Learning to read in different orthographies

Research has tried to identify the effects that differences between alphabetic writing systems might have on the development of reading skills and reading difficulties. Orthography (writing system) is a central concept when discussing cross-linguistic aspects of reading. The term refers to the set of symbols used to write a language and to the set of rules describing how these symbols are read and spelled correctly.

Orthographies differ according to several aspects:

- The phonetic components are represented with graphic or alphabetic symbols.
- Written symbols may represent syllables, consonant sounds, or all phonemes of the language.
- The orthographic code may also include non-phonetic clues such as morphological information.

Alphabetic orthographies with simple and straightforward correspondences between phonemes and graphemes are often referred to as "regular" (transparent, shallow) orthographies, whereas orthographies where the rules governing the mappings between letters and sounds are more complex are regarded as "irregular" (opaque, deep). Orthographic regularity is best defined as a continuum where English sits at the irregular end, and languages like Finnish, Italian and Spanish at the regular end. English for example has more than 40 phonemes and many more (often multi-letter) graphemes, which may represent these spoken sounds in script. Compared to very different Finnish a highly transparent orthography consists of mainly

single-letter graphemes consistently representing the 24 phonemes of the language.

There is huge amount of different local languages in each African country. Most of the local African languages are transparent. For example:

- **Zambia:** there are over 73 local languages in Zambia, and seven of them (Nyanja, Bemba, Tonga, Lozi, Kaonde, Luvale and Lunda) have been officially designated as curriculum languages for the purpose of initial literacy instruction. Zambian languages, just like the Finnish language, are orthographically very transparent, which basically implies that they have consistent, regular and predictable correspondences between units of spoken and written language, on the level of single letters. Open syllables, like '*ba*', '*ta*', '*ko*', '*mi*' are very common in most words of the Zambian language, and clusters are rare.
- **Namibia:** In Namibia, 13 languages are used in instruction. There are over 11 indigenous languages in Namibia; including the Bantu languages such as Oshiwambo (spoken at home by 48.5 % of the native population), Rukavango (9.7 %), Otjiherero (7.9 %) and Silozi (5 %), and the Khoesaan languages including Khoekhoegowab (11.5 %) and Bushman (1.2 %). Some Bushman languages (e.g., Naro, !Xóö) are in danger of becoming extinct. In addition, some Indo-European languages are spoken in Namibia. Of the indigenous languages used in Namibia, the ones of Bantu origin are mostly orthographically transparent.
- **Kenia:** Kenya has 46 tribes, each of which has its own language; it is noteworthy that the teaching is in English from the very beginning and that the majority of children are never exposed to reading material written in their mother tongue. About 90 % of the tribal languages in Kenya lack any printed materials, with the

official languages being English and Kiswahili. Kiswahili is highly regular in comparison to English. These aspects all have implications for children learning to read.

- **Tanzania:** [Damaris might help us]

The findings of cross-linguistic studies on learning to read show that reading development is dependent on the language and orthography. The differences observed in the rate of reading development between children learning to read in different orthographies are best explained by differences in the regularity of the grapheme-phoneme correspondence system.

Research suggests that there is a threshold on the regularity continuum that affects the processing requirements for initial reading. If the orthography satisfies relevant criteria for simplicity, early reading can be based solely on alphabetic processing – decoding is based on grapheme-phoneme correspondences, serial assembly and blending of phonemes together. If the boundaries of simplicity are exceeded, reading process is different and a certain level of dual processing is required – decoding and whole-word based strategies. This would suggest that when learning to read, the regularity of grapheme-phoneme mapping has an effect on the difficulty of the task at hand.

In regular orthographies, like in Finnish and many African languages, a child who has gained mastery of all letter sounds has the building blocks necessary for pronouncing practically nearly all written words. Therefore, in most cases in decoding, there is no need to pay attention to multi-letter units since graphemes mainly consist of single letters and the correspondences are not dependent on the specific item or the orthographic context. Decoding can thus be taught and learned as a serial phonemic assembly of single letter-sounds connections.

In more irregular orthographies, as in English, a serial

phonemic assembly at the level of single letters often proves unreliable as a tool for achieving correct pronunciation. Single letters correspond to a number of phonemes, graphemes often consist of multiple letters, and the reader has to pay attention to multi-letter segments while decoding.

There might be some orthography-related variation in the salience of the different linguistic skills underlying reading development, consequently resulting in reading problems, although the neurobiological background of reading problems (dyslexia) seems to be shared. It seems that the development of phonemic awareness is supported by regular writing systems, where the phonological structure is explicated and transparent in script.

Given the low literacy levels in many African languages despite relatively transparent orthographies, we are inclined to think that there are other serious challenges related to multilingualism, the quality and level of teacher education or instructional methods and learning materials, and possible confusion created by the multiplicity of several languages and orthographies one is required to master at school.

(“Assessment of Learning disabilities: Cooperation between Teachers, Psychologists and parents. African edition” pp. 52-53 ”Learning to read in different orthographies” by Mikko Aro) *(kirja voisi olla eTalen sisällä pdf muodossa ??)*