

Left Side, Right Side: A Review of Laterality Research. By A. Beaton. London: Batsford. 1985.
Pp. xiv + 364. Cased, £25.00.

Laterality has been of abounding interest at least since the time of Homer, and probably longer. Much of that interest has resulted in a series of myths—unsubstantiated truths supported only by repetition and the venerability accorded to time. A few weeks ago I spotted what to me was a new one: 'As people get older, their left eye gets much stronger than their right eye.' Thus spake a master gunsmith in the *Observer*. A variant has arisen of recent years, which Corballis has called 'neuromythology': myth which is ostensibly supported by the panoply of scientific rigour and methodology, but is in reality a wild and mythic extrapolation from it. A recent example, from the pages of *Aviation, Space and Environmental Medicine*, 'suggests that the success of the Wright brothers in designing the first airplane was due to their complementary hemispheric-dominant personalities, which enabled them to integrate the analytical and creative skills necessary to bridge the gap between theory and practical application'.

Amidst such wild extravagance there is clearly a need for serious, sober, critical and comprehensive reviews, so that the cold light of evidence can be turned upon these uncontrolled speculations. The present book is at least the fourth such attempt within the past three years by a single author. We are told that 'even for established researchers it had become difficult to keep abreast of the burgeoning literature' which had produced 'an explosion of interest'. Certainly I have sometimes woken in the early hours of the morning and worried that despite having published quite a few papers in the field I could not even begin to regard myself as keeping up with the relentless flood of material on laterality, and fearing that this could only be interpreted as a dereliction of professional duty.

The anonymous blurb writer on the dust jacket makes strong claims for this book (and in no sense can Dr Beaton be held responsible for them). To be precise, 'the text is backed up with *a comprehensive bibliography, listing all significant references in the field*' (my emphasis). Brave stuff indeed, and instantly to be doubted by a reviewer when he fails to find those papers of his own which he regards as particularly worthy. But putting aside such brute prejudice, it did set me wondering

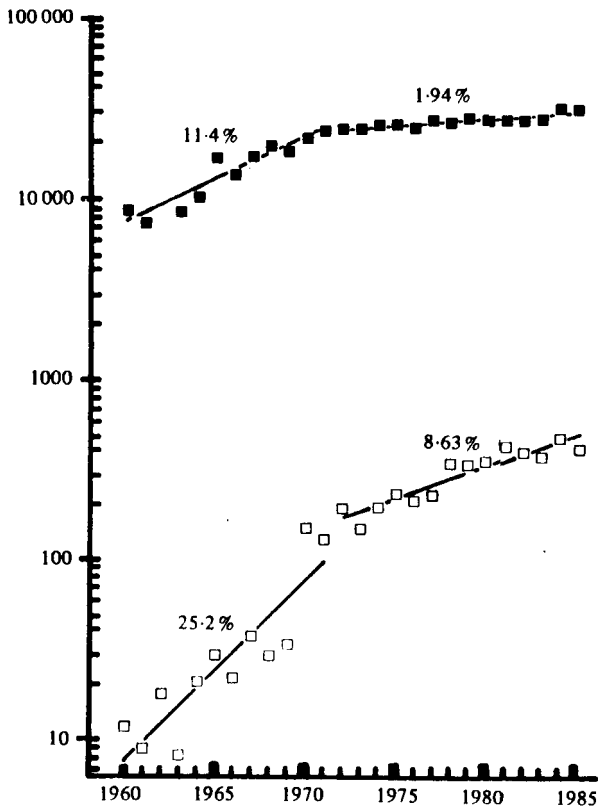


Figure 1. The total number of publications (■) and the number of publications cited under headings of 'Cerebral Dominance', 'Handedness' and 'Lateral Dominance' (□) in *Psychological Abstracts* for the years 1960–1985. The ordinate is on a logarithmic scale. Solid lines show least squares regression lines, calculated separately for the years 1960–1971 and 1972–1985, in view of the clear structural break between 1971 and 1972. Figures alongside lines indicate per cent growth *per annum* calculated from the slope of regression lines.

whether there was an 'explosion' of laterality literature, and how close a book like this could be to being 'comprehensive'. An hour or two in the library with *Psychological Abstracts*, counting the entries under 'Cerebral Dominance', 'Handedness', and 'Lateral Dominance', as well as the total entries overall for each year in the past quarter century, gave the data shown in Fig. 1 (and a quarter of a century's psychological productivity comprises 545 000 papers). Even accepting all the obvious limitations of such data, particularly in the matter of definition, it is clear that the psychological literature has been growing steadily, with an obvious structural change around 1972, presumably when the growth in Western economies began to decrease with successive oil crises, an overall growth of only about 2 per cent being maintained since then. By contrast the laterality literature has grown more rapidly, increasing by over 8 per cent each year, such that 426 papers were published in 1985 alone. Clearly laterality is a psychological growth industry, and a very recent one at that; half the five thousand or so papers published within the last five years, three-quarters within 10 years, and nine-tenths within 15 years. Beaton is right: the literature is indeed exploding. One of those extrapolations against which one warns students suggests that by the year 2049 *all* of the 105000 psychological papers published will be on laterality!

Beaton's book cites some 1615 references, the majority of which concern laterality, perhaps a third of the total publications on laterality available to him at the time of writing. As a comparison the recent reviews of Bryden (1982), Bradshaw & Nettleton (1983), and Corballis (1983) cite 727, 1203 and 840 references respectively. Given that they are all more expensive than Beaton's book, then on a simple citations per pound basis, this is clearly a winner. One does wonder, however, about the other

two-thirds or so of literature which is not regarded as 'significant'; either Beaton's judgement is wrong, the blurb writer suffers from hyperbole, or peer reviewers have made mistakes. Room for further research one suspects.

Of course quantity is not everything, but with a book of this scope it is difficult to make sensible critical comments without seeming nitpicking, or overly sweeping. Of course anyone who knows my own ideas on, for instance, the genetics of handedness would expect me to have disagreements over the details of that section, and so on. But this is not the place to make such comments. As a whole the book is usually solid, covers areas comprehensively, and applies critical analysis reliably, particularly, for instance, in the chapters on the various cognitive models of hemispheric specialization. The book is therefore safely to be recommended to undergraduates and postgraduates who wish rapidly to get into the field, and will provide useful pointers for them; particularly if they also compare and contrast with the other three recent reviews. More expert users will not find the book so easy to use, particularly as the subject index is grossly inadequate (a mere four pages in length) and the author index is completely absent. Perhaps it would have been better to have used the blurb writer's salary to pay a professional indexer and given a more scholarly result.

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Bradshaw, J. L. & Nettleton, N. C. (1983). *Human Cerebral Asymmetry*. Englewood Cliffs, NY: Prentice-Hall.

Bryden, M. P. (1982). *Laterality: Functional Asymmetry in the Intact Brain*. New York: Academic Press.

Corballis, M. C. (1983). *Human Laterality*. New York: Academic Press.

Neonate Cognition: Beyond the Blooming, Buzzing Confusion. Edited by J. Mehler & R. Fox.

Hillsdale, NJ: Erlbaum. 1985.

Modern psychology is deeply rationalist in theory, but disciplined by an experimental tradition that investigates how stimuli cause mental processes. William James, like Spinoza, realized that this split intellectual tradition must leave inner sources of mental life in the dark. It also misleadingly implies that infants, because they are both inexperienced and incapable of verbal rationalization, must be in