO spike *abbrev.* Pontogeniculo-occipital spike, a brief high-amplitude **EEG* wave, representing an alerting response, occurring spontaneously during **REM sleep* in the pons (where it is believed to originate), in the lateral geniculate nuclei, and in the occipital cortex, elicited in all phases of sleep by sounds or tactile stimuli. It is identical in appearance and probably similar in significance to an **eye-movement potential*. Also called a *PGO wave* or *pontogeniculo-occipital wave*. *See also* *NUCLEUS GIGANTOCELLULARIS*. [From *p(ons) + (lateral) g(eniculate nucleus) + o(ccipital cortex)*]

*****ebook converter DEMO Watermarks*****

pH *abbrev.* A measure of the acidity/alkalinity of a solution, originally the logarithm to the base 10 of the reciprocal of the concentration of hydrogen **ions* in moles per cubic decimetre, now indexed to a standard solution of potassium hydrogen phthalate at 15°C, which has a pH of 4 by definition. **Acid* (1) solutions have pH less than 7, pure water pH equal to 7, and **alkaline* solutions have pH more than 7. [Abbreviation of *potential of hydrogen*]

Phaedra complex *n.* The sexual love of a mother for her son. [Named after Phaedra, the wife of Theseus in Greek mythology, who accused her stepson Hippolytus of raping her after he declined her sexual advances]

phagocyte *n.* Any cell such as a **macrophage*, **astrocyte*, **granulocyte*, **monocyte*, or **microglial* cell that is specialized to absorb large solid particles such as invading micro-organisms or debris from dead cells. **phagocytic** *adj.* **phagocytosis** *n.* The process whereby a phagocyte engulfs particles. [From Greek *phagein* to consume + *kytos* a vessel or hollow]

phallic character *n.* In **psychoanalysis*, a personality pattern determined by **fixation* (2) at the **phallic stage*, characterized by reckless, resolute, and self-assured adult personality traits, and sometimes also vanity, exhibitionism, and touchiness. Also called the *phallic personality*.

phallic erotism *n.* In **psychoanalysis*, sensuous pleasure derived from stimulation of the penis or clitoris, and focusing of **libido* in that region during the **phallic stage*. **phallic-erotic** *adj.*

phallic stage *n.* In **psychoanalysis*, the **libidinal stage* of **psychosexual development* from about 3–5 or 6 years of age, following the **oral stage* and the **anal stage* but before the **latency* period and the **genital stage*. Sigmund Freud (1856–1939) introduced the concept late in his writings, in articles entitled ‘The Infantile Genital Organization’ (1923), ‘The Dissolution of the Oedipus Complex’ (1924), and ‘Some Psychical Consequences of the Anatomical Distinction Between the Sexes’ (1925), all of which are in volume XIX of the *Standard Edition* (pp. 141–5, 173–9, 248–58). During the phallic stage, libido is centred on the genital organs, but the
*****ebook converter DEMO Watermarks*****

child, whether male or female, recognizes only the male organ and the difference between the sexes is interpreted as phallic versus castrated. It is during this stage that the **castration complex* predominates and the **Oedipus complex* flourishes and then dissolves. Also called the *phallic phase*. See also *PENIS ENVY*, *PHALLIC CHARACTER*, *PHALLIC WOMAN*.

phallic symbol *n.* Any object that is taken as a symbol of a **phallus*.

phallic woman *n.* An image or fantasy of a woman endowed with a **phallus*, often discussed in **psychoanalysis*, where it is given an **interpretation (2)* in the light of the **phallic stage*. Also called a *phallic mother*. See also *COMBINED PARENT-FIGURE*.

phallocentric *adj.* Focused on or obsessed with the **phallus*, or biased towards cultural assumptions of male dominance symbolized by the phallus.

phallocrat *n.* A believer in or supporter of male superiority or dominance in social, economic, or political spheres. [From Greek *phallos* a phallus + *kratos* power]

phallus *n.* Another name for the **penis*, especially the erect penis considered as a symbol of masculinity, potency, or generation. The Hindu equivalent is **lingam*, the phallic image of the god Shiva. The French psychoanalyst Jacques Lacan (1901–81) developed a theory, published in the *Bulletin de Psychologie* in 1958, of the phallus as a signifier of desire, the **Oedipus complex* being reformulated as a conflict between being versus not being a phallus (or having versus not having a phallus), which plays a different role in the desires of each of the three parties involved in the complex. See also *FORECLOSURE*, *PHALLIC CHARACTER*, *PHALLIC EROTISM*, *PHALLIC STAGE*, *PHALLIC SYMBOL*, *PHALLIC WOMAN*, *PHALLOCENTRIC*. **phallic** *adj.* Of or pertaining to the phallus. **phalluses** or **phalli** *pl.* [From Greek *phallos* a phallus]

phantasm *n.* An illusion, ghost, or apparition. [From Latin *phantasma* a ghost or apparition, from Greek *phantazein* to cause to be seen, from *phanein* to show]

phantasmagoria *n.* A fantastic or dreamlike sequence of real or imagined images. See also [PHANTASTICANT](#). **phantasmagoric** or **phantasmagorical** *adj.* [From French *phantasmagorie* production of phantasms, from Greek *phantasma* an appearance, from *phantazein* to make visible + *agora* an assembly or marketplace + *-ia* indicating a condition or quality]

phantasticant *n.* Any drug that induces vivid perceptual experiences or [*phantasmagoria](#), the most common examples being [*phenylalkylamines](#) such as [*mescaline](#), [*STP](#), and [*ecstasy](#) (2); [*indole](#) alkaloids such as [*psilocybin](#) and [*DMT](#); and various other compounds such as [*LSD](#), [*bufotenin](#), [*harmine](#), [*ibotenic acid](#), [*myristin](#), [*ololiuqui](#), and [*phencyclidine](#). Also spelt *fantasticant*. See also [AMANITA MUSCARIA](#), [FLY AGARIC](#), [MAGIC MUSHROOM](#), [MORNING GLORY](#), [TEONANACTYL](#). Compare [HALLUCINOGEN](#), [PSYCHEDELIC](#). [From Greek *phantastikos* capable of imagining, from *phantazein* to make visible + *-ikos* relating to or resembling + *-ant* indicating an agent]

phantasy *n.* An alternative spelling of [*fantasy](#) (1, 2, 3). This spelling tends to be favoured by British-based psychoanalysts when referring to unconscious thought processes.

phantom grating *n.* An illusory grating of vertical bars that is seen in a blank area of an image when the rest of the image, on both sides of the blank area, consists of a real grating moving slowly in one direction. The phantom grating moves along with the real grating, as if the real grating were moving under the paper and could be seen faintly through it, but the phantom disappears if the real grating stops moving, suggesting that the phantom is activated by [*direction-sensitive neurons](#) in the retina. See also [APPARENT MOVEMENT](#). [From Greek *phantasma* an illusion, from *phantazein* to make visible, from *phainein* to show, from *phaein* to shine]

phantom limb *n.* An illusory sensation, experienced by an amputee, of the limb still being attached to the body, even when all sensory nerve fibres associated with the limb have been removed. It is experienced by almost all amputees, and the sensations include [*pain](#) in approximately 70 per cent of cases. See also [PSEUDAESTHESIA](#). Compare [ALIEN HAND SIGN](#), [RUBBER HAND](#)
*****ebook converter DEMO Watermarks*****

PHENOMENON.

phantom phoneme effect *n.* Another name for **phonemic restoration*.

phantom pregnancy *n.* See *PSEUDOCYESIS*.

pharmacodynamics *n.* The interaction of drugs with the **neuroreceptors* that mediate **drug* action. Compare *PHARMACOKINETICS*. [From Greek *pharmakon* a drug + *dynamikos* of or relating to strength or power, from *dynamis* strength or power + *-ikos* of, relating to, or resembling]

pharmacokinetics *n.* The mathematical analysis of the absorption, movement through the body, metabolism, and excretion of drugs. Compare *PHARMACODYNAMICS*. [From Greek *pharmakon* a drug + *kinetikos* of or relating to motion, from *kinesis* movement + *-ikos* of, relating to, or resembling]

pharmacology *n.* The study of drugs. See also *BEHAVIOURAL PHARMACOLOGY*, *PSYCHOPHARMACOLOGY*. **pharmacological** *adj.* Of or relating to drugs or the study of drugs. **pharmacologist** *n.* A specialist in pharmacology. [From Greek *pharmakon* a drug + *logos* word, discourse, or reason]

pharyngeal reflex *n.* Another name for the **gag reflex*.

pharynx *n.* The throat; the section of the **alimentary* canal between the mouth and the **oesophagus*. **pharyngeal** *adj.* [From Greek *pharynx* the throat]

phase *n.* Any distinct or characteristic period or stage in a process or a sequence of development or evolution, including especially a particular stage (such as the peak or the trough) in the cycle of a periodic oscillation or wave. [From Greek *phasis* a phase, from *phaein* to shine, alluding to the phases of the moon]

phase delay *n.* A continuous or ongoing binaural difference in the **phase* of a sound wave arising from the fact that the peaks arrive momentarily

*****ebook converter DEMO Watermarks*****

sooner at the nearer ear than the further ear. It is used in conjunction with ***transient disparity** as a ***cue (2)** for localization of sounds below about 1,000 hertz (about two octaves above Middle C) that have wavelengths longer than the diameter of the head, bending round the head rather than being absorbed or reflected by it, and that therefore do not cast ***sonic shadows** on the side further from the sound source. It is one of the *binaural time differences* or *interaural time differences* used in sound localization. Also called *phase difference*, *ongoing disparity*, or *ongoing time disparity*. See also [BINAURAL SHIFT](#), [BIOSONAR](#), [CONE OF CONFUSION](#), [SOUND LOCALIZATION](#).

phase-locking *n.* The synchronization of the phases of two or more waveforms, so that their peaks and troughs occur simultaneously, as when auditory receptors in the ***organ of Corti** synchronize their receptor potentials with the vibration of the ***basilar** membrane for sounds below about 4,000 hertz.

phase sequence *n.* A group of ***cell** assemblies that tend to excite one another and that constitute a neural basis for the ***consolidation** of learning and memory, according to an influential hypothesis of the Canadian psychologist Donald O(lding) Hebb (1904–85). See also [REVERBERATING CIRCUIT](#).

phenazocine *n.* An ***opiate** drug and ***narcotic** analgesic with a greater analgesic effect and a slightly lesser narcotic effect than morphine. Formula: $C_{22}H_{27}NO$. Compare [PENTAZOCINE](#). [From *phen(e)* an old name for benzene, from Greek *phainein* to show, alluding to its use in manufacturing illuminating gas + *azocine* a chemical compound]

phencyclidine *n.* 1-1-Phenycyclohexylpiperidine, or phencyclidine hydrochloride for short, a central nervous system ***depressant** developed in the 1950s as an ***anaesthetic (1)** and used in veterinary medicine to produce trancelike anaesthetic states in animals, adopted in the 1960s as a ***psychedelic** street drug capable of inducing vivid imagery. Street names include *hog*, *peace pill*, *tranq*, and most commonly *angel dust*. Formula $C_{17}H_{25}N$. See also [HALLUCINOGEN](#), [PHANTASTICANT](#), [PHENCYCLIDINE-RELATED DISORDERS](#). Compare [KETAMINE](#). **PCP** abbrev.

phencyclidine-related disorders *n.* *Substance-related and addictive disorders in *DSM-5 induced by consuming *phencyclidine or phencyclidine-like compounds such as *ketamine, which may be taken orally, injected intravenously, or smoked. See SUBSTANCE ABUSE, SUBSTANCE DEPENDENCE, SUBSTANCE-INDUCED DISORDERS, SUBSTANCE USE DISORDERS.

phenelzine *n.* Phenelzine sulphate (US *sulfate*), a *monoamine oxidase inhibitor (MAOI) derived from *hydrazine, used in the treatment of severe depression and panic disorder. [From its chemical name *phen(yl) + e(thyl) + (hydra)zine*]

phenmetrazine *n.* Phenmetrazine hydro-chloride, a *sympathomimetic central nervous system *stimulant used as an appetite suppressant for weight control and sometimes taken as a street drug. Also called *Preludin* (trademark). Formula: C₁₁H₁₅NO. [From its chemical name *phen(yl) + me(thyl) + (te)tra + (oxa)zine*]

phennies *n.* A common street name of the barbiturate drug *phenobarbital (phenobarbitone).

phenobarbital *n.* Phenobarbital sodium, a long-acting *barbiturate drug and central nervous system *depressant, used as a sedative and hypnotic, especially in major epilepsy with tonic-clonic convulsions, and sometimes taken as a street drug. Also called *Luminal* (trademark) or *phenobarbitone*. Street names include *phennies*, *purple hearts*. Formula: C₁₂H₁₂N₂O₃Na. [From *phen(e)* an old name for benzene, from Greek *phainein* to show, alluding to its use in manufacturing illuminating gas + *barbital*, from *barbit(uric) (acid) + -al* indicating a pharmaceutical product]

phenobarbitone *n.* See PHENOBARBITAL.

phenome *n.* The full set of characteristics constituting the *phenotype of an organism. Compare GENOME, PROTEOME. [From *phenotype*, on the model of *genome*]

phenomenal *adj.* Of or relating to a *phenomenon or something that is

*****ebook converter DEMO Watermarks*****

directly sensed or perceived, often (as in phenomenal regression) in contradistinction to the objective or physical reality giving rise to the sensation or perception. [From Greek *phainomenon* a thing shown, from *phainein* to show + Latin *-alis* of or relating to]

phenomenal consciousness *n.* According to a distinction introduced by the US philosopher Ned Block (born 1942) in a co-edited book entitled *The Nature of Consciousness* (1997), aspects of consciousness that are **phenomenal* in the sense of being directly experienced, often (but perhaps not always) accompanied by **access consciousness*. An example of phenomenal consciousness initially without access consciousness arises when a person involved in a conversation suddenly notices that the sound of a ticking clock has been clearly audible throughout the conversation. Up to that moment, the person was phenomenal-conscious of the sound but not access-conscious of it, because the sound was available to conscious perception but was not poised for control of action until it was noticed. Also called *P consciousness*. **phenomenal-conscious** or **P-conscious** *adj.*

phenomenal field *n.* The sum total of consciousness at a given moment. Also called the *phenomenological field*.

phenomenal motion *n.* Another name for **apparent movement*.

phenomenal regression *n.* The tendency for one's perceptions of an object viewed obliquely or at a distance to be intermediate in shape or size between the **proximal* stimulus and the actual object, or between the proximal stimulus and the perception that would occur if there were perfect **object constancy*, as when a plate viewed at an angle and from a distance yields a proximal stimulus that is elliptical and small, but the perception is somewhat rounder and larger. Also called *phenomenal regression to the real object*, the term used by the English psychologist Robert Henry Thouless (1894–1984) when he introduced the concept in 1931.

phenomenal self *n.* The **self* as experienced or apprehended directly. See also *I-SELF*, *ME-SELF*.

phenomenistic causality *n.* An important aspect of ***phenomenistic thought**, according to the Swiss psychologist Jean Piaget (1896–1980), in which events or processes that co-occur are interpreted as being causally linked, as when a child believes that trains go fast because they are big. [From Greek *phainomenon* a thing shown, from *phainein* to show + *istikos* like]

phenomenistic thought *n.* A term introduced by the Swiss psychologist Jean Piaget (1896–1980) to characterize the reasoning of young children, whose cognitive processes focus on the physical appearances of objects in the environment. One important aspect of phenomenistic thought is ***phenomenistic causality**.

phenomenological field *n.* Another name for the ***phenomenal** field.

phenomenology *n.* A philosophical method of enquiry, introduced in 1901 by the German philosopher Edmund (Gustav Albert) Husserl (1859–1938), that concentrates on the detailed description of conscious experience while suspending or bracketing all preconceptions, interpretations, and explanations; more generally a ***qualitative research** method in psychology that concentrates on the analysis of mental experience rather than behaviour. *See also* ACT PSYCHOLOGY, *EIGENWELT*, *EPOCHE*, EXISTENTIALISM, INTENTIONALITY (1), INTROSPECTIONISM, *MITWELT*, SOCIOLOGY OF KNOWLEDGE, *UMWELT*. [From Greek *phainomenon* a thing shown, from *phainein* to show + *logos* word, discourse, or reason]

phenomenon *n. sing.* Anything that can be perceived or observed.
phenomena *pl.* **phenomenal** *adj.* [From Greek *phainomenon* a thing shown, from *phainein* to show]

phenothiazine *n.* Any of a number of drugs such as ***chlorpromazine**, ***fluphenazine**, ***perphenazine**, ***thioridazine**, or ***trifluoperazine** that are derived from the phenothiazine compound C₁₂H₉NS and that belong to the ***neuroleptic** (1) subgroup of psychotropic drugs, having a strong affinity for ***dopamine** neuroreceptors, which they block. *See also* DOPAMINE ANTAGONIST, THIOXANTHENE.

phenotype *n.* The characteristics of an organism, determined jointly by its genetic constitution and its environment, including such physical characteristics as stature and eye colour and such psychological characteristics as intelligence and extraversion; more specifically the outward manifestations of a **gene*, in comparison to its **alleles*, in an organism that possesses it. *See also* EXTENDED PHENOTYPE, PHENOME. *Compare* GENOTYPE. **phenotypic** *adj.* [The word was introduced in 1909 by the Danish plant physiologist and geneticist Wilhelm Johannsen (1857–1927) in a book entitled *Elemente der exakten Erblchkeitslehre* (Elements of Exact Heredity), from Greek *phainein* to show + *typos* a mark]

phenylalanine *n.* An essential **amino acid* and precursor of **tyrosine*, contained in milk, eggs, cheese, and many food proteins. People with **phenylketonuria* cannot metabolize it and have to exclude it from their diets. Also spelt *phenylalanin*. *See also* ASPARTAME. **Phe** *abbrev.* [From *phene* an old name for benzene, from Greek *phainein* to show, alluding to its use in manufacturing illuminating gas + *hyle* material + German *Alanin(e)*, from *al(dehyde)* + Greek *-in(e)* indicating an organic compound]

phenylalkylamines *n.* One of the major groups of **hallucinogens* and **psychedelic* drugs, including especially **mescaline*, **STP*, and **ecstasy* (2) or MDMA. *See also* PHANTASTICANT.

phenylethanolamine-N-methyltransferase *See* PNMT.

phenylethylamine *n.* An **amine* that resembles **amphetamine* chemically and pharmacologically and that functions as a **neurotransmitter* in the nervous system. **PEA** *abbrev.* [From *phenyl* (as in phenylalanine) + *ethyl*, from Greek *aither* ether, from *aithein* to burn + *hyle* wood or substance + English *amine*, from *am(monium)* + Greek *-ine* indicating an organic compound]

phenylketonuria *n.* A hereditary disorder caused by a single recessive gene on chromosome 12, leading to the absence or deficiency of an enzyme required for the metabolism of **phenylalanine*, an amino acid found in red meats and other proteins, to **tyrosine*. Unless treated by dietary restriction of

phenylalanine, it leads to a deficiency of **serotonin* and the accumulation in all body fluids of phenylalanine, which is toxic to brain tissue and causes **intellectual disability*. When two carriers of the gene have a child, there is a 1 in 4 chance that it will have the disorder, a 1 in 2 chance that it will be a carrier, and a 1 in 4 chance that it will be normal; and because approximately 1 in 50 people carry the recessive gene, the incidence of the disorder is about 1 in 10,000 births. Also called *phenylpyruvic oligophrenia*. **PKU** abbrev. [From *phenyl(alanine)* + *keton(e)* + *-uria* indicating a diseased state of the urine, from Greek *ouron* urine + *-ia* indicating a condition or quality]

phenylpyruvic oligophrenia *n.* Another name for **phenylketonuria*.

phenylquinine writhing test *n.* Observation of writhing in an experimental animal injected with phenylquinine, which normally causes pain and suffering, to test the efficacy of an **analgesic (1)* drug or procedure.

phenylthiocarbamide *See* *PTC*.

phenytoin *n.* An anticonvulsant drug that is used in the treatment of **epilepsy* and that acts by stabilizing neuron cell membranes, decreasing the intracellular concentration of sodium and thereby causing **hyperpolarization* and preventing **action potentials*. It is also taken as a supposedly **smart drug* to improve IQ, concentration, verbal performance, and long-term memory. [A contraction of its chemical name, *(di)pheny(lhydantoin)*]

pheromone *n.* Any of a number of chemical substances with communicative functions, secreted externally by an organism and affecting the behaviour or physiology of other members of the same species. Human pheromones are poorly understood, the best documented though controversial examples being the **Whitten effect*, manifested as the synchronization of **menstrual cycles* among women living together, occurring only when a man is also present, and the increased regularity of menstrual cycles of women living with men, both effects apparently being mediated by **steroid* pheromones. *See also* *ALARM PHEROMONE*, *BRUCE EFFECT*, *KAIROMONE*, *LEE–BOOT EFFECT*, *SEX PHEROMONE*, *VOMERONASAL ORGAN*. *Compare* *ALLOMONE*. **pheromonal** *adj.* [From Greek *pherein* to bear + *horman* to stimulate]

phi coefficient *n.* In statistics, an index of the degree of association between two truly dichotomous variables, such as male/female or pass/fail. Mathematically it is equivalent to the **product–moment correlation coefficient* applied to two dichotomous variables, and in practice it is most often used to analyse data in **contingency tables*. Symbol: ϕ . *Compare* CRAMÉR'S C, CONTINGENCY COEFFICIENT.

philobat *n.* A person who enjoys the challenge of coping with dangerous or unfamiliar situations. *Compare* OCNOPHIL. [From Greek *philos* loving, from *phileein* to love + English (*acro*)bat, from Greek *akros* highest + *bat(os)* walking from *bainein* to walk]

philosophy *n.* The study of the nature of knowledge and beliefs, the intelligibility of concepts, and the validity of arguments. Its main branches include *metaphysics*, the study of the nature and phenomena of reality; *epistemology*, the theory of knowledge, especially the investigation of what distinguishes mere belief from knowledge; *ethics*, the study of moral principles and judgements; and *semantics*, the study of the relationship between linguistic expressions and their meanings. A useful informal definition of philosophy is thought about thought. [From Greek *philosophia* love of wisdom, from *philos* loving, from *phileein* to love + *sophia* wisdom]

phi movement *n.* A form of pure objectless **apparent movement*, without the appearance of any entity actually moving, that occurs when two visual stimuli a few centimetres apart are presented in an alternating pattern with an interstimulus interval too long for the stimuli to appear simultaneous or for **partial movement* or **optimal movement* to occur but not long enough for the disappearance of apparent movement and the veridical perception of the stimuli simply alternating. The term is often applied to any form of apparent movement, but it was defined precisely by the German psychologist Max Wertheimer (1880–1943) when he introduced it in 1912, and its indiscriminate application is avoided in careful usage. Wertheimer believed movement to be an immediate sense experience (a *quale*) like colour or lightness that under appropriate conditions may be perceived in a pure form as sheer objectless movement. The following demonstration provides an easy way to experience something similar to phi movement: hold a finger close enough to the eyes for a double image to be seen, then alternately open and

*****ebook converter DEMO Watermarks*****

close the left and right eyes—for some people, the finger appears to leap from one place to another without any image moving across the space. Also called *phi motion*, the *phi phenomenon*, or *pure phi*. See also [KORTE'S LAWS](#).

phi phenomenon *n.* Another name for [*phi movement](#). It is also applied to [*apparent movement](#) in general, but this is avoided in careful usage because it blurs the distinction between phi movement and other forms of apparent movement.

phlegm *n.* The slimy, viscous substance secreted in the throat and discharged by coughing, formerly believed to be one of the four cardinal humours of the body. See also [HUMOUR \(3\)](#). **phlegmatic** *adj.* Calm, unemotional, or cool-headed. [From Latin *phlegma* phlegm, from Greek *phlegma* flame, inflammation, or phlegm (thought to be produced by heat), from *phlegein* to burn]

phobia *n.* A persistent, irrational fear of an object, event, activity, or situation called a *phobic stimulus*, resulting in a compelling desire to avoid it. The presence or anticipation of the phobic stimulus triggers [*anxiety](#) or a [*panic attack](#), although the person acknowledges the fear to be irrational, and the phobic stimulus is either avoided or endured with dread. A phobia that leads to clinically significant distress or impairment in social, occupational, or other important areas of functioning may be diagnosed as a [*mental disorder](#)—either a [*specific phobia](#) or a [*social anxiety disorder](#). A comprehensive list of phobias and phobic stimuli is provided in Appendix I at the back of this dictionary. According to a large survey of 704 randomly selected adults in Stockholm, Sweden, reported in the journal *Behaviour Research and Therapy* in 1996, the most common phobic stimuli are heights (6.3 per cent of men, 8.6 per cent of women), snakes (2.4 per cent of men, 8.3 per cent of women), closed spaces (2.4 per cent of men, 5.4 per cent of women), and spiders (1.2 per cent of men, 5.6 per cent of women). Also called a *phobic neurosis*. See also (in the main body of the dictionary) [AGORAPHOBIA](#), [DYSMORPHOPHOBIA](#), [LITTLE HANS](#), [PA-LENG](#), [PARAPHOBIA](#), [PHOBIC TECHNIQUE](#), [SOCIAL PHOBIA](#), [SPECIFIC PHOBIA](#), [THANATOPHOBIA](#). **phobic** *adj.* [From Greek *phobos* fear + *-ia* indicating a condition or quality]

phobic stimulus *n.* Any object, event, or situation that functions as the

*****ebook converter DEMO Watermarks*****

focus of a ***phobia**, eliciting persistent, irrational fear.

phobic technique *n.* In ***psychoanalysis**, one of the ***defensive techniques** proposed by the Scottish psychoanalyst W. Ronald D. Fairbairn (1889–1964). It involves ***externalization** of both the ***good object** and the bad object, causing the phobic person to feel threatened by external forces. *See also* SPLITTING OF THE OBJECT. *Compare* HYSTERICAL TECHNIQUE, OBSESSIONAL TECHNIQUE, PARANOID TECHNIQUE.

phon *n.* The standard unit of ***loudness** level, ranging upwards from zero for the faintest audible sound. The loudness in phons of a sound is defined as the intensity level in units of ***decibel** sound pressure level (dB SPL) of a comparison pure tone of 1,000 hertz that is judged by the listener to be equally loud. Thus if the comparison tone is 20 dB SPL, then the loudness of any tone of another frequency that is judged to be equally loud is defined to be 20 phons; if the comparison tone is 40 dB SPL, then any tone judged equally loud is 40 phons, and so on. *See also* EQUAL-LOUDNESS CONTOUR. [From Greek *phone* sound or voice]

phonagnosia *n.* A form of agnosia involving an impaired ability to identify people by their voices. *See also* AGNOSIA. *Compare* PROSOPAGNOSIA. [From Greek *phone* a voice + *a-* without + *gnosis* knowing + *-ia* indicating a condition or quality]

phone *n.* The smallest perceptible discrete segment of sound in a stream of speech. A phone is a physical realization of a ***phoneme**, and different phones representing the same phoneme are ***allophones**. [From Greek *phone* a voice or sound, from *phonein* to speak]

phoneme *n.* A basic speech sound, with an average duration of 70 to 80 milliseconds at normal speaking rate, distinguishing one word from another in a given language, although it may have various phonetically distinct articulations, called ***allophones**, that are regarded as functionally identical by native speakers of the language. Phonemes are defined by the ***distinctive features** that allow ***minimal pairs** in a language to be distinguished. *See also* NEUTRALIZATION, PHONE. *Compare* KINEME. **phonemic** *adj.* [From Greek *phonema* a sound or utterance, from *phone* a voice or sound]

*****ebook converter DEMO Watermarks*****

phonemic restoration *n.* An ***auditory** illusion that occurs when a single ***phoneme** is deleted from a recording of a sentence (in the original experiment, the first /s/ of the word *legislatures* in the sentence *The state governors met with their respective legislatures convening in the capital city*) and is replaced by a recording of a cough or other intrusive sound; when this doctored recording is played to listeners, the missing phoneme is perceived as clearly as if it were physically present, even when the listeners hear the recording again after being told that the sound is missing. The cough cannot be clearly located in the sentence by listeners, but if the deleted sound is replaced by a silent gap it can be located easily and phonemic restoration does not occur. In spite of its name, the phenomenon is not restricted to single phonemes, a whole syllable such as the *-gis-* in the word *legislatures* being heard clearly when replaced by an extraneous sound of the same length. The phenomenon was discovered by the US psychologist Richard M. Warren (born 1925) and two colleagues and first reported in articles in the journals *Science* and *Scientific American* in 1970. Also called the *phantom phoneme effect*. Compare **AMODAL COMPLETION**.

phonemics *n.* The study of the ***phonemes** of a language.

phonetics *n.* The study of speech sounds, including their production, their use in language, their perception by listeners, and their transcription. [From Greek *phonetikos* of or relating to speech, from *phone* a voice or sound + *-itikos* resembling or marked by]

phonics *n.* **1.** The science of spoken sounds, or of sounds in general. **2.** A method of teaching reading by concentrating on the sounds associated with specific letters or groups of letters. Compare **WHOLE-WORD METHOD**. [From Greek *phonikos* of or relating to speech, from *phone* a voice or sound + *-ikos* of, relating to, or resembling]

phonogram *n.* A character or symbol, or a sequence of characters or symbols, representing a speech sound, such as (in English) *a*, *b*, *c*, *ch*, *ei*, or *th*. Some languages (including German or Spanish) are regular in the sense of having an unvarying correspondence between phonograms and ***phonemes**, while others (including English) are more or less irregular. Compare **IDEOGRAPH**, **LOGOGRAPH**. [From Greek *phonein* to make sounds or to speak +
*****ebook converter DEMO Watermarks*****]

gramma a character]

phonography *n.* A system of writing based on **phonograms*. Compare LOGOGRAPHY.

phonological buffer store *n.* One of the two components of the **phonological loop* of **working memory*, holding phonologically coded information but capable of maintaining the information only for brief periods. Also called a *rehearsal buffer*.

phonological disorder *n.* A **communication disorder* in **DSM-IV* that was renamed **speech sound disorder* in DSM-5.

phonological dyslexia *n.* A form of **dyslexia* involving an impaired ability to read by using spelling-to-sound correspondences, and an over-reliance on established spelling vocabulary. Closely related to **deep dyslexia*.

phonological loop *n.* A subsystem of **working memory* that functions as a **buffer store*, holding information with the help of **inner speech*, as when a person mentally rehearses a telephone number over and over while searching for a pen and paper to write it down. It contains two components, a short-term **phonological buffer store*, holding phonologically coded information for very short periods only, and a **subvocal rehearsal loop* that maintains information by repeating it mentally from time to time.

phonological priming See PRIMING (1).

phonological reading *n.* Another name for **surface dyslexia*.

phonology *n.* The study of the sound systems of languages, especially the study of **phonemes*. See also ADDRESSED PHONOLOGY, ASSEMBLED PHONOLOGY.
phonological *adj.* [From Greek *phonein* to make sounds or to speak + *logos* word, discourse, or reason]

phonoreceptor *n.* Another name for an **auditory* receptor.

phonoreception *n.* The perception of high-frequency variations in air pressure through ***auditory** receptors. [From Greek *phone* a sound or voice + English *receptor*, from Latin *recipere*, *receptum* to receive, from *re-* back + *capere*, *ceptum* to take]

phosphate *n.* Any salt or ***ester** of phosphoric acid. [From Greek *phosphoros* light-bringing, from *phos* light + *pherein* to bring]

phosphene *n.* The perception of a flash of light resulting from anything other than excitation of the photoreceptors of the retina by light, the most common causes being pressure on an eyeball behind closed lids, a blow to the head resulting in pressure of the visual cortex against the inside of the skull (the effect often described as seeing stars), electrical stimulation of the visual cortex, or an ***aura** (2) heralding an epileptic seizure (see **EPILEPSY**) or a ***migraine** headache. Also called a *photoma*. [From Greek *phos* light + *phainein* to show, from *phaein* to shine]

phosphocreatine *n.* Another name for ***creatine** phosphate, the ***phosphate** of creatine stored in muscles to enable adequate quantities of ***ATP** to be produced. [From *phosphate* + Greek *kreas*, *kreatos* flesh]

phosphodiesterase type 5 *n.* An ***enzyme** that metabolizes ***cyclic GMP**. See also **VIAGRA**. **PDE5** abbrev.

phot *n.* An obsolescent unit of illumination equal to one ***lumen** per square centimetre, 1 phot being equal to 10,000 lux. [From Greek *phos*, *photos* light]

photism *n.* 1. A form of ***synaesthesia** (1) in which a visual sensation accompanies stimulation of another ***sensory** modality. 2. The experience of a ***phosphene**.

photochemical *adj.* Of or relating to the production of light by a chemical process. See also **BIOLUMINESCENCE**. [From Greek *phos*, *photos* light + English *chemical*]

photochromatic interval *n.* The range of light intensity that is

sufficiently high to stimulate **rods* but not **cones* in the retina of the eye and that therefore produces vision without colour. *See also* SCOTOPIC. [From Greek *phos, photos* light + *chroma, chromatos* a colour + *-ikos* of, relating to, or resembling]

photographic memory *n.* A colloquial term for the ability to remember visual images very accurately. The technical term for such an image remembered in vivid detail is an **eidetic image*. *Compare* HYPERTHYMESIA.

photoma *n.* Another name for a **phosphene*. [From Greek *phos, photos* light + *-oma* indicating an abnormality]

photometer *n.* An instrument for measuring **luminous intensity*, older types usually involving visual comparisons of the illumination from a specified light source with that from a standard comparison source, and more modern types using photoelectric cells that generate electrical signals in response to light. **photometry** *n.* The measurement of **luminous intensity*, **luminous flux*, and related phenomena, or the branch of physics concerned with these phenomena. [From Greek *phos, photos* light + *metron* a measure]

photon *n.* The basic unit or quantum of light or other electromagnetic radiation, considered as a particle with zero rest mass and energy equal to hf , where h is Planck's constant (6.6262×10^{-34} Joule seconds) and f is the **frequency (1)* of the radiation in hertz. [From Greek *phos, photos* light + *-on* by analogy with *electron*]

photopic *adj.* Of, relating to, or governed by the **cone*-mediated visual system that functions when the eyes are light-adapted for bright illumination or day vision. It is maximally sensitive to light falling on the **fovea*, and it has peak sensitivity at a wavelength of 555 nanometres (green light), but it responds to light across the entire **visible spectrum*, operating with three different types of photoreceptors that normally provide colour vision, and it is less sensitive than the scotopic system except for wavelengths above 650 nanometres (in the red region of the spectrum), where the sensitivities of the two systems are similar. *See also* DUPLEXITY FUNCTION, FIELD ADAPTATION, HEMERALOPIA, LIGHT ADAPTATION, PHOTOPIC LUMINOSITY CURVE, PURKINJE SHIFT, *****ebook converter DEMO Watermarks*****

STILES—CRAWFORD EFFECT. Compare MESOPIC, SCOTOPIC. **photopia** *n.* Photopic vision, also called *daylight vision*. Compare SCOTOPIA. [From Greek *phos*, *photos* light + *ops* an eye + *-ikos* of, relating to, or resembling]

photopic luminosity curve *n.* A *luminosity curve depicting the intensity of light that is required at each point in the visible spectrum for the colours to appear equally bright in bright light, under *photopic vision mediated by *cones. Compare SCOTOPIC LUMINOSITY CURVE.

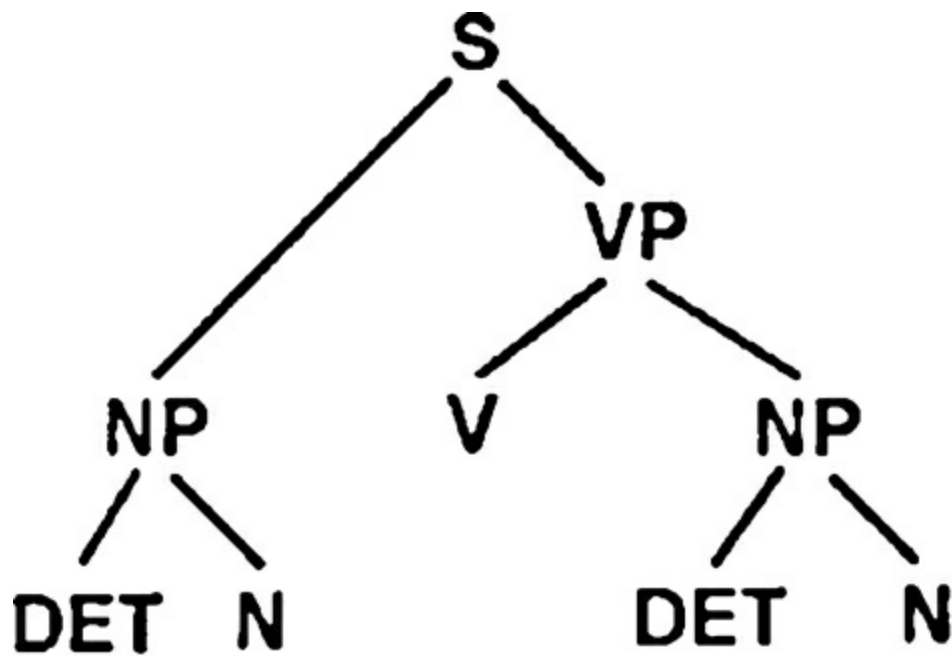
photopigment *n.* Any light-sensitive *pigment, including the *visual pigments found in the *photoreceptors of the eye.

photoreceptor *n.* A *sensory receptor situated at the back of the *retina, either a large cylindrical *rod or a smaller tapering *cone, specialized to convert light stimulation into electrical nerve impulses or *action potentials. The human retina contains approximately 120 million rods and 6 million cones. Also called a *visual receptor*. [From Greek *phos*, *photos* light + English *receptor*, from Latin *recipere*, *receptum* to receive, from *re-* back + *capere*, *ceptum* to take]

photosensitive epilepsy *n.* A form of *epilepsy in which seizures are precipitated by bright flashing or flickering lights, often from strobe lighting or television images. The physiological effects can be observed in *EEG recordings from the *occipital lobes of the brain.

phototherapy *n.* Controlled exposure to extremely bright light (generally 10,000 lux), simulating daylight, used especially to treat *seasonal affective disorder (SAD) and certain *sleep–wake disorders. Also called *bright light therapy*. [From Greek *phos*, *photos* light + *therapeia* service or treatment, from *therapeuein* to take care of or to heal]

phrase marker *n.* A representation, usually in the form of a tree diagram, of the grammatical structure of a sentence (see *illustration*). The sentence is conventionally labelled S; a noun, N; a verb, V; a noun phrase, NP; a verb phrase, VP; a determiner, DET; and so on. See also CONSTITUENT.



The man drank some wine

Phrase marker. S = sentence, NP = noun phrase, VP = verb phrase, DET = determiner, N = noun, V = verb.

phrase-structure grammar *n.* A form of **generative grammar* that describes the relations between words and **morphemes* of a sentence, but does not analyse syntactic relations in greater depth.

phrase-structure rule *n.* Another name for a **rewrite rule*.

phrenology *n.* A discredited doctrine of mental faculties supposedly located in specific areas of the brain and detectable through bumps at the corresponding points on the external skull. Founded in Germany by the physiologist Franz Joseph Gall (1758–1828) and the physician Johann Kaspar Spurzheim (1809–72), it flourished in the early decades of the 19th century, especially in the United States and Britain, where at one time there were 29 phrenological societies simultaneously active. *See also* *FACULTY PSYCHOLOGY*. [From Greek *phren* mind, originally midriff (the supposed seat of the soul) + *logos* word, discourse, or reason]

phylogeny *n.* The evolution of a ***phylum** or other ***taxonomic** group, as distinguished from the development of an individual organism. *Compare* ONTOGENY. **phylogenetic** or **phylogenic** *adj.* [From Greek *phylon* a race + *genes* born]

phylum *n.* Any of the primary taxonomic groups into which the animal and plant ***kingdoms** (2) are divided, each containing one or more ***classes** (2). Thus the phylum Platyhelminthes contains flatworms, flukes, and tapeworms. **phyla** *pl.* [From Greek *phylon* a race]

physical anthropology *n.* The branch of anthropology devoted to the study of physical and biological characteristics of humans, especially genetic traits, as opposed to cultural or social attributes. *Compare* CULTURAL ANTHROPOLOGY, SOCIAL ANTHROPOLOGY.

physiognomy *n.* 1. A person's physical features or habitual expression. 2. The art or pseudoscience of judging ***personality** from physical appearance, especially from the face. 3. The outward appearance or gross physical structure of anything. **physiognomic** or **physiognomical** *adj.* **physiognomist** *n.* One who practises physiognomy (2). [From Greek *physis* nature + *gnomon* an interpreter]

physiological arousal *See* AROUSAL.

physiological nystagmus *n.* A form of ***nystagmus** occurring continuously during visual ***fixation** (1), consisting of ***ocular drifts** with ***visual angles** up to about 5 minutes of arc (5/60 of a degree), ***microsaccades** between 1 and 2 minutes of arc, and ***ocular tremors** of about 30 seconds of arc (1/120 of a degree). That these eye movements are essential to vision is shown dramatically by experiments on ***stabilized retinal images**. *See also* AUTOKINETIC EFFECT, FILLING-IN ILLUSION, REAFFERENCE, SACCADE, VISUAL SUPPRESSION.

physiological psychology *n.* The branch of psychology devoted to the relations between physiological and psychological processes and events.

physiological time *n.* The fraction of ***reaction time** taken up by the passage of a nerve impulse from the ***sensory** receptor to the brain and of another nerve impulse from the brain to the muscle. According to an analysis introduced in 1868 by the Dutch ophthalmologist Franciscus Cornelius Donders (1818–89), total reaction time is physiological time plus ***central reaction time**.

physiological zero *n.* The temperature at which an object touching the ***skin** feels neither warm nor cold, its precise value not being fixed but approximating the surface temperature of the skin and depending on its state of adaptation to warmth. *See also* **SUCCESSIVE CONTRAST**, **THERMAL ADAPTATION**.

physiology *n.* The study of the functioning of ***organisms**; also the working of a particular organism or one of its organs or parts (as in *the physiology of the human ear*). [From Greek *physio-* of or relating to nature or natural processes, from *physis* nature, from *phyein* to cause to grow + *logos* word, discourse, or reason]

physostigmine *n.* An ***alkaloid** extracted from the ***Calabar bean** that functions as a reversible ***anticholinesterase** drug, inhibiting the breakdown of ***acetylcholinesterase**. Also called *eserine*. Formula $C_{15}H_{21}N_3O_2$. [From Latin *Physostigma venenosum* the Calabar bean plant, from Greek *physis* a bladder + *stigma* a mark]

Piagetian *adj.* Of, relating to, or resembling the theory of cognitive development of the Swiss psychologist Jean Piaget (1896–1980). *See* **ACCOMMODATION (2)**, **ADAPTATION (3)**, **ANIMISM (1)**, **ASSIMILATION (2)**, **CENTRATION**, **CONCRETE OPERATIONS**, **CONSERVATION**, **CONSTRUCTIVISM**, **DÉCALAGE**, **EGOCENTRISM**, **EQUILIBRATION**, **FORMAL OPERATIONS**, **GENETIC EPISTEMOLOGY**, **INDISSOCIATION**, **MENTAL OPERATION**, **OBJECT PERMANENCE**, **PHENOMENISTIC CAUSALITY**, **PHENOMENISTIC THOUGHT**, **PRECONCEPT**, **PREDICATE THINKING**, **PRE-OPERATIONAL STAGE**, **SCHEME**, **SENSORIMOTOR STAGE**, **STRUCTURALISM (1)**, **TRANSDUCTIVE REASONING**. *See also* **PIAGET KIDNAPPING MEMORY**.

Piaget kidnapping memory *n.* A classic example of a ***false memory** from the second year of life described by the Swiss psychologist Jean Piaget

(1896–1980) and reproduced in English translation by the US psychologist Elizabeth F. Loftus in her book *Eyewitness Testimony* (1979): ‘I was sitting in my pram, which my nurse was pushing in the Champs Élysées, when a man tried to kidnap me. I was held in by the strap fastened round me while my nurse bravely tried to stand between me and the thief. She received various scratches, and I can still see vaguely those on her face. Then a crowd gathered, a policeman with a short cloak and a white baton came up and the man took to his heels. I can still see the whole scene, and can even place it near the tube station. When I was about fifteen my parents received a letter from my former nurse saying that she had been converted to the Salvation Army. She wanted to confess past faults, and in particular to return the watch she had been given on this occasion. She had made up the whole story, faking the scratches. I, therefore, must have heard, as a child, the account of the story, which my parents believed, and projected it into the past in the form of a visual memory’ (pp. 62–3). *See also* [CONSTRUCTIVE MEMORY](#), [DEFERRED ACTION](#), [EYEWITNESS MISINFORMATION EFFECT](#), [INFANTILE AMNESIA](#), [REALITY MONITORING](#), [RECOVERED MEMORY](#).

pia mater *n.* A delicate vascular membrane enclosing the brain and spinal cord, forming the innermost of the three [*meninges](#), below the [*arachnoid space](#). *Compare* [ARACHNOID MEMBRANE](#), [DURA MATER](#). [Latin *pia mater* tender mother, a literal translation of the Arabic name *umm raqiqah*]

piano theory *n.* Another name for the [*place theory](#).

pibloktoq *n.* A [*culture-bound syndrome](#), sometimes called *arctic hysteria* in English, restricted mainly to Eskimo communities of North America and Greenland, characterized by a period of fatigue, social withdrawal, confusion, and irritability lasting for a few hours or days, leading up to an abrupt episode of [*dissociation](#) that usually lasts only minutes, during which the afflicted person may strip or tear off clothes, roll in the snow, run about in a frenzied state, shout obscenities, destroy property, engage in other violent, dangerous, or antisocial forms of behaviour, and manifest [*pseudolalia](#), [*echolalia](#), and [*echopraxia](#), before lapsing into [*convulsions](#) and losing consciousness, followed typically by complete [*amnesia](#) for the dissociative episode. [From Inuit *piblokto* frenzy]

pica *n.* An ***eating disorder** in ***DSM-5** characterized by persistent eating of inappropriate substances such as paint, plaster, string, hair, cloth, animal droppings, sand, insects, leaves, pebbles, clay, soil, or other non-nutritive matter, but without any aversion to conventional foods, the behaviour not occurring as part of a culturally sanctioned practice. *See also* **COPROPHAGIA**, **GEOPHAGIA**, **HYALOPHAGIA**, **PAGOPHAGIA**. [From Latin *pica* a magpie, referring to its fondness for inedible objects]

Pick's disease *n.* A progressive disorder commencing in middle age, caused by predominantly ***frontal lobe** or ***temporal lobe** impairment, characterized by ***dementia** with gradual personality change and deterioration of ***intelligence**, ***memory**, and ***language (1)**. *Compare* **ALZHEIMER'S DISEASE**. [Named after the Czech neurologist Arnold Pick (1851–1924) who first described it in 1892]

Pickwickian syndrome *n.* A ***breathing-related sleep disorder** associated with moderate or extreme obesity, hypoventilation (diminished or insufficient breathing, leading to low oxygen content of the blood), chronic drowsiness, cyanosis (a dark bluish to purplish coloration of the skin), and right-sided heart failure. The term *Pickwickian* was first applied to drowsiness caused by obesity by the Canadian physician Sir William Osler (1849–1919) in his book *The Principles and Practice of Medicine* (1918). The phrase *Pickwickian syndrome* first appeared in the title of an article by the US physician C(harles) Sidney Burwell (1893–1956) and three colleagues in the *American Journal of Medicine* in 1956. Also called *obesity hypoventilation syndrome (OHS)*. [The term alludes to Joe, a ‘fat and red-faced boy, in a state of somnolency’ in *The Pickwick Papers* by the English novelist Charles Dickens (1812–70)]

picrotoxin *n.* A bitter-tasting crystalline compound extracted from the seeds of the climbing plant *Cocculus indicus* (the ***fishberry** shrub) that functions as a central nervous system ***stimulant** and ***convulsant** by blocking the neuroreceptors that normally mediate the inhibitory effects of ***GABA**. It is used as an antidote to ***barbiturate** poisoning. *Compare* **STRYCHNINE**, **TETANUS TOXIN**. [From Greek *pikros* bitter + *toxikon pharmakon* arrow-poison, from *toxon* a bow]

pictogram *n.* Another name for a **pictograph*.

pictograph *n.* A symbol used in picture writing, typical examples being the images of human figures, body parts, animals, and other objects used in the writing of the Minoan period of ancient Crete, or the stylized images used in many countries to label men's and women's toilets. *Compare* *IDEOGRAPH*, *LOGOGRAPH*. **pictographic** *adj.* Of or relating to pictographs.

pictorial depth *n.* **Depth perception* arising from cues presented in two-dimensional pictures or images, only some of the monocular cues being functional under such conditions, namely **aerial perspective*, **chiaroscuro*, **elevation in the visual field*, **interposition*, **linear perspective*, **relative size*, **sfumato*, and **texture gradient*. *See also* *CARPENTERED WORLD*, *LEANING TOWER ILLUSION*.

picture-arrangement test *n.* A type of **intelligence* test item or subtest in which the respondent tries to arrange a number of pictures into a sequence that tells a meaningful story.

picture-completion test *n.* A type of **intelligence* test item or subtest in which the respondent tries to point out missing elements in pictures, such as a numeral missing from a clock face or a leg missing from an insect.

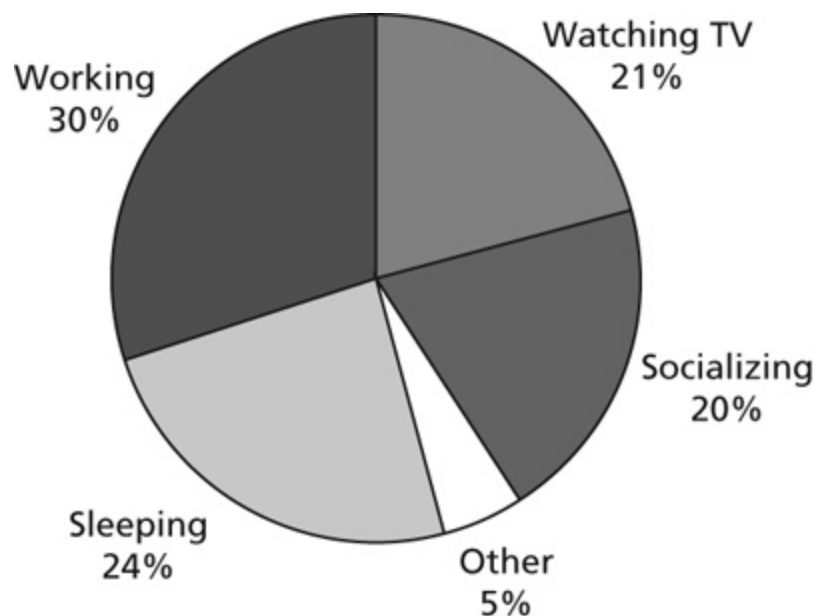
picture-frustration test *See* *ROSENZWEIG PICTURE-FRUSTRATION STUDY*.

picture-picture technique *n.* A technique of **evaluative conditioning* whereby a picture (**conditioned stimulus*) that a participant initially rates neutrally on a like-dislike scale, after repeated pairing with one that is strongly liked (**unconditioned stimulus*), tends later to be rated more highly than an initially neutral picture repeatedly paired with one that is disliked.

pidgin *n.* A language constructed from elements taken from two or more other languages and used for communication, especially trade, between members of two language communities. In contrast to a **creole*, a pidgin is not the mother tongue of any speech community. [From Chinese

pronunciation of the English word *business*]

pie chart *n.* A circular graph divided into sectors, resembling slices of a pie, with areas proportional to the sizes of the categories represented (see [illustration](#)). This method of displaying data was introduced in 1801 by the Scottish political economist William Playfair (1759–1823), in a book entitled *The Statistical Breviary*. The Italian-born British nurse Florence Nightingale (1820–1910), with help from the English medical statistician William Farr (1807–83), popularized a version in which the sectors subtend equal angles at the centre and the sizes of the categories are represented by radii of different lengths. An early version, which she called the *bat's wing*, was published in her report entitled *Mortality of the British Army* (1858), and an improved version, with the areas of the sectors rather than the lengths of the radii proportional to the category sizes, first appeared in her confidential report to the government entitled *Notes on Matters Affecting the Health of the British Army* (1858).



Pie chart. Showing percentages of time spent by a group of people in various types of activities.

pigment *n.* Any substance, including the [*visual pigments](#) contained in the rods and cones in the retina of the eye, whose constituent molecules absorb some wavelengths of light and reflect others. *See also* [CHROMOPHORE](#). [From Latin *pigmentum* painted, from *pingere* to paint]

*****ebook converter DEMO Watermarks*****

pigment epithelium *n.* The light-absorbing dark lining at the back of the retina of diurnal animals. *Compare* TAPETUM (1).

piloerection *n.* Raising of hair into an upright position as a result of contraction of *smooth muscles attached to the base of hair follicles, usually in response to cold or as part of a *startle reflex, in humans often accompanied by *goose pimples. Also called a *pilomotor response*. [From Greek *pilos* hair + English *erection*]

pilot study *n.* A preliminary and usually small-scale research study designed to try out procedures, calibrate measures, and generally serve as a dress rehearsal before a major study. Also called simply a *pilot*. [From Medieval Latin *pilotus* a steersman, from Greek *pedon* an oar]

pineal gland *n.* The pea-sized *endocrine gland, shaped like a miniature pine cone, attached to the base of the brain in the roof of the third ventricle below the anterior part of the *corpus callosum, receiving information from the *suprachiasmatic nucleus and secreting *melatonin into the bloodstream at night, involved in *circadian rhythms and probably in the promotion of sleep. It tends to calcify during middle age. It is one of the *circumventricular organs and is also called the *pineal body*. Its rarely used technical name is the *epiphysis* or *epiphysis cerebri*. *See also* CARTESIAN DUALISM, EPITHALAMUS. [From Latin *pinea* a pine cone, from *pinus* pine]

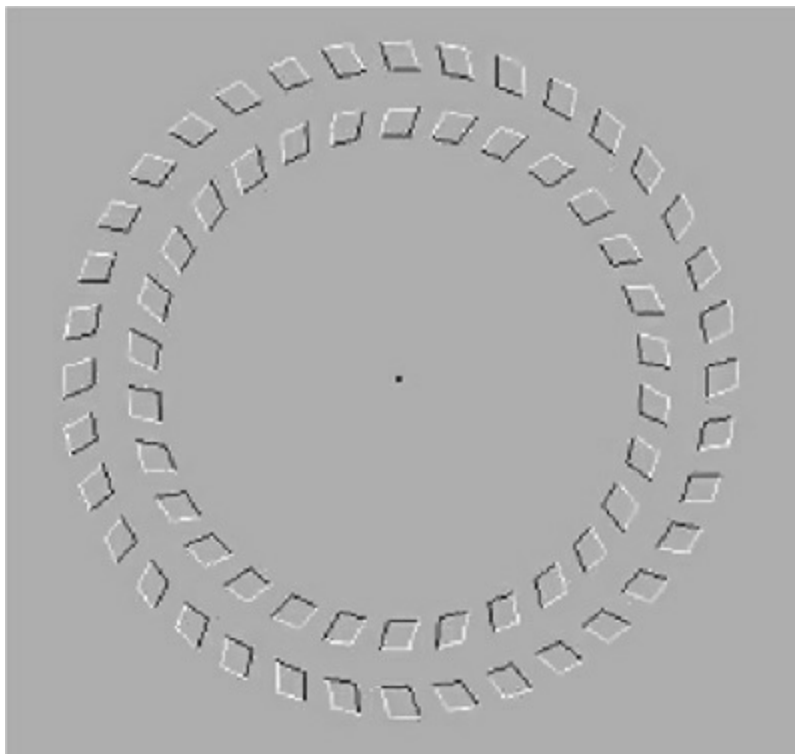
pink lady *n.* A street name for *secobarbital (quinalbarbitone) or *Seconal.

pink noise *n.* A sound wave or any other *time series that resembles *white noise, being essentially random, but with intensity or energy in inverse proportion to frequency, and hence more energy in the bass than the treble because high-frequency sound is more energetic than low-frequency sound. The sound of a waterfall, or waves crashing on a beach, is pink noise. *See also* NOISE (2). *Compare* COLOURED NOISE, FROZEN NOISE. [So called by analogy with white light in which higher frequencies (shorter waves) are damped, leading to a pink tinge]

pinna *n.* Any feather, leaflet, or feather-shaped structure, especially the

external part of the ear, also called the *auricle*. See also [EAR](#). **pinnae** *pl.* [From Latin *pinna* a feather]

Pinna–Brelstaff illusion *n.* A visual illusion of relative movement in a pair of concentric rings composed of small diamond-shaped elements angled in different directions in the inner and outer rings (see [illustration](#)). If the image is moved back and forth relative to the eyes, while the gaze is fixated on the centre of the rings, the rings appear to rotate in opposite directions or contrary motion. The illusion is believed to be caused by elements in [*peripheral vision](#) causing stimulation of direction-sensitive [*bar detectors](#) in Area V1 of the [*visual cortex](#). Also called the *rotating circles illusion* or the *counter-rotating circles illusion*. See also [MOVEMENT ILLUSION](#). Compare [OUCHI ILLUSION](#). [Named after the Italian vision scientist Baingio Pinna (born 1962), who discovered it in 1990, and the English psychologist Gavin J. Brelstaff (born 1961) who co-authored with Pinna the first major article on it in the journal *Vision Research* in 2000]



Pinna–Brelstaff illusion. If the image is moved back and forth relative to the eyes, the inner and outer rings appear to rotate in contrary motion.

Piper's law *n.* In **psychophysics*, a law relating either the **absolute threshold* or the **difference threshold* for visual brightness sensation to the intensity of the stimulus and the area of the retina that is stimulated, usually expressed as $\sqrt{A} \times I = k$, where *A* is the area of the retina stimulated, *I* is the intensity of the stimulus, and *k* is a constant. It is valid for stimuli subtending **visual angles* from about 6 minutes of arc (1/10 of a degree) to about 20 degrees. Compare *RICCO'S LAW*. [Named after the German physiologist Hans Edmund Piper (1877–1915) who formulated it]

piriform cortex *n.* An area in the anterior temporal lobe of each cerebral hemisphere forming part of the **olfactory cortex*, receiving nerve impulses from the olfactory receptors via the olfactory bulb without the prior involvement of the thalamus as in other sensory systems. It is not part of the **neocortex* but is a three-layered **palaeocortex*. Also spelt *pyriform cortex*, an etymologically incorrect but common form. [From Latin *pirum* a pear + *forma* a form or shape]

pitch *n.* The perceived height or depth of a **tone* (1), determined largely though not exclusively by the **frequency* (1) of the vibration that gives rise to it. According to an international standard adopted in 1939, a vibration of 440 hertz is identified as the A above Middle C, and all other notes of the musical scale are defined in relation to it. See also *ABSOLUTE PITCH*, *MEL*, *PITCH PERCEPTION*, *RELATIVE PITCH*.

pitch perception *n.* The process whereby the frequency of a sound wave entering the ear is converted into a sensation of pitch. See also *FREQUENCY THEORY*, *PLACE THEORY*, *VOLLEY THEORY*.

pituitary gland *n.* The master **endocrine gland*, shaped like a miniature bulb of garlic about the size of a pea, suspended by a stalk (the infundibulum) within a specialized bony cavity of the skull (the sella turcica) below the **hypothalamus*, to which it is connected beneath the centre of the brain, and from where it secretes into the bloodstream hormones that affect other endocrine glands throughout the body and that also influence bodily growth. Also called the *pituitary body*, *hypophysis*, or *hypophysis cerebri*. See also *ANTERIOR PITUITARY*, *POSTERIOR PITUITARY*. [From Latin *pituita* phlegm, which it was once mistakenly thought to produce owing to its location just above the
*****ebook converter DEMO Watermarks*****]

back of the nasal passage]

pivot grammar *n.* A grammar, first suggested by the Singaporean-born US psychologist Martin D. S. Braine (1926–96) in an article in the journal *Language* in 1963, based on two grammatical classes of words, namely pivot (*P*) and open (*O*), to describe two-word utterances of children at an early stage of language development, from about 18 months to 2 years of age. The *P* words are taken from a small vocabulary of high-frequency words that seldom occur as single-word utterances, and the *O* words from large, open classes of nouns, verbs, and adjectives. Typical *P* + *O* constructions recorded by Braine and later researchers are *Pretty fan*, *Night-night boat*, and *Allgone ball*. Compare [HOLOPHRASE](#), [TELEGRAPHIC SPEECH](#).

placebo *n.* 1. An assumedly inactive substance or dummy treatment administered to a [*control group](#) to serve as a baseline for comparison of the effects of an active drug or treatment. See also [PLACEBO EFFECT](#), [RANDOMIZED CONTROLLED TRIAL](#). 2. A psychological treatment, in contrast to a pharmacological treatment. [From Latin *placebo* I shall please, the opening word of the Roman Catholic office or service for the dead: *Placebo Domino*, I shall please the Lord]

placebo effect *n.* A positive or therapeutic effect resulting solely from the administration of a [*placebo](#) (1). Across a wide range of mental and physical symptoms and disorders, between 30 and 40 per cent of patients show improvement following the administration of a placebo. See also [SELF-FULFILLING PROPHECY](#). Compare [NOCEBO EFFECT](#).

place of articulation *n.* The location within the mouth where a speech sound is made. In English, there are ten places of articulation for [*consonants](#): [*bilabial](#), [*labiodental](#), [*dental](#), [*alveolar](#), [*post-alveolar](#), [*palato-alveolar](#), [*palatal](#), [*velar](#), [*glottal](#), and [*retroflex](#). There are a few additional places of articulation in other languages.

place theory *n.* A theory of pitch perception first proposed in 1865 by the German physiologist, physicist, and mathematician Hermann Ludwig Ferdinand von Helmholtz (1821–94) according to which the perceived pitch of a tone depends on the position or place on the [*basilar](#) membrane of the

*****ebook converter DEMO Watermarks*****

auditory receptors that transmit nerve impulses. Physiological evidence for the place theory was provided by the Nobel prizewinning Hungarian physicist and physiologist Georg von Békésy (1899–1972) and summarized in his book *Experiments in Hearing* (1962). Because the **cochlea* tapers from one end to the other, the part of the basilar membrane that vibrates the most depends on the frequency of the sound. Resting on the basilar membrane are **hair cells* with auditory nerve cells connected to their bases, and vibrations of the basilar membrane cause the hair cells to bend back and forth, triggering nerve impulses to the brain. For tones above about 5,000 hertz, the pitch that is heard depends on which part of the basilar membrane vibrates the most and which nerve cells are therefore excited. Also called the *harp theory*, the *piano theory*, or the *resonance theory*. Compare [FREQUENCY THEORY](#), [VOLLEY THEORY](#).

planned behaviour, theory of See [THEORY OF PLANNED BEHAVIOUR](#).

planned comparison *n.* A statistical test of a difference between two means, usually carried out after **analysis* of variance but planned before the data were collected, and therefore validly using a *t* test. Also called an *a priori* test. See also [MULTIPLE COMPARISONS](#). Compare [A POSTERIORI TEST](#).

plantar response *n.* A curling inwards of the toes when the sole of the foot is stroked with a hard object such as a key, replacing the infantile **Babinski reflex* from about 2 years of age in neurologically normal infants. Also called the *plantar reflex*. [From Latin *plantaris* of the sole of the foot, from *planta* the sole of the foot]

planum temporale *n.* The flat upper surface at the back of the temporal **operculum* in the region of **Wernicke's area*, extending to the end of the lateral sulcus, crucially involved in language comprehension. It is the most asymmetrical structure in the brain, much larger (approximately nine millimetres longer, on average) in the linguistically dominant (usually left) than the non-dominant cerebral hemisphere, resulting in a significantly longer left lateral sulcus in the left hemisphere. Also called the *temporal plane*. [From Latin *planum* a flat surface + *temporalis* of the temple, from *tempus*, *temporis* the temple (on the side of the head)]

plaque *n.* Any small patch or region of abnormal tissue within the body.

*****ebook converter DEMO Watermarks*****

See [AMYLOID PLAQUE](#), [GLIOSIS](#). [From French *plaquer* to plate, from Middle Dutch *placken* to beat metal]

plasma *n.* **1.** The clear, pale yellow liquid component of blood (blood plasma) or lymph (lymph plasma), within which corpuscles and cells are suspended. **2.** An obsolescent name for the [*cytoplasm](#) of a cell, surviving in a combining form in the word [*plasmagene](#). **3.** In physics, a hot ionized gas (see [ION](#)). [From Greek *plasma* a form, from *plassein* to form or mould]

plasmagene *n.* Any [*gene](#) located in the cytoplasm outside the [*nucleus](#) (1) of a cell, in a [*plasmid](#) or a [*mitochondrion](#), consisting of [*DNA](#) that self-replicates independently of chromosomal DNA. See also [MITOCHONDRIAL DNA](#). [From *plasma* cytoplasm + *gene*]

plasma membrane *n.* Another name for a [*cell](#) membrane.

plasmid *n.* A circular fragment of [*DNA](#) that is not part of a [*chromosome](#) but exists and reproduces autonomously in the [*cytoplasm](#) of a cell. Bacterial plasmids can be transmitted between bacteria of the same or different species and are useful in [*genetic engineering](#). See also [JUMPING GENE](#), [PLASMAGENE](#). Compare [MITOCHONDRIAL DNA](#). [From (cyto)*plasm* + *-is*, *-idos* daughter of, indicating a particle, body, or structure]

plateau *n.* **1.** A flat area of land, or more generally anything flat or any relatively long period of stability. **2.** A period or stage in a learning process when no progress is evident. [From French *plateau* a flat area of land, from Greek *platus* flat]

Plateau spiral *n.* An [*Archimedes spiral](#) or some other spiral that is attached to a circular disc and, when rotating, appears to be continuously expanding from its centre or contracting towards its centre depending on the direction of rotation. After being observed for several seconds it induces a powerful opposite [*motion aftereffect](#) in which an object or surface that is fixated appears to be contracting or expanding, so that a person's face (for example) appears to shrink or enlarge while remaining paradoxically the same size, and this aftereffect is called the *spiral aftereffect*. It is also called a *Talbot–Plateau spiral* or *Archimedes spiral*, though the latter term is
*****ebook converter DEMO Watermarks*****

misleading, partly because the Archimedes spiral is a mathematical concept predating the illusion by many centuries, and partly because other spirals are often used to produce the effect. *See also* [VISUAL ILLUSION](#). *Compare* [WATERFALL ILLUSION](#). [Named after the Belgian physicist Joseph Antoine Ferdinand Plateau (1801–83) who produced the first version of it with the help of an assistant in 1849, although he never saw it himself because he had blinded himself six years earlier by staring at the sun]

platelets *n.* Particles in the blood of vertebrates that are responsible for blood clotting. [So called because of their shape]

platoon-volley theory *See* [VOLLEY THEORY](#).

platykurtic *See* [KURTOSIS](#).

player *n.* **1.** A person who takes part in a game; more specifically a decision maker in an interactive decision problem of the type analysed within [*game](#) theory. A player in this sense may be a person, a committee or other decision making group, an animal, or any other entity that functions as a decision maker in a strategic [*game](#) (1). **2.** An actor or one who plays a musical instrument.

play therapy *n.* A form of [*psychotherapy](#) used with children in which play is used to facilitate communication between client or patient and therapist.

pleasantness *n.* The quality of being pleasing or satisfying. Also, another name for [*agreeableness](#).

pleasure centre *n.* Any region of the brain in which electrical stimulation is rewarding or in which implanted electrodes tend to elicit self-stimulation from experimental animals provided with levers with which they can stimulate the area. The most important pleasure centres are in areas of the [*hypothalamus](#) and the [*limbic system](#), especially the [*septum pellucidum](#) and the [*medial forebrain bundle \(MFB\)](#). US *pleasure center*. *See also* [PRIMING](#) (3).

pleasure-ego *n.* In **psychoanalysis*, one of the two major aspects of the **ego*, based on the **pleasure principle*, differentiated by Sigmund Freud (1856–1939) from the **reality-ego*, based on the **reality principle*. In his article on ‘Formulations on the Two Principles of Mental Functioning’ (1911), he summed up the distinction as follows: ‘Just as the pleasure-ego can do nothing but *wish*, work for a yield of pleasure, and avoid unpleasure, so the reality-ego need do nothing but strive for what is *useful* and guard itself against damage’ (*Standard Edition*, XII, pp. 218–26, at p. 223).

pleasure–pain principle *n.* Another name for the **pleasure principle*.

pleasure principle *n.* In **psychoanalysis*, the precept according to which psychological processes and actions are governed by the gratification of needs and the avoidance or discharge of unpleasurable tension. It is the governing principle of the **id*, in contrast to the **reality principle*, which is a governing principle of the **ego*. Sigmund Freud (1856–1939) borrowed the concept from the German philosopher, physician, psychologist, and mystic Gustav Theodor Fechner (1801–87) who, in an article in the journal *Zeitschrift für Philosophie und philosophische Kritik* in 1848, introduced the term (in its German form *Lustprinzip*) and noted that motives underlying actions can be unconscious. Freud introduced the concept in his book *The Interpretation of Dreams* (1900), where he initially called it the unpleasure principle (*Standard Edition*, IV–V, at p. 574), but later he fell in with Fechner's more natural terminology. Also called the *pleasure–pain principle* or (awkwardly but closer to Freud's original German) the *pleasure–unpleasure principle*. See also [FREE ENERGY](#), [PERCEPTION–CONSCIOUSNESS SYSTEM](#), [PLEASURE-EGO](#), [PRIMARY PROCESS](#), [PRINCIPLE OF CONSTANCY](#).

pleasure–unpleasure principle *n.* Another name for the **pleasure principle*.

pleiotropic *adj.* Of or relating to a **gene* or a **mutation* that has a simultaneous effect on more than one **phenotypic* trait. **pleiotropism** or **pleiotropy** *n.* [From Greek *pleion* more + *tropos* a turn, from *trepein* to turn + *-ikos* of, relating to, or resembling]

plethysmograph *n.* An instrument for recording changes in the size or volume of the penis (***penile plethysmograph**) or another body organ or part, especially changes resulting from variations in blood content. [From Greek *plethysmos* enlargement + *graphein* to write]

plexiform layer *n.* Either of two thin strata in the ***retina**, the ***inner plexiform layer** and the ***outer plexiform layer**, that separate the three major retinal layers and are connected by ***interplexiform cells** conveying information backwards towards the ***photoreceptors**. [From Latin *plexus* a network, from *plectere* to weave]

plexus *n.* Any complex network of nerves, ganglia, blood vessels, or lymphatic vessels, such as the ***choroid plexus**. [From Latin *plexus* a weaving, from *plectere* to weave]

plosive *n.* A ***consonant** speech sound articulated by completely blocking the airstream through the mouth and nose for a moment, as in the initial ***phonemes** in the words *bee*, *dear*, *gear*, *key*, *pea*, *tea*. See also **MANNER OF ARTICULATION**. [French, from (ex)plosif]

pneumoencephalogram *n.* An X-ray image of the brain with its ***cerebrospinal** fluid replaced with air to show the ***ventricles** clearly. Also called a *pneumoencephalograph* or an *air encephalogram*. See also **ENCEPHALOGRAM**. **pneumoencephalography** *n.* The production and interpretation of pneumoencephalograms. [From Greek *pneuma*, *pneumatōs* breath, from *pnein* to breathe + *en* in + *kephale* the head + *gramme* a line]

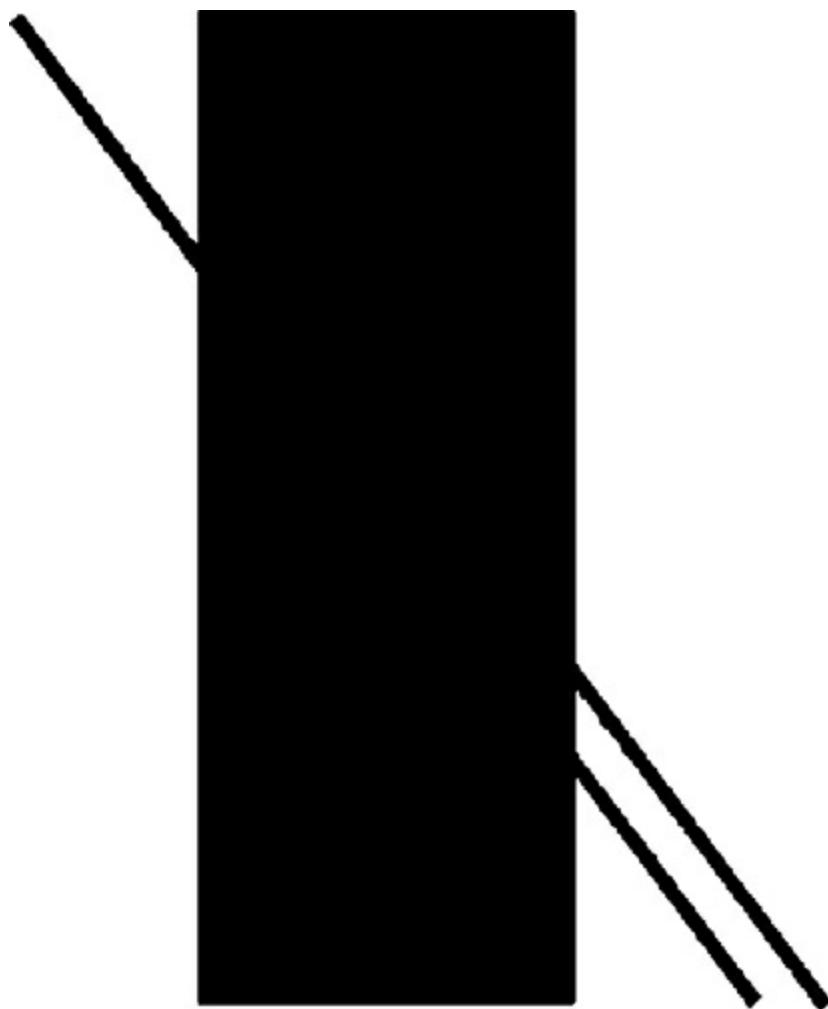
pneumograph *n.* An instrument for recording respiratory movements, usually from straps fitted around the chest or abdomen. **pneumogram** *n.* A recording from a pneumograph. See also **POLYGRAPH**. [From Greek *pneuma*, *pneumatōs* breath, from *pnein* to breathe + *graphein* to write]

pneumotachograph *n.* An instrument for measuring and recording the airflow from the nose and mouth during speech. [From Greek *pneuma* breath + *tachos* speed + *graphein* to write]

PNMT *abbrev.* An enzyme contained in adrenergic neurons of the adrenal medulla that synthesize ***adrenalin** (epinephrine). It functions as a catalyst in the conversion of noradrenalin (norepinephrine) to adrenalin. [From its chemical name *p(henylethanolamine)-N-m(ethyl)t(ransferase)*]

Poetzl phenomenon *n.* The reappearance in dreams of images or information previously perceived ***subliminally**. Also spelt *Pötzl phenomenon*. [Named after the Austrian neurologist Otto Pötzl (1877–1962) who first reported the phenomenon in 1917]

Poggendorff illusion *n.* A visual illusion in which a diagonal line appears displaced when interrupted by a rectangle appearing to occlude the middle part of it (see **illustration**). [Named after the German physicist Johann Christian Poggendorff (1796–1877) who discovered it, although the German astronomer Johann Karl Friedrich Zöllner (1834–82) first published it in 1860 after Poggendorff had drawn his attention to it]



Poggendorff illusion. The lower of the two lines on the right is a continuation of the line on the left.

poikilitic function *n.* Another name for a **psychometric function*.
[From Greek *poikilos* various + *-itikos* resembling or marked by]

poikilothermic *adj.* Cold-blooded, or having a body temperature that varies with the ambient temperature. Also called *poikilothermal*. Compare *HOMIOOTHERMIC*. **poikilothermy** or **poikilothermism** *n.* [From Greek *poikilos* various + *therme* heat + *-ikos* of, relating to, or resembling]

point-light display *n.* A moving image of small light sources attached to the principal joints of a person's body (usually shoulders, elbows, wrists, hips, knees, and ankles), filmed as the person moves around in the dark, introduced

*****ebook converter DEMO Watermarks*****

by the Swedish psychologist Gunnar Johansson (1911–98) and first published in the journal *Perception and Psychophysics* in 1973. Static point-light displays, even when several are viewed as a sequence, look like meaningless constellations, but the moving image is almost instantly (after two or three frames) and irresistibly interpreted as a human body in motion, and from such displays familiar people can be recognized easily from their characteristic gaits, the sexes of unknown people can be reliably judged even when cues relating to physical size are eliminated, and the weights of objects being lifted can be accurately judged to within 3–4 kg. The perception created by a point-light display is also called *biological motion* or *biomechanical motion*.

point mutation *n.* A **mutation* involving the alteration of a single base pair in a segment of **DNA*. [So called because it occurs at a single point in the sequence of bases]

point of non-discrimination *n.* Another name for a **point of subjective equality*.

point of subjective equality *n.* Any of the points along a stimulus dimension at which a **variable* stimulus is judged by an observer to be equal to a **standard stimulus*; also, any point along a stimulus dimension at which no relevant differences between responses to a variable stimulus and a standard stimulus can be detected in the behaviour of an animal. Also called a *non-discrimination point* or a *point of non-discrimination*. **PSE** abbrev.

point source *n.* A light source that is sufficiently small to be considered as having negligible size.

point subtraction aggression paradigm *n.* A laboratory measure of **aggression* in response to provocation, developed by the US psychiatrist Don (Donald Raymond) Cherek (born 1941) and published in the journal *Psychopharmacology* in 1981. In a slightly revised version that Cherek developed into a computer program in 1992, subjects can earn money by pressing a button marked *A*, take money from opponents with whom they believe that they are paired by pressing *B*, or protect their earned money by pressing *C*. Buttons can be pressed repeatedly, and a participant's accumulated earnings are displayed on the computer screen throughout the

*****ebook converter DEMO Watermarks*****

task. Irrespective of the participant's actions, the fictitious opponent periodically deducts money from the participant's account. From the participant's pattern of button-pressing, it is possible to determine the level of aggression in response to provocation. Compare [HOT SAUCE TASK](#), [TAYLOR AGGRESSION PARADIGM](#). **PSAP** abbrev.

Poisson distribution *n.* In statistics, a very skewed [*probability distribution](#) representing the number of discrete events occurring randomly but at a constant average rate in a specified continuous interval of time or space, for example. It is often used to model the random occurrence of rare events with fixed probability of occurrence. [Named after the French mathematician Siméon-Denis Poisson (1781–1840) who published the results of his researches in a book in 1837]

Polari *n.* An [*argot](#) or [*cant](#) that became popular in [*gay \(1\)](#) subculture in English-speaking countries during the 1960s and declined thereafter, though it survives in English slang words such as *naff* (tasteless), *bevv* (a drink), *cottaging* (frequenting public toilets for sex with strangers) and, less well known, *vada* (see), believed to have originated in the lingua franca of Mediterranean sailors. Also called *Parlyaree*. [From Italian *parlare* to speak, from Latin *parlare* to speak]

political correctness *n.* The avoidance of verbal expressions or actions that may be interpreted as prejudicial or offensive to minorities or groups considered to be disadvantaged by race, sex, disability, sexual orientation, social class, or appearance. As a consequence of political correctness, some [*epicene \(2\)](#) words have become commonplace (for example, *flight attendant* in preference to *air stewardess* and *firefighter* in preference to *fireman*), but certain other manifestations of political correctness have been ridiculed, as when a US television reporter, referring to the South African president Nelson Mandela (1918–2013) and wishing to refer to the fact that he was black without uttering the word *black*, referred to him as African American. See also [ABLEISM](#), [FATTISM](#), [HERSTORY](#), [HETEROSEXISM](#). **politically correct** *adj.* **PC** abbrev. [Coined by the US journalist Elinor Langer (born 1939) in the *New York Times* in 1984, alluding to social conventions in the liberal establishment]

Pollyanna effect *n.* A tendency for people to pay more attention in their thought and speech to positive than negative aspects of their conceptual worlds and to process positive information more easily than negative information. The term was coined in 1964 by the US psychologist Charles E(gerton) Osgood (1916–91) to explain the greater frequency of positive than negative words in written language: *good* occurs almost 10 times as frequently as *bad*, *love* almost 10 times as frequently as *hate*, and so on. *See also* [MERE EXPOSURE EFFECT](#), [TRAIT NEGATIVITY BIAS](#). [Named after Pollyanna Whittier, the ‘glad girl’, whose blindly optimistic and Panglossian disposition always led her to look on the bright side of things, in the novels *Pollyanna* (1913) and *Pollyanna Grows Up* (1915) by the US writer Eleanor H(odgman) Porter (1868–1920)]

polyandry *n.* The custom or practice of having more than one husband at the same time or, in female animals, of mating with more than one male during the same breeding season. *See also* [ADELPHOGAMY \(1\)](#), [POLYGAMY](#). *Compare* [POLYGyny](#). [From Greek *polys* many + *andros* a man]

polydipsia *n.* Excessive thirst, symptomatic of several disorders including **diabetes* mellitus and certain mental disorders. *Compare* [ADIPSIA](#). [From Greek *polys* much or many + *dipsa* thirst + *-ia* indicating a condition or quality]

polyethism *n.* Division of labour, especially in reference to the **social* insects. [From Greek *polys* many + *ethos* a custom]

polygamy *n.* The custom or practice of having more than one spouse (whether husband or wife) at the same time or, in animals, of having more than one mate during the same breeding season. *See* [POLYANDRY](#), [POLYGyny](#). *Compare* [MONOGAMY](#). [From Greek *polys* many + *gamos* marriage]

polygenic inheritance *n.* Inheritance of a characteristic that depends on the cumulative effects of several or many **genes* each having a small individual effect, such as physical stature or intelligence. *See also* [EMERGENESIS](#), [QUANTITATIVE INHERITANCE](#). *Compare* [MONOGENIC INHERITANCE](#), [QUALITATIVE INHERITANCE](#). [From Greek *polys* many + German *Gen* a gene,

from Greek *genein* to produce]

polygraph *n.* An instrument for the simultaneous recording of several largely involuntary physiological responses controlled by the autonomic nervous system, usually skin conductance or **galvanic skin response (GSR)*, respiration rate (monitored by a **pneumograph* and producing separate traces for chest movement and abdominal movement), blood pressure, and heart rate. It is sometimes used as a **lie detector*. The original instrument of this type was the **Keeler polygraph*. [From Greek *polygraphos* writing copiously, from *polys* many + *graphein* to write]

polygyny *n.* The custom or practice of having more than one wife at the same time or, in male animals, of mating with more than one female during the same breeding season. *See also* *POLYGAMY*. *Compare* *POLYANDRY*. [From Greek *polys* + *gyne* a woman]

polymerase chain reaction *n.* A technique for synthesizing numerous copies of a sequence of **DNA* without **genetic engineering* by repeatedly separating it into its two complementary strands and using **DNA* polymerase to catalyse the synthesis of double-stranded DNA from each single strand. *See also* *GENETIC FINGERPRINTING*, *TRANSCRIPTION (2)*. **PCR** *abbrev.* [From *polymer* a large molecule consisting of repeating subunits, from Greek *polys* many + *meros* a part + *-ase* denoting an enzyme, from *diastasis* separation]

polymorphic gene *n.* A gene such as any of the human genes for eye colour or the ABO blood groups that occurs as two or more different **alleles* at the same gene locus within a species or population. *See* *GENETIC POLYMORPHISM*. *See also* *RACE (2)*. [From Greek *polys* many + *morphe* a form or shape]

polymorphism *See* *GENETIC POLYMORPHISM*.

polymorphous perversity *n.* In **psychoanalysis*, the earliest **libidinal stage* of **psychosexual development*, during the **oral stage*, characterized by undifferentiated sexual desire that finds gratification through any **erotogenic zone*. The term is also used to denote the varied bodily
*****ebook converter DEMO Watermarks*****

sources and styles of libidinal gratification in the course of early psychosexual development. Compare ANAL STAGE, GENITAL STAGE, LATENCY PERIOD, ORAL STAGE, PHALLIC STAGE. [From Greek *polys* many + *morphe* a shape or form]

polyonymy *n.* The property of having several names. English has no equivalents for the many words for *camel* in Arabic, *snow* in the language of the Inuit Eskimos of Greenland, Canada, and Northern Alaska, or *hole* in the Australian aboriginal Pintupi; but on the other hand few languages have the polyonymy that English has for different types of vehicles (*car*, *lorry*, *bus*, *motorbike*, *go-cart*, and so on). See also LINGUISTIC DETERMINISM. Compare POLYSEMY. **polyonymous** *adj.* [From Greek *polys* many + *onoma* a name]

polypeptide *n.* A molecule that is smaller than a *protein, consisting of a *peptide chain composed of *amino acids linked together. If the molecular weight (in units of the weight of a single hydrogen atom) is less than 10,000, corresponding to about 100 amino acids, it is arbitrarily called a polypeptide; if the molecular weight exceeds 10,000, corresponding to over 100 amino acids, it is called a protein. The basis for the dividing line is the fact that molecules lighter than 10,000, when in solution, will pass through cellophane, providing a simple discriminative test. [From Greek *polys* many + English *peptide*]

polyphagia *n.* The habit of some creatures (omnivores) of eating many different kinds of foods. Also, loosely, another name for *bulimia (1). [From Greek *polys* much + *phagein* to consume + *-ia* indicating a condition or quality]

polysemy *n.* The property of a word or *lexeme of having several different meanings, a typical English example being the word *kind*, which can mean type (*a different kind of food*); quality (*a difference of kind rather than degree*); goods or services (*payment in kind*); something similar (*respond to the attack in kind*); compassionate (*a kind gesture*); or cordial (*kind regards*). Also called *polysemia*. See also HETERONYMS, LEXICAL AMBIGUITY. Compare MONOSEMY, POLYONYMY. **polysemous** *adj.* [From Greek *polys* many + *sema* a sign]

polysomnography *n.* The simultaneous recording of several physiological processes, usually including ***EEG** and ***electro-oculogram (EOG)** activity, in a sleeping person. [From Greek *polys* many + Latin *somnus* sleep + *graphein* to write]

polysubstance dependence *n.* A ***substance-related and addictive disorder**, specifically a form of ***substance dependence** involving at least three groups of ***drugs** for at least 12 months without any one of them predominating. [From Greek *polys* much + Latin *substantia* substance, from *sub* under + *stare* to stand]

polysynaptic reflex *n.* Any reflex with more than one ***synapse (1)**, not counting the synapse between neuron and muscle, and hence involving one or more ***interneurons**. In humans, all reflexes except ***stretch reflexes** are polysynaptic. *Compare* **MONOSYNAPTIC REFLEX**. [From Greek *polys* many + *neuron* a nerve]

POMC *abbrev.* Pro-opiomelanocortin, a large polypeptide present in the ***pituitary gland** that functions as a precursor of ***beta-endorphin** and ***adrenocorticotrophic hormone (ACTH)**.

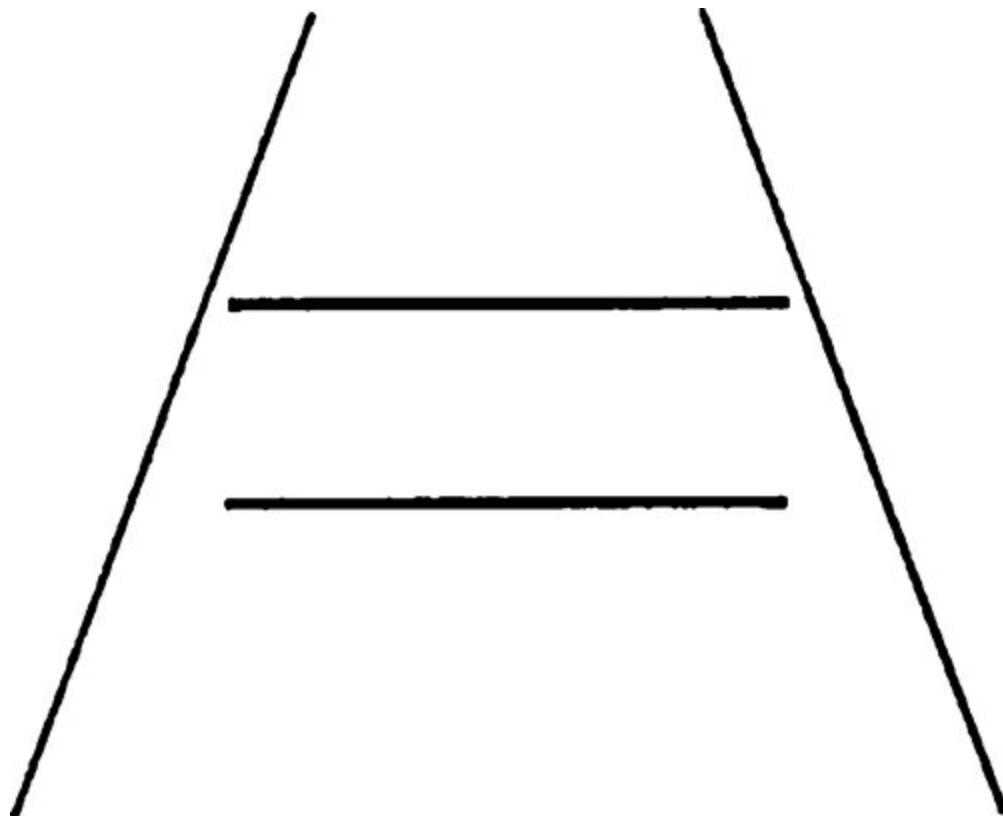
pons *n.* A broad band of mostly white fibres connecting the two halves of the brain at the level of the brainstem above the medulla oblongata, containing the ***corticospinal tract** and part of the ***reticular formation** and connected to the cerebral cortex via the ***corticopontine tract**. Not to be confused with the ***PONS**. *See also* **CEREBRAL PEDUNCLE**, **LOCKED-IN SYNDROME**, **LOCUS COERULEUS**, **NUCLEUS GIGANTOCELLULARIS**, **PERIAQUEDUCTAL GREY MATTER**, **SUBCOERULEAR NUCLEUS**, **SUPERIOR OLIVARY NUCLEUS**, **TECTUM**, **TRAPEZOID BODY**.
pontine *adj.* [From Latin *pons* a bridge, short for *pons Varolii* bridge of Varolius, named after the Italian anatomist Costanzo Varolius (?1543–75) who first identified it]

PONS *abbrev.* Profile of non-verbal sensitivity, a test designed to measure ability to decode non-verbal information from the face, body, and voice. It consists of brief film clips of a woman displaying various emotional states, the respondent's task being to identify those states. It was published

commercially in 1979 by the German-born US psychologist Robert Rosenthal (born 1933) and several colleagues, who reported that children's PONS scores tend to increase with age, that females tend to score higher than males, and that non-verbal behaviour of strangers tends to be less accurately decoded than that of familiar people. Not to be confused with the [*pons](#).

pontogeniculo-occipital *adj.* Pertaining to a [*PGO spike](#) or wave. [From *pons* + (*lateral*) *geniculate nucleus* + *occipital cortex*]

Ponzo illusion *n.* A visual illusion in which two lines of equal length appear unequal when drawn horizontally at different heights between a pair of converging lines (see [illustration](#)). It is also called the *railway illusion*, because it is often illustrated with a picture of converging railway lines, and it is closely related to [*Ehrenstein's square illusion](#). See also [CORRIDOR ILLUSION](#), [ORBISON ILLUSION](#), [PERCEPTUAL CONSTANCY](#), [SIZE CONSTANCY](#). [Named after the Italian psychologist Mario Ponzo (1882–1960) who first published it in 1913]



Ponzo illusion. The horizontal lines are equal in length.

pooled variance estimate *n.* In statistics, an estimate of a population's **variance* obtained by combining or pooling data from two or more samples. In the **independent samples t test*, for example, the squared deviations of the scores from their means in both groups are normally pooled to obtain an estimate of what is assumed under the **null hypothesis* to be the common population variance. *Compare* *SEPARATE VARIANCE ESTIMATES*.

poppers *n.* A street name for **nitrite inhalants* generally or **amyl nitrite* in particular. [Alluding to the fact that the capsules containing it make a popping sound when they are opened]

pop-type *n.* An informal name for a **population* stereotype.

population *n.* All the people inhabiting a country or other area or belonging to a specified group. In statistics, an aggregate of individuals from which a **sample* may be drawn and to which the results of a research investigation may be generalized. A population need not encompass every individual in a country: it is quite legitimate to refer to the population of patients diagnosed as schizophrenic or the population of university undergraduates, for example. [From Latin *populus* people + *-ation* indicating a process or condition]

population genetics *n.* A branch of genetics concerned with the relative frequencies of genes and genotypes in populations, as affected by natural selection under conditions of **mutation*, **assortative mating* or **disassortative mating*, and **migration*, focusing especially on phenomena such as **heritability*. *See also* *HARDY–WEINBERG LAW*.

population stereotype *n.* In a situation of seemingly arbitrary choice, a particular option that is chosen by a large proportion of a given population, or an expectation, interpretation, or a manner of perceiving, thinking, or behaving that is statistically prominent within the population. For example, most people in the US and Europe unconsciously expect a knob on an electrical appliance to increase the appliance's output when it is turned clockwise and to decrease the output when it is turned anticlockwise, but they expect a water or gas tap or faucet to function in exactly the opposite way,

decreasing the flow when it is turned clockwise and increasing the flow when it is turned anticlockwise, and controls that do not function in the expected ways cause irritation, inefficiency, and operator errors. Another example, often used by conjurors and people pretending to have telepathic powers, is the marked preference that emerges when people are asked to draw two geometric figures, one inside the other: research reveals that more than one-third of people draw a triangle and circle. Also (informally) called a *pop-type*. See also [THREE–SEVEN EFFECT](#).

pornographomania *n.* A pathological impulse to write obscene messages or graffiti. [From Greek *porne* a prostitute + *graphein* to write + *mania* madness]

pornolagnia *n.* A desire for sexual intercourse with prostitutes. [From Greek *porne* a prostitute + *lagneia* lust]

porphyria *n.* A group of hereditary disorders in which the body over-produces substances called porphyrins, causing abdominal pain, aversion to bright light, and a variety of neurological symptoms. [From Greek *porphyra* purple, referring to the colour of the substance excreted by people with the disorders + *-ia* indicating a condition or quality]

Porter's law *n.* Another name for the [*Ferry–Porter law](#).

Porteus Maze Test *n.* The first widely used [*non-verbal test](#) of ability, designed to supplement the [*Stanford–Binet intelligence scale](#) by measuring aspects of intellectual ability such as foresight, planning, and prudence. It involves finding paths through a series of mazes or labyrinths, and some researchers have considered it [*culture-fair](#). **PMT** *abbrev.* [Named after the Australian psychologist Stanley D. Porteus (1883–1972) who constructed it in 1914]

portfolio theory *n.* A theory of decision making under risk, based on [*unfolding technique](#), developed in the early 1960s by the US psychologist Clyde Hamilton Coombs (1912–88).

portmanteau word *n.* Another name for a **blend*. [From *portmanteau* a large travelling case, from French *porter* to carry + *manteau* a cloak]

portrait illusion *n.* Another name for the **rotating head illusion*.

position constancy *n.* A form of **perceptual constancy* through which stationary objects appear stationary in spite of movements of their retinal images caused by movements of the eyes, head, and body. *See also* [EYE-HEAD MOVEMENT SYSTEM](#), [REAFFERENCE](#).

position preference *n.* Any consistent tendency to choose an option because of its location, as when a person in a discrimination task tends to favour the right-hand option, or when a person responding to a multiple-choice questionnaire tends to favour the middle option of the response categories presented. *See also* [RESPONSE STYLE](#).

positive afterimage *n.* An **afterimage* in which the lightness contrasts of the original stimulus are preserved, light areas of the original stimulus appearing light and dark areas appearing dark. *See also* [COMPLEMENTARY AFTERIMAGE](#). *Compare* [NEGATIVE AFTERIMAGE \(1\)](#).

positive feedback *See* [FEEDBACK](#).

positive induction *See* [INDUCTION \(4\)](#).

positive Oedipus complex *See* [OEDIPUS COMPLEX](#).

positive psychology *n.* The psychology of valued psychological phenomena, such as contentment and satisfaction (with the past), hope and optimism (for the future), and happiness and well-being (in the present). It focuses on positive subjective experiences, such as love and aesthetic appreciation; positive individual qualities, such as courage, interpersonal skill, perseverance, originality, and wisdom; and positive social phenomena, such as cooperation, altruism, and tolerance. The term was introduced by the US psychologist Martin E. P. Seligman (born 1942) in a Presidential Address to the American Psychological Association in 1998, and it was discussed at

length in the journal *American Psychologist* in 2000, in a special issue edited by Seligman and by the Italian-born US psychologist Mihaly Csikszentmihalyi (born 1934). In March 2003, the British Psychological Society's journal *The Psychologist* also devoted a special issue to positive psychology. *See also* EUDAIMONIC WELL-BEING, HAPPINESS, HEALTH PSYCHOLOGY, HEDONIC TREADMILL, HEDONIC WELL-BEING, EGO INVOLVEMENT, POST-TRAUMATIC GROWTH, SELF-CONFIDENCE, SELF-EFFICACY, SELF-ESTEEM, SUBJECTIVE WELL-BEING.

positive reference group *n.* A **reference group* that an individual admires or aspires to and uses as a standard representing opinions, attitudes, or behaviour patterns to emulate. *Compare* NEGATIVE REFERENCE GROUP.

positive symptoms *n.* In the diagnosis of **schizophrenia*, the symptoms of **delusions*, **hallucinations*, **disorganized speech*, **disorganized thinking*, and **catatonia*. *Compare* NEGATIVE SYMPTOMS.

positive theory *See* NORMATIVE (1).

positive transfer *n.* A form of **transfer of training* in which the learning or performance of a task is facilitated or improves as a result of training on a different but related task, as when learning to speak Italian improves one's ability to speak Spanish, or vice versa. Transfer tends to be positive when the two tasks involve different stimuli and similar responses. *Compare* NEGATIVE TRANSFER.

positive transference *n.* In **psychoanalysis*, sexual desire on the part of the patient towards the analyst. *See also* TRANSFERENCE. *Compare* NEGATIVE TRANSFERENCE.

positivism *n.* 1. A philosophical doctrine developed explicitly by the French philosopher and mathematician Auguste Comte (1798–1857), though it can be traced back through the French socialist thinker Claude-Henri de Rouvroy Comte de Saint-Simon (1760–1825) to the English philosopher and statesman Francis Bacon (1561–1626), according to which observation and experiment are the only sources of substantial knowledge. Comte believed that human thought passes through three stages: theological, metaphysical, then finally positive. *See also* EMPIRICISM. 2. Another name for **logical*
*****ebook converter DEMO Watermarks*****

positivism. See also [FRANKFURT SCHOOL](#), [OPERATIONALISM](#).

positivity bias *n.* 1. A pervasive tendency for people, especially those with high [*self-esteem](#), to rate positive [*traits](#) as being more true of themselves than negative traits. 2. In [*balance theory](#), a general preference shown by most people for positive relations, especially *p–o* relations.

positron emission tomography See [PET SCAN](#).

possession trance *n.* A [*trance](#) associated with the replacement of one's customary personal identity with a new identity, and a belief that this is caused by the influence of a spirit, deity, power, or other person. See also [DISSOCIATIVE TRANCE DISORDER](#). [From Old French *possesser* to possess, from Latin *possidere* to occupy or inhabit + French *transe* trance, from Latin *transire* to go across or to die]

possible world *n.* In [*modal logic](#), a formalization of an imaginable state of affairs consistent with certain specified assumptions, such that a [*proposition](#) (1) is true if and only if it is true in every possible world.

post-alveolar *adj.* Of or relating to the area immediately behind the [*alveolar](#) ridge, the hard, bony part of the palate behind the upper front teeth, and descriptive of speech sounds articulated with the tongue tip in that area, examples being the initial sounds in the words *rye*, *try*, and *dry*. See also [PLACE OF ARTICULATION](#). [From Latin *post* after or behind + *alveolus* a small depression, referring to the tooth sockets]

postcategorical acoustic store *n.* A memory store for verbal information that has undergone a degree of [*information](#) processing, especially syntactic analysis. Also called *postcategorical acoustic memory*. Compare [PRECATEGORICAL ACOUSTIC STORE](#).

postcentral gyrus *n.* The gyrus of the parietal lobe immediately behind the central sulcus, occupied by the primary [*somatosensory cortex](#). Also called the *postrolandic gyrus*. [From Latin *post* after or behind + *centrum* the centre]

postconcussional disorder *n.* A condition (included in the *ICD-10 classification and in the *DSM-5 appendix of conditions meriting further study) following head *trauma causing significant *concussion, indicated by *fatigue (1), *dyssomnia, headache, *vertigo or dizziness, irritability, *anxiety, *depression, or labile *affect, changes in personality, and apathy. Also called *postconcussion syndrome*. [From Latin *post* after + *concussus* violently shaken, from *concutere* to shake violently, from *quater* to shake]

postconventional morality *n.* The third and final *Kohlberg stage of moral development, characterized by the internalization of moral principles. It is divided into two levels: at Level 5 the child defines moral behaviour in terms of the social contract and what is generally agreed to be for the public good (*I should not tell lies, because it is in all our best interests for everyone to be truthful*), and at Level 6 it is based on genuine ethical principles that determine a person's personal moral code. Compare CONVENTIONAL MORALITY, PRECONVENTIONAL MORALITY.

postencephalitic syndrome *n.* An *organic mental disorder following recovery from viral or bacterial *encephalitis, characterized by non-specific and variable behavioural change, including paralysis, deafness, *amnesia, *aphasia, *apraxia, or *acalculia.

posterior *adj.* Behind, at the back, or after. Compare ANTERIOR. [From Latin *posterus* coming after, later, or following, from *post* after]

posterior cerebral commissure *n.* A band of nerve fibres beneath the pineal gland in the epithalamus, connecting the midbrain regions of the two cerebral hemispheres, including the two superior colliculi. Also called the *intertectal commissure* or simply the *posterior commissure*. See also COMMISSURE. [From Latin *commissura* a joining together, from *com-* together + *mittere* to send]

posterior funiculus See FUNICULUS.

posterior horn *n.* Either of the two dorsal ends of the H-shaped column of grey matter running throughout the length of the spinal cord and receiving

inputs from most of the afferent nerves. It includes the **substantia gelatinosa*.
See also FUNICULUS. *Compare* ANTERIOR HORN.

posterior pituitary *n.* The back part or lobe of the **pituitary gland* that is responsive to a variety of pituitary, adrenal, gonadal, and hypothalamic hormones and that secretes **oxytocin* and **vasopressin* in response to neural stimulation. It is one of the **circumventricular organs* and is called the *neurohypophysis*. *Compare* ANTERIOR PITUITARY.

posterior probability *n.* In **Bayesian inference*, the probability assigned to an event, in accordance with **Bayes' theorem*, in the light of empirical evidence as to its observed relative frequency. Also called *conditional probability*. *Compare* PRIOR PROBABILITY (2).

post-Freudian *adj. n.* (Of or relating to) any of the **psychoanalysts* who followed Sigmund Freud (1856–1939).

postganglionic *adj.* Pertaining to **efferent* neurons of the **autonomic* nervous system that are peripheral to **ganglia* and that synapse directly on to muscles or glands. *Compare* PREGANGLIONIC. [From Latin *post* after or behind + Greek *ganglion* a cystic tumour + *-ikos* of, relating to, or resembling]

posthallucinogen perception disorder *n.* Another name for **flashback* (3).

post hoc test *n.* Another name for an **a posteriori* test. [From Latin *post* after + *hoc* this]

posthypnotic amnesia *n.* Another name for **hypnotic* amnesia.

postnatal blues *See* POSTPARTUM BLUES.

postnatal depression *See* POSTPARTUM DEPRESSION.

post-operative cognitive dysfunction *n.* Impairment of **cognitive* functions, including memory, learning, concentration, and speed

*****ebook converter DEMO Watermarks*****

of mental processing, emerging days or weeks after major surgery, especially in elderly patients. The condition may persist for months or years, long-term effects being especially common after cardiac surgery with use of heart-lung machines, as was noted soon after such machines were introduced. The first large-scale study of the condition after non-cardiac surgery was the International Study of Postoperative Cognitive Dysfunction ([ISPOCD](#)), initially reported in the journal *The Lancet* in 1998, confirming that anaesthesia and surgery cause long-term post-operative cognitive decline in some elderly patients having major, elective, non-cardiac surgery and that the risk increases with age. The term itself first appeared in print in an article by the US psychiatrist David G. Folks (born 1953) and several colleagues in the *Southern Medical Journal* in 1988. See also [COGNITIVE IMPAIRMENT](#), [PUMPHEAD](#). **POCD** abbrev.

postpartum blues *n.* A common emotional reaction of mothers to childbirth, characterized by transient [*depression](#) lasting up to 72 hours. Also called *postnatal blues*. Compare [POSTPARTUM DEPRESSION](#), [PUERPERAL PSYCHOSIS](#). [From Latin *post* after + *parturire* to give birth]

postpartum depression *n.* A form of [*depression](#) occurring occasionally in mothers between three days and six weeks after giving birth, with symptoms ranging from relatively mild to a [*major depressive episode](#). Also called *postnatal depression*. Compare [POSTPARTUM BLUES](#), [PUERPERAL PSYCHOSIS](#).

postpartum psychosis See [PUERPERAL PSYCHOSIS](#).

postrolandic gyrus *n.* Another name for the postcentral gyrus. [From Latin *post* + English *Rolandic (fissure)*, named after the Italian anatomist Luigi Rolando (1773–1831)]

post-rotational nystagmus *n.* A form of [*vestibular nystagmus](#) resulting from rotation of the body, occurring when the rotation stops abruptly. Also called *postrotatory optic nystagmus*.

postsynaptic *adj.* Of or relating to a [*neuron](#) or part of a neuron, muscle, or gland that receives a signal across a [*synapse \(1\)](#). Compare [PRESYNAPTIC](#).

*****ebook converter DEMO Watermarks*****

postsynaptic excitation See [EXCITATORY POSTSYNAPTIC POTENTIAL](#).
postsynaptic inhibition See [INHIBITORY POSTSYNAPTIC POTENTIAL](#). [From Latin *post* after or behind + Greek *synapsis* contact or junction, from *syn* together + *haptein* to fasten + *-ikos* of, relating to, or resembling]

postsynaptic potential *n.* A change in the [*membrane](#) potential of a [*postsynaptic](#) neuron resulting from a [*neurotransmitter](#) or other signal sent across a synapse by a [*presynaptic](#) neuron. See [EXCITATORY POSTSYNAPTIC POTENTIAL](#), [INHIBITORY POSTSYNAPTIC POTENTIAL](#).

postsynaptic receptor *n.* A [*neuroreceptor](#) molecule in a [*postsynaptic](#) cell membrane specialized to detect and respond to the [*neurotransmitter](#) released by a presynaptic neuron.

post-traumatic growth *n.* Improvement in psychological functioning following a traumatic experience, especially in the areas of self-evaluation (increased self-confidence and acceptance of personal limitations), personal relationships (increased compassion, appreciation of intimacy, and appreciation of friendships), and personal philosophy (replacement of materialistic outlook with deeper understanding of what matters in life). It is summed up in the maxim published in 1889 by the German philosopher Friedrich Wilhelm Nietzsche (1844–1900): ‘Aus der Kriegsschule des Lebens.—Was mich nicht umbringt, macht mich stärker’ (From the military academy of life: What doesn’t kill me makes me stronger). The concept was introduced by the US psychologist Richard G. Tedeschi (born 1950) and the Brazilian-born psychologist Lawrence G. Calhoun (born 1943) in an article in the *Journal of Traumatic Stress* in 1996 and is one of the central concepts in [*positive psychology](#). Compare [POST-TRAUMATIC STRESS DISORDER](#).

post-traumatic stress disorder *n.* A [*trauma-](#) and [stressor-related disorder](#) in [*DSM-5](#), also considered an [*anxiety disorder](#), arising as a delayed and protracted response to experiencing or witnessing a traumatic event involving actual or threatened death, serious injury, or sexual violence to self or others. It is characterized by recurrent, involuntary, intrusive, distressing memories of the traumatic event or dreams related to it; [*flashbacks](#) (2) causing the individual to feel or act as though the trauma were recurring; intense distress and physiological reactions in response to

*****ebook converter DEMO Watermarks*****

anything reminiscent of the traumatic event; persistent avoidance of stimuli associated with the trauma; a numbing of responsiveness and heightened arousal, manifested as insomnia, irritability, difficulty in concentrating, hypervigilance, or exaggerated startle response; and sometimes **depersonalization* or **derealization*. Formerly called *traumatic neurosis*, and before that *shell shock*. See also BATTERED WIFE SYNDROME, COMBAT FATIGUE, DISSOCIATIVE IDENTITY DISORDER, EYE-MOVEMENT DESENSITIZATION AND REPROCESSING, FLOODING, PROLONGED DURESS STRESS DISORDER, STRESS, TRAUMA-AND STRESSOR-RELATED DISORDERS. Compare ACUTE STRESS DISORDER, DISSOCIATIVE DISORDERS, POST-TRAUMATIC GROWTH. **PTSD** *abbrev.* [From Latin *post* after + Greek *trauma* a wound]

postulate *n.* Another name for an **axiom*.

postural aftereffect *n.* A subjective feeling that arises after adopting an eccentric or abnormal body posture for some time, and then adopting a normal posture. The sensation is of an abnormal posture that deviates from normality in the opposite direction to the prior abnormal posture, and this aftereffect is a consequence of the **perdeviation effect*. See KOHNSTAMM EFFECT.

postural tremor *n.* A form of **tremor* not easily classifiable as either a **passive tremor* or an **intention tremor*, appearing when an attempt is made to maintain a posture, resulting sometimes from lesions in the **basal ganglia* as in **parkinsonism*, with a typical frequency of 3–6 hertz, or as a sign of **cerebellar syndrome*, with a typical frequency of 2.5–4 hertz. See also POSTUROGRAPHY.

posturography *n.* Instrumental recording of the stability of erect posture by means of strain gauges attached to a supporting platform to detect swaying, used to detect **neurological* disorders, especially those associated with **postural tremor* in **cerebellar syndrome* and various forms of **ataxia*. In some cases **electromyogram* electrodes are also attached to muscles of the ankles and calves. [From *posture* + *graphein* to write]

post-viral fatigue syndrome *n.* A form of **chronic fatigue syndrome* developing after a viral infection. **PVFS** *abbrev.*

*****ebook converter DEMO Watermarks*****

pot *n.* An obsolescent street name for ***cannabis**. **pot-head** *n.* A habitual cannabis user. [Perhaps from the Mexican Indian *potiguaya* cannabis]

potassium *n.* A light, silvery, alkaline, metallic element that is highly reactive chemically and is an important ***electrolyte** in the body. It is the predominant ***cation** within cells and is required for contraction of ***skeletal muscles** and relaxation of ***cardiac muscle**. **K** *abbrev.* [From Latin *potassa* potash]

potlatch *n.* A competitive winter festival involving extravagant feasting, ostentatious distribution of gifts, and ceremonial destruction of valuable possessions, performed by the Kwakiutl and other American Indians of the north-west coastal area as a display of wealth and a method of maintaining or enhancing the prestige of chiefs and clans. [Chinook, from Nootka *patlatsch* a gift]

Pötzl phenomenon *See* **POETZL PHENOMENON**.

poverty of content *n.* Speech that conveys little information. *Compare* **POVERTY OF SPEECH**.

poverty of speech *n.* Marked deficit in spontaneous speech, and replies to questions that are perfunctory, monosyllabic, or unforthcoming. Also called *hypologia*, *hypophrasia*. *Compare* **POVERTY OF CONTENT**.

power law *n.* Any law expressed by a mathematical power function, especially the ***psychophysical** law that was advocated from 1953 onwards by the US psychologist S(tanley) S(mith) Stevens (1906–73) and discussed by him in an influential article in the journal *Psychological Review* in 1957, a century after it was first proposed by the Belgian physicist Joseph Antoine Ferdinand Plateau (1801–83), and that largely replaced ***Fechner's law**. According to the power law, the magnitude of a sensation is a power function of the intensity of the stimulus causing it, so that equal proportional increases in sensation correspond to equal proportional increases in stimulus intensity, the two proportions not necessarily being the same. It is usually expressed by the equation $\psi = k\phi^n$, where ψ is the magnitude of the sensation, ϕ is the

physical intensity of the stimulus, k is a constant scaling factor that depends on the units of measurement, and n is an exponent or power that is constant for a given type of sensory experience but that varies from one type of sensation to the next, with $n = 0.33$ for visual brightness perception, $n = 0.67$ for loudness perception, $n = 1.45$ for heaviness perception of lifted weights, $n = 1.00$ for visual length perception, of which people have much experience, and so on. Also called *Stevens's law* or *Stevens's power law*. See also [PROSPECT THEORY](#), [PSYCHOPHYSICAL FUNCTION](#). [So called because ϕ is raised to the power of n]

power, statistical See [STATISTICAL POWER](#).

power test *n.* In psychometrics, any test in which ability is measured by the degree of difficulty of the items that can be mastered, rather than the speed of performance. Compare [SPEED TEST](#).

POX triad See [BALANCE THEORY](#).

practice curve *n.* Another name for a [*learning](#) curve.

Prader–Willi syndrome *n.* A rare disorder (occurring in about one in 12,000–15,000 people of both sexes) usually caused by [*deletion](#), at or soon after conception, of several genes on the copy of [*chromosome](#) 15 inherited from the father, resulting in [*hyperphagia](#), with a risk of morbid obesity. Other signs and symptoms include [*hypotonia](#), [*cognitive](#) impairment, short stature and incomplete sexual development, [*obsessive](#) or [*compulsive](#) symptoms and [*tantrums](#). **PWS** *abbrev.* [Named after the Swiss paediatricians Andrea Prader (1919–2001) and Heinrich Willi (1900–71) who first described it briefly in an article in the *Schweizerische medizinische Wochenschrift* in 1956 and more fully in a second article in the *Journal of Pediatrics* in 1963]

pragmatic love *n.* A secondary type of [*love](#) that is practical and utilitarian and is a combination of [*ludic love](#) and [*storgic love](#). Compare [AGAPIC LOVE](#), [EROTIC LOVE](#), [MANIC LOVE](#). [From Greek *pragma* a deed + *-ikos* of, relating to, or resembling]

pragmatics *n.* The study of social and behavioural aspects of practical language usage, the factors governing speakers' choices of words and expressions in particular circumstances, and the effects of such choices on listeners. This was clarified by the English philosopher Peter (Frederick) Strawson (1919–2006) in a famous article 'On Referring' in the journal *Mind* in 1950 in which he pointed out that a phrase such as *the woman in the blue dress* does not, by itself, refer to a particular woman but that it acquires a clear meaning from the circumstances in which it is spoken. *See also* COOPERATIVE PRINCIPLE. [From Greek *pragma* an act or deed + *-itikos* resembling or marked by]

Prägnanz *n.* A principle or law of perception of *Gestalt psychology according to which perception of ambiguous stimuli tends to be as 'good' (meaning simple, regular, and symmetric) as the sensory input allows. The Gestalt psychologist Wolfgang Köhler (1887–1967) grounded this principle on the doctrine of *isomorphism (3), coupled with a belief that electrical brain fields, like other systems, evolve to physical Gestalten representing minimal energy states, a standard example being a soap bubble, which invariably evolves to a perfect sphere—the minimal energy state of a soap film. Köhler's theory was discredited as neuroscience advanced, but the principle of *Prägnanz* was widely embraced, and the underlying notion of a 'good' perception has been clarified in terms of *information theory as one encoded with the minimum *bits of information. Also spelt *Praegnanz* or *pregnance*, though the latter in particular is avoided in careful usage. *See also* GOOD GESTALT, LANDOLT CIRCLE, PRECISION LAW. *Compare* LIKELIHOOD PRINCIPLE. [From German *Prägnanz* pithiness or terseness]

prandial drinking *n.* Drinking stimulated by the eating of dry food. [From Latin *prandium* lunch]

pre-attentive processing *n.* Another name for *automatic processing.

precategory acoustic store *n.* An *echoic store that is believed to hold auditory information for brief periods before it has been subjected to significant *information processing. Evidence for it comes from experiments on serial digit recall, showing that the final two items in a list of digits are recalled better when the list is heard than when it is read but that this effect is

*****ebook converter DEMO Watermarks*****

suppressed if the auditory list is followed by a verbal suffix (such as *that's the end of the list*) that need not be recalled. This ***auditory** suffix effect suggests the existence of an auditory memory trace that decays quickly and can be overwritten by other verbal information, but doubt was cast on its existence during the 1990s. Also called a *precategorical acoustic memory (PAM)*. Compare **POSTCATEGORICAL ACOUSTIC STORE**. **PAS** abbrev.

precedence effect *n.* Hearing only the first of two sounds or sound patterns when the second is similar to the first and follows it within about 50 milliseconds. Compare **AUDITORY FUSION**.

precentral gyrus *n.* The gyrus of the frontal lobe immediately in front of the ***central sulcus**, occupied by the primary ***motor cortex**. [From Latin *prae* in front + *centrum* the centre]

precision law *n.* The most general law of perceptual organization in ***Gestalt** psychology, according to which a Gestalt tends to become as sharply defined, stable, strong, regular, symmetrical, simple, meaningful, and economical as the sensory information allows, these properties being characteristics or features of ***Prägnanz**. Also called the *simplicity principle*. See also **GOOD GESTALT**. [From Latin *praecision* a cutting off, from *prae* before + *caedere* to cut]

precocial *adj.* Of or relating to species of birds whose young are hatched with a covering of down and open eyes and are capable of leaving the nest alone within a few days. Compare **ALTRICIAL**. [From Latin *praecox* early maturing, from *prae* early + *coquere* to ripen]

precognition *n.* ***Extra-sensory perception** of objects or events in the future, or of another person's future mental processes, a conjectural ***paranormal** phenomenon. Compare **CLAIRVOYANCE**, **TELEPATHY**. **precognitive** *adj.* Of or relating to precognition. **precognitive clairvoyance** *n.* ***Extra-sensory perception** of objects or events in the future. **precognitive telepathy** *n.* Extra-sensory perception of another person's future mental processes. [From Latin *prae* before + *cognoscere*, *cognitum* to get to know, from *com-* together + *noscere* to know + *-ion* indicating an action, process, or state]

preconcept *n.* A term introduced by the Swiss psychologist Jean Piaget (1896–1980) to denote any of the primitive action-based concepts developed during the **pre-operational stage* of development.

preconscious *adj. n.* In **psychoanalysis*, (of or relating to) mental contents that are not currently in **consciousness* but are accessible to consciousness by directing attention to them, such as memories that are not at present being recalled but that can be recalled at will. Sigmund Freud (1856–1939) developed the theory of the preconscious early in his career and set it out fully in his book *The Interpretation of Dreams* (1900, *Standard Edition*, IV–V). A barrier of **censorship* exists between the preconscious and the **unconscious* (2), and a second barrier exists between the preconscious and consciousness, though this second barrier differs from the first inasmuch as it selects more than it distorts. In 1920 Freud abandoned this **topography* in favour of the structural model of id–ego–superego. *See also* PERCEPTION–CONSCIOUSNESS SYSTEM, SUBCONSCIOUS (2), THING–PRESENTATION, WORD–PRESENTATION. **pcs** *abbrev. (adj.)*, **Pcs** *abbrev. (n.)*.

preconscious processing *n.* 1. **Information* processing occurring without conscious awareness, as in **subliminal* perception and various phenomena that have been observed in the study of memory and emotion. 2. Another name for **automatic processing*.

preconventional morality *n.* The most primitive **Kohlberg stage* of moral development, in which the child interprets moral behaviour entirely in terms of personal gain and loss. It is divided into two levels: at Level 1 the child's moral behaviour is guided by the avoidance of punishment (*I should not tell lies because I might get into trouble*), and at Level 2 it is influenced also by the desire for gain (*I should not tell lies because then my parents will reward me*). *Compare* CONVENTIONAL MORALITY, POSTCONVENTIONAL MORALITY.

precursor *n.* A forerunner, or something that precedes or heralds something else; in particular, a chemical substance from which another more important substance is derived or synthesized. [From Latin *praecursor* one who runs in front, from *prae* before + *currere*, *cursum* to run]

predator *n.* Any **species* of animal that hunts and kills members of another species for food. Also called a *carnivore*. **predation** *n.* The hunting and killing for food by one animal species (the predator) of another (the **prey*). **predatory** or **predacious** *adj.* Habitually hunting and killing animals of other species for food. [From Latin *praedator* a plunderer or hunter, from *praeda* booty]

predicate calculus *n.* An advanced form of symbolic **logic* incorporating not only **propositions* (1), relations between propositions (*and*, *or*, *not*, and *if...then*), axioms, and rules of inference, but also **quantifiers* (1). First-order predicate calculus is obtained by extending **propositional calculus* to include quantifiers, and it is widely regarded as the most powerful form of symbolic logic. The first systematic description of this form of logic was introduced in 1928 by the German mathematical logicians David Hilbert (1862–1943) and Wilhelm Ackermann (1896–1962). [From Latin *praedicatum* something declared, from *prae* before + *dicare* to declare]

predicate thinking *n.* The fallacy of considering two things to be the same merely because they have attributes in common. According to the Swiss psychologist Jean Piaget (1896–1980), it is characteristic of **pre-operational stage* of development. Also called *predicative thinking*.

predicative *adj.* Of or relating to a part of a sentence that asserts or denies something about the subject of the sentence and is located outside the noun phrase that it refers to. For example, the adjective *good* is **attributive* in the phrase *the good terrorist*, but it is predicative in *the terrorist is good*. [From Latin *praedicare* to assert publicly, from *prae* before + *dicare* to proclaim + *-ivus* indicating a tendency, inclination, or quality]

prediction paradox *n.* Another name for the **unexpected hanging paradox*.

predictive validity *n.* In psychometrics, a form of **criterion validity* in which the predictor scores are obtained in advance of the criterion scores, as when a test of scholastic aptitude is validated against scores on tests of school performance obtained months or years later. *Compare* CONCURRENT VALIDITY.

predictor variable *n.* The name often given in **regression* analysis and **multiple regression* to an **independent variable* whose effect on the **dependent variable* is examined. The term *predictor variable* is preferred by many statisticians because it is not varied independently by the investigator.

prednisolone *n.* A synthetic **corticosteroid* hormone derived from **prednisone* and having similar effects to **cortisone*.

prednisone *n.* A synthetic **corticosteroid* hormone derived from and having similar effects to **cortisone*. [Perhaps from *pre(gnant)* + *d(ie)n(e)* a hydrocarbon with two double bonds between carbon atoms + (*cort*)*isone*]

preference-feedback hypothesis *n.* A conjecture put forward by the South African-born British psychologist Andrew M(ichael) Colman (born 1944), the English psychologist David J(ohn) Hargreaves (born 1948), and the Polish-born British psychologist Wladyslaw Sluckin (1919–85) in articles in the *British Journal of Psychology* and the *British Journal of Social Psychology* in 1981 to explain the fact that for certain classes of stimuli (such as surnames) the relationship between rated familiarity and attractiveness is an inverted U, with both very unfamiliar and very familiar surnames receiving lower ratings of attractiveness than stimuli of intermediate familiarity, whereas for other classes of stimuli (such as first names) the relationship is **monotonic*, with attractiveness increasing indefinitely with familiarity. According to the hypothesis, the underlying relationship is an inverted U, but the decrease in attractiveness for high levels of familiarity does not occur in stimuli such as first names whose frequency of exposure and therefore familiarity is significantly controlled by human choice, because as soon as such stimuli begin to decrease in attractiveness through over-exposure, they tend to be chosen less often and their frequency of exposure in the culture is thus damped by a **feedback* mechanism, the net effect being a monotonic empirical relationship. The **mere exposure effect* is explained partly by this mechanism and partly by the fact that, for complex stimuli, extremely high levels of exposure are required before the peak of the inverted U is passed.

preference reversal *n.* 1. A tendency, when facing a choice between gambles of nearly equal expected values in certain circumstances, to prefer
*****ebook converter DEMO Watermarks*****

one gamble but to place a higher monetary value on the other. Reversals occur when one gamble offers a high probability of winning a small prize and the other offers a low probability of winning a large prize. In a typical example, the high-probability *H* gamble offered an 8/9 probability of winning \$4 and the *L* gamble a 1/9 probability of winning \$40, and most participants preferred *H*; but when they were asked to place a monetary value on each gamble—to state the lowest price at which they would exchange it for cash—most put a higher value on *L*. The phenomenon was first reported in the *Journal of Experimental Psychology* in 1971 by the US psychologist Sarah C. Lichtenstein (born 1933) and the US-based Israeli psychologist Paul Slovic (born 1938), who attributed it to a finding that they had earlier (in 1968) reported, namely that preferences for gambles (and ratings of their attractiveness) are more highly correlated with probabilities of winning than with payoff sizes, whereas buying and selling prices of gambles are more highly correlated with payoff sizes than with probabilities of winning. Subsequent research, beginning with an experiment reported in 1990 by the Israeli-American psychologist Amos Tversky (1937–96), the US psychologist Paul Slovic, and the Israeli-American psychologist Daniel Kahneman (born 1934) showed that most preference reversals are not caused by violations of **expected utility* theory but by overpricing of low-probability gambles relative to the choice preference: a person who chooses between (*H*) \$10 for sure and (*L*) a 1/3 probability of winning \$40 is quite likely to prefer *H* but nevertheless to assign a value above \$10 to *L*, which implies an overpricing of *L* relative to the choice preference. This may be a result of **anchoring and adjustment* on the money scale. 2. A tendency to prefer one alternative when a set of alternatives is presented simultaneously and evaluated jointly but to prefer a different one when the same alternatives are presented in isolation and evaluated separately. The phenomenon was first published in an article in the *Administrative Science Quarterly* in 1992 by the US decision theorists Max H. Bazerman (born 1955), George F. Loewenstein (born 1955), and Sally Blount White (born 1961), who presented decision makers with a hypothetical dispute between neighbours and two potential resolutions involving splitting proceeds from the sale of vacant land between the two properties:

A: \$600 for yourself and \$800 for your neighbour;

B: \$500 for yourself and \$500 for your neighbour.

The results were that 75 per cent of decision makers who were presented with the two alternatives simultaneously and were asked which they considered more acceptable preferred A, but 71 per cent who were presented with the alternatives one at a time and were asked to indicate the acceptability of each on a rating scale preferred B.

preformationism *n.* A discredited theory that organisms are fully formed in miniature within the **ovum* (according to the ovists) or within the **spermatozoon* (according to the animalculists), and that development following fertilization involves mere enlargement and not differentiation or formation of new structures. *See also* [HOMUNCULUS](#). *Compare* [EPIGENESIS \(1\)](#).
preformationist *n.* One who propounds or believes in preformationism.

pre-fortis clipping *See* [CLIPPING](#).

prefrontal cortex *n.* The frontmost portion of the **frontal lobe*, in front of the primary and secondary motor cortex, uniquely large in the human brain, involved in anxiety and also in brain functions such as **working memory*, abstract thinking, social behaviour, and executive functions such as decision making and strategic planning, any or all of which are affected by lesions in this area. The right prefrontal cortex is involved in monitoring behaviour, resisting distractions, and providing an awareness of self and of time. *See also* [ATTENTION-DEFICIT/HYPERACTIVITY DISORDER](#), [DEFAULT MODE NETWORK](#), [DELAYED-RESPONSE TASK](#), [DORSOLATERAL PREFRONTAL CORTEX](#), [OBJECT PERMANENCE](#), [ORBITOFRONTAL CORTEX](#), [VENTROMEDIAL CORTEX](#). **PFC** *abbrev.* [From Latin *prae* in front + *frons* the forehead + *-alis* of or relating to + *cortex* bark or outer layer]

prefrontal leucotomy *See* [FRONTAL LEUCOTOMY](#).

prefrontal lobotomy *See* [FRONTAL LOBOTOMY](#).

preganglionic *adj.* Pertaining to **efferent* neurons of the **autonomic* nervous system that synapse on to other neurons in peripheral **ganglions*. *Compare* [POSTGANGLIONIC](#). [From Latin *prae* in front or before + Greek *ganglion* a cystic tumour + *-ikos* of, relating to, or resembling]

pregenital *adj.* In **psychoanalysis*, pertaining to any stage or phase of **psychosexual development* before the **genital stage*. See ANAL STAGE, LATENCY PERIOD, ORAL STAGE, PHALLIC STAGE, POLYMORPHOUS PERVERSITY.

pregnance See *PRÄGNANZ*.

pregnancy blockage *n.* Another name for the **Bruce effect*.

prehensile *adj.* Capable of grasping or holding, as in the prehensile tail of a monkey. [From Latin *prehendere* to seize or grasp]

prejudice *n.* A preconceived opinion or judgement, formed without adequate consideration of relevant evidence, especially an unfavourable judgement based on group membership, including **racialism*, **ethnocentrism*, **sexism*, or **ageism*. The US psychologist Gordon W(illard) Allport (1897–1967) defined it in his seminal book *The Nature of Prejudice* (1954) as ‘a feeling, favourable or unfavourable, toward a person or thing, prior to, or not based on, actual experience’ (p. 7), but he also suggested a rougher definition that is more often quoted: ‘being down on what you're not up on’ (p. 8). See also ABLEISM, AUTHORITARIANISM, CONFIRMATION BIAS, CONTACT HYPOTHESIS, FATTISM, HETEROSEXISM, JIGSAW CLASSROOM, ROBBERS CAVE EXPERIMENT, SOCIAL CATEGORIZATION, SOCIAL IDENTITY THEORY, SPECIESISM, STEREOTYPE, STIGMATIZE. **prejudiced** *adj.* Characterized by prejudice. **prejudicial** *adj.* Tending to cause prejudice. [From Latin *praeiudicium* a previous judgement or precedent, from *prae* before + *iudicium* a trial or sentence, from *iudex* a judge]

Preludin *n.* A proprietary name for the stimulant drug **phenmetrazine*. [Trademark]

premature (early) ejaculation *n.* A **sexual dysfunction* in **DSM-5* characterized by persistent or recurrent **orgasm* and **ejaculation* following minimal sexual stimulation and before they are wanted, usually prior to or around the time of penetration, making sexual intercourse difficult or impossible and causing significant distress or problems of interpersonal interaction. It is not diagnosed if it is attributable to a drug, many medicinal

drugs producing these symptoms as a side-effect. Also called *ejaculatio praecox*. See also [SQUEEZE TECHNIQUE](#). [From Latin *praematurus* unduly early, from *prae* before + *maturus* ripe + *e* from + *iaculatus* thrown, from *iacere* to throw + *-ation* indicating a process or condition]

premenstrual dysphoric disorder *n.* A [*depressive disorder](#) of women introduced in the [*DSM-5](#) classification in which at least five of the following symptoms appear regularly during the week before the onset of [*menstruation](#) and disappear or become minimal during the following week: labile [*affect](#), including mood swings and hypersensitivity to rejection; marked irritability or anger; [*depressed mood](#), including feelings of helplessness or worthlessness; [*anxiety](#), tension, or feeling 'on edge'; decreased interest in usual activities; difficulty concentrating; [*fatigue](#) (1) or lethargy; change in appetite or food cravings; [*hypersomnia](#) or [*insomnia](#); somatic symptoms such as breast tenderness, headaches, joint or muscle pain, and a sensation of bloating. According to DSM-5, the 12-month [*prevalence](#) is between 1.8 per cent and 5.8 per cent of menstruating women. Also called *late luteal phase dysphoric disorder*, *premenstrual tension* (PMT). **PDD** or **PMDD** *abbrev.* [From Latin *prae* before + *menstrualis* monthly, from *mensis* a month + Greek *dys-* bad or abnormal + *pherein* to bear + *-ikos* of, relating to, or resembling]

premenstrual syndrome *n.* Another name for [*premenstrual dysphoric disorder](#). **PMS** *abbrev.* [From Latin *prae* before + *menstrualis* monthly, from *mensis* a month]

premise *n.* In [*logic](#), a stated reason for believing the conclusion of an argument. In some contexts it refers to a statement or [*proposition](#) (1) that is assumed to be true for the purpose of drawing a conclusion in an argument. Also spelt *premiss*, especially in formal logic. See also [MONOTONICITY](#), [NON-MONOTONIC REASONING](#), [SYLLOGISM](#). [From Latin *praemissa* sent on before, from *prae* before + *mittere*, *missum* to send, meaning a statement to set before a conclusion]

premonition *n.* An intuition or foreboding of a future event, especially an unwelcome one; more generally, an early warning or forewarning of an event. **premonitory** *adj.* [From Latin *prae* before + *monere*, *monitum* to warn

*****ebook converter DEMO Watermarks*****

or advise]

premotor cortex See [MOTOR CORTEX](#). **PMC** *abbrev.*

pre-occipital notch *n.* An indentation in the base of each cerebral hemisphere towards the back, marking the boundary between the temporal lobe and the occipital lobe.

pre-Oedipal *adj.* In [*psychoanalysis](#), pertaining to the period of [*psychosexual development](#) before the development of the [*Oedipus complex](#), when attachment to the mother predominates in both sexes.

pre-operational stage *n.* In the theory of cognitive development of the Swiss psychologist Jean Piaget (1896–1980), the period between the [*sensorimotor](#) stage and the stage of [*concrete operations](#), from about 2 to 7 years of age. See also [CENTRATION](#), [CONSERVATION](#), [EGOCENTRISM](#), [PRECONCEPT](#), [PREDICATE THINKING](#), [TRANSDUCTIVE REASONING](#).

preoptic nucleus *n.* A region in the front of the [*hypothalamus](#), sometimes regarded as being apart from the hypothalamus proper, implicated in sexual behaviour, aggression, slow-wave sleep, and thirst, containing [*osmoreceptors](#) (2). Also called the *preoptic area*. [So called because it lies above the optic chiasm]

presbyacusic *n.* Loss of hearing sensitivity as a result of ageing, usually characterized by gradual loss of sensitivity to high-frequency sounds through deterioration of the [*organ of Corti](#). Also spelt *presbyacousis*. Also called *presbyacusia* or *presbyacousia*. See also [DEAFNESS](#), [SENSORINEURAL DEAFNESS](#).
presbyacusic *adj.* [From Greek *presbys* old + *akousis* hearing, from *akouein* to hear + *-ia* indicating a condition or quality]

presbyopia *n.* Loss of ability to accommodate the eyes to [*near vision](#), caused by loss of elasticity of the crystalline lens as a result of ageing and usually associated with hyperopia (long-sightedness). Compare [HYPEROPIA](#).
presbyopic *adj.* [From Greek *presbys* old + *ops* an eye + *-ia* indicating a condition or quality]

prescriptive theory See [NORMATIVE \(1\)](#).

presenile dementia *n.* A chronic, progressive form of [*dementia](#) starting before 65 years of age with no clear physical cause; another name for [*Alzheimer's disease](#). [From Latin *prae* before + *senilis* old, from *senex* an old man]

Present State Examination *n.* A semi-structured interview, intended to provide an objective evaluation of [*symptoms](#) associated with mental disorders. It contains 140 items, each scored on a 3-point or 4-point scale, and it is designed for use by experienced clinicians. It was constructed by the English psychiatrist John Kenneth Wing (1923–2010) and several colleagues, an early version being published in the *British Journal of Psychiatry* in 1967 and a widely used revision as a separate publication in 1974. See also [SCAN](#). **PSE** *abbrev.*

press *n.* Anything that exerts pressure. In the [*personology](#) of the US psychologist Henry Alexander Murray (1893–1988), another name for a [*stimulus \(1\)](#) or a configuration or pattern of stimuli that, in conjunction with [*needs \(3\)](#), determine behaviour. See also [NEED-PRESS](#).

press-need *n.* Another name for a [*need-press](#).

pressured speech *n.* Continuous, excessive, rapid, loud, and sometimes incoherent speech that is difficult to interrupt and may continue even when no one is listening, often seen in [*manic episodes](#) and other mental disorders. Also called *pressure of speech*. See also [LOGORRHOEA](#).

pressure receptor *n.* Any of a number of different kinds of [*touch](#) receptors that are sensitive to pressure stimulation. See [GOLGI TENDON ORGAN](#), [MEISSNER'S CORPUSCLE](#), [MERKEL CELL](#), [PACINIAN CORPUSCLE](#), [RUFFINI CORPUSCLE](#). See also [PRESSURE-SENSITIVE SPOT](#).

pressure-sensitive spot *n.* A small area of the [*skin](#) that is abundantly supplied by [*pressure receptors](#) and is especially sensitive to pressure stimulation, such spots occurring most numerous in the hands and

mouth.

prestige suggestion *n.* A persuasive message delivered by or attributed to a highly respected or admired source to maximize its **credibility*, as when a celebrity endorses a commercial product on television.

prestriate cortex *n.* A generic name for Areas V2, V3, V4, and V5, of the **visual cortex*, sometimes excluding V2. See *VISUAL CORTEX*. [So called because it is adjacent to the striate cortex or primary visual cortex (Area V1)]

presynaptic *adj.* Of or relating to a **neuron* that transmits a signal across a **synapse* (1). Compare *POSTSYNAPTIC*. [From Latin *prae* before or in front + Greek *synapsis* contact or junction, from *syn* together + *haptein* to fasten + *-ikos* of, relating to, or resembling]

presynaptic facilitation *n.* An increase in the effect of a **presynaptic* neuron on a **postsynaptic* neuron caused by a third neuron that makes an **axoaxonic* synapse with the presynaptic neuron near its terminal bouton.

presynaptic inhibition *n.* A diminution in the effect of a **presynaptic* neuron on its **postsynaptic* neuron caused by a third neuron that makes an **axoaxonic* synapse with the presynaptic neuron near its terminal bouton.

pretectal pathway *n.* Either of the pathways of nerve fibres of the **optic tracts* that do not reach the lateral geniculate nuclei but proceed instead to the pretectal nuclei, which are collections of nerve cell bodies in front of the tectum in the midbrain. Compare *TECTAL PATHWAY*. [From Latin *prae* before or in front + *tectum* a roof or canopy]

prevalence *n.* In **epidemiology*, the total number of existing cases of a disorder as a proportion of a population (usually per 100,000 people) at a specific time. Compare *INCIDENCE*.

prey *n.* An animal species that is hunted and killed for food by a **predator*.
prey on or **prey upon** *vb.* To hunt and kill for food, as in *Barn owls prey on fieldmice*. [From Latin *praeda* booty]

priapism *n.* A condition resulting from a disorder within the penis or the central nervous system, characterized by prolonged erection of the penis, seldom accompanied by sexual arousal, but usually causing pain. [From Greek *priapizein* to be lewd, from *Priapos* Priapus, the ancient deity personifying male fertility and generative power]

primacy effect *n.* **1.** In **serial learning* (1), a tendency for the items near the beginning of the series to be better recalled than those near the middle. *See also* SERIAL POSITION EFFECT. *Compare* RECENCY EFFECT. **2.** In **impression formation*, the tendency for information about a person that is presented first to have a larger effect on the overall impression of the person than the recipient forms than information presented later.

primacy, law of *See* PRIMACY EFFECT (1, 2).

primacy, oral *See* ORAL PRIMACY.

primal anxiety *n.* In **psychoanalysis*, **anxiety* resulting from the **birth trauma*. [From Latin *primalis* of or relating to the first, from *primus* first + *-alis* of or relating to]

primal fantasy *n.* In **psychoanalysis*, a primitive **fantasy* (2) of the **primal scene*, infantile seduction, castration, or similar experiences, believed by Sigmund Freud (1856–1939) to be universal and to be transmitted by genetic inheritance from practices that were common occurrences in prehistory. Freud introduced the concept in an article on ‘A Case of Paranoia Running Counter to the Psycho-Analytic Theory of the Disease’ (1915): ‘I call such phantasies—of the observation of sexual intercourse between the parents, of seduction, of castration, and others—“primal phantasies”’ (*Standard Edition*, XIV, pp. 263–72, at p. 269), and he expounded this genetic theory in his book *Introductory Lectures on Psycho-Analysis* (1916–17, *Standard Edition*, XV–XVI, at p. 371). *See also* SEDUCTION THEORY.

primal father *n.* In **psychoanalysis*, the head of the **primal horde*. *See also* TOTEM.

primal horde *n.* In **psychoanalysis*, an obsolete concept of a state of nature assumed to have existed in the distant past.

primal repression *n.* In **psychoanalysis*, a form of **repression*, when wishes emanating in the **id* are blocked from reaching **consciousness*. Sigmund Freud (1856–1939) introduced the concept in the **Schreber case* in 1911. *Compare* PRIMARY REPRESSION, SECONDARY REPRESSION.

primal scene *n.* In **psychoanalysis*, the spectacle of intercourse between one's parents. *See* PRIMAL FANTASY, WOLF MAN.

primal sketch *n.* In the **computational theory* of vision pioneered in the late 1970s by the English psychologist David Courtenay Marr (1945–80), the first stage in the perceptual process, similar to a rough line drawing, its function being to represent the variations in **luminance* present in the image after eliminating extraneous visual **noise* (2) such as glare that does not convey useful information about the image. The sketch is constructed by first blurring or smoothing the image with **filters* (2) of different **spatial frequencies*, capable of detecting information at different levels of resolution, and then locating regions of maximum change in luminance by finding **zero-crossings*, the result of this process being a two-dimensional black-and-white **representation* (2) of **contours* and shapes present in the image. The *raw primal sketch* incorporates edges and lines (formed wherever a zero-crossing emerges under a blur filter or pairs of zero-crossings emerge in the same place under two adjacent blur filters), bars (formed wherever a line detected under a filter that transmits only low-frequency information is flanked by two edges detected under a filter that transmits only high-frequency information), terminations (ends of bars), and blobs (areas enclosed in single edges). The *full primal sketch* joins together lines and edges that belong with one another, groups other items that appear to be associated, and locates the apparent boundaries of objects. *Compare* 3-D MODEL DESCRIPTION, 2½-D SKETCH.

primal therapy *n.* A form of **psychotherapy*, developed by the US psychologist Arthur Janov (born 1924) in 1970, in which clients or patients are encouraged to scream about their parents and their painful re-experiencing of birth and infancy. Also called *primal scream therapy* or *scream therapy*. *See also* BIRTH TRAUMA, BODY THERAPIES, REBIRTHING.

*****ebook converter DEMO Watermarks*****

primary abilities See PRIMARY MENTAL ABILITIES.

primary anxiety *n.* In *psychoanalysis, *anxiety arising from failure to control the impulses of the *id, its name alluding to the *primary process. Compare SIGNAL ANXIETY.

primary auditory cortex See AUDITORY CORTEX.

primary colour *n.* **1.** Any of the shades of red, green, or blue that can be mixed equally to form white or in different proportions to match all other *spectral colours and also certain *non-spectral colours such as purple. The wavelengths often used to define the primary colours are 670, 535, and 470 nanometres respectively. Also called an *additive primary*. See also CHROMATICITY, CIE COLOUR SYSTEM, COLOUR EQUATION, COMPLEMENTARY COLOUR, GRASSMANN'S LAWS (PERCEPTION), RAYLEIGH EQUATION, SPECTRUM, TRICHROMACY, TRISTIMULUS VALUES. Compare PSYCHOLOGICAL PRIMARY, SECONDARY COLOUR, SUBTRACTIVE PRIMARY. **2.** Any of the *complementary colours of red, green, and blue, namely green-blue (cyan), deep bluish purple (magenta), and yellow respectively, that can be subtracted from white light, equally to form black, or in different proportions (usually by mixing pigments) to match any other spectral colour. Also called a *subtractive primary*. **3.** Any of the four colours red, yellow, green, or blue that are basic to the processing of colour in the visual system and that are perceived as being basic or fundamental, the wavelengths often used to define them being 670, 589, 535, and 470 nanometres respectively. Also called a *principal colour* or a *psychological primary*. US *primary color*. See also BEZOLD–BRÜCKE PHENOMENON.

primary drive See DRIVE.

primary emotions *n.* According to a classification suggested in 1971 by the US psychologists Paul Ekman (born 1934) and Wallace V(erne) Friesen (born 1933), the six *emotions of happiness, sadness, disgust, fear, anger, and surprise, so called partly because their associated *facial expressions appear to be innate, the evidence for this being that they appear soon after birth, even in infants born blind and deaf who could not have learnt them from others, and that they are expressed and decoded similarly in relatively isolated
*****ebook converter DEMO Watermarks*****

cultures that have been studied by anthropologists. Some researchers believe that other emotions or **affects* are blends of these six.

primary gain *n.* In **psychoanalysis*, an immediate benefit, such as relief from **anxiety*, resulting from a **neurosis* or a **defence mechanism*. Sigmund Freud (1856–1939) drew the distinction between primary gain and **secondary gain* in 1916–17 in his book *Introductory Lectures on Psycho-Analysis* (*Standard Edition*, XV–XVI, at pp. 381–5). Also called *paranotic gain*. See also FLIGHT INTO ILLNESS. Compare SECONDARY GAIN.

primary hypersomnia *n.* One of the **dyssomnias*, with excessive sleepiness or **hypersomnia* as the major symptom. Also called *disorder of excessive somnolence* (DOES). See HYPERSOMNOLENCE DISORDER. Compare NARCOLEPSY.

primary identification *n.* In **psychoanalysis*, a primitive form of **identification* (2), occurring during the **oral* stage, before any other type of **object-relationship* is formed. Sigmund Freud (1856–1939) described this phenomenon in his book *The Ego and the Id* (1923): ‘At the very beginning, in the individual’s primitive oral stage, object-cathexis and identification are no doubt indistinguishable from each other’ (*Standard Edition*, XIX, pp. 12–66, at p. 29). Compare SECONDARY IDENTIFICATION.

primary immune response See IMMUNE RESPONSE.

primary impotence See IMPOTENCE (2).

primary integration *n.* In **psychoanalysis*, an infant’s first recognition of itself as a unitary being, separate from its environment.

primary memory *n.* The content of consciousness supplied by **memory* rather than direct perception. See also WORKING MEMORY. Compare SECONDARY MEMORY.

primary mental abilities *n.* A set of seven basic or fundamental cognitive capacities proposed in 1938 by the US psychologist Louis Leon

Thurstone (1887–1955), on the basis of **factor* analysis, as an interpretation of the group factors or clusters of correlations between certain types of test items and subtests. They are labelled verbal comprehension (V), word fluency (W), number (N), spatial ability (S), associative memory (M), perceptual speed (P), and reasoning (R) or induction (I). *Compare* *G. PMA abbrev.*

primary motor cortex *See* *MOTOR CORTEX.*

primary narcissism *n.* In **psychoanalysis*, a form of **narcissism* involving **cathexis* of the self with the whole of the **libido* in an early phase of development. The British-based Austrian psychoanalyst Melanie Klein (1882–1960) and her followers rejected the concept, arguing that object-relationships are evident from the earliest stages of sucking. *Compare* *SECONDARY NARCISSISM.*

primary object *n.* In **psychoanalysis*, the first **instinctual object*, usually the mother or the mother's breast, in an infant's libidinal development. *See also* *OBJECT-RELATIONSHIP.*

primary odour *n.* Any of the fundamental odours of which other odours are believed to be formed by combination, especially the six primary odours of **Henning's prism*: fragrant (like lavender or rose petals), ethereal (like ether or cleaning fluid), resinous (like resin or turpentine), spicy (like cinnamon or nutmeg), putrid (like faeces or rotten eggs), and burnt (like tar oil). *See also* *CROCKER–HENDERSON SYSTEM, STEREOCHEMICAL THEORY, ZWAARDEMAKER SMELL SYSTEM.*

primary prevention *n.* Measures taken to prevent the occurrence of a disorder. *Compare* *SECONDARY PREVENTION, TERTIARY PREVENTION.*

primary process *n.* In **psychoanalysis*, an unconscious, irrational mode of mental functioning, based on the **pleasure principle*, involving **free energy* governed by mechanisms such as **condensation* and **displacement*. Sigmund Freud (1856–1939) developed the concept at the beginning of his psychological work and expounded it at length in Chapter VII of his book *The Interpretation of Dreams* (1900, *Standard Edition*, IV–V). *See also* *****ebook converter DEMO Watermarks*****

BINDING. *Compare* [SECONDARY PROCESS](#).

primary projection area *n.* An area of the brain, such as the primary [*somatosensory cortex](#), [*primary visual cortex](#) (Area V1), or primary [*auditory cortex](#), that is the first to receive information from another system before relaying it elsewhere. *Compare* [SECONDARY PROJECTION AREA](#), [TERTIARY PROJECTION AREA](#).

primary quality *n.* In philosophy, a property such as solidity, physical extension, shape, motion or rest, or number that is inherent in an object or a group of objects and is capable of being experienced directly by an observer. It is distinguished from a *secondary quality*, such as sound, colour, taste, smell, warmth, or cold that is merely a property capable of producing in an observer a sensation that does not correspond to the property itself. This distinction was first made by the Greek philosopher Democritus of Abdera (? 460–?370 BC) and was accepted by the French philosopher René Descartes (1596–1650) and the English physicist and mathematician Sir Isaac Newton (1642–1727) before being fully developed and given its most influential formulation in 1690 by the English philosopher John Locke (1632–1704) in his *Essay Concerning Human Understanding* (Book 2, Chapter 8). *See also* [SUCCESSIVE CONTRAST](#).

primary repression *n.* In [*psychoanalysis](#), a form of [*repression](#) in which anxiety-arousing information already in [*consciousness](#) is removed and blocked from returning. *Compare* [PRIMAL REPRESSION](#), [SECONDARY REPRESSION](#).

primary sexual characteristic *n.* Any difference between the sexes in their sexual organs or gametes. *Compare* [SECONDARY SEXUAL CHARACTERISTIC](#).

primary sleep disorders *n.* A generic term for the [*dyssomnias](#) and the [*parasomnias](#).

primary somatosensory cortex *See* [SOMATOSENSORY CORTEX](#).

primary taste *n.* Any of the fundamental tastes that are believed to underlie all tastes, usually the four vertices of **Henning's tetrahedron*: sweet (like sugar or **aspartame*), sour (like vinegar or lemon juice), salty (like sea water or table salt), and bitter (like quinine or orange peel). *See also* [UMAMI](#).

primary visual cortex *n.* The part of the **visual cortex* to which the **photoreceptors* in the retinas of the eyes are eventually projected, occupying the gyri on both sides of the deep **calcarine sulcus* in the **occipital* cortex, containing 200 million cells within a total area of 25 square centimetres and arranged in an inverted **topographic map* of the object or scene being viewed, with neighbouring cells having **receptive fields* close together and being stacked vertically in **ocular-dominance columns* and **orientation columns*. It contains six layers of cells numbered 1 to 6 from the top, layer 4 being subdivided into three sublayers 4A, 4B and 4C, layer 4C receiving inputs from the photoreceptors in the retina via the **lateral* geniculate nuclei, the upper part 4C α receiving inputs from the **magnocellular* layer and the lower part 4C β from the **parvocellular* layer of the geniculate nuclei. All layers except layers 1 and 4A have neuronal connections outside the primary visual cortex: layers 1 and 2, which contain **blobs* for colour vision and are concerned with both form and colour, receive inputs from layers 4C α and 4C β , and layer 2 projects to Area V2 of the visual cortex; layer 4B, concerned with movement and stereopsis, receives inputs from layer 4C α and projects to Areas V2 and V5 (or MT) of the visual cortex, layer 4C α (in the magnocellular pathway) projects to layer 4A, and layer 4C β (in the parvocellular pathway) projects to layers 2 and 3 and thence to Area V2. Layers 5 and 6 are less well understood but are known to project to deep structures within the brain, layer 5 to the **superior* colliculus and layer 6 back to the lateral geniculate nuclei. Also called the *striate cortex* and known technically as *Area V1* or *Brodmann area 17*. *See also* [RETINOTOPIC MAP](#), [VISUAL CORTEX](#).

primary zone *n.* Another name for an **erotogenic zone*.

primate *n.* Any member of the order Primates, including humans, anthropoid apes, monkeys, lorises, and lemurs. [From Latin *primates* plural of *primas* principal, from *primus* first]

prime *n.* **1.** A **cue* (3) given to facilitate a particular response. See *PRIMING* (1). **2.** A *prime number*, that is, any number that is evenly divisible only by itself and 1. **3.** A typographical symbol (') affixed to a mathematical symbol as a modifier, as in *d'*—see *D PRIME*.

priming *n.* **1.** In a task involving recall, recognition, or some other form of cognitive performance, the provision of a contextual **cue* (3), **prime* (1), or **prompt* that provides information about either the identity or the time of appearance of a target stimulus and that may facilitate a response (in *facilitative priming*) or inhibit it (in *inhibitory priming*). When primes provide information that influences expectancies of targets, as in *associative priming* in which primes are meaningfully related to targets, *expectation-dependent* or *strategic priming* may occur, whereas when primes are unrelated to targets only *automatic priming* can occur, though it occurs more quickly. Associative priming that is dependent on verbal meaning, as when the prime *bread* is provided for the target *butter*, is called *semantic priming*; and a common type of associative priming that is not dependent on verbal meaning is *initial letter priming*, when the first letter of the word to be remembered is provided as a cue. Associative priming based on the sounds of words is called *phonological priming*: see *YOLK PHENOMENON*. **2.** Reduced reaction time (quicker responding) resulting from a signal warning of the imminent presentation of the stimulus. Compare *NEGATIVE PRIMING*. **3.** In research involving animals self-stimulating their **pleasure centres*, the provision of an initial stimulatory impulse at the start of the session to encourage the animal to provide further impulses on its own. [From Latin *primus* first]

primordial image *n.* In **analytical psychology*, a term originally introduced by the Swiss historian Jacob Christopher Burckhardt (1818–97) and adopted in 1912 by Carl Gustav Jung (1875–1961) for what he later came to call an **archetype* (2).

principal colour *n.* Another name for a **psychological primary*. US *principal color*.

principal-components analysis *n.* A statistical technique applied to a correlation matrix to combine observed variables into weighted linear
*****ebook converter DEMO Watermarks*****

combinations of the original variables called *principal components*, which are all uncorrelated with one another. The first principal component explains the maximum proportion of the variance, and successive principal components explain progressively smaller portions of the variance. This technique is closely related to **factor analysis*. See also CLUSTER ANALYSIS, CORRESPONDENCE ANALYSIS. **PCA** *abbrev.*

principal sulcus *n.* Another name for the **longitudinal fissure*.

principle of constancy *n.* In **psychoanalysis*, the proposition that the quantity of psychic energy within the mental apparatus remains constant, regulation being achieved through discharge of excess energy in **abreaction* and avoidance of increase through **defence mechanisms*. This **economic* concept is derived loosely from the first law of **thermodynamics*, the **conservation* of energy law, and may be thought of as a form of **homeostasis*, but the formulations of it by the Austrian physician Josef Breuer (1842–1925) in *Studies on Hysteria* (1895, *Standard Edition*, II, at pp. 183–252) and by Sigmund Freud (1856–1939) in his book *Beyond the Pleasure Principle* (1920, *Standard Edition*, XVIII, pp. 7–64, especially at pp. 9, 55–6) are ambiguous and contradictory; in particular, Freud appears to confuse the regulation of energy with its reduction. See also BOUND ENERGY, EGO LIBIDO, FREE ENERGY, HYDRAULIC THEORY, METAPSYCHOLOGY, OBJECT LIBIDO, QUOTA OF AFFECT. Compare NIRVANA PRINCIPLE.

principle of equipotentiality See EQUIPOTENTIALITY.

principle of least effort *n.* The proposition that, in striving for a goal, an organism generally seeks a method involving the minimum expenditure of energy. The concept was named in 1954 by the US psychologist Gordon W(illard) Allport (1897–1967). See COGNITIVE ECONOMY, COGNITIVE MISER, ELABORATION LIKELIHOOD MODEL, HODOLOGICAL SPACE.

principle of mass action See MASS ACTION.

principle of psychical determinism See PSYCHICAL DETERMINISM.

principle of reinstatement of stimulating conditions *n.*
Another (obsolete) name for **encoding* specificity.

principle of restricted choice *n.* A rule influencing the play of certain card combinations in the game of bridge, first discussed by the British-born US bridge expert Alan F(raser) Truscott (1925–2005) and later developed and named by the English player and author (John) Terence Reese (1913–96) in his book *The Expert Game* (1958), based on the same probabilistic phenomenon as the **Monty Hall problem*, according to which if a certain action could have been taken *either* because there was no alternative *or* as a result of a choice between two alternatives, then the first possibility is twice as likely as the second, other things being equal.

principle of the excluded middle *See* *EXCLUDED MIDDLE LAW*.

prion *n.* An infectious particle of protein that is not a virus or a bacterium and does not contain **nucleic acid* but is none the less capable of self-replication. The normal (alpha) form is harmless, but the rogue (beta) form, when it occurs in the brain and spinal cord, is believed to be a cause of prion diseases. *See also* *PRP*. [Coined in the 1980s from *proteinaceous infectious particle* to denote a mutant or rogue protein]

prion disease *n.* Any of a number of disorders of the nervous system, all fatal, believed to be caused by rogue **prions*, including scrapie in sheep, BSE in cattle, and the human prion diseases new-variant **Creutzfeldt–Jakob disease* (nvCJD), **fatal familial insomnia* (FFI), **Gerstmann–Sträussler–Scheinker syndrome* (GSS), and **kuru*. Unlike all other infectious diseases they do not provoke **immune responses*, and they are therefore difficult to detect because tests based on antibody production cannot be developed.

prion protein *See* *PRP*.

prior entry law *n.* The principle according to which, if two events occur simultaneously, then a person who is attending primarily to one of them will usually perceive that event as occurring before the other. This is believed to be one factor accounting for the **personal equation* in astronomy, because

some observers of star transits apparently attended primarily to the stars and others primarily to the ticking clock.

prior probability *n.* **1.** The **base* rate or relative frequency of an event or characteristic in a **population*. **2.** In **Bayesian inference*, the probability assigned to an event before taking empirical evidence into account. Also called an *a priori probability* or simply a *prior*. See also *INSUFFICIENT REASON*. Compare *POSTERIOR PROBABILITY*.

prism *n.* A transparent solid, usually with triangular or wedge-shaped cross-section and rectangular sides, through which white light is diffracted into a **spectrum*. It is also used to reflect rays of light, as in **inverting spectacles*. Compare *DIFFRACTION GRATING*. [From Greek *prisma* something sawn off, from *prizein* to saw]

prism adaptation *n.* A form of **adaptation* (2) in which a person wearing wedge-shaped **prism* spectacles, resulting in displacement of the visual field usually about 10 degrees to one side, becomes accustomed to the distortion, making normal body movements and no longer reaching out for objects at incorrect positions in space. See also *INVERTING SPECTACLES*.

Prisoner's Dilemma game *n.* A two-person game in which each player chooses between a cooperative *C* **strategy* (2) and a defecting *D* strategy, each receiving a higher payoff from *D* than *C* irrespective of whether the other player chooses *C* or *D*, but each receiving a higher payoff if both choose *C* than if both choose *D*. Its name derives from an interpretation first applied to it by the US mathematician Albert W(illiam) Tucker (1905–95) in a seminar at the Psychology Department of Stanford University in 1950: Two people, charged with involvement in a serious crime, are arrested and prevented from communicating with each other. There is insufficient evidence to obtain a conviction unless at least one of them discloses incriminating information, and each prisoner has to choose between concealing the information (*C*) and disclosing it (*D*). If both conceal, both will be acquitted, the second-best payoff for each; if both disclose, both will be convicted, the third-best payoff for each; and if only one discloses and one conceals, then according to a deal offered to them, the one who discloses will be acquitted and will receive a reward for helping the police, the best possible

*****ebook converter DEMO Watermarks*****

payoff, and the other will receive an especially heavy sentence from the court, the worst possible payoff. The game is ***paradoxical**, because *D* is a ***dominant** strategy for both players, so that it is ***rational** for each player to choose it whatever the other player does, but each player receives a higher payoff if they both choose their dominated *C* strategies than if they both choose *D*. The game was discovered in 1950 by the US mathematician Merrill M(eeks) Flood (1908–91) and the Polish-born US mathematician Melvin Dresher (1911–92). *See also* **MIXED-MOTIVE GAME**, **NEWMOMB'S PROBLEM**, **N-PERSON PRISONER'S DILEMMA**, **SOCIAL DILEMMA**, **SURE-THING PRINCIPLE**, **TIT FOR TAT STRATEGY**. **PD** or **PDG** *abbrev.*

prison psychosis *n.* A misleading name for ***Ganser syndrome**, which is not classified as a ***psychosis (1)** and is not peculiar to prisoners. [So called because Ganser's original description of it was based on three prisoners awaiting sentence]

proactive interference *n.* Impairment of learning or performance of a task caused by having previously learnt similar information or a similar task. Also called *proactive inhibition*. *See also* **RANSCHBURG INHIBITION**, **SKAGGS–ROBINSON PARADOX**. *Compare* **RETROACTIVE INTERFERENCE**. **PI** *abbrev.*

pro-ana *adj.* Pro-anorexia, loosely descriptive of a subculture, associated literature, and especially websites that provide support for people with eating disorders and also sometimes (controversially) promote ***anorexia nervosa** as a lifestyle choice and publish images of anorexic women as ‘thinspiration’ (inspiration to become thin). *Compare* **PRO-MIA**. [From Latin *pro* in favour of + *an(orexi)a*, from Greek *an-* not or without + *orexis* appetite + *-ia* indicating a condition or quality]

probabilistic functionalism *n.* A theory of perception formulated by the Hungarian-born US psychologist Egon Brunswik (1903–55) according to which perception involves the selection of environmental ***cues (2)** that are most useful or functional in responding, the validity of all perceptions and beliefs being necessarily probabilistic rather than certain. *See also* **BRUNSWIKIAN**.

probability *n.* A measure or index of degree of certainty regarding the
*****ebook converter DEMO Watermarks*****

occurrence of an event, on a scale from zero (indicating impossibility) to 1 (indicating certainty), interpreted as the relative frequency of the event (in classical statistics) or as one's subjective belief regarding the likelihood of the event (in [*Bayesian inference](#)). Probabilities are nowadays usually assumed to obey [*Kolmogorov's axioms](#). The theory of probability is the foundation on which the whole of [*statistics](#) is constructed. [From Latin *probabilis* that may be proved, from *probare* to prove + *-abilitas* capacity, from *habilis* able]

probability distribution *n.* In statistics, the probability or relative frequency of a variable for all possible values that the variable can assume.

probability learning *n.* A form of [*discrimination](#) learning in which the positive stimulus is rewarded on a randomized proportion of trials. In humans, this is usually achieved with variations of the light-guessing experiment first described by the US psychologist Lloyd G(irton) Humphreys (1913–2003) in the *Journal of Experimental Psychology* in 1939. An observer tries to predict which of two light bulbs will light up on each trial, and the bulbs are lit up randomly, 80 per cent left and 20 per cent right, for example. People typically began by distributing their guesses roughly equally between the two options, then they increase the frequency of choosing the bulb that is being lit up more often, and finally after very many trials, by which time they have enough information to judge the probabilities reasonably accurately, they usually settle into a non-optimal *matching strategy* of choosing 80 per cent left and 20 per cent right in the example above. This matching strategy yields a probability of $.8 \times .8 + .2 \times .2$ of being correct, which is 68 per cent correct guesses. This is non-optimal, because the strategy of choosing the more frequently illuminated bulb on every single trial yields 80 per cent correct guesses. Animals also tend to respond non-optimally, and when the responses of many animals are pooled, they sometimes correspond to probability matching.

probability matching *See* [PROBABILITY LEARNING](#).

probability sample *n.* Any sample drawn by a technique involving [*randomization](#), so that members of the population or sub-groups within it have known probabilities of inclusion. *See* [CLUSTER SAMPLE](#), [RANDOM DIGIT DIALLING](#), [SIMPLE RANDOM SAMPLE](#), [STRATIFIED RANDOM SAMPLE](#). *Compare*

*****ebook converter DEMO Watermarks*****

ACCIDENTAL SAMPLE, CONVENIENCE SAMPLE, NON-PROBABILITY SAMPLE, OPPORTUNITY SAMPLE, QUOTA SAMPLE, SELF-SELECTED SAMPLE, SNOWBALL SAMPLE.

probable error *n.* A measure of the degree of dispersion, variability, or scatter in a group of scores, equal to half the ***interquartile range**. It can be calculated by multiplying the ***standard deviation** by 0.6745. *Compare* INTERQUARTILE RANGE, RANGE, SEMI-INTERQUARTILE RANGE, VARIANCE. **PE** *abbrev.*

proband *n.* A person with a particular trait or disorder, serving as the starting point for a study in which the person's blood relatives are investigated in order to obtain information about the genetic transmission of the characteristic in question. Also called an *index case*. [From Latin *probandus* to be proved, from *probare* to prove]

probe *n.* Anything that is used to examine or explore, especially (in cognitive psychology) a ***cue (3)** in the form of an item in a list immediately preceding the item to be recalled.

problem solving *n.* Cognitive processing directed at finding solutions to ***well-defined problems**, such as the ***Tower of Hanoi**, ***Wason selection task**, or a ***water-jar problem**, by performing a sequence of operations. Problem solving by means of ***logic** or ***logical analysis** is usually called ***reasoning**. *See also* 2-4-6 PROBLEM, ALGORITHM, BRUTE FORCE ALGORITHM, CONVERGENCE–DIVERGENCE, FUNCTIONAL FIXEDNESS, GENERAL PROBLEM SOLVER, ILL-DEFINED PROBLEM, INSIGHT (2), INTELLIGENCE, LATERAL THINKING, MONTY HALL PROBLEM, MUDDY CHILDREN PROBLEM, NEWCOMB'S PROBLEM, NINE-DOT PROBLEM, ODDITY PROBLEM, PROBLEM-SOLVING STAGES, TAXICAB PROBLEM, TRAVELLING SALESMAN PROBLEM, WELL-DEFINED PROBLEM. [From Latin *problema*, something put forward, from Greek *pro* before or forward + *ballein* to throw]

problem-solving cycle *See* PROBLEM-SOLVING STAGES.

problem-solving stages *n.* The successive phases that can be observed in the process of ***problem solving**. According to the most influential scheme, proposed by the English psychologist Graham Wallas (1858–1932) in his book *The Art of Thought* (1921), the stages are preparation, ***incubation**, illumination or ***insight (2)**, and verification.

