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POSSIBLE DEVICES

FOR ALPHABETIC SIMPLIFICATION

IN AFRICA

Prof. Mauricio SWADESH,
Universidad Autonoma de Mexico,
Visiting Professor,
Institute of African Studies,
University of Ghana

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Simplification of alphabets is not an end in itself, but a means toward making easier and less expensive the extension of literacy, the education of the young and the use of the written language in all essential ways. This perspective spells out the basic considerations which must be met by any proposed writing system, which include the following :

1. ADEQUACY : This means the sounds of the language, in terms of its total system, must be differenciated clearly. Perfection is not absolutely imperative, as is amply demonstrated by French and English, but it is convenient for many reasons to come close to it.

2. MECHANICAL EFFICIENCY AND ECONOMY : The writing should be easy to write legibly, recognizing the complicated signs may lose legibility in rapid writing and that they take longer for children to learn to write properly. The employment of the written form on typewriters and with printing equipment should require no special expense that can possibly be avoided. Any use of special types will not only cost money, but will also impede the use of the written language in question by people who possess only standard equipment.

3. HARMONY WITH CO-EXISTING SYSTEMS : This includes :

(a) Earlier systems used for the same language. Although any modification of earlier practices will necessarily involve re-training of those already literate, nevertheless it is often possible to keep this down to a few minutes of explanation.

There is a practical difficulty in the fact that the Latin alphabet contains no tensity sign. To make up an entirely new one and to introduce it into typewriting and printing, would involve a considerable expense. Three possible alternate solutions have been suggested. One is the arbitrary adoption of some letter not other-wise used to fill the bill ; the only ones available happen to be C, Q and X. Because of their value in

other languages, any of these would be misleading and extremely difficult
to popularize. A second solution is to employ some commonly used diacritic
like those in French. A third solution involves assigning the representation
of vocalic "tenseness" to the two semi-consonants, _y_ and _w_, placed after
the first root vowel. The close association of these letters with the vowels
in the history of the alphabet and in the usage of English and French gives
this last solution usage a certain amount of naturality. From the typographic
stand-point, it is/ definitely easier than the use of diacritics : in typing,
it does not require back-spacing ; and in the print-shop, it calls for no
special letter.

The high variant of _a_ in root syllables is relatively uncommon, so
that it is practical to disregard the "tense" quality in this case, as has
been done in the present writing.

The plan for the vowels in major root syllable, therefore, involves
no change for _a_, and gives the following arrangement of the other sounds :

> _i_, as in English _it_ ;
> _iy_, like French _i_ ;
> _u_, as in English _put_ ;
> _uw_, as French _ou_ ;
> _e_, as in English _bet_ ;
> _ey_, like French _e_

Inter-system harmony does not require that the same number of letters
be always used, whatever the needs of the separate languages. In fact,
the simplest situation to meet is that involved between languages which
have identical poheme/ except for one or more extra in one of them. Cases
involving similar even though not completely identical sounds, may meet
by using the same letter for the corresponding sounds in each, for example
the aspirated stops of English _p t k_ and the unaspirated in French. The
speaker of one, when he learns the other, often learns to make the difference.
Even if he does not, he is still understood.

The need of inter-system harmony can sometimes, be met by the use of
digraphs. Thus, if a language has both a fricative and an affricate sibilant,
one may take _s_ and _ts_ to represent them. However, if in the same language
there is no _ch_-phoneme, in the interests of simplicity and if there were no
other obstacle, one might want to use _c_ for the _ts_ sound.

SIMPLICITY

Every alphabet should be simple. Diacritics should in general be avoided, but there may conceivably be some instances in which the judicious use of one or two accents, commonly available on typewriters and in typefaces may be much simpler than any other solution.

Compound letters are generally more economical in the long run than the use of diacritics, because they entail no extra expense in obtaining special equipment. Furthermore, it is easier on the typewriter to type one more letter than to backspace to put in a diacritic ; a saving of time could be achieved here only if there were a special type for the accented letter ‿ and if it did not require shifting, a thing which cannot be obtained without added cost and which at the same time may make it difficult to write a given language on the same typewriter as that designed for another.

Obviously if it is possible, the simplest solution is the use of a simple standard letter, neither compound nor composite.

Sometimes, simplicity is achieved by judicious undercutting. English does not suffer greatly by not writing the accent. Italian uses only five letters to represent seven phonemic vowels. And few languages attempt to mark intonation in an accurate fashion such undercutting is possible because anyone who knows the language can supply what is not written without difficulty. In applying this principle to the orthography of a language, it is necessary to see to it that it is not overdone, that the phonemes thus coalesced be related sounds, and that there be no significant amount of ambiguity in typical contexts.

When one is choosing compound letters, it is best to take tehm for the less common phonemes. However, this should not be done when it would work against inter-system harmony in any very serious fashion.

SOME SOLUTIONS FOR CONSONANTS

It is evident from what has been said that it will not always be easy to find satisfactory solutions. However, it can be done if the technician proceed with imagination and persistence, trying out one possibility after another until they have something truly satisfactory. We mention some ideas to serve as a beginning.

