APPENDIX 1 TRANSCRIPTION OF KHUEN NAMES IN ROMAN SCRIPT

PAYAP UNIVERSITY

There is no universally accepted system for transcribing place names in Myanmar in Roman script. That there is difficulty in achieving consensus is no doubt in part to the shortcomings of the Roman script for transcribing many of the world's languages. C. Sumner Spalding (1997) emphasised these shortcomings when he wrote

> The phonetic values of the letters of the Roman alphabet have about as much firmness as sponge rubber and are as riddled with ambiguities as a Swiss cheese is with holes.

Enfield and Evans (1998:6-7) forcefully put the case for using the International Phonetic Alphabet (IPA) for general transcription purposes. Notwithstanding these cautions, there is still a need for an accurate system of transcription in Roman script, particularly for place names. Enfield and Evans (1998:13) urge that all languages in use in a region be taken into consideration in devising a system of transcription not only languages in the same language family as the main language of focus. This is a laudable aim but introduces further complexity – and hence the need for more effort – into an already complex problem. In the interests of pragmatism, the conventions proposed in this thesis are Tai-centric and take as a starting point the Royal Thai General System of Transcription (RTGS) used for transcribing Standard Thai. These conventions are set out below and include initial consonants, final consonants and vowels. Tone is not explicitly marked although a distinction is made between long and short vowels to indicate a difference in tone in dead[46] syllables. A more comprehensive treatment of a transcription system appropriate for the languages of Eastern Shan State must remain a topic of further research.

Table 94 sets out the conventions used for initial consonants. In the table there are two columns for each place of articulation – the first listing Khuen consonant phones expressed in IPA and the second column giving the corresponding Roman transcription. All in all, Romanising the initial consonants does not pose any great

[46] A dead syllable is one ending in a stop.

PAYAP UNIVERSITY

problems. Note that the glottal stop is not explicitly written in the Romanisation, and in contrast to the RTGS, [tɕʰ] (transcribed as ch) is differentiated from [tɕ] (transcribed as j).

		Place of articulation									
		Labial		Alveolar		Alveolo-palatal		Velar		Glottal	
		IPA	Rom	IPA	Rom	IPA	Rom	IPA	Rom	IPA	Rom
Manner of articulation	Stop	pʰ	ph	tʰ	th	tɕʰ	ch	kʰ	kh		
		p	p	t	t	tɕ	j	k	k	ʔ	-
		b	b	d	d						
	Fricative	f	f	s	s					h	h
	Nasal	m	m	n	n			ŋ	ng		
	Trill			r	r						
	Approximant	w	w			j	y				
	Lateral approximant			l	l						

Table 94 Roman characters used to transcribe Khuen initial consonant phones

In Table 95 the conventions for transcribing Khuen final consonants in Roman script are described. Under each place of articulation there are two columns: the first column lists the Khuen phone in IPA and the second column gives the Roman transcription.

		Labial		Alveolo-palatal		Velar		Glottal	
		IPA	Rom	IPA	Rom	IPA	Rom	IPA	Rom
Manner of articulation	Stop	p	p	t	t	k	k	ʔ	-
	Nasal	m	m	n	n	ŋ	ng		
	Approximant	w	w	j	y				

Table 95 Roman characters used to transcribe Khuen final consonant phones

The Romanisation of Khuen vowels presents a particular challenge since there are only five vowel symbols in the Roman script, viz. a; e; i; o; and u whereas nine contrastive vowel positions have been identified for Khuen. To further complicate matters, vowel length is arguably phonemic for at least some vowel positions. The RTGS does not provide for any distinction in vowel length. The Khuen writing system itself provides a distinction in vowel length at each position. Indeed the

PAYAP UNIVERSITY

length of vowel is significant in determining the tone in dead syllables, so a system is proposed consisting of long and short vowels in each of the nine positions in which the Roman character h is used to denote a long vowel. The full array of vowel conventions is laid out in Table 96 and the possible ambiguities arising from the use of the consonant symbols h and r as components of vowel denotations are discussed following the table.

		Horizontal position of highest part of tongue							
		Front		**Central**		**Back**			
		IPA	**Rom**	**IPA**	**Rom**	**IPA**	**Rom**	**IPA**	**Rom**
Vertical position of highest part of tongue	**High**	i	i			ɯ	ue	u	u
		i:	ih			ɯ:	ueh	u:	uh
	High-mid	e	e			ɤ	ur	o	o
		e:	eh			ɤ:	urh	o:	oh
	Low-mid	ɛ	ae					ɔ	or
		ɛ:	aeh					ɔ:	orh
	Low			a	a				
				a:	ah				

Table 96 Roman characters used to transcribe Khuen vowel phones

The entries in Table 96 show that the Roman characters ‘e’ and ‘r’ are used in combination with one of the five Roman vowel symbols to create denotations for the four extra vowel positions that cannot be represented unambiguously by a single Roman character. Since Khuen syllables never end with the phones h or r, whenever these appear medially or at the end of a word in the Roman transcription it means that they are representing a vowel. The system can be seen in use in Table 97. From the author’s point of view as a mother tongue speaker of British English, the overall system appears to sacrifice some aesthetic appeal in favour of consistency and the ability to differentiate between long and short vowels which helps indicate different tones for dead syllables. In Table 97 the name of each village tract is written in 4 ways. The first column gives the name in Khuen script; the second gives a transliteration of the Khuen name in IPA; the phonetic transcription given in the third column is largely the same as the transliteration of the Khuen script, apart from the tones. Also unstressed syllables often have shorter vowels, so the phonetic transcription reflects this. The final column gives

PAYAP UNIVERSITY

the Roman transcription which is based on the phonetic transcription. In dead syllables and open syllables[47] however, the Roman transcription follows the transliteration so that the correct tone is represented. The phonemes and tonemes of Khuen are discussed in greater detail in Appendix 8 and Section 6.1.