*****ebook converter DEMO Watermarks*****

According to the US philosopher John Dewey (1859–1952) in his book *How We Think* (1933), the stages are suggestion, translation of a difficulty into a **well-defined problem*, framing of a hypothesis, **reasoning*, and testing.

problem space *n.* In **problem solving*, the set of all possible operations that can be performed in an attempt to reach a solution.

procedural knowledge *n.* Information about how to carry out sequences of operations—*knowing how* in contrast to *knowing that*—sometimes lacking awareness and understanding of how to perform certain tasks and therefore being a form of **non-declarative knowledge*. The English philosopher Gilbert Ryle (1900–76) argued in *The Concept of Mind* (1949) that it cannot be reduced to declarative knowledge of facts. *See also* KNOWLEDGE, MIRROR DRAWING, PROCEDURAL MEMORY. *Compare* ACQUAINTANCESHIP KNOWLEDGE, DECLARATIVE KNOWLEDGE.

procedural memory *n.* A storage system for **procedural knowledge*, information within it being acquired through a form of learning that is relatively slow, requiring repetition over many trials, often involving associations of sequential stimuli and permitting storage of information about predicative relations between events, expressed primarily by improved performance at skilled tasks, often occurring without conscious awareness or understanding of what is being learned and therefore being a form of **non-declarative memory*. It is distinguished from **episodic memory* and **semantic memory*. *See also* ACT*, MIRROR DRAWING. *Compare* DECLARATIVE MEMORY.

proceptive behaviour *n.* Behaviour of a female that facilitates mating. US *proceptive behavior*. *See also* LORDOSIS. [From Latin *pro* for + (*con*)*ceptus* becoming pregnant]

process *n.* **1.** A sequence of events leading to some change or alteration in the state of a dynamic system. **2.** In anatomy, a projecting part, especially a fine threadlike protrusion from a **neuron*, being an **axon*, a **dendrite*, or one of their branches, also called a *neurite*. [From Latin *processus* an advance, from *procedere* to proceed]

processing speed *n.* The rate at which a person performs simple perceptual or cognitive tasks such as apprehension, scanning, retrieval, and response to stimuli. Measures of processing speed correlate weakly with psychometric measures of intelligence. *See also* CHOICE REACTION TIME, INSPECTION TIME, NERVE CONDUCTION VELOCITY.

process, primary *See* PRIMARY PROCESS.

process, secondary *See* SECONDARY PROCESS.

proclitic *n.* A monosyllabic **clitic* that precedes the word on which it depends, such as the English 't, standing for *it* in the word 'twas. *Compare* ENCLITIC. [From Greek *pro* before + *enclinein* to cause to lean + *-itikos* resembling or marked by]

procyclidine *n.* Procyclidine hydrochloride, an **anticholinergic* drug that is used in the treatment of **parkinsonism*. *See also* ANTIPARKINSONIAN.

prodrome *n.* A precursor or premonitory **sign* (1) or **symptom* of a developing disorder or attack, such as an **aura* (2) before an attack of **epilepsy*. **prodromal** *adj.* Of or denoting a prodrome. [From Greek *prodromos* a forerunner, from *pro* before + *dromos* a run + *-alis* of or relating to]

production method *n.* Another name for **magnitude production*.

production rule *n.* In cognitive psychology, a condition–action or *if–then* sequence (*if X occurs or obtains, then do Y*) designed to implement a procedure, often incorporated in a **production system*.

production system *n.* In cognitive psychology, an ordered set of **production rules* that are implemented by locating the first production rule in the list whose condition is satisfied, implementing its procedure, then beginning again at the top of the list, and so on. *See also* ACT*.

productive orientation *n.* In **neo-Freudian* theory, a term used by the

German-born US psychoanalyst Erich Fromm (1900–80) to denote a character type manifesting full use of potential and realization of latent potentialities, independent thinking, respect for self and others, enjoyment of sensual pleasures without anxiety, and delight in nature and works of art. *Compare* [EXPLOITATIVE ORIENTATION](#), [HOARDING ORIENTATION](#), [MARKETING ORIENTATION](#), [RECEPTIVE ORIENTATION](#).

product-moment correlation coefficient *n.* A statistic representing the degree of linear relationship between two variables. It is defined as the **covariance* of the two variables divided by the product of their standard deviations, hence it may be thought of as a measure of **standardized (1) covariance*. It is symbolized by *r*, and it ranges from 1.00 for perfect positive correlation, through zero for uncorrelated variables, to –1.00 for perfect negative correlation. When one variable is being used to predict another, the square of *r* indicates the proportion of variance in one variable that is explained by the other (given certain linear assumptions), or the proportion of variance shared by the two variables: if $r = .50$, then $r^2 = .25$, indicating that 25 per cent of the variance in one of the variables is explained by the other, or that 25 per cent of the variance is shared by the two variables. Also called *Pearson's correlation coefficient*. *See also* [CORRELATION](#). *Compare* [CORRELATION RATIO](#), [PARTIAL CORRELATION](#), [SPEARMAN RANK CORRELATION COEFFICIENT](#).

profile *n.* An outline, especially of a person's face in side view. In psychometrics, a graphic representation of a person's scores on several tests or subtests using a common scale. *See also* [CRIMINAL PROFILING](#). **profiler** *n.* One who creates profiles. [From Italian *profilo* a profile, from Latin *pro* forth + *filare* to spin or draw a line, from *filum* a thread]

profile of non-verbal sensitivity *See* [PONS](#).

profiling *See* [CRIMINAL PROFILING](#).

profound mental retardation *n.* An obsolete term for a level of **intellectual disability* associated with **IQ* below approximately 20 (in adults, **mental age* below 3 years). Also called *profound mental subnormality*.

*****ebook converter DEMO Watermarks*****

progeria *n.* A congenital condition of premature ageing, characterized by small stature and the appearance during childhood of grey hair, wrinkled skin, and the posture and general demeanour of an old person. [From Greek *pro* before + *geras* old age + *-ia* indicating a condition or quality]

progesterone *n.* A female **steroid* **sex* hormone secreted especially by the **corpus luteum* in the ovary to prepare the uterus for a fertilized ovum and to maintain pregnancy. When it reaches the hypothalamus, it inhibits the release of **luteinizing hormone* from the pituitary gland. *See also* DHEA, OESTROUS CYCLE. [From *proge(stin)*, from *pro* before + *gestation* + *ster(ol)* + *-one* indicating a ketone, from Greek *-one* a feminine name suffix]

prognosis *n.* A prediction or forecast of the course or outcome of a disorder. **prognostic** *adj.* [From Greek *pro* before + *gnosis* knowing]

prognostic test *n.* In psychometrics, any test that is designed to predict the likely outcome for the respondent of a programme of therapy, education, or training. [From Greek *pro* before + *gnosis* knowing + *-ikos* of, relating to, or resembling]

programmed strategy *n.* A predetermined pattern of **strategy* (2) choices used in experimental studies of players' choices in repeated **strategic games*. In a two-person experimental game, a player may be pitted against a simulated co-player in the form of a computer or an accomplice of the experimenter's, programmed in advance to make a predetermined sequence of choices that may or may not depend on the player's choices. In many such experiments the players are led to believe that they are playing against ordinary co-players. The most thoroughly researched programmed strategy for repeated **Prisoner's Dilemma games* is **tit for tat*.

progression index *n.* An index of the comparative **intelligence* of mammalian species, based on a modification of the **encephalization* quotient, defined as volume of **neocortex* in the animal in question divided by volume of neocortex in a standard comparison animal belonging to the same order, correcting for body size. If a chimpanzee is arbitrarily assigned a standard progression index for primates of 1.0, then humans score 3.2.

Compare *A/S RATIO*, *ENCEPHALIZATION QUOTIENT*.

Progressive Matrices test See *RAVEN'S PROGRESSIVE MATRICES*.

progressive relaxation *n.* A form of **psychotherapy* used for treating **anxiety disorders*, in which skeletal muscles throughout the body, often beginning with the feet and legs and working upwards, are first tensed and then deeply relaxed. It is also used as an adjunct to other forms of psychotherapy, especially **systematic desensitization*. It was introduced by the US physician Edmund Jacobson (1888–1983) and was described in his book *Progressive Relaxation* (1938). Also called *Jacobson's progressive relaxation* or *relaxation therapy*.

progressive supranuclear palsy *n.* A neurological disorder of unknown cause, first described in 1964 by the Canadian neurologists John C. Steele (born 1934) and John Clifford Richardson (1909–86) and the Polish-born Canadian neurologist Jerzy Olszewski (1913–66), characterized by loss of balance while walking, a gradual paralysis of the **extra-ocular muscles*, making upward and downward eye movements difficult or impossible, **dysarthria*, and stiffness of the neck and trunk muscles, followed eventually by loss of memory and mild **dementia*. It strikes in middle or old age, and its associated pathology includes degeneration of neurons in the **basal ganglia*, **brainstem*, and **cerebellum*, with subcortical **amyloid plaques* and **neurofibrillary tangles*. It is estimated to affect approximately 1.4 per 100,000 people, slightly more women than men, and it is related to (though much less common than) **Parkinson's disease*. Also called *supranuclear palsy* or (especially in the UK) *Steele–Richardson–Olszewski syndrome (SRO)*. **PSP** *abbrev.* [So called because the paralysis, especially of the eye muscles, occurs above nuclei of the central nervous system]

projection *n.* 1. In **psychoanalysis*, a **defence mechanism* in which intolerable feelings, impulses, or thoughts are falsely attributed to other people. Sigmund Freud (1856–1939) developed the concept initially in relation to paranoia (**delusional disorder*), and later extended it to a wide range of psychological phenomena, but never provided a detailed analysis of it: in his celebrated case study entitled ‘Psycho-Analytic Notes on an Autobiographical Account of a Case of Paranoia (Dementia Paranoides)’

*****ebook converter DEMO Watermarks*****

published in 1911, he wrote: 'let us make up our minds to postpone the investigation of it (and with it that of the mechanism of paranoiac symptom formation in general) until some other occasion' (*Standard Edition*, XII, pp. 9–82, at p. 66), but he never published any such investigation. *See also* EXTERNALIZATION, PROJECTIVE IDENTIFICATION, PROJECTIVE TEST, SCHREBER CASE. 2. An area where *axons from a sense organ or another part of the nervous system terminate.

projection area *n.* Another name for a *sensory projection area.

projective identification *n.* In *Kleinian analysis, a *fantasy (2) in which one inserts oneself, or part of oneself, into an *instinctual object in order to possess it, control it, or harm it. The British-based Austrian psychoanalyst Melanie Klein (1882–1960) introduced the concept in 1932 in her book *The Psycho-Analysis of Children*, in which she described a child's fantasy of invading its mother's body and attacking it sadistically, but she did not introduce the term *projective identification* until 1952, when she described it in a chapter in a co-authored book *Developments in Psycho-Analysis* as 'a particular form of identification which establishes the prototype of an aggressive object-relation'. *See also* IDENTIFICATION (2), PARTICIPATION MYSTIQUE.

projective test *n.* Any of a variety of personality tests in which the respondent gives *free responses to a series of stimuli such as inkblots, pictures, or incomplete sentences. Such tests are based loosely on the psychoanalytic concept of *projection (1), the assumption being that respondents project unconscious aspects of their personalities on to the test items and reveal them in their responses. Among the best known projective tests are the *Blacky pictures, *Draw-a-Person test, *Holtzman Inkblot Technique, *House–Tree–Person Technique, *Make-a-Picture-Story Test, *Rorschach test, *Rosenzweig Picture-Frustration Study, *sentence completion test, *Szondi test, *TAT, and *word-association test. Also called a *projective technique* or a *projective method*. The term *projective method* first appeared in print in the title of an article in the *Journal of Experimental Education* in 1938, where the authors attributed it to the US psychologist Lawrence K. Frank (1890–1968), who published an article entitled 'Projective Methods for the Study of Personality' in the *Journal of*

Psychology in 1939 and later published a book entitled *Projective Methods* (1948) in which he suggested that projective tests provide X-ray images of the unconscious mind. See also [MOTIVATIONAL RESEARCH](#).

prokaryote *n.* A bacterium or a cyanobacterium (blue–green alga) composed of cells each containing genetic material in a single filament, not enclosed in a well defined [*nucleus \(1\)](#). Compare [EUKARYOTE](#). [From Greek *pro* before + *karyon* a kernel]

prokaryotic cell *n.* A biological cell without a [*membrane](#) separating the genetic material from the rest of the cell.

prolactin *n.* A [*gonadotrophic hormone](#) secreted by the anterior pituitary, stimulating the secretion of [*progesterone](#) by the [*corpus luteum](#), initiating and maintaining lactation and functioning as a contraceptive. Also called *luteotrophic hormone (LTH)* or *luteotrophin*. **PrL** abbrev. [From Latin *pro* before + *lac*, *lactis* milk]

proliferative phase *n.* Another name for the [*follicular phase](#) of the [*oestrous cycle](#) or [*menstrual cycle](#).

Prolixin *n.* A proprietary name for the neuroleptic drug [*fluphenazine](#). [Trademark]

prolonged duress stress disorder *n.* An [*anxiety disorder](#) resulting from prolonged exposure to [*stress](#), such as severe work-related stress or continual bullying, with symptoms similar to those of [*post-traumatic stress disorder \(PTSD\)](#) but without any specific trauma involving actual or threatened death or serious injury, as required for a diagnosis of PTSD. It was suggested by the British psychologists Michael J(ames) Scott (born 1948) and Stephen G. Stradling (born 1947) in a book entitled *Counselling for Post-traumatic Stress Disorder* (1992, p. 36) and in an article in the *British Journal of Clinical Psychology* published in 1994. It is not listed in [*DSM-5](#) or [*ICD–10](#). **PDSD** abbrev.

pro-mia *adj.* Pro-bulimia, loosely descriptive of a subculture, literature, and

websites that provide support for people with **bulimia nervosa* and that sometimes (controversially) promote the disorder as a lifestyle choice. Compare *PRO-ANA*. [From Latin *pro* in favour of + (*buli*)*mia*, from Greek *bous* ox + *limos* hunger + *-ia* indicating a condition or quality]

promnesia *n.* The sensation of remembering something that is being experienced for the first time; the sense of **déjà vu*. [From Greek *pro* before + *mneme* memory + *-ia* indicating a condition or quality]

prompt *n.* Anything that urges someone to act or that functions as a reminder, especially (in cognitive psychology) a **cue* (3, 4) intended to aid recall or as a hint to guide performance of a task. See also *PRIMING* (1). [From Latin *promptus* evident, from *promere* to bring forward, from *pro* before + *emere* to buy]

pronation *n.* Lying in a prone (belly-down) position or, if standing with one's arms at one's sides, turning the palms backwards. Compare *SUPINATION*. [From Latin *pronus* bent forward or bowed + *-ation* indicating a process or condition]

proof-reader's illusion *n.* 1. The failure of a proof-reader to notice gross errors in the meaning of the text being checked, because different and incompatible **levels of processing* are required for checking meaning and orthography. 2. The tendency of a proof-reader to overlook small errors of orthography because of the difficulty of suppressing higher **levels of processing* while checking orthography, especially when one is the author of the text. Some professional proof-readers read text backwards to avoid this problem.

pro-opiomelanocortin See *POMC*.

propanediol *n.* An early class of minor tranquillizers or **sedative* drugs, the best known example being **meprobamate* (Miltown). [So called because it is derived from propane-diol]

prophase *n.* The first phase of **mitosis*, when the nuclear membrane

disappears and the chromosomes divide lengthwise into **chromatids*, which become the chromosomes of the daughter cells. [From Greek *pro* before + *phasis* an aspect, from *phainein* to show]

proposition *n.* **1.** The meaning conveyed by a declarative sentence, a declarative sentence being one that asserts or denies something, or in other words one that is capable of being true or false. The proposition is not the sentence itself but its meaning. The sentences *Snow is white* and *Schnee ist weiß* are obviously different, but they express the same proposition in two different languages, and the proposition is true if and only if snow is indeed white. *See also* CATEGORICAL SYLLOGISM, MENTAL MODEL, MODAL LOGIC, POSSIBLE WORLD, PROPOSITIONAL CALCULUS, SENTENCE FUNCTOR, SYLLOGISM, TRUTH FUNCTOR, TRUTH TABLE, VENN DIAGRAM. **2.** More generally, any deal proposed for consideration. **3.** An invitation to engage in sexual intercourse. [From Latin *propositio* a setting forth, from *proponere* to display, from *pro* before + *ponere* to place]

propositional calculus *n.* Any formal system of symbolic **logic* providing a language for expressing **propositions* (1) and the relations between them (*and*, *or*, *not*, and *if...then*), without regard to the internal structure or content of the propositions, together with a set of axioms and rules of inference, enabling the process of constructing a valid argument to be reduced to a mechanical process. *See also* LOGICAL ANALYSIS, SENTENCE FUNCTOR, TRUTH FUNCTOR, TRUTH TABLE. *Compare* PREDICATE CALCULUS.

propositional representation *n.* Another name for **symbolic representation*.

propositus *n.* A person from whom a genealogical lineage is traced when delineating the pattern of inheritance of a psychological or physical trait. [From Latin *propositus* placed before, from *pro* before + *ponere* to place]

propoxyphene *n.* Propoxyphene hydrochloride, a **narcotic* analgesic that is sometimes taken as a street drug. Also called *Darvon* (trademark). [From *propoxy-* composed of propyl united with oxygen + *phene* an old name for benzene, from Greek *phainein* to show, alluding to its use in manufacturing illuminating gas]

*****ebook converter DEMO Watermarks*****

propranolol *n.* Propranolol hydrochloride, the most commonly prescribed **beta-blocker*. [From *pro(pyl)* containing the monovalent group C_3H_7 + *pr(op)anol*, from *propane* + *-ol* denoting a compound containing a hydroxyl group, from (*alcoh*)*ol*]

proprioception *n.* The form of sensation through which one is aware of the position and orientation of one's body relative to the direction of gravity, of one's body parts relative to one another, and of acceleration and changes in position, the information being supplied by **proprioceptors*. See *JOINT SENSE*, *MUSCLE SENSE*, *STATIC SENSE*, *TENDON SENSE*. See also *INTERNAL SENSE*, *KINAESTHESIS*. Compare *EXTEROCEPTION*, *INTEROCEPTION*. **proprioceptive** *adj.* [From Latin *proprius* one's own + English *receptor* + Latin *-ion* indicating an action, process, or state]

proprioceptor *n.* Any **sensory* receptor that supplies information for **proprioception*, especially receptors in the **vestibular system* and in the muscles, tendons, and joints. Compare *EXTEROCEPTOR*, *INTEROCEPTOR*.

propylthiouracil *n.* A crystalline compound that is used to treat abnormal swelling of the thyroid gland and that, depending on a simple hereditary factor, tastes very bitter to some people and tasteless to others, roughly 25 per cent of people being non-tasters, 50 per cent tasters, and 25 per cent **supertasters*. In 2003 a gene influencing the sensitivity to PROP was discovered. The gene, *TAS2R38*, codes for a taste bud receptor and has several natural variations. Formula: $C_7H_{10}N_2OS$. Compare *PTC*. **PROP** *abbrev.* [From *pro(pyl)* containing the monovalent group C_3H_7 + Greek *theion* sulphur + English *uracil*, from *ur(ea)* + *ac(etic)* + Latin *-il(is)* indicating capability or relationship]

prosencephalon *n.* A technical name for the **forebrain*, especially in a developing embryo. Compare *MESENCEPHALON*, *RHOMBENCEPHALON*. [From Greek *proso* forward + *enkephalos* the brain, from *en* in + *kephale* the head]

prosimian *n.* A primate of the primitive suborder Prosimii, including lemurs, tree shrews, lorises, and tarsiers. Compare *ANTHROPOID* (2). [From Latin *pro* before + *simia* an ape]

*****ebook converter DEMO Watermarks*****

prosocial behaviour *n.* Helping behaviour, [*altruism](#), or more generally any behaviour that is positive and calculated to promote the interests of society. US *prosocial behavior*.

prosody *n.* A generic name for the qualities of speech involving [*loudness](#), [*pitch](#), [*rhythm](#), and [*tempo](#). See also [PARALANGUAGE](#). [From Greek *prosoidia* a song set to music, from *pros* towards + *oide* a song]

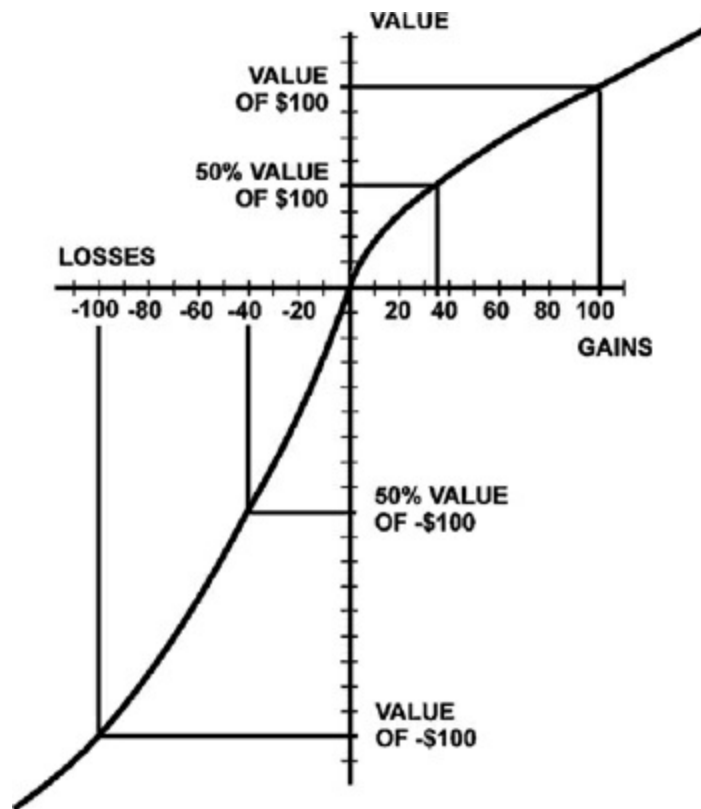
prosopagnosia *n.* A form of agnosia involving an impaired ability to recognize or identify previously familiar faces, sometimes even those of close relatives, such faces being identified as faces but not faces of particular known people, usually associated with damage to the posterior right hemisphere of the brain. See also [AGNOSIA](#). Compare [PHONAGNOSIA](#). [First used in 1947 by the German neurologist Joachim Bodamer (1910–85) in an article in *Archiv für Psychiatrie und Nervenkrankheiten*, from Greek *prosopon* a face + *a-* without + *gnosis* knowledge + *-ia* indicating a condition or quality]

prospective study *n.* A type of research investigation in which a [*cohort](#) of participants is examined over a period of time in an effort to discover the factor(s) that cause a particular disorder or characteristic to emerge. The initial sample is often selected from groups of participants relatively likely to develop the disorder or characteristic being studied; for example, in a prospective study of [*anorexia](#) nervosa, young women learning to be models might be used. Results from prospective studies carry more persuasive weight than those from [*retrospective studies](#). [From Latin *pro* before or in front + *specere, spectrum* to look]

prospect theory *n.* A theory of preferences among outcomes involving [*risk](#) (2) formulated in 1979 by the Israeli-American psychologists Daniel Kahneman (born 1934) and Amos Tversky (1937–96) as an alternative to [*expected utility](#) theory. According to prospect theory, human preferences tend to violate expected utility (SEU) theory in the following ways: people tend to evaluate outcomes as gains or losses relative to their current situation or the status quo rather than in terms of absolute value; they tend to attach greater weight to losses than to corresponding gains; they tend to show [*risk](#) aversion for gains but [*risk](#) seeking for losses; and they tend to overweight very small probabilities and underweight moderate and high probabilities.

*****ebook converter DEMO Watermarks*****

The theory is usually depicted by an S-shaped **utility* function that associates a subjective utility to any amount that may be gained or lost (see *illustration*); the part of the function representing gains is a concave power function (see *POWER LAW*) with an exponent of $2/3$, and the part representing losses is a convex power function with an exponent of $3/4$, though some researchers have reported slightly smaller exponents. The slope is greater for losses than for gains, depicting the observation that a loss has a greater subjective effect than an equivalent gain (loss aversion). In 1981 Tversky and Kahneman provided experimental data showing that 84 per cent of the undergraduate students preferred a sure gain of \$240 to a gamble involving a 25 per cent chance of gaining \$1,000 and a 75 per cent chance of gaining nothing (risk aversion for gains), but 87 per cent preferred a gamble involving a 75 per cent chance of losing \$1,000 and a 25 per cent chance of losing nothing to a sure loss of \$750 (risk seeking for losses). Combining these prospects, most of these students were expressing a preference for a portfolio containing a 25 per cent chance of winning \$240 and a 75 per cent chance of losing \$760 over a portfolio containing a 25 per cent chance of winning \$250 and a 75 per cent chance of losing \$750, thus violating the principle of rationality according to which a **dominant alternative/strategy* should invariably be preferred. See also *ENDOWMENT EFFECT*, *FRAMING EFFECT*, *HEDONIC TREADMILL*.



Prospect theory. The concave section to the right represents risk aversion for gains, with a sure gain of \$35 having the same value as a 50 per cent probability of gaining \$100; the steeper convex section to the left represents risk seeking for losses, with a sure loss of \$40 having the same value as a 50 per cent probability of losing \$100.

prostaglandin *n.* Any of a group of substances, composed mostly of fatty acids, present in semen and secreted into the bloodstream at various sites in the body, causing fever and inflammation and also playing a part in **pain* perception, muscle contraction, and various other bodily processes. Prostaglandins are produced by the enzyme prostaglandin H₂ synthase or PGHS, which converts arachidonic acid from the **endoplasmic reticulum* to prostaglandins. *See also* [ASPIRIN](#). **PG** *abbrev.* [From *prosta(te)* + *gland* (where it was first discovered) + Greek *-in(e)* indicating an organic compound]

prostitute pupil *n.* An offensive name for an [ARGYLL ROBERTSON PUPIL](#).

protanomaly *n.* A form of partial **colour-blindness* resulting from an abnormality in the **visual pigment* that absorbs long-wave light, resulting in

*****ebook converter DEMO Watermarks*****

a partial loss of sensitivity to light in the red part of the visible spectrum, a tendency to confuse reds and greens, and matches that deviate from the normal **Rayleigh equation*. See also *DALTONISM*. Compare *DEUTERANOPIA*, *PROTANOPIA*, *TRITANOPIA*. [From Greek *protos* first, from *pro* before, alluding to the first of the three **primary colours* (1) red, green, and blue + *anomalos* uneven or inconsistent, from *an-* without + *homalos* even, from *homos* the same]

protanopia *n.* A form of **anomalous dichromacy* in which the **visual pigment* that absorbs long-wave light is non-functional, leading to a loss of sensitivity to red light and a tendency to confuse reds and greens. See also *DALTONISM*. Compare *DEUTERANOPIA*, *PROTANOPIA*, *TRITANOPIA*. [From Greek *protos* first, from *pro* before, alluding to the first of the three **primary colours* (1) red, green, and blue + *anopia* blindness, from *an-* without + *ops* an eye + *-ia* indicating a condition or quality]

protein *n.* Any of a group of complex nitrogenous compounds that are encoded by genes and are the main constituents of living organisms. Every protein is composed of a chain of a hundred or more **amino acids* (if it contains fewer it is a **polypeptide*), linked by **peptide* bonds and folded into a distinctive three-dimensional shape, and some proteins are **enzymes*. The human body is composed of more than 50,000 proteins. [From Greek *proteios* primary, from *protos* first]

protein binding *n.* The attachment of molecules of a drug in the bloodstream to molecules of protein, especially albumin, effectively inactivating the drug by fixing it to a molecule that is too large to reach the target receptor sites. A dynamic equilibrium usually arises in which a portion of the drug is bound and a portion remains in the free form, the strength of the binding determining the quantity of the drug available in its active free form.

protein kinase C *n.* A protein that can move from the cytoplasm of a neuron to the membrane, changing the neuron's electrical and molecular properties and increasing its propensity to respond to stimulation by triggering nerve impulses, such changes providing physical substrates of certain types of memories in dendritic trees. **PKC** *abbrev.*

*****ebook converter DEMO Watermarks*****

protensity *n.* The subjective or psychological experience of duration as opposed to objective duration or time. [From Latin *protendere* to extend or prolong, from *pro* forward + *tendere* to stretch]

proteome *n.* The **proteins* that are encoded by a **genome*, especially the human genome, each protein being potentially capable of affecting the function of cells or organs, and many interacting with other proteins. The term was coined by the US-born Australian biochemist Marc R(onald) Wilkins (born 1967), Vice-President of Bioinformatics at Proteome Systems Limited in Sydney, Australia, and presented at a scientific meeting in Siena in 1994, shortly before the sequencing of the human genome. It appeared in print for the first time in an article by Wilkins and others in the journal *Electrophoresis* in 1995. Compare *PHENOME*. **proteomic** *adj.* **proteomics** *n.* The science devoted to the study of proteomes and the explanation of protein functions and interactions. [A blend of *prote(in)* and (*gen*)ome]

protest, masculine See *MASCULINE PROTEST*.

prothetic stimulus dimension *n.* Any stimulus dimension that varies continuously and produces continuous changes in perception, the standard example being the wavelength or frequency of sound, which produces continuous changes in perceived pitch as it varies continuously, whereas light produces qualitative perceptual changes. Compare *CATEGORICAL PERCEPTION*, *METATHETIC STIMULUS DIMENSION*. [From Greek *prothetikos* placed in front, from *pro* before + *tithenai* to place + *-ikos* of, relating to, or resembling]

protocol analysis *n.* Any of a number of techniques of **qualitative research* in which thought processes elicited from research participants or subjects while they were performing a mental task are studied and classified, often by means of **content analysis*. See also *INTROSPECTION*.

Proto-Indo-European See *INDO-EUROPEAN*.

protoplasm *n.* The living substance of a **cell*, consisting of the **cytoplasm* and the **nucleoplasm*. **protoplasmic** *adj.* [From Greek *protos*

first + *plasma* a form]

prototype *n.* 1. A preliminary version of a product, suitable for testing and modification before the product is manufactured and marketed commercially. 2. An object or item that serves as an example or typical representative of its type or class. *See also* FOCAL COLOUR, PROTOTYPE THEORY, SCHEMA. *Compare* EXEMPLAR. 3. In biology, the ancestral or original form of a species or other taxonomic category. **prototypical**, **prototypic**, or **prototypal** *adj.* [From Greek *protos* first, from *pro* before, + *typos* a mark]

prototype matching *n.* Another name for **template matching*.

prototype theory *n.* A theory of **concepts* and **concept* formation introduced in 1973 by the US psychologist Eleanor Rosch (born 1938) to overcome problems inherent in the classical **componential theory* originally put forward by the Greek philosophers Plato (?427–?347 BC) and Aristotle (384–322 BC). According to the componential theory, concepts can be expressed in terms of their **defining properties*, which are the necessary and sufficient **attributes* that items must have to be instances of the concept. But the Austrian-born British philosopher Ludwig (Josef Johann) Wittgenstein (1889–1951) argued in his *Philosophical Investigations* (1953, paragraph 66) that a concept such as that of a *game* has no necessary or sufficient attributes, and hence no defining properties, and that instances of games are linked to one another by family resemblance, just as some members of the family may share the same build, others the same eye colour, and others the same gait, without any characteristic being shared in common by all members of the family. According to prototype theory, instances of a natural concept are defined by their resemblance to a **prototype (2)* that is a best or most typical example of the concept, sharing the maximum number of **features (1)* or attributes with other instances and a minimum number with instances of other concepts. Thus a prototype consists of **characteristic features* rather than defining properties, and according to this interpretation concepts have indistinct boundaries and may be represented by **fuzzy sets* (but *see* GUPPY EFFECT). If an item is clearly similar to a prototype, as *table* is to the prototypical *furniture*, then it is likely to be perceived as belonging to the concept, whereas if it is somewhat (but not entirely) dissimilar to the prototype, as *carpet* is to *furniture*, then it may be unclear whether or not it

*****ebook converter DEMO Watermarks*****

belongs to the concept. See also [BASIC-LEVEL CATEGORY](#), [SCHEMA](#). Compare [COMPONENTIAL THEORY](#).

proverbs test *n.* Any test in which the respondent is asked to explain the figurative meaning of a series of proverbs. For example, the figurative meaning of the proverb *A rolling stone gathers no moss* is that a restless or wandering person does not become prosperous. In clinical practice it is sometimes used as a rough-and-ready test of [*thought disorder](#), the assumption being that people with thought disorder often have difficulty distinguishing between the literal and figurative meanings of proverbs.

Provigil *n.* The proprietary name for the stimulant drug [*modafinil](#). [From Latin *pro* for + *vigilans* keeping awake, from *vigilare* to be watchful, from *vigil* awake]

provisional tic disorder *n.* A [*tic disorder](#), introduced in [*DSM-5](#), characterized by one or more motor or vocal tics occurring many times a day for at least a month but no longer than a year and, apart from that, sharing the features of [*Tourette's disorder](#). Also called *transient tic disorder*. **PTD** *abbrev.*

proxemics *n.* A branch of [*non-verbal communication](#) concerned with the study of [*personal space](#) and other spatial aspects of human and animal interaction. [From Latin *proximus* nearest, superlative of *prope* near + Greek *-ikos* of, relating to, or resembling]

proximal *adj.* Nearer or nearest to the centre, point of attachment, or origin. Compare [DISTAL](#). [From Latin *proximus* next, superlative of *prope* near]

proximal stimulus *n.* The pattern of physical energy that stimulates or excites a [*sensory receptor](#). See also [REAFFERENCE](#). Compare [DISTAL STIMULUS](#). [From Latin *proximus* next + *-al* from Latin *-alis* of or relating to]

proximity grouping law *n.* One of the four original [*grouping laws](#) of [*Gestalt](#) psychology formulated in 1923 by the German psychologist Max

Wertheimer (1880–1943) to explain the organization of parts into wholes by the visual system. According to the law, elements close together tend to be grouped perceptually, so that the array OO OO OO OO tends to be perceived as four pairs rather than eight separate elements. *See also* [PRÄGNANZ](#), [COMMON FATE](#), [COMMON REGION](#), [CONNECTEDNESS GROUPING LAW](#). *Compare* [CLOSURE GROUPING LAW](#), [GOOD CONTINUATION](#), [SIMILARITY GROUPING LAW](#).

proximodistal *adj.* From the centre of the body towards the extremities, referring to the development of an embryo, and also later stages of development, in which growth is fastest near the head and torso and progressively slower towards the feet and hands. *Compare* [CEPHALOCAUDAL](#). [From Latin *proximus* next + *distare* to be distant, from *dis-* apart + *stare* to stand]

proximoreceptor *n.* A [*sensory](#) receptor such as a [*somatic](#) receptor that can be stimulated only by nearby stimuli and that mediates a [*near sense](#). Also called a *proximoceptor*. *Compare* [TELERECEPTOR](#). [From Latin *proximus* next + *recipere*, *receptum* to receive, from *re-* back + *capere*, *ceptum* to take]

Prozac *n.* Fluoxetine hydrochloride, an [*antidepressant](#) drug belonging to the group of [*selective serotonin reuptake inhibitor \(SSRI\)](#) agents, used in the treatment of depression, obsessive–compulsive disorder, bulimia nervosa, and panic disorder. [Trademark]

PrP *abbrev.* Prion protein, a glycoprotein (a protein in which the amino acid units are bound to sugars) that forms the major or only component of a [*prion](#). In brain tissue molecules of PrP tend to aggregate into rod-shaped structures, and the rods collect in clumps that appear in photomicrographs as fluffy tufts resembling [*amyloid plaques](#).

pruning *n.* Trimming by removing superfluous parts, including naturally occurring neuronal death or [*apoptosis](#) resulting in the elimination of redundant synapses, also occurring excessively in certain pathological states. *See also* [NEURAL DARWINISM](#). [From Old French *proignier* to clip, from Latin *propago* a cutting]

Psammetichus experiment *n.* The earliest recorded psychological
*****ebook converter DEMO Watermarks*****

experiment, reported about 429 BC in *The Histories* (Part 1, Book 2, paragraph 2) of the Greek historian Herodotus (?485–425 BC), the world's first history book. According to Herodotus, the Egyptian Pharaoh Psammetichus I (664–610 BC) performed the experiment to determine whether human beings have an innate capacity for speech, and if so, which particular language is innate. He ordered two infants to be brought up in a remote place by a shepherd who was forbidden to speak in their presence. After two years the children began to speak, and the word that they repeated most often was *becos*, which turned out to be the Phrygian word for bread. Psammetichus concluded that the capacity for speech is innate, and that the natural language of human beings is Phrygian. The experiment is conceptually similar to the [*Kaspar Hauser experiments](#) by the British ethologist William H. Thorpe (1902–86), published in 1958, in which birds were reared in isolation to determine which aspects of their songs are innate.

pseudaesthesia *n.* An illusory tactile sensation without any physical basis, such as a [*phantom limb](#). US *pseudesthesia*. Also called *pseudoaesthesia* or *pseudoesthesia*. [From Greek *pseudes* false + *aisthesis* feeling + *-ia* indicating a condition or quality]

pseudoangina *n.* Chest pain suggestive of a heart attack in a person without any coronary heart disease; a common feature of [*somatic symptom disorder](#). [From Greek *pseudes* false + Latin *angina* quinsy, from Greek *anchone* a strangling]

pseudoanorexia *n.* A condition in which a person eats secretly while claiming to have no appetite and to be unable to eat. Also called *false anorexia*. See also [FACTITIOUS DISORDER](#), [MALINGERING](#). Compare [ANOREXIA](#). [From Greek *pseudes* false + *an-* not or without + *orexis* appetite + *-ia* indicating a condition or quality]

pseudoataxia *n.* Loss of ability to coordinate voluntary movements without any lesion in the [*central nervous system](#). Compare [ATAXIA](#). [From Greek *pseudes* false + *a-* without + *taxis* order + *-ia* indicating a condition or quality]

pseudo-attack *n.* Another name for a [*pseudoseizure](#).

*****ebook converter DEMO Watermarks*****

pseudobulbar palsy *n.* A neurological condition, resulting from a lesion in the ***corticobulbar pathway**, in which the voluntary muscles of the face are paralysed, resulting in ***dysarthria** and ***dysphagia**, but involuntary facial movements such as facial expressions, coughing, and sneezing are unaffected. Also called *pseudobulbar paralysis*. [From Greek *pseudes* false + English (*cortico*)*bulbar* (*pathway*)]

pseudocoma *n.* Another name for ***locked-in syndrome**.

pseudocyesis *n.* In ***DSM-IV**, a ***somatoform disorder** involving a phantom pregnancy, with a false belief of being pregnant together with many of the physical signs of pregnancy. In DSM-5 this condition is listed as a ***somatic symptom disorder**. Also called *false pregnancy*, *pseudopregnancy*. See also **COUVADE**, **SYMPATHETIC PREGNANCY**. [From Greek *pseudes* false + *kyesis* pregnancy]

pseudodementia *n.* A syndrome, usually associated with ***depression**, in which the symptoms of ***dementia** are mimicked but evidence for an ***organic disorder** is lacking. [From Greek *pseudes* false + Latin *dementare* to drive mad, from *de* from + *mens, mentis* mind + *-ia* indicating a condition or quality]

pseudodepression *n.* A condition following a massive lesion in the ***frontal lobe** of the brain, characterized by apathy, indifference, and loss of initiative but no experience of ***depression**.

pseudohallucination *n.* A type of ***hallucination** that seems to come from within one's mind rather than from outside as in a true hallucination, although some authorities consider this distinction obscure and unhelpful.

pseudohermaphrodite *n.* A person who has the reproductive organs of one sex and the external genitalia of the other. Compare **HERMAPHRODITE (1)**.

pseudohermaphroditism *n.* The congenital condition of being a pseudohermaphrodite. [From Greek *pseudes* false + English *hermaphrodite*]

pseudoinomnia *n.* A condition characterized by recurrent dreams of

lying awake, creating the delusion of insomnia. *Compare* [INSOMNIA](#).

pseudo-isochromatic *adj.* Of or relating to a plate or image of two or more colours that appears isochromatic (uniform in colour) to a person with a particular form of [*colour-blindness](#) and is included in a set of plates such as the [*Ishihara test](#) or the [*Stilling test](#) used to test colour vision.

pseudolalia *n.* Speechlike sounds that are not interpretable as language. [From Greek *pseudes* false, from *pseudein* to lie + *lalein* to babble + *-ia* indicating a condition or quality]

pseudolinguistic *adj.* Resembling language superficially, but lacking one or more of the defining properties of true [*language \(1\)](#).

pseudologia fantastica *n.* A syndrome characterized by habitual telling of implausible lies and fantastic exaggerations, usually half believed by the teller but often transparently improbable to the recipients. *Compare* [FACTITIOUS DISORDER](#). **pseudologue** *n.* A person with pseudologia fantastica; a liar. [From Greek *pseudes* false + *logos* discourse + *phantastikos* imaginary, from *phantazein* to make visible + *-ikos* of, relating to, or resembling]

pseudology *n.* The study of lying; the art or science of lying. [From Greek *pseudes* false + *logos* discourse]

pseudomemory *n.* Another name for a [*false memory](#). Also called *pseudomnesia*. [From Greek *pseudes* false + English *memory*]

pseudomnesia *n.* Another name for a [*false memory](#). [From Greek *pseudes* false + *a-* without + *mnasthai* to remember + *-ia* indicating a condition or quality]

pseudomorpheme *n.* A portion of a word that resembles a [*morpheme](#) but is not, in fact, one. For example, in the word *history*, the portion *his* is a pseudomorpheme, appearing to some people to be a morpheme and encouraging the coinage *herstory* to denote history viewed from a feminine or a feminist perspective.

pseudomutuality *n.* A relationship between marriage partners, family members, or other people closely involved with each other in which surface harmony and agreement cloaks deep and damaging interpersonal conflicts that are not confronted openly.

pseudophone *n.* A device that transposes the sounds entering the left and right ears, used for studying **sound localization*. Compare **PSEUDOSCOPE**. [From Greek *pseudes* false + *phone* a sound or voice]

pseudopregnancy *n.* Another name for **pseudocyesis*.

pseudoscope *n.* A device that transposes the images projected on to the retinas of the left and right eyes, causing distance relations to be inverted so that convex objects appear concave and vice versa. Compare **PSEUDOPHONE**. [From Greek *pseudes* false + *skopeein* to view]

pseudoseizure *n.* An attack resembling an epileptic **seizure* or **convulsion* but lacking the **EEG* patterns associated with **epilepsy* and therefore ascribed to **psychogenic* causes. Also called a *non-epileptic seizure* or *convulsion*, *hysterical epilepsy*, a *hysterical seizure* or *convulsion*, a *pseudo-attack*, or a *psychogenic seizure* or *convulsion*.

psi *n.* A generic term for **paranormal* phenomena, including especially **extra-sensory perception* (telepathy, clairvoyance, and precognition) and **psychokinesis*. It is often preferred to more specific terms on the ground that it is difficult or impossible to distinguish between alternative manifestations of psi, as when an apparent demonstration of telepathy in a card-guessing experiment could be explicable by clairvoyance (paranormal perception of the cards themselves rather than of the sender's thoughts) or psychokinesis (paranormal control of the order of the cards during the shuffling process). [Named after *psi* (Ψ), the 23rd letter of the Greek alphabet, alluding to the adjective *psychic* or *psychical*]

psilocybin *n.* A **hallucinogen* belonging to the group of **indole* alkaloids, occurring in the form of a crystalline phosphate ester in the magic mushroom *Psilocybe mexicana*. See also **PHANTASTICANT**, **PSYCHEDELIC**,

TEONANACTYL. [From Greek *psilos* bare + *kybe* head, alluding to the appearance of the magic mushroom]

psi-missing *n.* A **psi* or parapsychological effect that is statistically significant in the opposite direction to the experimental hypothesis, such as a significantly below-chance number of hits in an experiment on telepathy or clairvoyance. *See also* **MISS**.

psittacism *n.* Meaningless, repetitive speech. [From Latin *psittacus* a parrot]

P600 *abbrev.* An **event-related potential* elicited when a person encounters a grammatical anomaly, either when reading text or listening to speech. It is also called the *syntactic positive shift*. It was first reported in 1992 by the US psychologists Lee Osterhout (born 1959) and Philip J. Holcombe (born 1951) in an article in the journal *Psychophysiological Brain Research*. [From *p(ositive) 600 (milliseconds)*]

psychasthenia scale *See* **MMPI**.

psyche *n.* The human mind or soul. In Greek mythology, the soul was personified by Psyche, a young woman who was loved by Eros, the god of love who married Psyche but visited her only at night and insisted that she should never see his face. One night Psyche lit an oil lamp while Eros was asleep, fell in love with him at first sight, and was so startled by his beauty that she spilt a drop of hot oil on his shoulder and awakened him, whereupon he immediately abandoned her. To win him back, Psyche had to endure many trials and dangers, but eventually she was transformed into a goddess and joined him in heavenly bliss. Psyche is often depicted in works of art with butterfly wings or as a butterfly, because she symbolizes the human soul, suffering hardship and struggle in life but re-emerging after death in a new and better existence, like a caterpillar reborn as a butterfly. **psychic** or **psychical** *adj.* [From Greek *psyche* breath, from *psychein* to breathe, alluding to the ancient belief that breathing was evidence that the soul had not yet left the body]

psychedelic *adj.* Of, relating to, or resembling a state of subjectively
*****ebook converter DEMO Watermarks*****

heightened perception and awareness associated with certain drugs, including **phenylalkylamines* such as **mescaline*, **STP*, and **ecstasy* (2); **indole* alkaloids such as **bufotenin*, **DMT*, **harmine*, **LSD*, and **psilocybin*; and various other compounds such as **ibotenic acid*, **myristin*, **ololiuqui*, and **phencyclidine*. Also spelt *psychodelic*. See also *AMANITA MUSCARIA*, *FLY AGARIC*, *MAGIC MUSHROOM*, *MORNING GLORY*, *TEONANACTYL*. Compare *HALLUCINOGEN*, *PHANTASTICANT*. **psychedelia** *n.* The culture and phenomena associated with psychedelic experiences and drugs. Also spelt *psychodelia*, but this is avoided in careful usage. [From Greek *psyche* mind + *delos* visible or clear + *-ikos* of, relating to, or resembling]

psychiatry *n.* The branch of medicine devoted to the diagnosis, classification, treatment, and prevention of **mental disorders*. Compare *CLINICAL PSYCHOLOGY*, *NEUROLOGY*, *NEUROPSYCHIATRY*. **psychiatric** *adj.* **psychiatrist** *n.* A physician who practises psychiatry. [From Greek *psyche* mind + *iatros* a physician]

psychic *adj.* **1.** Another word for **paranormal*, or sensitive to paranormal or spiritual phenomena, influences, or forces. Also written *psychical*. **2.** Mental as opposed to physical. *n.* **3.** A person who professes paranormal or spiritual powers or abilities. [From Greek *psychikos* of or relating to the soul, from *psyche* the soul + *-ikos* of, relating to, or resembling]

psychical apparatus *n.* In **psychoanalysis*, a term used prolifically by Sigmund Freud (1856–1939) and his followers for the mind, including its various conscious and unconscious components. Also called *psychic apparatus*.

psychical conflict *n.* In **psychoanalysis*, the situation that exists when two contradictory tendencies oppose each other in a person's mind. Some such conflicts are conscious, as when a desire is opposed by a moral constraint, but it is unconscious conflicts that are assumed to generate **neurotic* (1) symptoms. In an article on 'The Psycho-Analytic View of Psychogenic Disturbances of Vision' (1910), Sigmund Freud (1856–1939) argued that conflicts between ideas are invariably traceable to conflicts between instincts: 'We have discovered that every instinct tries to make itself effective by activating ideas that are in keeping with its aims. These instincts

*****ebook converter DEMO Watermarks*****

are not always compatible with one another; their interests often come into conflict. Opposition between ideas is only an expression of struggle between the various instincts' (*Standard Edition*, XI, pp. 211–18, at p. 213.) Also called *psychic conflict*.

psychical determinism *n.* In **psychoanalysis*, the assumption, first introduced by Sigmund Freud (1856–1939), that no psychological phenomena, not even **dreams*, **symptoms*, or **parapraxes*, occur by chance, but that they can always be assigned definite causes. Freud discussed this concept at length in his book *The Psychopathology of Everyday Life* (1901, *Standard Edition*, VI), citing numerous anecdotal instances. Also called *psychic determinism*. See also [OVERDETERMINATION](#), [REDUCTIVE INTERPRETATION](#).

psychical reality *n.* In **psychoanalysis*, anything that strikes a person as real, including fantasies that are experienced as memories of actual occurrences, including those of sexual seduction in childhood, whether or not they are based on real events. Sigmund Freud (1856–1939) claimed in his book *Introductory Lectures on Psycho-Analysis* (1916–17) that 'phantasies possess *psychical* as contrasted with material reality' and that '*in the world of the neuroses it is the psychical reality which is the decisive kind*' (*Standard Edition*, XV–XVI, at p. 368, italics in original). This concept has been attacked as an absurd and dangerous blurring of the distinction between truth and fantasy arising from Freud's discovery that his patients' claims of childhood seduction were untrue. Also called *psychic reality*. See also [SEDUCTION THEORY](#).

psychical research *n.* An obsolescent name for **parapsychology*. The world's first Society for Psychical Research was formed in Cambridge, England, in 1882; the American Society for Psychical Research was founded in 1885.

psychic apparatus See [PSYCHICAL APPARATUS](#).

psychic conflict See [PSYCHICAL CONFLICT](#).

psychic determinism See [PSYCHICAL DETERMINISM](#).

psychic reality *See* PSYCHICAL REALITY.

psychoacoustics *n.* The study of the relationship between sounds and their psychological effects. [A blend of *psycho(logy)* + *acoustics*]

psychoactive *adj.* Another word for **psychotropic*.

psychoanaleptic *adj. n.* (Of or relating to) a **stimulant drug*. [From Greek *psyche* the mind + *analeptikos* restorative, from *analambanein* to take up, from *ana* up + *lambanein* to take + *-ikos* of, relating to, or resembling]

psychoanalysis *n.* A theory of mental structure and function, consisting of a loosely connected set of concepts and propositions, a theory of mental disorders, and an associated method of **psychotherapy* (the ‘talking cure’) based on the writings of Sigmund Freud (1856–1939), its distinctive character residing in the emphasis that Freud placed on unconscious mental processes and the various mechanisms people use to repress them. As a therapeutic method, its major techniques are **free association*, **dream analysis*, the **interpretation (2)* of **parapraxes*, and the analysis of the **transference*. The Austrian neurologist Sigmund Freud (1856–1939) introduced the term in 1896 in an article on ‘Heredity and the Aetiology of the Neuroses’ (*Standard Edition*, III, pp. 143–56). Also spelt *psychoanalysis*. *See also* ADLERIAN, EGO PSYCHOLOGY, ERIKSONIAN, FREUDIAN, INSIGHT (3), JUNGIAN, KLEINIAN, KOHUTIAN, LACANIAN, NEO-FREUDIAN, OBJECT-RELATIONS THEORY, PSYCHOANALYTIC CONSTRUCTION, RESISTANCE, SELF-ANALYSIS, SELF-PSYCHOLOGY, WILD PSYCHOANALYSIS, WINNICOTTIAN. *Compare* PSYCHOANALYTIC PSYCHOTHERAPY. **psychoanalytic** *adj.* [From Greek *psyche* mind + *analysis* dissolution, from *ana-* up + *lysis* loosening, from *lyein* to loosen]

psychoanalyst *n.* One who practises **psychoanalysis*. Also called an *analyst*.

psychoanalytic construction *n.* In **psychoanalysis*, an explanation of a person's verbal utterances and actions that is more extensive and further removed from the empirical material than an **interpretation (2)*. Sigmund Freud (1856–1939) introduced this concept in 1937 in an article entitled

‘Constructions in Analysis’ (*Standard Edition*, XXIII, pp. 257–69), where he suggested that when a correct construction is put to a patient it sometimes results in the emergence of a repressed memory, and that it can be useful even when that does not happen: ‘Quite often we do not succeed in bringing the patient to recollect what has been repressed. Instead of that, if the analysis is carried out correctly, we produce in him an assured conviction of the truth of the construction which achieves the same therapeutic result as the recaptured memory’ (pp. 265–6). Freud’s articles ‘Psycho-analytic Notes on an Autobiographical Account of a Case of Paranoia (Dementia Paranoides)’ (1911, *Standard Edition*, XII, pp. 9–82) and ‘A Child is Being Beaten’ (1919, *Standard Edition*, XVII, pp. 179–204) contain virtuosic examples of psychoanalytic construction.

psychoanalytic psychotherapy *n.* A form of **psychotherapy* that evolved out of **psychoanalysis* and that uses many of its assumptions and techniques but that falls short of formal psychoanalysis. It tends to focus on specific problems—often a single conflict such as an inability to respond appropriately to criticism—and on aspects of the client’s social interactions. Also called *analytic therapy*.

psychobabble *n.* A term coined by the US writer Richard Dean Rosen (born 1949) in the title of his book *Psychobabble* (1977) for excessive or superfluous psychological **jargon* (1), especially in connection with various forms of **psychotherapy*.

psychobiology *n.* A term coined by the Swiss-born US psychiatrist and neurologist Adolf Meyer (1866–1950) for the study of the relationships between psychological and biological phenomena.

psychocardiology *n.* The study of psychological factors in the aetiology, diagnosis, treatment, and prevention of coronary heart disease. The field was launched by the German psychologist Jochen Jordan (born 1951) and two colleagues at an international conference (*Statuskonferenz Psychokardiologie*) in Frankfurt in 1998. Also called *behavioural cardiology* (US *behavioral cardiology*) or *cardiac psychology*. See also *TYPE A*, *TYPE D*. [From Greek *psyche* the mind + *kardia* heart + *logos* word, discourse, or reason]

*****ebook converter DEMO Watermarks*****

psychodermatology *n.* A branch of medicine, at the interface of psychiatry and dermatology, devoted to the diagnosis, classification, treatment, and prevention of disorders in which psychological factors are present together with **signs* or **symptoms* in the **skin*. The term was introduced in 1974 by the Dutch psychiatrist, sexologist, and dermatologist Herman Musaph (1915–92) in an article entitled ‘Psychodermatology’ in the journal *Psychotherapy and Psychosomatics*. See also [HYPNODERMATOLOGY](#).
psychodermatologist *n.* One who practises psychodermatology.
psychodermatological *adj.* [From Greek *psyche* soul or mind + English *dermatology*, the study of the skin, from Greek *derma*, *dermatos* the skin + *logos* word, discourse, or reason]

psychodrama *n.* A form of **group therapy* in which people act out their own emotional problems and conflicts in front of audiences in order to gain objectivity and understanding of them. See also [DRAMA THERAPY](#), [SOCIODRAMA](#).

psychodynamic *adj.* Of or relating to the **dynamic* interplay of psychological processes. See [DYNAMIC PSYCHOLOGY](#).

psychodysleptic *adj. n.* (Of or relating to) a **hallucinogen*. [From Greek *psyche* the mind + *dys-* bad or abnormal + *lepsis* a seizure, from *lambanein* to take + *-ikos* of, relating to, or resembling]

psychoendocrinology *n.* The interface between **psychology* and **endocrinology*; the study of the interaction between hormones, behaviour, and mental experience.

psychoenergizer *n.* An **antidepressant* drug belonging to the class of **monoamine oxidase inhibitors* (MAOIs).

psychogalvanic response *n.* Another name for a **galvanic skin response*. **PGR** *abbrev.* [From Greek *psyche* the mind + *galvanic* of or relating to current electricity, named after the Italian physiologist Luigi Galvani (1737–98) who first showed that muscles contract when electricity is passed through them]

psychogenesis *n.* The production of a disorder, including a ***mental disorder**, or a ***sign (1)** or ***symptom**, by a psychological rather than a physical process. **psychogenic** *adj.* Compare **ORGANIC MENTAL DISORDER**. [From Greek *psyche* mind + *genes* born]

psychogenic amnesia *n.* Any form of ***amnesia** arising by ***psychogenesis** rather than as part of an ***organic disorder**, similarly *psychogenic fugue*, *psychogenic pain disorder*, and so on.

psychogenic attack *n.* Another name for a ***pseudoseizure**. Also called a *psychogenic convulsion* or a *psychogenic seizure*. [From Greek *psyche* mind + *genes* born + *-ikos* of, relating to, or resembling]

psychogeriatrics *n.* The branch of medicine devoted to the prevention, diagnosis, and treatment of mental disorders affecting old people. Compare **GERIATRICS**. [From Greek *psyche* mind + *geras* old age + *iatros* a doctor + *-ikos* of, relating to, or resembling]

psychoid *adj.* In ***analytical psychology**, soul-like, a term that Carl Gustav Jung (1875–1961) applied to the ***collective unconscious**, which ‘cannot be directly perceived or “represented”, in contrast to the perceptible psychic phenomena, and on account of its “unrepresentable” nature I have called it “psychoid” ’ (*Collected Works*, 8, paragraph 840). [From Greek *psyche* the soul + *-oid* indicating likeness or resemblance, from *eidos* shape or form]

psychoimmunology *n.* The interface between ***psychology** and ***immunology**; the study of the interaction between behaviour, mental experience, and the immune system. Compare **PSYCHONEUROIMMUNOLOGY**. [From *psycho(logy)* + *immunology*]

psychokinesis *n.* The movement or change of physical objects by mental processes without the application of physical force, a conjectural ***paranormal** phenomenon. See also **ILLUSION OF CONTROL**, **PSYCHOPRAXIA**, **TELEKINESIS**. Compare **EXTRA-SENSORY PERCEPTION**. **PK** *abbrev.* **psychokinetic** *adj.* [From Greek *psyche* mind + *kinesis* movement]

psycholinguistics *n.* A word introduced by collective agreement at an academic conference in 1953 to denote the psychology of language, including language acquisition by children and all aspects of the production and comprehension of speech and writing.

psychological autopsy *n.* A postmortem study of the possible reasons for a person's death, especially after a suspected suicide, by interviewing relatives and acquaintances, examining diaries and letters, and making other personal inquiries.

psychological decision theory *n.* A **normative* (2) and descriptive approach to judgement and decision introduced in the early 1970s by the Israeli-American psychologists Amos Tversky (1937–96) and Daniel Kahneman (born 1934) and the US psychologists Paul Slovic (born 1938), Sarah C. Lichtenstein (born 1933), and Baruch Fischhoff (born 1946). *See* [BASE-RATE FALLACY](#), [CAUSAL SCHEMA](#), [CONJUNCTION FALLACY](#), [ELIMINATION BY ASPECTS](#), [FRAMING EFFECT](#), [HEURISTIC](#), [HINDSIGHT BIAS](#), [NON-REGRESSIVENESS BIAS](#), [PROSPECT THEORY](#), [REGRESSION FALLACY](#), [SAMPLE SIZE FALLACY](#), [TAXICAB PROBLEM](#). *See also* [BOUNDED RATIONALITY](#), [SATISFICING](#), [TIME-SAVING BIAS](#). *Compare* [BEHAVIOURAL DECISION THEORY](#), [DECISION THEORY](#).

psychological differentiation *n.* Another name for field independence. *See* [FIELD DEPENDENCE–INDEPENDENCE](#).

psychological essentialism *n.* The theory that people implicitly assume that things have essences that make them what they are, even when these essences are unknown, and that we classify things according to this assumption. *See also* [COMPONENTIAL THEORY](#), [ESSENTIALISM](#). *Compare* [PROTOTYPE THEORY](#). [From Latin *essentia* essence, from *esse* to be + Greek *-ismos* indicating a state or condition]

psychological primary *n.* Any of the colours red, yellow, green, or blue that are basic to the processing of colour in the visual system and are perceived as cardinal or fundamental rather than as mixtures of other colours. Also called a *unique colour*, *unique hue*, or *primary colour*, though the latter term is ambiguous. *See also* [BEZOLD–BRÜCKE PHENOMENON](#), [SPECTRUM](#).

Compare [ADDITIVE PRIMARY](#), [PRIMARY COLOUR \(1, 2\)](#), [SUBTRACTIVE PRIMARY](#).

psychological refractory period See [REFRACTORY PERIOD \(3\)](#). **PRP** abbrev.

psychologism *n.* An exaggeration of the importance or significance of psychology; a belief that psychology is the basis of philosophy or of all natural and social sciences; any unjustified or fanciful psychological explanation for a non-psychological phenomenon, such as [*drapetomania](#) or [*dysaesthesia aethiopsis](#).

psychology *n.* The study of the nature, functions, and phenomena of behaviour and mental experience. The etymology of the word (see below) implies that it is simply the study of the mind, but much of modern psychology focuses on behaviour rather than the mind, and some aspects of psychology have little to do with the mind. Many textbooks define psychology simply as the study of behaviour, or the science of behaviour, but that too is to exclude much of psychology: the study of [*cognition](#), for example, is concerned with behaviour only indirectly, as evidence of mental processes. The establishment of psychology as an independent discipline, separate from the disciplines of philosophy and biology from which it emerged, is attributable to the German psychologist Wilhelm (Max) Wundt (1832–1920), who stated in the opening sentence of his book *Principles of Physiological Psychology* (1873), the first major textbook of experimental psychology: ‘The book that I herewith offer to the public attempts to mark out a new domain of science’, and who founded the first psychological laboratory in Leipzig in 1879. See also [PSYCHE](#). [From Greek *psyche* soul or mind + *logos* word, discourse, or reason. The Latin *psychologia* emerged from obscure origins in Germany in the 16th century; the English word *psychology* first appeared in 1693 in Steven Blankaart's *The Physical Dictionary: Wherein the terms of Anatomy, the names and causes of Diseases, chyrurgical Instruments and their Use; are accurately Describ'd*: Blankaart refers to ‘*Anthropologia*, the Description of Man, or the Doctrin concerning him [which is divided] into Two Parts; viz. *Anatomy*, which treats of the Body, and *Psychology*, which treats of the Soul’ (p. 13, italics in original)]

psycholytic *adj. n.* (Of or relating to) a ***hallucinogen**. [From Greek *psyche* the mind + *lysis* loosening]

psychometric function *n.* In ***signal** detection theory, a plot of the intensity of stimuli on the horizontal axis against the percentage of correct detections of the stimuli on the vertical axis, the resulting curve being generally S-shaped. Also called a *poikilitic function*. [From Greek *psyche* mind + *metron* a measure + *-ikos* of, relating to, or resembling]

psychometrics *n.* The construction and application of psychological tests; mental measurement. [From Greek *psyche* mind + *metron* a measure + *-ikos* of, relating to, or resembling]

psychomotor *adj.* Of or relating to the relationship between mental activity and bodily movements. [From Greek *psyche* mind + Latin *motus* a movement, from *movere* to move]

psychomotor agitation *n.* Excessive motor activity, usually consisting of purposeless behaviour such as pacing, fidgeting, or hand-wringing, accompanied by a feeling of ***anxiety** or tension. *Compare* **PSYCHOMOTOR RETARDATION**. [From Latin *agitatus* stirred, from *agitare* to set into motion + *-ion* indicating an action, process, or state]

psychomotor depressant *n.* Another name for a central nervous system ***depressant drug**.

psychomotor epilepsy *n.* Another name for ***temporal lobe epilepsy**.

psychomotor retardation *n.* A general slowing of bodily movements, including eye blinking and speech, often associated with ***depression**. *Compare* **PSYCHOMOTOR AGITATION**. [From Latin *retardare*, *retardatum* to slow down, from *re-* again + *tardare* to slow + *-ation* indicating a process or condition]

psychomotor seizure *n.* A ***seizure** of the type found in ***temporal lobe epilepsy**, without any evidence of a ***convulsion**. Also called a *temporal*

lobe seizure.

psychomotor stimulant *n.* Another name for a central nervous system *stimulant drug.

psychoneuroimmunology *n.* The study of the interactions between psychological phenomena, the *nervous system, and the *immune system, including especially psychological effects such as *stress (1) on immune responses. This field of research emerged in the US in the early 1970s. Compare PSYCHOIMMUNOLOGY. **PNI** *abbrev.* [From *psycho*(logy) + Greek *neuro*(n) a nerve + English *immunology*]

psychoneurosis *n.* Another name for a *neurosis. In *psychoanalysis, it is any neurosis that is not an *actual neurosis, and it is also called a *neuropsychosis*. It includes *narcissistic neuroses and *transference neuroses. [From Greek *psyche* mind + *neuron* a nerve + *-osis* indicating a process or state]

psychopathic deviate scale *See* MMPI.

psychopathic personality *n.* A personality disorder characterized by *psychopathy.

psychopathology *n.* The study of *mental disorders; another name for *abnormal psychology. [From Greek *psyche* mind + *pathos* suffering + *logos* word, discourse, or reason]

psychopathy *n.* A *mental disorder roughly equivalent to *antisocial personality disorder, but with emphasis on affective and interpersonal *traits such as superficial charm, pathological lying, egocentricity, lack of remorse, and callousness that have traditionally been regarded by clinicians as characteristic of psychopaths, rather than social deviance traits such as need for stimulation, parasitic lifestyle, poor behavioural controls, impulsivity, and irresponsibility that are prototypical of antisocial personality disorder. Whether psychopathy and antisocial personality disorder share a common referent is an open question. The emotional deficit in psychopathy is

considered to be central, but its interpretation is controversial. According to the *anxiety deficit theory*, people with psychopathy focus on the present and lack normal anxiety or fear responses to future aversive events. According to the *empathy deficit theory*, such people have a primary dysfunction of empathic social responses. See also [PSYCHOPATHY CHECKLIST–REVISED](#). Compare [SOCIOPATHY](#). **psychopath** *n.* A person with psychopathy. **psychopathic** *adj.* [From Greek *psyche* mind + *pathos* suffering]

Psychopathy Checklist–Revised *n.* An instrument for measuring [*psychopathy](#), developed by the Canadian criminologist Robert D(ouglas) Hare (born 1934) and published commercially in 1991, based on an earlier Psychopathy Checklist ([PCL](#)) that he published in the journal *Personality and Individual Differences* in 1980. It comprises 20 items associated with behavioural, affective, and interpersonal attributes of psychopathy, taken from the classic description of the syndrome in *The Mask of Sanity: An Attempt to Reinterpret the So-called Psychopathic Personality* (1941) by the US neuropsychiatrist Hervey (Milton) Cleckley (1903–84). Each item is scored from 0 (not applicable) to 2 (highly applicable) on the basis of a semi-structured interview and collateral file review. [*Factor](#) analysis of scores from the Psychopathy Checklist and the Psychopathy Checklist–Revised has consistently identified two correlated but distinct factors, the first associated with affective and interpersonal attributes, such as superficial charm, selfishness, callousness, manipulativeness, pathological lying, lack of empathy, and shallow affect, and the second associated with socially deviant behaviour and lifestyle, including proneness to boredom, parasitic lifestyle, impulsivity, early behavioural problems, irresponsibility, and delinquent behaviour. The range of possible scores is 0–40, and the conventional cut-off score for diagnosing psychopathy is 30. According to this criterion, a person with true psychopathy has both an emotional disorder and a propensity to manifest antisocial behaviour. Hare found that 28 per cent of male prison inmates in the US scored at or above this cut-off score, and research in the UK has found a similar proportion. Also called the *Hare Psychopathy Checklist*. **PCL–R** *abbrev.*

psychopharmacology *n.* The study of the effects of drugs on behaviour and mental experience, with particular emphasis on changes in mood, emotions, and psychomotor functions and abilities. [From

psycho(logy) + pharmacology]

psychophysical function *n.* In **psychophysics*, a mathematical expression of the relation between the magnitude of sensations and the intensity of the stimuli that excite them, for example a relation between loudness and sound intensity or between perceived heaviness and mass. See FECHNER'S LAW, FULLERTON–CATTELL LAW, MERKEL'S LAW, PIPER'S LAW, POWER LAW, RICCO'S LAW, WEBER'S LAW. See also PSYCHOPHYSICAL SCALE.

psychophysical parallelism *n.* An approach to the **mind–body problem* first suggested by the German philosopher Gottfried Wilhelm Leibniz (1646–1716) in the early 18th century, a form of **dualism* according to which mental and physical processes are perfectly correlated but not **causally* connected, like the movements of two clocks standing side by side. Also called *parallelism*. Compare EPIPHENOMENALISM, INTERACTIONISM (1).

psychophysical scale *n.* In **psychophysics*, a specification of the values of a psychological dimension of perceived magnitude (such as brightness, loudness, or heaviness) corresponding to values of a physical dimension of stimulus intensity (such as luminous intensity, sound intensity, or mass). See DIRECT SCALING, FRACTIONATION, INDIRECT SCALING, LOUDNESS MATCHING, MAGNITUDE ESTIMATION, MAGNITUDE PRODUCTION, METHOD OF ABSOLUTE JUDGEMENT, METHOD OF BISECTION, METHOD OF EQUAL AND UNEQUAL CASES, METHOD OF EQUAL-APPEARING INTERVALS, METHOD OF GRADATION, METHOD OF PAIRED COMPARISONS, PRODUCTION METHOD, SENSE RATIO METHOD, STAIRCASE METHOD, UNFOLDING TECHNIQUE. See also PSYCHOPHYSICAL FUNCTION.

psychophysics *n.* The oldest branch of experimental psychology, concerned with the relationship between the psychological magnitude of sensations and the physical intensity (broadly interpreted to include any perceptible stimulus dimension) of the stimuli that produce them. It is concerned partly with the determination of **absolute thresholds* and **difference thresholds*, using variations of three classical methods called the **method of constant stimuli*, the **method of limits*, and the **method of average error*, and partly with the establishment of **psychophysical functions* and **psychophysical scales*. Among its greatest achievements are **Weber's law*, **Fechner's law*, and the **power law*, and one of its most important

*****ebook converter DEMO Watermarks*****

modern forms is **signal* detection theory. *See also* ABSOLUTE ERROR, ABX PARADIGM, CATCH TRIAL, CONSTANT ERROR, CROSS-MODAL MATCHING, DIRECT SCALING, FRACTIONATION, FULLERTON–CATTELL LAW, GLOBAL PSYCHOPHYSICS, INDIRECT SCALING, INTERVAL OF UNCERTAINTY, LOUDNESS MATCHING, MAGNITUDE ESTIMATION, MAGNITUDE MATCHING, MAGNITUDE PRODUCTION, MERKEL’S LAW, METHOD OF ABSOLUTE JUDGEMENT, METHOD OF BISECTION, METHOD OF EQUAL AND UNEQUAL CASES, METHOD OF EQUAL-APPEARING INTERVALS, METHOD OF GRADATION, METHOD OF PAIRED COMPARISONS, OLFACTIE, PIPER’S LAW, PRODUCTION METHOD, RELATIVE ERROR, RICCO’S LAW, SENSE RATIO METHOD, STAIRCASE METHOD, STANDARD STIMULUS, UNFOLDING TECHNIQUE, VARIABLE ERROR, VARIABLE STIMULUS, WEBER FRACTION. **psychophysical** *adj.*

psychophysiology *n.* The branch of psychology devoted to studying the physiological correlates of psychological functions and phenomena.

psychoplegic *adj. n.* (Of or relating to) a **neuroleptic* (1) drug. [From Greek *psyche* the mind + *plege* a blow + *-ikos* of, relating to, or resembling]

psychopomp *n.* One who conducts souls to the other world after death, a function ascribed in Greek mythology to Hermes. In **analytical psychology*, the word used by Carl Gustav Jung (1875–1961) to describe the role of the **anima* and **animus* (3) as go-betweens, linking the **ego* and the **unconscious* (2). **psychopomps** or **psychopompoi** *pl.* [From Greek *psyche* a soul + *pompos* a guide, from *pompein* to send or conduct]

psychopraxia *n.* A concept intended to unify **psychology* and **parapsychology*, eliminating the conceptual distinction between **extra-sensory perception* (ESP) and **psychokinesis* (PK), and also the distinction between normal information-acquisition and normal motor control. It was introduced by the Australian psychologist Michael (Anthony) Thalbourne (born 1955) in *A Glossary of Terms Used in Parapsychology* (1982, pp. 62–63). **psychopractic** *adj.* Of or relating to psychopraxia. [From Greek *psyche* spirit or soul + *praxis* a deed, from *prassein* to do]

psychoprophylaxis *n.* A training system based on breathing and relaxation exercises designed to prepare women for childbirth. [From Greek *psyche* the mind + *prophylaxis* protecting against affliction, from *pro* before

*****ebook converter DEMO Watermarks*****

+ *phylax* a guard]

psychose passionelle *n.* Another name for **erotomantic delusional disorder*. [French, literally insanity of passion]

psychosexual development *n.* In **psychoanalysis*, the progress during infancy and childhood through a sequence of **libidinal stages*. See ANAL STAGE, GENITAL STAGE, LATENCY PERIOD, ORAL STAGE, PHALLIC STAGE, POLYMORPHOUS PERVERSITY. See also MIRROR PHASE, NARCISSISM.

psychosexual dysfunctions *n.* Another name for **sexual dysfunctions*.

psychosexual stage *n.* Another name for a **libidinal stage*.

psychosis *n.* 1. Any mental disorder characterized by **delusions* and/or prominent **hallucinations* with or, in the narrowest definition of the term, without **insight* (3) into their pathological nature. Broader definitions include mental disorders characterized by other **positive symptoms* of **schizophrenia* such as **disorganized thinking* or **catatonia*. 2. In older psychological and psychiatric literature, mental impairment grossly interfering with the capacity to meet ordinary demands of life, or gross impairment in **reality testing*. Compare NEUROSIS. **psychoses** *pl.* [A word introduced in 1845 by the Austrian psychiatrist Ernst von Feuchtersleben (1806–49) in his *Lehrbuch der ärztlichen Seelkunde* (translated into English in 1847 as *The Principles of Medical Psychology*), from Greek *psyche* mind + *-osis* indicating a process or state]

psychosocial moratorium *n.* In **ego* psychology, a term introduced by the German-born psychoanalyst Erik H. Erikson (1902–94) to denote a ‘time out of life’ during which a person can retain a fluid identity, such a period often being a feature of early post-adolescent life in modern industrial societies, when young adults can take time out by travelling, for example, before settling into more fixed identities constrained by work and relationships.

psychosocial stressor *n.* Any life event or change, such as divorce, marriage, bereavement, loss or change of a job, or moving house, that causes **stress (1)* and may be associated with the onset or deterioration of a **mental disorder*. *See also* ADJUSTMENT DISORDERS.

psychosomatic *adj.* Of or relating to certain **organic disorders*, such as hypertension, that are believed to be caused or aggravated by psychological factors, such as **stress (1)*. [From Greek *psyche* mind + *soma* body + *-itikos* resembling or marked by]

psychosomatic disorder *n.* Any disorder that is **psychosomatic*. Also, in **psychoanalysis*, called an *organ neurosis*.

psychosomatic medicine *n.* The branch of medicine devoted to **psychosomatic disorders*.

psychostimulant *n.* Another name for a central nervous system **stimulant drug*.

psychosurgery *n.* Surgical operations such as **frontal leucotomy* performed on physically normal brain tissue to treat mental disorders rather than brain pathologies. *Compare* NEUROSURGERY.

psychotherapy *n.* The treatment of **mental disorders* and allied problems by psychological methods. *See* ACCEPTANCE AND COMMITMENT THERAPY, ANALYTIC PSYCHOLOGY, ART THERAPY, ASSERTIVENESS TRAINING, AUTOGENIC TRAINING, BEHAVIOUR THERAPY, BIBLIOTHERAPY, BIOENERGETICS (2), BODY THERAPIES, BRIEF PSYCHOTHERAPY, CLIENT-CENTRED THERAPY, CO-COUNSELLING, COGNITIVE–ANALYTIC THERAPY, COGNITIVE BEHAVIOUR MODIFICATION (CBM), COGNITIVE THERAPY, CONJOINT THERAPY, CONTINGENCY MANAGEMENT, COUPLES THERAPY, CRISIS INTERVENTION, DANCE THERAPY, DRAMA THERAPY, EST, EXISTENTIAL THERAPY, EXPERIENTIAL THERAPY, EYE-MOVEMENT DESENSITIZATION AND REPROCESSING (EMDR), FACILITATED COMMUNICATION (FC), FAMILY THERAPY, FIXED-ROLE THERAPY, FOCAL THERAPY, GESTALT THERAPY, GROUP THERAPY, HYPNOTHERAPY, LOGOTHERAPY, MARITAL THERAPY, MILIEU THERAPY, MODELLING, MORITA THERAPY, MULTIMODAL THERAPY (MMT), MUSIC THERAPY,

NARCOANALYSIS, NARCOSYNTHESIS, NARCOTHERAPY, NEURO-LINGUISTIC PROGRAMMING, ONLINE THERAPY, ORGONE THERAPY, PARADOXICAL THERAPY, PERSONAL CONSTRUCT THERAPY, PHOTOTHERAPY, PLAY THERAPY, PRIMAL THERAPY, PROGRESSIVE RELAXATION, PSYCHOANALYSIS, PSYCHOANALYTIC PSYCHOTHERAPY, RATIONAL EMOTIVE BEHAVIOUR THERAPY (REBT), REBIRTHING, REFLEXOLOGY (1), ROLFING, SEX THERAPY, SOCIODRAMA, T-GROUP, TRANSACTIONAL ANALYSIS (TA), TRANSCENDENTAL MEDITATION (TM), WILL THERAPY. *See also* DISTRESS RELIEF QUOTIENT, DODO BIRD CONJECTURE, EDUCATIONAL PSYCHOTHERAPY, NEGATIVE THERAPEUTIC REACTION. **psychotherapeutic** *adj.* **psychotherapist** *n.* One who practises psychotherapy. [From Greek *psyche* mind + *therapeia* service or treatment, from *therapeuein* to take care of or to heal]

psychotic *adj.* 1. Of, pertaining to, or resembling ***psychosis** (1). *n.* 2. A person with a ***psychosis** (1). [From Greek *psyche* mind + *-osis* indicating a process or state + *-itikos* resembling or marked by]

psychotic depression *n.* A form of ***depression** accompanied either by symptoms of ***psychosis** (1) such as ***delusions** or ***hallucinations** or by depressive ***stupor**.

psychotic disorder *n.* Any ***mental disorder** characterized by ***hallucinations**, ***delusions**, ***disorganized speech**, ***negative symptoms**, or grossly abnormal body movements. *See* SCHIZOPHRENIA SPECTRUM AND OTHER PSYCHOTIC DISORDERS.

psychotic disorder due to another medical condition *n.* In ***DSM-5**, a disorder characterized by prominent ***hallucinations** or ***delusions** resulting from a medical condition such as an ***endocrine disorder**, a metabolic disorder, an autoimmune disorder, or (most commonly) ***temporal lobe epilepsy**. For ***differential diagnosis**, it must be distinguished from ***delirium**, ***substance/medication-induced psychotic disorder**, and other ***psychotic disorders**. *See also* SCHIZOPHRENIA SPECTRUM AND OTHER PSYCHOTIC DISORDERS.

psychoticism *n.* A psychological condition or state characterized by ***psychosis** (1). Also, one of the three major dimensions of personality in the later writings (from 1975 onwards) of the German-born British psychologist

*****ebook converter DEMO Watermarks*****

Hans J(ürgen) Eysenck (1916–97), characterized by **traits* such as aggressiveness, coldness, impulsiveness, antisocial behaviour, tough-mindedness, and creativity. Also called *tough-mindedness*.

psychotogen *n.* A chemical substance or drug that induces a **psychotic* (1) state. **psychotogenic** *adj.* [From *psychotic* + Greek *gainein* to produce]

psychotomimetic *n.* Another name for a **hallucinogen*. [From *psychotic* + Greek *mimesis* imitation, from *mimeisthai* to imitate + *-ikos* of, relating to, or resembling]

psychotropic *adj.* Affecting mental experience or behaviour, generally referring to a **drug* that has such effects. Also called *psychoactive*. See ANAESTHETIC (2), ANALGESIC (2), ANTICHOLINERGIC, ANTICONVULSANT, ANTIDEPRESSANT, ANTIMANIC, ANTIPARKINSONIAN, ANXIOLYTIC, APHRODISIAC, BETA-BLOCKER, CHOLINOMIMETIC, CONVULSANT, DEPRESSANT DRUG, EMPATHOGEN, ENDOGENOUS OPIOID, EUPHORANT, FALSE NEUROTRANSMITTER, HALLUCINOGEN, HYPNOTIC (2), INDOLE ALKALOIDS, MONOAMINE OXIDASE INHIBITOR, MOOD STABILIZER, NARCOTIC, NARCOTIC ANALGESIC, NARCOTIC ANTAGONIST, NERVE GAS, NEUROLEPTIC (1), OPIATE, OPIOID ANTAGONIST, PHANTASTICANT, PHENYLALKYLAMINES, PSYCHEDELIC, SEDATIVE, SELECTIVE SEROTONIN REUPTAKE INHIBITOR, SMART DRUG, SOCIABILIZER, STIMULANT DRUG, SYMPATHOMIMETIC, TRICYCLIC ANTIDEPRESSANT, TRUTH DRUG. [From Greek *psyche* mind + *tropos* a turn, from *trepein* to turn + *-ikos* of, relating to, or resembling]

PTC *abbrev.* Phenylthiocarbamide, a crystalline compound that is tasteless to some people and intensely bitter-tasting to others, the difference being due to a recessive gene. Approximately one-third of Caucasian and Asian populations are *non-tasters* and two-thirds are *tasters*, but almost all members of African and native South American populations are *tasters*. Also called *phenylthiourea*. Formula: $C_6H_5NHCSNH_2$. Compare PROPYLTHIOURACIL (PROP).

P300 *n.* A large positive **evoked potential* that occurs approximately 300 milliseconds after the presentation of a stimulus, especially one that is unexpected, interesting, or potentially important, and that is believed to

indicate that the stimulus has been appraised. A low-amplitude P300 is a firmly established sign of schizophrenia. The P300 latency increases between 1 and 2 milliseconds per year of the adult lifespan. Also called the *P300 potential* or *P300 wave*. [From *p(ositive) 300 (milliseconds)*]

ptosis *n.* Drooping of one eyelid, partially or completely closing the eye. When the **pupil* of the eye is normal and there is only partial drooping, it is usually a sign of fatigue; if the pupil is constricted and there is only partial drooping, it may be a sign of **Horner's syndrome*; when the pupil is dilated and especially if the eye is completely closed and the eyeball is turned outwards, it may be a sign of malfunction of the **oculomotor nerve*, which travels from the brainstem directly to the eye. [From Greek *ptosis* a falling, from *piptein* to fall + *-osis* indicating a process or state]

P200 *n.* A major positive deflection in an **event-related potential* or an **average* evoked potential, occurring about 200 milliseconds after the onset of the stimulus. Some researchers have claimed that its magnitude, or the acuteness of the angle between the **N140* and the P200, correlates with **IQ*, but empirical findings are inconsistent. *Compare* *STRING LENGTH*. Also called the *P200 potential* or *P200 wave*. [From *p(ositive) 200 (milliseconds)*]

puberty *n.* The stage of development at the beginning of **adolescence* when the glands that secrete **sex* hormones mature and **secondary sexual characteristics* appear. Also called *pubescence*. **pubertal** *adj.* [From Latin *pubertas* maturity, from *puber* grown-up]

public goods dilemma *n.* A type of **social dilemma* in which members of a group choose whether or how much to contribute to something from which all group members benefit equally. In a classical (and typical) experiment, nine participants or subjects were given \$5 each, and the rules specified that if five or more of them contributed their money to a central fund, then all nine participants would receive a \$10 bonus whether or not they had contributed. If enough people contributed, the net payoff, taking into account contributions paid in, was \$10 to a contributor and \$15 to a non-contributor, but if too few contributed, the payoff was zero to a contributor and \$5 to a non-contributor. Public goods games are designed to simulate subscription payments to unions and other social dilemmas in which all

*****ebook converter DEMO Watermarks*****

members of a group benefit from actions that are costly to the individuals who make them. They are also called *free-rider problems*, and the corresponding experimental games are sometimes called *give-some* games.

puer aeternus *n.* In **analytical psychology*, an **archetype* (2) of eternal youth, viewed by Carl Gustav Jung (1875–1961) as a **neurotic* (1) component of personality, arising from an inability to come to terms with ageing. [From Latin *puer* a boy + *aeternus* eternal or everlasting]

puerperal psychosis *n.* The most severe and rarest (about two per thousand live births) of the three major postpartum mental disorders, with onset typically sudden, usually within two weeks of giving birth, and symptoms of severe terminal **insomnia*, sudden tearfulness or inappropriate laughter, **anxiety*, **depression*, **depersonalization*, rejection of the baby or **delusion* that it is deformed, cursed, or dead, **paranoid ideation* frequently implicating hospital staff or family members, and threats to kill the baby or commit **suicide*. Although widely recognized, this disorder is not listed separately in either **DSM-5* or **ICD-10*. Also called *postpartum psychosis*. Compare POSTPARTUM BLUES, POSTPARTUM DEPRESSION. [From Latin *puerperalis* of or relating to childbirth, from *puer* a boy, from *parere* to bear]

Pulfrich effect *n.* A visual illusion that is seen when a pendulum such as a length of string with a weight attached to one end is swung from side to side in a plane perpendicular to the line of vision. If it is viewed from a distance with a lens from a pair of sunglasses or a similar dark filter over one eye but with both eyes open, and with attention focused on the centre of the swing, the pendulum appears to move in an ellipse parallel to the floor, clockwise as seen from above if the dark lens is over the left eye and anticlockwise if it is covers the right eye. Any object moving across the line of vision is similarly affected, so that if the dark filter covers the left eye, objects moving from left to right on a television screen appear to recede and objects moving from right to left appear to be displaced forward. Since 1966 this effect has been exploited periodically by companies marketing expensive spectacles that are claimed to make ordinary television images three-dimensional but that consist merely of one dark and one plain lens. See also KINEPHANTOM. [Named after the German psychologist Carl Pulfrich (1858–1927) who first described it in 1922, although he was born blind in one eye]

*****ebook converter DEMO Watermarks*****

and never saw the effect himself]

pulvinar *n.* The cushion-shaped bulge at the back of the **thalamus* above the midbrain that receives projections from the auditory, somatosensory, and visual cortex, and also from the superior colliculus, and is believed to be implicated in visual attention, especially the suppression of attention to irrelevant stimuli. [From Latin *pulvinus* a cushion]

pumphead *n.* Another name for **post-operative cognitive dysfunction*, or a person suffering from post-operative cognitive dysfunction, after open heart surgery with a heart-lung machine. The term was introduced by US surgeons and first gained prominence following an article entitled 'Pumphead' in the magazine *Scientific American* in July 2003. [From *pump*, referring to the heart-lung machine, + *-head*, a combining form indicating a mental condition, as in *smackhead* a person whose mental state is affected by heroin]

punch-drunk *adj.* Manifesting the characteristic signs of some professional boxers and others who have suffered repeated blows to the head and contusions of the brain, including **clouding of consciousness*, **ataxia*, and **tremor*.

punctuated equilibrium *n.* A form of **evolution* characterized by short bursts of radical change interrupted or punctuated by long periods of stability; or a theory according to which evolution occurs in this way. [From Latin *punctuare*, *punctuatum* to prick, from *pungere*, *punctum* to puncture]

punctuationist *n.* One who believes in **punctuated equilibrium*.

punishment *n.* Any **stimulus* (1) that an organism seeks to avoid or escape. **Negative reinforcement* is not punishment but almost the reverse, namely the withdrawal of punishment. *See also* *AVOIDANCE CONDITIONING*, *ESCAPE CONDITIONING*, *LAW OF EFFECT*, *LOCUS OF CONTROL*.

pupil *n.* The dark central opening in the **iris* through which light enters the eye, its variable diameter being controlled by the *dilator pupillae* and *sphincter pupillae* muscles of the iris. *See also* *ACCOMMODATION REFLEX*,

ARGYLL ROBERTSON PUPIL, DARK ADAPTATION, DEPTH OF FIELD, GLAUCOMA, LIGHT ADAPTATION, OCULOMOTOR NERVE, PUPILLARY LIGHT REFLEX, SYMPATHETIC NERVOUS SYSTEM. **pupillary** *adj.* [From Latin *pupilla* a pupil, diminutive of *pupa* a girl or a doll, alluding to the tiny reflection in the eye]

pupillary light reflex *n.* A reflex in which light shone into one eye causes the pupils of both eyes to constrict involuntarily, protecting against damage to the retina and causing a temporary threshold shift (TTS), similar to the acoustic reflex in response to loud noise. The reflex is found even in people whose primary visual cortex is destroyed, rendering them totally blind. *Optic nerve damage results in equal pupils, neither responding to light shone into the eye on the damaged side but both responding normally to light shone into the other eye, whereas *oculomotor nerve damage results in a dilated pupil on the damaged side that does not respond to light shone into either eye. Also called the *consensual pupillary reflex*, the *consensual light reflex*, *Haab's pupillary reflex*, the *light reflex*, or the *pupillary reflex*. See also REFLEX.

pure erotomania *n.* Another name for *erotomantic delusional disorder.

pure hue *n.* A hue consisting of *monochromatic light.

pure light *n.* In the terminology introduced by the English physicist and mathematician Sir Isaac Newton (1642–1727) in his *Opticks* (1704), any light that cannot be broken down into constituent colours, thus the same as a pure hue consisting of *monochromatic light. Compare COMPOSITE LIGHT.

pure phi *n.* Another name for *phi movement.

pure tone *n.* A sound wave such as that generated by a tuning fork or oscillator whose pressure variation as a function of time is a sine wave. Also called a *simple tone*. See also FOURIER ANALYSIS, TONE (1). Compare COMPLEX TONE.

purine *n.* A white crystalline substance or any of several *bases (1) derived from it, including *adenine and *guanine, which are constituents of *DNA

and **RNA*, in which they are paired with pyrimidine bases. *Compare PYRIMIDINE*. [From *pure (uric acid)* + Greek *-ine* indicating an organic compound]

Purkinje cell *n.* A type of large efferent neuron that has dense **dendrites* forming as many as 100,000 synapses with afferent neurons, although it is not bushlike but lies flat in one plane and has an axon that breaks up into numerous branches near its end, its cell body being found in the middle layer of the **cerebellar cortex*, its action being inhibitory, and its neurotransmitter being **GABA*. Axons of Purkinje cells provide the only output from the cerebellar cortex after it has processed sensory and motor information from other parts of the nervous system. It was discovered in 1837 by the Czech-born German physiologist Johannes E(vangelista) Purkinje (Purkyně) (1787–1869). Also spelt *Purkyně cell*. Also called a *Purkinje neuron* or a *Purkyně neuron*.

Purkinje figure *n.* An image of the network of retinal blood vessels that is made visible in one's own eye if light is shone on to the eyeball at an oblique angle from a pinhole close to its surface. The best way of seeing the image is by darkening the room and holding a torch or flashlight against the outer corner of one closed eye, and then moving the torch from side to side. Also spelt *Purkyně figure*. [Named after the Czech-born German physiologist Johannes E(vangelista) Purkinje (Purkyně) (1787–1869) who discovered it]

Purkinje image *n.* A secondary **positive afterimage* occurring after the primary afterimage following exposure to a brief light stimulus, appearing in the **complementary colour* to that of the original stimulus, the primary (Hering) afterimage generally being either in the same colour as the stimulus or colourless. Depending on the intensity of the original stimulus, the Purkinje image may persist for several seconds if the gaze is held steady, but it tends to disappear as soon as the eyes are moved, though blinking may briefly restore it. Also spelt *Purkyně image*. Also called the *Purkinje afterimage*. *See also* *AFTERIMAGE*, *BIDWELL'S GHOST*. *Compare* *HERING IMAGE*, *HESS IMAGE*. [Named after the Czech-born German physiologist Johannes E(vangelista) Purkinje (Purkyně) (1787–1869) who first drew attention to it in 1823]

Purkinje–Sanson image *n.* Any of three images that can be seen reflected from the eye of a person who is looking at an illuminated object such as a flame in a dark room. The first is a bright image reflected from the convex surface of the cornea; the second is a large, dim image reflected from the convex front surface of the **crystalline lens*; and the third is a small, bright, inverted image that is reflected from the rear (posterior) surface of the lens and that enlarges with **accommodation* (1) of the eye for close viewing, because the curvature of the lens increases, such accommodation also causing the distance between the second and third images to change. Also spelt *PurkynĚ–Sanson image*. Also called a *Purkinje image* or a *Sanson image*. [So called because it was first observed in 1823 by the Czech-born German physiologist Johannes E(vangelista) Purkinje (PurkynĚ) (1787–1869) and investigated further in 1838 by the French surgeon Louis Joseph Sanson (1790–1841)]

Purkinje shift *n.* A change in peak sensitivity to light under changing illumination, from wavelengths close to 555 nanometres (green) in **photopic* (light-adapted) vision to 505 nanometres (blue–green) in **scotopic* (dark-adapted) vision, resulting from the predominance of **cone* vision in bright illumination and **rod* vision in dim illumination. Thus reds, oranges, and yellows appear relatively light in bright illumination whereas blues and greens appear relatively light in dim illumination, as can be demonstrated by finding red and blue objects that appear equally light under bright daylight illumination and then viewing them in twilight or dim illumination, where the red will appear very much darker than the blue. Also called the *Purkinje effect* or *Purkinje phenomenon*. Also spelt *PurkynĚ shift*. See also *BEZOLD–BRÜCKE PHENOMENON*. [Named after the Czech-born German physiologist Johannes E(vangelista) Purkinje (PurkynĚ) (1787–1869) who first drew attention to it in 1825 after noticing that in the dim light of early dawn, when one's eyes are usually dark adapted, red flowers look inky black]

purple hearts *n.* A street name for the barbiturate drug **phenobarbital* (phenobarbitone).

pursuit movement *n.* A **smooth following movement* of the eyes, used when tracking a moving object and sometimes accompanied by **saccades*. Also called an *ocular pursuit movement*.

*****ebook converter DEMO Watermarks*****

pursuit rotor *n.* A device for measuring a person's skill at tracking a moving target, usually consisting of an object or image moving either smoothly or irregularly and a stylus that the person being tested tries to keep on the target, the device keeping an automatic record of time on target.

push-down stack *n.* Any storage system from which items are withdrawn in reverse order to the order in which they were entered, so that the last item in is the first one out, and so on. In computing, temporary memory stores are often push-down stacks, and human ***short-term memory** operates mainly in this way. [Named after a type of spring-operated device for stacking trays in canteens]

pusher *n.* Someone or something that pushes. In informal usage, a person who sells illegal drugs, especially ***narcotics**. *See also* TRAVEL AGENT.

putamen *n.* One of the ***basal ganglia** in the ***corpus striatum**, a large reddish structure surrounding the globus pallidus on three sides in each cerebral hemisphere, consisting of the lateral part of the ***lenticular nucleus**, implicated in posture and movement control. [From Latin *putamen* clippings, from *putare* to prune]

putrid odour *n.* One of the six primary odours in ***Henning's prism** and one of the seven in the ***stereochemical theory**, resembling the odour of faeces or rotten eggs. US *putrid odor*.

p value *abbrev.* Probability value: in ***inferential statistics**, the probability of obtaining, by chance alone, results at least as extreme as those obtained; equivalently, the probability of a ***Type I error**. *See also* SIGNIFICANCE TEST.

Pygmalion effect *n.* A ***self-fulfilling prophecy** whereby people tend to behave the way others expect them to. In a famous field experiment on the Pygmalion effect in children, carried out by the German-born US psychologist Robert Rosenthal (born 1933) and the US elementary school head teacher Lenore F(rances) Jacobson (1922–2010) and published in a book entitled *Pygmalion in the Classroom* (1968), the researchers applied a standard IQ test to children in an elementary school in San Francisco at the

beginning of an academic year, selected 20 per cent (about five children per class) at random, and told their teachers that the tests suggested that these children were potential academic ‘spurters’ who could be expected to show unusual intellectual gains in the year ahead. When the children were retested at the end of academic year, the ‘spurters’ showed massive IQ gains relative to the other children, especially in the first and second grades (6–7-year-old children): 20 per cent of the ‘spurters’ gained at least 30 IQ points, and 80 per cent gained at least 10 IQ points. These gains were presumably due to subtle effects of the teachers' expectations on the way they handled the children, but the experiment has been criticized on methodological grounds. *See also* [EXPERIMENTER EXPECTANCY EFFECT](#), [GALATEA EFFECT](#), [GOLEM EFFECT](#), [LABELLING THEORY](#), [OEDIPUS EFFECT](#). [Named after George Bernard Shaw's play *Pygmalion* (1912), in which the linguist Professor Henry Higgins gives elocution lessons to a cockney flower-girl Eliza Dolittle and passes her off in high society as an upper-class lady—see also etymology of [*Pygmalionism](#)]

Pygmalionism *n.* **1.** Sexual attraction to a statue, dressmaker's dummy, or other representation of the human form. **2.** Falling in love with one's own handiwork. [Named after Pygmalion, the king of Cyprus in a Greek myth, who fell in love with his own ivory sculpture of a woman, later brought to life as Galatea]

pyknic body type *n.* A short, squat, rounded [*somatotype](#) believed by the German psychiatrist Ernst Kretschmer (1888–1964) and his followers to be prone to manic–depressive psychosis ([*bipolar disorders](#)). *See also* [KRETSCHMER CONSTITUTIONAL TYPE](#). *Compare* [ASTHENIC BODY TYPE](#), [ATHLETIC BODY TYPE](#), [DYSPLASTIC BODY TYPE](#). [From Greek *pyknos* thick]

pyramidal cell *n.* Any of the large neurons that are the principal output neurons of the [*neocortex](#), each having long [*dendrites](#) ascending towards and branching near the surface of the cortex, smaller basal dendrites near the pyramid-shaped cell body, and a long, slender [*axon](#) emerging from the base of the cell body, continuing for centimetres or in some cases more than a metre before terminating in a dense brush of branches. Most of the nerve fibres leaving the cerebral cortex are composed of the axons of pyramidal cells. Pyramidal cells are also found in the hippocampus, olfactory bulb, and elsewhere. *See also* [BETZ CELL](#). *Compare* [BIPOLAR CELL](#), [GRANULE CELL](#), [STELLATE](#)

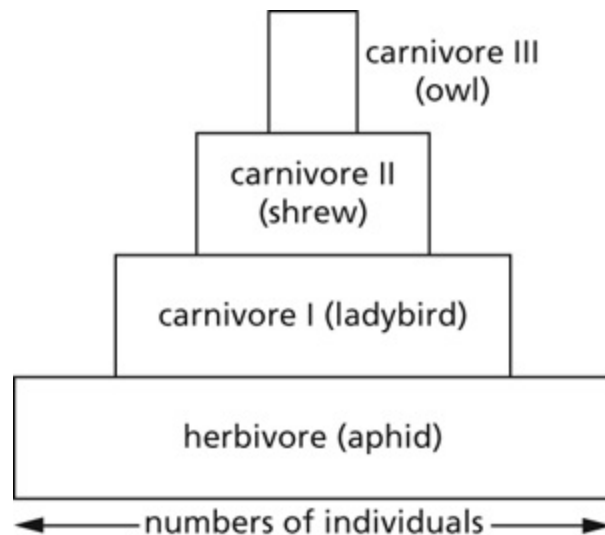
*****ebook converter DEMO Watermarks*****

CELL. [So called because of the pyramidal shape of its soma]

pyramidal decussation *n.* The partial ***decussation** of the ***corticospinal tract** in the medulla oblongata, just above its junction with the top of the spinal cord, where the fibres of ***pyramidal cells** divide into three, with 80 per cent crossing the left–right midline of the body. [So called because it forms a pyramid-shaped cross-section of pyramidal cell axons]

pyramidal tract *n.* Another name for the ***corticospinal tract**. [So called because it contains mostly the axons of ***pyramidal cells**, and also because it forms a pyramidal structure where it splits into three strands at the ***pyramidal decussation** just above the top of the spinal cord]

pyramid of numbers *n.* The characteristic decrease in the relative numbers of animals at each successively higher level in the ***food chain** of a natural ecosystem (see **illustration**).



Pyramid of numbers. A woodland food chain.

pyridoxine *See* **VITAMIN B₆**.

pyriform cortex *See* **PIRIFORM CORTEX**.

pyrimidine *n.* A type of crystalline nitrogenous ***base (1)** or a derivative of

*****ebook converter DEMO Watermarks*****

it such as **cytosine*, **thymine*, and **uracil*, which are found in **DNA* and **RNA*, where they are paired with purine bases. *Compare PURINE*. [A variant of *pyridine*, from Greek *pyr* fire + *-ide* indicating membership of a particular group of chemical compounds + *-ine* indicating an organic compound]

pyromania *n.* A **disruptive, impulse-control, and conduct disorder* in **DSM-5* characterized by multiple episodes of deliberate and purposeful fire setting, with emotional tension before the act, followed by pleasure, gratification, or relief while committing the act or watching its aftermath, and general interest in or preoccupation with fire and matters associated with fire. *See also URETHRAL EROTISM*. [From Greek *pyr* fire + *mania* madness]



qi-gong psychotic reaction *n.* A ***culture-bound syndrome** included in CCMD-2 (the *Chinese Classification of Mental Disorders*, 2nd ed.), restricted mainly to Chinese communities in southern and eastern Asia and elsewhere, the onset invariably following participation in qi-gong, a system of meditational exercises involving deep breathing believed to promote physical and spiritual well-being, characterized by a time-limited period of ***paranoid ideation**, ***dissociation**, and ***psychotic (1)** signs and symptoms. [From Chinese *qi-gong* exercise of vital energy, from *qi* energy + *gong* skill or exercise]

Q-methodology *n.* A form of ***factor** analysis in which the correlations between individuals rather than tests are analysed. It was introduced by the US-based English psychologist William Stephenson (1902–89) in an article entitled ‘Correlating Persons Instead of Tests’ in the journal *Character and Personality* in 1935 and expounded at length in his book *The Study of Behavior: Q-Technique and its Methodology* (1953). Also called *Q-technique*. See also **Q-sort**. Compare **R-METHODOLOGY**.

Q-sort *n.* In psychometrics, a test in which the respondent classifies items into categories along a dimension such as *Agree/Disagree*, often by arranging a deck of cards showing trait-descriptive statements into a fixed number of piles, such classifications being suitable for analysis by ***Q-methodology**. It amounts to a kind of ***rating scale**. [From *q(uestionnaire) sort*]

Quaalude *n.* A proprietary name for the depressant drug ***methaqualone**. [Trademark]

quadrantic hemianopsia *n.* Loss of vision for one quadrant of the visual field, usually associated with a lesion in **optic radiations* from a lateral geniculate nucleus to the visual cortex.

quadratic model *n.* A mathematical model represented by a quadratic equation such as $Y = aX^2 + bX + c$, or by a system of quadratic equations. The relationship between the variables in a quadratic equation is a parabola when plotted on a graph. *Compare* *LINEAR MODEL*.

quadriceps reflex *n.* An informal name for the **patellar reflex*. [Named after the quadriceps muscle that extends the leg at the knee joint]

quadriplegia *n.* Paralysis of all four limbs, usually as a result of an injury to the upper part of the spine. Also called *tetraplegia*, which is a less common but more correct form because it is not a neoclassical **hybrid* (3). *Compare* *DIPLEGIA*, *HEMIPLEGIA*, *MONOPLEGIA*, *OPHTHALMOPLEGIA*, *PARAPLEGIA*, *TRIPLEGIA*. **quadriplegic** *adj.* [From Latin *quadrans* a quarter + Greek *plege* a blow + *-ia* indicating a condition or quality]

qualia *n. pl.* A philosophical term for sensory experiences that have distinctive subjective qualities but lack any meaning or external reference to the objects or events that cause them, such as the painfulness of pinpricks or the redness of red roses. The term is virtually synonymous with **sense data*. *See also* *INVERTED QUALIA*, *PHI MOVEMENT*, *SENSATION*, *SENSIBILIA*. **quale** *sing.* [From Latin *qualis* of what kind]

qualitative inheritance *n.* Inheritance of an all-or-nothing **phenotypic* characteristic through an **allele* at a single locus, as contrasted with **quantitative inheritance* of a characteristic that varies on a **continuum* from one extreme to another. *See also* *MONOGENIC INHERITANCE*. *Compare* *POLYGENIC INHERITANCE*.

qualitative research *n.* Research that focuses on non-numerical data, such as verbal protocols or reports, and that uses such techniques and approaches as **content analysis*, **conversation analysis*, **critical theory*, **deconstruction*, **discourse analysis*, **ethnomethodology*, **focus groups*,

*grounded theory, *hermeneutics (1), *interviews, *motivational research, *phenomenology, *protocol analysis, *psychoanalytic construction, *sociology of knowledge, and *Verstehen. See also NUD*IST, OPEN-ENDED QUESTION.

quantifier *n.* 1. In *logic, a symbol denoting the degree of generality of an expression, the most important being the *existential quantifier* $\exists$ and the *universal quantifier* $\forall$. $\exists x$ means approximately *there exists an x such that...*; and $\forall x$ means approximately *for every x,....* The universal quantifier is also written (x) , for example, the sentence *All students are friendly* may be written either $\forall x: Sx \rightarrow Fx$ or $(x)(Sx \rightarrow Fx)$, where *S* stands for *is a student*, *F* stands for *is friendly*, and the arrow stands for *if...then* or material implication; literally, *For every x, if x is a student, then x is friendly*. See also PREDICATE CALCULUS. 2. In linguistics, a word or phrase referring to the number or amount of anything (*all, some, a few, every, many, any*), an example in context being the first word in the sentence *All generalizations are false*.

quantitative inheritance *n.* Inheritance of a phenotypic characteristic that varies on a *continuum from one extreme to another and is determined by multiple genes, as contrasted with *qualitative inheritance of an all-or-nothing characteristic. See also POLYGENIC INHERITANCE. Compare MONOGENIC INHERITANCE.

quantized image *n.* Another name for a *block portrait. [From Latin *quantum*, neuter of *quantus* how much + *-izare* from Greek *-izein* to cause to become]

quartile *n.* In descriptive statistics, a score such that one-quarter, one-half, or three-quarters of a set of scores, arranged in order, fall below it, these being the first, second, and third quartiles respectively, symbolized by Q_1 , Q_2 , and Q_3 . The second quartile is identical to the *median. See also PARTILE. Compare DECILE, PERCENTILE.

quasi-experiment *n.* Any research method that has some of the features of an *experiment but is not strictly experimental inasmuch as the investigator either does not manipulate the *independent variable directly or

does not have full control over the ***extraneous** or nuisance variables that might influence the results. *See also* **NON-EQUIVALENT GROUPS DESIGN**, **ONE-GROUP PRETEST–POSTTEST DESIGN**, **INTERRUPTED TIME-SERIES DESIGN**. *Compare* **CORRELATIONAL STUDY**. **quasi-experimental** *adj.* [From Latin *quasi* as if]

queen bee syndrome *n.* A tendency for some individually successful women in male-dominated environments to block the advancement of junior female colleagues and to be intolerant of competition from members of their own sex. The term was coined by the Australian-born US social psychologist Graham L. Staines (born 1946) and two colleagues in an article in the magazine *Psychology Today* in 1974, in the narrower sense of a tendency of successful women to oppose the women's liberation movement, and experimental evidence for the phenomenon in its more general form was reported in an article in the *British Journal of Social Psychology* in 2004 in which it was suggested that the syndrome may contribute to the 'glass ceiling' in organizations in which individually successful senior women, strongly represented on appointment and promotion committees in the interests of equal opportunities, may be less likely than men to support female applicants for appointments and promotions. *See also* **SEXISM**, **STEREOTYPE**. [So called because a bee colony has only one reproductive queen, all other female (worker) bees being infertile and serving the queen]

Querulantenwahn *n.* Another name for ***paranoia** querulans. [German: delusion of complaining people, from *Querulant*, a complaining person, from *quer* crossways + *Wahn* delusion]

questionnaire *n.* In psychometrics, a set of questions specially designed to provide objective information about some characteristic of a respondent, such as attitudes, preferences, interests, values, or personality. Also called an *inventory*, particularly when used to measure abilities, aptitudes, or intelligence, such instruments seldom being called questionnaires. [From French *questionner* to ask questions]

quiet-biting attack *n.* The organized pattern of behaviour of a ***predator** stalking and killing its ***prey**. This type of behaviour has been elicited in animals by stimulating the ***medial** forebrain bundle of the hypothalamus. [So called because other forms of aggression are

*****ebook converter DEMO Watermarks*****

characteristically accompanied by vocalization]

quiet sleep *n.* Another name for **NREM sleep*. **QS** *abbrev.*

quinalbarbitone *n.* Another name for **secobarbital*.

quinine *n.* A very bitter-tasting crystalline **alkaloid* extracted from the bark of trees belonging to the genus *Cinchona* and used as an **analgesic* (1), antipyretic, and muscle relaxant. *See also* *OTOTOXIC*. [From Spanish *quina* cinchona bark, from Quechua *kina* bark]

quinone *See* *VITAMIN K*.

quota of affect *n.* In **psychoanalysis*, a quantity of instinctual energy that remains constant despite **displacement* and various qualitative transformations that it undergoes. It is an **economic* concept related to the **principle of constancy*. Sigmund Freud (1856–1939) defined it in an important though confused passage (because it seems to allow the quota to increase or diminish) in an article on ‘The Neuro-Psychoses of Defence’ (1894): ‘In mental functions something is to be distinguished—a quota of affect or sum of excitation—which possesses all the characteristics of a quantity (though we have no means of measuring it), which is capable of increase, diminution, displacement and discharge, and which is spread over the memory-traces of ideas somewhat as an electric charge is spread over the surface of a body’ (*Standard Edition*, III, pp. 45–61, at p. 60).

quota sample *n.* A **non-probability sample* drawn from a population so that its composition in terms of sex, age, social class, or other demographic characteristics matches the known proportions in the population. *See also* *ACCIDENTAL SAMPLE*, *CONVENIENCE SAMPLE*, *OPPORTUNITY SAMPLE*, *SELF-SELECTED SAMPLE*, *SNOWBALL SAMPLE*. *Compare* *CLUSTER SAMPLE*, *PROBABILITY SAMPLE*, *RANDOM DIGIT DIALLING*, *SIMPLE RANDOM SAMPLE*, *STRATIFIED RANDOM SAMPLE*. [From Latin *quota pars*? how large a share?]



rabbit syndrome *n.* A form of [*parkinsonism](#) affecting the lip, arising as a side-effect of prolonged [*neuroleptic \(1\)](#) medication. [So called because of its resemblance to the quivering of a rabbit's lip]

race *n.* **1.** A competitive trial of speed in running, swimming, driving, etc; more generally, any manifestation of rivalry or contest. *See also* [ARMS RACE](#). **2.** In biology, a [*taxonomic](#) group into which a [*species](#) is divided, arising from relative reproductive isolation of populations from one another owing to geographic and other barriers, containing organisms that are genetically differentiable from other members of the same species by the relative frequencies of their [*polymorphic genes](#). Thus in humans the relative percentages of the A, B, and O [*blood](#) group [*alleles](#) are 28, 6, 66 in Caucasian populations; 18, 11, and 71 in African populations; and 19, 17, and 64 in Oriental populations; and many other polymorphic genes show similar racial differences, but across all polymorphic genes, only about 6 per cent of genetic [*variance](#) among humans is due to racial differences. Also called a *microspecies*, *subspecies* or *variety*. *See also* [ETHNIC](#), [RACIALISM](#), [RACISM](#). **racial** *adj.* [From Italian *razza*, origin uncertain]

racialism *n.* [*Prejudice](#), discrimination, stereotyping, or condescension on the basis of [*race \(2\)](#), usually accompanied by a belief in the intrinsic superiority of one race over another or others or by race hatred. Also called *racism*, but distinguished from it in careful usage. *See also* [AUTHORITARIANISM](#), [MODERN RACISM](#), [STEREOTYPE](#). *Compare* [ETHNOCENTRISM](#), [RACISM](#). **racialist** *n.* **1.** One who manifests or practises racialism. *adj.* **2.** Manifesting or practising racialism. [From *racial* + Greek *-ismos* indicating a state or condition]

racial memory *n.* Another name for the **collective unconscious*. Also called the *racial unconscious*.

racism *n.* A belief that **races* (2) are inherently different from one another and that people's characteristics and capacities are determined largely by race, usually accompanied by a belief in the intrinsic superiority of one particular race over another or others. Also called *racialism*, but distinguished from it in careful usage. *See also* *AUTHORITARIANISM*, *MODERN RACISM*, *STEREOTYPE*. *Compare* *ABLEISM*, *AGEISM*, *ETHNOCENTRISM*, *FATTISM*, *HETEROSEXISM*, *SEXISM*, *SPECIESISM*. **racist** *n.* 1. A person with opinions or attitudes that are characterized by racism. *adj.* 2. Of, relating to, or manifesting racism. [From *race* + Greek *-ismos* indicating a state or condition]

radical *adj.* 1. Relating to, consisting of, or going to the root or fundament; necessitating, entailing, or favouring fundamental social, economic, or political change. *n.* 2. A group of atoms that is unstable in the free state but when bound together in a molecule behaves as a single unit, such as the **acetyl* group —COCH₃. *See also* *FREE RADICAL*. [From Latin *radix* a root + *-icalis* of, relating to, or resembling]

radical constructivism *See* *CONSTRUCTIVISM*.

radioisotope scan *n.* A method of examining the brain by passing a Geiger counter over the cranium after the intravenous injection of a radioisotope, used to detect tumours, vascular disturbances, cerebral atrophy, and other abnormalities.

railway illusion *n.* Another name for the **Ponzo illusion*.

ramp movement *n.* A slow, deliberate, sustained bodily movement thought to be controlled by the **basal ganglia*. Also called a *smooth movement*. *Compare* *BALLISTIC MOVEMENT*. [From French *ramper* to creep or clamber]

random digit dialling *n.* A technique used by some public opinion polling organizations to draw a **probability* sample of telephone subscribers

*****ebook converter DEMO Watermarks*****

within a telephone exchange by dialling the last few digits randomly. A variation of this technique is ***directory plus one sampling**. US *random digit dialing*. See also **CLUSTER SAMPLE**, **SIMPLE RANDOM SAMPLE**, **STRATIFIED RANDOM SAMPLE**. Compare **ACCIDENTAL SAMPLE**, **CONVENIENCE SAMPLE**, **NON-PROBABILITY SAMPLE**, **OPPORTUNITY SAMPLE**, **QUOTA SAMPLE**, **SELF-SELECTED SAMPLE**, **SNOWBALL SAMPLE**. **RDD** abbrev.

random-dot kinematogram *n.* Two or more patterns of random dots presented in sequence, each having an area or shape within it that has no visible border but is identical in both or all the patterns and is displaced a short distance from one pattern to the next. If viewed singly or in slow succession, the patterns appear random and the displaced area remains totally invisible, but if viewed in rapid succession, with interstimulus intervals between approximately 10 and 100 milliseconds for displacements of 5 to 40 minutes of arc (sixtieths of a degree) of ***visual angle**, the displaced area stands out from the background pattern of dots with an ***illusory contour** and appears to move as a block. In some displays the area of identical dots changes slightly in outline, though not in the relative positions of its dots, from one frame to the next, and in one popular example it depicts a Dalmatian dog walking in a spotty environment. See also **APPARENT MOVEMENT**, **VISUAL ILLUSION**. Compare **RANDOM-DOT STEREOGRAM**, **TERNUS PHENOMENON**. [From Greek *kinema*, *kinematos* motion + *gramme* a line]

random-dot stereogram *n.* A type of ***anaglyph** for studying binocular depth perception invented by the Hungarian-born US radar engineer and psychologist Bela Julesz (1928–2003) at Bell Telephone Laboratories in 1960, consisting of two random arrays of dots that when viewed stereoscopically, one array being viewed by each eye, appears to contain a form such as a triangle or square lying in a plane either in front or behind the rest of the dots, bounded by an ***illusory contour**. It is constructed by generating two arrays of randomly placed dots, identical except for a clearly defined region that is slightly shifted sideways in one of the arrays, and it is usually presented for viewing by printing one of the arrays in red and the other in green or cyan (blue–green), with a slight horizontal displacement so that the unshifted dots do not fall exactly on top of one another, and it is viewed with spectacles having one red and one green or cyan lens. Also called a *Julesz stereogram*. See also **CYCLOPEAN PERCEPTION**, **STEREOPSIS**, **VISUAL**

ILLUSION. Compare **RANDOM-DOT KINEMATOGRAM**. [From Greek *stereos* solid + *gramme* a line]

random drift *n.* Another name for ***genetic drift**.

randomization *n.* A technique of particular importance in ***experimental design**, introduced by the English statistician and geneticist Ronald Aylmer Fisher (1890–1962) in an article in the *Journal of the Ministry of Agriculture* in 1926, in which experimental subjects are assigned to ***treatment conditions** strictly at random in order to control for the influence of ***extraneous variables** and to enable ***inferential statistics** to be used to determine the significance of any effects that are then observed. The control of extraneous variables through random assignment to treatment groups can be demonstrated by choosing a page from a telephone directory, assigning all the entries on it to two groups by tossing a coin, and then comparing the two groups for the number of surnames containing the letter *p*, or the number of telephone numbers ending in 6, or the number of addresses in a particular sector of the area covered by the directory, or any other characteristic of the entries whatsoever: in each case the two groups will turn out to be roughly similar, especially if the groups are large. See also **RANDOMIZED CONTROLLED TRIAL**, **TIME SAMPLING DIARY**. [From Old French *randon* random, from *randir* to gallop + *-izare* from Greek *-izein* to cause to become + Latin *-ation* indicating a process or condition]

randomization test *n.* In statistics, a ***distribution-free** approach to ***significance** testing that is carried out either by forming all possible permutations of all possible scores, or by selecting a random sample of all possible permutations of all possible scores, and then counting the proportion that are at least as extreme as the observed score, either in terms of raw scores or a test statistic, such as the ***t test** value, derived from the raw scores. It is similar to ***resampling statistics** but differs from it in using all possible permutations of scores, or a random sample of these, rather than restricting the permutations to the actual scores obtained in the study. The prototypical randomization test is ***Fisher's exact test**. See also **MONTE CARLO METHOD**.

randomized blocks design *n.* A research design in which research participants or subjects are assigned to blocks according to a pretest, the

*****ebook converter DEMO Watermarks*****

members of each block being roughly matched on a variable assumed to be related to the [*dependent variable](#), and each block containing as many members as there are treatment conditions, and then the members of each block are randomly assigned to treatment conditions. *See also* [LATIN SQUARE](#).

randomized controlled trial *n.* A research design used for testing the effectiveness of a drug, or any other type of treatment, in which research participants are assigned randomly to treatment and control or [*placebo \(1\)](#) groups and the differences in outcomes are compared. The idea of [*randomization](#) as a method of control was introduced by the English statistician and geneticist Ronald Aylmer Fisher (1890–1962) in an article in the *Journal of the Ministry of Agriculture* in 1926, and the first randomized controlled trial was designed by the English medical statistician Sir Austin Bradford Hill (1897–1991) and carried out in 1948 by the Medical Research Council of the UK to study the therapeutic efficacy of the antibiotic drug streptomycin. Hill gave a full account of this historic drug trial in an article in the journal *Controlled Clinical Trials* in 1990. Also called a *randomized clinical trial*. *See also* [DOUBLE-BLIND STUDY](#), [RANDOMIZED DOUBLE-BLIND EXPERIMENT](#), [SINGLE-BLIND STUDY](#). **RCT** *abbrev.*

randomized double-blind experiment *n.* A type of [*double-blind study](#), often used in conducting drug trials and trials of other forms of treatment, in which participants or subjects are randomly assigned to [*treatment conditions](#), usually an [*experimental group](#) and a [*control group](#), and neither they nor the experimenter knows, until the data have been collected, which groups they have been assigned to. *See also* [RANDOMIZED CONTROLLED TRIAL](#).

randomized response *n.* A technique designed to reduce or eliminate evasive [*response](#) bias in [*survey research](#) on sensitive issues by preserving respondent confidentiality through randomization. For example, an investigator might instruct the respondents as follows: Toss a coin privately and then answer *Yes* if *either* your coin fell heads *or* you have smoked cannabis, otherwise answer *No*. With a sample size of 1,000, we would expect 500 *Yes* replies if none of the respondents had smoked cannabis; additional *Yes* responses would suggest that some respondents whose coins fell tails also replied *Yes*, and the proportion who had smoked cannabis could

*****ebook converter DEMO Watermarks*****

be estimated from the results without identifying the individuals concerned. If 80 answered Yes, then we might assume that approximately 80 of the 500 whose coins fell tails answered Yes, and we could therefore estimate the proportion of the population who have smoked cannabis to be $80/500 = 16$ per cent, and this conclusion could be reached without having identified any individual cannabis smokers. The technique was first proposed by the US economist Stanley Leon Warner (1928–92) in an article in the *Journal of the American Statistical Association* in 1965. See also [NON-REACTIVE MEASURE](#), [REACTIVITY](#).

random lottery incentive system *n.* A method of rewarding experimental participants or subjects for taking part in a research study by using a chance device. For example, participants may be rewarded with points or tokens on the understanding that one in ten of them, selected at random, will be paid at a specified rate for the points that they accumulate. This technique is supposed to save money while retaining a real financial incentive for the participants.

random sample *n.* A [*probability](#) sample drawn from a [*population](#) in such a way that every member of the population is equally likely to be selected. Also called, especially in the context of [*survey research](#), a *simple random sample*.

range *n.* In descriptive statistics, a crude measure of the degree of dispersion, variability, or scatter in a group of scores, defined as the difference between the highest and lowest score in the group. Compare [INTERQUARTILE RANGE](#), [PROBABLE ERROR](#), [SEMI-INTERQUARTILE RANGE](#), [STANDARD DEVIATION](#), [VARIANCE](#).

range of accommodation *n.* The distance between the [*near point](#) and the [*far point](#) of the eye, the limits within which [*accommodation \(1\)](#) is able to adjust the crystalline lens so that an image is sharply focused on the retina.

rank *n.* Position or status within a social organization. In statistics and measurement theory, an ordinal number (1, 2, 3,...) often used in place of measurements made on an [*ordinal scale](#) to represent the order of magnitude

*****ebook converter DEMO Watermarks*****

of the scores. If two or more raw scores are equal, then they are both assigned a rank that is the mean of the ranks they would have had if the raw scores had been slightly different. Many ***non-parametric statistical** procedures work with ranks. [Old French *ranc* a row or tier]

rank correlation *n.* A shortened name for ***Spearman rank correlation coefficient**.

Rankian *adj.* Of or relating to the Austrian ***psychoanalyst** Otto Rank (1884–1939) or his writings and doctrines. See **WILL THERAPY**.

Ranschburg inhibition *n.* The difficulty of recalling lists of similar items relative to clearly differentiated items; thus a list of ***nonsense syllables** such as *BEX, DOV, DEX, BOV, DEV* takes longer to learn and tends to result in more errors on recall than *DEG, VOK, NUX, ZAJ, KIF*, or a list of words such as *big, immense, large, great, vast* is similarly harder than *cold, red, quiet, clever, hungry*. A special case of this phenomenon is the ***repetition effect**. Also called the *Ranschburg effect*, *Ranschburg phenomenon*, *Ranschburgsches Phänomen*, or *Ranschburgsches phenomenon*, though the latter mixture of two languages is a barbarism that is avoided in careful usage. See also **PROACTIVE INTERFERENCE**, **RETROACTIVE INTERFERENCE**. Compare **VON RESTORFF EFFECT**. [Named after the Hungarian psychiatrist Paul Ranschburg (1870–1945) who reported it in 1901]

Ranvier's node *n.* Any of the spaces that occur at regular intervals along the ***myelin** sheath of a nerve fibre, where the ***axon** is exposed. Also called a *node of Ranvier*. See also **SALTATION (1)**. [Named after the French histologist Louis-Antoine Ranvier (1835–1922) who studied them]

raphe nuclei *n. pl.* A series of neuron clusters resembling stitches connecting the two halves of the ***medulla oblongata**. They release ***serotonin** and may be implicated in ***slow-wave sleep**. Also called the *raphe system*, and sometimes spelt *raphé nuclei* or *raphé system*, probably in the mistaken belief that the word is of French origin. **raphe nucleus** *sing.* [From Greek *rhaphe* a seam, from *rhaptein* to sew together]

rapid eye movement *n.* Any of the quick, jerky, synchronized
*****ebook converter DEMO Watermarks*****

rotations of the eyeballs behind closed lids that occur throughout ***REM sleep** and are associated with dreaming. **REM** *abbrev.*

rapid eye movement sleep behaviour disorder *n.* A ***parasomnia** in ***DSM-5** characterized by repeated arousal and vocalization or complex behaviour during sleep, these activities occurring during ***REM sleep**, more than 90 minutes after falling asleep and usually in the latter part of a sleep period, often involving acting out dreams. A person who is awakened from such an episode is normally fully alert and not disoriented or confused. *See also* **REM BEHAVIOUR DISORDER**. *Compare* **NON-RAPID EYE MOVEMENT SLEEP AROUSAL DISORDER**. US *rapid eye movement sleep behavior disorder*.

rapidly adapting *adj.* Of or relating to a ***afferent** neurons from ***sensory** receptors in the ***skin** that respond only to the onset and offset of stimulation and not to sustained stimulation. *See also* **TRANSIENT RESPONDER**. *Compare* **SLOWLY ADAPTING**. **RA** *abbrev.*

rapport *n.* A sympathetic or harmonious relationship or state of mutual understanding. The word was introduced into psychology by the Viennese physician Franz Anton Mesmer (1734–1815), and the French psychologist and neurologist Pierre Janet (1859–1947) confined its meaning specifically to the relationship between a hypnotist and a hypnotized subject; then Sigmund Freud (1856–1939) eventually widened its meaning and described it as the ***prototype (2)** of the ***transference**. [From French *rapporter* to bring back, from *re-* again + *aporter* to carry to, from Latin *apportare* to bring to, from *ad* to + *portare* to bring or carry]

Rasch scale *n.* In psychometrics, a simple application of ***item response theory** based on the assumption that the probability of a particular response to a test item depends on two parameters that can be estimated independently: the extent to which the item elicits a latent trait, and the status of the respondent on that latent trait, the latter being constant across test items. The ***British Ability Scales** were among the first to be constructed according to Rasch scales. [Named after the Danish psychometrician Georg Rasch (1901–80), who expounded this approach in his book *Probabilistic Models for Some Intelligence and Attainment Tests* (1960)]

*****ebook converter DEMO Watermarks*****

rate-dependency effect *n.* Another name for the **initial values law*, as it applies to the effects of drugs on behaviour.

rating scale *n.* In psychometrics, any device for quantifying a respondent's subjective judgement or response to a stimulus. Some rating scales consist of a row of unlabelled boxes or lines on which the respondent marks a chosen point, whereas others provide the respondent with sets of alternatives labelled with numbers or words. In all of these cases, the end-points of the scale are generally anchored with labels such as *Strongly Disagree* and *Strongly Agree*. See also *BIPOLAR RATING SCALE*, *GRAPHIC RATING SCALE*, *NUMERICAL RATING SCALE*, *Q-SORT*, *REPERTORY GRID TEST*, *RESPONSE CATEGORY*, *SEMANTIC DIFFERENTIAL*, *VERBAL RATING SCALE*.

ratio IQ *n.* The original but now obsolete conception of **IQ*, introduced in 1912 by the German psychologist (Louis) William Stern (1871–1938), as a ratio of **mental age (MA)* to **chronological age (CA)*. Although Stern's original quotient was this MA/CA, in 1916 the US psychologist Lewis Madison Terman (1877–1956) modified it to $(MA/CA) \times 100$, to express mental age as a percentage of chronological age and to eliminate awkward decimals. Since the publication of *The Measurement of Intelligence* in 1944 by the Romanian-born US psychologist David Wechsler (1896–1981), the standard definition of IQ has been the purely statistical **deviation IQ*.

ratiomorphic *adj.* Of or relating to psychological processes that appear **rational* but are inaccessible to consciousness, especially the computational processes involved in perception. The word was coined by the Hungarian-born US psychologist Egon Brunswik (1903–55). See also *BRUNSWIKIAN*.
ratiomorphism *n.* [From Latin *ratio* reason + Greek *morphe* form]

rational *adj.* **Thinking* or behaving reasonably or logically. Rational decisions or choices are those that are in the best interests of the agent who makes them, relative to the information available to the agent at the time of acting; or more specifically, rational decisions or choices are those that maximize **expected utility*. In addition, rational **beliefs* are those that are internally consistent; rational preferences are those that are **transitive*; rational probability judgements are those that obey **Kolmogorov's axioms*; and rational **inferences* or arguments are those that obey the rules of **logic*.

*****ebook converter DEMO Watermarks*****

See also [BOUNDED RATIONALITY](#), [DOMINANT ALTERNATIVE/STRATEGY](#), [NASH EQUILIBRIUM](#), [RATIONAL CHOICE THEORY](#), [RATIONALISM \(1, 2, 3\)](#), [REASON](#), [SURE-THING PRINCIPLE](#), [TRANSITIVE PREFERENCES](#). **rationality** *n.* The state or quality of being rational. Compare [NEGATIVE CAPABILITY](#). [From Latin *rationalis* rational, from *ratio*, -onis reason or reckoning, from *reri*, *ratus* to think]

rational choice theory *n.* A theory of [*decision making](#) according to which, when faced with several options or possible courses of action, a decision maker chooses an option that is believed to offer the best outcome from that agent's own point of view. The fundamental assumption is that agents are [*rational](#) in the sense of maximizing [*expected utility](#), but this is often interpreted as a [*normative \(1\)](#) assumption rather than one that accurately describes human behaviour. Many writers use the term synonymously with [*decision theory](#). The theory has been particularly influential in economics and in branches of psychology closely associated with economics. See also [EXPECTED UTILITY THEORY](#), [INTRANSITIVE PREFERENCES](#), [MONEY PUMP](#), [PASCAL'S WAGER](#). Compare [BEHAVIOURAL DECISION THEORY](#), [PSYCHOLOGICAL DECISION THEORY](#).

rational emotive behaviour therapy *n.* A form of [*psychotherapy](#) or [*cognitive](#) therapy developed by the US psychologist Albert Ellis (1913–2007) in 1955, based on the assumption that psychological problems often arise from people's interpretations of events in their lives rather than the events themselves, and that irrational interpretations (as when people who are rejected in love irrationally infer that they are intrinsically worthless and unlovable) cause psychological problems; the therapy involves challenging irrational belief systems in an extremely directive manner by explicit confrontation, suggestion, argument, and various specialized procedures. US *rational emotive behavior therapy*. See also [ABC \(1\)](#), [COGNITIVE RESTRUCTURING](#), [RATIONAL EMOTIVE THERAPY](#). **REBT** *abbrev.*

rational emotive therapy *n.* The term used by the US psychologist Albert Ellis (1913–2007) for a new form of [*psychotherapy](#) that he developed in 1955 and that from 1993 he began calling [*rational](#) emotive behaviour therapy. **RET** *abbrev.*

rationalism *n.* 1. The doctrine associated especially with the French

*****ebook converter DEMO Watermarks*****

philosopher René Descartes (1596–1650), the Dutch philosopher Baruch Spinoza (1632–77), and the German philosopher and mathematician Gottfried Wilhelm von Leibniz (1646–1716) that it is possible to obtain knowledge by **reason* alone, that there is only one valid system of reasoning and it is deductive in character, and that everything is explicable in principle by this form of reasoning. *See also* [A PRIORI](#), [HUME'S FORK](#), [NATIVISM](#). *Compare* [EMPIRICISM](#). **2.** The more general view that everything is explicable in principle by one system of reasoning. **3.** A general commitment to **reason* as opposed to faith, religious belief, prejudice, tradition, or any other source of belief that is without foundation in reason. **rationalist** *n.* One who believes in or practises rationalism (1, 2, 3). **rationalistic** *adj.* [From Latin *rationalis* of or relating to reason, from *ratio* reason]

rationality, bounded *See* [BOUNDED RATIONALITY](#).

rationalization *n.* The act of justifying discreditable actions after the event, or a justification or excuse put forward in this way. In **psychoanalysis*, a **defence mechanism* in which a false but reassuring or self-serving explanation is contrived to explain behaviour that in reality arises from a repressed wish. The term was first used in the narrower psychoanalytic sense in 1908 by the Welsh psychoanalyst Ernest Jones (1879–1958) in an article in the *Journal of Abnormal Psychology* entitled 'Rationalisation in Everyday Life'. **rationalize** *vb.*

rational type *n.* One of the basic personality types in **analytical psychology*. *See* [FUNCTION TYPE](#).

ratio scale *n.* A scale of measurement in which differences between values can be quantified in absolute terms and a fixed zero point is defined, as for example in measurements of length in centimetres or age in years. In a ratio scale, equal differences between scores represent equal differences in the **attribute* being measured, and a zero score represents complete absence of the attribute. It is only when measurement reaches the level of a ratio scale that it is meaningful to describe a score as twice the value of another score, for example. *See also* [MEASUREMENT LEVEL](#), [SCALE \(1\)](#). *Compare* [ABSOLUTE SCALE](#), [INTERVAL SCALE](#), [LOG-INTERVAL SCALE](#), [NOMINAL SCALE](#), [ORDINAL SCALE](#). [From Latin *ratio* a reckoning]

*****ebook converter DEMO Watermarks*****

Rat Man *n.* The nickname used in the literature of [*psychoanalysis](#) to refer to an early patient of Sigmund Freud (1856–1939). The Rat Man was tormented by fantasies of rats gnawing at his father's anus and that of a woman to whom he was attracted. Freud's case study, published in 1909, entitled 'Notes upon a Case of Obsessional Neurosis' (*Standard Edition*, X, pp. 155–320), is a classic text on the psychoanalytic theory of [*obsessive-compulsive disorder](#). *See also* [UNDOING](#).

rausch *n.* A state of diminished consciousness characteristic of light general [*anaesthesia](#), often defined in anaesthesiology as the point at which a patient fails to respond to questions. [From German *Rausch* intoxication or ecstasy]

Rauwolfia *n.* A genus of tropical trees and shrubs including the south-east Asian species *Rauwolfia serpentina* from the powdered roots of which [*reserpine](#) is derived. [Named by the French botanist and monk Charles Plumier (1646–1704), after the German Botanist Leonhard Rauwolf (1535–96) who had travelled to Africa and Asia to study such plants]

raven paradox *n.* Another name for [*Hempel's paradox](#).

Raven's Progressive Matrices *n.* A non-verbal [*intelligence](#) test requiring inductive reasoning about abstract geometric patterns, first published in 1938 and revised several times since then, designed to cover a very wide range of mental ability and to be usable with subjects irrespective of age, sex, nationality, or education. The respondent is presented with 60 abstract geometric patterns, and in each case tries to select from several alternatives the one that fits in a missing part of the pattern. Some psychologists believe that it provides the purest available measure of general intelligence, uncontaminated by cultural and educational influences, but there is evidence to suggest that it is not entirely [*culture-fair](#). Also called the *Progressive Matrices test*. *See also* [CATTELL CULTURE-FAIR TEST](#), [MILL HILL VOCABULARY SCALE](#). **RPM** *abbrev.* [Named after the English psychologist John C(arlyle) Raven (1902–70), who developed it in 1938]

raw primal sketch *See* [PRIMAL SKETCH](#).

raw score *n.* In statistics and measurement theory, a numerical result of an empirical investigation in the form in which it was recorded. *See also* DATA, SCORING FORMULA, TRANSFORMATION. *Compare* DERIVED SCORE.

Rayleigh equation *n.* An index of a person's colour vision given by the proportion of light from the red and green parts of the visible spectrum that need to be mixed to match a standard yellow. Usually 670 nanometres (spectral red) is mixed with 535 nm (spectral green) until it matches 589 nm (spectral yellow). Also called the *Rayleigh match*. *See also* ADDITIVE PRIMARY, ANOMALOSCOPE, COLOUR-BLINDNESS, COLOUR EQUATION, PRIMARY COLOUR (1), TRISTIMULUS VALUES. [Named after the English physicist Lord (John William Strutt) Rayleigh (1842–1919) who introduced it in 1881]

reactance *n.* 1. A psychological state resulting from the elimination or threatened elimination of an option, causing that option to appear more attractive. For example, if a child who initially has the possibility of playing with either of two toys is forbidden to play with one of them, then the forbidden toy may suddenly seem more attractive to the child. According to reactance theory, a person who is subjected to excessive *persuasion that is experienced as a threat to freedom of choice may respond by strengthening the targeted attitude rather than changing it, and a person with a nagging spouse may deliberately avoid doing what the spouse continually demands. The concept was introduced in 1966 by the US psychologist Jack W(illiams) Brehm (1928–2009) in a book entitled *A Theory of Psychological Reactance*. *See* COGNITIVE DISSONANCE. 2. In engineering, opposition to the flow of alternating current, measured in ohms, resulting from the presence of an inductor or capacitor in an electrical circuit, or opposition to acoustic or mechanical vibration, usually resulting from inertia or stiffness of the vibrating object or medium. [From Latin *reagere* to react, from *agere* to do + *-antia* indicating an action, state, condition, or quality]

reaction formation *n.* In *psychoanalysis, a *defence mechanism whereby a person replaces a repressed thought, feeling, or behavioural act with one that is diametrically opposed to it, as when a shy person behaves in an exhibitionist manner or a repressed homosexual denounces homosexuality. According to the Austrian psychoanalyst Otto Fenichel (1898–1946), it is a form of permanent *countercathexis: ‘The person who has built up reaction-
*****ebook converter DEMO Watermarks*****

formations does not develop certain defence mechanisms for use when an instinctual danger threatens; he has changed his personality structure as if the danger were continually present, so that he may be ready whenever the danger occurs' (*The Psychoanalytic Theory of Neuroses*, 1945, p. 151).

reaction latency *n.* In **Hullian learning theory*, the time elapsing between a **stimulus (1)* and a **response*. *st_R* abbrev.

reaction threshold *n.* In **Hullian learning theory*, the strength of an organism's momentary reaction potential that must be reached for it to respond to a **stimulus (1)*. *sL_R* abbrev.

reaction time *n.* The time elapsing between the onset of a **stimulus (1)* and a **response* to it, sometimes broken down into **physiological time* plus **central reaction time*. **Simple reaction time* applies when there is only one possible stimulus requiring only one type of response; **choice reaction time* (also called *complex reaction time*) when there are two or more possible stimuli requiring different responses; and **discrimination* reaction time when the response depends on the detection of a difference in an objectively measurable perceptual dimension such as brightness, length, or weight. Also, especially in relation to animal behaviour, called *latency*, *latent time*, or *response latency*. See also *FITTS' LAW*, *HICK'S LAW*, *LIBET'S DELAY*, *PERSONAL EQUATION*, *PHYSIOLOGICAL TIME*, *READINESS POTENTIAL*, *SUBTRACTION METHOD*. **RT** abbrev.

reactive attachment disorder *n.* In **DSM-5*, a **trauma- and stressor-related disorder* of infancy or early childhood (beginning before age 5 years) characterized by a persistent pattern of emotional withdrawal from carers, manifested by rarely seeking comfort when distressed and responding minimally when comforted, and more generally by a lack of social and emotional responsiveness to others, limited positive **affect*, and episodes of labile affect in interactions with adult carers, together with evidence of pathogenic care, assumed to be responsible for the disturbed social relating, in which the child has experienced either neglect or persistent lack of adult care, repeated changes of carers with limited opportunity to form stable attachments, or rearing in institutions with insufficient numbers of carers or

other circumstances of severely limited opportunities for forming attachments to carers. *See also* [ATTACHMENT THEORY](#), [TRAUMA- AND STRESSOR-RELATED DISORDERS](#). *Compare* [AUTISM SPECTRUM DISORDER](#), [DISINHIBITED SOCIAL ENGAGEMENT DISORDER](#), [INTELLECTUAL DISABILITY](#).

reactive depression *n.* A form of [*depression](#) that arises as a consequence of some upsetting event or experience. Also called *exogenous depression*. *Compare* [ENDOGENOUS DEPRESSION](#).

reactive synaptogenesis *n.* The spontaneous formation of new [*synapses](#) (1) in reaction to axon terminal degeneration at nearby receptor sites. [From Greek *synapsis* contact or junction, from *syn* together + *haptēin* to fasten + *genesis* birth]

reactivity *n.* The property of being responsive to stimuli, or (in relation to a mental disorder) of being precipitated by an external cause, notably with reference to [*reactive depression](#). In psychometrics, the property of some psychological measures of yielding scores that are influenced by the participants' or subjects' knowledge that their behaviour is being observed or measured. *See* [NON-REACTIVE MEASURE](#). *See also* [DEMAND CHARACTERISTICS](#).

readability formulas *See* [FLESCH INDICES](#).

readiness potential *n.* A negative [*event-related potential](#), across wide areas of both [*frontal lobes](#), the [*motor cortex](#), and the [*parietal lobes](#) of the [*cerebral](#) cortex, gradually increasing for approximately a second to two seconds before a person performs a voluntary action at a time of his or her own choosing. The phenomenon, revealed by averaging the [*EEG](#) traces across a number of voluntary actions, was discovered in 1964 by the German neurologist H(ans) H(elmut) Kornhuber (1928–2009) and his postgraduate student Lüder Deecke (born 1938) and published in the journal *Pflügers Archiv (European Journal of Physiology)* briefly in 1964 and at length in 1965. It is usually interpreted as an electrophysiological sign of planning, preparation, and initiation of voluntary action, and it has been replicated with a variety of bodily actions, including flexing a finger or wrist, moving a foot, and vocalizing a syllable. It suggests that voluntary decision processes occupy more than a second, which contrasts with the much shorter [*reaction](#)

*****ebook converter DEMO Watermarks*****

time for automatic responses to stimuli. According to research by the US neurophysiologist Benjamin Libet (1916–2007) published in the journal *Behavioral and Brain Sciences* in 1985, conscious decisions lag 350 to 400 milliseconds behind the onset of the associated readiness potentials, suggesting that spontaneous voluntary action begins unconsciously and apparently undermining the conventional interpretation of free will. *See also* **LIBET'S DELAY**. Compare **CONTINGENT NEGATIVE VARIATION**. **RP** or **BP** abbrev. [Translated from the German *Bereitschaftspotential*, the term introduced by Kornhuber and Deecke]

reading by sound *n.* Another name for ***surface dyslexia**.

reading disorder *n.* A ***specific learning disorder** characterized by a level of reading ability (accuracy, speed, and comprehension) substantially below what is expected for the child's age, intelligence, and education, the reading difficulty interfering substantially with scholastic or academic achievement or everyday life and not being attributable to neurological or sensory impairment, ***intellectual disability**, or environmental deprivation. Also called *legasthenia*, *reading disability*, *specific developmental dyslexia*, *specific reading disorder*. *See also* **DYSLEXIA**, **HYPERLEXIA**, **SPECIFIC SPELLING DISORDER**.

reading ease score *n.* One of the ***Flesch indices** of the readability of text, defined by the formula $RE = 206.835 - (1.015 \times \text{average number of words per sentence}) - (84.6 \times \text{average number of syllables per word})$. In practice, reading ease scores almost always lie between zero and 100. A reading ease score of zero indicates that the text is practically unreadable, 40 that it is difficult, 65 that it is standard, 85 that it is easy, and 95 that it is very easy. Reading ease scores have been found to correlate highly with ratings of readability and with measures of comprehension and retention. *See also* **HUMAN INTEREST SCORE**.

reading span *n.* The number of words that can be apprehended in a single ***fixation** (1) while reading. Most adults have an average reading span of about three.

reafference *n.* Changes in ***proximal** stimuli resulting from self-produced

*****ebook converter DEMO Watermarks*****

movements rather than any movements or changes in the ***distal** stimuli, including especially the changes in visual stimulation resulting from head and eye movements. **reafferent** *adj.* [From Latin *re-* back again + *aferre* to carry to, from *ad* to + *ferre* to carry]

realistic anxiety *n.* In ***psychoanalysis**, any ***anxiety** resulting from an external danger that poses a real threat, in contrast to an internally generated anxiety. *Compare* **NEUROTIC ANXIETY**.

realistic group conflict theory *n.* The notion that group conflict and hostility are caused chiefly by competition for resources and power. The theory was first proposed by the US-based Turkish psychologist Muzafer Sherif (1906–88) and several colleagues in the ***Robbers Cave experiment**. **RGCT** *abbrev.*

reality-ego *n.* In ***psychoanalysis**, one of the two major aspects of the ***ego**, based on the ***reality principle**, differentiated by Sigmund Freud (1856–1939) from the ***pleasure-ego**, based on the ***pleasure principle**. In his article on ‘Formulations on the Two Principles of Mental Functioning’ (1911), he summed up the distinction as follows: ‘Just as the pleasure-ego can do nothing but *wish*, work for a yield of pleasure, and avoid unpleasure, so the reality-ego need do nothing but strive for what is *useful* and guard itself against damage’ (*Standard Edition*, XII, pp. 218–26, at p. 223).

reality monitoring *n.* The act or process of discriminating between genuine memories that are acquired through perception from external reality and apparent memories that are generated internally by imagination. It tends to break down in ***schizophrenia**, ***delusional disorder**, ***Alzheimer's disease**, and other mental disorders characterized by ***hallucinations**, ***delusions**, and ***dementia**, and it is temporarily disrupted by intoxication with some types of drugs, especially ***hallucinogens**. Research into ***constructive memory** has shown that the sources of many memories are neither purely external nor purely internal, and the distinction between external and internal memory sources is therefore considered relative rather than absolute. Reality monitoring is a form of ***metacognition** that was named in 1981 by the US psychologists Marcia K. Johnson (born 1943) and Carol L. Raye (born 1946), who were also the first to study it systematically. The term is widely used in

*****ebook converter DEMO Watermarks*****

cognitive psychology and is closely related to [*reality testing](#) in clinical psychology. *See also* [DÉJÀ VU](#), [EYEWITNESS MISINFORMATION EFFECT](#), [FALSE MEMORY](#), [PARAMNESIA \(1\)](#), [PIAGET KIDNAPPING MEMORY](#), [RECOVERED MEMORY](#), [SOURCE MEMORY](#).

reality principle *n.* In [*psychoanalysis](#), the chief governing principle of the [*ego](#), exercising control over behaviour to meet the conditions imposed by external reality, thereby acting as a moderating influence on the [*pleasure principle](#). The Irish dramatist George Bernard Shaw (1856–1950) expressed its essence with remarkable clarity and brevity in his play *Man and Superman: A Comedy and a Philosophy* (1901–3), in the discussion about the Life Force near the end of Act III, when the Devil asks Don Juan what the use is of knowing oneself, and Don Juan replies: ‘Why, to be able to choose the line of greatest advantage instead of yielding in the direction of the least resistance’. The reality principle involves the conversion of [*free energy](#) into [*bound energy](#). Sigmund Freud (1856–1939) gave a full account of this aspect of his theory in 1915 in an article on ‘Instincts and their Vicissitudes’ (*Standard Edition*, XIV, pp. 117–40). *See also* [REALITY-EGO](#), [REALITY TESTING](#).

reality, psychical *See* [PSYCHICAL REALITY](#).

reality testing *n.* Objective differentiation between the external world and one's inner imaginative world, loss of which in a [*mental disorder](#) tends to indicate lack of [*insight \(3\)](#) and is often taken to be indicative of [*psychosis \(1\)](#). The term is used widely in clinical psychology and is closely related to [*reality monitoring](#) in cognitive psychology. The concept was introduced by the Austrian neurologist Sigmund Freud (1856–1939) in his article on ‘Formulations on the Two Principles of Mental Functioning’ (1911, *Standard Edition*, XII, pp. 218–26).

reason *n.* The faculty of [*rational](#) thought; rational grounds for a belief, or a [*premise](#) of an argument supporting a belief; a rational motive or cause for an action or a choice; sanity or soundness of mind. [From Old French *reisun* reason, from Latin *ratio* reckoning, from *rerī* to think]

reasoned action, theory of *See* [THEORY OF REASONED ACTION](#).

reasoning *n.* Cognitive processing directed at finding solutions to problems by applying formal rules of ***logic** or some other ***rational** procedure. See **CONDITIONAL REASONING**, **COUNTERFACTUAL REASONING**, **DEDUCTION**, **DEDUCTIVE REASONING**, **DEFAULT REASONING**, **DEONTIC REASONING**, **EPISTEMIC REASONING**, **INDUCTION (1, 2)**, **INFERENCE**, **LOGIC**, **LOGICAL ANALYSIS**, **MODAL LOGIC**, **NON-MONOTONIC REASONING**, **SYLLOGISM**. See also **MENTAL MODEL**, **PREMISE**, **RATIONAL**, **RATIONALISM (1, 2)**. Compare **PROBLEM SOLVING**.

rebirthing *n.* A technique of ***psychotherapy** based on and similar to ***primal therapy**, but concentrating specifically on reliving and coming to terms with one's birth pains and involving total body immersion in warm water.

rebound effect *n.* A pattern of events, opposite to those produced by a drug or some other special treatment, that occur when the drug or treatment is abruptly withdrawn, typical examples being rebound insomnia following sudden withdrawal from a ***hypnotic (2)** drug and ***REM rebound** following the cessation of a period of REM deprivation. See also **DELIRIUM TREMENS**.

rebound REM *n.* Another name for ***REM rebound**.

rebus *n.* A representation of a word or sentence by a combination of ***pictographs**, ***logographs**, or other symbols in the form of a puzzle. A typical example is h@b& to represent the word *hatband*. **rebuses** *pl.* [French *rébus*, from Latin *rebus* by things]

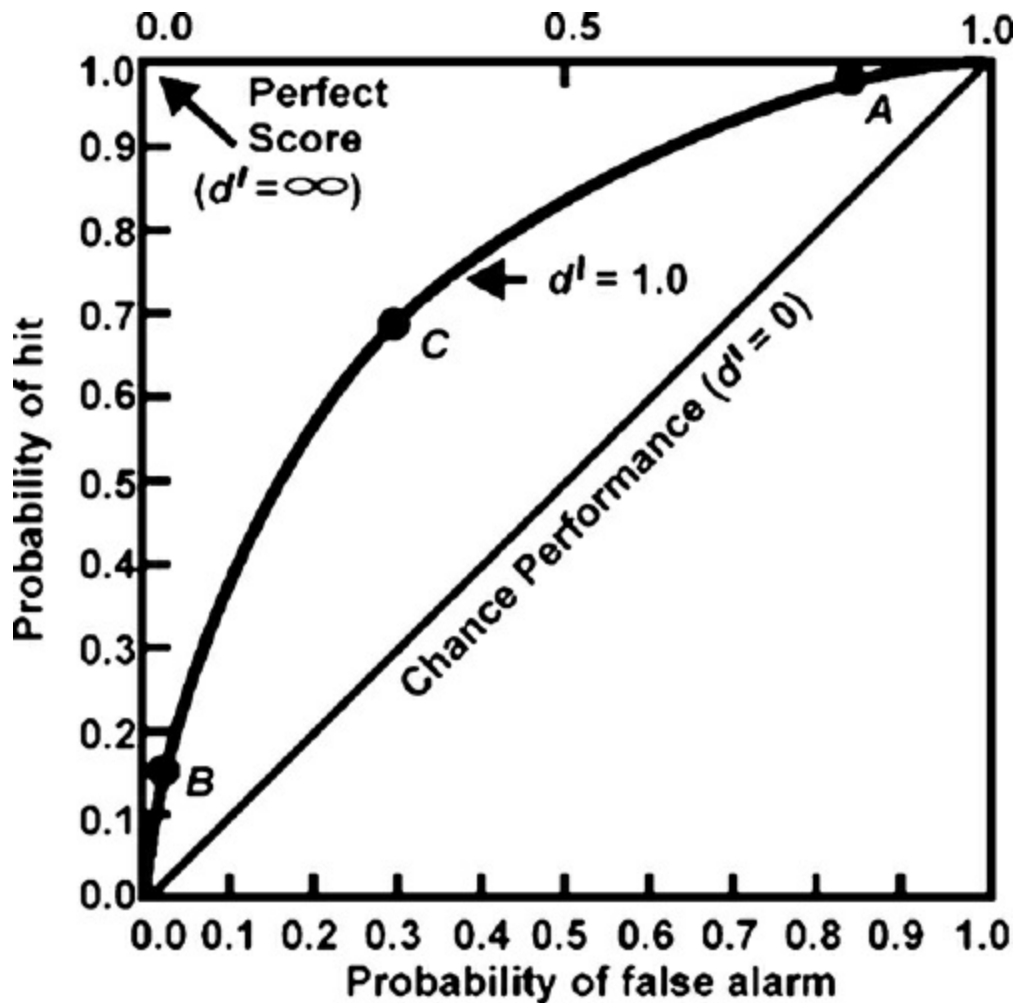
recall *n.* The act or process of retrieving information from memory spontaneously, either without ***cues (3)** in the case of *free recall* or with cues in the case of *cued recall*. It involves reproduction of the remembered information, in contrast to ***recognition**, which involves identification of a match between the remembered information and newly presented information, recognition generally being easier than recall and producing higher memory scores in formal tests. See also **ENCODING SPECIFICITY**, **MEMORY**, **MNEMONIC**, **SERIAL RECALL**, **STATE-DEPENDENT MEMORY**.

recapitulationism *n.* The doctrine that the development of an organism

from conception to maturity repeats the same sequence of stages as have occurred during the evolution of its **species* or **race* (2). Also called *palingenesis* or *recapitulation theory*. [From Latin *recapitulare* to reinstate headings in a document]

Received Pronunciation *n.* The standard, regionally neutral, prestige **accent* (1) of British English, sometimes (misleadingly) called BBC English. **RP** *abbrev.*

receiver operating characteristic *n.* In **signal* detection theory, a plot of the proportion of **false alarms* (2) on the horizontal axis against the proportion of **hits* on the vertical axis (see *illustration*), the diagonal from bottom left (0, 0) to top right (1, 1) corresponding to a **d prime* of zero, and the curve obtained from a particular experiment always describing an arc above this diagonal, its precise form depending on the value of *d prime*, which in turn depends on the **signal-to-noise ratio* and the observer's sensitivity to the signal, different points on the curve representing variations in the observer's attitude towards the relative importance of **misses* and false alarms. *See also* MEMORY OPERATING CHARACTERISTIC. **ROC** *abbrev.*



Receiver operating characteristic. The observer at A is concerned to avoid misses and is willing to risk many false alarms, and at B is concerned to avoid false alarms and is willing to risk many misses; the observer at C is equally concerned about misses and false alarms.

recency effect *n.* In **serial learning (1)*, enhanced memory for the last items in a series of items that have been learned. *See also* [SERIAL POSITION EFFECT](#). *Compare* [PRIMACY EFFECT \(1\)](#).

recency law *n.* The principle according to which the more recently information was learned the better it tends to be remembered.

receptive aphasia *n.* Another name for Wernicke's aphasia. *See* [APHASIA](#).

receptive field *n.* An area of the retina or any other receptor surface that when stimulated increases or decreases the propensity of a neuron at a higher level in the sensory system to discharge a nerve impulse, the receptor area thus being the receptive field of that neuron. The term is sometimes applied in the same way to the neurons in the **sensory* projection areas of receptors. A *classical receptive field* is one within which stimulation invariably excites the neuron or invariably inhibits the neuron; a *non-classical receptive field* is an area that surrounds or is adjacent to a classical receptive field and within which stimulation cannot influence the neuron directly but can modulate the firing of neurons in the associated classical receptive field. A receptive field is sometimes defined in terms of an external area of the perceptual field that stimulates a specified neuron rather than in terms of an internal area of the receptor surface. *See also* AUDITORY RECEPTIVE FIELD, CENTRE-SURROUND RECEPTIVE FIELD, COMPLEX CELL, DOUBLE-OPPONENT RECEPTIVE FIELD, END-STOPPED RECEPTIVE FIELD, HYPERCOMPLEX CELL, SIMPLE CELL. *Compare* PERCEPTUAL FIELD, VISUAL FIELD.

receptive orientation *n.* In **neo-Freudian* theory, a term used by the German-born US psychoanalyst Erich Fromm (1900–80) to denote a passive-dependent character type who leans on authority for knowledge and help, and on people in general for support, usually accompanied by a chronic inability to say no to requests and an inordinate fondness for food and drink. *Compare* EXPLOITATIVE ORIENTATION, HOARDING ORIENTATION, MARKETING ORIENTATION, PRODUCTIVE ORIENTATION.

receptor *n.* 1. An abbreviated name for a **sensory* receptor. 2. An abbreviated name for a **neuroreceptor*. [From Latin *recipere*, *receptum* to receive, from *re-* back + *capere*, *ceptum* to take]

receptor blocker *n.* Another name for a **competitive antagonist*.

receptor potential *n.* Another name for **generator potential*.

receptor site *n.* Another name for a **neuroreceptor*.

recessive gene *n.* A **gene* that is inherited from one parent and that

produces its characteristic ***phenotype** only in a homozygous organism, that is, only when the corresponding ***allele** inherited from the other parent is the same. Also (more accurately but less commonly) called a *recessive allele*. See also **COMPLEMENTATION**. Compare **DOMINANT GENE**.

reciprocal altruism *n.* A form of ***altruism** or helping behaviour whose performance or continuation is conditional on the recipient behaving altruistically or helpfully in return. The concept was introduced by the US biologist Robert L. Trivers (born 1943) in an article in the *Quarterly Review of Biology* in 1971, where he used the example of cleaner-fish, some 50 species of which are known to feed on parasites attached to the bodies, including the insides of the mouths, of other, larger species of fish, which reciprocate by refraining from eating the cleaner-fish. Trivers explained the basic idea as follows: Suppose a swimmer with cramp has 1/2 chance of drowning unless a passer-by jumps into the water to help. If this entails a 1/20 chance of both the swimmer and passer-by drowning, then, by volunteering the help, the passer-by who expects the good turn to be reciprocated by the swimmer in the future trades a 1/10 chance of drowning (two episodes, each with a 1/20 chance) for a 1/2 chance of drowning, so the altruism pays off in the end. He suggested that many psychological characteristics, such as guilt, gratitude, and sympathy, have been shaped by natural selection of the ability to detect and avoid individuals who take advantage of reciprocally altruistic relationships by cheating. See also **PRISONER'S DILEMMA GAME**, **TIT FOR TAT STRATEGY**.

reciprocal inhibition *n.* A technique of ***behaviour** therapy used especially to treat ***phobias** by repeatedly evoking a response that is physiologically incompatible with anxiety, such as deep muscular relaxation, simultaneously with the anxiety-provoking ***phobic stimulus**, usually imagined rather than actually present. A specialized application of this technique, with a hierarchy of increasingly anxiety-provoking imaginary situations involving the phobic stimulus, is called ***systematic desensitization**.

recoding test *n.* Another name for a ***coding test**.

recognition *n.* The act or process of perceiving or identifying information

*****ebook converter DEMO Watermarks*****

as matching or being the same as information that has been remembered. It is often contrasted with ***recall**, which involves reproduction of remembered information without ***cues** (3), and it is generally easier than recall, producing higher memory scores in formal tests. *See also* **MEMORY**, **MEMORY OPERATING CHARACTERISTIC**, **STERNBERG TASK**. **recognize** *vb.* [From Latin *recognoscere* to know again, from *re-* again + *cognoscere* to know, from *com-* together + *noscere* to know]

recognition heuristic *n.* A ***heuristic** used when making judgements, on the basis of limited relevant knowledge, as to which of two alternatives is higher on some criterion such as size or monetary value. If one of the alternatives is recognized and the other is not, the heuristic involves simply judging the recognized alternative to be higher. For example, if a person with limited knowledge of mountains is presented with pairs of mountain names and is asked which is taller in each pair, and if the person recognizes only about half the names, then choosing the recognized mountain whenever only one is recognized will yield a high proportion of right answers. This works when there is a strong correlation between recognizability and the criterion being judged. The heuristic was introduced in 1999 by the US psychologist Daniel G(ray) Goldstein (born 1969) and the German psychologist Gerd Gigerenzer (born 1947) in a book by Gigerenzer and several co-authors entitled *Simple Heuristics That Make Us Smart* and in 2002 in an article in the journal *Psychological Review* that was under editorial review when the book was published. *See also* **LESS-IS-MORE EFFECT**.

recombinant DNA *n.* A form of ***genetic engineering** in which genetic material is produced by combining ***DNA** extracted from different sources, often combining ***genes** from a human or animal with those from a bacterium, using ***restriction enzymes** to cut DNA chains and ***DNA** ligase to unite strands that have been cut. Not to be confused with ***DNA** recombination. *See also* **ANNEALING (2)**, **HETERODUPLEX DNA**, **HYBRIDIZATION**.

recombination *n.* Another name for ***DNA** recombination, not to be confused with ***recombinant DNA**.

reconstructive memory *n.* An active process whereby various strategies are used during the process of memory ***retrieval** to rebuild

*****ebook converter DEMO Watermarks*****

information from memory, filling in missing elements while remembering. It was first differentiated from ***reproductive memory** in 1932 by the English psychologist Sir Frederic Charles Bartlett (1886–1969), who studied it with the technique of ***successive reproduction**. *See also* CONSTRUCTIVISM, DEFERRED ACTION, FALSE MEMORY, WAR OF THE GHOSTS. *Compare* CONSTRUCTIVE MEMORY.

recovered memory *n.* A memory, usually for a traumatic event or experience, such as being sexually abused as a child, retrieved after having been forgotten or repressed, often for many years. Unless it is verified, what appears to be a recovered memory may in fact be a ***false memory**. *See also* DEFERRED ACTION, FALSE MEMORY SYNDROME, HYPNOTHERAPY, PARAMNESIA (1), PIAGET KIDNAPPING MEMORY. *Compare* EYEWITNESS MISINFORMATION EFFECT.

recruitment *n.* **1.** The process or practice of enlisting people, especially for military service or employment. **2.** A symptom of certain forms of hearing disorder in which there is a greater than normal increase in loudness with increasing stimulus intensity, resulting in a distressing exaggeration of loud sounds, while soft sounds may be comfortably audible. Also called *loudness recruitment*. **3.** An increase in the number of neurons firing as a stimulus is prolonged. [From French *recroître* to reinforce, from Latin *recrescere* to grow again, from *re-* again + *crescere* to grow]

rectus muscle *n.* A straight muscle, especially one of the ***extra-ocular muscles** attached externally to each eyeball along its front-to-back axis: the *superior rectus*, *medial rectus* (also called *internal rectus*), *lateral rectus* (also called *external rectus*), or *inferior rectus*. Together with the two ***oblique muscles**, the rectus muscles control eye movements, the lateral and medial recti moving the visual axis from side to side, and the superior and inferior recti moving the axis up and down. *See also* ABDUCENS NERVE, DIPLOPIA. [From Latin *rectus* straight]

red blood cell *n.* Another name for an ***erythrocyte**. Also called a *red blood corpuscle*.

red devils *n.* A street name for ***secobarbital** (quinalbarbitone) or ***Seconal**.

red-green cell *n.* A neuron that is located in the visual system and is excited by red light and inhibited by green light or vice versa. Such **opponent cells* are not found in the retina, where the **trichromatic theory* applies, but at higher levels in the visual system. *See also* BLUE-YELLOW CELL. *Compare* CONE.

red-green colour-blindness *n.* Another name for **daltonism*. US *red-green color-blindness*.

redintegration *n.* The restoration of a complete mental state when only a single element of it is experienced. A classic literary example, often quoted as an illustration of the power of the chemical senses to reawaken memories from the distant past, occurs at the end of the 'Overture' to the vast novel *À la Recherche du Temps Perdu* (Remembrance of Things Past) by the French novelist Marcel Proust (1871–1922), where the taste of a madeleine cake soaked in lime tea evokes vivid memories of childhood: 'I had recognized the taste of the crumb of madeleine soaked in her concoction of lime-flowers which my aunt used to give to me.... Immediately the old grey house upon the street, where her room was, rose up like the scenery of a theatre to attach itself to the little pavilion, opening on to the garden, which had been built out behind it for my parents', and so on for seven volumes. *See also* FLASHBACK (2), STATE-DEPENDENT MEMORY. [From Latin *re-* again + *integrare* to make whole, from *integer* whole]

red nucleus *n.* A large **nucleus* (2) in the front of the **tegmentum* of the midbrain in each hemisphere, receiving inputs from the motor cortex and the cerebellum and sending outputs to the inferior olivary nucleus on the same side and also to the cerebellum, the reticular formation, and the thalamus. It is involved in movement control in distal muscles, including those of the hands and feet. *See also* RUBROSPINAL TRACT. [So called because of its reddish appearance, which results from its high iron content]

Red Queen hypothesis *n.* The proposition that any evolutionary advance by one species is ipso facto detrimental to other species in the same **ecosystem*, so that species are involved in a competitive evolutionary race in which they must continually evolve merely to survive and maintain their positions. The term was introduced by the US evolutionary biologist Leigh
*****ebook converter DEMO Watermarks*****

(Maiorana) Van Valen (1935–2010) in an article in the journal *Evolutionary Theory* in 1973. [Alluding to the passage in Chapter 2 of Lewis Carroll's *Through the Looking Glass* in which Alice first finds herself on a chessboard and the Red Queen says: ‘Now, *here*, you see, it takes all the running *you* can do, to stay in the same place. If you want to get somewhere else, you must run at least twice as fast as that!’]

reduced reaction time *n.* Another name for **central reaction time*.

reductional division *n.* Another name for **meiosis (1)*.

reductionism *n.* An attempt to provide a complete explanation of a phenomenon in terms of events or processes occurring at a lower or more basic level. Thus a psychological phenomenon may be reduced to neurophysiological processes, which in turn are correlated in detail with biochemical processes, and these may be similarly reduced to chemical processes, and the chemical processes to physical processes. Reductionism usually entails a belief that the lower or more basic processes in some sense explain the higher; but critics argue that such correlations cannot amount to a complete explanation any more than a specification of the electronic or electrical processes taking place in a computer could explain the computations that it performs. **reductionist** or **reductionistic** *adj.*

reduction screen *n.* A visual barrier perforated by a pinhole through which an observer can view a scene while eliminating several important depth cues, namely monocular (movement) **parallax*, **ocular convergence*, and **stereopsis*. Also called an *artificial pupil*. Compare VOID MODE.

reductive interpretation *n.* In **analytical psychology*, a term used dismissively by Carl Gustav Jung (1875–1961) to characterize **interpretation* in classical **psychoanalysis*, in which the doctrine of **psychic* determinism encourages analysts to explain everything causally in terms of unconscious instinctual processes. According to Jung, on the contrary, ‘No psychological fact can ever be explained in terms of causality alone; as a living phenomenon, it is always indissolubly bound up with the continuity of the vital process, so that it is not only something evolved but also continually evolving and creative’ (*Collected Works*, 6, paragraph 717).

