Morphophonemic Spelling for Pedagogical and Other Practical Purposes

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In August of every year since 1965, linguists who study the
Native languages of British Columbia and adjacent Northwestern
States gather to discuss topics and resolve problems common to
their field investigations. This gathering has come to be named
the International Conference on Salish and Neighboring Languages.

During the Fourth Conference, held at the University of
Victoria in 1969, a long and heated discussion arose concerning
orthographies for pedagogical materials and other "practical"
purposes. It was generally agreed that a common core of identical
symbols was both possible and desirable. It was possible because
the inventories of consonants and vowels are relatively similar
throughout the area in spite of the very large number of languages
spoken here belonging to nine different families. It was desirable
because many Native people know two and sometimes three or more
indigenous languages. The more similar the orthographic conventions
among the languages they use, the easier their task in becoming
literate in them. It was also noted that there would be a
considerable financial savings for everyone if a common font could
be designed.

Beyond these two points, however, there was no agreement. Some
of the linguists believed that the conventions of English orthography
should be adopted as far as possible, augmented by digraphs and
diacritics. They felt that because nearly all Native people through-
out the region were already literate in English, reading habits
learned for English should be utilized for greater ease in learning
to read and write in a Native language. These linguists also pointed
out that the symbols used by professionals look quite formidable to
the layman; and they expressed the fear that Native people would be
too intimidated by linguists' strange letters to be willing to try
to learn to write. A few even argued (with shocking patronization)
that the symbols used by Amerindianists would be too difficult for
most Native people to cope with.

Others at this conference disagreed quite strongly with the
above opinions. This group maintained that the principle of one
sound one symbol was a great advantage whereas digraphs disguised
both the regularity of many reduplicative patterns and the
canonical shape of roots which in some languages were also formed
very regularly. Furthermore, these linguists pointed to the fact
that all fluent speakers were very well aware that the Native
languages had many sounds quite different from anything heard in
English; therefore, it seemed natural to the speakers of these
languages to use different looking symbols for writing different

sounding languages.

A third objection to devising a writing system which resembled English as much as possible centred around the hope of bringing Native speakers more and more completely into the work of recording and describing their languages. Learning a writing system that adheres closely to linguists' phonemic notations makes available to Native speakers the fast growing bodies of descriptive data being written about their languages. This access would, it was hoped, provide the researcher with a group of literate Native speakers capable of checking the accuracy of his notations and glosses; and perhaps it would lead to other, more extensive collaboration between speaker and linguist.

This debate concerning symbols for Native language alphabets[1] was not resolved at the Fourth Conference; it continued during the next several conferences but gradually expired without consensus. Each linguist went his own way, giving advice to various Native language committees, different from what his colleagues were suggesting. For some languages this difference of opinion has resulted in two (and in some cases even more) competing writing systems.[2] Instead of cooperation in the urgent matter of language preservation and continuance, linguists have on this point sewn discord.

Regretably, all of the energy in this debate was centred on

just this one relatively minor issue — the symbols to be used. Everyone seemed to assume that all words should be and would be written phonemically; but, our experience with Lushootseed and Saanich Salish language programmes showed that phonemic spelling is not always the best orthographic system. While fluent speakers generally preferred phonemic writing, young adults attempting to learn the language of their people were helped most by a partially morphophonemic system which took into consideration the orthographic conventions of their first language — in these cases, English.

In the early 1970's, several Lushootseed language classes were begun both on reservations and in public schools and universities. Some of these classes were for young children to whom writing was not taught, but others were for young adult Natives who had grown up without any knowledge of their ancestral tongue. (Such is the case of most Salish young people today regardless of language area.) Provisional textbooks were prepared in which the words were spelled phonemically.