Ref	Name (Khuen)	Name (IPA transliterated)	Name (IPA phonetic)	Name (Roman)
1	ꪘꪱꪖꪶ	jaːŋ^{2} lɔː^{2}	jaŋ^{4} lɔː^{44}	Yang Lorh
2	ꪖꪶꪜꪊꪖꪒ	dɔːj^{2} loːŋ^{1}	dɔj^{4} loːŋ^{24}	Dory Lohng
3	ꪱꪖꪎ	wat^{6} saːw^{2}	wat^{53} saːw^{44}	Wat Sahw
4	ꪀꪱꪖꪮ	kaːt^{3} taw^{3}	kat^{2} taw^{23}	Kaht Taw
5	ꪀꪱꪖꪷ	kaːt^{3} tʰaːj^{5}	kat^{2} tʰaːj^{33}	Kaht Thay
6	ꪘꪱꪒꪫ	jaːŋ^{2} keːŋ^{2}	jaŋ^{4} keːŋ^{44}	Yang Kehng
7	ꪀꪱꪖꪝ	kaːt^{3} faː^{6}	kat^{2} faː^{52}	Kaht Fah
8	ꪙꪳꪒꪱ	mɤŋ^{2} laŋ^{2}	mɤŋ^{44} laŋ^{44}	Murng Lang
9	ꪙꪳꪶꪱ	mɤŋ^{2} laːp^{4}	mɤŋ^{44} laːp^{22}	Murng Lahp
10	ꪙꪳꪗ	mɤŋ^{2} cem^{2}	mɤŋ^{44} cem^{44}	Murng Jehm
11	ꪣꪷꪀꪗ	hoj^{5} kɔːj^{1}	hoj^{3} kɔːj^{24}	Hoy Korhy
12	ꪙꪳꪉꪹ	mɤŋ^{2} kʰɔːn^{1}	mɤŋ^{44} kʰɔːn^{24}	Murng Khorhn
13	ꪙꪳꪀꪔꪙ	mɤŋ^{2} pak^{6} tʰet^{2}	mɤŋ^{44} pak^{5} tʰet^{5}	Murng Pak Thet
14	ꪙꪳꪀꪔꪣ	mɤŋ^{2} pak^{6} ʔɔːk	mɤŋ^{44} pak^{5} ʔɔːk^{23}	Murng Pak Orhk
15	ꪓꪫ	naː^{2} bɔː^{3}	naː^{44} bɔː^{23}	Nah Borh
16	ꪓꪹꪉꪀ	nam^{6} kʰuk^{2}	nam^{53} kʰuk^{5}	Nam Khuk
17	ꪓꪹꪘꪳ	nam^{6} ʔin^{2}	nam^{53} ʔin^{44}	Nam In

[47] An open syllable is one ending in a vowel, for example in the first entry in the table [lɔː^{44}] .

PAYAP UNIVERSITY

Ref	Name (Khuen)	Name (IPA transliterated)	Name (IPA phonetic)	Name (Roman)
18	ᩉᩣᨦᨾᩮᩣ	nɔːŋ^{1} taw^{1}	nɔŋ^{23} taw^{24}	Norng Taw
19	ᨾᩩᨦᩥᨶ	mɤŋ^{2} ʔin^{2}	mɤŋ^{44} ʔin^{44}	Murng In
20	ᨻᩣᨶᩈᩩ	baːn^{5} cuː^{2}	ban^{23} cuː^{44}	Ban Juh
21	ᨾᩩᨦᨷ	mɤŋ^{2} pan^{1}	mɤŋ^{44} pan^{24}	Murng Pan
22	ᨻᩣᨶᨾᩮᨲ	baːn^{5} mat^{6}	ban^{3} mat^{53}	Ban Mat
23	ᨸᩁᨦᨲᩮᩣ	paːŋ^{1} taw^{5}	paŋ^{23} taw^{33}	Pang Taw
24	ᨻᩣᨶᨲᩣᨸᩩᨦ	baːn^{5} taː^{3} puːŋ^{3}	ban^{3} ta^{2} puːŋ^{23}	Ban Tah Puhng
25	ᨾᩩᨦᨾᩣ	mɤŋ^{2} maː^{6}	mɤŋ^{44} maː^{52}	Murng Mah
26	ᨾᩩᨦᩃᩣ	mɤŋ^{2} laː^{2}	mɤŋ^{44} laː^{44}	Murng Lah
27	ᨻᩣᨶᨸᩩᨦ	baːn^{5} puːŋ^{4}	ban^{3} puːŋ^{22}	Ban Puhng
28	ᨲᩣᨸᩥᨦ	taː^{3} piŋ^{4}	taː^{2} piŋ^{22}	Tah Ping
29	ᨲᩣᨸᨦᩃᩮᨦ	taː^{3} paːŋ^{1} loːŋ^{1}	ta^{2} paŋ^{23} loːŋ^{24}	Tah Pang Lohng
30	ᨾᩩᨦᨶᩮᨾ	mɤŋ^{2} ŋɔːm^{2}	mɤŋ^{44} ŋɔːm^{44}	Murng Ngorhm
31	ᨾᩩᨦᨠᩩᨦ	mɤŋ^{2} kɯŋ^{1}	mɤŋ^{44} kɯŋ^{24}	Murng Kueng
32	ᨾᩩᨦᨶᩮᩣ / ᨻᩣᨲᩣ	mɤŋ^{2} nɔʔ^{6} / baː^{2} taʔ^{2}	mɤŋ^{44} nɔʔ^{53} / baː^{4} taʔ^{5}	Murng Nor / Bah Ta
33	ᨴᩮᩣᨾᩩᨻᩥ	dɔːj^{2} mɤːj^{1}	dɔj^{4} mɤːj^{24}	Dory Murhy
34	ᨶᩴᨶᩥ / ᨶᩴᩃᩮᨦ	nam^{6} niʔ^{6} / nam^{6} loŋ^{1}	nam^{53} niʔ^{53} / nam^{53} loŋ^{24}	Nam Ni / Nam Lohng
35	ᨿᩁᨦᨡ	jaːŋ^{2} kʰaʔ^{2}	jaŋ^{4} kʰaʔ^{5}	Yang Kha

Table 97 Names of village tracts in Keng Tung Township

PAYAP UNIVERSITY

APPENDIX 2 DESIGN OF KHUEN 406 WORDLIST

PAYAP UNIVERSITY

The Khuen 406 wordlist was designed incrementally seeking a list of words that provide reasonable coverage of a range of phonological categories. The categories used in the design of the wordlist are essentially taken from Woranut (1978). Unless otherwise stated the counts presented in this appendix are based on the Standard Thai version of the wordlist. This is a convenient proxy for the PT version of the wordlist.

Tones

Gedney (1972:434-436) devised a wordlist for eliciting words for tone analysis in Tai languages. All of the words suggested by Gedney are included in the Khuen 406 wordlist. Further, the Gedney tone box for every other word in the list was identified to determine the overall coverage of the tonal categories. Certain categories have relatively few entries so efforts were made to ensure that these were adequately represented in the list. Table 98 gives frequencies of words in the list in each of the 20 tonal categories. Only the stressed syllable from polysyllabic words is represented in the table. Thus for example there are 60 words in the wordlist whose stressed syllable is in Gedney tone box A1.

Type of initial consonants at time of tone split	**PT tones**				
	A	**B**	**C**	**DS**	**DL**
1. Friction sounds	60	15	13	14	12
2. Voiceless unaspirated sounds	28	11	15	13	16
3. Glottalised sounds	16	10	7	11	14
4. Voiced sounds	56	26	28	22	19
Total	160	62	63	60	61

Table 98 Frequencies of occurrence of Gedney tonal categories

As can be seen from the numbers in Table 98 there are considerable differences in frequencies of occurrence of the various tonal categories. By using a table such as this to evaluate the wordlist during compilation it was possible to ensure that even the least commonly occurring tonal categories have reasonable coverage – the minimum frequency in the table is 7 for category C3. It is notable that the number of words with tones from column A is over twice the amount in any other single column. This is not just by design – it rather reflects the natural frequencies found

PAYAP UNIVERSITY

in Tai languages, as observed previously by Gedney and quoted by Hartmann (1976:148).

