Factors to check in developing a useful and usable orthography

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Steps in Orthography Development Orthography Services, SIL International

SIL Orthography Advisory Group, January 2017 See also the Orthography web page at www.sil.org/orthography Contact: orthography services@sil.org

These steps may be considered general "best practice," but much depends on the local situation. They are listed roughly in order, but much of major steps 1 and 2 may be done simultaneously. This is also subject to revisions and additions!

1. Find out about the local situation and involve people (sociolinguistic and political factors)

1.1 Who are the stakeholders? Identify them.

- 1.1.1 developers of previous orthographies
- 1.1.2 religious leaders What is the place of the local church? Respected or not? Interested in literacy or not?
- 1.1.3 community leaders What is the authority structure in the language group? Work through them.
- 1.1.4 local teachers (especially of beginning literacy)
- 1.1.5 government leaders at different levels
- 1.1.6 government agencies
- 1.1.7 your own organizational leaders and consultants
- 1.1.8 financial sponsors and partnerships
- 1.1.9 the average language speaker
- 1.1.10 people who have already been writing in their language (whether published or not)
- 1.1.11 Is there a language committee or other organization in place already? Who has authority to make decisions?
- 1.1.12 For all of these, what is the people's attitude toward literacy in general? How strong is their motivation toward literacy? Are there only a few enthusiasts/champions? How much in a hurry are the local people? (And how much does or should it affect plans?) The local church, if any?
- 1.1.12 other?



1.2 Contact and interact with them; repeat as necessary!

- 1.2.1 How do they make decisions that affect the community? Work through them in this way.
- 1.2.2 What is the people's attitude toward literacy in general? How strong is their motivation toward literacy?
- 1 .2.3 Uncover felt needs with connections to local literacy
- 1.2.4 Discuss possibilities and the process of orthography development
- 1.2.5 Discover/discuss relevant sociopolitical issues
- 1.2.6 Discuss possible local language candidates to participate in orthography development (e.g. committee or workshop)
- 1.2.7 Get help in forming an orthography committee, if one does not already exist. Define their roles and authority.
- 1.2.8 What sources of funding are available for orthography development expenses

1.3 What government policies exist, if any? (You should conform to them, or possibly engage in discussion to see if there is flexibility)

- 1.3.1 If there are, which agency or agencies are in charge?
- 1.3.2 Do they restrict the characteristics of new orthographies (how?), or just approve them?

1.4 What orthographies are in place that people have contact with or know about?

- 1.4.1 National
- 1.4.2 Neighboring languages
- 1.4.3 Are their attitudes positive or negative? or does it depend on the particular feature being discussed? or do they know enough to have an opinion?
- 1.4.4 Are there people who can read in one of these other languages/scripts?

1.5 Has there been a previous orthography in the local language?

- 1.5.1 Is it adequate? if not, why not? Sociopolitical, educational, linguistic, technological reasons?
- 1.5.2 How widely is it being used? By whom? How big are the barriers to changing it?
- 1.5.3 Is the developer of the orthography still around? Is that person respected or marginal? Is that person likely to be a help or not?
- 1.5.4 Are there multiple orthographies? If so, what people or groups developed them? Are they "attached" to certain groups? (e.g. religious)?



1.6 What dialects exist?

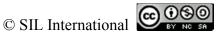
- 1.6.1 Basic information: How many dialects? Where are they located? How many people speak each?
- 1.6.2 Is there a dialect that is the most prestigious? Why?
- 1.6.3 What are the linguistic differences in the dialects? (relates to major step 2 below)

2 Do the relevant linguistic investigation (at least some of this may be done in a workshop with local speakers)

- 2.1 Has anything been previously written on the language? Check it out for adequacy and relevance.
- 2.2 What are the segmental phonemes? (consonants and vowels) (Much can be established through participant methodology)
- 2.3 What suprasegmentals are contrastive (tone, nasality, stress, etc.) Is there a way to estimate functional load?
- 2.3.1 For tone, is there grammatical tone? If so, what?
- 2.4 Given the above, how many symbols are needed to represent all contrasts in an alphabet?
- 2.5 What phonological processes exist?
- 2.5.1 What are the main phonological processes in the language?
- 2.5.2 What can be classed as lexical vs. postlexical? (this often correlates with people's awareness of sounds and what should be symbolized)
- 2.6 What is the nature of compounds in the language?
- 2.7 What evidence is there for word break divisions?
- 2.7.1 Compounds vs. noun/verb phrases?
- 2.7.2 Affixes vs. free morphemes
- 2.7.3 Pronouns, tense/aspect/mood markers, definites, etc.

2A Alternate workshop procedure

- 2A.1 Gather local language speakers, have them write stories
- 2A.2 Have them read each others' stories, and note a) where there are no problems and b) where there are problems.
- 2A.3 Analyze the problems and adjust orthography accordingly



3 With stakeholders, make tentative decisions on orthography (this may involve a workshop of some sort, details of which will be developed elsewhere)

3.1 Consider the wider sociolinguistic situation in all these steps and revise accordingly. Return to this step as needed!

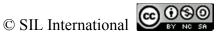
- 3.1.1 Government policies
- 3.1.2 Neighboring languages
- 3.1.3 Dominant or national language

3.2 Consider technology factors

- 3.2.1 What devices (tablets, phones, etc.) are currently used (or could potentially be used in the future)?
- 3.2.2 Are the same symbols equally easily used in print and digitally?

3.3 Decide on script

- 3.3.1 What are the possible scripts?
- 3.3.2 What have other related or neighbor languages chosen?
- 3.3.3 What are the pros and cons of each script?
- 3.3.4 Which script does the language community prefer?
- 3.3.5 CRUCIAL! Find out which script choices are available in Unicode
- 3.4 Decide on symbols, including suprasegmentals
- 3.5 Decide on word break principles and decisions
- 3.6 Decide on punctuation and capitalization
- 3.6.1 Capitalization: when do you use it?
- 3.6.2 Punctuation: periods, commas, question marks, exclamation points, colons, semicolons, hyphens
- 3.6.3 Hyphenation across lines
- 3.7 Write up an orthography statement, with principles, decisions, and why those decisions and not others were made, emphasizing that this is a *trial* orthography.
- 3.7.1 Consider who the audience is (other linguists, mother tongue speakers, government officials). Consider writing different statements for different audiences,



- with appropriate title (e.g. "Orthography Statement for Bababa" vs. "Guide to Reading and Writing in Bababa."
- 3.7.2 Decide which language to write in (varies with context).
- 3.7.3 Include decisions based on visual and educational issues as well as on topics mentioned above.
- 3.8 Make decisions on how to pronounce the names of the symbols when talking about them, e.g. English [e, bi, si, di, i, εf, dʒi...] for <a, b, c, d, e, f, g...>
- 4 Test with wider community and revise as necessary
- 4.1 For all these, test writing as well as reading.
- 4.2 Prepare trial materials in the language and circulate. **Encourage reporting of problems.**
- 4.2.1 Determine how many audiences you need materials for
- 4.2.2 Make sure materials developed match the information needs of these.
- 4.2 Consider formal testing of problematic areas
- 4.3 Have a way to process any proposed changes, including the orthography committee if one exists. Involve other stakeholders.
- 4.4 Consider if public relations for orthography is needed, and follow through
- 5 Write up your experience: what worked and what didn't (non-successful stories can be instructive too)

Ideas that may not fit neatly into the above - or may... Stages of orthography development. SIL PNG's LCORE defines Trial, Intermediate (approved) and Advanced (established)

