

## Between a good read and a good reed

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**Children's Reading Problems.** By Peter Bryant and Lynette Bradley. *Basil Blackwell: 1985. Pp.116. Hbk £16.50, \$24.95; pbk £5.95, \$9.95.*

**Reading Ability.** By Charles A. Perfetti. *Oxford University Press: 1985. Pp.282. £25, \$35.*

In 1945 Herbert Hoover declared that the liquidation of illiteracy was one of the five or six major tasks for the postwar world. It still is. Even in the industrialized world a small but distressing minority of children experience great difficulty in learning to read and never achieve the fluent command of visual language that is necessary to participate fully in a technological society; what can be done for the 'slow learner' or the 'dyslexic' child? Many students in tertiary education who have mastered the nuts and bolts of reading complain of slow reading speeds and poor comprehension; can these young adults learn to cope better with the demands that professional life places upon true literacy?

These two books reach a similar conclusion on one key issue: the invention of the alphabet was a good idea, and a firm grasp of the alphabetic principle that letters (or letter groups) map onto the constituent sounds of words is of crucial importance in learning to read. Beyond this, the books differ greatly in both style and content.

The primary virtue of Bryant and Bradley's monograph lies not so much in their conclusion *per se* (advocates of so-called 'phonic' instruction have been with us for a century or more), but rather in their evidence for that conclusion. First reported in this journal (*Nature*, 310, 419-421, 1983), Bradley and Bryant have provided the most compelling demonstration that awareness of the relationship between letters and sounds is *causally* implicated in the efficiency with which children learn to read.

*Children's Reading Problems* contains a vigorous, albeit good-natured, attack upon the methodological and interpretative inadequacies of much previous research; it defends, more cogently than any other work I know, the central importance of phonic skills. The book is written in lucid English, quite free of psychological jargon. Parents and teachers should find Bryant and Bradley's simple description of their training methods of considerable practical value. More generally, Bryant and Bradley provide an acute analysis of how to conduct serious educational research on which practical decision-making could be rationally based.

One aspect of their work is, however, controversial. They fail to acknowledge the full import of the fact that English (or

French) cannot be read or written solely on the basis of letter-sound correspondence rules. The child who writes, YOT, or PLAZE (for "yacht" and "plays") has mastered the skills that Bryant and Bradley stress; likewise, the child who reads SHOE as "show" or SWEAT as "sweet". But to attain mature literacy the child must eventually come to read and write orthographically and forgo reliance on phonic rules; a good read is not the same as a good reed. One alarming consequence of Bryant and Bradley's over-reliance on phonological awareness is their belief that reading backwardness must have a solitary cause — failure to acquire normally the regular mappings between letters and sounds.

This flies in the face of the extensive evidence, from single-case studies, that backward readers (or 'developmental dyslexics') constitute a very heterogeneous population with striking qualitative variation from child to child in the nature of their impaired and intact sub-skills. Bryant and Bradley are well aware of this literature (they quote a few pertinent examples), yet they dismiss its significance on the peculiar grounds that analogous qualitative variation can be found in younger children who read at age level. This seems such an obvious *non-sequitur* — why should the balance of skills required to read normally at one age be identical with that required for normal reading at a later age? — that one is deeply puzzled to see it put forward by *developmental* psychologists.

By contrast with the straight but narrow path chosen by Bryant and Bradley, Perfetti reviews a substantial chunk of the primary literature on all aspects of reading ability in both children and adults; the discussion ranges from word recognition to text comprehension, from the analysis of eye movements in skilled reading to the role of verbal short term memory, and from brain laterality to computerized reading instruction. Many of the studies

reported are as relevant to speech processing and oral comprehension as they are to reading and writing. These review chapters are solid and workmanlike, although somewhat heavy going; Perfetti's turgid style lacks the sparkle and excitement of Bryant and Bradley's clear arguments.

Perfetti's own "verbal efficiency theory" succeeds in showing that comprehension of a written text is a complicated business but provides little real insight into the mysterious processes of "propositional assembly" and "propositional integration". Much of this research has a curiously circular flavour. Groups of high- and low-ability readers are selected and then shown to differ on a variety of reading-related skills. The unproductiveness of such a strategy derives in part from the use of heterogeneous groups; it is thus unclear whether a particular impairment is characteristic of all low-ability readers or solely that of a subgroup. Many of the studies also fail to distinguish between cause and effect; an impairment of "verbal intelligence" could be a cause of poor comprehension, but equally the failure to learn from reading may be reflected in poor performance on other language tasks. In contrast, Bryant and Bradley's discussion of how to disentangle cause and effect is particularly incisive.

These problems assume major significance in Perfetti's chapter on dyslexia. He tentatively concludes that "dyslexia may be the low end of an ability continuum rather than a qualitatively different problem." But once again, the failure to distinguish individuals from groups renders the conclusion suspect. Indeed, the very concept of a single ability continuum seems misguided when we are dealing with cognitive functions, such as reading and writing, whose effective deployment depends upon a large range of subcomponents. □

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