Out of sight but not out of mind

Kevin Wheldall

A common misconception about dyslexia is that it is typically to do with distorted vision. The letters on the page are said to leap about, for example, making reading difficult if not impossible. Consequently, many treatments for dyslexia have involved attempts to remedy these essentially visual problems, the most common being spectacles with coloured lenses or coloured plastic overlays. The evidence supporting the efficacy of 'Irlen lenses' and similar products is shaky to say the least and various international ophthalmological organisations and specialists in vision have firmly stated that such treatments are ineffective and are not to be recommended.

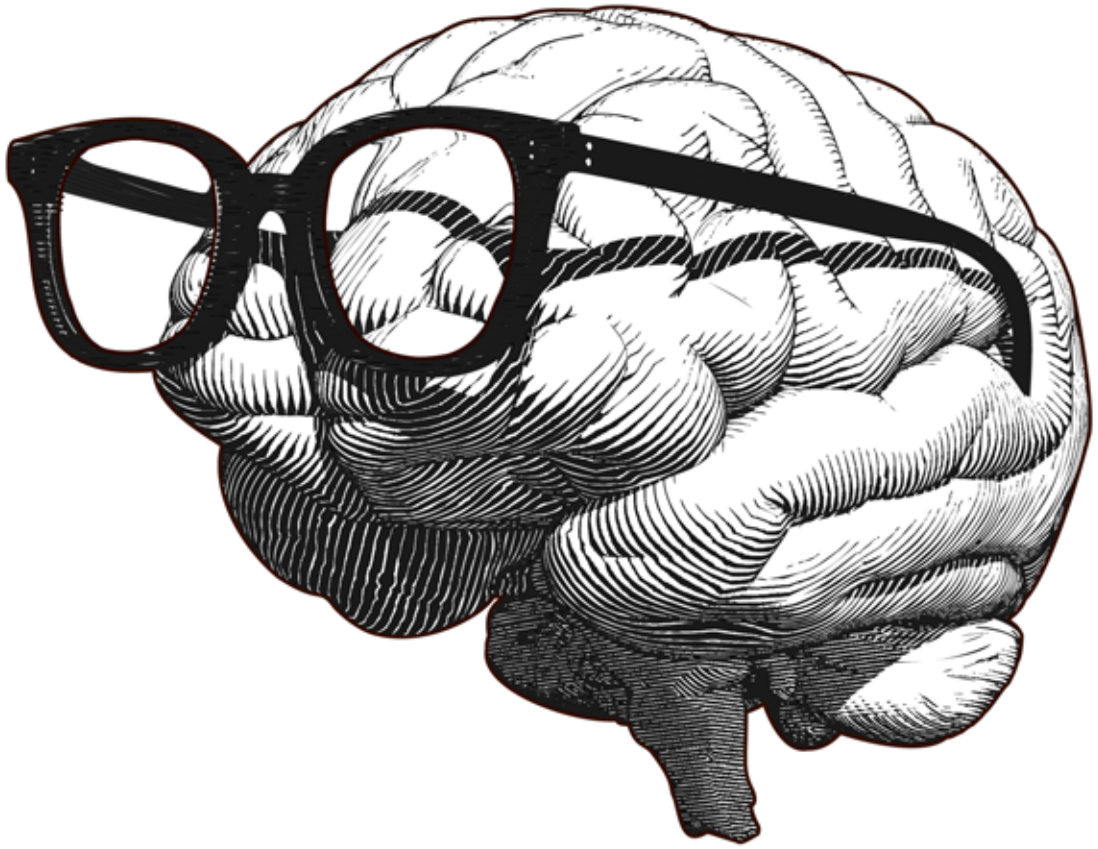
Today, most reading scientists agree that difficulty in learning to read is almost always a language problem, specifically a problem with phonological processing. But the preoccupation with visual processing continues, even among some supposed dyslexia experts.

To the extent that a minimal level of visual acuity is required to input the black marks on the page to the brain, there is of course a modicum of truth in this. One does actually have to be able to see the written words on the page but this is rarely the problem. The same could be said of algebra, but being able to register the numbers and symbols on the page in the textbook is a long way from understanding the underlying mathematical protocols.

This preoccupation with vision spills over into our language when we talk about reading, the concept of so-called 'sight words' being the prime example. What constitutes a sight word is a source of confusion in the language, literature and science of reading. Sometimes, 'sight words' refers to words that supposedly have to be learned as whole units, by sight, as a sort of logographic image like Chinese characters. Many schools still send home lists of 'magic' words to be learned in this way by young children at home; a dubious practice.

A more sophisticated usage of the term 'sight words' is to refer to words that have been successfully learned by phonological recoding (phonics) so that they are recognised automatically when they are read, without further need for sounding them out. But sight actually has very little to do with it, as we have argued, and continuing this usage will serve only to confuse and obfuscate.

If we take a moment to think about mature word recognition, it becomes obvious that successful reading is not dependent on recognising a particular logographic pattern. When we can read fully, we can read a word in any size, font, case or colour and even combinations of these variables. If the word table is printed as t**A***b***L**e, we can still read it. In fact we can distort its presentation quite a bit and still be able to read it. So, it is unlikely, to say the least, that we have learned words as simple visual images. What we have learned is far more abstract than that. We have learned the quintessential essence of the written word in all of its manifestations. I like to think of this as being similar to, if not an example of, Platonic universals, as described by Plato, in the mouth of Socrates in *The Republic*. In his view, when we see what we call a table in this world it is merely one, and a less than perfect, example of the ideal concept of 'table' which exists outside of what we perceive as reality. Similarly, when we learn to read a written word, we have learned its essence.



When we have thoroughly learned a word, its recognition is automatic and is essentially a non-conscious process. (If we persist in thinking of this as a visual image we would eventually have the problem of who or what is 'seeing' the image and how; a maze we shall not explore.) It makes more sense to think of words learned like this as concepts, ideas or, in Piagetian terms, schemas. Nor should we forget that in the final instance all of this has to be translated, if you will, into the 'wet stuff' of the brain, unless we are Cartesian dualists. The ideas, concepts or schemas of written words, need to occupy a space in what we call 'the mind' that serves as the halfway house between the external world out there and the 'wet stuff' we have inside our heads that makes it all happen.

All of this adds weight to the point that continuing to refer to learned words as sight words causes conceptual confusion and misunderstandings, especially among those who are not privy to what underlies this sort of cognitive shorthand we employ in reading science. We do no favours to teachers and parents by continually giving the impression that reading is all about seeing when it is a far more abstract process than that.

We might speculate, without buying into Piagetian theory more generally or its supposed utility in informing instruction, that Piaget's ideas about assimilation, accommodation and schemas could perhaps provide a working framework to think about how these word universals are formed. We begin by learning or assimilating simple letter sound combinations so that we recognise the phonemes conveyed by the letters or letter combinations. We subsequently learn simple patterns of these as whole CVCs; we accommodate these assimilations into schemas that represent the whole word. We subsequently learn syllables as mini schemas which aid in the identification and learning of whole words. Learning to read words we know like 'night', 'fight', 'flight', 'sight', etc. leads us to be able to read, in the sense of decode, words we may not yet have previously encountered like 'plight' or 'slight'.

Whether we choose to use Piagetian terminology or not, we really must rid ourselves of the term sight words and remember that skilled reading may be out of sight but not out of mind.

Kevin Wheldall, Joint Editor

Note: I would like to acknowledge the helpful discussions I have had with Molly de Lemos on this topic.

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