

Shrinking minds and swollen heads

The Encyclopedia of Psychiatry, Psychology, and Psychoanalysis

edited by Benjamin B. Wolman

Holt: 1996. Pp. 649. \$135

The Blackwell Dictionary of Neuropsychology

edited by J. Graham Beaumont, Pamela

M. Kenealy and Marcus J. C. Rogers

Blackwell: 1996. Pp. 788. £80

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At a time when behavioural science, psychology and neuroscience are becoming increasingly fragmented into narrow sub-specialisms, there is a real need for single-volume compilations that provide brief, informative summaries for the nonspecialist. These two volumes were presumably produced with this objective in mind. Unfortunately, the quality of the entries varies considerably, with some so banal as to take one's breath away.

Consider these penetrating insights from the *Encyclopedia*. Love: "It became apparent that increases in liking do not always lead to love, especially romantic love." Laughter: "The research of developmental psychologists has contributed most to our understanding of laughter, although by and large their conclusions are not unequivocal. It is clear that laughter matu-

rationally precedes humor appreciation."

Pair-bonding: "When limerence (infatuation) is at its peak, the limerent person undergoes subjective and somatic changes similar to those that signify a state of expectancy or anticipation. The cycle of sleeping and waking is altered, as is food intake, thermoregulation, and kinesis. At the approach or thought of the beloved, there are changes in pulse rate, blushing, breathing, swallowing, perspiration and vocal fluency. Communication with the beloved becomes a prime occupation. Dreams may involve images of being together romantically, erotically, genitally. They may culminate in orgasm with the partner represented in absentia."

Acculturation: "The assimilation of a newcomer into a foreign culture is highly dependent on the development of understanding between the recent arrival and his or her hosts. Crucial to the development of such understanding is effective interchange of information between the new arrival and his hosts, that is, intercultural communication."

There is very little in these descriptions that one's grandmother would not have known. They are a sad reminder that the behavioural sciences today are hardly more advanced than physics was in the seven-

teenth century, or biology was in the nineteenth. So the fault, perhaps, is not so much with the *Encyclopedia*, but with the field as a whole. Perhaps we should not expect too much from a field that is still in its infancy.

Anyone interested in the history of ideas would be puzzled by the following striking differences between advances in biology and advances in psychology. The progress of biology has been characterized by landmark discoveries, each of which resulted in a breakthrough in understanding — the discoveries of cells, Mendel's laws of heredity, chromosomes, mutations, DNA and the genetic code. Psychology, on the other hand, has been characterized by an embarrassingly long sequence of 'theories', each really nothing more than a passing fad that rarely outlived the person who proposed it.

Why the difference? There are at least four possible reasons. First, it may be that the profession attracts especially dull people — this seems possible, but unlikely. Second, it may be that human behaviour is inherently more complex, capricious and difficult to fathom than biology — there is obviously some truth to this view. Third, as pointed out by Peter Medawar, the difference may reflect the fact that psychologists suffer from "physics envy" — they assume tacitly that the only sure way to progress is to imitate the mannerisms, fads and fashions of the physical sciences, including the belief that a detailed quantitative study of any phenomenon is intrinsically meritorious.

A good example of this fallacy is the 100-year history of IQ research — the attempt to provide a single-number evaluation of 'intelligence', an entity (or multiple entities really) about which little is known. Among the many acrimonious battles fought in psychology, none is more absurdly comical than the so-called 'nature-nurture' debate about intellectual ability. It is significant, and a sign of the difference in maturity of the two fields, that no such 'debate' exists in biology. Everyone recognizes the complementary roles of genes and the environment, but no conferences are held to decide 'which is more important'. Most biologists recognize that intelligence is not one trait but probably several dozen abilities influenced by many different genes each affecting more than one character. And before we can even begin to assess the relative roles of nature and nurture, we need to understand what these traits are, and what the underlying mechanisms might be.

Sure enough, IQ tests can be used as a rough and ready rule of thumb for estimating 'general intelligence' when time is short (as when recruiting for the Navy, for instance), just as pulse, blood pressure and



Chilling tales of winters past

Fairs were held on the frozen Thames in London in past centuries. This picture shows the river at Tower Bridge on 11 February 1895 when the ice was not firm enough for a fair but navigation had almost ceased. From

Frosts, Freezes and Fairs: Chronicles of the Frozen Thames and Harsh Winters in Britain since 1000 AD by Ian Currie (Frosted Earth, £8.95). The book contains many early photographs and engravings.