*****ebook converter DEMO Watermarks*****

reduplicative paramnesia *n.* A disorder of [*memory](#) in which people may believe that familiar objects such as buildings are not the ones they know but merely resemble them. *Compare* [CAPGRAS SYNDROME](#), [DOPPELGÄNGER](#).

reefer *n.* An obsolescent street name for a hand-rolled cigarette containing [*cannabis](#). [From *reef* the part of a sail gathered in when there is high wind, alluding to the resemblance of a cannabis cigarette to a rolled-up sail]

re-evaluation counselling *n.* Another name for [*co-counselling](#). US *re-evaluation counseling*. **RC** abbrev.

reference, delusion (ideas) of *See* [DELUSION OF REFERENCE](#), [IDEAS OF REFERENCE](#).

reference group *n.* Any group that an individual takes as a standard in adopting opinions, attitudes, or patterns of behaviour or in self-judgement of social standing. The term was introduced in 1942 by the US sociologist Herbert H(iram) Hyman (1918–85). The US psychologist Harold H(arding) Kelley (1921–2003) later distinguished between *normative reference groups*, which set standards that individuals use as positive or negative models, and *comparative reference groups*, which are used by individuals to judge their own income, status, education, and so on. *See also* [ANTICIPATORY SOCIALIZATION](#), [NEGATIVE REFERENCE GROUP](#), [POSITIVE REFERENCE GROUP](#), [RELATIVE DEPRIVATION](#).

referred pain *n.* Pain felt at a site in the body some distance from a [*lesion](#) that gives rise to it, well-known examples being [*angina](#), which originates from coronary artery disease but may be felt in the left arm, shoulder, or jaw, and pain in the right shoulder often felt by a person with disease of the [*gall bladder](#). It arises only from stimulation of deep-lying [*pain](#) receptors in viscera, joints, and muscles, and never from pain receptors in the skin. Also called *telalgia*. *See also* [PAIN](#), [SYNAESTHESIA \(2\)](#).

reflectance *n.* The degree to which a surface reflects light, sound, or any other form of radiant energy. Radiation striking a surface that is not reflected

is either absorbed, depending on the *absorbance* of the surface, or transmitted, depending on its *transmittance*, which is the reciprocal of its *opacity*, the degree to which it reflects or absorbs incident light. *See also* [LUMINANCE](#). [From Latin *reflectere* to turn back, from *re-* again + *flectere* to bend]

reflected appraisal *n.* An evaluation of oneself inferred from the reactions of others during social interaction. Also called *reflected self-appraisal*. [From Latin *reflectere* to turn back, from *re-* again + *flectere* to bend]

reflecting back *n.* In client-centred therapy or counselling, a process whereby the therapist or counsellor puts into words and feeds back, without **interpretation* (2) or judgement, the emotional content of the client's words and behaviour. The therapist might say, for example, 'You are angry because I am not taking your side against your husband'. Also called *reflection of feeling*.

reflection-impulsivity *n.* A **cognitive* style, first identified in 1958 by the US psychologist Jerome Kagan (born 1929), characterized by either *reflection* or *reflectivity*, a tendency to consider and deliberate over alternative solutions to problems, or *impulsivity*, a tendency to respond spontaneously without deliberation, especially in situations of uncertainty. It is usually measured by analysing patterns of response latencies and errors in simple tasks, a reflective person generally producing relatively few errors but long response times, and an impulsive person more errors but shorter response times. *See also* [MATCHING FAMILIAR FIGURES TEST](#). Also called *conceptual tempo*.

reflex *n.* 1. An immediate involuntary stereotyped **response* to a **stimulus* (1), such as blinking both eyes when something touches the cornea of either eye. In spite of being involuntary, many reflexes are effected by voluntary (striated) muscles, but some (such as the axon reflex) do not involve voluntary muscles. Also called a *reflex action* or a *reflex response*. *See* [ACCOMMODATION REFLEX](#), [ACHILLES TENDON REFLEX](#), [ACOUSTIC REFLEX](#), [AUDIO-OCULOGYRIC REFLEX](#), [AXON REFLEX](#), [BABINSKI REFLEX](#), [BICEPS REFLEX](#), [BLINK REFLEX](#), [CILARY REFLEX](#), [CORNEAL REFLEX](#), [DEEP TENDON REFLEX](#), [FLEXION REFLEX](#), [GAG REFLEX](#), [GRASP](#)

*****ebook converter DEMO Watermarks*****

REFLEX, MORO REFLEX, PATELLAR REFLEX, PUPILLARY LIGHT REFLEX, ROOTING REFLEX, SPINAL REFLEX, STARTLE REFLEX, STRETCH REFLEX, TRICEPS REFLEX, VESTIBULO-OCULAR REFLEX. *See also* CONDITIONED REFLEX, LOOMING, REFLEX ARC, UNCONDITIONED REFLEX. *adj.* 2. Of, relating to, or resembling a reflex (1). [From Latin *reflexus* bent back, from *reflectere* to bend back, from *flectare* to bend]

reflex arc *n.* A simple model of a neural pathway underlying a **reflex*, regarded by some psychologists as the basic element of behaviour: **stimulus* (1) → **sensory* receptor → **afferent* nerve → **interneuron(s)* → **efferent* nerve → **effector* → **response*. According to this model, a reflex carries an impulse from a sensory receptor to the spinal cord, where it connects either directly or via one or more interneurons with an efferent neuron that transmits the impulse to an appropriate muscle, gland, or other effector organ. The mechanism of the **axon* reflex does not conform to this pattern. *See also* CONDITIONED RESPONSE, MONOSYNAPTIC REFLEX, POLYSYNAPTIC REFLEX, UNCONDITIONED RESPONSE. *Compare* TOTE.

reflexology *n.* 1. A form of **psychotherapy* involving massage of the soles of the feet to relieve tension by stimulating nerve function and blood flow. 2. The doctrine, associated especially with Pavlovian **classical conditioning*, that all or almost all behaviour can be interpreted in terms of **reflexes*.

refraction *n.* A deflection in the direction of propagation of a light wave, sound wave, or other wave, caused by passing from one medium of transmission to another in which it is propagated at a different velocity, the degree of refraction depending on the relative **refractive* indices of the two media, the angle of incidence to the second medium, and the wavelength of the radiation. This phenomenon explains the working of a **lens*, including the **crystalline lens* of the eye, and the optical defect of chromatic aberration. *See also* ABERRATION (3), REFRACTIVE INDEX. **refract** *vb.* [From Latin *refractus* broken up, from *refringere* to break up, from *re-* again + *frangere* to break + *-ion* indicating an action, process, or state]

refractive index *n.* A measure of the degree of **refraction* of light or other radiation at the interface of two media, equal to the ratio of the sine of

*****ebook converter DEMO Watermarks*****

the angle of incidence to the sine of the angle of refraction, which in turn is equal to the ratio of the wave propagation speed in the first medium to the wave propagation speed in the second. *See also* [DIOPTRE](#).

refractory period *n.* **1.** A variable period of time following [*orgasm](#) during which males lack sexual desire and are incapable of achieving erection of the penis. *See also* [COOLIDGE EFFECT](#). **2.** A period up to approximately 2 milliseconds after an [*action potential](#) (the firing of a neuron) before the neuron recovers its capacity to fire again (the [*absolute refractory period](#)) or the subsequent period of up to 10 milliseconds during which its propensity to fire again is diminished (the [*relative refractory period](#)). **3.** A period following a response to a stimulus during which reaction time to a further stimulus is increased. Also called a *refractory phase* or, in sense 3, a *psychological refractory period* or *PRP*. [From Latin *refractus* broken, from *frangere* to break]

regeneration *n.* The process whereby a damaged [*axon](#) of a sensory or motor neuron in the peripheral nervous system grows a new connection to the organ, tissue, or cell that it previously innervated. In the central nervous system, damaged neurons do not always regenerate.

regenerative sprouting *n.* The growth of offshoots or sprouts from a severed axon initiating a process of [*regeneration](#).

regional cerebral blood flow *n.* Blood flow in localized areas of the brain during specific mental states or activities, recorded by a non-invasive [*brain](#) imaging technique such as a [*PET scan](#) or a [*SPECT scan](#), usually after introducing a radioactive substance, or by [*MRI](#). **rCBF** *abbrev.*

register *n.* **1.** In computer technology, a specialized memory location. **2.** A speech style associated with a particular topic or class of social interactions, such as legal [*jargon](#) (1), the [*argot](#) of a particular group, or [*slang](#). *See also* [VOCAL REGISTER](#). **3.** The anatomically determined range of a human voice. **4.** Another name for a [*sensory](#) register.

regression *n.* **1.** A reversion to an earlier, more immature mode of thinking, feeling, or behaving. **2.** In [*psychoanalysis](#), a [*defence mechanism](#)
*****ebook converter DEMO Watermarks*****

whereby a person reverts to a form of behaviour, thinking, or ***object-relationship** characteristic of an earlier stage of development in order to avoid or reduce ***anxiety**. *Libidinal regression* is a retreat to an earlier ***libidinal stage**, and tends to occur in response to conflict if there has been an earlier ***fixation** (2); *ego regression* is a return to earlier modes of mental functioning, as when an adult behaves in a childlike manner under stress. The concept was introduced by Sigmund Freud (1856–1939) in 1900 in his book *The Interpretation of Dreams* (Standard Edition, IV-V, at pp. 533–48). See also **REGRESSION IN THE SERVICE OF THE EGO**. **3.** In statistics, a technique for analysing the association between one or more ***independent variables** and a ***dependent variable**. See **MULTIPLE REGRESSION**, **REGRESSION ANALYSIS**, **REGRESSION TOWARDS THE MEAN**. **4.** A backward glance while reading a line of text. [From Latin *regressus* a stepping back + *-ion* indicating an action, process, or state]

regression analysis *n.* In statistics, the analysis of the relationship between a ***predictor variable** (or ***independent variable**) and a ***dependent variable**, usually expressed as a ***linear model** in which the value of the dependent variable is equal to a weighted value of the independent variable plus a constant. It was originally put forward in a primitive form by the English explorer, amateur scientist, and psychologist Sir Francis Galton (1822–1911) at a meeting of the Royal Institution in London in 1877. When more than one predictor variable is involved, it is called ***multiple regression**. Also called *linear regression*. See also **CROSS-VALIDATION** (2).

regression fallacy *n.* An erroneous interpretation of ***regression** towards the mean as being caused by something other than chance. A frequently quoted example reported in 1973 by the Israeli-American psychologists Daniel Kahneman (born 1934) and Amos Tversky (1937–96) comes from the experience of flying instructors. Experienced instructors noticed that praise given to a trainee pilot for an exceptionally smooth landing was usually followed by a rougher landing on the following attempt, and harsh criticism for an unusually rough landing was usually followed by a smoother landing on the following attempt, and the instructors therefore came to believe that praise was not merely ineffective but counter-productive and that punishment was highly effective, whereas in reality an unusually smooth or rough landing is likely to be followed by a more average one because of

regression towards the mean. The fallacy is usually explained by the use in judgements of this kind of the **representativeness heuristic*. Compare *NON-REGRESSIVENESS BIAS*.

regression in the service of the ego *n.* A term introduced into **ego* psychology by the US-based German psychologist Ernst Kris (1901–57) to denote the use of **regression* (2) as a means of facilitating creativity.

regression towards the mean *n.* In statistics, the tendency for the value of a variable predicted probabilistically and with random error to be closer to its mean than predicted. When a **predictor variable* is used to predict the value of a **dependent variable* with which it is imperfectly correlated, and then the actual value of the dependent variable is observed and compared with its predicted value, the observed value turns out most often to be somewhere between the predicted value and the mean. To clarify this phenomenon, consider the limiting case of a totally unreliable predictor variable that has a zero correlation with the dependent variable. Suppose a fair coin is tossed ten times, and the number of heads (the predictor variable) is used to predict the number of heads in the following ten tosses (the dependent variable). In this case there is *complete* regression to the mean, the expected value of the dependent variable being *equal* to its mean, namely five heads. The higher the correlation between the predictor variable and the dependent variable, the less the regression towards the mean, but unless the correlation is perfectly reliable, the expected value of the dependent variable is always somewhere between its predicted value and its mean. One manifestation of this phenomenon is the fact that when values fluctuate randomly around a mean value, an extreme score is relatively improbable, so that if such a score is observed, then the following observation is likely to be a less extreme score. A familiar instance of regression towards the mean is **filial regression*. US *regression toward the mean*. See also *NON-REGRESSIVENESS BIAS*, *ONE-GROUP PRETEST–POSTTEST DESIGN*, *REGRESSION FALLACY*. Compare *OVERDOMINANCE*. [From Latin *regressus* a stepping back + Old French *moien*, from Latin *medius* middle]

regulator *n.* A person who regulates or controls, or anything that regulates or controls, especially (in social psychology) a **gesture* (1) that accompanies speech and helps to coordinate turn-taking, including raising a hand in the air

*****ebook converter DEMO Watermarks*****

to indicate that one has not finished speaking, and establishing **eye* contact at the beginning and end of a speaking turn. *See also* [KINESICS](#).

regulator gene *n.* A gene that controls the expression of a **structural gene* by directing the synthesis of a **gene* regulator that binds to a **gene* operator and affects the synthesis of the structural gene's protein product. *See* [ACTIVATOR GENE](#), [REPRESSOR GENE](#). *See also* [OPERON](#). *Compare* [STRUCTURAL GENE](#).

rehabilitation *n.* The process of helping a person who has been ill, disabled, hospitalized, or imprisoned to re-adapt to society or find employment; more generally, the process of restoring the status or reputation of a person or thing. *See also* [HALFWAY HOUSE](#). **rehabilitate** *vb.* [From Latin *rehabilitare* to restore, from *re-* again + *habilitas* skill + *-ation* indicating a process or condition]

rehearsal buffer *n.* Another name for a **phonological buffer store*.

rehearse *vb.* **1.** To repeat or go over something, usually in order to commit it to memory or to retain it in memory. **2.** To recall or enumerate items of information repeatedly in order to retain them in **short-term memory*. Such repetition is called *maintenance rehearsal* when it is simple repetition and *elaborative rehearsal* when deeper processing is involved. *See also* [PHONOLOGICAL LOOP](#). **3.** To practise a speech or a musical or dramatic act in preparation for a performance of it. **rehearsal** *n.* [From Old French *rehercier* to harrow again, from *re-* again + *hercer* to harrow, from Latin *hirpex*, *hirpici* a rake or harrow]

Reichian therapy *n.* Another name for **orgone therapy*. [Named after the Austrian (later US-based) psychiatrist Wilhelm Reich (1897–1957), who introduced it in 1942 in his book *The Function of the Orgasm*, not a translation of *Die Funktion des Orgasmus* (1927), despite its similar title.]

reify *vb.* To treat an abstract concept as something concrete, as when a child asks what colour sadness is. *See also* [CATEGORY MISTAKE](#). **reification** *n.* The act or process of reifying. [From Latin *res* a thing, on the model of the English word *deify*]

reinforcement *n.* 1. In **operant* conditioning, any **stimulus (1)* that, if it is presented soon after a **response*, increases the relative frequency with which that response is emitted in the future; also the process whereby a response is strengthened in this way. See also CUMULATIVE RECORD, DIFFERENTIAL REINFORCEMENT, LAW OF EFFECT, NEGATIVE REINFORCEMENT, REINFORCEMENT SCHEDULE, SKINNER BOX, SOCIAL LEARNING. 2. In **classical conditioning*, an **unconditioned stimulus* that, if paired repeatedly with a **conditioned stimulus*, causes the conditioned stimulus to elicit a **conditioned response*. **reinforce** *vb.* To provide reinforcement (1, 2). **reinforcer** *n.* A **stimulus (1)* that provides reinforcement (1, 2).

reinforcement schedule *n.* In **operant* conditioning, a particular arrangement of the contingency of **reinforcement (1)*, relating an organism's responses to the frequency and timing of the reinforcement. In *continuous reinforcement*, the organism is rewarded after every response, whereas in *partial reinforcement* or *intermittent reinforcement* the organism is rewarded after a certain amount of time has elapsed or a certain number of responses have been made. The most important *simple reinforcement schedules* are the **fixed-interval schedule*, **fixed-ratio schedule*, **variable-interval schedule*, and **variable-ratio schedule*. See also COMPOUND REINFORCEMENT SCHEDULE, DIFFERENTIAL REINFORCEMENT OF HIGH RESPONSE RATES, DIFFERENTIAL REINFORCEMENT OF LOW RESPONSE RATES, DIFFERENTIAL REINFORCEMENT OF OTHER RESPONSES, DIFFERENTIAL REINFORCEMENT OF PACED RESPONSES.

reinforcing selection *n.* Pressures of **natural selection* operating at two or more levels (individual, family, population) in such a way that certain genes are favoured at all levels and their spread through the population is accelerated. Compare COUNTERACTING SELECTION.

Reissner's membrane *n.* A membrane separating the vestibular and cochlear canals of the inner ear. [Named after the German anatomist Ernst Reissner (1824–78) who discovered it and published his finding in 1851]

Reiz *n.* Stimulus. This causes confusion in English-speaking countries where *R* is an abbreviation for *response*. **R** *abbrev.* [From German *Reiz* stimulus]

Reiz limen *n.* Absolute threshold. **RL** *abbrev.* [From German *Reiz* stimulus + Latin *limen* a threshold]

rejection-then-retreat technique *n.* Another name for the *door-in-the-face technique.

related scores t test *n.* In *inferential statistics, a version of the **t* test used for comparing means from two statistically related samples, such as two sets of scores taken from a single group of research participants or subjects. Also called a *paired samples t test*. Compare INDEPENDENT SAMPLES T TEST.

relationship, coefficient of See COEFFICIENT OF RELATIONSHIP.

relative deprivation *n.* The discrepancy that one perceives between what one has and what one could or should have, in contradistinction to absolute deprivation of the bare necessities for living. *Egoistic relative deprivation* arises from unfavourable comparisons between one's individual circumstances and those of a comparative *reference group, and it tends to generate personal dissatisfaction and unhappiness; *fraternal relative deprivation* arises from unfavourable comparisons between the circumstances of one's group (social class, racial group, occupational group, and so on) and a reference group, and it tends to generate protest behaviour, rebellion, and in extreme cases revolution. The concept was introduced by the US sociologist Samuel A(ndrew) Stouffer (1900–60) and several co-authors in their study of *The American Soldier* (1949), where it was reported that army units with the highest rates of promotion also had the highest levels of dissatisfaction among those not promoted. The US sociologist Robert K(ing) Merton (1910–2003) developed the idea further in his book *Social Theory and Social Structure* (1957), arguing that high rates of social mobility raised hopes and expectations and encouraged over-optimistic social comparisons. The British sociologist Walter Garrison (Garry) Runciman (born 1934), in his book *Relative Deprivation and Social Justice* (1966), provided further evidence that workers' feelings of deprivation and class consciousness tend to be relative rather than absolute. Subsequent researchers have generally corroborated and extended these basic ideas and findings. See also EQUITY THEORY, SOCIAL COMPARISON.

relative error *n.* In **psychophysics*, the **absolute error* divided by the true value of a stimulus.

relative pitch *n.* The ability to recognize the **pitch* of a **tone* (1), or to produce a tone at its correct pitch, by referring it to a tone of known pitch. Thus a person with relative pitch who is presented with a C and told that it is a C can recognize another tone as an F or can hum an F. *Compare* *ABSOLUTE PITCH*.

relative refractory period *n.* A **refractory period* (2), lasting up to 10 milliseconds, immediately after the **absolute refractory period*, during which a neuron will fire only in response to a very strong stimulus, well above the normal threshold strength. This allows frequency of neuron firing to be used by the nervous system to signal stimulus strength in spite of the **all-or-none law*.

relative size *n.* The **angular size* of an object as compared with that of another; specifically, one of the monocular cues of visual **depth perception*, useful only with objects that are familiar or of known size, objects with relatively large angular sizes being perceived as closer than objects with relatively small angular sizes.

relaxation technique *n.* 1. Any method or procedure designed to induce relaxation. See *ABAISSEMENT DU NIVEAU MENTAL*, *AUTOGENIC TRAINING*, *BASIC-ID*, *BIOFEEDBACK*, *HYPNOSIS*, *MINDFULNESS*, *RECIPROCAL INHIBITION*, *TRANSCENDENTAL MEDITATION*, *PROGRESSIVE RELAXATION*, *PSYCHOPROPHYLAXIS*, *SYSTEMATIC DESENSITIZATION*. 2. In **connectionism* (1) and **parallel distributed processing*, the use of iterated propagation of signals through a network of connected units until they are all responding as consistently as possible to signals received from one another and no further adjustments in connections and firing rates can lead to further improvements. If some connections between units are excitatory and others are inhibitory, then a single signal propagated through the network will cause some of the units to increase their strength of firing in response to excitatory input from other units, and will cause other units to decrease their strength of firing because of inhibitory input, but the resulting pattern will not necessarily be stable or settled, because a second signal propagated through the network will in most cases
*****ebook converter DEMO Watermarks*****

result in further changes, but after a number of iterations the system will usually settle down to an equilibrium state. *Compare* [ANNEALING \(1\)](#).

relaxation therapy *n.* Another name for [*progressive relaxation](#).

relaxin *n.* A polypeptide hormone that is secreted by the corpus luteum of a pregnant woman and that relaxes the pelvic ligaments, allowing the pelvis to dilate during childbirth.

relay cell *n.* Another name for an [*interneuron](#). Also called a *relay neuron*.

releaser *n.* In ethology, a [*sign](#) stimulus that is contained in a structure, crest, colouring pattern, call, or scent and that evokes an immediate innate response or [*fixed-action pattern](#), having evolved specifically as a signal to communicate with [*conspecifics \(1\)](#). Not all sign stimuli are releasers: the speckling pattern on some birds' eggs is a sign stimulus for incubation behaviour, but it is believed to have evolved as camouflage. *See also* [INNATE RELEASING MECHANISM](#), [VACUUM ACTIVITY](#).

releasing hormone *n.* Any of several [*peptide](#) hormones secreted by the hypothalamus and transmitted to the anterior pituitary via the hypothalamic–hypophyseal portal system, where it stimulates the release of a [*trophic hormone](#). *See* [CORTICOTROPHIN-RELEASING HORMONE](#), [GROWTH HORMONE RELEASING HORMONE](#), [LUTEINIZING — HORMONE RELEASING HORMONE](#), [THYROTROPHIN-RELEASING HORMONE](#). Also called a *releasing factor*.

reliability *n.* The quality of being trustworthy or dependable. In psychometrics, the [*internal consistency](#) and [*stability](#) with which a measuring instrument performs its function, corresponding roughly to the everyday concept of accuracy. *See* [CRONBACH'S ALPHA](#), [EQUIVALENT-FORM RELIABILITY](#), [KUDER–RICHARDSON COEFFICIENT](#), [SPLIT-HALF RELIABILITY](#), [TEST–RETEST RELIABILITY](#). *See also* [CLASSICAL TEST THEORY](#), [GENERALIZABILITY THEORY](#). *Compare* [VALIDITY](#). [From Old French *relier* to rely, from Latin *religare* to tie back + *-abilitas* capacity, from *habilis* able]

reliability coefficient *n.* In psychometrics, a ***correlation** coefficient or other numerical index of the ***reliability** of a test or measure.

REM atonia *abbrev.* An inhibition of skeletal muscles (but not ***extra-ocular muscles**) during ***REM sleep**, manifested as complete ***atonia**, that is governed by a small inhibitory centre in the pons called the ***subcoerulear nucleus** and by the ***magnocellular nucleus** in the medulla oblongata to which it is connected, and that prevents spinal nerves from activating skeletal muscles and thereby stops dreams from being acted out by the sleeper. The only observable bodily movements in a person in REM sleep, apart from breathing and rapid eye movements, are occasional twitches of the extremities, except in people with ***REM behaviour disorder**. The French physiologist Michel Jouvet (born 1925) discovered the mechanism in 1965 by performing experiments on cats in which he used a heated wire to destroy a small volume of the subcoerulear nucleus or of the magnocellular nucleus to which it is linked. This caused the cats to move about during REM sleep, stand up, twitch their whiskers, hiss, paw the air, and make movements typical of stalking and attacking prey—a phenomenon called *REM sleep without atonia*. See also **NARCOLEPSY**, **SLEEP PARALYSIS**. Compare **RAPID EYE MOVEMENT SLEEP BEHAVIOUR DISORDER**. [From *rapid eye movement* + *atonia*, from Greek *a-* without + *tonos* tension or tone + *-ia* indicating a condition or quality]

REM behaviour disorder *abbrev.* A condition in which ***REM atonia** does not function during episodes of dreaming. People with this disorder thrash violently about, leap out of bed, and sometimes attack bed-partners during REM sleep. It is assumed to be due to a lesion in the ***subcoerulear nucleus** or the ***magnocellular nucleus**. US *REM behavior disorder*. See **RAPID EYE MOVEMENT SLEEP BEHAVIOUR DISORDER**. **RBD** *abbrev.*

remember *n.* To maintain in or recall to consciousness something previously experienced or learned, or to retain information. See **MEMORY**. [From Latin *re-* again + *memor* mindful]

reminiscence *n.* 1. The act or process of recalling or recounting a past experience; the event recalled or recounted, or something that reminds one of a past experience. See also **ANAMNESIS (1)**. 2. In ***cognitive** psychology, an
*****ebook converter DEMO Watermarks*****

improvement in memory for material or performance of a task some time after learning it, compared to the level of performance immediately after learning, especially when the learning was carried out by **massed practice*. The concept was introduced in 1913 by the Welsh schoolteacher Philip Boswood Ballard (1865–1950), who reported that schoolchildren who memorized passages of poetry and were tested repeatedly for periods up to a week could often recall lines on later tests that they could not recall on earlier tests. Ballard contrasted this phenomenon with **obliviscence*. Reminiscence of some items of information can be offset by forgetting of others, so that the overall performance may not improve over time; however, under some conditions there may be an overall gain in performance over successive tests, in which case the phenomenon is called **hypermnnesia*. See also *SUCCESSIVE REPRODUCTION*. **reminiscent** *adj.* [From Latin *reminisci* to call to mind, from *re-* again + *mens* mind]

remote viewing *n.* A conjectural **paranormal* phenomenon involving **extra-sensory perception* of distant objects or events, especially of large environmental features such as lakes or prominent buildings. Also called *clairvoyance*.

REM rebound *abbrev.* The tendency for a person or animal deprived of **REM sleep* to spend an increased proportion of sleeping time in REM sleep during immediately succeeding sleeping periods. In research into this phenomenon, the person or animal is awakened whenever a period of REM begins and then allowed to go back to sleep, carefully curtailing the amount of REM sleep but not the total amount of sleep. Also called *rebound REM*. See also *REBOUND EFFECT*.

REM sleep *abbrev.* Rapid-eye-movement sleep, a stage of sleep occurring in progressively lengthening episodes roughly every 90 minutes throughout the night in human adults and occupying about 20 per cent of sleeping time, strongly associated with vivid **dreams (1)*, and characterized by **rapid eye movements*, **theta waves*, absence of **delta waves*, penile erections in males, and **REM atonia* of the skeletal muscles preventing dreams being acted out. REM sleep does not occur in reptiles but has been found in birds and almost all mammals, including dogs and cats (whose eyelids can be lifted gently to reveal darting eyes during REM episodes) and also in bats, moles, and

*****ebook converter DEMO Watermarks*****

whales, but not in the Australian spiny anteater or echidna of the genus *Tachyglossus*, which is exceptional in this regard. Also called *active sleep*, *desynchronized (D) sleep* or *paradoxical sleep*. See also REM REBOUND, SLEEP. Compare NREM SLEEP.

renifleur *n.* A person with *osphresiolagnia; one given to recurrent sexually arousing fantasies, sexual urges, or behaviour involving smells. [French *renifleur* a sniffer]

renin *n.* A hormone secreted by the kidneys in response to signals from *baroreceptors and *blood-flow receptors, indicating falling blood pressure or blood flow or a rise in the concentration of *vasopressin in the blood. Its secretion causes the synthesis of *angiotensin II, which leads to the constriction of blood vessels, compensating for the lowered blood pressure, and angiotensin II also precipitates the release of *aldosterone, leading to decreased sodium excretion in urine, therefore increased whole-body sodium and the stimulation of the *subfornical organ, which tends to initiate drinking. [From Latin *renes* kidneys, from *ren* a kidney]

Renshaw cell *n.* A type of spinal *motor neuron that releases glycine as a neurotransmitter, inhibiting the activity of *alpha motor neurons and preventing their repeated firing. See also GAMMA MOTOR NEURON. [Named after the US neurologist Birdsey Renshaw (1911–48) who first reported its discovery in the *Journal of Neurophysiology* in 1946]

reparation *n.* The act or process of repairing, compensating, or making amends. In *Kleinian analysis, a mechanism associated with depressive anxiety and feelings of guilt whereby one repairs the damage done by destructive fantasies to an *instinctual object, enabling the *depressive position to be overcome. [From Latin *reparare* to mend, from *parare* to prepare]

repeated-measures analysis of variance *n.* A form of *analysis of variance that is used to analyse the difference between three or more means when the sets of scores are not independent, data that require this type of analysis most often arising in *within-subjects designs when several measurements of a variable are taken from a single group of individuals at

*****ebook converter DEMO Watermarks*****

different times. *[Multifactorial analysis](#) of variance may involve repeated measures on one or more of its independent variables.

repeated reproduction See [SUCCESSIVE REPRODUCTION](#).

Repertory Grid Test *n.* A test designed to reveal the respondent's ways of construing the world according to *[personal construct theory](#). The respondent is presented with three elements from the domain of interest (people, events, or objects) and is asked to indicate in what way any two of the elements are similar to each other and different from the third. For example, if the three elements are *my father*, *my boss*, and *my husband*, then the respondent may reply that *my father* and *my boss* are both unfriendly and in that way different from *my husband*, thereby eliciting the personal construct *friendly–unfriendly* among the respondent's ways of construing people. Then the respondent answers the same question with regard to a second group of three elements, and so on, until all the respondent's important constructs in the relevant domain have been elicited, whereupon a grid is constructed, with elements running across the top, elicited constructs down the side, and each cell marked with a tick if the construct applies to the element, a cross if it does not apply, or unmarked if the respondent has not used the construct to judge the element. After the repertory grid has been drawn up, the constructs may be presented as *[rating scales](#) on which the respondent rates each of the elements on each of the constructs. What is unusual about this test is that it is tailored to the individual respondent's way of construing or interpreting the world. The earliest form of the test was first described by its inventor, the US psychologist George A(lexander) Kelly (1905–67), in his book *The Psychology of Personal Constructs* (1955, Vol. 1, pp. 219–66). See also [GRID ANALYSIS](#), [ROLE CONSTRUCT REPERTORY TEST](#). **Rep test** *abbrev.* [From *repertory* an entire stock of things available, from Latin *repertorium* a storehouse, from *reperire* to obtain, from *re-* again + *parere* to bring forth]

repetition compulsion *n.* In *[psychoanalysis](#), a type of *[compulsion](#) characterized by a tendency to place oneself in dangerous or distressing situations that repeat similar experiences from the past. Sigmund Freud (1856–1939) introduced it in 1914 in an article on ‘Remembering, Repeating and Working-Through’ (*Standard Edition*, XII, pp. 147–56) and discussed it

*****ebook converter DEMO Watermarks*****

at length in his book *Beyond the Pleasure Principle* (1920). In analysis, the ***transference** often contains elements that involve recreations of past conflicts with parents and other family members. Also called a *compulsion to repeat*. See also **FATE NEUROSIS**.

repetition effect *n.* In ***serial recall** of a string of letters, numbers, or other items, the phenomenon of generally superior performance when none of the items occurs more than once than when some items are repeated. It is a special case of ***Ranschburg inhibition**.

repetitive DNA *n.* Any segment of ***DNA** containing stuttering duplications of a sequence of base pairs that may be from tens to hundreds of base pairs long. Most repetitive DNA does not code for proteins but consists of ***introns** or ***junk** DNA with no apparent function, and because it tends to be highly variable and individually distinctive, it is useful in ***DNA** fingerprinting. Also called a *VNTR locus*. See also **CENTROMERE**.

replication *n.* **1.** The reproduction of exact copies of complex ***DNA** or other molecules such as occurs during the growth of living tissue. **2.** The repetition of an experiment or other research procedure to check the ***external validity** of the results.

representability *n.* In ***psychoanalysis**, an aspect of ***dreamwork** denoting the quality of ideas that have been transformed so as to be capable of representation by visual images. Sigmund Freud (1856–1939) discussed considerations of representability in 1900 in his book *The Interpretation of Dreams* (*Standard Edition*, IV-V, at pp. 539–49).

representation *n.* **1.** Anything that corresponds to something else in certain specified ways, or that serves as an ***image** (1, 2, 3) of it. **2.** More specifically a formal system for making explicit a certain class of information together with a specification of how the system achieves this, typical examples being representations of the natural numbers by systems of Arabic numerals (1, 2, 3, 4,...), Roman numerals (I, II, III, IV,...), or binary digits (1, 10, 11, 100,...), each system having its own explicit rules for constructing an integer of any desired size. ***Computational theories** of vision seek to construct representations of visual information.

*****ebook converter DEMO Watermarks*****

representational momentum *n.* After perceiving a static pictorial image of a moving object, such as a photograph of a person jumping off a wall, a tendency for subsequent recall of the image to be extrapolated forward in time, as though the movement implied in the image had continued further along its course. Respondents who are later asked to pick out the original image from a sequence of images of the scene at different points in time are more likely to err by selecting one slightly later in time than one slightly earlier. The phenomenon was first reported by the US psychologist Jennifer J. Freyd (born 1957) in an article in the journal *Perception and Psychophysics* in 1983. See also [CONSTRUCTIVE MEMORY](#), [SCHEMA](#). **RM** abbrev. [From Latin *repraesentare* to exhibit, from *re-* again + *praesentare* to present + *momentum* movement or impetus, from *movere* to move]

representativeness heuristic *n.* A cognitive [*heuristic](#) through which people estimate the probability that *A* belongs to (or originates from) a particular class *B* by judging the degree to which *A* is representative or typical of *B*. It can lead to errors of judgement because it ignores [*prior probabilities](#) (1) and can thus cause people to commit the [*base-rate fallacy](#), and if it is used to estimate the probability of obtaining a particular value in a sample drawn from a known population, then it is insensitive to information about the sample size and may therefore cause people to commit the [*sample size fallacy](#). See also [CONJUNCTION FALLACY](#), [NON-REGRESSIVENESS BIAS](#), [REGRESSION FALLACY](#).

repressed gene *n.* A [*gene](#) that has been inactivated by a [*gene](#) repressor.

repression *n.* In [*psychoanalysis](#), a [*defence mechanism](#) whereby unacceptable thoughts, feelings, or wishes are banished from [*consciousness](#). In an article entitled 'Repression' in 1915, Sigmund Freud (1856–1939) gave the following brief and frequently quoted definition: '*The essence of repression lies simply in turning something away, and keeping it at a distance, from the conscious*' (Standard Edition, XIV, pp. 146–58, at p. 147, italics in original). In [*primal repression](#), wishes emanating from the [*id](#) are blocked from reaching consciousness; in [*primary repression](#), anxiety-arousing information already in consciousness is removed and blocked from returning; and in [*secondary repression](#) conscious material that is reminiscent

*****ebook converter DEMO Watermarks*****

of repressed material is also removed from consciousness. The term (German *Verdrängung*) was introduced in its psychological sense in 1806 by the German philosopher and psychologist Johann Friedrich Herbart (1776–1841) (*Samtliche Werke*, V, p. 19) and repeated in 1824 in his book *Psychologie als Wissenschaft* (Psychology as Science), and it has not been established whether Freud knew of this work when he began using the term in 1894. See also [COUNTERCATHESIS](#). Compare [FORECLOSURE](#), [SUPPRESSION](#) (with which this concept is often confused). **repress** *vb.* **repressed** *adj.*

repression–sensitization scale *n.* A personality questionnaire designed to measure a respondent's characteristic mode of reacting to threatening stimuli or ideas, typical *repressors* tending to react by blocking, denial, and repression, that is, by putting threatening ideas out of their minds, and *sensitizers* tending to react by approaching, facilitating, and increasing vigilance, that is, by confronting the threatening stimuli directly. It was developed by the US psychologist Donn Byrne (born 1931), on the basis of items taken from the [*MMPI](#), and published in the *Journal of Personality* in 1961. **R–S scale** *abbrev.*

repressor gene *n.* A [*regulator](#) gene that synthesizes a [*gene](#) repressor capable of binding to a [*gene](#) operator and preventing the expression of a [*structural gene](#) by suppressing the synthesis of its protein product. Compare [ACTIVATOR GENE](#).

reproducibility *n.* In a [*Guttman scale](#), the degree to which the items can be arranged in a hierarchy such that a respondent's agreement to an item implies agreement to all items below it in the hierarchy, deviations from this pattern being counted as errors. It is often abbreviated to *Rep* and defined as $Rep = 1 - (\text{number of errors})/(\text{total number of responses})$, a Guttman scale being considered satisfactory if it has been administered to a large group of respondents and its reproducibility is at least .90, implying that the scale is reasonably unidimensional, measuring mainly one major variable. See also [UNIDIMENSIONALITY](#). **Rep** *abbrev.*

reproduction method *n.* Another name for the [*method of average error](#).

reproductive interference *n.* Impairment of the reproduction of learned material caused by the learning of other material. See [PROACTIVE INTERFERENCE](#), [RETROACTIVE INTERFERENCE](#).

reproductive memory *n.* Accurate retrieval of information from memory, without significant alteration. The English psychologist Sir Frederic Charles Bartlett (1886–1969) first differentiated it from [*reconstructive memory](#) in 1932.

Rep test See [REPERTORY GRID TEST](#).

resampling statistics *n.* A general approach to statistical analysis in which, given a set of scores, new data are generated by repeated random sampling with replacement from the existing scores (the bootstrapping technique) or by using a data-generating mechanism such as a computer's random number generator (the [*Monte Carlo method](#) or simulation technique), and the results of the new samples are then examined. Thus if 7/10 patients given a drug and 2/10 given a [*placebo \(1\)](#) improved, a researcher could randomly select 10 balls with replacement from an urn containing 9 white balls (representing the improved patients) and 11 black balls (representing the unimproved patients) and count the proportion of these samples containing 7 or more white balls; if the proportion is less than 5 per cent, then the observed result is statistically significant. The procedure would normally be performed using a computer rather than a physical urn and balls. It is similar to [*randomization](#) statistics but differs from it in using the observed scores rather than all possible scores that could be generated. See also [MONTE CARLO METHOD](#).

research hypothesis *n.* Another name for an [*alternative hypothesis](#).

reserpine *n.* An [*alkaloid](#) extracted from the roots of the south-east Asian plant [*Rauwolfia serpentina](#), used for the treatment of hypertension and as a sedative and tranquillizer. It has a broad spectrum of pharmacological actions, including especially the progressive depletion of the neurotransmitters [*noradrenalin](#) (norepinephrine), [*dopamine](#), and [*serotonin](#) from synaptic vesicles in the central nervous system, and it tends to cause

severe depression. [From German *Reserpin* an irregular blend of Latin *Rauwolfia* and *serpentina*]

residual *n.* **1.** In statistics, especially in **regression* analysis and **analysis of variance* (ANOVA), short for residual variance, that part of the variance in the dependent variable unaccounted for by the independent variables and thus attributed to chance variation. **2.** The difference between a score and its expected value according to a theoretical model. [From Latin *residuus* remaining over, from *residere* to stay behind + *-alis* of or relating to]

residual schizophrenia *n.* A form of **schizophrenia* without **positive* symptoms, that is, without **delusions*, **hallucinations*, **disorganized speech*, **disorganized thinking*, or **catatonia*, but with evidence of **negative* symptoms such as **affective flattening*, **alogia*, or **avolition*.

resinous odour *n.* One of the six primary odours in **Henning's prism*, resembling the odour of resin or turpentine. US *resinous odor*.

resistance *n.* The process of striving against, opposing, or withstanding something. In **psychoanalysis*, the tendency to strive against the transition of **repressed* thoughts, feelings, or wishes from the **unconscious* (2) to **consciousness*, especially an attempt to prevent this happening while undergoing psychoanalysis. The **interpretation* (2) of resistance is an important aspect of psychoanalytic technique. Sigmund Freud (1856–1939) discussed a number of forms of resistance in *Studies on Hysteria* (1895, *Standard Edition*, II, at pp. 278–87) and in *Inhibitions, Symptoms and Anxiety* (1926, *Standard Edition*, XX, pp. 77–175, at pp. 158–60). In an article on ‘A Difficulty in the Path of Psycho-Analysis’ in 1917, he interpreted hostility to his work as further evidence of resistance (*Standard Edition*, XVII, pp. 137–44). When it occurs during psychoanalysis, it is also called *transference resistance*. See also *NEGATIVE THERAPEUTIC REACTION*, *WORKING THROUGH*.

resistance stage *n.* The second stage of the **general adaptation syndrome* to **stress* (1), during which the body copes actively with a stressor by mechanisms such as sending **leucocytes* to the site of an injury or infection. See also *ALARM REACTION*, *EXHAUSTION STAGE*.

resolution phase *n.* The fourth phase of the *sexual response cycle, occurring after the *orgasmic phase.

resonance theory *n.* Another name for the *place theory of pitch perception. Also called *resonance place theory*.

resource dilemma *n.* A type of *social dilemma in which players harvest resources (usually tokens representing money) from a common resource pool of known size, and after each trial the pool is replenished at a predetermined rate. Players are free to choose, within limits, how much to take from the pool, and it is in each player's individual self-interest to take as much as possible, but if everyone behaves greedily, then the pool is exhausted and every player suffers. One popular type of resource dilemma is the *commons dilemma. The resource dilemma research paradigm provides a useful model of everyday social dilemmas involving conservation of natural resources. It is also called a *resource management dilemma* or a *resource conservation dilemma*, and the corresponding experimental games are sometimes called *take-some* games.

resource-holding potential *n.* A measure of an animal's capacity to win a fight against an opponent, assuming that both adopt the same behavioural strategy. It is often equivalent simply to the animal's *escalated fighting ability, which in turn derives from its strength, size, and experience, but it is sometimes affected by other factors, as when a male insect in possession of a female has greater chances of winning, even against a stronger opponent, because it is easier to hold on to something than to wrest it from the grip of an opponent. Also called *resource-holding power* or *relative holding power*. **RHP** *abbrev.* [Coined in 1974 by the British biologist Geoffrey Alan Parker (born 1944)]

respiration *n.* Breathing, or more generally any process by which an organism generates usable energy, usually in the form of molecules of *ATP, from the oxidative metabolism of food. *See also* KREBS CYCLE. [From Latin *respirare* to breathe + *-ation* indicating a process or condition]

respondent conditioning *n.* Another name for *operant conditioning.

response *n.* Any physical or psychological reaction of an organism to a **stimulus* (1). It may include a behavioural, muscular, glandular, or neurophysiological reaction caused by stimulation of a **sensory* receptor, and in the **behaviourism* of the US psychologist Burrhus F. Skinner (1904–90) and his followers, it also includes a purely mental reaction. See also *CONDITIONED RESPONSE*, *DISCRIMINATIVE RESPONSE*, *FIGHT-OR-FLIGHT RESPONSE*, *FIXED-ACTION PATTERN*, *REACTION TIME*, *REFLEX* (1), *UNCONDITIONED RESPONSE*. **R** *abbrev.* [From Latin *respondere* to reply, from *re-* back + *spondere* to promise]

response amplitude *n.* In **Hullian learning theory*, the magnitude or intensity of an organism's response to a **stimulus* (1). **A** *abbrev.*

response bias *n.* In psychometrics, any systematic tendency of a respondent to choose a particular response category in a multiple-choice questionnaire for an extraneous reason, unrelated to the variable that the response is supposed to indicate but related to the content or meaning of the question. A typical example is **social desirability response set*. See also *LIE SCALE*, *RESPONSE SET* (2). Compare *RESPONSE STYLE*.

response category *n.* One of the alternatives from which a respondent must select in responding to a **closed question*. For example, in the questionnaire item *I enjoy working with numbers* (YES, NO), the response categories are YES and NO. See also *MULTIPLE-CHOICE*, *NUMERICAL RATING SCALE*, *VERBAL RATING SCALE*. Compare *FREE RESPONSE*, *GRAPHIC RATING SCALE*, *OPEN-ENDED QUESTION*.

response competition *n.* A condition in which a **stimulus* (1) activates more than one **response* in an organism, so that the responses vie with one another for dominance. For example, a person performing a difficult task in front of an audience may need to concentrate on the task but may also wish to concentrate on aspects of **self-presentation* and may therefore experience response competition, leading to an **audience effect*.

response latency *n.* The interval of time elapsing between a **stimulus* (1) and a **response*, a term used in preference to **reaction time* when

referring to animal behaviour. Also called *latency* or *latent time*.

response set *n.* 1. A bias disposing an organism to respond in a particular way to a stimulus, especially if the organism is concentrating on the **response* rather than the **stimulus* (1). Compare STIMULUS SET (1, 2). 2. In psychometrics, a type of **response* bias such as **acquiescence response set* or **social desirability response set* in which a respondent replies to items in a multiple-choice questionnaire by choosing or avoiding certain response categories for reasons related to the content of the items or questions, such as **self-presentation* or **impression management*. Compare RESPONSE STYLE.

response style *n.* In psychometrics, any consistent tendency on the part of a respondent to choose a particular response category in a multiple-choice questionnaire irrespective of the content of the question or item, as in **acquiescence response set* or **position preference*, rather than a tendency to choose a particular type of response determined by the content of the item or question, as in **social desirability response set*. See also RESPONSE SET (2). Compare RESPONSE BIAS.

rest-activity cycle See BASIC REST—ACTIVITY CYCLE.

resting potential *n.* The voltage difference of about -70 millivolts (mV) across the cell membrane of a neuron (negative on the inside) maintained by the **sodium* pump when it is not transmitting a nerve impulse. Given that it occurs across the very thin membrane of a tiny cell, it equates to about 10,000 volts per millimetre. It represents stored energy, and its momentary reversal when the nerve is stimulated constitutes the firing of the neuron. Also called *equilibrium potential* or *resting membrane potential*. See also DEPOLARIZATION, REFRACTORY PERIOD (2), SODIUM CHANNEL. Compare ACTION POTENTIAL.

resting tremor *n.* A form of **tremor* characterized by fine, quick quavering movements that tend to disappear during purposeful movements, this type of tremor being characteristic of **parkinsonism*. Also called *passive tremor*. See also POSTURAL TREMOR. Compare INTENTION TREMOR.

restless legs syndrome *n.* A condition classified by **DSM-5* as a
*****ebook converter DEMO Watermarks*****

***parasomnia** involving discomfort in the legs and an urge to keep moving them, especially at night, worsening during periods of inactivity and relieved by movement. **RLS** *abbrev.*

Restorff effect *See* **VON RESTORFF EFFECT**.

Restoril *n.* A proprietary name for the benzodiazepine drug ***temazepam**.
[Trademark]

restricted affect *See* **AFFECT**.

restricted choice principle *See* **PRINCIPLE OF RESTRICTED CHOICE**.

restricted code *n.* A concept introduced by the English sociologist Basil Bernstein (1924–2000) to denote an informal use of language, linked to immediate situations (context bound), with a reduced semantic and syntactic range, supposedly characteristic of lower-working-class speakers, in contrast to middle-class speakers who have access to both a restricted and an ***elaborated code**. The theory is often reduced to the proposition that, owing to differences in the linguistic resources available to them, middle-class people are capable of abstract reasoning, whereas lower-working-class people are not; but Bernstein argued vigorously against this interpretation. Bernstein first drew attention to social class differences in language in an article in the *British Journal of Sociology* in 1958, and he developed the concept further in two articles in the journal *Language and Speech* in 1962 and in numerous subsequent publications.

restriction analysis *n.* Another name for ***restriction mapping**.

restriction enzyme *n.* Any of a number of ***enzymes** that are produced by bacteria and are used to cut DNA in ***genetic engineering**, ***genetic fingerprinting**, and ***gene** mapping. Each restriction enzyme cuts DNA at a different point defined by a different palindromic sequence of bases. Also called a *restriction endonuclease*. *See also* **RESTRICTION MAPPING**. *Compare* **DNA LIGASE**. **restriction fragment** *n.* A section of DNA cut by a restriction enzyme.

restriction mapping *n.* Determination of the distinctive features of a segment of **DNA* by treating it with different **restriction enzymes* to produce restriction fragments of different lengths, which are then separated and sized by **electrophoresis* to produce a map of the segment with distances between restriction sites measured in base pairs (bp) or thousands of base pairs (kbp). Used in **genetic fingerprinting* and research. Also called *restriction analysis*.

retardation, mental *See* INTELLECTUAL DISABILITY.

retardation, psychomotor *See* PSYCHOMOTOR RETARDATION.

retarded depression *n.* A form of **depression* occurring during the depressive phase of a **bipolar disorder*.

rete mirabile *n.* A network of fine blood vessels in the base of the brain within which the temperature of arterial blood is lowered before entering the brain. [From Latin *rete* a net + *mirabile* wonderful]

retention hysteria *n.* In **psychoanalysis*, one of three types of **hysteria* distinguished in 1895 by the Austrian physician Josef Breuer (1842–1925) and Sigmund Freud (1856–1939) in *Studies on Hysteria* (*Standard Edition*, II, at pp. 169–73), supposedly characterized by emotions that have not undergone **abreaction* and are therefore retained, Freud's case of Rosalia H (pp. 169–73) being the classic example. After 1895 Freud came to believe that all hysteria is defence hysteria, and he abandoned the tripartite distinction. *Compare* DEFENCE HYSTERIA, HYPNOID HYSTERIA.

reticular activating system *n.* An abbreviated name for the **ascending reticular activating system*. **RAS** *abbrev.*

reticular formation *n.* A small, thick bundle of ascending and descending axons running through the length of the brainstem, interwoven with nerve cells having predominantly horizontal and evenly spaced dendrites producing a netlike pattern, responsible for controlling breathing, heartbeat, blood pressure, swallowing, urination, movements of the face, eyes, and

tongue, sleep and wakefulness, and other vital functions. Also called the *brainstem reticular formation (BSRF)*. See also [ASCENDING RETICULAR ACTIVATING SYSTEM](#), [DESCENDING RETICULAR FORMATION](#), [NEUROPIL](#). **RF** abbrev. [From Latin *reticulum* a little net, diminutive of *rete* a net, alluding to its appearance]

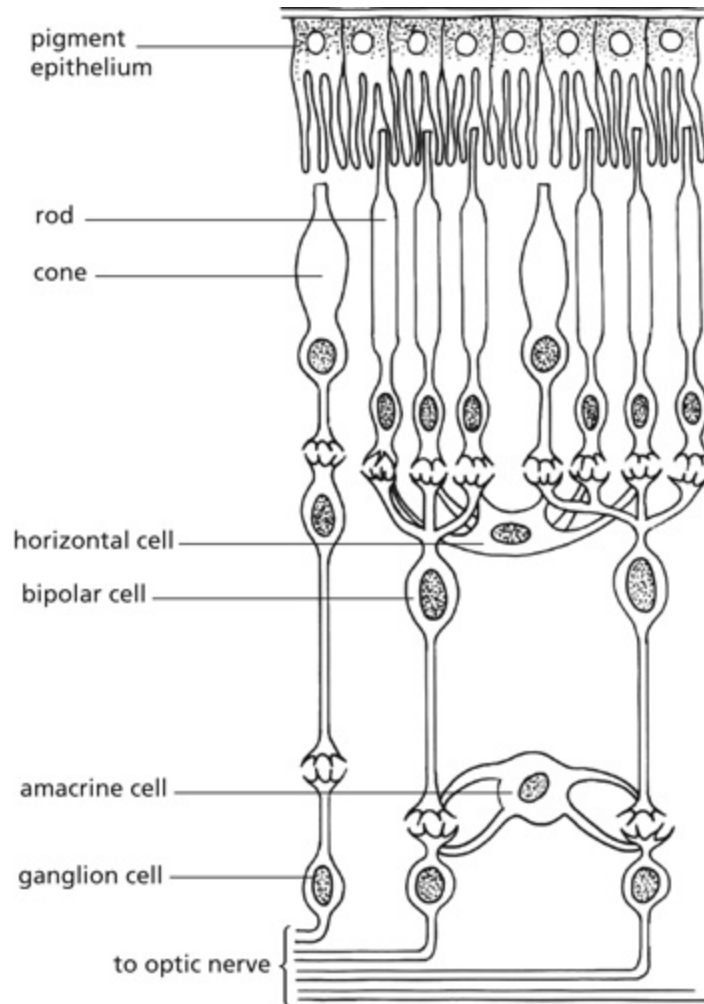
reticular nucleus *n.* Any of the clusters of nerve cell bodies belonging to the [*reticular formation](#) and situated in the pons or the medulla oblongata.

reticular nucleus of the thalamus *n.* A network of nerve cell bodies surrounding the front and sides of the [*thalamus](#), receiving impulses ascending to and descending from the cerebral cortex and inhibiting neurons in the thalamus.

retina *n.* A platelike structure, a quarter of a millimetre thick, at the back of each eye, technically part of the brain, responsible for converting light into nerve impulses, arranged in three principal layers separated by two thin strata of synaptic connections called [*plexiform layers](#) (see [illustration](#)). The outer layer nearest the [*pigment](#) epithelium has an array of 126 million photoreceptors ([*rods](#) and [*cones](#)), the middle layer contains [*bipolar](#) cells that receive inputs from photoreceptors immediately in front of them, and the inner layer facing the [*crystalline lens](#) contains [*ganglion](#) cells, interlaced with [*horizontal cells](#) and [*amacrine](#) cells, and receives inputs from retinal [*bipolar](#) cells. This arrangement of layers is found in all vertebrates and is unexpected, because light has to pass through a forest of neurons before reaching the photoreceptors, and because fibres from ganglion cells have to burrow back through the layers of the retina to feed into the optic nerve, thereby creating the [*blind spot \(1\)](#). This seems so illogical that diagrams appearing in textbooks sometimes incorrectly show light entering from the outer layer where the photoreceptors are located, and various arguments have been put forward to explain why the layers have to be arranged back to front, but such arguments are beside the point because, quite independently of vertebrates, squids and octopuses have evolved eyes that are very similar to those of vertebrates but have retinal layers arranged the other way round, avoiding the drawbacks mentioned above. See also [COLOUR ZONE](#), [DUPLEXITY THEORY](#), [FOVEA](#), [INNER NUCLEAR LAYER](#), [INNER PLEXIFORM LAYER](#), [INTERPLEXIFORM CELL](#), [MACULA LUTEA](#), [OUTER NUCLEAR LAYER](#), [OUTER PLEXIFORM LAYER](#). **retinas** or

*****ebook converter DEMO Watermarks*****

retinae *pl.* **retinopathy** *n.* Disorder of the retina. *See also* [SOLAR RETINOPATHY](#).
[Probably from Latin *rete* a net]



Retina. Basic structure (light enters from the bottom of the diagram).

retinal *adj.* **1.** Of or relating to the retina. *n.* **2.** Another name for [*retinene](#).

retinal cone *See* [CONE](#).

retinal disparity *n.* Another name for [*binocular](#) disparity.

retinal expansion *n.* Another name for [*looming](#).

retinal ganglion cell *See* [GANGLION CELL](#).

*****ebook converter DEMO Watermarks*****

retinal image *n.* The inverted image of the *visual field that is focused on to the *retina by the crystalline lens of the eye.

retinal painting *n.* An explanation of *anorthoscopic perception in terms of a hypothetical process by which the extended image of a figure viewed through a moving slit is gradually spread over the retina and imprinted on to it part by part, resulting in a retinal imprint of the whole figure whose form is then perceived. This hypothesis was championed by the German physiologist, physicist, and mathematician Hermann Ludwig Ferdinand von Helmholtz (1821–94) and other 19th-century researchers, but it was subsequently discredited by studies of eye movements that occur during anorthoscopic perception and that would disrupt the process.

retinal rivalry *n.* Another name for *binocular rivalry.

retinene *n.* A form of *retinol that combines with the protein *opsin to form *rhodopsin, the visual purple pigment. Also called *retinal*. [From *retin(a)* + *-ene* indicating an unsaturated compound with double bonds, from Greek *-ene* a feminine name suffix]

retinex theory *n.* A theory of colour vision according to which the visual system includes three separate eye–brain systems called *retinexes*, each with a peak sensitivity to long-wave light (560 nanometres), medium-wave light (530 nm), or short-wave light (430 nm) and inhibitory effects on the other systems, operating to assign a colour to each spot in the visual field according to the ratio, for each of the three retinexes, of light reflected from that spot to the average of the light reflected from its surround, the resulting triplet of ratios uniquely defining the colour at each spot. The theory, which was put forward by the US physicist Edwin H(erbert) Land (1909–91), inventor of the Polaroid Land camera and president of the Polaroid Corporation, in the *Journal of the Optical Society of America* in 1971, accounts for the *Land effect and for *colour constancy, because relative rather than absolute wavelengths determine perceived colour, the perceived colour of an object remaining constant as long as the reflectance ratios are unchanged, even if the total amount of light of any given wavelength varies markedly, and this explains why colour constancy is disrupted and some colours cannot be perceived at all when surfaces are viewed in *void mode. [Coined by its
*****ebook converter DEMO Watermarks*****]

inventor from *retin(a)* + (*cort*)*ex*]

retinitis pigmentosa *n.* Any of a group of disorders, often hereditary, characterized by bilateral degeneration of the retinas, with onset in childhood, often manifested initially as night blindness or reduction in visual field, leading to **blindness* in middle age. [From *retin(a)* + *-itis* indicating an inflammation + Latin *pigmentum* paint, alluding to the reddish pigmentation of the retina associated with the disease]

retinol *n.* A fat-soluble vitamin necessary for **scotopic* vision, formed by **hydrolysis* of beta-carotene, found in carrots and other yellow and green vegetables, butter, eggs, and fish oil. Also called *vitamin A*. *See also* RETINENE, VITAMIN. [From Greek *rhetine* resin + English *-ol* denoting a compound containing a hydroxyl group, from (*alcoh*)*ol*]

retinotopic map *n.* An inverted **topographic map* of the object or scene being viewed with the eyes, with neighbouring cells having **receptive fields* close together, in the **lateral* geniculate nucleus or in the **primary visual cortex* where the neurons are stacked vertically in **ocular-dominance columns* and **orientation columns*. [Probably from Latin *rete* a net + Greek *topos* a place + *-ikos* of, relating to, or resembling]

retrieval *n.* The act or process of retrieving anything, especially (in psychology) the act or process of recovering **encoded* information from **storage* in **memory* and bringing it into **consciousness*. **retrieve** *vb.*

retrieval-based learning *n.* A learning strategy based on repeated **retrieval* or **recall* of the material being learnt. In an article in the journal *Psychological Science* in 2006, the US psychologists Henry L(ederer) Roediger III (born 1947) and Jeffrey D. Karpicke (born 1980) reported an experiment in which they compared three different learning strategies spread over four study periods. One group of students spent all four periods studying text material, reading it repeatedly (SSSS); a second group studied the text in three periods and then spent the fourth period trying to recall it, writing down as many ideas from the text as they could remember (SSSR); and a third group studied the text during the first period and then spent the remaining three periods recalling it (SRRR). Later testing showed that recall was best in

*****ebook converter DEMO Watermarks*****

the SRRR (retrieval-based learning) group and worst in the SSSS (study-based learning) group, although a poll of student opinion showed that most students expected the reverse pattern. [The term *retrieval-based learning* was first used in an article by Jeffrey D. Karpicke in the journal *Current Directions in Psychological Science* in 2012, although the learning strategy itself is older.]

retrieval-induced forgetting *n.* A failure to remember an item of information as a result of recalling related information. The standard experimental demonstration of this phenomenon involves **paired-associate learning* of word pairs such as *animal-cat*, *animal-dog*, and *fruit-banana*, followed by a retrieval-practice phase in which recall is cued by category and initial letter, such as *animal-d_____*. In the retrieval-practice phase, some previously learnt animal pairs (*animal-dog*) are recalled but others (*animal-cat*) are not, and none from the fruit category are recalled. Finally, cued recall is tested for all pairs: *animal-c_____*, *animal-d_____*, *fruit-b_____*, and so on. Numerous experiments have confirmed that recall of *cat* is significantly impaired, relative to recall of *banana*, although neither was included in the retrieval-practice phase, because inhibition is required to overcome interference during retrieval, and recall of some animal paired associates can induce forgetting of other animal paired associates. Similar retrieval-induced forgetting has been shown to occur with visual images, faces, autobiographical memories, eyewitness memories, odours, motor actions, and native-language words when retrieving foreign-language equivalents. The phenomenon was first reported and named in an article by the US psychologists Michael C(hristopher) Anderson (born 1964), Robert A. Bjork (born 1938), and Elizabeth L(igon) Bjork (born 1941) in the *Journal of Experimental Psychology: Learning, Memory, and Cognition* in 1994, although a closely related phenomenon, on immediate-memory tests, was first reported by the Estonian-born Canadian psychologist Endel Tulving (born 1927) and Tannis Y(vonne) Arbib (born 1936) in an article in the *Journal of Experimental Psychology* in 1966. **RIF** abbrev.

retroactive association *n.* Another name for a **backward association*.

retroactive facilitation *n.* Facilitation or improvement in the learning

*****ebook converter DEMO Watermarks*****

or performance of a task caused by **positive transfer* from training on a different task occurring later in time.

retroactive inhibition *n.* Another name for **retroactive interference*.

retroactive interference *n.* Impairment of memory for previously learnt information, or performance of a previously learnt task, caused by subsequent learning of similar information or a similar task. Also called *retroactive inhibition*. See also *RANSCHBURG INHIBITION*, *SKAGGS–ROBINSON PARADOX*. Compare *PROACTIVE INTERFERENCE*. **RI** *abbrev.*

retroflex *adj.* Of or relating to speech sounds articulated with the tip of the tongue curled back towards the front part of the hard palate behind the **alveolar* ridge, as in the *r* sounds in North American English and some **rhotic* varieties of British English, especially the south-west of England. See also *PLACE OF ARTICULATION*. [From Latin *retroflexus* bent back, from *retro-* back + *flectere* to bend]

retrograde amnesia *n.* Loss of memory for events or experiences before a traumatic event or incident that causes the amnesia. The memories are generally recovered gradually over time, starting with early memories, and the traumatic event itself is often, though not always, recalled eventually. See also *GLOBAL AMNESIA*, *NEXT-IN-LINE EFFECT*, *TRANSIENT GLOBAL AMNESIA*. Compare *ANTEROGRADE AMNESIA*. [From Latin *retro* behind + *gradus* a step]

retrograde transport *n.* The movement of worn-out components of neurons along **microtubules* from **axons* and **dendrites* back to the cell body or soma for degradation by **lysosomes*. Compare *ANTEROGRADE TRANSPORT*. [From Latin *retro* backwards + *gradi* to go]

retrospective falsification *n.* Unconscious alteration or distortion of memories to make them satisfy present wishes or needs. [From Latin *retro* backwards + *specere, spectrum* to look]

retrospective study *n.* A type of research investigation in which participants with a particular disorder or characteristic are recruited and their

past histories are examined in an effort to discover the relevant causal factor(s). The findings of such an investigation carry less persuasive force than those of a **prospective study*, partly because they rely on the fallible memories of the participants, which may be influenced by their own theories about the causative factors.

retrovirus *n.* Any of a group of viruses, notably **HIV*, whose genetic code is carried in **RNA* rather than **DNA* and is transcribed by **reverse transcriptase* into DNA, thereby reversing the normal direction in which it was once thought that genetic information invariably flows. *See also* *CENTRAL DOGMA*. **retroviral** *adj.* [From *re(verse) tr(anscriptase) + virus*]

Rett's disorder *n.* A **neurodevelopmental disorder* found only in girls, characterized by the appearance, between 5 months and 4 years of age, of accelerated head growth and **psychomotor* retardation, replacement of purposeful hand movements with stereotyped **gestures* (1) such as hand-wringing, poorly coordinated gait, withdrawal from social interaction, and impairment in speech and language comprehension. [Named after the German-born Austrian paediatrician Andreas Rett (1924–97) who first described the disorder in 1965]

return of the repressed *n.* In **psychoanalysis*, the reappearance in **dreams* (1), **symptoms*, or **parapraxes* of material that has been subject to **repression*. *See also* *CHOICE OF NEUROSIS*, *COMPROMISE FORMATION*.

reuptake *n.* The reabsorption by a **presynaptic* neuron of a **neurotransmitter* substance recently released from its terminal **bouton*, thereby halting the **action potential* in the **postsynaptic* cell.

revealed preference *n.* A preference inferred from observations of a decision maker's actual choices. The notion was introduced in a posthumous article by the English philosopher, mathematician, and economist Frank (Plumpton) Ramsey (1903–30), published in 1931, and was later popularized by the US economist Paul Anthony Samuelson (1915–2009). It underlies the modern form **utility* theory introduced in 1947 by the Hungarian-born US mathematician John von Neumann (1903–57) and the German-born US economist Oskar Morgenstern (1902–77). Consider a woman facing a

*****ebook converter DEMO Watermarks*****

decision involving several alternatives. We may assign a value of 0 to her least preferred alternative *L* and 1 to her most preferred alternative *M*. Then, to determine her degree of preference for another alternative *X* we may find a gamble involving *L* and *M* that she considers equally as attractive as *X*. For example, she may turn out to be indifferent between *X* for certain and roll of a die resulting in *L* if one spot comes up and *M* if any other number of spots come up, in which case the utility of *X* according to revealed preference is 5/6 or .83 on the scale from 0 to 1. A strong interpretation of revealed preference holds that it is meaningless to assert that a decision maker's choice of *X* rather than *Y* can be explained by a preference for *X* over *Y*, because the choice literally determines the preference, and hence decision makers choose according to their preferences by definition. However, the strong interpretation leads to difficulties in interpreting inconsistent preferences such as those induced by the **Allais paradox* or **modified Ellsberg paradox*. See also ANCHORING AND ADJUSTMENT, EXPECTED UTILITY THEORY, SUBJECTIVE UTILITY.

reverberating circuit *n.* A **cell* assembly that continues to respond after the original stimulus that excited it has ceased, providing a neural basis for **short-term memory*, according to a hypothesis of the Canadian psychologist Donald O(lding) Hebb (1904–85). Also called a *reverberatory circuit*. See also PHASE SEQUENCE.

reversal *n.* 1. The act or process of turning round. In **psychoanalysis*, a **defence mechanism* whereby an **instinctual aim* changes into its opposite, usually from an active to a passive form, as when **sexual sadism* turns to **sexual masochism* or **voyeurism* to **exhibitionism* (1). Also called *reversal into the opposite*. 2. Another name for a **reversal error* in reading or writing.

reversal error *n.* An error of reading or writing in which a letter, group of letters, or word is read or written backwards, as when a *d* is read or written as a *b* or the word *bed* is read or written as *deb*. Also called simply a *reversal*.

reversal into the opposite See REVERSAL (1).

reversal learning *n.* Another name for **habit* reversal.

reverse anorexia nervosa *n.* Another name for **muscle* dysmorphia.

*****ebook converter DEMO Watermarks*****

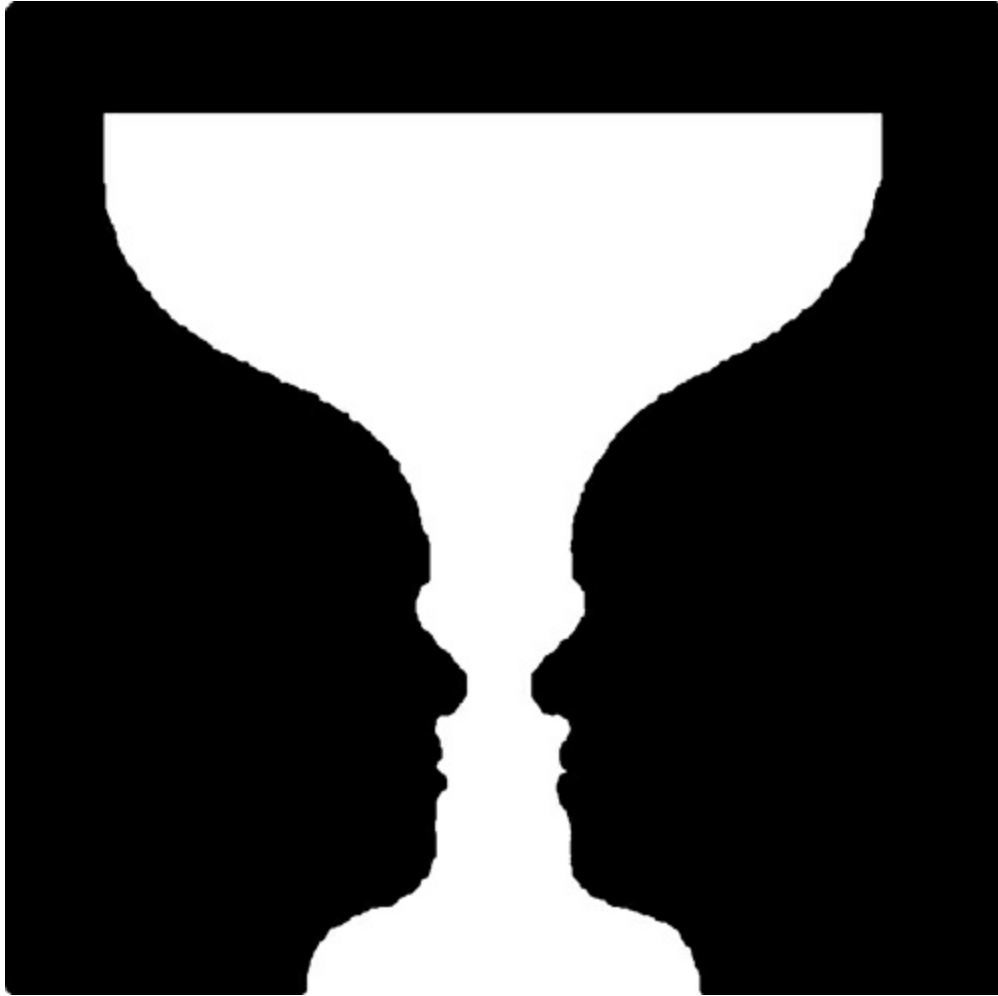
See also [BIGOREXIA](#). Compare [ANOREXIA NERVOSA](#).

reverse tolerance *n.* Another name for [*sensitization](#).

reverse transcriptase *n.* An enzyme present in [*retroviruses](#) that transcribes information from [*RNA](#) into [*DNA](#), thereby reversing the usual direction of transcription of genetic information from DNA to RNA. Compare [RNA POLYMERASE](#).

reversible figure *n.* Another name for an [*ambiguous figure](#).

reversible goblet *n.* An [*ambiguous figure](#) introduced in 1915 by the Danish psychologist Edgar Rubin (1886–1951), a classic demonstration of [*figure–ground reversal](#), its appearance alternating between a goblet and a pair of facial profiles in silhouette (see [illustration](#)). Also called the *face–goblet illusion* or *Rubin's figure*.



Reversible goblet. It can be seen as a white goblet or a pair of black facial profiles.

reversible perspective See [PERSPECTIVE REVERSAL](#).

reversion *n.* A turning back, reverse, or recurrence. In genetics, the restoration of a [*mutant \(2\)](#) phenotype to the normal form by a further mutation of the same gene. Also called a *back mutation*. [From Latin *re-* back + *vertere* to turn + *-ion* indicating an action, process, or state]

rewrite rule *n.* A rule in [*generative grammar](#) of the form $A \rightarrow X$, where *A* represents a syntactic category such as a sentence or a noun phrase and *X* a sequence of syntactic categories. The rule expresses an instruction to replace *A* by *X*. For example, a sentence (S) can be rewritten as a noun phrase ([NP](#))

plus a verb phrase (VP): $S \rightarrow NP + VP$; and the verb phrase can be rewritten as a verb (V) plus a noun phrase (NP): $VP \rightarrow V + NP$. Also called a *phrase-structure rule*. See also PHRASE MARKER.

rhathymia *n.* A *personality trait discovered through *factor analysis, associated with light-heartedness and freedom from worry; hence, the state or condition of being optimistic and carefree. The term was introduced by the US psychologist J(oy) P(aul) Guilford (1897–1987) and a co-author in an article in the *Journal of Psychology* in 1936. [From Greek *rhathymia* freedom from care]

rhetoric *n.* 1. The art of persuasive, influential, or entertaining speech or oratory, or the study of effective language use. See also ATTITUDE CHANGE, PERSUASION. 2. Bombastic or mannered speech or writing, or language that seems impressive but lacks true meaning (*the Chinese claims are mere rhetoric*). **rhetorical** *adj.* [From Greek *rhetor* a teacher of rhetoric + *-ikos* of, relating to, or resembling]

rhetorical question *n.* A question asked for dramatic effect and not requiring an answer.

rheumatic chorea *n.* Another name for *Sydenham's chorea.

rhinencephalon *n.* The olfactory lobe in the *forebrain of each cerebral hemisphere containing the *olfactory bulb, *olfactory tract, and *olfactory cortex, concerned largely with the sense of smell, but in humans also with *emotions. The meaning is sometimes restricted to the olfactory cortex alone and is sometimes taken to be nearly synonymous with the limbic system, which was once believed to be devoted to olfaction. [From Greek *rhis*, *rhinos* the nose + *enkephalos* the brain, from *en* in + *kephale* the head]

rhinotillexomania *n.* Compulsive nose-picking. See also COMPULSION. [From Greek *rhis*, *rhinos* the nose + *tillein* to pull + *ex* out + *mania* madness]

rhodopsin *n.* The *visual pigment found in *rods in the retina, with peak sensitivity to light of approximately 505 nanometres in the blue–green part of

the visible spectrum. Also called *visual purple*, not because it is sensitive to light in the purple part of the spectrum, but on the contrary because it reflects blue and red light and therefore looks purple. *See also* [NYCTALOPIA](#), [OPSIN](#), [OPTOGRAM](#), [RETINENE](#). *Compare* [CONE PIGMENT](#). [From Greek *rhodon* a rose + *opsis* sight, from *ops* and eye]

rhombencephalon *n.* A technical name for the [*hindbrain](#), especially in a developing embryo. *Compare* [MESENCEPHALON](#), [PROSENCEPHALON](#). [From Greek *rhombos* a rhombus (alluding to the shape of the fourth ventricle that it contains) + *enkephalos* the brain, from *en* in + *kephale* the head]

rho, Spearman's *See* [SPEARMAN RANK CORRELATION COEFFICIENT](#).

rhotic *adj.* Denoting an [*accent \(1\)](#) or [*dialect](#) in which an *r* following a vowel (as in the words *car* and *cart*) is pronounced. In [*Received Pronunciation](#) *r* is pronounced only before a vowel and never before a consonant or a pause; but rhotic pronunciation is found in most varieties of English in the United States and Canada, Ireland, Scotland, and parts of England including the area to the south and west of London. **rhotacism** *n.* Defective or non-standard pronunciation of *r*. [From the name of the Greek letter *rho*, corresponding to the roman *r* + *-itikos* resembling or marked by]

rhyming method *n.* A memory aid based on rhymes. *See* [MNEMONIC](#).

rhyming slang *n.* A form of [*slang](#) characteristic of the [*cockney](#) dialect of the East End of London, in which a word is replaced by another word or phrase that rhymes with it, for example, *apples and pears* meaning stairs, *Jimmy Riddle* meaning piddle, *dicky-bird* meaning word, and *boat race* meaning face. In practice, the rhyming part is often dropped, originally to hide the meaning from the uninitiated, so that (for example) *apples* means stairs and *Jimmy* means piddle. Some of the shortened forms have become common words, including the familiar *loaf* (from *loaf of bread*) and the surprisingly offensive *berk* (from *Berkshire hunt*).

rhythm *n.* An ordered arrangement of stressed and unstressed or long and short sounds in speech or music, or any analogous regularly occurring sequence of events, including a [*biological rhythm](#). **rhythmic** or **rhythmical**

*****ebook converter DEMO Watermarks*****

adj. [From Greek *rhythmos* a measure or measured motion, from *rhein* to flow]

riboflavin *See* VITAMIN B₂.

ribonucleic acid *See* RNA. [From *ribo(se)* + *nucleic acid*]

ribose *n.* A sugar that occurs in *RNA. *See also* DEOXYRIBOSE. [Changed from *arabinose* a sugar found in cedar and pine gum]

ribosome *n.* Any of the tiny particles that are found in abundance in the *cytoplasm of a cell, some being attached to the *endoplasmic reticulum, and that contain *RNA and *protein and are the construction sites where proteins are synthesized according to information carried to them by *messenger RNA. [From *ribo(nucleic acid)* + Greek *soma* a body]

Ribot's law *n.* The principle that, during *retrograde amnesia, the oldest memories are most resistant to disruption or impairment. *Compare* JACKSON'S PRINCIPLE. [Named after the French psychologist Théodule Armand Ribot (1839–1916), who formulated it]

Ricco's law *n.* In *psychophysics, a law relating the *absolute threshold or *difference threshold for visual brightness to the intensity of the stimulus and the area of the retina that is stimulated, usually expressed as $A \times I = k$, where A is the area of the retina stimulated, I is the intensity of the stimulus, and k is a constant. It is valid for small retinal areas centred on the fovea, corresponding to stimuli subtending *visual angles up to about 6 minutes of arc (1/10 of a degree). *Compare* PIPER'S LAW. [Named after the Italian astronomer Annibale Ricco (1844–1919) who formulated it]

Ringelmann effect *n.* Another name for *social loafing. [Named after the French agricultural engineer Maximilien (Max) Ringelmann (1861–1931) who first investigated the phenomenon in 1882–7]

risk *n.* **1.** Danger or hazard; or a situation or factor involving danger or hazard, or one likely to cause loss or injury. **2.** A situation in which an action

will result in an outcome that is not known with certainty, but the set of possible outcomes and their associated probabilities are known or can be estimated. For example, betting on the outcome of the roll of a die involves risk inasmuch as the particular outcome is not known in advance, but the possible outcomes {1, 2, 3, 4, 5, 6} and their associated probabilities (1/6 each) are known. The US economist Frank Hyneman Knight (1885–1972) was the first to distinguish between risk and ***uncertainty (2)** in his book *Risk, Uncertainty, and Profit* (1921), and the distinction is maintained in careful usage, but many writers use the terms interchangeably. *See also* [COMMON RATIO EFFECT](#), [ELLSBERG PARADOX](#), [INSUFFICIENT REASON](#), [MODIFIED ELLSBERG PARADOX](#). **risky** *adj.* [From French *risque* risk, from Italian *risco* risk, from Greek *rhiza* a cliff]

risk aversion *n.* A widespread characteristic of human preferences, first discussed in 1738 by the Swiss mathematician and physicist Daniel Bernoulli (1700–82), according to which most people tend to value gains involving ***risk (2)** less than certain gains of equivalent monetary expectation. A typical example is a choice between a sure gain of 50 units (Swiss francs, dollars, pounds sterling, or any other units) and a gamble involving a 50 per cent probability of winning 100 units and a 50 per cent probability of winning nothing. The two prospects are of equivalent monetary expected value, but most people prefer the sure gain to the gamble, which they typically value equally to a sure gain of about 35 units. *See also* [ALLAIS PARADOX](#), [CERTAINTY EFFECT](#), [ELLSBERG PARADOX](#), [FRAMING EFFECT](#), [MODIFIED ELLSBERG PARADOX](#), [PROSPECT THEORY](#), [ST PETERSBURG PARADOX](#). *Compare* [RISK SEEKING](#). **risk-averse** *adj.*

risk seeking *n.* A tendency among human decision makers to prefer losses involving risk (2) to sure-thing losses of equivalent monetary expectation. Experiments have shown that human decision makers typically prefer a gamble involving a 50 per cent probability of losing 100 units (such as dollars or pounds) to a sure loss of 50 units, although these two prospects are of equivalent monetary expectation; in fact, people typically value a 50 per cent probability of losing 100 units equally to a sure loss of about 40 units. *See also* [FRAMING EFFECT](#), [PROSPECT THEORY](#). *Compare* [RISK AVERSION](#). **risk-seeking** *adj.*

risky shift *n.* In decisions involving risk, a tendency for involvement or participation in a group to cause the individual opinions of the group members to change in the direction of greater risk, causing group decisions to be generally riskier than the average of the individual decisions of the participating group members. It was discovered independently in 1957 by the US psychologist Robert Charles Ziller (born 1924) and in 1961 by a US graduate student James (Arthur Finch) Stoner (born 1935), who used quite different methods and who both expected the opposite effect. The finding has been replicated many times and holds true for most decisions involving risk, although dilemmas have been found that reliably produce cautious shifts. It is explained partly by a **social comparison* effect, based on a cultural tendency for people to admire riskiness rather than caution in most circumstances, as a result of which most people like to consider themselves at least as willing to take risks as their peers, but during group discussion some group members discover that others are riskier than themselves, and they therefore alter their opinions in a risky direction to restore their self-images, causing a risky shift in the group decision. A second explanatory mechanism is the *persuasive argumentation* effect, which arises from the same cultural tendency to admire riskiness rather than caution, causing group members to be more willing to voice pro-risk than procaution persuasive arguments during the group discussion, resulting in more persuasive arguments in a risky than a cautious direction. Social comparison and persuasive argumentation effects can also explain cautious shifts, and some authorities believe that they can also explain the more general **group polarization* phenomenon. Also called a *choice shift*.

risperidone *n.* A drug belonging to the group of **atypical antipsychotics* that acts as a **serotonin* and a **dopamine* antagonist and is used in the treatment of **schizophrenia* with fewer **neuroleptic-induced* side-effects than are associated with conventional neuroleptic drugs. Also called *Risperdal* (trademark).

risus sardonicus *n.* A spasm of the facial muscles resulting in a permanent contorted grin, most frequently caused by tetanus. [From Latin *risus* a laugh + *sardonicus* sardonic or scornful]

Ritalin *n.* A proprietary name for the stimulant drug **methylphenidate*.

*****ebook converter DEMO Watermarks*****

[Trademark]

ritualized fighting *n.* Another name for **conventional fighting*.

r–K continuum *n.* A dimension along which **natural selection* is claimed by some **sociobiologists* to vary according to ecological conditions, from **r-selection* at one extreme to **K-selection* at the other. *See also* CONTINUUM.

R-methodology *n.* Regular **factor* analysis, in which correlations between tests are analysed. Also called *R-technique*. *Compare* Q-METHODOLOGY. [Arbitrary symbol, presumably chosen because it follows Q in the alphabet]

RNA *abbrev.* Ribonucleic acid, a type of **nucleic acid* present in all living cells, playing an important part in the synthesis of **proteins* within the cells' **ribosomes*. Hydrolysis of RNA yields the bases **adenine*, **guanine*, **cytosine*, and **uracil*, together with ribose and phosphoric acid (see *illustration* overleaf). *See also* AMP, CODON, COMPLEMENTARY BASE PAIRING, DOUBLE HELIX, GENE EXPRESSION, NITROGENOUS BASE, NUCLEOTIDE, POLYMERASE CHAIN REACTION, RNA POLYMERASE. *Compare* MESSENGER RNA, TRANSFER RNA.

disorder or other form of **impulse-control disorder*. Compare ROID RAGE.

Robbers Cave experiment *n.* A **field* experiment on conflict and cooperation carried out by the US-based Turkish psychologist Muzafer Sherif (1906–88) and several colleagues in the summer of 1954 and published in books entitled *The Robbers Cave Experiment: Intergroup Conflict and Cooperation* (1961) and *In Common Predicament: Social Psychology of Intergroup Conflict and Cooperation* (1966). Two groups of white, middle-class eleven-year-old boys, arbitrarily named Rattlers and Eagles by the experimenters and each initially unaware of the other group's existence, spent the first week of a three-week summer holiday hiking, swimming, boating, and camping. After they had established separate group identities, they were brought together to compete at football, treasure hunts, tug-of-war, and other events, the winners receiving trophies and medals. Almost immediately, Rattlers and Eagles became hostile and antagonistic towards each other: flags were burned, cabins ransacked, and a food fight escalated into a near-riot in the mess hall. The experimenters restored peace by contriving situations in which members of the two groups had to cooperate to achieve superordinate goals. For example, the camp truck was made to break down at a spot where members of both groups were needed to pull it up a steep hill. At the end of the third week, the two groups were so friendly that they chose to travel home on the same bus. See also REALISTIC GROUP CONFLICT THEORY, SOCIAL IDENTITY THEORY. Compare JIGSAW CLASSROOM. [Named after Robbers Cave State Park in Oklahoma, where the experiment took place]

rocks *n.* A street name for **crack* cocaine. [Referring to its appearance]

rod *n.* One of the two major classes of **photoreceptors* at the back of the **retina*, absent from the **fovea*, long and cylindrical in shape, with an outer segment at its back end containing photosensitive membranes arranged like an orderly stack of discs studded with light-absorbing pigment molecules of **rhodopsin* and a synaptic ending at the other end transmitting nerve impulses to **bipolar* cells and **horizontal cells* in the retina. A rod is totally unresponsive to colour; it mediates **scotopic* vision, functioning only in dim light, and is extremely sensitive, being capable of excitation by a single **photon*. The human retina contains some 120 million rods, far outnumbering the 6 million retinal cones. See also DARK ADAPTATION, PHOTOCHROMATIC

*****ebook converter DEMO Watermarks*****

INTERVAL. *Compare* CONE.

rod-and-frame test *n.* A test of *field dependence–independence in which the respondent, seated in a completely darkened room, attempts to adjust a luminous rod to a vertical position within a tilted luminous frame. Field-dependent people are more strongly influenced by the frame and less able to discount it in judging the upright. *Compare* TILTING-ROOM TEST. **RFT** *abbrev.*

rod pigment *n.* Rhodopsin.

Rogarian *adj.* Of, relating to, or resembling the *client-centred therapy of the US psychologist Carl Rogers (1902–87).

Rohypnol *n.* A proprietary name for *flunitrazepam, a benzodiazepine drug approximately ten times as potent as Valium, that when taken orally induces within 15 minutes slight nausea, dizziness, and a form of drowsiness and immobility resembling mild general anaesthesia lasting from two to eight hours. It is used in the treatment of insomnia, and it is sometimes called the *date rape drug* on account of having been implicated in a number of incidents of rape and sexual assault: it is tasteless, odourless, and colourless and can easily be used to spike a potential rape victim's drink without her knowledge; all traces of it disappear from the bloodstream within 36 hours; and people who take it with alcohol generally experience amnesia lasting at least 12 hours. It is sometimes taken as a street drug, and its most common street name is *roofies*. [Trademark]

roid rage *n.* Heightened aggression or a *tantrum arising as a side-effect of *anabolic steroid ingestion. It is distinguished from *road rage, which may or may not be associated with steroid use. The term first appeared in an article in the *San Diego Union-Tribune* in 1987. *See also* IMPULSE-CONTROL DISORDERS, INTERMITTENT EXPLOSIVE DISORDER. [A shortened form of *steroid*]

rok-joo *See* KORO.

Rolandic fissure *n.* Another name for the *central sulcus. Also written

Rolando's fissure. [Named after the Italian anatomist Luigi Rolando (1773–1831)]

Role Construct Repertory Test *n.* Another name for the **Repertory Grid Test* when the elements presented to the respondent are role titles such as *A teacher you liked*, *Your mother*, *A neighbour with whom you get along well*, and so on. Its inventor, the US psychologist George A(lexander) Kelly (1905–67), listed 24 role titles, including the three quoted here, in the original publication of the test in his book *The Psychology of Personal Constructs* (1955, Vol. 1, pp. 221–2).

rolfing *n.* A technique of **psychotherapy* based on body manipulation and **massage*, using fingers, knuckles, and elbows, designed to correct postural faults and to realign the body vertically and symmetrically. Also written *Rolfing*. See also *BODY THERAPIES*. [Named after the US biochemist Ida P. Rolf (1896–1979) who invented and promoted it from the 1970s]

romantic love *n.* A type of love characterized by erotic passion and intimacy but lacking commitment. See *LOVE*.

romantic love scale *n.* A questionnaire designed to measure romantic **love*, defined in terms of three components labelled affiliative/dependent needs (needing to be with the loved person), predispositions to help (willingness to make sacrifices for the loved person), and exclusivity (desire to be intimately involved with the loved person to the exclusion of others), the scale being specifically designed to distinguish romantic love from liking, which is measured by the **liking scale*. Both scales were constructed by the US psychologist Zick Rubin (born 1944) and published in the *Journal of Personality and Social Psychology* in 1970.

Romberg's sign *n.* Swaying or falling over when standing upright with eyes shut and feet together; a sign of **sensory ataxia* or **locomotor ataxia*. [Named after the German pathologist and neurologist Moritz Heinrich Romberg (1795–1873) who gave the first clinical description of **locomotor ataxia* (tabes dorsalis)]

roofies *n.* A street name for the benzodiazepine drug **Rohypnol*, the date
*****ebook converter DEMO Watermarks*****

rape drug.

rooting reflex *n.* A reflex in which a newborn infant responds to being touched or stroked on the cheek by turning its head towards the stimulated side and making sucking movements. The reflex usually disappears at around 3 or 4 months of age but can persist until 12 months. [From Old English *wrotan* to burrow with the snout, from *wrot* a snout]

root language *n.* Another name for an [*isolating language](#).

rootwork *n.* A [*culture-bound syndrome](#) found in the Caribbean and among African American and Latino communities in the southern United States, where it is generally attributed to witchcraft, sorcery, or hexing, characterized by [*anxiety](#), gastrointestinal complaints such as nausea, vomiting, and diarrhoea, weakness, dizziness, and fear of being poisoned or killed, the symptoms generally persisting unless the spell is removed by a healer called a *root doctor*. Also called *mal puesto* or *brujería* in Spanish-speaking communities. Compare [VOODOO DEATH](#). [From Old English *rot* a root, from Old Norse *rot* a root]

Rorschach test *n.* A [*projective test](#) consisting of ten symmetric ink blots varying in shape and colour. The respondent examines each one in turn and interprets it by saying what it looks like. The test is designed to yield information about unconscious mental processes. It was developed in 1911 and published in 1921 in a book entitled *Psychodiagnostik* (Psychodiagnostics) by the Swiss psychiatrist Hermann Rorschach (1884–1922). Rorschach was not the first to experiment with the interpretation of ink blots, his most famous forerunner having been the Italian polymath Leonardo da Vinci (1452–1519). See also [HOLTZMAN INKBLOT TECHNIQUE](#).

Rosencrantz and Guildenstern effect *n.* A type of [*approach–avoidance conflict](#) and entrapment experienced by a person who is kept waiting while attempting to achieve a particular goal, as when a person waiting at a bus stop faces the choice of waiting or walking but as time passes feels increasingly unwilling to leave the bus stop because of the increasing likelihood that a bus will arrive. In such situations, time is simultaneously an investment that increases the likelihood of goal attainment and an expense

*****ebook converter DEMO Watermarks*****

that increases the likelihood of failing to attain the goal, and as time passes, the conflict increases. [Named after the following passage in the play *Rosencrantz and Guildenstern are Dead* (1967) by the Czechoslovakian-born British playwright Tom Stoppard (born 1937): 'We've travelled too far, and our momentum has taken over; we move idly towards eternity, without possibility of reprieve or hope of explanation.']

Rosenthal effect *n.* Another name for the **experimenter expectancy effect*. [Named after the German-born US psychologist Robert Rosenthal (born 1933) who pioneered research on it]

Rosenzweig Picture-Frustration Study *n.* A **projective test*, designed to measure characteristic modes of responding to frustration, in which the respondent is presented with 24 cartoon drawings, each depicting one person saying something frustrating to the other, the second person being shown with a blank speech bubble. The respondent's task is to fill in each of the 24 blank speech bubbles with the first response that comes to mind, and from the responses the direction of aggression (directed inwards, directed outwards, or repressed) and type of aggression, including obstacle-dominance (frustrating objects stand out), ego-defence (the respondent's ego predominates to protect itself), and need-persistence (the respondent pursues goals despite frustration) are scored. In addition, a group conformity rating is provided, indicating how closely the responses resemble the most common responses or population norms. **RPFS** *abbrev.* [Named after the US psychologist Saul Rosenzweig (1907–2004) who published early accounts of research using the test in the *Journal of Experimental Psychology* in 1943 and the *Journal of Personality* in 1945 and adult and child versions of the test itself in 1948]

Ross–Jones test *n.* A test for excess of globulin in the **cerebrospinal fluid*. Cerebrospinal fluid is floated on a solution of ammonium sulphate, and globulin forms a greyish-white ring at the junction of the two liquids, the width of the ring providing an index of excess of globulin. [Named after the Scottish pathologist Hugh Campbell Ross (1875–1926) and the Welsh psychoanalyst Ernest Jones (1879–1958) who introduced it]

rostral *adj.* Of, relating to, or situated towards the **anterior* end or side of a

*****ebook converter DEMO Watermarks*****

body, organ, or part; or, in the human brain, towards the top, as if humans walked on all fours like other animals. *Compare* CAUDAL. [From Latin *rostrum* a beak]

rostrum *n.* 1. Any beak or beak-shaped structure, such as the rostrum of the *corpus callosum, the front tip below the genu. 2. A platform for public speaking, named after the *rostrum* of the Roman forum, which was festooned with beaks plundered from the bows of captured ships. [From Latin *rostrum* a beak]

rotating circles illusion *n.* Another name for the *Pinna–Brelstaff illusion.

rotating head illusion *n.* A visual illusion in which a two-dimensional painting or photograph of a head (or of any three-dimensional object) appears to rotate in the same direction as a viewer who moves in front of it from one side to the other. The illusion results from the fact that if the head were three-dimensional, then the viewer, moving from side to side, would see it first from one side, then from the front, then finally from the other side, as if the head were rotating in the opposite direction, and the head would appear stationary, therefore with a two-dimensional painting or photograph, the absence of any apparent contrary rotation causes the head to appear to rotate in the same direction as the viewer, and the sitter's *gaze seems to follow the viewer around. Also called the *portrait illusion*. *Compare* HOLLOW-FACE ILLUSION.

rotation *n.* Application of any of several statistical techniques in *factor analysis for making a factor solution easier to interpret by rotating the axes of the factor loadings to achieve a simple or meaningful structure. *See* SIMPLE STRUCTURE.

rotation, mental *See* MENTAL ROTATION.

rote learning *n.* Memorization through repetition and reproduction without attention to meaning. In psychology, the term is applied especially to the learning of inherently meaningless information such as *nonsense syllables. [Perhaps from Latin *rota* a wheel]

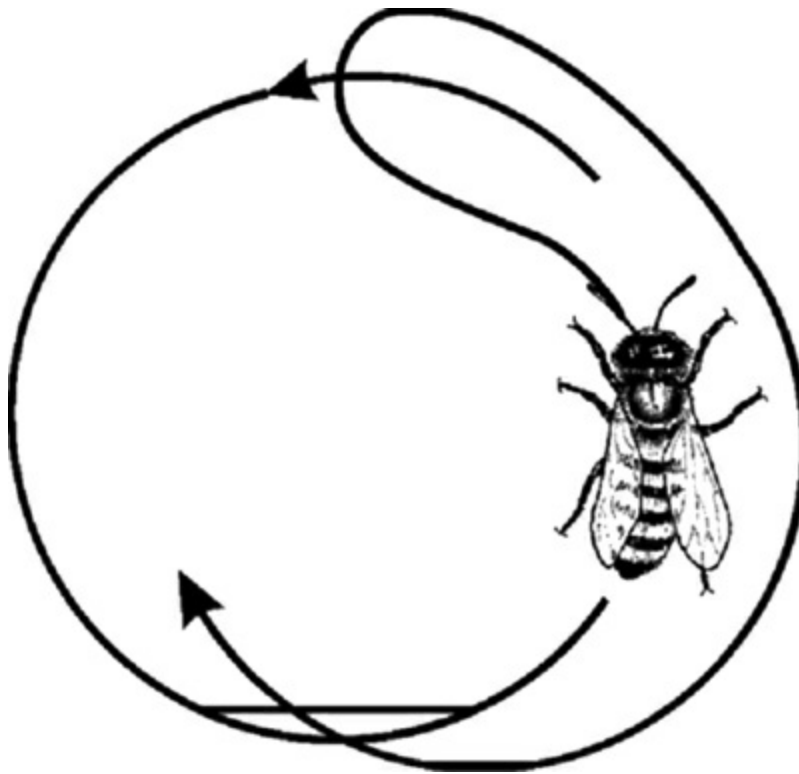
*****ebook converter DEMO Watermarks*****

rote memory *n.* Mechanical memory based on [*rote learning](#).

Rotter Incomplete Sentences Blank *n.* A [*sentence completion test](#) designed to measure psychological adjustment, available in three forms (high school, college, and adult), each consisting of 40 truncated sentences, such as *I hate...*; *The best...*; and *Most girls...*. It is scored for conflict, positive responses, and neutral responses, from which an overall adjustment score is calculated. **RISB** *abbrev.* [Named after the US psychologist Julian B(ernard) Rotter (1916–2014) who published the earliest version of it in the journal *American Psychologist* in 1946 and, with two colleagues, issued a revised version commercially in 1992]

rough endoplasmic reticulum *See* [ENDOPLASMIC RETICULUM](#). **RER** *abbrev.*

round dance *n.* One of two patterns of movement, first described by the Austrian zoologist Karl von Frisch (1886–1982) in a series of publications from 1924 to 1955, through which a female honey-bee communicates to other members of her hive the direction and distance of a source of nectar or sometimes a new nesting site less than a certain distance away—less than about 5–80 metres away, depending on the bee species or subspecies—the more elaborate and specific [*waggle dance](#) being reserved for targets further away. In the round dance, the bee moves in circles on a (usually) vertical surface of the honeycomb, alternating clockwise and anticlockwise, the liveliness and length of her dance indicating how rich the food source is (see [illustration](#)). Also called a *circling dance*. [Translated from von Frisch's German *Rundtanz* literally round dance, from *rund* round + *Tanz* a dance]



Round dance

round window *n.* An opening in the wall of the middle ear leading to the cochlea, covered by a membrane, functioning to reduce pressure caused by vibration of the ***oval window**. Also called the *cochlear window*, *fenestra cochleae* or *fenestra rotunda*. [So called because of its circular shape]

r-selection *n.* A form of ***natural selection** that is typical of organisms in relatively unstable, variable, and unpredictable ecological conditions in which rapid population growth is crucial, and that is characterized by fast development, small size, early reproduction, perfunctory parental care, limited learning capacity, and generally opportunistic behaviour. *See also R-K CONTINUUM. Compare K-SELECTION. r-selected* *adj.* Selected for superiority in environments favouring *r*-selection.

R squared *n.* In statistics, the square of the ***multiple correlation coefficient**. *See COEFFICIENT OF DETERMINATION. Symbol:* R^2 .

rubber hand phenomenon *n.* A **cognitive illusion* that is induced when a person holds one hand out of sight while an artificial hand is positioned where the person's own hand might be, and both the artificial hand and the real hand are simultaneously stroked with a paintbrush or similar object. The artificial hand begins to be experienced as the person's own hand after about 10 seconds, on average, and this effect is accompanied by electrical activity in the premotor area of the **motor cortex*. The phenomenon was first reported by the US psychiatrists Matthew M. Botvinick (born 1967) and Jonathan D. Cohen (born 1955) in the journal *Nature* in 1998, and the brain activity associated with this body-ownership illusion was first described in an article in the journal *Science* by the Swedish neuroscientist H. Henrik Ehrsson (born 1972) and colleagues in 2004. *See also* PHANTOM LIMB. *Compare* ALIEN HAND SIGN, ANARCHIC HAND.

Rubin's figure *n.* Another name for the **reversible goblet*. [Named after the Danish psychologist Edgar Rubin (1886–1951) who introduced it in 1915]

rubrospinal tract *n.* A bundle of efferent nerve fibres connecting the **red nucleus* to the **spinal cord*. [From Latin *ruber* red + English *spinal*]

Ruffini corpuscle *n.* An oval-shaped sensory nerve ending in subcutaneous tissue of hairy **skin* and near fingernails, similar in structure to a **Golgi tendon organ*, sensitive to drag or shearing stress. Also called a *Ruffini ending*. *Compare* FREE NERVE ENDING, MEISSNER'S CORPUSCLE, MERKEL CELL, PACINIAN CORPUSCLE. [Named after the Italian histologist Angelo Ruffini (1864–1929) who discovered it and published his findings in 1892]

rule of abstinence *See* ABSTINENCE RULE.

rumination disorder *n.* An **eating disorder* in **DSM-5* characterized by a persistent pattern of repeated regurgitation, chewing, and swallowing or spitting out of partly digested food, without apparent nausea, retching, or disgust, the behaviour not occurring as a result of **anorexia nervosa*, **bulimia nervosa* or a gastrointestinal or other medical condition. [From Latin *ruminare* to chew the cud, from *rumen* the gullet]

rumour *n.* An unverified story or report circulating in a community, usually by word of mouth. It tends to focus on people or events about which there is interest or concern but not much concrete evidence, and as it is propagated, it undergoes the same processes of **assimilation* (5), **levelling* (1), and **sharpening* as are found in other forms of **serial reproduction*. US *rumor*. See also MEME, RUMOUR INTENSITY FORMULA, SMALL WORLD PHENOMENON, URBAN LEGEND. [From Latin *rumor* noise]

rumour intensity formula *n.* A proposition formulated by the US psychologists Gordon W(illard) Allport (1897–1967) and the Russian-born Leo (Joseph) Postman (1918–2004) in their book *The Psychology of Rumor* (1947) that the strength of a **rumour* depends on its importance multiplied by the difficulty of falsifying it. US *rumor intensity formula*.

Rumpelstiltskin phenomenon *n.* The tendency for the naming of something to create the impression of imparting an understanding of it. It applies, for example, to the naming of mental disorders: a person who tells implausible lies may be said to be suffering from **pseudologia fantastica*, but that term is nothing more than a name for implausible lying, and any impression that it imparts an understanding of the phenomenon is a **cognitive illusion*. [Named after Rumpelstiltskin in a famous fairy tale, called Rumpelstilzchen in the German version collected by the brothers Grimm, a strange dwarf who exerts a baleful influence over a miller's daughter until she eventually gains power over him by learning his name]

run *n.* The act or process of running, or a journey, trip, or spell. In statistics, any succession of observations of one specified type in an ordered sequence of observations, preceded and followed by observations of a different type or by no observations at all. For example, a succession of heads in a sequence of coin tosses is a run, and so is a succession of failures in a sequence of trials of a treatment. See also RUNS TEST.

runs test *n.* In statistics, a test of the randomness of an ordered sequence of binary or dichotomous observations, in which the number of **runs* expected on the basis of chance is calculated and compared with the observed number of runs. Also called the *Wald–Wolfowitz runs test*.

Russell's paradox *n.* The most famous [*paradox](#) of [*set](#) theory. Some sets are members of themselves and others are not: for example, the set of all sets is a member of itself, because it is a set, whereas the set of all penguins is not, because it is not a penguin. Now consider the set of all sets that are not members of themselves; is it a member of itself or is it not? If it is a member of itself, then it is not a member of itself, because it is one of those that are not members of themselves; and if it is not a member of itself, then it is a member of itself. It was discovered in 1901 by the Welsh philosopher Bertrand (Arthur William) Russell (1872–1970), and it undermined the attempt by the German logician and mathematician Friedrich Ludwig Gottlob Frege (1848–1925) to derive the whole of arithmetic from logic via set theory. When the second volume of Frege's monumental *Grundgesetze der Arithmetik* was in press, he received a letter from Russell describing the paradox; he replied that ‘arithmetic totters’ and was forced to add an appendix to the book explaining why the ambitious project had to be abandoned. Russell's paradox is closely related to the [*barber's paradox](#).



saccade *n.* A rapid ***ballistic movement** of the eyes, lasting 20 to 100 milliseconds, as they jump from one fixation point to the next when reading or tracking a moving object or image. A ***microsaccade** is a small saccade occurring as part of ***physiological nystagmus** during visual fixation of a stationary object. *See also* **AUTOKINETIC EFFECT**, **CHANGE BLINDNESS**, **EYE-TRACKING**, **FEEDFORWARD**, **VISUAL SUPPRESSION**. *Compare* **SMOOTH EYE MOVEMENT**. **saccadic** *adj.* [French *saccade* a jerk, from Old French *saquer* to pull]

saccadic suppression *n.* Another name for ***visual suppression**.

saccul *n.* A small sac, especially the smaller of the two sections of the ***membranous labyrinth** of the inner ear that functions as an ***otolith** receptor in the ***vestibular system**. **saccular** *adj.* *Compare* **UTRICLE**. [From Latin *sacculus* a little sac, diminutive of *saccus* a sack]

sad horse disease *See* **BORNA DISEASE VIRUS**.

sadism *n.* Another name for ***sexual sadism**. The term is also used loosely to denote extreme cruelty not motivated by sexual desire. *See also* **ORAL SADISTIC PHASE**. **sadistic** *adj.* [Named after the French writer Count Donatien François de Sade (1740–1814), also known as the Marquis de Sade, who described it in his novels, notably *Les 120 Journées de Sodome* (1785, *The 120 Days of Sodom*) and *Juliette* (1796)]

sadistic–anal stage *n.* Another name for the ***anal sadistic stage**. *See* **ANAL STAGE**.

sadistic–oral phase See ORAL SADISTIC PHASE.

sadomasochism *n.* A generic name for *sexual sadism and *sexual masochism, alluding to the fact that they are often combined in the same person. **sadomasochistic** *adj.* **SM** *abbrev.*

sagittal plane *n.* The vertical plane dividing the body, the brain, or any other organ into left and right parts, the *midsagittal plane* (also called the *median plane*) dividing the structure along its midline. (see illustration at *coronal plane). Compare CORONAL PLANE, TRANSVERSE PLANE. [From Latin *sagitta* an arrow]

sagittal section *n.* A cutting through a *sagittal plane. The midsagittal section (also called the *median section*) of the brain passes through the *longitudinal fissure and exposes the *medial surfaces of the cerebral hemispheres. Compare CORONAL SECTION, HORIZONTAL SECTION, TRANSVERSE SECTION.

sagittal suture *n.* The serrated line along the middle of the top of the skull where the left and right *parietal bones join together.

Saint John's wort See ST JOHN'S WORT.

Saint Vitus' dance *n.* A disorder of the motor nerves leading to jerky, *choreiform movements of the limbs and face; also an obsolete name for *Sydenham's chorea. [So called because of an early confusion with *tarantism in pilgrims to the shrine of St Vitus at Ulm]

saka See UFUFUNYANE.

salience *n.* 1. The protruding or jutting-out property of a physical structure; hence figuratively the prominence, conspicuousness, or striking quality of a *stimulus (1). 2. In relation to animal behaviour, leaping. **salient** *adj.* [From Latin *saliens* leaping, from *salire* to leap]

salivary gland *n.* Any of the *exocrine glands that secrete saliva into the

*****ebook converter DEMO Watermarks*****

oral or mouth cavity. Human salivary glands include the parotid glands in front and below each ear, the sublingual gland below the tongue, and the submaxillary glands below each side of the jaw.

saltation *n.* 1. The manner in which a nerve impulse is propagated along a **myelinated* nerve fibre in a sequence of jumps from one **node* of Ranvier to the next, greatly increasing its speed of propagation. Also called *saltatory conduction*. 2. A sudden variation in the structure or behaviour of an organism, species, or subspecies resulting from genetic **mutation*. 3. Another name for **sensory* saltation. [From Latin *saltus* a leap, from *saltare* to dance + *-ation* indicating a process or condition]

salty *n.* One of the primary tastes in **Henning's tetrahedron*, the characteristic taste of sodium chloride or table salt.

sample *n.* In research methods and statistics, a number of individuals selected from a **population* to test hypotheses about the population or to derive estimates of its **parameters*. See ACCIDENTAL SAMPLE, CLUSTER SAMPLE, CONVENIENCE SAMPLE, HOLD-OUT SAMPLE, NON-PROBABILITY SAMPLE, OPPORTUNITY SAMPLE, PROBABILITY SAMPLE, QUOTA SAMPLE, RANDOM DIGIT DIALLING, SELF-SELECTED SAMPLE, SIMPLE RANDOM SAMPLE, SNOWBALL SAMPLE, STRATIFIED RANDOM SAMPLE. [From Latin *exemplum* an example]

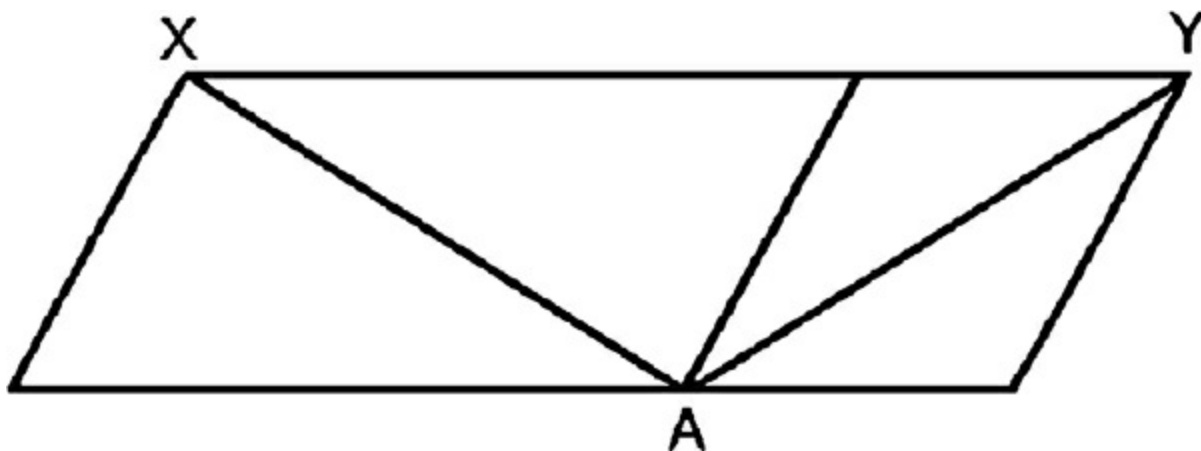
sample size fallacy *n.* A failure to take account of sample size when estimating the probability of obtaining a particular value in a sample drawn from a known population. Research into the fallacy was first reported by the Israeli-American psychologists Daniel Kahneman (born 1934) and Amos Tversky (1937–96) in an article in the journal *Cognitive Psychology* in 1972 describing an experiment in which participants were asked to estimate the probability of a group of people having an average height over 6 feet. The participants produced almost identical estimates for group sizes of 10, 100, and 1,000, whereas in reality the probability of an unusually high sample average, relative to the population average, is much greater in a small sample than in a large one. The fallacy is explained by the use of the **representativeness heuristic*, which is insensitive to sample size. The most common form of the fallacy is the tendency to assume that small samples should be representative of their parent populations, the **gambler's fallacy*

*****ebook converter DEMO Watermarks*****

being a special case of this phenomenon. Compare [BASE-RATE FALLACY](#).

sampling frame *n.* A list of members of a [*population](#) from which members of a [*sample](#) are selected, especially when a [*simple random sample](#) (SRS) is drawn.

Sander parallelogram *n.* A visual illusion in which the long diagonal of a parallelogram appears much longer than that of a smaller parallelogram contiguous to it, one of the large parallelogram's short sides forming one of the long sides of the smaller parallelogram and the two long diagonals being of equal length (see [illustration](#)). Also called the *parallelogram illusion*. [Named after the German Gestalt psychologist Friedrich Sander (1889–1971) by one of his students, who published it in 1926, although it had already been published by the US lighting engineer and psychologist Matthew Luckiesh (1883–1967) in his book *Visual Illusions: Their Causes, Characteristics and Applications* (1922, p. 58) and should arguably be called the Luckiesh illusion]



Sander parallelogram. The distances AX and AY are equal.

sangue dormido *n.* A [*culture-bound syndrome](#) largely confined to Portuguese-speaking Cape Verde islanders and emigrant Cape Verde communities in other parts of the world, the symptoms of which may include muscle and joint pain, numbness, trem-bling, paralysis, convulsions, stroke, blindness, heart attack, and (among pregnant women) miscarriage. [From Spanish *sangue* blood, from Latin *sanguis* blood + Spanish *dormido* sleeping,

from Latin *dormire* to sleep]

Sanson image *n.* Another name for a **Purkinje–Sanson image*. [So called because it was investigated in 1838 by the French surgeon Louis Joseph Sanson (1790–1841), having been first observed in 1825 by the Czech-born German physiologist Johannes E(vangelista) Purkinje (1787–1869)]

sapid *adj.* Tastable; in non-technical discourse also tasty or pleasant-tasting. [From Latin *sapidus* tastable, from *sapere* to taste]

Sapir–Whorf hypothesis *n.* The two-pronged theory that language determines the way people perceive the world and think, rather than the other way round (see *LINGUISTIC DETERMINISM*), and that people who speak different languages perceive reality differently and think differently, because categories and distinctions encoded in one language are not necessarily available in another (see *LINGUISTIC RELATIVITY*). Also called the *Whorfian hypothesis*. See also *POLYONYMY*. [Named after the US anthropologist Edward Sapir (1884–1939) and the US fire prevention officer and linguist Benjamin Lee Whorf (1897–1943) who formulated it in the 1920s]

sapphism *n.* A less common name for **lesbianism*. **sapphic** *adj.* [Named after the lyric poet Sappho (born about 650 BC) who lived on the Greek island of Lesbos and expressed love for women in many of her poems]

sarcomere *n.* Any of the transverse segments of **striped muscle* tissue, situated between two **Z-discs*, that comprise an integrated contractile unit. [From Greek *sarx*, *sarcos* flesh + *meros* a part]

sarin *n.* The **organophosphate*, **anticholinesterase*, **nerve* gas isopropyl methylphosphonofluoridate. Formula: $C_4H_{10}FPO_2$. [German, origin unknown]

Saroten *n.* A proprietary name for the tricyclic antidepressant drug **amitriptyline*. [Trademark]

SAS *abbrev.* Statistical Analysis System, a suite of statistical computer programs often used by psychologists, distributed by SAS Inc. of Cary, North Carolina, USA. *Compare* [BMDP](#), [SPSS](#), [SYSTAT](#).

satellite cell *n.* A type of [*neuroglial](#) cell that forms round a damaged cell. [From Latin *satelles* an attendant]

satiety centre *n.* One of the two structures of the [*appestat](#), situated in each side of the [*ventromedial hypothalamus](#), stimulation of which inhibits eating and destruction increases eating. US *satiety center*. *Compare* [FEEDING CENTRE](#).

satisficing *n.* A decision making procedure or cognitive [*heuristic](#) that entails searching through the available options just long enough to find one that reaches a preset threshold of acceptability, first suggested by the US political scientist and decision theorist Herbert A(lexander) Simon (1916–2001) in his book *Models of Man: Social and Rational* (1957), to explain the behaviour of human decision makers with [*bounded rationality](#) in circumstances in which an optimal solution cannot be determined, often because a thorough examination of all available options would be required but would be infeasible or would consume too much time and energy. Thus a newly married couple looking for a house to buy may accept the first one they find that satisfies certain minimal requirements of price, location, number of rooms, and local amenities; human chess players also usually adopt satisficing moves because it is impossible to analyse all available moves in a typical chess position; and firms often seek satisfactory rather than optimum levels of profits and growth. *See also* [PSYCHOLOGICAL DECISION THEORY](#). **satisfice** *vb.* **satisficer** *n.* One who satisfices. [A blend of *satis(factory)* and *(suf)ficing*, because it involves the choice of options that are satisfactory or that suffice]

saturation *n.* 1. The amount of [*chroma](#) in a colour as a proportion of all the colour, both [*chromatic \(1\)](#) and [*achromatic \(1\)](#), the admixture of grey causing the colour to appear *desaturated*. It is one of the three major dimensions of colour, the other two being [*hue](#) and [*lightness](#). The [*Munsell](#) chroma scale of saturation ranges from grey (zero) to the most saturated level (14). *See also* [CHROMATICITY](#), [MUNSELL COLOUR SYSTEM](#). 2. In [*log-linear](#) *****ebook converter DEMO Watermarks*****

analysis, the state of a model that contains all main effects and interactions and in which observed and expected frequencies are therefore equal. **3.** More generally, the state or quality of being soaked or imbued with something to the fullest extent possible. [From Latin *saturare*, -*atum* to soak, from *satur* full or sated, from *satis* enough + -*ation* indicating a process or condition]

satyriasis *n.* A psychological condition of men characterized by uncontrollable sexual desire and an inability to have lasting sexual relationships. Referred to non-technically as *Don Juanism*. Compare **NYMPHOMANIA**. [From Greek *satyros* one of the Greek gods of the woodlands who chase the nymphs]

savant *n.* **1.** A person of great wisdom or learning. **2.** Another name for an ***idiot savant**. [From French *savant* wise or knowledgeable]

savings, method of See **METHOD OF SAVINGS**.

saxitoxin *n.* A ***neurotoxin** that is produced by plankton in reddish discoloured sea water and that selectively blocks ***sodium** channels in neurons, disabling their ability to generate nerve impulses, used as a neurotoxin in experimental neurophysiology. See also **NEUROTOXIN**. **STX** *abbrev.* [Named after *Saxi(domus) (gigantus)* an Alaskan clam that feeds on it and from which it is isolated + *toxin* poison, from Greek *toxikon* arrow-poison, from *toxon* a bow]

Sayre's law *n.* Another name for ***Issawi's law of social motion**. [Named after the US political scientist Wallace Stanley Sayre (1905–72) who formulated it but did not publish it]

scala *n.* Any of the three fluid-filled chambers separated by membranes that run through the length of the ***cochlea** of the inner ear. See **SCALA MEDIA**, **SCALA TYMPANI**, **SCALA VESTIBULI**. **scalae** *pl.* [From Latin *scala* a ladder or staircase, alluding to the cochlea's resemblance to a spiral staircase]

scala media *n.* A ***cochlear** chamber bounded by the ***organ of Corti** and ***Reissner's membrane** and containing ***endolymph**.

scala tympani *n.* A *cochlear chamber lying below the *basilar membrane and containing *perilymph.

scala vestibuli *n.* A *cochlear chamber situated on the opposite side of Reissner's membrane to the *organ of Corti and containing perilymph.

scale *n.* **1.** In statistics and measurement theory, a rule governing the relationship between numerical scores and the magnitudes of the *attributes or quantities being measured. *See also* ABSOLUTE SCALE, INTERVAL SCALE, LOG-INTERVAL SCALE, MEASUREMENT LEVEL, NOMINAL SCALE, ORDINAL SCALE, RATIO SCALE. **2.** A test or measuring instrument for implementing a scale (1). **scaling** *n.* The development or construction of scales (1, 2), often by aggregating or ordering responses of individuals. [From Latin *scala* a ladder, from *scandere* to climb]

scalogram analysis *n.* The method used to construct a *Guttman scale.

SCAN *abbrev.* Schedules for Clinical Assessment in Neuropsychiatry, a set of instruments and manuals for assessing, measuring, and accurately classifying the *signs (1) and *symptoms of adult mental disorders, with the objective of facilitating valid comparisons across research investigations, published by the World Health Organization in 1994. Its major components are the *Present State Examination (PSE), an *Item Group Checklist (IGC), a *Clinical History Schedule (CHS), and *Catego, a computer software package for processing SCAN data.

scanning speech *n.* Abnormal speech characterized by staccato articulation, with words clipped and broken into detached syllables with pauses between them, caused by neuromuscular disorder.

scatter *n.* In descriptive statistics, the degree of dispersion or variability in a set of scores, usually indexed by the *variance or *standard deviation. *See also* INTERQUARTILE RANGE, PROBABLE ERROR, RANGE, SEMI-INTERQUARTILE RANGE.

scatterplot *n.* In statistics, a graph of the relationship between two variables consisting of unconnected points representing individuals or cases,

with the horizontal axis usually representing the individuals' scores on one variable and the vertical axis the scores on the other variable. A scatterplot is often useful when the **correlation* between two variables is being investigated. Also called a *scatter diagram* or a *scattergram*.

schedule of reinforcement See REINFORCEMENT SCHEDULE.

Scheffé test *n.* In statistics, a method of **multiple comparisons* that can be used for making not only pairwise comparisons but all possible linear combinations of group means. For pairwise comparisons of means it tends to be conservative, inasmuch as it requires larger differences between means for significance than some other methods. Compare BONFERRONI CORRECTION, DUNCAN'S MULTIPLE RANGE TEST, LEAST-SIGNIFICANT DIFFERENCE TEST, NEWMAN-KEULS TEST, TUKEY-HSD TEST. [Named after the US mathematician Henry Scheffé (1907–77) who developed it in 1959]

schema *n.* A plan, diagram, or outline, especially a mental representation of some aspect of experience, based on prior experience and memory, structured in such a way as to facilitate (and sometimes to distort) perception, cognition, the drawing of inferences, or the interpretation of new information in terms of existing knowledge. The term was first used in a psychological sense by the English neurologist Sir Henry Head (1861–1940), who restricted its meaning to a person's internal **body image*, and it was given its modern meaning by the English psychologist Sir Frederic Charles Bartlett (1886–1969) in his book *Remembering: A Study in Experimental and Social psychology* (1932, p. 199) to account for the observation that errors in the recall of stories tend to make them more conventional, which Bartlett attributed to the **assimilation* (5) of the stories to pre-existing schemata. The concept of a **frame* (2), introduced in 1975 by the US cognitive scientist Marvin (Lee) Minsky (born 1927), is essentially a schema formalized in **artificial intelligence*. A **script* (3) is a schema of an event sequence. See also CAUSAL SCHEMA, CONSTRUCTIVISM, PERCEPTUAL SCHEMA, SCHEME, SELF-SCHEMA, WAR OF THE GHOSTS. Compare MENTAL MODEL, PROTOTYPE (2). **schemata** or **schemas** *pl.* [From Greek *schema* a form, from *echein* to have]

scheme *n.* In the writings of the Swiss psychologist Jean Piaget (1896–1980), a concept almost synonymous with **schema* but restricted to

*****ebook converter DEMO Watermarks*****

conscious cognitive representations and plans.

schizoaffective disorder *n.* A *mental disorder* in *DSM-5* characterized by a *major depressive episode*, a *manic episode*, or a *mixed episode*, together with the symptoms of *schizophrenia*.

schizoid personality *n.* A concept introduced in 1963 by the Scottish psychoanalyst W. Ronald D. Fairbairn (1889–1964) to denote a type of person who may be outwardly successful but is solitary, withdrawn, and unable to relate to people, and even when interacting gives nothing to the other person. Fairbairn linked this to a failure of the person's mother to treat the child as real or to love it for its own sake. *See also* SCHIZOID PERSONALITY DISORDER.

schizoid personality disorder *n.* A *personality disorder* in *DSM-5* characterized by a pervasive detachment from social relationships and a restricted range of emotional expression, indicated by such signs and symptoms as a lack of desire for or enjoyment of close relationships; almost exclusive choice of solitary pursuits; little or no interest in having sexual relationships; enjoyment of few activities; lack of close friends or confidants other than immediate family members; apparent indifference to praise and criticism; and emotional coldness, detachment, and *affective flattening*. *See also* SCHIZOID PERSONALITY. *Compare* ASPERGER'S DISORDER, AVOIDANT PERSONALITY DISORDER, SCHIZOPHRENIA, SCHIZOTYPAL (PERSONALITY) DISORDER.

schizophrenia *n.* A major *mental disorder*, formerly called *dementia praecox*, characterized by *positive symptoms* such as *delusions*, *hallucinations*, *disorganized speech*, *disorganized thinking*, grossly disorganized behaviour, or *catatonia*; *negative symptoms* such as *affective flattening*, *alogia*, or *avolition*; and marked deterioration in work, social relations, or self-care. Associated features include inappropriate *affect*, *anhedonia*, *dysphoric mood*, lack of *insight* (3), *depersonalization*, and *derealization*. To meet the diagnostic criteria of *DSM-5*, at least two major symptoms must be present. Because of its etymology (see below), schizophrenia is often confused with multiple personality disorder or split personality (*dissociative identity disorder*), but the Swiss psychiatrist Eugen Bleuler (1857–1939), who coined the term,

*****ebook converter DEMO Watermarks*****

meant it to refer to the splitting up or disintegrating of the mental functions rather than the cleaving in two of the mind. On page 5 of his book *Dementia praecox oder Gruppe der Schizophrenien* (1911, p. 8 of the English translation *Dementia Praecox or the Group of Schizophrenias*, 1950), he explained: ‘I call dementia praecox “schizophrenia” because...the “splitting” of the different psychic functions is one of its most important characteristics’. See also BORNA DISEASE VIRUS, CATATONIC SCHIZOPHRENIA, DELUSIONAL DISORDER, DISORGANIZED SCHIZOPHRENIA, DOUBLE BIND, PARANOID SCHIZOPHRENIA, p50, p300, REALITY MONITORING, REALITY TESTING, RESIDUAL SCHIZOPHRENIA, SCHIZOAFFECTIVE DISORDER, SCHIZOPHRENIA SCALE, UNDIFFERENTIATED SCHIZOPHRENIA. Compare SCHIZOID PERSONALITY, SCHIZOPHRENIFORM DISORDER, SCHIZOTYPAL (PERSONALITY) DISORDER. [From Greek *schizein* to split + *phren* mind, originally midriff, the supposed seat of the soul + *-ia* indicating a condition or quality]

schizophrenia scale *n.* Any scale designed to measure schizophrenia, including the schizophrenia scale of the *MMPI.

schizophrenia spectrum and other psychotic disorders *n.* An umbrella term introduced in *DSM-5 to encompass disorders associated with *hallucinations, *delusions, *disorganized speech, *negative symptoms, and grossly abnormal body movements. The disorders in this category are *schizotypal (personality) disorder, *delusional disorder, *brief psychotic disorder, *schizophreniform disorder, *schizophrenia, *schizoaffective disorder, *substance/medication-induced psychotic disorder, *psychotic disorder due to another medical condition, and *catatonia.

schizophreniform disorder *n.* A *mental disorder in *DSM-5 with the same features as *schizophrenia, but lasting for only a short time, usually more than one month but less than six months. [From *schizophreni(a)* + *form*, from Latin *forma* a form]

schizophrenogenic *adj.* Tending to cause schizophrenia. The word has been used especially to describe mothers or parents who create *double binds for their children.

schizotypal (personality) disorder *n.* A *personality disorder in *DSM-5 characterized by behavioural eccentricities and anomalies of
*****ebook converter DEMO Watermarks*****

cognition and affect that resemble those of **schizophrenia*, notably marked discomfort with, and reduced capacity for, close personal relationships together with cognitive or perceptual distortions and eccentric behaviour, beginning by early childhood, indicated by such signs and symptoms as **ideas of reference* (but not **delusions* of reference); odd beliefs or magical thinking (such as superstitions and beliefs in telepathy or clairvoyance); unusual perceptual experiences; strange speech and thinking; **paranoid* ideation; inappropriate **affect* or **affective flattening*; eccentric or peculiar appearance or behaviour; absence of close friends; and excessive social anxiety that does not decline with intimacy. *See also* COGNITIVE SLIPPAGE, SCHIZOTYPY. *Compare* SCHIZOID PERSONALITY DISORDER, SCHIZOPHRENIA.

schizotypy *n.* A mental disorder believed to be closely related to **schizophrenia*, first described and named by the Hungarian-born US psychiatrist and psychoanalyst Sandor Rado (1890–1972) in an article in the *American Journal of Psychiatry* in 1953, characterized by the following signs and symptoms: **anhedonia*, a distorted body **schema*, a deficit of **motivation*, and inability to organize goal-oriented activities. In an influential article by the US psychologist Paul Everett Meehl (1920–2003) in the journal *American Psychologist* in 1962, the definition was extended to include **cognitive* slippage, **social anxiety disorder*, and **ambivalence*. The corresponding disorder in **DSM-5* is called **schizotypal (personality) disorder*. [From Greek *schizein* to split + *phren* mind, originally midriff, the supposed seat of the soul + *typos* a mark]

Scholastic Aptitude Test *See* SCHOLASTIC ASSESSMENT TEST.

Scholastic Assessment Test *n.* The most widely used test for selecting candidates for admission to colleges and universities in the US. Its subtests include verbal and mathematical aptitude tests and an achievement test in each academic subject. It was introduced in schools in 1926 and was originally called the *Scholastic Aptitude Test*, but the Educational Testing Service changed its name in 1994 in response to criticisms of its accuracy at predicting academic performance. *Compare* AMERICAN COLLEGE TESTING PROGRAM, GRADUATE RECORDS EXAMINATION. **SAT** *abbrev.*

school psychology *n.* The name given in the US to the field of **applied*

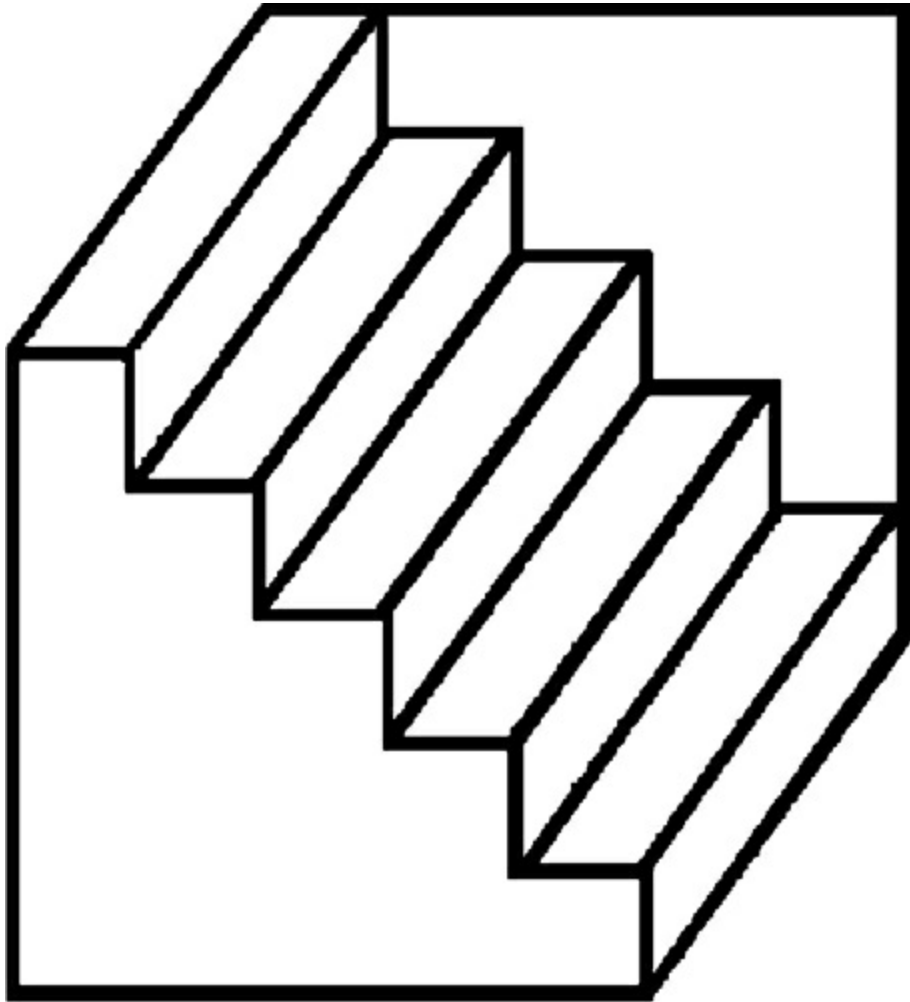
*****ebook converter DEMO Watermarks*****

psychology that in the UK is called **educational psychology*. The work of school psychologists involves the diagnosis and treatment of educational, emotional, and behavioural problems in children of all ages up to the late teens.

Schreber case *n.* A virtuosic **case study* in **psychoanalysis* by Sigmund Freud (1856–1939), entitled ‘Psycho-Analytic Notes on an Autobiographical Account of a Case of Paranoia (Dementia Paranoides)’ (1911, *Standard Edition*, XII, pp. 9–82), based on the memoirs of the German magistrate Daniel Paul Schreber (1842–1911). Freud sought to explain why the particular **delusions* found in paranoia (now called **delusional disorder*) are delusions of jealousy, **erotomania* (1), persecution, and grandeur, rather than any others, and he concluded that the following unconscious homosexual wish-fantasy underlies paranoia in a man: *I (a man) love him (a man)*. Homosexuality being socially taboo, the man with paranoia distorts the wish-fantasy into a more acceptable form. First, he may alter the grammatical subject of the wish-fantasy by **projection* (1), yielding *It is not I, but she (my sexual partner), who loves him*, and delusions of jealousy arise. Second, he may alter the object of the sentence by **displacement*: *I don't love a man, because I love women*. This is still unacceptable to a Victorian married man, so it is distorted further by projection into *Women love me*, and delusions of erotomania arise. Third, the verb may be altered by **reversal* (1): *I do not love a man, I hate men*, and this may be changed by projection into the more acceptable form *Men hate me*, yielding delusions of persecution. Finally, he may deny the whole sentence: *I don't love a man, because I love no one*; but for **economic* reasons **object libido* cannot simply disappear but is diverted into **ego* libido, so this is equivalent to *I love no one but myself*, yielding delusions of grandeur. If the person with paranoia is female, then the whole chain of argument applies with the gender terms reversed. The reason for the particular group of delusions found in paranoia was thus explained by Freud. See also LATENT HOMOSEXUALITY, PSYCHOANALYTIC CONSTRUCTION.

Schröder staircase *n.* An **ambiguous figure* appearing as a staircase viewed either from above or below, a classic illustration of **perspective reversal* (see *illustration*). Also spelt *Schroeder staircase*. Often confused with the **staircase illusion*. [Named after the German bacteriologist and psychologist Heinrich Georg Friedrich Schröder (1810–85) who first

published it in 1858]



Schröder staircase. The perspective alternates spontaneously between views of a staircase as seen from above and from below.

schwa *n.* The neutral and central mid **vowel* (see also the diagram accompanying that entry) that occurs in the words *the* and *fern*, at the beginning of *about*, and at the end of *sofa*, and the symbol in the **International Phonetic Alphabet (IPA)* that represents it, namely an inverted *e*. Statistically, it is the most frequently occurring English vowel (over ten per cent of all vowel sounds), yet it has no corresponding single letter in the standard alphabet. See also *CENTRAL VOWEL*, *FORMANT*, *MID VOWEL*. [From Hebrew *shewa* a mark indicating the absence of a vowel sound]

Schwann cell *n.* A type of large **neuroglial* cell responsible for forming the **myelin* sheath around nerves in the **peripheral nervous system*. See also *NEUROLEMMA*. Compare *OLIGODENDROCYTE*. [Named after the German physiologist Theodor Schwann (1810–82) who studied it]

scientific method *n.* Another (less precise) name for the hypothetico-deductive method.

scientific revolution *n.* According to the US historian and philosopher of science Thomas S(amuel) Kuhn (1922–96) in *The Structure of Scientific Revolutions* (1962), a period in which competing **paradigms* (1) vie with one another in a scientific discipline, in a manner analogous to **Darwinian evolution*, until a new paradigm replaces the old by a process of **survival of the fittest*, and a **paradigm* shift thus occurs. See also *KUHNIAN*, *NORMAL SCIENCE*.

sclera *n.* The tough inelastic opaque white membrane that forms the outer covering of the eyeball, apart from one-sixth of the area that is covered by the transparent **cornea*. It maintains the eyeball's shape and forms attachments to the **extra-ocular muscles*. [From Greek *skleros* hard]

sclerosis *n.* Hardening of tissue resulting from inflammation, deposits of fat or of **amyloid plaques*, infiltration of connective tissue fibres, or other causes. See also *AMYOTROPHIC LATERAL SCLEROSIS*, *ARTERIOSCLEROSIS*, *ARTERIOSCLEROTIC DEMENTIA*, *ATHEROSCLEROSIS*, *CEREBRAL ARTERIOSCLEROSIS*, *GLIOSIS*, *MULTIPLE SCLEROSIS*. **sclerotic** *adj.* [From Greek *skleros* hard + *-osis* indicating a process or state]

scopolamine *n.* A colourless, viscous, liquid **alkaloid* that is found in **henbane* and other plants and that acts pharmacologically to inhibit muscarinic acetylcholine activity by competing with acetylcholine for receptor sites, having the effect of a central nervous system **depressant* that crosses the blood–brain barrier and produces sedation and amnesia, used as an adjunct to analgesics in surgery and obstetrics and as a preventative of motion sickness. Also called *hyoscine*. Formula: $C_{17}H_{21}NO_4$. See also *METHYL SCOPOLAMINE*, *TRUTH DRUG*. Compare *ATROPINE*. [From Latin *Scopolia*

the belladonna genus of plants, named after the Italian naturalist Giovanni Scopolli (1723–88) + *amine*]

scopophilia *n.* A **paraphilia* characterized by recurrent, intense sexual fantasies, urges, or behaviour involving looking at naked bodies or other arousing stimuli. Also written *scoptophilia*. *See also* [VOYEURISM](#). [From Greek *skopeein* to watch + *philos* loving, from *phileein* to love + *-ia* indicating a condition or quality]

scoring formula *n.* In psychometrics, a mathematical rule by which **raw scores* are converted to test scores. According to the simplest scoring formula, the test score is simply the sum of the item scores; other scoring formulas involve combining raw scores in various ways other than simple addition, weighting different items of subtests differently, correcting for guessing or for failing to respond to certain items, and so on. *See also* [CONFIGURAL SCORING RULE](#).

scotoma *n.* A blind spot or area of absent or diminished vision, usually resulting from a lesion in the **retina* or **optic nerve*, from viewing the sun directly (called *solar retinopathy* or an *eclipse scotoma*, because it often arises from a person trying to watch an eclipse of the sun), or from squinting. Temporary scotomas often arise as **auras* heralding **epileptic seizures* or **migraine* headaches. *See also* [BLIND SPOT](#), [FILLING-IN](#), [MODAL COMPLETION](#), [TROXLER EFFECT](#). **scotomas** or **scotomata** *pl.* [From Greek *skotoma* dizziness, from *skotos* darkness + *-oma* indicating an abnormality]

scotopic *adj.* Of, relating to, or governed by the **rod*-mediated visual system that functions when the eyes are dark-adapted for dim illumination or night vision, functioning only outside the **fovea* and having peak sensitivity at a wavelength of 505 nanometres (blue–green light) but responding to light across the entire visible spectrum, having only one type of photoreceptor and therefore being completely colour-blind though significantly more sensitive than the **photopic* system except for wavelengths above 650 nanometres (in the red region of the spectrum), where the sensitivities of the two systems are similar. *See also* [ARAGO PHENOMENON](#), [DARK ADAPTATION](#), [DUPLEXITY FUNCTION](#), [FIELD ADAPTATION](#), [LIGHT ADAPTATION](#), [NYCTALOPIA](#), [PHOTOCHROMATIC INTERVAL](#), [PURKINJE SHIFT](#), [RETINOL](#), [SCOTOPIC LUMINOSITY CURVE](#), [STILES-CRAWFORD EFFECT](#).

*****ebook converter DEMO Watermarks*****

Compare MESOPIC, PHOTOPIC. **scotopia** *n.* scotopic vision. Also called *night vision* or *twilight vision*. Compare PHOTOPIC. [From Greek *skotos* darkness + *ops* an eye + *-ikos* of, relating to, or resembling]

scotopic luminosity curve *n.* A *luminosity curve depicting the intensity of light that is required at each point in the *visible spectrum for the colours to appear equally bright in dim light, under *scotopic vision mediated by *rods. Compare PHOTOPIC LUMINOSITY CURVE.

scream therapy See PRIMAL THERAPY.

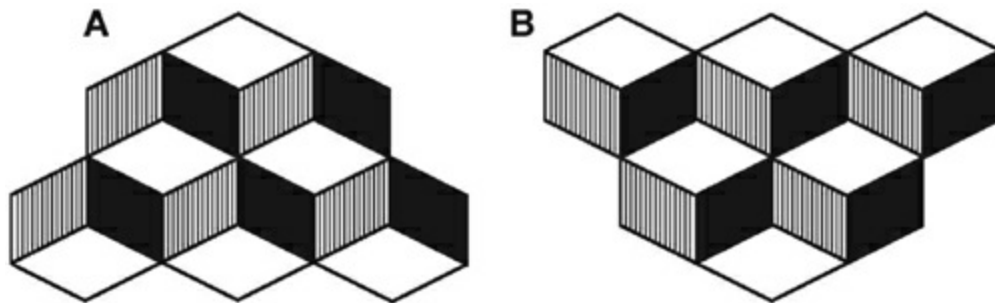
screening test *n.* In psychometrics, a test designed to eliminate a significant proportion of respondents as a preliminary step to a process of *diagnosis or a *selection test.

screen memory *n.* In *psychoanalysis, an innocuous and non-threatening memory of a childhood experience, noteworthy for its sharpness in relation to the insignificance of its content, that signifies an unconscious memory of a significant and threatening kind. Sigmund Freud (1856–1939) introduced the concept in 1899 in an article entitled ‘Screen Memories’ (*Standard Edition*, III, pp. 303–22). Also called a *cover memory*. Compare BLOCKING MEMORY.

script *n.* 1. Handwriting in contradistinction to type or printed text. 2. Any written text. 3. A *schema of an event sequence, such as paying at the checkout of a supermarket, incorporating assumptions about the characteristic actors, objects, and actions in a prototypical instance of the schema. This usage was introduced in 1977 by the US linguist and cognitive scientist Roger C. Schank (born 1946) and the US psychologist Robert P(aul) Abelson (1928–2005) in their book *Scripts, Plans, Goals and Understanding*. See also CONCEPTUAL DEPENDENCY THEORY, FRAME (3), MEMORY ORGANIZATION PACKET. [From Latin *scribere*, *scriptum* to write]

Scripture's blocks *n.* An *ambiguous figure that can be perceived either as three cubes or as five cubes depending on how the perspective cues are interpreted (see *illustration*). See also PERSPECTIVE REVERSAL. [Named after the US-born German/British psychologist Edward Wheeler Scripture (1864–
*****ebook converter DEMO Watermarks*****]

1945) who published it in 1895]



Scripture's blocks. A is identical to B but inverted, as can be confirmed by inverting the page. If one of the groups is seen as three blocks, then the other will be seen as five, and whenever one of the images appears to flip over, so does the other.

SDAT *abbrev.* Senile dementia of the Alzheimer type; a disorder similar to **Alzheimer's disease* but with onset after 65 years of age. *See also* [SENILE DEMENTIA](#).

Seashore Measures of Musical Talent *n.* A set of measures devised by the Swedish-born US psychologist Carl E(mil) Seashore (1866–1949) and discussed in his book *The Psychology of Musical Talent* (1919). They involve controlled procedures for measuring the respondent's ability to discriminate pitch, loudness, tempo, timbre, and rhythm. Also called the *Seashore Tests of Musical Ability*, but Seashore himself deliberately avoided the word *tests* and preferred *measures*, which he thought better captured their character as standardized laboratory procedures.

seasonal affective disorder *n.* A **mood disorder* characterized by recurrent **major depressive episodes* that tend to occur during the winter months, thought to be related to the reduction in hours of daylight. Also called *seasonal mood disorder*. *See also* [PHOTOTHERAPY](#). **SAD** *abbrev.*

secobarbital *n.* A short-acting **barbiturate* drug and central nervous system **depressant*, used as a sedative and hypnotic and sometimes taken as a street drug. Also called *quinalbarbitone* or *Seconal* (trademark). Street names include *pink lady*, *red devils*. Formula $C_{12}H_{18}N_2O_3$. [From *seco-* indicating a chemical compound with an open ring + *barbit(uric) acid* + *-al*

indicating a pharmaceutical product]

Seconal *n.* A proprietary name for the barbiturate drug *secobarbital (quinalbarbitone). [Trademark]

secondary advantage *n.* Another name for *secondary gain.

secondary colour *n.* A colour resulting from the mixture of two *primary colours (1). US *secondary color*. Also called a *binary colour*. See also METAMER.

secondary drive See DRIVE.

secondary elaboration *n.* Another name for *secondary revision.

secondary gain *n.* Any benefit that a person receives as an indirect result of having a disorder, such benefits taking the form of monetary compensation, disability benefits, personal services and attention, or escape from work or onerous responsibilities. Sigmund Freud (1856–1939) drew the distinction between *primary gain and secondary gain in 1916–17 in his book *Introductory Lectures on Psycho-Analysis* (Standard Edition, XV–XVI, at pp. 381–5). Also called *advantage by illness*, *epinosic gain*, *gain from illness*, *secondary advantage*.

secondary identification *n.* In *psychoanalysis, *identification (2) occurring after the establishment of an *object-relationship. See PRIMARY IDENTIFICATION.

secondary immune response See IMMUNE RESPONSE.

secondary impotence See IMPOTENCE (2).

secondary memory *n.* Another name for *long-term memory. Compare PRIMARY MEMORY.

secondary narcissism *n.* In *psychoanalysis, a form of *narcissism in

which **libido* is withdrawn from external **instinctual objects* and turned back on the **ego*. *See also* EGO LIBIDO, OBJECT LIBIDO. *Compare* PRIMARY NARCISSISM.

secondary prevention *n.* Measures taken to limit the spread of an existing disorder. *Compare* PRIMARY PREVENTION, TERTIARY PREVENTION.

secondary process *n.* In **psychoanalysis*, a conscious, rational mode of mental functioning, based on the **reality principle*, involving **bound energy*. Sigmund Freud (1856–1939) developed the concept at the beginning of his psychological work and expounded it at length in Chapter VII of his book *The Interpretation of Dreams* (1900, *Standard Edition*, IV–V). *See also* BINDING. *Compare* PRIMARY PROCESS.

secondary projection area *n.* Any area of the cerebral cortex that receives projections from a **primary projection area*. *Compare* TERTIARY PROJECTION AREA.

secondary quality *See* PRIMARY QUALITY.

secondary reinforcement *n.* In **operant* conditioning, **reinforcement* by means of a **stimulus* (7) that has acquired reinforcing properties by having been paired with a **reinforcer*. For example, if a bell is sounded repeatedly before an animal is fed, then the bell becomes a secondary reinforcer that can be used to reinforce a particular response, such as pressing a lever. Secondary reinforcement is especially useful in **shaping* (1), because it is often difficult to time primary reinforcers such as food sufficiently precisely. The counterpart of secondary reinforcement in **classical conditioning* is **higher-order conditioning*. **secondary reinforcer** *n.* A **stimulus* (7) that has become a **reinforcer* through secondary reinforcement.

secondary repression *n.* In **psychoanalysis*, a form of **repression* in which conscious material that is reminiscent of repressed material is removed from consciousness. *Compare* PRIMAL REPRESSION, PRIMARY REPRESSION.

secondary revision *n.* In **psychoanalysis*, one of the forms of **dreamwork* in which the contents of a dream are rearranged to present a more consistent and comprehensible narrative. Also called *secondary elaboration*.

secondary sexual characteristic *n.* Any of the **attributes* that distinguish the sexes, apart from differences in their reproductive organs and **gametes*, and that develop during **puberty* under the influence of **sex* hormones. Among the most prominent are facial hair and deep voices in men, and wide hips and breasts in women. Compare PRIMARY SEXUAL CHARACTERISTIC.

secondary somatosensory area See SOMATOSENSORY CORTEX.

second censorship See CENSORSHIP.

second messenger *n.* Any chemical substance, notably **cyclic AMP*, that is synthesized within the **cytoplasm* of a cell in response to stimulation by a nerve impulse from a neuron and that has the effect of changing the electrical potential across the **cell* membrane of the cell in which it is operating. [So called because it acts as a neurotransmitter after being activated by a different neurotransmitter or hormone]

second-order approximation to language See APPROXIMATION TO LANGUAGE.

secretory phase *n.* Another name for the **luteal phase* of the **oestrous cycle* or **menstrual cycle*. [So called because of the secretion of progesterone from the corpus luteum during this phase, although hormones are also secreted during the other phases]

sedative *adj. n.* (Of or relating to) a drug or agent that has a calming or soothing effect without a strong hypnotic (sleep-inducing) effect, especially certain of the **benzodiazepine* drugs acting via the **GABA* receptor complex, a **propanediol* drug, or **buspirone*. See also SEDATIVE-HYPNOTIC; SEDATIVE-, HYPNOTIC-, OR ANXIOLYTIC-RELATED DISORDERS. [From Latin *sedatus*

stilled, from *sedare* to still, related to *sedere* to sit + *-ivus* indicating a tendency, inclination, or quality]

sedative–hypnotic *n.* Any of a number of central nervous system **depressant* drugs that are used mainly for their calming and sleep-inducing effects, among the most commonly prescribed being the **barbiturates*, certain of the **benzodiazepines*, the **propanediols*, **chloral hydrate*, **GHB*, **glutethimide*, **paraldehyde*, and **temazepam*. See also SEDATIVE-, HYPNOTIC-, OR ANXIOLYTIC-RELATED DISORDERS.

sedative-, hypnotic-, or anxiolytic-related disorders *n.* A class of **substance-related and addictive disorders* in **DSM-5* induced by consuming **sedatives*, **hypnotics*, and **anxiolytic* or anti-anxiety drugs. These drugs, all of which are central nervous system depressants, include the **benzodiazepines*, **carbamates*, and **barbiturates*, comprising all sleeping medications and all anti-anxiety drugs apart from the non-benzodiazepine anxiolytics. DSM-5 distinguishes between sedative-, hypnotic-, or anxiolytic use disorder, intoxication, and withdrawal. See SUBSTANCE ABUSE, SUBSTANCE DEPENDENCE, SUBSTANCE-INDUCED DISORDERS, SUBSTANCE USE DISORDERS.

seduction theory *n.* In **psychoanalysis*, a theory propounded by Sigmund Freud (1856–1939) from 1895 to 1897, and then abandoned, according to which **neuroses* were attributed to **repressed* memories of sexual seduction in childhood. But in 1897 he ceased to believe that the fantasies were based in reality and propounded a theory of **psychical reality* to deal with the problem. In his article ‘On the History of the Psycho-Analytic Movement’ (1914), he wrote: ‘If hysterical subjects trace back their symptoms to traumas that are fictitious, then the new fact which emerges is precisely that they create such scenes in *phantasy*, and this psychical reality requires to be taken into account alongside practical reality’ (*Standard Edition*, XIV, pp. 7–66, at pp. 17–18).

segregation of alleles *n.* The law of segregation of alleles, the first of **Mendel’s laws*, stating that every **somatic* cell of an organism carries a pair of hereditary units (now identified as **alleles*) for each **character* (2), and that at **meiosis* (1) the pairs separate so that each **gamete* carries only one unit from each pair. Also called the *law of segregation*. See also INDEPENDENT

*****ebook converter DEMO Watermarks*****

ASSORTMENT.

seizure *n.* A sudden attack of a disorder, especially a **convulsion*. *See also* AGENESIS OF THE CORPUS CALLOSUM, AUDIOGENIC SEIZURE, PSEUDOSEIZURE, PSYCHOMOTOR SEIZURE. [From Old French *saisir* to take possession of, from Latin *sacire* to appropriate]

selection *n.* 1. The act or process of choosing, or the item(s) chosen. 2. The natural and artificial processes whereby certain organisms or their characteristics or **genotypes* are reproduced and perpetuated in a population in preference to others. *See* NATURAL SELECTION. *See also* APOSTATIC SELECTION, CANALIZING SELECTION, COUNTERACTING SELECTION, DIRECTIONAL SELECTION, DISRUPTIVE SELECTION, FREQUENCY-DEPENDENT SELECTION, GROUP SELECTION, KIN SELECTION, *K*-SELECTION, REINFORCING SELECTION, *R*-SELECTION, SELECTION PRESSURE, SELECTIVE BREEDING, SEXUAL SELECTION, STABILIZING SELECTION. [From Latin *seligere*, *selectum* to sort, from *se-* apart + *legere* to choose + *-ion* indicating an action, process, or state]

selection pressure *n.* Any environmental feature, such as shortage of food, presence of predators, or competition from **conspecifics* (1), that drives **natural selection*.

selection test *n.* In psychometrics, any test used to choose among candidates for jobs or positions, for promotion, for places on training courses, and so on.

selective advantage *n.* Any characteristic or **trait* that gives an organism or a **genotype* greater chances of surviving and reproducing than the available alternatives.

selective attention *n.* Focusing concentration on a single stimulus or class of stimuli to the exclusion of others. The US psychologist William James (1842–1910) famously pointed out in his *Principles of Psychology* (1890) that this ability must be acquired: ‘The baby, assailed by the eyes, ears, nose, skin and entrails all at once, feels it all as one great blooming, buzzing confusion’ (p. 488). *See* ATTENUATION THEORY, BOTTLENECK THEORY, COCKTAIL PARTY PHENOMENON, FILTER THEORY, FLANKER COMPATIBILITY EFFECT, *****ebook converter DEMO Watermarks*****

KAMIN BLOCKING.

selective breeding *n.* The artificial mating of organisms with particular **genotypes* in order to enhance or suppress certain hereditary characteristics.

selective exposure *n.* The tendency for people to expose themselves to mass media messages that reinforce their pre-existing attitudes. For example, people tend to read newspapers whose editorial opinions are close to their own.

selective mutism *n.* An **anxiety disorder* in **DSM-5* whose essential feature is a persistent failure to speak in certain social situations in which speaking is expected, such as at school or among peers, despite a proven ability to speak in other situations. To satisfy the diagnostic criteria, the behaviour must interfere with educational or occupational achievement or with social interaction and must not be attributable to a lack of knowledge or facility with the language required in the specified situations, or to embarrassment about a communication disorder such as stuttering. Also called *elective mutism*. [From Latin *mutus* dumb]

selective serotonin reuptake inhibitor *n.* A class of **antidepressant* drugs that have a specific blocking action on the reuptake of **serotonin* at **synapses (1)* in the central nervous system, allowing ambient concentrations of this neurotransmitter to increase. Side-effects include sexual dysfunction in approximately half of the people who take them. See CITALOPRAM (Cipramil), CLOMIPRAMINE (Anafranil), FLUOXETINE (Prozac), FLUVOXAMINE (Luvox), PAROXETINE (Paxil), SERTRALINE (Zoloft), ST JOHN'S WORT. Compare MONOAMINE OXIDASE INHIBITOR (MAOI), TETRACYCLIC ANTIDEPRESSANT, TRICYCLIC ANTIDEPRESSANT. **SSRI** *abbrev.*

self *n.* A person's distinctive individuality, identity, essential nature, or collection of personal characteristics. See also COHESIVE SELF, GRANDIOSE SELF, IDEAL SELF, I-SELF, ME-SELF, NUCLEAR SELF, PHENOMENAL SELF, SELF-ACTUALIZATION, SELF-DETERMINATION THEORY, SELF-PSYCHOLOGY, TRUE SELF, VIRTUAL SELF. [From Old English *seolf*, cognate with Old High German *selb*]

self-actualization *n.* A term introduced by the German psychiatrist Kurt
*****ebook converter DEMO Watermarks*****

Goldstein (1878–1965) to denote the motive to realize one's latent potential, understand oneself, and establish oneself as a whole person. In the theory of ***personality** of the US psychologist Abraham Maslow (1908–70), set out in his book *Toward a Psychology of Being* (1962), it represents the highest level of psychological development. The Swiss psychologist Carl Gustav Jung (1875–1961) used the word to define his concept of ***individuation** (*Collected Works*, 7, paragraph 266). *See also* **NEED-HIERARCHY THEORY**, **PEAK EXPERIENCE**. *Compare* **ACTUALIZATION**. **self-actualize** *vb*.

self-analysis *n*. The systematic application to oneself of the techniques of ***psychoanalysis**, apart from the analysis of the ***transference**.

self-confidence *n*. Belief or assurance in oneself, trusting one's abilities, judgements, or decisions, either in general or in relation to a specific situation or activity. Also called *self-assurance*. *See also* **HARD-EASY EFFECT**, **OVERCONFIDENCE EFFECT**, **UNREALISTIC OPTIMISM**. **self-confident** *adj*. [From Old English *seolf* self + Latin *confidens* confident, from *con* with + *fides* faith]

self-defeating personality disorder *n*. A controversial ***personality disorder**, not listed in ***ICD-10** or ***DSM-5** (though listed in an appendix of DSM-III-R), characterized by habitual or recurrent behaviour that leads to failure and invites rejection. Also (misleadingly, since no sexual arousal is implied) called *masochistic personality*.

self-defeating prophecy *n*. A prediction that becomes false as a consequence of having been made. A frequently cited example is the ***unexpected hanging paradox**, but the prediction in that paradox is not actually self-defeating, although it appears to be. A more natural and less paradoxical example is the following: a doctor may discover that a particular patient has a strong genetic predisposition to breast cancer and may predict that she will develop the disease; but the patient may respond to the prediction by having a double mastectomy, eliminating the possibility of developing breast cancer. Also called a *self-defeating prediction*. *See also* **OEDIPUS EFFECT**. *Compare* **SELF-FULFILLING PROPHECY**.

self-determination theory *n*. A theory of human motivation according to which people have three basic psychological needs, for
*****ebook converter DEMO Watermarks*****

autonomy, competence, and relatedness, and are intrinsically motivated, for example, to initiate positive health-related behaviours, when these needs are fulfilled. The theory emerged from research carried out in the 1970s by the US psychologist Edward L. Deci (born 1942) and others, but it was not formally proposed until the 1980s and fully developed by Deci and the US psychologist Richard M. Ryan (born 1953) in an article in the journal *Psychological Inquiry* in 2000. **SDT** abbrev.