Not surprisingly, these provisional texts turned out to need improvement. Certain structures which we thought to be clearly explained proved to be difficult for students in all classes. One of these was the s-absolute paradigm which includes within its semantic range forms translatable with English possessives:

/dəbád/	*my father*	/ck̓ʷúy/	*my mother*
/ʔədbád/	*your father*	/ʔəck̓ʷúy/	*your mother*
/bádᶻ/[3]	*his father*	/sk̓ʷúys/	*his mother*
/bádčəɬ/	*our father*	/sk̓ʷúyčəɬ/	*our mother*
/bádləp/	*your (pl) father*	/sk̓ʷúyləp/	*your (pl) mother*

The stem in the left column is the root /bád/ *father*; on the right
it is /sk̓ʷúy/ *mother* which is composed of the root -k̓ʷuy and a prefix
s-. In Lushootseed (as in most other Salish languages) roots of
fundamentally nounlike meaning belong to two classes, namely, those
that require the s- prefix and those that do not.[4] Only the affixes
glossed as *our* and *your (plural)* are pronounced the same way in both
columns. Each of the other three undergoes an assimilatory change
in one or the other column.

However, complement heads[5] such as /bád/ and /sk̓ʷúy/ are very
often accompanied by clitics which correspond roughly to English
articles. These clitics, added to the above paradigms, give the
following new forms:

tidbád	*my father*[6]	cick̓ʷúy	*my mother*
tadbád	*your father*	cack̓ʷúy	*your mother*
tibádᶻ	*his father*	cisk̓ʷúys	*his mother*
tibádčəɬ	*our father*	cisk̓ʷúyčəɬ	*our mother*
tibádləp	*your (pl) father*	cisk̓ʷúyləp	*your (pl) mother*

Thus, to express a singular possessor in the three persons, first,
second, third, the student must remember the following twelve
different forms:

> 1st. də-, c-, tid-, cic-
>
> 2nd. ʔəd-, ʔəc-, tad-, cac-
>
> 3rd -s, the fused form bádᶻ, s- ... -s, ci- ... -s.

All this variety, however, disguises the underlying simplicity
of the system. Several simple assimilation patterns account for the
apparent complexity. (1) In the onset of a syllable, both /t/ plus
/s/ and /d/ plus /s/ result in /c/ while (2) in the coda /d/ plus /s/
becomes /dᶻ/. (3) The vowel sequence /i/ plus /a/ is reduced to /a/
otherwise (4) unstressed /a/ becomes /ə/. Finally, (5) an epenthetic
/ə/ separates two contiguous voiced stops which would otherwise occur
in the same syllable as in /dəbád/ from {d+bad}.

The textbooks were revised[7] and a morphoponemic spelling system
adopted which revealed the basic simplicity of these (and other)
constructions and at the same time took advantage of the students'
English writing habits already well instilled. In other words, with
only one exception, no special pronunciation rules had to be taught
in order for students to automatically pronounce correctly the
appropriate phonological sequences from the more abstract writing.
Below is the revised spelling of the s-absolute (possessive) paradigm.

The numbers following forms refer to the morphophonemic rules listed
above which derive the correct pronunciation.

dbád (5)	ti dbád ͨ	*my father*
adbád (4)	t(i) adbád (3)	*your father*
báds (2)	ti báds (2)	*his father*
bádčəɫ	ti bádčəɫ	*our father*
bádləp	ti bádləp	*your (pl) father*
dskʷúy (1)	tsi⁹ dskʷúy (1)	*my mother*
adskʷúy (1,4)	ts(i) adskʷúy (1,3)	*your mother*
skʷúys	tsi skʷúys (1)	*his mother*
skʷúyčəɫ	tsi skʷúyčəɫ (1)	*our mother*
skʷúyləp	tsi skʷúyləp (1)	*your (pl) mother*

In this orthography each of the singular affixes is always
written the same way in spite of the twelve distinct pronunciations
listed above: d- *first person*, ad- *second person*, and -s *third
person*. Yet to correctly realize the twelve pronunciations, the
student need only be told to omit letters in parentheses. All other
transitions from writing to talking are automatic and more or less
unconscious for young adults who are literate native speakers of
English.[10] Thus, the sequence d plus s in the coda is rendered as
/dᶻ/ just as in English *roads* without specific instruction to do so

from the teacher (2).[11] Students intuitively pronounce t plus s and
d plus s as /c/ (1).[12] Compare English pronunciation of *tsetse fly*
and *cats*. Confronted with an initial sequence of d plus b everyone
automatically adds an epenthetic /ə/ (5). From the habits of English
students also render unstressed a as /ə/ (4). Finally, they auto-
matically begin all syllables with /ʔ/ which are spelled with an
initial vowel. This practice too follows English habits; in
Lushootseed, however, /ʔ/ is phonemic.