Initial consonants

Table 99 gives the frequencies of occurrence of the various Standard Thai consonants occurring in initial position. By ensuring that each of these consonants has reasonable representation – the minimum frequency is 7 for [ŋ] – it is possible to have greater confidence that the wordlist will yield sufficient data about the corresponding reflexes in Khuen. Rasi (1978:11-16) claimed that [b] is an allophone of /w/; [d] and [r] are allophones of /l/ and [f] is an allophone of /p^h/. It is therefore important to have good coverage of these sounds to investigate their phonemic status.

		Place of Articulation					
		Labial	**Alveolar**	**Postalveolar**	**Palatal**	**Velar**	**Glottal**
Manner of articulation	**Stop**	p^h 28	t^h 17	$tɕ^h$ 12		k^h 42	
		p 26	t 19	tɕ 8		k 38	ʔ 14
		b 15	d 17				
	Fricative	f 12	s 25				h 17
	Nasal	m 20	n 24			ŋ 7	
	Trill		r 19				
	Approximant	w 8			j 16		
	Lateral approximant		l 22				

Table 99 Frequencies of occurrence of initial consonant phonemes

Final consonants

Table 100 gives frequencies of occurrence of the Standard Thai consonant phonemes that occur in syllable-final position. The numbers in the table show that each has reasonable coverage – the minimum frequency is 6 for [ʔ]. The frequencies in the table total 325 – the remaining items end in a vowel.

PAYAP UNIVERSITY

		Place of articulation				
		Labial	**Alveolar**	**Palatal**	**Velar**	**Glottal**
Manner of articulation	**Stop**	p 25	t 39		k 51	ʔ 6
	Nasal	m 22	n 61		ŋ 55	
	Approximant	w 25		j 43		

Table 100 Frequencies of occurrence of final consonant phonemes

Vowels and diphthongs

Table 101 gives the frequencies of occurrence of vowels and diphthongs in the Standard Thai version of the wordlist. The huge range of frequencies reflects those occurring generally in Standard Thai.

		Horizontal position of highest part of tongue							
		Front		**Central**		**Back**			
Vertical position of highest part of tongue	**High**	i 22	iː 11			ɯ 6	ɯː 8	u 8	uː 18
		ia 12				ɯa 18		ua 14	
	High-mid	e 18	eː 3			ɤ 1	ɤː 3	o 30	oː 9
	Low-mid	ɛ 2	ɛː 16					ɔ 2	ɔː 28
	Low			a 65	aː 112				

Table 101 Frequencies of occurrence of vowel phonemes

According to the previous studies Khuen has a smaller vowel inventory than Standard Thai and this fact means the respective vowels have better coverage in the list (Rasi 1978:43-48; Egerød 1959:125-127). Table 102 gives estimates of the frequencies of Khuen vowel phonemes that will appear in the wordlist based on Rasi's analysis and the reported sound correspondences between Khuen and Standard Thai (Rasi 1978:43-48). As can be seen by the numbers in Table 102 the wordlist gives good coverage of all the vowel phonemes of Khuen Kang Murng.

PAYAP UNIVERSITY

		Horizontal position of highest part of tongue							
		Front		Central		Back			
Vertical position of highest part of tongue	High	i 33				ɯ 14		u 26	
	High-mid	e 15				ɤ 21		o 23	
	Low-mid	ɛ 18	ɛː 18					ɔ 31	ɔː 30
	Low			a 65	aː 112				

Table 102 Frequencies of Khuen Kang Murng vowel phonemes

Table 103 gives frequencies of occurrence of the vowels [e] and [o] (and their long counterparts) followed by a nasal. These words are used to check whether any Khuen varieties display the nasal umlaut found in Lue.

e + nasal	eː + nasal	o + nasal	oː + nasal
5	2	19	2

Table 103 Frequencies of occurrence of [e] and [o] vowels followed by a nasal

Standard Thai ร [r]

As shown in Table 99 above there are 19 occurrences of the phoneme /r/ in initial position in the Standard Thai version of the wordlist which equates to the same number of occurrences of the Standard Thai graph ร. Egerød (1959:128) observed that sometimes Standard Thai initial /h/ corresponded to Khuen /r/. The words in Table 104 were cited by Egerød in this context and are therefore included in the wordlist.

Khuen 406 ref	English gloss	Thai IPA (phonemic)	Khuen IPA
28	stone	hin^{5}	rin
320	seek (verb)	haː^{5}	raː

Table 104 Words included to check for word initial /r/ in Khuen

PAYAP UNIVERSITY

Consonant clusters

Table 105 gives the frequencies of initial consonant clusters in the Standard Thai version of the wordlist.

		2nd consonant		
		l	**r**	**w**
1st consonant	**k^h**	3	4	5
	k	15	3	3
	p^h	2	2	
	p	8	4	

Table 105 Frequencies of occurrence of initial consonant clusters

Rasi (1978:16) observed that there were only two initial consonant clusters in native Khuen words, namely /k^hw/ and /kw/. These clusters are both represented in the wordlist as can be seen from Table 105. Egerød (1959:128) claimed that Khuen has the initial consonant clusters /t^hw/, /sw/ and /sr/ corresponding to Standard Thai /t^haw/, /saw/ and /sar/ respectively. Egerød (1959:125) further claimed that Khuen sometimes has /r/ as the second element in word initial clusters after dental sounds. To explore whether these assertions hold for contemporary Khuen varieties the words in Table 106 were included. The final column gives Egerød's phonemic IPA transcription (with tones omitted) of Khuen words either given explicitly or asserted in his paper. The final entry in the table 'wealth' is included because in Standard Thai it is spelled ทรัพย์ i.e. it begins with the initial consonant cluster /t^hr/ although its initial sound is pronounced [s]. Egerød did not include this word in his paper and of the two words he did cite, viz. 'shape' and 'sand' one is pronounced in Khuen with initial /t^hr/ and the other /s/. It is thus not wise to conjecture which form the Khuen word for 'wealth' will take.

PAYAP UNIVERSITY

Khuen 406 ref	English gloss	Thai IPA (phonemic)	Khuen IPA
356	offer (verb)	$t^{h}awa:j^{5}$	$t^{h}waj$
319	seek	$sawɛ:ŋ^{5}$	$swɛ:ŋ$
5	heaven	$sawan^{5}$	swan
199	sarong	$saro:ŋ^{3}$	sroŋ
329	conclude	$sarup^{4}$	srup
395	shape (e.g. sphere)	$soŋ^{1}$	$t^{h}roŋ$
29	sand	$sa:j^{1}$	sa:j
337	wealth	sap^{2}	

Table 106 Words included in order to check for the initial consonant clusters $t^{h}w$, sw, sr and $t^{h}r$

Standard Thai ย [j] and ญ [j]

There are 12 occurrences of word initial ย and 4 occurrences of word initial ญ in the Standard Thai version of the wordlist.