1. There is little question about the proper role of certain letters, including :

b d f g h k l m n p r s t v w z

2. The normal values for the vowels, a e i o u, can be taken from Spanish or Czech.

3. For the palatal semivowel, y might be used as in English and French, thereby coinciding with the most co-existing European languages in Africa and with much of the existing practice. Alternate possibilities are j, as in Dutch or Czech, and according to the earliest Latin use of this letter as a mere variant of I. This would free the y for use as a vowel, presumably for the rounded high vowel in accordance with the classic use of the Greek letter, as still preserved in German, or for the back non-rounded vowel. However, it should be born in mind that this sound, as an independent phoneme, is not common in Africa and that there are sounds to be represented that were lacking in Latin, and for which j can serve.

4. If j is not used for the semi-consonant, it can serve for the affricate sound in judge or for the fricative of French juger. The first is the more frequent occuring sound, so that logically this should be the first value. If a language has the French sound and not the English, the same letter could be used. If it has both affricate and spirant phoneme, one might select j and zh of dj and j, according to which of the two is the more frequent. That is, the digraph is taken for the less common entity. If there is no other use of z in the language, the h, may be omitted from zh. Another usable combination would be zy. There is also the possibility of using dj, gy, or dz, because all these combinations suggest something close to the sound concerned.

5. The <u>ch</u> sound of English can be shown by any of the following : -

   <u>c,</u> as in the Latin spelling of Sancrit and in according with a common practice in Africa.

   <u>ch,</u> as in English.

   <u>ty, ky,</u> or <u>ts</u> - because phonetically they suggest something close to the desired sound, and, in some cases, even closer than the English sound.

6. The first consonant of <u>ship</u> can be shown by :

   <u>s,</u> if there is no other sibilant spirant

   <u>sh,</u> as in English

   <u>sy,</u> as another possible combination

   <u>x,</u> as in portuguese

7. Spirant <u>g</u> of Spanish <u>lago</u> "lake" can be represented by ;

   <u>g,</u> if there is no contrast with <u>g,</u> or if the letter is very uncommon, and can be represented in some other way, as <u>gg</u>.

   <u>gh,</u> because the <u>h</u> is normally used for glottal fricative and because it has been applied as a sign of friction. In <u>sh</u> and <u>zh,</u> its value is to indicate fricative of modified type.

8. Bilabial voiced spirant, as in Spanish <u>cabo</u> "corporal", can by shown by :

   <u>b</u> if there is no contrast with bilabial-stop.

   <u>v,</u> if there is no contrast with labiodental spirant <u>bh,</u> or possibly <u>bw</u>.

9. Similarly the voiceless bilabial spirant can be <u>p, f, ph, fw,</u> or <u>hw</u>.

10. Fricative velar, if it contrasts with <u>h,</u> may be written with x or, if it is considered important to avoid a conflict with French and English, by kh, or <u>hh,</u> that is as fricative <u>k</u> or as "strong" <u>h</u>.

11. The glottal stop, if it is an important consonant, may be represented by apostrophe. It can usually be omitted at the beginning of a word.

12. Ejectives (glottalized) perhaps can be represented by doubling. If they contrast with double consonants in the same language, the apostrophe can be used. Implosives may be written the same way.

13. Clicks might be written with double apostrophe, as p" ts" t" k" .

14. For palatal and velar nasals, ny and ng may be used the g or ng should not be written before k, unless both n and ng are possible.

VOWELS

The basic use of the vowel letters, a e i o u, should be more or less as in classic Latin or modern Spanish, Special problems that may have to be met include :

1.   A central vowel or a back unrounded one can be represented by any of the vowel letters that is not other-wise pre-empted. If none of the letters is thus available, a digraph must be thought of, either for the central vowels or, if it is very frequent, for some infrequent sound, whose letter can thus be made available for the central vowel.

Possible digraphs for the central vowel are oe, ae, ea, ui, iu, eu. The choice would depend on non-ambiguity with reference to other phonemes or sequences in the system. Or it may be possible to use the same letter for two sounds, if the instances of ambiguity in normal contexts are extremely few.

2.   For long vowels, the simplest procedure is doubling, as in Finn.

3.   If it is necessary to distinguish between two types of vowels, whether close and open, tense and lax, retracted and unretracted, the mark of distinction should normally be assigned to the less common type. This is generally the tense or close, which may be represented :
  (a)   by doubling, if no confusion with long vowels or sequences would be entailed.
  (b)   by combination with corresponding semi-vowels, as iy, ey, uw, ow ; the letter a may be combined with either y or w, according to the quality of the variant to be represented.

If it is desirable to mark specifically the open vowel, h after the vowel may be used.

4.   Although we have been avoiding diacritics, there is one situation in which the use of just one of them may give sufficient advantages to justify an exception. This would apply to languages having vowel harmony, so that when one vowel is tense this carries through the entire word. The sign used has to stand out. Therefore it is suggested that an "acute" accent on or after the first vowel of the stem be used.

5.   If it is necessary to show rounded front vowels, combinations like ui for the high type, oe for the high type, oe for the low, may be feasible.

6.   For nasalization, the best solution is a nasal letter placed after the vowel. Thus, n m or ng can be used if they do not lead to serious confusion terms of the phonetic system of the language. Or n might be used for nasalization and nn for the dental nasal.

NOTE ON PRELIMINARY STUDIES

It is evident that suitable simplified alphabets generally can be devised only after careful preliminary studies, by capable personnel, of all factors ; the nature of the phonemic system, its relation to the form structure (morpho-phonemics), relative frequencies, previous practices in writing the language, facts about other co-existing languages, attitudes and opinion of the people. Often, after the most adequate form has been agreed on by the authorities, it is necessary to study ways and means of introducing the reformed writing with the least possible difficulties.