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Funnell, E. (Ed.) (2000). *Case Studies In The Neuropsychology Of Reading*. Hove, UK: Psychology Press. Pp v + 154.

Case Studies In The Neuropsychology Of Reading states on its cover that it is designed to 'help readers keep up with, or step newly into, this developing field of study by capturing our present state of knowledge concerning a range of reading disorders of central interest'. To meet these aims the volume comprises a series of chapters written by well-respected researchers in the field. The chapters address four syndromes of acquired dyslexia: the three 'central' dyslexias (deep dyslexia, phonological dyslexia and surface dyslexia), and the most well researched 'peripheral' dyslexia (letter-by-letter reading). In addition, there is one final chapter on developmental surface dyslexia.

The book is introduced with by the editor, Elaine Funnell. This chapter outlines the aims of the volume, and also discusses the methodology and symptomatology of acquired dyslexia research. Clearly written and concise this chapter is a very useful tutorial and I highly recommend it to those unfamiliar with the area. The subsequent chapters mostly assume that the reader has a good grasp of these basic principles.

Chapter 1: Pure Alexia: The case of JG

Eleanor Saffran and Branch Coslett begin their account of Pure Alexia (also known as alexia without agraphia, or letter-by-letter reading) with a brief historical overview. They then provide a detailed case study of JG, a man who showed letter-by-letter reading – he was only able to successfully read words aloud by first naming each of the letters in the word one by one. Amongst other things, they describe the ability of some letter-by-letter readers to provide some information about letter strings even when unable to read them aloud (when presented at too brief a duration for a letter-by-letter strategy to be employed). For example, JG, was able to perform lexical decision and semantic categorisation, with a success rate greater than chance. Their theoretical discussion focuses on a 'right hemisphere' account of the so-called 'implicit' knowledge in letter-by-letter reading, which (unusually for cognitive neuropsychology) centres around the site of the (brain) lesion. This chapter is a good

combination of detailed case study and discussion in the context of other cases in the literature. However, as this volume aims to give a 'state-of-the-art' review, it may have provided more balance to include a commentary from an author who holds a different theoretical viewpoint.

Chapter 2: Deep dyslexia.

Elaine Funnell gives a chronological account of deep dyslexia (where nonword reading is impaired and word reading characteristically results in, amongst other things, semantic errors). She begins by describing in some detail Marshall and Newcombe's 1966 case – GR. The inclusion of many examples of errors is most helpful for the reader to get a 'feel' for what GR's reading was like. This is followed by a description of some of the cases which followed GR. Funnell lists the twelve characteristic properties of deep dyslexia which Coltheart noted were common to the 21 reported cases of deep dyslexia up to 1980. There then follows a discussion of imageability effects in deep dyslexia. This includes the fact that the 'word class effect' is usually simply a result of the confound between imageability and word class (nouns being on average more imageable/concrete than verbs which are in turn more imageable than function words). Interesting as it is, for me the next section, on exactly what imageability is and how it can be accounted for theoretically distracted rather from the central theme of deep dyslexia. The chapter continues with a description of connectionist (computational) models of deep dyslexia (which would be difficult to follow for those new to the topic) and then the right hemisphere hypothesis, concluding with some directions for future research.

Chapter 3: Phonological Alexia: The case of the singing detective

Karalyn Patterson reviews the literature on phonological dyslexia (where nonword reading is impaired in the context of preserved word reading) and then gives a careful and detailed description of a single case, CJ. She takes the perspective that as reading is a recently acquired skill in evolutionary terms, disorders of reading should be associated with a deficit in a more evolutionarily established domain of processing (e.g. visual processing, phonological processing). Her position is that phonological dyslexia the deficit is phonological rather than specific to reading. She argues that a high proportion of individuals with phonological dyslexia

have deficits in non-reading phonological tasks (such as segmentation, blending or repetition of nonwords). In the case study, this hypothesis is discussed in greater detail, and evidence from semantic priming presented to support an account of reading via semantics. As in the first chapter, the position argued for so persuasively by Patterson is by no means the 'accepted' interpretation of phonological dyslexia. Indeed, as a footnote makes clear, the study of CJ was a collaborative venture between Karalyn Patterson and Elaine Funnell, but "we did not entirely agree on the interpretation of the results obtained and, to avoid an untidy discussion section, we elected amicably to present KP's version" (p64, footnote 2). However, I feel that the inclusion of a commentary by Elaine Funnell where her account was presented, would have been a welcome addition to the volume, providing a critique that many readers may be unable to generate unassisted.

Chapter 4: Surface dyslexia: Description, treatment and interpretation.

The chapter by Andy Ellis, Matt Lambon-Ralph, Julie Morris and Alison Hunter addresses surface dyslexia (where nonword reading is preserved and errors on real words are typically 'regularisations' of irregularly spelled words). Although it too takes a historical perspective, this chapter is rather different in style to the other acquired dyslexia chapters in this volume. First, it assumes less prior knowledge on the part of the reader, and as such it would stand easier alone (as for example an undergraduate reading) than the other chapters. The authors clearly describe and provide a critique of theories of reading and explanations of surface dyslexia within these theories. Second, this paper addresses the issue of remediation. Like all the chapters on acquired dyslexia, the authors present a single case study and identify the nature of the deficit. However they then go on to describe how these deficits were treated. In a methodologically sound study, they (partially) replicate the results of previous attempts at remediation with other surface dyslexic people.

Chapter 5: Developmental surface dyslexia

The final chapter in the volume, by Jackie Masterson, is the only one not concerned with acquired disorders of reading, instead it focuses on difficulties in learning to read, and specifically one sub-type – developmental surface dyslexia. The chapter includes a

description of a single case study of CD a 16 year old with developmental surface dyslexia. This case study is used to provide the context for a historical review of the debates surrounding the study of developmental dyslexia. This includes discussion of the relevant control groups (age matched or reading age matched), the problems with groupings into subtypes of developmental dyslexia and a discussion of attempts at remediation. This is a very clear, balanced account which gives the reader a good feel for the area. Nevertheless, I do wonder as to how well it fits in a book on the neuropsychology of reading.

Summary

This volume will provide a useful resource for all those with an interest in dyslexia, and particularly acquired dyslexia and I recommend it to students, clinicians and researchers. The chapters are all well written and insightful and the introductory chapter ensures that those unfamiliar should (with a little effort) be able to follow those chapters that follow.

Nevertheless, the volume could be improved with commentaries on some of the chapters from authors with a different theoretical stance, and more of the chapters reviewing attempts at remediation. Perhaps these are points that could be addressed in a revision.

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