Standard Thai triphthongs เอียว [iaw], เอือย [ɯaj] and อวย [uaj]

The frequencies of occurrence of the three phonetic triphthongs are given in Table 107.

iaw	ɯaj	uaj
3	3	5

Table 107 Frequencies of occurrence of triphthongs in the Standard Thai version of the wordlist

Standard Thai พ [p^{h}], ท [t^{h}], ช [$tɕ^{h}$] and ค [k^{h}]

The frequencies of occurrence of the Standard Thai low class voiceless aspirated consonants พ [p^{h}], ท [t^{h}], ช [$tɕ^{h}$] and ค [k^{h}] are given in Table 108.

พ [p^{h}]	ท [t^{h}]	ช [$tɕ^{h}$]	ค [k^{h}]
16	12	11	19

Table 108 Frequencies of occurrence of low class voiceless aspirated consonants

PAYAP UNIVERSITY

Vocabulary for classification

Li (1959:18-20) proposed certain vocabulary items for classifying a Tai variety as Northern; Central; or Southwestern. As described in Section 1.1.1 previous research has shown that Khuen belongs to the Southwestern branch. Even though there is no hint that Khuen is anything other than SWT, eight of Li's proposed words are included in the list to check whether his assertion holds for Khuen. In Table 109 these words are grouped according to whether they occur in one or two of the categories. For reference the phonemic IPA transcription of the Standard Thai translation is given alongside the English gloss. Since Thai is Southwestern, the intended Tai word for a given English gloss for categories that do not include Southwestern will not be cognate with the Thai gloss and so in such cases the Thai words are put in brackets.

Khuen 406 ref	English gloss	Thai IPA (phonemic)	One category only	Two categories
369	count (verb)	nap^{4}	SW	
12	cold	naːw^{5}	SW	
96	tiger	(sɯa^{5})	N	
256	lazy	(kiat^{2})	N	
4	sky	faː^{4}		SW & C
188	blind	bɔːt^{2}		SW & C
33	below[48]	taːj^{3}		SW & C
157	beard	(kʰraw^{1})		C & N
310	afraid	(klua^{1})		C & N
115	hunt	(laː^{3})		C & N
221	knife	miːt^{3}		SW & N
347	warn (verb)	tɯan^{1}		SW & N
360	challenge (verb)	tʰaː^{4}		SW & N

Table 109 Li's suggested words for classification included in the list

[48] In the wordlist this actually appears as 'south' but 'south' includes the lexeme for 'below'.

PAYAP UNIVERSITY

APPENDIX 3 KHUEN 406 WORDLIST

PAYAP UNIVERSITY

No.	English	Burmese	Thai IPA[49]	Shan	Tone Frame
	The world around				
1	sun	နေ	ʔaː^{1}t^{h}it^{4}	တုဝဆ်း	ဘဆ့် လၢဝ် ဘိူဝ်း
2	moon	လ	can^{1}	လိုဆ်	
3	star	ကြယ်	daːw^{1}	လၢဝ်	
4	sky	မိုးကောင်းကင်	faː^{4}	တွင်.ဇၢ့	
5	heaven	ကောင်းကင်	sa^{2}wan^{5}	ဘင်ၵဝ်	
6	world	ကမာ	loːk^{3}	ဘမ်,ဇၢ့	
7	cloud	မိုးတိမ်	meːk^{3}	မွဘ်,ဘုမ်း	
8	rain (noun)	မိုး	fon^{5}	ဇူဆ်	
9	rainbow	သက်တန့်စို့	ruŋ^{4}	ရှင်းၵှ်း	
10	wind (noun)	လေ	lom^{1}	လုမ်း	
11	sunshine	နေသာသည်	dɛːt^{2}	သၢလီတ်,	
12	cold (weather) (adj)	အေးသော	naːw^{5}	ဘတ်း	
13	daytime	နေ့	klaːŋ^{1} wan^{1}	ဘဆ်ဝဆ်း	
14	night	ည	klaːŋ^{1} k^{h}ɯːn^{1}	ဘင်ၶမ်း	
15	morning	နံနက်	c^{h}aːw^{4}	ဘင်ဆ်ၵ်	
16	noon	နေ့လည်	t^{h}iaŋ^{3}	ဘင်ဝဆ်းတိင်း	
17	water (noun)	ရေ	naːm^{4}	ဆမ်.	
18	lake	ရေအိုင်	t^{h}a^{4}leː^{1} saːp^{2}	ဆွင်	
19	river	မြစ်	mɛː^{3} naːm^{4}	ဆမ်.စဘး	
20	boat	လှေ	rɯa^{1}	ရှိဝ်း	
21	pier, harbour	ကုန်းဘောင်	t^{h}aː^{3}		
22	swim (verb)	ရေကူး တယ်	waːj^{3} naːm^{4}	လူလ်းဆမ်.	မဆ်း လွှ်းဆမ့် ယူ,
23	wave (on sea)	ရေလှိုင်း	k^{h}lɯːn^{3}	ရွှဆ်ဆမ်.	
24	iron	သံ	lek^{2}	လဘ်း	
25	mountain	တောင်	p^{h}uː^{1} k^{h}aw^{5}	လွှ်	

[49] This column gives the phonemic transcription of the words in Standard Thai. The tonemes and their phonetic descriptions are as follows /1/: [33] mid; /2/: [21] low; /3/: [42] falling; /4/: [45] high; /5/: [24] rising (Noss 1964 :18-20; M.R. Kalaya et al. 1999:149).

PAYAP UNIVERSITY

26	go up (verb)	အပေါ်တတ်သည်	k^hɯn^3	စိုဆ်း;ဂွၤ	မဆ်း ---- ယူ,
27	earth (soil)	မြေ (ကြီး)	din^1	လိဆ်	
28	stone	ကျောက်တုံး	hin^5	မဂ်ဓှိဆ်	
29	sand	သဲ	saːj^1	သံး	
30	east	အရှေ.အရပ်	ta^{2}wan^1 ʔɔːk^2	တင်းဘွဂ်,	
31	west	အနောက်အရပ်	ta^{2}wan^1 tok^2	တင်းတုဂ်း	
32	north	တောင်အရပ်	nɯa^5	ရွှင်,	
33	south	ရေ	taːj^3	လၢဆ်း	
34	be apart, separated	ခွဲခြားသည်	haːŋ^2	ဗၢတ်,စဗ	
35	silver	ငွေ	ŋɤn^1	ငိုဆ်း	
36	year	နှစ်	piː^1	ပီ	
37	far (adj)	ဝေး တယ်	klaj^1	ဂံ	
38	near	နီး တယ်	klaj^3	လမ်	
39	hard (object) (adj)	မာတယ်	k^hɛŋ^5	ဂီဆ်,	
40	heavy (adj)	လေး တယ်	nak^2	ဆဂ်း	
41	this (adj)	ဒါ/ဒီ(ဟာ)	niː^4	ဆံ.	
42	that (adj)	ဟို (ဟာ)	nan^4	ဆဆ်.	
43	that over there (adj)	ဟိုနား က (ဟာ)	noːn^4	တီ;ပုဆ်.	
	Plants & food				
44	forest	သစ်တော	paː^2	ထိုဆ်,	
45	tree	သစ်ပင်	ton^3 maːj^4	တုဆ်;မံ.	
46	branch	သစ်ကိုင်း	kiŋ^2 maːj^4	ဂိင်,မံ.	
47	bark (tree)	သစ်ခေါက်	plɯak^2 maːj^4	ပိုဂ်,မံ.	
48	hemp	လျော်	paːn^2	ပၢဆ်,	
49	wood	ထင်း	maːj^4	မံ.	
50	stem	ပင်စည်	kaːn^3	ဂၢဆ်;	
51	thorn	ဆူး	naːm^5	ဆၢမ်	
52	root	သစ်မြစ်	raːk^3	ဓှဂ်;	
53	leaf	သစ်ရွက်	baj^2	ဝှ်	
54	flower	ပန်း	dɔːk^2	မွဂ်,	
55	fruit	အသီး	p^hon^{5}la^{4}maːj^4	မဂ်,မံ.	