Self-Directed Search test See [HOLLAND CODES](#).

self-efficacy *n.* Ability to achieve desired results. Perceived self-efficacy includes beliefs about one's ability or competence to bring about intended results. The concept became widely known in the 1980s and 1990s, largely through the influence of the Canadian-born US psychologist Albert Bandura (born 1925), culminating in his book *Self-Efficacy: The Exercise of Control* (1997). See also [CORE SELF-EVALUATION](#), [SOCIAL COGNITIVE THEORY](#). [From English *self* + Latin *efficax* efficient or effective, from *efficere* to accomplish, from *facere* to do]

self-esteem *n.* One's attitude towards oneself or one's opinion or evaluation of oneself, which may be positive (favourable or high), neutral, or negative (unfavourable or low). Also called *self-evaluation*. See also [CORE SELF-EVALUATION](#), [EGO INVOLVEMENT](#), [POSITIVITY BIAS \(1\)](#), [SELF-IMAGE](#).

self-estrangement *n.* A feeling of [*depersonalization](#) and detachment from one's natural self, especially as a result of immersion in complex industrial culture.

self-evaluation *n.* Another name for [*self-esteem](#).

self-fulfilling prophecy *n.* A prediction that becomes true as a consequence of having been made. For example, if the president of a large company predicts a fall in the company's share price, then the prediction is likely to bring about a fall in the share price irrespective of any other factors, because investors will be more inclined to sell their shares. The best-known self-fulfilling prophecy effects in psychology are the [*experimenter expectancy effect](#) and the [*Pygmalion effect](#). Also called a *self-fulfilling*

*****ebook converter DEMO Watermarks*****

prediction. See also LABELLING THEORY, NOCEBO EFFECT, OEDIPUS EFFECT, PLACEBO EFFECT. *Compare* SELF-DEFEATING PROPHECY.

self-handicapping *n.* Imposing an obstacle to one's successful performance in a particular situation in order to provide an excuse for failure (usually in a person of low self-esteem) or to increase the credit that one can take for success (usually in a person of high self-esteem). Typical examples are going out with friends rather than staying at home and studying the night before an important examination, or becoming intoxicated with alcohol before a date or a potential sexual encounter. It occurs most often when a person is uncertain of success in an **ego-involving* endeavour. The concept was introduced in an article in the journal *Personality and Social Psychology Bulletin* in 1978 by the US psychologists Edward Ellsworth Jones (1926–93) and Steven (Charles) Berglas (born 1949).

self-hypnosis *n.* Self-induced **hypnosis*. Also called *autohypnosis*.

self-image *n.* The idea or conception that one has of oneself in general. *See also* GUIDING FICTION, SELF-ESTEEM, SELF-PERCEPTION THEORY, SELF-SCHEMA.

selfish *adj.* Characterized by self-interest or promotion of one's own interests without regard to the welfare of others. More specifically in social psychology and sociobiology, of or relating to forms of behaviour that benefit an individual in terms of direct advantage or chances of survival and reproduction at some cost to another individual or individuals. *See also* SELFISH GENE. *Compare* ALTRUISM.

selfish gene *n.* A way of describing any **gene*, drawing attention to the fact that it is the fundamental unit of competition in the process of evolution by **natural selection*, increasing in relative frequency in the gene pool by having **phenotypic* effects that give it greater chances of survival and replication than its **alleles*. *See also* EXTENDED PHENOTYPE. [Coined in 1976 by the British ethologist Richard Dawkins (born 1941) in the title of his book *The Selfish Gene*]

self-monitoring *n.* Observation and control of **expressive behaviour* and **self-presentation*. High self-monitors regulate their expressive self-
*****ebook converter DEMO Watermarks*****

presentation and are highly responsive to social and interpersonal cues to situationally appropriate behaviour, whereas low self-monitors lack these abilities or motivations. The concept was introduced in an article in the *Journal of Personality and Social Psychology* in 1974 by the US-based Canadian social psychologist Mark Snyder (born 1947).

Self-Monitoring Scale *n.* A questionnaire comprising 25 true/false items designed to measure **self-monitoring*. It was introduced in 1974 by the US-based Canadian social psychologist Mark Snyder (born 1947).

self-object *n.* In **self-psychology*, one's subjective experience of another person who sustains one's self within a social relationship, evoking and reinforcing one's sense of selfhood. The element *object* refers to an **instinctual object*, not to an inanimate thing. Also written *selfobject*.

self-perception theory *n.* A theory according to which people infer their own **attitudes* (1), **opinions*, and other internal states partly by observing their overt behaviour and the circumstances in which that behaviour occurs. A canonical example is of a man who is asked whether he likes brown bread and who replies, 'I must like it; I'm always eating it.' According to the theory, **introspection* is a poor guide to one's internal states, because internal cues are weak and ambiguous, and a person is therefore in essentially the same position as an outside observer, who necessarily relies on outward behaviour in interpreting another's internal states. The theory has been used to provide an alternative interpretation of **cognitive* dissonance effects. It was introduced in two influential articles by the US psychologist Daryl J. Bem (born 1938) in the *Journal of Experimental Social Psychology* in 1965 and in *Psychological Review* in 1967. It is sometimes regarded as a **behaviourist* type of **attribution* theory.

self-presentation *n.* The conscious or unconscious control of the impression that one creates in social interactions or situations. It is one of the important forms of **impression management*, namely management of one's own impression on others through role playing. The phenomenon is encapsulated in Shakespeare's famous observation in *As You Like It*: 'All the world's a stage, / And all the men and women merely players: / They have their exits and their entrances; / And one man in his time plays many parts'

*****ebook converter DEMO Watermarks*****

(II.vii.139–42). It was popularized by the Canadian-born US sociologist Erving Goffman (1922–82) in his influential book *The Presentation of Self in Everyday Life* (1959). See also [INGRATIATION](#), [SELF-MONITORING](#), [SOCIAL CONSTRUCTIONIST PSYCHOLOGY](#).

self-preservation instinct *n.* In [*psychoanalysis](#), another name for an [*ego](#) instinct, as distinct from a [*sexual instinct](#) or [*libido](#), the prototypical example of a self-preservation instinct being [*hunger \(1\)](#). The following key passage occurs in an article entitled ‘The Psycho-Analytic View of Psychogenic Disturbance of Vision’ (1910) by Sigmund Freud (1856–1939): ‘From the point of view of our attempted explanation, a quite specially important part is played by the undeniable opposition between the instincts which subserve sexuality, the attainment of sexual pleasure, and those other instincts, which have as their aim the self-preservation of the individual—the ego instincts. As the poet has said, all the organic instincts that operate in our mind may be classified as “hunger” or “love”’ (*Standard Edition*, XI, pp. 211–18, at pp. 214–15). Ten years later he began to change his mind on the point made in the last sentence of the quotation—see [THANATOS](#).

self-psychology *n.* A version of [*psychoanalysis](#), put forward by the Austrian-born US psychoanalyst Heinz Kohut (1913–81) in his books *The Analysis of the Self* (1971) and *The Restoration of the Self* (1977), and in his edited volumes *The Search for the Self* (1978) and *How Does Psychoanalysis Cure?* (1984), placing emphasis on the self and the experience of selfhood, the constituent sectors of the self being the *pole of goals and ambitions*, the *pole of ideals and standards*, and the *arc of tension* between the two poles functioning to activate basic talents and skills. Kohut distinguished between the *virtual self* (an image of the neonate’s self in the mind of a parent), the *nuclear self* (the initial organization of the self that emerges in the second year of life), the *cohesive self* (a coherent structure representing the normally functioning self), and the *grandiose self* (a normal exhibitionistic and self-centred self in early infancy). See also [GRANDIOSE SELF](#), [NARCISSISM](#), [NARCISSISTIC PERSONALITY DISORDER](#), [SELF](#), [SELF-OBJECT](#).

self-report *adj.* In psychometrics, of, relating to, or comprising a questionnaire, inventory, check list, or other measuring instrument in which the respondent rather than the test administrator selects and records the

*****ebook converter DEMO Watermarks*****

responses.

self-schema *n.* Any mental structure representing knowledge about oneself on a particular dimension or in a particular domain. A person who has a well-developed ***self-image** in a particular area—for example, a person with a strong self-image of being truthful—is said to be *self-schematic* on that dimension, and such a person is likely to form self-judgements more rapidly and more confidently about information relevant to the self-schema than is a person who is not self-schematic in that area. *See also* [COGNITIVE THERAPY](#), [DEPRESSIVE REALISM](#), [SCHEMA](#).

self-selected sample *n.* A type of ***convenience sample** comprising research participants or subjects who have volunteered to participate, often in response to an advertisement calling for people with certain characteristics to come forward. *Compare* [ACCIDENTAL SAMPLE](#), [CLUSTER SAMPLE](#), [NON-PROBABILITY SAMPLE](#), [OPPORTUNITY SAMPLE](#), [PROBABILITY SAMPLE](#), [QUOTA SAMPLE](#), [RANDOM DIGIT DIALING](#), [SIMPLE RANDOM SAMPLE](#), [SNOWBALL SAMPLE](#), [STRATIFIED RANDOM SAMPLE](#).

self-serving bias *n.* An ***attribution** bias that leads people to ascribe their own successes to internal personal factors, such as ability, and their failures to external situational causes, such as bad luck. *See also* [ATTRIBUTION THEORY](#), [KELLEY'S CUBE](#), [LAKE WOBEGON EFFECT](#).

sella turcica *n.* A saddle-shaped depression enclosing the ***pituitary gland** in the middle of the sphenoid bone at the base of the skull. Also called the *Turkish saddle*. [From Latin *sella* a saddle + *turcica* Turkish]

semantic *adj.* Of or relating to meaning in linguistics and philosophy. [From Greek *semantikos* significant, from *sema* a sign + *-ikos* of, relating to, or resembling]

semantic coding *n.* Remembering a word or verbal expression by storing its meaning rather than its sound or the physical movements required to articulate it. *Compare* [ACOUSTIC CODING](#), [ARTICULATORY CODING](#).

semantic component *n.* Another name for a ***semantic feature**.

semantic confusion *n.* Misperceiving or misremembering a word as one that has a similar meaning, as when *lamp* is perceived or recalled as *light*. Compare [ACOUSTIC CONFUSION](#).

semantic differential *n.* A device for measuring the [*affective](#) or [*connotative](#) meaning of words, also widely used for measuring attitudes towards other concepts and objects. It consists of a variable number of seven-point bipolar [*rating scales](#), such as

good -- -- -- -- -- *bad*
active -- -- -- -- -- *passive*
strong -- -- -- -- -- *weak*

on which respondents rate the items under investigation. According to [*factor analysis](#), there are three underlying dimensions of affective or connotative meaning, exemplified by the three core scales shown above, labelled evaluation, activity, and potency, respectively. Scores ranging from −3 at the negative end of each scale to +3 at the positive end are usually assigned. To illustrate how it works, research in the US has shown that average ratings of the word *nurse* tend to be towards the *good*, *active*, and *weak* poles, whereas the word *policeman* tends to be rated towards the *good*, *active*, and *strong* poles. The particular adjective pairs used depend on the items being evaluated: *active* versus *passive* could be included among the scales used to measure the activity dimension if the items being rated were political parties, for example, but this might be less appropriate if the items were types of food. The technique was developed by the US psychologist Charles E(gerton) Osgood (1916–91) and published in 1952 in the journal *Psychological Bulletin*, and it became popular with researchers after it was expounded in detail in the book *The Measurement of Meaning* (1957) by Osgood, his US colleague G(eorge) J(ohn) Suci (1925–1998), and the Canadian-born US psychologist Percy (Hyman) Tannenbaum (1927–2009). See also [CONGRUITY THEORY](#). **SD** *abbrev.*

semantic encoding See [SEMANTIC MEMORY](#).

semantic feature *n.* An element of a word's [*denotation](#) or denotative meaning. For example, *young*, *male*, and *human* are semantic features of the

word *boy*. Also called a *semantic component*.

semantic-feature hypothesis *n.* The proposition that the order of appearance of words in the course of a child's language acquisition are governed by the type and complexity of the **semantic* features that they contain. **SFH** *abbrev.*

semantic generalization *n.* A form of **stimulus* generalization in which a learned **response* to a particular **stimulus* (1) comes to be elicited by another stimulus that resembles it not in its stimulus properties but in its meaning, as when a learned response to the word *shoe*, or to an image of a shoe, comes to be elicited by the word *lace*, or by the image of a shoelace.

semantic memory *n.* A type of **long-term memory* for factual information about the world, excluding personal episodes in one's life, typical examples being knowledge of the dates of the Second World War, the chemical formula for water, and the Spanish word for a book. The concept was introduced in 1972 by the Estonian-born Canadian psychologist Endel Tulving (born 1927), who distinguished it from **episodic memory* and **procedural memory*. *See also* **GENERIC KNOWLEDGE**. [From Greek *semantikos* significant, from *sema* a sign + *-ikos* of, relating to, or resembling, so called because it is necessary for the use of language]

semantic priming *See* **PRIMING** (1).

semantics *n.* The branch of **linguistics* devoted to the study of meaning, including **concept* formation, changes in meaning, and the relationship between linguistic expressions and their meanings. *See also* **CASE GRAMMAR**, **COMPONENTIAL THEORY**, **PROTOTYPE THEORY**.

semantic satiation *n.* A peculiar sense of loss of meaning that occurs when a word is recited slowly 15 or 20 times in succession. *Compare* **VERBAL TRANSFORMATION EFFECT**.

semicircular canal *n.* Any of the three looped, fluid-filled ducts, set at right-angles to one another as if lying in the x, y, and z planes of a three-

dimensional graph, forming part of the **vestibular system* within the **membranous labyrinth* of the inner ear and being partly responsible for the sense of balance and spatial orientation through its responses to angular acceleration, the angle of rotation of the head determining which one, two, or three of the canals in each ear are affected. Each canal has a bulge (**ampulla*) on its crest-shaped inner surface in which are embedded **hair cells* that project into a gelatinous membrane (the **cupula*) where a fluid (**endolymph*) within the canal acts as an inertial mass resisting angular acceleration, displacing the cupula and hair cells backwards relative to the direction of movement and causing adjoining neurons to send nerve impulses to the brainstem and cerebellum. *See also* *AUBERT EFFECT*, *BÁRÁNY TEST*, *OTOLITH*.

semi-interquartile range *n.* In descriptive statistics, half the **interquartile range*, sometimes used as an index of variability.

semiology *n.* The study of signs and signals, especially of spoken and written language, and their relationships to the objects, concepts, and ideas to which they refer. *Compare* *SEMIOTICS*. [From Greek *semeion* a sign + *logos* word, discourse, or reason]

semiorder *n.* A term introduced in 1956 by the US mathematical psychologist Robert Duncan Luce (1925–2012) to denote an ordering, such as a preference ordering, in which an element x is ranked above another element y only if it exceeds y by a certain specified threshold value ϵ , and x ties with y if the absolute difference between them falls below ϵ . *See also* *LEXICOGRAPHIC SEMIORDER*.

semiotics *n.* The study of patterned human communication in all its modes, including touch, facial expression, gestures, and the spoken and written signs and symbols of human languages. *See also* *KINESICS*, *NON-VERBAL COMMUNICATION*. *Compare* *SEMIOLOGY*. [From Greek *semeiotikos* of or relating to signs, from *semeion* a sign + *-ikos* of, relating to, or resembling]

semipermeable membrane *n.* A **membrane* that is partly but not fully permeable, especially one through which a solvent but not its solute or dissolved substance can diffuse. *See also* *CELL MEMBRANE*.

semitone *n.* A musical interval corresponding to a frequency ratio of approximately 17:18, the difference in pitch between adjacent keys on a piano, equal to one-twelfth of an **octave*, the smallest difference in pitch normally used in Western music. *See also* *TONE (2)*.

semitone paradox *n.* A phenomenon in the perception of musical tones that are ambiguous as regards the **octaves* to which they belong, each tone being composed of equal **sinusoidal* waves from octaves spanning the auditory range. Using ambiguous tones of this kind, if two tones such as D and G are presented simultaneously, followed by C# and G#, which differ from the first pair by a **semitone* down and up, then the sequence is clearly perceived as either converging or diverging in contrary motion, although the stimulus tones lack the information required to determine pitch: if the D is below the G, then it is divergent motion, but if the D is above the G, then it is convergent motion, and there is no way of knowing whether the D is below or above the G. It is a surprising phenomenon rather than a true **paradox*. *See also* *AUDITORY ILLUSION*. *Compare* *MELODIC PARADOX*, *TRITONE PARADOX*.

semivowel *n.* A speech sound articulated like a **vowel* but functioning like a **consonant* because it is non-syllabic. In English, there are two semivowels, both of which are **approximants*, namely the initial **phonemes* in the words *wet* and *yet*. *See also* *MANNER OF ARTICULATION*.

senescence *n.* The process of growing old and the physical and psychological changes that characterize this process. [From Latin *senescere* to grow old, from *senex* old]

senile dementia *n.* Any chronic, progressive form of **dementia* starting in old age (usually taken to mean from 65 years of age) with no clear physical cause, most commonly due to a late-onset form of **Alzheimer's disease*, **vascular* or **multi-infarct dementia*, dementia resulting from **HIV* infection, head trauma, **Parkinson's disease*, **Huntington's disease*, **Pick's disease*, **Creutzfeldt–Jakob disease*, or substance-induced persisting dementia resulting from **alcohol*, **inhalants*, **sedatives*, **hypnotics*, or **anxiolytics*. *See also* *SDAT*. [From Latin *senilis* old, from *senex* an old man]

senile plaque *n.* Another name for an ***amyloid plaque**.

sensate focus *n.* A technique used in ***sex** therapy, consisting of a structured programme of non-genital tactile stimulation, stroking, and pleasuring, with a strict prohibition of intercourse or genital contact. It was introduced by the US gynaecologist and sexologist William Howell Masters (1915–2001) and Virginia E(shelman) Johnson (1925–2013) in a series of publications including their influential books *Human Sexual Response* (1966) and *On Sex and Loving* (1986).

sensation *n.* A subjective experience or feeling that results from stimulation of a ***sense** organ, or the capacity to experience through the senses, conventionally distinguished in psychology from ***perception**, in which sensory experience is not merely experienced as such but is interpreted with reference to its presumed external stimulus, this distinction having first been made in 1785 by Thomas Reid (1710–96), founder of the Scottish school of psychological philosophy. *See also* **AFTERSENSATION**, **QUALIA**, **SENSE (1)**, **SENSE DATA**, **SENSIBILIA**. [From Latin *sensatio* sensation, from *sensus* felt, from *sentire* to feel + *-ation* indicating a process or condition]

sensation level *n.* The absolute intensity of a sound measured in ***decibels** relative to the ***absolute threshold** of the listener. Thus a sensation level of 40 dB indicates a sound 40 dB more intense than the faintest sound of the same frequency that the listener can hear. *Compare* **SOUND PRESSURE LEVEL**. **SL** *abbrev.*

sensation seeking *n.* A personality ***trait** associated with a preference for intense sensory stimulation, strong, novel, and varied experiences, and in many cases risk taking. The concept was introduced by the US psychologist Marvin Zuckerman (born 1928), who defined it in his book *Behavioural Expressions and Biosocial Bases of Sensation Seeking* (1994) as ‘a trait defined by the seeking of varied, novel, complex and intense sensations and experiences, and the willingness to take physical, social, legal and financial risks for the sake of such experience’ (p. 27). Zuckerman developed a sensation-seeking scale (**SSS**), originally published in collaboration with three colleagues in the *Journal of Consulting Psychology* in 1964. The scale has four subscales: thrill and adventure seeking (indicated by agreement with
*****ebook converter DEMO Watermarks*****

questionnaire items such as *I often wish I could be a mountain climber*); disinhibition (*I like wild ‘uninhibited’ parties*); experience seeking (*People should dress in individual ways even if the effects are sometimes strange*); and boredom susceptibility (*I can’t stand watching a movie that I’ve seen before*). Men score significantly higher on this and other measures of sensation seeking than women. See also [SOCIOSEXUALITY](#).

sensation type *n.* Another name for a [*sensing type](#).

sense *n.* **1.** Any of the faculties by which one experiences the external world or the internal state of one’s body. In about 350 BC the Greek philosopher Aristotle (384–322 BC) distinguished between five senses, namely vision, hearing, smell, taste, and touch, but he recognized that touch includes more than one sense, and there are now known to be separate touch receptors for heat, cold, pain, and various forms of pressure, and also sensory receptors that respond to mechanical stimulation in the [*vestibular system](#) and that supply information about balance, orientation, and movement, and in some species [*electroreceptors](#) for detecting electrical discharges, a [*magnetic sense](#) that responds to the Earth’s magnetic field, or [*infra-red](#) vision. See also [SENSATION](#), [SENSE ORGAN](#), [SENSORY MODALITY](#). **2.** Moral discernment (*a sense of right and wrong*). **3.** Practical intelligence (*common sense*). **4.** Reason or purpose (*this doesn’t make sense*). **5.** The specific meaning of a word (*in what sense do you mean you are sorry?*). **6.** The mathematical property of being positive or negative. *vb.* **7.** To experience something through intuition or extra-sensory perception (*I sensed that something was going to happen*). [From Latin *sensus* felt, from *sentire* to feel]

sense data *n. pl.* A philosophical term for [*sensations](#) detached from their meaning and from any reference to the stimuli that give rise to them, the raw experiences given through the senses of sight, hearing touch, smell, and taste. See also [QUALIA](#), [SENSIBILIA](#). **sense datum** *sing.* [From *sense* + Latin *data* things given, from *dare* to give]

sense modality See [SENSORY MODALITY](#).

sense organ *n.* An anatomic structure specialized for detecting [*stimuli](#)

*****ebook converter DEMO Watermarks*****

(3) and converting them into nerve impulses that are transmitted to the central nervous system, its sensory components being **sensory* receptors. *See also* EAR, EYE, NOSE, SKIN, TONGUE, VESTIBULAR SYSTEM.

sense ratio method *n.* A **psychophysical* method in which an observer is presented with two **standard stimuli* *A* and *B* that differ on some perceptible dimension and is then presented with a different pair of stimuli *C* and *D* and is asked to adjust *D* so that it stands in the same relation of magnitude to *C* as *B* does to *A*.

sensibilia *n. pl.* A philosophical term for potential **sense* data or **qualia* that are not necessarily sensed by any organism and that can therefore exist independently of sensation. **sensibile** *sing.* [From Latin *sensibilia* things that can be sensed, from *sensibilis* capable of being sensed, from *sentire* to sense or feel]

sensing type *n.* One of the subsidiary personality types in **analytical psychology*. *See* FUNCTION TYPE.

sensitivity training group *n.* Another name for a **T-group*.

sensitization *n.* In **addiction* or drug **dependence* (2), an increase in responsiveness to a drug resulting from repeated use of it, or a tendency to require smaller and smaller dosages of a drug to achieve a desired effect. Also called *reverse tolerance*. *Compare* TOLERANCE (3), which is more common. *See also* SUBSTANCE DEPENDENCE.

sensitization–repression scale *See* REPRESSION–SENSITIZATION SCALE.

sensorimotor *adj.* Of, relating to, or involving both sensory and motor functions or the nerves governing them. Also spelt *sensory-motor*.

sensorimotor cortex *n.* A generic name for both the **somatosensory cortex* and the **motor cortex*, separated by the **central sulcus*.

sensorimotor rhythm *n.* An **EEG* rhythm of 12–14 hertz that is

generated in the ***sensorimotor** cortex. It was discovered in 1965 by the US neurobiologist M(aurice) Barry Stermann (born 1935) in an experiment on cats and is known to be associated with behavioural stillness and mental alertness. *See also* BIOFEEDBACK. **SMR** *abbrev.*

sensorimotor stage *n.* According to the theory of cognitive development of the Swiss psychologist Jean Piaget (1896–1980), the first stage of cognitive development, from birth to approximately 2 years of age, when the infant gradually adapts motor behaviour to sensory input to serve its motivational goals, increasing the number and complexity of its sensory and motor abilities. *Compare* CONCRETE OPERATIONS, FORMAL OPERATIONS, PRE-OPERATIONAL STAGE.

sensorineural deafness *n.* Any form of ***deafness** in which sound is conducted normally through the external and middle ears but hearing loss occurs as a result of disease or damage in the ***cochlea** or the neural pathway from it to the brain. Its most common forms are ***presbycusis** (high-frequency hearing loss in old people resulting from deterioration of the ***organ of Corti**), occupational deafness caused by exposure to noise at work, ***ototoxic** deafness following excessive intake of drugs such as ***quinine** or ***aspirin**, infectious deafness from mumps or congenital rubella (German measles) leading to destruction of the cochlea, and a tumour on a nerve supplying the ***vestibular system**. Also called *nerve deafness*. *See also* DECIBEL. *Compare* CENTRAL AUDITORY PROCESSING DISORDER, CONDUCTIVE DEAFNESS. [From Latin *sensorius* of the senses, from *sensus* felt, from *sentire* to feel + Greek *neuron* a nerve + *-al* from *-alis* of or relating to]

sensorium *n.* Any area of the brain responsible for receiving and analysing information from the ***sense** organs; also the apparatus of perception considered as a whole. [From Latin *sensorius* of the senses, from *sensus* felt, from *sentire* to sense]

sensory *adj.* Of or relating to ***sensation** or the ***senses** (1). [From Latin *sensorius* of the senses, from *sensus* felt, from *sentire* to sense]

sensory acuity *n.* The sharpness or keenness of a sense organ or sensory system. *See also* ACUITY.

*****ebook converter DEMO Watermarks*****

sensory adaptation See ADAPTATION (2).

sensory aphasia *n.* Another name for Wernicke's aphasia. See APHASIA.

sensory apraxia *n.* Another name for *ideational apraxia. See APRAXIA.

sensory ataxia *n.* Any form of *ataxia caused by an impairment of sensation, usually *proprioception.

sensory conflict theory *n.* A proposed explanation for *motion sickness according to which *passive movement creates a mismatch between information relating to orientation and movement supplied by the visual and the vestibular systems, and it is this mismatch that induces feelings of nausea.

sensory cortex *n.* Any area of the *cerebral cortex receiving information from a *sense organ. See AUDITORY CORTEX, OLFACTORY CORTEX, SOMATOSENSORY CORTEX, VISUAL CORTEX.

sensory decision theory *n.* Another name for *signal detection theory. SDT *abbrev.*

sensory deprivation *n.* The state of being cut off from almost all sensory stimulation from the external environment, sometimes used as a technique of *brainwashing. The earliest experiments, reported in the mid 1950s, involved volunteers lying in small, soundproof cubicles, sometimes immersed in water held at body temperature, wearing translucent goggles that transmitted diffuse light, to prevent form perception, and cotton gloves with cardboard cuffs to restrict tactile sensations. The volunteers remained in sensory deprivation typically for 2–4 days almost continuously (apart from brief periods for eating and visiting the toilet) during which time their thinking usually became undirected and was often replaced by fantasies and hallucinations, many of the volunteers becoming unable to distinguish sleep from waking, and some found the experience intensely unpleasant.

sensory homunculus *n.* Another name for the *somatosensory homunculus.

sensory information store *n.* Another name for a **sensory* register. **SIS** *abbrev.*

sensory memory *n.* A very short-term memory store for information being processed by the sense organs. The most frequently investigated sensory registers are the **iconic store* and the **echoic store*, though the existence of an echoic store has not been convincingly established. It should not be confused with **perceptual memory*. *See also* LEVELS OF PROCESSING, SENSORY REGISTER. *Compare* LONG-TERM MEMORY, SHORT-TERM MEMORY.

sensory modality *n.* Any of the relatively independent sensory systems such as vision, hearing, smell, taste, and touch, the traditional five senses originally identified in about 350 BC by the Greek philosopher Aristotle (384–322BC), who recognized that touch includes different senses within itself. In 1904 the Austrian physiologist Max von Frey (1852–1932) identified the four component sensations of touch as heat, cold, pain, and pressure, pressure now being known to include sensations of texture and vibration. The sensory systems associated with the **vestibular system*, **kinaesthesia*, **proprioception*, and the **magnetic sense* are also sometimes regarded as sensory modalities. Also called a *modality* or a *sense* or a *communication channel*. *See also* CROSS-MODAL MATCHING, CROSS-MODAL TRANSFER, EGOCENTRE, MODALITY EFFECT, MOLYNEUX'S QUESTION, SYNAESTHESIA (1).

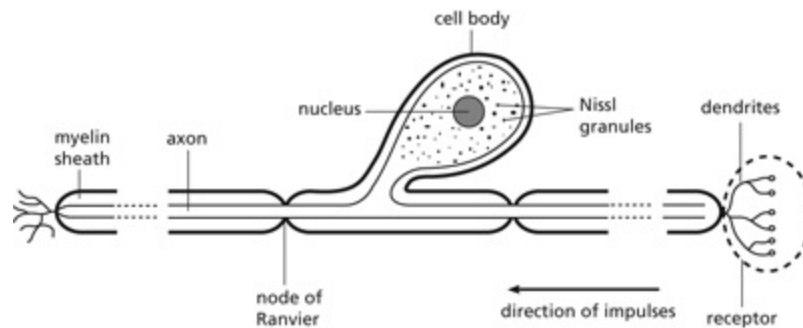
sensory-motor *See* SENSORIMOTOR.

sensory neglect *n.* Any condition in which a well-defined class of sensory information is processed normally by **sensory* receptors but is persistently ignored or not responded to. It usually arises from a **neurological disorder*, and its most common form is **spatial neglect*.

sensory nerve *n.* Any **nerve* that carries information from a **sensory* receptor to the central nervous system. *See* COCHLEAR NERVE, FACIAL NERVE, GLOSSOPALATINE NERVE, GLOSSOPHARYNGEAL NERVE, OLFACTORY NERVE, OPTIC NERVE, TRIGEMINAL NERVE, VAGUS NERVE, VESTIBULOCOCHLEAR NERVE.

sensory neuron *n.* A **neuron* belonging to a **sensory* receptor or a

*sensory nerve (see [illustration](#)).



Sensory neuron

sensory preconditioning *n.* Learning of an association between two stimuli that are presented together or in close succession without [*reinforcement](#) (2), the learned association becoming apparent when a response is conditioned to one of the stimuli and is found to be elicited by the other.

sensory projection area *n.* Any area of the cerebral cortex to which information is transmitted by afferent fibres from [*sensory](#) receptors. Also called a *projection area*. See also [HOMUNCULUS](#).

sensory receptor *n.* An anatomical structure composed of [*sensory](#) nerve endings adapted to respond to specific [*stimuli](#) (1) and to convert them into nerve impulses that are transmitted to other parts of the [*nervous](#) system, the forms of energy to which they respond being light, kinetic energy, temperature, chemical reactions, in some species of fish electrical discharges, in some snakes infrared radiation, and in some birds and other species the Earth's magnetic field. See [AUDITORY RECEPTOR](#), [COLD SPOT](#), [CONE](#), [ELECTRORECEPTOR](#), [FREE NERVE ENDING](#), [GOLGI TENDON ORGAN](#), [GUSTATORY RECEPTOR](#), [HAIR CELL](#), [INFRA-RED VISION](#), [MAGNETIC SENSE](#), [MECHANORECEPTOR](#), [MEISSNER'S CORPUSCLE](#), [MERKEL CELL](#), [MUSCLE SPINDLE](#), [NOCIRECEPTOR](#), [OLFACTORY RECEPTOR](#), [OSMORECEPTOR](#) (1, 2), [OTOLITH](#), [PACINIAN CORPUSCLE](#), [PAIN RECEPTOR](#), [PHOTORECEPTOR](#), [PRESSURE RECEPTOR](#), [ROD](#), [RUFFINI CORPUSCLE](#), [SACCULE](#), [TACTILE RECEPTOR](#), [TASTE BUD](#), [TEMPERATURE RECEPTOR](#), [TOUCH RECEPTOR](#), [UTRICLE](#), [WARM SPOT](#). See also [CHEMORECEPTOR](#), [CONTACT RECEPTOR](#), [CUTANEOUS SENSE](#), [DISTANCE RECEPTOR](#), [EXTEROCEPTOR](#), [INTEROCEPTOR](#), [PROXIMORECEPTOR](#),

*****ebook converter DEMO Watermarks*****

RECEPTIVE FIELD, SENSE ORGAN, SOMATIC RECEPTOR, TELERECEPTOR, TRANSDUCER. Also called a *receptor*. [From *sensory* + *receptor*, from Latin *recipere*, *receptum* to receive, from *re-* back + *capere*, *ceptum* to take]

sensory register *n.* Any of the subsystems of **sensory* memory such as the **iconic store* for vision and the **echoic store* for hearing, generally assumed to exist separately for each sensory modality. Also called a *sensory information store (SIS)*, *sensory store*, or *register*.

sensory relay nucleus *n.* Any of the **nuclei* (2) in the **thalamus* to which some or all of the information from sensory receptors apart from olfactory receptors is sent before being transmitted to specialized sensory areas of the cerebral cortex.

sensory saltation *n.* A tactile illusion, discovered in 1972 by the US psychologist Frank A(rthur) Geldard (1904–84), that occurs if the forearm or other area of the body is given a light tap, then a second and third tap are delivered in quick succession (about one-tenth of a second apart), the second tap in the same spot as the first and the third a few centimetres away. The effect is that the second tap is felt very distinctly to have occurred at a point somewhere between the first and the third taps. Saltatory areas within which the phenomenon occurs differ in size and shape in different parts of the body, but they never cross the **midsagittal plane* of the body, and within these areas saltation is experienced even if the area of skin between the taps is anaesthetized, showing that the illusion arises not in the skin but at a higher level of the sensory system. Also called *cutaneous rabbit illusion*, *saltation*. [From Latin *saltus* a leap, from *saltare* to dance + *-ation* indicating a process or condition]

sensory store *n.* Another name for a **sensory* register.

sensory summation *n.* A generic name for **spatial summation* and **temporal summation*.

sensory suppression *n.* The partial or complete blocking by a stimulus of sensory experience of a different stimulus. See BINOCULAR RIVALRY, MASKING, MIXTURE SUPPRESSION, TASTE suppression. See also AMBLYOPIA EX
*****ebook converter DEMO Watermarks*****

ANOPSIA, CHESHIRE CAT EFFECT, HOLE-IN-THE-HAND ILLUSION.

sensory transduction *n.* The conversion by a ***sensory** receptor of any of a number of different forms of energy into nerve impulses or ***action potentials**. Touch receptors supply kinetic energy; photoreceptors, light; auditory receptors, sound; temperature receptors, heat; olfactory and taste receptors, energy from chemical reactions; and electroreceptors in some species of fish, electrical energy. *See also* **TRANSDUCER**. [From *sensory* + Latin *transducere* to lead across, from *trans* across + *ducere*, *ductum* to lead + *-ion* indicating an action, process, or state]

sentence completion test *n.* A type of ***projective test** in which the respondent is presented with the first few words of a series of sentences and is asked to fill in the missing words. Typical items are *My greatest fear is...*; *I only wish I had....* One of the most carefully constructed versions is the ***Rotter Incomplete Sentences Blank**. The technique was first used in 1897 by the German psychologist Hermann von Ebbinghaus (1850–1909) as an intelligence test. Also called an *incomplete sentences test*.

sentence functor *n.* In ***logic**, a string of words and sentence variables (usually represented by Greek letters) such that if the sentence variables are replaced by declarative sentences, then the whole becomes a declarative sentence with the inserted sentences as constituents. A typical example is: *Many people have said that ϕ , but it is a lie that ψ* . Replacing the sentence variables, this might become *Many people have said that fruit is nourishing, but it is a lie that Hitler loved animals*. *See also* **TRUTH FUNCTOR**, **TRUTH TABLE**. [From Latin *functio* a function, from *fungi* to perform]

sentient *adj.* Capable of ***sensation**; conscious or aware. **sentient being** *n.* Any ***organism** that is sentient or capable of feeling. [From Latin *sentiens* feeling, from *sentire* to feel]

separable attribute *n.* An ***attribute** that is not inherent in a ***phenomenon**, inasmuch as the phenomenon can occur or exist without the attribute. For example, ***frequency (1)** is a separable attribute of sound, because ***noise (1)** is sound without frequency, whereas ***amplitude** is not a separable attribute of sound, because without amplitude there can be no

*****ebook converter DEMO Watermarks*****

sound wave and therefore no sound. In the visual modality, **saturation (1)* is a separable attribute of colour, but **lightness* is not. *See also* SEPARABLE STIMULUS DIMENSION. *Compare* INTEGRAL ATTRIBUTE.

separable stimulus dimension *n.* A **separable* attribute of any measurable aspect of a **stimulus (1)*. *Compare* INTEGRAL STIMULUS DIMENSION.

separate variance estimates *n.* In statistics, separate estimates of **variances* of two or more populations, used when the population variances cannot be assumed to be equal for testing the null hypothesis that their means are equal. *Compare* POOLED VARIANCE ESTIMATE.

separation anxiety *n.* The normal fear or apprehension of infants when separated from their mothers or other major attachment figures, or when approached by strangers, usually most clearly evident between 6 and 10 months of age or, in later life, similar apprehension about separation from familiar physical or social environments. *See also* SEPARATION ANXIETY DISORDER.

separation anxiety disorder *n.* An **anxiety disorder* in **DSM-5* characterized by developmentally inappropriate and excessive **separation anxiety* relating to separation from home or from major attachment figures. Symptoms, which to satisfy the diagnostic criteria must persist for at least 4 weeks and must cause clinically significant distress or social, academic, or occupational problems, may include unrealistic fear of losing major attachment figures or of harm befalling them, refusal to attend school, refusal to sleep alone, repeated nightmares about separation, and complaints of somatic symptoms such as headaches, nausea, or vomiting when separation is threatened. *See also* ANACLOTIC DEPRESSION, HOSPITALISM.

septal *adj.* Of, relating to, or situated in the **septum pellucidum*.

septal rage *n.* Intense **dysphoria*, hyperexcitability, and anger resulting from a lesion in the **septum pellucidum*. Also called *sham rage*.

septum pellucidum *n.* A thin, double partition extending down from

the lower surface of the corpus callosum to the fornix and adjacent structures, separating the lateral ventricles of the brain and enclosing an area above the third ventricle. It is part of the ***limbic system** and one of the most important of the ***pleasure centres** of the brain, electrical stimulation of this area producing intensely agreeable sensations of well-being in humans. Experimental rats with access to levers to control the output of electrodes implanted semi-permanently in their septal areas self-stimulate themselves for long periods to the virtual exclusion of food, sex, and sleep, whereas ablation of the area leads to ***septal** rage. Also spelt *septum pelucidum*. Also called the *septum*, *septal area*, *septal nucleus*, *septal region*, or *septum lucidum*. **septa pellucida** *pl.* [From Latin *saeptum* a fence or enclosure, from *saepire* to fence or enclose + *pellucidus* transparent, from *per* through + *lucere* to shine]

sequence completion *n.* Another name for ***number-completion tests**.

serial anticipation method *n.* A technique for studying verbal learning in which on each trial the learner is provided with a stimulus word and attempts to provide the next word in the list, or, in the case of ***paired-associate learning**, the second member of a pair, and after each response the learner is shown the correct word. Also called the *anticipation method*.

serial learning *n.* **1.** Any task that involves learning lists of items and recalling them in the same serial order in which they were presented. *See also* SERIAL ANTICIPATION METHOD. **2.** A generic term for any form of ***discrimination learning** in which the set of stimuli is replaced with a new and unfamiliar set. *See* GENERALIZED ODDITY PROBLEM, HABIT REVERSAL, NON-REVERSAL SHIFT.

serial position effect *n.* In ***serial learning (1)**, a tendency for the items near the beginning and end of the series to be recalled best, and those in the middle worst, producing a U-shaped *serial position curve* of recall as a function of serial position. It includes the ***primacy effect (1)** and the ***recency effect**. Also called the *edge effect* or *end effect*. *See also* TIP-OF-THE-TONGUE PHENOMENON.

serial processing *n.* Computational processing in which steps are executed one at a time in a fixed sequence. This is the way in which ordinary

*****ebook converter DEMO Watermarks*****

computers function, but the brain is believed to use [*parallel processing](#). See also [CASCADE PROCESSING](#), [CONNECTIONISM](#), [DISCRETE PROCESSING](#), [NEURAL NETWORK](#), [PARALLEL DISTRIBUTED PROCESSING](#). [From Latin *serialis* of or relating to a series, from *series* a row, from *serere* to link + *-alis* of or relating to]

serial recall *n.* Retrieval from memory of a number of items of information in the order in which they were originally presented, in contradistinction to [*free recall](#). See also [RANSCHBURG INHIBITION](#), [RECALL](#), [REPETITION EFFECT](#), [SERIAL ANTICIPATION METHOD](#).

serial reproduction *n.* A technique for studying memory in a social context, popularized by the English psychologist Sir Frederic Charles Bartlett (1886–1969) in his book *Remembering: A Study in Experimental and Social Psychology* (1932, chapters 7–8) and usually attributed to him, but in fact introduced by the US psychologist Ernest Norton Henderson (1869–1967) in an article in the journal *Psychological Review* in 1903, surprisingly not cited by Bartlett. It involves a person reading a short story (typically about 100 words long) and recounting it from memory to a second person, who then recounts it from memory to a third, and so on in the manner of the children's game of Chinese whispers, the phenomena of [*assimilation](#) (5), [*levelling](#) (1), and [*sharpening](#) becoming obvious after about eight transmissions. The technique has been used as a laboratory model of [*rumour](#) transmission. In some studies, the original stimulus is a drawing that is serially reproduced from memory by each of the participants or subjects in turn. See also [WAR OF THE GHOSTS](#). Compare [SUCCESSIVE REPRODUCTION](#).

series completion *n.* Another name for [*number-completion tests](#).

Serlect *n.* A proprietary name for the atypical antipsychotic drug [*sertindole](#). [Trademark]

Seropram *n.* A proprietary name for the antidepressant drug [*citalopram](#). [Trademark]

serotonergic *adj.* Releasing [*serotonin](#); also activated by or responding to serotonin, this extended usage being widespread but consistently rejected by the English physiologist Sir Henry Hallet Dale (1875–1968), who coined
*****ebook converter DEMO Watermarks*****

the suffix *-ergic*, and by many other authorities. The term applies especially to nerve fibres such as those of the **raphe nuclei* of the medulla oblongata, the **area postrema*, and the **locus coeruleus* that use serotonin as a **neurotransmitter* and that project to the cerebral cortex, limbic system, thalamus, and cerebellum. Compare ADRENERGIC, CHOLINERGIC, DOPAMINERGIC, GABAERGIC, NORADRENERGIC. [From *serotonin* + Greek *ergon* work + *-ikos* of, relating to, or resembling]

serotonin *n.* A **biogenic amine* that is a powerful **vasoconstrictor* and one of the major neurotransmitter substances in the central nervous system, originating mainly in **raphe nuclei* of the brainstem, the **area postrema*, and **locus coeruleus*, and that is involved in arousal, attention, NREM sleep, and, above all, mood—depression and suicide often being associated with low serotonin levels. It is synthesized in the brain from its precursor **5-hydroxytryptophan* (obtained from dietary **tryptophan*), an amino acid that, unlike serotonin itself, is able to cross the **blood–brain barrier*, and it generates the metabolite 5-hydroxyindoleacetic acid. Formula: $\text{HOC}_8\text{H}_5\text{NCH}_2\text{CH}_2\text{NH}_2$. Also called *5-hydroxytryptamine* or *5-HT*. See also PARACHLOROPHENYLALANINE, PROZAC, SELECTIVE SEROTONIN REUPTAKE INHIBITOR, SEROTONERGIC, TRICYCLIC ANTIDEPRESSANT, TRYPTOPHAN HYDROXYLASE. [From *serum* the liquid portion of blood, from Latin *serum* whey + Greek *tonos* tone, so called because of its constricting effect on blood vessels]

Seroxat *n.* A proprietary name for the antidepressant drug **paroxetine*. [Trademark]

sertindole *n.* An **atypical antipsychotic* drug, used in the treatment of **schizophrenia* and other **psychotic (1)* disorders. Also called *Serlect* (trademark).

sertraline *n.* An antidepressant drug belonging to the group of **selective serotonin reuptake inhibitors (SSRIs)*. Also called *Zoloft* (trademark).

set *n.* 1. A collection of objects or elements that have something in common or that are treated as a unit. See also SET THEORY, VENN DIAGRAM. 2. A temporary readiness to perceive, think, or act in a particular way, usually as a

result of experimental instructions or an experimental manipulation, hence *perceptual set*, *cognitive set*, *behavioural set*, *motor set*. Also called a *mental set*, formerly called an *Einstellung*. See also [AUFGABE](#), [FUNCTIONAL FIXEDNESS](#), [WATER-JAR PROBLEM](#).

set point *n.* A natural state to which a dynamically stable system tends to return if perturbed, such as normal body temperature of 37°C, or the weight to which a person's body tends to revert after loss or gain from unusual or special circumstances or activities such as temporary illness, dieting, or overeating. See also [APPESTAT](#), [HOMEOSTASIS](#).

set theory *n.* A mathematical theory originated by the Russian-born German mathematician Georg Cantor (1845–1918) between 1874 and 1897 to deal with collections of objects, called **sets* (1). A set is usually represented by an upper-case letter or by a pair of curly brackets enclosing all of its members; thus the set of all additive primary colours is the set $C = \{\text{red, green, blue}\}$; the set of natural numbers is $N = \{1, 2, 3, \dots\}$; and the set of female US presidents is $F = \emptyset$, which is called the *empty set* or *null set*. See also [BARBER PARADOX](#), [BOOLEAN](#), [FUZZY SET](#), [RUSSELL'S PARADOX](#).

severe mental retardation *n.* An obsolescent term for a level of **intellectual disability* associated with **IQ* approximately between 20 and 35 (in adults, **mental age* from 3 to under 6 years). Also called *severe mental subnormality*.

severe myoclonic epilepsy of infancy *n.* An alternative name for **Dravet syndrome*. **SMEI** abbrev.

sex *n.* **1.** Either of the categories of male and female or the sum total of biological **attributes* on which this distinction is based within a species. Compare [GENDER](#) (1). *adj.* **2.** Of or relating to sex, especially sex (1), as in the phrase *sex differences* or *sex discrimination*, but also sex (3) as in *sex industry*. **3.** Short for sexual intercourse or any of the activities distinctively associated with it. **sexual** *adj.* Of or relating to sex, especially sex (3), as in the phrase *sexual abuse*, but also sex (1) as in *secondary sexual characteristics*. [From Latin *sexus* sex, perhaps from *secare* to divide]

sex cell *n.* Another name for a **gamete*.

sex chromosome *n.* A **chromosome* that determines the sex of a human or other organism. See *X CHROMOSOME*, *Y CHROMOSOME*. Compare *AUTOSOME*.

sex difference *n.* Any of the myriad psychological characteristics that differentiate reliably between women and men or girls and boys, such as the significant superiority of women, on average, at tasks involving decoding non-verbal communication, as in the **PONS*, or the significant superiority of men, on average, at **mental rotation*. See also *ANDROGYNY*, *FEAR OF SUCCESS*.

sex hormone *n.* Any **hormone* such as **progesterone*, **oestrogen* (or **oestradiol*), **oestrone*, **Müllerian inhibiting substance*, **testosterone*, or **androsterone* that is produced by the gonads (ovaries or testes) and controls the development of primary and/or secondary sexual characteristics.

sex-influenced trait *n.* A phenotypic characteristic or **trait* such as male pattern baldness that is expressed differently in males and females, usually because its expression depends on androgens or oestrogens, and that is controlled by a single gene that is dominant in males but recessive in females, so that, for example, men who inherit the gene from either parent lose hair as they age, whereas women do so only if they inherit it from both parents and are thus homozygotes. Also called a *sex-limited trait*. Compare *SEX-LINKED*.

sexism *n.* A belief in the intrinsic superiority of one sex over the other, often accompanied by **prejudice*, discrimination, or **stereotyping* on the basis of sex. See also *QUEEN BEE SYNDROME*. Compare *ABLEISM*, *AGEISM*, *ETHNOCENTRISM*, *FATTISM*, *HETEROSEXISM*, *RACISM*, *SPECIESISM*. **sexist** *n.* 1. One who manifests or practises sexism. *adj.* 2. Of or relating to sexism. [Coined from *sex* following the model of *racism*]

sex-limited trait *n.* Another name for a **sex-influenced trait*.

sex-linked *adj.* Of or relating to a gene located on a **sex* chromosome or

a characteristic or ***trait** inherited along with one's sex through being determined by such a gene. The best known examples in humans are haemophilia and various forms of colour-blindness, which are determined by genes located on the X chromosome, carried by females but expressed mostly by males, because the smaller Y chromosome has no homologous alleles to bring about ***complementation**. See also **HOLANDRIC**, **HOLOGYNIC**, **HORNER'S LAW**, **X-LINKED**, **Y-LINKED**. Compare **SEX-INFLUENCED TRAIT**.

sex pheromone *n.* A ***pheromone** that is released by an animal and that induces a sexual response in members of the same species, such as the volatile sexual attractants released by female insects that can attract males from great distances. See also **CATNIP**. [From sex + Greek *pherein* to bear + *horman* to stimulate]

sexsomnia *n.* A ***parasomnia**, named by the Canadian-based South African psychiatrist Colin M. Shapiro (born 1952) and two co-authors in the title of an article in the *Canadian Journal of Psychiatry* in 2003, involving sexual behaviour initiated by a person who is asleep, sometimes with a willing partner but sometimes causing injury to self or others. It is believed to be related to ***sleepwalking** but distinct from it, especially because of the relatively higher level of ***arousal** typical of sexsomnia. [A blend of sex and (para)somnia]

sex therapy *n.* Any form of therapy, including ***psychotherapy** and ***sensate focus**, offered to people with ***sexual dysfunctions**. Also called *sexual therapy*.

sexual abuse *n.* The subjection of a child or other vulnerable person to sexual activity liable to cause physical or psychological damage. See also **CHILD SEXUAL ABUSE**, **ELDER ABUSE**.

sexual anomaly *n.* Another name for a ***paraphilia**.

sexual arousal disorder *n.* Another name for ***male hypoactive sexual desire disorder** and ***female sexual interest/arousal disorder**. See also **PERSISTENT SEXUAL AROUSAL SYNDROME**.

sexual aversion disorder *n.* A [*sexual dysfunction](#) characterized by persistent or recurrent extreme antipathy to and active avoidance of genital contact with a sexual partner, generally accompanied by anxiety, fear, or disgust at the thought of sexual activity, causing significant distress or problems of interpersonal interaction. [From Latin *aversus* turned away or hostile, from *avertere* to turn from, from *vertere* to turn]

sexual desire disorder *n.* Another name for [*male hypoactive sexual desire disorder](#) and [*female sexual interest/arousal disorder](#).

sexual deviation *n.* Another name for a [*paraphilia](#).

sexual dimorphism *n.* The property of some species, including humans, of having differences between males and females in shape, size, or morphology. *See also* [DIMORPHIC](#). **sexually dimorphic** *adj.* [From *sexual* + Greek *dis* twice + *morphe* a form or shape + *-ismos* indicating a state or condition]

sexual disorder *See* [SEXUAL DYSFUNCTIONS](#).

sexual dysfunctions *n.* A category of [*mental disorders](#) in [*DSM-5](#) involving disturbances in the [*sexual response cycle](#) or pain associated with sexual intercourse. *See* [DELAYED EJACULATION](#), [ERECTILE DISORDER](#), [FEMALE ORGASMIC DISORDER](#), [FEMALE SEXUAL INTEREST/AROUSAL DISORDER](#), [GENITO-PELVIC PAIN/PENETRATION DISORDER](#), [MALE HYPOACTIVE SEXUAL DESIRE DISORDER](#), [PREMATURE \(EARLY\) EJACULATION](#). *See also* [DYSPAREUNIA](#), [PERSISTENT SEXUAL AROUSAL SYNDROME](#), [SEXUAL AVERSION DISORDER](#), [VAGINISMUS](#).

sexual harassment *n.* Persistent unwelcome sexual remarks, looks, or advances, especially from a senior colleague in the workplace. *See also* [STALKING](#).

sexual instinct *n.* In [*psychoanalysis](#), one of the two classes of [*instincts](#) (3) or [*drives](#) in the early classification of Sigmund Freud (1856–1939), the other being the [*ego](#) instincts of self-preservation. In Freud's theory, the form of energy driving the sexual instinct is [*libido](#), and it drives

a far wider range of activity than is ordinarily understood by sexual behaviour. In his later classification, first introduced in 1920, he distinguished between ***Eros** (the life instincts, including the sexual instinct) and ***Thanatos** (the death instinct). Also called the *sex instinct*, *sexual drive*, or *sex drive*.

sexual involution *n.* The decline in sexual desire and activity manifested by some people of both sexes after the ***menopause** or in middle life. [From Latin *involutum* rolled up, from *involvere* to roll up + *-ion* indicating an action, process, or state]

sexual latency See **LATENCY PERIOD**.

sexual masochism *n.* A ***paraphilia** characterized by recurrent, intense sexual fantasies, urges, or behaviour involving submission to pain, humiliation, bondage, or some other form of physical or psychological suffering. Also called simply *masochism*, a term introduced by the German neurologist and sexologist Richard von Krafft-Ebing (1840–1902) in his book *Psychopathia Sexualis* (1886). See also **FUSION OF INSTINCTS**, **HYPOXYPHILIA**, **SEXUAL MASOCHISM DISORDER**. Compare **SEXUAL SADISM**. [Named after the Austrian historian and novelist Leopold von Sacher-Masoch (1836–95) who wrote about it, notably in his novel *Venus im Pelz* (1870), translated into English as *Venus in Furs* (1902), in which the heroine Wanda subjects the narrator to sexually stimulating suffering]

sexual masochism disorder *n.* A ***paraphilic disorder** in ***DSM-5** characterized by intense, recurrent sexual arousal from the physical or mental suffering of another person, or associated fantasies or urges over a period of at least six months. To meet the diagnostic criteria, the individual must either have acted out this behaviour with a non-consenting person, or the fantasies or urges must have caused clinically significant distress or impairment in social, occupational, or other areas of life. See also **SEXUAL MASOCHISM**.

sexual orientation *n.* Another name for ***sexual preference**. See also **EGO-DYSTONIC SEXUAL ORIENTATION**. [From Latin *sexualis* of or relating to sex + *oriens*, *orientis* rising, alluding to the rising sun, used to find one's bearings + *-ation* indicating a process or condition]

*****ebook converter DEMO Watermarks*****

sexual pain disorder *n.* A non-technical name for [*dyspareunia](#).

sexual perversion *n.* An obsolescent term, often considered offensive nowadays, for a [*paraphilia](#).

sexual preference *n.* The predominant predilection or inclination that defines a person as a [*heterosexual \(1\)](#), [*homosexual \(1\)](#), or [*bisexual \(1\)](#). Also called *sexual orientation*. See also [HETEROSEXISM](#).

sexual preference disorder *n.* Another name for a [*paraphilia](#).

sexual reproduction *n.* Biological reproduction involving the fusion of male and female [*gametes](#). Compare [ASEXUAL REPRODUCTION](#), [PARTHENOGENESIS](#).

sexual response cycle *n.* The cycle of phases associated with sexual activity, classified and labelled differently by different researchers, but roughly as follows: appetitive phase (sexual desire, fantasy, and appetite for sexual activity); arousal phase (sexual excitement accompanied in the male by tumescence and erection of the penis and in the female by vasocongestion in the pelvis, lubrication and expansion of the vagina, and swelling of the external genitalia); orgasmic phase (male climax and ejaculation, female climax); resolution phase (muscular relaxation, feelings of well-being, and detumescence of the male penis); refractory period (lack of sexual desire and incapacity of males to achieve erection of the penis for a time).

sexual sadism *n.* A [*paraphilia](#) characterized by recurrent, intense sexual fantasies, urges, or behaviour involving the subjection of another person to pain, humiliation, bondage, or some other form of physical or psychological suffering. Also called *sadism*, a term introduced by the German neurologist and sexologist Richard von Krafft-Ebing (1840–1902) in his book *Psychopathia Sexualis* (1886). See also [FUSION OF INSTINCTS](#), [SEXUAL SADISM DISORDER](#). Compare [SEXUAL MASOCHISM](#). [Named after the French writer Count Donatien François de Sade (1740–1814), also known as the Marquis de Sade, who described it in his novels, notably *Les 120 Journées de Sodome* (1785, *The 120 Days of Sodom*) and *Juliette* (1796)]

sexual sadism disorder *n.* A [*paraphilic disorder](#) in [*DSM-5](#) characterized by recurrent and intense sexual arousal from fantasies, urges, or behaviour involving the physical or psychological suffering of another person. To meet the diagnostic criteria, the individual must either have acted out these fantasies or urges with a non-consenting person, or the fantasies or urges must cause the individual clinically significant distress or problems in social, occupational, or other areas of life. *See also* [SEXUAL SADISM](#).

sexual selection *n.* A form of [*natural selection](#) operating through the differential success of individuals of different genotypes in acquiring mates. It works largely through mate choices that are made by members of the opposite sex and that are based on perceptible characteristics such as size, plumage, or behaviour. *See also* [BATEMAN'S PRINCIPLES](#), [PARENTAL INVESTMENT](#).

sexual therapy *See* [SEX THERAPY](#).

sfumato *n.* One of the monocular cues of visual [*depth perception](#) based on the fact that the outlines of distant objects tend to appear slightly blurred because of diffusion by atmospheric dust, smoke, and vapour particles. This term was first used in relation to painting and drawing, in which the effect is achieved by smoothly blending different regions of colour or tone. [*Aerial perspective](#) is partly explained by sfumato. *See also* [HYBRID IMAGE](#). [From Italian *sfumato* shaded off, from *sfumare* to shade off, Latin *ex* out + *fumare* to smoke]

shading *n.* The depiction of highlights and shadows in visual art, the effect of light and shade; more specifically, another name for [*chiaroscuro](#), one of the monocular cues of visual [*depth perception](#).

shadow *n.* **1.** A dark shape cast on a surface by an object blocking rays of light; more generally, an area of relative darkness. **2.** In [*analytical psychology](#), the negative side of a person's personality, comprising all personal and collective elements that do not fit in with the person's self-perception and that are therefore denied overt expression but exist in the unconscious as an [*archetype](#) (2). It is so called because it is the dark side of one's personality and is interpreted as a shadow cast by the [*ego](#). Carl Gustav

Jung (1875–1961) described the shadow in a key passage as ‘that hidden, repressed, for the most part inferior and guilt-laden personality whose ultimate ramifications reach back into the realm of our animal ancestors and so comprise the whole historical aspect of the unconscious’ (*Collected Works*, 9, part 2, paragraph 422).

shadowing *n.* Repeating out loud words as they are being heard, used in experiments on **dichotic* listening to prevent **rehearsal (1)* of words presented simultaneously to the other ear.

shaking palsy *n.* The name that the English surgeon James Parkinson (1755–1824) originally gave to the disorder that is now invariably called **Parkinson's disease*.

shallow living *n.* In the **neo-Freudian* theory of the German-born US psychoanalyst Karen Horney (1885–1952), a **neurotic (1)* method of dealing with a conflict by immersion in trivial though distracting activities.

sham rage *n.* Unfocused anger or fury in response to any strong stimulus, originally observed in decorticate animals (animals whose cerebral cortex has been removed) and animals in which the pathway between the hypothalamus and pituitary gland has been damaged. It is known to result from more specific lesions, notably ablation of the **septum pellucidum* (in which case it is called septal rage) or the **ventromedial hypothalamus*, which is responsible for controlling anger and aggression. It has been observed in humans who have suffered extensive cortical damage from prolonged hypoglycaemia or carbon monoxide poisoning. [So called because it is not triggered by a normal external instigator of anger, such as frustration]

shape constancy *n.* A form of **perceptual constancy* in which a familiar object tends to retain its perceived shape despite radical changes in the pattern of retinal stimulation resulting from differences in its orientation. Thus a dinner plate looks the same shape whether the **proximal* stimulus image that it casts on the retina is a circle, an ellipse, or (if it is viewed from the edge) roughly a straight line. Also called *form constancy*. *See also* PERSPECTIVE ILLUSION, SHAPE–SLANT INVARIANCE, TEMPLATE MATCHING.

shape–slant invariance *n.* A hypothesis, seemingly obvious yet contradicted by experimental evidence, that impressions of the shape and of the slant or orientation of an object are mutually dependent, so that misperceptions of shape should produce misperceptions of slant and vice versa. Also called *shape–tilt invariance*. See also [SHAPE CONSTANCY](#). Compare [SIZE–DISTANCE INVARIANCE](#).

shaping *n.* **1.** A technique of [*operant](#) conditioning that involves gradually building up a desired pattern of behaviour by selectively [*reinforcing](#) (1) closer and closer approximations to it, beginning with existing elements of the subject's behavioural repertoire, until the required responses are learned. It can be used to train animals more effectively than any other known method, and is sometimes used as a technique of [*behaviour](#) therapy to treat mental disorders and psychological problems in human beings. See also [SECONDARY REINFORCEMENT](#). Compare [AUTOSHAPING](#). **2.** More generally, moulding something into a particular form.

shared psychotic disorder *n.* A [*mental disorder](#) in which a person develops a [*delusion](#) that is similar in content to that of a closely associated person with a pre-established delusion. Also called *folie à deux*, *induced delusional disorder*, *shared paranoid disorder*. Compare [SCHIZOPHRENIA](#).

sharpening *n.* The magnification or exaggeration of certain salient details in perception or memory, and also in [*serial reproduction](#) and [*rumour](#) transmission. See also [WEAPON FOCUS](#). Compare [ASSIMILATION](#) (5), [LEVELLING](#) (1).

Sheldon's constitutional psychology *n.* A theory, especially that of the US psychologist William H(erbert) Sheldon (1899–1977), postulating that [*personality](#) is dependent on physique or [*somatotype](#). See [ECTOMORPH](#), [ENDOMORPH](#), [MESOMORPH](#). Compare [KRETSCHMER CONSTITUTIONAL TYPE](#).

shell shock *n.* A term introduced by the English psychologist Charles Samuel Myers (1873–1946), in an article in the medical journal *The Lancet* in 1915, to denote what came to be called [*post-traumatic stress disorder](#). It resulted from traumatic experiences during military actions and was

attributed at that time to noise and concussion associated with exploding shells. Also called *combat fatigue*.

shenjing shuairuo *n.* A **culture-bound syndrome* included in CCMD-2 (the *Chinese Classification of Mental Disorders*, 2nd ed.), found mainly among Chinese communities in southern and eastern Asia, characterized by **fatigue* (1), dizziness, headaches, joint and muscle pain, loss of concentration, gastrointestinal complaints, **sexual dysfunctions*, assorted **dyssomnias*, and **amnesia*. It is sometimes interpreted in Western cultures as an **anxiety disorder* or a **mood disorder*. [Chinese term for **neurasthenia*, from *shenjing* a nerve + *shuairuo* weak]

shen-k'uei *n.* A **culture-bound syndrome* found mainly among men in Thailand and in ethnic Chinese communities in southern and eastern Asia, characterized by **anxiety* and **panic attacks* accompanied by somatic symptoms such as **insomnia*, **sexual dysfunctions*, dizziness, backache, and **fatigue* (1), the symptoms often being attributed to loss of semen brought about by excessive sexual intercourse, masturbation, nocturnal emissions (wet dreams), and the passing of whitish urine believed to contain semen. Spelt *shenkui* in Chinese-speaking communities. *Compare* DHAT. [From Thai or Chinese *shen* spirit + *k'uei* or *kui* deficit or wastage]

shifted checkerboard figure *n.* Another name for the **Münsterberg illusion*.

shin-byung *n.* A **culture-bound syndrome* restricted mainly to Korea and Korean communities living elsewhere, characterized by **anxiety*, **dissociation*, **insomnia*, **anorexia*, dizziness, and **fatigue* (1), together with somatic symptoms such as gastrointestinal complaints and general **asthenia*, the symptoms generally being attributed to possession by the spirits of dead ancestors. [From Korean *shin* spirit + *byung* possession]

shinkei-shitsu *n.* Another name for **taijin kyofusho*. [From Japanese *shinkei-shitsu* nervous temperament, from *shinkei* a nerve + *shitsu* constitution or nature]

shock *n.* 1. Any sudden and unexpected experience of extreme surprise,
*****ebook converter DEMO Watermarks*****

horror, or outrage; any violent impact or jarring. **2.** In medical discourse, another name for **traumatic shock*.

shock therapy *n.* Another name for **electroconvulsive therapy*. Also called *shock treatment*.

shoe anaesthesia *n.* A condition analogous to **glove anaesthesia* occurring in the foot. US *shoe anesthesia*.

shook yong *See* KORO.

shorthand *n.* Any method of writing quickly, using special symbols or abbreviations. *See also* BRACHYGRAPHY (short writing), STENOGRAPHY (narrow writing), and TACHYGRAPHY (quick writing).

short-sightedness *n.* A non-technical name for **myopia*.

short-term memory *n.* A memory system capable of holding a limited amount of information for brief periods, up to a maximum of about 20 or 30 seconds, although it can be renewed indefinitely if the information within it is **rehearsed* (2). Its capacity is about seven items or **chunks* of information according to evidence first reviewed in an influential article by the US psychologist George A(rmitage) Miller (1920–2012) in the journal *Psychological Review* in 1956. Without short-term memory, language would be incomprehensible, because to understand a sentence a listener or reader has to remember its beginning at least until its end. Also called *immediate memory*. *See also* CHUNKING, CORSI BLOCKS, DYNAMIC MEMORY SPAN, LEVELS OF PROCESSING, MAGICAL NUMBER SEVEN, MAINTENANCE REHEARSAL, PHONOLOGICAL LOOP, PUSH-DOWN STACK, REVERBERATING CIRCUIT, SPAN OF APPREHENSION, WORKING MEMORY. *Compare* LONG-TERM MEMORY, SENSORY MEMORY. **STM** *abbrev.*

short-term store *n.* Another name for **short-term memory*. **STS** *abbrev.*

SHRDLU *n.* A famous **artificial intelligence* program devised in 1968–70 by the computer scientist Terry (Allen) Winograd (born 1946) to carry out

instructions in a *block world*—a table with blocks of various shapes and colours scattered over it. On the basis of images from a video camera scanning the scene, the program works out the arrangement of blocks, some of which may be lying on top of others, responds to questions in English about the situation, replies to these questions in English, understands requests in English to manipulate the blocks, carries out such requests with a robotic arm, and describes in English its actions and the reasons behind them. [Named after the printer's code ETAOIN SHRDLU used to indicate typographical errors, representing the twelve most frequent letters in English in descending order]

shrink *n.* A colloquial term for a **psychiatrist* or a **psychoanalyst*. [A contraction of *headshrinker*]

sibling *n.* **1.** A brother or sister. *See also* *SIBLING RIVALRY*. **2.** Any member of one's sib, a sib being a group of kinspeople descended from a single ancestor. [From Old English *sibb* relationship, from *gesibb* related + *-ling* denoting a person associated with the group specified]

sibling rivalry *n.* Rivalry or competition between brothers, sisters, or brothers and sisters.

sibling rivalry disorder *n.* Abnormally intense negative feeling towards an immediately later-born sibling, manifested in **regression* (1), **tantrums*, **dysphoria*, **dyssomnia*, and oppositional, defiant, or attention-seeking behaviour towards one or both parents.

side-effect *n.* Any secondary or incidental effect of a drug or other treatment, especially an unwanted effect in addition to the intended reaction. Also called an *adverse drug effect* or an *adverse drug reaction*.

Sidman avoidance conditioning *n.* A type of **avoidance conditioning* in which the organism receives an aversive stimulus (such as an electric shock) at regular fixed intervals, without any warning signal, unless it performs an avoidance response (such as jumping over a barrier), and each avoidance response resets the timer to zero. Also called *free operant avoidance conditioning*. [Named after the US psychologist Murray Sidman]
*****ebook converter DEMO Watermarks*****

(born 1923) who popularized it in the early 1960s]

sight method *n.* Another name for the **whole-word method*.

sight vocabulary *n.* The set of words that a person can recognize as wholes without decomposing them into their elements.

sigma score *n.* Another name for a **standard score*. [Named after *sigma* (σ), the eighteenth letter of the Greek alphabet, the lower-case form of which is often used to symbolize it]

sigmatism *n.* 1. Abnormal or defective pronunciation of /s/, as in lisping. 2. The repetitive use of the letter s for poetical effect. [From the name of the Greek letter *sigma*, corresponding to the roman s]

sign *n.* 1. An objective indication of a disorder observed by an examiner rather than reported by the afflicted person. *See also* *HARD SIGN*, *SCAN*, *SOFT SIGN*, *SYNDROME*. *Compare* *SYMPTOM*. 2. More generally, any signal, gesture, mark, emblem, or token with an identifiable meaning. [From Latin *signum* a mark]

signal *n.* Any verbal or non-verbal pattern of sounds, signs, gestures, or other events transmitted through a communication channel and capable of conveying information; more generally any non-random component of a **time series*. *See also* *RECEIVER OPERATING CHARACTERISTIC*, *SIGNAL DETECTION THEORY*, *SIGNAL-TO-NOISE RATIO*. *Compare* *NOISE (2)*. [From Latin *signum* a sign]

signal anxiety *n.* In **psychoanalysis*, **anxiety* activated by the **ego* in response to external danger. The concept was introduced by Sigmund Freud (1856–1939) in his book *Inhibitions, Symptoms and Anxiety* (1926, *Standard Edition*, XX, pp. 77–175, at pp. 80–3, 92–4). *Compare* *PRIMARY ANXIETY*. [So called because this form of anxiety is a signal of danger]

signal detection theory *n.* A **psychophysical* theory of the detectability of stimuli developed in 1952–4 by a number of US researchers

led by John A(rthur) Swets (born 1928), based on the assumptions that there is a normal probability distribution N of activation of the sensory system by *noise (2) generated externally or by internal random neural activity in the absence of any *signal, that there is a different normal probability distribution (SN) of activation by signal plus noise, and that the difference between the means (or equivalently the separation between the peaks) of the SN and N distributions, divided by the *standard deviation of the N distribution, is an index of detectability called d prime or d' that can be estimated experimentally from the relative frequencies of correct detections of the signal when it is present (*hits*) and incorrect detections of the signal when it is absent (*false alarms*), the performance of an observer usually being depicted by means of a *receiver operating characteristic (ROC). According to the theory, an observer sets a criterion level of sensory activation below which the signal is reported as absent and above which it is reported as present, but if the two probability distributions overlap, then stimuli below the criterion must include not only instances of noise (*correct rejections*) but also instances of signal (*misses*), and stimuli above the threshold must include not only instances of signal (*hits*) but also instances of noise (*false alarms*). Also called *sensory decision theory*. See also IDEAL OBSERVER, LIKELIHOOD RATIO (2), MEMORY OPERATING CHARACTERISTIC, PSYCHOMETRIC FUNCTION, SIGNAL-TO-NOISE RATIO, TWO-ALTERNATIVE FORCED-CHOICE TASK. SDT abbrev.

signal-to-noise ratio *n.* The ratio of *signal strength to *noise (2) strength in a communication channel or *time series. See also RECEIVER OPERATING CHARACTERISTIC.

significance See STATISTICAL SIGNIFICANCE.

significance test *n.* In *inferential statistics, any test designed to determine whether an *alternative hypothesis achieved the required level of *statistical significance to justify being accepted in preference to the *null hypothesis. In a classical null hypothesis significance test, the null hypothesis is provisionally assumed to be true, and a calculation is then made of the probability of obtaining a result as extreme as the one actually obtained. If the probability is sufficiently small (by convention this significance level is often set at $p < .05$), the investigator is justified in rejecting the null hypothesis and

*****ebook converter DEMO Watermarks*****

therefore also in accepting its logical negation, namely the alternative hypothesis. The term ‘tests of significance’ was introduced by the English statistician and geneticist Ronald Aylmer Fisher (1890–1962) in 1925, on page 43 of his book *Statistical Methods for Research Workers*. Also called a *statistical test*.

significant other *n.* A term used by the US psychiatrist Harry Stack Sullivan (1892–1949) in his book *Conceptions of Modern Psychiatry* (1947) to denote the most influential person—usually the mother—in a child’s world. It is used colloquially to denote a person with whom someone is sexually or romantically involved.

sign language *n.* Any system of communication based on hand signals, especially one used by deaf people. There are many such systems, including **American Sign Language* and **British Sign Language*, and like **natural languages* they tend to be mutually unintelligible. *See also* *CHEROLOGY*, *DACTYLOLOGY*, *MAKATON*.

sign stimulus *n.* In ethology, a **feature (1)* of a complex **stimulus (1)* that triggers a specific response or **fixed-action pattern*. A classic example is the redness of the belly of a male stickleback fish in breeding condition, which elicits aggressive attacks from other male sticklebacks, whereas other features of the stimulus, such as its shape, size, and manner of movement, have little effect on the responses. Similarly, the tactile sensation of prodding by a male stickleback at the base of the tail of a female in the right condition elicits egg-laying, whereas other features of the stimulus, including its colouring, are irrelevant to this response. The Dutch-born British ethologist Niko Tinbergen (1907–88), who first identified sign stimuli in 1951, reported that even a red mail van passing outside the window of his laboratory elicited aggressive **display (1)* from his male sticklebacks, and even prodding with a glass rod at the base of a female’s tail elicited egg-laying. Many sign stimuli, though not all, are **releasers*. *See also* *SUPERNORMAL STIMULUS*, *VACUUM ACTIVITY*. **sign stimuli** *pl.*

sign test *n.* In statistics, a **distribution-free test* applied to two related samples to test the **null hypothesis* that the two variables are distributed similarly. Differences between corresponding scores on the two variables are

*****ebook converter DEMO Watermarks*****

classified as either positive, negative, or tied, and if the two variables are similarly distributed, the numbers of positive and negative differences will not be significantly different.

sildenafil citrate *n.* The chemical name of the drug **Viagra*, used for treating **erectile disorder*.

silent mutation *n.* Any **mutation* that has no effect on the phenotype, either because the altered **codon* happens to specify the same amino acid as the original one (see *CODON FAMILY*), or because it occurs in an **intron* that has no genetic function. [So called because it is not expressed]

silent receptors *n.* **Neuroreceptors* to which substances bind without producing any apparent physiological response.

silhouette illusion See *SPINNING DANCER ILLUSION*.

silok See *LATAH*.

similarities test *n.* A type of **intelligence* test item or subtest in which the respondent tries to explain in what way things are similar or alike. A typical example is: *In what way are fear and happiness similar or the same?* The answer is that they are both emotions.

similarity-attraction hypothesis See *ATTITUDE SIMILARITY HYPOTHESIS*.

similarity grouping law *n.* One of the four original **grouping laws* of **Gestalt* psychology, formulated in 1923 by the German psychologist Max Wertheimer (1880–1943) to explain the organization of parts into wholes by the visual system. According to the law, elements that are similar tend to be grouped perceptually, so that (for example) the array OOxx tends to be perceived as two pairs. Also called *equality grouping law*. See also *COMMON FATE*, *COMMON REGION*, *CONNECTEDNESS GROUPING LAW*, *PRÄGNANZ*. Compare *CLOSURE GROUPING LAW*, *GOOD CONTINUATION*, *PROXIMITY GROUPING LAW*.

similarity law *n.* In the doctrine of [*associationism](#), a law introduced by the English philosopher John Stuart Mill (1806–73) according to which mental elements that are similar tend to become associated. *See also* [GROUPING LAW](#). *Compare* [CONTIGUITY LAW](#), [FREQUENCY LAW](#).

similarity paradox *n.* Another name for the [*Skaggs–Robinson paradox](#).

simile *n.* A [*figure of speech](#) in which something is explicitly compared to something that it resembles, usually with one of the prepositions *like* or *as*, a typical example being ‘Love is like the measles; we all have to go through it’—Jerome K(lapka) Jerome (1859–1927), *Idle Thoughts of an Idle Fellow* (1889). *Compare* [METAPHOR](#). [From Latin *simile* something similar, from *similis* like]

Simon effect *n.* The tendency for [*choice reaction time](#) to be shorter and responses more accurate when [*stimulus \(1\)](#) and [*response](#) occur in the same relative location, even if location is irrelevant to the task. Thus, if respondents are instructed to press a left-hand button whenever a cross appears on a screen and a right-hand button whenever a circle appears, then reactions are generally faster and more accurate on congruent trials on which crosses appear on the left of the screen and circles appear on the right than on incongruent trials, suggesting that location information cannot be ignored in decision making, even if it is irrelevant. In Simon’s original experiments, participants moved a lever left or right in response to stimuli presented to their left or right ears. *Compare* [STROOP EFFECT](#). [Named after the US psychologist J(ennings) Richard Simon (born 1929), who first reported the effect in articles in the *Journal of Experimental Psychology* in 1968 and 1969]

simple cell *n.* A type of neuron in the [*primary visual cortex](#) (Area V1) that responds maximally to a stationary bar (slit) or straight edge with a particular orientation or slant and position on the [*retina](#) and that divides the [*receptive field](#) into excitatory and inhibitory regions: excitation within a bar and inhibition outside it, excitation outside a bar and inhibition inside it, or excitation on one side of an edge and inhibition on the other side. *See also* [BAR DETECTOR](#), [EDGE DETECTOR](#), [END-STOPPED RECEPTIVE FIELD](#), [FEATURE DETECTOR](#),
*****ebook converter DEMO Watermarks*****

ORIENTATION-SPECIFIC CELL. *Compare* COMPLEX CELL, HYPERCOMPLEX CELL.

simple deteriorative disorder *n.* A condition (included in the *ICD-10 classification but not in *DSM-5) characterized by progressive decline in occupational or academic functioning; gradual appearance and exacerbation of *negative symptoms such as *affective flattening, *alogia, and *avolition; poor interpersonal skills; and social isolation and withdrawal. *Compare* SCHIZOAFFECTIVE DISORDER, SCHIZOID PERSONALITY DISORDER, SCHIZOPHRENIFORM DISORDER, SCHIZOTYPAL (PERSONALITY) DISORDER. [So called because of the absence of prominent *catatonic, *hebephrenic, or *paranoid symptoms]

simple line graph *See* LINE GRAPH.

simple phobia *n.* Another name for *specific phobia.

simple random sample *n.* A *probability sample drawn from a *population in such a way that every member of the population is equally likely to be selected. Also called a *random sample*. *See also* CLUSTER SAMPLE, RANDOM DIGIT DIALING, STRATIFIED RANDOM SAMPLE. *Compare* ACCIDENTAL SAMPLE, CONVENIENCE SAMPLE, NON-PROBABILITY SAMPLE, OPPORTUNITY SAMPLE, QUOTA SAMPLE, SELF-SELECTED SAMPLE, SNOWBALL SAMPLE. **SRS** *abbrev.*

simple reaction time *n.* *Reaction time in a situation in which there is only one possible stimulus requiring only one type of response. *Compare* CHOICE REACTION TIME, DISCRIMINATION REACTION TIME.

simple receptive field *n.* The *receptive field of a *simple cell.

simple reinforcement schedule *n.* A *reinforcement schedule that does not incorporate two or more different schedules. Also called a *simple schedule*. *Compare* COMPOUND REINFORCEMENT SCHEDULE.

simple schizophrenia *n.* Another name for *simple deteriorative disorder.

simple structure *n.* In *factor analysis, a method of *rotation advocated

by the US psychologist Louis Leon Thurstone (1887–1955) in which as many factor loadings as possible are zero and none is negative.

simple tone *n.* Another name for a **pure tone*.

simplicity principle *n.* Another name for the **precision law* of Gestalt psychology.

Simpson's paradox *n.* A statistical **paradox* in which two sets of data, considered separately, each support a certain conclusion, but together support the opposite conclusion. Suppose that a drug trial is run, and drug A is effective in 10 out of 100 patients (10 per cent), whereas drug B is effective in 200 out of 1,000 (20 per cent). Then a second trial is run, and in this case drug A is effective in 400 out of 1,000 patients (40 per cent), whereas drug B is effective in 60 out of 100 patients (60 per cent). Clearly, drug B is superior in each of the two trials, yet if the data are combined, then drug A is superior: drug A is effective in 410 out of 1,100 (37 per cent), whereas drug B is effective in 260 out of 1,100 (24 per cent). [Named after the British mathematician Edward Hugh Simpson (born 1927) who published it in 1951]

simulation heuristic *n.* A **heuristic* whereby people make predictions, assess the probabilities of events, carry out **counterfactual reasoning*, or make judgements of causality through an operation resembling the running of a simulation model. The ease with which the mental model reaches a particular state may help a decision maker to judge the propensity of the actual situation to reach that outcome. The Israeli-American psychologists Daniel Kahneman (born 1934) and Amos Tversky (1937–96), who introduced the heuristic in a lecture in 1979 and published it as a book chapter in 1982, provided empirical evidence that people use it to predict the behaviour of others in certain circumstances and to answer questions involving counterfactual propositions by mentally undoing events that have occurred and then running mental simulations of the events with the corresponding input values of the model altered. For example, when provided with a **vignette* describing two men who were delayed by half an hour in a traffic jam on the way to the airport so that both missed flights on which they were booked, one of them by half an hour and the second by only five minutes (because his flight had been delayed for 25 minutes), 96 per cent of a

*****ebook converter DEMO Watermarks*****

sample of students thought that the second man would be more upset. Kahneman and Tversky argued that this difference could not be attributed to disappointment, because both had expected to miss their flights, and that the true explanation was that the vignette invited the use of the simulation heuristic, in which it would be easier to imagine minor alterations that would have enabled the second man to arrive in time for his flight. The heuristic is often interpreted as a form of [*availability heuristic](#).

simultanagnosia *n.* Impaired ability to perceive more than one object or image at the same time, hence an inability to comprehend a whole picture even when its constituent elements can be recognized, often occurring as a symptom of [*Bálint's syndrome](#) or a lesion in the [*left](#) temporal lobe. See also [AGNOSIA](#), [MOTION-INDUCED BLINDNESS](#), [NAVON FIGURE](#). [From *simultan(eous)* + *agnosia*]

simultaneous contrast *n.* The tendency for a sensation such as lightness, colour, or warmth to induce the opposite sensation in a stimulus with which it is juxtaposed. See [COLOUR CONTRAST](#), [CONTRAST \(2\)](#), [LIGHTNESS CONTRAST](#), [WARMTH CONTRAST](#). Compare [SUCCESSIVE CONTRAST](#).

simultaneous masking *n.* A form of [*masking](#) that occurs when the perception of a stimulus, called the *test stimulus*, is reduced or eliminated by the simultaneous presentation of a second stimulus, called the *masking stimulus*. See also [AUDITORY MASKING](#), [VISUAL MASKING](#). Compare [BACKWARD MASKING](#), [FORWARD MASKING](#).

simultaneous matching to sample See [MATCHING TO SAMPLE](#).

single-blind study *n.* A research design in which the research participants or subjects do not know until after the data have been collected, but the experimenter does know, which experimental treatment has been applied to which subjects. This type of design is often used in drug trials involving the comparison of a drug and a [*placebo \(1\)](#), to avoid contamination of the results from biases and preconceptions on the part of the subjects. See also [RANDOMIZED CONTROLLED TRIAL](#). Compare [DOUBLE-BLIND STUDY](#), [OPEN STUDY](#).

single-case design *n.* Another name for a **case study*.

single-frame task *n.* A **visual search* task in which all stimuli are presented together. *Compare* MULTIFRAME TASK.

single-linkage clustering *n.* In statistics, any technique of **cluster analysis* in which the distance between two clusters is defined as the distance between their two closest members. Also called the *nearest neighbour method*.

single photon emission computed tomography *See* SPECT SCAN.

single stimuli method *See* METHOD OF SINGLE STIMULI.

single-synapse reflex *n.* Another name for a **monosynaptic reflex*.

sinusoidal *adj.* Varying according to the regular undulating sine curve $y = \sin x$. [From Latin *sinus* a curve or bay + *-oid* indicating likeness or resemblance, from Greek *eidos* shape or form + *-al* from Latin *-alis* of or relating to]

sinusoidal grating *n.* A grating in which the **luminance* of the image undulates at a regular **spatial frequency* along an axis, increasing and decreasing according to the sine curve $y = \sin x$.

sitology *n.* The study of food, nutrition, and diet. [From Greek *sitos* grain or food + *logos* word, discourse, or reason]

situationist critique *n.* A critique of the concept of **personality*, initiated by the Austrian-born US psychologist Walter Mischel (born 1930) in his book *Personality and Assessment* (1968), based on evidence apparently contradicting the fundamental assumption of all personality theories, namely that people display more or less consistent patterns of behaviour across situations. Mischel drew attention to the low correlations between personality test scores and behaviour in everyday situations and concluded that behaviour

can be more reliably predicted from past behaviour than from personality test scores. According to the strong form of the situationist critique, behaviour is merely predictive of itself, and theories of personality are futile. *See also* [INTERACTIONISM \(2\)](#).

six degrees of separation *See* [SMALL WORLD PHENOMENON](#).

6-hydroxydopamine *n.* A [*neurotoxin](#) that is closely related to [*dopamine](#) and is readily taken into dopaminergic and noradrenergic neurons via their normal reuptake mechanism, whereupon it destroys the neuron terminals, causing the organism to lose the ability to perform simple actions to obtain rewards. **6-OHDA** *abbrev.*

16PF *abbrev.* The Sixteen Personality Factor Questionnaire, a popular personality scale that consists of 185 questions, such as ‘I get frustrated when people take too long to explain something’, each having three response categories—usually *true ? false*—and that yields scores on sixteen primary factors: Warmth, Reasoning, Emotional Stability, Dominance, Liveliness, Rule-consciousness, Social Boldness, Sensitivity, Vigilance, Abstractedness, Privateness, Apprehension, Openness to Change, Self-reliance, Perfectionism, and Tension. Scores on the primary factors can be combined to yield scores on five global factors: Extraversion, Anxiety, Tough-mindedness, Independence, and Self-control, and in addition an Impression Management (lie) score can be calculated. The questionnaire was constructed by the English-born US psychologist Raymond B(ernard) Cattell (1905–98) and first described in an article in the *Journal of Clinical Psychology* in 1956. The sixteen primary factors were derived by successive reduction, using [*factor](#) analysis, of the 17,953 trait names, 4,505 with distinct meanings, located by the US psychologists Gordon W(illard) Allport (1897–1967) and Henry S(ebastian) Odbert (1909–95) in an exhaustive dictionary search in 1936. Also called the *Cattell 16PF*. *See also* [LANGUAGE PERSONALITY SPHERE](#), [TRAIT](#).

size constancy *n.* A form of [*perceptual constancy](#) in which an object tends to retain its perceived size despite changes in its [*angular size](#) or the size of the image that it casts on the retina. Thus a football looks the same size whether its [*proximal](#) stimulus image covers a large area of the retina

*****ebook converter DEMO Watermarks*****

when it is viewed close up or a tiny area when it is viewed from a distance.

size–distance invariance *n.* A hypothesis that the perceived size s and the perceived distance d of an object are associated in such a way that their ratio is a constant, so that $s/d = k$, implying that any misperception of size implies a misperception of distance and vice versa. This relation breaks down in the **moon illusion*. Compare *SHAPE–SLANT INVARIANCE*.

size–weight illusion *n.* A powerful **cognitive illusion* that causes approximately 98 per cent of people to judge an object to be heavier than another object of the same weight but much larger size when the two are lifted by hand. In a simple home demonstration of the illusion, pieces of lead or other heavy material may be placed in two different-sized containers and surrounded by sand to prevent them from moving about and from being visible if the containers are transparent, and the weights of the containers may be adjusted until they are identical, whereupon the smaller container will feel much heavier than the larger one. In a classic experiment on this illusion, 100 US military officers judged a smaller object to be on average two and a half times as heavy as one that was the same weight but twice the size in each dimension. The illusion was first reported in 1889 by the German psychologists Georg Elias Müller (1850–1934) and Friedrich Schumann (1863–1940). It is sometimes classified as a **tactile illusion*. Also called *Charpentier’s illusion*.

skag *n.* A street name for **heroin*.

Skaggs–Robinson paradox *n.* A surprising fact about the rate at which learning and subsequent recall are affected by the degree of similarity of the material to be learnt in two tasks carried out in close succession. On the one hand, the more similar the material to be learnt in the two tasks, the slower the rate of learning and the worse the subsequent recall, because similarity increases **proactive interference* and **retroactive interference*; but on the other hand, the rate of learning and the amount of recall are highest when the material in the two tasks is identical, because proactive and retroactive interference cease to operate and each task functions as practice for the other. Also called the *similarity paradox*. [Named after the US psychologists Ernest Burton Skaggs (1892–1970) and Edward Stevens

*****ebook converter DEMO Watermarks*****

Robinson (1893–1937) who discussed it in articles in the journal *Psychological Monographs* in 1925 and 1920 respectively]

skeletal muscle *n.* The [*striped muscle](#) tissue that is used for voluntary movements of the limbs and other body parts, including the external muscles of the eyes. [So called because most of them move parts of the skeleton]

sketchpad, visuospatial See [VISUOSPATIAL SKETCHPAD](#).

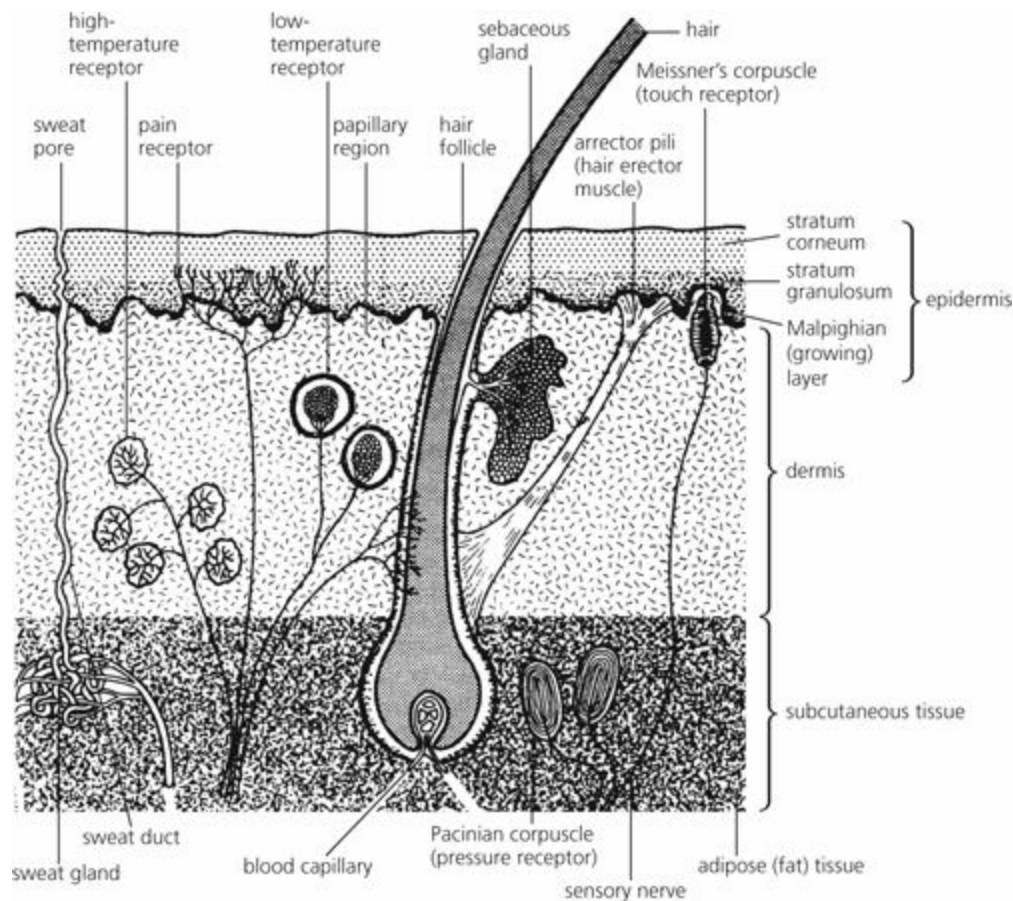
skewness *n.* In statistics, an index of the degree to which a distribution is asymmetric around its mean. The [*normal distribution](#) is symmetric and thus has zero skewness, whereas a distribution whose right tail is more prominent than its left tail is positively skewed or skewed to the right, and one whose left tail is comparatively prominent is negatively skewed or skewed to the left. In a positively skewed distribution the mean is larger than the median and the median is larger than the mode, and in a negatively skewed distribution these inequalities are reversed, the order of the parameters often being used as a test for skewness. Skewness is used along with the [*kurtosis](#) to assess whether a variable is normally distributed.

skill *n.* Expertise or accomplishment in any field; specifically, any complex, organized pattern of behaviour acquired through training and practice, including cognitive skills such as mathematics or chess, perceptual skills such as radar monitoring, motor skills such as juggling, and social skills such as non-verbal communication. Research into skills can be traced at least as far back as 1820, when the German astronomer Friedrich Wilhelm Bessel (1784–1846) studied the accuracy of difficult astronomical observations requiring judgements of duration (see [PERSONAL EQUATION](#)). In the latter half of the 19th and the early decades of the 20th century investigations continued into how people learn Morse code, typing, and other skills, and research gained considerable momentum during the Second World War with the development of radar, advanced military aircraft, and sophisticated weapon systems, which presented human operators with difficult problems of learning and performance. Since the 1970s, research on skills has been further stimulated by the rise of sport psychology and increased concern about skilled aspects of social interaction. See also [MIRROR NEURON](#), [MOTOR SKILLS DISORDER](#), [PERCEPTUAL–MOTOR SKILL](#), [SOCIAL SKILL](#), [SOCIAL SKILLS TRAINING](#), [SPECIFIC](#)

*****ebook converter DEMO Watermarks*****

DISORDER OF ARITHMETIC SKILLS, TEN THOUSAND HOUR RULE. [From Old Norse *skil* distinction, from *skilja* to separate]

skin *n.* The tough, flexible, cutaneous **membrane* that covers most of the outer surface of the body and that functions as the body's largest **sense* organ, occupying a total surface area in a human adult of approximately 1.67 square metres (18 square feet) and being composed of two layers, the outer **epidermis* and the inner **dermis* (see *illustration*). See also COLD SPOT, CUTANEOUS SENSE, ECTODERM, EPICRITIC, EXOCRINE GLAND, FORMICATION, FREE NERVE ENDING, GALVANIC SKIN RESPONSE, GOOSE PIMPLES, HISTAMINE, MECHANORECEPTOR, MEISSNER'S CORPUSCLE, MELATONIN, MERKEL CELL, PACINIAN CORPUSCLE, PAIN RECEPTOR, PALLAESTHESIA, PARADOXICAL COLD, PARADOXICAL HEAT, PARADOXICAL WARMTH, PARAESTHESIA, PELLAGRA, PHYSIOLOGICAL ZERO, PRESSURE-SENSITIVE SPOT, RAPIDLY ADAPTING, RUFFINI CORPUSCLE, SENSORY SALTATION, SKIN CONDUCTANCE RESPONSE, SLOWLY ADAPTING, SUBSTANCE P, SWEAT GLAND, TEMPERATURE RECEPTOR, TOUCH, TOUCH RECEPTOR, TWO-POINT THRESHOLD, URBACH-WIETHE DISORDER, WARM SPOT.



Skin. The structure of mammalian skin.

skin conductance response *n.* A measure of change in the conductivity of the **skin* to a weak electric current. It is usually measured in mhos (*mho* being *ohm* spelt backwards), because it is the reverse of the **galvanic skin response* in which change in the electrical resistance of the skin is measured in conventional units of ohms. **SCR** *abbrev.*

Skinner box *n.* A compartment containing a lever, key, or other manipulable device that a rat, pigeon, or other animal can operate in order to receive food delivered from a storage magazine to a hopper, or occasionally to avoid electric shocks delivered through the floor of the compartment. It was invented by the US psychologist Burrhus F(rederic) Skinner (1904–90) while he was a postgraduate student at Harvard University in 1929, and it is often attached to a **cumulative recorder* to study **operant* conditioning. See also [MAGAZINE TRAINING](#), [REINFORCEMENT \(1\)](#).

*****ebook converter DEMO Watermarks*****

Skinner crib *n.* Another name for an [*air crib](#).

Skinnerian conditioning *n.* Another name for [*operant conditioning](#). [Named after the US psychologist Burrhus F. Skinner (1904–90) who introduced the procedure in his PhD dissertation in 1931]

skin-picking disorder *See* [EXCORIATION DISORDER](#).

skin-pop *vb.* In drug-culture slang, to inject a drug subcutaneously (below the skin) or intramuscularly (into muscle tissue) rather than intravenously (into a vein). Also called *skinning*. *Compare* [MAINLINE](#).

skin sense *n.* Another name for a [*cutaneous sense](#).

skin shrink *n.* A colloquial term for a [*psychodermatologist](#). [Alluding to the colloquial term *headshrinker* for a psychiatrist]

skunk *n.* A street name for a potent form of [*cannabis](#), a cross-breed of *Cannabis sativa* and *C. indica*, usually grown indoors, either under special lights or in greenhouse conditions using hydroponic methods (without soil, in nutrient-enriched water). Compared with ordinary herbal cannabis, in which the [*psychotropic](#) ingredient delta-9-tetrahydrocannabinol (THC) ranges from 2 to 4 per cent, the concentration in skunk is usually between 10 and 15 per cent and is sometimes even higher. [From New England Algonquian *squunck*, a North American polecat that emits an offensive odour when threatened, alluding to the strong smell of burning skunk cannabis]

slang *n.* An informal, non-standard variety of a language, or the [*jargon](#) (1) of an occupational or social group. *See also* [BACK SLANG](#), [REGISTER](#) (2), [RHYMING SLANG](#). *Compare* [ARGOT](#).

sleep *n.* A periodic state of muscular relaxation, reduced metabolic rate, and suspended consciousness in which a person is largely unresponsive to events in the environment. Five stages of sleep can be distinguished by psychophysiological measurements, namely [*REM sleep](#) and four separate stages of [*NREM sleep](#), called stages I, II, III, and IV NREM sleep

respectively. *See also* BASAL FOREBRAIN, BASIC REST–ACTIVITY CYCLE, CIRCADIAN RHYTHM, DELTA SLEEP-INDUCING PEPTIDE, DELTA WAVE, DREAM (1), DYSSOMNIAS, HYPNAGOGIC IMAGE, HYPNOPOMPIC IMAGE, K COMPLEX, LOCUS COERULEUS, MAGNOCELLULAR NUCLEUS, MELATONIN, NUCLEUS GIGANTOCELLULARIS, PARADOXICAL SLEEP, PARASOMNIAS, PGO SPIKE, PINEAL GLAND, POLYSOMNOGRAPHY, PSEUDOINSOMNIA, REM ATONIA, REM REBOUND, SLEEP SPINDLE, SLEEP–WAKE CYCLE, SLEEPWALKING, SLOW-WAVE SLEEP, SUBCOERULEAR NUCLEUS.

sleep apnoea *n.* A *breathing-related sleep disorder characterized by recurrent episodes of breathing cessation during sleep, leading to *hypersomnia during the daytime. US *sleep apnea*. *See also* CENTRAL SLEEP APNOEA, OBSTRUCTIVE SLEEP APNOEA HYPOPNOEA. *Compare* CENTRAL ALVEOLAR HYPOVENTILATION SYNDROME. [From Greek *apnoia* cessation of breathing, from *a-* without + *pnein* to breathe]

sleep disorders *n.* A category of *mental disorders prominently associated with disturbances of *sleep patterns. They are subdivided into the *dyssomnias, involving disturbances in the amount, quality, and timing of sleep, and the *parasomnias, characterized by behavioural and physiological abnormalities associated with sleep, although there is overlap between these categories.

sleeper effect *n.* The tendency for the recipients of a persuasive message from a source of low *credibility to show increased *attitude change a few days or weeks after exposure to the message, either relative to recipients of the same message attributed to a source of high credibility (the *relative sleeper effect*) or relative to the amount of attitude change occurring immediately after exposure to the message (the *absolute sleeper effect*). The effect was first reported by the US psychologists Carl I(vor) Hovland (1912–61) and Walter Weiss (born 1925) in the journal *Public Opinion Quarterly* in 1951.

sleeping beauty syndrome *n.* Another name for *Kleine–Levin syndrome. [Alluding to the hypersomnia that characterizes the disorder]

sleep-onset insomnia *n.* Difficulty falling asleep, also called *initial insomnia*. *See* INSOMNIA.

*****ebook converter DEMO Watermarks*****

sleep paralysis *n.* A condition in which ***REM atonia** is experienced in the waking state. Such episodes typically occur immediately after waking or shortly before falling asleep. They are often frightening and may be accompanied by ***out-of-body experiences**. See also **NARCOLEPSY**. Compare **REM BEHAVIOUR DISORDER**.

sleep-related hypoventilation *n.* A ***breathing-related sleep disorder** in ***DSM-5** characterized by ***hypoventilation** during sleep with elevated levels of carbon dioxide in the blood. [From Greek *hypo* under + Latin *ventilare* to ventilate, from *ventus* a wind]

sleep spindle *n.* An ***EEG** wave form that occurs periodically in brief (approximately 1-second) bursts with a frequency of 12–15 hertz during light Stage II ***NREM sleep**. [So called because of the resemblance of its trace to a spindle, tapering at both ends]

sleep terrors *n.* In ***DSM-5**, a ***non-rapid eye movement sleep arousal disorder** characterized by repeated awakening from sleep, usually during the first part of the night and with a scream or cry, in a state of intense fear, confused, disoriented, and without any vivid recall of a dream, unresponsive to being comforted, and with amnesia for the episode the following morning. Also called *night terrors* or *pavor nocturnus* or, if occurring during the day, *pavor diurnus*. Compare **NIGHTMARE DISORDER**.

sleep–wake cycle *n.* The ***circadian rhythm** of sleep and wakefulness that persists even when environmental cues as to the passage of time are removed, although in those circumstances it usually has a period slightly longer than 24 hours.

sleep–wake disorders *n.* An umbrella term introduced in ***DSM-5** to cover a large number of disorders related to the ***sleep–wake cycle**. See **BREATHING-RELATED SLEEP DISORDERS**, **CIRCADIAN RHYTHM SLEEP–WAKE DISORDERS**, **HYPERSOMNOLENCE DISORDER**, **INSOMNIA DISORDER**, **NARCOLEPSY**, **PARASOMNIAS**.

sleep–wake schedule disorders *n.* Another name for ***circadian rhythm sleep–wake disorders**.

sleepwalking *n.* In *DSM-5, a *non-rapid eye movement sleep arousal disorder associated with Stages III and IV *NREM sleep, usually during the first third of the night, in which the sleeper manifests complex motor activity, including rising from bed and walking about with a blank facial expression, and is unresponsive and difficult to awaken, with amnesia for the episode the following morning. Also called *noctambulation* or *somnambulism*. See also NON-RAPID EYE MOVEMENT SLEEP AROUSAL DISORDER, SEXSOMNIA.

sleepy sickness *n.* A colloquial name for *encephalitis lethargica.

slimmers' disease *n.* A popular name for *anorexia nervosa, misleading because slimmers do not necessarily have it and it is not caused by slimming.

slip of action See ACTION SLIP. See also PARAPRAXIS.

slip of memory *n.* A minor error of recall, including an instance of *paramnesia (2). Also called a *lapsus memoriae*. See also PARAPRAXIS.

slip of the pen *n.* A mistaken piece of writing when something else was intended. Also called a *lapsus calami*. See also PARAPRAXIS.

slip of the tongue *n.* A mistaken utterance when something else was intended. Also called a *lapsus linguae*. See also MOSES ILLUSION, PARAPRAXIS, YOLK PHENOMENON.

slowly adapting *adj.* Of or relating to *afferent neurons from *sensory receptors in the *skin that respond constantly to sustained stimulation. See also SUSTAINED RESPONDER. Compare RAPIDLY ADAPTING. **SA** abbrev.

slow oxidative fibre *n.* Another name for a *slow-twitch fibre. US *slow oxidative fiber*. **SO fibre** abbrev. [So called because it reacts relatively slowly and is adapted for oxidative or aerobic metabolism]

slow-twitch fibre *n.* A dark-coloured *striped muscle fibre, especially in muscles involved in standing and walking, that responds more slowly and

is less prone to fatigue but capable of less powerful contractions than **fast-twitch fibre*. US *slow-twitch fiber*. Also called a *slow oxidative fibre* or *SO fibre*.

slow-wave sleep *n.* Another name for Stages III and IV of **NREM sleep*, characterized by high-amplitude (150 microvolts), low-frequency (1–3 hertz) EEG waves called **delta waves*. See also *DELTA SLEEP-INDUCING PEPTIDE*. *SWS* *abbrev.*

smack *n.* A common street name for **heroin*. [From Yiddish *schmeck* heroin]

small calorie See *CALORIE*.

small intestine *n.* The section of the **alimentary* canal between the **stomach* and the **large intestine*.

small-sample fallacy *n.* Another name for the **sample* size fallacy.

small world phenomenon *n.* The finding that two people *A* and *B*, chosen at random, tend to be connected by a surprisingly short acquaintanceship chain, *A* knowing someone who knows someone...who knows *B*. This helps to explain how **rumours* and other **memes* diffuse rapidly through populations. The US psychologist Stanley Milgram (1933–84) determined the typical length of the acquaintanceship chain within the US by providing over 200 participants with the name, address, and occupation of a distant target person and requesting them to send a document folder to someone with whom they were on first-name terms who would be most likely to know the target person. Each recipient along the chain received similar instructions, and the process continued until the folder reached the target person or the chain was broken. Milgram's results, published in the magazine *Psychology Today* in 1967, showed that, among the 29 per cent of cases in which the folder reached the target person, the median number of intermediaries was five, and the number of steps from the starting person to the target person was therefore six, suggesting that the US is a small world in which there are typically six degrees of separation between people. Milgram also carried out a cross-racial replication of the study, published in the

*****ebook converter DEMO Watermarks*****

Journal of Personality and Social Psychology in 1970, with similar results. The phenomenon inspired a play by the US playwright John Guare (born 1938) entitled *Six Degrees of Separation* (1992), and a film with the same title, released in 1993. [The term was introduced into the social sciences by the US political scientist Ithiel de Sola Pool (1917–84) and the Austrian-born US mathematician Manfred Kochen (1928–89) in an article on social networks written in 1958 but not published until 1978 in the journal *Social Networks*]

smart drug *n.* A non-technical name for any drug believed to have **nootropic* effects or to enhance **cognitive* ability or performance. Also called a *cognitive enhancer*. See *CAFFEINE*, *CREB*, *DEPRENYL*, *GINKGO*, *GINSENG*, *MEM 1414*, *PHENYTOIN*, *VASOPRESSIN*. See also *PERFORMANCE ENHANCER*.

smell *n.* One of the five classical **senses* (1), mediated by **olfactory receptors* in the nose. The **olfactory bulb* receives impulses from the **olfactory receptors* and transmits them via the **olfactory nerves* directly to the **olfactory cortex* and the **amygdala*, this sensory pathway being unique in bypassing the **thalamus* entirely. Perhaps for that reason, smell is more effective than any other sense in reawakening memories from the distant past, especially the emotions associated with past experiences, although the literary passage most often cited in support of this phenomenon, quoted under **redintegration*, clearly refers to taste rather than smell. See *OLFACTION*.

smell prism *n.* Another name for **Henning's prism*.

smell square *n.* Another name for the **Crocker–Henderson system*.

smile See *DISPLAY RULE*, *DUCHENNE SMILE*, *FAST*, *HYBRID IMAGE*.

smooth endoplasmic reticulum See *ENDOPLASMIC RETICULUM*. *SER* *abbrev.*

smooth eye movement *n.* An eye movement that is slow, steady, and controlled by feedback, in contrast to a **saccade*. See also *COMPENSATORY EYE MOVEMENT*, *OCULAR CONVERGENCE*, *OCULAR DIVERGENCE*, *SMOOTH FOLLOWING*

MOVEMENT.

smooth following movement *n.* A *smooth eye movement occurring only when tracking a moving object and keeping the gaze fixated on the target. *See also* PURSUIT MOVEMENT.

smooth movement *n.* Another name for a *ramp movement.

smooth muscle *n.* Involuntary muscle tissue, capable of slow, rhythmic contractions, such as is found in the muscles that control the walls of blood vessels, the erection of hair cells, the iris, and all internal organs except the heart. *Compare* CARDIAC MUSCLE, STRIPED MUSCLE. [So called because it does not have the transversely striped appearance of voluntary muscle and cardiac muscle]

Snellen fraction *n.* An index of visual *acuity based on the familiar *Snellen chart* used by optometrists and opticians, on which are printed upper-case letters arranged in size from the largest at the top to the smallest at the bottom. The person being tested normally stands 20 feet or 6 metres from the chart and reads as many letters as possible starting at the top, and a score is assigned in the form of the ratio or fraction d/d_n , where d is the viewer's distance from the chart and d_n is the distance at which a viewer with normal visual acuity could read the smallest letters that the person being tested can read. On this scale 20/20 vision is normal by definition, and 20/200 vision is a criterion of blindness originally introduced by the American Foundation for the Blind, indicating that the smallest letters read by the person being tested from 20 feet could be read from 200 feet by a viewer with normal (20/20) visual acuity, which means that the letters are approximately ten times as tall as the letters that a viewer with normal visual acuity could read. Normal visual acuity is usually defined as a *minimum separable of one minute of arc or 1/60 of a degree of *visual angle. [Named after the Dutch ophthalmologist Hermann Snellen (1834–1908) who devised it]

snow *n.* A street name for *cocaine.

snowball sample *n.* A *non-probability sample obtained by recruiting

*****ebook converter DEMO Watermarks*****

one or more individuals who each recruit one or more individuals, and so on, in the manner of pyramid selling. Although it is sometimes used informally merely for convenience, it is also uniquely effective for accessing 'hidden' groups scattered sparsely in large populations but linked by social networks, such as drug users, prostitutes, professional criminals, or paedophiles. Its first prominent implementation was in a study of leadership dynamics among gang members, carried out by the US sociologist William Foote Whyte (1914–2000) and published in his book *Street Corner Society* (1943). Compare ACCIDENTAL SAMPLE, CLUSTER SAMPLE, CONVENIENCE SAMPLE, OPPORTUNITY SAMPLE, PROBABILITY SAMPLE, QUOTA SAMPLE, RANDOM DIGIT DIALLING, SELF-SELECTED SAMPLE, SIMPLE RANDOM SAMPLE, STRATIFIED RANDOM SAMPLE.

snurp *n.* A small complex of *RNA and protein that helps to clear meaningless *introns from genetic material in cells by splicing *messenger RNA. [From *snRNP* an abbreviation of small nuclear ribonucleoprotein]

sociabilizer *n.* A drug such as *ecstasy (2) or *GHB that stimulates or enhances natural sociability. See also EMPATHOGEN.

social age *n.* A child's performance on a test of social maturity, such as the *Vineland Social Maturity Scale, expressed as the average age of children who achieved the same level of performance in a standardization sample. The concept is based on that of *mental age. Compare CHRONOLOGICAL AGE. SA *abbrev.*

social anthropology *n.* The branch of anthropology devoted to the study of social and cultural phenomena such as religious beliefs, kinship systems, and political and economic structures, especially (though not exclusively) in non-literate societies. Compare CULTURAL ANTHROPOLOGY, PHYSICAL ANTHROPOLOGY.

social anxiety disorder *n.* An *anxiety disorder in *DSM-5 characterized by a *phobia of scrutiny by others or of being the focus of attention in social situations involving strangers. Exposure to such social situations either generates anxiety about behaving in an embarrassing or humiliating way, or triggers a *panic attack, but the reaction is out of
*****ebook converter DEMO Watermarks*****

proportion to the actual threat posed by the social situation, and the avoidance behaviour or anxious anticipation interferes significantly with everyday life, occupational or academic performance, or social relationships. *See also* [HIKIKOMORI](#), [PAROXETINE](#). *Compare* [AGORAPHOBIA](#), [AUTISM SPECTRUM DISORDER](#), [GENERALIZED ANXIETY DISORDER](#), [PANIC DISORDER](#), [SEPARATION ANXIETY DISORDER](#), [SPECIFIC PHOBIA](#).

social categorization *n.* The assignment of people to social categories on the basis of skin colour, clothing, speech style, or other signs or indications of group membership, and the consequent **stereotyping* of group members according to the supposedly typical characteristics of members of those categories. *See* [SOCIAL IDENTITY THEORY](#). *See also* [MINIMAL GROUP SITUATION](#), [STIGMATIZE](#).

social class *n.* Another name for **class* (1).

social cognition *n.* The cognitive activity that accompanies and mediates social behaviour, including the acquisition of information about the social environment, the organization and transformation of this information in memory, and its effects on social behaviour. It includes **impression formation*, **person perception*, **attribution*, and **social categorization*. *See also* [MIRROR NEURON](#).

social cognitive neuroscience *n.* An interdisciplinary research field devoted to the understanding of behaviour and experience at three levels of analysis: the social level, including both motivational and social factors; the cognitive level, focusing on information-processing mechanisms influencing social-level phenomena; and the neural level, concerned with brain mechanisms underlying cognitive-level processes. This approach typically involves **brain* imaging and **neuropsychological* methods to test **social psychological* phenomena, with **cognitive* psychology bridging the neural and the social. It became widely recognized as an independent field of research in 2001, after a conference at the University of California, Los Angeles, organized by the US psychologist Matthew D. Lieberman (born 1970) and others, and the first wave of research in the field was reviewed in an article in the journal *American Psychologist* later in the same year by the US psychologists Kevin N. Ochsner (born 1969) and Matthew Lieberman.

*****ebook converter DEMO Watermarks*****

The term first appeared in print in 2000 in two simultaneous publications: an article by Matthew Lieberman and a book chapter by Kevin Ochsner. Compare [SOCIAL NEUROSCIENCE](#).

social cognitive theory *n.* An approach to [*social learning](#), incorporating findings from research into [*learning \(1\)](#), [*memory](#), and [*social cognition](#), and focusing on people's thoughts and how they affect social behaviour. It was introduced by the Canadian-born US psychologist Albert Bandura (born 1925) in his book *Social Foundations of Thought and Action: A Social Cognitive Theory* (1986), as a successor to [*social learning](#) theory. See also [SELF-EFFICACY](#). **SCT** abbrev.

social comparison *n.* The process whereby people reduce uncertainty about their beliefs, abilities, and emotions by comparing themselves with others, especially when objective criteria of evaluation are not readily available. The concept was introduced by the US psychologist Leon Festinger (1919–89) in an article in the journal *Human Relations* in 1954. See also [RELATIVE DEPRIVATION](#), [RISKY SHIFT](#).

social compliance See [COMPLIANCE](#).

social constructionist psychology *n.* An approach to [*social psychology](#) that seeks to study the ways in which people and groups create and institutionalize social phenomena by constructing their perceived reality. Socially constructed reality is interpreted as a continuous, dynamic process, with reality emerging from people's interpretations. This approach became influential in psychology after the US psychologist Kenneth J(ay) Gergen (born 1934) published a controversial article entitled 'Social Psychology as History' in the *Journal of Personality and Social Psychology* in 1973. Gergen argued that social psychology produces knowledge that alters the very phenomena that it studies and that although its methods are scientific in character, its theories are primarily reflections of contemporary history. Social constructionist psychology arose from the dramaturgical approach to [*self-presentation](#) of the Canadian-born US sociologist Erving Goffman (1922–82) in his influential book *The Presentation of Self in Everyday Life* (1959) and the social [*constructivism](#) introduced by the Austrian-born US sociologist Peter Ludwig Berger (born 1929) and the Slovene-born US

*****ebook converter DEMO Watermarks*****

sociologist Thomas Luckmann (born 1927) in their influential book *The Social Construction of Reality* (1966). See also [NARRATIVE PSYCHOLOGY](#).

social constructivism See [CONSTRUCTIVISM](#).

social contagion *n.* The spread of ideas, attitudes, or behaviour patterns in a group through imitation and [*conformity](#). Also called *behavioural contagion*.

social desirability response set *n.* A predisposition or readiness to respond to items of a multiple-choice questionnaire with responses calculated to present oneself in a favourable light according to perceived social norms and values. See also [RESPONSE SET \(2\)](#).

social dilemma *n.* An interactive decision in which individual interests are at odds with collective interests, the pursuit of individual self-interest by every decision maker leaving everyone worse off than if each had acted cooperatively. In empirical studies, social dilemmas are presented in one of three general forms, called [*N-person Prisoner's Dilemmas](#), [*public goods dilemmas](#), and [*resource dilemmas](#), and they have been used to model problems of inflation and voluntary wage restraint, conservation of scarce natural resources, environmental pollution, arms races and multilateral disarmament, mob behaviour, and many other social problems involving cooperation and trust. The [*Prisoner's Dilemma game](#) is a social dilemma restricted to two interacting decision makers. See also [COMMONS DILEMMA](#). [So called because it is an extension of the Prisoner's Dilemma game and models social problems]

social distance scale *n.* An instrument introduced by the US sociologist Emory S(tephen) Bogardus (1882–1973) in an article in the *Journal of Applied Sociology* in 1925 for measuring attitudes towards social or ethnic groups. Respondents are presented with a number of groups and are asked to indicate which they would willingly admit to various categories of social relationship, varying in level of intimacy. In one of Bogardus's earliest studies, published in his book *Immigration and Race Attitudes* (1928), the groups were Englishmen, Germans, Jews, and Negroes, and the respondents, 1,725 native-born Americans, were asked which they would 'willingly admit'

*****ebook converter DEMO Watermarks*****

to the following: *to close kinship by marriage, to my club as personal chums, to my street as neighbours, to employment in my occupation, and to citizenship in my country.* The percentages for Englishmen were respectively 94, 97, 97, 95, 96; for Germans 54, 67, 79, 83, 87; for Jews 8, 22, 26, 40, 54; and for Negroes 1, 9, 12, 39, 57. A social distance scale is a simple example of a [*Guttman scale](#), although it predates Guttman's formalization of his scale. Also called a *Bogardus social distance scale*.

social exchange theory *n.* A theory of social interaction based on the proposition that people expect rewards and costs from social exchange to be equitable. It was developed by the US sociologist George Caspar Homans (1910–89) and expounded in his books *The Human Group* (1950) and *Social Behavior: Its Elementary Forms* (1961). See [EQUITY THEORY](#).

social facilitation *n.* The term coined in 1920 by the US psychologist Floyd H(enry) Allport (1890–1978) to refer to the phenomena that were later called [*audience effects](#) and [*coaction effects](#). Allport's term is a misnomer, because the effects are not invariably facilitative. See also [DRIVE THEORY OF SOCIAL FACILITATION](#).

social identity theory *n.* A theory of [*social categorization](#) based on the concept of social identity, the part of the self-concept that derives from group membership. According to the theory, social categories, including large groups such as nations and small groups such as clubs, provide their members with a sense of who they are, and social identities not only describe but also prescribe appropriate behaviour, and membership of the social category of 'student', for example, determines not only how members define and evaluate themselves but also how others define and evaluate them. According to the theory, the basis of social [*prejudice](#) is the enhancement of self-esteem by discrimination against out-groups. The theory was originally formulated in 1978 by the British-based Polish psychologist Henri Tajfel (1919–82). See also [JIGSAW CLASSROOM](#), [MINIMAL GROUP SITUATION](#), [ROBBERS CAVE EXPERIMENT](#), [STIGMATIZE](#). **SIT** abbrev.

social impact See [LAW OF SOCIAL IMPACT](#).

social influence *n.* Any process whereby a person's [*attitudes](#) (1),

*****ebook converter DEMO Watermarks*****

**opinions, *beliefs, or behaviour are altered or controlled by some form of social communication. It includes *conformity, *compliance, *group polarization, *minority social influence, *obedience, *persuasion, and the influence of social *norms (1). See also LAW OF SOCIAL IMPACT, REACTANCE.*

social insect *n.* Any of the species of bees, wasps, ants, and termites that live in organized colonies with division of labour. Some species of ants even practise slavery (see DULOSIS). See also EUSOCIAL, POLYETHISM.

social intelligence *n.* Another name for **emotional intelligence*, especially those aspects concerned with the ability to perceive, appraise, and express emotions accurately and the ability to comprehend emotional messages and to make use of emotional information. Its existence as a distinct characteristic would require evidence for high correlations among different measures of social intelligence and low correlations between such measures and conventional measures of **intelligence*, and neither of these requirements has been adequately fulfilled.

social introversion scale *n.* Any scale designed to measure **introversion*, including the social introversion scale of the **MMPI*.

socialization *n.* 1. The process, beginning in infancy, whereby one acquires the attitudes, values, beliefs, habits, behaviour patterns, and accumulated knowledge of one's society, through child-rearing, education, and modification of one's behaviour to conform with the demands of the society or group to which one belongs. See also ANTICIPATORY SOCIALIZATION. 2. The act or process of altering something in accordance with socialist principles, as by transferring an industry to public ownership.

socialize *vb.* 1. To train, educate, or prepare someone for life in a particular society or group. See also SOCIALIZATION (1). 2. To create or alter something according to socialist principles, as by nationalization. See also SOCIALIZATION (2). 3. To act in a sociable or friendly manner.

social learning *n.* The processes by which social influences alter people's thoughts, feelings, and behaviour. The earliest social learning theories, put forward in 1950 by the US psychologists John Dollard (1900–
*****ebook converter DEMO Watermarks*****

80) and Neal Elgar Miller (1909–2002) and in 1954 by the US psychologist Julian B(ernard) Rotter (1916–2014) were simple ***operant** conditioning theories based on ***reinforcement** (1); more recent versions assign a major role to ***cognitive** processes. In 1969 the Canadian-born US psychologist Albert Bandura (born 1925) argued that imitation and ***modelling** sometimes occur without reinforcement, through simple observational learning, as in an experiment by Bandura and two colleagues in 1961 in which children who observed the actions of an aggressive adult towards an inflatable five-foot BoBo doll tended later, after they were subjected to mild ***frustration**, to imitate the hostile behaviour they had observed. *See also* **LOCUS OF CONTROL**, **MIRROR NEURON**.

social learning theory *n.* The conceptual framework within which the processes of ***social learning** are studied. *See also* **SOCIAL COGNITIVE THEORY**. **SLT** *abbrev.*

social loafing *n.* The tendency to exert less effort on a task when working as part of a cooperative group than when working on one's own—one reason why many hands make light work. The French agricultural engineer Maximilien (Max) Ringelmann (1861–1931) first investigated this phenomenon in a series of experiments carried out in 1882–7 but not published until 1913, in one of which students pulled as hard as they could on a rope, alone and in groups of two, three, and eight; the results showed that, on average, groups of three exerted only two and a half times as much force as an individual working alone, and groups of eight exerted less than four times the force of a single person. The term *social loafing* was coined by the US psychologist Bibb Latané (born 1937) and colleagues who performed an experiment, published in the *Journal of Personality and Social Psychology* in 1979, in which participants attempted to make as much noise as possible, by yelling and clapping, while wearing blindfolds and listening to masking noise through headphones. Compared to the amount of noise that they generated alone, participants made only about 82 per cent as much noise when they believed they were working in pairs and 74 per cent as much noise when they believed they were part of a group of six people working together. The phenomenon has been replicated across a variety of tasks, and evidence has shown that it is greatly reduced by making individual contributions identifiable within the group. Subsequent evidence suggests that social

loafing tends to occur when individuals contribute to a group product, whereas **coaction effects* tend to occur when individuals work in groups to produce individual products. Also called the *Ringelmann effect*. See also *DIFFUSION OF RESPONSIBILITY*.

social neuroscience *n.* An integrative field devoted to the study of the **nervous system*, the **endocrine system*, and the **immune system* in **social psychological* phenomena. It focuses on neural, hormonal, and immunological processes as both causes and effects of such phenomena-how the brain influences social processes and how social processes influence the brain. It incorporates **social cognitive neuroscience* but is potentially wider in scope, including as it does non-cognitive processes. Also called *social psychophysiology*. This approach rose to prominence at the beginning of the third millennium, and a special issue of the *Journal of Personality and Social Psychology* (Volume 85, Number 4) was devoted to it in 2003.

social perception *n.* The processes by which people **perceive* one another. See *ATTRIBUTION*, *ATTRIBUTION THEORY*, *FALSE-CONSENSUS EFFECT*, *IMPLICIT PERSONALITY THEORY*, *IMPRESSION FORMATION*, *PERSON PERCEPTION*, *STEREOTYPE*.

social phobia *n.* Another name for **social anxiety disorder*.

social (pragmatic) communication disorder *n.* A **communication disorder* introduced in **DSM-5* characterized by persistent deficits of verbal and **non-verbal communication* in social situations, including lack of appropriate greeting and information-sharing, inability to adapt communication style to social context, difficulty following conversational rules such as turn-taking, rephrasing when not understood, inappropriate use of **gesture (1)*, and difficulty understanding metaphors, idioms, jokes, and other communications that require understanding of more than what is explicitly stated. To meet the DSM diagnostic criteria, these deficits must cause problems in social, academic, or occupational functioning, with onset during early development and must not be attributable to a **neurological impairment*, **autism spectrum disorder*, **attention-deficit/hyperactivity disorder*, **social anxiety disorder*, or **intellectual developmental disorder*. [From Greek *pragma* a deed + *-ikos* of, relating to,

*****ebook converter DEMO Watermarks*****

resembling, or alluding to **pragmatics*, the social and behavioural aspects of practical language usage]

social psychology *n.* The branch of psychology devoted to social behaviour in all its forms, including **altruism*, **attitudes*, social **compliance*, **conformity*, **obedience* to authority, **person perception*, **attribution* processes, **group dynamics*, **group polarization*, and **non-verbal communication*. See also LIBERATION PSYCHOLOGY, SOCIAL CONSTRUCTIONIST PSYCHOLOGY, SOCIAL NEUROSCIENCE.

social psychophysiology *n.* Another name for **social neuroscience*.

social quotient *n.* An index of social maturity, based on the ratio definition of the intelligence quotient or **IQ*, the social quotient being defined as **social age* divided by **chronological age*, the ratio then being multiplied by 100. Hence $SQ = (SA/CA) \times 100$. See also VINELAND SOCIAL MATURITY SCALE. **SQ** *abbrev.*

social skill *n.* Any **skill* necessary for competent social interaction, including both **language* (1) and **non-verbal communication*. See also CYRANOID, SOCIAL SKILLS TRAINING.

social skills training *n.* Any of a number of techniques, often involving practice, feedback, modelling, and **assertiveness training*, for teaching the complex patterns of behaviour involved in forms of social interaction such as holding conversations, dating, and being interviewed. Also called *communication skills training*. **SST** *abbrev.*

sociobiology *n.* The study of the biological bases of social behaviour. The term was popularized by the US biologist Edward O(sborne) Wilson (born 1929) in the title of his book, *Sociobiology: The New Synthesis* (1975). See also EVOLUTIONARY PSYCHOLOGY. **sociobiological** *adj.* Pertaining to sociobiology. **sociobiologist** *n.* One who practises sociobiology.

sociodrama *n.* A technique of **group therapy* introduced by the Romanian-born US psychiatrist Jacob L(evy) Moreno (1892–1974) as an

adjunct to **psychodrama*. It differs from psychodrama in the greater importance it places on audience participation and its focus on problems likely to be common to all group members rather than just one. Group members act out the relevant conflicts in an effort to find their own solutions to the problems, while the director keeps the audience constantly involved. See also *DRAMA THERAPY*.

socio-economic class *n.* Another name for **class (1)*.

sociogram *n.* A chart showing the network of interrelationships in a social group. It is usually constructed by inviting the group members to indicate their choices (or rejections) of one another, in response to a question such as the following, used in a classic study of an air force squadron: *Which member of the squadron would you most like to have flying alongside you during combat?* On the resulting chart, each group member is represented by a circle, with an arrow pointing from each circle to another, indicating which individuals chose which others, and it typically contains one or more *stars* (chosen by many others), one or more *isolates* (chosen by few), and often one or more *cliques* of mutually chosen individuals. The process of mapping social networks in this way, called **sociometry*, was introduced by the Romanian-born US psychiatrist Jacob L(ey) Moreno (1892–1974), whose books *Who Shall Survive?* (1934) and *Sociometry, Experimental Method and the Science of Society* (1951) made his ideas available to a wide audience. See also *CLIQUE*, *ISOLATE (1)*. [From Latin *socius* a companion + Greek *gramme* a line]

sociolinguistics *n.* The study of interrelationship between language and its social context, especially the social and cultural factors affecting language.

sociology *n.* The study of human societies and the structures and processes within them. Classical sociology has been influenced by the writings of three social theorists in particular: the German political philosopher Karl Marx (1818–1883), who argued that economic modes and relations of production are the fundamental bases of the structures and ideologies within all societies, and who drew particular attention to the importance of class conflict in the functioning and change of societies; the French sociologist Émile Durkheim (1858–1917), who challenged the

*****ebook converter DEMO Watermarks*****

assumption that social processes can be understood in terms of the actions of individuals and argued that even **suicide*, apparently the ultimately individualistic act, cannot be fully explained at the purely individual level; and the German economist and sociologist Max Weber (1864–1920), who focused attention on the social implications of rationality, interpreting economics and law as forms of rational human action and religion as a model of non-rational action, and who classified types of authority and bureaucracy according to this distinction. **Social psychology* is studied in both sociology and psychology. [From French *sociologie* coined in 1837 by the French philosopher and mathematician Auguste Comte (1798–1857) in lectures that were incorporated in his six-volume *Cours de Philosophie Positive* (Positive Philosophy), from Latin *socius* a companion + *logos* word, discourse, or reason]

sociology of knowledge *n.* The study of the social origins of belief systems and (according to its proponents) **knowledge*. The German political philosophers Karl Marx (1818–83) and Friedrich Engels (1820–95) argued in *Die Deutsche Ideologie* (1846, The German Ideology) and elsewhere that people's ideologies, including their social and political beliefs and opinions, are rooted in their class interests, and more generally in the social and economic circumstances in which they live: 'It is men, who, in developing their material intercourse, change, along with this their real existence, their thinking and the products of their thinking. Life is not determined by consciousness, but consciousness by life' (*Marx-Engels Gesamtausgabe* 1/5). Under the influence of this doctrine, and of **phenomenology*, the Hungarian-born German sociologist Karl Mannheim (1893–1947) gave impetus to the growth of the sociology of knowledge with his *Ideologie und Utopie* (1929, translated in 1936 as *Ideology and Utopia*), although the term had been introduced five years earlier by the co-founder of the movement, the German philosopher and social theorist Max Scheler (1874–1928), in *Versuche zu einer Soziologie des Wissens* (1924, Attempts at a Sociology of Knowledge). A strong interpretation claims that all knowledge and beliefs are the products of socio-political forces, but this version is self-defeating, because if it is true, then it too is merely a product of socio-political forces and has no claim to truth and no persuasive force. Mannheim sought to escape this paradox by exempting free-floating intellectuals, whom he claimed were only loosely anchored in social traditions, relatively detached from the class system, and

capable of avoiding the pitfalls of total ideologies and of forging a ‘dynamic synthesis’ of the ideologies of other groups. *See also* [EPISTEMOLOGY](#), [SOCIOLOGY](#).

sociometry *n.* The quantitative study of the interrelations between the members of a social group, especially through the use of a [*sociogram](#). It was introduced by the Romanian-born US psychiatrist Jacob L(ey) Moreno (1892–1974) and became popular after the publication of his books *Who Shall Survive?* (1934) and *Sociometry, Experimental Method and the Science of Society* (1951). **sociometric** *adj.* [From Latin *socius* a companion + *metron* a measure]

sociopathy *n.* Another name for [*antisocial personality disorder](#). **sociopath** *n.* A person with sociopathy. *Compare* [PSYCHOPATHY](#). **sociopathic** *adj.* [From Latin *socius* a companion + *pathos* suffering]

sociosexuality *n.* The degree to which a person is willing to engage in sex without emotional ties. The term was introduced by the US sexologists Alfred Charles Kinsey (1894–1956), Wardell B(axter) Pomeroy (1913–2001), and Clyde E(ugene) Martin (born 1918) in their book, *Sexual Behavior in the Human Male* in 1948. In an article in the *Journal of Personality and Social Psychology* in 1991, the US psychologists Jeffrey A(lan) Simpson (born 1959) and Steven W. Gangestad (born 1957) presented an [*inventory](#) designed to measure individual differences in *sociosexual orientation*, as they called it. People with a restricted orientation typically insist on commitment and closeness in a relationship before engaging in sex with a romantic partner, whereas those with an unrestricted orientation are typically comfortable engaging in sex without commitment or closeness. People with an unrestricted sociosexual orientation typically report that they enjoy sex without commitment, have had several different sexual partners in the past year, and have engaged in sex with partners once and only once on several different occasions. *See also* [SENSATION SEEKING](#). **sociosexual** *adj.* [From Latin *socius* a companion + *sexualis* relating to sex, from *sexus* sex + *-alis* of or relating to]

sodium *n.* A silvery-white, alkaline, metallic element that occurs abundantly in the form of sodium chloride (as in sea water and common table

*****ebook converter DEMO Watermarks*****

salt) and is required to maintain the electrolyte balance in living cells, also playing an important part in the transmission of nerve impulses and in muscle contractions. *See also* [SODIUM CHANNEL](#), [SODIUM PUMP](#). **Na** *abbrev.* [From Latin *soda* sodium carbonate + *-ium* indicating a metallic element]

sodium channel *n.* A [*cation](#) channel, such as one of the pores in the [*rods](#) and [*cones](#) of the retina that is kept open by the substance [*cyclic GMP](#) and consequently has an unusually low [*resting potential](#) of approximately -50 millivolts in the dark, but when molecules of visual pigment are stimulated by light they activate the enzyme [*transducin](#), which in turn inactivates cGMP so that the pores close and the cell becomes [*hyperpolarized](#). *See also* [DRAVET SYNDROME](#), [ION CHANNEL](#), [SAXITOXIN](#).

sodium current *n.* The flow of sodium through the sodium channels of a cell membrane.

sodium glutamate *n.* Another name for [*monosodium glutamate](#).

sodium inactivation *n.* The momentary interruption of the activity of the [*sodium](#) pump during an [*action potential](#).

Sodium Pentothal *n.* A proprietary name for the barbiturate drug [*thiopental](#) (thiopentone). *See also* [TRUTH DRUG](#). [Trademark]

sodium-potassium pump *n.* Another name for the [*sodium pump](#).

sodium pump *n.* A mechanism for expelling positively charged sodium [*ions](#) from inside a neuron, where large negatively charged particles (anions) are trapped by the membrane, across the semipermeable cell membrane to the extracellular fluid, to maintain the interior concentration of positively charged ions far below that of the exterior. When an [*action potential](#) occurs, sodium ions are transferred to the inside of the cell, and after an action potential the process of pumping them out is necessary to maintain the [*resting potential](#) of the neuron. The mechanism simultaneously drives positively charged potassium ions from the extracellular fluid, where their concentration is low, to the intracellular fluid, where their concentration is high, but this occurs at a

lower rate than the outward transfer of sodium ions. Because the pumping process is a form of ***active transport** against the electrochemical gradient resulting from ***osmotic pressure**, it requires energy, which is supplied by the hydrolysis of ***ATP** by certain enzymes that are themselves sometimes called pumps. Also called the *sodium-potassium pump* or $\text{Na}^+ - \text{K}^+$ pump.

soft drug *n.* An imprecise term for a drug such as cannabis or LSD that is not addictive. *See also* **GATEWAY DRUG**. *Compare* **HARD DRUG**.

softening of the brain *n.* A non-technical name for ***encephalomalacia**.

soft sign *n.* A slight abnormality of speech, gait, posture, or behaviour observed during a ***neurological** examination and judged to be indicative of a mild neurological impairment. Also called an *equivocal sign*. *Compare* **HARD SIGN**.

solar retinopathy *n.* Damage to the ***retina** caused by looking at the sun. *See also* **SCOTOMA**.

solecism *n.* 1. A grammatical error or non-standard sentence construction. 2. Any error, mistake, impropriety, breach of etiquette, or departure from good manners. [From Greek *soloikos* speaking incorrectly, from *Soloi* an Athenian colony where a corrupt form of the Attic dialect of Greek was spoken + *oikizein* to colonize]

soluble RNA *n.* Another name for ***transfer RNA**.

solvent *n.* Any substance that is capable of dissolving another.

solvent abuse *n.* Self-intoxication by the deliberate inhalation of volatile ***solvents** such as toluene that are found in many common household products. Preferred usage *solvent misuse*. *See also* **GLUE-SNIFFING**, **INHALANT**, **INHALANT-RELATED DISORDERS**.

soma *n.* 1. The central part of a neuron or other cell containing the ***nucleus**

(1) and other structures that keep the cell alive, as distinct from a cell **process* (2). Also called a *cell body*. 2. The body of an organism as distinct from its mind, or (in physiology and genetics) as distinct from its **germ cells*. **somata** *pl.* **somatic** *adj.* [From Greek *soma* a body]

somaesthesia *n.* A generic term for bodily sensations, including the **cutaneous senses*, **proprioception*, and **kinaesthesia*. US *somesthesia*. Also called *somaesthesia* or *somesthesia*. [From Greek *soma* a body + *aisthesis* sensation, from *aisthanesthai* to feel]

somaesthetic association area *n.* Another name for the somatosensory association area (see *SOMATOSENSORY CORTEX*). US *somesthetic association area*. [From Greek *soma* a body + *aisthesis* sensation, from *aisthanesthai* to feel]

somaesthetic cortex *n.* Another name for the primary **somatosensory cortex*. US *somesthetic cortex*. [From Greek *soma* a body + *aisthesis* sensation, from *aisthanesthai* to feel + Latin *cortex* bark or outer layer]

somatic *adj.* 1. Of or relating to the body as distinct from the mind. 2. Of or relating to the cell body or **soma* (1). [From Greek *somatikos* of or relating to the body, from *soma* a body + *-itikos* resembling or marked by]

somatic cell *n.* A body cell as opposed to a **germ cell*.

somatic compliance *n.* In **psychoanalysis*, the involvement of the body in the expression of symptoms of **hysteria* and other **neurotic* (1) disorders. Sigmund Freud (1856–1939) introduced the concept in his celebrated case study of ‘Dora’ entitled ‘Fragment of an Analysis of a Case of Hysteria’ (1901/5): ‘Every hysterical symptom involves the participation of *both* sides. It cannot occur without the presence of a certain degree of *somatic compliance* offered by some normal or pathological process in or connected with one of the bodily organs’ (*Standard Edition*, VII, pp. 7–122, at p. 40, italics in original). [From Greek *soma* a body + *-ikos* of, relating to, or resembling]

somatic delusion *n.* A ***delusion** regarding the functioning or appearance of one's body, such as the unfounded belief that one's skin, mouth, vagina, or anus emits a foul smell, that one is infested with insects or parasites, that certain body parts are deformed or unsightly, that one is pregnant when one is not, or that an internal organ is not functioning properly. [From Greek *somatikos* of or relating to the body, from *soma* a body + *-itikos* resembling or marked by]

somatic delusional disorder *n.* A type of ***delusional disorder** in which the central delusion is a ***somatic** delusion.

somatic hallucination *n.* A ***hallucination** of a physical state or event within the body, such as an electrical impulse running down one's arms or an object inside one's chest.

somatic marker hypothesis *n.* The idea that people are influenced by somatic markers—physiological reactions such as ***skin conductance responses**—in ***decision-making** situations, even before consciously evaluating alternatives or forming judgements of the relevant ***expected utilities**. According to this hypothesis, decisions are arrived at through the interplay of two processes, the first deliberative and rational, tending to favour alternatives yielding optimal rewards, and the second largely subconscious, affect-driven, and influenced by physiological reactions that tend to override deliberative decisions involving ***deferred gratification**. The hypothesis was put forward by the US-based Portuguese neurologist and neuroscientist Antonio R. Damasio (born 1944) and two colleagues in a book chapter in 1991 and developed further in Damasio's book *Darwin's Error: Emotion, Reason and the Human Brain* (1994). According to Damasio, somatic markers are controlled by the ***ventromedial cortex**. See also **IOWA GAMBLING TASK**. **SMH** abbrev.

somatic nervous system *n.* The division of the ***nervous** system devoted to ***sensation** from external sense organs and control of ***skeletal muscles**. Compare **AUTONOMIC NERVOUS SYSTEM**. **SNS** abbrev.

somatic receptor *n.* A ***sensory** receptor mediating a ***cutaneous sense**,

**kinaesthesia*, or **proprioception*. Also called a *somatoreceptor*. [From Greek *soma*, *somat-* a body + English *receptor*]

somatic sensory cortex *n.* Another name for the **somatosensory cortex*.

somatic symptom disorder *n.* A term introduced in **DSM-5* to replace **somatization disorder*, **hypochondriasis*, and other related terms used in DSM-IV. It is a disorder characterized by one or more **somatic* symptoms that are sufficiently distressing to interfere with everyday life, accompanied by excessive focus on and anxiety associated with the symptoms, persistent worry about health, and excessive devotion of time and energy to the symptoms. The symptoms may or may not be associated with another medical condition. *Compare* BODY DYSMORPHIC DISORDER, GENERALIZED ANXIETY DISORDER, ILLNESS ANXIETY DISORDER, OBSESSIVE—COMPULSIVE DISORDER, PANIC DISORDER.

somatization disorder *n.* A term used in **DSM-IV* for what was later called **somatic symptom disorder*. [From Greek *soma* body + *-izein* cause to become or to resemble]

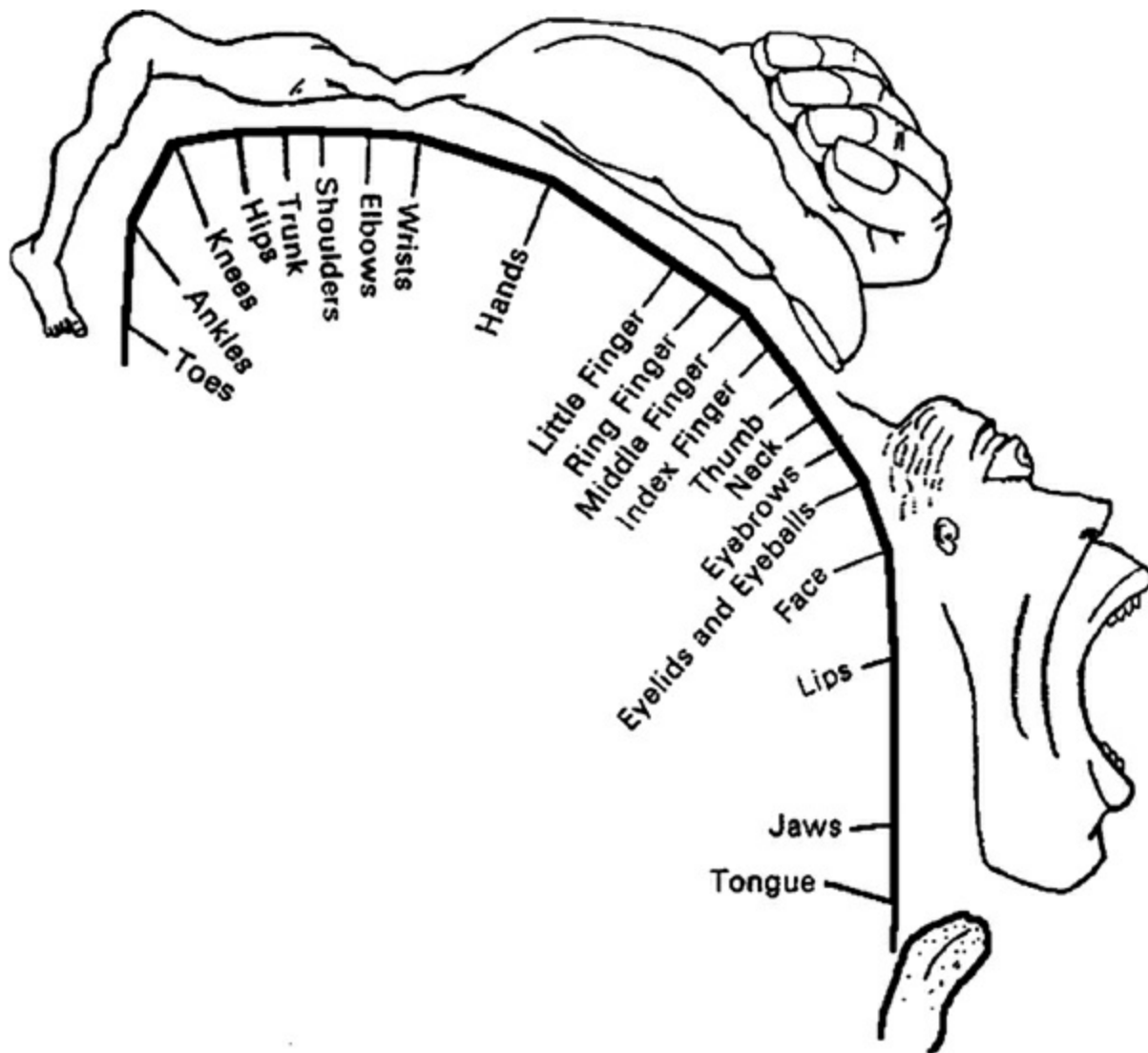
somatoform disorders *n.* In **DSM-IV*, a category of **mental disorders* characterized by **somatic* symptoms suggestive of a **general medical condition*, but without independent evidence of any diagnosable general medical condition, and not produced intentionally, but causing clinically significant distress or impairment in social, occupational, or other areas of functioning. In DSM-5 this term was replaced by **somatic symptom disorder*. *See* BODY DYSMORPHIC DISORDER, CONVERSION DISORDER, HYPOCHONDRIASIS, PAIN DISORDER, PSEUDOCYCLIS, SOMATIZATION DISORDER, UNDIFFERENTIATED SOMATOFORM DISORDER. *Compare* COMPENSATION NEUROSIS, FACTITIOUS DISORDERS, MALINGERING. [From Greek *soma* body + Latin *forma* form]

somatosensory association area *See* SOMATOSENSORY CORTEX.

somatosensory cortex *n.* Areas of the **cerebral* cortex, namely the primary somatosensory cortex, the secondary somatosensory area, and the
*****ebook converter DEMO Watermarks*****

somatosensory association area, devoted to processing information from the **somatic* receptors. The primary somatosensory cortex, also called the *somaesthetic cortex*, occupying the **postcentral gyrus* immediately behind the central sulcus of the temporal lobe in both cerebral hemispheres, is an area in which parts of the body are mapped contralaterally, with disproportionately large representations of hands, lips, and tongue. The small secondary somatosensory area in the parietal lobes responds specifically to **painful* stimuli relayed by the peripheral nervous system. The somatosensory association area, also called the *somaesthetic association area* or the *supplementary sensory area*, lies just behind the primary somatosensory cortex and provides a basis for **stereognosis*. Also called the *somatic sensory cortex*. See also CUTANEOUS SENSE, SENSORIMOTOR CORTEX, SOMATOSENSORY HOMUNCULUS. [From Greek *soma*, *somat-* a body + Latin *sensorius* of the senses, from *sensus* felt, from *sentire* to sense]

somatosensory homunculus *n.* A standard depiction of the primary **somatosensory cortex* of each cerebral hemisphere as a human figure lying supine along the **postcentral gyrus* immediately behind the central sulcus with its toes deep in the longitudinal fissure towards the midline of the brain (see *illustration*). Each part of the figure represents the area of the somatosensory cortex receiving sensations from the corresponding (contralateral) part of the body, and it has disproportionately large hands, lips, and tongue, which gives it a grotesque appearance. The best known version was developed by the US-born Canadian neurosurgeons Wilder Graves Penfield (1891–1976) and the US neurologist Theodore B(rown) Rasmussen (1910–2002) and published in their book *The Cerebral Cortex of Man* in 1950. Also called a *sensory homunculus*. See also HOMUNCULUS. [From Latin *homunculus* a little man, diminutive of *homo* a man]



Somatosensory homunculus. A version adapted from Penfield and Rasmussen's *The Cerebral Cortex of Man* (1950).

somatostatin *n.* A peptide hormone that inhibits the release of ***growth hormone** by the anterior pituitary and ***insulin** by the pancreas. *Compare* GROWTH HORMONE RELEASING HORMONE.

somatotrophin *n.* Another name for ***growth hormone**. Also spelt *somatotropin*. [From Greek *soma*, *somat-* a body + *trophe* nourishment + *-in(e)* indicating an organic compound]

somatotrophin-releasing hormone *n.* Another name for ***growth hormone releasing hormone**. Also spelt *somatotropin-releasing hormone*. **STRH** *abbrev.*

somatotrophin release inhibiting factor *n.* Another name for ***somatostatin**. Also spelt *somatotropin release inhibiting factor*. **SRIF** *abbrev.*

somatotype *n.* Any of the types of human physique or body build distinguished within a classificatory scheme, sometimes associating specific physical types with corresponding psychological types. See **CONSTITUTIONAL PSYCHOLOGY**. See also **ASTHENIC BODY TYPE**, **ATHLETIC BODY TYPE**, **DYSPLASTIC BODY TYPE**, **PYKNIC BODY TYPE**. **somatotypology** *n.* The study of somatotypes. [From Greek *soma* a body + *typos* a mark]

Somers' D *n.* In descriptive statistics, an asymmetric index of association, closely related to the gamma statistic, between an ***independent variable** and a ***dependent variable** measured on ***ordinal scales** with ties allowed. If two pairs of scores are examined, they must either be concordant, in the sense that the one ranked higher than the other on the independent variable is also ranked higher than the other on the dependent variable, or discordant. Somers' *D* is defined as the difference between the number of concordant pairs and the number of discordant pairs divided by the total number of pairs not tied on the independent variable, and it ranges from -1 to +1. See also **KENDALL'S TAU**. [Named after the US sociologist and statistician Robert Hough Somers (1929–2004) who developed it in 1962]

somesthesis See **SOMAESTHESIS**.

somesthetic See **SOMAESTHETIC**.

somnambulism *n.* Another name for ***sleepwalking**. **somnambulist** *n.* One who engages in somnambulism or sleepwalking. [From Latin *somnus* sleep + *ambulare* to walk]

sonar *n.* Any device or system for detecting or locating objects by

***echolocation**, especially such devices on submarines and the systems of ***biosonar** used by some organisms. [From *so(und)na(vigation and)r(anging)*]

sone *n.* A unit of loudness equivalent to 40 ***phons**. [From Latin *sonus* a sound]

sonic shadow *n.* An area of reduced sound intensity around the ear that is further from a sound source, as a result of reflection and absorption of sound waves by the head, leading to a binaural difference in loudness that is used as a ***cue (2)** for localizing sounds above about 1,000 hertz (about two octaves above Middle C), which have wavelengths shorter than the diameter of the head, but not for longer waves that bend round the head and do not produce sonic shadows. It is less accurate than localization based on ***transient disparity** and ***phase** delay, except for very high-pitched sounds with frequencies above 8,000 hertz, when the ***pinna** becomes effective as a focusing device. Animals with very small heads, such as rodents, cannot use transient disparity or phase delay, because the time differences are too tiny to be detected accurately, but their ears are sensitive to very high-pitched sounds whose wavelengths are shorter than the diameter of their heads, which enables them to use sonic shadows to locate sounds. Also called a *binaural intensity difference*, an *interaural intensity difference*, or a *sound shadow*. See also **BINAURAL RATIO**, **BIOSONAR**, **CONE OF CONFUSION**, **SOUND LOCALIZATION**.

sorites *n.* A string of ***syllogisms** in which the conclusion of each forms a premise of the next, arranged with the intermediate conclusions omitted and only the final conclusion stated explicitly. For example: *All true believers shall be saved; Anyone who is saved must be free from sin; Anyone who is free from sin is innocent in the eyes of God; All those who are innocent in the eyes of God go to heaven when they die; Therefore, all true believers go to heaven when they die.* See also **SORITES PARADOX**. **soritical** or **soritic** *adj.* [From Greek *soreites* heaped, from *soros* a heap]

sorites paradox *n.* A sophistical argument in the form of a ***sorites**, the most familiar example being the following. One grain of sand is clearly not a heap of sand, and the addition of one grain to something that is not a heap can never transform it into a heap; therefore there can never be a heap of sand, and it would be futile to try to make one. A similar argument can be used to

*****ebook converter DEMO Watermarks*****

prove that no man is bald or that no one is old. It is considered by some to be a **paradox* but is more correctly classified as a fallacy.

Sotos syndrome *n.* Another name for **cerebral* gigantism, often spelt incorrectly as *Soto's syndrome*. [Named after the US paediatrician Juan Fernandez Sotos (born 1927) who, with four colleagues, first described it in 1964]

soul talk *n.* A non-technical name for **Black English Vernacular*.

sound localization *n.* The perception of the position of a sound source in space. Sounds below about 1,000 hertz (about two octaves above Middle C) are located in the horizontal plane by momentary *binaural time differences* called **transient disparity* and **phase* delay, and high-pitched sounds are located through *binaural intensity differences* called **sonic shadows*. Humans have a **minimum audible angle* in the horizontal plane of about 2 degrees, but like other terrestrial animals are not good at locating sound in the vertical dimension, whereas the barn owl, which hunts fieldmice and other prey in total darkness, can locate sound sources to within about one degree in both the horizontal and vertical dimensions (azimuth and elevation), more accurately than any other species that has been tested, its left ear pointing downwards and its right ear upwards to aid localization in the vertical dimension. Also called *auditory localization* or *auditory space perception*. See also AUDIOGRAVIC ILLUSION, AUDITORY RECEPTIVE FIELD, BIOSONAR, CONE OF CONFUSION, PSEUDOPHONE, SUPERIOR OLIVARY NUCLEUS, TRAPEZOID BODY.

sound pressure level *n.* The absolute intensity of a sound in decibels relative to a reference level of 10^{-16} W/cm² (watts per square centimetre), slightly below the average human **absolute threshold* for a sound of 1,000 hertz (about two octaves above Middle C). Thus a sound of 60 dB SPL is 60 dB higher than the reference level and has an intensity of 10^{-10} W/cm², and a doubling or halving of absolute sound intensity always corresponds to a change of 3 dB. See also DECIBEL. **SPL** abbrev.

sound shadow *n.* Another name for a **sonic shadow*.

sound spectrogram *n.* A diagram produced by a ***sound spectrograph** showing the intensities of the frequency components of a sound as a function of time, with time represented on the horizontal axis, frequency on the vertical axis, and intensity by the darkness of the line. Often called a *speech spectrogram* when representing speech sounds. [From Latin *spectrum* a spectacle, from *spectare* to watch, from *specere* to look at + Greek *gramme* a line]

sound spectrograph *n.* An electronic device incorporating a large number of sound ***filters** (2), each responsive to a narrow band of frequencies, used for producing ***sound spectrograms**. Also called a *speech spectrograph* when used to analyse speech sounds. See also **VOICEPRINT**.

sound spectrum *n.* The distribution of ***pure tones** in a sound wave, usually represented as a plot of power or ***amplitude** as a function of frequency. See also **SOUND SPECTROGRAM**.

sour *n.* One of the primary tastes in ***Henning's tetrahedron**, the characteristic taste of vinegar or lemon juice.

source amnesia *n.* A form of ***amnesia** in which information is remembered, but the person who remembers it is unable to recall where, from whom, or how the information was obtained.

source memory *n.* Memory for where, from whom, or how certain knowledge or information was acquired. For example, a person who knows that all insects have six legs, and also remembers learning this fact from *Gardeners' Question Time* on the radio while driving to a family gathering on Christmas day in 1995, has excellent source memory for this particular item of knowledge. ***Reality monitoring** is a special form of source memory that involves distinguishing between genuine external sources and one's own imagination as sources of information.

source of instinct See **INSTINCTUAL SOURCE**.

space-time illusion *n.* An ***illusion** in which perception of space

interferes with perception of time or vice versa. See [KAPPA EFFECT](#), [TAU EFFECT](#).

Spanish fly *n.* Another name for [*cantharides](#).

span of apprehension *n.* The number of items that a person can apprehend or grasp at one time, which in turn determines the number of items that can be stored in [*short-term memory](#). Also called an *attention span* or a *span of attention*. See also [CHUNKING](#), [ICONIC STORE](#), [MAGICAL NUMBER SEVEN](#), [SUBITIZE](#). **SOA** *abbrev.*

spasm *n.* An involuntary muscular contraction, such as a [*tic](#), a [*convulsion](#), or a hiccup. See also [AGENESIS OF THE CORPUS CALLOSUM](#). **spasmodic** *adj.* Of, relating to, or occurring in spasms. [From Greek *spasmos* a cramp]

spasmodic torticollis *n.* A [*psychogenic](#) condition characterized by sustained or episodic [*spasms](#) of the neck muscles, causing the head to be twisted out of alignment. Also called *torticollis*, *wryneck*. [From Greek *spasmos* a cramp + Latin *tortus* twisted + *collum* neck]

spasmophemia *n.* A form of [*aphasia](#) in which speech is impaired by [*spasms](#) of the muscles in the [*vocal tract](#), causing stammering or laboured speech. [From Greek *spasmos* a cramp + *phanai* to speak + *-ia* indicating a condition or quality]

spastic *n.* 1. A derogatory term for a person afflicted by [*spasms](#), especially one with [*cerebral](#) palsy. *adj.* 2. Afflicted by or resembling [*spasms](#). [From Greek *spastikos* of or relating to spasms, from *spasmos* a cramp + *-ikos* of, relating to, or resembling]

spastic paralysis *n.* Permanent contraction of a muscle or group of muscles caused by damage to the [*motor cortex](#).

spastic speech *n.* Another name for [*spasmophemia](#).

spatial ability *n.* The capacity to perform tasks requiring the mental

manipulation of spatial relationships, such as **mental rotation*, **mirror drawing*, map-reading, or finding one's way around an unfamiliar environment. *See also* AGNOSIA, COGNITIVE MAP, CORSI BLOCKS, MOZART EFFECT, PRIMARY MENTAL ABILITIES.

spatial frequency *n.* The inverse of the wavelength in a visual image that has been transformed into a **sinusoidal* grating of varying **luminance*, a high spatial frequency capturing fine detail and a low spatial frequency coarse detail in the image, the luminance variation across any image being decomposable into sinusoidal components by **Fourier analysis*. *See also* CONTRAST SENSITIVITY FUNCTION, HYBRID IMAGE, PRIMAL SKETCH, SINUSOIDAL GRATING. *Compare* FREQUENCY (1).

spatial neglect *n.* A **neurological* disorder characterized by a partial or complete lack of awareness of sensory information in (usually) one half of the **visual field*. It is possible for a person to be totally blind in half the visual field without being aware of this fact, though it is easily demonstrated by the **line bisection test*. Lesions in either of the **cerebral* hemispheres in the **visual cortex* or secondary somatosensory area (see SOMATOSENSORY CORTEX) are usually responsible for spatial neglect on the opposite side. Also called *unilateral neglect*, or *unilateral spatial neglect*. *See* HOMONYMOUS HEMIANOPIA.

spatial summation *n.* The simultaneous action of two or more **afferent* neurons that combine additively to produce a **graded potential* in a **postsynaptic* neuron and that may cause it to transmit a nerve impulse or **action potential* that could not be generated by impulses from a single neuron. *See also* GRADED POTENTIAL. *Compare* TEMPORAL SUMMATION.

speaking in tongues *n.* A non-technical name for **glossolalia*.

