Blueprint for a universal theory of learning to read:
The Combinatorial Model

David L. Share, University of Haifa
and
Edmond J. Safra Brain Research Center for the Study of Learning Disabilities

Spoken language unites the human species, dividing humans from animals; *written* language and the literacy it affords also unites those literate in a shared language and writing system but it also divides the literate from the illiterate and semi-literate - separating cultures, communities and individuals from one another. The foundations of literacy are the basic reading and writing skills taught on entry to formal schooling around the world. Literacy learning is much more than the foundational word reading skills discussed here, but it is nothing without them.

The scientific study of reading has made important progress over the past several decades but is still entrenched in Anglocentric and Eurocentric/alphabeto-centric theoretical frameworks (Share, 2008; Share, 2014). This presentation offers some general guidelines for constructing a universal, non-ethnocentric theory of learning to read, one that seeks universals yet embraces the enormous diversity among the world's languages and writing systems.

I claim that there exists a fundamental and universal dualism in printed word learning that applies to all words in all possible writing systems (Share, 2008). Because *every* printed word is, at one point unfamiliar, the reader must possess some means of independently identifying units of meaning (words and morphemes) encountered for the first time. I propose that this is true for every orthography; alphabets, abjads, akshara-based scripts, syllabaries and morpho-syllabaries. In addition, the reader must eventually achieve a high degree of unitization or "chunking" either of letter strings, aksharas, stroke combinations or character compounds to enable rapid, holistic/parallel, and near-effortless recognition of familiar words and morphemes (Anderson et al. 2013; LaBerge & Samuels 1974; Perfetti, 1985). And because separate morphemes necessarily have distinct visual forms, each must be individually learned as a unique visual configuration of the limited set of characters - letters in phonemic scripts, aksharas in Brahmi-derived Indic-based scripts or character combinations in morphosyllabaries.

In order to cater to the reader's needs, an efficient writing system must have both *decipherability/learnability* (via phonological transparency) and *unitizability/automatizability* (via morphemic transparency). A writing system, like spoken language, must therefore be "combinatorial" (Hockett, 1960), combining and recombining a limited, and hence learnable number of sub-lexical elements to generate an unlimited vocabulary. I outline how this decipherability/unitizability dualism plays out in the five varieties of writing system drawing out its graphonomic/linguistic, psychological/educational implications.

References

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