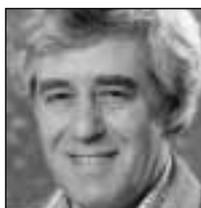


Defining issues

PSYCHOLOGY emerged as an independent discipline in Germany in the 1880s and immediately began accumulating a specialised vocabulary. The boundaries of this vast lexicon are ill-defined and conjectural. One reason for this is that psychology overlaps with psychiatry, psychoanalysis, neuroanatomy, neurophysiology, pharmacology, computing, optometry, ethology, genetics, statistics, philosophy, linguistics, sociology, and anthropology, and has borrowed and stolen terminology from all of these fields. More than a hundred dictionaries of psychology have appeared in English since 1892, and all have included words from these cognate disciplines, in addition to purely psychological words.

In retrospect, these dictionaries can be seen as reflecting, to a large extent, the times in which they appeared. The definition of the word *psychology*, for example, tended to emphasise mental experience in the era before the rise of behaviourism, the 'science of behaviour' from the end of the Second World War until the 1960s, and behaviour and cognitive processes in the most recent phase.

I am the author of the latest psychological dictionary – the *Oxford Dictionary of Psychology* (Colman, 2001). In the process of selecting headwords and writing definitions for this vast work, I made some surprising discoveries about



ANDREW M. COLMAN discusses the specialist vocabulary of psychology and the problems of compiling a psychological dictionary.

the lexicon of psychology and the problems of compiling a dictionary.

My starting point was Boneau's (1990) empirical study of the terms and concepts that textbook authors in the principal subfields of psychology rated as most important for graduates to know. Also useful was the *Thesaurus of Psychological Index Terms* (7th edn, 1994), which lists the keywords of databases such as *Psychological Abstracts*, PsycINFO, PsycLIT, and ClinPSYC. These sources provided a core vocabulary of essential terms on which to build.

I also examined the leading psychological dictionaries currently in use: English and English's *Comprehensive Dictionary of Psychological and Psychoanalytical Terms: A Guide to Usage* (1958); *The Penguin Dictionary of Psychology* (Reber, 1995); *The Macmillan Dictionary of Psychology* (Sutherland, 1995); and Corsini's *Dictionary of Psychology* (1999). Each is an outstanding work of scholarship in its own way, and if the *Oxford Dictionary of Psychology* has any additional merits, they rest firmly on the foundations of its predecessors. I selected headwords from these dictionaries and also from textbooks, journals, specialised glossaries, and general reference works. Oxford University Press helped me with information from its electronic database, and occasionally I trawled the internet.

I was rapidly overwhelmed by a plethora of words. As Kevin Keegan, the England football coach, commented sagely on BBC radio in September 1999: 'Picking the team isn't difficult; what's difficult is deciding which players to leave out.' I had the same problem: the difficult part was deciding which headwords to leave out. For example, a famous dictionary search carried out by Allport and Odbert (1936) uncovered a 'language personality sphere'

of 17,953 English words denoting personality traits, or 4505 if synonyms are deleted. There are also hundreds of words denoting emotions. The only practical way of dealing with this problem was by restricting coverage to terms that have attracted particular attention from researchers.

After I had exercised my tentative judgement, a panel of advisory editors helped to improve my headword list, and later to eliminate blunders from my definitions. In addition, scores of colleagues all over the world answered e-mail messages from me about terms that they had been responsible for introducing into the lexicon of psychology.

Etymologies

When I studied the leading psychological dictionaries, my first surprise was that none of them supplied word origins or etymologies. Etymologies are not only interesting, they also help to inoculate us against errors of spelling and interpretation.

An embarrassing example is provided by *autopagnosia* [*sic*], a headword in the first edition of one of the most popular psychological dictionaries. In fact, it's a rather common typographical error, an example of *haplography* – omitting the second occurrence of a repeated letter or syllable. The correct form is *autotopagnosia*, denoting a form of agnosia characterised by 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. Such a typo would never be made by anyone familiar with the etymology. The word comes from the Greek *autos* (self) + *topos* (place), followed by *agnosia*. Incidentally, *agnosia*, from three further Greek roots, was introduced in 1891 by Sigmund Freud to denote a neurological impairment of ability to

WEBLINKS

Oxford Dictionary of Psychology:

www.oup-usa.org/isbn/0198662114.html

Preface to Oxford Dictionary of Psychology:

www.le.ac.uk/psychology/amc/adop.html

Brunner-Routledge Dictionary of Psychology:

www.brunner-routledge.com/bkfiles/1583910028X.htm

Penguin Dictionary of Psychology:

www.theoimedia.se/titlar/peps81.html

Obituary for Stuart Sutherland by Christopher Longuet-Higgins:

www.biols.susx.ac.uk/EP/stuart.html

Preface to Johnson's Dictionary:

www.andromeda.rutgers.edu/~jlynch/Texts/preface.html

recognise or identify familiar things. Difficult words need etymologies; we therefore decided to include them in the *Oxford Dictionary of Psychology*.