Spearman rank correlation coefficient *n.* In statistics, a correlation coefficient computed on scores that consist of or have been converted to **ranks*. It is mathematically equivalent to the **product-moment correlation coefficient* after converting the raw scores to ranks. Also called *rho*. Symbol: ρ . *See also* CORRELATION. [Named after the English statistician and psychologist Charles Spearman (1863–1945) who devised it]

*****ebook converter DEMO Watermarks*****

Spearman's rho *n.* Another name for the **Spearman rank correlation coefficient*. [Named after the English statistician and psychologist Charles Spearman (1863–1945) who devised it and *rho* (ρ), the seventeenth letter of the Greek alphabet, which is used to symbolize it]

Special K *n.* A common street name for the drug **ketamine*.

speciation *n.* The process of evolutionary divergence whereby new **species* are formed. *See also* ISOLATING MECHANISM.

species *n.* A **taxonomic* group containing individuals capable of interbreeding and producing fertile offspring. A species is a subdivision of a **genus*, and it may contain one or more **subspecies*, **varieties*, or **races* (2). By convention, following the system put forward by the Swedish botanist Carolus Linnaeus (1707–78) in his book *Systema Naturae* (1737), a species is always given a double name, comprising the generic name with an upper-case initial letter followed by the specific name with a lower-case initial letter, like an entry in a telephone directory comprising a surname followed by a first name, hence *Cannabis sativa*, the common hemp plant, or *Homo sapiens*, the human species. *See also* GENUS. **species** *pl.* **specific** *adj.* [From Latin *species* appearance or kind, from *specere* to look]

speciesism *n.* The belief in the intrinsic superiority of the human **species* over all others, often accompanied by an assumption that human beings are therefore justified in exploiting non-human animals for their own advantage. *Compare* ABLEISM, AGEISM, ETHNOCENTRISM, FATTISM, HETEROSEXISM, RACISM, SEXISM. **speciesist** *n.* 1. One who advocates or practises speciesism. *adj.* 2. Of or relating to speciesism. [Coined from *species* on the model of *racism*]

species-specific *adj.* Of or relating to a characteristic, trait, or pattern of behaviour that is peculiar to a species. **species specificity** *n.* The quality of being species-specific.

specific anosmia *n.* A selective inability to smell a particular odorant. *See also* ANOSMIA, CACOSMIA, DYSOSMIA, HYPEROSMIA, HYPOSMIA, PAROSMIA.

specific developmental disorder *n.* Any disorder in which some distinctive and circumscribed ability or function fails to develop properly from an early age, the deficit not being attributable to any other disorder.

specific developmental disorder of language *n.* A term sometimes used (in **ICD-10* and elsewhere) to refer to a **specific learning disorder*, the deficit not being attributable to neurological or sensory impairment, **intellectual disability*, or environmental deprivation. See LANGUAGE DISORDER, READING DISORDER, SPECIFIC DISORDER OF ARITHMETIC SKILLS, SPECIFIC SPELLING DISORDER.

specific developmental dyslexia *n.* Another name for **reading disorder*.

specific disorder of arithmetic skills *n.* A **specific learning disorder* characterized by a significant impairment in arithmetic skills (addition, subtraction, multiplication, and division) that is not explicable by **intellectual disability* or inadequate schooling. See also ACALCULIA, DYSCALCULIA.

specific hunger *n.* A craving for a particular food or nutrient, especially one in which the body is deficient, the most obvious and well-established example being specific hunger for salt.

specific language disability *n.* Any **specific learning disorder* associated with language. See LANGUAGE DISORDER.

specific learning disability *n.* Another name for a **specific learning disorder*. SLD *abbrev.*

specific learning disorder *n.* A **neurodevelopmental disorder*, introduced in **DSM-5*, characterized by learning and academic difficulties such as inaccurate or slow reading, difficulty in understanding what is read, or difficulty with spelling, grammar, or numerical or mathematical ideas. To meet the DSM-5 diagnostic criteria, the problems must have persisted for at least six months despite remedial interventions, and the academic skills must

be substantially below age norms and must interfere significantly with academic or occupational performance or everyday life, the learning difficulties must have begun during school-age years, and the condition must not be due to vision or hearing problems, to [*intellectual disability](#) or any other mental or neurological disorder, or to language problems or inadequate schooling. According to DSM-5, the [*prevalence](#) of this disorder is between 5 and 15 per cent among school-age children across languages and cultures. *Compare* [ATTENTION-DEFICIT/HYPERACTIVITY DISORDER](#). **SLD** *abbrev.*

specific nerve energies *n.* The doctrine formulated in 1826 by the German physiologist Johannes Peter Müller (1801–58), elaborated by him in 1838, and later firmly established by research, that the qualitative differences between visual, auditory, tactile, olfactory, and gustatory sensations are determined by the particular [*sensory](#) receptors that are stimulated.

specific phobia *n.* An [*anxiety disorder](#) in [*DSM-5](#) characterized by a [*phobia](#) in which the [*phobic stimulus](#) is a specific type of object (such as spiders), event (such as thunder), activity (such as flying), or situation (such as enclosed spaces), exposure to the phobic stimulus almost invariably triggering an anxiety response or [*panic attack](#) and being either avoided or tolerated only with intense anxiety or dread, the avoidance behaviour or anxious anticipation of it being out of proportion to the actual danger and interfering significantly with everyday life, occupational or academic performance, or social relationships. Some classifications (including DSM-5 and [*ICD-10](#)) exclude [*agoraphobia](#). According to DSM-5, the 12-month [*prevalence](#) of this disorder is between 7 and 9 per cent in the US and Europe but significantly lower (between 2 and 4 per cent) in Asian, African, and Latin American countries. A comprehensive table of phobias and phobic stimuli is provided in Appendix I at the back of this dictionary. *Compare* [AGORAPHOBIA](#), [OBSESSIVE—COMPULSIVE DISORDER](#), [PANIC DISORDER](#), [SEPARATION ANXIETY DISORDER](#), [SOCIAL ANXIETY DISORDER](#).

specific spelling disorder *n.* A [*specific learning disorder](#) characterized by a significant impairment in the development of spelling skills without any history of [*reading disorder](#), the [*deficit](#) not being attributable to [*neurological](#) or [*sensory](#) impairment, [*intellectual disability](#), or environmental deprivation.

*****ebook converter DEMO Watermarks*****

spectral colour *n.* Any colour found in the **visible spectrum*, thus excluding colours such as purple (a mixture of red and blue). US *spectral color*. Also called a *spectral hue*. Compare *NON-SPECTRAL COLOUR*.

spectrogram *n.* A graphic representation of a **spectrum*. A graphic representation of the frequency components in a speech sound as a function of time is called a **speech spectrogram*. [From Latin *spectrum* a spectacle, from *spectare* to watch, from *specere* to look at + Greek *gramme* a line]

spectrum *n.* Any distribution of values across a range, especially the range of colours produced by passing white light through a **prism* or a **diffraction grating*, the **visible spectrum* extending from a wavelength of about 390 nanometres at the short end to about 740 nm at the long end. Perceived colour depends on the balance of wavelengths across the whole visual field, and most people who are asked what colours they can see in a spectrum name the **psychological primaries* red, yellow, green, and blue, but the following breakdown and labelling has become conventional: red, 740–620 nm; orange, 620–585 nm; yellow, 585–575 nm; green, 575–500 nm; blue, 500–445 nm; indigo, 445–425 nm; violet, 425–390nm. This sevenfold breakdown can be traced to the English physicist and mathematician Sir Isaac Newton (1642–1727), who first studied the spectrum scientifically in 1666 and who attributed magical properties to the number seven, which he pointed out was also the number of notes in a (**diatonic*) musical scale. See also *CATEGORICAL PERCEPTION*, *INFRA-RED*, *METATHETIC STIMULUS DIMENSION*, *SOUND SPECTRUM*, *SPECTRAL COLOUR*, *ULTRAVIOLET*. **spectral** *adj.* [From Latin *spectrum* a spectacle, from *spectare* to watch, from *specere* to look at]

SPECT scan *abbrev.* Single photon emission computed tomography, a technique of **brain* imaging similar to a **PET scan*, also indicating **regional cerebral blood flow*, but using longer-lived radioactive isotopes and producing less clearly defined images than a PET scan, though at much lower cost because it does not require the use of an on-site cyclotron. Also written *SPET scan*, probably to resemble *PET scan*. Compare *RADIOISOTOPE SCAN*.

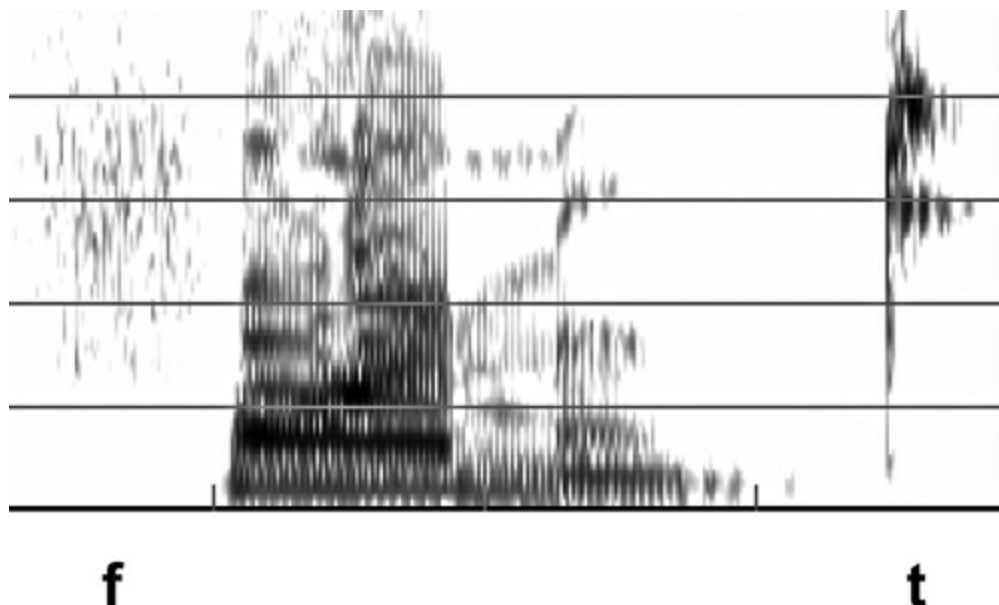
speech act *n.* A verbal utterance defined in terms of its content, the intention of the speaker, and the effect on the listener. A speech act necessarily involves a **locutionary act* and may or may not involve an
*****ebook converter DEMO Watermarks*****

***illocutionary act** and a ***perlocutionary act**. The term was introduced in 1961 by the English philosopher John Langsham Austin (1911–60).

speech apraxia *n.* A form of speech ***impairment** resulting not from any language deficit but from difficulty in making the required voluntary movements of the tongue, lips, and lower jaw. *See also* **APRAXIA**.

speech sound disorder *n.* In ***DSM-5**, a ***communication disorder** characterized by persistent difficulty expressing speech sounds, affecting intelligibility of speech, and consequent impairment of social, academic, or occupational functioning. Onset is during development, and to meet the diagnostic criteria, these difficulties must not be due to ***cerebral palsy**, ***deafness**, or any other medical or ***neurological** condition. In the general population, the speech of most children is intelligible by age 4 years, and that of 50 per cent is intelligible by age 2 years. *Compare* **DYSARTHRIA**, **SELECTIVE MUTISM**. **SSD** *abbrev.*

speech spectrogram *n.* A graph of the spectrum of speech sounds produced by a ***sound spectrograph**, called a *speech spectrograph* when used for this purpose, showing sound ***frequency** on the vertical axis and time on the horizontal axis (see **illustration**). It was claimed in the 1960s that voiceprints are as distinctive as fingerprints, and people were convicted in courts of law on the evidence of voiceprint identification. Experiments subsequently established that the technique is less reliable than had originally been thought, and much less reliable than fingerprints or genetic fingerprints. *See also* **SOUND SPECTROGRAM**. [From Latin *spectrum* a spectacle, from *spectare* to watch, from *specere* to look at + Greek *gramme* a line].



Speech spectrogram. This shows a spectrogram of a person uttering the word 'formant'.

speech stretcher *n.* A device that produces slowed but otherwise undistorted recordings of sounds, especially human speech.

speech synthesizer *n.* A device that generates sound waves of varying frequency and intensity. It can be used to simulate the production of human speech, making possible experiments on the perception of speech sounds, and enabling people who are paralysed to communicate verbally.

speed *n.* A common street name for **amphetamine*, **methamphetamine*, and other closely related drugs. [So called because of their stimulant effects]

speed-accuracy trade-off *n.* The tendency for increased speed of performance to lead to more errors.

speedball *n.* A street name for a drug consisting of **cocaine* hydrochloride mixed with **heroin*.

speed test *n.* Any test in which the rapidity of responses, rather than their accuracy, is measured. *Compare* *ACCURACY TEST*, *POWER TEST*.

spell *n.* A **culture-bound syndrome* widespread in sub-Saharan Africa and among African American and Latino communities in the southern United States and elsewhere, characterized by brief episodes of personality change during which the person experiencing the spell believes that some form of communication is taking place with dead relatives or their spirits. A person with this pattern of experiences is endowed locally with dignity and respect, and usually considers it a privilege resulting from being appointed by dead ancestors as a diviner; hence this disorder is distinguished sharply from **ufufunyane*, which is feared and despised and is associated with evil spirits. Also (in southern Africa) called *thwasa*. [From Old English *spell* speech, from *spellian* to speak or announce]

spelling disorder See *SPECIFIC SPELLING DISORDER*.

spelling dyslexia *n.* A form of **dyslexia*, also called *letter-by-letter reading*, usually not accompanied by **dysgraphia*, in which reading proceeds literally letter by letter and is therefore slow and manifests grave impairment. It is caused by a lesion in the left **fusiform gyrus*. See also *SIMULTANAGNOSIA*.

spermatozoon *n.* A male **gamete* or reproductive cell, with a small, flattened head, a long neck, and a very long tail in the form of a whiplike **filament* that provides motility, large numbers of which are contained in the semen that is **ejaculated* during **coitus* although only one at most can penetrate and fertilize the much larger female ovum. **spermatozoa** *pl.* See also *ZYGOTE*. [From Greek *sperma*, *spermatos* seed, from *speirein* to sow]

SPET scan *abbrev.* Another name for a **SPECT scan*. [Presumably to emphasize its relation to a PET scan]

spherical aberration See *ABERRATION (3)*.

sphincter pupillae *n.* The muscle that expands the **iris* and thereby constricts the **pupil* of the eye. Compare *DILATOR PUPILLAE*. [From Greek *sphinkter* a tightener, from *sphingein* to bind tight + Latin *pupillae* of the pupil, from *pupilla* a pupil, diminutive of *pupa* a girl or a doll, alluding to the tiny reflection in the eye]

spicy odour *n.* One of the six primary odours in **Henning's prism*, resembling the odour of cinnamon or nutmeg. US *spicy odor*.

spinal accessory nerve *n.* Another name for either of the pair of **accessory nerves* that supply muscles in the side and front of the neck, the shoulder, and the upper back.

spinal canal *n.* The channel down the middle of the spinal column or backbone containing the **spinal cord*.

spinal cord *n.* The thick band of nerve tissue that runs through the spinal canal and to which 31 pairs of **spinal nerves* are attached. The spinal cord and the brain together constitute the **central nervous system*. *See also* ANTERIOR HORN, BELL–MAGENDIE LAW, CENTRAL CANAL, CORTICOSPINAL TRACT, FUNICULUS, POSTERIOR HORN, PYRAMIDAL DECUSATION, SPINAL CANAL, SPINAL NERVE, SPINAL REFLEX, SUBSTANTIA GELATINOSA.

spinal nerve *n.* Any of the 31 pairs of nerves connected to the **spinal cord*, serving the striped muscles, the skin, and the autonomic nervous system, numbered according to the level at which they emerge: 8 cervical pairs, 12 thoracic, 5 lumbar, 5 sacral, and 1 coccygeal pair. *Compare* CRANIAL NERVE.

spinal reflex *n.* Any **reflex* arc that passes through the spinal cord but avoids the brain. *See also* STRETCH REFLEX.

spinal root *n.* The point of attachment of a **spinal nerve* to the **spinal cord*. *See* DORSAL ROOT, VENTRAL ROOT.

spindle *See* NUCLEAR SPINDLE, SLEEP SPINDLE, SPINDLE CELL.

spindle cell *n.* A type of neuron found in the sixth and deepest (fusiform) layer of the cerebral cortex, with two short **processes* (2) that divide into multiple long fibres. Also called a *fusiform cell*. [So called because it tapers at each end like a spindle]

spinning dancer illusion *n.* A ***movement illusion** based on an ***ambiguous figure**, first published and copyrighted in 2003 by the Japanese Flash designer Nobuyuki Kayahara (born 1972), in which a silhouette of a nude female dancer appears to be pirouetting either to her right or to her left, the absence of depth cues leaving her direction of rotation ambiguous. About two out of three viewers initially perceive her rotating to her right, but viewing the image for some time, or looking away and viewing it in ***peripheral vision**, usually causes her apparent direction of rotation to flip. Although it is widely promoted as a test of left-brain versus right-brain ***laterality** or ***cerebral dominance**, experimental research published in the journal *Perception* in 2010 by the German biologist Nikolaus F(riedrich) Troje (born 1960) and the psychologist Matthew McAdam, his undergraduate student, suggested instead that the direction of rotation depends on whether the viewpoint is assumed to be from slightly above or from slightly below, the human visual system usually being biased towards a viewpoint from above, probably because looking down is more common in everyday life than looking up. Also called the *silhouette illusion*.

spinocerebellar tract *n.* A bundle of nerve fibres connecting afferent nerve fibres in the spinal cord to the cerebellum.

spinocerebellum *n.* The functional area of the ***cerebellum** adjacent to both sides of the midline ***vermis**, including most of the anterior lobe, receiving inputs from the spinal cord and controlling posture and gait. Lesions in this area lead to ***gait ataxia** and impairment of posture. *See also* CEREBELLAR SYNDROME. *Compare* NEOCEREBELLUM, VESTIBULOCEREBELLUM.

spinoreticulothalamic system *n.* A system of nerve fibres connecting the spinal cord, reticular formation, and thalamus, thought to be involved in the processing of bodily sensations such as ***pain**.

spinothalamic tract *n.* A bundle of nerve fibres connecting each ***posterior** horn of the spinal cord to the opposite side of the ***thalamus**, carrying information about ***pain** and temperature and some information about touch. It is one of two major routes by which afferent spinal nerve fibres carrying sensations of ***somaesthesia** are transmitted to the ***thalamus**. *Compare* DORSAL COLUMN.

*****ebook converter DEMO Watermarks*****

spiny I *n.* A type of neuron with spiny projections on its **dendrites*, found abundantly in the **striatum*, projecting to the **globus pallidus* and **substantia nigra*.

spiral aftereffect *n.* The visual aftereffect that is induced by exposure to the **Plateau* spiral.

spiral ganglion cell *n.* Any of a large number of **bipolar* neurons that have their cell bodies just outside the **cochlea* of each ear and that transmit auditory information from the cochlea to the central nervous system via the **vestibulocochlear nerve*. [So called because they occupy the spiral-shaped cochlear canal]

spiral test *n.* In psychometrics, any test of aptitude, ability, or intelligence in which a number of items are presented in sequence, and then the sequence is repeated with more difficult instances of each item type, and so on, with each cycle containing more difficult items than the last.

spiroperidol *n.* A **neuroleptic* (1) drug belonging to the class of **butyrophenones* that blocks **dopamine* neuroreceptors and is used in the treatment of schizophrenia. *See also* DOPAMINE ANTAGONIST.

spite *n.* 1. An **emotion* of malicious ill will characterized by an urge to cause harm to another person, especially when this necessitates some harm to oneself as well. 2. In sociobiology, behaviour of an organism towards another that reduces the **Darwinian fitness* of both. **spiteful** *adj.* Filled with or motivated by spite (1, 2). [A variant of *despite*]

splenium *n.* The rounded tip at the back of the **corpus callosum*, primarily concerned with integrating visual information from the left and right visual fields. [From Greek *splenion* pad or plaster]

splicing, gene *See* GENE SPLICING.

spliff *n.* A common street name for a **cannabis* cigarette. [Rastafarian]

slang]

split brain *n.* Another name for **commissurotomy* or **split-brain preparation*.

split-brain preparation *n.* A surgical operation in which the two **cerebral* hemispheres of a person's brain are separated by cutting the **corpus callosum*, usually to relieve the symptoms of epilepsy, or in which an animal is treated in this way for research purposes. Also called a *commissurotomy* or *commissurectomy*. See also *DISCONNECTION SYNDROME*.

split-half reliability *n.* A measure of the **reliability* of a test based on the correlation between scores on two arbitrarily formed halves of the test, often the odd-numbered and even-numbered test items. More sophisticated versions of this technique are the **Kuder–Richardson coefficient* and **Cronbach's alpha*.

split personality *n.* Another name for **dissociative identity disorder*.

split-plot design *n.* An **experimental design* involving both **between-subjects* and **within-subjects* effects, using a mixed **analysis of variance*. For example, participants randomly assigned to treatment conditions in which they are *either* sleep-deprived or not sleep-deprived (between-subjects factor) may be tested for short-term memory *both* with and without noise (within-subjects factor). The fully developed idea was introduced by the English statistician Frank Yates (1902–94) in a paper entitled 'Complex Experiments' presented to the Royal Statistical Society in 1935 and published in the same year in a *Supplement to the Journal of the Royal Statistical Society* (Volume 2, pp. 181–247). [So called because the design was first used in agricultural research at Rothamsted Experimental Station in Hertfordshire, England, with different treatments being applied to different plots of ground, each subdivided into parts that were exposed to two or more sub-treatments]

split-span See *FILTER THEORY*.

splitting of the ego *n.* In **psychoanalysis*, the coexistence within the

***ego** of two attitudes towards external reality, functioning side by side without influencing each other, one taking reality into account and the other disavowing reality. According to Sigmund Freud (1856–1939), it is peculiar to the disorder of ***fetishism** and certain of the ***psychoses**. He presented his theory in various publications, including an article on ‘Splitting of the Ego in the Process of Defence’ (*Standard Edition*, XXIII, pp. 275–8). In ***object-relations theory** it is seen as a more normal mode of psychological functioning.

splitting of the object *n.* In ***Kleinian** analysis, the most primitive of all ***defence mechanisms**, in which ***instinctual objects** that evoke ***ambivalence** and therefore ***anxiety** are dealt with by compartmentalizing positive and negative emotions, leading to images of self and others that are not integrated. Splitting plays a central role in the theory of ***defensive techniques** proposed by the Scottish psychoanalyst W. Ronald D. Fairbairn (1889–1964). *See also* **GOOD BREAST**, **GOOD OBJECT**.

spontaneous remission *n.* Recovery from a disorder occurring without treatment. The rate of spontaneous remission ranges from about 30 per cent to about 60 per cent for the various classes of mental disorders.

sports psychology *n.* Application to the performance of competitors in all types of sports of research into ***skills** and into psychological factors associated with athletic performance. Also called *sport psychology*.

spouse abuse *n.* Any form of physical or mental exploitation or cruelty towards a husband or wife, causing significant harm to its victim. *See also* **BATTERED WIFE SYNDROME**, **SEXUAL ABUSE**.

spreading activation *n.* An increase in activity in part of a network caused by increased activity in adjacent units or areas. The term is applied to ***neural** network models and also to biological networks such as the ***central nervous system**. *Compare* **SPREADING DEPRESSION**.

spreading depression *n.* An inhibition of the activity of part of the ***nervous** system induced by the application of a solution of potassium chloride (or another salt), which causes the inhibition to spread slowly from
*****ebook converter DEMO Watermarks*****

the point of application into neighbouring **neurons*. Also called *cortical spreading depression*. See also [ACTION POTENTIAL](#), [SODIUM PUMP](#). Compare [SPREADING ACTIVATION](#).

SPSS *n.* No longer an abbreviation (formerly, Statistical Package for the Social Sciences), the most popular set of statistical computer programs among psychologists, distributed by IBM since 2009. Compare [BMDP](#), [SAS](#), [SYSTAT](#).

squeeze technique *n.* A procedure for preventing **premature (early) ejaculation*, in which the partner squeezes the neck of the penis tightly until the urge to ejaculate subsides.

SQUID *abbrev.* Superconducting quantum interference device, an instrument for detecting changes in minute magnetic fields generated by the brain.

squiggle game *n.* In **psychoanalysis*, a procedure introduced by the English psychoanalyst Donald Woods Winnicott (1896–1971) for therapeutic consultations with children: the therapist begins by drawing a random scribble on a sheet of paper, and the child responds by making it into a meaningful drawing on the basis of what it seems to suggest; and then it is the child's turn to make a random scribble for the therapist to complete, and so on, the drawings serving as points of departure for therapeutic interchanges. Winnicott's researches with the game were published posthumously in his book *Therapeutic Consultations in Child Psychiatry* (1971).

squint *n.* Another name for **strabismus*. Also, the act of half-closing the eyes in bright light, but this usage is avoided in technical discourse.

stability *n.* The state or quality of being stable, steady, or dependable. In psychometrics, an aspect of **reliability*, according to which a test or measuring instrument yields approximately the same scores when administered to the same respondents on separate occasions. See also [TEST–RETEST RELIABILITY](#).

stabilized retinal image *n.* A visual image that is prevented from moving on the retina by means of specially constructed contact lenses, so that the eye movements that occur continually during visual **fixation* (1), owing to various forms of **physiological nystagmus*, do not cause the image to move across the retina, the result being that vision fades away after about one second and is replaced by undifferentiated **Eigengrau*, although brief glimpses of the image or parts of it may reappear periodically, especially if the stabilization is not complete. This phenomenon, which was discovered simultaneously and independently by researchers in the US and England in 1952, is also called a *fixed image*, a *stabilized image*, or a *stopped image*. See also [FILLING-IN ILLUSION](#).

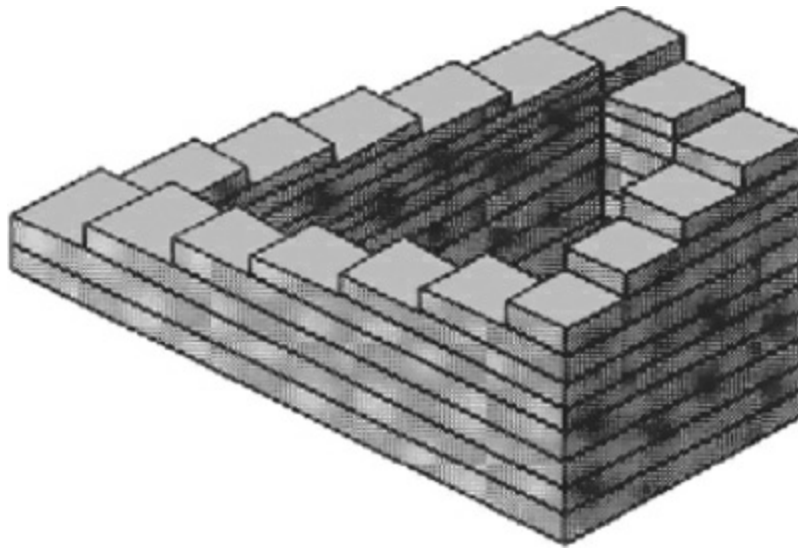
stabilizing selection *n.* A form of **natural selection* that operates against the extremes of the range of variation of a characteristic, thereby tending to stabilize the population close to the mean. See also [FREQUENCY-DEPENDENT SELECTION](#). Compare [APOSTATIC SELECTION](#), [DISRUPTIVE SELECTION](#).

stage fright *n.* A form of **anxiety* preceding or accompanying participation in any activity involving public self-presentation before an audience. Also called *performance anxiety*. See also [AUDIENCE EFFECT](#), [DRIVE THEORY OF SOCIAL FACILITATION](#).

stage, libidinal See [LIBIDINAL STAGE](#).

stages of problem solving See [PROBLEM-SOLVING STAGES](#).

staircase illusion *n.* An **impossible figure* based on a staircase in the form of a continuous loop that apparently rises endlessly (see [illustration](#)), first devised in 1958 by the English psychologist/geneticist Lionel S. Penrose (1898–1972) and his mathematical physicist son Roger Penrose (born 1931), later incorporated into *Ascending and Descending*, one of the best known etchings of the Dutch graphic artist Maurits C(ornelis) Escher (1898–1970). Also called the *Penrose staircase*. Often confused with the **Schröder staircase*. See also [AUDITORY STAIRCASE ILLUSION](#).



Staircase illusion. An impossible figure in which a flight of stairs appears to rise endlessly.

staircase method *n.* A **psychophysical** method introduced in 1962 by the US cognitive scientist Tom Norman Cornsweet (born 1929) in which, for **absolute thresholds**, a **variable** stimulus is presented repeatedly and is adjusted upwards whenever it is not perceived and downwards whenever it is perceived, and for **difference thresholds** a variable stimulus is adjusted to increase its absolute difference from a **standard stimulus** whenever the difference is not discriminated or is adjusted to decrease its absolute difference from the standard stimulus whenever the difference is discriminated. Also called the *up-and-down method*. Compare **METHOD OF AVERAGE ERROR**, **METHOD OF CONSTANT STIMULI**, **METHOD OF LIMITS**.

stalking *n.* Pursuing or following prey stealthily and surreptitiously. During the late 1980s, the word's meaning was extended to denote the obsessional pursuit of media and sports celebrities by fans, and it was then extended further to include persistent attempts to communicate with, follow, harass, or maintain surveillance over any unwilling recipient of such attention. During the 1990s, a specific crime of stalking was enacted in every state in the US and in many other countries, legal definitions of stalking usually (though not in England and Wales) requiring proof that the victim experienced reasonable fear of harm. Surveys in the US suggest that approximately 8 per cent of women and 2 per cent of men have been targeted

by stalkers at some time in their lives. *See also* [EROTOMANIA \(1\)](#), [SEXUAL HARASSMENT](#). **stalk** *vb.* **stalker** *n.* A person who engages in stalking. [From Old English *bestealcian* to walk stealthily]

stammering *n.* Another name for **stuttering*. *See* [CHILDHOOD-ONSET FLUENCY DISORDER](#).

standard deviation *n.* In descriptive statistics, a measure of the degree of dispersion, variability, or scatter in a set of scores, expressed in the same units as the scores themselves, defined as the square root of the **variance*. The term was coined in 1893 by the English statistician Karl Pearson (1857–1936). Symbol: *SD* or σ . *Compare* [INTERQUARTILE RANGE](#), [PROBABLE ERROR, RANGE](#), [SEMI-INTERQUARTILE RANGE](#).

standard error *n.* In statistics, a measure of degree of uncertainty about the value of a **parameter* of a population estimated from a sample **statistic*, defined as the **standard deviation* of values of the statistic observed in a large number of random samples from the population. If the parameter being referred to is the **arithmetic mean*, then its standard error is called the *standard error of the mean*, and similarly for any other parameter. **SE** *abbrev.*

standardize *vb.* **1.** In statistics, to convert a score or value to a **standard score*. **2.** In **psychometrics*, to establish population **norms (2)* for a test by applying it to standardization samples. **standardized** *adj.*

standardized regression coefficient *n.* Another name for a **beta coefficient*. Also called a *standardized regression weight*.

standardized test *n.* In psychometrics, a test for which population **norms (2)* have been established.

standard score *n.* In statistics, any score expressed in units of **standard deviations* of the distribution of scores in the population, with the mean set at zero. Also called a *sigma score* or a *z score*. *See also* [STANINE SCORE](#), [STEN SCORE](#), [T SCORE](#).

standard stimulus *n.* In *psychophysics*, a *stimulus* (1) to which an observer attempts to match a *variable* stimulus, or an anchoring stimulus that is assigned a number by the experimenter and that an observer uses as the basis in *magnitude estimation* by assigning numbers to a variable stimulus in relation to it. **S** or **St** *abbrev.*

Stanford–Binet intelligence scale *n.* The first *standardized* (2) English-language *intelligence* test and the prototype of most subsequent intelligence tests, based on a translation of the *Binet–Simon scale*, introduced in the United States in 1916 by the psychologist Lewis Madison Terman (1877–1956) and revised several times since then, one of the first to attempt to eliminate cultural and gender bias from its test items. *See also* **PORTEUS MAZE TEST**. **S–B scale** *abbrev.* [Named after Stanford University, California, where Terman was working when the test was introduced, and the French psychologist Alfred Binet (1857–1911)]

Stanford marshmallow test *See* **MARSHMALLOW TEST**.

Stanford prison experiment *n.* An experiment, conducted in 1971 by the US social psychologist Philip G(eorge) Zimbardo (born 1933) and several colleagues, in which 24 physically and psychologically healthy male undergraduate volunteers were randomly assigned to play the roles of prisoners and guards in a mock prison for \$15 per day. The prisoners wore loose-fitting smocks with ID numbers printed on them, nylon caps, and ankle chains, and the guards wore khaki uniforms and reflecting sunglasses and carried whistles and sticks. The guards were instructed to keep the prisoners incarcerated but were given no specific instructions about how to treat them. The main finding was that both groups entered into their roles excessively realistically, although they knew they were merely participating in an experiment. The prisoners became passive, helpless, and withdrawn, and the guards became aggressive and cruel, inventing ever more creative ways of abusing and humiliating the prisoners. One-third of guards manifested genuinely sadistic tendencies, and two prisoners were so emotionally traumatized that they had to be removed. The experiment was planned to run for two weeks but was abandoned after only six days after concerns were raised about its ethical justification. The findings were first published in the *International Journal of Criminology and Penology* in 1973. *See also*

*****ebook converter DEMO Watermarks*****

OBEDIENCE. SPE *abbrev.* [So called because it was conducted at Stanford University in California, in the basement of the psychology department]

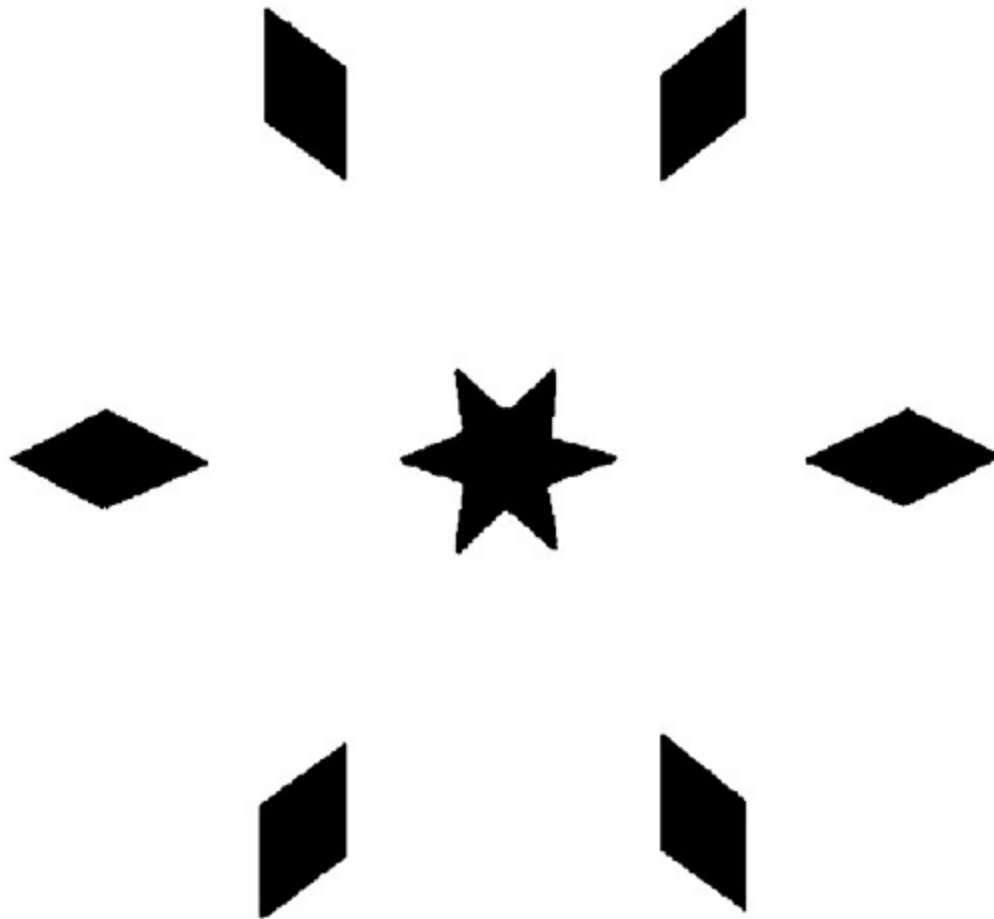
stanine score *n.* In psychometrics, a test score converted to an equivalent ***standard score** in a ***normal distribution** with values 1, 2,..., 9, a ***mean** of 5, and a ***standard deviation** of 1.96. *See also* **DERIVED SCORE**. *Compare* **IQ**, **STEN SCORE**, **T SCORE**, **Z SCORE**. [A blend of *Sta(ndard) nine score*]

stanozolol *n.* An ***anabolic steroid** popular with athletes and bodybuilders and frequently used as a ***performance enhancer**. Formula: $C_{21}H_{32}N_2O$. [From the chemical name of its main metabolite *3'-hydroxystanozolol*]

stapedius *n.* A small muscle in the middle ear that pulls the ***stapes** backwards and acts in conjunction with the ***tensor tympani** in the ***acoustic reflex** to protect the ear from damage when exposed to loud sounds.

stapes *n.* The innermost of the three small bones in the ***middle ear**, transmitting sound vibrations from the ***incus** to the inner ear. Referred to non-technically as the *stirrup*. *Compare* **INCUS**, **MALLEUS**. **stapedes** *pl.* [From Latin *stapes* a stirrup, from *stare* to stand + *pes* a foot, alluding to its resemblance to a stirrup]

star illusion *n.* A form of ***irradiation** illusion in which a central dark star is surrounded by dark diamonds, the spaces between the star and each of the diamonds being equal to the diameter of the star and the longest diameter of a diamond but appearing much larger (see **illustration**). The illusion is enhanced by an effect related to the ***Müller-Lyer illusion** arising from the arrowhead shapes formed by the star and the diamonds.



Star illusion. The white space between the points of the star and of each of the diamonds is equal to the diameter of the star and the longest diameter of a diamond.

start codon *n.* The [*codon](#) or triplet of bases AUG (adenine, uracil, guanine) in a segment of [*RNA](#), or its equivalent in [*DNA](#), signalling the beginning of a protein-coding sequence and specifying the amino acid methionine. Also called an *initiation codon* or an *initiator codon*. See also [TATA BOX](#). Compare [STOP CODON](#).

startle reflex *n.* A reflex pattern of responses to a sudden unexpected stimulus such as a loud noise, including physiological signs of [*arousal](#), flexion of the trunk and limbs, [*piloerection](#), and closing of the eyes. Also called the *startle response* or *startle reaction*. Compare [MORO REFLEX](#).

state anxiety *n.* A temporary form of [*anxiety](#) related to a particular

situation or condition that a person is currently in, a typical example being **test anxiety*. See also [STATE-TRAIT ANXIETY INVENTORY](#). Compare [TRAIT ANXIETY](#).

state-dependent memory *n.* The tendency for information learnt in a particular mental or physical state to be most easily remembered in a similar state. The phenomenon was first investigated systematically in 1964 by the US psychologist Donald (Albert) Overton (born 1935), who focused on *drug-dependent memory* in rats, and this was later demonstrated in humans: material learnt in a drunken state is best remembered in a later drunken state, and so on. Clinical evidence has been cited of heavy drinkers who hide alcohol or money when drunk and are unable to find it when sober but remember where it is as soon as they become drunk again. It has since been established that many classes of drugs produce the effect, that the effect is dose-dependent, that it affects recall but not recognition, and that non-pharmacological states can also elicit the effect demonstrated: in a frequently cited British experiment on *context-dependent memory*, lists of words that were learned by divers while they were underwater were best recalled when they were again underwater, and conversely words learned on land were best recalled on land. Emotional states can also produce the effect—*mood-dependent memory*—and this helps to explain why pleasant experiences are more likely to be remembered by a person who is happy, and unpleasant experiences by someone who is unhappy and is likely to become even more unhappy as a result. Also called *state-dependent learning*. See also [COGNITIVE INTERVIEW](#), [ENCODING SPECIFICITY](#), [REDINTEGRATION](#).

State-Trait Anxiety Inventory *n.* A questionnaire comprising two separate self-rating scales, one measuring **state anxiety* and the other **trait anxiety*, each scale containing 20 items. The inventory was first published by the US psychologist Charles D(onald) Spielberger (1927–2013) and several colleagues in 1970. **STAI** *abbrev.*

static assessment environment *n.* A typical context for test administration in which the tester does not respond interactively to a respondent's incorrect answers but merely proceeds to the following question. Compare [DYNAMIC TESTING](#).

static labyrinth *n.* The **maculae* in the **utricle* and **sacculle*, functioning to control balance by increasing muscle **tonus* to counteract the effect of gravity on the side to which the head is tilted. *See also* VESTIBULAR SYSTEM.

static sense *n.* A form of **proprioception* and **kinaesthesia* providing information about orientation, balance, and acceleration, mediated by the **vestibular system*.

statistic *n.* Any numerical value representing a property of a **sample* of scores. Examples of statistics in this sense are the **arithmetic mean*, the **variance*, and the minimum (lowest score). [From Latin *statisticus* concerning affairs of state, from *status* a state + *-icus* of, relating to, or resembling]

Statistical Analysis System *See* SAS.

statistical inference *n.* Estimating the **parameters* of a population, or forming a judgement about whether an observed relationship or difference can be attributed to chance, usually from the observed properties of a **random sample*. *See also* INFERENCE STATISTICS.

Statistical Package for the Social Sciences *See* SPSS.

statistical power *n.* In inferential statistics, the probability that a **significance* test will reject the **null hypothesis* when it is in fact false. Significance tests vary in power, but all tests increase in power with increasing sample sizes. The power of a test depends on the particular **alternative hypothesis* against which it is tested. *See also* TYPE II ERROR.

statistical prediction *n.* Another name for **actuarial prediction*.

Statistical Product and Service Solutions *See* SPSS.

statistical significance *n.* In statistics, a property of the results of an empirical investigation suggesting that they are not due to chance alone. The

5 per cent level of significance has become conventional in psychology; this means that results are normally considered to be statistically significant if statistical tests show that the probability of obtaining, by chance alone, results at least as extreme as those obtained is less than 5 per cent, usually written $p < .05$. If the probability is not sufficiently small, then the correct interpretation is that there is no evidence of an effect, not that there is evidence of no effect. *See also* [ALTERNATIVE HYPOTHESIS](#), [INFERENTIAL STATISTICS](#), [NULL HYPOTHESIS](#), [P VALUE](#), [SIGNIFICANCE TEST](#). **statistically significant** *adj.* [From Latin *significare* to signify]

statistical test *n.* A procedure for deciding whether or not to reject the [*null hypothesis](#) and conclude that an observed difference or relationship is not due to chance. *See also* [SIGNIFICANCE TEST](#).

statistics *n.* The science of describing and interpreting numerical data in accordance with the theory of [*probability](#), and the application of analytical techniques such as [*significance](#) tests, determination of [*confidence intervals](#), and [*parameter](#) estimation to such data. The two major branches of statistics are [*descriptive statistics](#) and [*inferential statistics](#). [From Latin *statisticus* concerning affairs of state, from *status* a state + *-icus* of, relating to, or resembling]

statocyst *n.* An organ of equilibrium containing [*otoliths](#), found in crustaceans and other invertebrates; also a gravity-sensitive plant cell containing starch grains enabling the plant to maintain its orientation or direction of growth. [From Greek *statos* set or placed + *kystis* a bladder]

statolith *n.* Another name for an [*otolith](#). [From Greek *statos* set or placed + *lithos* a stone]

status epilepticus *n.* A dangerous condition characterized by [*convulsions](#) continuing without interruption, caused by sudden withdrawal from anticonvulsant medication, a lack of glucose in the body, a brain tumour, head injury, fever, or poisoning. [From Latin *status* condition + *epilepticus* epileptic]

status quo bias *n.* Another name for the [*endowment effect](#).

*****ebook converter DEMO Watermarks*****

stealing, pathological See KLEPTOMANIA.

Steele–Richardson–Olszewski syndrome *n.* Another name (especially in the UK) for **progressive supranuclear palsy*. **SRO syndrome** *abbrev.* [Named after the Canadian neurologists John C. Steele (born 1934) and John Clifford Richardson (1909–86) and the Polish-born Canadian neurologist Jerzy Olszewski (1913–64) who first described it in 1964]

steepest descent *n.* Another name for **gradient descent*.

Stelazine *n.* A proprietary name for the **neuroleptic* (1) drug **trifluoperazine*. [Trademark]

stellate cell *n.* Any of a class of small **interneurons* in the **cerebellum*, with multiple processes that synapse on the dendrites of **Purkinje cells*, the action of which they inhibit, also found in the cerebral cortex, where spiny stellates are excitatory and non-spiny stellates are inhibitory. They are especially abundant in the somatosensory cortex, the primary visual cortex (Area V1), and the primary auditory cortex. *Compare* BASKET CELL, GOLGI CELL, PYRAMIDAL CELL. [From Latin *stellatus* starry, from *stella* a star]

stem-and-leaf display *n.* In descriptive statistics, a method of tabulating scores that consist of two or more digits. The initial digits (the stems) determine the rows in which the scores are placed and the remaining digits (the leaves) are listed in order within their respective rows, so that the display resembles a **histogram* lying on its side with the scores in each class interval listed in order, in place of the bars of the histogram (see *illustration*). A stem-and-leaf display provides an informative picture of the distribution of a variable. Also called a *stem-and-leaf diagram*.

Raw data		Stem-and-leaf display
177	171	10 7
118	174	11 1228
122	121	12 12355
178	194	13 3
112	125	14
107	123	15
183	182	16 8
111	112	17 1478
125	133	18 233
183	168	19 4

Stem-and-leaf display. The hidden bimodal distribution of the data, with no scores falling between 134 and 167, emerges when the raw data on the left, displayed for convenience in two columns, are rearranged without loss of information on the right.

stem cell *n.* A master cell that resides in bone marrow and that replicates repeatedly and differentiates to create many different kinds of blood cells and cells of the immune system, and that, unlike other body cells, divides to produce not only new cells of its own type (new stem cells) but also other types of cells, including monocytes, erythrocytes, B lymphocytes, T lymphocytes, and macrophages.

stem completion task *n.* Another name for a **word-stem completion task*.

Stendhal syndrome *n.* A transient **psychosomatic disorder*, supposedly brought about by exposure to a large amount of art or natural beauty in a short space of time, characterized by racing pulse, dizziness, fainting, and sometimes **thought disorder* and **hallucinations*. The term was

introduced in 1979 by the Italian psychiatrist and psychoanalyst Graziella Magherini and popularized in her book *La sindrome di Stendhal* (The Stendhal Syndrome) in 1989. It is named after the French novelist Stendhal, the pen name of Marie-Henri Beyle (1783–1842) who experienced the syndrome on visiting Florence and described his symptoms in his book *Naples and Florence: A Journey from Milan to Reggio* (1817): ‘I was in a sort of ecstasy from the idea of being in Florence, close to the great men whose tombs I had seen. Absorbed in the contemplation of sublime beauty... I reached the point where one encounters celestial sensations. Everything spoke so vividly to my soul.... Life was drained from me. I walked with the fear of falling.’ Compare [JERUSALEM SYNDROME](#).

Stenger test *n.* A test designed to distinguish genuine unilateral *deafness from *malingering. Two tones of the same frequency but different intensity are presented simultaneously, one to each ear. In a person with normal hearing, only the more intense tone is heard, and this is called the *Stenger phenomenon*. A person who is unilaterally deaf in the ear receiving the more intense tone cannot hear that sound but can hear the softer tone in the good ear. In contrast, a person feigning unilateral deafness in the ear receiving the more intense tone cannot hear the softer tone in the other ear and reports hearing nothing. This is called a *positive Stenger response*, and it is very strong evidence of malingering. [Named after the German otologist Paul Stenger (1865–1940) who first described it in an article in the journal *Archiv für Ohrenheilkunde* in 1901 and, in more detail, in the journal *Deutsche Medizinische Wochenschrift* in 1907]

stenography *n.* Shorthand writing, especially with the use of a *Stenotype, specially designed for this purpose. Compare [BRACHYGRAPHY](#), [TACHYGRAPHY](#). **stenographer** *n.* A person skilled in the use of stenography. [From Greek *stenos* narrow + *graphein* to write]

Stenotype *n.* A small silent keyboard machine with 22 keys for recording shorthand, invented in 1906 by a US court reporter Ward Stone Ireland (1883–1956) and still used for making court records. The fingers of the left hand type consonants appearing before vowels, and these are printed on the left of the paper, the fingers of the right hand consonants after vowels, and these appear on the right, and the thumbs of both hands type all the vowels,

*****ebook converter DEMO Watermarks*****

which are printed in the middle. An experienced stenographer can operate comfortably at a normal conversational speed of about 150 words per minute. See also [STENOGRAPHY](#). [Trademark, from Greek *stenos* narrow + *typos* type]

sten score *n.* In psychometrics, a test score converted to an equivalent [*standard score](#) in a [*normal distribution](#) with values 1, 2,..., 10, a [*mean](#) of 5.5, and a [*standard deviation](#) of approximately 2. See also [DERIVED SCORE](#). Compare [IQ](#), [STANINE SCORE](#), [T SCORE](#), [Z SCORE](#). [A blend of *sta(ndard)ten score*]

Stent–Singer rule See [HEBBIAN RULE](#).

stereoacuity *n.* Another name for [*stereoscopic acuity](#).

stereoblindness *n.* An inability to perceive depth on the basis of [*binocular](#) disparity, owing to a reduction in the number of functioning [*disparity-selective cells](#) in the [*visual cortex](#), usually as a result of [*strabismus](#) during infancy. The condition is believed to be quite common (perhaps 4 or 5 per cent of the population) but is generally unrecognized because other depth cues compensate, though it is immediately apparent under examination with [*stereograms](#) or [*anaglyphs](#). See also [DEPTH PERCEPTION](#).

stereochemical theory *n.* An explanation for odour in terms of a small number of odorant molecules with distinctive three-dimensional structures that are assumed to bind to [*olfactory receptors](#), owing to ultramicroscopic slots in their cell membranes specialized to respond to those specific molecular structures. The seven primary odours according to this theory are camphoraceous (like moth balls), musky (like musk), floral or fragrant (like rose or lavender petals), minty (like menthol or peppermint), ethereal (like ether or cleaning fluid), pungent (like vinegar or roasted coffee), and putrid (like faeces or rotten eggs). Also called the *lock-and-key theory*.

stereocilium *n.* Any of the approximately 100 threadlike structures, not true cilia in spite of their name, projecting from each [*hair cell](#) in the [*saccular](#) macula within the [*membranous labyrinth](#) of the [*inner ear](#) and in other epithelia in which hair cells are located. In the inner ear they are

*****ebook converter DEMO Watermarks*****

embedded in a gelatinous matrix containing crystals of calcium carbonate that exert gravitation drag on them. Compare [KINOCILIUM](#). **stereocilia** *pl.* [From Greek *stereos* solid + Latin *cilium* an eyelash]

stereognosis *n.* The identification and recognition of solid or three-dimensional objects by touch alone. Compare [ASTEREOGNOSIS](#). [From Greek *stereos* solid + *gnosis* knowledge]

stereogram *n.* A double picture made up of slightly different images that when viewed through a [*stereoscope](#) or special spectacles produces a three-dimensional visual image. See also [ANAGLYPH](#), [RANDOM-DOT STEREOGRAM](#), [STEREOPSIS](#).

stereopsis *n.* Depth perception based on [*binocular](#) disparity, resulting from the slightly different viewpoints of the side-by-side eyes of humans, monkeys, and some other species, discovered in 1838 by the English physicist and inventor Sir Charles Wheatstone (1802–75). It is served by the [*magnocellular system](#), which is colour-blind (see [ISOLUMINANT](#)). The [*visual cortex](#) contains [*disparity-selective cells](#) that respond only to particular binocular disparities and are thus tuned to respond to stimuli at particular distances. Also called *stereoscopic vision*. See also [ANAGLYPH](#), [BINOCULAR PARALLAX](#), [HOROPTER](#), [PANUM'S FUSION AREA](#), [PANUM'S LIMITING CASE](#), [RANDOM-DOT STEREOGRAM](#), [REDUCTION SCREEN](#), [STEREOBLINDNESS](#), [STEREOSCOPE](#), [STEREOSCOPIC ACUITY](#). [From Greek *stereos* solid + *opsis* sight, from *ops* and eye]

stereoscope *n.* An optical device for displaying a [*stereogram](#) so that its two slightly different images of the same object or scene are presented one to each eye, enabling three-dimensional perception to be experienced through [*stereopsis](#). [From Greek *stereos* solid + *skopein* to view]

stereoscopic acuity *n.* Keenness or sharpness of [*stereopsis](#), measured by the subtended angle corresponding to the minimum [*binocular](#) disparity sufficient to produce a sensation of depth. Under good viewing conditions, stereoscopic acuities corresponding to [*visual angles](#) in the region of 2 seconds of arc, equivalent to 1/1,800 of a degree, have been found. Also called *stereoacuity*. See also [ACUITY](#).

*****ebook converter DEMO Watermarks*****

stereoscopic illusion *n.* Any ***visual illusion** in which three-dimensional depth is misperceived, or any visual illusion that arises from a phenomenon peculiar to binocular vision. See **ANAGLYPH**, **CHESHIRE CAT EFFECT**, **FLOATING-FINGER ILLUSION**, **HOLE-IN-THE-HAND ILLUSION**, **LISSAJOUS FIGURE**, **PULFRICH EFFECT**, **RANDOM-DOT KINEMATOGRAM**, **RANDOM-DOT STEREOGRAM**.

stereoscopic vision *n.* Another name for ***stereopsis**.

stereotactic *adj.* Of or relating to precise three-dimensional localization, especially of brain structures. Also written *stereotaxic*. [From Greek *stereos* solid + *taktos* arranged (for battle), from *tassein* to arrange + *-ikos* of, relating to, or resembling]

stereotactic instruments *n.* Devices designed to facilitate precise three-dimensional localization of tissues for brain surgery and research.

stereotype *n.* A relatively fixed and oversimplified generalization about a group or class of people, usually focusing on negative, unfavourable characteristics, although some authorities recognize the possibility of positive stereotypes as well. The word originally denoted a solid metallic printing plate containing a masthead or other stock image that was difficult to change once cast, and the psychological meaning was introduced by the US journalist Walter Lippmann (1899–1974) in his book *Public Opinion* (1922), where he also articulated the ***cognitive miser** theory of stereotyping. Early empirical studies stressed the remarkable consensus in the stereotypes of various ethnic groups in the US; research into the ***frustration–aggression hypothesis** from the 1940s onwards found evidence for the motivated nature of some stereotypes; and research using the ***F scale** after its publication in 1950 found stereotypic thinking to be characteristic of people with ***authoritarian** personalities and fascist belief systems. In 1954, a book entitled *The Nature of Prejudice* by the US psychologist Gordon W(illard) Allport (1897–1967) popularized the interpretation of stereotypes as nothing more than cognitive categories that simplify ***information** processing and are quite resistant to disconfirming information. There is evidence that some people are capable of maintaining strong stereotypes of typical group members without these stereotypes necessarily influencing how they perceive and evaluate particular members of those groups. See also **CONFIRMATION BIAS**,
*****ebook converter DEMO Watermarks*****

DUAL-PROCESS MODEL, SOCIAL CATEGORIZATION, STEREOTYPE THREAT. **stereotypic** *adj.* **stereotyping** *n.* The act or process of forming a stereotype. [From *stereotype* a fixed, stock plate used for printing a masthead or other standardized text, from Greek *stereos* solid + *typos* type, from *typtein* to strike]

stereotyped movements *n.* Repetitive, non-functional, self-injurious bodily movements such as hand waving, body rocking, head banging, self-biting, or hitting parts of the body, sometimes using an object. *See also* STEREOTYPIC MOVEMENT DISORDER.

stereotype threat *n.* Impairment of performance resulting from perceived likelihood of being judged according to a negative **stereotype*, or fear of acting in a manner likely to confirm the negative stereotype. According to the US psychologists Claude Mason Steele (born 1946) and Joshua M(ichael) Aronson (born 1961), who introduced the term in the *Journal of Personality and Social Psychology* in 1995, stereotype threat tends to occur when members of minority groups find themselves in situations in which negative group stereotypes are salient, typical examples being when African Americans are asked to indicate their ethnic group status before taking a difficult intelligence test, or when women are asked to indicate their sex before responding to a test of mathematical or mechanical ability. The impairment is believed to be caused by physiological **arousal* or **anxiety*.

stereotypic movement disorder *n.* A **neurodevelopmental disorder* in **DSM-5* characterized by apparently purposeless **stereotyped movements*, such as body rocking, head-banging, self-biting or slapping, or hand-waving, interfering with social or academic life and sometimes causing injury requiring medical treatment, with onset in early development, the behaviour not being explained by **drugs* or by another neurodevelopmental or **mental disorder*, such as **obsessive–compulsive disorder* or **trichotillomania*. According to **DSM-5*, the prevalence of this disorder is about 3–4 per cent, but among people with **intellectual disability* in residential homes, between 10 and 15 per cent may have stereotypic movement disorder with self-injury. *Compare* AUTISM SPECTRUM DISORDER, TIC DISORDERS.

Sternberg task *n.* A [*recognition](#) task in which a short sequence of symbols (such as digits) is presented and then removed; a single symbol is then presented, and the respondent has to decide whether or not it was part of the original sequence. Experiments reveal that the mean [*reaction time](#) increases linearly with the number of items in the sequence, and the slope of the function suggests a scanning process of serial comparison in which respondents compare the target symbol with each member of the original sequence at an average rate of 25–30 symbols per second. [Named after the US psychologist Saul Sternberg (born 1949) who published the first experiment using this procedure in the journal *Science* in 1966]

steroid *n.* Any of a group of fat-soluble organic substances with a characteristic chemical structure of 17 carbon atoms bound in four closely linked rings, including the [*sterols](#), [*vitamin D](#), and many [*hormones](#). [From *sterol* + Greek *-oeides* denoting resemblance of form, from *eidos* shape]

steroid hormone *n.* Any [*hormone](#) such as a glucocorticoid, aldosterone, or a sex hormone (androgen or oestrogen) that is synthesized from cholesterol and is a [*steroid](#). The hormones of the adrenal cortex, testes, and ovaries are steroid hormones, whereas those of all other endocrine glands and of the hypothalamus are [*peptide](#) hormones. Synthetic analogues include [*dexamethasone](#), [*nandrolone](#), [*prednisone](#), [*prednisolone](#), [*tetrahydrogestrinone](#), and a synthetic form of [*cortisone](#). See ALDOSTERONE, CORTICOSTERONE, CORTISOL, OESTRADIOL, PROGESTERONE, TESTOSTERONE. See also CORTICOSTEROID DHEA. Compare ANABOLIC STEROID.

steroid receptor *n.* A specific region in a cell specialized for [*steroid](#) hormone binding.

steroid-regulated gene *n.* A gene whose expression is modified by one or more [*steroid](#) hormones.

sterol *n.* Any [*steroid](#) alcohol such as [*cholesterol](#). [Contraction of *cholesterol*, *ergosterol*, and cognate words]

Stevens's law *n.* Another name for the [*power law](#) in psychophysics.

Also called *Stevens's power law*. [Named after the US psychologist S(tanley) S(mith) Stevens (1906–73) who formulated it in 1953 and discussed it in an influential article in the journal *Psychological Review* in 1957]

stigma *n.* A mark of disgrace associated with a person, a personal quality, or a personal circumstance; a mark on the skin indicating a disease; in Christian tradition, the marks left on Christ's body by the crucifixion and transferred by divine intervention to St Francis of Assisi and others. In ancient Greece, bodily signs were sometimes cut or burnt into the bodies of people to advertise their status as slaves, criminals, or traitors and to indicate that they were blemished, ritually polluted, and to be avoided, especially in public places. The term was introduced into the social sciences by the Canadian-born US sociologist Erving Goffman (1922–82) in a book entitled *Stigma: Notes on the Management of Spoiled Identity* (1963). *See also* **STIGMATIZE**. **stigmata** or **stigmas** *pl.* [From Greek *stigma*, *stigmatos* a mark left by a sharp point]

stigmatize *vb.* To devalue or discredit a person or category of people with a deviant attribute or ***stigma**, whose social identity deviates from society's normative expectations, or to exclude a person or group with a particular attribute from certain forms of social interaction. The Canadian-born US sociologist Erving Goffman (1922–82), in his influential book *Stigma: Notes on the Management of Spoiled Identity* (1963), distinguished between blemishes of character (such as mental illness, homosexuality, or criminal behaviour); abominations of the body (physical deformities of various kinds); and the tribal stigma of race, nation, or religion. In virtually all societies, people with disfiguring diseases tend to be ostracized, together with free riders who take social benefits without paying the costs (*see* **PUBLIC GOODS DILEMMA**), and in many societies racial minority groups, obese people, and sexual minority groups also tend to be stigmatized. Psychological research into this phenomenon was stimulated by the book *Social Stigma: The Psychology of Marked Relationships* (1984) by the US psychologist Edward Ellsworth Jones (1926–93) and several co-authors. *See also* **PREJUDICE**, **SELF-PRESENTATION**, **SOCIAL CATEGORIZATION**, **SOCIAL IDENTITY THEORY**. **stigmatization** *n.* The act or process of stigmatizing a person or group of people.

stilboestrol *n.* Diethylstilboestrol, a synthetic form of oestrogen, used as

*****ebook converter DEMO Watermarks*****

a 'morning after' or post-coital contraceptive, especially in cases of rape or incest. US *stilbestrol*. [From Greek *stilb(os)* glittering + English (o)*estr(o)gen* + *-ol* denoting a compound containing a hydroxyl group, from (*alcoh*)*ol*]

Stiles–Crawford effect *n.* The differential effectiveness of light entering through the centre rather than through the edge of the pupil, bright light that is effective for **cones* and that is mediated by the **photopic* system being less effective when entering through the edge than the centre, but dim light effective for **rods* and mediated by the **scotopic* system not showing this differential effect. It is explained by the fact that cones have inner segments serving to channel light travelling directly down their axes, whereas rods are adapted to exploit every scrap of light that falls on them and do not have any channelling mechanism. [Named after the English physiologists Walter Stanley Stiles (1901–85) and Brian Hewson Crawford (1906–91) who discovered the effect in the late 1920s and published it in the *Proceedings of the Royal Society of London, Series B*, in 1933]

Stilling test *n.* A test for **colour-blindness* and **colour* deficiency in the form of a **pseudo-isochromatic* chart composed of dots of equal brightness but different hues arranged to form large numerals visible to viewers with normal vision. This test, the first to use a pseudo-isochromatic chart, was modified and adapted by the Japanese ophthalmologist Shinobu Ishihara (1879–1963) to form his famous **Ishihara test*. Also called the *Stilling Colour Chart* or *Stilling's Colour Table*. Compare *HOLMGREN TEST*. [Named after the German ophthalmologist Jakob Stilling (1842–1915) who developed it]

stimulant drug *n.* Any drug that increases or tends to increase the activity of a system or organ of the body, especially one that increases or speeds up the activity of the **central nervous system* by boosting **catecholamine* transmission, producing an exaggeration of the characteristic features of alert wakefulness, and that in high dosages can cause hallucinations, convulsions, and death. Also called a *psychoanaleptic drug*, a *psychomotor stimulant*, or a *psychostimulant*. A common street name for stimulant drugs in general is *uppers*. See *AMPHETAMINE*, *CAFFEINE*, *COCAINE*, *DEXTROAMPHETAMINE*, *DIGITALIS*, *ECSTASY* (2), *EPHEDRINE*, *KAINIC ACID*, *KHAT*, *MEPHEDRONE*, *MESCALINE*, *METHAMPHETAMINE*, *METHYLPHENIDATE* (Ritalin),

*****ebook converter DEMO Watermarks*****

MODAFINIL, NICOTINE, PENTYLENE TETRAZOL, PHENMETRAZINE, PICROTOXIN, STRYCHNINE, THEOBROMINE, THEOPHYLLINE, XANTHINE, YABA, YOHIMBINE. *See also* PERFORMANCE ENHANCER, SUBSTANCE ABUSE, SUBSTANCE-RELATED AND ADDICTIVE DISORDERS, SYMPATHOMIMETIC, TACHYPHRENIA. *Compare* DEPRESSANT DRUG.

stimulant-related disorders *n.* *Substance-related and addictive disorders in *DSM-5 associated specifically with the use of *stimulant drugs. DSM-5 distinguishes between stimulant use disorder, intoxication, and withdrawal. *See also* SUBSTANCE-INDUCED DISORDERS, SUBSTANCE-RELATED AND ADDICTIVE DISORDERS, SUBSTANCE USE DISORDERS.

stimulus *n.* 1. Any event, agent, or influence, internal or external, that excites or is capable of exciting a *sensory receptor and of causing a *response in an organism. 2. An object or event in the external environment that causes a *response in an organism, also called a *distal stimulus*. 3. A pattern of physical energy that stimulates or excites a *sensory receptor, also called a *proximal stimulus*. 4. Any class of events, agents, or influences that elicit the same type of *response in an organism. 5. Any occurrence that excites or inhibits the firing of a neuron. 6. Anything that rouses an organism or goads it into action. 7. In the *behaviourism of the US psychologist B(urrhus) F(rederic) Skinner (1904–90) and his followers, any event, whether physical or mental, that evokes a *response. *See also* ADEQUATE STIMULUS, CONDITIONED STIMULUS, REACTION TIME, SIGN STIMULUS, SUPERNORMAL STIMULUS, UNCONDITIONED STIMULUS. **stimuli** *pl.* **S** *abbrev.* [From Latin *stimulus* a cattle goad or spur]

stimulus generalization *n.* The tendency for a learned *response to a particular *stimulus (1) to be elicited by other stimuli that resemble it. In *operant conditioning, it is the tendency to respond, after conditioning, to stimuli that were present during *reinforcement (1). *See also* ACOUSTIC GENERALIZATION, GENERALIZATION GRADIENT, SEMANTIC GENERALIZATION.

stimulus intensity dynamism *n.* In *Hullian learning theory, the strength of a *stimulus (1), playing a part with other *intervening variables in determining the *generalized reaction potential. **V** *abbrev.*

stimulus onset asynchrony *n.* The time interval between the
*****ebook converter DEMO Watermarks*****

beginning of one stimulus and the beginning of another. *Compare* INTERSTIMULUS INTERVAL. **SOA** *abbrev.*

stimulus set *n.* 1. In experiments on **reaction time*, a predisposition to concentrate on the **stimulus (1)* rather than the **response*. In **reaction time* experiments it generally leads to slower reactions but fewer errors than a **response set (1)*. 2. A bias disposing an organism to respond in a particular way to a stimulus or class of **stimuli (1)*. 3. A group of **stimuli (1)* used in a particular empirical investigation.

stirrup *n.* A non-technical name for the **stapes* of the middle ear. [So called because of its resemblance to a stirrup]

St John's wort *n.* A shrub of the genus *Hypericum*, especially *H. perforatum*, popular in Europe as an **antidepressant* with relatively few side-effects compared with the more common types, its action combining mild serotonin reuptake inhibition and monoamine oxidase inhibition. *See also* ORPHAN DRUG. *Compare* MONOAMINE OXIDASE INHIBITOR (MAOI), SELECTIVE SEROTONIN REUPTAKE INHIBITOR (SSRI), TETRACYCLIC ANTIDEPRESSANT, TRICYCLIC ANTIDEPRESSANT. [So called because it used to be collected on St John's Eve (23 June) to ward off evil spirits and as a medicinal herb]

stochastic *adj.* Randomly determined, of or relating to a process or variable that has a probability distribution subject to statistical regularities but that cannot be predicted precisely. *Compare* DETERMINISTIC. [From Greek *stochastikos* capable of guessing, from *stochazesthai* to conjecture or aim at, from *stochos* a target]

Stockholm syndrome *n.* A psychological condition in which hostages or victims of kidnappings sometimes develop positive feelings towards their captors, on whom they depend for their survival, especially after being released. [Named after a siege in the Swedish capital Stockholm in 1973 in which people were taken hostage by bank robbers and later refused to cooperate with police]

stocking anaesthesia *n.* A condition analogous to **glove anaesthesia* occurring in the foot and lower leg. US *stocking anesthesia*.

*****ebook converter DEMO Watermarks*****

stomach *n.* The section of the **alimentary* canal between the **oesophagus* and the **small intestine*, consisting of a strong, muscular sac where food is partially digested. [From Greek *stomachos* the throat, later the stomach, from *stoma* the mouth]

stoned *adj.* In drug-culture slang, under the influence of drugs. [From a sense of *stone* to numb or desensitize]

stooge *n.* In experimental methodology, another name for a **confederate*.

stop codon *n.* Any member of the RNA **codon* family UAA, UAG, and UGA (involving the bases uracil, adenine, and guanine), or any of their three equivalents in DNA, signalling the end of a protein-coding sequence. Also called a *nonsense codon*, a *termination codon*, or a *terminator codon*. See also NONSENSE MUTATION. Compare START CODON.

stopped image *n.* Another name for a **stabilized retinal image*.

storage *n.* The act or process of storing anything, especially (in psychology) storing **encoded* information in **memory* for subsequent **retrieval*, or (in computer technology) storing information in a computer or on a magnetic disk or tape. **store** *vb.*

storge *n.* Natural fondness, especially parental affection. [From Greek *storge* affection]

storgic love *n.* A primary type of **love* that is friendly/affectionate and is based on caring and nurturing. Compare AGAPIC LOVE, EROTIC LOVE, LUDIC LOVE, MANIC LOVE, PRAGMATIC LOVE.

STP *n.* A common name for 2,5-dimethoxy-4-methylamphetamine, one of the **phenylalkylamines* among the **hallucinogens*. Also called *DOM*. [A trademark for a motor oil additive]

St Petersburg paradox *n.* A **paradox* of decision making first presented to the St Petersburg Academy in 1738 by the Swiss mathematician

*****ebook converter DEMO Watermarks*****

and physicist Daniel Bernoulli (1700–82). A coin is tossed; if it falls heads then the player is paid one rouble and the game ends. If it falls tails then it is tossed again, and this time if it falls heads the player is paid two roubles and the game ends. This process continues, with the payoff doubling each time, until heads comes up and the player wins something, and then it ends. How much should a player be willing to pay for the opportunity to play this game? According to the principles of probability theory, the player wins one rouble with probability $1/2$, two roubles with probability $1/4$, four roubles with probability $1/8$, and so on, therefore the game's ***expected value** is $(1/2)(1) + (1/4)(2) + (1/8)(4) + \dots$, and this sum is infinite because each of its terms is equal to $1/2$. But it would obviously be absurd to pay a large amount for the privilege of playing the game, because there is a high probability of losing everything, including a 50 per cent chance of losing it on the very first toss, and the game is fatally damaging to the principle of maximizing expected value. The discovery of the paradox led directly to Bernoulli's introduction of 'moral worth', which later came to be called ***utility (1)**. Also called the *St Petersburg game*. See also [RISK AVERSION](#). Compare [ALLAIS PARADOX](#), [COMMON RATIO EFFECT](#), [ELLSBERG PARADOX](#), [MODIFIED ELLSBERG PARADOX](#).

strabismus *n.* A condition in which the orientation of the eyes is abnormal, so that they are not parallel. *Paralytic strabismus* is associated with a malfunction of the ocular muscles resulting from a neurological or muscular disorder or dysfunction. *Non-paralytic strabismus* is an inherited defect in the positioning of the eyes relative to each other, resulting in an inability to use both eyes together, causing the person to fixate with one eye or the other, sometimes leading to ***stereoblindness**. A person with *alternating strabismus* fixates objects in the visual field first with one eye and then with the other, the eyes taking turns for approximately a second each as long as the object is fixated. A person with *monocular* or *non-alternating strabismus* fixates continuously with one eye, the other eye often becoming blind as a result of disuse. Also called *squint*. See also [AMBLYOPIA EX ANOPSIA](#), [ANOOPSIA](#), [CYCLOPHORIA](#), [ESOTROPIA](#), [EXOPHORIA](#), [HETEROPHORIA](#), [HYPERPHORIA](#), [HYPOPHORIA](#). **strabismic** *adj.* [From Greek *strabismos* squinting, from *strabizein* to squint, from *strabos* cross-eyed, related to *straphein* to twist]

stranger anxiety *n.* A form of ***anxiety** occurring in response to the appearance of an unfamiliar person, normally developing in infants between

6 and 8 months of age, manifested by avoidance of **eye* contact, hiding, or crying. It was first discussed in 1957 by the Austrian psychoanalyst René Árpád Spitz (1887–1974). Also called *eight-month anxiety*.

strategic dominance *n.* The property of being a **dominant alternative/strategy*.

strategic game *n.* An interactive decision problem of the type analysed within **game* theory. Also called a *game*.

strategic priming See PRIMING (1).

strategy *n.* **1.** The art or science of generalship or military planning, or a specific long-term plan in a military conflict, business, politics, or social affairs, often distinguished from *tactics*, the detailed manoeuvres carried out to achieve immediate or short-term objectives. **2.** In **game* theory, a complete plan of action, specifying in advance what moves a player will make in every possible situation that might arise in the course of a game. If each player has only one move to make, and if the moves are made simultaneously or in ignorance of the moves chosen by the other player(s), then the available strategies are simply the available moves, but in other cases a strategy specifies a complete contingency plan covering all possible replies by the co-player(s). See also DOMINANT ALTERNATIVE/STRATEGY, MIXED STRATEGY, PROGRAMMED STRATEGY. **strategies** *pl.* **strategist** *n.* **strategic** or **strategical** *adj.* One who devises or implements strategies (1, 2). [From Greek *strategia* generalship, from *strategos* a general, from *stratos* an army + *agein* to lead]

stratified random sample *n.* A **probability* sample in which random sampling is applied piecewise to each stratum of the population to ensure that all subgroups are adequately represented. It resembles a **quota sample*, except that the respondents within each category are selected by simple random sampling rather than haphazardly. See also CLUSTER SAMPLE, RANDOM DIGIT DIALLING, SIMPLE RANDOM SAMPLE. Compare ACCIDENTAL SAMPLE, CONVENIENCE SAMPLE, NON-PROBABILITY SAMPLE, OPPORTUNITY SAMPLE, SELF-SELECTED SAMPLE, SNOWBALL SAMPLE.

Strattera *n.* A proprietary name for the drug **atomoxetine*, a selective
*****ebook converter DEMO Watermarks*****

***noradrenalin** reuptake inhibitor used in the treatment of ***attention-deficit/hyperactivity disorder (ADHD)**. [Trademark]

Stratton experiment *n.* A classic experiment involving inverted visual images carried out in 1895 by the US psychologist George Malcolm Stratton (1865–1957) and published in 1897. See **INVERTING SPECTACLES**.

stream of consciousness *n.* The continuous flow of sensations, images, thoughts, ideas, and feelings that occupy one's ***consciousness**. The concept was introduced by the US psychologist William James (1842–1910) in his book *Principles of Psychology* (1890, p. 237). It was first used as a device in fictional literature by the English novelist Dorothy Miller Richardson (1873–1957) in her sequence of novels under the collective title *Pilgrimage* (1915–38), and it was made famous by two writers who are also linked by the remarkable coincidence of identical dates, the English novelist (Adeline) Virginia Woolf (1882–1941) and the Irish novelist James (Augustine Aloysius) Joyce (1882–1941), especially in the last 50 pages of *Ulysses* (1922).

street drug *n.* Any drug that is taken for its ***psychotropic** effects or for recreational purposes, often though not always illegally.

street name *n.* An unofficial name by which a street drug is referred to by its users and dealers. See **ADAM**, **ACID (2)**, **ANGEL DUST**, **BARBS**, **BENNIES**, **BENZOS**, **CANDY (2)**, **CHARLIE**, **CHINA WHITE**, **COKE**, **CRACK**, **CRANK**, **CRYSTAL METH**, **DOLLS**, **DOPE**, **DOWNERS**, **EINSTEINS**, **GANJA**, **GEAR**, **GOOFERS**, **GRASS**, **H**, **HOG**, **HORSE**, **HUG DRUG**, **ICE**, **JOINT**, **JUNK**, **MEOW MEOW**, **MUSH**, **NEBBIES**, **PEACE PILL**, **PHENNIES**, **PINK LADY**, **POPPERS**, **POT**, **PURPLE HEARTS**, **RED DEVILS**, **REEFER**, **ROCKS**, **ROOFIES**, **SKAG**, **SKUNK**, **SMACK**, **SNOW**, **SPECIAL K**, **SPEED**, **SPEEDBALL**, **SPLIFF**, **TRANQ**, **UPPERS**, **WEED**, **YELLOW BULLETS**.

strephosymbolia *n.* A typical symptom of ***dyslexia** in which letters are transposed, reversed, or confused; more generally a disorder in which objects are perceived in mirror image. [From Greek *strephein* to twist + *symbolon* a symbol]

stress *n.* 1. Psychological and physical strain or tension generated by
*****ebook converter DEMO Watermarks*****

physical, emotional, social, economic, or occupational circumstances, events, or experiences that are difficult to manage or endure. *See also* ACUTE STRESS DISORDER, BASKERVILLE EFFECT, BURNOUT, GENERAL ADAPTATION SYNDROME, IRRITABLE MALE SYNDROME, POST-TRAUMATIC STRESS DISORDER, PROLONGED DURESS STRESS DISORDER, PSYCHONEUROIMMUNOLOGY, PSYCHOSOCIAL STRESSOR, VODOO DEATH. *Compare* EUSTRESS. **2.** In phonetics, the degree of force used in uttering a syllable, stressed syllables being more prominent than unstressed syllables, the prominence being due not only to increased loudness but also sometimes increased length and raised pitch. Also called *accent*. [From C14 English *stresse*, shortened from *distress*, from Latin *strictus* tightened, from *stringere* to draw tight]

stress interview *n.* An interview specifically designed to create *stress (1) in order to assess the interviewee's capacity to withstand stress in other situations.

stressor *See* PSYCHOSOCIAL STRESSOR.

stretch receptor *n.* A receptor such as (in mammals) a *muscle spindle that responds to the stretching of a muscle.

stretch reflex *n.* A reflex contraction of a muscle in response to sudden stretching, controlled by a reflex arc involving just one sensory nerve fibre from a *muscle spindle and one motor neuron. Numerous stretch reflexes help to maintain posture against gravitational and other forces, and *deep tendon reflexes are special examples of stretch reflexes. Also called a *myostatic reflex*. *See also* MONOSYNAPTIC REFLEX, REFLEX.

striate cortex *n.* Another name for the *primary visual cortex (Area V1), showing in cross-section alternating bands of *white matter and *grey matter unrelated to the striped *ocular-dominance columns and *orientation columns that are made visible only by special staining procedures. Often confused with the corpus striatum and the striatum. [From Latin *striatus* streaked, from *stria* a furrow or a flute of a column]

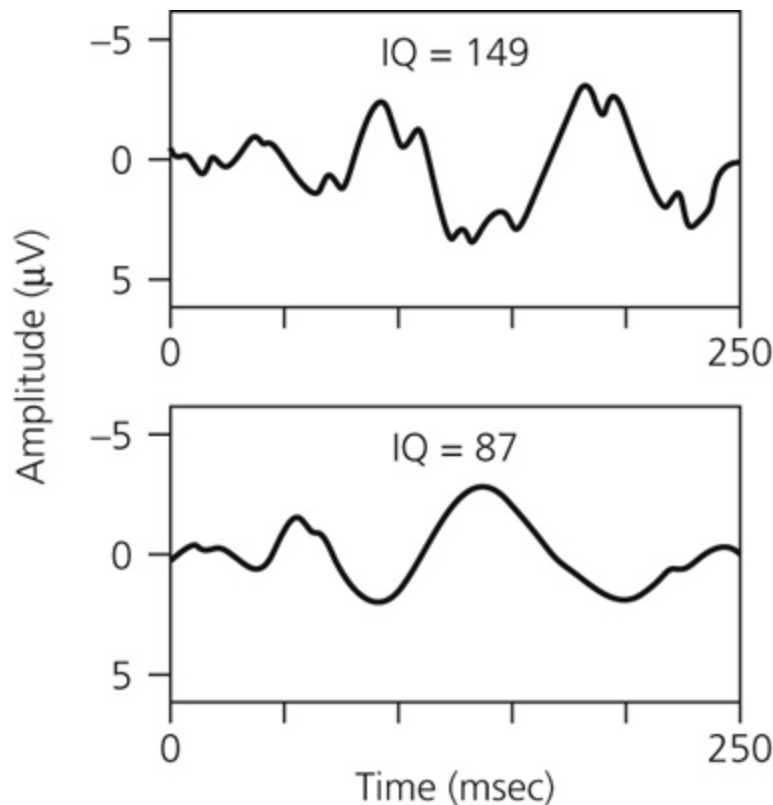
striated muscle *n.* Another name for a *striped muscle. [From Latin *striatus* streaked, from *stria* a furrow or a flute of a column]

*****ebook converter DEMO Watermarks*****

striatum *n.* A large mass of striped white and grey matter of the ***forebrain** or prosencephalon in front of and around the thalamus in each cerebral hemisphere, the afferent part of the basal ganglia, mainly involved in movement planning and control and habit formation. It includes the ***putamen** (connected mainly to the primary ***somatosensory cortex**, the primary ***motor cortex**, and the supplementary motor area) and the ***caudate nucleus** (connected to widespread cortical ***association areas**). Often confused with the corpus striatum, of which it is a part, or the striate cortex, to which it is unrelated. Also called the *neostriatum*. [From Latin *striatus* streaked, from *stria* a furrow, groove, or a flute of a column]

strictly competitive game *n.* A two-person ***zero-sum game**.

string length *n.* A measure of the complexity of an ***average** evoked potential or an ***event-related potential** corresponding to the length of a piece of string laid over a trace of the waveform, a longer string being required for a trace with many high-amplitude deviations from the baseline than for one with few lower-amplitude deviations in the first 250 or 500 ms following onset of the signal. The concept was introduced in 1980 in an article in the journal *Personality and Individual Differences* by the British psychologist Alan E(iner) Hendrickson (born 1936) and the US-born psychologist Donna E(laine) Hendrickson (born 1937), who found a correlation of .72 between string length and Wechsler ***IQ** in a sample of school children (see **illustration**), but hopes that this might provide a truly ***culture-free** measure of ***intelligence** were dashed by subsequent research, which failed to replicate this result. Compare **n140**, **p200**.



String length. Typical evoked potentials from a person with a high IQ (top) and a person with a low IQ (bottom).

string variable *n.* In statistics and measurement theory, any **variable* whose values contain letters or other characters instead of or in addition to numbers. Also called an *alphanumeric variable*. Compare [NUMERIC VARIABLE](#).

striped muscle *n.* Any voluntary muscle, capable of fast contraction, composed of long **myofibrils* that have many nuclei and are transversely striped by alternating bands of **myosin* and **actin*, including all **skeletal muscles*. Also **cardiac muscle*, which is striped but is exceptional in being involuntary. Also called *striated muscle* or *voluntary muscle* (excluding cardiac muscle). Compare [SMOOTH MUSCLE](#).

stroboscope *n.* A device that produces a bright, flashing light, the frequency of which can be synchronized with the frequency, or a multiple of the frequency, of rotation, vibration, or other movement of an object such as a piece of machinery, making it appear stationary and allowing it to be

*****ebook converter DEMO Watermarks*****

inspected in operation. It is also used as a form of illumination in nightclubs and discotheques. Also called a *strobe* or a *strobe light*. See also [ALIASING](#), [WAGON WHEEL ILLUSION](#). **stroboscopic** *adj.* [From Greek *strobos* a whirling + *skopein* to view]

stroboscopic movement *n.* Another name for [*beta movement](#).

stroke *n.* A blockage or (in about 20 per cent of cases) a haemorrhage of blood vessels in the brain, leading to a decreased supply of oxygenated blood to brain tissues normally perfused with blood by those vessels, lasting for more than 24 hours if the patient survives. The consequences depend on the site and extent of the stroke but often include [*paralysis](#) (especially [*hemiplegia](#) on the side of the body opposite the stroke), [*homonymous hemianopia](#), [*amnesia](#), [*aphasia](#), [*agraphia](#), [*convulsions](#), or [*coma](#). Also called *cerebrovascular accident* or *CVA*. See also [ANEURYSM](#), [FAST](#), [INTERNAL CAPSULE](#). Compare [TRANSIENT ISCHAEMIC ATTACK \(TIA\)](#).

strong AI *n.* An interpretation of [*artificial intelligence](#) according to which all thinking is computation, from which it follows that conscious thought can be explained in terms of computational principles, and that feelings of conscious awareness are evoked merely by certain computations carried out by the brain or (in principle at least) by a computer. A debatable implication of this view is that a computer that can pass the [*Turing test](#) must be acknowledged to be conscious. Also called *hard AI*. See also [CHINESE ROOM](#), [GÖDEL'S THEOREM](#). Compare [WEAK AI](#).

Strong–Campbell Interest Inventory *n.* The revised version of the [*Strong Interest Inventory](#), first published in 1974, widely used in career counselling. It was revised several times, incorporating the [*Holland codes](#) and the associated [*Self-Directed Search test](#). Named after the US psychologists David P. Campbell (born 1934) who revised it and Edward Kellogg Strong Jr (1884–1963) who devised the original versions in 1927 and 1938. See also [STRONG INTEREST INVENTORY](#). **SCII** *abbrev.*

Strong Interest Inventory *n.* The revised version of the [*Strong Vocational Interest Blank](#), an [*occupational interest inventory](#), unified for men and women, comprising 317 items, each with the [*response](#) categories

*****ebook converter DEMO Watermarks*****

Like/Indifferent/Dislike or *Yes/?/No*. Since its 1974 revision it has been called the **Strong–Campbell Interest Inventory (SCII)*. **SII** abbrev. [Named after the US psychologist Edward Kellogg Strong Jr (1884–1963)]

Strong Vocational Interest Blank *n.* One of the first widely used **occupational interest inventories*, constructed by the US psychologist Edward Kellogg Strong Jr (1884–1963) and published commercially in a version for men in 1927 and a version for women in 1938. The revised version was called the **Strong Interest Inventory*. **SVIB** abbrev.

Stroop effect *n.* Delay and disruption in naming the colours of words printed in non-matching coloured ink, as when the word *red* is printed in blue ink, the word *blue* in green ink, and so on. To perform the task it is necessary to ignore the meanings of the printed words and to respond only to the colours in which they are printed, but with experienced adult readers **automatic processing* tends to occur, causing interference in the processing of information and a significant (approximately 75 per cent) increase in the time required to name the colours, compared with the time taken to name the colours of meaningless strings of letters, and the effect cannot be suppressed voluntarily. The delay and disruption occur when naming the colours, but not when reading the words. This phenomenon provides a remarkable example of **top-down processing* and knowledge acting as a handicap: a person who could not read the words, through illiteracy or lack of knowledge of the language, for example, would not be slowed down. A commercial test of neuropsychological functioning based on this phenomenon is called the *Stroop Neuropsychological Screening Test (SNST)*. A simple demonstration of it can be constructed with a colour printer, or even with coloured pens. Prepare a page of colour names, such as *red*, *green*, *blue*, and *black*, in random order, each name printed in one of those colours at random, and then prepare another sheet, identical apart from the fact that the colour names are changed to nonsense words by moving each letter forward one place in the alphabet, so that *red* becomes *sfe*, and so on; then ask people to name all the colours in which the words are printed as quickly as possible, and compare the average times for the two sheets. *Compare* **FLANKER COMPATIBILITY EFFECT**, **SIMON EFFECT**. [Named after the US psychologist J(ohn) Ridley Stroop (1897–1973) who first reported the effect in the *Journal of Experimental Psychology* in 1935]

structural equation *n.* An equation representing the strengths of hypothesized relations among a set of **variables* in a formal **model*.

structural equation modelling *n.* The construction of statistical models out of **structural equations*. US *structural equation modeling*. See also ANALYSIS OF COVARIANCE STRUCTURES, PATH DIAGRAM. **SEM** *abbrev.*

structural gene *n.* A **gene* specifying an **amino acid* sequence of a **protein* that is used for building body cells. Compare REGULATOR GENE.

structuralism *n.* **1.** An approach to linguistics, textual analysis, social anthropology, and psychology, inspired by the Swiss linguist Ferdinand de Saussure's (1857–1913) *Course in General Linguistics* (1916) and associated especially with the writings of the French anthropologist Claude Lévi-Strauss (1908–2009) and the Swiss psychologist Jean Piaget (1896–1980), in which systems are analysed according to relations (such as equivalence and contrast) between their elements in order to determine the underlying structures below the surface manifestations of phenomena, and elements cannot be understood apart from their interrelations, because it is the network of interrelations that constitutes the meaningful structure of a system. See also DECONSTRUCTION. **2.** A school of psychology, founded originally on the German psychologist Wilhelm (Max) Wundt's (1832–1920) book *Outlines of Psychology* (1896) and Edward Bradford Titchener's (1867–1927) book *An Outline of Psychology* (1896), devoted to studying mental experience by analysing its elements, notably sensations, but also ideas (images of memory and imagination), and feelings, their properties, and the way they combine with one another, using controlled methods of **introspection*. Structuralism (in this sense) went into decline in Germany with the advent of Nazism in the 1930s and disappeared from US psychology shortly after Titchener's death in 1927. See also ACT PSYCHOLOGY, CONTENT PSYCHOLOGY, INTROSPECTIONISM, WÜRZBURG SCHOOL. **structuralist** *adj. n.* Of or relating to structuralism; a member or follower of the school of structuralism (2), or one who advocates or practises structuralism (1, 2).

structure from motion *n.* The process whereby the three-dimensional shape of an object is perceived by viewing it from different angles as it moves or the vantage point changes. Also called *depth from motion*. See also *****ebook converter DEMO Watermarks*****

KINETIC DEPTH EFFECT. **SFM** *abbrev.*

structure-of-intellect model *n.* Another name for **Guilford's cube*. **SOI** *abbrev.*

strychnine *n.* A highly poisonous **alkaloid* drug derived from the seeds of the *Strychnos nux-vomica* plant, in small doses functioning as a central nervous system **stimulant*, exciting especially spinal reflexes, and sometimes being added to street drugs. It acts by binding to the neuroreceptor sites on **alpha motor neurons* to which **glycine* molecules normally bind, causing **convulsions*. It has been used, probably inappropriately, as an antidote for the respiratory and cardiovascular depression that occurs with barbiturate or anaesthetic poisoning. *Compare* *CURARE*, *PICROTOXIN*, *TETANUS TOXIN*. [From Greek *Strychnos* nightshade]

Student–Newman–Keuls procedure *n.* Another name for the **Newman–Keuls test*. [Named after Student, the pen name of the English statistician William Sealy Gosset (1876–1937) who published a statistic that is used in the test in 1908, the English statistician Dennis Newman (1916–88) who published a preliminary article on the test in the journal *Biometrika* in 1939, and the Dutch horticulturist Matthijs Keuls who developed it further in an article in the journal *Euphytica* in 1952]

Student's t test *n.* The full name for the **t test*. Although it was developed by Student (see *STUDENT–NEWMAN–KEULS PROCEDURE*), it was later developed and modified by the English statistician Karl Pearson (1857–1936).

Study of Values *See* *ALLPORT–VERNON–LINDZEY STUDY OF VALUES*.

stupor *n.* A state of **lethargy* and unresponsiveness with immobility and **mutism*. [From Latin *stupor* numbness, torpor, or senselessness]

stuttering *n.* An informal term for **childhood-onset fluency disorder*. Also called *stammering*. **stutter** *vb.*

stylometrics *n.* Another name for **stylostatics*.

stylostatics *n.* The objective analysis of the relative frequencies of stylistic forms and patterns in the use of language, especially written texts. In practice, stylostatical studies have focused on the frequency and distribution of a small number of stylistic features, such as parts of speech, the **type–token ratio*, the size and diversity of the author's **lexicon* (2), the lengths of words and sentences, the author's preference between alternatives such as *on* versus *upon* and *while* versus *whilst*, rare and idiosyncratic constructions and usages. Stylostatics has been used to settle issues of disputed authorship, and it has important applications in **forensic linguistics*. Also called *stylometrics*. See also APPROXIMATION TO LANGUAGE, HAPAX LEGOMENON.

stylostixis *n.* Another name for **acupuncture*. [From Greek *stylos* a pointed instrument + *stixis* a mark or spot]

subarachnoid *adj.* Below the **arachnoid membrane*, in the space between it and the **pia mater*. See also SUBARACHNOID HAEMORRHAGE. [From Latin *sub* under + *arachne* a spider, alluding to the membrane's delicate weblike structure]

subarachnoid haemorrhage *n.* Bleeding into the space between the **arachnoid membrane* and the **pia mater* and sometimes into the brain itself. The first symptom is a blinding headache that is initially highly localized and then spreads, followed rapidly by dizziness, rigidity of the neck, unequal pupil dilation, nausea, drowsiness, sweating, coma, and in the absence of urgent treatment death within hours or days. US *subarachnoid hemorrhage*. **SaH** *abbrev.*

subception *n.* Another name for **subliminal* perception. [A blend of *sub(liminal)* + (*per*)ception]

subcoerulear nucleus *n.* A cluster of neurons adjacent to the **locus coeruleus* on either side of the **pons*, involved in **REM atonia*. Also spelt *subcerulear nucleus*. See also MAGNOCELLULAR NUCLEUS.

subconscious *adj.* 1. Operating or existing outside of **consciousness*. *n.* 2. In **psychoanalysis*, a term used by Sigmund Freud (1856–1939) in a few very early publications to denote the **unconscious* (2) but quickly abandoned because of its ambiguity. When it is used as a noun, it is usually another name for the **preconscious*, but this is avoided in careful usage.

subcortical *adj.* Located beneath or below the **cerebral* cortex, of or relating to structures or processes in the nervous system below the level of the cerebral cortex. [From Latin *sub* under + *cortex* bark or outer layer + *-icalis* of, relating to, or resembling]

subdural *adj.* Below the **dura mater*, between it and the **arachnoid membrane*. [From Latin *sub* under + *dura mater* hard mother, a literal translation of the Arabic name of the brain's outer membrane]

subdural haematoma *n.* **Subdural* bleeding, creating a blood-filled space between the normally contiguous **dura mater* and **arachnoid membrane*, usually caused by a blow to the head or, especially in old people, by **cerebral arteriosclerosis*, leading to various signs and symptoms including headaches, personality changes, convulsions, coma, and sometimes death. US *subdural hematoma*. [From Greek *haima*, *haimatos* blood + *-oma* indicating an abnormality]

subfornical organ *n.* A small structure below the **fornix* containing neurons that respond to the presence of **angiotensin II* in the blood by exciting neural circuits that tend to initiate drinking. It is one of the **circumventricular organs*. **SFO** *abbrev.*

subiculum *n.* A part of the hippocampal formation (see *HIPPOCAMPUS*) that is situated immediately below **Ammon's horn* (the hippocampus proper) between the dentate gyrus and the entorhinal cortex and that projects to the entorhinal cortex and the fornix. [From Latin *subicio* to lie under]

subitize *vb.* To perceive the number of items in a group without counting them. The maximum number of items that can be subitized under normal circumstances is about six, but **chunking* can sometimes increase the number

substantially. The word was coined by the US psychologist Edna L. Kaufman (1925–2005) and several co-authors in an article in the *American Journal of Psychology* in 1949. See also [ICONIC STORE](#), [MAGICAL NUMBER SEVEN](#), [SPAN OF APPREHENSION](#). **subitization** *n.* [From Latin *subitus* sudden, from *sub* below + *ire* to go + *-izare* to cause to become]

subjective colour *n.* A colour that is perceived in an [*achromatic](#) (1) stimulus. US *subjective color*. See [BENHAM'S TOP](#), [PATTERN-INDUCED FLICKER COLOUR](#).

subjective contour *n.* Another name for an [*illusory contour](#).

subjective equality See [POINT OF SUBJECTIVE EQUALITY](#).

subjective expected utility *n.* The [*expected utility](#) of an event or outcome calculated from subjective probabilities rather than from objective probabilities based on relative frequencies of observable events. **SEU** *abbrev.*

subjective expected utility theory *n.* A theory of decision making according to which a decision maker chooses an alternative or [*strategy](#) (2) that maximizes [*subjective expected utility](#). It was introduced by the US decision theorist Leonard J(immie) Savage (1917–71) in his book *The Foundations of Statistics* (1954), and in the same year it was named and first studied empirically by the US psychologist Ward (Denis) Edwards (1927–2005). See also [ALLAIS PARADOX](#), [BEHAVIOURAL DECISION THEORY](#), [COMMON RATIO EFFECT](#), [ELLSBERG PARADOX](#), [MODIFIED ELLSBERG PARADOX](#), [ST PETERSBURG PARADOX](#). Compare [EXPECTED UTILITY THEORY](#), [PROSPECT THEORY](#), [UTILITY THEORY](#).

subjective probability *n.* Probability defined in terms of degree of belief rather than relative frequency of events (as in the classical interpretation of probability), widely used in [*Bayesian inference](#), in which [*prior probabilities](#) (2) and [*posterior probabilities](#) are often interpreted as degrees of belief, and in [*subjective expected utility theory](#). See also [PROSPECT THEORY](#), [SUBJECTIVE EXPECTED UTILITY](#), [TAXICAB PROBLEM](#), [WELLS EFFECT](#).

subjective utility *n.* The [*utility](#) (1) of an outcome or an event

expressed in terms of an individual's personal judgement or degree of satisfaction rather than by **revealed preference*. See also [SUBJECTIVE EXPECTED UTILITY](#), [SUBJECTIVE EXPECTED UTILITY THEORY](#).

subjective well-being *n.* People's assessment of the overall quality of their lives. Research in **positive psychology* has revealed that, within any given nation, there is only a weak and unreliable correlation between income and subjective well-being, but between nations there is a strong correlation between average income and average subjective well-being, and rising income does not always increase subjective well-being. It is substantially determined by genetic inheritance and is strongly associated with health and longevity. See [EUDAIMONIC WELL-BEING](#), [HEDONIC TREADMILL](#), [HEDONIC WELL-BEING](#). See also [EMERGENESIS](#). **SWB** *abbrev.*

subject (research or experimental) *n.* A person or other organism whose behaviour or mental experience is investigated in a research study. Also called a research or experimental *participant* or *volunteer*. [From Latin *subiectus* thrown under, from *sub* under + *iacere* to throw]

subjunctive conditional *n.* A conditional statement or proposition (of the form *If p, then q*) in which both *p* and *q* are hypothetical. See [CONDITIONAL REASONING](#).

sublimation *n.* In **psychoanalysis*, a **defence mechanism* whereby a repressed or unconscious drive that is denied gratification is diverted into a more acceptable channel or form of expression, as when aggression is diverted into playing or watching violent sports or when **libido* is diverted into artistic or creative activity. Sigmund Freud (1856–1939), in his book *Civilization and its Discontents* (1930, *Standard Edition*, XXI, pp. 64–145), attributed the highest expressions of civilization to the sublimation of the sexual instinct. [From Latin *sublimare* to elevate, from *sublimis* lofty]

subliminal *adj.* Occurring without conscious awareness or below the **absolute threshold*. See also [SUBLIMINAL PERCEPTION](#). Compare [SUPRALIMINAL](#). **subliminally** *adv.* [From Latin *sub* below + *limen* a threshold + *-al(is)* of or relating to]

subliminal perception *n.* *Preconscious processing of stimuli below the intensity or duration of the *absolute threshold and therefore not eliciting conscious perception. It has been shown to occur for all sense modalities, and has been established experimentally by presenting stimuli of sufficiently low intensity or short duration as to be sub-threshold, and by *masking. Alarm was raised about subliminal advertising by the best-selling book *The Hidden Persuaders* (1957) by the US journalist Vance (Oakley) Packard (1914–96) and the essay *Brave New World Revisited* (1959) by the English novelist and essayist Aldous (Leonard) Huxley (1894–1963). Packard referred to a newspaper report in *The Times*: ‘It cited the case of a cinema in New Jersey that it said was flashing ice-cream ads onto the screen during regular showings of film. These flashes of message were split-second, too short for people in the audience to recognize them consciously but still long enough to be absorbed unconsciously. A result, it reported, was a clear and otherwise unaccountable boost in ice-cream sales’ (pp. 42–3). In 1957 the *New Yorker* magazine (21 September, p. 21) and the *Nation* magazine (5 October, p. 206) reported that the *motivational research practitioner James M(cDonald) Vicary (1915–77) had carried out an experiment in a New Jersey cinema in which the messages *Drink Coca-Cola* and *Eat popcorn* (not ice-cream) had been flashed subliminally on alternate evenings and the sales of these products during the intervals had reportedly risen by 18 per cent and 58 per cent respectively. However, Vicary admitted later that he had never actually carried out these experiments (*Advertising Age*, September 17, 1984, pp. 72–3, and October 15, 1984, p. 46); in any event, the reported exposure time of 1/3,000 second was far too short to produce subliminal perception, and attempts to replicate the effect have uniformly failed. Research has shown that subliminal messages have only limited power to influence behaviour, and ‘subliminal auditory tapes’ that are marketed as a means of boosting IQ or helping people to lose weight, give up smoking, or achieve other self-help goals have proved ineffective when studied objectively. Also called *subception*. See also POETZL PHENOMENON.

sublingual gland See SALIVARY GLAND.

submaxillary gland See SALIVARY GLAND.

submissive behaviour *n.* A form of *display (1) in which an animal
*****ebook converter DEMO Watermarks*****

that loses a fight, whether an **escalated fight* or a **conventional fight*, adopts a submissive posture to acknowledge defeat and to deter further attack. Human equivalents include **gestures (1)* of **non-verbal communication* such as holding up one's empty palms to communicate 'I give up'. US *submissive behavior*. See also *EMBLEM*.

Suboxone *n.* A proprietary name for the drug containing **buprenorphine* and **naloxone*. [Trademark]

subspecies *n.* In biology, a **taxonomic* group into which a **species* is divided, containing organisms that are genetically differentiable from other members of the same species by the relative frequencies of their **polymorphic genes*. Also called a *microspecies*, *race*, or *variety*.

substance abuse *n.* A maladaptive use of a **drug*, resulting in impairment of functioning or distress, as manifested by: a failure to perform adequately at home, school, or work; repeated drug use in dangerous circumstances, such as when driving or operating machinery; repeated police arrests; or serious marital or interpersonal problems caused or exacerbated by the drug use. Preferred usage *substance misuse*. See also *ADDICTION*, *DEPENDENCE (2)*, *PSYCHOPHARMACOLOGY*, *SUBSTANCE DEPENDENCE*, *SUBSTANCE-INDUCED DISORDERS*, *SUBSTANCE-RELATED AND ADDICTIVE DISORDERS*, *SUBSTANCE USE DISORDERS*.

substance dependence *n.* One of the major **substance use disorders*, characterized by a maladaptive pattern of substance use leading to clinically significant impairment or distress, manifested by signs and symptoms such as **tolerance (3)*, **withdrawal*, frequently taking larger amounts of the substance over a longer period than intended, persistent desire or effort to cut down on the substance use, excessive time spent on activities related to the substance use and its effects, often leading to the abandonment of social, occupational, or recreational activities, and continued substance use despite knowledge of problems likely to have been caused or exacerbated by it. See also *DEPENDENCE (2)*, *SUBSTANCE-RELATED AND ADDICTIVE DISORDERS*.

substance-induced disorders *n.* A class of **substance-related and addictive disorders* in **DSM-5* including **substance intoxication*, **substance*

*****ebook converter DEMO Watermarks*****

withdrawal, and substance-induced forms of **delirium*, persisting **dementia*, persisting **amnesic disorder*, **psychotic (1) disorders*, **mood disorders*, **anxiety disorders*, **sexual dysfunctions*, and **sleep–wake disorders*. Compare SUBSTANCE USE DISORDERS.

substance-induced persisting amnesic disorder See AMNESTIC DISORDER.

substance intoxication *n.* A condition following administration of a **psychoactive* substance or **drug* resulting in disturbances of **consciousness*, **cognition*, **perception*, **affect*, or **behaviour*. [From Latin *intoxicare* to poison, from *in* in + *toxicum* poison + *-ation* indicating a process or condition]

substance intoxication delirium *n.* A form of **delirium* associated with evidence from the case history, physical examination, or laboratory findings that the disturbance of **consciousness* and change in **cognition* developed during **substance intoxication* or as a consequence of medication.

substance/medication-induced disorder *n.* A term introduced in **DSM-5* to cover **substance/medication-induced psychotic disorder* and also the following disorders, when there is evidence that they are substance/medication-induced: **anxiety disorders*, **bipolar disorders*, **depressive disorders*, **neurocognitive disorders*, **obsessive–compulsive disorder*, **sexual dysfunctions*, and **sleep disorders*. See also **SUBSTANCE INTOXICATION*, **SUBSTANCE WITHDRAWAL*.

substance/medication-induced psychotic disorder *n.* In **DSM-5*, a disorder characterized by **hallucinations* and/or **delusions* that developed during or shortly after **substance intoxication* or **withdrawal* or ingestion of medication capable of producing the symptoms. Compare SUBSTANCE ABUSE, SUBSTANCE DEPENDENCE, SUBSTANCE-INDUCED DISORDERS, SUBSTANCE INTOXICATION, SUBSTANCE INTOXICATION DELIRIUM, SUBSTANCE-RELATED AND ADDICTIVE DISORDERS.

substance P *n.* An 11-member **peptide* that is present in the brain, spinal cord, and peripheral nervous system and that functions as a
*****ebook converter DEMO Watermarks*****

***neurotransmitter**, carrying afferent ***pain** signals, responding to painful stimuli by causing smooth muscles to contract, blood vessels to dilate, and mast cells to release ***histamine**. It is released by ***free nerve endings** after painful stimulation results in transmission of impulses not only in the normal ***orthodromic** direction to the central nervous system but also from points of bifurcation of their axons in the ***antidromic** direction into the neighbouring skin, where the nerve endings respond by releasing substance P. *See also* **AXON REFLEX**, **CAPSAICIN**. [From *substance* + German *P(ulver)* powder, from Latin *pulvis* dust, sand, or ashes, because it was first extracted in 1931 as a powder]

substance-related and addictive disorders *n.* A class of ***mental disorders** resulting from ***drug** use (including alcohol), ***side-effects** of medication, or exposure to toxins, or gambling. The following substances and groups of substances are specifically discussed in ***DSM-5**: ***alcohol**, ***caffeine**, ***cannabis**, ***inhalants**, ***phencyclidine**, other ***hallucinogens**, ***opiates**, ***sedatives**, ***hypnotics**, ***anxiolytics**, ***stimulant drugs**, and tobacco. However, many other substances, including heavy metals, rat poisons containing strychnine, carbon monoxide, and carbon dioxide can also lead to substance-related disorders. *See* **ALCOHOL-RELATED DISORDERS**, **AMPHETAMINE-RELATED DISORDERS**, **CAFFEINE-RELATED DISORDERS**, **CANNABIS-RELATED DISORDERS**, **COCAINE-RELATED DISORDERS**, **GAMBLING DISORDER**, **HALLUCINOGEN-RELATED DISORDERS**, **INHALANT-RELATED DISORDERS**, **NICOTINE-RELATED DISORDERS**, **OPIOID-RELATED DISORDERS**, **PHENCYCLIDINE-RELATED DISORDERS**, **SEDATIVE-, HYPNOTIC-, OR ANXIOLYTIC-RELATED DISORDERS**. *See also* **SUBSTANCE-INDUCED DISORDERS**, **SUBSTANCE USE DISORDERS**.

substance use disorders *n.* A class of ***substance-related and addictive disorders** in ***DSM-5**. *See* **SUBSTANCE ABUSE**, **SUBSTANCE DEPENDENCE**, **SUBSTANCE-RELATED AND ADDICTIVE DISORDERS**. *Compare* **SUBSTANCE-INDUCED DISORDERS**.

substance withdrawal *See* **WITHDRAWAL**.

substance withdrawal delirium *n.* A form of ***delirium** associated with evidence from the case history, physical examination, or laboratory findings that the disturbance of consciousness and change in cognition

*****ebook converter DEMO Watermarks*****

developed during, or shortly after, an episode of **withdrawal*.

substantia alba *n.* The technical name for the **white matter* of the brain and spinal cord. [From Latin *substantia* matter + *alba* white]

substantia gelatinosa *n.* Areas of **grey matter* in the **posterior* horns of the spinal cord, playing a part in **pain* and temperature perception. They are packed with excitatory **interneurons*, the **neurotransmitter* of which is **glutamate*, and inhibitory interneurons, the neurotransmitter of which is either **GABA* for some interneurons or the endogenous opioid **enkephalin* for others. [From Latin *substantia* matter + *gelatina* gelatine, from *gelare* to freeze, alluding to its consistency]

substantia grisea *n.* The technical name for the **grey matter* of the brain and spinal cord. [From Latin *substantia* matter + *grisea* grey]

substantia nigra *n.* One of the **basal ganglia*, implicated in motor control. It is a dark, pigmented area in the midbrain, just below the thalamus, containing neurons that synthesize and release **dopamine* and project primarily to the striatum. Lesions in this area are associated with **Parkinson's disease*. See also *MPP⁺*. [From Latin *substantia* matter + *nigra* black]

substantive *n.* 1. Either a noun or some other word (often a pronoun) standing in place of a noun. *adj.* 2. Of or relating to a word that is a substantive (1). 3. Of or relating to one of the classes of linguistic universals. See *SUBSTANTIVE UNIVERSALS*. [From Latin *substantia* substance, from *sub* under + *stare* to stand + *-ivus* indicating a tendency, inclination, or quality]

substantive universals *n.* One of the classes of **linguistic universals*, consisting of the fundamental building blocks of languages, examples being the apparent existence in all languages of nouns and of vowels.

substitute formation *n.* In **psychoanalysis*, the appearance of a **symptom*, **parapraxis*, or other psychological phenomenon that functions as a proxy or surrogate for an unconscious wish or idea following a process of **substitution*. See also *CHOICE OF NEUROSIS*, *COMPROMISE FORMATION*, *RETURN OF*

substitution *n.* The act or process of putting one thing in place of another. In **psychoanalysis*, a **defence mechanism* whereby an unattainable or unacceptable **instinctual object* or **emotion* is replaced by one that is more accessible or tolerable, resulting in **substitute formation*.

substitution test *n.* Another name for a **coding test*.

subthalamic fasciculus *n.* The small bundle of nerve fibres between the **subthalamic nucleus* and the **globus pallidus*.

subthalamic nucleus *n.* A structure belonging to the **basal ganglia*, situated between each of the cerebral peduncles and one of the mammillary bodies, interconnected primarily with the **globus pallidus*, functioning as a correlation centre for optical and vestibular impulses. See also *BALLISM*, *HEMIBALLISM*, *JACTATION*.

subthreshold *adj.* 1. Insufficient to evoke a **response*. 2. Another word for **subliminal*.

subtraction method *n.* A technique for estimating the duration of a psychological process by measuring the **reaction time* for a task that incorporates the psychological process in question, and the reaction time for a task that does not incorporate it, and then subtracting the second from the first. It was introduced by the Dutch ophthalmologist Franciscus Cornelius Donders (1818–89) in his work on simple reaction time and choice reaction time, published in the *Archives of Anatomy and Physiology* in 1868. Also called the *subtractive method* or *Donders' method*.

subtractive colour mixture *n.* A colour formed from the absorption of light by **subtractive primary* colorants, or the process of forming such a colour. US *subtractive color mixture*. See also *COLOUR MIXING*. Compare *ADDITIVE COLOUR MIXTURE*.

subtractive primary *n.* Any of the colorants blue–green (cyan), deep

purplish red (magenta), or yellow that can be subtracted from white light (usually by mixing pigments) to match any other spectral colour. They are the **complementary colours* of red, green, and blue respectively. Also called a *primary colour*, though that term is ambiguous. *See also* PRIMARY COLOUR (2). *Compare* ADDITIVE PRIMARY, PSYCHOLOGICAL PRIMARY.

Subutex *n.* A proprietary name for the drug **buprenorphine*. [Trademark]

subvocal rehearsal loop *n.* One of the two components of the **phonological loop* of **working memory*, functioning to keep information from decaying by mental repetition, and also translating visual information into phonological code where necessary for **short-term memory*. Also called an *articulatory loop*, an *articulatory rehearsal loop*, or an *articulatory store*.

successive contrast *n.* The phenomenon whereby a sensation such as lightness, colour, or warmth tends to induce the opposite sensation in a stimulus that follows it. Successive warmth contrast can be demonstrated vividly by holding one's left hand in a bowl of cold water and one's right hand in a bowl of hot water for a minute and then transferring both hands to a bowl of lukewarm water, close to **physiological zero*; the lukewarm water feels hot to the left hand and cold to the right hand. This experiment was first alluded to somewhat obscurely in 1690 by the English philosopher John Locke (1632–1704) in his *Essay Concerning Human Understanding* (Book 2, Chapter 8, section 21), as an argument that some physical properties that can be sensed must be secondary rather than **primary qualities*, and in 1846 the experiment was described clearly and studied quantitatively by the German psychophysicist Ernst Heinrich Weber (1795–1878). *See* COLOUR CONTRAST, CONTRAST (2), LIGHTNESS CONTRAST, THERMAL ADAPTATION, WARMTH CONTRAST. *Compare* SIMULTANEOUS CONTRAST.

successive reproduction *n.* A technique for studying memory, popularized by the English psychologist Sir Frederic Charles Bartlett (1886–1969) in his book *Remembering: A Study in Experimental and Social Psychology* (1932, Chapter 5) in which a person reproduces learned material on a sequence of occasions over a period of time. Bartlett called it the *method of repeated reproduction*, and he used the technique to study **reconstructive memory*. The technique had been introduced by the Welsh schoolteacher

*****ebook converter DEMO Watermarks*****

Philip Boswood Ballard (1865–1950) in the *British Journal of Psychology Monograph Supplements* in 1913, although Bartlett did not cite this earlier work. See also [HYPERMNESIA](#), [REMINISCENCE \(2\)](#), [WAR OF THE GHOSTS](#). Compare [SERIAL REPRODUCTION](#).

success neurosis *n.* In [*psychoanalysis](#), a term introduced in 1950 by the Hungarian psychoanalyst Sándor Lorand (1892–1987) to denote the phenomenon whereby a person responds to success with guilt and self-reproach. The condition was first identified by Sigmund Freud (1856–1939) in an article in 1916 on ‘Some Character Types Met With in Psycho-Analytic Work’, where he described people who were ‘wrecked by success’ (*Standard Edition*, XIV, pp. 311–33, at p. 316). Compare [FATE NEUROSIS](#), [FEAR OF SUCCESS](#).

sudorific *adj.* Sweat-producing. [From Latin *sudor* sweat]

suffix effect See [AUDITORY SUFFIX EFFECT](#).

suggestibility *n.* A propensity to be abnormally compliant with suggestions, commands, directions, instructions, or orders from another person, as in [*hypnosis](#). See also [CHEVREUL PENDULUM](#). **suggestible** *adj.* [From Latin *suggerere* to suggest, from *sub* under + *gerere* to bring + *-ibilitas* capacity, from *habilis* able]

suicide *n.* The act of killing oneself deliberately. Approximately 15 per cent of people with [*major depressive disorder](#) or [*bipolar disorder](#) kill themselves each year, suicide being the tenth leading cause of death in the US according to official figures, which are widely believed to underestimate its incidence. The French sociologist Émile Durkheim (1858–1917), in his book *Suicide* (1897), used survey data purporting to show that egoistic suicide, resulting from feelings of self-reproach and sense of failure and more common among single than married people, arises from a lack of social cohesion; that altruistic suicide, carried out for the benefit of others and relatively common in Japan, arises from a sense of failure to society; and that anomic suicide, arising from a sense that life is pointless and rare among Catholics, arises from an absence of social norms that he called [*anomie](#). See also [DEPRESSION](#). Compare [PARASUICIDE](#). **suicidology** *n.* The study of suicide.

*****ebook converter DEMO Watermarks*****

[From Latin *sui* of oneself + *caedere* to kill]

sukra prameha See DHAT.

suk yeong See KORO.

sulcus *n.* Any of the grooves or furrows between the **gyri* or convolutions of the brain, such as the **calcarine sulcus*, **central sulcus*, **lateral sulcus*, **longitudinal fissure*, **parieto-occipital sulcus*, or **superior temporal sulcus*. Also called a *fissure*, especially when referring to one of the longer and deeper grooves. **sulci** *pl.* [From Latin *sulcus* a furrow]

sulcus principalis *n.* Another name for the **longitudinal fissure*.

sum *n.* In mathematics and statistics, a total arrived at by adding a set of numbers or scores together. [From Latin *summa* the top or total, from *summus* highest]

summated ratings *n.* The method used to construct a **Likert scale*.

summation tone *n.* A **combination tone* whose frequency is equal to the sum of the frequencies of the two tones generating it. Compare DIFFERENCE TONE.

sum of squares *n.* In statistics, a shortened expression for the sum of the squared deviations of a set of scores from their **arithmetic mean*, to be distinguished from the sum of the squared scores, the meaning usually being clear from the context. The mean of the sum of the squared deviations, called the *mean square*, is used as an estimate of **variance*.

sunk cost fallacy *n.* Another name for the **Concorde fallacy*, especially among decision theorists.

superaesthesia *n.* Another name for **hyperaesthesia*. US *superesthesia*.

superdominance *n.* Another name for **overdominance*.

*****ebook converter DEMO Watermarks*****

superego *n.* In **psychoanalysis*, one of the three components of the human mental apparatus according to Sigmund Freud (1856–1939), after he replaced the **topography* of the unconscious–preconscious–conscious by the structural model of id–ego–superego after 1920. The superego, which originates from a conflict between the **id* and the **ego* in the course of development, monitors and controls the ego like a judge or a censor. Freud introduced the concept in print for the first time in 1923 in his book *The Ego and the Id* (*Standard Edition*, XIX, pp. 12–66). In his later book *New Introductory Lectures on Psycho-Analysis* (1932/3), he described its three functions as being ‘of self-observation, of conscience and of the ideal’ (1933, *Standard Edition*, XXII, pp. 5–182, at p. 66), and in the following key passage he referred to its long-term effects: ‘Thus a child’s super-ego is in fact constructed on the model not of its parents but of its parents’ super-ego; the contents which fill it are the same and it becomes the vehicle of tradition and of all the time-resisting judgements of value which have propagated themselves in this manner from generation to generation’ (p. 67). In the same work Freud explained its formation in both boys and girls as a consequence of the process of overcoming the **Oedipus complex* (p. 129), and the superego is often described as the heir of the Oedipus complex. Some later theorists have claimed that its development occurs much earlier: the Hungarian psychoanalyst Sandor Ferenczi (1873–1933) argued in 1925 that prohibitions are internalized from the beginning of toilet training; the British-based Austrian psychoanalyst Melanie Klein (1882–1960) first claimed in 1933 that the superego develops during the **oral* stage; and the Austrian psychoanalyst René A(rpad) Spitz (1887–1974) argued in 1958 that it develops gradually during infancy and childhood through **identification* with the aggressor. Also spelt *super-ego*. See also *EGO IDEAL*, *SUPEREGO LACUNA*. [From German *Über-Ich* over-I, from *über* over or above + *ich* I, following the precedent of *ego*]

superego lacuna *n.* In **psychoanalysis*, a class of obviously immoral actions that are not forbidden by the **superego* of a particular person, especially a person with **psychopathy* or **antisocial personality disorder*. [From Latin *lacuna* a hollow or a cavity, from *lacus* a lake]

supergene *n.* A string of **genes* along a **chromosome* whose functions are generally unrelated but that tend to be inherited together because of their

*****ebook converter DEMO Watermarks*****

close proximity.

superior *adj.* Higher in any respect; towards the top of a body, organ, or part, or situated above another homologous structure. *Compare* **INFERIOR**. [From Latin *superior* higher, from *super* above]

superior colliculus *n.* Either of two small hillock-shaped bumps on the ***tectum** (the roof of the midbrain), above and in front of the inferior colliculi, receiving some optic tract nerve fibres that bypass the lateral geniculate nucleus, involved in processing spatial aspects of visual information and eye movements in the direction of visual attention. The four colliculi are collectively called the corpora quadrigemina. **superior colliculi** *pl.* [From Latin *superior* higher, from *super* above + *colliculus* a small hill from *collis* a hill]

superiority complex *n.* A non-technical name for ***grandiose ideas or actions** or a ***grandiose delusion**; more generally, an inflated estimate of one's own merit or importance.

superior longitudinal fasciculus *n.* A bundle of nerve fibres in each cerebral hemisphere linking the ***frontal lobe** to the ***occipital lobe**. *Compare* **INFERIOR LONGITUDINAL FASCICULUS**. [From Latin *superior* higher + *longitudo* length, from *longus* long + *fasciculus* a little bundle, diminutive of *fasculus* a bundle]

superior oblique muscle *n.* The upper of the two ***oblique muscles** attached externally to the eyeball.

superior olivary nucleus *n.* Either of two collections of neuron cell bodies that are situated just above the inferior olivary nuclei in the pons and that receive signals from the ***trapezoid bodies** and project to the ***inferior colliculi**. They contain binaural neurons responding to inputs from both ears, the inputs reaching the superior olivary nuclei after the trapezoid bodies have amplified the left-right differences, and they are implicated in ***sound localization** based on binaural differences in both timing and sound intensity. Also called the *superior olivary complex* or the *superior olive*. *Compare* **INFERIOR OLIVARY NUCLEUS**. **SON** *abbrev.* [So called because it is olive-shaped]

*****ebook converter DEMO Watermarks*****

and above the inferior olivary nuclei]

superior rectus *n.* The upper of the four **rectus muscles* attached externally to the eyeball.

superior temporal gyrus *n.* The top **gyrus* running horizontally on the lateral surface of the **temporal lobe*, a small part of which (**Heschl's gyrus*) is occupied by the primary auditory cortex. Also called the *temporal operculum*.

superior temporal sulcus *n.* The horizontal **sulcus* near the top of each **temporal lobe*, immediately below the superior temporal gyrus, believed to contain neurons that respond to visual images of faces. *See also* MIRROR NEURON. **STS** *abbrev.*

supernormal stimulus *n.* In ethology, an exaggerated **sign* stimulus that evokes a stronger **fixed-action pattern* than the normal sign stimulus. Thus, a yellow pencil with two red spots near its tip evokes even more pecking from a herring gull chick than its parent's bill, which is broader and has only one red spot.

supertaster *n.* A person whose tongue has far more **fungiform papillae* than usual and who therefore experiences **taste* sensations between twice and three times as intensely as normal tasters. About 25 per cent of people are supertasters, and they are more often women than men. They typically experience more intense likes and dislikes for foods and drinks than normal tasters. *See* MAGNITUDE MATCHING, PROPYLTHIOURACIL. [The term was introduced in 1990 by the US psychologist Linda M. Bartoshuk (born 1938) and became widely known after she used it in an article in the journal *Physiology & Behavior* in 1994.]

supertentorial *adj.* Of or relating to symptoms that are presumed to be psychological rather than physical in origin and nature. [From Latin *super* above + English *tentorium* the membrane separating the **cerebrum* from the **cerebellum*, from Latin *tentorium* a tent, from *tendere* to stretch + *-alis* of or relating to]

supervised analysis *n.* Another name for a **control analysis*.

supination *n.* Lying in a supine position (flat on one's back) or, if standing with one's hands at one's sides, turning the palms forwards. *Compare PRONATION.* [From Latin *supinus* lying on the back + *-ation* indicating a process or condition]

supplementary motor area *See MOTOR CORTEX. SMA abbrev.*

supplementary sensory area *n.* Another name for the somatosensory association area. *See SOMATOSENSORY CORTEX.*

suppression *n.* Deliberate banishing from consciousness of selected thoughts, feelings, wishes, or memories, as in **thought stopping*. In **psychoanalysis*, it is a **defence mechanism* in which emotional conflicts or **psychosocial stressors* are dealt with by deliberately eliminating them from **consciousness*. Unlike **repression*, it is a conscious process, and the eliminated material ends up in the **preconscious* rather than the **unconscious* (2). Sigmund Freud (1856–1939) discussed it in his book *The Interpretation of Dreams* (1900, *Standard Edition*, IV–V, at pp. 235–7, 606n).

suppression amblyopia *n.* Another name for **amblyopia* ex anopsia.

suprachiasmatic nucleus *n.* A collection of nerve cell bodies in each side of the **hypothalamus*, above the optic chiasm and immediately adjacent to the supraoptic nucleus, receiving visual information via an accessory optic tract and projecting to the **pineal gland*, involved in the regulation of **biological clocks* and the control of **biological rhythms*. **SCN** *abbrev.* [From Latin *supra* above + Greek *chiasma* a cross, named after the shape of the upper-case letter chi (X), so called because of its location above the optic chiasm]

supraliminal *adj.* Above the threshold of **consciousness* or **sensation*, and hence available in consciousness. *See also SUBLIMINAL PERCEPTION.* *Compare SUBLIMINAL.* **supraliminally** *adv.* [From Latin *supra* above + *limen* a

threshold + *-al(is)* of or relating to]

supranuclear palsy See [PROGRESSIVE SUPRANUCLEAR PALSY](#).

supraoptic nucleus *n.* A [*nucleus](#) (2) in each side of the [*hypothalamus](#), above the optic chiasm and immediately adjacent to the suprachiasmatic nucleus, with nerve fibres projecting to the [*posterior](#) pituitary. Its stimulation causes [*vasopressin](#) to be released by the posterior pituitary. [From Latin *supra* above + Greek *optikos* optic, from *optos* seen, alluding to the optic chiasm]

sure-thing principle *n.* A precept, first enunciated and named by the US decision theorist Leonard J(immie) Savage (1917–71) in his book *The Foundations of Statistics* (1954), according to which, if an alternative *A* is judged to be as good as another *B* in all possible states of the world and better than *B* in at least one, then a [*rational](#) decision maker will prefer *A* to *B*. Savage's illustration refers to a person deciding whether or not to buy a certain property shortly before a presidential election, the outcome of which could radically affect the property market. 'Seeing that he would buy in either event, he decides that he should buy, even though he does not know which event will obtain' (p. 21). This principle is accepted by virtually all decision theorists, although it appears counter-intuitive to some people in puzzles such as [*Newcomb's problem](#), the [*Prisoner's Dilemma game](#), and the [*N-person Prisoner's Dilemma](#). A sure-thing alternative in a decision or a game of strategy is a [*dominant alternative/strategy](#).

surface colour *n.* The appearance of colour when it is perceived as belonging to the surface of an object at a particular distance, with lines and/or edges present in the visual field. US *surface color*. Compare [FILM COLOUR](#).

surface dyslexia *n.* A form of [*dyslexia](#) characterized by an over-reliance on spelling-to-sound correspondences, making words whose spelling is irregular (such as *debt*, *busy*, and *yacht*) difficult or impossible to read. Also called *phonological reading*, *reading by sound*. See also [COGNITIVE NEUROPSYCHOLOGY](#). Compare [DEEP DYSLEXIA](#).

surface structure *n.* A representation of a sentence together with labels
*****ebook converter DEMO Watermarks*****

and brackets to indicate the sentence's syntactic structure. In a famous example given by the US linguist and philosopher (Avram) Noam Chomsky (born 1928), the sentences *John is eager to please* and *John is easy to please* have similar surface structures but completely different ***deep structures**, because the first involves John pleasing someone and the second John being pleased by someone. See also [TRANSFORMATIONAL GRAMMAR](#).

surgency *n.* Another name for ***extraversion**.

surprise examination paradox *n.* Another name for the ***unexpected hanging paradox**.

survey research *n.* Research methods for investigating the distribution of attitudes, opinions, mental disorders, and other characteristics of individuals in specific sections of a population, or in a whole population, often broken down into demographic groups defined by geographical location, ethnic identity, age, sex, social class, marital status, education, and similar criteria. Surveys designed to compare different cultures or subcultures are called ***cross-cultural surveys**. [From Latin *super* over + *videre* to see]

survival of the fittest *n.* An informal description of ***natural selection**, referring to the fact that the fittest organisms in the struggle for existence live longest and therefore transmit more of their genetic characteristics to future generations. [The phrase was coined not by Charles (Robert) Darwin (1809–82) but by the English philosopher Herbert Spencer (1820–1903) in his *Principles of Biology* (1864, part III, Chapter 12), though in the 6th and final edition of *Origin of Species*, Darwin changed the title of Chapter 4 from 'Natural Selection' to 'Natural Selection and the Survival of the Fittest']

survivor guilt *n.* A feeling of guilt for surviving a tragedy in which others died, often associated with a sense of having been partly responsible for what happened. See also [POST-TRAUMATIC STRESS DISORDER](#), [SURVIVOR SYNDROME](#).

survivor syndrome *n.* A term introduced by the US psychiatrist Robert Jay Lifton (born 1926) for a pattern of responses often seen in survivors of terrible ordeals, the most important symptoms being ***anhedonia**, chronic ***anxiety**, ***depression**, ***dyssomnias**, ***nightmares (1)**, and in many cases
*****ebook converter DEMO Watermarks*****

*survivor guilt.

sustained responder *n.* Any of the *photoreceptors in the retina that respond to continuous stimulation by light rather than to changes in light stimulation. *See also* SLOWLY ADAPTING. *Compare* TRANSIENT RESPONDER.

susto *n.* A *culture-bound syndrome found in Peru and other parts of Latin America and among Spanish-speaking communities in the United States and elsewhere, in which, following a frightening experience (sometimes weeks, months, or even years later), the soul is believed to have departed the body, resulting in symptoms such as *psychomotor agitation, *anorexia, *insomnia or *hypersomnia, *nightmares (1), and *depressed mood, together with somatic complaints such as muscle and joint pain, headaches, and diarrhoea. It is also called *espanto* (fright, terror), *tripa ida* (departing gut), *perdida del alma* (departure of the soul), or *fallen fontanel syndrome*. [Spanish *susto* fright or scare]

sweat gland *n.* An *exocrine gland consisting typically of a coiled epithelial tube that secretes perspiration through a pore on to the surface of the *skin, present in humans in nearly all parts of the body.

sweet *n.* One of the primary tastes in *Henning's tetrahedron, the characteristic taste of sugar or *aspartame.

SWOT analysis *n.* A method of auditing an organization, policy, practice, or procedure by listing its strengths (what works well), weaknesses (what works badly), opportunities (feasible improvements), and threats (potential problems and obstacles). Carrying out a SWOT analysis is a simple and easy method of identifying improvements that can usefully be made. [Coined by an unknown source in the US in the late 1960s, from the initial letters of strengths, weaknesses, opportunities, threats]

Sydenham's chorea *n.* A form of *chorea resulting from rheumatic fever, usually in children. Also called *chorea minor*, *rheumatic chorea*, *Saint Vitus' dance*. [Named after the English physician Thomas Sydenham (1624–89) who first identified it]

sylllogism *n.* A structured logical argument consisting of two assumed or given ***propositions** (1), functioning as ***premises**, and a third proposition, functioning as a *conclusion*, deduced from the premises. The premises each share a term in common with the conclusion and also a *middle term* with each other but not with the conclusion. There are 256 structurally distinct syllogisms, of which only 24 are valid. This syllogism is valid: *All men are mortal; No gods are mortal; Therefore no men are gods.* The following syllogism is invalid: *Some men are bald; some men like football; therefore some bald men like football.* Since the Greek philosopher Aristotle (384–322 BC) popularized this form of reasoning in his *Prior Analytics* and *Posterior Analytics*, virtually all syllogisms that have been discussed are ***categorical syllogisms**, but see **MODAL LOGIC**. See also **ATMOSPHERE HYPOTHESIS**, **BELIEF-BIAS EFFECT**, **CONVERSION HYPOTHESIS**, **DEDUCTIVE REASONING**, **LOGIC**, **MOOD** (3), **SORITES**, **VENN DIAGRAM**. **sylllogistic** *adj.* [From Greek *sylllogismos* a syllogism, from *syllogizesthai* to reckon together, from *syn* together + *logizesthai* to reckon or calculate, from *logos* word, discourse, or reason]

Sylvian aqueduct *n.* Another name for the ***cerebral** aqueduct. [Named after the French anatomist Sylvius (1478–1555), also called Jacques Dubois, who discovered it]

Sylvian fissure *n.* Another name for the ***lateral** sulcus. [Named after the Prussian physician Franciscus Sylvius (1614–72), also called Franz de le Boë, who apparently discovered it]

symbiosis *n.* A mutually beneficial relationship between two different species, especially between species living in close proximity to each other. **symbiotic** *adj.* [From Greek *syn* together + *bios* life + *-osis* indicating a process or state]

symbol–digit test *n.* Another name for a ***digit–symbol test**.

symbolic interactionism *n.* A theoretical approach in social psychology and sociology, stemming largely from the writings of the US social psychologist George Herbert Mead (1863–1931), in which people are assumed to respond to elements of their environments according to the

meanings they attach to those elements, such meanings being created and modified through social interaction involving symbolic communication with other people.

symbolic racism *See* MODERN RACISM.

symbolic representation *n.* A form of **knowledge* representation in which arbitrary symbols or structures are used to stand for the things that are represented, and the representations therefore do not resemble the things that they represent. Natural language (apart from onomatopoeic expressions) is the most familiar example of symbolic representation. Also called *propositional representation*. Compare ANALOGUE (2). [From Greek *symbolon* a token + *-ikos* of, relating to, or resembling]

symbolization *n.* In **psychoanalysis*, a **defence mechanism* whereby an unconscious idea is expressed in the form of a different idea, object, image, or concept, sometimes resulting in **symptom* formation.

symbol-substitution test *n.* Another name for a **coding test*.

Symmetrel *n.* A proprietary name for the dopamine agonist drug **amantadine*. [Trademark]

symmetry law *n.* A principle of **Gestalt* psychology according to which perceptions tend to assume forms that are as symmetrical as the sensory input allows. *See also* PRÄGNANZ.

sympathetic apraxia *n.* Another name for **unilateral limb apraxia*. *See also* APRAXIA.

sympathetic ganglionic chain *n.* A string of **ganglia* running down each side of the spinal cord throughout most of its length, containing cell bodies of neurons that belong to the **sympathetic nervous system* and that project axons to muscles and glands, controlling the smooth muscles of the blood vessels, eyelids, hair follicles, sweat, tear, and salivary glands, respiratory organs, irises, and also the heart and other organs. Also called the

chain ganglia or *sympathetic trunk*. [From Greek *syn* with + *pathos* suffering + *ganglion* a cystic tumour]

sympathetic nervous system *n.* One of the two major subdivisions of the **autonomic* nervous system, consisting of nerves originating from the cervical, thoracic, and lumbar regions of the spinal cord, supplying muscles and glands, concerned with general activation and mobilizing the body's fight or flight reaction to stress or perceived danger. It acts in opposition to and more diffusely than the **parasympathetic nervous system*, accelerating pulse rate, dilating the pupils of the eyes and preparing them for **far vision*, causing the sweat glands to secrete and urine to be retained, inhibiting the **smooth muscles* of the **alimentary* canal, diverting blood from the skin and intestines to the voluntary **striped muscles*, and activating the **adrenal gland* to secrete **adrenalin* (epinephrine) and **noradrenalin* (norepinephrine). See also *SYMPATHETIC GANGLIONIC CHAIN*. **SNS** *abbrev.* [From Greek *syn* with + *pathos* suffering]

sympathetic pregnancy *n.* Symptoms of pregnancy experienced by the male partner of a pregnant woman. A majority of men with pregnant partners feel at least some such symptoms. See also *COUVADE*, *PSEUDOCYESIS*.

sympathetic trunk *n.* Another name for a **sympathetic ganglionic chain*.

sympathin *n.* An obsolete name for **adrenalin*, introduced by the US physiologist Walter Bradford Cannon (1871–1945) and the Belgian radiobiologist and inventor Zénon M(arcel) Bacq (1903–83) in an article in the *American Journal of Physiology* in 1931: 'Because the substance is derived from structures under sympathetic control, when they are influenced by sympathetic impulses, we suggest that it be called sympathin' (p. 411).

sympatholytic *adj. n.* (Of, relating to, or having an effect similar to) a drug or other agent that acts against or inhibits the activity of the **sympathetic nervous system*. Compare *PARASYMPATHOLYTIC*, *SYMPATHOMIMETIC*. [From *sympathetic* + Greek *lysis* loosening + *-ikos* of, relating to, or resembling]

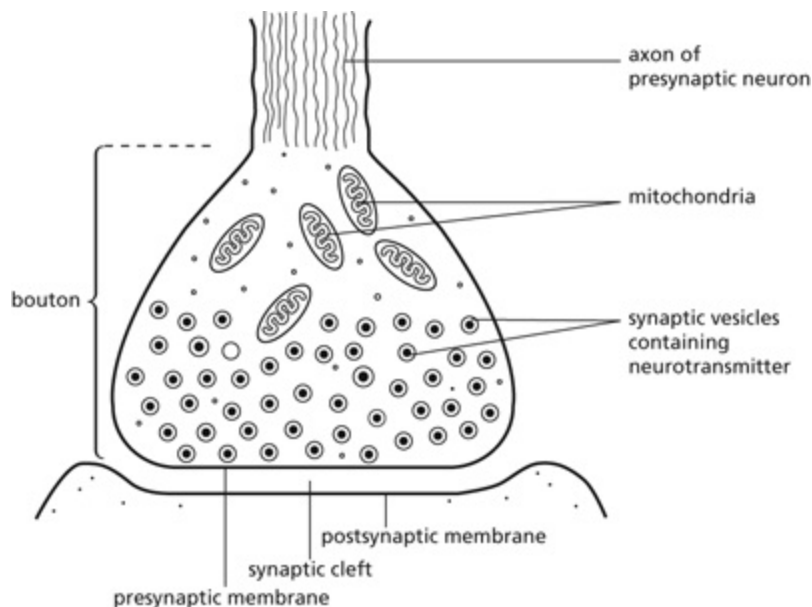
sympathomimetic *adj. n.* (Of, relating to, or having an effect similar to) any drug such as **amphetamine*, **cocaine*, **ephedrine*, **phenmetrazine*, **tyramine*, or **yohimbine* that mimics or increases the activity of **adrenalin* (epinephrine), **noradrenalin* (norepinephrine), and **dopamine*, the major neurotransmitters of the **sympathetic nervous system*, thereby acting as a central nervous system **stimulant*, moderate dosages producing increased heart rate and general arousal, decreased fatigue and boredom, enhanced psychomotor performance, loss of appetite, and elevations in mood that are frequently described as euphoric, and higher dosages being associated with a variety of motor symptoms (twitching, restlessness, stereotyped movements), perceptual symptoms (distortion of time, tactile hallucinations or **formication*), mood distortions (fear, paranoia, psychotic symptoms), and occasionally convulsions and death. *Compare* PARASYMPATHOMIMETIC, SYMPATHOLYTIC. [From Greek *syn* with + *pathos* suffering + *mimesis* imitation, from *mimeisthai* to imitate + *-ikos* of, relating to, or resembling]

symptom *n.* A subjective indication of a disorder reported by an afflicted person rather than being observed by an examiner. *See also* PRESENT STATE EXAMINATION (PSE), SCAN, SYMPTOM FORMATION, SYNDROME. *Compare* SIGN (1). [From Greek *symptoma*, from *syn-* together + *piptein* to fall]

symptom formation *n.* In **psychoanalysis*, the appearance of a **neurotic* (1) or other **symptom*, as a symbolic expression or manifestation of a mental conflict through the **return of the repressed*. *See also* CHOICE OF NEUROSIS, COMPROMISE FORMATION, RETURN OF THE REPRESSED, SUBSTITUTE FORMATION, SYMBOLIZATION.

synaesthesia *n.* 1. A sensory experience elicited by a stimulus in a different sensory modality, as when particular sounds evoke sensations of colour. An unusual but memorable example is the remark made in November 2009 by the English supermodel Kate Moss (born 1974): ‘Nothing tastes as good as skinny feels.’ *See also* CHROMAESTHESIA, PHOTISM (1). 2. The experience of a sensation in a different part of the body from the area of stimulation. *See also* REFERRED PAIN. Also called *synaesthesia*. US *synesthesia*, *synesthesia*. [From Greek *syn-* together + *aisthesis* feeling + *-ia* indicating a condition or quality]

synapse *n.* **1.** The junction between two **neurons* or between a neuron and a muscle or gland, where nerve impulses are relayed, usually by a **neurotransmitter*, from the axon of a **presynaptic* neuron to the axon, dendrite, or cell body of a **postsynaptic* neuron, or sometimes from the dendrite of one to the dendrite of another, a typical synapse consisting of a **synaptic cleft* approximately 20 nanometres (millionths of a millimetre) wide into which the neurotransmitter is released from **synaptic vesicles* in the presynaptic neuron, triggering an **action potential* in the postsynaptic neuron if the sum of all the signals reaching the postsynaptic neuron reaches a critical threshold (see *illustration*). Somatodendritic (cell body to dendrite) and somatosomatic (cell body to cell body) synapses have also been identified but are very rare. The effect of the presynaptic neuron on the postsynaptic neuron, muscle, or gland may be either excitatory or inhibitory. See *AXOAXONIC*, *AXODENDRITIC*, *AXOSOMATIC*, *DENDRODENDRITIC*. See also *GAP JUNCTION*, *SYNAPTIC RECEPTOR*. *vb.* **2.** To form or play a part in a synapse (1) as in *Motor neurons synapse directly on to muscles*. **synaptic** *adj.* Of, relating to, or consisting of a synapse (1). [From Greek *synapsis* contact or junction, from *syn* together + *haptein* to fasten]



Synapse. Basic structure.

synaptic bouton *n.* Another name for a **bouton*. Also called an *end foot*, *end bulb*, or *synaptic terminal*.

*****ebook converter DEMO Watermarks*****

synaptic cleft *n.* The narrow gap, typically 0.02 micrometres wide, between a *presynaptic neuron and a *postsynaptic neuron, muscle, or gland at a *synapse (1).

synaptic potential *n.* A change in the voltage difference across the membrane of a *postsynaptic cell, produced by the transmission of a nerve impulse across a *synapse (1). *See also* EXCITATORY POSTSYNAPTIC POTENTIAL, INHIBITORY POSTSYNAPTIC POTENTIAL.

synaptic receptor *n.* A *neuroreceptor in a *postsynaptic neuron specialized to respond to a *neurotransmitter released from a *presynaptic neuron.

synaptic terminal *n.* Another name for a *bouton.

synaptic transmission *n.* The chemical process whereby a *presynaptic neuron passes a nerve impulse across a *synapse (1) to a *postsynaptic neuron, muscle, or gland.

synaptic vesicle *n.* A tiny sac in a synaptic *bouton containing a *neurotransmitter substance. When a nerve impulse arrives, it releases a small amount of the neurotransmitter across the *synapse (1).

synchronicity *n.* A term coined by Carl Gustav Jung (1875–1961) to denote a seemingly significant coincidence in time of two or more events that are related but not causally connected, as when a dream turns out to correspond to an external event or when close relatives or friends have similar thoughts, dreams, or experiences at the same time. Jung introduced the term in 1930, in a lecture on the *I Ching*, an ancient Chinese book of divination, and he published a full account in 1952 in an essay entitled *Synchronizität als ein Prinzip akausaler Zusammenhänge* (Synchronicity: An Acausal Connecting Principle) in Volume 8 of the *Collected Works of C. G. Jung*. *See also* ANALYTICAL PSYCHOLOGY, NOMINATIVE DETERMINISM. [From Greek *synchronos* simultaneous, from *syn* together + *chronos* time + Latin *-itas* indicating a state or condition]

synchronized sleep *n.* Another name for ***NREM sleep**. **S sleep** *abbrev.*

synchronizer *n.* Another name for a ***Zeitgeber**.

syncope *n.* **1.** A brief loss of consciousness resulting from a fall in blood pressure or an interruption in the supply of oxygen to the brain, usually preceded by a sensation of light-headedness and often preventable by lying down or placing one's head between one's knees. It may be caused by emotional stress, stimulation of the ***vagus nerve**, or a sudden change in posture or body temperature. **2.** In linguistics, another word for ***haplology**. [From Greek *synkoptein* to cut short, from *syn-* together + *koptein* to cut off]

syndrome *n.* A pattern of ***signs (1)** and ***symptoms** that tend to co-occur and may indicate a common origin, course, familial pattern, or indicated treatment of a particular disorder. [From Greek *syndrome* from *syn-* together + *dromos* course]

synecdoche *n.* A ***figure of speech** involving the substitution of a word denoting a part of the thing referred to for the whole, or the whole for a part, as in the phrase *all hands on deck*, in which *hands* means sailors. *Compare* **METONYMY**. [From Greek *syn-* together + *ekdoche* interpretation]

synergist *n.* A muscle that acts with another, or a substance that increases the effects of another. *See* **AGONIST (2, 3)**. [From Greek *synergia* cooperation, from *syn-* together + *ergon* work]

synonym *n.* A word that has approximately the same meaning as another word, such as *leap*, which is a synonym of *jump*. In ***semantics**, words are considered to be synonyms if they are close enough in meaning to be interchangeable in some contexts, although they may not be interchangeable in others: for example, in the sentence *This store offers a wide range of goods*, the word *choice* could be substituted for *range* without altering the meaning, and hence these two words are synonyms in that context; but in the sentence *This student displays a wide range of knowledge*, the word *choice* cannot be substituted and is not a synonym of *range*. *Compare* **ANTONYM**.

synonymous *adj.* **synonymy** *n.* The relationship between words that are synonyms. [From Greek *syn* together + *onoma* a name]

synonym test *n.* A type of **intelligence* test item in which the respondent is presented with a word and is asked to supply a word with the same meaning to it, often by choosing from a set of response alternatives. *See also* *SYNONYM*. *Compare* *ANTONYM TEST*.

syntactic aphasia *See* *APHASIA*.

syntactic positive shift *n.* Another name for the **P600* event-related potential. [From Greek *syn* together + *tassein* to arrange in order + *-ikos* of, relating to, or resembling]

syntactics *n.* A term sometimes used, though not in linguistics, as a synonym for **syntax*.

syntax *n.* The branch of **linguistics* devoted to the study of the grammatical arrangement of words and **morphemes* in sentences, and with the rules governing sentence structure in general. **syntactic** *adj.* [From Greek *syn* together + *tassein* to arrange in order]

synthetic language *n.* Another name for an **inflecting language*.

synthetic statement *n.* In **logic*, a declarative statement in which the predicate asserts something that is not contained either explicitly or implicitly in the subject. Such a statement can be tested by observation or experience, and its negation is not self-contradictory. An example is the statement *All bachelors live alone*. The truth or falsity of a synthetic statement or proposition is **a posteriori*. Also called a *synthetic proposition*. *Compare* *ANALYTIC STATEMENT*. [From Greek *synthetikos* expert in putting together, from *syntithenai* to put together, from *syn-* together + *tithenai* to place]

SYSTAT *abbrev.* System for Statistics, a suite of statistical computer programs often used by psychologists, distributed by Systat Software, Inc. *Compare* *BMDP*, *SAS*, *SPSS*.

*****ebook converter DEMO Watermarks*****

systematic desensitization *n.* A technique of **behaviour* therapy, developed in the 1950s by the South African-born US psychiatrist Joseph Wolpe (1915–97) for treating **phobias* in particular, in which each member of a hierarchy of increasingly anxiety-provoking imaginary situations involving the **phobic stimulus* is repeatedly paired with a response that is physiologically incompatible with fear and anxiety, such as deep muscular relaxation, starting with the least frightening item and working up the hierarchy by degrees. An adaptation of the technique involving exposure to the actual phobic stimulus or situation is called *in vivo desensitization*. See also PROGRESSIVE RELAXATION, RECIPROCAL INHIBITION.

systematic review *n.* A review of research using methodical and organized procedures for identifying, selecting, appraising, and synthesizing the primary findings of a large number of research studies. It is especially suited to reviews whose principal aim is to assemble, pool, and summarize research data relevant to a clearly specified question or set of questions. Some systematic reviews include **meta-analysis*. See also COCHRANE REVIEW.

systematized delusion *n.* An organized cluster of **delusions* arising as ramifications of a single basic delusion in order to preserve a coherent or logical belief system.

System for Statistics See SYSTAT.

System 1 thinking *n.* Fast, reactive, emotional thinking, associated with **limbic system* activity. It may be contrasted with *System 2 thinking*: slow, deliberate thinking that uses logic, considers the long-term consequences of actions, and is associated with **prefrontal cortex* activity. This terminology was introduced by the Israeli-American psychologist Daniel Kahneman (born 1934) in an article in the journal *American Economic Review* (2003) and popularized in his book, *Thinking, Fast and Slow* (2011). Taken together these modes of thinking provide an example of a **dual-process model*.

systems analysis *n.* The process of breaking down a complex task into its constituent parts and translating them into a form that enables a computer to carry out the task. **systems analyst** *n.* One who practises systems analysis.

systems theory *n.* An approach to industrial relations, applied also to *family therapy and *group therapy, in which organizations, families, and other groups resemble organisms composed of interdependent parts, each with its own function and pattern of interrelationships with the others.

syzygy *n.* Conjunction or juxtaposition of opposites, as when the sun and the moon lie in a straight line on opposite sides of the Earth. In *analytical psychology, a pair of opposites, especially *anima and *animus (3). Carl Gustav Jung (1875–1961) was struck by the ubiquity of cultural symbols of syzygy, such as the Chinese *yin and yang. **syzygies** *pl.* **syzygial** *adj.* [From Greek *syzygia* union or coupling, from *syn-* with or together + *zygon* a yoke]

Szondi test *n.* A *projective test consisting of 48 photographs of mental patients arranged in six groups, each group containing photographs of eight people representing eight basic psychological needs: a homosexual, a sadist, an epileptic, a hysteric, a catatonic schizophrenic, a paranoid schizophrenic, a depressive, and a manic patient. The respondent is asked to select the two most attractive and the two most repellent photographs from each group. The assumption underlying the test, based on the doctrine of *genotropism, is that the respondent will tend to be attracted to photographs of people with similar genetic predispositions and repelled by those with incompatible genes. The test provides measures (following the order of the photographs listed above) of need for tender, feminine love; need for aggression and masculinity; mode of dealing with aggression; need to exhibit emotions; narcissistic ego-needs; expansive tendencies of the ego; need to acquire and master objects; and need to cling to objects for enjoyment. [Named after the Hungarian geneticist and psychoanalyst Lipot (Leopold) Szondi (1893–1986), who expounded the ideas behind his test in 1944 in a book entitled *Schicksalsanalyse* (Analysis of Destiny) and published the test itself shortly thereafter]



tabes dorsalis *n.* Another name for **locomotor ataxia*. [From Latin *tabes* wasting + *dorsalis* of the back, from *dorsum* the back]

tabletop illusion See *TURNING THE TABLES ILLUSION*.

tabula rasa *n.* A blank slate, a term introduced by the English philosopher John Locke (1632–1704) as a metaphor for the human mind at birth, the belief of Locke and the other British empiricists being that nothing is innate in the mind and that all knowledge comes through the senses. See also *EMPIRICISM*. Compare *INNATE IDEA*. [From Latin *tabula* a tablet + *rasa* smoothed]

tachistoscope *n.* A device for exposing visual stimuli for very brief and carefully measured intervals, used in the study of visual perception, attention, and memory. **tachistoscopic** *adj.* Of or relating to a tachistoscope. [From Greek *tachistos* swiftest, from *tachys* swift + *skopeein* to view]

tachycardia *n.* Abnormally rapid pulse in the normal resting state, often taken to mean over 100 beats per minute. Compare *BRADYCARDIA*. [From Greek *tachys* swift + *kardia* the heart]

tachygraphy *n.* Shorthand writing, especially of the type used in ancient Greece and Rome. Compare *BRACHYGRAPHY*, *STENOGRAPHY*. [From Greek *tachys* quick + *graphein* to write]

tachylalia *n.* Excessively rapid speech. [From Greek *tachys* swift + *lalia* speech]

tachyphasia *n.* Another word for ***tachylalia**. Also called *tachyphresia*. [From Greek *tachys* swift + *phasis* speech, from *phanai* to speak + *-ia* indicating a condition or quality]

tachyphrenia *n.* Racing thoughts or mental processes. It can be induced by extreme emotional states or ***stimulant drugs**. [From Greek *tachys* swift + *phren* mind, originally midriff, the supposed seat of the soul + *-ia* indicating a condition or quality]

tachyphylaxis *n.* A form of drug ***tolerance** (3) that develops very rapidly, exemplified by the typical reaction to repeated dosages of ***ephedrine**, functioning by rapid emptying of ***catecholamine** neurotransmitter substances from ***synaptic vesicles**. **tachyphylactic** *adj.* [From Greek *tachys* swift + *phylax* a guard, following the model of *prophylaxis*]

tact *n.* **1.** Consideration or politeness in dealing with others; diplomacy or skill in handling delicate negotiations. **2.** In the writings of the US psychologist Burrhus F. Skinner (1904–90), a verbal utterance that is elicited by an object or event in the external world. It differs from a ***mand** by being under the control of its antecedents rather than its consequences, but some non-Skinnerians have had difficulty understanding the concept. A typical example is the utterance: *Hello Hymie!* **3.** An almost obsolete term for the sense of touch. [From Latin *tactus* a touching, from *tangere* to touch]

tactile *adj.* **1.** Of, relating to, or involving touch. *n.* **2.** A person whose characteristic style of mental imagery is tactile rather than visual, auditory, or motor. Also (rarely in psychology) called *tactual*. Compare **AUDILE** (2), **MOTILE** (2), **VISUALIZER**. [From Latin *tactilis* tactile, from *tactus* touched, from *tangere* to touch + *-il(is)* indicating capability or relationship]

tactile acuity *n.* The keenness or sharpness of the sense of touch, usually measured by the ***two-point threshold**. Also called *touch acuity*. See also **ACUITY**.

tactile agnosia *n.* Impaired ability to recognize or identify objects by

touch alone. Also called *haptic agnosia*, *tactoagnosia*. Compare [AHYLOGNOSIA](#), [AMORPHOGNOSIA](#). [From Latin *tactilis* of or relating to touch, from *tangere* to touch + Greek *a-* without + *gnosis* knowledge + *-ia* indicating a condition or quality]

tactile aphasia *n.* A modality-specific naming impairment in which objects cannot be correctly named on the basis of touch alone so that a pair of scissors may be misnamed as a clock, or a ring as a balloon. This form of aphasia usually results from neurological damage resulting in disconnection between the tactile and language centres of the brain. See also [APHASIA](#), [DISCONNECTION SYNDROME](#). Compare [AMORPHOGNOSIA](#).

tactile corpuscle *n.* Another name for a [*Meissner's corpuscle](#).

tactile disc *n.* Another name for a [*Merkel cell](#). US *tactile disk*.

tactile egocentre *n.* Any of various points in the body where tactile sensations are perceived or felt to converge. US *tactile egocenter*. See also [EGOCENTRE](#).

tactile hallucination *n.* A [*hallucination](#) of being touched or of something touching the skin, or quite commonly a feeling of electric shock or [*formication](#).

tactile illusion *n.* Any [*illusion](#) of touch. See [ARISTOTLE'S ILLUSION](#), [LIBET'S DELAY](#), [RUBBER HAND PHENOMENON](#), [SENSORY SALTATION](#), [SIZE—WEIGHT ILLUSION](#), [THERMAL GRILL ILLUSION](#). Compare [AUDITORY ILLUSION](#), [VISUAL ILLUSION](#).

tactile receptor *n.* A generic name for [*Meissner's corpuscle](#) or a [*Merkel cell](#). See also [TOUCH RECEPTOR](#).

tactoagnosia *n.* Another name for [*tactile agnosia](#). See [AGNOSIA](#).

tactor *n.* Another name for a [*touch](#) receptor. [From Latin *tactus* a touching, from *tangere* to touch]

tactual *adj.* Another word for **tactile* (1).

Tadoma method *n.* A technique devised in 1910 by the US educator Sophia Kindrick Alcorn (1883–1967) to enable a person who is both blind and deaf to receive and interpret speech by placing a thumb lightly in contact with the speaker's lips and the fingers of the same hand on the speaker's jaw and neck, thereby detecting by touch the pattern of airflow from the speaker's mouth and nose, the articulatory movements, and the vibrations from the vocal tract, permitting a well-practised user of the system to achieve a modest comprehension of slow speech. [Named after two deaf-blind children, Winthrop 'Tad' Chapman (1915–96) and Oma Simpson (1902–27), with whom the technique was first used at the Kentucky School for the Deaf]

taijin kyofusho *n.* A **culture-bound syndrome* found in Japan and included in the official Japanese classification of mental disorders, characterized by an intense and debilitating anxiety that one's body or its parts or functions are embarrassing, displeasing, repugnant, or offensive to others. Also called *shinkei-shitsu*. It is sometimes interpreted in Western cultures as a **body dysmorphic disorder*. [Japanese *taijin* confrontation + *kyofu-sho* phobia, from *kyofu* fear + *sho* nature or kind]

Talbot–Plateau law *n.* Another name for **Talbot's law*.

Talbot–Plateau spiral *n.* Another name for the **Plateau* spiral. Also called the *Talbot–Plateau disc*. [Named after the English photographer, physicist, and psychologist (William Henry) Fox Talbot (1800–77) who studied it, and the Belgian physicist Joseph Antoine Ferdinand Plateau (1801–83) who published a major article on it in 1850]

Talbot's law *n.* The proposition that when two or more colours differing in **hue* or **lightness* are alternated, as on a rotating **Maxwell disc* divided into contrasting sectors, there is a frequency beyond which perceived flicker ceases and an impression of uniform colour is created, and when a colour is mixed with black in this way, its lightness is proportional to the area of the disc that it fills. Also called the *Talbot–Plateau law*. [Named after the English photographer, physicist, and psychologist (William Henry) Fox Talbot]

(1800–77) who published it in 1834, although the Belgian physicist Joseph Antoine Ferdinand Plateau (1801–83) had already formulated the underlying principle and published it in an obscure article in 1829]

Talwin *n.* A proprietary name for the narcotic analgesic **pentazocine*. [Trademark]

tandem gait *n.* Heel-to-toe walking; walking by placing the heel of each foot in turn immediately in front of the toe of the other. It is used as a neurological test of balance and coordination and is useful in identifying subtle or mild **gait ataxia*, and as a crude indication of **alcohol* intoxication. Patients who lose balance during tandem walking are generally considered ataxic. [From Latin *tandem* at length + Old Norse *gata* a path or way]

tandem reinforcement schedule *n.* A **compound reinforcement schedule* in which **reinforcement* (1) is delivered after an organism has completed two or more **simple reinforcement schedules* in succession, no signal being given to indicate to the organism which schedule is operating at any particular time. Also called a *tandem schedule*. See also REINFORCEMENT SCHEDULE. Compare CHAINED REINFORCEMENT SCHEDULE. [From Latin *tandem* at length]

tangentiality *n.* Responding to questions obliquely rather than directly, without giving direct answers. Also called *tangential speech*. Compare CIRCUMSTANTIALITY, GANSER SYNDROME. [So called because responses go off at a tangent to the questions]

tantrum *n.* A sudden outburst or fit of childish rage or temper. Also called a *temper tantrum*.

tanyphonia *n.* Thin, weak, metallic vocal quality resulting from tension in the muscles of the **vocal tract*. [From Greek *tanyzo* to stretch + *phone* a sound + *-ia* indicating a condition or quality]

tapetum *n.* 1. The highly reflective layer that lies behind the retina of cats and other nocturnal animals and that provides the **photoreceptors* with a

second opportunity to respond to rays of light as they return through the retina after being reflected, thereby maximizing the eye's ability to respond to sparse light. It is the tapetum that causes cats' eyes to glow when caught in the beams of a car's headlamps. *Compare* PIGMENT EPITHELIUM. **2.** The sheet of nerve fibres of the *corpus callosum above the lateral ventricles of the brain. [From Latin *tapete* a carpet, from Greek *tapes* a carpet]

tarantism *n.* A nervous disorder characterized by *ataxia and frenzied *choreiform *hyperkinesia that began in southern Italy in the 15th century and spread northwards throughout Europe during the succeeding two centuries before dying out, initially believed to have been caused by a tarantula bite, and remedied by means of lively Neapolitan dances called *tarantellas*. Also called *dancing mania*, *tarantulism*. *See also* SAINT VITUS' DANCE. [From Latin *tarantula*, the large hairy venomous wolf spider, from *Taranto* the name of a port in southern Italy]

tardive dyskinesia *n.* Involuntary *choreiform, *athetoid, or rhythmic, stereotyped or writhing movements of the tongue, jaw, fingers, or hands, resulting as a *side-effect of *neuroleptic (1) medication and damage to the *basal ganglia. **TD** *abbrev.* [From Latin *tardus* late + Greek *dys-* bad or abnormal + *kinesis* movement + *-ia* indicating a condition or quality]

target item *n.* A stimulus that a research participant or subject is searching for or trying to concentrate on, and that in research is often accompanied by *distractors.

task-negative network *n.* Another name for the *default mode network. **TNN** *abbrev.*

task-positive network *n.* An interconnected system of cortical areas involved in attention-demanding activities, including *orienting responses and responses to external sensory input, especially *top-down processing. It includes the inferior *frontal lobe, the frontal eye fields of the *motor cortex, parts of the inferior *parietal lobe areas, and the *dorsolateral prefrontal cortex. *Compare* DEFAULT MODE NETWORK. Also called the *dorsal attention network*. **TPN** *abbrev.*

taste *n.* One of the five classical **senses* (1), stimulated by *sapid* (tastable) substances that are dissolved in water or capable of being dissolved in saliva and that stimulate approximately 9,000 **taste buds* located principally in the **tongue* but also in the soft palate, throat, pharynx, and inside of the cheeks, giving rise to sensations based on the primary tastes, usually assumed according to **Henning's tetrahedron* to be sweet, sour, salty, and bitter (but *see also* *UMAMI*). Also called *geusis* or *gustation*. *See also* *AFTERTASTE*, *AGEUSIA*, *CACOGEUSIA*, *CHEMORECEPTOR*, *FLAVOUR*, *HYPERGEUSIA*, *HYPOGEUSIA*, *MIRACULIN*, *MONOSODIUM GLUTAMATE*, *REDINTEGRATION*, *SUPERTASTER*, *TASTE BLINDNESS*.

taste aversion learning/conditioning *See* *FOOD AVERSION LEARNING*.

taste blindness *n.* An impaired ability to taste certain **sapid* substances such as **PTC* or **propylthiouracil* (*PROP*), or less commonly a complete absence of taste (*ageusia*). *Compare* *CACOGEUSIA*, *DYSGEUSIA*, *HYPERGEUSIA*, *HYPOGEUSIA*, *PARAGEUSIA*, *SUPERTASTER*.

taste bud *n.* Any of approximately 9,000 **sensory* receptors for taste that are abundantly present at the bases of **papillae* in fissures or grooves of the **tongue* and also in the soft palate, throat, pharynx, and insides of the cheeks. *Sapid* (tastable) substances dissolved either in water or saliva enter laterally through pores in the tongue's epithelial cells and make contact within each taste bud with receptor surfaces on the 50–150 **taste* cells that are specialized to bind to molecules with particular structural features, the chemical property of the stimulus being converted into nerve impulses that are transmitted to the central nervous system and are experienced as the distinctive tastes sweet, sour, salty, or bitter. *See also* *HENNING'S TETRAHEDRON*, *PTC*, *SUPERTASTER*, *TASTE*, *TONGUE*.

taste cell *n.* A **neuron* that is located in a **taste* bud and is the actual **sensory* receptor for taste. *See* *GUSTATORY RECEPTOR*. Also called a *gustatory cell* or a *taste receptor*.

taster *See* *PROPYLTHIOURACIL*, *PTC*.

taste receptor *n.* Another name for a [*taste](#) cell, or sometimes for a [*taste](#) bud.

taster(PCT) *n.* A person with a hereditary capacity to taste [*PTC](#).

taster(PROP) *n.* A person with a hereditary capacity to taste [*propylthiouracil](#) (PROP).

taste tetrahedron *n.* Another name for [*Henning's tetrahedron](#).