PAYAP UNIVERSITY

56	seed	အစေ့	ma^{4}let^{4}	မီတ်.	
57	grass	မြက်	jaː^{3}	ယိုဝ်း	
58	elephant grass	မြင်းခွါရွက်	fɛɛk^{3}		
59	bamboo	ဝါး	maːj^{4} p^{h}aj^{2}	မံ.ပုဂ်,	
60	mushroom	မှို	het^{2}	ရှိပ်း	
61	sugarcane	ကြံချောင်း	ʔɔːj^{3}	ဘွံး	
62	sugar palm	ထန်းပင်	ton^{3} taːn^{1}		
63	betel nut	ကွမ်းသီး	maːk^{2}	မဂ်,မု	
64	banana (fruit)	ငှက်ပျောသီး	kluaj^{3}	ဂူလ်း	
65	mango (fruit)	သရက်သီး	maʔ^{4}muaŋ^{3}	မဆ်,မူင်း	
66	pomelo (fruit)	ရှောက်ပန်းသီး	som^{3} ʔoː^{1}	မဂ်,ဘူဝ်း	
67	guava	မာလကာသီး	fa^{2}raŋ^{2}	မဂ်,ဂ၊,	
68	sweet (adj)	ချိုတယ်	waːn^{5}	ဝ၊ဆ်း – လိမ်း	
69	bitter (adj)	ခါး တယ်	k^{h}om^{5}	စုမ်	
70	sour (adj)	ချဉ်တယ်	priaw^{3}	သူမ်း	
71	discoloured, spotted, (adj)		daːŋ^{2}	လုဆ်,	
72	pumpkin	ဖရုံသီး	fak^{4}t^{h}ɔːŋ^{1}	မဂ်,ပဂ်.	
73	red chilli pepper	ငရုတ်သီး	p^{h}rik^{4}	မဂ်,ဗီဂ်း	
74	corn	ပြောင်းဖူး	k^{h}aːw^{3} p^{h}oːt^{3}	စဝ်းဂပ်,	
75	garlic	ကြက်သွန်ဖြူး	kra^{2}t^{h}iam^{2}	ရှုဝ်မီ,စဝ်	
76	salt	ဆား	klɯa^{1}	ဂိုဝ်	
77	tea	လက်ဖက်ရည်	c^{h}aː^{1}	ဆီင်း	
78	liquor	အရက်	law^{3}	လဝ်း	
79	drink (verb)	သောက် တယ်	dɯːm^{2}	သူတ်.	မဆ်း ---- ယူ,
80	opium	ဘိန်း	fin^{2}	ဗီဆ်	
81	vegetable	ဟင်းသီးဟင်းရွက်	p^{h}ak^{2}	ဗဂ်း	
82	ripe (adj)	မှည့်တယ်	suk^{2}	သူဂ်း	
83	raw, unripe (adj)	အစိမ်း	dip^{2}	လိပ်း	
84	rice (cooked)	ထမင်း	k^{h}aːw^{3} suk^{2}	စဝ်းသုဂ်း	
85	rice (in paddy)	စပါး	k^{h}aːw^{3}plɯak^{2}	စဝ်းပိုဂ်,	
86	rice seedling	စပါးမျိုးပင်	k^{h}aːw^{3} klaː^{3}	ဂ၊း	

PAYAP UNIVERSITY

87	irrigated paddy field	လယ်ကွင်း	na:[1]	ဆေး	
88	dry field	တောင်ယာ	raj[3]	ခွံး	
89	sickle	တဇင်	kʰiaw[1]	ခိဝ်း	
90	spade	ဂေါ်ပြား	siam[5]	သူာ်,	
91	dig (verb)	တူး တယ်	kʰut[2]	ခုတ်း	မဆ်း ---- ယူ,
92	plant (verb)	စိုက်တယ်	plu:k[2]	ဇုာ်,	မဆ်း ---- ယူ,
	Animals				
93	elephant	ဆင်	cʰa:ŋ[4]	ဂင်.	
94	trunk (elephant)	ဆင်နှမောင်း	ŋuaŋ[1]	ငူင်းဂင်.	
95	tusk, ivory	ဆင်စွယ်	ŋa:[1]	ငါးဂင်.	
96	tiger	ကျား	sɯa[5]	သိုဝ်	
97	deer	သမင်	kwa:ŋ[1]	ခွင်	
98	bear	ဝက်ဝံ	mi:[5]	မီ	
99	monkey	မျောက်	liŋ[1]	လိင်း	
100	horse	မြင်း	ma:[4]	မ.	
101	goat	ဆိတ်	pʰɛʔ[4]	ဧပ.	
102	pig	ဝက်	mu:[5]	မူ	
103	buffalo	ကျဲ	kʰwa:j[1]	ခွံး	
104	horn (of buffalo)	ဦးချို (ကဲ)	kʰaw[5]	ဧာဝ်	
105	milk	နွား:	nom[1]	ဆုမ်း	
106	suck (milk) (verb)	စုပ် တယ်	du:t[2]	လုပ်,	မဆ်း ---- ယူ,
107	tail	အမြီး	ha:ŋ[5]	ခွင်	
108	dog	ခွေး	ma:[5]	မ	
109	lick (verb)	လျက် တယ်	lia[1]	ဇလး	မဆ်း ---- ယူ,
110	bite (verb)	ကိုက်တယ်	kat[2]	ခုပ်း	မဆ်း ---- ယူ,
111	hurt (verb)	နာ တယ်	cep[2]	လိပ်း	မဆ်း ---- ယူ,
112	flea	ခွေးသန်း	mat[2]	မတ်း	
113	louse (head)	သန်း	haw[5]	မတ်း	
114	animal		sat[2]	သၢတ်း	
115	hunt (verb)	အမဲလိုက်တယ်	la:[3]	ဧပ်းထိုဆ်,	မဆ်း ---- ယူ,
116	kill (verb)	သတ်တယ်	kʰa:[3]	ဧာဝ်တံ	မဆ်း ---- ယူ,

