

# Reading in local languages

In a nutshell

- Research has identified differences between alphabetic writing systems on the development of reading skills and reading difficulties.
- Orthography of the language refers to the set of symbols used to write a language and the set of rules describing how these symbols are read and spelled correctly.
- Alphabetic orthographies with simple and straightforward correspondences between phonemes (individual speech sounds that make up words) and graphemes (individual letters or groups of letters that make up the speech sounds) are often referred to as “*regular*” (*transparent, shallow*) orthographies.
- Orthographies in which the rules governing the mappings between letters and sounds are more complex and regarded as “*irregular*” (*opaque, deep*) such as English and French
- Orthographic regularity is best defined on a continuum where English sits at the irregular end and languages like Finnish, Italian, and Bantu languages sit at the regular end.
- Local African languages used in Zambia, Namibia, Kenya, and Tanzania are described here and letter-sound connections can be found in the Language studio section.

## 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 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 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
- any phonemes of the language.

The orthographic code may also include nonphonetic 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 in which the rules governing the mappings between letters and sounds are more complex are regarded as “*irregular*” (*opaque, deep*). Orthographic regularity is best defined on a continuum where English sits at the irregular end and languages like Finnish, Italian, and Bantu languages sit at the regular end. English, for example, has more than forty phonemes and many more (often multiletter) graphemes, which may represent these spoken sounds in script. The Finnish language’s highly transparent orthography, for example, consists of mainly single-letter graphemes

consistently representing the 25 phonemes of the language<sup>1</sup>Aro, T. & Ahonen, T (eds.) (2011) Assessment of learning disabilities: Cooperation between teachers, psychologists and parents. African edition. University of Turku and Niilo Mäki Institute, Jyväskylä, Finland.Aro, T. & Ahonen, T (eds.) (2011) Assessment of learning disabilities: Cooperation between teachers, psychologists and parents. African edition. University of Turku and Niilo Mäki Institute, Jyväskylä, Finland.<sup>2</sup>Joshi, R.M, Aaron, P.G. (2005). Handbook of orthography and literacy. New York: Routledge..

## **African Languages**

We need to involve communities that see the value and importance of promoting African languages, especially at the early learning stages, to engender natural understanding of taught concepts<sup>3</sup>Namubiru, G. (2021). Towards an Africentric curriculum. Academia Letters, Article 1243.. There is a huge amount of different local languages in each African country. Most of the local African languages are transparent in terms of their orthography. For example:

### **Zambia**

The exact number of Zambian languages is not known, although many texts claim that Zambia has seventy-three languages or seventy-three languages and dialects <sup>4</sup>Chanda, V. M., & Mkandawire, 2013)Speak Zambian languages. Luksaka: Unza Press. The figure of seventy-three languages is probably due to a lack of distinction between language and dialect, using the criterion of mutual intelligibility. If this criterion is used, the number of Zambian languages would probably only be about twenty or thirty. The government of the Republic of Zambia recognises seven regional official languages, namely Nyanja, Bemba, Tonga, Lozi, Kaonde, Luvale, and Lunda. Zambian languages, just like the Finnish language, are orthographically transparent, which means that they have

consistent, regular, and predictable correspondences between units of sounds and graphemes across languages, on the level of monographs, digraphs, and trigraphs. Sounds can blend to form open syllables, like 'ba', 'ta', 'ko', 'mi', and such sounds are very common in most words of the Zambian languages. Consonant clusters with nasals and semivowels are also very common across Zambian languages.

[Learning to read in transparent local languages vs English](#)

[Learning to read in Bantu languages](#)

[ECE and school readiness](#)

[Helping children with reading difficulties](#)

Link to [Zambian Language Studio](#)

## **Namibia**

There are over thirteen indigenous languages in Namibia, of which eleven are used during instruction in relevant regions or schools. In Namibia, thirteen languages are used in instruction, 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 Khoesaa 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.

Link to Namibian podcast

Link to [Namibian Language Studio](#)

## **Kenya**

Kenya has forty-six tribes, each of which has its own language; it is noteworthy that English is the medium of instruction from the very beginning of public education 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.

Link to [Kenya Podcast](#)

Link to [Language Studio](#)

## **Tanzania**

The precise number of local languages spoken in Tanzania is not clear. Ethnologue mentions 128 languages, and the most recent survey of the Tanzanian linguistic situation states 164 languages. Most of these languages fall into Bantu classifications (e.g., Kiswahili, understood and spoken by almost 95% of the population; and Kisukuma, Kinyamwezi, Kihehe, Kinyakyusa, Kimakonde, Kibena, Kirwa (Kimeru), Kiluguru, Kiyao, Kihaya, Kifipa, Kigogo, Kishambaa, etc.) and Nilotes (e.g., Kimasai). Minority ethnic languages include those of the Afro-Asiatic family, such as Kiiraqw, Kigorowa, Arabic, and Kiburunge, and languages like Kihadza and Kisandawe, which are click dialects of Khoisan origin. The local Bantu languages in Tanzania share features of a transparent language. For example, the words are typically made up of open syllables: *person* is 'munu' (mu-nu) in Kisukuma, 'ndu' (n-du) in Kirwa, and 'mtu' (m-tu) in Kiswahili.