Technical words

My second surprise was that the leading psychological dictionaries covered only superficially the more technical terminologies of neuroanatomy, neurophysiology, psychopharmacology, and statistics, concentrating chiefly on the easier words. It could be argued that the difficult technical words are the ones most crucially in need of inclusion and careful definition in a specialist dictionary.

Take, for example, the *blood-brain barrier*, a pivotal neuroanatomical term

that all our undergraduates are expected to understand. Among the leading psychological dictionaries mentioned earlier, one omits it altogether; another defines it as 'a semipermeable membrane surrounding blood vessels in the central nervous system ...'; and another as 'a membrane between blood-vessels and the central nervous system ...'. These definitions just aren't good enough, in my opinion.

The blood-brain barrier is admittedly a complicated and imperfectly understood mechanism, but it is not a membrane, which according to the *Oxford Dictionary of Psychology* is 'a thin film, skin, or layer of (usually) fibrous tissue that covers, lines, or connects biological organs or cells'. The blood-brain barrier is effected through the unique structure of the capillaries that

supply blood to the brain. These capillaries are composed of endothelial cells sealed together in continuous tight junctions to form solid walls not found anywhere else in the body, and they are encircled by astrocytes, which seal them with glial sheaths.

A useful definition should also mention the fact that lipid-soluble substances such as alcohol, nicotine, caffeine, and heroin easily cross the blood-brain barrier and enter the brain. This is because the cell membranes and glial sheaths are composed largely of lipid molecules, whereas water-soluble substances are generally kept out, because oil and water don't mix, although certain water-soluble substances are carried across the barrier by specialised *active transport* mechanisms. And, of course, active transport should then be cross-referenced (two leading dictionaries do not even include this important term).

Psychoanalysis

Equally surprising was the discovery that the leading psychological dictionaries failed to cover the specialised vocabulary of psychoanalysis systematically or in any depth. The *Comprehensive Dictionary of Psychological and Psychoanalytical Terms* includes the key psychoanalytic terms, as its title promises, but defines them only briefly and superficially, and does not cite sources to enable the reader to learn more. The other three dictionaries include the most elementary psychoanalytic terms, such as *id*, *ego*, and *Oedipus complex*, but not the less familiar ones, such as *omega process*, *quota of affect*, and the Lacanian *foreclosure*, for example.

What is worse, the definitions are often judgemental but not informative enough. The *Macmillan Dictionary of Psychology* is a case in point. Its author, Stuart Sutherland, professor of psychology at the University of Sussex until his death in 1998, had been on the receiving end of psychoanalytic therapy in the early 1970s after suffering from a severe mental disorder, about which he wrote fascinatingly (Sutherland, 1987). His dictionary is in many ways brilliant, but psychoanalytic terminology is certainly not its forte. Here, for example, is his definition of *intellectualization* in its entirety:

Dealing dispassionately with emotional problems using the head rather than the heart, while ignoring feelings and emotions; it is considered to be a defence mechanism. The term is pejorative and has become a cant word

among psychotherapists, who tend to use it when confronted with patients who are cleverer than they are.

No one could accuse Sutherland's dictionary of blandness, as this example illustrates, and that is one of its strengths. The definitions are forthright, often tendentious, and occasionally self-indulgent, very much in the tradition of Samuel Johnson's *Dictionary of the English Language*, but all that comes at a price. Sutherland's definition of *intellectualization* should surely have informed his readers that its function, according to psychoanalytic theory, is to block disturbing emotions or conflicts from consciousness; also that the term was introduced not by Sigmund Freud but by his daughter Anna Freud, in her book *The Ego and the Mechanisms of Defence* in 1937.

After careful consideration, we decided that the *Oxford Dictionary of Psychology* should cover psychoanalytic terminology systematically, with citations of key passages from Freud referenced to the *Standard Edition of the Complete Psychological Works of Sigmund Freud*, passages from Jung referenced to the *Collected Works of C.G. Jung*, and so on. Many psychologists will regard the inclusion of these vocabularies as unnecessary or even irritating, but others may find them useful.

Fuzzy concepts

When I began planning the *Oxford Dictionary of Psychology*, I expected the psychoanalytic and biological terminology to present the greatest problems, but I assumed that plain vanilla cognitive psychology would go down easily. Exactly the opposite transpired. Psychoanalytic terminology turned out to be not nearly as extensive as I had assumed. Furthermore, both psychoanalytic and biological concepts, though often quite technical, were generally easy to define, because they have quite specific meanings. (There are exceptions, of course, such as Freud's hopelessly confused *principle of constancy*.) But cognitive psychology turned out to encompass a vast and sprawling vocabulary of vague and fuzzy concepts, defined and redefined seemingly arbitrarily, swirling about the literature chaotically. Even the most familiar cognitive terms are assigned different meanings by different writers. For example, *working memory*, according to some, is a synonym for *short-term memory*; for others

it is a temporary store for recently activated conscious information that the central executive moves in and out of short-term memory. Pointless neologisms are commonplace, even when perfectly serviceable words are already available, such as *articulatory loop* and *articulatory store*, which both merely rename the *subvocal rehearsal loop*.