PAYAP UNIVERSITY

117	bow (hunting)	လေး၊ ဒူးလေး	sɔːn^{5}	ၯင်,	
118	arrow	မြား	luːk^{3} sɔːn^{5}	ပိူဆ်ၼ်	
119	shoot (verb)	ပစ်တယ်	jiŋ^{1}	ပိုတ်း	မဆ်း ---- ယူ,
120	spear	လံ့(ရှည်)	hɔːk^{2}	ၶွၵ်,	
121	carry (on pole)	ထမ်းသည်	haːp^{2}	ၶပ်,	
122	chicken	ကြက်	kaj^{2}	ၵဲ,	
123	egg	ဥ	k^{h}aj^{2}	ၶဲ,	
124	duck (bird)	ဘဲ	pet^{2}	ပိတ်း	
125	bird	ငှက်	nok^{4}	ၼၢၵ်.	
126	wing	တောင်ပံ/အတောင်	piːk^{2}	ပိၵ်,	
127	feather	ငှက်မေ့း	k^{h}on^{5} nok^{4}	ၶူၼ်ၼၢၵ်.	
128	fly (verb)	ပျံတယ်	bin^{1}	ပိၼ်	မဆ်း ---- ယူ,
129	crow	ကျီး	kaː^{1}	ၵၢလမ်	
130	bee	ပျား	p^{h}ɯŋ^{3}	ဖဵင်း	
131	cockroach	ပိုးဟပ်	ma^{4}lɛːŋ^{1} saːp^{2}	မိၼ်းသၢပ်,	
132	insect	ပိုးမွား	ma^{4}lɛːŋ^{1}	မိၼ်း	
133	termite	ခြ	pluak^{2}	ဇၵ်း	
134	fish	ငါး	plaː^{1}	ပၢ	
135	fishhook	ငါးမြားချိတ်	bet^{2}	ငွၵ်းပိတ်း	
136	frog	ဖါး	kop^{2}	ၵုပ်း	
137	snake	မြွေ	ŋuː^{1}	ငူး	
138	rat	ကြွက်	nuː^{5}	ၼူ	
139	leech (land)	ကျွတ်	t^{h}aːk^{3}	တီၵ်း	
140	water leech	မြှော့	pliŋ^{1}	ပိင်	
	Human body				
141	head	ဦးခေါင်း	hua^{5}	ၶူဝ်	
142	brain	ဦးနှောက်	sa^{2}mɔːŋ^{5}	ၸွၵ်,ဢော	
143	forehead	နဖူး	naː^{3} p^{h}aːk^{2}	ၼဵးဇၵ်.	
144	shoulder	ပခုံး	baː^{2}	ၶူဝ်ဝ,	
145	hair	ဆံပင်	p^{h}om^{5}	ၶူၼ်ၶဝ်	
146	tongue	လျှာ	lin^{4}	လိၼ်.	

PAYAP UNIVERSITY

147	mouth	ပါးစပ်	paːk^{2}	သုပ်း	
148	tooth	သွား	fan^{1}	ဆီဝ်း	
149	gums	သွားဖုံး	ŋɯak^{2}	ရှိုဂ်	
150	to open (the mouth)	ဟ သည်	ʔaː^{3}	ဘုး	
151	blow (with the mouth)	မှုတ်သည်	paw^{2}	ပဝ်,	
152	spit (verb)	တံတွေးထွေးတယ်	t^{h}om^{2}, t^{h}uj^{5}	ထူမ်,	မဆ်း ---- ယူ,
153	eye	မျက်စိ	taː^{1}	တု	
154	ear	နာရွက်	huː^{5}	ရှု	
155	nose	နှာခေါင်း	ca^{2}muːk^{2}	ရှုးလင်	
156	breathe (verb)	အသက်ရှုတယ်	haːj^{5} caj^{1}	ထူလ်ဂ့်	မဆ်း ---- ယူ,
157	beard	မုတ်ဆိတ်	k^{h}raw^{1}	မွှံဂင်း	
158	shave (beard)	ရိတ်တယ်	koːn^{1}	ဆုတ်,	
159	neck	လည်ပင်း	k^{h}ɔː^{1}	ဇေုး	
160	chest (breast)	ရင်ပတ်	ʔok^{2}	ဘုဂ်း	
161	armpit	ချိုင်း	rak^{4} rɛː^{4}	ဂိင်,ဧရှ.	
162	belly/ abdomen	ဝမ်းဗိုက်	t^{h}ɔːŋ^{4}	တွင်.	
163	hand	လက်	mɯː^{1}	မိုဝ်း	
164	left (side or hand)	ဘယ်ဘက်	saːj^{4}	ဇ်ုသံ.	
165	right (side or hand)	ညာဘက်	k^{h}waː^{5}	၎ဇ်ုးစွု	
166	palm (hand)	လက်ဖဝါး	faː^{2} mɯː^{1}	ဇုမိုဝ်း	
167	finger	လက်ချောင်း	niw^{4}	ဆိဝ်.	
168	ring (finger)	လက်စွပ်	wɛːn^{5}	လွမ်,မိုဝ်း	
169	nail (finger)	လက်သဲ	lep^{4}	ဆီပ်.မိုဝ်း	
170	heart	နှလုံး	hua^{5} caj^{1}	ရှဝ်ဂ့်	
171	liver	အသဲ	tap^{2}	တပ်း	
172	lungs	အဆုတ်	pɔːt^{2}	ပွတ်,	
173	intestines	အူသိမ်အူမ	lam^{1} saj^{3}	သံ;	
174	blood	သွေး	lɯat^{3}	လိုတ်;	
175	flesh (meat)	အသား	nɯa^{4}	ဆိုဝ်.	
176	fat (grease)	အဆီ	k^{h}aj^{5} man^{1}	မဆ်း	
177	bone	အရိုး	kra^{2}duːk^{2}	လူပ်,	