Though Kiswahili is the language of instruction in primary education, the percentage of those who don't speak Kiswahili is much higher among primary aged children in rural areas compared to those from urban areas. Thus, children come to school competent in their mother tongue but not in Kiswahili. Lack of competence in Kiswahili in the early grades may have effects on learning to read and write.

[Guidelines in literacy instruction policy and curriculum concerning local languages](#)

[What are the challenges and prospects for literacy instruction in the future?](#)

[How children who struggle with learning to read are supported?](#)

[How is the situation of literacy to deaf and hard of hearing learners?](#)

Link to [Language Studio](#)

## **Orthography and Learning to Read**

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 the blending of phonemes together. If the boundaries of simplicity are exceeded, the reading process is different and a certain level of dual processing is required – that is, 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 multiletter 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-sound 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 multiletter 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 have communalities with it. 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<sup>5</sup>

Aro, T. & Ahonen, T (eds.) (2011) Assessment of learning disabilities: Cooperation between teachers, psychologists and parents. African edition. University of Turku and Niilo Mäki Institute, Jyväskylä, Finland.

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Jyväskylä, Finland.<sup>6</sup>Joshi, R.M, Aaron, P.G. (2005). Handbook of orthography and literacy. New York: Routledge..

## **The Role of Language in Learning and Teaching Reading**

Research about the development of reading skills started from research of English-language learners, and it is still strongly Anglo-American. In addition, theoretical models of reading skill development and theories about learning difficulties as well as support methods are mainly based on findings of children learning to read the English language. In the background, there has been an assumption that there would not be significant differences between different alphabetic writing systems on reading skill development. However, findings of clear differences in the nature of reading skill development between alphabetical languages<sup>7</sup>Seymour, P.H.K., Aro, M., & Erskine, J.M. (2003). Foundation literacy acquisition in European orthographies. *British Journal of Psychology* (2003), 94, 143–17. <https://doi.org/10.20935/AL1243>. have raised the need to critically scrutinise the universally held models of reading skill development and problems in reading skill development.

It has been found that in languages that have orthographically shallow letter-phoneme correspondences (for example, Finnish, Greek, Italian, Spanish), children accurately and fluently read familiar words and simple pseudowords at the end of the first school year<sup>8</sup>Seymour, P.H.K., Aro, M., & Erskine, J.M. (2003). Foundation literacy acquisition in European orthographies. *British Journal of Psychology* (2003), 94, 143–17. <https://doi.org/10.20935/AL1243>.. In orthographically opaque languages (English, Danish, French, and Portuguese), there were still problems in reading accuracy at the end of the first school year. Children reading in English, which is the most orthographically opaque language, still had poorer reading accuracy after two school years when compared to the reading level of first-year students in other languages. The



complicated and difficult-to-learn letter-phoneme correspondence in English language seems to cause obstacles in comparison with other alphabetical languages, from the viewpoint of learning reading skills. The differences found were not explained by the age at which students start school; rather, they were explained by the differences in the complexity of the connections between spoken and written language between different languages.

Differences in language and writing system characteristics also affect which factors are essential in teaching reading and supporting reading difficulties. Therefore, methods that are functional in some language environments and writing systems may not necessarily be functional or well-grounded in other language environments and writing systems. For example, the skill of dividing words into syllables, which is essential for the beginning reader in Bantu languages, is not necessary in the English language. Similarly, the whole word method (a method based on the recognition of whole words) may function as a method for teaching beginning reading skills in languages where words do not conjugate and where usage of letter-phoneme correspondence does not capture pronunciation of irregular words. Thus, those working in teaching reading skills and supporting reading difficulties should know the special characteristics of the language and writing system being learned so that they can critically evaluate teaching and support methods that have been developed in different language environments.

## **References**

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## **Research briefs**

[Education in Sub-Saharan Africa](#)

[Literacy Programs Efficacy for Developing Children's Early Reading Skills in Familiar Language in Zambia](#)

[Differentiation of Effect Across Systemic Literacy Programs in Rwanda, the Philippines, and Senegal](#)

[Designing for Scale: Reflections on Rolling Out Reading Improvement in Kenya and Liberia](#)