

## CHAPTER 8

### APPLICATION OF THE PHONOLOGICAL COMPARISON

In the previous chapter, a comparison of phonemes between the Northwest Karen and Sgaw languages was made. In this chapter, the findings are organized into an implementation of a broader Sgaw orthography. The need for further research, and an application of language planning are also briefly discussed. Sections 8.2 – 8.4 contain a specific proposal for extending the Sgaw Karen orthography for use with the Northwest Karen languages. The eight principles of orthography and Simon's seven principles for designing a multidialectal orthography (Chapter 3) are applied as necessary, in order to explain why certain symbols were chosen or modified to fit the needs of the Northwest Karen languages.

#### **8.1 Impacts of findings for an extension of Sgaw orthography**

The comparison shows that some Karenic languages have more phonemes or different phonemes than Sgaw. For instances, of the 25 existing Sgaw consonant symbols, it is found that all have correspondences with the Northwest Karenic consonants. However, there are also additional sounds in Northwest Karenic languages, which will require symbols to represent them. No one dialect contains all of the additional sounds. For instance, the voiced velar stop /g/ is found in Gebah dialect but is missing in Sgaw, Bwe, Paku, Gekho, and Palaychi. Adding these consonants with appropriate symbols to the Sgaw alphabets will provide a broader orthography, which the Northwest Karen language communities may use to develop literature.

The existing Sgaw Karen orthography was developed using borrowed symbols from the Burmese script. Therefore, when there is a need to find a new symbol or to develop a new grapheme for Karenic languages within the sociolinguistic “sphere of influence” of Sgaw, it is natural to draw on the Burmese alphabet. Symbols for the consonant phonemes that lack symbols can be borrowed from the Burmese script. Burmese script is familiar to most of the people of different language groups and therefore, borrowing from it may be more realistic psychologically. Moreover, there are some characters in the Burmese script that are not used by the current Sgaw orthography. These are likely to be both socially and psychologically accepted. Using characters from the Burmese alphabet will also help one who is a Myanmar national gain access to the national language, easing national education for those who have learned to read their own language (cf. Appendix E).

## 8.2 Consonants

Table 39 compares the Sgaw graphemes and the Karenic phonemes. The existing 25 consonant graphemes of Sgaw are listed according to the Karen alphabetical order, starting with <ṃ> /k/ and ending with <ḙ> /f/. The corresponding phonemes of the Northwest Karenic groups are arranged so that the phonemes may be compared with the Sgaw Karen graphemes. The blank cells represent phonemes that do not occur in a particular language.

Sgaw	IPA	Kayah	Bwe1	Bwe2	Geker	Gebah	Paku1	Paku2	Palachi
က	k	+	+	+	+	+	+	+	+
ခ	k <sup>h</sup>	+	+	+	+	+	+	+	+
ဂ	ɣ	+	+	+	+	+	+	+	+
	g		+	+	+				
ဃ	x	+	+	+	+	+	+	+	+
င	ŋ	+		+	+	+		+	+
စ	s	+	+	+	+	+	+	+	+
	z	+					+	+	+
ဆ	s <sup>h</sup>	+	+		+	+	+	+	+
ရှ	s <sup>j</sup>	+	+	+	+	+			+
ည	ʃ					+	+		
တ	t	+	+	+	+	+	+	+	+
တ	t <sup>h</sup>	+		+	+	+	+	+	+
ဒ	d		+	+	+	+	+	+	+
	d	+	+	+	+	+	+	+	+
န	n	+	+	+	+	+	+	+	+
	ɲ					+			
	ɳ						+		
ပ	p	+	+	+	+	+	+	+	+
ဖ	p <sup>h</sup>	+	+	+	+	+	+	+	+
	f								+
	v	+	+						+
	b	+	+	+	+	+		+	+
ဗ	β		+	+	+	+	+	+	+
မ	m	+	+	+	+	+	+	+	+
	m̥		+			+			
	m̄								+
ယ	j	+	+	+	+	+	+	+	+
ရ	r	+	+	+	+	+			
လ	l	+	+	+	+	+	+	+	+
	ɭ		+		+				
ဝ	w	+	+	+	+	+	+	+	+
သ	ɬ	+	+	+	+	+		+	+
ဟ	h	+	+	+	+	+	+	+	+
အ	ʔ	+	+	+	+	+	+	+	+
ဧ	ɦ				+		+	+	

Table 38. Comparison of Sgaw graphemes vs. Karenic phonemes

Comparison of the Sgaw alphabet with the total consonant inventory of Northwestern Karen varieties shows that the present alphabet lacks symbols for eleven consonants: [g, z, d, ɲ, ɳ, f, v, b, m̥, m̄, ɭ].

### 8.3 Principles of orthography adaptation

The following principles are suggested to developed a Northwest Karen orthography.

