

A worm in your ear

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Have you ever had a worm in your ear? Not a real live worm, of course (but commiserations if you have!). No, I mean what we commonly refer to as earworms – intrusive songs that come into our consciousness, unbidden and unwanted. Quite frequently they are songs we do not want to hear. For my sins, I am plagued by ‘Scarlet ribbons’, a song I first heard in a panto when I was in primary school. Even worse, ‘Little white bull’ by Tommy Steele, one of the first records I bought as a child, frequently pays an uninvited visit! And that’s the thing – rarely are they songs one wants to hear. They are usually atrocious.

These unbidden earworm songs ‘play’ from deep within our brains into our consciousness; nothing to do with our ears at all. Of course, we can summon up songs to play willingly and ‘listen’ to them with such accuracy that we can take over mid-lyric and sing the song out loud, if we so choose. In fact, I often use this technique deliberately to banish earworms. As soon as that little white bull makes its presence known, I call up something infinitely more pleasing such as Dylan’s ‘She belongs to me’ or ‘My back pages’. We can do this with any piece of music we know well, be it modern or classical.

This is a remarkable facility when you come to think about it ... and it is not limited to music. A similar process occurs when we learn to read via the orthographic mapping of phonemes to letters or letter combinations. When we have had sufficient experience, or ‘reps’ of a decoded word, we learn to read it as a whole; we no longer need to rely on sounding out. This is something that critics of phonics frequently misunderstand. They think that we are arguing for phonics as a means of reading: that we sound out words phonetically every time we encounter them. If this were the case, reading would continue to be a very laborious and time-consuming process. This is because critics often confuse the process of reading with learning how to read. Phonics is a teaching mechanism, not a reading method.

Of course, the number of reps we need varies considerably from child to child. Some children need very few reps, not even with paradigmatic clarity; they just seem to pick it up out of nowhere, sometimes by themselves. They crack the code intuitively. On the other hand, those we call ‘low-progress readers’ need many, many reps, presented with optimal paradigmatic clarity, to catch on. Most children fall in the middle of these extremes.

These learned words are often incorrectly referred to as ‘sight words’ (mea culpa for my own past transgressions in this regard). But sight has relatively little to do with it once the visual input of the letters is received from the word on the page, in the same way that earworms have nothing to do with the ears once the song has been initially registered in the brain. We do not learn words as shapes or pictograms, we learn something much deeper than visual patterns. This is evidenced by the fact that once we know a word we can read it in any color, size or font or combinations thereof. I like to think of this as being like learning the platonic universals of words.

This brings me to my favourite joke of the moment (bear with, bear with):

A moth makes an after-hours drop-in visit to an optometrist

O: How can I help you?

M: Well, I'm having a terrible time of it at the moment. My wife is threatening to leave me, my son's been suspended from school ...

O: That sounds terrible!

M: But that's not all. My mother is very, very ill and my dad's become an alcoholic. I could go on ...

O: Now hang on! It sounds to me like you need to see a psychologist or a psychiatrist. Why have you come to see me? I'm an optometrist.

M: Well ... your light was on.

And the point of this is, of course, that one needs to go to the right specialist when presenting with a specific problem. Far too often, parents are seduced into going to see an expert about their child's reading difficulties, who might superficially appear to be relevant ('your light was on') but who is, in fact, inappropriately qualified or not suitably qualified at all.

So, going to see an audiologist might be a good idea, to check whether a hearing problem is making it harder for a child to learn to read. But fixing a hearing problem will not teach the kid to read per se. Ditto

going to see an optometrist. It makes good sense to have both your child's hearing and vision checked if they are experiencing reading difficulties. If there is a problem in either modality, it will certainly make learning to read more difficult for them and needs attention. But it will not fix the reading problem.

For far too long dyslexia and reading difficulties generally have been thought to be visual problems. But as we noted above, reading takes place much deeper in the brain than the level of simple visual input. This means that Irlen lenses, coloured overlays, vision exercises, etc., are of little or no value in teaching a child to read because the accepted science tells us that reading difficulties are largely the result of a phonological processing problem, arising as a result of poor or insufficient reading instruction ('instructional casualties') and/or an inherent compromised processing difficulty. Whatever the cause, we now know that a focus on the explicit, systematic teaching of letter-sound relationships – phonics – is an essential component of any reading intervention.

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