TAT *abbrev.* Thematic Apperception Test, one of the best known [*projective tests](#), consisting of 31 pictures (originally 20) of emotionally charged social events and situations printed on cards, from which the test administrator selects 20 depending on the age and sex of the respondent, plus a blank card that is presented last. For each picture, the respondent is asked to make up a story that the picture could illustrate, describing the relationship between the people, what has happened to them, what their present thoughts and feelings are, and what the outcome will be. The assumption underlying the test is that respondents tend to project their own circumstances, experiences, and preoccupations into their stories. The test was first introduced by the US artist/psychologist Christiana D(rummond) Morgan (1897–1967) and the US psychologist Henry Alexander Murray (1893–1988) in an article in the journal *Archives of Neurology and Psychiatry* in 1935, where they argued that ‘when someone attempts to interpret a complex social situation he is apt to tell as much about himself as he is about the phenomena on which attention is focused’ (p. 289). An earlier version of the article by Morgan and Murray had been submitted to the *International Journal of Psycho-Analysis* but was rejected in 1934 by the editor, the Welsh psychoanalyst Ernest Jones (1879–1958). A new edition of the test, together with the first manual, were published in 1943 by Harvard University Press, the test being attributed to ‘Henry A. Murray, M.D., and the Staff of the Harvard Psychological Clinic’, although before Chris Morgan was airbrushed out of history the test had been generally known as the *Morgan–Murray Thematic Apperception Test*. The word *thematic* in its name derives from Murray’s concept of a *thema*, an abstract representation of a situation combining a [*press](#) and a [*need](#) (3). See also [APPERCEPTION](#), [BLACKY PICTURES](#), [CHILDREN’S APPERCEPTION TEST](#), [MAKE-A-PICTURE-STORY TEST](#), [PERSONOLOGY](#).

*****ebook converter DEMO Watermarks*****

TATA box *n.* In genetics, the sequence TATAAA of the bases thymine and adenine, approximately 25 base pairs upstream of a **start codon*, involved in binding **RNA* polymerase prior to transcription.

tau effect *n.* A relation between perceived space and time, demonstrated most simply by flashing three equidistant lights *A*, *B*, and *C* successively in the dark, with a shorter time interval between *A* and *B* than between *B* and *C*, creating the **space–time illusion* that *A* and *B* are closer together in space than *B* and *C*. Compare *KAPPA EFFECT*.

tau, Kendall's See *KENDALL'S TAU*.

taxicab problem *n.* The following problem of probability judgement, introduced in a book chapter in 1977 by the Israeli-American psychologists Amos Tversky (1937–96) and Daniel Kahneman (born 1934) to demonstrate the **base-rate fallacy*. A taxicab was involved in a hit-and-run accident at night. Only the Green and Blue cab companies operate in the city, where 85 per cent of the cabs are Green and 15 per cent are Blue. A witness identified the cab as Blue, and when tested under similar conditions was able to identify 80 per cent of both Blue and Green cabs correctly. What is the probability that the cab involved in the accident was Blue? The modal and median judgement was 80 per cent, which coincides with the reliability of the witness but ignores the relative frequency of Blue and Green cabs (the base rate). The correct answer, worked out from **Bayes' theorem*, is .41 or 41 per cent, which is much closer to the base rate.

taxon *n.* Any of the classes or categories belonging to a **taxonomy*. Sometimes contrasted with a dimension or **continuum*, as when a question is posed as to whether or not antisocial personality disorder is a taxon. See also *TYPE FALLACY*. [Back formation from *taxonomy*]

taxonomy *n.* The branch of biology concerned with the classification of organisms; more loosely, any systematic classification. The conventional biological taxonomy includes the following, starting from the highest level: **kingdom* (2), **phylum*, **class* (2), **order* (3), **family* (2), **genus*, **species*, **microspecies*. A microspecies may be a **subspecies*, a **race* (2), or a
*****ebook converter DEMO Watermarks*****

***variety.** See also **TAXON.** **taxonomic** *adj.* [From Greek *taxis* order + *-nomos* arranging]

Taylor aggression paradigm *n.* An established, well validated, and frequently used laboratory technique for measuring ***aggression**. Participants are led to believe that they are engaging in a competitive ***reaction time** task in pairs, trying to press a button before the opponent when a visual cue appears on a screen. Before each trial, the participants set the intensity, on a scale from 1 to 10, of a punishing ***aversive** stimulus (originally, electric shock; later, stimuli such as loud noise) that they will deliver to the opponent if they win, the intensity of the punishments providing a measure of aggression. In a pilot phase, each participant's threshold of unpleasantness is established, to ensure that the punishments are aversive but not painful. In reality, there is no genuine opponent, and the success and failure on each trial is predetermined by the experimenter, so that each participant receives the same punishments and has the same opportunities to deliver punishments. Participants are programmed to win on the first trial, and the intensity of the punishments that they use on that trial provides a measure of unprovoked aggression. After losing and receiving punishments on later trials, the intensity levels that they then set reflect the strength of their aggressive retaliation. The technique was developed by the US psychologist Stuart P. Taylor (born 1939) in the course of his PhD research and published in the *Journal of Personality* in 1967. Also called the *competitive reaction time* (CRT) paradigm. Compare **HOT SAUCE TASK**, **POINT SUBTRACTION AGGRESSION PARADIGM**. **TAP** *abbrev.*

Taylor Manifest Anxiety Scale *n.* Another name for the ***Manifest Anxiety Scale**.

Taylor-Woodhouse illusion *n.* Another name for the ***hollow squares illusion**. [Named after the English optometrists Stephen P(hilip) Taylor (born 1951) and J(oy) Margaret Woodhouse (born 1948) who first published it in 1980]

Tay-Sachs disease *n.* A hereditary disorder transmitted through a ***recessive gene**, relatively common among Ashkenazi Jews, characterized by progressive accumulation of lipids in the brain, leading to ***blindness**,

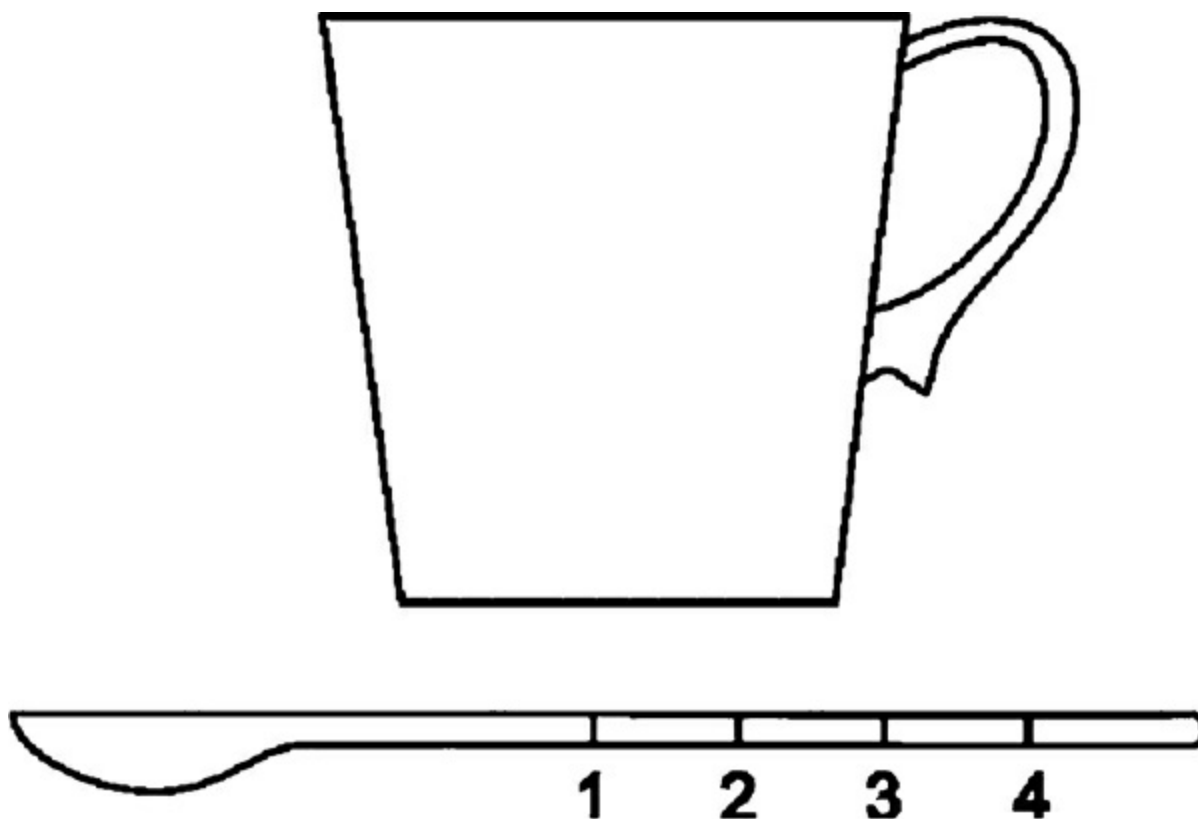
*****ebook converter DEMO Watermarks*****

convulsions*, **intellectual disability*, and death, usually before 5 years of age. Also called *amaurotic familial idiocy*. **TSD *abbrev.* [Named after the English ophthalmologist Warren Tay (1843–1927) who first identified it in 1881 and the US neurologist Bernard Sachs (1858–1944) who described it further in 1887]

T cell *n.* Another name for a **T lymphocyte*.

teacher unit *n.* In **connectionism* (1) and **parallel distributed processing*, a unit with a predetermined level of activation that determines the levels of activation of other units in order to achieve a target level according to the **delta rule*. See *BACK-PROPAGATION ALGORITHM*. See also *NEURAL NETWORK*.

teacup illusion *n.* A visual illusion closely related to the **horizontal–vertical illusion* that occurs when a person is invited to guess the depth of a teacup, relative to a teaspoon lying horizontally on the table, by grasping the teaspoon's handle at the point that would be opposite the top of the cup if the teaspoon were standing vertically in the cup (see *illustration*). Most people grossly overestimate the depth of the cup relative to the teaspoon.



Teacup illusion. If the teaspoon were standing upright in the teacup, which of the marks on the spoon would be exactly opposite the top of the cup? The answer is 1.

tear gas *n.* Any gas or vapour such as **CN gas*, **CS gas*, or **Mace* that causes the eyes to smart and water, inducing temporary blindness, and is used for personal protection or as an **incapacitant* in warfare or crowd control. Also called a *lacrimator*. Compare *BZ GAS*, *PEPPER SPRAY*.

technique, active See *ACTIVE TECHNIQUE*.

technique, defensive See *DEFENSIVE TECHNIQUE*.

tectal pathway *n.* The nerve fibres from the retinas of the eye that project via the **optic tract* to the **superior colliculi*. Compare *PRETECTAL PATHWAY*. [So called because the superior colliculi are situated in the **tectum*]

tectorial membrane *n.* The membrane in the **inner ear* covering the

***organ of Corti.** Also called *Corti's membrane*. [From Latin *tectorium* a covering, from *tectum* a roof or canopy]

tectum *n.* The structure at the base of the pons that forms the roof of the midbrain, on which are situated four hillock-shaped bumps, the two ***inferior** colliculi involved in hearing and the two ***superior** colliculi (the optic tectum) involved in vision, the four being known collectively as the corpora quadrigemina. In fishes, birds, amphibians, and reptiles it contains the main visual area. *See also* **POSTERIOR CEREBRAL COMMISSURE**. **tectal** *adj.* [From Latin *tectum* a roof or canopy]

tegmentum *n.* The tegmentum mesencephali, the intermediate region of the brainstem below the tectum, containing the motor pathways descending to the spinal cord, the sensory pathways ascending to the thalamus, part of the reticular formation, groups of nerve cell bodies such as the ***substantia nigra**, ***red nucleus**, and ***locus coeruleus**, and in its front part close to the substantia nigra, the ***ventral** tegmental area containing clusters of neurons that secrete dopamine. [From Latin *tegmentum* a covering, from *tegere* to cover or conceal]

Tegretol *n.* A proprietary name for the antimanic drug ***carbamazepine**. [Trademark]

telaesthesia *n.* Perception of objects or events that are beyond the range of the ***sense** organs, a conjectural ***paranormal** phenomenon. US *telesthesia*. *Compare* **CLAIRAUDIENCE**, **CLAIRVOYANCE**, **PRECOGNITION**, **TELEGNOSIS**, **TELEPATHY**. **telaesthetic** or **telesthetic** *adj.* [From Greek *tele* far, from *telos* an end + *aisthesis* feeling + *-ia* indicating a condition or quality]

telalgia *n.* Another name for ***referred pain**. [From Greek *tele* far, from *telos* an end + *algos* pain + *-ia* indicating a condition or quality]

teledildonics *n.* Computer-mediated sexual interaction between entities in ***virtual reality**, using remotely manipulated tactile devices and sex toys. *See also* **MUD**. [From Greek *tele* far + English *dildo* an artificial penis + Greek *-ikos* of, relating to, or resembling]

telegnosis *n.* Knowledge of distant objects or events obtained without use of the sense organs, a conjectural ***paranormal** phenomenon. *Compare* CLAIRAUDIENCE, CLAIRVOYANCE, PRECOGNITION, TELAESTHESIA, TELEPATHY. **telegnostic** *adj.* [From Greek *tele* far, from *telos* an end + *gnosis* knowledge]

telegraphic speech *n.* The typical speech of children from about 2 to 3 years of age, in which most utterances are about three or four words in length and ***function words** are usually omitted. Questions and commands as well as declarative sentences emerge, and typical utterances during this period are: *Daddy kick ball, Where Teddy going?, and Put car here.* *Compare* HOLOPHRASE, PIVOT GRAMMAR.

telekinesis *n.* Movement of a body without the application of physical force, a conjectural ***paranormal** phenomenon. *See also* PSYCHOKINESIS. **telekinetic** *adj.* [From Greek *tele* far, from *telos* an end + *kinesis* movement]

telencephalon *n.* The top part of the forebrain or prosencephalon, comprising the ***cerebral** hemispheres together with the ***olfactory lobes** and ***olfactory bulbs**. Also called *endbrain*. *Compare* DIENCEPHALON. [From Greek *tele* far, from *telos* end + *enkephalos* the brain, from *en* in + *kephale* the head]

teleonomy *n.* The science of ***adaptation (1)**. [From Greek *telos* the end + *-nomos* arranging]

teleopsia *n.* A visual abnormality in which objects appear further away than they are, sometimes arising from the ingestion of a drug such as ***cannabis** or ***LSD**. [From Greek *tele* far, from *telos* an end + *ops* an eye + *-ia* indicating a condition or quality]

telepathy *n.* ***Extra-sensory perception** of another person's mental processes, a conjectural ***paranormal** phenomenon. *See also* PSI, PSI-MISSING. *Compare* CLAIRVOYANCE, PRECOGNITION. **telepathic** *adj.* [From Greek *tele* far, from *telos* an end + *pathos* feeling]

telephone scatologia *n.* A ***paraphilia** characterized by recurrent sexually arousing fantasies, sexual urges, or behaviour involving making

obscene telephone calls to non-consenting recipients. [From Greek *skor*, *skatos* excrement + *logos* a word or discourse + *-ia* indicating a condition or quality]

telephone theory *n.* Another name for the ***frequency** theory of hearing.

telereceptor *n.* A ***sensory** receptor such as a ***visual receptor** or an ***auditory** receptor that can be stimulated by distant stimuli and that mediates a ***far sense**. Also called a *teleceptor*, a *teleoreceptor*, or a *teleoceptor*. Compare **PROXIMORECEPTOR**. [From Greek *tele* far, from *telos* an end + English *receptor*, from Latin *recipere*, *receptum* to receive, from *re-* back + *capere*, *ceptum* to take]

telesthesia See **TELAESTHESIA**.

teletactor *n.* A device for deaf people that converts sound waves into vibrations that can be felt on the skin. The equivalent device for blind people is an ***optacon** or an ***optohapt**. [From Greek *tele* far, from *telos* an end + Latin *tactus* a touching, from *tangere* to touch]

telomerase *n.* A short name for telomere terminal transferase, an ***enzyme** that helps to rebuild ***telomeres** in ***germ line** cells but is normally absent from ***somatic** cells, although it is present in most cancer cells and is largely responsible for their ability to proliferate indefinitely without manifesting cellular or replicative senescence.

telomere *n.* A segment of ***DNA** at the tip of every ***chromosome** that is thought to perform a protective function like the plastic or metal aglet at the end of a shoelace, preventing the chromosome from losing genetic information during replication. It is made up of thousands of repeating or stuttering units consisting of the bases thymine, adenine, and guanine in the sequence TTAGGG, a ***consensus sequence** found in widely divergent species of fish, amphibians, reptiles, birds, and mammals. Every time a cell divides, the telomeres get progressively shorter by about 70 base pairs, until the length eventually falls below a critical level and the cell enters a phase of replicative senescence during which cell division no longer occurs. Telomere

*****ebook converter DEMO Watermarks*****

shortening thus functions as a mitotic clock that regulates the number of divisions a cell can undergo, and it may be chiefly or at least partly responsible for the ageing process. *See also* [TELOMERASE](#). *Compare* [CENTROMERE](#). [From Greek *telos* end + *meros* part]

telophase *n.* The fourth and final phase of [*mitosis](#), when the cell pinches in the middle and a nuclear membrane forms around the chromosomes at each end. [From Greek *telos* end + *phasis* an aspect, from *phainein* to show]

temazepam *n.* A [*sedative–hypnotic](#) drug belonging to the class of [*benzodiazepines](#), used in the treatment of insomnia. Also called *Restoril* (trademark).

temperament *n.* Character or [*personality](#); the characteristic mode of behaviour or reaction of a person or an animal; originally character or personality determined by the particular mixture of the four [*humours](#) (3) in an individual's body. *See also* [COMPLEXION](#) (2). **temperamental** *adj.* Excitable, emotionally volatile, or easily upset. [From Latin *temperamentum* a mixing in proportion, from *temperare* to temper or mingle]

temperament theory *n.* A popular typology of [*personality](#), based on the [*Myers–Briggs Type Indicator](#), focusing on four basic temperaments rather than the standard 16, namely SJ (sensing judges or *guardians*), SP (sensing perceivers or *performers*), NT (intuitive thinkers or *rationalists*), and NF (intuitive feelers or *idealists*).

temperature receptor *n.* A type of [*sensory](#) receptor consisting of [*free nerve endings](#) that respond to stimulation by cold objects or substances in a [*cold spot](#) or to warm or hot objects or substances in a [*warm spot](#). Also called a *thermoreceptor*.

temperature sense *n.* The mainly [*cutaneous sense](#) that responds to warm and cold stimuli. Also called *thermaesthesia* or the *thermal sense* or *thermic sense*. *See also* [COLD SPOT](#), [WARM SPOT](#).

temperature spot *n.* A generic name for a [*cold spot](#) or a [*warm spot](#).

temper tantrum See [TANTRUM](#).

template matching *n.* A hypothetical mechanism of visual recognition according to which forms or patterns are identified by matching them to stored forms or patterns (templates). This principle underlies [*optical character recognition](#) and most systems of [*computer vision](#), but it is not the normal way in which recognition works in the visual system, and it fails to account for [*shape constancy](#). Also called *prototype matching*. See also [SHAPE—SLANT INVARIANCE](#).

tempo *n.* The speed at which a piece or passage of music is played or an utterance or fragment of speech is delivered. [From Italian *tempo* speed, from Latin *tempus* time]

temporal bone *n.* Either of the bones at the sides and base of the skull containing the [*auditory](#) canals. [From Latin *temporalis* of the temple, from *tempus*, *temporis* a temple (on the side of the head)]

temporal lobe *n.* The bottom [*lobe](#) on the side of each cerebral hemisphere, separated on its lateral or outer surface from the frontal lobe and the parietal lobe by the [*lateral](#) sulcus and an imaginary line extending the sulcus horizontally towards the occipital lobe, and from the occipital lobe by an imaginary line from the top of the [*parieto-occipital sulcus](#) to the [*pre-occipital notch](#). It is concerned with hearing, speech perception (especially in the left hemisphere), sexual behaviour, visual perception, musical interpretation (especially in the right hemisphere), memory, and social behaviour. Major lesions in the medial underlying part of this area can result in memory deficits and [*temporal lobe epilepsy](#). See also [GLOBAL AMNESIA](#), [KLÜVER—BUCY SYNDROME](#), [LIMBIC SYSTEM](#), [LOBE](#), [OPERCULUM](#), [SIMULTANAGNOSIA](#), [TOPOGRAPHAGNOSIA](#).

temporal lobe epilepsy *n.* A form of [*epilepsy](#) associated with abnormal electrical discharges radiating from the [*temporal lobe](#), characterized by temporary impairment or loss of consciousness, sometimes accompanied by automatism, and abnormal or even antisocial or violent behaviour, without any apparent convulsions. Such an episode is often

preceded by premonitory **auras* (2), **derealization*, **déjà vu*, **jamais vu*, or **cacosmia*. Also called *psychomotor epilepsy* or *temporal lobe syndrome*. See also INTERICTAL SYNDROME. **TLE** abbrev.

temporal lobe seizure *n.* A **seizure* of the type found in **temporal lobe epilepsy*, without any evidence of a **convulsion*. Also called a *psychomotor seizure*.

temporal operculum See OPERCULUM.

temporal plane *n.* Another name for the **planum temporale*.

temporal retina *n.* The half of the **retina* that is nearest to the temple and from which nerve fibres are projected to the ipsilateral (same-side) cerebral hemisphere after passing through the **optic chiasm*. Compare NASAL RETINA.

temporal summation *n.* The successive impulses of afferent neurons combining additively in a **postsynaptic* neuron to produce a **graded potential* that may cause the neuron to transmit a nerve impulse or **action potential* that could not be produced by a single afferent impulse. See also GRADED POTENTIAL. Compare SPATIAL SUMMATION. [From Latin *temporalis* of or relating to time, from *tempus* time + *-alis* of or relating to]

temporary threshold shift *n.* A temporary change (usually an increase) in a sensory **threshold*, the most familiar forms being the increase in auditory threshold resulting from the **acoustic* reflex in response to loud noise and the increase in visual threshold resulting from the **pupillary light reflex* in response to bright light. **TTS** abbrev.

tendon organ *n.* A shortened name for a **Golgi tendon organ*.

tendon reflex *n.* Another name for a **deep tendon reflex*.

tendon sense *n.* A form of **proprioception* and **kinaesthesia* mediated by receptors in or adjacent to the tendons. See also GOLGI TENDON ORGAN.

tension headache *n.* A pain in the head associated with tension in the muscles of the neck, face, and shoulder, resulting from stress or overwork.

tensor tympani *n.* A muscle in the middle ear that reduces the movement of the **ossicles* when it contracts and that acts in conjunction with the **stapedius* in the **acoustic* reflex to protect the ear from damage when exposed to loud sounds. [From Latin *tensor* a stretcher from *tensus* tight, from *tendere* to stretch + *tympanum* a drum]

ten thousand hour rule *n.* The proposition that expertise in playing a musical instrument or performing any other high-level **skill* requires 10,000 hours of practice, equivalent to three hours a day for slightly under 10 years, or 40 hours a week for slightly under five years. The term was introduced by the English–Canadian journalist and author Malcolm Gladwell (born 1963) on page 40 of his best-selling book, *Outliers: The Story of Success*, published in 2008, citing a study of expert musicians carried out by the Swedish psychologist K. Anders Ericsson (born 1947) and two colleagues that was published in the journal *Psychological Review* in 1993. More precisely, what the research showed was that the attained level of expert music performance of students at an international music academy was positively correlated with the number hours of *goal-directed, deliberate* practice accumulated, and 10,000 hours was merely an approximate *average*. The Nobel-prizewinning US economist and decision theorist Herbert A(lexander) Simon (1916–2001) and the US psychologist William G. Chase (1940–83) had already stated in an article in the journal *American Scientist* in 1973 that there appears to be no chess player who has ever reached grandmaster level with less than about 10,000 hours of practice and that this ‘is comparable to the times that highly literate people have spent in reading by the time they reach adolescence’ (Vol. 61, p. 402). Also written *10,000-hour rule*.

tentorium *n.* 1. The membrane separating the **cerebrum* from the **cerebellum*, consisting of a fold in the **dura mater*. 2. The internal structure of an insect’s head. 3. Any tent or tent-like canopy. *tentoria pl.* **tentorial** *adj.* [From Latin *tentorium* a tent, from *tendere* to stretch]

teonanactyl *n.* Any mushroom of the Agaricaceae family that contains the **hallucinogenic* ingredient **psilocybin*. Also called a *magic mushroom*.

*****ebook converter DEMO Watermarks*****

[From Nahuatl *teotl* a god + *nanacatl* a mushroom]

teratogen *n.* Any substance, organism, or process that causes or increases the probability of a congenital disorder or birth defect in a baby, including a drug such as alcohol (see [FOETAL ALCOHOL SYNDROME](#)), an infection such as German measles, or processes such as exposure to X-rays or other forms of ionizing radiation (see [MUTAGEN](#)). **teratogenic** *adj.* **teratogenesis** *n.* The production of a congenital defect by a teratogen. [From Greek *teras*, *teratos* a monster + *genes* born]

terminal bouton *n.* Another name for a [*bouton](#). Also spelt *terminal button*.

terminal insomnia See [INSOMNIA](#).

terminal threshold *n.* The point along a [*continuum](#) of stimulus intensity beyond which further increases produce no further increases in sensation, although for some types of stimuli pain or damage to the [*sensory](#) receptors may be caused, or an analogous upper point along another stimulus dimension such as sound-wave frequency, the terminal threshold in that case being approximately 20,000 hertz for a person with normal hearing. Also called an *upper threshold*, though this usage causes confusion.

termination codon *n.* Another name for a [*stop codon](#). Also called a *terminator codon*.

Ternus phenomenon *n.* A form of [*apparent movement](#) that is usually demonstrated with a row of four evenly spaced elements (dots or other identical shapes) labelled A, B, C, and D from left to right and presented in a sequence of brief flashes as follows: first A, B, and C all together, then B, C, and D, then A, B, and C again, and so on. If the [*interstimulus interval](#) is long, then no apparent movement is seen; with an intermediate interstimulus interval of about 200 milliseconds (under what Ternus called optimal conditions) *group movement* occurs as a single triplet of elements appears to move forwards and backwards in step without any appearance of two of the elements remaining fixed; and as the interstimulus interval is shortened further *element movement* occurs as A appears to hop forwards and

*****ebook converter DEMO Watermarks*****

backwards over *B* and *C*, which appear to remain stationary. Also called a *Ternus display*. See also [APPARENT MOVEMENT](#), [PHANTOM GRATING](#), [RANDOM-DOT KINEMATOGRAM](#). [Named after the German Gestalt psychologist Josef Ternus (1892–1959) who first described it in 1926]

territoriality *n.* The behaviour of certain animals and birds in marking out or defending their own territory against other members of the same species.

tertiary prevention *n.* Measures taken to alleviate the effects of a disorder, often through [*rehabilitation](#). Compare [PRIMARY PREVENTION](#), [SECONDARY PREVENTION](#).

tertiary projection area *n.* An area of the cerebral cortex that receives projections from a [*secondary projection area](#). Also called an *association area*. Compare [PRIMARY PROJECTION AREA](#).

test age *n.* In psychometrics, a [*derived score](#), expressed in years, representing the average age at which children in the standardization sample achieved the raw score that the respondent achieved.

test anxiety *n.* A form of [*state anxiety](#) aroused by the event or prospect of taking a test or examination. Also called *examination anxiety*. **test-anxious** *adj.*

test battery *n.* In psychometrics, a set of tests standardized on the same population, enabling meaningful comparison or combination of scores on several tests.

test bias *n.* In psychometrics, the property of a psychological test, when administered to a particular group, such as an ethnic minority or one of the sexes, of yielding an average score that is either lower (in the case of negative bias) or higher (positive bias) than the average score for the total population, the disparity being due to a factor or factors other than a true difference in the attribute being measured. The last stipulation is often difficult to prove in practice, but without it an allegation of test bias is vacuous. Without it, one could argue that scales for weighing newborn babies are biased against black

babies, because they yield lower average birth weights for black than white babies. *See also* [ITEM BIAS](#).

testee *n.* In psychometrics, a person being tested or responding to a test.

testing effect *n.* Any effect of taking tests on the respondents, a typical example being [*test sophistication](#).

testis *n.* The technical word for a testicle, the male sex gland or [*gonad](#), which produces [*spermatozoa](#) and secretes [*androgens](#) such as [*androsterone](#) and [*testosterone](#) into the bloodstream. *See also* [MÜLLERIAN INHIBITING SUBSTANCES](#), [WOLFFIAN DUCT](#). *Compare* [OVARY](#). **testes** *pl.* [From Latin *testis* a witness, alluding to the fact that testes bear witness to a person's masculinity]

test item *n.* In psychometrics, an individual question or other element of a psychological test.

Test-Operate-Test-Exit *See* [TOTE](#).

testosterone *n.* A potent male [*steroid](#) [*sex](#) hormone secreted mainly by the testes but also by the female ovaries (where it is required for the production of oestrogen) and adrenal glands, responsible for the development of the male sex organs and tending to stimulate competitiveness and aggression. *See also* [ANDROPAUSE](#), [DIGIT RATIO](#), [DHEA](#), [IRRITABLE MALE SYNDROME](#), [PERFORMANCE ENHANCER](#), [SEX HORMONE](#), [WOLFFIAN DUCT](#). *Compare* [OESTROGEN](#). [From *test(is)* + *ster(oid)* + *-one* indicating a ketone, from Greek *-one* a feminine name suffix]

testosterone replacement therapy *n.* A treatment for disorders associated with reduced [*testosterone](#). *See also* [ANDROPAUSE](#), [IRRITABLE MALE SYNDROME](#). **TRT** *abbrev.*

test-retest reliability *n.* A measure of a test's [*reliability](#), or more specifically its [*stability](#), based on the correlation between scores of a group of respondents on two separate occasions.

test sophistication *n.* Knowledge of how to respond advantageously to psychological tests, acquired as a **testing effect* by a person through extensive experience of taking similar tests. Also called *test wiseness*.

test wiseness *n.* A colloquial name for **test sophistication*. **test-wise** *adj.*

tetanus toxin *n.* A substance that blocks the action of **glycine* on **alpha motor neurons*, causing convulsions. *Compare* *PICROTOXIN*, *STRYCHNINE*.

tetrachromatic theory *n.* Another name for the **opponent-process theory*. [From Greek *tetra-* four + *chroma*, *chromatos* a colour + *-ikos* of, relating to, or resembling]

tetracyclic antidepressant *n.* A class of **antidepressant* drugs, the best known being **mianserin*, that are used to treat depression, their mechanism of action being poorly understood. *Compare* *MONOAMINE OXIDASE INHIBITOR (MAOI)*, *SELECTIVE SEROTONIN REUPTAKE INHIBITOR (SSRI)*, *St JOHN'S WORT*, *TRICYCLIC ANTIDEPRESSANT*. [So called because they have four fused rings in their molecular structures]

tetrahydrocannabinol *n.* An abbreviated name for **delta-9-tetrahydrocannabinol (THC)*.

tetrahydrogestrinone *n.* An **anabolic steroid* used to increase muscle growth, developed secretly by attaching four hydrogen atoms to the steroid drug gestrinone for the specific purpose of making its metabolites undetectable in the urine of a person taking it, and used by athletes as a **performance* enhancer. In 2003 a test was developed for detecting it in urine samples, and several prominent athletes were penalized. **THG** *abbrev.* [From Greek *tetra-* four + *hydor* water + *gestrinone* a drug with a weak progestin and strong anti-progesterone action, used for treating endometriosis]

tetraplegia *n.* Another name for **quadriplegia*. **tetraplegic** *adj.* [From Greek *tetra-* four + *plege* a blow + *-ia* indicating a condition or quality]

tetrodotoxin *n.* A powerful [*neurotoxin](#) that is present in a species of puffer fish and that functions by blocking sodium channels in the neuronal membrane, thereby inactivating the [*sodium](#) pump. Tingling in the lips and tongue usually develops within 10–45 minutes of eating puffer fish, then the sensations spread rapidly to other parts of the body, and this is followed by excessive salivation, weakness, nausea, vomiting, diarrhoea, abdominal pain, paralysis, difficulty swallowing, convulsions, and sometimes death by respiratory paralysis. *See also* [NEUROTOXIN](#), [ZOMBIE \(2\)](#). **TTX** *abbrev.* [From Greek *tetra-* four + *odous*, *odontos* a tooth + *toxikon* arrow-poison, from *toxon* a bow]

texture gradient *n.* A change in the appearance of the grain or microstructure of a surface, an abrupt or sudden change providing a cue for the perception of a [*contour](#), and a gradual change (as when the blades of grass in a meadow appear widely spaced in the foreground and increasingly close together towards the background) being a form of [*perspective](#) that is related to [*aerial perspective](#) and [*linear perspective](#) and is one of the monocular cues of visual [*depth perception](#) (see [illustration](#)). *See also* [VISUAL CLIFF](#).



Texture gradient

T-group *n.* A group of people who meet regularly and investigate patterns of authority and communication among themselves, as a technique of [*group therapy](#) and training developed in the 1940s by the German–US psychologist Kurt Lewin (1890–1947). Also called a *human relations group* or a *sensitivity training group*. *Compare* [ENCOUNTER GROUP](#). [An abbreviation of

(sensitivity) t(raining) group]

thalamencephalon *n.* The part of the ***diencephalon** that includes the ***thalamus** and ***pineal gland**. [From *thalam(us)* + (*di*)*encephalon*]

thalamic syndrome *n.* A raised threshold (diminished sensitivity) for tactile sensations, which are felt as unpleasant if they are felt at all, resulting from a lesion in the ***thalamus**.

thalamus *n.* Either of a pair of large, golfball-sized capsules near the base of the brain in the diencephalon, forming a lateral wall of the third ***ventricle**, containing all the nerve fibres that ascend and descend between the cortex and the spinal cord, part of the ***ascending reticular activating system**, and relay stations such as the ***lateral** geniculate nuclei and ***medial** geniculate nuclei, and receiving all sensory inputs, except from the olfactory receptors, before they are relayed to areas in the cerebral cortex. Its ***ventral** anterior nuclei and ***ventral** lateral nuclei receive inputs from the globus pallidus and cerebellum and project to the prefrontal cortex and motor cortex, its ***ventral** posterior nuclei contain inverted ***topographic maps** of the body and project to the somatosensory cortex, and the ***pulvinar** at its back is implicated in attention. *See also* EPITHALAMUS, INTRALAMINAR NUCLEUS, MASSA INTERMEDIA, NEOTHALAMUS, THALAMIC SYNDROME. **thalami** *pl.* **thalamic** *adj.* [From Greek *thalamos* an inner room or chamber, from *thalos* a vault]

thanatomania *n.* Another name for ***voodoo death**. [From Greek *thanatos* death + *mania* madness]

thanatophobia *n.* A ***specific phobia** focused on fear of death or dying. [From Greek *thanatos* death + *phobos* fear + *-ia* indicating a condition or quality]

Thanatos *n.* In ***psychoanalysis**, the unconscious drive towards dissolution and death, initially turned inwards on oneself and tending to self-destruction; later turned outwards in the form of aggression. Sigmund Freud (1856–1939), influenced by witnessing the ravages of the First World War, introduced the concept hesitantly and tentatively in 1920, in Chapter 6 of his book *Beyond the Pleasure Principle* (*Standard Edition*, XVIII, pp. 7–64), and
*****ebook converter DEMO Watermarks*****

he admitted in a later book *Civilization and its Discontents* (1930) that its existence was open to debate: 'Since the assumption of the existence of the instinct is mainly based on theoretical grounds, we must also admit that it is not entirely proof against theoretical objections' (*Standard Edition*, XXI, pp. 64–145, at pp. 121–2). The concept defies conventional biological assumptions, [*natural selection](#) favouring characteristics promoting survival and reproduction, and many psychoanalysts did indeed dissent, though others, notably the British-based Austrian psychoanalyst Melanie Klein (1882–1960) and her followers, assigned a major role to it, even in early childhood. Also called the *death instinct*. See also [DESTRUCTIVE INSTINCT](#), [DESTRUDO](#), [MORTIDO](#), [NIRVANA PRINCIPLE](#), [OBJECT INSTINCT](#), [PAIN PRINCIPLE](#). Compare [EROS](#). [Named after Thanatos in Greek mythology, the personification of death and brother of Hypnos (the personification of sleep), from Greek *thanatos* death]

Thatcher illusion *n.* Another name for the [*Margaret Thatcher illusion](#).

theism *n.* Belief in a god who created the universe and continues to govern everything that happens, in most theistic belief systems answering prayers and being directly involved with human affairs. Compare [AGNOSTICISM](#), [ATHEISM](#), [DEISM](#), [PANTHEISM](#). **theist** *n.* One who espouses theism. **theistic** or **theistical** *adj.* [From Greek *theos* a god + *-ismos* indicating a state or condition]

Thematic Apperception Test See [TAT](#).

theobromine *n.* A white, crystalline, [*alkaloid](#), [*xanthine](#) derivative, an isomer of theophylline (having the same chemical formula but a different arrangement of atoms within the molecule), that is found in tea, cocoa, and chocolate and that acts as a central nervous system [*stimulant](#), being used in the treatment of headaches, as a diuretic, and as a myocardial stimulant in coronary heart disease. Formula: C₇H₈N₄O₂. Compare [CAFFEINE](#), [THEOPHYLLINE](#). [From Latin *Theobroma* the genus of tropical American cacao trees, literally food of the gods, from *theos* a god + *broma* food + *-ine* indicating an organic compound]

theophylline *n.* A white, crystalline, [*alkaloid](#), [*xanthine](#) derivative and central nervous system [*stimulant](#), an isomer of theobromine (having the same chemical formula but a different arrangement of atoms within the molecule), that is found in tea leaves and is used as a bronchodilator in the treatment of asthma and as a muscle relaxant, with pharmacological properties and medicinal uses similar to those of theobromine. Formula: $C_7H_8N_4O_2$. *Compare* [CAFFEINE](#), [THEOBROMINE](#). [From *theo(bromine)* or Latin *thea* tea + Greek *phyll(on)* a leaf + *-ine* indicating an organic compound]

theoretical research *n.* Another name for [*basic research](#).

theory *n.* **1.** In logic and mathematics, a coherent system of primitive concepts, axioms, and rules of inference from which theorems may be derived. **2.** A [*proposition \(1\)](#) or set of propositions offered as a conjectured explanation for an observed phenomenon, state of affairs, or event. *Compare* [HYPOTHESIS](#), [MODEL](#). **3.** Non-technically, any speculative or conjectural notion or opinion. [From Greek *theoria* view or theory, from *theoreein* to view or observe]

theory of games *See* [GAME THEORY](#).

theory of mind *n.* People's intuitive understanding of their own and other people's minds or mental states, including beliefs and thoughts. It develops by degrees from a very early age in humans: by the age of 3 years children normally have a well-developed theory of mind but cannot yet understand, for example, that people's beliefs can be false: 3-year-olds who open a candy or chocolate box and are surprised to find pencils inside it consistently say that, before the box was opened, other people would have believed that there were pencils inside it and that they believed this also. Research has suggested that a theory of mind is fully developed only in human beings, but that people with [*autism spectrum disorder](#) are severely impaired in their ability to understand mental states and to appreciate how mental states govern behaviour. Without a theory of mind, social behaviour is disrupted and the [*cooperative principle](#) breaks down. The concept was introduced by the US psychologists and primatologists David Premack (born 1925) and Guy Woodruff in an article in the journal *The Behavioral and*

Brain Sciences in 1978, where they defined it as follows: ‘In saying that an individual has a theory of mind, we mean that the individual imputes mental states to himself and others’ (p. 515). The specific inability to appreciate other people’s mental states is called [*mind-blindness](#). See also [EMPATHY](#), [MIRROR NEURON](#). **ToM** abbrev.

theory of planned behaviour *n.* An extended version of the [*theory](#) of reasoned action, incorporating a construct of perceived behavioural control and thus enabling predictions to be made of actions that are under incomplete volitional control. In the theory, perceived behavioural control is a function of one’s beliefs about how likely it is that one has the resources and opportunities required to perform the behaviour. The theory was formulated by the Polish-born US psychologist Icek Ajzen (born 1942) and expounded in his book *Attitudes, Personality, and Behavior* (1988) and in an article in the journal *Organizational Behavior and Human Decision Processes* (1991). US *theory of planned behavior*. **TPB** abbrev.

theory of reasoned action *n.* A general theory of the relationship between attitudes and behaviour, according to which behaviour is determined by behavioural intentions, and behavioural intentions in turn are determined by [*attitudes](#) (1) to behaviour and subjective [*norms](#) (1). An attitude to behaviour is one’s evaluation of the goodness or badness of performing the action in question, and a subjective norm is the perceived social pressure arising from one’s perception of the extent to which significant others would like one to perform the action. Algebraically, $B(f)BI = w_1A_B + w_2SN$, where B denotes behaviour, f indicates a function, BI behavioural intention, A_B attitude towards the behaviour, and SN subjective norm; w_1 and w_2 are empirically determined weights representing the relative importance of the attitudinal and normative components. Attitude towards the behaviour (A_B) is determined by one’s beliefs about the consequences of the behaviour multiplied by the evaluation of each consequence and then summed (see [EXPECTANCY–VALUE THEORY](#)). Subjective norm (SN) is a function of one’s perception of the preferences of significant others as to whether one should engage in the behaviour. The weights w_1 and w_2 reflect the relative influence on behavioural intention of attitude towards the behaviour and subjective norm. The theory was formulated by the US psychologist Martin Fishbein (1936–

2009) and the Polish-born US psychologist Icek Ajzen (born 1942) and published in their books *Belief, Attitude, Intention and Behavior: An Introduction to Theory and Research* (1975) and *Understanding Attitudes and Predicting Social Behavior* (1980). The theory is well supported by research findings, but a limitation of it is that it applies only to behaviour that is predominantly volitional or voluntary, and this limitation was addressed in the later **theory* of planned behaviour.

therapeutic *adj.* Of or relating to the treatment of disorders. *See also* *PSYCHOTHERAPY*. **therapeutics** *n.* The aspect of medicine concerned with the treatment and cure of disorders. **therapist** *n.* An old-fashioned name for a therapist. [From Greek *therapeuein* to heal or take care of, from *theraps* an attendant + *-itikos* resembling or marked by]

therapeutic alliance *n.* In **psychoanalysis*, the implicit cooperative compact between an analyst and a patient whereby the analyst undertakes to offer **interpretations* (2) and the patient undertakes to obey the **fundamental rule of psychoanalysis* and to try to understand the analyst's interpretations.

therapeutic community *n.* A treatment facility in which the total environment, including the physical milieu, the other clients or patients, and the staff, is part of the treatment. *See also* *MILIEU THERAPY*. **TC** *abbrev.*

therapeutic index *n.* Any of several indices relating the clinical effectiveness of a drug to its safety factor, the most common being the **therapeutic* ratio of the **median* lethal dosage to the **median* effective dosage (LD-50/ED-50). Other therapeutic indices include the ratio of the **minimum toxic dosage* to the **minimum effective dosage*, and the difference between the minimum effective dosage and the minimum toxic dosage.

therapeutic ratio *n.* An index relating the clinical effectiveness of a drug to its safety factor, introduced by the German bacteriologist and immunologist Paul Ehrlich (1854–1915), given by dividing the **median* lethal dosage (LD-50) by its **median* effective dosage (ED-50), whence therapeutic ratio = LD-50/ED-50, a drug often being considered safe only if its therapeutic ratio is at least 10. *See also* *THERAPEUTIC INDEX*.

*****ebook converter DEMO Watermarks*****

therapist *n.* A person who practises a *therapy.

therapy *n.* Any form of treatment for a disorder by a method other than surgery; such treatments in general. See also GENE THERAPY, PSYCHOTHERAPY. [From Greek *therapeuein* to heal or take care of, from *theraps* an attendant]

thermaesthesia *n.* Another name for the *temperature sense. US *thermesthesia*. [From Greek *therme* heat + *aisthesis* feeling + *-ia* indicating a condition or quality]

thermal adaptation *n.* A form of *adaptation (2) whereby prolonged exposure to a stimulus that is warmer than *physiological zero tends to cause it to feel less warm, and prolonged exposure to a stimulus that is colder than physiological zero tends to cause it to feel less cold. It can be demonstrated by an experiment described under *successive contrast.

thermalgesia *n.* A condition in which *warm spots are hypersensitive and warm stimuli elicit pain responses. Also written *thermoalgesia*. Compare THERMOANALGESIA. [From Greek *therme* heat + *algesis* sense of pain, from *algos* pain + *-ia* indicating a condition or quality]

thermalgia *n.* Another name for *causalgia.

thermal grill illusion *n.* A *tactile illusion produced by a device, called a *heat grill*, consisting of closely packed alternating warm (40° C) and cool (20° C) bars. When applied to the skin it stimulates both *cold spots and *warm spots and creates a painful sensation of intense heat called *paradoxical heat*. A version of the illusion can be demonstrated by placing your second and fourth fingers (counting your thumb as your first finger) of one hand in a container of warm water and your third finger in a separate container of cold water. This generates a paradoxical sensation of painful heat in the middle finger. The illusion is not fully understood but appears to involve anomalous activation of polymodal C fibre *pain receptors that respond to both heat and cold. The illusion was first reported by the Swedish physiologist Torsten Thunberg (1872–1953) in the journal *Uppsala Läkfören Förhandlingar* in 1896. See also PAIN. TGI abbrev.

thermal sense *n.* Another name for the ***temperature sense**. Also called the *thermic sense*.

thermoanaesthesia *n.* Insensitivity to warmth and coldness owing to a failure of the ***temperature sense**. US *thermoanesthesia*. Also called *thermanaesthesia* or *thermanesthesia*. [From Greek *therme* heat + *an-* without + *aisthesis* feeling + *-ia* indicating a condition or quality]

thermoanalgesia *n.* A condition in which hot stimuli fail to elicit pain responses. Also called *thermanalgesia*. Compare **THERMALGESIA**. [From Greek *therme* heat + *an-* without + *algesis* sense of pain, from *algos* pain + *-ia* indicating a condition or quality]

thermodynamics *n.* The study of the laws governing the interrelationships between heat, mechanical work, and other forms of energy and their effects on the behaviour of systems. The *first law of thermodynamics* (the law of the conservation of energy), states that when a system changes from one state to another, energy is converted to a different form but the total amount of energy remains unchanged or is conserved, making a perpetualmotion machine impossible; the *second law of thermodynamics* states that in any closed system (one that exchanges energy but not matter with the exterior) ***entropy** can only increase or in an idealized case remain unchanged; the *third law of thermodynamics* (the Nernst heat theorem) states that as a homogeneous system approaches a temperature of absolute zero its entropy tends to zero; and the *zeroth law of thermodynamics* states that if two bodies are each in thermal equilibrium with a third body, then they are in thermal equilibrium with each other. [From Greek *therme* heat + *dynamikos* powerful, from *dynamis* strength + *-ikos* of, relating to, or resembling]

thermoform *n.* A raised or embossed representation of a map, diagram, or picture for tactile inspection by blind people. [So called because it is made by shaping heated vinyl sheets]

thermoreceptor *n.* Another name for a ***temperature receptor**.

thermoregulation *n.* A form of **homeostasis* whereby **homoiothermic* animals such as humans maintain a constant internal body temperature. [From Greek *therme* heat + Latin *regulare* to control + *-ation* indicating a process or condition]

theta wave *n.* A low-frequency (5–8 hertz) **EEG* wave in the **hippocampus* associated with relaxed wakefulness and REM sleep. Also called a *theta rhythm*. [From *theta* (θ) the eighth letter of the Greek alphabet]

thiamine See *VITAMIN B₁*.

thigmohyperaesthesia *n.* Abnormal sensitivity to pressure stimuli, often manifested as discomfort caused by pressure from clothing, watchstraps, rings, eyeglasses, or bedcovers. US *thigmohyperesthesia*. **thigmohyperaesthetic**, **thigmohyperaesthetic**, or (US) **thigmohyperesthetic** *adj.* [From Greek *thigma*, *thigmatos* touch + *hyper* over + *aisthesis* sensation, from *aisthanesthai* to feel + *-ia* indicating a condition or quality]

thigmotaxis *n.* Movement towards or away from a solid object in response to tactile stimulation. Compare *THIGMOTROPISM*. **thigmotactic** *adj.* **thigmotactically** *adv.* [From Greek *thigma*, *thigmatos* touch + *taxis* arrangement, from *tassein* to arrange]

thigmotropism *n.* An orienting movement, turning towards or away, in response to a tactile stimulus, a typical example in human behaviour being the **rooting reflex*. Compare *THIGMOTAXIS*. **thigmotropic** *adj.* [From Greek *thigma*, *thigmatos* touch + *tropos* a turning + *-ismos* indicating a state or condition]

thing-presentation *n.* In **psychoanalysis*, the type of non-linguistic and largely visual representation of memories that is characteristic of the **unconscious* (2), whereas in the **preconscious* and in **consciousness* thing-presentations do not occur alone but are accompanied by or associated with **word-presentations*. In a typical passage in an article on ‘The Unconscious’ (1915), Sigmund Freud (1856–1939) referred to this phenomenon: ‘The

conscious presentation comprises the presentation of the thing plus the presentation of the word belonging to it, while the unconscious presentation is the presentation of the thing alone' (*Standard Edition*, XIV, pp. 166–215, at p. 201).

thinking *n.* The act or process of having ideas or thoughts, including *reasoning, *problem solving, *decision making, the formation of *mental models, and the contemplation of *knowledge, *beliefs, and *opinions. See also ABSOLUTE THINKING, CENTIPEDE EFFECT, COGNITIVE DERAILMENT, CONVERGENCE–DIVERGENCE, DELUSION, DEREISM, DIRECTED THINKING, FANTASY THINKING, HUMPHREY'S LAW, HYPER-REFLECTION, IMAGELESS THOUGHT, LATERAL THINKING, LOGIC, MAGICAL THINKING, NOESIS, OBSESSION, PREDICATE THINKING, PROBLEM SOLVING, RATIONAL, THOUGHT DISORDER, THOUGHT STOPPING.

thinking type *n.* One of the subsidiary personality types in *analytical psychology. See FUNCTION TYPE.

thinspiration *n.* Inspiration to lose weight. See PRO-ANA. [A blend of *thin* and (*in*)*spiration*]

thiopental *n.* Thiopental sodium, an ultra-short-acting *barbiturate drug used as an intravenous general anaesthetic and sometimes as a *truth drug. Also called *Pentothal* (trademark), *Sodium Pentothal*, or *thiopentone*.

thiopentone See THIOPENTAL.

thioridazine *n.* Thioridazine hydrochloride, a *neuroleptic (1) drug belonging to the class of *phenothiazines, prescribed in the treatment of *schizophrenia and other *psychotic (1) disorders, dysthymic disorder, childhood behavioural disorders, geriatric mental disorders, depressive disorders, and alcohol withdrawal. Also called *Mellaril* (trademark).

thiothixene *n.* A *neuroleptic (1) drug belonging to the group of *thioxanthenes, used (sometimes in its hydrochloride form) in the treatment of *schizophrenia and other *psychotic (1) disorders. Also called *Navane* (trademark).

thioxanthene *n.* Any of a group of [*neuroleptic \(1\)](#) drugs such as [*thiothixene](#) that have similar pharmacological effects to the [*phenothiazines](#). [From *thio-* indicating a chemical compound containing sulphur, from Greek *theion* sulphur + English *xanthene* a yellow crystalline compound used as a fungicide and as a dye, from Greek *xanthos* yellow + *-ene* indicating an unsaturated compound containing double bonds, from *-ene* a feminine name suffix]

third ear *n.* In [*psychoanalysis](#), a term sometimes used to denote the analyst's faculty of [*interpretation \(2\)](#), which is supposed to enable the analyst to hear things in the patient's words that would not be apparent to an untrained listener with an ordinary pair of ears. The term was introduced by the Austrian-born psychoanalyst Theodore Reik (1888–1969) in the title of his book *Listening with the Third Ear* (1949).

third eyelid *n.* A non-technical name for a [*nictitating membrane](#).

third ventricle *See* [VENTRICLE](#).

thirst *n.* The physiological and psychological state or condition caused by dehydration or lack of drink, characterized by an urge to drink and a feeling of dryness in the mouth and throat. *See also* [ANGIOTENSIN II](#), [BARORECEPTOR](#), [HYPOVOLAEMIC THIRST](#), [INTRACELLULAR THIRST](#), [POLYDIPSIA](#), [SUBFORNICAL ORGAN](#).

Thorazine *n.* A proprietary name for the neuroleptic drug [*chlorpromazine](#). [Trademark]

thought broadcasting delusion *n.* A [*delusion](#) that one's thoughts are being disseminated in a way that enables others to know them.

thought disorder *n.* Any pathological disturbance of thought processes, including [*delusions](#), [*flight of ideas](#), [*loosening of associations](#), or [*perseveration \(2\)](#), characteristic of certain mental disorders, notably [*schizophrenia](#), and considered by some authorities, including the Swiss psychiatrist Eugen Bleuler (1857–1939), who coined the term *schizophrenia*, to be the defining feature of that disorder. Because of the difficulty of

defining it objectively, ***DSM-5** refers to ‘disorganized thinking (speech)’.
See also [COGNITIVE SLIPPAGE](#), [OVERINCLUSIVENESS](#), [PROVERBS TEST](#).

thought experiment *n.* Another name for a **Gedankenexperiment*.

thought insertion delusion *n.* A **delusion* that certain of one’s thoughts that are not one’s own have been inserted into one’s mind by an external agent.

thought stopping *n.* A technique of **cognitive* behaviour modification in which patients or clients are trained to stop thinking about something as soon as it comes to mind, sometimes by self-administering a painful reminder, such as by snapping a rubber band worn round the wrist. It has been used to treat **obsessions*, **phobias*, **paraphilias*, and **hallucinations*.
See also [SUPPRESSION](#).

Thouless ratio *n.* A modified version of the **Brunswik ratio* of **perceptual constancy*, influenced by Fechner’s law, given by $(\log R - \log S)/(\log A - \log S)$, where *R* is the physical magnitude or intensity of the stimulus chosen as a match, *S* is the physical magnitude or intensity for a stimulus match with zero constancy, and *A* is the physical magnitude or intensity that would be chosen under 100 per cent constancy. The ratio is equal to zero when there is no perceptual constancy and 1 when there is perfect constancy. [Named after the English psychologist Robert Henry Thouless (1894–1984) who proposed it in 1931]

three-colour theory *n.* Another name for the **trichromatic theory*.

3-D model description *n.* In the **computational theory* of vision pioneered in the late 1970s by the English psychologist David Courtenay Marr (1945–80), the third and final **representation* (2), consisting of an abstract, object-centred three-dimensional representation enabling object recognition to occur, in contrast to the primitive **primal sketch* and the viewer-centred **2½-D sketch*.

360-degree feedback *n.* A method of appraising the performance of

employees by incorporating confidential evaluations by colleagues or peers and subordinates as well as supervisors or line managers, in contrast to traditional top-down appraisal by supervisors or line managers only. Typically, 360-degree feedback is given in the form of responses to questionnaire items covering behavioural criteria such as problem-solving ability, adaptability, communication skills, team-working, supervisory skills, and administrative skills, each item requiring a rating-scale response, plus a few narrative responses to qualitative questions. In some cases, employees also rate themselves, and *gap analysis* shows the discrepancy between how they perceive themselves and how others perceive them. Employees tend to prefer 360-degree feedback to traditional top-down appraisal, because it provides them with an idea of how their performance is judged from a variety of perspectives. The term was introduced in 1985 by the US marketing expert Mark R. Edwards (born 1948), Chief Executive Officer of TEAMS International, and from the mid-1990s the approach spread rapidly among leading companies. Also called *multi-rater feedback*, *multi-source feedback*, *360-degree assessment*, *360-degree review*, or *upward feedback*, although the latter term is misleading. [So called because an angle of 360 degrees is a complete circle, and the approach incorporates feedback from all directions rather than from only one]

3-hydroxytyramine See [DOPAMINE](#).

three Ps *n.* Pedantry, parsimony, and petulance. See [ANAL CHARACTER](#).

three-seven effect *n.* A phenomenon, based on [*population](#) stereotypes, that is often used by stage conjurors pretending to project their thoughts telepathically to their audiences. The performer says: 'I'm going to think of a two-digit number between one and fifty. I'll make both digits odd but not the same, so fifteen would be OK, but eleven wouldn't because the two odd digits are the same ... [pause]. Now how many of you got thirty-seven?' It usually turns out that more than one-third of the audience have thought of the number 37, partly because 3 and 7 are population stereotypes and partly because, surprisingly, the performer's instructions leave only seven possible two-digit numbers, apart from 15, which is effectively eliminated by being used as an example. It is often used in phoney demonstrations of telepathy.

*****ebook converter DEMO Watermarks*****

threshold *n.* The lowest intensity at which a *stimulus (1) evokes a *response or at which two stimuli can be discriminated from each other. Intensity is interpreted broadly to include variable stimulus *attributes such as the length of a line or the pitch of a tone. Also called a *limen*. See ABSOLUTE THRESHOLD, DIFFERENCE THRESHOLD. See also SIGNAL DETECTION THEORY, SUBLIMINAL PERCEPTION, TERMINAL THRESHOLD.

Thurstone scale *n.* A type of *attitude scale constructed by the *method of equal-appearing intervals, in which a large pool of candidate statements about an attitude object, ranging from strongly negative (*Abortion is never justified*) through neutral (*There are arguments both for and against abortion*) to strongly positive (*Abortion is every woman's right*), are sorted by a group of judges into eleven categories, assumed to appear equally spaced on the attitude *continuum, according to how favourable the statements are towards the attitude object, and items that yield the highest level of agreement among the judges as to their scale position, and that collectively represent an adequate range of contents and scale positions, are then selected for the final scale. Respondents to the scale endorse just those items with which they agree, and an individual respondent's score is calculated as the mean (or occasionally median) of the items endorsed, such scores being assumed to lie on an *interval scale of measurement. Also called an *equal-appearing interval scale*. Compare GUTTMAN SCALE, LIKERT SCALE, SEMANTIC DIFFERENTIAL, UNFOLDING TECHNIQUE, UNOBTRUSIVE MEASURE. [Named after the US psychologist Louis Leon Thurstone (1887–1955) who introduced it in an article in the journal *Psychological Bulletin* in 1929]

thwasa *n.* The Xhosa word for a *spell. [From Xhosa *ukuthwasa* to appear or become visible]

thymine *n.* One of the constituent *bases (1) of *DNA, having an affinity for *adenine. **T** *abbrev.* [From Greek *thymos* the thymus gland + *-ine* indicating an organic compound]

thymoleptic *adj. n.* (Of or relating to) an *antidepressant drug. [From Greek *thymos* temper or emotion + *lepsis* a taking hold or seizure + *-ikos* of, relating to, or resembling]

thymus *n.* A double-lobed ***endocrine gland** situated just below the ***thyroid gland** at the base of the neck, formerly believed to be vestigial in adults but now known to have a crucial role in the lymphatic system and to be the source of ***T lymphocytes**. [From Greek *thymos* the sweetbread or thymus gland]

thyroid gland *n.* An ***endocrine gland**, consisting in humans of two lobes near the base of the neck, that secretes the hormone ***thyroxine**, accelerating growth and metabolism and controlling body temperature. A deficiency of thyroxine leads to ***hypothyroidism** and can result in ***intellectual disability**, whereas an excess produces ***hyperthyroidism** and can lead to swelling of the eyeballs and exophthalmic goitre. The thyroid gland also secretes ***calcitonin**, which regulates ***calcium levels** (*compare* **PARATHYROID GLAND**). *See also* **THYROID-STIMULATING HORMONE**, **THYROTROPHIN-RELEASING HORMONE**. [From Greek *thyreoeides* a door-shaped shield, from *thyra* a door + *eidos* form, alluding to its appearance]

thyroid-stimulating hormone *n.* A hormone secreted by the anterior pituitary in response to ***thyrotrophin-releasing hormone** secreted by the hypothalamus. It stimulates the ***thyroid gland** to secrete ***thyroxine**. Also called *thyrotrophic hormone* or *thyrotropic hormone*(*TH*). **TSH** *abbrev.*

thyrotrophin-releasing hormone *n.* A ***releasing hormone** synthesized and secreted by the hypothalamus, causing the secretion of ***thyroid-stimulating hormone** by the anterior pituitary. Also spelt *thyrotropin-releasing hormone*. **TRH** *abbrev.*

thyroxine *n.* A hormone secreted by the ***thyroid gland**, derived from the non-essential amino acid tyrosine, accelerating metabolism and growth and controlling body temperature. Its chemical name is tetraiodothyronine. Also spelt *thyroxin*.

tic *n.* A spasmodic, recurrent, non-rhythmic, stereotyped movement or vocalization, experienced as irresistible but capable of being temporarily suppressed, often made worse by stress and improved by distraction. Simple motor tics include eye blinking, neck twisting, shoulder shrugging, and facial

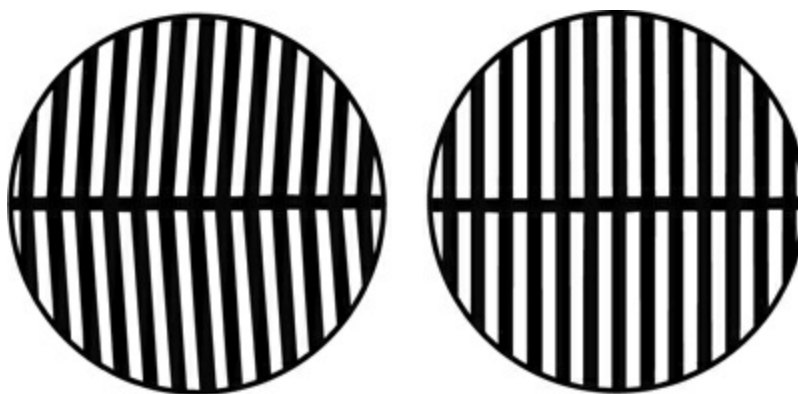
grimacing, and simple vocal tics include throat clearing, grunting, snorting, and barking. Complex tics include facial and bodily gestures, repeating words or phrases, **coprolalia*, **echolalia*, and **palilalia*. See also [TIC DISORDERS](#), [TIC DOULOUREUX](#). [French: origin obscure]

tic disorders *n.* An umbrella term in **DSM-5* for a group of **neurodevelopmental disorders* characterized by **tics*. See [PERSISTENT \(CHRONIC\) MOTOR OR VOCAL TIC DISORDER](#), [PROVISIONAL TIC DISORDER](#), [TOURETTE'S DISORDER](#).

tic douloureux *n.* A disorder of the **trigeminal nerve*, usually in a person over 60 years old, causing spasmodic stabbing pain in the forehead, nose, and scalp, the region between the nose, mouth and temple, or the lower face, depending on which of the three branches of the nerve is affected. [From French *tic* a tic + *douloureux* painful, from *douleur* pain or suffering]

tickle *vb.* **1.** To touch, stroke, or poke a part of another person's body lightly, especially in certain sensitive areas such as the chest, stomach, genital area, or under the arms, in a manner that tends to produce **goose pimples*, involuntary muscle spasms, and sensations that are partly pleasurable and partly aversive; hence, figuratively, to excite pleasurable (*She was tickled pink when she heard she was pregnant*). Self-tickling is difficult or impossible to achieve. *n.* **2.** The sensation produced by tickling.

tilt aftereffect *n.* A perceived inclination or slant in the parallel bars of a **grating* as a result of gazing for half a minute or more at a different grating in which the parallel bars are slightly slanted in the opposite direction (see [illustration](#)). See also [CONTINGENT AFTEREFFECT](#), [FIGURAL AFTEREFFECT](#).



Tilt aftereffect. Run your eyes back and forth in the central channel of the left-hand figure for half a minute, then transfer your gaze to the central channel of the right-hand figure; the bars will appear to slope in the opposite direction to those on the left.

tilting-room test *n.* A test devised in the late 1940s by the US psychologist Herman A. Witkin (1916–79) to separate the gravitational cues from the **vestibular system* from the visual cues that are used to judge one's orientation relative to the upright and to measure the cognitive style that came to be called **field* dependence–independence. It consists of a small room that an experimenter can tilt to the left or right, containing a chair that the respondent can tilt to the left or right, the respondent's objective being to try to maintain an upright orientation. Field-independent people are able to bring the chair close to the vertical irrespective of how much the room is tilted, whereas field-dependent people tend to align themselves with the room, even when the room is tilted by as much as 35 degrees. Also called the *body adjustment test* (*BAT*). Compare *ROD-AND-FRAME TEST*.

timbre *n.* The tone-colour or quality of a musical sound, the property that distinguishes the sound of a continuous tone played on two different musical instruments or sung by two different voices at the same pitch and intensity. In German it is called *Klangfarbe*, literally sound colour. In phonetics, it is the characteristic tonal quality distinguishing one **vowel* from another. [From French *timbre* the sound of a bell, from Latin *tympanum* a drum]

time delay in consciousness *n.* Another name for **Libet's delay*.

time sampling diary *n.* A research technique designed to access

*****ebook converter DEMO Watermarks*****

representative samples of people's subjective experiences, especially emotions and motivations, as they go about their daily activities. Participants record their subjective experiences at randomly selected times, typically several times a day for about 30 consecutive days. *Randomization ensures unbiased sampling, and various methods are used to achieve it, including sending bleeper or phone messages to participants at randomly selected times. The technique was first reported by the Austrian psychologist Hermann Brandstätter (born 1930) in a paper delivered to the 30th Congress of the German Psychological Association in 1976 and published in the official proceedings, *Bericht über den 30. Kongreß der DGfPs in Regensburg 1976* (Vol. 2, edited by Werner H. Tack, pp. 60–2), although the English psychologist and psychoanalyst John C(arl) Flugel (1884–1955) had published an article in the *British Journal of Psychology* in 1925 describing a study, without random sampling, in which participants retrospectively recorded, approximately every hour over a period of 30 consecutive days, their emotions during the past hour. Also called *time sampling*. See also [EXPERIENCE SAMPLING](#). **TSD** abbrev.

time-saving bias *n.* A tendency to underestimate the journey time saved by travelling faster when increasing from a low speed and to overestimate the time saved when increasing from a relatively high speed. For example, most people judge that more time will be saved in driving a fixed distance by increasing speed from 70 to 110 km/h (an increase of 40 km/h) than from 30 to 40 km/h (an increase in only 10 km/h), whereas the reverse is actually the case. The correct formula for calculating the time saved $t = D(1/V_1 - 1/V_2)$, where t is the time gained, D is the distance travelled, and V_1 and V_2 are the slower and faster speeds, respectively, but people's judgements tend to be close to the incorrect formula $t = D(V_1 - V_2)/V_2$. The illusion was first reported by the Swedish psychologist Ola Svenson (born 1939) in the *Journal of Experimental Psychology* in 1970.

time series *n.* In statistics, any series of values of a variable taken at successive times or in a fixed order. For example, a person's pulse rate, measured every five minutes over a period of 24 hours, could be regarded as a time series. See also [INTERRUPTED TIME-SERIES DESIGN](#), [NOISE \(2\)](#), [SIGNAL](#), [SIGNAL-TO-NOISE RATIO](#), [TIME-SERIES ANALYSIS](#), [WHITE NOISE](#).

time-series analysis *n.* A set of statistical procedures for analysing *time series. See [ARIMA](#), [AUTOCORRELATION](#), [AUTOREGRESSION](#), [CORRELOGRAM](#), [FOURIER ANALYSIS](#), [MOVING AVERAGE](#). See also [ALIASING](#), [INTERRUPTED TIME-SERIES DESIGN](#), [WHITE NOISE](#).

tinnitus *n.* Ringing, hissing, or rumbling noises in one or both ears, either of psychogenic origin or resulting from such physical causes as middle ear infection, the side-effects of certain drugs, including aspirin, or exposure to very loud noise. [From Latin *tinnire* to ring]

tip-of-the-tongue phenomenon *n.* The recall of certain *attributes of an item of information being sought in memory without being able to recall the information itself. For example, a person trying to recall the capital of Nicaragua may recall that it begins with the letter M, and may know that it has three syllables, but may nevertheless not be able to recall its full name: *Managua*. If asked to guess, such a person might suggest names such as *Minorca*, *Montana*, or *Monica*. Apart from the initial letter or sound and number of syllables, which according to research are most often recalled when the phenomenon occurs, the principal stressed syllable and the final letter or sound are also sometimes recalled—see [SERIAL POSITION EFFECT](#). The phenomenon was first investigated and named by the US psychologists Roger (William) Brown (1925–97) and David McNeill (born 1933) in an article in the *Journal of Verbal Learning and Verbal Behavior* in 1966. See also [UGLY SISTER EFFECT](#). **TOT** abbrev.

Titchener circles *n.* Another name for the *[Ebbinghaus illusion](#). Also called the *Titchener illusion*. [Named after the English psychologist Edward Bradford Titchener (1867–1927) who published it in 1898]

tit for tat strategy *n.* A *[programmed strategy](#) for playing repeated *[Prisoner's Dilemma games](#), also occasionally applied to other games, in which the program cooperates on the first trial and then, on each subsequent trial, chooses the strategy chosen by the co-player on the previous trial. It is often interpreted as a method of implementing *[reciprocal altruism](#). The idea was introduced by the Russian-born US psychologist Anatol Rapoport (1911–2007) in his book *Two-Person Game Theory* (1966, p. 133), and the name was first applied by him to a computer program for playing repeated
*****ebook converter DEMO Watermarks*****

Prisoner's Dilemma games as reported in an article by the US political scientist Robert Axelrod (born 1943) in the *Journal of Conflict Resolution* in 1980. **TFT** *abbrev.*

T lymphocyte *n.* A type of **lymphocyte* synthesized in the **thymus* gland that plays a crucial role in the **immune system*. Two major subtypes are killer T cells that destroy cells infected by viruses and helper T cells that induce other cells, namely **B lymphocytes*, to produce **antibodies*. Also called a *T cell*. *See also* *STEM CELL*. [From *t(hymus)lymphocyte*]

T-maze *n.* A simple **maze* incorporating only one choice point with only two alternatives. It is shaped like the letter *T*, an animal entering the maze at the bottom and being rewarded for reaching the goal box at one end of the crossbar.

tobacco-related disorders *n.* **Substance-related and addictive disorders* introduced in **DSM-5* associated specifically with the use of tobacco, diagnosed only when tobacco use is problematic and causes significant impairment or distress. DSM-5 distinguishes between tobacco use disorder and tobacco withdrawal. *See also* *SUBSTANCE-INDUCED DISORDERS*, *SUBSTANCE-RELATED AND ADDICTIVE DISORDERS*, *SUBSTANCE USE DISORDERS*.

tocopherol *See* *VITAMIN E*.

Tofranil *n.* A proprietary name for the tricyclic antidepressant drug **amitriptyline*. [Trademark]

token *n.* **1.** An indication, sign, or symbol representing something else. **2.** A voucher or object that can be used as payment for goods or services. **3.** In linguistics, an instance or occurrence of a word or other linguistic unit in speech or writing, in contradistinction to the word or symbol (called a *type*) of which it is an instance. *See also* *DISTRACTOR*, *TYPE—TOKEN RATIO*.

token distractor *See* *DISTRACTOR*.

token economy *n.* A technique of **behaviour* therapy sometimes used

in hospitals and other institutions, in which inmates are given tokens (for example, poker chips) as ***reinforcement (1)** for the performance of certain target behaviour patterns (such as dressing or speaking normally or interacting with other patients on the ward), the tokens later being convertible into privileges such as special foods, cigarettes, or access to television.

Tolansky's curvature illusion See **CURVATURE ILLUSION**.

tolerance *n.* **1.** The quality of being able or willing to accept the behaviour of others. **2.** The capacity to withstand extreme conditions or circumstances. **3.** In relation to drugs such as ***narcotic** analgesics, ***dopamine** antagonists, and ***barbiturates**, a tendency to require ever-increasing dosages of the drug to achieve a desired effect, or a markedly diminished effectiveness with continuation of the same dosages, caused by various mechanisms that reduce the number of drug molecules reaching neuroreceptor sites on target cells or that involve compensatory responses to the drug effects such as ***enzyme** induction or ***neuromodulation**. See also **HABITUATION (3)**, **SUBSTANCE DEPENDENCE**, **TACHYPHYLAXIS**. Compare **SENSITIZATION** (reverse tolerance). [From Latin *tolerare* to sustain or lift up]

tolerance of ambiguity See **INTOLERANCE OF AMBIGUITY**.

tomoxetine See **ATOMOXETINE**.

tonal density *n.* A quality of sound associated with the perceived tightness or compactness of a tone, greater density usually occurring with higher frequency tones.

tone *n.* **1.** Any sound wave that is capable of being perceived as having a definite ***pitch**. See also **COMPLEX TONE**, **PURE TONE**. Compare **NOISE (1)**. **2.** A musical interval or difference in pitch equivalent to two ***semitones** or one-sixth of an ***octave**. Also called a *whole tone*. [From Greek *tonos* a tone]

tone deafness *n.* A non-technical name for ***asonia**.

tongue *n.* The movable muscular structure situated on the floor of the

mouth that functions as the principal organ of **taste* and that plays an important part in the articulation of speech sounds, its epithelial covering being richly covered with **papillae*, at the bases of which **taste* buds are situated. Since the beginning of the 20th century, it has often been stated in textbooks that maximal sensitivity for sweet tastes is located at the front of the tongue, sour tastes at the sides, salty tastes at the front and front sides, and bitter tastes in the soft palate above the back of the tongue, but in reality all taste qualities can be elicited from all regions of the tongue containing taste buds. *See also* CIRCUMVALLATE PAPILLA, FILOFORM PAPILLA, FOLIATE PAPILLA, FUNGIFORM PAPILLA. [From Old English *tunge*, cognate with Old High German *zunga*, Latin *lingua*]

tonic-clonic *adj.* Of or pertaining to a convulsion or spasm characteristic of **major epilepsy*, beginning with a **tonic convulsion* lasting up to a minute, then a **clonic convulsion* for approximately a minute, often with clenched teeth, chewing movements, and loss of bladder or bowel control, then usually a period of relaxed unconsciousness followed by amnesia for the episode. Also called *grand mal*, *tonoclonic*. *Compare* ABSENCE.

tonic convulsion *n.* A prolonged and generalized contraction of the skeletal muscles. Also called *tonic immobility* or *tonic spasm*. *Compare* CLONIC CONVULSION, TONIC-CLONIC. [From Greek *tonos* tension, from *teinein* to stretch]

tonoclonic *adj.* A synonym for **tonic-clonic*.

tonotopic map *n.* A **topographic map* of the **basilar* membrane in the **auditory* cortex on **Heschl's gyrus*. Also called a *cochleotopic map*. [From Greek *tonos* a tone + *topos* a place + *-ikos* of, relating to, or resembling]

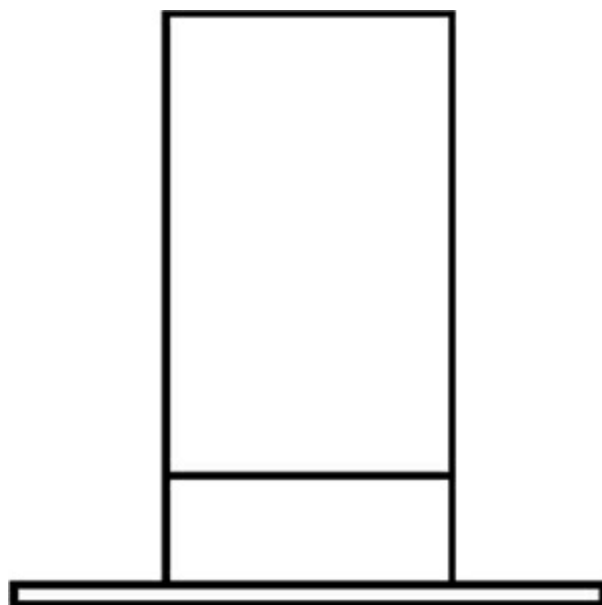
tonus *n.* The normal tension or elasticity of a resting muscle. Also called *muscle tone*. *See also* CATALEPSY, CATAPLEXY (1), CATATONIA, DECEREBRATE RIGIDITY, DYSTONIA, HYPERTONIA, HYPOTONIA, REM ATONIA. *Compare* ATONIA. [From Greek *tonos* tension or tone]

topagnosia *n.* A form of agnosia involving an impaired ability to identify which part of one's body has been touched. Also called *topagnosis*. *See* *****ebook converter DEMO Watermarks*****

AGNOSIA. See also **AUTOTOPAGNOSIA**. [From Greek *topos* a place + *gnosis* knowing + *-ia* indicating a condition or quality]

top-down processing *n.* ***Information** processing that proceeds from information already stored in memory, especially general assumptions or presuppositions about the material being processed, as when a person forms a hypothesis on the basis of existing ***schemata** and prior experience about what an object might be and then uses sensory evidence to corroborate or disconfirm the hypothesis. In reading indistinct handwriting, for example, if the words *whisky and...* occur and the last word is illegible, a reader may use top-down processing and guess the last word to be *water*, checking the script for evidence to confirm or refute this guess, and if it is refuted, to guess that the word is *soda* and performing another check, and so on. A standard illustration of top-down processing is the phenomenon of reversal in an ***ambiguous figure**, which irresistibly oscillates between different interpretations. *Top-down theories* of perception are theories according to which perceptions are formed in this way. The term was introduced by the US psychologists Donald A(rthur) Norman (born 1935) and David E(verett) Rumelhart (1942–2011) in their book *Exploration in Cognition* (1975). Also called *conceptually driven processing*. See also **ANALYSIS BY SYNTHESIS**, **AUTOMATIC PROCESSING**, **CONSTRUCTIVE MEMORY**, **CONSTRUCTIVISM**, **RECONSTRUCTIVE MEMORY**, **STROOP EFFECT**, **TASK-POSITIVE NETWORK**. Compare **BOTTOM-UP PROCESSING**, **FEATURE DETECTION THEORY**.

top hat illusion *n.* A visual illusion, closely related to the ***horizontal–vertical illusion**, in which a drawing of a top hat, the height of which is equal to the width of its brim, appears much taller than it appears wide (see **illustration**).



Top hat illusion. Its height is equal to the width of its brim.

topographagnosia *n.* A form of agnosia involving an inability to find one's way around, read maps, draw plans, and perform similar functions, often associated with damage to the right hemisphere **parietal lobe*. *See also* *AGNOSIA*. Compare visuospatial agnosia (*see* *AGNOSIA*).

topographic map *n.* Any of the point-to-point representations of sensory fields, including especially the visual, auditory, and tactile fields, within particular areas of the brain, preserving the topological relationship between neighbouring points but often distorting relative distances. Also called a *topographical map* or a *topographic(al) (spatial)representation*. *See* *AUDITORY CORTEX*, *CEREBELLUM*, *LATERAL GENICULATE NUCLEUS*, *PRIMARY VISUAL CORTEX*, *RETINOTOPIC MAP*, *SOMATOSENSORY CORTEX*, *THALAMUS*, *TONOTOPIC MAP*, *VENTRAL POSTERIOR NUCLEUS*. *See also* *SOMATOSENSORY HOMUNCULUS*. [From Greek *topos* a place + *graphein* to write + *-ikos* of, relating to, or resembling]

topography *n.* A detailed description of the major features of a region. In **psychoanalysis*, a description of the layout of the mental apparatus, especially the first topography of Sigmund Freud (1856–1939) in terms of the **unconscious* (2), **preconscious*, and **consciousness*, or his second structural model (from 1920 onwards) in terms of the **id*, **ego*, and

*****ebook converter DEMO Watermarks*****

***superego.** See also METAPSYCHOLOGY. **topographic** or **topographical** *adj.*
[From Greek *topos* a place + *graphein* to write]

topological psychology *n.* A largely discredited psychological geometry introduced in 1936 by the German–US psychologist Kurt Lewin (1890–1947) to represent his ***field** theory, in particular the ***life space**, conceived as a ***hodological space**, and a person’s locomotion within it. [So called in reference to *topology*, the branch of geometry concerned with the properties of a figure that remain unchanged when the figure is stretched, compressed, or bent]

torticollis *n.* A shortened name for ***spasmodic torticollis**.

total quality management *n.* An approach to management based on the principle that every member of staff should be involved in decision making and committed to achieving and maintaining high standards in all areas of the organization’s activities. Additional assumptions are that success depends on giving the customers what they want at a price that they can afford, and that when one part of an organization supplies services to another it should treat the recipient as a customer. **TQM** *abbrev.*

TOTE *abbrev.* Test-Operate-Test-Exit, a ***feedback** loop proposed as the basic unit of behaviour by the US psychologist George A(rmitage) Miller (1920–2012) and co-authors in their book *Plans for the Structure of Behavior* (1960). This hypothetical mechanism responds to a ***stimulus (1)** by testing it for incongruity, operates to remove the incongruity if any is found, tests again, and so on indefinitely until the incongruity is eliminated, then exits. The authors explained in a key passage that the TOTE is intended as a conceptual alternative to the ***reflex** arc: ‘Obviously, the reflex arc is not the unit we should use as the element of behavior: the unit should be the feedback loop itself. If we think of the Test-Operate-Test-Exit unit—for convenience, we shall call it a TOTE unit—as we do of the reflex arc, in purely anatomical terms, it may describe reflexes, but little else. That is to say, the reflex should be recognized as only one of many possible actualizations of the TOTE pattern’ (p. 27). It is not only energy that flows through the feedback loop, but also information and control, and it can be actualized at the cognitive level, as in the following example, especially apt

*****ebook converter DEMO Watermarks*****

for illustrating feedback: a person who is cooking tests a sauce for taste, notes an incongruity between the sensory input and the desired or expected taste, operates by adding various ingredients, tests again and repeats the cycle until no incongruity is found, then finally exits from the feedback loop.

totem *n.* A physical object having ritual significance, or a symbolic representation of such an object, especially a type of animal, plant, or natural structure representing a clan in certain cultures such as those of North American Indians. In **psychoanalysis*, Sigmund Freud (1856–1939), in his book *Totem and Taboo* (1912–13, *Standard Edition*, XIII, pp. 1–162) interpreted it as a representation of the **primal father*. See also *PARTICIPATION MYSTIQUE*. **totem pole** *n.* A pole on which totems are hung. [From Ojibwa *nintotem* mark of my family]

touch *n.* Originally one of the five classical **senses* (1), now a generic term for several senses that respond to stimuli directly in contact with the **skin*. **Dynamic* touch is the ability to sense certain physical properties of an object by moving it around; **haptic* touch is active exploration of objects or surfaces using the sense of touch, usually using the hands; and the **cutaneous senses* are those responsible for the four sensations that may be felt when an object or surface touches the skin and that the Austrian physiologist Max von Frey (1852–1932) identified in 1904 as warmth, cold, pain, and pressure, although pressure is now known to include sensations of texture and vibration (*pallaesthesia*). See also *AESTHESIOMETER*, *COLD SPOT*, *HAPHALGESIA*, *LIBET'S DELAY*, *PARAESTHESIA*, *PRESSURE-SENSITIVE SPOT*, *SENSORY SALTATION*, *TACTILE ACUITY*, *TOUCH RECEPTOR*, *TWO-POINT THRESHOLD*, *WARM SPOT*.

touch acuity *n.* Another name for **tactile* acuity.

touch receptor *n.* A type of **sensory* receptor, located in the **epidermis* or the **dermis* of the **skin*, specialized for sensations of **touch*. See *FREE NERVE ENDING*, *GOLGI TENDON ORGAN*, *MECHANORECEPTOR*, *MEISSNER'S CORPUSCLE*, *MERKEL CELL*, *PACINIAN CORPUSCLE*, *PAIN RECEPTOR*, *RUFFINI CORPUSCLE*, *TEMPERATURE RECEPTOR*. Also called a *tactor*.

tough-mindedness *n.* Practicality, lack of sentimentality, and determination, or obduracy and intractability. In the later writings (from 1975

*****ebook converter DEMO Watermarks*****

onwards) of the German-born British psychologist Hans J(ürgen) Eysenck (1916–97) it is another name for **psychoticism*.

Tourette's disorder *n.* In **DSM-5*, a **tic disorder* of genetic origin (located on chromosome 18) characterized by recurrent multiple motor tics and at least one vocal tic, causing significant distress or impairment in social or occupational functioning, the onset being before age 18 years, and the tics not being attributable to a stimulant drug or other substance or a **general medical condition*. Contrary to common misconception, **coprolalia* or **copropraxia* are present in only a minority of people with the disorder. Also called *Gilles de la Tourette's syndrome (GTS)* or *Tourette's syndrome (TS)*. [Named after the French physician Georges Gilles de la Tourette (1857–1904), who published case studies of eight patients with the disorder in 1885]

Tower of Hanoi *n.* A logical puzzle, frequently studied in cognitive psychology and used as a test of **problem solving* ability, consisting of three pegs, on one of which are placed a number of discs of varying diameter, the largest at the bottom and the smallest at the top (see *illustration*). The problem is to move the tower of disks over to one of the other pegs in the smallest number of moves, moving one disc at a time and using the third peg as a temporary way station as required, and never placing a larger disc on top of a smaller one. The puzzle is of ancient (possibly Indian) origin but was rediscovered by the French mathematician Edouard Lucas (1842–91) and marketed as a toy in 1883. Lucas proved that, for any number n of discs, the minimum number of moves is given by the formula $2^n - 1$. Hence 3 discs can be transferred in 7 moves, 4 discs in 15 moves, 5 discs in 31 moves, and so on. See also *GENERAL PROBLEM SOLVER*. [So called because of its supposed resemblance to a certain type of Vietnamese building, Lucas's toy having been described as a simplified version of the Tower of Brahma, which was said to contain 64 gold discs, and which would therefore require a minimum of $2^{64} - 1$ (more than 18 billion billion) moves to solve]



Tower of Hanoi

toxic *adj.* Of, relating to, or caused by a **toxin*. See also TOXIC DOSAGE.
toxicity *n.* The state or quality of being toxic; or the potency of a **toxin*.
[From Greek *toxikon pharmakon* arrow-poison, from *toxon* a bow]

toxic dosage *n.* The minimum dosage of a drug required to produce signs or symptoms of toxicity in an organism. **TD** *abbrev.* **toxic dosage 50** *n.* Another name for the **median* toxic dosage. See also THERAPEUTIC INDEX, THERAPEUTIC RATIO. Compare EFFECTIVE DOSAGE, LETHAL DOSAGE. **TD-50** or **TD₅₀** *abbrev.*

toxicosis *n.* 1. Any disorder or condition brought about by poisoning. 2. Another name for **food aversion learning*. [From Greek *toxikon pharmakon* arrow-poison, from *toxon* a bow + *-osis* indicating a process or state]

toxin *n.* Any organic poison that stimulates an **immune response* or the production of neutralizing **antibodies*. More generally, any poison, but this meaning is avoided in careful usage. [From Greek *toxikon pharmakon* arrow-poison, from *toxon* a bow]

trace conditioning *n.* A form of **conditioning* (1) involving the repeated brief presentation of a **conditioned stimulus*, followed by a period of time during which no stimulus is presented, and then the presentation of an **unconditioned stimulus*, leading eventually to the development of a **conditioned response* based on the memory of a previous stimulus. Compare DELAY CONDITIONING. [So called because it depends on a memory trace of the conditioned stimulus]

trace, memory See MEMORY TRACE.

trachea *n.* The membranous tube, reinforced with cartilaginous rings, between the lungs and the *larynx, referred to non-technically as the *windpipe. [From Greek *tracheia arteria* rough artery]

tragedy of the commons See COMMONS DILEMMA.

trainable mentally retarded *adj.* An obsolescent educational category equivalent to moderate *intellectual disability. **TMR** abbrev.

training analysis *n.* A course of *psychoanalysis undergone by a student wishing to become an analyst. It was made obligatory at the Congress of the International Psycho- Analytical Association in 1922, although Sigmund Freud (1856–1939), the founder of psychoanalysis, believed that, for practical reasons, it could only be short and incomplete, and that its main objective should be to ensure that the student is suitable for further training ('Analysis Terminable and Interminable', 1937, *Standard Edition*, XXIII, pp. 216–53). Compare CONTROL ANALYSIS.

trait *n.* A characteristic or quality distinguishing a person or (less commonly) a thing, especially a more or less consistent pattern of behaviour that a person possessing the characteristic would be likely to display in relevant circumstances, typical examples being *shyness*, *honesty*, *tidiness*, and *stupidity*. The US psychologists Gordon W(illard) Allport (1897–1967) and Henry S(ebastian) Odbert (1909–95) carried out an exhaustive dictionary search (published in the journal *Psychological Monographs* in 1936) in which they found 17,953 trait names, and after eliminating synonyms that denoted essentially the same traits they were left with 4,505 distinct English trait names denoting psychological differences between people. See also 16PF, BIG FIVE, LANGUAGE PERSONALITY SPHERE, METATRAIT, TRAIT CENTRALITY. [From Old French *trait* a drawing or a stroke of the pen in a picture, from Latin *trahere*, *tractum* to draw]

trait anxiety *n.* A person's general or characteristic level of *anxiety. See also STATE-TRAIT ANXIETY INVENTORY. Compare STATE ANXIETY.

trait centrality *n.* A tendency of certain personality **traits* to have an overwhelming effect in **impression formation*, even influencing the interpretation of other traits associated with the person being judged (an **atmosphere effect*). The phenomenon was discovered in 1946 by the Polish-born US psychologist Solomon E(lliott) Asch (1907–96), who presented one group of judges with a description of a target person who was described as *intelligent, skilful, industrious, warm, determined, practical, and cautious* and another group of judges with a description that was identical apart from the replacement of *warm* with *cold*. The *warm/cold* trait turned out to be central in the sense of profoundly affecting the overall impression of the target person. When the list of traits contained *warm*, 91 per cent of judges guessed that the target person was also *generous*, compared with only 8 per cent when the list contained *cold*. When the stimulus list included *warm*, the target person tended to be perceived as also being *happy, humorous, sociable, and popular*, but when the stimulus list included *cold*, most judges thought the stimulus person would not have those traits but would be *persistent, serious, and restrained*. Other traits, such as *reliable*, were not significantly affected by the *warm/cold* trait. Other trait pairs, such as *polite/blunt*, do not produce the same centrality effect. Central traits are believed to have the property of centrality by virtue of being highly correlated with other traits in the judges' **implicit personality theories*. The phenomenon illustrates the property of a **Gestalt* in which the whole is more than the mere sum of its parts. *See also* HALO EFFECT.

trait negativity bias *n.* A tendency for unfavourable information about a person to have more impact on impressions of that person than favourable information, so that, for example, even a single unfavourable comment in an otherwise supportive reference or testimonial may create a generally bad impression and undermine the candidate's chances. The effect presumably arises from the fact that information about people tends to be mostly positive or neutral, as a result of which negative information tends to have more **salience* (1) and to contain more **information* (2) in the sense of **information* theory. *See also* POLLYANNA EFFECT.

trait validity *n.* In psychometrics, a form of **validity* determined by the extent to which a test correlates more highly with different methods of measuring the same **construct* than it does with similar methods of

*****ebook converter DEMO Watermarks*****

measuring different constructs. The concept was proposed by the US psychologist Donald T(homas) Campbell (1916–96) in an article in the journal *American Psychologist* in 1960, where it was distinguished from validity established through a [*nomological network](#). See also [MULTITRAIT–MULTIMETHOD MATRIX](#).

trance *n.* An altered state of [*consciousness](#), shown by a narrowing of awareness of events in the immediate surroundings, a suspension of the sense of personal identity, and diminution in the range of motor activity and speech. It is characteristic of certain forms of intoxication, some mental disorders, and (controversially) [*hypnosis](#). See also [DISSOCIATIVE TRANCE DISORDER](#), [POSSESSION TRANCE](#). [French *trance*, from Latin *transire* to go across or to die]

trance disorder, dissociative See [DISSOCIATIVE TRANCE DISORDER](#).

trance logic *n.* A peculiar willingness of some people who are [*hypnotized](#) to accept logical contradictions that people who are not hypnotized do not normally tolerate. A classic example, reported by the Austrian-born US psychologist Martin Theodore Orne (1927–2000) in an article in the *Journal of Abnormal and Social Psychology* in 1959, where trance logic was first reported and named, is the *double hallucination*. Orne gave a group of hypnotically susceptible subjects the suggestion that, when they opened their eyes while still hypnotized, they would see a research assistant called Joe, whom they had met, sitting in a chair opposite them. All hypnotic subjects duly hallucinated Joe in the empty chair. They were then told to turn around and look behind them, where the real Joe was standing, and were asked what they saw. Almost invariably, the hypnotic subjects indicated by their answers that they could perceive two images of the same person. Members of a [*control group](#) of subjects who were pretending to be hypnotized either refused to see anyone behind them, or claimed that they could not recognize the person behind them, or said that the hallucination in front of them had vanished; unlike the hypnotized subjects, they were trying to interpret what they had seen according to conventional logic. [So called because of its supposed relation to a hypnotic trance]

tranq *n.* A common street name for the depressant drug [*phencyclidine](#).

*****ebook converter DEMO Watermarks*****

[From *tranquillizer*]

tranquillizer *n.* Any drug that has a calming effect without causing any significant dulling of consciousness, usually because its sites of action are in subcortical structures, in contrast to a sedative or hypnotic drug that also has a calming effect but tends to produce significant hypnotic (sleep-inducing) or narcotic effects as well. The term was first introduced in 1953 to describe the psychotropic effects of reserpine but later came to refer to **anxiolytic* and **sedative* drugs. The *major tranquillizers* are the **neuroleptic (1)* drugs, and the *minor tranquillizers* are the **anxiolytic* drugs. US *tranquilizer*. [From Latin *tranquillus* quiet, calm, or still]

trans See *CIS–TRANS COMPLEMENTATION TEST*.

transactional analysis *n.* A theory of **personality* and a form of **psychotherapy*, originated by the Canadian-born psychoanalyst Eric Berne (1910–70), aimed primarily at improving interpersonal relations by adjusting the balance between the child, adult, and parent ego states that are assumed to coexist within the same personality. **TA** *abbrev.*

transactionalism *n.* An empiricist approach to perception adopted in the 1940s and 1950s by the US painter and psychologist Adelbert Ames, Jr (1880–1955) and his followers, according to which all stimuli are ambiguous, and perceptions are constructed largely from past experiences (transactions) with relevant stimuli, such phenomena as the **Ames room* and the **trapezoidal window* being cited as evidence for this interpretation, which can be traced to the *Essay Towards a New Theory of Vision* (1709) by the Irish philosopher Bishop George Berkeley (1685–1753).

transcendental meditation *n.* A spiritual exercise and form of **psychotherapy* based on Hindu traditions, involving daily periods of relaxation and quiet meditation on a special word, called a mantra, given by an instructor or therapist. See also *MINDFULNESS*. **TM** *abbrev.*

transcortical aphasia *n.* A generic term for transcortical motor aphasia, transcortical sensory aphasia, and mixed transcortical aphasia, all of which arise from lesions interfering with the transmission of nerve impulses

*****ebook converter DEMO Watermarks*****

across the cerebral cortex between the language and motor centres, leading to impairment of spontaneous speech with intact ability to repeat spoken language. See [APHASIA](#). Also called *ideomotor aphasia*.

transcortical magnetic stimulation *n.* A painless and non-invasive technique for studying brain function by applying a pulsed magnetic field across the skull, first used as an aid to neurological examination, by stimulating regions of the [*motor cortex](#) and observing body movements to confirm that the corresponding neural pathways were intact. Depending on the precise positioning of the magnetic field and the pulse frequency, the stimulation elicits [*evoked potentials](#) and can affect visual perception, memory, reaction time, speech, and mood. In the late 1980s it began to be used as a method of functional brain mapping and as a research tool, and it was also investigated as a possible treatment method for certain forms of mental disorder. Also called *transcranial magnetic stimulation*. Compare [ELECTROCONVULSIVE THERAPY](#). TMS *abbrev.* [From Latin *trans* across + *cortex* bark or outer layer + *-icus* of, relating to, or resembling + *-alis* of or relating to]

transcranial magnetic stimulation See [TRANSCORTICAL MAGNETIC STIMULATION](#).

transcriptase *n.* Another name for [*RNA](#) polymerase.

transcription *n.* **1.** The act or process of copying or rewriting a text. **2.** In genetics, the process whereby a molecule of [*RNA](#) is synthesized from a [*DNA](#) template. **transcribe** *vb.* [From Latin *trans* across + *scribere*, *scriptum* to write + *-ion* indicating an action, process, or state]

transducer *n.* A device or instrument that converts one form of energy into another. All [*sensory](#) receptors are transducers inasmuch as they transform kinetic energy, light, sound, heat, and energy from chemical reactions into nerve impulses or [*action potentials](#). [From Latin *transducere* to lead across, from *trans* across + *ducere* to lead]

transducin *n.* An enzyme that is activated by molecules of visual pigment in the retina when they are stimulated by light and that in turn stops the action
*****ebook converter DEMO Watermarks*****

of **cyclic GMP* in keeping open **sodium* channels into the rods and cones. [Alluding to the role of the visual receptors as **transducers* of light into nerve impulses]

transduction *n.* 1. The conversion of energy from one form into another by a **transducer*. See also *SENSORY TRANSDUCTION*. 2. In genetics, the transfer of **DNA* from one bacterial cell to another by a bacteriophage (a virus that infects a bacterium).

transductive reasoning *n.* The term used by the Swiss psychologist Jean Piaget (1896–1980) to denote the type of thinking characteristic of children during the **pre-operational stage* of development. It is so called because it focuses on concrete instances and does not follow the principles of either **induction* (1) or **deductive reasoning*. Also called *transductive logic*, but this is avoided in careful usage, because it is clearly not a form of **logic*.

transfer-appropriate processing *n.* Another name for **encoding specificity*.

transference *n.* In **psychoanalysis*, a form of **displacement* involving the redirection of emotions and attitudes from their original **instinctual object* on to a substitute, especially as occurs in the dependent, child-like, and often both sexually and aggressively charged relationship that a person undergoing therapy usually forms with the analyst, generally having features carried over (transferred) from earlier relationships, especially with parents. The **interpretation* (2) or **working through* of the transference is an important aspect of psychoanalytic therapy in which aspects of past relationships are explored. Sigmund Freud (1856–1939) introduced and discussed this idea in 1914 in an article on ‘Remembering, Repeating and Working-Through’ (*Standard Edition*, XII, pp. 147–56). See also *ACTING OUT* (1), *COUNTER-TRANSFERENCE*, *NEGATIVE TRANSFERENCE*, *POSITIVE TRANSFERENCE*, *RAPPORT*, *REPETITION COMPULSION*, *TRANSFERENCE NEUROSIS* (1, 2).

transference neurosis *n.* 1. In **psychoanalysis*, a category of **psychoneuroses* comprising **anxiety* hysteria, **conversion* hysteria, and **obsessional neurosis*. It is distinguished from **narcissistic neurosis* because **libido* is not withdrawn into the **ego* but is displaced or transferred on to

*****ebook converter DEMO Watermarks*****

external **instinctual objects*. Sigmund Freud (1856–1939) expounded his taxonomy of neuroses to include transference neurosis in 1916–17 in his book *Introductory Lectures on Psycho-Analysis* (*Standard Edition*, XV–XVI, at pp. 387–91). 2. More specifically, the artificial psychoneurosis that develops during psychoanalytic therapy, the **interpretation* (2) of which is one of the techniques of psychoanalysis. In his article on ‘Remembering, Repeating and Working-Through’ (1914) Freud claimed that ‘we regularly succeed in giving all the symptoms of the illness a new transference meaning and in replacing his [the patient’s] ordinary neurosis by a “transference-neurosis” of which he can be cured by the therapeutic work’ (*Standard Edition*, XII, pp. 147–56, at p. 154). See also *TRANSFERENCE*.

transfer of training *n.* The facilitation or impairment of performance of a task resulting from prior training on a different but related task. Transfer tends to be positive when the two tasks involve different stimuli and similar responses, and it tends to be negative when the two tasks involve similar stimuli and different responses. When the two tasks involve different stimuli and different responses, there tends to be little or no transfer. See *BILATERAL TRANSFER*, *NEGATIVE TRANSFER*, *POSITIVE TRANSFER*.

transfer RNA *n.* A soluble form of **RNA* that transports a specific **amino acid* to a **ribosome* during protein synthesis. Also called *soluble RNA*. See also *FRAMESHIFT SUPPRESSION*. Compare *MESSANGER RNA*. *tRNA* abbrev.

transformation *n.* Any alteration in form, character, or substance. In statistics and measurement theory, a change of all the **raw scores* in a data set by means of a mathematical function. Raw scores may be transformed to simplify computation, as when a constant is added to eliminate negative scores, to express the scores in dimensionless units of standard deviations, as when scores are transformed to **standard scores*, to change the shape of the distribution of scores to meet the assumptions of a statistical test, as when **product–moment correlation coefficients* are transformed to **z scores* by means of the **Fisher’s r to z transformation*, or for a variety of other reasons. Some transformations, such as the transformation of raw scores measured on an **interval scale* to **ranks*, are irreversible and involve loss of information, whereas others are reversible and involve no loss of information.

transformational grammar *n.* A representation of a language in terms of the rules through which structures or elements can be derived from others, and in particular the **deep structures* of sentences can be converted into their **surface structures*. See also *BINDING PROBLEM*, *CHOMSKYAN*, *COMPETENCE (2)*, *FORMAL UNIVERSALS*, *GOVERNMENT AND BINDING*, *PERFORMANCE (2)*, *WUG TEST*. Compare *GENERATIVE GRAMMAR*.

transgendered *adj.* Having a preference for or engaging in **transvestism* or **transsexualism*. **transgenderism** *n.* The practice of transgendered behaviour. **transgenderist** *n.* A transgendered person.

transgenic *adj.* Of or relating to an **organism* containing a **gene* or genes transferred artificially from another organism. [From Latin *trans* across + English *gene* + Latin *-icus* of, relating to, or resembling]

transient disparity *n.* Any instantaneous difference between the arrival times of a sound wave at the two ears, including interaural differences in the onset time of the sound, the termination time, and the time of any sudden change in pitch or intensity, but excluding ongoing or continuous **phase* delay. It is used in conjunction with phase delay as a **cue (2)* for localizing sounds below about 1,000 hertz (about two octaves above Middle C) having wavelengths greater than the diameter of the head, so that the sound waves bend round the head rather than being reflected from or absorbed by it, thus preventing a **sonic shadow* from forming on the side furthest from the sound source. Sound waves reach the nearer ear fractionally before the further one, and in an open area with no reflecting surfaces, or a simulation of these conditions using earphones, low-pitched sounds can be localized easily within 10 degrees in the horizontal plane (using other cues in addition, the **minimum audible angle* is nearer 2 degrees). Because sound travels through air at about 343 metres per second (1,240 kilometres per hour or 770 miles per hour), a simple calculation shows that people can detect time differences between the movements of their two eardrums of less than one ten-thousandth of a second. It is one of the *binaural time differences* or *interaural time differences* used in sound localization. See also *BINAURAL SHIFT*, *BIOSONAR*, *CONE OF CONFUSION*, *SOUND LOCALIZATION*. [From Latin *transiens* going over, from *transire* to go over, from *trans* across + *ire* to go]

transient global amnesia *n.* A sudden loss of memory, including both **anterograde amnesia* and **retrograde amnesia*, with full recovery within 24 hours, often resulting from **ischaemia* in the **hippocampus* or **fornix*. Compare GLOBAL AMNESIA. **TGA** abbrev.

transient ischaemic attack *n.* An episode similar to a **stroke* but with full recovery within 24 hours, caused by a partial blockage of blood vessels in the brain leading to a decreased supply of oxygenated blood to brain tissues normally perfused with blood by those vessels, the symptoms typically including disturbance of vision in one eye, dizziness, weakness, numbness, **dysphasia*, or unconsciousness. It is a warning sign of a stroke, which is 13 times more likely within a year of such an episode. US *transient ischemic attack*. **TIA** abbrev.

transient polymorphism *n.* A form of **genetic polymorphism* occurring in the process of **natural selection*, when an **allele* has a selective advantage over another and is proceeding towards fixation at a relative frequency of $p = 1$ but has not yet reached that point. For the time being both alleles are present in the **gene* pool, and some individuals **heterozygous* for the **trait* are present in the population. See also HARDY–WEINBERG LAW. Compare BALANCED POLYMORPHISM. [From Latin *transiens* going over, from *trans* across + *ire* to go + Greek *polys* many + *morphe* a form or shape]

transient responder *n.* Any of a large number of **photoreceptors* in the retina that show little or no response to a static stimulus but respond strongly to a change in the stimulus, such as a movement. See also RAPIDLY ADAPTING. Compare SUSTAINED RESPONDER.

transient tic disorder *n.* Another name for **provisional tic disorder*.

transient tritanopia *n.* A temporary increase in the threshold for blue stimuli after a yellow adapting field is removed, relative to the threshold in the presence of the yellow adapting field. See also ADAPTATION (2), CHROMATIC ADAPTATION (1), TRITANOPIA.

transitional object *n.* In **psychoanalysis*, a term introduced in 1953 by

the English psychoanalyst Donald Woods Winnicott (1896–1971) to denote a familiar object, such as the hem of a blanket, from which an infant between 4 and 12 months old derives comfort, especially while falling asleep, its significance sometimes re-emerging in later life, especially in a period of depression. Winnicott considered it to lie ‘between the thumb and the teddy bear’ inasmuch as it is almost inseparable from the infant, like a thumb, yet in reality is an external object, like a teddy bear. Subsequent writers have generally interpreted the term to refer to an object that a child treats as something halfway between itself and another person, thus including a teddy bear as a typical example.

transitive preferences *n.* Preferences having the property that if one alternative is preferred to a second, and the second is preferred to a third, then the first is preferred to the third. It is often assumed to be an axiom of **rational* judgement. In a transitive preference order, if *x* is preferred to *y*, and *y* is preferred to *z*, then *x* is preferred to *z*. Preferences that are not transitive are said to be *intransitive*. See also *ARROW’S IMPOSSIBILITY THEOREM*, *CONDORCET’S PARADOX*, *LEXICOGRAPHIC SEMIORDER*, *MONEY PUMP*. Compare *CYCLIC PREFERENCES*, *INTRANSITIVE PREFERENCES*. [From Latin *transitivus* going over, from *transiens* going over, *transire* to pass over, from *trans* across + *ire* to go + *-ivus* indicating a tendency, inclination, or quality]

transliminality *n.* A psychological **trait* involving hypersensitivity to psychological material (including **ideation*, **imagery*, **affect*, and **perception*) originating in the **unconscious* (2) and/or the external world, associated with ready transmission of information across the threshold from the unconscious into **consciousness*, and linked with increased likelihood of belief in **paranormal* phenomena, **creativity*, mystical experience, **manic episodes*, **hyperaesthesia*, and positive attitudes to **dream analysis*. The word *transliminal* was coined by the English chemists Francis Lawry Usher (1885–1969) and Frank Playfair Burt (1880–1938) in an article in the *Annals of Psychical Science* in 1909, referring to the process whereby information crosses the threshold either into or out of consciousness. The Australian psychologist Michael (Anthony) Thalbourne (born 1955) introduced the noun *transliminality* and published the earliest version of this concept in the journal *Exceptional Human Experience* in 1991. **transliminal** *adj.* [From Latin *trans* across + *limen* a threshold + *-al(is)* of or relating to]

transmission deafness *n.* Another name for **conductive deafness*.

transmittance *See* REFLECTANCE.

transmitter *n.* Anything that sends or conveys objects, substances, genes, information, and so on; more specifically, a commonly used abbreviation of **neurotransmitter*. [From Latin *trans* across + *mittere* to send]

transplantation of brain tissue *See* FOETAL BRAIN TRANSPLANTATION.

transposon *n.* In genetics, a fragment of **DNA* that is capable of migrating from one **gene* locus to another on the same or a different chromosome, causing a change in the genetic constitution of the organism. *See also* JUMPING GENE. [From Latin *transponere* to remove, from *trans* across or beyond + *ponere* to place, on the model of *codon*]

transsexual *n.* 1. A person with a powerful desire to adopt the physical attributes and to play the role of a member of the opposite sex. *See also* TRANSSEXUALISM. 2. A person who has undergone medical and surgical treatment to alter the body's external sexual characteristics to those of the opposite sex.

transsexualism *n.* Severe **gender* dysphoria, accompanied by a persistent desire to live and be accepted as a member of the opposite sex. *See also* DIANA COMPLEX. *Compare* FETISHISTIC TRANSVESTISM, TRANSVESTISM.

transverse plane *n.* A plane at right angles to the long axis of any organ or organism, in the human body often the same as the **horizontal plane* (see illustration at **coronal plane*). *Compare* CORONAL PLANE, SAGITTAL PLANE. [From Latin *transversus* across]

transverse section *n.* A cutting through the **transverse plane*, in the human body generally equivalent to a **horizontal section*. *Compare* CORONAL SECTION, SAGITTAL SECTION.

transvestic disorder *n.* A **paraphilic disorder* in **DSM-5*

characterized by intense, recurrent sexual arousal from cross-dressing, or associated fantasies or urges over a period of at least six months. To meet the diagnostic criteria, the fantasies, urges, or behaviour must have caused clinically significant distress or impairment in social, occupational, or other areas of life. *See also* [TRANSVESTISM](#).

transvestic fetishism *See* [FETISHISTIC TRANSVESTISM](#).

transvestism *n.* Dressing in the clothes of a member of the opposite sex. Also called *cross-dressing*, *eonism*. *See also* [EONISM](#), [FETISHISTIC TRANSVESTISM](#), [GENDER DYSPHORIA](#), [TRANSVESTIC DISORDER](#). **transvest** *vb.* **transvestite** *n.* A person who is given to transvestism. [From Latin *trans* across + *vestire* to dress]

tranylcypromine *n.* The most stimulating, dopaminergic, and relatively fast-acting of the **monoamine oxidase inhibitor* ([MAOI](#)) drugs, chemically related to **amphetamine* and used in its sulphate form to treat severe depression and panic disorder. Formula C₉H₁₁N. [From its chemical name *tran(s)* + *(phen)yl* + *cy(clo)* + *pro(pyla)mine*]

trapezoidal window *n.* A visual illusion invented by the US painter and psychologist Adelbert Ames, Jr (1880–1955) that consists of a distorted window in the shape of a trapezium (US trapezoid) and that, when viewed frontally from a distance, looks like a rectangular window turned at an angle, and when rotated slowly about its vertical axis and viewed monocularly from about 3 metres (10 feet) or binocularly from more than 6 metres (20 feet) is perceived as a rectangular window oscillating back and forth in a peculiar and unnatural way. Also called the *Ames window*. *See also* [KINEPHANTOM](#), [TRANSACTIONALISM](#). *Compare* [AMES ROOM](#). [From *trapezoid*, in US a quadrilateral having two parallel sides of unequal length, from Greek *trapezoeides* trapezium-shaped, from *trapeza* a table + *-oeides* denoting resemblance of form, from *eidos* shape or form]

trapezoid body *n.* Either of the two diamond-shaped nuclei near the bottom of the **pons* that receive nerve impulses from the auditory receptors and project to the **superior* olivary nucleus. Each trapezoidal body contains

***interneurons** that inhibit impulses from the ear on the same side and excite those from the opposite side, amplifying the left-right differences in the signals transmitted to the binaural neurons of the superior olivary nucleus and thereby facilitating ***sound localization**. [From Greek *trapezion* a small table, diminutive of *trapeza* a table, from *tetra-* four + *peza* a foot]

trauma *n.* A physical injury or wound, or a powerful psychological shock that has damaging effects. **traumatic** *adj.* **traumata** or **traumas** *pl.* **traumatize** *vb.* [From Greek *trauma* a wound]

trauma- and stressor-related disorders *n.* An umbrella term introduced in ***DSM-5** for a group of ***mental disorders** in which experienced ***trauma** or ***stress (1)** are among the diagnostic criteria. See **ACUTE STRESS DISORDER**, **ADJUSTMENT DISORDERS**, **DISINHIBITED SOCIAL ENGAGEMENT DISORDER**, **POST-TRAUMATIC STRESS DISORDER**, **REACTIVE ATTACHMENT DISORDER**.

trauma, birth See **BIRTH TRAUMA**.

traumatic brain injury *n.* Injury to the ***brain** resulting from external force in a road traffic accident, physical assault, fall, or other misadventure. Signs and symptoms include headache, vomiting, nausea, loss of motor coordination, ***aphasia**, ***dysarthria**, ***alexithymia**, dizziness, blurred vision, ***convulsions**, slurred speech, pupil dilation, short-term loss of ***consciousness**, ***coma**, and death. ***Prognosis** depends on the severity and site of the lesion, and length of delay in receiving treatment. ***Subarachnoid haemorrhage** approximately doubles the chances of death. **TBI** *abbrev.* [From Greek *trauma* a wound + *-ikos* of, relating to, or resembling]

traumatic neurosis *n.* Any ***neurosis** precipitated by a ***trauma**. The term was introduced in 1889 by the German neurologist Hermann Oppenheim (1858–1919). See **POST-TRAUMATIC STRESS DISORDER**.

traumatic psychosis *n.* A ***psychosis (1)** resulting from a head injury causing brain damage.

traumatic shock *n.* The partial or total collapse of voluntary and

involuntary bodily functions resulting from circulatory failure or a sudden drop in blood pressure brought about by physical **trauma*, especially blood loss or injury to the spinal cord, **anaphylaxis*, or intense psychological trauma or stress. *Compare* [SHOCK \(1\)](#).

travel agent *n.* An intermediary who arranges trips for travellers; hence, figuratively, an informal name for a street drug dealer. *See also* [TRIP](#).

travelling salesman problem *n.* The problem of finding the shortest path that passes through a given set of points once and only once, as when a travelling salesman needs to visit a number of specified cities exactly once, using the shortest possible route. The problem is notoriously difficult to solve, because the number of possible tours rises rapidly with the number of cities. For 10 cities, there are 3,628,800 different tours from which to choose, because there are ten cities available for the first visit, and for each of these there are nine possibilities left for the second, hence there are $10 \times 9 = 90$ different ways in which the tour can begin with the first two cities, and for each of these there are eight possibilities left for the third visit, and so on, the total number of tours through the ten cities therefore being $10 \times 9 \times 8 \times 7 \times 6 \times 5 \times 4 \times 3 \times 2 \times 1 = 3,628,800$ tours. For 20 cities, the number of possible tours is 2,432,902,008,176,640,000, and for 30 cities it exceeds 265 thousand billion billion billion. Even the world's fastest supercomputer would take many billions of years to solve the travelling salesman problem for a tour of the 52 county towns of England and Wales or the 50 state capitals of the United States, but no efficient method of solving the problem has been found, and mathematicians have come very close to proving that it is impossible in principle to find an efficient solution to a problem of this type. *US traveling salesman problem. See also* [BOUNDED RATIONALITY](#), [BRUTE FORCE ALGORITHM](#). **TSP** *abbrev.*

travelling wave *n.* Any wave in which energy is transferred progressively in the direction of the wave propagation (in contrast to a standing wave); in particular a wave that is propagated from the **oval window* along the **basilar* membrane when the eardrum vibrates in response to a sound stimulus, the amplitudes of high-frequency components of the wave being greatest near the oval window and of low-frequency components furthest from the oval window. *US traveling wave. See also* [PLACE THEORY](#).

*****ebook converter DEMO Watermarks*****

treadmill *n.* A device for driving machinery or providing exercise consisting of a continuous moving belt on which a person can walk or jog while staying in the same place. *See also* [HEDONIC TREADMILL](#) [From Old High German *tretan* to tread + Latin *mola* a mill or millstone, from *molere* to grind]

treatment condition *n.* In experimental design, a level of an [*independent variable](#) or combination of levels of two or more independent variables. For example, in an experiment examining the effects of four different drugs on dreaming, research participants or subjects would receive a different drug in each treatment condition. Often shortened to *condition*.

tremor *n.* Any rhythmic vibration or shaking of the body or any of its parts. Two major classes are distinguished: [*resting tremor](#), also called passive tremor, manifested when the affected body part is at rest, as in [*parkinsonism](#), and [*intention tremor](#), also called movement tremor, manifested only when the body part is moved deliberately, as in tremor arising from [*alcohol](#) dependence, [*cerebellar syndrome](#), or [*senile dementia](#). [*Postural tremor](#) does not fall neatly into either category. *See also* [CEREBELLAR SYNDROME](#), [DELIRIUM TREMENS](#), [EXTRAPYRAMIDAL SYNDROME](#), [HIV DEMENTIA](#), [KURU](#), [MULTIPLE SCLEROSIS](#), [NERVIOS](#), [OCULAR TREMOR](#), [PUNCH-DRUNK](#), [YIPS](#). [From Latin *tremere* to tremble]

triad, anal *See* [ANAL TRIAD](#), [THREE PS](#).

triangular theory *See* [LOVE](#).

triarchic theory of intelligence *n.* A theory of [*intelligence](#), put forward in 1985 by the US psychologist Robert J(effrey) Sternberg (born 1949), according to which its three fundamental aspects are analytic, creative, and practical intelligence, only the first of which is measured adequately by conventional IQ tests. Analytic problems require the problem solver to analyse, evaluate, compare, contrast, judge, and so on; creative problems to create, invent, discover, imagine, and so on; and practical problems to apply, put into practice, use, implement, and so on. Unlike analytic problems, creative and practical problems tend to depend on problem recognition and

formulation by the problem solver, to be poorly defined, to require information seeking, to have more than one acceptable solution, and to require everyday experience, motivation, and personal involvement. [From Greek *triarchia* a triple rule, from *treis* three + *archein* to rule + *-ikos* of, relating to, or resembling]

triazolam *n.* A **benzodiazepine* drug used mainly as a **hypnotic (2)* in the short-term treatment of insomnia and as an **anxiolytic* and **sedative*. Also called *Halcion* (trademark).

tribade *n.* A lesbian. **tribadic** *adj.* **tribadism** *n.* lesbianism. [From Latin *tribas* a lesbian, from Greek *tribein* to rub]

tribar *n.* Another name for the **Penrose triangle*.

tricarboxylic acid cycle *n.* Another name for the **Krebs cycle*. [Named after tricarboxylic acid, an acid having three carboxyl groups in each molecule, that plays a crucial role in the Krebs cycle]

triceps reflex *n.* A **deep tendon reflex* occurring in response to a tap on the back of the elbow. [Named after the triceps brachii muscle that controls it, from Latin *triceps* three-headed + *brachium* an arm]

trichotillomania *n.* A **mental disorder* in **DSM-5* characterized by repeated pulling out of one's hair (most often from the scalp, eyebrows, or eyelashes), resulting in visible hair loss, with an increasing sense of tension before pulling the hair, followed by pleasure, gratification, or relief after completing the act. Compare EXCORIATION DISORDER, OBSESSIVE–COMPULSIVE DISORDER. [From Greek *trichos* of hair, from *thrix* hair + *tillein* to pull + *mania* madness]

trichromacy *n.* The phenomenon discovered in 1704 by the English physicist and mathematician Sir Isaac Newton (1642–1727) whereby any spectral colour can be formed by the combination of red, green, and blue light, or in fact by any three wavelengths provided that they are well separated on the visible spectrum. See also PRIMARY COLOUR (1), TRICHROMATIC

THEORY, TRISTIMULUS VALUES. [From Greek *treis* three + *chroma* colour]

trichromatic theory *n.* A theory of colour vision specifically intended to take account of **trichromacy*, according to which at each point on the retina of the eye there are three light-sensitive structures responsive to red, green, and blue light. The theory was formulated in 1802 by the English physician, physicist, and Egyptologist Thomas Young (1773–1829) and championed in 1852 by the influential German physiologist, physicist, and mathematician Hermann Ludwig Ferdinand von Helmholtz (1821–94), and in 1959 physiological research confirmed that the retina contains three types of **cones*, each maximally responsive to a different wavelength, though with overlapping response curves. Also called the *three-colour theory* or the *Young–Helmholtz theory*. Compare *OPPONENT-PROCESS THEORY*.

tricyclic antidepressant *n.* Any member of a class of **antidepressant* drugs that block the reuptake mechanism of **noradrenalin* (norepinephrine) and in some cases also of **serotonin*, allowing these neurotransmitter substances to accumulate at **synapses (1)* in the central nervous system. See *AMITRIPTYLINE*, *CLOMIPRAMINE*, *IMIPRAMINE*. Compare *MONOAMINE OXIDASE INHIBITOR (MAOI)*, *SELECTIVE SEROTONIN REUPTAKE INHIBITOR (SSRI)*, *St JOHN'S WORT*, *TETRACYCLIC ANTIDEPRESSANT*. **TCA** *abbrev.* [So called because they have three rings in their molecular structures]

trifluoperazine *n.* Trifluoperazine hydrochloride, a **neuroleptic (1)* drug belonging to the group of **phenothiazines*, used in the treatment of **schizophrenia* and other **psychotic (1)* disorders and anxiety disorders, also used as an anti-emetic. Also called *Stelazine* (trademark).

trigeminal chemoreception *n.* Another name for the **common chemical sense*.

trigeminal lemniscus *n.* Either of the two bundles of nerve fibres within the **lemniscus* running parallel to the **medial lemniscus* and conveying information from one of the **trigeminal nerves* to the **thalamus*. Compare *LATERAL LEMNISCUS*, *MEDIAL LEMNISCUS*.

trigeminal nerve *n.* Either of the fifth pair of **cranial nerves* whose
*****ebook converter DEMO Watermarks*****

three sensory branches supply (a) the skin of the forehead, nose, and scalp, (b) the region between the nose, mouth and temple, including the **mucous membranes* of the mouth and nose, and (c) the lower face and teeth. It also has a motor root supplying the muscles involved in chewing. *See also* COMMON CHEMICAL SENSE, CORNEAL REFLEX, MAGNETIC SENSE, TIC DOULOUREUX. [From Latin *trigeminus* a triplet, from *tres* three + *geminus* a twin]

trigeminal neuralgia *n.* Another name for **tic douloureux*.

trigram *n.* A string of three letters, which may be a word (*cat*) or a **nonsense syllable* (*kep*). *See also* CVC. [From Greek *treis* + *gramma* a letter or character]

trigraph *n.* A three-letter combination representing a single speech sound, such as *sch* in the German word *Schule*. *Compare* TRIGRAM, TRIPHTHONG.

trihexyphenidyl *n.* Trihexyphenidyl hydrochloride, an **anticholinergic* drug that is used in the treatment of Parkinson's disease. *See also* ANTIPARKINSONIAN.

Trilafon *n.* A proprietary name for the neuroleptic drug **perphenazine*. [Trademark]

trimmed mean *n.* In statistics, the **arithmetic mean* calculated after eliminating a specified proportion or percentage of the largest and smallest scores, a common type being the **5 per cent trim*. It is used occasionally when the set of scores contains values that are much smaller or much larger than the rest, because in such cases it yields a more useful indication of **central tendency* than the untrimmed mean. It was introduced in 1962 by the US statistician John Wilder Tukey (1915–2000).

trip *n.* An excursion involving an outward and return journey; hence, figuratively, an experience induced by a **hallucinogenic* drug. *See also* TRAVEL AGENT.

tripa ida *n.* Another name for **susto*. [From Spanish *tripa* intestine]

(believed in the past to be the seat of the soul) + *ida* departure]

triphthong *n.* A complex **vowel* sound comprising a **glide* from one vowel sound to a second and then a third within a single syllable, with movement of the tongue between the three sounds. In **Received Pronunciation* there are five triphthongs, all of which consist of a **diphthong* followed by a **schwa*; they are the vowels in the words *layer*, *buyer*, *soya*, *flour*, and *mower*. Compare *MONOPHTHONG*, *DIPHTHONG*, *TRIGRAPH*. [From Greek *treis* three + *phthongos* sound]

triplegia *n.* Paralysis of three of the four limbs of the body, usually as a result of multiple lesions in the **motor cortex* or **peripheral nervous system*. Compare *DIPLEGIA*, *HEMIPLEGIA*, *MONOPLÉGIA*, *OPHTHALMOPLÉGIA*, *PARAPLEGIA*, *QUADRIPLEGIA*. **triplegic** *adj.* [From Greek *treis* three + *plege* a blow + *-ia* indicating a condition or quality]

triplet code *n.* A sequence of three **bases* (1) in a **DNA* or an **RNA* molecule, interpreted either as a single **amino acid* during **protein* synthesis or, if it is a **stop codon*, as a signal to terminate translation. See also *CODON*, *CODON FAMILY*, *GENETIC CODE*.

Triptafen *n.* A proprietary name for the tricyclic antidepressant drug **amitriptyline*. Often confused with **tryptophan*. [Trademark]

trisomy *n.* The condition of a human or other **diploid* organism of having three rather than two **chromosomes* of a particular type. **Autosomal* trisomies are often associated with **intellectual disability*, whereas trisomies of the sex chromosomes have variable psychological effects. See *KLINEFELTER'S SYNDROME*, *XXX SYNDROME*, *XXY SYNDROME*. **trisomy 21** *n.* Trisomy of chromosome 21, which underlies **Down's syndrome*. **trisomic** *adj.* [From Greek *treis* three + *soma* a body]

tristimulus values *n.* Three numbers, usually symbolized by *x*, *y*, and *z*, that together define a colour in terms of the proportions of three **additive primaries* that match the given colour when mixed. See also *CIE COLOUR SYSTEM*, *CHROMATICITY*, *COLOUR EQUATION*, *GRASSMANN'S LAWS (PERCEPTION)*, *PRIMARY COLOUR (1)*, *TRICHROMACY*.

*****ebook converter DEMO Watermarks*****

tritanomaly *n.* A form of partial **colour-blindness* caused by a deficiency in the **visual pigment* that absorbs short-wave light, characterized by a decreased sensitivity to blue light and matches that deviate from the normal **Rayleigh equation*. Compare DEUTERANOMALY, PROTANOMALY, TRITANOPIA. [From Greek *tritos* third, alluding to the third of the three **primary colours* (1) red, green, and blue + *anomalos* uneven or inconsistent, from *an-* without + *homalos* even, from *homos* the same]

tritanopia *n.* A rare form of **anomalous dichromacy* in which the **visual pigment* associated with short-wave (blue) light is non-functional, causing a decreased sensitivity to blue light and a tendency to confuse blue with green. See also TRANSIENT TRITANOPIA. Compare DEUTERANOPIA, PROTANOPIA, TRITANOMALY. [From Greek *tritos* third, alluding to the third of the three **primary colours* (1) red, green, and blue + *anopia* blindness, from *an-* without + *ops* an eye + *-ia* indicating a condition or quality]

tritone *n.* A musical interval or difference in pitch of three whole tones (an augmented fourth), as between C and F# or between D and G#, the two sounds thus being separated in pitch by exactly half an **octave*.

tritone paradox *n.* A phenomenon in the perception of musical tones that are clearly defined in terms of pitch class (the twelve notes of the octave that are normally labelled C, C#, D, ... , B) but are ambiguous as regards the octaves to which they belong, each tone being composed of equal **sinusoidal* waves from octaves spanning the auditory range. If one such ambiguous tone is followed by a second, separated from the first by a tritone, then the sequence is clearly perceived as either rising or falling by half an octave, although the stimulus tones lack the cues required to determine pitch. It is a surprising phenomenon rather than a true **paradox*. It was first reported by the British-born psychologist Diana Deutsch (born 1938) in an article in the journal *Music Perception* in 1986. See also AUDITORY ILLUSION, AUDITORY STAIRCASE ILLUSION. Compare MELODIC PARADOX, SEMITONE PARADOX.

trochlear nerve *n.* Either of the fourth pair of **cranial nerves* supplying the superior **oblique muscles* of the eyes. Paralysis of this nerve causes **diplopia* when looking down, as when descending stairs. [From Greek *trochalia* a pulley, referring to the fact that the superior oblique muscle
*****ebook converter DEMO Watermarks*****]

passes through an eyelet and works like a pulley]

troilism *n.* Sexual activity involving three people. [A blend of French *trois* three + English *dualism*]

Troland *n.* A unit of the intensity of light falling on the retina, calculated as the product of ***luminance** and pupil area. It is defined as the retinal illuminance produced by viewing a surface illuminated by 1 lumen per square metre through an artificial pupil with an area of 1 square millimetre centred on the natural pupil. [Named after the US psychologist Leonard Thompson Troland (1889–1932) who introduced it before it was adopted by the Optical Society of America in 1944]

trolley problem *n.* A hypothetical moral dilemma used by philosophers to investigate ethical judgements and intuitions. The original trolley problem was proposed by the English philosopher Philippa Ruth Foot (1920–2010) in an article in the journal *Oxford Review* in 1967. In the slightly modified version that became standard, a trolley is running out of control down a railway track. In its path are five people who will be killed if it continues on its course. By operating a lever, you can divert the trolley on to a different track, where a solitary man on that track will be killed. Is it morally permissible to operate the lever? Most people say yes—about 90 per cent in a very large online survey conducted in 2007 by the US evolutionary biologist Marc D. Hauser (born 1959). In contrast, the US philosopher Judith Jarvis Thompson (born 1929) suggested the following *footbridge problem* in an article in the *Yale Law Journal* in 1985. A trolley is running out of control down a railway track. In its path are five people who will be killed if it continues on its course. You are on a footbridge over the tracks next to a large man. The only way to save the five people is to push the man off the bridge, into the path of the trolley, where only he will be killed. Is it morally permissible to push the man off the footbridge? Most people say no—about 90 per cent in Hauser’s survey. Why most people consider it morally acceptable to sacrifice one life to save five in the trolley problem but not the footbridge problem has been the focus of a great deal of research and discussion in both philosophy and psychology. Compare **KNOBE EFFECT**.

trompe l’oeil *n.* A visual illusion in a painting or other work of art

*****ebook converter DEMO Watermarks*****

creating an impression of reality, such as a painting that appears to be an open window or a T-shirt that gives the impression of a naked torso. [French: a deception of the eye]

trophic hormone *n.* Any of a number of **hormones*, such as **adrenocorticotrophic hormone*, that is secreted by the **anterior* pituitary and that controls the secretion of hormones by other **endocrine glands*. [From Greek *tropos* a turn, from *trepein* to turn]

Troxler effect *n.* The fading of an image in peripheral vision when a central stimulus is fixated with a steady gaze while attention is shifted to the peripheral stimulus. Movement of the peripheral stimulus normally prevents it from fading. Also called *Troxler fading*. [Named after the Swiss-German philosopher and physician Ignaz Paul Vitalis Troxler (1780–1866) who first reported it in 1804]

true self *n.* In the **neo-Freudian* theory of the German-born US psychoanalyst Karen Horney (1885–1952), an underlying personality of unrealized potentials that is fundamentally good.

trust versus mistrust See *BASIC TRUST VERSUS BASIC MISTRUST*.

truth drug *n.* Any sedative or analgesic drug such as **scopolamine* or one of the short-acting **barbiturates*, especially **thiopental* (thiopentone or Sodium Pentothal), that is administered to a person who is to be interrogated in the belief that it might encourage free and truthful answers to questions. Also called a *truth serum*. See also *HYPERMNESIA*.

truth functor *n.* A **sentence functor* with a **truth table*. [From Latin *functio* a function, from *fungi* to perform]

truth table *n.* In **logic*, an arrangement of rows and columns indicating the truth or falsity of a **proposition (1)* for every combination of truth values (true or false) of its component propositions (see *illustration*). It is a device for performing **logical analysis*. See also *SENTENCE FUNCTOR*, *TRUTH FUNCTOR*.

ϕ	ψ	$\phi \vee \psi$
T	T	T
T	F	T
F	T	T
F	F	F

Truth table. The sentence functor of the disjunction ' ϕ or ψ '. The bottom row shows that if ϕ is false and ψ is false, then ' ϕ or ψ ' is false. For every other combination of truth values of the component propositions ϕ and ψ , the sentence functor is true.

tryptamine *n.* A crystalline **amine* formed by decomposition of **tryptophan*, functioning as a **biogenic amine* belonging to the group of **indoleamines*. *See also* DMT, MELATONIN, SEROTONIN. [From *trypt(o)phan* + *amine*]

tryptophan *n.* An essential **amino acid* obtained from dietary milk, cheese, poultry, pineapple, and banana. It is metabolized into **5-hydroxytryptophan*, which is able to cross the **blood–brain barrier*, and then by brain neurons into **serotonin*. Sometimes confused with **Triptafen*. **Trp** *abbrev.* [From Greek *trypsis* a rubbing + *phainein* to appear, alluding to trypsin, an enzyme first produced by rubbing the pancreas with glycerine]

tryptophan hydroxylase *n.* An enzyme involved in the synthesis of **serotonin*, having a parallel action to tyrosine hydroxylase in the synthesis of catecholamines. **TPH** *abbrev.*

T score *n.* In psychometrics, a test score converted to an equivalent **standard score* in a **normal distribution* with a **mean* of 50 and a **standard deviation* of 10. *See also* DERIVED SCORE. *Compare* IQ, STANINE SCORE, STEN SCORE, Z SCORE. [Probably an abbreviation of *true score*]

t test *n.* In inferential statistics, a test most often used to establish the
 *****ebook converter DEMO Watermarks*****

significance of the difference between the means of two samples of scores. It is calculated by dividing the difference between the means by the ***standard error** of this difference. Its full name is ***Student's *t* test**, because 'Student' was the pen name of the English statistician William Sealy Gosset (1876–1937) who developed the theory behind it in 1908 while working for the Guinness brewery in Dublin. The test itself was developed later by the English statistician Karl Pearson (1857–1936). Often written *t-test*, but the hyphen may be considered otiose, because analogous tests such as the χ^2 test and the *U* test are usually written without hyphens. *See also* **INDEPENDENT SAMPLES T TEST**, **ONE-SAMPLE T TEST**, **RELATED SCORES T TEST**. [Probably an abbreviation of *true test*]

tufted cell *n.* A type of vertically oriented neuron in the ***olfactory bulb** that receives inputs from olfactory neurons.

Tukey-HSD test *n.* In statistics, a method of ***multiple comparisons** in which a set of group means are ranked from smallest to largest, and then a statistic that is used to test for a significant difference between a pair of means is computed on the basis of the number of steps between the two means in the rank order. Its full name is the *Tukey honestly significant difference (HSD) test*. Compare **BONFERRONI CORRECTION**, **DUNCAN'S MULTIPLE RANGE TEST**, **LEAST-SIGNIFICANT DIFFERENCE TEST**, **NEWMAN-KEULS TEST**, **SCHEFFÉ TEST**. [Named after the US statistician John Wilder Tukey (1915–2000) who developed versions of it in 1951 and 1952]

tumescence *n.* The process of becoming swollen or enlarged, especially with reference to the ***penis** during the excitement phase of the ***sexual response cycle**. Compare **DETUMESCENCE**. [From Latin *tumescere* to begin to swell, from *tumere* to swell]

tuning curve *n.* The response threshold of a single fibre of an auditory nerve, plotted as a function of the frequencies of the sounds to which it responds, the point at which the threshold is lowest, and therefore the responsiveness greatest, being the ***characteristic frequency** of the fibre. Also called the *frequency tuning curve* or *frequency threshold curve* (**FTC**).

tunnel vision *n.* A form of visual impairment in which the ***visual field** is
*****ebook converter DEMO Watermarks*****

decreased, creating the effect of looking down a narrow tube or tunnel, often resulting from advanced chronic [*glaucoma](#). The American Foundation for the Blind defines a visual field subtending a [*visual angle](#) of 20 degrees or less as a criterion of [*blindness](#).

Turing machine *n.* A hypothetical computing machine consisting of a movable head that reads, writes, or erases discrete symbols drawn from a finite set (often just 1 and 0), dealing with the symbols one at a time in separate frames marked on a tape of limitless length, and that always assumes one of a finite number of states, the activity of the machine being determined jointly by its current state and the symbol being read in the current frame, these two input variables in turn determining what symbol the machine writes in the current frame, what state it assumes next, and whether it moves one frame to the left, one frame to the right, or halts. A Turing machine usually consists of a table of instructions specifying what the machine does in every possible contingency, the input data being abbreviated by a pair of symbols such as (S_1 , 0) or represented by appropriately labelled rows and columns of a matrix, and an instruction being represented by a triplet of symbols such as ($1, S_3, R$), this particular input pair and instruction triplet indicating that if the machine is in state S_1 and the symbol in the current frame is 0, then the machine writes the symbol 1 in the current frame (overwriting the 0), assumes state S_3 , and moves one frame to the right. A *universal Turing machine* incorporates a coded description of a Turing machine in the form of a table of instructions and also a sequence of symbols that it encounters on the tape when it operates. For any possible computation, a Turing machine can, in principle, be constructed, and a universal Turing machine can compute anything computable, given sufficient time. *See also* [ALGORITHM](#), [ARTIFICIAL INTELLIGENCE](#), [CELLULAR AUTOMATON](#). [Named after the English mathematician Alan Mathison Turing (1912–54) who first described it in an influential article in the *Proceedings of the London Mathematical Society* in 1936–7]

Turing test *n.* A hypothetical test or [*Gedankenexperiment](#) to clarify the question as to whether computers can think. A person A and an interrogator in a different room engage in a dialogue by typing messages over an electronic link. At some point A is replaced by intelligent software that

simulates human responses. Turing argued that if the remaining human being is free to ask probing questions (such as *Please write me a sonnet on the subject of the Forth Bridge*) but is unable to determine reliably whether the replies are generated by a human being or a computer, then the computer has passed the test. Turing considered the question *Can machines think?* to be ‘too meaningless to deserve discussion’ and argued that his test, which replaces it, poses a more meaningful problem; but passing the Turing test came to be interpreted by many of his followers as amounting to being able to think. The most sustained attacks on this approach have focused on the [*Chinese room](#) and [*Gödel’s theorem](#). See also [ARTIFICIAL INTELLIGENCE](#), [STRONG AI](#). [Named after the English mathematician Alan Mathison Turing (1912–54) who introduced it in an article in the journal *Mind* in 1950, where he called it the *imitation game*]

Turkish saddle *n.* Another name for the [*sella turcica](#).

Turner’s syndrome *n.* A congenital chromosomal aberration in a female who has only one X chromosome, leading to short stature, absence of functioning ovaries, underdeveloped breasts, uterus, and vagina, often moderate [*intellectual disability](#), and various other signs and symptoms. Zygotes with just one Y chromosome are non-viable. Also called *monosomy X*. Compare [TRISOMY](#). [Named after the US physician Henry Hubert Turner (1892–1970) who first described it in 1938]

turning the tables illusion *n.* An astonishingly powerful though little-known [*perspective illusion](#) in which a pair of identical parallelograms representing the tops of two tables appear radically different (see [illustration](#)). The illusion was first presented by the US psychologist Roger N(ewland) Shepard (born 1929) in his book *Mind Sights: Original Visual Illusions, Ambiguities, and Other Anomalies* (1990, p. 48). Shepard commented that ‘any knowledge or understanding of the illusion we may gain at the intellectual level remains virtually powerless to diminish the magnitude of the illusion’ (p. 128). The illusion arises from our inability to avoid making three-dimensional interpretations of the drawings, according to which the identical parallelograms would represent very different shapes because of perspective foreshortening, and it is based on his less powerful parallelogram illusion, published in an edited book entitled *Perceptual Organization* (1981,

*****ebook converter DEMO Watermarks*****

pp. 297–9). Also called the *tabletop illusion*. Compare [AMES ROOM](#), [CORRIDOR ILLUSION](#), [MÜLLER-LYER ILLUSION](#), [PONZO ILLUSION](#).



Turning the tables illusion. Almost unbelievably, the tabletop on the left is identical in shape and size to the one on the right, as can be confirmed by tracing either of the white parallelograms and placing the tracing over the other.

twilight vision *n.* A non-technical name for [*scotopia](#).

twin study *n.* In behaviour genetics, an examination of the correlation between [*monozygotic](#) twins, and sometimes a comparison with the correlation between [*dizygotic](#) twins, on a measurable [*trait](#) in order to estimate the [*heritability](#) of that trait, the assumption being that the higher the heritability of the trait the greater will be the correlation between monozygotic twins and the more it will differ from the correlation between dizygotic twins, because monozygotic twins share identical genes and should therefore be more alike on a heritable trait than dizygotic twins who share only about half their genes in common. It can be shown mathematically that a rough estimate of heritability is provided by twice the difference between the monozygotic-twin and dizygotic-twin correlations. See also [DF EXTREMES ANALYSIS](#). Compare [ADOPTION STUDY](#), [KINSHIP STUDY](#).

twisted-cord illusion *n.* Any of several visual illusions that are created if a cord made by twisting dark and light strands together, or graphical representations of thin strips of diagonal stripes resembling such a twisted cord, are displayed against a chequered background, the alignment of the cords or strips appearing distorted and disordered (see [illustration](#)). The illusion is caused by the responses of [*orientation-specific](#) neurons in the

*****ebook converter DEMO Watermarks*****

visual cortex. The Scottish physician and psychologist James Fraser (1863–1936) discovered it in 1908, allegedly after observing wool made from strands of different colours lying on tartan fabric, and called it the ‘twisted cord on chequer-work background illusion’. Also called a *Fraser illusion*. See also [FRASER SPIRAL](#).



Twisted-cord illusion. The lines outlining the letters are perfectly vertical or horizontal.

two-alternative forced-choice task *n.* In [*signal](#) detection theory, an experimental procedure designed to eliminate bias resulting from the observer’s criterion level of sensory activation by presenting the observer with pairs of observation time intervals, only one interval in each pair containing the signal, the task being to choose the interval with the signal on each trial. The theory assumes that a particular level of sensory activation occurs in each observation interval and that the observer simply chooses the larger, and it has been shown that 76 per cent correct responses in this task equates to a [*d prime](#) of 1. **2AFC** *abbrev.*

2½-D sketch *n.* In the [*computational theory](#) of vision pioneered in the late 1970s by the English psychologist David Courtenay Marr (1945–80), the second stage in the perceptual process after the [*primal sketch](#), incorporating orientation and depth cues relative to the viewpoint of the observer, but providing a [*representation](#) (2) that is insufficiently abstract for object recognition, because it is viewer-centred rather than being invariant with respect to the observer’s viewpoint. *Compare* [3-D MODEL DESCRIPTION](#), [PRIMAL SKETCH](#). [So called because although it is a three-dimensional representation, it provides insufficient information for visual recognition of three-dimensional objects]

2-deoxyglucose *n.* A substance that stimulates hunger by blocking glucose metabolism in cells. **2-DG** *abbrev.* [From Latin *de-* indicating a deprivation + English *oxygen* + Greek *glykys* sweet]

2-4-6 problem *n.* A problem of concept formation in which people are given the ordered triple of numbers (2, 4, 6) and are invited to try to generate further examples of triples conforming to an unspecified rule that the example obeys, trying to home in on the correct rule on the basis of simple right/wrong feedback after every guess. The actual rule is *any ascending sequence*, but the example invites people to form more specific hypotheses, such as *ascending even numbers* or *numbers ascending by equal intervals*. It was introduced in 1960 by the English psychologist Peter C(athcart) Wason (1924–2003), who found that people tend to try examples consistent with such more specific hypotheses, such as (10, 20, 30) and seldom try examples that would refute them such as (10, 11, 30), thus manifesting **confirmation bias* and failing to find the right answer but often becoming increasingly convinced of the rightness of their incorrect hypotheses. Also called *Wason's 2-4-6 problem*. See also [PROBLEM SOLVING](#).

two-point threshold *n.* A measure of **tactile* acuity defined as the smallest separation at which two points applied simultaneously to the **skin* can be clearly distinguished from a single point. It varies from 1 or 2 millimetres in the finger pads and tongue to more than 60 millimetres on the upper arm, upper thigh, and back. See also [AESTHESIOMETER](#).

two-sample t test *n.* Another name for the **independent samples t test*.

two-step flow *n.* A phenomenon of mass communication, first discovered in a **panel study* of the 1944 US Presidential election and reported in *The People's Choice* (1944) by the Austrian-born US sociologist Paul Felix Lazarsfeld (1901–76) and several colleagues, according to which most rank-and-file members of a population are not directly influenced by messages conveyed through the mass media but are influenced by face-to-face contact with a relatively small number of recipients who do respond to mass media messages and are called *opinion leaders*. This explains why mass media messages often cause significant shifts in public opinion in spite of the fact that most individuals who are investigated show little or no direct
*****ebook converter DEMO Watermarks*****

response to them. The same phenomenon has been shown to occur in the diffusion of fashions and innovations, including the adoption of new drugs by general practitioners.

2-tailed probability *n.* In **inferential statistics*, the probability of obtaining a result as extreme as the one observed, in either direction from the expected value, if the **null hypothesis* is true. If the probability is small (by convention, often less than $p < .05$), then the null hypothesis may be rejected. *Compare 1-TAILED PROBABILITY.* [The name refers to both tails of the relevant **probability* distribution]

2-tailed test *See 1-TAILED TEST.*

two-way avoidance conditioning *n.* A form of **avoidance conditioning* in which, typically, a **conditioned stimulus* such as a light is presented in one end of an alley and is followed by the delivery of foot shock that the animal can avoid or escape by shuttling to the other end of the alley; but after a period of time, the conditioned stimulus is presented at the other end of the alley, so that the animal must return to the original location in order to avoid or escape the shock. The conflict in this situation interferes with learning to such an extent that a rat typically requires dozens or hundreds of responses to learn the task, and many do not learn it at all. Also called *two-way avoidance learning*.

Tycho's illusion *n.* A **cognitive* illusion that caused the cosmology of the Danish astronomer Tycho Brahe (1546–1601) to appear physically impossible to his contemporary, the German astronomer Johannes Kepler (1571–1630), and to astronomers and cosmologists for the next four centuries, until its illusory quality was pointed out in 1998 in a letter to the journal *Nature* by the US political scientist Howard Margolis (1932–2009). In Tycho's cosmology, which partially preserved Copernican heliocentrism but avoided the heresy of displacing the Earth from the centre of the universe, the planets revolve round the sun, but the sun together with its orbiting planets revolves round the Earth. When this is depicted diagrammatically, the orbits of Mars and the sun intersect, creating the impression that these bodies would collide with each other in the Tychonic system, whereas Margolis showed, by constructing a cardboard model, that the system implies no such

*****ebook converter DEMO Watermarks*****

collision.

tympanic membrane *n.* A membrane with a diameter of about 10 millimetres that separates the ***middle ear** from the ***outer ear** and that transmits sound vibrations to the ***inner ear** via the auditory ***ossicles**. Also called the *eardrum*, *membrana tympani*, or *tympanum*.

tympanic reflex *n.* Another name for the ***acoustic** reflex.

Type A *n.* A style of behaviour (*Type A behaviour*) and a personality type (*Type A personality*) characterized by hurried activity, impatience, ambition, and competitiveness, generally associated with the AHA triad of traits (anger, hostility, and aggression), irritable tapping of fingers or feet and clenching of fists or teeth, and a tendency to try to do more than one thing at a time. The term was introduced by the US cardiologists Meyer Friedman (1910–2001) and Ray H(arold) Rosenman (1920–2013) in an article in the *Journal of the American Medical Association* in 1959 and popularized in their book, *Type A Behavior and Your Heart* (1974). Friedman and Rosenman presented the first evidence indicating a significantly increased risk of coronary heart disease associated with Type A behaviour, hence the corresponding personality type is sometimes called the *coronary-prone* personality. See also **PSYCHOCARDIOLOGY**. Compare **TYPE B**, **TYPE C**, **TYPE D**.

Type B *n.* An easy-going style of behaviour (*Type B behaviour*) and personality type (*Type B personality*) lacking the characteristics of ***Type A** and thus associated with a lesser predisposition to coronary heart disease. Compare **TYPE A**, **TYPE C**, **TYPE D**.

Type C *n.* A style of coping with stress or a behaviour pattern (*Type C pattern*) theorized to be associated with relatively poor ***prognosis** in patients with various types of cancer. First described in 1981 in a paper presented at the American Psychological Association's Annual Conference by the US psychologist Lydia Temoshok (born 1960), the Type C pattern reflects a fragile means of coping, characterized by repression and/or decreased recognition of one's own needs and feelings, particularly anger and sadness, with reduced emotional expression and concomitant physiological dysregulation. A relation between this pattern and relatively poor prognosis

*****ebook converter DEMO Watermarks*****

in patients with malignant melanoma (skin cancer) was first reported in an article by Temoshok and colleagues in the *Journal of Psychosomatic Research* in 1985, and another paper authored by Temoshok was published the same year in the journal *Social Science and Medicine* on mechanisms of **psychoneuroimmunology* that might explain the medical effects. Compare TYPE A, TYPE B, TYPE D.

Type D *n.* A personality type associated with a significantly increased risk of death from myocardial infarction (heart attack), independently of biomedical risk factors, and possibly also cancer and immune system malfunction. It was first identified by the Belgian medical psychologist Johan K. L. Denollet (born 1957) and several colleagues in articles published in the journals *Psychosomatic Medicine* in 1995 and *The Lancet* in 1996, although the earlier article used the term *distressed personality type* and the later article the term *Type D personality*. People with this personality type tend simultaneously to experience negative emotion (anxiety, irritability, gloom) and to inhibit or suppress its social expression. Compare TYPE A, TYPE B, TYPE C.

type distractor See DISTRACTOR.

type fallacy *n.* The widespread tendency to classify people or things into categories, even when the ways in which they differ are matters of degree rather than of kind. For example, people tend to think of one another as either being extraverts or introverts, whereas it is well established that **extraversion* is a **continuum* rather than a **taxon*, with most people falling between the extremes. See also CATEGORICAL PERCEPTION.

Type I error *n.* In statistics, the error of rejecting the **null hypothesis* when it is true. The significance level determined from a **statistical test* is the probability of a Type I error. Compare TYPE II ERROR, TYPE III ERROR.

Type II error *n.* In statistics, the error of failing to reject the **null hypothesis* when it is false. The probability of avoiding a Type II error is the **statistical power* of the test, and it depends on the **alternative hypothesis*. Compare TYPE I ERROR, TYPE III ERROR.

Type III error *n.* A term occasionally used to refer to an error arising from a misinterpretation of the nature of the scores being compared in a *significance test, as when a significant difference in an *interrupted time-series design is misinterpreted as relating to a comparison between the mean of the baseline scores and the mean of the post-intervention scores, whereas the true comparison is between *weighted* means of the raw scores, the weights depending on the components of the statistical model (such as autoregressions and/or moving averages; see [ARIMA](#)). Compare [TYPE I ERROR](#), [TYPE II ERROR](#). [Named by the US psychologist Bradley E. Huitema (born 1938) by analogy with Type I and Type II errors]

type-token ratio *n.* In the study of texts, the ratio of the number of different words, called *types*, to the total number of words, called *tokens*. For example, in a particular text, the number of different words may be 1,000 and the total number of words 5,000, because common words such as *the* may occur several times, and in this case the type-token ratio would be 1/5 or 0.2. See [TOKEN \(3\)](#). See also [STYLOSTATISTICS](#). **TTR** abbrev.

tyramine *n.* An *amine with a *sympathomimetic action, synthesized in the body from *tyrosine and replacing *neurotransmitter substances at *adrenergic *neuroreceptors. It is found in ripe cheese, pickled herring, yeast extract, and certain red wines, all of which are forbidden to anyone taking a *monoamine oxidase inhibitor (MAOI) to avoid acute hypertension. See also [CHEESE EFFECT](#). [From *tyr(osine)* + *amine*]

tyrosine *n.* A non-essential *amino acid that is synthesized in the body from *phenylalanine and that acts as a precursor of adrenalin (epinephrine), noradrenalin (norepinephrine), dopamine, thyroxine, L-dopa, and melanin. **Tyr** abbrev. [From Greek *tyros* cheese, from which it was first obtained + *-ine* indicating an organic compound]

tyrosine hydroxylase *n.* An enzyme involved in the synthesis of *catecholamines, having a parallel action to tryptophan hydroxylase in the synthesis of serotonin. See also [ALPHA-METHYLPARATYROSINE](#). Compare [TRYPTOPHAN HYDROXYLASE](#). **TH** abbrev.



ufufunyane *n.* A ***culture-bound syndrome** found mainly among young women in Zulu-speaking and Xhosa-speaking communities of southern Africa, and in Kenya where it is called *saka*, attributed locally to spirit possession, witchcraft, or magical potions administered by rejected lovers or enemies, characterized by shouting, sobbing, ***pseudolalia**, ***paralysis**, ***convulsions**, ***nightmares (1)** with sexual themes, and ***trance** or loss of ***consciousness**. It is feared and despised among local communities and is sharply distinguished from *thwasa* (see **SPELL**). Among Xhosa-speaking people the plural form *amafufunyane* is used to denote the syndrome. [From Zulu *ufufunyane* a character or voice that has entered and taken control of a person, from *ukufuya* to possess (such things as herds of cattle) or to treat a person as a possession]

ugly sister effect *n.* A common feature of the ***tip-of-the-tongue phenomenon**, when a different but related ***blocking memory** pops into consciousness, impeding access to the required memory, and generally being difficult or impossible to dislodge. [The name alludes to the ancient fairy tale in which Prince Charming tries to gain access to the beautiful Cinderella but is blocked by her ugly sisters, who pop up in her place]

Ultimatum game *n.* A two-person ***game (1)** in which a monetary prize is divided by one player making a one-off proposal for a division of the prize and the other player either accepting or rejecting it, neither player receiving anything if the proposal is rejected. Suppose the prize is \$10 or £10. Player I first proposes a division (such as 60 per cent to Player I and 40 per cent to Player II); then Player II either accepts the proposal, in which case the prize is accordingly divided, or rejects it, in which case neither player receives

anything. From a game-theoretic point of view, Player I should offer Player II one penny, and Player II should accept this offer because one penny is better than nothing. Numerous experiments by the US economist Richard H. Thaler (born 1945) and others have shown that human players appear to deviate sharply from **expected utility* theory: Player I usually offers much more than one penny and often offers 50 per cent of the prize, and Player II usually rejects Player I's offer if it is less than about one-quarter of the prize, in which case it is perceived as too unfair or insulting to accept.

ultradian rhythm *n.* Any **biological rhythm* such as a **circannual rhythm* or a **menstrual cycle* with a period longer than a day. *See also* BIOLOGICAL CLOCK, CHRONOBIOLOGY. *Compare* CIRCADIAN RHYTHM, INFRADIAN RHYTHM. [From Latin *ultra* beyond + *dies* a day]

ultrasound *n.* A pressure wave of the same physical character as sound but with a frequency above the **audibility range*, or above about 20,000 hertz, used in scanning devices for *ultrasound imaging* of internal body structures and unborn foetuses, which reflect some of the waves, and also for cleaning jewellery. Some frequencies of ultrasound can be perceived by animals such as bats, which use them for **biosonar*, and dogs. *See also* AUDIOGENIC SEIZURE, GALTON WHISTLE. *Compare* INFRASOUND. **ultrasonic** *adj.* [From Latin *ultra* beyond, from *ulter* distant + English *sound*]

ultraviolet *adj. n.* (Of or relating to) electromagnetic radiation with wavelengths shorter than the shortest radiation in the **visible spectrum* but not as short as X-rays, hence within the range 5 to 390 nanometres, absorbed by glass but transmitted by quartz crystals (from which ultraviolet **lenses* and **prisms* are therefore made), capable of causing genetic **mutations*. *Compare* INFRA-RED. **UV** *abbrev.* [From Latin *ultra* beyond, from *ulter* distant + English *violet*]

Ulysses contract *n.* A form of **informed consent* given in the form of an advance directive by people who have had **psychotic* (1) episodes in the past and wish to precommit themselves to undergo appropriate treatment should they have similar crises in the future. Also called *voluntary involuntary treatment*. [Named after an episode in Homer's *Odyssey* in which Ulysses binds himself to the masthead of a ship to avoid being drawn by the

*****ebook converter DEMO Watermarks*****

Sirens who bewitch men with their songs]

umami *n.* A fundamental taste in Japanese psychophysics, characteristic of the flavour enhancer * **monosodium glutamate** (**MSG**), supposedly not reducible to any combination of the traditional four primary tastes of ***Henning's tetrahedron**, namely sweet, sour, salty, and bitter. It was discovered in 1908 by the Japanese chemist Kikunae Ikeda (1864–1936), who also patented monosodium glutamate in the same year. [From Japanese *umami* delicious taste, from *umai* delicious]

Umweg problem *n.* Another name for a ***detour problem**. [From German *Umweg* a detour, from *um* around + *Weg* a path or road]

Umwelt *n.* An umbrella term for all the environmental influences shaping an individual's behaviour, or the environment as it is experienced by the individual. The word was introduced in 1909 by the Estonian biologist Jacob Johann von Uexküll (1864–1944) in his book *Umwelt und Innenwelt der Tiere* (Environment and Inner World of Animals). In ***phenomenology** and ***existentialism** it is the environment as it is experienced. See also **EXISTENTIAL ANALYSIS**, **EXISTENTIAL THERAPY**. Compare **EIGENWELT**, **MITWELT**. [From German *Umwelt* environment, from *um* around + *Welt* world]

unbalanced bilingual *n.* A person who can speak two languages but not with equal facility. Most bilinguals fall into this category, although rare cases of ***balanced bilinguals** have been confirmed by researchers.

uncertainty *n.* **1.** The state or condition of not being able to know or predict something accurately. **2.** The situation that exists when the outcome that will result from an action is not known with certainty, and even the probabilities associated with the possible outcomes are unknown or cannot be meaningfully estimated. A typical example would arise if a medical researcher were to test a new drug for the first time: various possible outcomes may be known, but there may be no meaningful way of assigning probabilities to them. ***Risk** (2) and uncertainty were first distinguished by the US economist Frank Hyneman Knight (1885–1972) in his book *Risk, Uncertainty, and Profit* (1921), and the distinction is maintained in careful usage, although the terms are often used interchangeably. See also **ELLSBERG**

*****ebook converter DEMO Watermarks*****

PARADOX, INSUFFICIENT REASON, MODIFIED ELLSBERG PARADOX, UNCERTAINTY PRINCIPLE. **uncertain** *adj.* [From Old English *un-* not + Latin *certus* sure or fixed, from *cernere* to discern or decide]

uncertainty principle *n.* The physical law, first propounded in 1927 by the German physicist Werner (Karl) Heisenberg (1901–76), that the position and momentum of a particle cannot both be determined with certainty, because neither can be measured without affecting the other. If the uncertainty of position is Δp , and the uncertainty of momentum is Δq , then $\Delta p \times \Delta q = h/4\pi$, where h is Planck's constant (6.6×10^{-34} Joule seconds). Because h is so small, the uncertainty is apparent only at the subatomic scale, but it has been argued by several brain scientists, and by the mathematical physicist Roger Penrose (born 1931) in *The Emperor's New Mind* (1989) and *Shadows of the Mind* (1994), that such subatomic events may occur in the **cytoskeletons* of **neurons* and may have important implications for psychological processes at the macroscopic level. Also called the *Heisenberg uncertainty principle* or *indeterminacy principle*.

uncinate fasciculus *n.* Either of two small bundles of nerve fibres in the cerebral cortex linking the **frontal lobe* to the anterior **temporal lobe*. [From Latin *uncinatus* hooked, from *uncinus* a hooked structure, from *uncus* a hook + *fasciculus* a little bundle, diminutive of *fasculus* a bundle]

unconditional response *n.* An uncommon but more accurate name for an **unconditioned response*.

unconditional stimulus *n.* An uncommon but more accurate name for an **unconditioned stimulus*.

unconditioned reflex *n.* Another name for an **unconditioned response*, presupposing that it consists of a **reflex* arc. Also called an *unconditional reflex*.

unconditioned response *n.* In **classical conditioning*, a **response* such as salivation that follows an **unconditioned stimulus* such as food naturally without any prior process of **conditioning* (1). *Unconditioned* is a

slight mistranslation of *unconditional*, the term originally used by the Russian physiologist Ivan Petrovich Pavlov (1849–1936), referring to a response that occurs unconditionally, that is, without conditioning. Also called an *unconditioned reflex* or an *unconditional reflex*, presupposing that it consists of a **reflex* arc. Compare *CONDITIONED RESPONSE*. **UR** abbrev.

unconditioned stimulus *n.* In **classical conditioning*, a **stimulus* (1) such as food that naturally elicits an **unconditioned response* such as salivation, without any prior process of **conditioning* (1). It is a slight mistranslation of *unconditional stimulus*, the term originally used by the Russian physiologist Ivan Petrovich Pavlov (1849–1936) to denote a stimulus that elicits a particular response unconditionally, that is, without conditioning. Compare *CONDITIONED STIMULUS*. **US** abbrev.

unconscious *adj.* **1.** Lacking **consciousness* or awareness of mental experiences such as perceptions, thoughts, or emotions; lacking deliberate intention (*an unconscious slip*). Compare *CONSCIOUS* (1, 2). **ucs** abbrev. *n.* **2.** In **psychoanalysis*, a part of the mind containing repressed instincts and their representative wishes, ideas, and images that are not accessible to direct examination, its functions being governed by the mechanisms of the **primary process*, especially **condensation* and **displacement*. The operation of **repression* prevents the contents of the unconscious from entering either **consciousness* or the **preconscious*, and a barrier of **censorship* exists between the unconscious and the preconscious–conscious system. Sigmund Freud (1856–1939) explicated his theory in 1912 in ‘A Note on the Unconscious in Psycho-Analysis’ (*Standard Edition*, XII, pp. 260–6) and in 1915 in an article on ‘The Unconscious’ (*Standard Edition*, XIV, pp. 166–215), but after 1920 he abandoned this **topography* of the mind in favour of a structural model based on the concepts of the **id*, **ego*, and **superego*. See also *COLLECTIVE UNCONSCIOUS*, *ID*, *PERSONAL UNCONSCIOUS*, *THING-PRESENTATION*. **Ucs** abbrev.

uncus *n.* The anterior curved end of the hippocampal formation. [From Latin *uncus* a hook, alluding to its hooklike appearance]

undecidable figure *n.* Another name for an **impossible figure*.

underextension *n.* The interpretation of a word, usually by a child during the course of language development in the second or third year, to mean only part of what it normally means, for example, when a child understands the word *cup* to denote only a particular cup, as if the word were a proper noun. See also [CONCEPT FORMATION](#). Compare [OVEREXTENSION](#), [OVERGENERALIZATION](#), [MISMATCH](#).

undifferentiated schizophrenia *n.* One of the major types of [*schizophrenia](#), defined negatively by the absence of signs and symptoms characteristic of [*catatonic schizophrenia](#), [*disorganized schizophrenia](#), or [*paranoid schizophrenia](#).

undifferentiated somatoform disorder *n.* In [*DSM-IV](#), a [*somatoform disorder](#) characterized by one or more [*somatic](#) symptoms (most commonly chronic tiredness, loss of appetite, gastrointestinal or urinary complaints), lasting at least six months, causing significant distress or impairment in social, occupational, or other important areas of functioning, but below the threshold for a diagnosis of [*somatization disorder](#). The term was replaced in DSM-5 by [*somatic symptom disorder](#). [From Greek *soma* body + Latin *forma* form]

Undine's curse See [ONDINE'S CURSE](#).

undinism *n.* Another name for [*urophilia](#). [From *undine* a water spirit, from Latin *unda* a wave]

undoing *n.* In [*psychoanalysis](#), a [*defence mechanism](#) whereby an emotional conflict associated with an action is dealt with by negating the action or attempting 'magically' to cause it not to have occurred by substituting an approximately opposite action. It differs from an ordinary act of making amends for an action that one regrets, inasmuch as the original action itself, and not merely its consequences, are negated. Sigmund Freud (1856–1939) introduced the concept briefly in his famous case study of the 'Rat Man' entitled 'Notes upon a Case of Obsessional Neurosis' (1909), where he describes [*compulsive](#) actions 'in two successive stages, of which the second neutralises the first' (*Standard Edition*, X, pp. 155–320, at p. 192).