1. The principle of borrowing. The existing consonants of Sgaw will serve as the basis of the alphabet. Where the Burmese alphabet provides additional symbols that can be borrowed, these should be used. Thus, other consonants such as /b, g, z, d, ʈ/ will be borrowed from the left over Burmese consonants: <ဝ> for /b/, <ဂ> for /g/, <ဇ> for /z/, <ဓ> for / d / and <ဇာ> for / ʈ/.
2. The principle of modification. Burmese lacks symbols for the fricatives /f, v/. The Burmese character <ဝ> may be modified as <ဖ> for /v/ and [ဝ] will be modified as <ဖ> for /f/. here the Burmese alphabet lacks a symbol for a needed sound a Burmese character may be modified.
3. The principle of using digraphs. For the two syllabic nasals /ṁ, ṅ/, Sgaw characters for /m, n/ may be combined with a Pwo tone mark <း>; thus for <မး> for /m/, and <နး> for /ṅ/. In the case of syllabic nasals /ṁ, ṅ/, and voiceless nasals /ṁ̥, ṅ̥/ a different syllable structure is involved. Here we may turn to using a diagraph to represent this.

### 8.4 Application to consonants

The missing phones [g, z, d, ṅ, ṅ̥, f, v, b, ṁ, ṁ̥, ʈ] as shown in Table 39 are those needing graphemes. For the missing phoneme /g /, the Burmese grapheme <ဂ> could be used. The grapheme <ဝ> in Burmese sound / d /. However, it is shaped like <ဝ>, which is used to represent /γ/ in Sgaw Karen orthography (though its original

sound in Burmese is /g/). The same reasoning can be taken with the other consonants: <၉> for /z/; <၈> for /d/; <၉> for /t/ and <၈> for /b/.

In the case of the consonants /f/ and /v/, there is no available Burmese character. The nearest and appropriate character to represent, the nearest sound <၈> could be modified as <၉> and recognized as [ f ]. The symbol for the consonant [v], <၈> can be modified as <၉> to represent it. The reason for this choice and modification of the symbols is that the chosen symbols bear the nearest shapes and sound, which should help people read or pronounce it much easier. Moreover, the modified symbols could be typed with a manual typewriter and are therefore practical to produce.

For the syllabic nasals /m̥/ and /n̥/ a Pwo Karen vowel symbol <၉> could be used. Pwo Karen script is well recognized by all the Karen. /m̥/ can be written in Karen as <၈၉> where <၈>, the Sgaw symbol for the voiced nasal /m/, <၈> is combined with the Pwo Karen vowel symbol <၉>, to indicate the syllabic nasal /m̥/ <၈၉>. The same rule can be applied to the symbol [n̥], where the Sgaw voiced nasal /n/ <၉> is combined with the Pwo Karen vowel symbol <၉> to make <၉၉>. Because /m̥/ and /n̥/ do not co-occur in a single dialect <၈၉> may be able to serve for both syllabic nasals and voiceless nasals. <၈၉> could also be used as graphemes for the voiceless nasal consonants /m̥/ in Bwe 1 and Gebah, and <၉၉> for /n̥/ in Paku 1 dialect as a multidialectal feature.

literature in their own dialects. The vowels in Karen can be written as Table 40 and 41:

Karen	ᵛ	ᵛ̣	ᵛ̇	ᵛ̣ᵛ	ᵛ̣	ᵛ̣	ᵛ̣ᵛ	ᵛ̣ᵛ̣	ᵛ̣ᵛ̣
IPA	i	e	ɛ	ə	ɯ	u	o	ɔ	a

Table 40. Existing Sgaw Karen vowel symbols

KAREN	ᵛᵛ	ᵛ̣ᵛ̣	ᵛ̣ᵛ̣	ᵛ̣ᵛ̣	ᵛ̣ᵛ̣	ᵛ̣ᵛ̣	ᵛ̣ᵛ̣	ᵛ̣ᵛ̣	ᵛ̣ᵛ̣	ᵛ̣ᵛ̣	ᵛ̣ᵛ̣	ᵛ̣ᵛ̣	ᵛ̣ᵛ̣
IPA	ai	ei	ɜm	ɛə	əi	iə	əw	uw	ao	oi	ɜo	əu	u

Table 41. Proposed vowel symbols

The proposed vowel symbols for the Northwest Karen displayed in Table 41 are possible transcriptions of the sounds as each diphthong are articulated. The above three principles (see § 8.3) are to be applied appropriately for the tone mark and vowel systems of the Northwest Karen orthography. The existing Sgaw vowels will serve as the monophthongs of the Northwest Karen vowels and the digraph principle is applied for the diphthongs of the Northwest Karen orthography. For /ai/ a symbol from Pwo vowel is borrowed to represent it. For /ei/, two vowel symbols <ᵛ̣ᵛ̣> and <ᵛ̣ᵛ̣> from Sgaw is used; and the third vowel symbol is the combination of two Pwo vowel symbols: <ᵛ̣ᵛ̣>, <ᵛ̣ᵛ̣>. The latter vowels follow this principle to represent each respective symbol.