PAYAP UNIVERSITY

178	skin	အရေပြား	$p^{h}iw^{5}$ $naŋ^{5}$	ဗိုဝ်ဆင်	
179	leg	ခြေထောက်	$k^{h}a:^{5}$	ဘု	
180	knee	ဒူး	$k^{h}aw^{2}$	ရှုဝ် ဘဝ်,	
181	foot	ခြေမျက်စိ အောက်ပိုင်း	$t^{h}a:w^{4}$	တိဆ်	
182	birthmark		$pa:n^{1}$	မံ	
183	blistered (adj)		$p^{h}ɔ:ŋ^{1}$	တုမ်,ပွင်း	
184	give birth (verb)	မွေးသည်	$k^{h}lɔ:t^{3}$	ဂိုတ်,	မဆ်း ---- ယူ,
185	be born, happen (verb)	ဖြစ်လာသည်	$kɤ:t^{2}$	ပိဆ်မုး	မဆ်း ---- ယူ,
186	die (verb)	သေ တယ်	$ta:j^{1}$	တံ	မဆ်း ---- ယူ,
187	live/ be alive (verb)	အသက်ရှင်သည်	$ju:^{2}$	လိပ်း	မဆ်း ---- ယူ,
188	blind (adj)	ကန်း တယ်	$ta:^{1}$ $bɔ:t^{2}$	မွတ်,	
189	deaf (adj)	နားပင်း တယ်	$hu:^{5}$ $nuak^{2}$	ရှုဆုဂ်,	
190	fever	အဖျား	$k^{h}aj^{3}$	ဆၢဝ်	
191	cough (verb)	ချောင်းဆိုးတယ်	$ʔaj^{1}$	ဘၢံ	မဆ်း ---- ယူ,
192	ill (sick) (adj)	ဖျားသည်	$puaj^{2}$	ဘမ်ယူလီ	
193	medicine	ဆေး	$ja:^{1}$	ယု	
194	itch (verb) (be itchy)	ယား တယ်	$k^{h}an^{1}$	ဘုမ်း	မဆ်း ---- ယူ,
195	scratch (verb)	ခြစ် တယ်	kaw^{1}	ယၢံး	မဆ်း ---- ယူ,
196	excrement	ချေး	$ʔut^{2}ca:^{1}raʔ^{4}$	ဘီး;	
197	urine	ဆီး	$pat^{2}sa:^{5}waʔ^{4}$	ယီဝ်း;	
198	sweat (noun)	ခြွေး	$ŋɯa^{2}$	ရှိုဝ်,	
199	sarong	လုံချည်	$sa^{2}ro:ŋ^{2}$	ဗုး;တုင်,	
200	shirt	အကျီ	$sɯa^{3}$	သိုဝ်း;	
201	tight (eg shirt)	ကျပ်သည်	$k^{h}ap^{4}$	ရှတ်.	
202	naked	ကိုယ်တုံးလုံး	$plɯaj^{1}$	ပုလ်တူဝ်	
	People				
203	person		$k^{h}on^{1}$	ဂုဆ်း	
204	man	ယောက်ျား	$p^{h}u:^{3}$ $c^{h}a:j^{1}$	ဂုဆ်းလၢံး	
205	woman	မိန်းမ	$p^{h}u:^{3}$ $jiŋ^{5}$	ဂုဆ်းယိင် း	
206	young man	လူငယ်	$ba:w^{2}$	ဂုဆ်းဆုမ်,	

PAYAP UNIVERSITY

207	old (adj) (person)	အိုသည်	kɛː^{2}	ထဝ်း	
208	child (offspring)	သားသမီး/ကလေး	luːk^{3}	လုဟ်း	
209	grandchild	မြေး	laːn^{5}	လဆ်	
210	father	အဖေ	p^{h}ɔː^{3}	ပေါ့	
211	son-in-law	သားသမက်	luːk^{3} k^{h}ɤːj^{5}	လုဟ်းစုလ်	
212	relative (eg uncle)	ဆွေမျိုး	jaːt^{3}	ပီးဆွင်.	
213	friend	မိတ်ဆွေ	p^{h}ɯan^{3}	ဘေါ့သေး	
214	sibling (older)	မောင်နှမ	p^{h}iː^{3}	ပီးဘ်ပီဆင်း	
215	sibling (younger)	မောင်နှမ	nɔːŋ^{4}	ဆွင်.ယင်းဆွင်.လၢ်း	
216	sister (elder of f)	အစ်မ	paː^{3}	ပီဆၢင်း	
217	I (1s) (familiar)	ကျွန်တော်	c^{h}an^{5}	ဘဝ် ဗှ ၎ဝ်း –စု	
218	thou (2s)	သင်/ခင်ဗျား	k^{h}un^{1}	မ်ုး – သူ	
219	craftsman (eg builder)		c^{h}aːŋ^{3}	မေါ	
220	former priest		(naːn^{1})[50]	ဆၢဆ်	
	Around the home				
221	knife	ဓါး	miːt^{3}	မီတ်း	
222	sharp (adj)	ချွန်တယ်	k^{h}om^{1}	လီမ်	
223	blunt (adj) (blade)	တုံး တယ်	t^{h}ɯː^{3}	ထိုင်.	
224	saw (hand tool)	လွှ	lɯaj^{3}	လိုဝ်း	
225	axe	ပုဆိန်	k^{h}waːn^{5}	တုမီတ်း	
226	split (verb)	ခွဲသည်	jɛːk^{3}	ဗေါ့	မဆ်း ---- ယူ၊
227	cup	ခွက်	t^{h}uaj^{3}	ဘွဟ်း	
228	plate	ပန်းကန်	caːn^{1}	ဝၢဆ်၊	
229	spoon	ဇွန်း	c^{h}ɔːn^{4}	ဇေါ့.	
230	tray	လင်ပန်း	p^{h}aːn^{1}	ပၢဆ်.	
231	basin	ဇလုံ	ʔaːŋ^{2}	ဘင်၊	
232	cupboard	ကြောင်အိမ်	tuː^{3}	စိင်၊	

[50] Whether this word exists in Standard Thai is uncertain. It exists in Northern Thai and is written as หนาน [naːn^{24}]. The word exists in Shan and Khuen Kahng Murng as [naːn^{24}] (Rasi 1978; Orawan 1984).