The Rat Man knocked his foot against a stone lying in the road and felt obliged to remove it in case a carriage containing his loved one struck it and caused her to come to grief; but a few minutes later he realized the absurdity of what he had done and felt obliged to put the stone back in its original position in the middle of the road. Freud discussed undoing at greater length in his book *Inhibitions, Symptoms and Anxiety* (1926), where he gave the clearest definition of it: 'An action which carries out a certain injunction is immediately succeeded by another action which stops or undoes the first one even if it does not go quite so far as to carry out its opposite' (*Standard Edition*, XX, pp. 77–175, at p. 113). Freud's daughter Anna Freud (1895–1982) discussed the phenomenon on page 36 of her book *The Ego and the Mechanisms of Defence* (1937).

unexpected hanging paradox *n.* A **paradox* of prediction. Sentencing a man on Friday, a judge says: 'You will be hanged at noon on a day next week, but you will not know which day it is until the morning of the fateful day.' The prisoner reasons as follows. (a) I cannot be hanged next Saturday, because by the end of Friday I would know that I was to be hanged the next day. (b) I cannot be hanged on Friday because, with Saturday ruled out, by the end of Thursday I would know that I was to be hanged on Friday. (c) All the other days of the week can be excluded by the same argument, so I conclude that I cannot be hanged on any day next week, and therefore the judge's sentence cannot be carried out. The paradox was discovered by the Swedish mathematician Lennart Ekbom (1919–2002) and discussed with students in 1943 or 1944 after the Swedish broadcasting system announced that a civil defence drill would be held the following week but that no one would know in advance on which day it would take place. It was first discussed in print in an article in the journal *Mind* in 1948 by the British philosopher D(aniel) John O'Connor (1914–2012). O'Connor initially interpreted the judge's sentence as a classic **self-defeating prophecy*, and for that reason described the problem as 'rather frivolous'; but later commentators pointed out that if the hanging were to take place on Wednesday, for example, then it would indeed be unexpected, given the prisoner's reasoning that appears to have ruled out every day including Wednesday, and this shows that the sentence is not self-defeating. The problem was commented on by several eminent philosophers in subsequent issues, and it has generated by far the greatest attention of all epistemic

paradoxes, without any consensus emerging. However, there are strong reasons to consider it a fallacy (a *falsidical paradox*). In the prisoner's reasoning, (b) contradicts (a), because in (a) he infers from the fact that he is not hanged by Friday that he is certain to be hanged on Saturday, but in (b) he assumes that, if he is not to be hanged by Friday, then Saturday will have been 'ruled out'. Also, even if the prisoner were correct in believing that (a) and (b) imply a contradiction between the judge's statements that the sentence would be carried out the following week and that the prisoner would not know which day it was until the morning of that day, it would not be valid to infer from this that it is the first rather than the second of these statements that is false, and therefore that the hanging could not take place on any day of the following week. Also called the *surprise examination* (or *test*), or the *prediction paradox*. See also [OEDIPUS EFFECT](#).

unfaithful wives problem See [MUDDY CHILDREN PROBLEM](#).

unfinished business *n.* In **Gestalt* therapy, an incomplete Gestalt arising from an experience with which a person has not come to terms; more generally an unresolved problem or issue in an interpersonal relationship.

unfolding technique *n.* A method of **scaling* a set of stimuli without relying on any presupposed scale of measurement. Imagine a set of stimuli that are statements about capital punishment (*Capital punishment is never justified*, *People who commit murder should pay with their own lives*, and so on) arranged along a hypothetical scale, with anti-capital-punishment statements near the left and pro-capital-punishment statements near the right. Suppose an individual has judged the stimuli by the **method of paired comparisons* and produced the rank-ordering of them, from anti-capital-punishment to pro-capital-punishment, and suppose that the judge's ideal point—in this example, the point corresponding to the judge's own attitude towards capital punishment—is marked on the scale with an *X*, yielding a *joint continuum* or *J* scale. An example of a hypothetical *J* scale with the positions of five stimuli (statements about capital punishment) *A*, *B*, *C*, *D*, and *E*, and the individual's ideal point *X*, might be as follows:

---A-----X---C-----B-----D-----E---

From such a *J* scale, the individual's *I* scale could be obtained by imagining
*****ebook converter DEMO Watermarks*****

the *J* scale folded about the point *X*, so that the part of the scale to the left of the *X* is made to overlap the part to the right, yielding the following *I* scale:

X----*C*--*A*-----*B*-----*D*-----*E*---

Reading from the *X* at the left, it is now clear that the individual's preference ordering of the five stimuli (attitude statements) is *CABDE*. If *X* had been closer to *A* than to *C* on the *J* scale, then the individual's preference order would have been *ACBDE*, and if *X* were to the right of the midpoint between *C* and *B*, then the order would be *BCADE*. Any *I* scale may thus be viewed as a folded *J* scale, and from empirical data consisting in effect of observed *I* scales, *J* scales may therefore be recovered by unfolding the observed *I* scales. By unfolding the *I* scales of a number of judges who have ranked the five stimuli (statements), each with a different ideal positions *X* on the hypothetical *J* scale, it is possible to infer not only the order of stimuli on the *J* scale, but also information about relative distances between them, and hence **interval scale* information can be inferred from purely **ordinal scale* input data, provided the judges behave consistently. For example, because the *J* scale depicted above induces the *I* scale *CABDE* and not *CBADE*, we can infer that the distance between *A* and *C* is less than the distance between *C* and *B*, although the data are purely ordinal. The technique was formulated by the US psychologist Clyde Hamilton Coombs (1912–88) and published in the journal *Psychological Review* in 1950, and is also called the *Coombs unfolding technique*. See also [ATTITUDE SCALE](#), [CONJOINT MEASUREMENT THEORY](#), [PORTFOLIO THEORY](#).

unidimensionality *n.* The property of having only one dimension. In psychometrics, the property of a test of measuring only one underlying **attribute* or **construct*. See also [GUTTMAN SCALE](#), [REPRODUCIBILITY](#).

unilateral limb apraxia *n.* Another name for **left-sided apraxia*. See also [APRAXIA](#).

unilateral neglect See [SPATIAL NEGLECT](#). Also called *unilateral spatial neglect*.

uniocular *n.* Another word for **monocular*.

unipedophilia *n.* Another name for ***acrotomophilia**. [From Latin *unus* one + *pes, pedis* a foot + Greek *mania* madness]

unipolar depression *n.* A form of ***depression** that occurs within a ***mood disorder** with symptoms of depression only, without ***manic episodes**. [From Latin *unus* one + *polaris* of or relating to a pole, from *polus* a pole]

unipolar neuron *n.* A ***neuron** that has a single ***neurite**, sometimes considered to be an axon and sometimes part axon and part dendrite. It has a ***dendrite** at one end and an ***end organ** at the other, attached to the cell body by a short process. Also called a *unipolar cell*, *monopolar neuron*, or *monopolar cell*. Compare **BIPOLAR CELL**, **MULTIPOLAR NEURON**.

unique colour *n.* Another name for a ***psychological primary**. US *unique color*. Also called a *unique hue*.

univariate statistics *n.* The branch of statistics devoted to analysing the effects of one or more ***independent variables** on a single ***dependent variable**. The *uni-* in the name refers to the dependent variable. Compare **BIVARIATE STATISTICS**, **MULTIVARIATE STATISTICS**.

universal grammar *n.* The set of formal grammatical features that all ***natural languages**, both actual and possible, must possess in order to have the properties of human languages, as proposed by the US linguist and philosopher (Avram) Noam Chomsky (born 1928) and his followers. See also **FORMAL UNIVERSALS**, **LINGUISTIC UNIVERSALS**. **UG** *abbrev.*

universal quantifier See **QUANTIFIER**.

universals, linguistic See **LINGUISTIC UNIVERSALS**.

universal Turing machine See **Turing machine**.

unobtrusive measure *n.* Any means of obtaining psychological or social science research data other than by interviews, questionnaires, or other direct approaches, that is, without the conscious cooperation of the research

participants or subjects. It is considered useful where responses might be influenced by the respondents' awareness that their behaviour is being observed, the **validity* of measurements in such circumstances demanding **non-reactive measures*. The most common unobtrusive measures are **observational studies*; studies of the physical traces of behaviour, such as the wear of floor tiles in front of museum exhibits as measures of the exhibits' popularity; and investigations based on archival records, including legal records, mass media, sales records, diaries, and other personal data. The term was popularized by the US psychologist Eugene J(ohn) Webb (1933–95) and several co-authors in their book *Unobtrusive Measures: Nonreactive Research in the Social Sciences* (1966), in which the idea itself is traced to the 1870s and attributed to the English explorer and scientist Sir Francis Galton (1822–1911). See also [BOGUS PIPELINE](#), [IMPLICIT ASSOCIATION TEST](#), [LOST-LETTER TECHNIQUE](#), [MODERN RACISM](#).

unrealistic optimism *n.* A judgemental bias that tends to affect people's subjective estimates of the likelihood of future events in their lives, causing them to overestimate the likelihood of positive or desirable events and to underestimate the likelihood of negative or undesirable events. It was first reported in 1925 by the US psychologist F(rederick) H(ansen) Lund (1894–1965) and in 1938 by the US psychologist (Albert) Hadley Cantril (1906–69), and it came to prominence in 1980 when it was studied rigorously and named by the US psychologist Neil D(avid) Weinstein (born 1945) in an article in the *Journal of Personality and Social Psychology*. Weinstein asked students to estimate the relative likelihoods of various events happening to them, compared to the likelihoods of the same events happening to their peers, and his results showed that they rated their chances of experiencing positive events, such as *owning your own home*, *receiving a good job offer before graduation*, and *living past 80*, to be significantly above the average for students of the same sex at the same university, and their chances of experiencing negative events, such as *having a heart attack before age 40*, *being sued by someone*, and *being the victim of a mugging*, to be significantly below average. See also [DEPRESSIVE REALISM](#), [HYPOMANIC EPISODE](#). Compare [LAKE WOBEGON EFFECT](#), [OVERCONFIDENCE EFFECT](#).

unweighted pair-group method using arithmetic averages *n.* Another name for the **average linkage between groups*

*****ebook converter DEMO Watermarks*****

method of cluster analysis. **UPGMA** *abbrev.*

up-and-down method *n.* Another name for the **staircase method*.

uppers *n.* A common street name for central nervous system **stimulant drugs* in general. *Compare* **DOWNERS**.

upper threshold *n.* 1. The higher of the two thresholds determined by the **method of limits*. 2. Another name for a **terminal threshold*, though this usage can cause confusion.

uptalk *n.* An English language speech style in which **intonation* rises in the final syllables of sentences even if they are not questions. It is associated particularly with young people along the west coast of the United States, but it is believed to have spread from New Zealand or Australia in the 1980s, although it has been a standard feature of the speech style of Belfast, Northern Ireland, for centuries. By the beginning of the 21st century, it had become common among young speakers in the United Kingdom, Canada, South Africa, and in other English-speaking language communities. Also called *high rising intonation (HRI)* or *high rising terminal (HRT) speech*. The term was introduced by the science writer James Gorman (born 1949) in an article in the *New York Times* on 15 August 1993.

upward feedback *n.* A misleading name for **360-degree feedback*. It is avoided in careful usage, because 360-degree feedback is sideways and downward as well as upward.

uqamairineq *n.* A **culture-bound syndrome* restricted mainly to Eskimo communities of North America and Greenland, characterized by a sensation of a peculiar sound or smell, followed by sudden **paralysis* accompanied by **anxiety*, **psychomotor agitation*, or **hallucinations*, usually lasting only minutes and attributed to soul loss or spirit possession. It is sometimes interpreted as a type of dissociative disorder. [Inuit]

uracil *n.* One of the constituent **bases (1)* of **RNA*, having an affinity for **adenine*. **U** *abbrev.* [From *ur(ea)* + *ac(etic)* + Latin *-il(is)* indicating

capability or relationship]

Urbach-Wiethe disorder *n.* A skin disorder, probably of genetic origin, believed to cause crystallization of the amygdala and consequent cognitive deficits in some cases. [Named after the US dermatologist Erich Urbach (1893–1946) and the Austrian otologist Camillo Wiethe (1888–1949) who studied its features]

urban legend *n.* An apocryphal story, usually with either a nasty or a humorous twist in its tail, circulated by people who believe it actually to have happened to a ‘friend of a friend’. A typical example is the following, named the *Blind Man* urban legend by folklorists. A woman is taking a shower when she hears the doorbell ring. She calls out ‘Who is it?’ and a voice replies ‘Blind man’. The woman is generous, and keen on helping people with disabilities, so she grabs some loose change and, without bothering to cover herself in front of a blind man, opens the door. The man looks at her with astonishment and says, ‘Good day, madam. Now where do you want me to hang your blinds?’ It is occasionally possible to establish beyond doubt that such a story is apocryphal, but more commonly internal evidence casts sufficient doubt on its veracity for it to be classified as a probable urban legend. The *Blind Man* is typical inasmuch as it appears plausible at first but does not bear closer scrutiny: a bathroom is unlikely to be situated close enough to a front door to enable a woman taking a shower to converse with a man outside; a man who installs blinds does not normally call himself a ‘blind man’; everyone knows that a person describing himself as blind is not necessarily totally blind; a woman would normally cover herself to open the front door even to a caller she thought was totally blind, because other people may be passing in the street; and so on. Also called an *urban myth*. See also RUMOUR.

urethral character *n.* In *psychoanalysis, a personality pattern determined by *fixation (2) of *urethral erotism, characterized by ambition and competitiveness, both being interpreted as reactions against shame. Also called the *urethral personality*.

urethral erotism *n.* In *psychoanalysis, a mode of *libidinal satisfaction through urinating, and focusing of *libido in that region during the *phallic

*****ebook converter DEMO Watermarks*****

stage. Sigmund Freud (1856–1939) linked it to ***masturbation** in his case study of ‘Dora’ entitled ‘Fragment of an Analysis of a Case of Hysteria’ (1901/5, *Standard Edition*, VII, pp. 7–122, at p. 74), and (symbolically) with fire-setting or ***pyromania** in an article on ‘The Acquisition and Control of Fire’ (1932, *Standard Edition*, 22, p. 185). The British-based Austrian psychoanalyst Melanie Klein (1882–1960), on page 186 of her book *The Psycho-Analysis of Children* (1932), stressed the aggressive, corrosive, and essentially sadistic fantasies associated with urination in both children and adults. Also called *urethral eroticism* or *urinary erotism* or *eroticism*. See also **URETHRAL CHARACTER**. Compare **UROPHILIA**. **urethral-erotic** *adj.* [From Greek *ourethra* the urinary canal, from *ourein* to urinate]

urinary erotism *n.* Another name for ***urethral erotism**. Also called *urinary eroticism*.

uroboros *n.* An ancient circular symbol depicting a snake, or sometimes a dragon, swallowing its own tail, representing unity and/or infinity. Carl Gustav Jung (1875–1961) and his followers interpreted it as a metaphor for early development, when ***Eros** and ***Thanatos** are not differentiated and the infant cannot distinguish love from aggression or the feeder from the fed. **uroboric** *adj.* [From Greek *drakon ouroboros* snake devouring its own tail]

urolagnia *n.* Another name for ***urophilia**. [From Greek *ouron* urine + *lagneia* lust]

urophilia *n.* A ***paraphilia** characterized by recurrent sexually arousing fantasies, sexual urges, or behaviour involving urinating or being urinated on. Also called *undinism*, *urolagnia*. Compare **URETHRAL EROTISM**. [From Greek *ouron* urine + *philos* loving, from *phileein* to love + *-ia* indicating a condition or quality]

utility *n.* 1. A measure of the subjective desirability of an outcome or event, corresponding to the individual’s preference for it. The concept was introduced in 1738 by the Swiss mathematician and physicist Daniel Bernoulli (1700–82), who explained the ***St Petersburg paradox** by pointing out that the values of things to a person are not simply equivalent to their monetary values, but the term *utility*, which Bernoulli called *moral worth*,

*****ebook converter DEMO Watermarks*****

became widespread only after the emergence of **expected utility* theory in 1947. It is often used to represent the total gain or loss resulting from a particular course of action or the outcome of a strategic **game* (1). *See also* EXPECTED UTILITY, PAYOFF, PROSPECT THEORY, RISK AVERSION, RISK SEEKING, SUBJECTIVE EXPECTED UTILITY, SUBJECTIVE UTILITY, UTILITY FUNCTION, UTILITY THEORY. **2.** The fact, character, or quality of being useful or serviceable. **3.** The capacity of any commodity to satisfy a human want. **4.** A public service, such as a bus system or an electricity, water, or gas supply. [From Latin *utilitas* usefulness, from *utilis* useful, from *uti* to use]

utility function *n.* A rule specifying the relation between quantities of money or of any commodity and an individual's **utility* (1). *See also* PROSPECT THEORY.

utility theory *n.* A theory of decision making according to which a decision maker chooses an alternative or **strategy* (2) that maximizes the **utility* (1) of the outcome. The modern form of the theory was introduced in 1947 by the Hungarian-born US mathematician John von Neumann (1903–57) and the German-born US economist Oskar Morgenstern (1902–77). *See also* ALLAIS PARADOX, COMMON RATIO EFFECT, ELLSBERG PARADOX, EXPECTED UTILITY THEORY, MODIFIED ELLSBERG PARADOX, PROSPECT THEORY, REVEALED PREFERENCE, ST PETERSBURG PARADOX, SUBJECTIVE EXPECTED UTILITY THEORY.

utricle *n.* The larger of the two sections of the **membranous labyrinth* of the inner ear, functioning as an **otolith* receptor in the **vestibular system*. Also called a *utricle*. *Compare* SACCULE. **utricular** *adj.* [From Latin *utricle* a little bag, diminutive of *uter* a bag]

uvula *n.* The small finger of fleshy tissue that hangs from the soft palate at the back of the throat. [From Latin *uvula* little grape, diminutive of *uva* a grape]

uvular *adj.* In phonetics, of or relating to speech sounds whose **place of articulation* is in the region of the **uvula*, as in the pronunciation of the letter *r* in Parisian French.



vacuum activity *n.* Performance of a **fixed-action pattern* in the absence of its normal **sign* stimulus or **releaser*, believed to result from a build-up of motivational energy breaking through the inhibitory function of the **innate* releasing mechanism. A familiar example to cat owners is the slow rhythmic trampling by a cat with its front paws in its owner's lap, always accompanied by purring and often by dribbling, such behaviour being interpretable as a milk-treading fixed-action pattern normally triggered in a kitten by its mother lying down and exposing her nipples. Also called a *vacuum response* or an *overflow response*.

vagina *n.* The genital canal in females, extending from the vulva to the cervix of the uterus. *See also* *MÜLLERIAN DUCT*, *MÜLLERIAN INHIBITING SUBSTANCE*. **vaginal** *adj.* [From Latin *vagina* a sheath]

vagina dentata *n.* A fantasy of a toothed vagina, a legendary hazard associated with sexual intercourse. The Austrian psychoanalyst Otto Rank (1884–1939) first identified it, in his book *The Trauma of Birth* (1924), as a widespread cause of anxiety among neurotic men, and it was explored further by the Hungarian psychoanalyst Sandor Ferenczi (1873–1933). The counterpart fantasy among women, called *penis dentata* (toothed penis), is less commonly observed. [From Latin *vagina* a sheath + *dentata* toothed, from *dens*, *dentis* a tooth]

vaginismus *n.* A **sexual dysfunction* of women characterized by recurrent or persistent involuntary spasm of the perineal muscles surrounding the vagina when penetration is attempted with a penis, finger, tampon, or other object, interfering with sexual intercourse, causing significant distress

or problems of interpersonal interaction. It is not diagnosed if it is attributable to a ***general medical condition**. *See also* GENITO-PELVIC PAIN/PENETRATION DISORDER. *Compare* DYSPAREUNIA. [From Latin *vagina* a sheath + *-ismus* indicating a state or condition]

vagus nerve *n.* Either of the tenth pair of ***cranial nerves**, the longest cranial nerve and the most important nerve of the ***parasympathetic nervous system**, a sensory part receiving sensations from the ***mucous membranes** of the digestive system and a motor part supplying the heart, lungs, and alimentary canal, controlling swallowing. One of the most striking effects of its stimulation is slowing of the heart. *See also* VAGUSSTOFF. [From Latin *vagus* wandering, alluding to its roundabout course]

Vagusstoff *n.* The name coined in 1921 by the German pharmacologist Otto Loewi (1873–1961) for what is now called ***acetylcholine**, following his pioneering experimental demonstration of the chemical nature of nervous transmission. Electrical stimulation of the ***vagus nerve** of a frog's heart, held in a beaker of saline solution and still beating, stimulated the release of a substance that, when pumped into a separate beaker containing a second frog's heart with its vagus nerve removed, caused the beating of the second heart to slow as if its vagus nerve had been stimulated. [From German *Vagus* vagus + *Stoff* material or substance]

validation *n.* The act or process of making something valid, ratifying it, or checking that it satisfies certain standards or conditions. In psychometrics, the process of establishing the ***validity** of a test. **validate** *vb.* [From Latin *validus* valid, from *valere* to be strong + *-ation* indicating a process or condition]

validity *n.* The soundness or adequacy of something or the extent to which it satisfies certain standards or conditions. A research procedure or an interpretation of results obtained from a research study are considered valid if they can be justified on reasoned grounds. In psychometrics, it is the extent to which a test measures what it purports to measure, or the extent to which specified inferences from the test's scores are justified or meaningful. ***Internal validity**, ***external validity**, and ***ecological validity** (1) form a hierarchy in that order: an empirical investigation may produce results that

*****ebook converter DEMO Watermarks*****

have high internal validity and low external validity and ecological validity, or high internal validity and external validity and low ecological validity, but a higher form of validity is not possible without the lower forms. See CONCURRENT VALIDITY, CONGRUENT VALIDITY, CONSENSUAL VALIDITY, CONSTRUCT VALIDITY, CONTENT VALIDITY, CONVERGENT VALIDITY, CRITERION VALIDITY, CROSS-VALIDATION (1), DISCRIMINANT VALIDITY, FACE VALIDITY (a priori validity), INCREMENTAL VALIDITY, INTRINSIC VALIDITY, PREDICTIVE VALIDITY, TRAIT VALIDITY. See also NOMOLOGICAL NETWORK, REPLICATION (2), VALIDITY COEFFICIENT, VALIDITY GENERALIZATION. Compare RELIABILITY. **valid** *adj.*

validity coefficient *n.* A *correlation coefficient between scores on a test and a criterion of *validity, or a similar value taken as evidence of the test's validity. Compare RELIABILITY COEFFICIENT.

validity generalization *n.* Applying evidence of *validity obtained in a restricted range of circumstances to situations falling outside that range. This procedure is generally justified on the basis of *Bayesian inference, *meta-analysis, or other reasoned grounds. See also EXTERNAL VALIDITY, ECOLOGICAL VALIDITY (1).

Valium *n.* A proprietary name for the benzodiazepine drug *diazepam. [Trademark]

value (of a variable) *n.* In mathematics and statistics, a specific number, amount, or magnitude attained by a *variable, or occasionally a state attained by a non-numerical variable such as sex, the possible values of which are male and female. [From Latin *valere* to be worth]

vanishing point *n.* A point, usually located on the *horizon, towards which receding lines such as railway tracks appear to converge when depicted or viewed in *linear perspective.

vapours *n.* An almost obsolete word for the psychological condition later called *hysteria, formerly thought to arise from gases in the abdomen.

variability *n.* In statistics, the degree to which a set of scores is dispersed

or scattered. Two sets of scores with identical ***means** (averages) may have widely different variabilities. The usual measures of variability are the ***variance** and the ***standard deviation**. *See also* INTERQUARTILE RANGE, PROBABLE ERROR, RANGE, SEMI-INTERQUARTILE RANGE.

variable *n.* Anything that is subject to variation; in psychological research, any ***stimulus (1)**, ***response**, or extraneous factor that is changeable and that may influence the results of the research. *See also* DEPENDENT VARIABLE, EXTRANEOUS VARIABLE, INDEPENDENT VARIABLE, INTERVENING VARIABLE, MEDIATING VARIABLE, VALUE (OF A VARIABLE), VARIATE.

variable error *n.* In ***psychophysics**, any error of judgement or perception that is attributable to chance fluctuation and does not include any systematic bias. *Compare* CONSTANT ERROR.

variable-interval schedule *n.* In ***operant** conditioning, a simple ***reinforcement** schedule in which reward follows the first response that the organism makes after a random time interval, and then the first response that it makes after another random time interval, and so on, the average length of the interval being specified in seconds as an affix to the abbreviation, hence VI20 indicates a variable-interval schedule with an average interval of 20 seconds. Also called a *variable-interval reinforcement schedule*. *See also* SIMPLE REINFORCEMENT SCHEDULE. *Compare* FIXED-INTERVAL SCHEDULE, FIXED-RATIO SCHEDULE, VARIABLE-RATIO SCHEDULE. **VI** *abbrev.*

variable-ratio schedule *n.* In ***operant** conditioning, a simple ***reinforcement** schedule in which reward is delivered after the organism has made a random number of responses, and is then rewarded after a further random number of responses, and so on, the average number of responses before reinforcement being specified as an affix to the abbreviation, hence VR50 indicates a variable-ratio schedule with an average of 50 responses between reinforcements. Also called a *variable-ratio reinforcement schedule*. *See also* SIMPLE REINFORCEMENT SCHEDULE. *Compare* FIXED-INTERVAL SCHEDULE, FIXED-RATIO SCHEDULE, VARIABLE-INTERVAL SCHEDULE. **VR** *abbrev.*

variable stimulus *n.* In ***psychophysics**, a ***stimulus (1)** that is varied by the experimenter and is usually compared in magnitude to a ***standard**

*****ebook converter DEMO Watermarks*****

stimulus. Also called a *comparison stimulus*. **s** or **V** abbrev.

variable-sum game *n.* Another name for a **mixed-motive game*. [So called because the sum of the payoffs to the players varies from one outcome to another]

variance *n.* In descriptive statistics, a measure of the degree of dispersion, variability, or scatter of a set of scores. It is defined as the mean (average) of the squared deviations of the scores from their mean. Also called a *mean square*. See also INTERQUARTILE RANGE, PROBABLE ERROR, RANGE, SEMI-INTERQUARTILE RANGE, STANDARD DEVIATION. [From Latin *variare* to diversify]

variate *n.* In statistics, any **variable* whose values can be predicted only probabilistically, such as a **dependent variable* in a research design. The term is often used loosely to refer to any **variable*. See also BIVARIATE STATISTICS, MULTIVARIATE STATISTICS, UNIVARIATE STATISTICS.

variety *n.* The quality or condition of being diversified, or a collection of unlike things. In biology, a **taxonomic* group into which a **species* is divided, containing organisms that are genetically differentiable from other members of the same species by the relative frequencies of their **polymorphic genes*. Also called a *microspecies*, *race*, or *subspecies*. [From Latin *varietas* variety, from *varius* various]

vascular dementia *n.* A form of **dementia* associated with neurological signs and symptoms (such as exaggerated deep tendon reflexes) or laboratory findings indicating cerebrovascular disease (such as multiple cortical **infarcts*) that are judged to be responsible for the disorder. Also called *arteriosclerotic dementia*, *multi-infarct dementia (MID)*. [From Latin *vasculum* a little vessel, diminutive of *vas* a vessel]

vascular neurocognitive disorder *n.* A **neurocognitive disorder* in **DSM-5* associated with **vascular dementia*.

vascular tunic *n.* The middle layer of the eyeball, including the **ciliary body*.

vasoconstrictor *n.* Any drug, hormone, or nerve that causes blood vessels to narrow or contract. **vasoconstriction** *n.* Narrowing of blood vessels. See also [ERGOT](#), [VASOPRESSIN](#). Compare [VASODILATOR](#). [From Latin *vas* a vessel + *constringere*, *constrictum* to bind together or compress]

vasodilator *n.* Any drug, hormone, or nerve that causes blood vessels to expand. **vasodilation** *n.* Expansion or widening of blood vessels. Compare [VASOCONSTRICTION](#). [From Latin *vas* a vessel + *dilatare* to spread out, from *dis-* apart + *latus* wide]

vasomotor *adj.* Of or relating to a drug, hormone, or nerve that can cause blood vessels to constrict or dilate. See [VASOCONSTRICTOR](#), [VASODILATOR](#). [From Latin *vas* a vessel + *motor* a mover, from *movere* to move]

vasopressin *n.* A hormone produced by the [*hypothalamus](#) and stored in the [*posterior](#) pituitary, also synthesized artificially. It is released from the posterior pituitary in response to a decrease in blood volume detected by [*baroreceptors](#) or [*blood-flow receptors](#), or in response to an increase of sodium or of certain other substances in the blood detected by [*osmoreceptors](#) (2), or as a reaction to pain, stress, or the action of certain drugs such as nicotine, whereupon it stimulates smooth muscle contraction and causes constriction of small blood vessels and release of [*renin](#) by the kidneys, thereby raising blood pressure and inducing water retention in the kidney tubules. It also functions as a [*neurotransmitter](#) in the brain, where it is thought to have a role in memory, and it is sometimes inhaled via a nasal spray as a [*smart drug](#), supposedly improving attention, concentration, and memory. Also called *antidiuretic hormone* or *ADH*. See also [OXYTOCIN](#). [From *Vasopressin* a trademark, from Latin *vas* a vessel + *pressare* to keep pressing, from *premere*, *pressum* to press]

Vater–Pacini corpuscle *n.* Another name for a [*Pacinian corpuscle](#). [Named after the German anatomist Abraham Vater (1684–1751) who discovered it some time prior to 1741, and the Italian anatomist Filippo Pacini (1812–83) who rediscovered it in 1835 and gave a full description of it in 1840]

vault *n.* Another name for the ***fornix**, so called because of its arched appearance; or more generally an arched roof or ceiling, or a room, chamber, or cellar with such a structure. [From Old French *voute* a vault, from Latin *volvere, volutum* to roll]

vection *n.* An illusion of ***passive movement** arising from the perception of motion in the surrounding environment, as when a person sitting in a stationary train sees another train on an adjacent track begin to move and experiences an illusory sensation of being moved in the opposite direction. The phenomenon was first identified and studied quantitatively in 1929 by the German psychologist Karl Duncker (1903–40). Also called *induced motion*. See also **AUDIOGYRAL ILLUSION**. Compare **APPARENT MOVEMENT**. [From Latin *vector* a bearer or carrier, from *vehere, vectum* to convey + *-ion* indicating an action, process, or state]

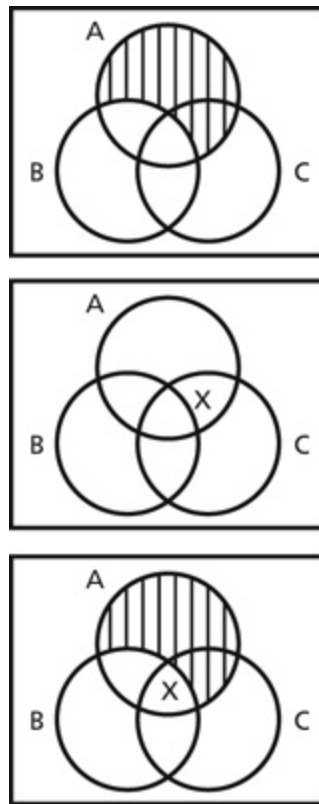
vegetative state See **PERSISTENT VEGETATIVE STATE**.

velar *adj.* Of or relating to speech sounds articulated with the back of the tongue against the soft palate, as in the final ***phonemes** in the words *wick*, *wig*, and *wing*. See also **PLACE OF ARTICULATION**. [From *velum* the soft palate, from Latin *velum* a veil]

velocity constancy *n.* A form of ***perceptual constancy** according to which if an object is moving with constant velocity its perceived velocity also remains constant despite changes in the velocity of its images on the viewer's retinas, as when a viewer standing by the side of a road watches a car approaching at constant speed, the retinal image moves slowly when the car is far away and much more rapidly as it passes the viewer, and movements of the viewer's eyes add erratic movements to the retinal images, but the viewer nevertheless perceives the car moving at a constant speed.

Venn diagram *n.* A pictorial representation of logical ***propositions (1)** or ***sets (1)** by overlapping circles depicting all possible combinations of set membership within different areas of the diagram. It is useful for clarifying and checking logical arguments (see **illustration**). Any area that contains no members is shaded, an x is placed within any area containing at least one

member, and an x is placed on the border between any two areas at least one of which contains members. For example, the proposition *All A are B* is depicted by two overlapping circles representing *A* and *B*, with the area of *A* that does not overlap *B* being shaded to show that it is empty; the proposition *Some A are C* is depicted by two overlapping circles representing *A* and *C*, with an x in the area where *A* and *C* overlap; and so on. Compare [EULER DIAGRAM](#). [Named after the English logician John Venn (1834–1923) who introduced it in 1880]



Venn diagram. This represents the syllogism: ‘All *A* are *B*; Some *C* are *A*; Therefore, some *C* are *B*’.

ventral *adj.* Of, relating to, or situated towards the same side of the body as the belly, except in the brain, where *ventral* is synonymous with *inferior* or *bottom*, as if humans walked on all fours and the cerebrum were not bent forwards 80° relative to the brainstem to keep it horizontally oriented when standing upright. Compare [DORSAL](#). [From Latin *venter*, *ventris* the belly]

ventral anterior nucleus *n.* A cluster of nerve cell bodies near the

front of the lower part of each **thalamus*, receiving inputs from the globus pallidus and projecting to the prefrontal cortex. *Compare* VENTRAL LATERAL NUCLEUS, VENTRAL POSTERIOR NUCLEUS.

ventral lateral nucleus *n.* A cluster of nerve cell bodies at the side of the lower part of each **thalamus*, receiving inputs from the globus pallidus and the cerebellum and projecting to the motor cortex and the supplementary motor area. *Compare* VENTRAL ANTERIOR NUCLEUS, VENTRAL POSTERIOR NUCLEUS.

ventral posterior nucleus *n.* A cluster of nerve cell bodies behind the ventral lateral nucleus of each **thalamus*, containing an inverted **topographic map* of the body with a disproportionate amount of space devoted to the face and especially the tongue, receiving inputs from the medial lemniscus and the trigeminal lemniscus and projecting to the somatosensory cortex. *Compare* VENTRAL ANTERIOR NUCLEUS, VENTRAL LATERAL NUCLEUS.

ventral root *n.* The short pathways into which a **spinal nerve* divides near its point of attachment to the front of the **spinal cord*, containing efferent or motor fibres emerging from the front of the spinal cord. *See also* BELL–MAGENDIE LAW. *Compare* DORSAL ROOT.

ventral tegmental area *n.* The lower part of the **tegmentum* alongside the substantia nigra, containing nerve cell bodies that release **dopamine*, projecting to various parts of the **limbic system* and the **prefrontal cortex*, implicated in emotional responsiveness and possibly, when overactive, linked to schizophrenia. *See also* MESOCORTICAL SYSTEM. VTA *abbrev.*

ventricle *n.* Any of a number of small cavities in the body, especially the two lower contractile chambers of the heart, which are filled with blood, and the four major cavities in the brain, which are filled with **cerebrospinal* fluid. The two lateral ventricles in the forebrain, the main parts of which lie in the temporal lobes immediately below the corpus callosum and above the thalamus, are separated by the **septum pellucidum* and are connected by the **foramen of Monro* to the third ventricle in the midline of the brainstem, and the third ventricle is connected in turn by the **cerebral* aqueduct to the fourth

*****ebook converter DEMO Watermarks*****

at the level of the pons and cerebellum. Also called a *lumen*. See also [AREA POSTREMA](#), [ENCEPHALOGRAM](#), [EPENDYMA](#), [EPENDYMAL CELL](#), [HYDROCEPHALUS](#), [LUMEN \(2\)](#), [MAGENDIE'S FORAMEN](#), [ORGANUM VASCULOSUM LAMINA TERMINALIS](#), [PNEUMOENCEPHALOGRAM](#). **ventricular** *adj.* [From Latin *ventriculus* a little belly, diminutive of *venter*, *ventris* a belly]

ventriloquism effect *n.* An [*auditory](#) illusion in which sound is misperceived as emanating from a source that can be seen to be moving appropriately when it actually emanates from a different invisible source. The effect is most powerful for speech sounds, and it arises from [*visual dominance](#) over auditory information. It is exploited by stage ventriloquists who practise the art of speaking without moving their lips while manipulating the movements of a puppet or dummy. [From Latin *venter* the belly + *loqui* to speak]

ventromedial cortex *n.* The lowest part of the [*prefrontal cortex](#) on the [*medial](#) or inner surfaces of both brain hemispheres, below the [*corpus callosum](#), corresponding to Brodmann areas 11, 12, 13, 14, and 47 (see illustration accompanying entry on [*Brodmann area](#)), involved in sensations of pleasure and [*reinforcement \(1\)](#), [*social skills](#), and physiological reactions implied by the [*somatic marker hypothesis](#). Also called the *ventromedial prefrontal cortex*. [From Latin *venter*, *ventris* the belly + *medialis* situated in the middle, from *medius* the middle + *cortex* bark or outer layer]

ventromedial hypothalamic syndrome *n.* A constellation of signs and symptoms associated with a lesion in both sides of the [*ventromedial hypothalamus](#), especially [*hyperphagia](#), [*bulimia \(1\)](#), and [*aggression](#) or rage. Also called *hypothalamic hyperphagia*. Compare [LATERAL HYPOTHALAMIC SYNDROME](#).

ventromedial hypothalamus *n.* The lower middle part of each side of the [*hypothalamus](#), responsible for the feeling of satiation after eating, stimulation of which inhibits eating and destruction increases eating, also implicated in the control of anger and aggression. Also called the *satiety centre*. See also [APPESTAT](#). Compare [LATERAL HYPOTHALAMIC FEEDING CENTRE](#). **VMH** *abbrev.* [From Latin *ventris* a belly + *medialis* situated in the middle, from *medius* the middle]

*****ebook converter DEMO Watermarks*****

ventromedial tract *n.* Part of the ***corticospinal tract** controlling trunk movements that does not decussate but stays on the same side of the body midline.

verbal ability *n.* Another name for ***verbal intelligence**.

verbal intelligence *n.* One of the fundamental ***factors (2)** of human intelligence, derived from ***factor** analysis, corresponding roughly to ***crystallized intelligence**. Also called *verbal ability*. See also **BRITISH ABILITY SCALES**, **MILL HILL VOCABULARY SCALE**, **WECHSLER SCALES**.

verbal overshadowing *n.* A phenomenon of memory in which verbally describing a face (or other item) impairs later recognition of it, apparently contradicting the traditional idea that ***elaborative rehearsal** enhances memory performance. The phenomenon was discovered in 1999 by the US psychologists Jonathan W(olf) Schooler (born 1959) and Tonya Y. Engstler-Schooler (born 1967) and first reported in an article in the journal *Cognitive Psychology* in 1990. In their original experiment, these researchers showed subjects a video of a bank robbery; then they asked half of them to describe the robber and the other half (the ***control group**) to perform an irrelevant activity. The subjects who had described the robber verbally were significantly worse than the control subjects at recognizing the previously seen robber from a line-up of similar looking faces, because their verbal memory had overshadowed their visual memory. The finding has both theoretical and practical significance, especially for the accuracy of eyewitness recollection. This phenomenon is not directly related to ***overshadowing**. [So called because the verbal description eclipses the visual memory]

verbal rating scale *n.* Any ***rating scale** in which the ***response** categories are labelled with words, such as *Strongly Disagree*, *Disagree*, *Neutral*, *Agree*, *Strongly Agree*. Compare **GRAPHIC RATING SCALE**, **NUMERICAL RATING SCALE**.

verbal transformation effect *n.* An ***auditory illusion** involving radical changes in what is heard in a clear recording of a word or phrase

repeated many times in a continuous loop. If a single word is repeated 360 times in three minutes, the average young adult listener experiences substantial distortions and hears about 30 changes involving about six different word forms. In a classic experiment in which the word *tress* was used, listeners heard such words as *dress*, *stress*, *Joyce*, *florist*, *purse*, and even phonetically unrelated words such as *lunchtime*. Children under six years experience few if any transformations, and susceptibility to the effect declines slowly in middle age. The phenomenon was discovered by the US psychologist Richard M. Warren (born 1925) and the English psychologist Richard L(angton) Gregory (1923–2010) and published in the *American Journal of Psychology* in 1958, a more detailed account being provided by Warren in the journal *Psychological Bulletin* in 1968. Compare [SEMANTIC SATIATION](#).

vergence *n.* Inward or outward turning of the eyes; a generic term for both [*ocular convergence](#) and [*ocular divergence](#). [From Latin *vergere* to incline]

veridical *adj.* Truthful or accurate, especially in relation to [*perceptions](#), [*dreams](#), or [*premonitions](#) that are confirmed by subsequent observations. **veridicality** *n.* The property or condition of being veridical. [From Latin *veridicus* truthful, from *verus* true + *dicere* to speak]

vermis *n.* The wormlike central strip connecting the two halves of the [*cerebellum](#) along its midline, involved in the coordination of trunk and eye movements and probably in the regulation of motivation. See also [ATTENTION-DEFICIT/HYPERACTIVITY DISORDER](#). [From Latin *vermis* a worm]

vernacular *n.* The indigenous language or [*dialect](#) commonly spoken by members of a community. See also [BLACK ENGLISH VERNACULAR](#). [From Latin *vernaculus* belonging to a household slave, from *verna* a household slave]

vernier acuity *n.* [*Visual acuity](#) expressed in terms of the minimum [*visual angle](#) of displacement that can be detected between two bars or lines that are almost, but not quite, aligned. [From *vernier scale* an auxiliary device for making fine adjustments to a measuring instrument, named after the French mathematician Paul Vernier (1580–1637) who invented it]

Verstehen *n.* A method of interpreting or understanding other people through an intuitive understanding of symbolic relationships derived from adopting the point of view of the people being studied. It was originally put forward by the German philosopher Wilhelm Dilthey (1833–1911) who argued that the ultimate goal of the human or mental sciences (*Geisteswissenschaften*) is understanding, whereas that of the natural sciences (*Naturwissenschaften*) is explanation (*Erklärung*). See also [ACTION](#), [HERMENEUTICS \(1\)](#). [From German *Verstehen* understanding, from *verstehen* to understand]

vertebrate *n.* **1.** An animal with a spinal column or backbone, belonging to the subphylum Vertebrata, characterized by a relatively well-developed brain, including fish, amphibians, reptiles, birds, and mammals in the phylum Chordata. Compare [INVERTEBRATE \(1\)](#). *adj.* **2.** Of or relating to a vertebrate (1). Compare [INVERTEBRATE \(2\)](#). [From Latin *vertebra* a spinal joint, from *vertere* to turn]

vertical décalage See [DÉCALAGE](#).

vertical icicle plot *n.* In statistics, a graphical representation of the formation of clusters during successive steps of a [*cluster analysis](#). The steps of the analysis are represented in the display by the rows, and the individuals or cases by the columns, with individuals or cases in the same cluster being joined by a horizontal line. Compare [HORIZONTAL ICICLE PLOT](#). [Named after its resemblance to a row of icicles hanging from a windowsill]

vertical thinking See [LATERAL THINKING](#).

vertigo *n.* A sensation of dizziness or of the external world or one's body whirling around, usually caused by damage to the [*vestibular system](#). Sometimes used to denote a pathological fear of heights, more correctly called *acrophobia*. [From Latin *vertigo* a whirling around, from *vertere* to turn]

vesicle *n.* Any small sac or cavity, including any of the [*ventricles](#) of the brain, or the [*prosencephalon](#), [*mesencephalon](#), or [*rhombencephalon](#) of the

developing foetus. *See also* [SYNAPTIC VESICLE](#). [From Latin *vesicula* a little bladder or blister, diminutive of *vesica* a bladder or blister]

vestibular nerve *n.* One of the two major branches of the [*vestibulocochlear nerve](#), transmitting information related to balance from the [*vestibular system](#). [From Latin *vestibulum* a forecourt]

vestibular nystagmus *n.* Any form of [*nystagmus](#) controlled by the [*vestibular system](#) and activated by head movements. *See also* [POST-ROTATIONAL NYSTAGMUS](#), [VESTIBULO-OCULAR REFLEX](#).

vestibular sense *n.* The sense of balance and orientation, governed by the [*vestibular system](#). *See also* [AUBERT EFFECT](#), [VESTIBULOCOCHLEAR NERVE](#).

vestibular system *n.* An organ in the [*membranous labyrinth](#) of the [*inner ear](#) mediating sensations of balance, orientation, and movement, containing the [*otolith](#) (or statolith) organs that are responsive to linear acceleration (including gravity) and the [*semicircular canals](#) that are responsive to angular acceleration. When the head is accelerated rapidly in a straight line, a gelatinous membrane covered with heavy [*otoconia](#) crystals of calcium carbonate tends to remain stationary through inertia, bending or displacing [*hair cells](#) that project into the fluid at different angles from the [*maculae](#) of the [*utricle](#) and [*sacculle](#), causing the hair cells to trigger nerve impulses that are sent to the brainstem and cerebellum, leading to reflex movements of muscles of the eyes, neck, limbs, and trunk, and exciting neurons in the central nervous system that mediate the perception of motion and orientation in space. The otolith organs also respond to gravity, which according to the general theory of relativity is equivalent to accelerating an object upwards at 9.8 metres per second squared. The three semicircular canals detect angular acceleration by means of hair cells that project into the gelatinous membrane of the [*cupula](#) where a fluid (endolymph) acts as an inertial mass resisting angular acceleration, displacing the hair cells in the direction opposite to the direction of movement and causing adjoining neurons to send nerve impulses to the brainstem and cerebellum. Also called the *vestibular apparatus*. *See also* [AUBERT EFFECT](#), [KINAESTHESIS](#), [MECHANORECEPTOR](#), [PROPRIOCEPTION](#), [VESTIBULAR NERVE](#), [VESTIBULAR NYSTAGMUS](#), [VESTIBULAR SENSE](#), [VESTIBULO-OCULAR REFLEX](#). [From Latin *vestibulum* a

*****ebook converter DEMO Watermarks*****

forecourt or entrance]

vestibule *n.* An entrance hall, or a cavity positioned at the entrance to another, especially the **vestibular system* of the inner ear. **vestibular** *adj.*

vestibulitis *n.* Inflammation of the **labyrinth* and **cochlea* of the inner ear, causing ataxia, deafness, and vertigo.

vestibulocerebellum *n.* The functional area of the **cerebellum*, comprising the **vermis*, **flocculonodular lobe*, and associated nuclei, having two-way connections with **Deiters' nucleus* in the **medulla oblongata*. Lesions in this area lead to **nystagmus* and **ataxia*, especially involving trunk movements. *See also* CEREBELLAR SYNDROME. *Compare* NEOCEREBELLUM, SPINOCEREBELLUM. [So called because it is a part of the cerebellum connected to Deiters' nucleus, which receives inputs mainly from the vestibular system]

vestibulocochlear nerve *n.* Either of the eighth pair of **cranial nerves*, supplying the organs of hearing and balance in the **inner ear*. It has two principal branches: the vestibular nerve, which transmits information related to balance from the **vestibular system*, and the cochlear nerve, which transmits auditory information from the **organ of Corti* in the cochlea of the inner ear to the **inferior colliculus* and thence to the **auditory cortex*. Also called the *auditory nerve* or the *acoustic nerve*.

vestibulo-ocular reflex *n.* A reflex rotation of the eyes activated by the **vestibular system* in response to a movement of the head, keeping the retinal image stable, also activated by stimulation of the external auditory canal with warm fluid, eliciting rotatory nystagmus towards the stimulated side, or cold fluid eliciting rotation away from the stimulated side. *See also* BÁRÁNY TEST, CALORIC NYSTAGMUS. **VOR** *abbrev.*

Viagra *n.* The proprietary name of the drug sildenafil citrate, introduced in 1998 for the treatment of **impotence (2)* or **erectile disorder*. It acts by selectively inhibiting the enzyme phosphodiesterase type 5 (PDE5) that metabolizes **cyclic GMP* in the **corpora cavernosa* of the penis, increasing the bioavailability of cyclic GMP and thereby increasing the inflow and decreasing the outflow of blood in these erectile tissues, the effects becoming
*****ebook converter DEMO Watermarks*****

apparent within half an hour or an hour of oral administration. [Trademark, a blend of *vi(gour)* + *(Ni)ag(a)ra*, suggesting a combination of power or stamina and unstoppable flow, coined by the drug company Pfizer in spite of the fact that the name *Niagara* has connotations of falls rather than rises]

vibration receptor *n.* A **sensory* receptor that responds to rapid oscillatory movements and that mediates the **vibratory sense*. See *MEISSNER'S CORPUSCLE*, *PACINIAN CORPUSCLE*. See also *MECHANORECEPTOR*.

vibratory sense *n.* The faculty for sensing vibration, mediated by **vibration receptors*, also involved in the tactile sensation of texture when the fingers are moved across a surface. Also called *vibrotactile perception*. See also *PALLAESTHESIA*, *TOUCH*.

Vierordt's law *n.* The proposition that short time intervals tend to be overestimated and long ones underestimated, the *indifference interval* being the intermediate length that is neither overestimated nor underestimated, usually found by experiment to be in the region of 0.7 second. [Named after the German physiologist Karl von Vierordt (1818–84) who formulated it in 1868]

vigilance *n.* The state or condition of being alert and attentive. It is studied in psychology by measuring the speed and accuracy with which a person can respond to stimuli, the stimuli usually being infrequent and difficult to detect against a background of **noise* (2). See also *SIGNAL DETECTION THEORY*. [From Latin *vigilans* keeping awake, from *vigilare* to be watchful, from *vigil* awake]

vignette *n.* A word-picture, a brief verbal outline of a scenario, or a short story about hypothetical characters in a particular situation, to which research participants or interviewees are asked to respond. Vignettes are used in various areas of psychological research including studies related to **attribution* theory, and they are also used to elicit opinions, attitudes, beliefs, or judgements. [From French *vignette* a small vine, from *vigne* a vine, from Latin *vineā* a vine, alluding to the original meaning, a design of vine-leaves and tendrils used on the title-page of a book or manuscript]

Vigotsky blocks See *VGOTSKY BLOCKS*.

*****ebook converter DEMO Watermarks*****

Vineland Social Maturity Scale *n.* A scale designed to measure social competence, defined as a functional composite of human traits that subserve social usefulness and are reflected in self-sufficiency and in service to others, from birth to 30 years of age. It measures eight categories of behaviour: self-help general, self-help eating, self-help dressing, locomotion, occupation, communication, self-direction, and socialization. An interview is conducted with a parent, sibling, or other third party who is familiar with the person being assessed, and scores are assigned according to the behaviours that are reported to be customarily exhibited, the assessment being expressed in terms of **social age* or **social quotient*. It was developed by the US psychologist Edgar (Arnold) Doll (1889–1968), originally published in 1936, and discussed in Doll's booklet *Your Child Grows Up* in 1950. [Named by Doll after the Vineland Training School for the Mentally Retarded, where it was developed]

virtual reality *n.* A computer-generated perceptual simulation of a three-dimensional image or environment with which the viewer can interact, often requiring a headset or goggles providing visual stimuli and gloves or other bodily attachments fitted with sensors. In a typical virtual reality display, turning the head produces an appropriate change in what is seen, and moving a hand activates a corresponding movement of an image of a hand in the display. The term, which became popular in the 1980s, is based on the concept of a *virtual image* in optics, which is an image of the kind seen in a mirror and formed from light rays apparently diverging from an object or surface, in contradistinction to an actual image formed from light rays actually diverging from an object or surface. *See also* *MUD*, *TELEDILDONICS*. **VR** *abbrev.*

virtual self *n.* In **self-psychology*, an image of the **neonate*'s self in the mind of a parent.

virus *n.* A submicroscopic particle of **RNA* or **DNA*, coated with **protein* and capable of self-replication within the cells of an organism, where its effects are often **pathogenic*. [From Latin *virus* venom]

viscera *n. pl.* A generic term for the large internal organs of the abdominal cavity. **viscus** *sing.* **visceral** *adj.* [From Latin *viscera* entrails, plural of *viscus*]
*****ebook converter DEMO Watermarks*****

an internal organ]

visceral afferent fibres *n.* Nerve fibres that arise from neuron cell bodies in ***dorsal** root ganglia and that transmit impulses from the internal organs of the body to the spinal cord. *Compare* **VISCERAL EFFERENT FIBRES**. [From Latin *viscera* entrails, plural of *viscus* an internal organ + *aferre* to carry to, from *ad* to + *ferre* to carry]

visceral efferent fibres *n.* Nerve fibres that belong to the sympathetic and parasympathetic divisions of the ***autonomic** nervous system and that transmit impulses from the spinal cord to smooth muscles and glands. [From Latin *viscera* entrails, plural of *viscus* an internal organ + *eferre* to carry off, from *e* from + *ferre* to carry]

visceroreceptor *n.* A ***sensory** receptor located in the ***viscera**. Also called a *visceroceptor*. *See also* **INTEROCEPTOR**.

visible spectrum *n.* The part of the ***spectrum** of light that stimulates ***photoreceptors** in the eye and produces visual sensations, with wavelengths ranging from about 390 to 740 nanometres corresponding to the ***bandwidth** of the visual system.

vision *n.* **1.** One of the five classical ***senses** (1), stimulated by light and mediated by ***photoreceptors** in the retinas of the eyes. It consists of three largely independent systems that analyse information about shape, colour, and movement, respectively, and that feed sensory signals from photoreceptors along three separate visual pathways to different processing systems in the ***visual cortex**, rather than a single hierarchical system that processes them all together. *See also* **MAGNOCELLULAR SYSTEM**, **PARVOCELLULAR SYSTEM**. **2.** An unusually vivid mental ***image** (3). **3.** A mystical or religious experience or divine revelation involving supernatural or paranormal perception (*the vision of St John of the Cross*). **4.** The experience of perceiving an apparition or ghost (*I had a vision of my late father*). **5.** The faculty of wise judgement or foresight (*We need a leader with vision*). **visual** *adj.* Of or relating to vision (1) or the eyes. [From Latin *visio* sight, from *videre* to see + *-ion* indicating an action, process, or state]

visual accommodation *n.* Another name for **accommodation (1)*.

visual acuity *n.* The keenness or sharpness of **vision (1)*, measured by various devices such as an **acuity grating*, **Landolt circles*, **König bars*, or a **Snellen fraction*. See also ACUITY, DYNAMIC VISUAL ACUITY, MINIMUM SEPARABLE, MINIMUM VISIBLE, STEREOSCOPIC ACUITY, VERNIER ACUITY.

visual adaptation *n.* A generic term for **chromatic adaptation (1)*, **dark adaptation*, **light adaptation*, **prism adaptation*, **transient tritanopia*, or any other form of **adaptation (2)* affecting **vision (1)*. See also FIELD ADAPTATION, VISUAL AFTEREFFECT.

visual aftereffect *n.* Any visual experience that follows and is caused by an earlier visual stimulus, including **afterimages* and an important class of **visual illusions*. See AUBERT EFFECT, CONTINGENT AFTEREFFECT, FIGURAL AFTEREFFECT, MCCOLLOUGH EFFECT, MOTION AFTEREFFECT, SPIRAL AFTEREFFECT, SUCCESSIVE CONTRAST, TILT AFTEREFFECT, WATERFALL ILLUSION.

visual angle *n.* The angle subtended at the nodal point of the eye's crystalline lens by a visual stimulus, determined jointly by the size of the stimulus and its distance from the observer. The visual angle subtended by the moon in the night sky is almost exactly one-half of a degree or 30 minutes of arc, this being the *angular size* of the stimulus. Labelling the visual angle θ (degrees), if the linear size (height, width, or diameter) of the stimulus is h and its distance from the observer is d , where h and d are measured in any units provided they are the same, then according to simple trigonometry $\tan(\theta/2) = (h/2)/d$. Hence for the image of a person 6 feet tall at a distance of 100 feet, $h = 6$, $d = 100$, and $\tan(\theta/2) = 3/100 = 0.03$. Using an inverse tangent button ($\tan^{-1}$) on a pocket calculator or a table of tangents, we can determine that $\theta/2 = 1.72$, therefore the visual angle θ subtended by the object is 3.44 degrees or 3 degrees and 26 minutes of arc. For small visual angles, the approximation $\tan \theta \approx h/d$ may be used, yielding in this example $\tan \theta = 0.06$ and $\theta = 3.43$ degrees, which also rounds to 3 degrees and 26 minutes of arc. The moon's diameter is 2,160 miles and its average distance is 238,900 miles, therefore $\tan \theta \approx 2,160/238,900$, yielding an angular size of $\theta \approx 0.52$. The sun's diameter is approximately 400 times that of the moon and it is 400

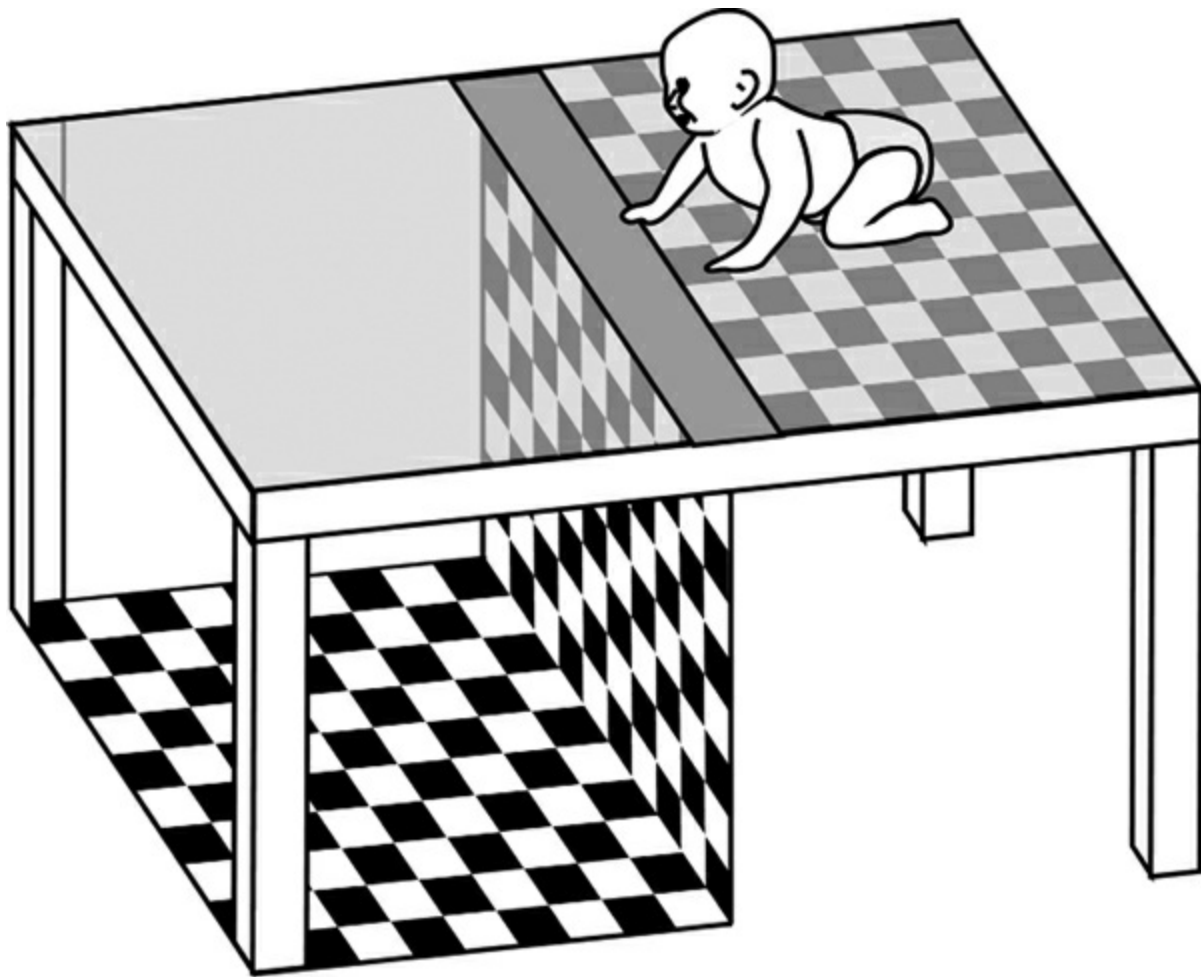
times further away, so by a remarkable coincidence, it subtends almost exactly the same angle at the eye. *See also* [AUBERT–FÖRSTER PHENOMENON](#), [EMMERT’S LAW](#), [KÖNIG BARS](#), [MINIMUM SEPARABLE](#), [MINIMUM VISIBLE](#), [SIZE CONSTANCY](#).

visual aphasia *n.* Another name for [*alexia](#). *See also* [APHASIA](#).

visual area *See* [VISUAL CORTEX](#).

visual association cortex *See* [VISUAL CORTEX](#).

visual cliff *n.* An experimental apparatus for studying depth perception in infants, introduced by the US psychologists Eleanor J(ack) Gibson (1910–2002) and Richard D(avid) Walk (1920–1999) and published in the journals *Science* in 1957 and *Scientific American* in 1960, consisting of a narrow wooden board laid across the middle of a sheet of heavy glass, with a chequered material immediately beneath the glass on one side of the board and several feet below it on the other side (see [illustration](#)). Although the glass surface is palpably flat and solid on both sides, the chequered pattern provides a [*texture gradient](#) indicating a deep cliff on one side of the central board, and an infant as young as 6 months who is placed on the board will happily crawl across the glass to its mother on the shallow side but will almost invariably refuse to cross the deep side in spite of strong coaxing and tactile evidence that the glass provides a solid surface. The effect has also been found in several other species, such as kittens that have just learned to walk at about 4 weeks of age and that never cross the visual cliff, and chicks less than a day old that also never cross the cliff, suggesting that depth perception is innate rather than learned by experience.



Visual cliff. The infant will not crawl across the deep end.

visual cortex *n.* The areas of the ***cerebral** cortex devoted to processing visual information from the eyes, including the ***primary visual cortex** and the visual association cortex. The primary visual cortex, occupying the gyri on both sides of the deep ***calcarine sulcus** in the ***occipital** cortex, is known technically as Area V1 (for Visual Area 1), and it is sometimes called the striate cortex, because it contains white bands of myelin within the cortical layers of grey matter that give it a striped appearance. Neurons in Area V1 have the smallest ***receptive fields** in the visual cortex. The visual association cortex, now generally called the prestriate cortex, occupies areas successively further outward from the primary visual cortex. Area V2, immediately adjacent to V1, is characterized by thin stripes responsive to colour information and thick stripes responsive to directional motion and form,

*****ebook converter DEMO Watermarks*****

separated by paler interstripes responsive only to form, and it receives inputs concerning form from layers 2 and 3 of Area V1 and relays them to Area V3; it also receives inputs concerning colour from **blobs* in Area V1 and relays them to Area V4; and it receives inputs concerning movement and stereopsis from layer 4B of Area V1 and relays them to Area V5 (also called *MT* because it is situated towards the back of the **middle temporal gyrus*). Area V3, which surrounds V1 and V2, is specialized for monochromatic pattern perception, and Area V3A, which surrounds V3, is specialized for dynamic or moving form; Area V4, which occupies the **fusiform gyrus*, is specialized for colour vision and form perception; and Area V5 (or MT) is specialized for the perception of visual motion and stereopsis. There are further projections from Areas V3, V4, and V5 to specialized visual areas, such as the **inferior temporal gyrus* specialized for recognizing certain types of patterns, perhaps including hands, a part of the **superior temporal sulcus* containing neurons that respond selectively to faces, and the **pulvinar* at the back of the thalamus concerned with attention. Area V7, adjacent to V3A, has an unknown function, Area V8, adjacent to V4 at the back of the inferior temporal gyrus, processes colour vision, and an area labelled V6 has been identified only in monkeys.

visual disparity *n.* Another name for **binocular* disparity.

visual dominance *n.* The tendency for visual information to determine what is perceived when there is a conflict between the visual information and information from another sensory modality, as in the **ventriloquism effect*.

visual egocentre *n.* The point either midway between the eyes or at the centre of the skull where visual sensations are perceived or felt to converge. US *visual egocenter*. See also *EGOCENTRE*.

visual evoked potential *n.* An **evoked potential* elicited by a visual stimulus. See also *NERVE CONDUCTION VELOCITY*. **VEP** abbrev.

visual field *n.* The entire area of space supplying stimuli to the visual receptors at a given time. In humans, the visual field of each eye subtends a **visual angle* of about 170 degrees in the horizontal plane and there is almost complete overlap between the visual fields of the two eyes. The part of the

*****ebook converter DEMO Watermarks*****

visual field to the left of the point on which gaze is fixated is called the *left visual field* (lvf) and the area to the right the *right visual field* (rvf), each of these areas being a *hemifield*. Also called *field of vision* or a *visual perceptual field*. See also APPURTENANCE, DIVIDED VISUAL FIELD, GANZFELD, HOMONYMOUS HEMIANOPIA, PERIMETRY, TUNNEL VISION. Compare RECEPTIVE FIELD.

visual fixation *n.* The act or process of **fixating* (1) or training one's eyes on an object or point in the visual field so that its image falls on the **foveas* of the eyes.

visual hallucination *n.* A **hallucination* of vision, either of fully formed images of people or objects, or of unformed visual sensations such as flashes of colour or movement.

visual illusion *n.* Any of a diverse and heterogeneous group of **illusions* in the visual domain, also called *optical illusions*, the most significant of which fall into the following inexact and overlapping categories: *ambiguous figures*, which are not strictly illusory but are generally included in discussions of visual illusions: see DUCK-RABBIT, HYBRID IMAGE, MACH ILLUSION, NECKER CUBE, REVERSIBLE GOBLET, SCHRÖDER STAIRCASE, SCRIPTURE'S BLOCKS, SPINNING DANCER ILLUSION, YOUNG GIRL/OLD WOMAN FIGURE; *associative illusions*: see BALDWIN ILLUSION, CHEQUER-SHADOW ILLUSION, CRAIK-O'BRIEN EFFECT, CURVATURE ILLUSION, DELBOEUF ILLUSION, EBBINGHAUS ILLUSION, EHRENSTEIN'S BRIGHTNESS ILLUSION, EHRENSTEIN'S SQUARE ILLUSION, FILLED-SPACE ILLUSION, FILLING-IN ILLUSION, FRASER SPIRAL, GELB EFFECT, HELMHOLTZ ILLUSION, HERING ILLUSION, HERMANN GRID, HOLLOW SQUARES ILLUSION, HORIZONTAL-VERTICAL ILLUSION, IRRADIATION ILLUSION, JASTROW ILLUSION, KARDOS EFFECT, LAND EFFECT, MARGARET THATCHER ILLUSION, MORINAGA MISALIGNMENT ILLUSION, MÜLLER-LYER ILLUSION, MÜNSTERBERG ILLUSION, ORBISON ILLUSION, OUCHI ILLUSION, PATTERN-INDUCED FLICKER COLOUR, PINNA-BRELSTAFF ILLUSION, POGGENDORFF ILLUSION, PONZO ILLUSION, SANDER PARALLELOGRAM, STAR ILLUSION, TEACUP ILLUSION, TOP HAT ILLUSION, TWISTED-CORD ILLUSION, WUNDT ILLUSION, ZANFORLIN ILLUSION, ZÖLLNER ILLUSION; *illusory contours*: see EHRENSTEIN'S BRIGHTNESS ILLUSION, KANIZSA TRIANGLE, RANDOM-DOT STEREOGRAM; *impossible figures*: see FREEMISH CRATE, IMPOSSIBLE TRIDENT, PENROSE TRIANGLE, STAIRCASE ILLUSION; *movement illusions*: see APPARENT MOVEMENT (alpha movement, beta movement, gamma movement, delta movement), AUTOKINETIC EFFECT,

*****ebook converter DEMO Watermarks*****

CHESHIRE CAT EFFECT, FLASH-LAG EFFECT, HOLLOW-FACE ILLUSION, KINETIC DEPTH EFFECT, LISSAJOUS FIGURE, MOTION CAPTURE, OCULOGYRAL ILLUSION, OPTIMAL MOVEMENT, OUCHI ILLUSION, PARTIAL MOVEMENT, PINNA–BRELSTAFF ILLUSION, PHANTOM GRATING, PHI MOVEMENT, RANDOM-DOT KINEMATOGRAM, ROTATING HEAD ILLUSION, SPINNING DANCER ILLUSION, SPIRAL AFTEREFFECT, TERNUS PHENOMENON, VECTION, WAGON WHEEL ILLUSION, WATERFALL ILLUSION, WINDMILL ILLUSION; *perspective illusions*: see AMES ROOM, CORRIDOR ILLUSION, HOLLOW-FACE ILLUSION, HORIZONTAL–VERTICAL ILLUSION, LEANING TOWER ILLUSION, MOON ILLUSION, PONZO ILLUSION, TEACUP ILLUSION, TRAPEZOIDAL WINDOW, TURNING THE TABLES ILLUSION; *space–time illusions*: see KAPPA EFFECT, TAU EFFECT; *STEREOSCOPIC ILLUSIONS*: see ANAGLYPH, CHESHIRE CAT EFFECT, FLOATING-FINGER ILLUSION, HOLE-IN-THE-HAND ILLUSION, HOLLOW-FACE ILLUSION, LISSAJOUS FIGURE, PULFRICH EFFECT, RANDOM-DOT KINEMATOGRAM, RANDOM-DOT STEREOGRAM; *VISUAL AFTEREFFECTS*: see AUBERT EFFECT, CONTINGENT AFTEREFFECT, FIGURAL AFTEREFFECT, MCCOLLOUGH EFFECT, MOTION AFTEREFFECT, SPIRAL AFTEREFFECT, SUCCESSIVE CONTRAST, TILT AFTEREFFECT, WATERFALL ILLUSION. *See also* CARPENTERED WORLD, HONI PHENOMENON, NAIVE REALISM, PEPPER’S GHOST, TROMPE L’OEIL, VIERORDT’S LAW. *Compare* AUDITORY ILLUSION, POSTURAL AFTEREFFECT, TACTILE ILLUSION.

visual image *See* IMAGE (1, 2, 3).

visual impairment *n.* Any defect of vision, especially one falling short of total blindness. *See* BLINDNESS.

visual induction *n.* A form of *induction (3) in the visual modality in which stimulus elements associated with one part of the visual field or of an object or image affect what is perceived in another. *See* ASSOCIATIVE ILLUSION, COLOUR CONTRAST, LIGHTNESS CONTRAST.

visualizer *n.* A person whose characteristic style of mental imagery is visual rather than auditory, tactile, or motor. *Compare* AUDILE (2), MOTILE (2), TACTILE (2).

visual masking *n.* A reduction or elimination of the detectability of a brief (shorter than 100 milliseconds) visual stimulus called the *test stimulus* by the presentation of a second stimulus called the *masking stimulus* either

*****ebook converter DEMO Watermarks*****

before the test stimulus (**forward masking*), at the same time as the test stimulus (**simultaneous masking*), or after the test stimulus (**backward masking*). When the test stimulus and masking stimulus do not overlap spatially, forward masking is called **paracontrast* and backward masking is called **metacontrast*. The term was introduced in 1925 by the French experimental psychologist Henri Piéron (1881–1964). See also [BRIGHTNESS MASKING](#), [CENTRAL MASKING](#), [DICHOPTIC MASKING](#), [INSPECTION TIME](#), [MASKING](#), [PERKY PHENOMENON](#).

Visual–Motor Gestalt Test See [BENDER GESTALT TEST](#). **VMGT** *abbrev.*

visual pigment *n.* Any of four different **pigments* that are contained in **rods* and **cones* in the retinas of the eyes and that absorb light over a broad range of the **visible spectrum* but are maximally sensitive to either short wavelengths (blue light), medium wavelengths (green light), or long wavelengths (red, orange, and yellow light), the rod pigment **rhodopsin* having peak sensitivity to light of approximately 510 nanometres in the green part of the spectrum and the **cone* pigments having peak sensitivity at approximately 430 nm, 530 nm, and 560 nm, usually called blue, green, and red pigments respectively, although light of these wavelengths actually looks violet, blue–green, and yellowish–green. See also [BUNSEN–ROSCOE LAW](#), [CHROMOPHORE](#).

visual purple *n.* Another name for **rhodopsin*.

visual receptor *n.* Any of the **rods* or **cones* in the **retina* of the eyes that function as **sensory receptors* by converting light stimuli into nerve impulses. Also called a *photoreceptor*.

visual search *n.* An experimental task, the objective of which is to find a particular element in a visual display, as when all occurrences of the letter *e* have to be located and crossed out as quickly as possible in a page of text. A simple but striking demonstration of the fallibility of visual search can be carried out by printing the following sentence on a sheet of paper: FINISHED FILES ARE THE RESULT OF YEARS OF SCIENTIFIC STUDY COMBINED WITH THE EXPERIENCE OF LIFE. Many people who are
*****ebook converter DEMO Watermarks*****

asked to count the occurrences of the letter F as quickly as possible find only four of them after completing the search to their own satisfaction, although F occurs seven times in the sentence. *See also* [MULTIFRAME TASK](#), [SINGLE-FRAME TASK](#).

visual suppression *n.* Momentary suspension of visual perception during a [*saccade](#), triggered by [*feedforward](#) of the efferent output of the extra-ocular muscles, eliminating the impression of movement that would otherwise be created by the motion of the eyes, which cause movements of the images across the retinas. If a visual display linked to an automatic eye-movement tracker is altered only during saccades, the viewer does not perceive the changes occurring but may eventually become conscious of the fact that the image is no longer the same as it was. Also called *saccadic suppression*.

visual system *n.* A generic name for the totality of structures of the nervous system involved in vision.

visual violet *n.* Another name for [*iodopsin](#).

visual word-form dyslexia *n.* A generic name for [*attentional dyslexia](#), [*neglect dyslexia](#), and [*spelling dyslexia](#). Also called *peripheral dyslexia*.

visuospatial sketchpad *n.* A subsystem of [*working memory](#) that functions as a [*buffer store](#) for visually coded information.

vitamin *n.* Any of a number of organic substances (thus excluding trace minerals) that are present in foods in small quantities (thus excluding fats, carbohydrates, and proteins) and are necessary for normal [*metabolism](#).

vitamin A *n.* [*Retinol](#), a fat-soluble vitamin necessary for [*scotopic](#) vision, formed by [*hydrolysis](#) of beta-carotene, which is found in carrots and other yellow and green vegetables, butter, eggs, fish oil. **vitamin B complex** *n.* A group of water-soluble vitamins found especially in yeast and liver, necessary for the normal function of the cardiovascular and nervous systems, including thiamine (vitamin B₁), riboflavin (vitamin B₂ or, especially in the US,

vitamin G), pyridoxine (vitamin B₆), and cyanocobalamin (vitamin B₁₂). **vitamin C** *n.* Ascorbic acid, a white, crystalline, water-soluble vitamin found in citrus fruits, tomatoes, green vegetables, and potatoes, necessary for repair of fibrous tissue, as an antioxidant scavenging **free radicals* that can damage cells, and as a cofactor in the synthesis of **adrenalin* (epinephrine) and **noradrenalin* (norepinephrine); the human body cannot store it and a deficiency causes scurvy. **vitamin D** *n.* A group of fat-soluble vitamins found in cod-liver oil and other fish oils, milk, butter, and eggs, also synthesized from cholesterol in the skin when exposed to sunlight, a deficiency causing rickets and osteoporosis. **vitamin E** *n.* Tocopherol, a group of fat-soluble vitamins found in wheatgerm, lettuce, nuts, soybean, and eggs, necessary for normal reproduction and for maintaining **pituitary gland*, **adrenal gland*, and **sex* hormones. **vitamin G** *n.* Another name for vitamin B₂. **vitamin H** *n.* Another name (especially in US) for biotin, one of the B complex vitamins. **vitamin K** *n.* A group of fat-soluble vitamins found in green vegetables, eggs, fish-liver oils, necessary for blood clotting, also called *quinones*. **vitamin P** *n.* A group of water-soluble vitamins found in citrus fruits, blackcurrants, and rosehips, necessary for maintaining the permeability of the blood capillaries, also called *bioflavonoids*. [From Latin *vita* life + English *amine*, from *am(monium)* + Greek *-ine* indicating an amine, first identified and named in 1912 by the Polish-born US biochemist Casimir Funk (1884–1967) in the mistaken belief that they are amines]

vitamin therapy *See* ORTHOMOLECULAR THERAPY.

vitreous humour *n.* The transparent gelatinous substance that fills the eyeball between the crystalline lens and the retina. US *vitreous humor*. [From Latin *vitreus* made of glass, from *vitrum* glass, probably related to *videre* to see]

VNTR *abbrev.* Variable number of tandem repeats. VNTR genetic loci are those containing **repetitive DNA*.

vocal cords *n.* Two pairs of membranes in the **larynx*. The upper pair are called false vocal cords and are not involved in speech production; the lower pair (true vocal cords) are the **vocal folds*. [From Latin *vocalis* of or

relating to voice, from vox voice]

vocal folds *n.* A pair of membranes, resembling lips, stretched across the *larynx from front to back and capable of closing and opening to form a space called the *glottis. During speech production, the airstream from the lungs causes them to vibrate, and this vibration, amplified by resonators of the chest, throat, mouth-cavity, nose-cavity, and sinuses, results in the production of vocal sounds. Also called (*true*) *vocal cords*.

vocal fry *n.* A *vocal register characterized by a low-frequency (20–70 Hz) creaky articulation of a vowel, usually at the end of a speech segment or sentence. A typical example occurs in the 1933 Paramount film *She Done Him Wrong* at the end of the sentence in which the US actress Mae West (1893–1980) says: ‘Why don’t you come up some time and see me?’ According to research published in the *Journal of Voice* in 2012, vocal fry became common mainly among young, female Americans in the first decade of the 21st century, but in the United Kingdom it was already established among upper-class men as a marker of social status, and it is an intrinsic feature of some languages, such as Vietnamese, in which it can change the meaning of a word. Also called *creak* or *glottal fry*. [So called because of its resemblance to the sound of food being fried in fat]

vocal register *n.* The vocal *pitch adopted for speech, three important examples being falsetto (high pitch), modal voice (the normal pitch for speech), and *vocal fry (the lowest pitch). [From Latin *registrum* a register, from *regerere* to transcribe, from *re-* again + *gerere* to bear]

vocal tic disorder *n.* Any *tic disorder in which the predominant symptom is a vocal tic. *See also* TIC.

vocal tract *n.* The part of the air passage from the lungs that lies above the *larynx. The part of the air passage below the larynx is the *trachea.

vocational aptitude test *n.* In psychometrics, any *aptitude test designed to predict how successful the respondent is likely to be in a particular occupation.

voice box *n.* A non-technical name for the *larynx.

voiceprint *n.* Another name for a *speech spectrogram.

void mode *n.* A manner of viewing a coloured surface through a small aperture so that only a small and isolated area of the surface is visible at one time. Under these conditions the *Land effect disappears, and some *non-spectral colours such as brown cannot be perceived at all, the appearance of brown arising only when a yellow surface is darker than its surround. See also RETINEX THEORY. Compare ANORTHOSCOPIC, REDUCTION SCREEN.

volaemic thirst *n.* Another name for *hypovolaemic thirst. US *volemic thirst*.

volley theory *n.* A refinement of the *frequency theory of pitch perception, first proposed in 1939 by the US psychologist Ernest Glen Wever (1902–91), according to which the ear converts acoustic vibrations into nerve impulses for frequencies between about 500 hertz (the maximum firing rate of individual auditory neurons) and 5,000 hertz (above which the *place theory provides an adequate explanation) by causing groups of neurons to fire repeatedly and slightly out of phase with one another, producing a stream of nerve impulses more rapid than the firing rate of any individual neuron, analogously to volleys of arrows from a group of asynchronous archers arriving at their target more frequently than the maximum firing rate of any individual archer. Also called the *platoon-volley theory*. Compare FREQUENCY THEORY, PLACE THEORY.

voltage-gated ion channel *n.* An *ion channel, the permeability of which is regulated by changes in the cell's *membrane potential. Compare CHEMICALLY GATED ION CHANNEL.

volume *n.* 1. The magnitude of the three-dimensional space occupied by a solid or a quantity of fluid (*brain volume*, *blood volume*); hence, figuratively, a quantity or amount of anything (*volume of trade*). 2. The perceived magnitude of space filled by a sound, loud and low-pitched sounds generally appearing to fill more space than soft and high-pitched sounds. 3. Another

name for **loudness*, but this sense is avoided in careful usage. **4.** A bound book, especially one belonging to a series. [From Latin *volumen* a roll or book, from *volvere* to turn or roll up]

volume colour *n.* Another name for **film colour*. US *volume color*. [So called in contrast to surface colour]

volumetric thirst *n.* Another name for **hypovolaemic thirst*. [From Greek *volumen* a roll + *metron* a measure + *haima* blood]

voluntary involuntary treatment *n.* Another name for a **Ulysses contract*.

voluntary muscle *n.* Any muscle controlling voluntary functions and consisting of **striped muscle* tissue, including any **skeletal muscle*. The **cardiac muscle*, though striped, is an exception in not being a voluntary muscle. *See also* *MUSCLE*. *Compare* *INVOLUNTARY MUSCLE*.

volunteer (research or experimental) *n.* Another name for a **subject (research or experimental)* or **participant (research or experimental)*.

vomer nasal organ *n.* A slender horizontal groove ending in a blind pouch in the nasal **mucous membrane* on each side of the septum separating the nostrils in most mammals. In non-human mammals and reptiles it is highly developed and functions as a sensitive olfactory organ that responds to **pheromones*, but in human adults it is rudimentary and possibly vestigial, though there is some evidence that it functions as a receptor for **steroid* molecules and mediates the **Whitten effect*, even in humans. Also called *Jacobson's organ*. **VNO** *abbrev.* [From *vomer* the bone separating the nasal passages in mammals, from Latin *vomer* a ploughshare + *nasalis* of or relating to the nose, from *nasus* the nose]

von Osten's horse *See* *CLEVER HANS*.

von Restorff effect *n.* A tendency, when attempting to recall a list of

words or other items that have been learned, to show superior recall for any item that has a high degree of **salience* (1), a typical example being a word printed in differently coloured ink. The effect is much weaker for **recognition* memory. Also called the *Restorff effect* or the *isolation effect*. See also *NEXT-IN-LINE EFFECT*. Compare *RANSCHBURG INHIBITION*. [Named after the German psychologist Hedwig von Restorff (1906–62) who first reported it in her doctoral dissertation, published in the journal *Psychologische Forschung* in 1933, and in a second article, co-authored with her dissertation supervisor, the German Gestalt psychologist Wolfgang Köhler (1887–1967), in the same journal in 1937]

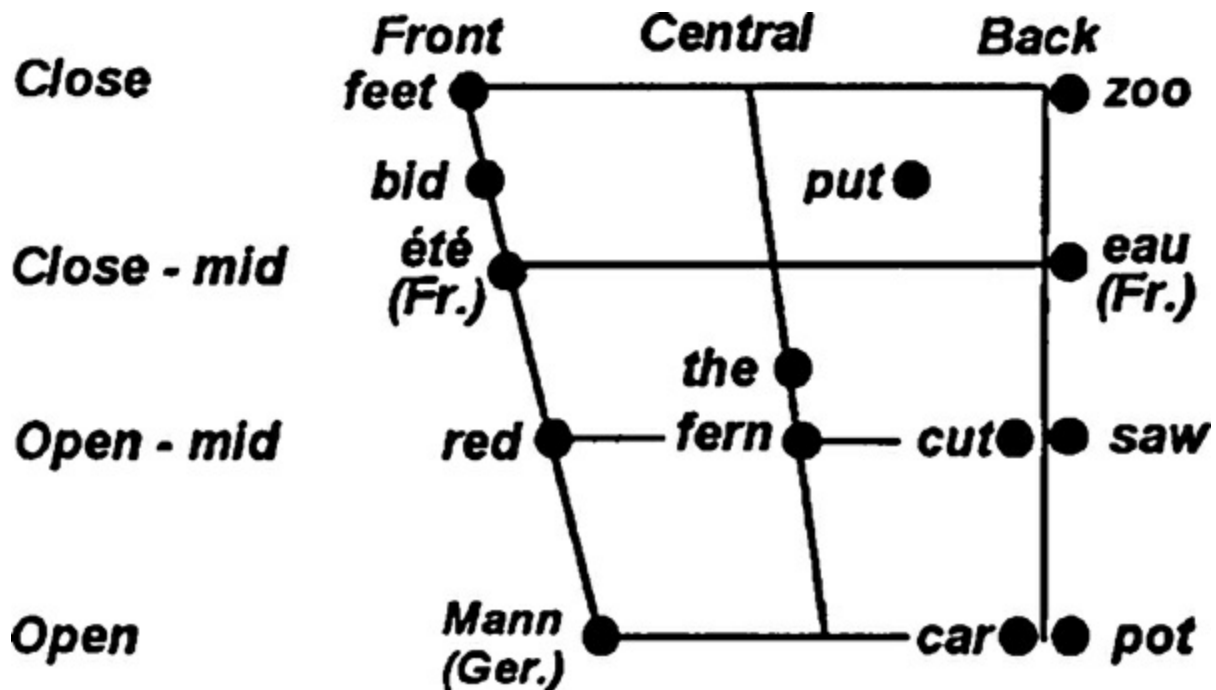
voodoo death *n.* Death or apparent death resulting from the effects of voodoo, a set of religious beliefs and practices of West African origin, surviving in Haiti and other parts of the Caribbean and in scattered communities in the southern United States. Voodoo formerly involved human sacrifice and cannibalism; it now involves sorcery and curses so frightening that they are believed to be capable of causing the death of their victims, though some of the deaths may be apparent rather than real and may result from poisoning by sorcerers attempting zombification (see *ZOMBIE* (2)). In Haitian voodoo (or vodun), the physical parts of a human being are the *corps cadavre* (mortal flesh), which decays after death, and the *n'âme* (spirit of the flesh), which passes into the soil. The spiritual parts are the *z'étoile* (star of destiny) and the two components of the soul, namely the *gros-bon-ange* (great good angel) and the *ti-bon-ange* (little good angel), both of which survive death and are susceptible to sorcery. The term was brought to prominence by the US physiologist Walter Bradford Cannon (1871–1945) in an article entitled ‘“Voodoo” Death’ in the journal *American Anthropologist* in 1942. Also called *thanatomania*. See also *BASKERVILLE EFFECT*, *NOCEBO EFFECT*, *ZOMBIE* (2). [From Louisiana French *voudou*, from West African Ewe *vodu* a guardian spirit]

voting paradox *n.* Another name for **Condorcet's paradox*.

vowel *n.* A speech sound, almost invariably forming the main part of a syllable, that involves no significant obstruction of the airstream through the **vocal tract*. Various features distinguish the sound of one vowel from another, notably whether the front, central part, or back of the tongue is

*****ebook converter DEMO Watermarks*****

raised, leading to **front vowels*, **central vowels*, and **back vowels* respectively, and how high the tongue is raised towards the roof of the mouth, leading to **close vowels*, **mid vowels*, and **open vowels*. These features are often portrayed on a *vowel quadrilateral* representing the mouth schematically (see *illustration*). Compare *CONSONANT*, *SEMIVOWEL*. [French *voyelle*, from Latin *vox* a voice]



Vowel quadrilateral

voyeurism *n.* A **paraphilia* characterized by recurrent, intense sexual fantasies, urges, or behaviour involving the surreptitious observation of people who are naked, undressing, or engaging in sexual activity. See also *SCOPOPHILIA*, *VOYEURISTIC DISORDER*. **voyeur** *n.* A person given to voyeurism, often referred to non-technically as a **peeping Tom*. Compare *ÉCOUTEUR*. [From French *voyeur* one who observes or sees]

voyeuristic disorder *n.* A **paraphilic disorder* in **DSM-5* characterized by intense, recurrent sexual arousal from watching unsuspecting people when they are naked, undressing, or having sex, or associated fantasies or urges. To meet the diagnostic criteria in *DSM-5*, the individual must be at least 18 years of age and must either have acted out this

behaviour with a non-consenting person over a period of at least six months, or the fantasies or urges must have caused clinically significant distress or impairment in social, occupational, or other areas of life for the same minimum period. *See also* [VOYEURISM](#).

vulva *n.* The orifice of the [*vagina](#), constituting the external genitalia of a human female, including the labia majora, labia minora, and clitoris. [From Latin *vulva* a covering or womb]

VX *abbrev.* The chemical name of methylphosphonothioic acid, a colourless and odourless liquid that was developed in the UK in 1949, that turns into a potent [*nerve](#) gas when exposed to air, and that is stockpiled by the United States and other countries as a potential chemical weapon. It blocks the transmission of nerve impulses in the central nervous system, causing convulsions and respiratory failure, its effect being immediate. Just 10 milligrams on the skin is enough to kill an average adult male. Formula: $C_{11}H_{26}NO_2PS$.

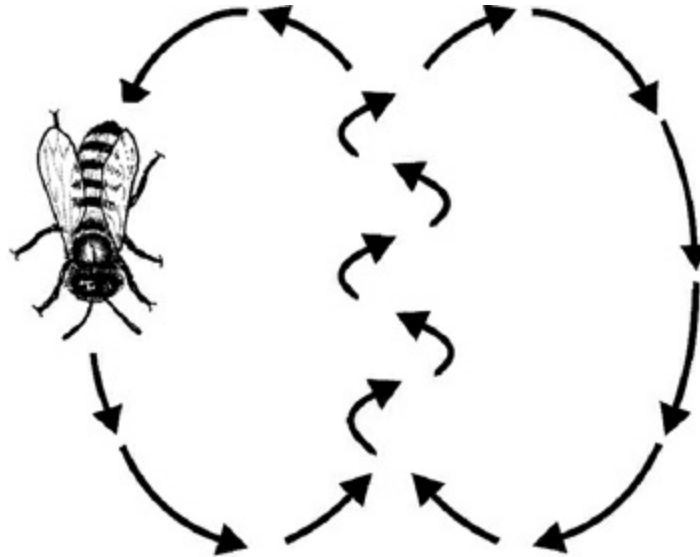
Vygotsky blocks *n.* A test of [*concept formation](#) in which the respondent is presented with 32 blocks differing in shape, colour, width, and height and is asked to sort them into categories according to codes written on their undersides. The respondent is not told the meaning of the codes, but blocks with the same code belong to the same category, one code being used for all tall and wide blocks, a second code for short and wide blocks, a third code for tall and thin blocks, and a fourth code for short and thin blocks, colour and shape being irrelevant. Also spelt *Vigotsky blocks*, and sometimes referred to as the *Vygotsky test* or *Vigotsky test*. [Named after the Russian psychologist Lev Semyonovich Vygotsky (1896–1934) who used them extensively in his research, though he credited their development to his colleague Leonid Solomonovich Sakharov (1900–28)]



Wada test *n.* A procedure for determining which cerebral hemisphere is dominant for speech production by injecting an anaesthetic (sodium amytal) into one of the carotid arteries that supply blood to the brain and noting whether speech is immediately disrupted, indicating that the anaesthetized hemisphere is dominant for speech. [Named after the Japanese-born Canadian physician Juhn Atsushi Wada (born 1924) who introduced it in 1949]

waggle dance *n.* One of two patterns of movement, described by the Austrian zoologist Karl von Frisch (1886–1982) in a series of publications from 1924 onwards, through which a female honey-bee communicates to other members of her hive the direction and distance of a source of nectar or a new nesting site more than a certain distance away—more than about 5–80 metres away, depending on the bee species or subspecies. The bee describes a repeated figure of eight on the (usually) vertical surface of a honeycomb, moving in a straight line while wagging her abdomen swiftly (3–15 hertz) from side to side, looping back to perform another straight wagging run from the same point, then looping back for a further straight wagging run, and so on, alternating the return loops between left anticlockwise) and right (clockwise) (see [illustration](#)). The direction of the wagging run relative to the perpendicular indicates the direction of the target relative to the position of the sun, the liveliness and length of the dance, how rich the food source is; and the tempo of the dance, the distance of the food source—for example, in the giant honey-bee *Apis dorsata*, 40 complete figures of eight per minute indicates 15 metres, 27 per minute indicates 30 metres, and 19 per minute indicates 610 metres. This comes closer to being a [*language \(1\)](#) than any other non-human communication system. *Compare* [ROUND DANCE](#). [Translated

from von Frisch's German *Schwänzeltanz* literally tail-wagging dance, from *schwänzel* to wag one's tail, from *Schwanz* a tail + *Tanz* a dance]



Waggle dance

Wagner–Meissner corpuscle *n.* Another name for ***Meissner's corpuscle**. [Named after the German anatomists Rudolf Wagner (1805–64) and Georg Meissner (1829–1905) who both studied it]

wagon wheel illusion *n.* A visual illusion caused by ***aliasing** in which a rotating wheel or other object, when viewed in a cinema or television picture or under ***stroboscopic** illumination, appears to turn slowly one way, then slowly the other way as its rotation gathers speed. If the picture or stroboscopic frequency is exactly synchronized to a multiple of the rotation frequency, then the rotating object appears stationary. Compare **WINDMILL ILLUSION**.

Wald–Wolfowitz runs test *n.* In statistics, a ***non-parametric** and ***distribution-free test** of the randomness of an ordered sequence of binary or dichotomous observations, in which the number of ***runs** expected on the basis of chance is calculated and compared with the observed number of runs. Also called the *runs test*. [Named after the Romanian-born US statistician Abraham Wald (1902–50) and the Polish-born US statistician Jacob Wolfowitz (1910–81) who developed it in 1940]

*****ebook converter DEMO Watermarks*****

Wallerian degeneration *n.* Disintegration of a nerve fibre following injury or disease distal to the nerve cell body, progressing from the site of the lesion along the axon away from the nerve cell body, leaving the segment between the nerve cell body and the site of the injury intact. It is sometimes induced experimentally to trace projections from particular areas to unknown destination sites. Also called *anterograde degeneration*. [Named after the English physiologist Augustus V(olney) Waller (1816–70)]

Ward's method *n.* In statistics, a widely used technique of **cluster analysis* that begins with isolated individuals or cases and progressively combines them into clusters, and then combines clusters, until every individual is in the same cluster. At each stage in the analysis individuals or clusters that merge are those that result in the smallest increase in the sum of the squared distances of each individual from the mean of its cluster. Ward's method is a form of **agglomerative hierarchical clustering*. [Named after the US educational psychologist Joe Henry Ward, Jr (1926–2011), who developed the technique in 1963]

warm/cold effect *See* TRAIT CENTRALITY.

warm spot *n.* A small area of the **skin* supplied by **free nerve endings* that transmit sensations of warmth when touched by warm stimuli. *See also* PARADOXICAL WARMTH, PARADOXICAL HEAT. *Compare* COLD SPOT.

warmth contrast *n.* The apparent increase in the warmth of a stimulus when it is juxtaposed with or follows shortly after a cooler stimulus, or its apparent decrease in warmth if it is juxtaposed with or follows a warmer stimulus. *See also* CONTRAST (2), SIMULTANEOUS CONTRAST, SUCCESSIVE CONTRAST, THERMAL ADAPTATION.

War of the Ghosts *n.* A haunting native American folk tale that has been widely used to study memory since the English psychologist Sir Frederic Charles Bartlett (1886–1969) introduced it into psychology for his experiments on **serial reproduction* and **successive reproduction* and recorded it in his book *Remembering: A Study in Experimental and Social Psychology* (1932). He chose it because of its capacity to arouse vivid

imagery and because it was taken from a radically different culture and 'seemed likely to afford good material for persistent transformation' (p. 64). This is the story exactly as Bartlett presented it, apart from new paragraphs, which have been suppressed for reasons of space: 'One night two young men from Egulac went down to the river to hunt seals, and while they were there it became foggy and calm. Then they heard war-cries, and they thought: "Maybe this is a war party". They escaped to the shore, and hid behind a log. Now canoes came up, and they heard the noise of paddles, and saw one canoe coming up to them. There were five men in the canoe, and they said: "What do you think? We wish to take you along. We are going up the river to make war on the people". One of the young men said: "I have no arrows". "Arrows are in the canoe", they said. "I will not go along. I might be killed. My relatives do not know where I have gone. But you", he said, turning to the other, "may go with them." So one of the young men went, but the other returned home. And the warriors went on up the river to a town on the other side of Kalama. The people came down to the water, and they began to fight, and many were killed. But presently the young man heard one of the warriors say: "Quick, let us go home: that Indian has been hit". Now he thought: "Oh, they are ghosts". He did not feel sick, but they said he had been shot. So the canoes went back to Egulac, and the young man went ashore to his house, and made a fire. And he told everybody and said: "Behold I accompanied the ghosts, and we went to fight. Many of our fellows were killed, and many of those who attacked us were killed. They said I was hit, and I did not feel sick". He told it all, and then he became quiet. When the sun rose he fell down. Something black came out of his mouth. His face became contorted. The people jumped up and cried. He was dead.' (p. 65)

Wason selection task *n.* A simple but tricky logical puzzle introduced in 1966 by the English psychologist Peter C(atheart) Wason (1924–2003) and widely used to study **problem solving*. Four cards are laid on a table with their uppermost faces showing the following letters and numbers: *E*, *K*, 4, 7. The respondent is told that each card has a number on one side and a letter on the other. The following rule may or may not be true: *If a card has a vowel on one side, then it has an even number on the other side*. Which cards would have to be turned over to determine whether or not the rule is true? The vast majority of respondents choose only the card showing *E*, or the card showing *E* and the card showing 4. The correct answer is *E* and 7. If the card showing

E turned out to have an odd number on the other side, or if the card showing 7 turned out to have a vowel on the other side, that would disprove the rule. But the card showing 4 is irrelevant, because the rule does not state that a card with an even number on one side must have a vowel on the other, and therefore turning over this card could neither prove nor disprove the rule. The failure of most respondents to select the card showing 7, which could disprove the rule, and their tendency to select the irrelevant card showing 4, were interpreted by Wason as evidence of a **confirmation bias*. According to some researchers, errors in this task may also be due partly to a **matching bias*—a tendency to focus attention on evidence that contains the letters and numbers mentioned explicitly in the rule that is being tested. The problem can be framed in realistic rather than abstract terms. In one influential Italian experiment, participants were shown a sealed and an unsealed envelope face down, and an envelope with a 50-lire stamp and an envelope with a 40-lire stamp face up, and were asked which envelopes would have to be turned over to prove or disprove the rule: *If a letter is sealed, then it has a 50-lire stamp on it*. This is the identical problem; but when it was presented in this way, most people solved it easily—a classical **framing effect*. Also called *Wason's four-card selection task* or simply the *four-card problem*.

Wason's 2-4-6 problem See 2-4-6 PROBLEM.

waterfall illusion *n.* A visual illusion of **apparent movement* created by gazing for a period of time at a fixed point in a waterfall and then looking at a stationary object, which appears to move upwards. It is usually produced in the laboratory by means of an endless belt of horizontal stripes or dots at which a viewer is instructed to stare fixedly. If the belt is stopped after about 30 seconds, the vivid illusion is created that it is drifting backwards, but in a strange manner, appearing to move without changing position. The illusion was first discussed in print by the Greek philosopher Aristotle (384–322 BC) in the *Parva Naturalia* in the essay *On Dreams*, although Aristotle did not mention waterfalls: 'When people turn away from looking at objects in motion, for example rivers, and especially those that flow very rapidly, things really at rest are then seen as moving' (Chapter 2, Bekker edition, p. 459b). Also called the *waterfall effect*. See also MOTION AFTEREFFECT. Compare PLATEAU SPIRAL.

water intoxication *n.* A condition of irritability, lethargy, and confusion, sometimes followed by convulsions and coma, caused by drinking an excessive quantity of water, leading to an abnormally low concentration of **sodium* in the blood.

water-jar problem *n.* Any logical problem involving the measurement of a specified volume of liquid using jars of different capacity, first introduced into cognitive psychology in 1942 by the US psychologist Abraham S(amuel) Luchins (1914–2005) to study **Einstellung* effects in **problem solving*. A typical complex water-jar problem requiring an indirect solution is as follows. Given empty jars holding 21 quarts, 127 quarts, and 3 quarts, obtain 100 quarts of water; this is solved by filling the 127-quart jar and then from it filling the 21-quart jar once and the 3-quart jar twice, leaving 100 quarts as required in the 127-quart jar. A simple water-jar problem such as the following can be solved directly. Given empty jars holding 15 quarts, 39 quarts, and 3 quarts, obtain 18 quarts of water; this can be solved directly by filling the 15-quart and 3-quart jars and then emptying their contents into the 39-quart jar. In an experiment with college students, Luchins found that after solving several complex problems, 81 per cent of the students used the same indirect procedure with simple problems that could be solved directly, and only 17 per cent used the direct approach, whereas 100 per cent of students who had not been exposed to the complex problems solved the simple problems directly. Previous success with the indirect technique apparently created an *Einstellung* or **set (2)* that blinded students to the direct approach. See also *AUFGABE*, *GENERAL PROBLEM SOLVER*, *SET (2)*.

water on the brain *n.* A non-technical name for **hydrocephalus*.

wavelength *n.* The distance between successive peaks of a wave, measured in the direction of propagation. Wavelength (λ) is equivalent to the velocity of propagation (v) divided by wave frequency (f): $\lambda = v/f$. The **visible spectrum* of light extends from a wavelength of about 390 nanometres at the violet end to about 740 nm at the red end, and the **audibility range* of sound waves from about 21.44 metres at the low end to 1.72 centimetres at the high end.

W cell *n.* A type of ganglion cell with a slow-conducting axon found in the
*****ebook converter DEMO Watermarks*****

retinas and the lateral geniculate nuclei, not clearly classifiable as an X cell or a Y cell, projecting to cells lying in the **parvocellular system* of the **lateral geniculate nucleus* concerned with colour vision and from there to **blobs* in the upper layers of the **primary visual cortex*.

weak AI *n.* An interpretation of **artificial intelligence* according to which conscious awareness is a property of certain brain processes, and whereas any physical behaviour can, in principle at least, be simulated by a computer using purely computational procedures, computational simulation cannot in itself evoke conscious awareness. *See also* CHINESE ROOM, GÖDEL'S THEOREM. *Compare* STRONG AI.

weal response *See* AXON REFLEX.

weapon focus *n.* A tendency for eyewitnesses to a crime involving a firearm to concentrate their attention on the weapon and as a consequence to show relatively poor subsequent recall of other aspects of the incident, in particular poor ability to identify the offender. The underlying psychological mechanism responsible for this phenomenon is **sharpening*.

Weber–Fechner law *n.* Another name for **Fechner's law*, Fechner himself having called it Weber's law, acknowledging the contribution to its development of the German psychophysicist Ernst Heinrich Weber (1795–1878).

Weber fraction *n.* In **psychophysics*, a ratio, differing from one type of sensory experience to another, representing the smallest increment in the magnitude of a stimulus that can be detected under ideal testing conditions, and that is a constant for each type of sensation according to **Weber's law*. Its value has been determined experimentally as $k = 1/62$ for visual brightness discrimination, $k = 1/333$ for auditory pitch discrimination, $k = 1/11$ for auditory loudness discrimination, $k = 1/53$ for weight discrimination, and so on. *See also* WEBER'S LAW. [Named after the German psychophysicist Ernst Heinrich Weber (1795–1878) who discovered it and published it in Latin in 1834 and in German in 1846]

Weber's law *n.* In **psychophysics*, the proposition that the smallest
*****ebook converter DEMO Watermarks*****

detectable difference in the magnitude of a stimulus (the [*Weber fraction](#)) is proportional to the magnitude of the lesser stimulus. Thus, for example, the smallest difference in weight that can be detected is proportional to the original weight, so that most people can just barely feel the difference in weight between an object of 530 grams and one of 540 grams, or between 1,060 grams and 1,080 grams, the [*Weber fraction](#) being 1/53 for weight discrimination according to experimental tests. The law is usually expressed by the equation $(\Delta I)/I = k$, where ΔI is the [*difference threshold](#) in physical magnitude, I is the magnitude of the lesser stimulus, and k is the Weber fraction, which is a constant for any type of sensation but that varies from one type of sensation to another. The law is accurate over most of the usable ranges for most sensory modalities (across 99.9 per cent of the range of visual brightness intensities that can be tested without damaging people's eyes, across 999,999-millionths of the usable range of auditory loudness intensities, and so on) but it breaks down at the extremes, and for auditory pitch perception the Weber fraction remains constant above 500 hertz but is slightly larger for lower pitches. *Compare* [FULLERTON–CATTELL LAW](#). [Named after the German psychophysicologist Ernst Heinrich Weber (1795–1878) who formulated it in 1834]

Wechsler Adult Intelligence Scale *See* [WECHSLER SCALES](#).

Wechsler Intelligence Scale for Children *See* [WECHSLER SCALES](#).

Wechsler Preschool and Primary Scale of Intelligence *See* [WECHSLER SCALES](#).

Wechsler scales *n.* A suite of [*intelligence tests](#) based on a test originally developed in 1939 as the *Wechsler-Bellevue* ([WB](#)) scale by the Romanian-born US psychologist David Wechsler (1896–1981). The *Wechsler Adult Intelligence Scale* (fourth revision) or WAIS-IV and the *Wechsler Intelligence Scale for Children* or WISC-IV were published in 2008 and are among the most highly regarded intelligence tests, and the *Wechsler Preschool and Primary Scale of Intelligence* or WPPSI and the *Wechsler Abbreviated Scale of Intelligence* or WASI are also well known. Each of these scales has to be administered individually by a trained tester, and each yields an overall IQ score, plus four index scores and scores on component

*****ebook converter DEMO Watermarks*****

subtests. The subtests of the WAIS-IV are grouped into a *Verbal Comprehension Scale*, comprising similarities (explaining what things have in common), vocabulary (explaining the meanings of words), information (general knowledge), and comprehension (explaining the reasons for everyday things); a *Perceptual Reasoning Scale*, comprising block design (arranging painted wooden blocks to copy designs formed by the examiner), matrix reasoning (filling in missing abstract symbols in an array), visual puzzles (working within a specified time limit, viewing a completed jigsaw puzzle and selecting three pieces that, when combined, reconstruct the puzzle), picture completion (working within a specified time limit, pointing out missing elements in several line drawings, such as the numeral 8 missing from a clock face or a leg missing from a crab), and figure weights (working within a specified time limit, viewing a scale with missing weights and selecting the option that keeps the scale balanced); a *Working Memory Scale*, comprising digit span (repeating back a string of numbers that are read out, either in the same order or reverse order), arithmetic (solving numerical problems), and letter-number sequencing (ordering numbers and letters presented in an unordered sequence); and a *Processing Speed Scale*, comprising symbol search (working within a specified time limit, scanning a group of symbols and indicating whether one matches a symbol in another group, completing as many items as possible), coding (working within a specified time limit, copying symbols that are paired with numbers), and cancellation (working within a specified time limit, scanning a structured arrangement of shapes and marking particular shapes). The [*correlations](#) between scores on the subtests are generally moderate or high.

weed *n.* Any useless or unwanted plant. Also, a common street name for [*cannabis](#), especially in the form of [*marijuana](#).

Weigl–Goldstein–Scheerer tests *See* [GOLDSTEIN–SCHEERER TESTS](#).

Weismannism *n.* The doctrine of the continuity of the [*germ plasm](#) and its rigid segregation from the mortal bodies in which it resides, including the notion that the [*germ line](#) can influence the body but not vice versa. *See also* [CENTRAL DOGMA](#). [Named after the German biologist August Friedrich Leopold Weismann (1834–1914) who expounded it in a series of articles in 1889–92]

*****ebook converter DEMO Watermarks*****

well-defined problem *n.* In the study of **problem solving*, any problem in which the initial state or starting position, the allowable operations, and the goal state are clearly specified, and a unique solution can be shown to exist. Typical examples are the **Tower of Hanoi*, **Wason selection task*, and **water-jar problems*. A problem that lacks one or more of these specified properties is an **ill-defined problem*, and most problems that are encountered in everyday life fall into this category. Also called a *well-structured problem*. See also *NINE-DOT PROBLEM*, *PROBLEM-SOLVING STAGES*.

Wells effect *n.* A reluctance to make judgements of legal liability on the basis of naked statistical evidence alone. In the original experiments, evidence from tyre tracks providing an 80 per cent probability that a particular bus company was responsible for running over a dog persuaded fewer than 20 per cent of experienced judges and people without legal training to rule against the bus company, although they were instructed to decide on the balance of probabilities. In contrast, evidence that the particular bus company was responsible for running over the dog, based on an analysis of tyre tracks that was said to be 80 per cent reliable, persuaded almost 70 per cent to rule against the company. Thus, evidence that is 80 per cent reliable is sufficient to persuade most people, but naked statistical evidence of an 80 per cent probability is not, although the mathematical probability is the same in both cases. See also *BASE-RATE FALLACY*, *SUBJECTIVE PROBABILITY*, *TAXICAB PROBLEM*. [Named after the US psychologist Gary L(eroy) Wells (born 1950) who first drew attention to the phenomenon in 1992]

well-structured problem *n.* Another name for a **well-defined problem*.

Weltanschauung *n.* A world view, philosophy, or distinctive outlook of a particular individual or group. [From German *Welt* world + *Anschauung* view or opinion]

wendigo *n.* Another name for **windigo*.

Wernicke–Korsakoff syndrome *n.* A generic name for disorders of the **central nervous system* resulting from a deficiency of thiamine (vitamin

B₁), usually caused by chronic **alcohol dependence*, with the signs and symptoms of **Wernicke's encephalopathy* and/or **Korsakoff's psychosis*.

Wernicke's aphasia *See* APHASIA.

Wernicke's area *n.* A region of the **cerebral cortex* towards the back of the **superior temporal gyrus* (temporal operculum), between Heschl's gyrus and the angular gyrus, usually in the left **cerebral hemisphere*, involved in the comprehension of both spoken and written language. Lesions in this area are associated either with Wernicke's aphasia, also called *auditory aphasia*, *receptive aphasia*, or *sensory aphasia* (*see* APHASIA), or with logagnosia (*see* AGNOSIA). *See also* PLANUM TEMPORALE. *Compare* BROCA'S AREA. [Named after the German neuropsychiatrist Karl Wernicke (1848–1905) who discovered it in 1874]

Wernicke's encephalopathy *n.* A degenerative brain disorder resulting from a deficiency of thiamine (vitamin B₁), usually caused by chronic **alcohol dependence*, characterized by lesions in the hypothalamus and elsewhere, causing **diplopia*, **nystagmus*, **dyskinesia*, and intellectual impairment. [Named after the German neurologist Karl Wernicke (1848–1905) who first described it in 1881]

Wertherism *n.* Morbid sentimentality. *See also* WERTHER SYNDROME.
Wertherian *adj.* [Named after the hero of Goethe's novel *The Sorrows of Young Werther* (1774), the publication of which led to a spate of suicides among young men]

Werther syndrome *n.* A pattern of imitative **cluster suicides* following the well-publicized suicide of a famous person. The phenomenon was first demonstrated statistically by the South African-born US sociologist David P. Phillips (born 1943) in an article in *American Sociological Review* in 1974, and elaborated in articles in *Science* in 1977 and 1978 and in the *New England Journal of Medicine* in 1986 and 1987. For etymology, *see* WERTHERISM.

Wheatstone–Panum limiting case *n.* Another name for **Panum's*

limiting case. [Named after the English physicist and inventor Sir Charles Wheatstone (1802–75) who discovered and reported it in 1838, and the Danish physician and physiologist Peter Ludvig Panum (1820–85) who rediscovered it in 1858]

whistled speech *n.* A form of human communication by whistling used by certain communities in Central and South America, the Canary Islands, and Turkey. When used for this purpose, whistling follows closely the rhythms and intonation contours of speech, allowing the listener to translate the whistled tones into ordinary language.

white blood cell *n.* Another name for a **leucocyte*. Also called a *white blood corpuscle*.

white coat syndrome *n.* High blood pressure or hypertension caused by **anxiety* in a doctor's surgery or other clinical environment, in a patient whose blood pressure is normal in other environments. Also called *white coat hypertension*. [Alluding to the white coat traditionally worn by clinicians]

white matter *n.* The whitish tissue of the brain and spinal cord, composed chiefly of myelinated neurons, the whiteness being due to the **myelin* and not the nerve tissue, which is grey. Also called (technically) the *substantia alba*. Compare GREY MATTER.

whiteness constancy *n.* Another name for **lightness* constancy.

white noise *n.* A sound wave or any other **time series* that is essentially random, all frequencies within a specified range being represented with equal intensity or energy. The sound of a radio or television receiver tuned between stations is white noise. The Russian statistician Evgeny Evgenievich Slutsky (1880–1948) proved in 1927 that a time series with a periodic structure can be transformed into white noise by passing it through a linear filter such as a **moving average*, and white noise can be transformed back into the periodic time series by passing it through the reverse linear filter, and this theorem is a basic principle of time-series modelling. See also NOISE (2). Compare COLOURED NOISE, FROZEN NOISE, PINK NOISE. [So called by analogy with white light, which contains all spectral frequencies in equal proportion]

*****ebook converter DEMO Watermarks*****

whitigo *n.* Another name for **windigo*.

Whitten effect *n.* The synchronization of the **oestrous cycles* of a group of females living together, occurring only when a male or his **pheromone* is present. It has been observed in rats, hamsters, voles, goats, cows, sheep, and humans, and is believed to operate via the **vomeronasal organ*. Also called the *male mouse effect*. Compare *LEE–BOOT EFFECT*. [Named after the Australian reproductive biologist Wes (Wesley Kingston) Whitten (1918–2010) who first reported it in 1959]

whole object *n.* In **Kleinian* analysis, any person or other entity that serves as an **instinctual object* satisfying another person's sexual **instinct* (3), the first instance in human development usually being the mother. It is distinguished from a **part object* that is a portion of a whole object serving the same function, such as the mother's breast. See also *DEPRESSIVE POSITION*, *GOOD OBJECT*, *INSTINCTUAL OBJECT*, *OBJECT RELATIONS*, *SPLITTING OF THE OBJECT*.

whole tone *n.* Another name for a **tone* (2).

whole-word method *n.* A method of teaching reading by encouraging children to recognize the shapes of entire words rather than individual letters and their associated sounds. Also called *look-and-say method*. Compare *PHONICS* (2).

Whorfian hypothesis *n.* Another name for the **Sapir–Whorf hypothesis*.

wicket rhythm *n.* Another name for the **mu wave*. [Named after the appearance of the EEG wave, which resembles a row of croquet wickets or hoops]

Widrow–Hoff rule *n.* Another name for the **delta rule*.

wife/mother-in-law figure *n.* Another name for the **young girl/old woman figure*. Also called the *wife-mistress figure*.

Wilcoxon matched-pairs test *n.* In statistics, a popular *significance test that is used with two related samples to test the *null hypothesis that the distributions of two variables are identical. It makes no assumptions about the shapes of the distribution of the two variables and it is therefore a *distribution-free test. It involves calculating the absolute values of the differences between the two variables for each individual or case and then converting these differences to *ranks, and the test statistic is computed from the sums of ranks for negative and positive differences. The distribution-dependent alternative is the *related scores *t* test. [Named after the Irish-born US chemist and self-taught statistician Frank Wilcoxon (1892–1965) who developed the test in 1945]

Wilcoxon rank-sum test *n.* An alternative name for the *Mann–Whitney *U* test, not to be confused with the *Wilcoxon matched-pairs test.

Wild Boy of Aveyron *n.* A boy, about 10 years old, discovered in 1798 by a group of hunters near Aveyron in France, after living in the forest, roaming about almost naked, apparently without human contact. He was studied in detail by the French physician Jean Marie Gaspard Itard (1774–1838) and is considered a classic example of a *feral child.

wild psychoanalysis *n.* A term introduced in 1910 by Sigmund Freud (1856–1939), in an article entitled “‘Wild’ Psycho-Analysis’ (*Standard Edition*, XI, pp. 221–7), to denote amateur attempts at *psychoanalysis based on ignorance or misunderstandings of its fundamental ideas, such endeavours being characterized by attempts to rush the process of analysis through premature *interpretations (2) conveyed to the patient without proper *working through and without regard for *resistance and *transference. Appropriately, Freud’s article was published in the same year that the International Psycho-Analytic Association was founded.

Williams syndrome *n.* A rare condition (estimated to occur in 1 out of 20,000 births) characterized by delayed physical and mental development, leading to mild *intellectual disability, coupled with strengths in such areas of functioning as language usage, face recognition, social skills, and musical performance. It was discovered in 1993 that the syndrome is caused by the deletion of the gene that directs the manufacture of elastin, a protein

*****ebook converter DEMO Watermarks*****

providing strength and elasticity to blood vessels, from one of the two copies of chromosome 7 present in every body cell. People with this syndrome, who are often called *Williams people* or *Williams children*, have facial features reminiscent of elves or pixies, hoarse voices, ***hyperacusis** or extreme sensitivity to noise, cardiovascular problems, and elevated levels of ***calcium** in the blood. Compare **DOWN'S SYNDROME**. **WS** abbrev. [Named after the New Zealand cardiologist John Cyprian Phipps Williams (born 1922) who first described it in 1961. According to a biography by Michael King of the New Zealand writer Janet Frame, entitled *Wrestling With the Angel: A Life of Janet Frame* (2000), Williams disappeared into obscurity in Europe in the mid 1960s, and his brother and sister were unable to trace him even with the help of Interpol]

will therapy *n.* A type of ***psychotherapy**, introduced by the Austrian ***psychoanalyst** Otto Rank (1884–1939) in his book *Will Therapy and Truth and Reality* (1945), in which the patient is encouraged to exert will power in order to develop autonomy and independence.

will to power *n.* In ***individual psychology**, a term introduced by the Austrian psychiatrist Alfred Adler (1870–1937) to denote the need, especially in men, to outdo and to dominate others.

windigo *n.* A rare ***culture-bound syndrome** found among North American Indian tribes in the subarctic cultural area, characterized by symptoms such as depression, homicidal or suicidal thoughts, and a compulsive desire to eat human flesh, often prompting warnings to family and friends to get as far away as possible, followed by the afflicted person turning into a cannibal, regarded locally as a monster and generally ostracized or put to death. The reality of this syndrome, as opposed to its status as a localized folk myth, is controversial. Also called *wendigo*, *whitigo*. [From Ojibwa *wintiko* a flesh-eating monster]

windmill illusion *n.* A visual illusion first described by the English mathematician Robert Smith (1689–1768) in his book *A Compleat System of Opticks* (1738), in which the blades of a windmill, seen from a distance silhouetted against the sky, appear to reverse their direction of rotation. The direction of rotation sometimes becomes indeterminate, and Smith pointed

*****ebook converter DEMO Watermarks*****

out that the illusion can also be observed in weather-cocks and flags. It should not be confused with the [*wagon wheel illusion](#) but is closely related to the [*kinetic depth effect](#).

windpipe *n.* A non-technical name for the [*trachea](#).

winner's curse *n.* A tendency for the highest bid at an auction to exceed the true market value of the lot or prize. It arises from the fact that the bidders' estimates of the value of the prize are unreliable; some bidders are likely to underestimate the value and others to overestimate it, and it is the bidder who overestimates it the most who is likely to make the highest bid and to win the prize, in which case the winner is, in this sense, a loser. The effect has been confirmed by both experimental and field studies. It can be explored with the following demonstration, based on a classic experiment published in the *Journal of Conflict Resolution* in 1983. Fill a jar with coins and auction it off to the highest bidder among a group of friends. The average bid will probably be less than the value of the coins, because of [*risk aversion](#) among bidders, but the winning bid will probably exceed the value of the coins, dramatically illustrating the winner's curse and providing a small profit for the auctioneer. The phenomenon was first discussed in an article on the purchase of oil-drilling rights in the *Journal of Petroleum Technology* in 1971 and was subsequently analysed in depth by the US economist Richard H. Thaler (born 1945).

Winnicottian *adj.* Of or relating to the theories and practices of the English psychoanalyst Donald Woods Winnicott (1896–1971). See [GOOD-ENOUGH MOTHER](#), [OBJECT-RELATIONS THEORY](#), [SQUIGGLE GAME](#), [TRANSITIONAL OBJECT](#). See also [BASIC TRUST VERSUS BASIC MISTRUST](#).

win-stay, lose-shift strategy *n.* A simple strategy, applicable to any sequential decision task or [*game \(1\)](#), according to which the first decision or move is chosen arbitrarily, and thereafter, whenever a choice leads to reward or a satisfactory outcome the player repeats it on the following occasion, and whenever it leads to punishment or an unsatisfactory outcome the player switches to a different option on the following occasion. If applied to the [*minimal social situation](#), it leads to mutually rewarding choices after only three rounds. It amounts to an implementation of the [*law of effect](#). It was

*****ebook converter DEMO Watermarks*****

first suggested in 1962 by the US psychologist Harold H(arding) Kelley (1921–2003) and several colleagues in the journal *Psychological Monographs*. It has also been called the *Pavlov strategy* because of its simple reflex properties.

Wisconsin Card Sorting test *n.* A widely used test of abstract thinking, planning, and ability to alter mental **set* (2) as circumstances require. The test consists of 128 cards differing in colour, form, and number of design markings, and the respondent tries to match them to four target cards, the test administrator telling the respondent merely whether each sort is right or wrong but not what the rule is, and in the latter stages of the test the sorting rule is changed without warning, requiring the respondent to show flexibility. The test was developed at the University of Wisconsin by the US psychologist David A(lexander) Grant (1916–77) and Esta A. Berg and first published in the *Journal of General Psychology* in 1948. It is regarded as a good indicator of **frontal lobe* damage, and is especially useful for identifying **perseveration* (1, 2). **WCST** *abbrev.*

Wisconsin General Test Apparatus *n.* A device incorporating a presentation tray and a moveable screen for studying learning and perception in rhesus monkeys. Several objects are placed on the tray, just outside the cage, and the monkey selects one of them, then the screen is lowered, the placement of the objects is altered, and then the screen is lifted and the monkey chooses again, and so on. **WGTA** *abbrev.* [So called because it was developed at the University of Wisconsin]

wish fulfilment *n.* Satisfaction of a desire, especially, in **psychoanalysis*, the satisfaction of an **unconscious* (1) desire in a disguised way such as a **fantasy* (2), **dream* (1), **symptom*, or **parapraxis*. *See also* DREAM ANALYSIS.

withdrawal *n.* A constellation of **signs* (1) and **symptoms* manifested by a person with drug **dependence* (2) or **addiction* after ceasing to take the drug or reducing the dosage, varying from one drug to another but often including agitation, anxiety, delirium, insomnia, dysphoria, running nose, muscle pains, sweating, fever, tremor, formication, and nausea. Also called *abstinence syndrome*. *See also* INCENTIVE–SENSITIZATION THEORY, NALORPHINE,

*****ebook converter DEMO Watermarks*****

SUBSTANCE DEPENDENCE, SUBSTANCE WITHDRAWAL DELIRIUM.

withdrawal of cathexis *n.* Another name for **decathexis*.

within-subjects design *n.* Any research design in which the same research participants or subjects are tested under different **treatment conditions*. *See also* LATIN SQUARE, RELATED SCORES *T* TEST, REPEATED-MEASURES ANALYSIS OF VARIANCE. *Compare* BETWEEN-SUBJECTS DESIGN, SPLIT-PLOT DESIGN.

Witzelsucht *n.* A pattern of verbal punning and inappropriate jocularity often observed in people with **frontal lobe* lesions. [From German *witzeln* joking + *Sucht* sickness or mania]

Wolffian duct *n.* Either of the pair of ducts that are present in a human **embryo*, alongside the pair of **Müllerian ducts*, and that develop into the male internal reproductive tract if embryonic **testes* are present and secrete **testosterone* and **Müllerian inhibiting substance*. In a female embryo the default development occurs: the Wolffian ducts atrophy and disappear because of the absence of testosterone, while in the absence of Müllerian inhibiting substance the Müllerian ducts develop into Fallopian tubes, uterus, and the upper part of the vagina. [Named after the German anatomist Kaspar Friedrich Wolff (1735–94)]

Wolf Man *n.* The nickname given in the literature of **psychoanalysis* to a 23-year-old Russian patient analysed in 1910–14 by Sigmund Freud (1856–1939) and discussed in 1918 in a case study entitled ‘From the History of an Infantile Neurosis’ (*Standard Edition*, XVII, pp. 7–122). The nickname refers to a terrifying dream about wolves that the patient had experienced at the age of 3½, which Freud interpreted as a symbolic representation of the **primal scene* of parental intercourse that he had witnessed two years earlier. The case generated a great deal of material that appeared to confirm Freud’s theories and refute those of the Austrian psychiatrist Alfred Adler (1870–1937) and the Swiss psychologist Carl Gustav Jung (1875–1961), who had defected from the psychoanalytic movement in 1911 and 1913 respectively.

woman, phallic *See* PHALLIC WOMAN.

*****ebook converter DEMO Watermarks*****

woolsorter's disease *n.* An obsolescent name for **anthrax*. [So called because woolsorters used to be at risk of contracting it from sheep]

word-association test *n.* A research technique pioneered by the English explorer, amateur scientist, and psychologist Sir Francis Galton (1822–1911) and published in 1879/80 in the journal *Brain*, then reinvented in 1904 as a diagnostic aid or **projective test* by the Swiss psychologist Carl Gustav Jung (1875–1961). In the technique popularized by Jung, a list of (usually 100) stimulus words is read out, the patient or subject responding to each stimulus word as quickly as possible with the first response word that comes to mind, and then the exercise is repeated a second time with the same list of words. The stimulus words are selected to cover a wide range of topics and generally include a number of *critical words* that are likely to have particular psychological significance (Jung's original list included such critical words as *beat*, *dead*, *fear*, *kiss*, *pure*, *ridicule*, and *sick*), and the person's responses, occurring before **defence mechanisms* have time to intervene, are assumed to reveal aspects of unconscious mental processes and especially **complexes* (2), enabling the analyst to focus in on the key areas of unconscious conflict. According to Jung, the major *complex indicators* are unusual reactions such as laughing or blushing, abnormally long reaction times, repetition of the stimulus word, absurd or far-fetched associations, and failure to respond to a stimulus word. Jung published an account of the technique as a **lie detector* test in an article entitled 'The Association Method' in the *American Journal of Psychology* in 1910 and expounded it in detail in his book *Studies in Word-Association* (1919), after he had founded his school of **analytical psychology*. See also EXPERIMENTALLY INDUCED FALSE MEMORY, KENT–ROSANOFF FREE ASSOCIATION TEST, MARBE'S LAW. **WAT** *abbrev.*

word blindness *n.* A non-technical name for **alexia* or **dyslexia*. It was the original term used by the German physician Adolf Kussmaul (1822–1902), who first described dyslexia in 1877.

word-building test *n.* A cognitive task in which a respondent is given a set of letters from which to construct as many words as possible.

word completion task *n.* Another name for a **word-stem completion*
*****ebook converter DEMO Watermarks*****

task.

word constancy *n.* A form of **perceptual constancy* according to which a spoken word tends to sound recognizably the same despite wide variations both between and within speakers in **paralanguage*, including **accent* (1), **loudness*, **pitch*, **prosody*, **rhythm*, **tempo*, and **timbre*.

word deafness *n.* An impaired ability to understand spoken language; another name for Wernicke's aphasia. Also called *word meaning deafness*. See *APHASIA*.

word-form dyslexia See *VISUAL WORD-FORM DYSLEXIA*.

word-length mnemonic *n.* A memory aid based on the numbers of letters in a sequence of words. See *MNEMONIC*.

word-presentation *n.* In **psychoanalysis*, the linguistic and largely auditory representation of memories accompanying non-linguistic **thing-presentations* in the **preconscious* and **consciousness*, in contrast to the purely thing-presentations in the **unconscious* (2). Sigmund Freud (1856–1939) argued that in **schizophrenia*, word-representations are sometimes treated like thing-representations, and in an article entitled 'A Metapsychological Supplement to the Theory of Dreams' (1915/17) he described a similar phenomenon occurring in dreams: 'Where the word-presentations occurring in the day's residues are recent and current residues of *perceptions*, and not the expressions of thoughts, they are themselves treated like thing-presentations' (*Standard Edition*, XIV, pp. 217–36, at p. 228).

word salad *n.* A non-technical name for **incoherence*.

word-stem completion task *n.* A cognitive task in which the respondent is given the first few letters of a word (such as *VIK* ...) and tries to complete the word as quickly as possible. Also called a *word completion task* or a *stem completion task*.

word superiority effect *n.* A **configural superiority effect*, making a letter more easily recognizable when it is seen in the context of a word than on its own. Thus, if several observers are shown brief **tachistoscopic* exposures and are asked to press one button if the word *fact* appears and another button if the word *fast* appears, they will tend to respond quicker and more accurately than if the stimuli are the letter *c* and the letter *s* presented in isolation. This type of **context effect* presents a serious challenge to researchers who believe that letters must be recognized in order to identify words. **WSE** *abbrev.*

working memory *n.* According to a theory put forward by the English psychologists Alan (David) Baddeley (born 1934) and Graham J(ames) Hitch (born 1946) in a book chapter in 1974, a temporary store for recently activated items of information that are currently occupying consciousness and that can be manipulated and moved in and out of **short-term memory*. It consists of a **central executive* and two **buffer stores*, called the **phonological loop* and the **visuospatial sketchpad*, its functions are carried out largely in the **prefrontal cortex* of the brain, and it is tested in a variety of organisms by means of **delayed-response tasks* and tests of **object permanence*. In 2000, Baddeley proposed a third buffer store, called the **episodic buffer*, providing limited-capacity storage for integrated episodes or scenes using multiple codes. *See also* DORSOLATERAL PREFRONTAL CORTEX. **WM** *abbrev.* [The term was first used by the US psychologist George A(rmitage) Miller (1920–2012) and co-authors in a book entitled *Plans for the Structure of Behavior* (1960, p. 65) to denote a unitary memory store for action plans, and the Canadian-born US psychologist John R(obert) Anderson (born 1947) subsequently used it to denote a declaratory memory store (*see* ACT*). The term appeared again in the book *Human Problem Solving* (1972) by the US cognitive scientists Allen Newell (1927–92) and the US political scientist and decision theorist Herbert A(lexander) Simon (1916–2001) shortly before being used by Baddeley and Hitch to denote their multi-component model.]

working through *n.* In **psychoanalysis*, the process by which an **interpretation* (2) is conveyed to a patient, overcoming the **resistance* that it has previously generated and enabling the patient to accept repressed ideas or wishes underlying **symptoms*. Sigmund Freud (1856–1939) described this

*****ebook converter DEMO Watermarks*****

process most fully in his article on 'Remembering, Repeating and Working-Through' (1914, *Standard Edition*, XII, pp. 147–56).

work psychology *n.* An umbrella term for all aspects of **occupational psychology* and **industrial/organizational psychology*.

W process *n.* In **psychoanalysis*, a term used by Sigmund Freud (1856–1939) to denote any function of the **perception–consciousness system*. Also called a ω process or a *Pcpt–Cs process*.

writing disorder *See* *SPECIFIC LEARNING DISORDER*.

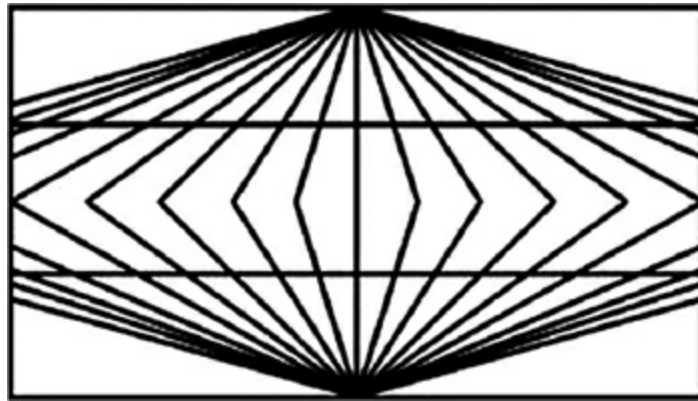
written expression, disorder of *n.* A **specific learning disorder* characterized by substantially below-average writing skills for the given age, intelligence, and education, interfering substantially with scholastic or academic achievement or everyday life and not being due merely to a sensory deficit.

wryneck *n.* A non-technical name for **spasmodic torticollis*.

wug test *n.* A test designed to investigate the acquisition of plural-forming and other rules of **grammar*. A child is presented with an imaginary object and is told, 'This is a *wug*'. Then a second instance is presented, and the child is asked what the two are called. The correct answer is *wugs*, pronounced with a voiced /z/ sound, as in *dogs*, because the plural-forming letter follows a voiced consonant /g/. After a voiceless consonant such as /t/, the plural-forming letter should be a voiceless /s/, as in *cats*, and after a sibilant, an additional syllable should have a voiced /z/, as in *verses*. To investigate understanding of other grammatical rules, the test includes questions such as 'What do you call a man who *zibs*?' the correct answer being a *zibber*. Even very young children are able to produce correct plurals, past tenses, and possessives of words that they have never heard before, showing that they have internalized abstract linguistic rules. The test was introduced by the US psychologist Jean Berko (born 1931, later called Jean Berko Gleason) in an article in the journal *Word* in 1958. *See also* *ASSIMILATION (3)*, *IMPLICIT LEARNING*. [A deliberately constructed nonsense word]

*****ebook converter DEMO Watermarks*****

Wundt illusion *n.* A visual illusion in which a pair of straight lines appear to be bowed inwards when superimposed on a pattern of lines converging to points on either side of them (see [illustration](#)). It is closely related to the [*Hering illusion](#). [Named after the German psychologist Wilhelm (Max) Wundt (1832–1920) who first published it in 1896]



Wundt illusion. The two horizontal lines are straight.

Würzburg school *n.* A school of psychological thought that flourished under the leadership of the Latvian-born German psychologist Oswald Külpe (1862–1915) from 1894 until his death in 1915. Külpe worked in Leipzig for eight years with the founder of the structuralist school Wilhelm (Max) Wundt (1832–1920) before moving to Würzburg in 1894, where he founded the school that became an important rival to the [*structuralism \(2\)](#) of Leipzig. Whereas Wundt discouraged experimental research into higher mental processes such as thinking, Külpe and his followers concentrated their research largely on thinking, attention, and aesthetic responses. The Würzburg school is remembered chiefly for claiming to have discovered [*imageless thought](#).



Xanax *n.* A proprietary name for the benzodiazepine drug **alprazolam*.
[Trademark]

xanthine *n.* The white, crystalline compound methylxanthine or any substituted derivative of it, especially the three methylated derivatives **caffeine*, **theobromine*, and **theophylline* that are pharmacologically active as central nervous system **stimulants*, acting through increasing the permeability of neuron cell membranes to **calcium*, the major psychological effects at low doses being a decrease in fatigue and drowsiness, an increase in speed and efficiency, and a decrease in the number of errors (especially in an overlearned task such as typing). Formula: $C_5H_4N_4O_2$. [From Greek *xanthos* yellow, alluding to the lemon-yellow residue that it leaves when evaporated with nitric acid]

xanthopsia *n.* A visual defect in which everything in the visual field appears to have a yellow hue. It can be induced temporarily by prolonged exposure to blue light, and it is sometimes associated with jaundice or poisoning with **digitalis* or foxglove. *See also* CHROMATIC ADAPTATION (1). [From Greek *xanthos* yellow + *ops* an eye + *-ia* indicating a condition or quality]

X cell *n.* A type of ganglion cell belonging to the **parvocellular system*, present in the retina and the lateral geniculate nuclei. Also called a *P cell*.

X chromosome *n.* A type of **sex* chromosome present in pairs in all of the diploid cells of females, and present singly, paired with a **Y chromosome*, in all diploid cells of males. [So called because of its

*****ebook converter DEMO Watermarks*****

resemblance to the letter X]

xenoglossia *n.* A facility claimed by some spirit mediums, clairvoyants, and other psychics to speak in languages that they have never learnt. Xenoglossia should be distinguished carefully from ***glossolalia**. [From Greek *xenos* foreign + *glossa* a tongue + *-ia* indicating a condition or quality]

xenomelia *n.* Another word for ***apotemnophilia**, considered more appropriate by the Scottish neurologist Paul D(uncan) McGeoch (born 1975) and several co-authors who introduced the term in an article in the *Journal of Neurology, Neurosurgery and Psychiatry* in 2011. [From Greek *xenos* foreign + *melos* a limb + *-ia* indicating a condition or quality]

X-linked *adj.* Of or relating to a gene situated on the ***X chromosome** or a ***character** (2) or ***trait** determined by such a gene. Most X-linked disorders and conditions, including ***Duchenne muscular dystrophy**, haemophilia, and various forms of ***colour-blindness**, are determined by ***recessive genes** carried by females on an X chromosome but expressed predominantly in males who have only one X chromosome, preventing ***complementation** from occurring. A female can inherit such a gene, but its effects are normally masked by a normal ***dominant *allele**, unless the female inherits the abnormal allele from both parents. *See also* DALTONISM, HOLOGYNIC, HORNER'S LAW, SEX-LINKED. *Compare* Y-LINKED. **X-linkage** *n.*

XTC *n.* A street name for ***ecstasy** (2). [From the similarity in sound; not an abbreviation]

XXX syndrome *n.* A chromosomal abnormality in which a woman has three ***X chromosomes** instead of the usual two, leading to deficits in auditory and language comprehension, and usually sterility. *Compare* KLINEFELTER'S SYNDROME, XYY SYNDROME.

XXY syndrome *n.* Another name for ***Klinefelter's syndrome**.

XYY syndrome *n.* A chromosomal abnormality in which a man has an extra ***Y chromosome**, often leading to antisocial behaviour and violence.

Compare ANTISOCIAL PERSONALITY DISORDER, KLINEFELTER'S SYNDROME,
TURNER'S SYNDROME, XXX SYNDROME.



yaba *n.* A popular street drug, originating in Thailand and Burma (Myanmar), consisting mainly of **methamphetamine* but with more powerful effects than **ecstasy*. Regular use of yaba has been linked with kidney and lung disorders, **hallucinations*, **paranoia*, **formication*, and **panic attacks*. First manufactured in Germany in 1934, where it was originally called Pervitin and was added as a **stimulant drug* to chocolate bars supplied to members of the German air force (*Luftwaffe*) in World War II, it is usually ingested in pill form but can also be smoked on tin foil, and its **psychotropic* effects occur largely through activation of **noradrenalin* pathways. [Thai: literally crazy medicine]

yagé *n.* The South American plant *Banisteriopsis caapi*, or the **hallucinogenic* drink more commonly called **harmine*, made from its seeds, originally by native Americans. [American Spanish]

yang See *YIN AND YANG*.

Yates' correction for continuity *n.* In statistics, a correction sometimes applied before performing the **chi-square test* on data in a 2×2 contingency table to improve the approximation to the theoretical distribution, which is a continuous distribution in contrast to the discrete scores being analysed. Corrected chi-square values are always smaller than uncorrected values. [Named after the English statistician Frank Yates (1902–94) who published the correction in 1934]

YAVIS *abbrev.* Young, attractive, verbal, intelligent, successful, the syndrome of personal qualities that counsellors, therapists, and people in

*****ebook converter DEMO Watermarks*****

general supposedly find most appealing in their clients or associates. This idea first appeared in 1964 in the book *Psychotherapy: The Purchase of Friendship* by the US psychologist William Schofield (1921–2006). *Compare* [HOUND](#).

yawn *vb.* To open the mouth and [*pharynx wide](#), inhale deeply, stop breathing for a short period, and then exhale slowly, in a distinctive pattern of largely involuntary behaviour that is observed in all classes of [*vertebrates](#), including fish, amphibians, reptiles, birds, and mammals, and is therefore assumed to have evolved to serve an important adaptive function. It used to be believed that it serves to restore the ratio of oxygen to carbon dioxide in the blood, but that interpretation was undermined by evidence that yawning is not triggered by experimental manipulations that lower the level of oxygen in the blood or by oxygen-depleting physical exercise. The adaptive function of yawning may be to increase physiological arousal or to cool the brain. In humans, yawning develops prenatally, is often associated with fatigue or boredom, and is highly sensitive to [*behavioural contagion](#). *n.* The act of yawning. [From Old English *gionian* to yawn, cognate with Old Saxon *ginon* and Old High German *ginen* to yawn]

Y cell *n.* A type of ganglion cell belonging to the [*magnocellular system](#), present in the retinas and the lateral geniculate nuclei. Also called an *M cell*.

Y chromosome *n.* A [*sex](#) chromosome occurring in all of the diploid cells of males, paired with an [*X chromosome](#). [So called because of its resemblance to the upper-case letter Y]

yellow bile *See* [HUMOUR \(3\)](#).

yellow bullets *n.* A street name for the barbiturate drug [*pentobarbital](#) (pentobarbitone).

yellow-sighted *adj.* Experiencing [*xanthopsia](#).

yellow spot *n.* Another name for the [*macula lutea](#).

Yerkes–Dodson law *n.* The proposition that optimal task performance occurs at an intermediate level of ***arousal**, with relatively poorer performance at both lower and higher arousal levels, leading to an inverted U relation between arousal and performance. It is often accompanied by the proposition that the peak occurs at a lower level of arousal for easy than for difficult tasks. **YDL** *abbrev.* [Named after the US psychologists Robert Mearns Yerkes (1876–1956) and John Dillingham Dodson (1879–1955) who published an article in the *Journal of Comparative Neurology and Psychology* in 1908 on the ‘Relation of Strength of Stimulus to Rapidity of Habit-formation’, though they did not enunciate the law explicitly or attempt to test it directly]

Yerkish *n.* An artificial language, using a computer console with keys bearing geometrical symbols for words, developed by the US primatologists Duane Rumbaugh (born 1929) and Sue Savage-Rumbaugh (born 1946) for communicating with chimpanzees. [Named after the Yerkes Regional Research Center in Georgia, US, where the language was developed, which in turn is named after the US psychologist Robert Mearns Yerkes (1876–1956), who founded the parent laboratory in Florida in 1919]

yin and yang *n.* In traditional Chinese philosophy, two complementary principles of the universe, *yin* being a passive female principle that is cold, wet, dark, and earthly, and *yang* being an active male principle that is hot, dry, light, and heavenly. Their balance is believed to maintain the harmony of the universe and of everything in it, including human bodies and minds. *See also* **SYZYGY**. [From Chinese *yin* dark + *yang* bright]

yips *n.* A type of focal ***dystonia** associated with psychological tension or anxiety, common among golfers but, for reasons unknown, seldom afflicting snooker, pool, or billiards players, usually experienced as a ***tremor**, ***spasm**, or weakness in the fingers or hands before making a shot (especially a golfing putt) and described as *having the yips*. [Origin unknown]

Y-linked *adj.* Of or relating to a gene situated on the ***Y chromosome** or a characteristic or ***trait** determined by such a gene, such as hirsutism of the ears and certain other characteristically masculine traits. No significant Y-linked disorders are known. *See also* **HOLANDRIC**, **SEX-LINKED**. *Compare* **X-**
*****ebook converter DEMO Watermarks*****

LINKED. **Y-linkage** *n.*

yohimbine *n.* A crystalline alkaloid, found in the bark of the tropical African yohimbe tree *Corynanthe yohimbe*, that acts as a noradrenalin (norepinephrine) ***agonist** (3) and is taken as a ***sympathomimetic** central nervous system ***stimulant drug** and, in its hydrochloride form, as an ***aphrodisiac**. Formula $C_{21}H_{26}N_2O_3$. [From Bantu *yohimbé* the yohimbe tree + *-ine* indicating an organic compound]

yoked control *n.* In experimental designs in which members of an ***experimental group** and a ***control group** are paired, the control group members receiving the same stimuli, reinforcements, or punishments as the experimental group members but without the possibility of influencing these effects through their own behaviour, the effects being controlled by the experimental group members alone.

yolk phenomenon *n.* A slip of the tongue experimentally induced by phonological ***priming**, first described in 1970 in an article in the journal *Psychological Review* by the US psychologists Gregory A(dams) Kimble (1917–2006) and Lawrence C(harles) Perlmuter (born 1938) using the following word game, which also explains its name: ‘If one reads the following list of questions (Q) to someone, he will get either the answer (A) shown for the last question or else he will almost get that answer. In the latter case, the subject will probably recognize the point of the demonstration and indicate that fact. Q. What do we call a tree that grows from acorns? A. Oak. Q. What do we call a funny story? A. Joke. Q. The sound made by a frog? A. Croak. Q. What is another word for cape? A. Cloak. Q. What do we call the white of an egg? A. Yolk (sic!)’ (vol. 17, p. 373). *See also* **COGNITIVE ILLUSION**. *Compare* **MOSES ILLUSION**.

young girl/old woman figure *n.* A popular ***ambiguous figure** that does not depend on figure–ground reversal and that appears as a portrait of a young girl or an old woman (see **illustration**). It was copied from an anonymous German postcard issued in 1888 and published as a cartoon by the US artist William Ely Hill (1887–1962) in *Puck* magazine in 1915 under the title *My Wife and My Mother-in-law. They are Both in this Picture—Find Them*, then it was adapted and republished in 1930 by the US psychologist
*****ebook converter DEMO Watermarks*****

Edwin Garrigues Boring (1886–1968), to whom it is often wrongly attributed. In 1961 the US psychologist Jack Botwinick (1923–2006) published a version equally as unflattering to old men entitled *Husband and Father-in-law*. Also called the *old woman/young girl figure*, the *wife/mistress figure*, or (misleadingly) the *Boring figure*.



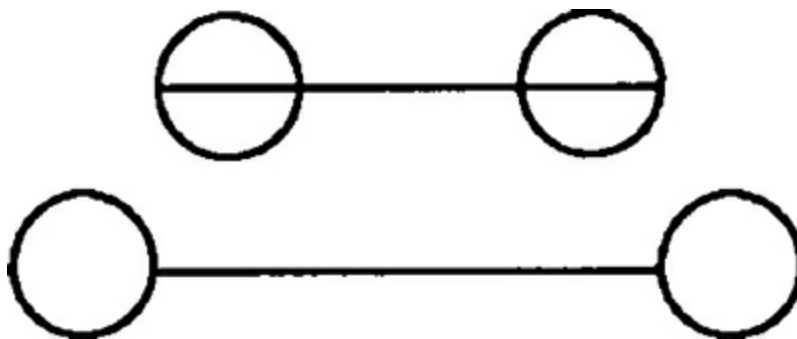
Young girl/old woman figure

Young–Helmholtz theory *n.* Another name for the **trichromatic theory* of colour vision. [Named after the English physician, physicist, and Egyptologist Thomas Young (1773–1829) who proposed it in 1802, and the German physiologist, physicist, and mathematician Hermann Ludwig Ferdinand von Helmholtz (1821–94) who subsequently championed it]

YRMODA *abbrev.* Year, month, day. A function in **SPSS* and other statistical software packages for converting dates to days elapsed, so that arithmetic calculations can be performed on them.



Zanforlin illusion *n.* A visual illusion in which a straight line extending between the most distant points on the circumferences of two circles appears shorter than a line of the same length extending between the nearest points on the circumferences of two similar circles (see [illustration](#)). It is closely related to the [*Baldwin illusion](#) and possibly also the [*Müller-Lyer illusion](#). [Named after the Italian psychologist Mario Zanforlin (born 1934) who first described it in 1967]



Zanforlin illusion. The horizontal straight lines are equal in length.

zar *n.* A [*culture-bound syndrome](#) found in Ethiopia and other areas of North Africa, and among Arab communities in various parts of the Middle East, characterized by episodes of [*dissociation](#) that are locally attributed to spirit possession and are associated with signs and symptoms such as shouting, laughing, self-injury or self-mutilation, singing and weeping, often followed by apathy and withdrawal. The condition is traditionally dealt with through elaborate ceremonies of exorcism involving singing, dancing, and drinking the blood of a sacrificed ram. Also called *sar* in Somalia and elsewhere. [Amharic *zar* an evil spirit]

*****ebook converter DEMO Watermarks*****

Z-disc *n.* A dark line separating two *sarcomeres of muscle tissue, being the membranes to which the *actin filaments of the sarcomere are attached. US *Z-disk*. Also called a *Z-line*.

Zeigarnik effect *n.* The tendency for interrupted tasks, in some circumstances, to be recalled better than completed tasks. For example, a restaurant waiter may remember a complex order while a meal is in progress but forget the details as soon as the meal is over and the bill calculated. [Named after the Russian psychologist Bluma (Wolfovna) Zeigarnik (1901–88), who first reported it in the journal *Psychologische Forschung* in 1927]

Zeitgeber *n.* An environmental cue as to the passage of time, such as the *diurnal cycle of light and dark, that tends to calibrate and synchronize a *biological clock to the external passage of time. Also called a *synchronizer*. See also *ENTRAINMENT*. [From German *Zeitgeber* a timer, from *Zeit* time + *geben* to give]

Zener cards *n.* A deck of 25 cards used in research into *extra-sensory perception. On the face of each card is printed one of five symbols (circle, cross, square, star, or wavy lines); therefore, the chance probability of a hit is 1/5 for an individual card, and the number of hits expected on the basis of chance alone for the complete pack is five. Also called *ESP cards*. [Named after the US psychologist Karl E(dward) Zener (1903–64) who devised them at Duke University in 1930 and objected in vain to their being named after him]

zenith distance *n.* The direction of an object or image in a vertical plane relative to a point directly overhead. Compare *AZIMUTH*. [From Old Spanish *zenit* zenith, from Arabic *samt*, short for *samt-al-ras* overhead, from *samt* direction + *al* the + *ras* head]

zero-crossing *n.* In *computational theories of vision, a location where the *luminance in a smoothed or blurred visual image changes abruptly. Zero-crossing segments that align with one another for different levels of smoothing form the basis of *contours in the *primal sketch. [So called because in mathematical terms it is a region where the second derivative of

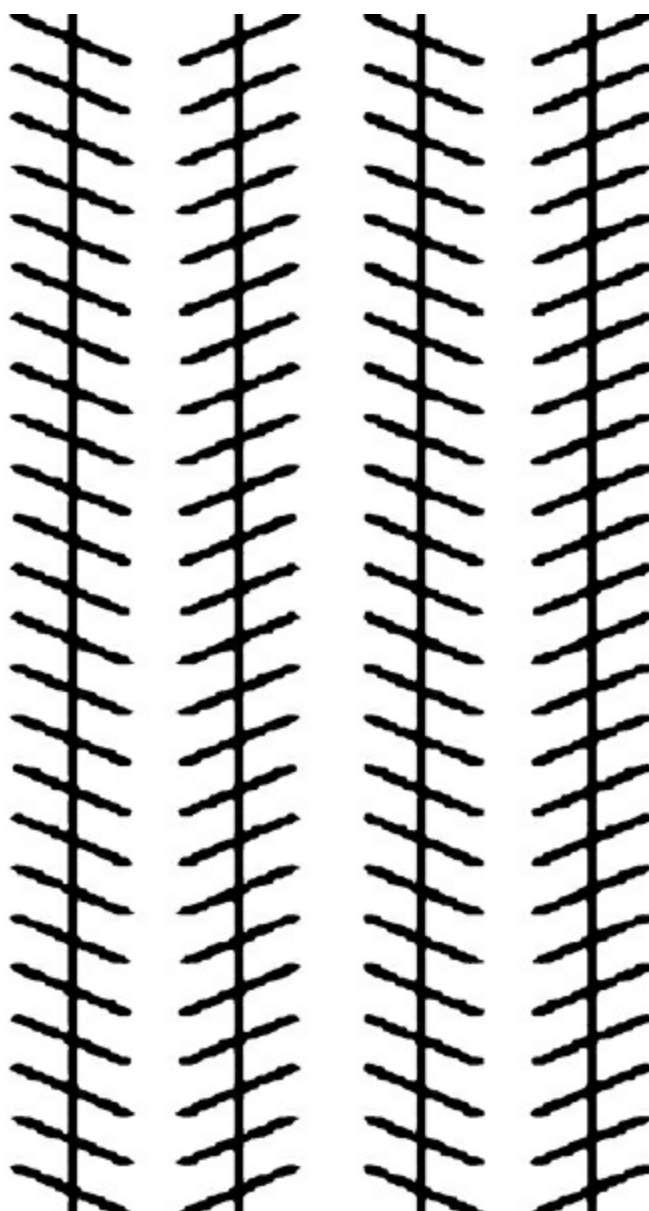
the luminance function changes from positive through zero to negative or from negative through zero to positive]

zero-order approximation to language See APPROXIMATION TO LANGUAGE.

zero-sum game *n.* In *game theory, a game in which the sum of the players' payoffs is equal to zero in every outcome of the game. Two-person zero-sum games are *strictly competitive games*, in which the players' interests are directly opposed, one player's gain invariably being equal to the other's loss. See also MINIMAX THEOREM. Compare MIXED-MOTIVE GAME.

Zipf's laws *n.* **1.** A law of linguistics stating that the frequency of a word is inversely proportional to its rank in frequency. More precisely, the rank (r) of a word on a frequency list multiplied by the frequency (f) with which the word is used is a constant (C), hence $rf = C$. For example, in the London–Lund corpus of spoken English, the words *see*, *which*, and *get* are the 45th, 55th, and 65th most frequently used words, and their frequencies are 674, 563, and 469 respectively; thus $45 \times 674 = 30,330$, $55 \times 563 = 30,965$, and $65 \times 469 = 30,485$; in each case $rf = 30,500$ approximately. This relationship has been confirmed in many languages, but it is now known that it tends to break down for words at both extremes of the frequency range. **2.** A law of linguistics stating the existence of an inverse relation between the lengths of words and their frequency, resulting presumably from the fact that frequently used words tend to be shortened, so that *pianoforte* becomes *piano*, *omnibus* becomes *bus*, *television* becomes *telly*, *zoological garden* becomes *zoo*, and so on. [Named after the US philologist George Kingsley Zipf (1902–50) who formulated both laws]

Zöllner illusion *n.* A visual illusion in which parallel straight lines appear to converge and diverge alternately when intersected by a herringbone pattern of oblique stripes (see illustration). [Named after the German astronomer Johann Karl Friedrich Zöllner (1834–82) who first reported it in 1860 after observing it in the pattern of a piece of dressmaking fabric]



Zöllner illusion. The long lines are straight and parallel.

Zoloft *n.* A proprietary name for the antidepressant drug [*sertraline](#).
[Trademark]

zombie *n.* 1. In informal usage, a person who appears to be lifeless, apathetic, and unresponsive to the external environment, or one who behaves like an [*automaton](#). 2. A being believed to belong to the living dead, a corpse resurrected by witchcraft, especially in the voodoo cult of Haiti and in certain

*****ebook converter DEMO Watermarks*****

West African religions from which it is derived. In Haitian voodoo, a person who has been given a *coup poudre* (magic powder) by a voodoo sorcerer, called a *bokor*, appears to die, is buried, and is exhumed a few days later as an apparently soulless zombie to work as the *bokor*'s slave. In 1982 the Irish-Canadian ethnobiologist (Edmund) Wade Davis (born 1953) discovered that *coup poudre* is made from puffer fish and other ingredients containing the powerful neurotoxin * [tetrodotoxin](#) (TTX), and in his book *The Serpent and the Rainbow* (1985) he put forward a theory of zombiism according to which ingestion of a barely sub-lethal dosage of the poison results in a deep coma resembling death, and both the poison and the live burial cause extensive neurological damage, so that the victim who is later exhumed and revived has few intact memories or mental capacities and no power of speech and usually adopts the shuffling gait and blank facial expression characteristic of a zombie. Although this theory has been widely accepted, there is evidence that some zombies, at least, are simply people with severe or profound *[intellectual disability](#). Also spelt *zombi*. See also [VOODOO DEATH](#). **zombify** vb. To turn someone into a zombie (1, 2), or deprive a person of vitality or spirit. [From Kikongo *zumbi* a fetish, from *nzambi* a spirit of a dead person]

zona fasciculata *n.* The middle portion of the *[adrenal cortex](#), where *[glucocorticoids](#) and other hormones are produced. [From Latin *zona* a girdle or belt + *fasciculus* a small bundle, diminutive of *fascis* a bundle]

zona glomerulosa *n.* The outer, knotty portion of the *[adrenal cortex](#), where *[mineralocorticoids](#) are produced. [From Latin *glomerulus* a cluster or knot, diminutive of *glomus* a ball]

zona granulosa *n.* The granular portion of a *[Graafian follicle](#), where the *[ovum](#) is embedded. [From Latin *granulum* a little grain, diminutive of *granum* a grain]

zona incerta *n.* A small ribbon of nerve cell bodies on each side of the *[hypothalamus](#) that control drinking. Stimulation in this area instigates *[polydipsia](#) or excessive drinking, and a lesion can result in *[adipsia](#) or cessation of drinking. [From Latin *zona* a girdle or belt + *incertus* uncertain or obscure, so called because its function was unknown for a long time after its discovery]

*****ebook converter DEMO Watermarks*****

zona reticularis *n.* The innermost netlike portion of the **adrenal cortex*, acting together with the **zona fasciculata* to produce **glucocorticoids* and other hormones. [From Latin *zona* a girdle or belt + *reticulum* a little net, diminutive of *rete* a net]

zone of proximal development *n.* A term introduced in 1931 by the Russian psychologist Lev Semyonovich Vygotsky (1896–1934) to denote the distance between a child's 'actual developmental level as determined by independent problem solving [and the higher level of] potential development as determined through problem solving under adult guidance or in collaboration with more capable peers'. Vygotsky believed that it is most likely to emerge during play. See *DYNAMIC TESTING*. Also called the *zone of potential development*. **ZPD** abbrev.

zonule of Zinn *n.* The ligament from which the **crystalline lens* of the eye is suspended. Also called the *ciliary zonule* or the *zonula ciliaris*. [Named after the German anatomist Johann Gottfried Zinn (1727–59) who discovered it]

zooerasty *n.* Another name for **bestiality (1)*. [From Greek *zoion* and animal + *erastes* a lover]

zoophilia *n.* A **paraphilia* characterized by recurrent sexually arousing fantasies, sexual urges, or behaviour involving erotic attraction of a person to an animal; more specifically, another name for **bestiality (1)*. [From Greek *zoion* an animal + *philos* loving, from *phileein* to love + *-ia* indicating a condition or quality]

zoösemiotics *n.* The study of animal communication systems. [From Greek *zoion* an animal + *semiotics*]

z score *n.* In statistics, any score expressed in units of **standard deviations* of the distribution of scores in the population, with the mean set at zero and standard deviation equal to 1. It was introduced in 1924 by the English statistician and geneticist Ronald Aylmer Fisher (1890–1962). Also called a *standard score* or *sigma score* or sometimes a *deviation score*. See *STANDARD*

SCORE. *See also* [DERIVED SCORE](#). *Compare* [IQ](#), [STANINE SCORE](#), [STEN SCORE](#), [T SCORE](#).

z test *n.* In inferential statistics, a test to determine whether a sample [*mean](#) is significantly different from a population mean, and hence whether the sample is unlikely to have come from the population. The z statistic is calculated by dividing the difference between the two means by the [*standard error](#) of the sample mean. If the value of z exceeds a critical value (plus or minus 1.96, for a [*significance](#) level of 5 per cent), then the [*null hypothesis](#) is rejected.

Zwaardemaker olfactometer *n.* A device for measuring olfaction, consisting of a glass tube through which an odorant is drawn into the nostril, the amount of odour being determined by the length of the tube. [Named after the Dutch physiologist Hendrik Zwaardemaker (1857–1930) who devised it in 1888]

Zwaardemaker smell system *n.* A scheme for classifying smells based on nine fundamental or primary odours: ethereal (like ether or beeswax), aromatic (like spice or camphor), fragrant (like lavender or rose petals), ambrosiac (like amber or musk), alliaceous (like garlic or onion), empyreumatic (like roasted coffee or tobacco smoke), hircine (like strong cheese or rancid food), foul (like bedbugs or coriander flower), and nauseous (like faeces or rotten eggs). *Compare* [CROCKER–HENDERSON SYSTEM](#), [HENNING’S PRISM](#). [Named after the Dutch physiologist Hendrik Zwaardemaker (1857–1930) who published it in 1895]

zygote *n.* A fertilized [*ovum](#) or egg. *See also* [BLASTOCYST](#), [EMBRYO](#), [FOETUS](#), [MORULA](#). [From Greek *zygotos* yoked, from *zygon* a yoke]

Zyprexa *n.* A proprietary name for the atypical antipsychotic drug [*olanzapine](#). [Trademark]

Appendices

Appendix I: Phobias and phobic stimuli

A phobia is a persistent, irrational fear of an object, event, activity, or situation, called the *phobic stimulus*, resulting in a compelling desire to avoid it. A more detailed definition is given under the headword **phobia** in the main body of the dictionary, and the correct term for irrational fears that do not qualify as true phobias is defined under the headword **paraphobia**. This is probably a more comprehensive inventory of phobias and their etymologies than any previously published, but it has no pretensions to completeness. Virtually anything is capable of becoming a phobic stimulus, and names of phobias are often coined as nonce words; hence the number of potential phobias is unlimited, and any attempt to list them exhaustively would be futile. The entries in this appendix are restricted to phobias that have been discussed in serious publications or catalogued in general or specialist reference works. In addition to etymologies, the table includes cross-references and occasional comments on usage. Phobias with separate entries in the main body of the dictionary are flagged.