Such judicious use of morphophonemic spelling can be very
helpful in language instruction. In particular, the use of parentheses
has proved useful in languages where sound changes have bequeathed
a string of morphemes all having the same shape. The Straits
Salish dialect, Saanich, provides a good example of the phenomenon.

Saanich has three prefixes all of which are realized as /S/ at
times. This can prove confusing to a student, particularly when the
stem to which one or another of these prefixes is added itself begins
with /s/. The three can be conveniently labelled as follows:

1. derivational {s-}. Some roots automatically require this
   element although its significance has long since been lost.[13]
2. syntactic {s-}. This morpheme is required in certain types
   of negations. It is bound to the negated predicates
   whether these be a single word or a whole phrase. (It also
   occurs in other types of syntactic constructions.)

3. the stative prefix {əs-} is realized as /s/ when sentence initial (among other places).

In the word sč̓ámən *angle adze* is the root -č̓əmən, a member of the class which always requires the s- prefix. In contrast is maay? *basket* which does not take this prefix.

In negative constructions, however, both words begin with s-:

/?ə́wə smàay?/   {?əwə s+maay?}   *It is not a basket.*

/?ə́wə sč̓ə̀mən/   {?əwə s+s+č̓əmən}   *It is not an angle adze.*

Complete assimilation has left only one /s-/ in the second sentence. One might introduce the parentheses convention here writing ?ə́wə (s)sč̓əmən; but it is probably simpler to maintain phonemic spelling and tell the student that ?əwə requires the following word to have an s- prefix if it does not already have one.

With the addition of {əs-} *stative* to the lessons, however, the use of parentheses is a definite help to the language learner. The following four sentences have among them four allomorphs of {əs-}, namely, /s/ in (a), /∅/ in (b), /əs-/ in (c), and /ə-/ in (d):

(a) /snáw?ə́ɫ ?ə t^θə màay?/   {əs+naw?+əɫ ?ət t^θə maay?}

    It is in the basket.

(b) /sí?əq ?ə t^θə lətèm/   {əs+si?əq ?ət t^θə lətem}

    It is under the table.

(c) /?ə́wə səsnàw?ə́ɫ ?ə t^θə màay?/   {?əwə s+əs+naw?+əɫ ?ət t^θə maay?}

    It is not in the basket.

(d) /?ə́wə səsì?əq ?ə t^θə lətèm/   {?əwə s+əs+si?əq ?ət t^θə lətem}

    It is not under the table.

The use of parentheses again provides an easy means of showing the student both the pronunciation and the underlying pattern at the same time.

(a) (ə)snáw?ə́ɫ ?ə(t)[14] t^θə màay?.

(b) (əs)sí?əq ?ə(t) t^θə lətèm.

(c) ?ə́wə səsnàw?ə́ɫ ?ə(t) t^θə màay?.

(d) ?ə́wə sə(s)sí?əq ?ə(t) t^θə lətèm.

In both Lushootseed and Saanich these particular morphophonemic spellings were originally introduced to help language learners. Fluent speakers of both languages (all of whom were over sixty) found a phonemic system of writing more natural. In Lushootseed, however, the elders who learned to write well felt the morphophonemic system to be the standard because the textbooks were, for most of them, the first published forms of Lushootseed they had seen. Therefore, they assigned more prestige to the morphophonemic spelling and chose to learn it. Among Saanich elders, on the other hand, the morpho- phonemic system was never accepted. The only elder who grasped the reasoning behind it was employed as a language teacher and he referred to it somewhat condescendingly as training wheels for the young folks.[15]

Our experiences with pedagogical materials for the Wakashan language called Nitinaht corroborated these opinions. Again fluent adult speakers preferred phonemic spelling, while young adults attempting to acquire Nitinaht as a second language were greatly helped by a partially morphophonemic spelling.