## 8.6 Tones

When the tone system of the Northwest Karen are evaluated, it is found that Bwe 1, Bwe 2, Geker and Paku 2 have three more contrastive tones: high, high falling and low falling (55, 53, 31). Geker, Paku1, and Paku 2 split the low tone to low (11) and low falling (31) tone. However, the low falling tone (31) appears to be the allotones

of the low tone and the high tone found could be a prosodic high pitch. Therefore, the general Karen orthography will contain five tone marks, as in Sgaw. The following table displays the tone marks of the Sgaw Karen and some examples of possible tone transcriptions of the Northwest Karen language.

Tone marks	High	Mid high	Mid	Mid low	Low	High checked	Low checked
IPA	˥	˥˥	˥˥˥	˥˥˥˥	˥˥˥˥˥	˥˥˥˥˥˥	˥˥˥˥˥˥˥
Sgaw		∅	˥	˥˥	˥˥˥	˥˥˥˥	˥˥˥˥˥

Table 42. Sgaw Karen tone marks

Sgaw Karen has the tone marks as displayed in Table 42. There are three level pitch tone marks: mid <˥> /˥/; mid low <˥˥>, /˥˥/; and low <˥˥˥>, /˥˥˥/. The two falling tones with creaky voiced quality are: high checked <˥˥˥˥>, /˥˥˥˥/ and low checked <˥˥˥˥˥>, /˥˥˥˥˥/. Mid high is unmarked. The possibility of applying these tone marks is demonstrated below.

(49)	(IPA)	Northwest transcription
a. Bwe 1	mu˥˥ ne˥˥ kʰe˥˥? 'night'(12) tʰe˥˥? 'bear' (74)	မုၢ် နဲၤ ခဲး ထဲၣ်
b. Bwe 2	mu˥˥ he˥˥ ni˥˥ kʰa˥˥ nu˥˥? 'yesterday'(16)	မုၢ် ဟံၣ်နဲၤ ခဲၣ်န့း
c. Gebah	ka˥˥ ka˥˥ du˥˥ sʰyo˥˥? 'eyebrow' (124)	ကုၣ် ကၢ ခုၣ် ဆိး
d. Geker	həu˥˥ prei˥˥? 'cool'(433)	ဟံၣ် [ပဲး
e. Paku 1	pəɰ˥˥ za˥˥ tʰei˥˥? 'mist'(6)	ပကူၤ ထဲး
f. Paku 2	tʰe˥˥ tʃu˥˥? tʰe˥˥ me˥˥? 'thorn'(41)	တဲၤခူၤ:တဲၤမဲ
g. Palaychi	ta˥˥ vu˥˥? ta˥˥ za˥˥? 'fight' (316)	တၢ် ဗး တၢ် ဇး

## 8.7 The need for further research

While the Southeast Asia 436 word list is largely sufficient for data analysis, some phonemes included in the basic phonological structure of the Northwest Karen languages seemed to force their way into the phoneme inventory, since they rarely

occurred in the data. For instance the standard Sgaw data does not contain the consonant like /ŋ/, /s<sup>j</sup>/, /h/. The consonant cluster, /pr/, /p<sup>h</sup>r/, /p<sup>h</sup>j/, /w/, /kr/, /k<sup>h</sup>r/, /ml/, /sy/ etc. are also missing. Nevertheless, the present data has provided a great help to the formation of a tentative Northwest Karen orthography.

### **8.8 The principles for Northwest Karen orthography**

It was mentioned in Chapter 1 that the Northwest Karen orthography is the goal of this thesis. The findings from Chapter 7 provide the Northwest Karen groups with an orthography, suggested in Chapter 8, which they can test and utilize for their benefit. It is believed that Sgaw based orthography will help Northwest Karen speakers read and write their own dialect.

The proposed Northwest orthography is not yet final. A workshop for testing a Northwest Karen orthography was done in Yangon during the Literacy workshop in November 1999, applying the above principles. Please see some specimens of orthography testing in Appendix C.

### **8.9 Program planning**

A literacy committee of Bwe or any subgroup could be formed to organize a special conference for testing this orthography possibly starting with the development of a sample primer or other appropriate literature to introduce the orthography to the whole community. If the whole community has a positive attitude toward using this, a literacy project may be viable. When the Northwest Karen orthography is developed and established, the Northwest Karen can produce materials to learn to read and write in their mother tongue.