Mental disorders

I expected the terminology of mental disorders to be large, and it turned out to be outsize. But it is well codified, and the task of writing definitions was greatly facilitated by the American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders* (1994) (DSM-IV), the World Health Organization's *Diagnostic Criteria for Research* (1993) (ICD-10) and other authoritative sources. We teach clinical psychology students that DSM-IV and ICD-10 are the definitional gold and silver standards, and it is surprising that earlier psychological dictionaries did not key their definitions of mental disorders strictly to these authorities.

Building on the foundations laid in the *Penguin Dictionary of Psychology*, the *Oxford Dictionary of Psychology* includes an appendix containing what we believe to be the most comprehensive inventory of phobias (with etymologies) and phobic

stimuli yet compiled. Among the entries are *sesquipedalophobia* – pathological fear of long words, from Latin *sesqui* (one and a half) + *pedalis* (of the foot) + *phobos* (fear); and *deipnophobia* – pathological fear of dinner parties or dining, from Greek *deipnon* (dinner). John Simpson, chief editor of the *Oxford English Dictionary*, drew my attention to these and many other obscure and exotic phobias. But no inventory of phobias could ever be fully comprehensive, because new phobias are continually being described and named.

Information sought

An unusual feature of the *Oxford Dictionary of Psychology* is the heavy cross-referencing of entries. For example, *independent variable* is cross-referenced not only to *dependent variable* but also to *experimental design*, *extraneous variable*, and *multiple regression*. *Visual illusion* is cross-referenced to approximately 100 particular visual illusions with separate entries (and often illustrations), and *cranial nerve* is cross-referenced to all 12 of the human cranial nerves, each of which has a separate entry. This is intended to help a reader to obtain additional information that is either directly or indirectly relevant to the headword, and in general to encourage the use of the dictionary as an aid to serious scholarship.

Another unusual feature is the attempt to attribute important – especially eponymous – terms and concepts to their originators or discoverers. The publisher requested basic biographical details of everyone mentioned by name. Though there are some I failed to track down, I managed to trace many obscure people, including Charles Edwin Benham (1860–1929), who gave his name to *Benham's top*, a black-and-white patterned disc that produces vivid sensations of colour when rotated; James Fraser (1863–1936), who devised *Fraser's spiral* and the *twisted-cord illusion*; and Cheves West Perky (1874–1940), who discovered the *Perky phenomenon*, whereby a faint physical stimulus is mistakenly thought to have been imagined. Several shadowy figures whose details are incomplete are listed in the box below; I'd be delighted to hear from anyone who can supply the missing biographical information about any of them.

Harmless drudgery

Samuel Johnson famously defined a lexicographer as 'a harmless drudge'. I wrote the *Oxford Dictionary of Psychology* in circumstances that were difficult for me at work, and the only way of preventing the drudgery from getting on top of me and grinding all my other activities to a halt was by working extremely fast. I tried hard to avoid errors, but some must have slipped through. I hope that readers who spot them will get in touch with me, citing chapter and verse, so that I can correct them for later editions.

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MISSING PERSONS

Andrew Colman would be delighted to hear from anyone who can supply basic biographical information about any of the following people for future editions of the *Dictionary of Psychology*. A complete set of details should include the person's full name, discipline or profession, nationality, country of birth, year of birth, and year of death if dead. Among those for whom data are missing are:

- Esta A. Berg**, who helped to develop the Wisconsin Card Sorting test in 1948
- M. Boot** who, in collaboration with S. van der Lee, first reported the Lee-Boot effect in 1955
- John N. Buck**, who developed the House-Tree-Person technique in 1948
- M. B. Cook**, who published the statistic now called Cook's D in 1951
- John Dillingham Dodson** who, in 1908 while at Johns Hopkins University (which claims to have no record of him), collaborated with Yerkes on the Yerkes-Dodson law
- Harvey Jackins**, who developed co-counselling in the 1950s
- Arthur Janov**, who developed primal therapy in 1970
- Adolf (or Adolph) Korte**, who formulated the earliest version of the laws of apparent movement in the journal *Zeitschrift für Psychologie* in 1915
- L. S. Sakharov**, whom Vygotsky credited with developing the Vygotsky blocks
- S. van der Lee**, who, in collaboration with I. M. Boot, first reported the Lee-Boot effect in 1955
- James Vicary**, who claimed in 1957 to have carried out an experiment in a New Jersey cinema on subliminal perception that he later admitted was a fraud
- Jean G. Wallace**, who co-authored with Richard Gregory in 1963 the case study of SB (neither Gregory nor the Cambridge Experimental Psychology department knows what became of her)
- J. C. P. Williams**, the New Zealand cardiologist who, in 1961, first described the condition now called Williams syndrome