In addition to pedagogical ends a morphophonemic spelling has another advantage. It often can serve several dialects of a particular language, whereas a purely phonemic system either has a more limited readership or forces speakers of other speech communities to read in a dialect that is not their own. This wider use is particularly important where there are few speakers and these are divided among several dialects. A unified writing system enables them to pool their resources for printing their materials.

While the selection of symbols is a necessary consideration, it is only one of several important factors that ought to be carefully thought out. Two of these have been discussed here: (1) For whom is the writing system intended? (2) How should words be spelled? In British Columbia these two fundamental questions have very often been overlooked. It is hoped that those involved with planning orthographies in the future will give these considerations the attention they ought to have.

Notes

1. Syllabaries were never considered because most languages in this region permit long consonant clusters. A sequence of five consonants in one syllable is not unusual. Some language such as the Salish Bella Coola and the Wakashan Oowekyala have many whole words utterly devoid of vowels.

2. I know of four systems being used to write Halkomelem Salish — three of them competing on one reserve!

3. $/d^z/$ represents a voiced alveolar affricate, the voiced counterpart to $/c/$. The gloss *his* is to be understood to include *her*, *their*, and *its* here and throughout this paper.

4. On this derivational level {s-} no longer carries any semantic weight. Although meaningless here, the same (historical) element occurs inflectionally and syntactically with an aspectual significance difficult to explain concisely in English. The same statements pertain to the cognate form in Saanich, {s-}, discussed below.

5. That is, nouns. However in Lushootseed, Saanich, and many other Salish languages roots are not inherently nominal or verbal; therefore, many Salishanists prefer to avoid the terms *noun* and *verb* and the concepts typically associated with them in European languages.

6. Literally, *the my father*, etc.

7. *Lushootseed, The Language of the Skagit, Nisqually, and other tribes of Puget Sound*. Vols. I, II. Daybreak Star Press. Seattle.

8. Space to represent word divisions was introduced to separate the clitics from head words. Constructions such as /tiháʔɬdəbàd/ {ti háʔɬ dbàd}, *my good father* prove the validity of this word boundary because haʔɬ *good* is a free form which along with others of its class occurs between the clitics and the prefixes of the head words. Students have experienced no difficulty in remembering to pronounce the sequence of clitic plus prefix as a single syllable.

9. The analysis of /c/ into {t} plus {s} is based upon a more complete inventory of these article-like particles than is included in this discussion. Two more will suffice to show the reasoning. Beside /ti/ and /ci/, which are definite, are /kʷi/ and /kʷsi/ indicating a remote or vague complement. These and all other particles belonging to this class have /s/ when modifying a word with female referent; therefore, it is assumed that /c/ is here a portmanteau representing {t} plus {s}.

10. As mentioned above, this orthography was prepared for Native people who do not speak their ancestral language. However, elders fluent in Lushootseed also found the system easy to use.

In fact, several people in their sixties taught themselves to read and write it by using the textbooks which had been intended only for language instruction. (Note, however, the contrary reaction of Saanich elders to morphophonemic spelling mentioned below.)

11. The number following this and subsequent sentences refers to the morphophonemic statements listed above, pages 9, 10.

12. The letter sequence $\underline{d}$ + $\underline{s}$ is so pronounced only when in the onset of a syllable. (Some students, of course, need practice in order to pronounce /c/ in a syllable onset, but that is a different type of problem.)

13. Compare the identical phenomenon in Lushootseed mentioned above in connection with the word for *mother*, namely skʷúy.

14. The symbol t^θ stands for a voiced dental slit affricate. The /t/ of the preceding particle is lost before /t^θ/. Here, too, parentheses have been introduced to show the underlying regularity.

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