The names of most phobias are formed by combining a Greek prefix denoting the phobic stimulus with the suffix *-phobia* (from Greek *phobos* fear + *-ia* indicating a condition or quality). But many names of phobias are neoclassical hybrids, combining a Latin prefix with the Greek suffix, a typical example—one is tempted to say a classic example—being *claustrophobia*. Although frowned on by linguistic purists, this type of word formation is well established in contemporary English: compare *sociology*, *television*, *monolingual*. There are also a few phobias that are named by combining an English (or other modern language) prefix with the Greek suffix, for example *computerphobia*.

What follows is a double-entry list. Each phobia can be looked up either under its technical name, where the phobic stimulus is specified and a brief etymology is given, or (excepting *panphobia*) under its distinguishing phobic stimulus or stimuli—spiders, confined spaces, heights, and so on—where the name of the corresponding phobia will be found. After looking up the name of a phobia, the entry under the corresponding phobic stimulus may then be consulted for alternative names, if any, of the same phobia; or after looking

up a phobic stimulus, the entry under the corresponding phobia may be consulted for further information, including its etymology and occasional cross-references to related entries within the list.

ablutophobia Bathing. [From Latin *ablutio* the act of washing, from *abluere* to wash away]

acarophobia Bugs, mites, and other small creatures. *Compare* MICROPHOBIA, PARASITIOPHOBIA. [From Greek *akari* a mite]

accidents Dystychiphobia.

acerbophobia Sour tastes. Also called *acerophobia*. [From Latin *acerbus* sour, from *acer* sharp]

achluophobia Darkness. [From Greek *achlys* mist]

acousticophobia Noise. [From Greek *akoustikos* relating to sound, from *akouein* to hear + *-itikos* resembling or marked by]

acrophobia Heights. *Compare* BATHOPHOBIA. [From Greek *akros* highest]

action Ergasiophobia.

adolescents Ephebophobia.

aelurophobia *See* AILUROPHOBIA.

aeroacrophobia High open places. [From Greek *aer* air + *akron* extreme or topmost]

aeronausiphobia Flying in an aircraft. *Compare* AVIOPHOBIA. [From Greek *aer* air + *naus* a ship]

aerophobia Draughts (US drafts) or (loosely) flying. [From Greek *aer* air]

ageing Gerascophobia.

agoraphobia Public places, crowds, travelling alone, or being away from home (for more detail, see the [entry](#) in the main body of the dictionary).

*****ebook converter DEMO Watermarks*****

[From Greek *agora* a marketplace]

agrizoophobia Wild animals. [From Latin *ager* a field + Greek *zoion* an animal]

agyrophobia Crossing streets or thoroughfares. [From Greek *a-* without + Latin *gyrare* to turn, from Greek *gyros* a circle]

aibohphobia Palindromes. [A jocular formation that is itself a palindrome]

aichmophobia Sharp or pointed objects or knives. [From Greek *aichme* the point of a spear]

ailurophobia Cats. Also spelt *aelurophobia*. Also called *gatophobia* or (not quite accurately) *galeophobia*. [From Greek *ailouros* a cat]

aircraft (flying in) Aeronausiphobia or (loosely) aerophobia.

alcoholic drinks Potophobia or dipsophobia.

alektorophobia Chickens. [From Greek *alektor* a cock or a rooster]

algophobia Pain. [From Greek *algos* pain]

alliumphobia Garlic. [From Latin *allium* garlic]

allodoxaphobia Contrary or other opinions. [From Greek *allos* other + *doxa* an opinion, from *dokein* to think]

alone (being) Autophobia, eremophobia, or monophobia.

amathophobia Dust. [From Greek *amathos* sand]

amaxophobia Vehicles or travelling in a vehicle. *Compare* HODOPHOBIA. [From Greek *amaxa* a wagon]

amnesia Amnesiophobia.

amnesiophobia Amnesia or forgetting. [From Greek *amnesia* oblivion]

amychophobia Being scratched. [From Greek *amyche* a scratch]

*****ebook converter DEMO Watermarks*****

anablephobia Looking up. [From Greek *ana* up + *blepein* to look]

androphobia Men. [From Greek *andros* of a man]

anemophobia Wind, draughts (US drafts), or cyclones. [From Greek *anemos* wind]

anginophobia Choking or suffocation. [From Latin *angina* quinsy, from Greek *anchone* a strangling]

Anglophobia England or English people or culture. [From Latin *Anglus* English]

animals Zoophobia.

animals, wild Agrizophobia.

ankylophobia Stiffening of a joint. [From Greek *ankylosis* joint stiffening, from *ankyloein* to crook]

anthophobia Flowers. [From Greek *anthos* a flower]

anthrophobia An aberrant form of *anthropophobia*.

anthropophobia Humanity or human beings. Also called *phobanthropy*. [From Greek *anthropos* human]

antlophobia Floods. [From Greek *antlos* bilge water]

ants Myrmecophobia.

anus Proctophobia.

apeirophobia Infinity or endlessness. [From Greek *apeiros* endless or infinite, from *a-* without + *peirar* an end]

aphephobia An alternative spelling of *haphophobia*.

apiphobia Bees. [From Latin *apis* a bee]

aquaphobia Water. [From Latin *aqua* water]

*****ebook converter DEMO Watermarks*****

arachibutyrophobia Peanut butter, especially fear of peanut butter sticking to the roof of the mouth. [From Latin *arachis* a leguminous plant, from Greek *arachos*, *arakis* leguminous plants + *boutyron* butter, from *bous* ox + *tyros* cheese]

arachnophobia Spiders. Also spelt *arachnephobia* or *arachniphobia*. [From Greek *arachne* a spider]

arctophobia Bears or teddy bears. [From Greek *arktos* a bear]

arithmophobia Numbers. [From Greek *arithmos* a number]

asthenophobia Weakness. [From Greek *asthenes* weak, from *a-* without + *sthenos* strength]

astraphobia Thunder and lightning. [From Greek *astrape* lightning]

astrophobia The influence of the stars. Also called *astronophobia*. [From Greek *astron* a star]

atax(i)ophobia Disorder. [From Greek *ataxia* disorder, from *a-* without + *taxis* order]

atelophobia Incompleteness or imperfection. [From Greek *ateles* incomplete]

attention (being the focus of) Social phobia.

atychiphobia Failure. [From Greek *atyches* unfortunate]

aulophobia Flutes and similar wind instruments. [From Greek *aulos* an ancient Greek wind instrument]

aurophobia Gold or money. [From Latin *aurum* gold]

automobiles Amaxophobia.

automysophobia Being dirty. [From Greek *autos* self + *mysos* defilement]

autophobia Being alone or by oneself. *Compare* AUTOPHOBY, EREMOPHOBIA. [From Greek *autos* self]

autophoby Referring to oneself or drawing attention to oneself. *Compare* AUTOPHOBIA. [From Greek *autos* self]

aviophobia Flying. *Compare* AERONAUTOPHOBIA. [From Latin *avis* a bird]

away from home (being) Agoraphobia.

bacilli Bacillophobia or bacteriophobia.

bacillophobia Bacteria or bacilli. [From Latin *bacillus* a little rod]

bacteria Bacillophobia or bacteriophobia.

bacteriophobia Bacteria or bacilli. [From Greek *bakterion* a little stick]

bad breath Halitophobia.

bad luck Dystychiphobia.

bad people Scelerophobia.

baldness Peladophobia or phalacrophobia.

ballistophobia Projectiles, missiles, or thrown objects. [From Greek *ballein* to throw]

basiphobia Walking. [From Greek *basis* a step from *bainein* to step or go]

bathing Ablutophobia.

bathmophobia Stairs or escalators. [From Greek *bathmos* a step]

bathophobia Depth or looking down from high places. [From Greek *bathos* depth]

bathysiderodromophobia Subways or underground trains. [From Greek *bathys* deep, from *bathos* depth + *sideros* iron + *dromos* running]

batrachophobia Frogs, toads, and newts. [From Greek *batrachos* a frog]

beards or bearded men Pogonophobia.

*****ebook converter DEMO Watermarks*****

bears Arctophobia.

beautiful women Calligynophobia.

bed (going to) Clinophobia.

bees Apiphobia or melissophobia.

behaviour Ergasiophobia.

belonephobia Sharp, pointed objects. [From Greek *belone* a needle]

bibliophobia Books. [From Greek *biblion* a book]

bicycling Cyclophobia.

biophobia Life or living things. [From Greek *bios* life]

birds Ornithophobia.

black Melanophobia.

black people Colorphobia (US), Negrophobia.

blennophobia Slime or mucus. *Compare* MYXOPHOBIA. [From Greek *blennos* slime]

blind spots Scotomaphobia.

blood Haematophobia (US hematophobia) or haemophobia (US hemophobia).

blushing Erythrophobia.

body odour Bromidrosiphobia.

bogeyphobia Bogies. [From the Scots *bogle* a spectre or goblin]

bogeys Bogeyphobia or bogyphobia.

bogyphobia An alternative spelling of *bogeyphobia*.

*****ebook converter DEMO Watermarks*****

books Bibliophobia.

botanophobia Plants. [From Greek *botane* a plant]

boys Paedophobia.

breasts Kolpophobia.

bridges Gephyrophobia.

bromidrosiphobia Body odour. *Compare* OSMOPHOBIA. [From Greek *bromos* a stink + *drosos* moisture]

brontophobia Thunder or thunderstorms. [From Greek *bronte* thunder]

bufophobia Toads. [From Latin *bufo* a toad]

bugs Acarophobia.

bulls Taurophobia.

burglary Kleptophobia.

burial alive Taphophobia.

cacohydrophobia Sewer water and sewers. Also spelt *kakohydrophobia*. [From Greek *kakos* bad + *hydor* water]

caenophobia Novelty or new things or ideas. Also called *cainophobia*, *caenotophobia*, *cainotophobia* (US), *cenophobia* (US), *cenotophobia*, *kainophobia*, *kainotophobia*. *Compare* NEOPHOBIA. [From Greek *kainos* new]

caino(to)phobia *See* CAENOPHOBIA.

calligynephobia Beautiful women. [From Greek *kallos* beauty + *gyne* a woman]

cancer Cancer(o)phobia, carcinomatophobia, or carcinophobia.

cancerphobia Cancer. Also called *cancerophobia*. [From English *cancer*, from Latin *cancer* a crab, alluding to the manner in which it creeps]

*****ebook converter DEMO Watermarks*****

canophobia Dogs. [From Latin *canis* a dog]

carcinophobia Cancer. Also called *carcinomatophobia*. [From Greek *karkinos* a crab]

cardiophobia Heart disease or heart attacks. [From Greek *kardia* heart]

carnophobia Meat. [From Latin *caro*, *carnis* meat]

cars Amaxophobia.

catagelophobia Ridicule or humiliation. Also spelt *katagelophobia*. [From Greek *katagelaen* to mock, from *kata* down + *gelaen* to laugh]

catapedaphobia Jumping. [From Greek *kata* down + Latin *pes*, *pedis* a foot]

cathisophobia Sitting down. Also spelt *kathisophobia*. [From Greek *kathizein* to cause to sit down, from *kata* down + *hizein* to seat]

catoptrophobia Reflections or mirrors. Also called *spectrophobia*. [From Greek *katoptron* a mirror, from *kata* back and *optos* seen]

cats Ailurophobia or gatophobia.

Celtophobia Celts. [From English *Celt*, from Latin *Celtae* the Celts]

Celts Celtophobia.

cemeteries Coimetrophobia.

cenotophobia (US) See CAENOPHOBIA.

censorship Logocrisiaphobia.

chaerophobia Gaiety or fun. Also spelt *chairophobia*, US *cherophobia*. [From Greek *chairein* to be pleased]

chairophobia See CHAEROPHOBIA.

change Metathesiophobia or tropophobia.

cheimaphobia Cold weather. Also called *cheimatophobia*. [From Greek *cheimon* winter]

cherophobia (US) See CHAEROPHOBIA.

chickens Alektorophobia.

childbirth or labour Maieusiophobia, parturiphobia, or tocophobia.

children Paedophobia.

China or Chinese people or culture Sinophobia.

chins Geniophobia.

chionophobia Snow. [From Greek *chion* snow]

chiraptophobia Being touched by someone's hand. [From Greek *cheir* a hand + *haptain* to touch]

choking Anginophobia, pnigophobia, or pnigerophobia.

cholera Cholerophobia.

cholerophobia Cholera. [From Greek *cholera* jaundice, from *chole* bile]

chopsticks Consecotaleophobia.

chorophobia Dancing. [From Greek *choros* a dance]

chrematophobia Wealth or money. [From Greek *chremata* money]

Christian fathers, early Paterophobia.

chrom(at)ophobia A particular colour or colours. [From Greek *chroma*, *chromatos* colour]

chronophobia Time. [From Greek *chronos* time]

church Ecclesiophobia.

cibophobia Food. [From Latin *cibus* food]

claustrophobia Confined spaces. [From Latin *claustrum* an enclosed space]

cleisiophobia Closed spaces. [From Greek *kleistos* closed]

climacophobia Stairs. [From Greek *klimax* a ladder]

clinophobia Going to bed. [From Greek *kline* a bed]

clithrophobia Being locked up or confined. [From Greek *kleithron* a bar]

closed spaces Claustrophobia or cleisiophobia.

clouds Nephophobia.

cnidophobia Nettle stings or stings in general. [From Greek *knide* a nettle or sea-anemone]

coimetrophobia Cemeteries. [From Greek *koimeterion* a room for sleeping, from *koiman* to put to sleep]

coitophobia Sexual intercourse. *Compare* CYPRIDOPHOBIA. [From Latin *coitio* coitus, from *co-* together + *ire, itum* to go]

cold Cheimaphobia, cheimatophobia, frigophobia, or psychrophobia.

colorphobia (US) Coloured people or black people. [From English *color*, US spelling of *colour*, from Latin *color* colour or complexion]

colour (particular) Chrom(at)ophobia.

coloured people Colorphobia (US), Negrophobia.

cometophobia Comets. [From English *comet*, from Greek *kometes* long-haired, from *kome* hair]

comets Cometophobia.

computerphobia Computers. [From English *computer*, from Latin *computare* to calculate, from *com-* together + *putare* to reckon]

*****ebook converter DEMO Watermarks*****

computers Computerphobia or cyberphobia.

confined spaces Claustrophobia or cleisiophobia.

consecotaleophobia Chopsticks, or using chopsticks. [From Latin *consecare* to cut into pieces or chop up, from *con-* completely + *secare* to cut + *talea* a rod or stick]

constipation Coprostanophobia.

contamination Mysophobia, rhyphobia, or scatophobia.

contrary opinions Allodoxaphobia.

coprophobia Faeces (US feces) or dung. [From Greek *kopros* dung]

coprostanophobia Constipation. [From Greek *kopros* dung + *stasis* a standstill]

corpses Necrophobia.

cremnophobia Precipices or steep places. [From Greek *kremannynai* to hang]

criticism Enissophobia.

criticophobia Critics. [From English *critic*, from Greek *kritikos* of or relating to judgement, from *krinein* to judge]

critics Criticophobia.

crossing streets Dromophobia, agyrophobia.

crowds Agoraphobia, demophobia, ochlophobia.

crucifixes Staurophobia.

cryophobia Frost or ice. [From Greek *kryos* frost]

cyberphobia Another name for *computerphobia*. [From Greek *kybernetes* a steersman]

*****ebook converter DEMO Watermarks*****

cycling or cyclists Cyclophobia.

cyclones Anemophobia.

cyclophobia Cycling or cyclists. [From English *cycle*, from Greek *kyklos* a wheel]

cynophobia Another name for *canophobia*. [From Greek *kyon*, *kynos* a dog]

cyprianophobia Prostitutes. [From Greek *Kypris* Venus, the goddess of love]

cypridophobia Venereal disease and sexual activity. *Compare* COITOPHOBIA, GENOPHOBIA. [From Greek *Kypris* Venus, the goddess of love]

daemonophobia *See* DEMONOPHOBIA.

dampness Hygrophobia.

dancing Chorophobia.

darkness Achluophobia, nyctophobia, scotophobia.

dawn Eosophobia.

daylight Phengophobia.

death and dying Thanatophobia, necrophobia.

decidophobia Decisions or decision making. [From English *decide*, from Latin *decidere* to decide, from *de* away + *caedere* to cut]

decisions Decidophobia.

defecation Rhypophobia.

deformity Dysmorphophobia.

deipnophobia Dinner parties or dining. [From Greek *deipnon* dinner]

dementia Dementophobia.

dementophobia Dementia or insanity. [From Latin *dementare* to drive mad, from *de* from + *mens, mentis* mind]

demonophobia Demons. Also spelt *daemonophobia*. [From Greek *daimon* a spirit or deity]

demons Demonophobia.

demophobia Crowds. [From Greek *demos* the people]

dendrophobia Trees. [From Greek *dendron* a tree]

depth Bathophobia.

dermatopathophobia Skin disease. [From Greek *derma, dermatos* skin + *pathos* suffering]

dermatophobia Skin. *Compare* DORAPHOBIA. [From Greek *derma, dermatos* skin]

deserted places Eremophobia.

design (doctrine of) Teleophobia.

destitution Peniaphobia.

devil Satanophobia.

diabetes Diabetophobia.

diabetophobia Diabetes. [From English *diabetes*, from Greek *diabetes* a siphon, from *dia* through + *bainein* to go]

didaskaleinophobia Teaching. [From Greek *didaskalein* to teach]

dikephobia Justice. [From Greek *dike* trial]

dinner parties or dining Deipnophobia.

dipsophobia Drinks or drinking. [From Greek *dipsa* thirst]

dirt Coprophobia, mysophobia, rhyphobia, scatophobia.

dirty (being) Automysophobia.

disease Pathophobia.

disease (contracting a specific) Nosophobia or monopathophobia.

disorder Ataxiophobia or ataxophobia.

doctors Iatrophobia.

dogs Canophobia or cynophobia.

dolls Pupaphobia.

domatophobia Being confined at home. *Compare* OIKOPHOBIA. [From Greek *domation* diminutive of *doma* a house]

doraphobia Fur. *Compare* DERMATOPHOBIA. [From Greek *dora* skinning]

draughts (US drafts) Aerophobia or anemophobia.

drinking Dipsophobia, phobodipsia, potophobia.

dromophobia Crossing streets. [From Greek *dromos* a public way]

drugs (medicinal) Pharmacophobia.

dung Coprophobia, rhyphobia, or scatophobia.

dust Amathophobia.

duty (neglecting) Paraleipophobia.

dysmorphophobia Any personal physical deformity (for more detail, see the [entry](#) in the main body of the dictionary). [From Greek *dys* bad or abnormal + *morphe* form]

dystychiphobia Accidents or bad luck. [From Greek *dys* bad or abnormal + *tyche* luck]

*****ebook converter DEMO Watermarks*****

eating Cibophobia, phagophobia.

ecclesiophobia The Church and its traditions. [From Greek *ekklesia* the church]

economic globalization Globophobia.

ecophobia See OIKOPHOBIA.

emetophobia Vomiting. [From Greek *emetikos* causing vomiting, from *emein* to vomit + *-itikos* resembling or marked by]

empty spaces Kenophobia.

endlessness Apeirophobia.

England or English people or culture Anglophobia.

enissophobia Criticism. [From Greek *enissein* to attack or reproach]

entomophobia Insects. [From Greek *entomon* an insect]

eosophobia Dawn or sunrise. [From Greek *eos* dawn]

ephebophobia Adolescents. [From Latin *ephebus* an adolescent, from Greek *ephebos* a young citizen from 18 to 20 years of age, from *epi* above + *hebe* young manhood]

epistaxiophobia Nosebleeds. [From Greek *epistazein* to shed in drops, from *epi* on + *stazein* to drip]

epistemophobia Knowledge. [From Greek *episteme* knowledge]

equinophobia Another name for hippophobia. [From Latin *equinus* of or pertaining to horses, from *equus* a horse]

erection (loss of during intercourse) Mesomalacophobia.

erect penises Ithyphallophobia.

eremophobia Solitude, loneliness, or deserted places. [From Greek *eremos* a

*****ebook converter DEMO Watermarks*****

desert]

ergasiophobia Behaviour or action. *Compare* ERGOPHOBIA, PONOPHOBIA. [From Greek *ergasia* work or business]

ergophobia Work. *Compare* ERGASIOPHOBIA, PONOPHOBIA. [From Greek *ergon* work]

erotica Cypridophobia, erotophobia, or pornophobia.

erotophobia Sex. *Compare* GENOPHOBIA. [From Greek *eros* love]

erythrophobia Blushing or the colour red. [From Greek *erythros* red]

escalators Bathmophobia.

Europe or the European Union (EU) Europhobia.

Europhobia Europe or (more commonly) the European Union (EU). [From English *Europe*, from *Europa* a princess of Tyre in Greek mythology]

everything Pantophobia.

evil eye Ommatophobia.

evil people Scelerophobia.

exhaustion Kopophobia.

eyes Ommatophobia.

faeces (US feces) Coprophobia, rhyphobia, or scatophobia.

failure Atychiphobia or kakorraphiophobia.

Fathers (of the early Church) Paterophobia.

fatigue Kopophobia.

fear Phobophobia.

feathers Pteronophobia.

febriphobia Fever. Also applied to a generalized fear resulting from a rise in body temperature. [From Latin *febris* fever]

feces US spelling of *faeces*.

feminophobia Women. [From Latin *femina* a woman]

fever Febriphobia or pyrexiphobia.

filth Coprophobia, mysophobia, rhyphobia, or scatophobia.

final causes (doctrine of) Teleophobia.

fire Pyrophobia.

fish Ichthyophobia.

flashing lights Selaphobia.

flogging Mastigophobia.

floods Antlophobia.

flowers Anthophobia.

flutes Aulophobia.

flying Aeronausiphobia, aerophobia, or aviophobia.

fog Homichlophobia, nebulophobia.

food Cibophobia, sitophobia, or sitiophobia.

foreigners Xenophobia.

foreign languages Xenoglossophobia.

forests Hylephobia or xylophobia.

forgetting Amnesiophobia.

France or French people or culture Francophobia or Gallophobia.

Francophobia France or French people or culture. [From Latin *Francus* a Frank]

Friday the 13th Parascevedekatriaphobia.

fright Hormephobia.

frigophobia Cold (for a specific Chinese form, see [pa-leng](#) in the main body of the dictionary). [From Latin *frigus* cold]

frogs Batrachophobia, ranidaphobia.

frost Cryophobia.

fun Chaerophobia or hedonophobia.

fur Doraphobia.

gaiety Chaerophobia.

galeophobia Weasels, martens, or (loosely) cats. [From Greek *galee* a weasel or marten]

Gallophobia France or French people or culture. [From Latin *Gallus* a Gaul]

gamophobia Marriage. [From Greek *gamos* marriage]

garlic Alliumphobia.

gatophobia Cats. [From Spanish *gato* a cat]

gelophobia Laughter. [From Greek *gelos* laughter]

geniophobia Chins. [From Greek *genys* a jaw]

genophobia Sex or sexual intercourse. [From Greek *genos* begetting or producing]

*****ebook converter DEMO Watermarks*****

genuphobia Knees, or having a knee bent backwards. [From Latin *genu* a knee]

gephyrophobia Bridges or crossing bridges. [From Greek *gephyra* a bridge]

gerascophobia Ageing or old age. [From Greek *geraskein* to grow old]

Germanophobia Germany or German people or culture. [From English *German*, from Latin *Germanus* German]

Germany or German people or culture Germanophobia, Teutonophobia, Teutophobia.

germs Bacillophobia or bacteriophobia.

gerontophobia Old people or old age. [From Greek *geron*, *gerontos* an old man]

geumaphobia Tastes. [From Greek *geuma* taste]

ghosts Phasmaphobia.

girls Parthenophobia.

glass Hyalophobia.

globalization Globaphobia.

globaphobia Globalization. [From Latin *globus* a globe or sphere]

glossophobia Speaking. [From Greek *glossa* a tongue]

God Theophobia.

gold Aurophobia.

graphophobia Writing. [From Greek *graphein* to write]

Greek language, people, or culture Hellenophobia.

Greek terminology Hellenologophobia.

*****ebook converter DEMO Watermarks*****

gymnophobia Nudity. [From Greek *gymnos* naked]

gynophobia Women. Also spelt *gynophobia*. [From Greek *gyne* a woman]

hadephobia Hell. [From Greek *Hades* the underworld abode of the dead]

haematophobia Blood or the sight of blood. Also called *haemophobia*, *hematophobia* (US), *hemophobia* (US). [From Greek *haima*, *haimatos* blood]

haemophobia Blood or the sight of blood. Also called *haematophobia*, *hematophobia* (US), *hemophobia* (US). [From Greek *haima* blood]

hair (excessive or unwanted) Hypertrichophobia, trichopathophobia, or trichophobia.

halitophobia Bad breath. [From Latin *halitus* breath, from *halare* to breathe]

hamartophobia Sin. *Compare* PECCATOPHOBIA. [From Greek *hamartia* sin or error of judgement]

haphephobia Being touched by another person. Also spelt *aphephobia*. [From Greek *haphe* touch]

haptophobia Being touched by another person. [From Greek *haptein* to touch]

heart disease or heart attacks Cardiophobia.

heat Thermophobia.

heaven Uranophobia.

hedonophobia Pleasure. [From Greek *hedone* pleasure]

heights Acrophobia, hypsosophobia.

heliophobia The sun or sunlight. *Compare* PHENGOPHOBIA, PHOTOPHOBIA. [From Greek *helios* the sun]

hell Stygiophobia, hadephobia.

hellenologophobia Greek terminology or scientific jargon. [From Greek *Hellen* a Greek + *logos* word, discourse, or reason]

Hellenophobia Greek people or culture. [From Greek *Hellen* a Greek]

helminthophobia Worms. [From Greek *helmins*, *helminthos* a worm]

hematophobia US spelling of *haematophobia*.

hemophobia US spelling of *haemophobia*.

hereditary disorders Patriophobia.

heresy Heresyphobia.

heresyphobia Heresy. [From English *heresy*, from Greek *hairesis* school of thought, from *haireein* to take]

herpetophobia Reptiles. [From Greek *herpeton* a reptile, from *herpein* to creep]

hierophobia Religion or the objects and rituals associated with religion. [From Greek *hieros* sacred]

high open places Aeroacrophobia.

hippophobia Horses. [From Greek *hippos* a horse]

hodophobia Travelling. *Compare* AGORAPHOBIA, AMAXOPHOBIA. [From Greek *hodos* a way]

holes Trypophobia.

home Domatophobia, oikophobia.

home (being away from) Agoraphobia.

homichlophobia Fog or mist. [From Greek *omichle* fog or mist]

homilophobia Sermons or sermonizing. [From Greek *homilia* a sermon, from *homos* the same + *ile* a company]

*****ebook converter DEMO Watermarks*****

homophobia Homosexuals or homosexuality. [From English *homo*(sexual), from Greek *homos* the same + Latin *sexus* sex]

homosexuals or homosexuality Homophobia.

hoplophobia Weapons. [From Greek *hoplon* a weapon]

hormephobia Shock or fright. [From Greek *hormaein* to stir up]

horses Equinophobia or hippophobia.

hospitals Nosocomophobia.

house (one's) Oikophobia. *Compare* DOMATOPHOBIA, ECOPHOBIA.

human beings or humanity Anthropophobia.

humiliation Catagelophobia.

hurricanes Lilapsophobia.

hyalophobia Glass. [From Greek *hyalos* glass]

hydrophobia Water. As a symptom of rabies, hydrophobia is an inability to swallow water as a result of a contraction of the throat. *Compare* HYDROPHOBIAPHOBIA. [From Greek *hydor* water]

hydrophobiaphobia Rabies. *Compare* HYDROPHOBIA. [From English *hydrophobia*]

hygrophobia Dampness or moisture. [From Greek *hygros* wet]

hylephobia Forests or wood. Also spelt *hylophobia*. [From Greek *hyle* wood]

hypoaeiaphobia Responsibility. [From Greek *hypo* under + *aigis* the shield of Zeus]

hypengyophobia Responsibility. [From Greek *hypengyos* liable to punishment, from *hypo* under + *engye* surety]

hypertrichophobia Excessive personal bodily hair. *Compare*

*****ebook converter DEMO Watermarks*****

TRICHOPATHOPHOBIA, TRICHOPHOBIA. [From Greek *hyper* over + *thrix*, *trichos* hair]

hypnophobia Falling asleep. [From Greek *hypnos* sleep]

hypsosophobia Heights. [From Greek *hypsos* height]

iatrophobia Doctors or visiting a doctor. [From Greek *iatros* a physician]

ice Cryophobia.

ichthyophobia Fish. [From Greek *ichthys* a fish]

iconophobia Images. [From Greek *eikon* an image, from *eikenai* to be like]

illness Pathophobia.

illness (contracting a specific) Nosophobia.

images Iconophobia.

imperfection Atelophobia.

impotence during intercourse Mesomalacophobia.

incompleteness Atelophobia.

infinity Apeirophobia.

injections Trypanophobia.

injury Traumatophobia.

inoculation (performing) Vaccinophobia.

insanity Dementophobia, lyssophobia, or phrenophobia.

insects Entomophobia.

intercourse (sexual) Genophobia.

iophobia 1. Being poisoned. 2. Rusty objects. [From Greek *ios* poison or rust]

iron Siderophobia.

Italophobia Italy or Italian people or culture. [From Greek *Italia* Italy]

Italy or Italian people or culture Italophobia.

ithyphallophobia Erect penises. [From Greek *ithyphallos* an erect penis, from *ithys* straight + *phallos* an erect penis]

jealousy Zelophobia.

joint, stiffening of Ankylophobia.

Judaephobia Judaism. [From Latin *iudaicus* pertaining to Judaism, from *Iuda* Judah, a son of Israel]

Judaism Judaephobia.

jumping Catapedaphobia.

justice Dikephobia.

kaino(to)phobia See CAENOPHOBIA.

kakohydrophobia See CACOHYDROPHOBIA.

kakorr(h)aphiophobia Failure. [From Greek, *kakorrhaphia* mischievousness, from *kakos* bad + *raphe* a stitching]

katagelophobia See CATAGELOPHOBIA.

kathisophobia Sitting down. Also spelt *cathisophobia*. [From Greek *kathizein* to cause to sit down, from *kata* down + *hizein* to seat]

kenophobia Empty spaces. [From Greek *kenos* empty]

keraunophobia Thunder. [From Greek *keraunos* a thunderbolt]

kinesophobia Motion or movement. Also called *kinetophobia*. [From Greek *kinesis* movement, from *kineein* to move]

kissing Philemaphobia.

kleptomaniac (becoming) Kleptophobia.

kleptophobia Thieves, thieving, burglary, or becoming a kleptomaniac. [From Greek *kleptein* to steal]

knee, bending back of Genuphobia.

knees Genuphobia.

knives Aichmophobia.

knowledge Epistemophobia.

kolpophobia Breasts. [From Greek *kolpos* a breast]

kopophobia Becoming tired or exhausted. [From Greek *kopos* fatigue]

kymophobia Waves. [From Greek *kyma* a wave]

laevophobia The left-hand side of one's body or other objects. US *levophobia*. [From Latin *laevus* left]

lakes Limnophobia.

laliophobia Speaking or making errors while speaking. Also spelt *lalophobia*. [From Greek *lalia* chatter, from *lalein* to babble]

large objects Macrophobia or megalophobia.

laughed at (being) Catagelophobia.

laughter Gelophobia.

learning Sophophobia.

leaves Phyllophobia.

*****ebook converter DEMO Watermarks*****

left-hand side Laevophobia or levophobia.

lepraphobia Another name for *leprophobia*.

leprophobia Leprosy. [From English *leprosy*, from Greek *lepros* scaly, from *lepis* a scale, from *lepein* to peel]

leprosy Lepraphobia or leprophobia.

levophobia US spelling of *laevophobia*.

lice Pediculophobia.

lies Mythophobia.

light Photophobia. *Compare* HELIOPHOBIA, PHENGOPHOBIA, SELAPHOBIA.

lightning Astraphobia, selaphobia.

lilapsophobia Hurricanes or tornadoes. [From Greek *lailaps* a hurricane]

limnophobia Lakes, ponds, or pools. [From Greek *limne* a body of water enclosed by land]

locked up (being) Clithrophobia.

logocrisiaphobia Censorship. [From Greek *logokrisia* censorship, from *logos* word + *krisis* judgement]

logophobia Words. [From Greek *logos* word]

loneliness Autophobia, eremophobia, monophobia.

long words Hellenologophobia or sesquipedalophobia.

looked at (being) Scopophobia.

looking down from a high place Bathophobia.

looking up Anablephobia.

lousiness Pediculophobia.

love Philophobia.

luck (bad) Dystychiphobia.

lutraphobia Otters. [From Latin *lutra* an otter]

lyssophobia Madness, hydrophobia, or rabies. [From Greek *lyssa* madness or rabies]

machines Mechanophobia.

macrophobia Large objects. [From Greek *makros* large]

madness Lyssophobia or phrenophobia.

maieusiophobia Childbirth or labour. [From Greek *maieusis* midwifery, from *maia* a midwife]

male sex Androphobia.

many things Polyphobia.

marriage Gamophobia.

martens Galeophobia.

mastigophobia Being flogged or whipped. [From Greek *mastix*, *mastigos* a whip]

meat Carnophobia.

mechanophobia Machines or machinery. [From Greek *mechane* a contrivance, machine]

medicines Pharmacophobia.

megalophobia Large objects. [From Greek *megas*, *megalou* large]

melanophobia The colour black [From Greek *melas*, *melanos* black]

*****ebook converter DEMO Watermarks*****

melissophobia Bees. [From Greek *melissa* a bee]

melophobia Music. [From Greek *melos* a song]

memories Mnemophobia.

men Androphobia.

menophobia Menstruation. [From Greek *men* a month]

menstruation Menophobia.

mesomalacophobia Loss of erection or impotence during intercourse. [From Greek *mesos* middle + *malakos* soft]

metal Metallophobia.

metallophobia Metal. *Compare* SIDEROPHOBIA. [From Greek *metallon* a mine]

metathesiophobia Changes of position or rearrangements. [From Greek *metatithenai* to transpose, from *meta* among, with, or beside + *tithenai* to place]

meteorophobia Meteors or one's success being short-lived (overnight success). [From English *meteor*]

meteors Meteorophobia.

metrophobia Poetry. [From Greek *metron* a measure]

mice Muriphobia or musophobia.

microphobia Small objects or creatures. *Compare* ACAROPHOBIA, PARASITIOPHOBIA. [From Greek *mikros* small]

mirrors Catoptrophobia, spectrophobia.

missiles Ballistophobia.

mist Homichlophobia, nebulophobia.

mites Acarophobia.

mnemophobia Memories. [From Greek *mneme* memory, from *mnasthai* to remember]

mobs Demophobia or ochlophobia.

moisture Hygrophobia.

money Aurophobia or chrematophobia.

monopathophobia Contracting a specific disease. [From Greek *monos* single + *pathos* suffering]

monophobia Being alone. [From Greek *monos* single or alone]

monsters Teratophobia.

moon Selenophobia.

motion or movement Kinesophobia or kinetophobia.

mucus Blennophobia or myxophobia.

muriphobia Mice. [From Latin *mus*, *muris* a mouse]

mushrooms Mycophobia.

music Melophobia or musicophobia.

musicophobia Music. [From English *music*]

musophobia Mice. [From Latin *mus*, *muris* a mouse]

mycophobia Mushrooms. [From Greek *mykes* a mushroom]

myrmecophobia Ants. [From Greek *myrmex* an ant]

mysophobia Contamination or dirt. [From Greek *mysos* defilement]

mythophobia Lies. [From Greek *mythos* a myth]

*****ebook converter DEMO Watermarks*****

myxophobia Mucus. *Compare* BLENNOPHOBIA. [From Greek *myxa* mucus]

name (a particular) Onomatophobia.

nautophobia The sea. [From Greek *nautes* a sailor, from *naus* a ship]

nebulophobia Fog or mist. [From Latin *nebula* mist or cloud]

necrophobia Death or corpses. [From Greek *nekros* dead or dead body]

needles Belonephobia.

neglecting work or duty Paraleipophobia. Also spelt *paralipophobia*.

Negrophobia Black people. [From English *Negro*, from Latin *niger*, *nigri* black]

neophobia New or novel foods (**dietary neophobia**) or other things. *Compare* CAENOPHOBIA. [From Greek *neos* new]

nephophobia Clouds. [From Greek *nephos* a cloud]

nettle stings Cnidophobia.

new things or ideas Caenophobia or neophobia.

newts Batrachophobia.

night Nyctophobia.

noise Acousticophobia.

nosebleeds Epistaxiophobia.

nosocomophobia Hospitals. [From Greek *nosokomeion* a hospital, from *nosos* a disease + *komeein* to tend]

nosophobia Disease or contracting a disease. [From Greek *nosos* a disease]

novelty Caenophobia, neophobia.

novercaphobia Stepmothers. [From Latin *noverca* a stepmother]

nudity Gymnophobia.

numbers Arithmophobia.

nyctophobia The night or darkness. [From Greek *nyx*, *nyktos* the night]

obscenity Pornophobia.

ochlophobia Crowds or mobs. [From Greek *ochlos* a crowd]

odontophobia Teeth or having one's teeth worked on by a dentist. [From Greek *odon*, *odontos* a tooth]

odour (body) (US odor) Bromidrosiphobia.

odours (US odors) Osmophobia.

odynophobia Pain. [From Greek *odyne* pain]

oecophobia See OIKOPHOBIA.

oikophobia One's house or home. *Compare* DOMATOPHOBIA. [From Greek *oikos* a house]

old age Gerontophobia or gerascophobia.

old people Gerontophobia.

ombrophobia Rain or rainstorms. Applied more often to plants than to human beings. [From Greek *ombros* a rainstorm]

ommatophobia Eyes or the evil eye. [From Greek *omma*, *ommatos* an eye]

oneself Autophobia.

onomatophobia A particular name or word. [From Greek *onoma*, *onomatos* a name]

ophidiophobia Snakes. [From Greek *ophidion* a little snake, diminutive of

*****ebook converter DEMO Watermarks*****

ophis a snake]

opinions, contrary or other Allodoxaphobia.

ornithophobia Birds. [From Greek *ornis*, *ornithos* a bird]

osmophobia Odours or smells. *Compare* BROMIDROSIPHOBIA. [From Greek *osme* a smell]

osphresiophobia Odours or smells. *Compare* BROMIDROSIPHOBIA. [From Greek *osphresis* smell]

ostraconophobia Shellfish. [From Greek *ostrakon* a shell]

otters Lutraphobia.

overnight success Meteorophobia.

overwork Ergophobia or ponophobia.

paedophobia Children or boys. US *pedophobia* or *pediophobia*. *Compare* PARTHENOPHOBIA. [From Greek *pais*, *paidos* a child or a boy]

pain Algophobia or odynophobia.

palindromes Aibohphobia.

pamphobia A variant spelling of *panphobia*.

panophobia A variant spelling of *panphobia*.

panphobia Sudden causeless fear or panic, hence a phobia without a phobic stimulus. Often misdefined and misinterpreted as fear of everything, on a mistaken assumption (a folk etymology) that it derives from the Greek *pan* all. *Compare* PANTOPHOBIA, POLYPHOBIA. [From Greek *Pan* the god of pastures, flocks, and woods, who supposedly inspired fears]

pantophobia Everything. Often confused with *panphobia*, which has a different meaning and etymology. *Compare* POLYPHOBIA. [From Greek *pas*, *pantos* all]

papaphobia The pope or popery. [From Latin *papa* a pope]

paper Papyrophobia.

papyrophobia Paper. [From Greek *papyros* the paper-reed]

paraleipophobia Neglecting work or duty. Also spelt *paralipophobia*. [From Greek *paraleipein* to leave aside, from *para* beside + *leipein* to omit]

parascevedekatriaphobia Friday the 13th. Also spelt *paraskevedekatriaphobia* or *paraskevidekatriaphobia*. Compare TRISKAIDEKAPHOBIA. [From Latin *parasceve* and Greek *paraskeue* Friday or the day of preparation (for the Jewish sabbath), from Greek *para* beside or beyond + *skeuos* a utensil + *dekatreis*, *dekatria* thirteen, from *deka* ten + *treis*, *tria* three]

parasites Parasitiophobia.

parasitiophobia Parasites. Compare ACAROPHOBIA, MICROPHOBIA. [From Greek *parasitos* a parasite, from *para* beside + *sitos* corn]

parthenophobia Virgins or young girls. Compare PAEDOPHOBIA. [From Greek *parthenos* a virgin]

parturiphobia Childbirth or labour. [From Latin *parturire* to be in labour]

paterophobia Fathers (of the early Church). [From Greek *pater* a father]

pathophobia Disease. [From Greek *pathos* suffering]

patriophobia Hereditary disorders. [From Greek *patrios* ancestral or native]

peanut butter Arachibutyrophobia.

peccatophobia Sinning. Also spelt *peccatiphobia*. Compare HAMARTOPHOBIA. [From Latin *peccare* to sin]

pediculophobia Lousiness or infestation of lice. [From Latin *pediculus* a little louse]

pedophobia or pediophobia See [PAEDOPHOBIA](#).

peladophobia Baldness or becoming bald. [From French *pelade* alopecia, from *peler* to deprive of hair, pluck, or peel]

peniaphobia Poverty or destitution. [From Greek, *penia* poverty, from *penes* a destitute or needy person]

penises Ithyphallophobia or phallophobia.

phagophobia Eating. [From Greek *phagein* to eat]

phalacrophobia Baldness. [From Greek *phalakros* bald-headed]

phallophobia Penises. [From Greek *phallos* a penis]

phantoms Phasmaphobia.

pharmacophobia Medicines or medicinal drugs. [From Greek *pharmakon* a drug]

phasmaphobia Ghosts or phantoms. Also spelt *phasmophobia*. [From Greek *phasma* a spectre]

phengophobia Daylight. Compare HELIOPHOBIA, PHOTOPHOBIA, SELAPHOBIA. [From Greek *phengos* light, daylight]

philemaphobia Kissing. [From Greek *philema* a kiss]

philophobia Love. [From Greek *phileein* to love]

philosophobia Philosophy or philosophers. [From English *philosophy*, from Greek *philosophia* philosophy, from *philos* friend, from *phileein* to love + *sophia* wisdom]

philosophy or philosophers Philosophobia.

phobanthropy See ANTHROPOPHOBIA.

phobias Phobophobia.

*****ebook converter DEMO Watermarks*****

phobodipsia Drinking.

phobophobia Fear of phobias. [From Greek *phobos* fear]

phonophobia Sounds or speaking aloud. [From Greek *phone* a sound or voice]

photophobia Light. This word more usually denotes a physiological hypersensitivity to light caused by conjunctivitis, etc. *Compare* HELIOPHOBIA, PHENGOPHOBIA, SELAPHOBIA. [From Greek *phos*, *photos* light]

phrenophobia Thinking or madness. [From Greek *phren* mind, originally midriff, the supposed seat of the mind]

phronemophobia Thinking. [From Greek *phronema* thought, from *phronein* to think]

phthisiophobia Tuberculosis. [From English *phthisis* tuberculosis, from Greek *phthisis* consumption]

phyllophobia Leaves. [From Greek *phyllon* a leaf]

places (certain) Topophobia.

plants Botanophobia.

plutophobia Wealth. [From Greek *ploutos* wealth]

pneumatophobia Spiritual things. [From Greek *pneuma*, *pneumatos* spirit]

pnigophobia Choking or suffocating. Also called *pnigerophobia*. [From Greek *pnigos* choking]

poetry Metrophobia.

pogonophobia Beards or bearded men. [From Greek *pogon* a beard]

poinophobia Punishment. *Compare* RHABDOPHOBIA. [From Greek *poinē* penalty]

pointed objects Aichmophobia or belonephobia.

*****ebook converter DEMO Watermarks*****

poison or poisoning Iophobia or toxiphobia.

politicophobia Politics or politicians. [From English *politics*, from Greek *politikos* of the people, from *polites* a citizen]

politics or politicians Politicophobia.

polyphobia Many things. *Compare* PANTOPHOBIA. [From Greek *polys* many]

ponds Limnophobia.

ponophobia Overwork. *Compare* ERGASIOPHOBIA, ERGOPHOBIA. [From Greek *ponos* toil]

pools Limnophobia.

pope or popery Papaphobia.

pornophobia Prostitutes or obscenity. [From Greek *porne* a prostitute]

porphyrophobia Purple. [From Greek *porphyra* purple dye]

potamophobia Rivers. [From Greek *potamos* a river]

potophobia Drinks or drinking. [From Latin *potare* to drink]

poverty Peniaphobia.

precipices Cremnophobia.

proctophobia The anus or rectum. [From Greek *proktos* the anus]

projectiles Ballistophobia.

prostitutes Cyprianophobia or pornophobia.

psellismophobia Stuttering or stammering. [From Greek *psellismos* stammering, from *psellos* stammer]

psychrophobia Cold. [From Greek *psychros* cold]

pteronophobia Feathers. [From Greek *pteron* a wing]

public places Agoraphobia.

punishment Poinophobia.

pupaphobia Dolls or puppets. [From Latin *pupa* a doll or puppet]

puppets Pupaphobia.

purple Porphyrophobia.

pyrexia Fever. [From Greek *pyrexia* fever, from *pyr* fire]

pyrophobia Fire. [From Greek *pyr* fire]

rabies Hydrophobia, lyssophobia.

railways Siderodromophobia or sideromophobia.

rain or rainstorms Ombrophobia.

ranidaphobia Frogs. [From Latin Ranidae the frog family, from *rana* a frog]

rearrangements Metathesiophobia.

rectum Proctophobia.

red (colour) Erythrophobia, rhodophobia.

referring to oneself Autophoby.

reflections Catoptrophobia, spectrophobia.

relatives Syngenesophobia.

religion Hierophobia.

reptiles Herpetophobia.

responsibility Hypaegiophobia or hypenigophobia.

*****ebook converter DEMO Watermarks*****

rhabdophobia Being beaten with a rod. *Compare* POINEPHOBIA. [From Greek *rhabdos* a rod]

rhodophobia The colour red or red objects. [From Greek *rhodon* a rose]

rhyphobia Dirt, defecation, or faeces. Also spelt *rupophobia*. [From Greek *rhypos* dirt]

rhytiphobia Wrinkles. [From Greek *rhytis* a wrinkle]

ridicule Catagelophobia.

rivers Potamophobia.

rods (being beaten with) Rhabdophobia.

Russia or Russian people or culture Russophobia.

Russophobia Russia or Russian people or culture. [From English *Russia*]

rusty objects Iophobia.

Satan Satanophobia.

Satanophobia Satan or the devil. [From Greek *Satan* the Devil, from Hebrew *satan* an enemy]

scabies Scabiophobia.

scabiophobia Scabies. [From English *scabies*, from Latin *scabies* itch, from *scabere* to scratch]

scatophobia Contamination by faeces. [From Greek *skor*, *skatos* dung]

scelerophobia Bad or evil people. [From Latin *scelus*, *sceleris* a crime]

school School phobia.

school phobia School or attending school. [From English *school*, from Greek *schole* a lecture or a school]

scientific terminology Hellenologophobia.

sciophobia Shadows. [From Greek *skia* a shadow]

scoleciphobia Worms. Also spelt *skoleciphobia*. [From Greek *skolex*, *skolekos* a worm]

scopophobia Being looked at. [From Greek *skopeein* to look at]

Scotland or Scots people or culture Scotophobia.

scotomaphobia Blind spots in the visual field. [From Greek *skotoma* dizziness, from *skotos* darkness]

scotophobia Darkness. Not to be confused with *Scotophobia*. [From Greek *skotos* darkness]

Scotophobia Scotland or Scots people or culture. Not to be confused with *scotophobia*. [From English *Scot*, from Latin *Scotus* a Scot]

scratched (being) Amychophobia.

scrutiny by other people Social phobia.

sea Thalassophobia.

selachophobia Sharks. [From Greek *selachos* a shark]

selaphobia Flashing lights or lightning. [From Greek *selas* brightness]

selenophobia The moon. [From Greek *selene* the moon]

self-reference Autophoby.

semen Spermatophobia.

sermonizing Homilophobia.

sesquipedalophobia Long words. [From Latin *sesqui-* one and a half + *pedalis* of the foot]

sewer water Cacohydrophobia.

sexual activity Cypridophobia, erotophobia, or genophobia.

sexual intercourse Coitophobia, cypridophobia, erotophobia, or genophobia.

shadows Sciophobia.

sharks Selachophobia.

sharp objects Aichmophobia or belonephobia.

shellfish Ostrakonophobia.

shock Hormephobia.

short-lived success Meteorophobia.

siderodromophobia Railways or trains. Also called *sideromophobia*. [From Greek *sideros* iron + *dromos* running]

sideromophobia Railways or trains. Also called *siderodromophobia*. [From Greek *sideroma* iron fitting, from *sideros* iron]

siderophobia Iron. More often in reference to a property of chemicals than people. *Compare* METALLOPHOBIA. [From Greek *sideros* iron]

sinning Hamartophobia, peccatophobia.

Sinophobia China or Chinese people or culture. [From Greek *Sinai* Chinese (*pl.*)]

sitiophobia Another name for *sitophobia*.

sitophobia Food. [From Greek *sitos* grain or food]

sitting down Cathisophobia, kathisophobia.

skin Dermatophobia.

skin disease Dermatopathophobia.

*****ebook converter DEMO Watermarks*****

skoleciphobia See SCOLECIPHOBIA.

sleep Hypnophobia.

slime Blennophobia or myxophobia.

small creatures Acarophobia.

small objects Microphobia.

smell (body) Bromidrosiphobia.

smells Osmophobia or osphresiophobia.

snakes Ophidiophobia.

snow Chionophobia.

social embarrassment Social phobia.

social phobia Scrutiny by other people, being the focus of attention, or social embarrassment (for more detail, see [SOCIAL ANXIETY DISORDER](#) in the main body of the dictionary). [From English *social*, from Latin *socius* a companion]

solitude Eremophobia.

sophophobia Learning or wisdom. [From Greek *sophia* wisdom]

sounds Phonophobia.

sour tastes Acerbophobia or acerophobia.

speaking Glossophobia, phonophobia, or laliophobia.

spectrophobia Mirrors or one's own reflection. Also called *catoptrophobia*. [From Latin *spectrum* an appearance, from *specere* to look at]

speech errors Laliophobia.

speed Tachophobia.

*****ebook converter DEMO Watermarks*****

sperm Spermatophobia.

spermatophobia Sperm or semen. [From Greek *sperma*, *spermatos* seed or semen, from *speirein* to sow]

spheksophobia Wasps. [From Greek *sphex*, *sphekos* a wasp]

spiders Arachnophobia.

spiritual things Pneumatophobia.

stairs Bathmophobia, climacophobia.

stammering Psellismophobia.

standing upright Stasiphobia or stasibasiphobia.

stars (the influence of) Astrophobia.

stasibasiphobia Standing and walking upright. Also spelt *stasobasophobia*. [From Greek *stasis* a standing + *basis* a step, from *bainein* to step or go]

stasiphobia Standing. Also spelt *stasophobia*. [From Greek *stasis* a standing]

staurophobia Crucifixes. [From Greek *stauros* a cross]

stealing Kleptophobia.

steep places Cremnophobia.

stepmothers Novercaphobia.

stiffening of a joint Ankylophobia.

stings Cnidophobia.

strangers Xenophobia.

streets (crossing) Dromophobia, agyrophobia.

stuttering Psellismophobia.

*****ebook converter DEMO Watermarks*****

stygiophobia Hell. [From Greek *Stygios* Stygian, from *Styx* one of the rivers of Hades, from *stygein* to hate]

subways (US) Bathysiderodromophobia.

suffocation Anginophobia, pnigophobia, or pnigerophobia.

sun or sunlight Heliophobia, phengophobia, photophobia.

surgery Tomophobia.

symbolophobia Symbols or symbolic representations. [From English *symbol*, from Greek *symbolon* a token, from *syn* together + *ballein* to throw]

symbols Symbolophobia.

symmetrophobia Symmetry. [From Greek *symmetria* symmetry, from *syn* together + *metron* a measure]

symmetry Symmetrophobia.

syngenesophobia Relatives. [From Greek *syn* together + *genesis* generation]

syphilis Syphilophobia.

syphilophobia Syphilis. [From the title of Fracastoro's Latin poem of 1530, whose hero *Syphilus* is infected]

tachophobia Speed. [From Greek *tachos* speed]

taeniophobia Tapeworms. Also spelt *taeniphobia*. Compare TRICHINOPHOBIA. [From Greek *tainia* a band, a tapeworm]

talking Glossophobia, laliophobia, or phonophobia.

tapeworms Taeniophobia.

taphophobia Being buried alive. Also spelt *taphophobia*. [From Greek *taphos* a grave]

tastes Geumaphobia.

*****ebook converter DEMO Watermarks*****

taurophobia Bulls. [From Greek *tauros* a bull]

teaching Didaskaleinophobia.

technology Technophobia.

technophobia Technology. [From English *techno(logy)*, from Greek *techne* art or skill]

teddy bears Arctophobia.

teeth Odontophobia.

teleophobia The doctrine of design or final causes in nature. [From Greek *telos* end]

teniophobia US spelling of *taeniophobia*.

teratophobia Monsters or giving birth to a monster. [From Greek *teras*, *teratos* a monster]

Teutonophobia Germany or German people or culture. [From Latin *Teutoni* the Teutons]

Teutophobia Another name for *Teutonophobia*.

thalassophobia The sea. Also spelt *thalassiophobia*. [From Greek *thalassa* the sea]

thanatophobia Death and dying (for more detail, see the [entry](#) in the main body of the dictionary). [From Greek *thanatos* death]

theatres and theatre-going (US theaters and theater-going) Theatrophobia.

theatrophobia Theatres and theatre-going. [From English *theatre*, from Greek *theatron* a theatre, from *theaesthai* to see]

theophobia God. [From Greek *theos* a god]

thermophobia Heat. [From Greek *therme* heat]

*****ebook converter DEMO Watermarks*****

thieves or thieving Kleptophobia.

thinking Phronemophobia or phrenophobia.

thirteen (the number) Triskaidekaphobia.

thrown objects Ballistophobia.

thunder or thunderstorms Astraphobia, brontophobia, keraunophobia, or tonitrophobia.

time Chronophobia.

toads Batrachophobia or bufophobia.

tocophobia Childbirth or labour. Also spelt *tokophobia*. [From Greek *tokos* childbirth, from *tiktein* to bear]

tokophobia See TOCOPHOBIA.

tomophobia Surgery. [From Greek *tomos* a slice, from *temnein* to cut]

tonitrophobia Thunder. [From Latin *tonitrus* thunder]

topophobia Certain places. [From Greek *topos* a place]

tornadoes Lilapsophobia.

touched (being) Chiraptophobia, haptophobia, or (h)aphophobia.

toxiphobia Poison or being poisoned. Also spelt *toxicophobia* or *toxophobia*. [From Greek *toxikon* arrow-poison, from *toxon* a bow]

trains Siderodromophobia or sideromophobia.

traumatophobia Injury or wounds. [From Greek *trauma*, *traumatos* a wound]

travelling Hodophobia.

travelling alone Agoraphobia.

*****ebook converter DEMO Watermarks*****

travelling in a vehicle Amaxophobia.

trees Dendrophobia.

trembling Tremophobia.

tremophobia Trembling. Also spelt *tremaphobia*. [From Latin *tremere* to shake]

trichinophobia Trichinosis or infestation by trichinae worms. *Compare* TAENIOPHOBIA. [From Greek *trichinos* of hair, from *thrix*, *trichos* hair]

trichinosis Trichinophobia.

trichopathophobia Hair growing where it is unwanted. *Compare* HYPERTRICHOPHOBIA, TRICHOPHOBIA. [From Greek *thrix*, *trichos* hair + *pathos* suffering]

trichophobia Hair. *Compare* HYPERTRICHOPHOBIA, TRICHOPATHOPHOBIA. [From Greek *thrix*, *trichos* hair]

triskaidekaphobia The number thirteen. *Compare* PARASCEVEDEKATRIAPHOBIA. [From Greek *tr(e)iskaideka* thirteen]

tropophobia Change. [From Greek *tropos* a turn]

trypanophobia Injections. [From Greek *trypanon* a borer, from *trypaein* to bore]

tuberculophobia Tuberculosis. [From English *tuberculosis*, from Latin *tuberculum* a little bump or swelling, from *tuber* a bump or swelling]

tuberculosis Phthisiophobia or tuberculophobia.

tyrannophobia Tyrants. [From English *tyran(t)*, from Latin *tyrannus* and Greek *tyrannos* a tyrant]

tyrants Tyrannophobia.

underground trains Bathysiderodromophobia.

*****ebook converter DEMO Watermarks*****

uranophobia Heaven. [From Greek *ouranos* heaven]

vaccination Vaccinophobia.

vaccinophobia Performing a vaccination or being vaccinated. [From English *vaccin-(ation)*, from Latin *vaccinus* of a cow, from *vacca* a cow]

vehicles Amaxophobia.

venereal disease Cypridophobia.

vermin Vermiphobia.

vermiphobia Vermin or worms. [From Latin *vermis* a worm]

virgins Parthenophobia.

vomiting Emetophobia.

walking or walking upright Basiphobia or stasibasiphobia.

wasps Spheksophobia.

water Aquaphobia or hydrophobia.

waves Kymophobia.

weakness Asthenophobia.

wealth Chrematophobia or plutophobia.

weapons Hoplophobia.

weasels Galeophobia.

whipping Mastigophobia.

wiccaphobia Witches. [From Old English *wicca* a (male) witch]

wild animals Agrizoophobia.

wind Anemophobia.

wind instruments Aulophobia.

wisdom Sophophobia.

witches Wiccaphobia.

women Feminophobia or gynephobia.

women, beautiful Calligynephobia.

wood Hylephobia or xylophobia.

word (particular) Onomatophobia.

words Logophobia.

work Ergophobia, ergasiophobia, or ponophobia.

work (neglecting) Paraleipophobia.

worms Helminthophobia, scoleciphobia, taeniophobia, trichinophobia, or vermiphobia.

wounds Traumatophobia.

wrinkles Rhytiphobia.

writing Graphophobia.

xenoglossophobia Foreign languages. [From Greek *xenos* foreign + *glossa* a tongue or language]

xenophobia Foreigners or strangers or their cultures. [From Greek *xenos* foreign]

xylophobia Forests or wood. [From Greek *xylon* wood]

young girls Parthenophobia.

zelophobia Jealousy. [From Greek *zelos* jealousy]

zenophobia A rare spelling of *xenophobia*.

zoophobia Animals. [From Greek *zoion* an animal]

Appendix II: Abbreviations and symbols

In this appendix, for convenience, Greek letters and numerals precede roman letters. Terms that are more commonly used in their abbreviated forms, such as IQ, RNA, and PET scan, are cross-referenced to the main body of the dictionary where full entries are to be found.

α See ADRENERGIC RECEPTOR, ALPHA FIBRE/MOTOR NEURON, ALPHA MALE, ALPHA MOVEMENT, CRONBACH'S ALPHA.

β See ADRENERGIC RECEPTOR, BETA COEFFICIENT, BETA-ENDORPHIN, BETA-LIPOTROPIN, BETA MOVEMENT, LIKELIHOOD RATIO (2).

γ See GAMMA FIBRE/MOTOR NEURON, GAMMA MOVEMENT, GOODMAN-KRUSKAL GAMMA.

δ See DELTA FIBRE, DELTA MOVEMENT.

η See CORRELATION RATIO.

κ effect See KAPPA EFFECT.

K See KAPPA STATISTIC.

λ See GOODMAN-KRUSKAL LAMBDA.

μ See MU WAVE.

ρ See SPEARMAN RANK CORRELATION COEFFICIENT, SPEARMAN'S RHO.

σ See SIGMA SCORE, STANDARD DEVIATION.

τ effect See KENDALL'S TAU, TAU EFFECT.

φ See PHI COEFFICIENT.

Φ See LUMINOUS FLUX.

*****ebook converter DEMO Watermarks*****

χ^2 See [CHI-SQUARE DISTRIBUTION](#), [CHI-SQUARE TEST](#).

ω See [OMEGA PROCESS](#), [PERCEPTION—CONSCIOUSNESS SYSTEM](#).

2AFC See [TWO-ALTERNATIVE FORCED-CHOICE TASK](#).

2D:4D See [DIGIT RATIO](#).

2-DG See [2-DEOXYGLUCOSE](#).

5-HIAA See [5-HYDROXYINDOLEACETIC ACID](#).

5-HT 5-hydroxytryptamine. See [SEROTONIN](#).

5-HTP See [5-HYDROXYTRYPTOPHAN](#).

6-OHDA See [6-HYDROXYDOPAMINE](#).

16PF Sixteen Personality Factor Questionnaire. See [16PF](#) in the main body of the dictionary.

A See [ADENINE](#), [RESPONSE AMPLITUDE](#).

A-A See [AXOAXONIC](#).

AAS Anabolic androgenic steroid. See [ANABOLIC STEROID](#).

ABA See [APPLIED BEHAVIOUR ANALYSIS](#).

ABC Activating event, beliefs, consequences; or antecedent, behaviour, consequence. See [ABC](#) in the main body of the dictionary.

ABH Actual bodily harm. See [GBH \(1\)](#).

Ac Achievement via conformance. See [CALIFORNIA PSYCHOLOGICAL INVENTORY](#).

ACC See [AGENESIS OF THE CORPUS CALLOSUM](#), [ANTERIOR CINGULATE CORTEX](#).

ACh See [ACETYLCHOLINE](#).

AChE See [ACETYLCHOLINESTERASE](#).

*****ebook converter DEMO Watermarks*****

ACL See [ADJECTIVE CHECK LIST](#).

ACT See [ACCEPTANCE AND COMMITMENT THERAPY](#).

ACT* See [ACT*](#) in the main body of the dictionary.

ACTH See [ADRENOCORTICOTROPIC HORMONE](#).

ACTP See [AMERICAN COLLEGE TESTING PROGRAM](#).

AD See [ALZHEIMER'S DISEASE](#).

A-D See [AXODENDRITIC](#).

ADAM Androgen decline in the ageing male. US *androgen decline in the aging male*. See [IRRITABLE MALE SYNDROME](#).

ADC AIDS dementia complex. See [HIV DEMENTIA](#).

ADD Attention-deficit disorder. See [ATTENTION-DEFICIT/HYPERACTIVITY DISORDER](#).

ADH Antidiuretic hormone. See [VASOPRESSIN](#).

ADHD See [ATTENTION-DEFICIT/HYPERACTIVITY DISORDER](#).

ADP Adenosine diphosphate. See [ADP](#) in the main body of the dictionary.

AEP See [AVERAGE EVOKED POTENTIAL](#).

AER Average evoked response. See [AVERAGE EVOKED POTENTIAL](#).

AF See [AUDIBILITY FUNCTION](#).

AFF See [AUDITORY FLUTTER FUSION](#).

afp See [ALPHA-FOETOPROTEIN](#).

AgCC See [AGENESIS OF THE CORPUS CALLOSUM](#).

AGCT See [ARMY GENERAL CLASSIFICATION TEST](#).

*****ebook converter DEMO Watermarks*****

AH See [ANARCHIC HAND](#).

AHA Anger, hostility, and aggression. See [TYPE A](#).

AI See [ARTIFICIAL INTELLIGENCE](#).

Ai Achievement via independence. See [CALIFORNIA PSYCHOLOGICAL INVENTORY](#).

AIDS Acquired immune (or immuno-) deficiency syndrome. See [AIDS](#) in the main body of the dictionary.

AKI Autokinetic illusion. See [AUTOKINETIC EFFECT](#).

AL See [ADAPTATION LEVEL](#).

ALS See [AMYOTROPHIC LATERAL SCLEROSIS](#).

AMH See [ANTI-MÜLLERIAN HORMONE](#).

AMP Adenosine monophosphate. See [AMP](#) in the main body of the dictionary.

AMPT See [ALPHA-METHYLPARATYROSINE](#).

AMS Ageing male syndrome. US *aging male syndrome*. See [IRRITABLE MALE SYNDROME](#).

AN See [ANOREXIA NERVOSA](#).

ANCOVA See [ANALYSIS OF COVARIANCE](#).

ANN Artificial neural network. See [NEURAL NETWORK](#).

ANOVA See [ANALYSIS OF VARIANCE](#).

ANS See [AUTONOMIC NERVOUS SYSTEM](#).

AoA See [AGE OF ACQUISITION](#).

AOC See [ATTENTION OPERATING CHARACTERISTIC](#).

*****ebook converter DEMO Watermarks*****

APA American Psychiatric Association, American Psychological Association.

APD See [ANTISOCIAL PERSONALITY DISORDER](#).

APFC See [ANTERIOR PREFRONTAL CORTEX](#).

ARAS See [ASCENDING RETICULAR ACTIVATING SYSTEM](#).

ARC See [AIDS-RELATED COMPLEX](#).

ARIMA Autoregressive integrated moving average. See [ARIMA](#) in the main body of the dictionary.

ARP See [ARGYLL ROBERTSON PUPIL](#).

A-S Anti-Semitism, ascendance–submissiveness, axosomatic. See [A–S REACTION STUDY](#), [A–S SCALE](#), [AXOSOMATIC](#).

A/S Association/sensation. See [A/S RATIO](#) in the main body of the dictionary.

ASC See [ALTERED STATE OF CONSCIOUSNESS](#).

ASD See [ACUTE STRESS DISORDER](#), [AUTISM SPECTRUM DISORDER](#).

ASL See [AMERICAN SIGN LANGUAGE](#).

Asp See [ASPARTIC ACID](#).

AT See [ATTRIBUTION THEORY](#).

ATP Adenosine triphosphate. See [ATP](#) in the main body of the dictionary.

ATPase Adenosine triphosphatase, See [ATPase](#) in the main body of the dictionary.

BA See [BRODMANN AREA](#).

BAC See [BLOOD ALCOHOL CONCENTRATION](#).

BAL Blood alcohol level. See [BLOOD ALCOHOL CONCENTRATION](#).

*****ebook converter DEMO Watermarks*****

BAP Beta-amyloid protein. See [AMYLOID PLAQUE](#).

BAS See [BRITISH ABILITY SCALES](#).

BASIC-ID Behaviours, affective processes, sensations, images, cognitions, and interpersonal relationships springing from drugs. or biological factors. See [BASIC-ID](#) in the main body of the dictionary.

BAT See [BODY ADJUSTMENT TEST](#).

BBB See [BLOOD—BRAIN BARRIER](#).

BC See [BEHAVIOUR CONTROL](#).

BCS See [BATTERED CHILD SYNDROME](#).

BDD See [BODY DYSMORPHIC DISORDER](#).

BDI See [BECK DEPRESSION INVENTORY](#).

BDSM Bondage, domination, sadism, and masochism. See [BONDAGE \(2\)](#), [SEXUAL SADISM](#), [SEXUAL MASOCHISM](#).

BDT See [BEHAVIOURAL DECISION THEORY](#).

BDV See [BORNA DISEASE VIRUS](#).

BEV See [BLACK ENGLISH VERNACULAR](#).

BFLPE See [BIG-FISH-LITTLE-POND EFFECT](#).

BGT See [BENDER GESTALT TEST](#).

BIP See [BIP](#) in the main body of the dictionary.

BMDP Bio-Medical Data Package. See [BMDP](#) in the main body of the dictionary.

BMR See [BASAL METABOLIC RATE](#).

BN See [BULIMIA NERVOSA](#).

*****ebook converter DEMO Watermarks*****

BOLD Blood-oxygen-level-dependent. See [MRI](#).

BOSS Basic Orthographic Syllabic Structure. See [BOSS](#) in the main body of the dictionary.

BP *Bereitschaftspotential*. See [READINESS POTENTIAL](#).

BPD See [BORDERLINE PERSONALITY DISORDER](#).

BPS British Psychological Society.

BRAC See [BASIC REST—ACTIVITY CYCLE](#).

BSE Bovine spongiform encephalopathy. See [BSE](#) in the main body of the dictionary.

BSL See [BRITISH SIGN LANGUAGE](#).

BSRF Brainstem reticular formation. See [RETICULAR FORMATION](#).

BWS See [BATTERED WIFE SYNDROME](#).

BZ Benzilic acid. See [BZ GAS](#) in the main body of the dictionary.

C See [C FIBRE](#), [COCHRAN'S C](#), [CRAMÉR'S C](#), [CYTOSINE](#).

Ca See [CALCIUM](#).

CA See [CATECHOLAMINE](#), [CHRONOLOGICAL AGE](#), [CONVERSATION ANALYSIS](#).

CAGE Cut, annoyed, guilty, eye-opener. See [CAGE](#) in the main body of the dictionary.

Cal. See [CALORIE](#).

cal. See [CALORIE](#).

cAMP See [CYCLIC AMP](#).

CAPD See [CENTRAL AUDITORY PROCESSING DISORDER](#).

CAT See [CHILDREN'S APPERCEPTION TEST](#). Also computed (or computerized, or computer-aided, or computer-assisted) axial tomography: see [CT SCAN](#).

C-B Cost-benefit. See [COST-BENEFIT ANALYSIS](#).

CBA See [COST-BENEFIT ANALYSIS](#).

CBF See [CEREBRAL BLOOD FLOW](#).

CBM See [COGNITIVE BEHAVIOUR MODIFICATION](#).

CBS See [CHARLES BONNET SYNDROME](#).

CBT Cognitive behaviour therapy. See [COGNITIVE BEHAVIOUR MODIFICATION](#).

CCC Consonant-consonant-consonant. See [CCC TRIGRAM](#).

CCFT See [CATTELL CULTURE-FAIR TEST](#).

CCHS Congenital central hypoventilation syndrome. See [CENTRAL HYPOVENTILATION SYNDROME](#).

CCK See [CHOLECYSTOKININ](#).

CD See [CONDUCT DISORDER](#).

cd See [CANDELA](#).

CDD See [CEREBELLAR DEVELOPMENTAL DELAY](#), [CHILDHOOD DISINTEGRATIVE DISORDER](#).

cDNA See [COMPLEMENTARY DNA](#).

CDP See [CHLORDIAZEPOXIDE](#).

CDSR Cochrane Database of Systematic Reviews. See [COCHRANE REVIEW](#).

CDT See [CLOCK DRAWING TEST](#).

CE See [CONSTANT ERROR](#).

CER *See* [CONDITIONED EMOTIONAL RESPONSE](#).

CF *See* [CHARACTERISTIC FREQUENCY](#).

CFA *See* [CONFIRMATORY FACTOR ANALYSIS](#).

cff *See* [CRITICAL FLICKER FREQUENCY](#).

CFQ *See* [COGNITIVE FAILURES QUESTIONNAIRE](#).

CFS *See* [CHRONIC FATIGUE SYNDROME](#).

cGMP Cyclic guanosine monophosphate. *See* [CYCLIC GMP](#).

CHS *See* [CLINICAL HISTORY SCHEDULE](#).

CIE Commission Internationale de l'Éclairage. *See* [CIE COLOUR SYSTEM](#).

CIND Cognitive impairment no dementia. *See* [MILD COGNITIVE IMPAIRMENT](#).

CJD *See* [CREUTZFELDT–JAKOB DISEASE](#).

CL *See* [COMMON LANGUAGE EFFECT SIZE STATISTIC](#).

CLES *See* [COMMON LANGUAGE EFFECT SIZE STATISTIC](#).

CM *See* [COCHLEAR MICROPHONIC](#).

Cm Community. *See* [CALIFORNIA PSYCHOLOGICAL INVENTORY](#).

CMT *See* [CHARCOT–MARIE–TOOTH SYNDROME](#).

CN Chloroacetophenone. *See* [CN GAS](#) in the main body of the dictionary.

CNN Connectionist neural network. *See* [CONNECTIONISM](#), [NEURAL NETWORK](#).

CNS *See* [CENTRAL NERVOUS SYSTEM](#).

CNV *See* [CONTINGENT NEGATIVE VARIATION](#).

Co Comparison stimulus. *See* [VARIABLE STIMULUS](#).

*****ebook converter DEMO Watermarks*****

COMT *See* [CATECHOL-O-METHYL-TRANSFERASE](#).

CPI *See* [CALIFORNIA PSYCHOLOGICAL INVENTORY](#).

CPU *See* [CENTRAL PROCESSING UNIT](#).

CPZ *See* [CHLORPROMAZINE](#).

CR *See* [CONDITIONED RESPONSE](#).

CRE *See* [COMMON RATIO EFFECT](#).

CREB Cyclic AMP response element binding protein. *See* [CREB](#) in the main body of the dictionary.

CRF Corticotrophin-releasing factor. *See* [CORTICOTROPHIN-RELEASING HORMONE](#).

CRH *See* [CORTICOTROPHIN-RELEASING HORMONE](#).

CRT *See* [CHOICE REACTION TIME](#), [COMPETITIVE REACTION TIME PARADIGM](#).

CS *See* [CONDITIONED STIMULUS](#), [CS GAS](#).

Cs *See* [CONSCIOUSNESS](#). Also capacity for status: *see* [CALIFORNIA PSYCHOLOGICAL INVENTORY](#).

CSA *See* [CHILD SEXUAL ABUSE](#).

CSB *See* [COMPULSIVE SEXUAL BEHAVIOUR](#).

CSEI *See* [COOPERSMITH SELF-ESTEEM INVENTORIES](#).

CSF *See* [CEREBROSPINAL FLUID](#), [CONTRAST SENSITIVITY FUNCTION](#).

CSI effect *See* [CSI EFFECT](#) in the main body of the dictionary.

CST *See* [COMMUNICATION SKILLS TRAINING](#), [CORTICOSPINAL TRACT](#).

CT Computed (or computerized) tomography. *See* [CT SCAN](#) in the main body of the dictionary.

CV Consonant–vowel. See [CV DIGRAM](#).

CVA Cerebrovascular accident. See [STROKE](#).

CVC Consonant–vowel–consonant. See [CVC](#) in the main body of the dictionary, and [CVC TRIGRAM](#).

D See [COOK'S D](#), [DRIVE STRENGTH](#), [SOMERS' D](#). Also depression: see [MMPI](#); [DESYNCHRONIZED](#): see [REM SLEEP](#).

d See [COHEN'S D](#).

d' Detectability or discriminability. See [D PRIME](#).

D2:D4 Digit 2:Digit 4. See [DIGIT RATIO](#).

DA See [DISCOURSE ANALYSIS](#), [DOPAMINE](#).

DAF See [DELAYED AUDITORY FEEDBACK](#).

DAM See [DRAW-A-MAN TEST](#).

DAN Dorsal attention network. See [TASK-POSITIVE NETWORK](#).

DAP See [DRAW-A-PERSON TEST](#).

DAT See [DIFFERENTIAL APTITUDE TESTS](#). Also dementia of the Alzheimer type: see [ALZHEIMER'S DISEASE](#).

dB See [DECIBEL](#).

dB SPL Decibel sound pressure level. See [DECIBEL](#).

DBT See [DIALECTICAL BEHAVIOUR THERAPY](#).

DCD See [DEVELOPMENTAL COORDINATION DISORDER](#).

DCT See [DUAL-CODE THEORY](#).

DD See [DISSOCIATIVE DISORDERS](#).

D-D See [DENDRODENDRITIC](#).

df See [DEGREES OF FREEDOM](#).

DF DeFries and Fulker. See [DF EXTREMES ANALYSIS](#) in the main body of the dictionary.

DFA See [DISCRIMINANT FUNCTION ANALYSIS](#).

DHEA Dehydroepiandrosterone. See [DHEA](#) in the main body of the dictionary.

DID See [DISSOCIATIVE IDENTITY DISORDER](#).

DIMS Disorders of initiating and maintaining sleep. See [DYSSOMNIAS](#).

DL Difference limen. See [DIFFERENCE THRESHOLD](#).

DLPFC See [DORSOLATERAL PREFRONTAL CORTEX](#).

DMD See [DUCHENNE MUSCULAR DYSTROPHY](#).

DMN See [DEFAULT MODE NETWORK](#).

DMT Dimethyltryptamine. See [DMT](#) in the main body of the dictionary.

DNA Deoxyribonucleic acid. See [DNA](#) in the main body of the dictionary.

Do Dominance. See [CALIFORNIA PSYCHOLOGICAL INVENTORY](#).

DOES Disorder of excessive somnolence. See [PRIMARY HYPERSOMNIA](#).

DOM Dimethoxy-methylamphetamine. See [STP](#).

DQ See [DEVELOPMENTAL QUOTIENT](#).

DRH See [DIFFERENTIAL REINFORCEMENT OF HIGH RESPONSE RATES](#).

DRL See [DIFFERENTIAL REINFORCEMENT OF LOW RESPONSE RATES](#).

DRO See [DIFFERENTIAL REINFORCEMENT OF OTHER RESPONSES](#).

*****ebook converter DEMO Watermarks*****

DRP *See* [DIFFERENTIAL REINFORCEMENT OF PACED RESPONSES](#).

DRT *See* [DISCRIMINATION REACTION TIME](#).

DS *See* [DOWN'S SYNDROME](#), [DRAVET SYNDROME](#).

DSM Diagnostic and Statistical Manual of Mental Disorders. *See* [DSM](#) in the main body of the dictionary.

DSPS *See* [DELAYED SLEEP-PHASE SYNDROME](#).

DST *See* [DEXAMETHASONE SUPPRESSION TEST](#).

DT *See* [DECISION THEORY](#).

DTR *See* [DEEP TENDON REFLEX](#).

DTs *See* [DELIRIUM TREMENS](#).

DV *See* [DEPENDENT VARIABLE](#).

DZ *See* [DIZYGOTIC](#), [DIZYGOTIC TWINS](#).

DZP *See* [DIAZEPAM](#).

E *See* [EPINEPHRINE](#), [ECSTASY \(2\)](#), [E SCALE \(ETHNOCENTRISM\)](#).

e^2 *See* [ENVIRONMENTABILITY](#).

EBA *See* [ELIMINATION BY ASPECTS](#).

EBS *See* [ELECTRICAL BRAIN STIMULATION](#).

EC *See* [EVALUATIVE CONDITIONING](#).

ECF *See* [EXTRACELLULAR FLUID](#).

ECS Electroconvulsive shock. *See* [ELECTROCONVULSIVE THERAPY](#).

ECT *See* [ELECTROCONVULSIVE THERAPY](#).

ED See [EFFECTIVE DOSAGE](#): ED-1 is the dosage that produces a specified effect in 1 per cent of the population, ED-2 is the dosage that produces a specified effect in 2 per cent of the population, and so on. Also erectile dysfunction or erectile disorder: see [ERECTILE DISORDER](#), [IMPOTENCE \(2\)](#).

ED-50 Effective dosage 50. Also written *ED*₅₀. See [MEDIAN EFFECTIVE DOSAGE](#).

EDA See [EXPLORATORY DATA ANALYSIS](#).

EDR Electrodermal response. See [GALVANIC SKIN RESPONSE](#).

EEG Electroencephalogram. See [EEG](#) in the main body of the dictionary.

EFT See [EMBEDDED-FIGURES TEST](#).

EI See [EMOTIONAL INTELLIGENCE](#).

ELM See [ELABORATION LIKELIHOOD MODEL](#).

EMDR See [EYE-MOVEMENT DESENSITIZATION AND REPROCESSING](#).

EMG See [ELECTROMYOGRAM](#).

EMR See [EDUCABLE MENTALLY RETARDED](#).

EOG See [ELECTRO-OCULOGRAM](#).

EP See [EDUCATIONAL PSYCHOLOGY](#), [EVOKED POTENTIAL](#).

EPI See [EYSENCK PERSONALITY INVENTORY](#).

EPO See [ERYTHROPOIETIN](#).

EPP See [END-PLATE POTENTIAL](#).

EPPS See [EDWARDS PERSONAL PREFERENCE SCHEDULE](#).

EPQ See [EYSENCK PERSONALITY QUESTIONNAIRE](#).

EPSP See [EXCITATORY POSTSYNAPTIC POTENTIAL](#).

EQ See [EMOTIONAL QUOTIENT](#), [ENCEPHALIZATION QUOTIENT](#).

ER See [ENDOPLASMIC RETICULUM](#).

ERG See [ELECTRORETINOGRAM](#).

ERP See [EVENT-RELATED POTENTIAL](#).

ES See [EFFECT SIZE](#).

ESN See [EDUCATIONALLY SUBNORMAL](#).

ESP See [EXTRA-SENSORY PERCEPTION](#).

ESS See [EVOLUTIONARILY STABLE STRATEGY](#).

ESSB See [ELECTRICAL SELF-STIMULATION OF THE BRAIN](#).

EST Electric shock therapy. See [ELECTROCONVULSIVE THERAPY](#).

est Erhard Seminars Training. See [EST](#) in the main body of dictionary.

EU See [EXPECTED UTILITY](#).

EV See [EXPECTED VALUE](#).

F Potentiality for fascism. See [F SCALE](#) in the main body of the dictionary.

F See [BARTLETT–BOX F TEST](#), [F STATISTIC](#) in the main body of the dictionary.
Also validity: see [MMPI](#).

F₁ First filial generation. See [FILIAL GENERATION](#).

FAE See [FIGURAL AFTEREFFECT](#).

fan Facts associated with node. See [FAN EFFECT](#).

FAP See [FIXED-ACTION PATTERN](#).

FAS See [FOETAL ALCOHOL SYNDROME](#), [FOREIGN ACCENT SYNDROME](#).

FAST See [FAST](#) in the main body of the dictionary.

FC See [FACILITATED COMMUNICATION](#), [FATE CONTROL](#).

fc See [FOOT-CANDLE](#).

FCE See [FALSE-CONSENSUS EFFECT](#), [FLANKER COMPATIBILITY EFFECT](#).

FCM See [FEATURE COMPARISON MODEL](#).

FCT Facilitated communication training. See [FACILITATED COMMUNICATION](#).

FD-I See [FIELD DEPENDENCE-INDEPENDENCE](#).

Fe Femininity. See [CALIFORNIA PSYCHOLOGICAL INVENTORY](#).

FEF Frontal eye field. See [MOTOR CORTEX](#).

fff Flicker fusion frequency. See [CRITICAL FLICKER FREQUENCY](#).

FFI See [FATAL FAMILIAL INSOMNIA](#).

FFM Five-factor model. See [BIG FIVE](#).

FG Fast glycolytic. See [FAST GLYCOLYTIC FIBRE](#).

FGM See [FEMALE GENITAL MUTILATION](#).

FI Fixed-interval. See [FIXED-INTERVAL SCHEDULE](#).

F_{ij} See [COEFFICIENT OF CONSANGUINITY](#).

FIRO–B Fundamental Interpersonal Relations Orientation–Behavior. See [FIRO–B](#) in the main body of the dictionary.

FLE See [FLASH-LAG EFFECT](#).

F max See [HARTLEY'S \$F\$ MAX](#).

fMRI Functional magnetic resonance imaging. See [MRI](#).

FMS See [FALSE MEMORY SYNDROME](#).

FOG Fast oxidative glycolytic. See [FAST OXIDATIVE GLYCOLYTIC FIBRE](#).

FPC See [FRONTOPOLAR CORTEX](#).

FR Fixed-ratio. See [FIXED-RATIO SCHEDULE](#).

FRT See [FIXED-ROLE THERAPY](#).

FSD Female sexual dysfunction. See [FEMALE ORGASMIC DISORDER](#), [FEMALE SEXUAL INTEREST/AROUSAL DISORDER](#), [GENITO-PELVIC PAIN/PENETRATION DISORDER](#).

FSH See [FOLLICLE-STIMULATING HORMONE](#).

FTC Frequency threshold curve or frequency tuning curve. See [TUNING CURVE](#).

ft-L See [FOOT-LAMBERT](#).

Fx Flexibility. See [CALIFORNIA PSYCHOLOGICAL INVENTORY](#).

FXT See [FLUOXETINE](#).

G See [GUANINE](#). Also Gräfenberg: see [G SPOT](#) in the main body of the dictionary.

g General ability or intelligence. See [G](#) in the main body of the dictionary.

GA See [GOLGI APPARATUS](#).

GABA Gamma-aminobutyric acid. See [GABA](#) in the main body of the dictionary.

GAD See [GLUTAMIC ACID DECARBOXYLASE](#), [GENERALIZED ANXIETY DISORDER](#).

GAS See [GENERAL ADAPTATION SYNDROME](#).

GB See [GOVERNMENT AND BINDING](#).

GBH Grievous bodily harm. See [GBH](#) in the main body of the dictionary.

g(C) *See* [CRYSTALLIZED INTELLIGENCE](#).

g(F) *See* [FLUID INTELLIGENCE](#).

GFP *See* [GENERAL FACTOR OF PERSONALITY](#).

GH *See* [GROWTH HORMONE](#).

GHB Gamma-hydroxybutyrate. *See* [GHB](#) in the main body of the dictionary.

GHQ *See* [GENERAL HEALTH QUESTIONNAIRE](#).

GHRH *See* [GROWTH HORMONE RELEASING HORMONE](#).

GI *See* [GASTROINTESTINAL](#).

Gi Good impression. *See* [CALIFORNIA PSYCHOLOGICAL INVENTORY](#).

GID *See* [GENDER IDENTITY DISORDER](#).

GIGO Garbage in, garbage out (computer slang).

Glu *See* [GLUTAMIC ACID](#).

Gly *See* [GLYCINE](#).

GM *See* [GENETICALLY MODIFIED](#).

GMP Guanosine monophosphate. *See* [CYCLIC GMP](#).

GnRH *See* [GONADOTROPHIN-RELEASING HORMONE](#).

GPI *See* [GENERAL PARALYSIS \(PARESIS\) OF THE INSANE](#).

GPS *See* [GENERAL PROBLEM SOLVER](#).

GRE *See* [GRADUATE RECORDS EXAMINATION](#).

GSA *See* [GENETIC SEXUAL ATTRACTION](#).

GSR *See* [GALVANIC SKIN RESPONSE](#).

*****ebook converter DEMO Watermarks*****

GSS See [GERSTMANN–STRÄUSSLER–SCHEINKER SYNDROME](#).

GST See [GENERAL SYSTEMS THEORY](#).

GTS Gilles de la Tourette's syndrome. See [TOURETTE'S DISORDER](#).

GWS See [GULF WAR SYNDROME](#).

H See [HEROIN](#).

h^2 See [HERITABILITY](#).

HAM-D See [HAMILTON DEPRESSION RATING SCALE](#).

Hb See [HAEMOGLOBIN](#).

HD See [HUNTINGTON'S DISEASE](#).

HERA See [HEMISPHERIC ENCODING/RETRIEVAL ASYMMETRY](#).

HEXACO See [HEXACO](#) in the main body of the dictionary.

HIT See [HOLTZMAN INKBLOT TECHNIQUE](#).

HIV Human immunodeficiency virus. See [HIV](#) in the main body of the dictionary.

HOUND Humble, old, unattractive, non- verbal, dumb. See [HOUND](#) in the main body of the dictionary.

HPA axis Hypothalamic–pituitary–adrenal axis. See [HPA AXIS](#) in the main body of the dictionary.

HPD See [HISTRIONIC PERSONALITY DISORDER](#).

HRSD Hamilton Rating Scale for Depression. See [HAMILTON DEPRESSION RATING SCALE](#).

HRI High rising intonation. See [UPTALK](#).

HRT High rising terminal. See [UPTALK](#).

*****ebook converter DEMO Watermarks*****

Hs Hypochondriasis. See [MMPI](#).

HSD Honestly significant difference. See [TUKEY-HSD TEST](#).

HSE See [HERPES SIMPLEX ENCEPHALITIS](#).

HST See [HOT SAUCE TASK](#).

H-T-P See [HOUSE-TREE-PERSON TECHNIQUE](#).

Hy Hysteria. See [MMPI](#).

Hz See [HERTZ](#).

I See [LUMINOUS INTENSITY](#). Also Induction (intelligence factor): See [PRIMARY MENTAL ABILITIES](#).

IAPS See [IAPS](#) in the main body of the dictionary.

Ia See [IA FIBRE](#).

IAS See [INTERNET ADDICTION SYNDROME](#).

IAT See [IMPLICIT ASSOCIATION TEST](#).

Ib See [IB FIBRE](#).

IBS See [IRRITABLE BOWEL SYNDROME](#).

ICD International Classification of Diseases and Related Health Problems. See [ICD](#) in the main body of the dictionary.

ICF See [INTRACELLULAR FLUID](#).

ICSH Interstitial-cell-stimulating hormone. See [LUTEINIZING HORMONE](#).

ICSI Intracytoplasmic sperm injection. See [ICSI](#) in the main body of the dictionary.

ID See [INTELLECTUAL DISABILITY](#).

IDD *See* [INTELLECTUAL DEVELOPMENTAL DISORDER](#).

IDR *See* [INSTINCTIVE DROWNING RESPONSE](#).

Ie Intellectual efficiency. *See* [CALIFORNIA PSYCHOLOGICAL INVENTORY](#).

I–E *See* [INTERNAL–EXTERNAL SCALE](#).

Ig *See* [IMMUNOGLOBULIN](#).

IgA, IgG, IgM *See* [IMMUNOGLOBULIN](#).

IGC *See* [ITEM GROUP CHECKLIST](#).

IGD *See* [INTERNET GAMING DISORDER](#).

IGT *See* [IOWA GAMBLING TASK](#).

IHC *See* [INNER HAIR CELL](#).

II *See* [II FIBRE](#).

IID *See* [INTERAURAL INTENSITY DIFFERENCE](#).

INDSCAL Individual differences scaling. *See* [INDSCAL](#) in the main body of the dictionary.

I/O *See* [INDUSTRIAL/ORGANIZATIONAL PSYCHOLOGY](#).

ION *See* [INFERIOR OLIVARY NUCLEUS](#).

IPA *See* [INTERACTION PROCESS ANALYSIS](#), [INTERNATIONAL PHONETIC ALPHABET](#).

IPIP International personality item pool. *See* [IPIP](#) in the main body of the dictionary.

IPSP *See* [INHIBITORY POSTSYNAPTIC POTENTIAL](#).

IQ Intelligence quotient. *See* [IQ](#) in the main body of the dictionary.

IQR *See* [INTERQUARTILE RANGE](#).

*****ebook converter DEMO Watermarks*****

IR See [INFRA-RED](#).

IRM See [INNATE RELEASING MECHANISM](#).

IRT See [ITEM RESPONSE THEORY](#).

ISI See [INTERSTIMULUS INTERVAL](#).

ISPOCD International Study of Postoperative Cognitive Dysfunction. See [POST-OPERATIVE COGNITIVE DYSFUNCTION](#).

IT See [INFORMATION TECHNOLOGY](#), [INSPECTION TIME](#), [INTERDEPENDENCE THEORY](#).

ITA See [INITIAL TEACHING ALPHABET](#).

ITC Inferior temporal cortex. See [INFERIOR TEMPORAL GYRUS](#).

ITD See [INTERAURAL TIME DIFFERENCE](#).

ITG See [INFERIOR TEMPORAL GYRUS](#).

ITPA See [ILLINOIS TEST OF PSYCHOLINGUISTIC ABILITIES](#).

IU See [INTERVAL OF UNCERTAINTY](#).

IV See [INDEPENDENT VARIABLE](#).

IVF See [IN VITRO FERTILIZATION](#).

JDI See [JOB DESCRIPTIVE INDEX](#).

jnd Just noticeable difference. See [DIFFERENCE THRESHOLD](#).

K See [INCENTIVE MOTIVATION](#).

K See [KAPPA STATISTIC](#), [POTASSIUM](#). Also Correction factor: see [MMPI](#).

kcal Kilocalorie. See [CALORIE](#).

KDE See [KINETIC DEPTH EFFECT](#).

KLS See [KLEINE–LEVIN SYNDROME](#).

KPR See [KUDER PREFERENCE RECORD](#).

KPR–V Kuder Preference Record–Vocational. See [KUDER PREFERENCE RECORD](#).

KR See [KNOWLEDGE REPRESENTATION](#).

K–R 20 Kuder–Richardson 20 formula. See [KUDER–RICHARDSON COEFFICIENT](#).

K–R 21 Kuder–Richardson 21 formula. See [KUDER–RICHARDSON COEFFICIENT](#).

L See [LUMINANCE](#). Also Lie scale: see [MMPI](#).

LAD See [LANGUAGE ACQUISITION DEVICE](#).

LAS Language acquisition system. See [LANGUAGE ACQUISITION DEVICE](#).

L_B See [GOODMAN–KRUSKAL LAMBDA](#).

LD See [LEARNING DISABILITY](#), [LETHAL DOSAGE](#).

LD-50 Lethal dosage 50. Also written LD_{50} . See [MEDIAN LETHAL DOSAGE](#).

L-dopa Laevo-dihydroxyphenylalanine. See [L-DOPA](#) in the main body of the dictionary.

LDT See [LEXICAL DECISION TASK](#).

LEM See [LATERAL EYE MOVEMENT](#).

LFC See [LATERAL FRONTAL CORTEX](#).

LGB See [LESBIAN](#), [GAY](#), [BISEXUAL](#).

LGBT See [LESBIAN](#), [GAY](#), [BISEXUAL](#), [TRANSGENDERED](#).

LGN See [LATERAL GENICULATE NUCLEUS](#).

LH See [LUTEINIZING HORMONE](#).

*****ebook converter DEMO Watermarks*****

LH-RH *See* [LUTEINIZING HORMONE RELEASING HORMONE](#).

LI *See* [LATENT INHIBITION](#).

LLPDD *See* [LATE LUTEAL PHASE DYSPHORIC DISORDER](#).

lm *See* [LUMEN](#).

LOP *See* [LEVELS OF PROCESSING](#).

LPAD *See* [LEARNING POTENTIAL ASSESSMENT DEVICE](#).

LSD Lysergic acid diethylamide. *See* [LSD](#) in the main body of the dictionary.

LTH Luteotrop(h)ic hormone. *See* [PROLACTIN](#).

LTM *See* [LONG-TERM MEMORY](#).

LTP *See* [LONG-TERM POTENTIATION](#).

LTS *See* [LONG-TERM STORE](#).

lvf Left visual field. *See* [VISUAL FIELD](#).

M Magnocellular, mean, memory (intelligence factor). *See* [MAGNOCELLULAR SYSTEM](#), [M CELL](#), [MEAN](#), [PRIMARY MENTAL ABILITIES](#).

MA *See* [MENTAL AGE](#).

Ma Hypomania. *See* [MMPI](#).

MAA *See* [MINIMUM AUDIBLE ANGLE](#).

MADM *See* [MULTI-ATTRIBUTE DECISION MAKING](#).

MAE *See* [MOTION AFTEREFFECT](#).

MAF *See* [MINIMUM AUDIBLE FIELD](#).

MANOVA *See* [MULTIVARIATE ANALYSIS OF VARIANCE](#).

MAO See [MONOAMINE OXIDASE](#).

MAOI See [MONOAMINE OXIDASE INHIBITOR](#).

MAP See [MINIMUM AUDIBLE PRESSURE](#).

MAPS See [MAKE-A-PICTURE-STORY TEST](#).

MAS See [MANIFEST ANXIETY SCALE](#).

MAT See [MILLER ANALOGIES TEST](#).

MBCT See [MINDFULNESS-BASED COGNITIVE THERAPY](#).

MBD Minimal brain dysfunction. See [ATTENTION-DEFICIT/HYPERACTIVITY DISORDER](#).

MBPS Munchausen by proxy syndrome. See [FACTITIOUS DISORDER IMPOSED ON ANOTHER](#).

MBTI See [MYERS-BRIGGS TYPE INDICATOR](#).

MCI See [MILD COGNITIVE IMPAIRMENT](#).

MDA Methyl-dioxy amphetamine. See [MDA](#) in the main body of the dictionary.

MDD See [MAJOR DEPRESSIVE DISORDER](#).

MDMA 3,4-methylene-dioxy-methamphetamine. See [MDMA](#) in the main body of the dictionary.

MDP See [MANIC-DEPRESSIVE PSYCHOSIS](#).

MDS See [MULTIDIMENSIONAL SCALING](#).

ME See [MYALGIC ENCEPHALOMYELITIS](#).

MED See [MINIMUM EFFECTIVE DOSAGE](#).

MED-50 Median effective dosage, 50 per cent. See [MED-50](#) in the main body

*****ebook converter DEMO Watermarks*****

of the dictionary.

MEG See [MAGNETOENCEPHALOGRAPHY](#).

MEM 1414 Memory 1414. See [MEM 1414](#) in the main body of the dictionary.

MEPP See [MINIATURE END-PLATE POTENTIAL](#).

Mf Masculinity–femininity. See [MMPI](#).

MFB See [MEDIAL FOREBRAIN BUNDLE](#).

MFFT See [MATCHING FAMILIAR FIGURES TEST](#).

MGN See [MEDIAL GENICULATE NUCLEUS](#).

MHPG 3-methoxy-4-hydroxyphenylethylene glycol. See [MHPG](#) in the main body of the dictionary.

MHV See [MILL HILL VOCABULARY SCALE](#).

MIB See [MOTION-INDUCED BLINDNESS](#).

MID Multi-infarct dementia. See [VASCULAR DEMENTIA](#).

MIS See [MÜLLERIAN INHIBITING SUBSTANCE](#).

MLD See [MINIMUM LETHAL DOSAGE](#).

MLU See [MEAN LENGTH OF UTTERANCE](#).

MMPI See [MMPI](#) in the main body of the dictionary.

MMSE See [MINI-MENTAL STATE EXAMINATION](#).

MMT See [MULTIMODAL THERAPY](#).

MND See [MOTOR NEURON DISEASE](#).

MOC See [MEMORY OPERATING CHARACTERISTIC](#).

MOP See [MEMORY ORGANIZATION PACKET](#).

MPB See [MEPROBAMATE](#).

MPD Multiple personality disorder. See [DISSOCIATIVE IDENTITY DISORDER](#).

MPI See [MAUDSLEY PERSONALITY INVENTORY](#).

MPP⁺ Methylphenylpyridine. See [MPP⁺](#) in the main body of the dictionary.

MPPP 1-Methyl-4-phenyl-4-propionoxy-piperidine. See [MPPP](#) in the main body of the dictionary.

MPTP 1-Methyl-4-phenyl-1,2,3,6-tetrahydropyridine. See [MPTP](#) in the main body of the dictionary.

MR See [MENTAL RETARDATION](#), [MOTIVATIONAL RESEARCH](#).

MRH Müllerian regression hormone. See [MÜLLERIAN INHIBITING SUBSTANCE](#).

MRI Magnetic resonance imaging. See [MRI](#) in the main body of the dictionary.

mRNA See [MESSENGER RNA](#).

MRS Modern Racism Scale. See [MODERN RACISM](#).

MS See [MULTIPLE SCLEROSIS](#).

MSD Male sexual dysfunction. See [DELAYED EJACULATION](#), [ERECTILE DISORDER](#), [MALE HYPOACTIVE SEXUAL DESIRE DISORDER](#), [PREMATURE \(EARLY\) EJACULATION](#).

MSE See [MENTAL STATUS EXAMINATION](#).

MSER See [MENTAL STATUS EXAMINATION REPORT](#).

MSG See [MONOSODIUM GLUTAMATE](#).

MSH See [MELANOCYTE-STIMULATING HORMONE](#).

MSS See [MEDICAL STUDENT SYNDROME](#).

*****ebook converter DEMO Watermarks*****

MT See [MASSAGE THERAPY](#). Also, median or middle temporal. See MT in the main body of the dictionary.

MTD See [MINIMUM TOXIC DOSAGE](#).

mtDNA See [MITOCHONDRIAL DNA](#).

MTF Modulation transfer function. See [CONTRAST SENSITIVITY FUNCTION](#).

MTL See [MEDIAL TEMPORAL LOBE](#).

MTMM See [MULTITRAIT–MULTIMETHOD MATRIX](#).

MTT See [MENTAL TIME TRAVEL](#).

MUD Multi-user dungeon, or multi-user dimension. See MUD in the main body of the dictionary.

MZ See [MONOZYGOTIC](#).

N Often used to represent the total number of scores in a data set or total number of research participants or subjects in an experiment or investigation. *Compare N*. Also Number (intelligence factor): see [PRIMARY MENTAL ABILITIES](#).

n Often used for the number in a subsample. *Compare N*.

N140 Negative deflection, 140 milliseconds. See [n140](#) in the main body of the dictionary.

N₂O See [NITROUS OXIDE](#).

N400 Negative deflection, 400 milliseconds. See [n400](#) in the main body of the dictionary.

NA See [NORADRENALIN](#).

Na See [SODIUM](#).

N Ach See [NEED FOR ACHIEVEMENT](#). Also written *nAch*.

N Aff See [NEED FOR AFFILIATION](#). Also written *nAff*.

*****ebook converter DEMO Watermarks*****

Na⁺-K⁺ Sodium–potassium. *See* [SODIUM PUMP](#).

NANC Non-adrenergic, non-cholinergic. *See* [NANC](#) in the main body of the dictionary.

nbM *See* [NUCLEUS BASALIS OF MEYNERT](#).

NCD *See* [NEUROCOGNITIVE DISORDERS](#).

NCV *See* [NERVE CONDUCTION VELOCITY](#).

NDE *See* [NEAR-DEATH EXPERIENCE](#).

NE Norepinephrine. *See* [NORADRENALIN](#).

NEO Neuroticism, Extraversion, Openness to experience. *See* [NEO](#) in the main body of the dictionary.

NEO-FFI Neuroticism, Extraversion, Openness to experience Five-Factor Inventory. *See* [NEO](#) in the main body of the dictionary.

NEO-PI-R Neuroticism, Extraversion, Openness to experience Personality Inventory- Revised. *See* [NEO](#) in the main body of the dictionary.

NFT *See* [NEUROFIBRILLARY TANGLE](#).

NGF *See* [NERVE GROWTH FACTOR](#).

NHST Null hypothesis significance testing. *See* [NULL HYPOTHESIS, SIGNIFICANCE, SIGNIFICANCE TEST](#).

NLE *See* [NAME–LETTER EFFECT](#).

NLP *See* [NEURO-LINGUISTIC PROGRAMMING](#).

nm *See* [NANOMETRE](#).

NMR *See* [NUCLEAR MAGNETIC RESONANCE](#).

NO *See* [NITRIC OXIDE](#).

NPD See [NARCISSISTIC PERSONALITY DISORDER](#), [N-PERSON PRISONER'S DILEMMA](#).

NREM Non-rapid-eye-movement. See NREM sleep in the main body of the dictionary.

NSB See [NIGROSTRIATAL BUNDLE](#).

NUD*IST Non-numerical unstructured data indexing. See [NUD*IST](#) in the main body of the dictionary.

NVC See [NON-VERBAL COMMUNICATION](#).

nvCJD New-variant CJD. See [CREUTZFELDT–JAKOB DISEASE](#).

OBE See [OUT-OF-BODY EXPERIENCE](#).

OBS Organic brain syndrome. See [ORGANIC DISORDERS](#).

OC Oleoresin capsicum. See [PEPPER SPRAY](#).

OCD See [OBSESSIVE–COMPULSIVE DISORDER](#).

OCR See [OPTICAL CHARACTER RECOGNITION](#).

ODD See [OPPOSITIONAL DEFIANT DISORDER](#).

OEE See [OVERTRAINING EXTINCTION EFFECT](#).

OHC See [OUTER HAIR CELL](#).

OHP See [OCCUPATIONAL HEALTH PSYCHOLOGY](#).

OHS Obesity hypoventilation syndrome. See [PICKWICKIAN SYNDROME](#).

OKN See [OPTOKINETIC NYSTAGMUS](#).

OOBE See [OUT-OF-BODY EXPERIENCE](#).

OP See [ORGANOPHOSPHATE](#).

OPQ See [OCCUPATIONAL PERSONALITY QUESTIONNAIRE](#).

*****ebook converter DEMO Watermarks*****

OR See [OPERATIONAL RESEARCH](#).

ORE See [OVERTRAINING REVERSAL EFFECT](#).

OSAH See [OBSTRUCTIVE SLEEP APNOEA HYPOPNEA](#).

OT See [OCCUPATIONAL THERAPY](#), [OXYTOCIN](#).

OTC Over-the-counter, in contradistinction to prescription drugs.

OVL See [ORGANUM VASCULOSUM LAMINA TERMINALIS](#).

P Parvocellular, perceptual speed (intelligence factor). See [P CELL](#) in the main body of the dictionary, and [PRIMARY MENTAL ABILITIES](#).

p Probability. See [P VALUE](#) in the main body of the dictionary.

P50 Positive deflection, 50 milliseconds. See [p50](#) in the main body of the dictionary.

P200 Positive deflection, 200 milliseconds. See [p200](#) in the main body of the dictionary.

P300 Positive deflection, 300 milliseconds. See [p300](#) in the main body of the dictionary.

P600 Positive deflection, 600 milliseconds. See [p600](#) in the main body of the dictionary.

PA See [PAIRED-ASSOCIATE LEARNING](#).

Pa Paranoia. See [MMPI](#).

PAG See [PERIAQUEDUCTAL GREY MATTER](#).

PAL See [PAIRED-ASSOCIATE LEARNING](#).

PAM Precategorical acoustic memory. See [PRECATEGORICAL ACOUSTIC STORE](#).

PAR See [PARTICIPATORY ACTION RESEARCH](#).

PAS See [PRECATEGORICAL ACOUSTIC STORE](#).

PC See [POLITICALLY CORRECT](#). Also an abbreviation of *personal computer*.

PCA See [PRINCIPAL-COMPONENTS ANALYSIS](#).

PCL Psychopathy checklist. See [PSYCHOPATHY CHECKLIST—REVISED](#).

PCL–R See [PSYCHOPATHY CHECKLIST—REVISED](#).

PCP See [PHENCYCLIDINE](#).

p-CPA See [PARACHLOROPHENYLALANINE](#). Also written *PCPA*.

Pcpt–Cs See [PERCEPTION—CONSCIOUSNESS SYSTEM](#).

PCR See [POLYMERASE CHAIN REACTION](#).

Pcs See [PRECONSCIOUS](#).

pcs See [PRECONSCIOUS](#).

PCT See [PERSONAL CONSTRUCT THEORY](#).

PD See [PANIC DISORDER](#), [PARKINSON'S DISEASE](#), [PERSONALITY DISORDER](#), [PRISONER'S DILEMMA GAME](#).

Pd Psychopathic deviate. See [MMPI](#).

PDD See [PREMENSTRUAL DYSPHORIC DISORDER](#).

PDE5 See [PHOSPHODIESTERASE TYPE 5](#).

PDG See [PRISONER'S DILEMMA GAME](#).

PDP See [PARALLEL DISTRIBUTED PROCESSING](#).

PDP-CNN Parallel distributed processing connectionist neural network. See [PARALLEL DISTRIBUTED PROCESSING](#), [CONNECTIONISM](#), [NEURAL NETWORK](#).

PDSD See [PROLONGED DURESS STRESS DISORDER](#).

*****ebook converter DEMO Watermarks*****

PE See [PROBABLE ERROR](#).

PEA See [PHENYLETHYLAMINE](#).

PEC Political and economic conservatism. See [PEC SCALE](#).

PET scan Positron emission tomography scan. See [PET SCAN](#) in the main body of the dictionary.

PFA See [PANUM'S FUSION AREA](#).

PFC See [PREFRONTAL CORTEX](#).

PG See [PROSTAGLANDIN](#). Different prostaglandins are given names such as PGA, PGB, PGF_α, and so on.

PGHS Prostaglandin H₂ synthase. See [PROSTAGLANDIN](#).

PGO Pontogeniculo-occipital. See [PGO SPIKE](#) in the main body of the dictionary.

PGR Psychogalvanic response. See [GALVANIC SKIN RESPONSE](#).

pH Potential of hydrogen. See [pH](#) in the main body of the dictionary.

Phe See [PHENYLALANINE](#).

PI See [PARENTAL INVESTMENT](#), [PROACTIVE INTERFERENCE](#).

PIFC See [PATTERN-INDUCED FLICKER COLOUR](#).

PK See [PSYCHOKINESIS](#).

PKC See [PROTEIN KINASE C](#).

PKU See [PHENYLKETONURIA](#).

PMA See [PRIMARY MENTAL ABILITIES](#).

PMC Premotor cortex. See [MOTOR CORTEX](#).

*****ebook converter DEMO Watermarks*****

PMDD Premenstrual dysphoric disorder. *See* [PREMENSTRUAL SYNDROME](#).

PMS *See* [PREMENSTRUAL SYNDROME](#).

PMT *See* [PORTEUS MAZE TEST](#). Also premenstrual tension: *see* [PREMENSTRUAL SYNDROME](#).

PNI *See* [PSYCHONEUROIMMUNOLOGY](#).

PNMT Phenylethanolamine-*N*-methyltransferase. *See* [PNMT](#) in the main body of the dictionary.

PNS *See* [PARASYMPATHETIC NERVOUS SYSTEM](#), [PERIPHERAL NERVOUS SYSTEM](#).

POC *See* [PERFORMANCE OPERATING CHARACTERISTIC](#).

POCD *See* [POST-OPERATIVE COGNITIVE DYSFUNCTION](#).

POMC Pro-opiomelanocortin. *See* [POMC](#) in the main body of the dictionary.

PONS Profile of non-verbal sensitivity. *See* [PONS](#) in the main body of the dictionary.

PPVT *See* [PEABODY PICTURE VOCABULARY TEST](#).

PPVT-R Peabody Picture Vocabulary Test-Revised. *See* [PEABODY PICTURE VOCABULARY TEST](#).

PR *See* [PARTIAL REINFORCEMENT](#).

PRE *See* [PARTIAL REINFORCEMENT EFFECT](#).

PrL *See* [PROLACTIN](#).

PROP *See* [PROPYLTHIOURACIL](#).

PRP Psychological refractory period. *See* [REFRACTORY PERIOD \(3\)](#).

PrP Prion protein. *See* [PrP](#) in the main body of the dictionary.

PS Paradoxical sleep. *See* [REM SLEEP](#) in the main body of the dictionary.

*****ebook converter DEMO Watermarks*****

PSAP See [POINT SUBTRACTION AGGRESSION PARADIGM](#).

PSAS See [PERSISTENT SEXUAL AROUSAL SYNDROME](#).

PSE See [POINT OF SUBJECTIVE EQUALITY](#), [PRESENT STATE EXAMINATION](#).

PSL *Psicología social de la liberación*. See [LIBERATION PSYCHOLOGY](#).

PSP See [PROGRESSIVE SUPRANUCLEAR PALSY](#).

P system See [PARVOCELLULAR SYSTEM](#).

Pt Psychasthenia. See [MMPI](#).

PTC Phenylthiocarbamide. See [PTC](#) in the main body of the dictionary.

PTD See [PROVISIONAL TIC DISORDER](#).

PTH See [PARATHYROID HORMONE](#).

PTSD See [POST-TRAUMATIC STRESS DISORDER](#).

PVFS See [POST-VIRAL FATIGUE SYNDROME](#).

PVS See [PERSISTENT VEGETATIVE STATE](#).

PWS See [PRADER–WILLI SYNDROME](#).

Py Psychological-mindedness. See [CALIFORNIA PSYCHOLOGICAL INVENTORY](#).

Q See [COCHRAN'S Q](#), [Q-METHODOLOGY](#), [Q-SORT](#).

QS Quiet sleep. See [NREM SLEEP](#) in the main body of the dictionary.

R See [REIZ](#), [RESPONSE](#), [R-METHODOLOGY](#). Also reasoning (intelligence factor):
See [PRIMARY MENTAL ABILITIES](#).

R See [MULTIPLE CORRELATION COEFFICIENT](#).

r See [COEFFICIENT OF RELATIONSHIP](#), [PRODUCT–MOMENT CORRELATION COEFFICIENT](#).

R² See [COEFFICIENT OF DETERMINATION](#).

RA See [RAPIDLY ADAPTING](#).

RAS Reticular activating system. See [ASCENDING RETICULAR ACTIVATING SYSTEM](#).

RBD See [REM BEHAVIOUR DISORDER](#).

RC Re-evaluation counselling. See [CO-COUNSELLING](#).

rCBF See [REGIONAL CEREBRAL BLOOD FLOW](#).

RCT See [RANDOMIZED CONTROLLED TRIAL](#).

RDD See [RANDOM DIGIT DIALLING](#).

Re Responsibility. See [CALIFORNIA PSYCHOLOGICAL INVENTORY](#).

REBT See [RATIONAL EMOTIVE BEHAVIOUR THERAPY](#).

REM See [RAPID EYE MOVEMENT](#). See also [REM ATONIA](#), [REM BEHAVIOUR DISORDER](#), [REM REBOUND](#), and [REM SLEEP](#) in the main body of the dictionary.

Rep See [REPRODUCIBILITY](#). Also Repertory: See [REPERTORY GRID TEST](#).

RER Rough endoplasmic reticulum. See [ENDOPLASMIC RETICULUM](#).

RET See [RATIONAL EMOTIVE THERAPY](#).

RF See [RETICULAR FORMATION](#).

RFT See [ROD-AND-FRAME TEST](#).

RGCT See [REALISTIC GROUP CONFLICT THEORY](#).

RHP See [RESOURCE-HOLDING POTENTIAL](#).

RI See [RETROACTIVE INTERFERENCE](#).

RIF See [RETRIEVAL-INDUCED FORGETTING](#).

RISB See [ROTTER INCOMPLETE SENTENCES BLANK](#).

RL Reiz limen. See [ABSOLUTE THRESHOLD](#).

RLS See [RESTLESS LEGS SYNDROME](#).

RM See [REPRESENTATIONAL MOMENTUM](#).

RNA Ribonucleic acid. See RNA in the main body of the dictionary.

ROC See [RECEIVER OPERATING CHARACTERISTIC](#).

RP See [READINESS POTENTIAL](#), [RECEIVED PRONUNCIATION](#).

RPFS See [ROSENZWEIG PICTURE-FRUSTRATION STUDY](#).

RPM See [RAVEN'S PROGRESSIVE MATRICES](#).

R–S See [REPRESSION–SENSITIZATION SCALE](#).

RT See [REACTION TIME](#).

rvf Right visual field. See [VISUAL FIELD](#).

S See [STIMULUS](#), [STANDARD STIMULUS](#). Also Spatial ability (intelligence factor): see [PRIMARY MENTAL ABILITIES](#); synchronized: see [NREM SLEEP](#).

s See [VARIABLE STIMULUS](#).

SA See [SLOWLY ADAPTING](#), [SOCIAL AGE](#).

Sa Self-acceptance. See [CALIFORNIA PSYCHOLOGICAL INVENTORY](#).

SAD See [SEASONAL AFFECTIVE DISORDER](#).

SaH See [SUBARACHNOID HAEMORRHAGE](#). Also written *SAH*.

SAS Statistical Analysis System. See SAS in the main body of the dictionary.

SAT See [SCHOLASTIC APTITUDE TEST](#), [SCHOLASTIC ASSESSMENT TEST](#).

S–B See [STANFORD–BINET INTELLIGENCE SCALE](#).

Sc Schizophrenia. See [MMPI](#). Also self-control: see [CALIFORNIA PSYCHOLOGICAL INVENTORY](#).

SCAN Schedules for Clinical Assessment in Neuropsychiatry. See [SCAN](#) in the main body of the dictionary.

SCII See [STRONG–CAMPBELL INTEREST INVENTORY](#).

SCN See [SUPRACHIASMATIC NUCLEUS](#).

SCR See [SKIN CONDUCTANCE RESPONSE](#).

SCT See [SOCIAL COGNITIVE THEORY](#).

SD See [SEMANTIC DIFFERENTIAL](#), [STANDARD DEVIATION](#).

SDAT Senile dementia of the Alzheimer type. See [SENILE DEMENTIA](#) and [SDAT](#) in the main body of the dictionary.

SDS Self-Directed Search. See [HOLLAND CODES](#).

SDT See [SELF-DETERMINATION THEORY](#), [SENSORY DECISION THEORY](#), [SIGNAL DETECTION THEORY](#).

SE See [STANDARD ERROR](#).

SEM See [STRUCTURAL EQUATION MODELLING](#).

SEN Special educational needs. See [LEARNING DISABILITY](#).

SER Smooth endoplasmic reticulum. See [ENDOPLASMIC RETICULUM](#).

$s\bar{E}_R$ See [NET REACTION POTENTIAL](#).

sE_R See [GENERALIZED REACTION POTENTIAL](#).

SEU See [SUBJECTIVE EXPECTED UTILITY](#).

SFH See [SEMATIC-FEATURE HYPOTHESIS](#).

*****ebook converter DEMO Watermarks*****

SFM *See* [STRUCTURE FROM MOTION](#).

SFO *See* [SUBFORNICAL ORGAN](#).

sH_R *See* [HABIT STRENGTH](#).

sH_R *See* [GENERALIZED HABIT STRENGTH](#).

Si Social introversion. *See* [MMPI](#).

SII *See* [STRONG INTEREST INVENTORY](#).

si_R Aggregate inhibitory potential. *See* [HULLIAN LEARNING THEORY](#).

SIS Sensory information store. *See* [SENSORY REGISTER](#).

SIT *See* [SOCIAL IDENTITY THEORY](#).

SL *See* [SENSATION LEVEL](#).

SLD *See* [SPECIFIC LEARNING DISABILITY](#), [SPECIFIC LEARNING DISORDER](#).

sL_R *See* [REACTION THRESHOLD](#).

SLT *See* [SOCIAL LEARNING THEORY](#).

SM *See* [SADOMASOCHISM](#).

SMA Supplementary motor area. *See* [MOTOR CORTEX](#).

SMH *See* [SOMATIC MARKER HYPOTHESIS](#).

SMR *See* [SENSORIMOTOR RHYTHM](#).

snRNP Small nuclear ribonucleoprotein. *See* [SNURP](#).

SNS *See* [SOMATIC NERVOUS SYSTEM](#), [SYMPATHETIC NERVOUS SYSTEM](#).

SNST Stroop Neuropsychological Screening Test. *See* [STROOP EFFECT](#).

SO Slow oxidative. *See* [SLOW-TWITCH FIBRE](#).

*****ebook converter DEMO Watermarks*****

So Socialization. See [CALIFORNIA PSYCHOLOGICAL INVENTORY](#).

SOA See [SPAN OF APPREHENSION](#), [STIMULUS ONSET ASYNCHRONY](#).

SOD Sexual orientation disturbance. See [EGO-DYSTONIC SEXUAL ORIENTATION](#).

SOI Structure of intellect. See [GUILFORD'S CUBE](#).

SON See [SUPERIOR OLIVARY NUCLEUS](#).

sO_R See [BEHAVIOURAL OSCILLATION](#).

Sp Social presence. See [CALIFORNIA PSYCHOLOGICAL INVENTORY](#).

SPE See [STANFORD PRISON EXPERIMENT](#).

SPECT Single photon emission computed tomography. See [SPECT SCAN](#) in the main body of the dictionary.

SPET Single photon emission tomography. See [SPECT SCAN](#) in the main body of the dictionary.

SPL See [SOUND PRESSURE LEVEL](#).

SPSS Statistical Product and Service Solutions, or (formerly) Statistical Package for the Social Sciences. See [SPSS](#) in the main body of the dictionary.

SQ See [SOCIAL QUOTIENT](#).

SQUID Superconducting quantum interference device. See [SQUID](#) in the main body of the dictionary.

SRIF See [SOMATOTROPHIN RELEASE INHIBITING FACTOR](#).

SRO Steele–Richardson–Olszewski syndrome. See [PROGRESSIVE SUPRANUCLEAR PALSY](#).

SRS See [SIMPLE RANDOM SAMPLE](#).

SSRI See [SELECTIVE SEROTONIN REUPTAKE INHIBITOR](#).

*****ebook converter DEMO Watermarks*****

SSS Sensation Seeking Scale. See [SENSATION SEEKING](#).

SST See [SOCIAL SKILLS TRAINING](#).

St See [STANDARD STIMULUS](#).

STAI See [STATE-TRAIT ANXIETY INVENTORY](#).

STM See [SHORT-TERM MEMORY](#).

StR See [REACTION LATENCY](#).

STRH See [SOMATOTROPHIN RELEASING HORMONE](#).

STS See [SHORT-TERM STORE](#), [SUPERIOR TEMPORAL SULCUS](#).

STX See [SAXITOXIN](#).

SUD Subjective Units of Distress. See [EYE-MOVEMENT DESENSITIZATION AND REPROCESSING](#).

SVIB See [STRONG VOCATIONAL INTEREST BLANK](#).

SWB See [SUBJECTIVE WELL-BEING](#).

SWOT Strengths, weaknesses, opportunities, threats. See [SWOT ANALYSIS](#) in the main body of the dictionary.

SWS See [SLOW-WAVE SLEEP](#).

Sy Sociability. See [CALIFORNIA PSYCHOLOGICAL INVENTORY](#).

SYSTAT System for Statistics. See SYSTAT in the main body of the dictionary.

T See [THYMINE](#), [T-MAZE](#). Also true: see [T SCORE](#); thymus: see [T LYMPHOCYTE](#); training: see [T-GROUP](#).

t True. See [ONE-SAMPLE T TEST](#), [PAIRED SAMPLES T TEST](#), [RELATED SCORES T TEST](#), [T TEST](#).

TA *See* [TRANSACTIONAL ANALYSIS](#).

TAP *See* [TAYLOR AGGRESSION PARADIGM](#).

TAT Thematic Apperception Test. *See* TAT in the main body of the dictionary.

TATA Thymine adenine thymine adenine. *See* [TATA BOX](#) in the main body of the dictionary.

TBI *See* [TRAUMATIC BRAIN INJURY](#).

TC *See* [THERAPEUTIC COMMUNITY](#).

TCA *See* [TRICYCLIC ANTIDEPRESSANT](#).

TD *See* [TARDIVE DYSKINESIA](#), [TOXIC DOSAGE](#).

TD-50 Toxic dosage 50. Also written TD_{50} . *See* [MEDIAN TOXIC DOSAGE](#).

TFT *See* [TIT FOR TAT STRATEGY](#).

TGA *See* [TRANSIENT GLOBAL AMNESIA](#).

TGI *See* [THERMAL GRILL ILLUSION](#).

TH *See* [TYROSINE HYDROXYLASE](#). Also thyrotrophic hormone: *see* [THYROID-STIMULATING HORMONE](#).

THC *See* [DELTA-9-TETRAHYDROCANNABINOL](#).

THG *See* [TETRAHYDROGESTRINONE](#).

TIA *See* [TRANSIENT ISCHAEMIC ATTACK](#).

TLE *See* [TEMPORAL LOBE EPILEPSY](#).

TM *See* [TRANSCENDENTAL MEDITATION](#).

TMR *See* [TRAINABLE MENTALLY RETARDED](#).

TMS *See* [TRANSCORTICAL MAGNETIC STIMULATION](#).

TNN Task-negative network. *See* [DEFAULT MODE NETWORK](#).

To Tolerance. *See* [CALIFORNIA PSYCHOLOGICAL INVENTORY](#).

ToM *See* [THEORY OF MIND](#).

TOT Tip of the tongue. *See* [TIP-OF-THE-TONGUE PHENOMENON](#).

TOTE Test–Operate–Test–Exit. *See* TOTE in the main body of the dictionary.

TPB *See* [THEORY OF PLANNED BEHAVIOUR](#).

TPH *See* [TRYPTOPHAN HYDROXYLASE](#).

TQM *See* [TOTAL QUALITY MANAGEMENT](#).

TRH *See* [THYROTROPHIN-RELEASING HORMONE](#).

tRNA *See* [TRANSFER RNA](#).

Trp *See* [TRYPTOPHAN](#).

TRT *See* [TESTOSTERONE REPLACEMENT THERAPY](#).

TS Tourette's syndrome. *See* [TOURETTE'S DISORDER](#).

TSD *See* [TAY–SACHS DISEASE](#), [TIME SAMPLING DIARY](#).

TSH *See* [THYROID-STIMULATING HORMONE](#).

TSP *See* [TRAVELLING SALESMAN PROBLEM](#).

TTR *See* [TYPE-TOKEN RATIO](#).

TTS *See* [TEMPORARY THRESHOLD SHIFT](#).

TTX *See* [TETRODOTOXIN](#).

Tyr See [TYROSINE](#).

U See [MANN–WHITNEY U TEST](#), [URACIL](#).

Ucs See [UNCONSCIOUS \(2\)](#).

ucs See [UNCONSCIOUS \(1\)](#).

UG See [UNIVERSAL GRAMMAR](#).

UPGMA Unweighted pair-group method of analysis. See [UPGMA](#) in the main body of the dictionary.

UR See [UNCONDITIONED RESPONSE](#).

US See [UNCONDITIONED STIMULUS](#).

UV See [ULTRAVIOLET](#).

V See [CRAMÉR'S V](#), [STIMULUS INTENSITY DYNAMISM](#), [VARIABLE STIMULUS](#). Also Verbal comprehension (intelligence factor): see [PRIMARY MENTAL ABILITIES](#).

V1 Visual area 1, the primary visual cortex. Also **V2**, **V3**, **V3A**, **V4**, **V5**, **V6**, **V7**, **V8**. See [VISUAL CORTEX](#).

vCJD Variant Creutzfeldt–Jakob disease. See [CREUTZFELDT–JAKOB DISEASE](#).

VEP See [VISUAL EVOKED POTENTIAL](#).

VI Variable interval. See [VARIABLE-INTERVAL SCHEDULE](#).

VMGT See [VISUAL-MOTOR GESTALT TEST](#).

VMH See [VENTROMEDIAL HYPOTHALAMUS](#).

VNO See [VOMERONASAL ORGAN](#).

VNTR Variable number of tandem repeats. See [REPETITIVE DNA](#) and [VNTR](#) in the main body of the dictionary.

VOR See [VESTIBULO-OCULAR REFLEX](#).

*****ebook converter DEMO Watermarks*****

VR See [VARIABLE RATIO SCHEDULE](#), [VIRTUAL REALITY](#).

VTa See [VENTRAL TEGMENTAL AREA](#).

VX Methylphosphonothioic acid. See VX in the main body of the dictionary.

W See [PERCEPTION-CONSCIOUSNESS SYSTEM](#), [KENDALL COEFFICIENT OF CONCORDANCE](#). Also Word fluency (intelligence factor): see [PRIMARY MENTAL ABILITIES](#).

WAIS Wechsler Adult Intelligence Scale. See [WECHSLER SCALES](#).

WASI Wechsler Abbreviated Scale of Intelligence. See [WECHSLER SCALES](#).

WAT See [WORD-ASSOCIATION TEST](#).

WB Wechsler–Bellevue. See [WECHSLER SCALES](#).

Wb Sense of well-being. See [CALIFORNIA PSYCHOLOGICAL INVENTORY](#).

WCST See [WISCONSIN CARD SORTING TEST](#).

WGTA See [WISCONSIN GENERAL TEST APPARATUS](#).

WISC Wechsler Intelligence Scale for Children. See [WECHSLER SCALES](#).

WM See [WORKING MEMORY](#).

WPPSI Wechsler Preschool and Primary Scale of Intelligence. See [WECHSLER SCALES](#).

WS See [WILLIAMS SYNDROME](#).

WSE See [WORD SUPERIORITY EFFECT](#).

X See [X CHROMOSOME](#) in the main body of the dictionary. Also parvocellular system cell: see [PARVOCELLULAR SYSTEM](#).

XTC See [ECSTASY \(2\)](#).

XYZ Euclidian coordinates. See [CIE COLOUR SYSTEM](#).

*****ebook converter DEMO Watermarks*****

Y See [Y CHROMOSOME](#) in the main body of the dictionary.

YAVIS Young, attractive, verbal, intelligent, successful. See YAVIS in the main body of the dictionary.

YDL See [YERKES–DODSON LAW](#).

YRMODA Year, month, day. See YRMODA in the main body of the dictionary.

z See [STANDARD SCORE](#).

ZPD See [ZONE OF PROXIMAL DEVELOPMENT](#).

Appendix III: Web links

Listed below are over 120 useful and interesting web sites containing information about the concepts and terminology of psychology and closely related topics. Many of these sites contain large numbers of further links to additional related information. For convenience, the list has been grouped into roughly indicative categories, but the categories and the links within them are not arranged in any particular order. To access the web sites listed below, visit <http://oxfordreference.com/page/psych>.

Psychological societies

<http://www.psywww.com/resource/deptlist.htm>

- Psychology Departments on the Web. Worldwide list of university psychology departments, searchable by country.

http://www.lib.uwaterloo.ca/society/psychol_soc.html

- Scholarly Societies Project: Psychology. With numerous links to scholarly societies in psychology.

http://www.scholarly-societies.org/neuropsychiat_soc.html

- Scholarly Societies Project: Neurosciences & Psychiatry. With numerous links.

<http://psych.hanover.edu/Krantz/psy.html>

- Psychological Societies. List of psychological societies around the world.

<http://www.apa.org/>

- American Psychological Association. Massive site with many useful links.

<http://www.psychologicalscience.org/>

- Association for Psychological Science. With many links to other web sites.

<http://www.bps.org.uk/>

- British Psychological Society. With news about psychology, a research digest, and much else besides.

<http://smg.bps.org.uk/>

- Student Members Group. Site for the Student Members Group of the British Psychological Society.

<http://www.cpa.ca/>

- Canadian Psychological Association. In English and French.

<http://www.dgps.de/>

- Deutsche Gesellschaft für Psychologie. The German Psychological Society. In German.

<http://www.eps.ac.uk/>

- Experimental Psychology Society. 'For the furtherance of scientific enquiry within the field of Psychology.'

<http://www.psychonomic.org/>

- Psychonomic Society. Dedicated to promoting communication of scientific research in psychology and allied sciences.

<http://www.abainternational.org/>

- Association for Behavior Analysis International. Dedicated to 'the growth

*****ebook converter DEMO Watermarks*****

and vitality of behavior analysis'.

<http://www.cognitivesciencesociety.org/>

- Cognitive Science Society. Interdisciplinary research in artificial intelligence, linguistics, anthropology, psychology, neuroscience, philosophy, and education.

<http://www.cogneurosociety.org/>

- Cognitive Neuroscience Society. Committed to the development of mind and brain research.

<http://www.casbs.org/>

- Center for Advanced Study in the Behavioral Sciences. Dedicated to advancing knowledge about human behaviour.

<http://www.gestalttheory.net/>

- Society for Gestalt Theory and its Applications. 'Promoting the Gestalt-theoretical perspective in research and practice.'

Online publications and databases

<http://www.apa.org/monitor/>

- Monitor on Psychology. The American Psychological Association magazine.

<http://www.sciencedirect.com/>

- ScienceDirect. An online database of books and journal articles in psychology.

<http://www.apa.org/pubs/databases/psycarticles/index.aspx>

- PsycARTICLES. Full-text articles from journals published mainly by the American Psychological Association.

<http://www.apa.org/pubs/databases/psycinfo/index.aspx>

- PsycINFO database. Indexing some 2,000 psychology journals and including dissertations, books, and reports.

<http://www.apa.org/pubs/videos/index.aspx>

- APA Videos. Information and purchasing site for a wide range of psychology videos and DVDs.

<http://psychclassics.yorku.ca/author.htm>

- Classics in the History of Psychology. 19th- and 20th-century publications, with full-text versions.

<http://www.bps.org.uk/publications/journals/journals>

- BPS Journals. Information about journals published by the British Psychological Society.

<http://www.bps.org.uk/publications/research-digest/research-...>

- BPS Research Digest. The British Psychological Society's free fortnightly digest of current research findings.

<http://www.psycline.org/>

- Psycline. A journal and article locator.

<http://www.psymeet.com/psymeet/index.shtml>

- Search Resources. List of links for searching mental health and psychiatry resources on the web.

<http://journalseek.net/psyc.htm>

- Genamics JournalSeek. A searchable database of psychology journals, categorized by topic areas.

General psychology

<http://www.psychwww.com>

- Psych Web. A megasite of psychology resources for students and lecturers.

<http://www.wisdomportal.com/Psychology.html>

- Psychology Resources on the Internet. A massive collection of resources on a wide range of topics.

<http://www.apa.org/topics/>

- Psychology Topics. Extensive list of psychology topics, with associated articles and resources.

<http://allpsych.com/>

- AllPsych Online. A virtual psychology classroom for psychology students.

[http://78.158.56.101/archive/psychology/s.php?p=216&db=psychology.ltsn.:](http://78.158.56.101/archive/psychology/s.php?p=216&db=psychology.ltsn.)

- The Higher Education Academy Psychology Network. Useful information about psychology practicals.

<http://www.units.muohio.edu/psybersite/>

- Psybersite. Web tutorials for learning about a wide range of topics in psychology.

Biological and comparative psychology

<http://faculty.washington.edu/chudler/introb.html#tn>

- Neuroscience for Kids. Accessible web site dealing with many aspects of neuroscience.

<http://www.pigeon.psy.tufts.edu/psych26/history.htm>

- Important Scientists in the Early Development of Comparative Cognition. Information on Darwin, Pavlov, Thorndike, etc.

<http://animalbehaviorsociety.org/>

- Animal Behavior Society. 'Founded to encourage and promote the study of animal behavior.'

<http://www.neurosurgery.org/cybermuseum/pre20th/crowbar/crowbar.html>

- American Crowbar Case. Phineas Gage's brain injury and nineteenth century theories of cerebral localization.

<http://www.pbs.org/wgbh/aso/tryit/brain/>

- Probe the Brain. Activities to learn about brain structure and function.

<http://www.hedweb.com/gooddrug.htm>

- Good Drug Guide. Massive guide to drugs and their effects.

<http://psych.hanover.edu/Krantz/neurotut.html>

- Basic Neural Processes. A collection of tutorials on neural functions.

<http://www.rci.rutgers.edu/~lwh/drugs/>

- *Drugs, Brains and Behavior*. Full-text book by C. Robin Timmons and Leonard W. Hamilton (1990).

<http://www.psych.ucsb.edu/research/cep/primer.html>

- *Evolutionary Psychology: A Primer*. Full-text book, by Leda Cosmides and John Tooby (1997).

<http://www.sfn.org/>

- Society for Neuroscience. Advancing the study of the brain and nervous system.

Cognitive psychology, cognitive neuroscience, and cognitive science

<http://cogprints.org/view/subjects/psyc.html>

- Cogprints. Free access to thousands of psychology articles online, subdivided by areas.

<http://www.sjdm.org/>

- Society for Judgment and Decision Making. With useful links to relevant web sites.

<http://www.dualtask.org/>

- Dual Task. Demonstrations and information about human multi-task performance and attention limits.

<http://www.g2conline.org/?gclid=CNajoaHC67QCFQRnOgodom8AZA>

- Genes to Cognition Online. Neuroscience: disorders, cognitive processes, research.

<http://users.ecs.soton.ac.uk/harnad/Papers/Py104/loftus.mem.html>

- Formation of False Memories. Informative discussion by Elizabeth Loftus.

<http://wordnet.princeton.edu/wordnet/>

- WordNet. English nouns, verbs, adjectives, and adverbs grouped into sets of cognitive synonyms.

<http://www.cnbc.cmu.edu/>

- Center for the Neural Basis of Cognition. Investigation of neural mechanisms in human cognitive abilities.

Intelligence

<http://www.intelltheory.com/>

- Human Intelligence. Includes biographies and interactive map of the history of intelligence theory and testing.

<http://www.danielgoleman.info/topics/emotional-intelligence/>

- Daniel Goleman. Blog about emotional intelligence by one of its pioneers.

<http://www.cs.bath.ac.uk/~jjb/web/uni.html>

- Understanding Natural Intelligence. With a list of useful papers and books.

Perception

<http://www.illusionworks.com/>

- Illusions, Perception & Cognitive Science. Al Seckel's collection of visual illusions, with references and links.

<http://www.ritsumeai.ac.jp/~akitaoka/index-e.html>

- Akiyoshi's illusion pages. Spectacular collection of visual illusions.

<http://www.simplypsychology.org/perception-theories.html>

- SimplyPsychology. Theories of perception.

<http://sulcus.berkeley.edu/FLM/MS/Physio.Percept.html>

- Physiology of Perception. Explanations and diagrams to explain the physiology of perception.

Personality

<http://buros.unl.edu/buros/jsp/search.jsp>

- Test Reviews Online. Reviews of psychological tests from the *Mental Measurements Yearbook*.

<http://ipip.ori.org/ipip/>

- International Personality Item Pool. IPIP, providing free personality tests for research in psychology.

<http://pandc.ca/>

- Personality & Consciousness. Links to articles on personality theorists such as Adler, Jung, Lewin, and Maslow.

<http://www.uky.edu/~eushe2/Pajares/self-efficacy.html>

- Information on Self-efficacy. Massive site about self-efficacy, its measurement, and Albert Bandura's theories.

<https://personality-project.org/>

- Personality Project. A collection of web pages devoted to the academic study of personality.

<http://repgrid.com/>

- Personal Construct Psychology. Site devoted to the system developed by George Kelly.

Social psychology

<http://www.socialpsychology.org/>

- Social Psychology Network. With over 14,000 links, plus resources in social psychology teaching and research.

<http://www.prisonexp.org/>

- Stanford Prison Experiment. The official web site, describing the classic experiment.

<http://www.bbc.co.uk/programmes/p0038x9c>

- Altruism. Listen online to the BBC *In Our Time* debate about altruism.

<http://muskingum.edu/~psych/psycweb/history/milgram.htm>

- Stanley Milgram. Biography and overview of his research into obedience and other issues.

http://psychology.wikia.com/wiki/Social_Cognition_Paper_Archive_and_Infoc

- Social Cognition Paper Archive. Articles and links to social psychology researchers.

<https://implicit.harvard.edu/implicit/>

- Project Implicit. Demonstrations and research information about the Implicit Association Test.

<http://www.sesp.org/>

- Society of Experimental Social Psychology. 'A scientific organization dedicated to the advancement of social psychology.'

Positive psychology

<http://www.ppc.sas.upenn.edu/>

- Positive Psychology Center. Promoting research, training, education, and the dissemination of positive psychology.

<http://www.capeu.com>

- Centre for Applied Positive Psychology. Promoting the science and practice of positive psychology.

<http://eu.wiley.com/WileyCDA/Section/id-814228.html>

- TED Studies: Psychology - Understanding Happiness. Videos of short lectures.

Developmental psychology

<http://www.eadp.info/links/>

- European Association of Developmental Psychology. With useful developmental psychology links.

<http://www.bdadyslexia.org.uk/>

- British Dyslexia Association. With links to information about dyslexia.

<http://www.psychology.sunysb.edu/attachment/index.html>

- Resources and commentary on attachment from the New York Attachment Consortium.

Sleep and dreams

<http://www.sleephomepages.org/>

- Sleep Home Pages. A portal to many web sites with information about sleep.

<http://www.sleepnet.com/>

- Sleepnet. Many links to sites about sleep, sleep disorders, and dreams.

<http://psych.ucsc.edu/dreams/>

- Dreamresearch. Information about using content analysis to study dreams.

Mental health

<http://psychcentral.com/>

- PsychCentral. Mental health network, with information and support networks for mental health.

<http://www.aedweb.org/web/index.php>

- Academy for Eating Disorders. Information about all eating disorders.

<http://www.bacp.co.uk/>

- British Association for Counselling and Psychotherapy. With many links.

<http://rebt-cbt.net/>

- REBT–CBT. Rational emotive behaviour therapy and cognitive behaviour therapy, with podcasts and articles.

<http://www.simplypsychology.org/cognitive-therapy.html>

- SimplyPsychology. Straightfoward discussions of types of behaviour therapy.

<http://www.apahelpcenter.org/>

- APA Help Center. American Psychological Association's brochures, tips, and articles on psychological and emotional issues.

<http://www.stress.org/>

- The American Institute of Stress. Clearing house for information on all stress-related subjects.

Research resources

<http://www.surveymonkey.com/Default.aspx>

- SurveyMonkey. An online site for creating surveys.

<http://www.randomizer.org/>

- Research Randomizer. For assigning experimental participants or subjects randomly to treatment conditions.

<http://www.onlinepsychresearch.co.uk/participants/current-studies/>

- Online Psychology Research. Participate in psychology studies currently running on the internet.

<http://psych.hanover.edu/research/exponnet.html>

- Psychological Research on the Net. Categorized list of experiments on the internet to participate in.

<http://pics.psych.stir.ac.uk/>

- Psychological Image Collection at Stirling. Including a database of faces for use in research.

<http://www.data-archive.ac.uk/>

- UK Data Archive. The largest UK collection of social sciences digital data.

<http://survey.net.ac.uk/sqb/>

- Social Survey Question Bank. Examples to assist with the design of new survey questionnaires.

<http://www.apa.org/pubs/databases/psyc critiques/index.aspx>

- PsycCRITIQUES. American Psychological Association database of reviews of psychology books.

<http://www2.chass.ncsu.edu/garson/pa765/statnote.htm>

- Statnotes. Useful information about multivariate statistics.

Ethics

<http://www.apa.org/ethics/>

- APA Ethics Office. Ethical guidelines issued by the American Psychological Association.

<http://www.bps.org.uk/what-we-do/ethics-standards/ethics-standards/>

- Ethics and Code of Conduct. Ethical guidelines issued by the British Psychological Society.

<http://neuroethics.upenn.edu/>

- Neuroethics. Ethical issues emerging from different branches of clinical and basic neuroscience.

Careers

<http://www.bps.org.uk/careers-education-training/careers-education-and-training>

- Careers in Psychology. Advice from the British Psychological Society.
<http://www.apa.org/careers/resources/guides/careers.pdf>

- Careers in Psychology. Booklet from the American Psychological Association.

<http://psych.hanover.edu/gradframe.html>

- Career Decision Aids. List of links to web pages useful for psychology careers advice.

Prominent psychologists

<http://mechanism.ucsd.edu/~bill/research/ANAUT.html>

- Biographies of Major Contributors to Cognitive Science. Expanded from *Companion to Cognitive Science* (Blackwell, 1988).

<http://www.psychwww.com/books/interp/toc.htm>

- Interpretation of Dreams. Full-text online version of Sigmund Freud's book.

<http://www.freud.org.uk/>

- Freud Museum. Site of the Sigmund Freud Museum in London.

<http://www.uky.edu/~eushe2/Pajares/james.html>

- William James. Massive site dedicated to this pioneer of US psychology.

<http://webpace.ship.edu/cgboer/jung.html>

- Carl Jung. Biography and description of Jung's theories.

<http://webpace.ship.edu/cgboer/maslow.html>

- Abraham Maslow. Biography and description of his theory of the hierarchy of needs.

<http://www.maslow.org/main.php>

- Maslow Nidus. Collection of papers, portions of books, and biography of Abraham Maslow.

<http://www.piaget.org/index.html>

- Jean Piaget Society: Information about the Swiss developmental psychologist.

<http://webpace.ship.edu/cgboer/skinner.html>

- B. F. Skinner. A biography of and a description of Skinner's work.

<http://www.nrogers.com/carlr Rogers.html>

- Carl Rogers. Biographical pages about Carl Rogers and the humanistic psychology movement.

Miscellaneous

<http://www.indiana.edu/~kinsey/index.html>

- Kinsey Institute. For Research in Sex, Gender, and Reproduction.

http://www.theassc.org/eprints_archive

- Association for the Scientific Study of Consciousness. With a searchable list of free articles.

<http://www.myscp.org/>

- Society for Consumer Psychology. With additional links.

<http://serendip.brynmawr.edu/Mind/>

- *Mind and Body: René Descartes to William James*. Full-text book by Robert H. Wozniak (1992).

<http://www.behavior.org/>

- The Cambridge Center for Behavioral Studies. With information on behaviour analysis.

Principal sources

Aiken, L. R. (1999). *Personality assessment: Methods and practices* (3rd ed.). Seattle, WA: Hogrefe & Huber.

American Educational Research Association (2007). *Standards for educational and psychological testing / American Educational Research Association, American Psychological Association, National Council on Measurement in Education*. Washington, DC: Author.

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Washington, DC: Author.

American Psychological Association. (2009). *Publication manual of the American Psychological Association* (6th ed.). Washington, DC: Author.

Anderson, B. F., Deane, D. H., Hammond, K. R., & McClelland, G. H. (1981). *Concepts in judgement and decision research: Definitions, sources, interrelations, comments*. New York: Praeger.

Argyle, M., & Colman, A. M. (Eds.). (1995). *Social psychology*. London and New York: Longman.

Beaumont, J. G., Kenealy, P. M., & Rogers, M. J. C. (Eds.). (1996). *The Blackwell dictionary of neuropsychology*. Oxford: Blackwell.

Best, J. B. (1999). *Cognitive psychology* (5th ed.). New York: Wiley.

Biographical Dictionary of Parapsychology. (1996). New York: Garrett.

Blackburn, S. (2005). *The Oxford dictionary of philosophy* (2nd ed.). Oxford: Oxford University Press.

Boneau, C. A. (1990). Psychological literacy: A first approximation. *American Psychologist*, 45, 891–900.

Boring, E. G. (1942). *Sensation and perception in the history of experimental psychology*. New York: Appleton-Century-Crofts.

Boring, E. G. (1957). *A history of experimental psychology* (2nd ed.). New York: Appleton-Century-Crofts.

Bowman, W. C., Bowman, A., & Bowman, A. (1986). *Dictionary of pharmacology*. Oxford: Blackwell.

Bryant, P. E., & Colman, A. M. (Eds.). (1995). *Developmental psychology*. London and New York: Longman.

Campbell, R. J. (2004). *Campbell's psychiatric dictionary* (8th ed.). New York: Oxford University Press.

Carlson, N. R. (2007). *Foundations of physiological psychology* (7th ed.). Boston, MA: Allyn and

*****ebook converter DEMO Watermarks*****

Bacon.

Carlson, N. R. (2007). *Physiology of behavior* (9th ed.). Boston: Pearson Allyn & Bacon.

Chambers dictionary (10th ed.). (2006). Edinburgh: Chambers

Collins English dictionary (6th ed.). (2007). Glasgow: HarperCollins.

Colman, A. M. (Ed.). (1994). *Companion encyclopedia of psychology*. London and New York: Routledge.

Colman, A. M. (Ed.). (1995). *Applications of psychology*. London and New York: Longman.

Colman, A. M. (Ed.). (1995). *Controversies in psychology*. London and New York: Longman.

Colman, A. M. (Ed.). (1995). *Psychological research methods and statistics*. London and New York: Longman.

Colman, A. M. (1999). *What is psychology? The inside story* (3rd ed.). London and New York: Routledge.

Coltheart, M., & Caramazza, A. (Eds.). (2006). *Cognitive neuropsychology twenty years on*. Hove: Psychology Press.

Cooper, J. E. (Ed.). (1994). *Pocket guide to the ICD-10 classification of mental and behavioural disorders: With glossary and diagnostic criteria for research*. Edinburgh: Churchill Livingstone.

Corsini, R. J. (2002). *The dictionary of psychology*. New York: Brunner/Routledge.

Corsini, R. J., Auerbach, A. J., & Anastasi, A. (Eds.). (1998). *Concise encyclopedia of psychology* (2nd ed.). New York: Wiley.

Crystal, D. (2003). *The Cambridge encyclopedia of language* (2nd ed.). Cambridge: Cambridge University Press.

Crystal, D. (2007). *A dictionary of linguistics and phonetics* (6th ed.). Oxford: Blackwell.

Darby, D., & Walsh, K. W. (2005). *Walsh's neuropsychology: A clinical approach* (5th ed.). Edinburgh: Churchill Livingstone.

Davis, K. L. (Ed.). (2002). *Neuropsychopharmacology the fifth generation of progress: An official publication of the American College of Neuropsychopharmacology*. Philadelphia: Lippincott Williams & Wilkins.

Davis, S. F., & Buskist, W. (Eds.). (2008). *21st century psychology: A reference handbook* (Vol. 1). Thousand Oaks, CA: Sage.

Deutsche bibliographische Enzyklopädie: DBE. (1998). München: Saur.

Dodge, Y. (Ed.). (2003). *The Oxford dictionary of statistical terms* (6th ed.). Oxford: Oxford University Press.

Domjan, M., & Burkhard, B. (1986). *The principles of learning & behavior* (2nd ed.). Monterey, CA: Brooks/Cole.

Ellenberger, H. F. (1970). *The discovery of the unconscious: The history and evolution of dynamic psychology*. New York: Basic Books.

Ellis, W. D. (Ed.). (1999). *A source book of Gestalt psychology*. London and New York: Routledge. (Originally published 1938)

English, H. B., & English, A. C. (1958). *A comprehensive dictionary of psychological and psychoanalytical terms: A guide to usage*. New York: David McKay.

*****ebook converter DEMO Watermarks*****

- Eysenck, M. W., Ellis, A. W., Hunt, E. B., & Johnson-Laird, P. N. (Eds.). (1994). *The Blackwell dictionary of cognitive psychology*. Oxford: Blackwell.
- Feldman, R. S., & Quenzer, L. F. (1984). *Fundamentals of neuropsychopharmacology*. Sunderland, MA: Sinauer.
- Feltham, C., & Dryden, W. (2004). *Dictionary of counselling* (2nd ed.). London: Whurr.
- Fitzgerald, M. J. T., Gruener, G., & Mtui, E. (2007). *Clinical neuroanatomy and neuroscience* (5th ed.). Edinburgh: Elsevier Saunders.
- Flew, A., & Priest, S. (Eds.). (2002). *A dictionary of philosophy* (3rd ed.). London: Pan.
- French, C. C., & Colman, A. M. (Eds.). (1995). *Cognitive psychology*. London and New York: Longman.
- Freud, S. (1953–74). *The standard edition of the complete psychological works of Sigmund Freud* (Vols 1–24, J. Strachey, Ed. and Trans.). London: Hogarth Press. (Original works published 1886–1938)
- Freund, J. E., & Williams, F. J. (1966). *Dictionary/outline of basic statistics*. New York: McGraw-Hill.
- Garrett, B. (2008). *Brain & behavior: An introduction to biological psychology* (2nd ed.). Thousand Oaks, CA: Sage.
- Gregory, R. L. (1984). *Mind in science: A history of explanations in psychology and physics* (new ed.). London: Penguin.
- Gregory, R. L. (Ed.). (2004). *The Oxford companion to the mind* (2nd ed.). Oxford: Oxford University Press.
- Gregory, R. L., & Colman, A. M. (Eds.). (1995). *Sensation and perception*. London and New York: Longman.
- Grosser, G. S., & Spafford, C. S. (1995). *Physiological psychology dictionary: A reference guide for students and professionals*. New York: McGraw-Hill.
- Groves, P. M., & Rebec, G. V. (1992). *Introduction to biological psychology* (4th ed.). Dubuque, IA: Wm. C. Brown.
- Haines, D. E. (2008). *Neuroanatomy: An atlas of structures, sections, and systems* (7th ed.). Philadelphia: Lippincott Williams & Wilkins.
- Hamilton, L. W., & Timmons, C. R. (1990). *Principles of behavioral pharmacology: A biopsychological perspective*. Englewood Cliffs, NJ: Prentice-Hall.
- Hampson, S. E., & Colman, A. M. (Eds.). (1995). *Individual differences and personality*. London and New York: Longman.
- Harré R., & Lamb, R. (Eds.). (1986). *Dictionary of ethology and animal learning*. Oxford: Blackwell.
- Hayes, N., & Stratton, P. (2003). *A student's dictionary of psychology* (4th ed.). London: Arnold.
- Hearnshaw, L. S. (1987). *The shaping of modern psychology*. London: Routledge & Kegan Paul.
- Herrnstein, R. J., & Boring, E. G. (Eds.). (1965). *A source book in the history of psychology*. Cambridge, MA: Harvard University Press.
- Hickman, C. J., Johnson, M. L., & Abercrombie, M. (2008). *A dictionary of biology*. New Brunswick, NJ: Aldine Transaction.
- Hinshelwood, R. D. (1991). *A dictionary of Kleinian thought* (2nd ed.). Northvale, NJ: Jason Aronson.
- *****ebook converter DEMO Watermarks*****

- Houdé, O. (2004). *Dictionary of cognitive science: Neuroscience, psychology, artificial intelligence, linguistics, and philosophy*. New York: Psychology Press.
- Howells, J. G., & Osborn, M. L. (1984). *A reference companion to the history of abnormal psychology*. Westport, CT: Greenwood Press.
- Hubel, D. H. (1995). *Eye, brain, and vision* (new ed.). New York: W. H. Freeman.
- Isaacs, A., Daintith, J., & Martin, E. (Eds.). (1999). *Concise science dictionary* (4th ed.). Oxford: Oxford University Press.
- Johnstone, E. C., Lawrie, S., Owens, D. G., & Sharp, M. D. (Eds.). (2004). *Companion to psychiatric studies* (7th ed.). Edinburgh: Churchill Livingstone.
- Julien, R. M., Advokat, C. D., & Comaty, J. E. (2008). *A primer of drug action: A comprehensive guide to the actions, uses, and side effects of psychoactive drugs* (11th ed.). New York: Worth.
- Jung, C. G. (1953–71). *The collected works of C. G. Jung* (H. Read, M. Fordham, & G. Adler Eds.). London & Princeton, NJ: Routledge & Princeton University Press.
- Kalat, J. W. (1995). *Dictionary of biological psychology* (5th ed.). Pacific Grove, CA: Brooks/Cole.
- Kendall, M. G., & Buckland, W. R. (1982). *A dictionary of statistical terms* (4th ed.). London: Longman.
- Kendall, M. G., & Doig, A. G. (1962). *Bibliography of statistical literature 1950–1958*. Edinburgh: Oliver & Boyd.
- Kendall, M. G., & Doig, A. G. (1965). *Bibliography of statistical literature 1940–1949*. Edinburgh: Oliver & Boyd.
- Kendall, M. G., & Doig, A. G. (1965). *Bibliography of statistical literature pre–1949 with supplements to the volumes for 1940–49 and 1950–58*. Edinburgh: Oliver & Boyd.
- Kendell, R. E., & Zealley, A. K. (Eds.). (1993). *Companion to psychiatric studies* (5th ed.). Edinburgh: Churchill Livingstone.
- Kimble, D. P. (1992). *Biological psychology* (2nd ed.). Fort Worth, TX: Harcourt Brace Jovanovich.
- Kimble, D., & Colman, A. M. (Eds.). (1995). *Biological aspects of behaviour*. London and New York: Longman.
- Knowles, E. & Elliot, J. (1998). *The Oxford dictionary of new words* (2nd ed.). Oxford: Oxford University Press.
- Kolb, B., & Whishaw, I. Q. (2008). *Fundamentals of human neuropsychology* (6th ed.). Basingstoke: Palgrave Macmillan.
- Ksir, C., Ray, O. S., & Hart, C. L. (2008). *Drugs, society, and human behavior* (12th ed.). Boston, MA: McGraw-Hill.
- Kuper, A., & Kuper, J. (Eds.). (2004). *The social science encyclopedia* (3rd ed.). London and New York: Routledge.
- Laplanche, J., & Pontalis, J.-B. (1988). *The language of psycho-analysis* (Trs. D. Nicholson-Smith). London: Karnac Books and the Institute of Psycho-Analysis. [Original work in French published 1973]
- Lawrence, E., & Henderson, I. F. (2008). *Henderson's dictionary of biological terms* (14th ed.). London: Pearson Education.

- Lazarus, A. A., & Colman, A. M. (Eds.). (1995). *Abnormal psychology*. London and New York: Longman.
- Levine, M. W. (2000). *Fundamentals of sensation and perception* (3rd ed.). Oxford: Oxford University Press.
- Mackintosh, N. J., & Colman, A. M. (Eds.). (1995). *Learning and skills*. London and New York: Longman.
- MacRae, S. (1994). *Describing and interpreting data*. Leicester: The British Psychological Society.
- MacRae, S. (1994). *Drawing inferences from statistical data*. Leicester: The British Psychological Society.
- MacRae, S. (1994). *Models and methods for the behavioural sciences*. Leicester: The British Psychological Society.
- Manstead, A. S. R., & Hewstone, M. (Eds.). (1995). *The Blackwell encyclopedia of social psychology*. Oxford: Blackwell.
- Martin, E., & Hine, R. (2008). *A dictionary of biology* (6th ed.). Oxford: Oxford University Press.
- McCarthy, R. A., & Warrington, E. K. (1990). *Cognitive neuropsychology: A clinical introduction*. San Diego, CA: Academic Press.
- Miller, P. M., & Wilson, M. J. (1983). *A dictionary of social science methods*. New York: Wiley.
- Moore, B. E., & Fine, B. D. (Eds.). (1994). *Psychoanalytic terms and concepts* (new ed.). New York: Yale University Press.
- Mosby's dictionary of medicine, nursing & health professions* (7th ed.). (2006). St Louis, MO: Mosby.
- Nelson, R. D. (Ed.). (2003). *The Penguin dictionary of mathematics* (3rd ed.). London: Penguin.
- Oxford English dictionary* (2nd ed.). (1989). Oxford: Oxford University Press.
- Palfai, T., & Kankiewicz, H. (1991). *Drugs and human behavior*. Dubuque, IA: Wm. C. Brown.
- Parchi, P., & Gambetti, P. (1995). Human prion diseases. *Current opinion in neurology*, 8, 286–293.
- Parkinson, B., & Colman, A. M. (Eds.). (1995). *Emotion and motivation*. London and New York: Longman.
- Pashler, H. E. (Ed.). (2002). *Stevens' handbook of experimental psychology* (3rd ed.). New York: Wiley.
- Perry, P. J., Alexander, B., Liskow, B. I., & DeVane, C. L. (2007). *Psychotropic drug handbook* (8th ed.). Philadelphia, PA: Lippincott Williams & Wilkins.
- Reber, A. S., & Reber, E. S. (2001). *The Penguin dictionary of psychology* (3rd ed.). London: Penguin.
- Roach, P. (1992). *Introducing phonetics*. London: Penguin.
- Rosenzweig, M. R., & Leiman, A. L. (1989). *Physiological psychology* (2nd ed.). New York: Random House.
- Rycroft, C. (1995). *A critical dictionary of psychoanalysis* (2nd ed.). London: Penguin.
- Samuels, A., Shorter, B., & Plant, F. (1993). *A critical dictionary of Jungian analysis*. London: Routledge & Kegan Paul. (Original work published 1986)
- Sarle, W. (1995). What is measurement theory? In *Disseminations of the International Statistical Institute* (4th ed., pp. 61–66). Wichita, TX: ACG Press.

- Schiff, W. (1980). *Perception: An applied approach*. Boston, MA: Houghton Mifflin.
- Schiffman, H. R. (2000). *Sensation and perception: An integrated approach* (5th ed.). New York: Wiley.
- Schwandt, T. A. (1997). *Qualitative inquiry: A dictionary of terms*. Thousand Oaks, CA: Sage.
- Scriven, M. (1991). *Evaluation thesaurus* (4th ed.). Newbury Park, CA: Sage.
- Sekuler, R., & Blake, R. (2006). *Perception* (5th ed.). Boston: McGraw-Hill.
- Shahrokh, N. C., & Hales, R. E. (Eds.). (2003). *American psychiatric glossary* (8th ed.). Washington, DC: American Psychiatric Press.
- Sheehy, N., Chapman, A. J., & Conroy, W. A. (Eds.). (2002). *Biographical dictionary of psychology*. London and New York: Routledge. (Originally published 1997)
- Siegel, S., & Castellan, N. J., Jr. (1988). *Nonparametric statistics for the behavioral sciences* (2nd ed.). New York: McGraw-Hill.
- Soanes, C., & Stevenson, A. (Eds.). *Oxford dictionary of English* (2nd ed., rev.). (2005). Oxford: Oxford University Press.
- Spies, R. A., & Plake, B. S. (Eds.). (2005). *The sixteenth mental measurements yearbook*. Lincoln, NE: Buros Institute of Mental Measurements.
- SPSS for Windows: Release 15.0 [Computer software]. (2006). Chicago, IL: SPSS Inc.
- Sternberg, R. J., & Pretz, J. E. (2005). *Cognition and intelligence: Identifying the mechanisms of the mind*. Cambridge: Cambridge University Press.
- Stevens, S. S. (Ed.). (1951). *Handbook of experimental psychology*. New York: Wiley.
- Sutherland, S. (1995). *The Macmillan dictionary of psychology* (2nd ed.). London: Macmillan.
- Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics* (5th ed.). Boston: Pearson / Allyn & Bacon.
- Towl, G. J., Farrington, D. P., Crighton, D. A., & Hughes, G. (2008). *Dictionary of forensic psychology*. Cullompton: Willan Publishing.
- Trask, R. L. (1996). *A dictionary of phonetics and phonology*. London and New York: Routledge.
- Tuleya, L. G. (2007). *Thesaurus of psychological index terms* (11th ed.). Washington, DC: American Psychological Association.
- VandenBos, G. R. (Ed.). (2006). *APA dictionary of psychology*. Washington, DC: American Psychological Association.
- Vogt, W. P. (2005). *Dictionary of statistics & methodology: A nontechnical guide for the social sciences* (3rd ed.). Thousand Oaks, CA: Sage.
- Wardhaugh, R. (2003). *Understanding English grammar: A linguistic approach* (2nd ed.). Oxford: Blackwell.
- Watson, R. I. (Ed.). (1979). *Basic writings in the history of psychology*. New York: Oxford University Press.
- Webster's third new international dictionary of the English language unabridged*. (1993). Springfield, MA: Merriam-Webster.
- Weiner, I. B., & Craighead, W. B. (Eds.). (2010). *The Corsini Encyclopedia of Psychology* (4th ed.). New York: Wiley.

*****ebook converter DEMO Watermarks*****

- Wilson, R. A., & Keil, F. C. (Eds.). (1999). *The MIT encyclopedia of cognitive sciences*. Cambridge, MA: MIT Press.
- Wing, J. K., Cooper, J. E., & Sartorius, N. (1974). *Measurement and classification of psychiatric symptoms: An instruction manual for the PSE and Catego program*. Cambridge: Cambridge University Press.
- Winn, P. (Ed.). (2001). *Dictionary of biological psychology*. London and New York: Routledge.
- Woodworth, R. S. & Schlosberg, H. (1955). *Experimental psychology* (3rd ed.). London: Methuen.
- World Health Organization Division of Mental Health. (1994). *SCAN schedules for clinical assessment in neuropsychiatry: Glossary: Differential definitions of SCAN items and commentary on the SCAN text*. Geneva: Author.
- World Health Organization. (1993). *The ICD-10 classification of mental and behavioural disorders: Diagnostic criteria for research*. Geneva: Author.
- World Health Organization. (1994). *Lexicon of psychiatric and mental health terms* (2nd ed.). Geneva: World Health Organization.
- Yaremkko, R. M., Harai, H., Harrison, R. C., & Lynn, E. (1982). *Reference handbook of research and statistical methods in psychology: For students and professionals*. New York: Harper & Row.
- Youngman, M. B. (1979). *Analysing social and educational research data*. Maidenhead: McGraw-Hill.