PAYAP UNIVERSITY

233	water (verb)	ရေလောင်းသည်	rot^{4}	ဆမ်.	မဆ်း ---- ယူ၊
234	pour (drink)	လောင်းထည့်သည်	raːt^{3}	ထွက်၊သံ၊	
235	full (container) (adj)	ပြည့်တယ်	tem^{1}	တီမ်	
236	wash (dishes) (verb)	ဆေးကြောတယ်	laːŋ^{4}	လင်.	မဆ်း ---- ယူ၊
237	pestle	ကျည်ပွေ.	saːk^{2}	သက်၊စုက်.	
238	mortar	ငရုပ်ဆုံ	k^{h}rok^{4}	စုက်.	
239	pound (pulverise) (verb)	ထောင်းသည်	tɔːk^{2}	တမ်	မဆ်း ---- ယူ၊
240	grind (verb)	ကြိတ်တယ်	bot^{2}	မေါ့၊	မဆ်း ---- ယူ၊
241	squeeze (lemon) (verb)	ညစ်သည်	biːp^{2}	ပိပ်၊	မဆ်း ---- ယူ၊
242	cut (e.g. slice w/ knife) (verb)	လှီးဖြတ်သည်	faːn^{5}	သွံး	မဆ်း ---- ယူ၊
243	cut (hair) (verb)	(ဆံပင်) ညုပ် တယ်	tat^{2}	ဂ်တ်း	မဆ်း ---- ယူ၊
244	eat (verb)	စား တယ်	kin^{1}	ဂိဆ်	မဆ်း ---- ယူ၊
245	full (person-stomach) (adj)	ဗိုက်ပြည့် တယ်	ʔim^{2}	ဂီမ်၊	
246	fire	မီး	faj^{1}	ဗဲး	
247	smoke	မီးခိုး	k^{h}wan^{1}	ဂွဆ်း	
248	burn (wood) (verb)	မီးဝှိ့တယ်	p^{h}aw^{5}	သုမ်ဗဲး	မဆ်း ---- ယူ၊
249	extinguish (fire) (verb)	မီးငြိမ်း တယ်	dap^{2}	ဝွတ်၊ဗဲး	မဆ်း ---- ယူ၊
250	candle	ဖယောင်းတိုင်	t^{h}ian^{1}	တိဆ်း	
251	ashes	ပြာ	k^{h}iː^{3} t^{h}aw^{3}	တဝ်၊	
252	cook (rice) (verb)	ချက်တယ်	huŋ^{5} k^{h}aːw^{3}	ရှုင်	မဆ်း ---- ယူ၊
253	boil (sth.) (verb)	ပြုတ်တယ်	tom^{3}	တုမ်၊	မဆ်း ---- ယူ၊
254	good (adj)	ကောင်း တယ်	diː^{1}	လီ	
255	bad (evil) (adj)	ဆိုး တယ်	c^{h}ua^{3}	ရှံ.	
256	lazy (adj)	ပျင်းသည်	k^{h}iː^{3} kiat^{2}	စဆ်.	
257	crazy	ရှုးသွပ်သည်	baː^{3}	ယွင်၊	
258	name	နာမည်	c^{h}ɯː^{3}	လိုဝ်၊	
259	village	ရွာ	muː^{2} baːn^{3}	ဝၢဆ်၊	
260	house	အိမ်	baːn^{3}	ရှိဆ်း	
261	door	တံခါး	pra^{2}tuː^{1}	ဗက်းတူ	
262	shade (shadow)	အရိပ်	rom^{3} ŋaw^{1}	ဂွင်းငဝ်း	

PAYAP UNIVERSITY

263	road, path	လမ်း	$t^h a^2 non^5$	တၢင်း	
264	walk (verb)	လမ်းလျောက် တယ်	dɤːn^1	ယၢင်း;	မဆ်း ---- ယူ,
265	crawl (verb)	တွား သွားတယ်	k^hlaːn^1	ဂဆ်း	မဆ်း ---- ယူ,
266	tired (adj)	မောတယ်	nɯaj^2	ရှိုဝ်.	
267	sleep (verb)	အိပ် တယ်	nɔːn^1 lap^2	ဆွဆ်းလပ်း	မဆ်း ---- ယူ,
268	snore (verb)	ဟောက် တယ်	kron^1	ဆွဆ်းစုဆ်	မဆ်း ---- ယူ,
269	come (verb)	လာ တယ်	maː^1	မုး	မဆ်း ---- ယူ,
270	return (home) (verb)	ပြန် လာတယ်	klap^2	ပွဂ်;မုး	မဆ်း ---- ယူ,
271	barbed spike	သံပန်းဆူး	k^hwaːk^2	ဘဂ်,	
272	clothing	အဝတ်	p^haː^3	ဇုး;	
273	weave (cloth)	ရက်တယ်	t^hɔː^1 p^haː^3	တေုး	
274	needle	အပ်	k^hem^5	ဘိမ်	
275	sew (verb)	ချုပ် တယ်	jep^4	ယီပ်း	မဆ်း ---- ယူ,
276	trousers	ဘောင်းဘီ	kaːŋ^1 keːŋ^1	တီဝ်,	
277	loose (adj)	ချောင်တယ်	luam^5	လုမ်	
278	beautiful (adj)	လှပသည်	suaj^5	ရှၢင်လီ	
279	fall (object) (verb)	ကျ တယ်	tok^2	တုဂ်း	
280	collapse (verb)	လှဲပြိုသည်	p^haŋ^1 loŋ^1	ပၢင်း	မဆ်း ---- ယူ,
281	box	သေတ္တာ	klɔŋ^2	တိုဂ်;	
282	drum	စည်	klɔːŋ^1	ဂွင်	
283	broken, torn	စုပ်ပြဲသည်	k^haːt^2	သီဂ်,	
284	comb	ဘီး	wiː^5	ဝီ	
285	brush (eg hair brush)		prɛːŋ^1	ဝီရှုဝ်	
286	outside	အပြင်	nɔːk^3	တင်းဆွဂ်;	
287	work (eg homework)	အလုပ်လုပ်သည်	kaːn^1		
288	do/make (verb)	ရပုလုပ်တယ်	t^ham^1	ရှိတ်း	မဆ်း ---- ယူ,
289	sit (verb)	ထိုင် တယ်	naŋ^3	ဆင်;	မဆ်း ---- ယူ,
290	stand (verb)	ရပ် တယ်	jɯːn^1	လူဂ်း	မဆ်း ---- ယူ,
291	bathe (verb)	ရေချိုး တယ်	ʔaːp^2 naːm^4	ဂာပ်,ဆမ်.	မဆ်း ---- ယူ,
292	wet (adj)	ရေစိုတယ်	piak^2	ယမ်း	
293	dry (adj)	ရေခာက်တယ်	hɛːŋ^3	ရှိင်;	

PAYAP UNIVERSITY

294	warm (adj)	ပူနွေးတယ်	ʔop^{2} ʔun^{2}	ဢူဆ်ဲ့	
295	cold (drink) (adj)	အေးမြတယ်	jen^{1}	ဦဆ်	
296	rope	ကြိုး	cʰɯak^{3}	လိူဲဥ်း	
297	rock (cradle) (verb)	ပုခက်	kwaj^{1}	ဥံ (ဢူ့)	မဆ်း ---- ယူ့
298	tie (verb)	ချည်တယ်	pʰuːk^{2}	မတ်.	မဆ်း ---- ယူ့
299	tie up (bind) (verb)	ချည်နှောင်သည်	mat^{4}	မတ်.ဇူဥ့်	မဆ်း ---- ယူ့
300	pull (verb)	ဆွဲ တယ်	dɯŋ^{1}	လဆ်	မဆ်း ---- ယူ့
301	push (verb)	တွန်း တယ်	pʰlak^{2}	ဢီး	မဆ်း ---- ယူ့
302	wipe (verb)	သုတ်တယ်	cʰet^{4}		မဆ်း ---- ယူ့
303	rub, scrub (verb)	ပွတ်(တိုက်) တယ်	tʰuː^{5}	ထူ	မဆ်း ---- ယူ့
304	smooth (adj)	ချောတယ်	riap^{3}	လိူမ်း	
305	paper	စက္ကူ	kra^{2}daːt^{2}	လေး	
306	saa (paper)	ပေစွက်	saː^{5}	ပပ်.	
307	stick (glue) (verb)	ကပ်သည်	tit^{2}	တိတ်း	မဆ်း ---- ယူ့
308	bubble	ပူပေါင်း	fɔːŋ^{1}	ၶံဆမ်.	
309	kick (verb)	ကန် တယ်	teʔ^{2}	ပိတ်.	မဆ်း ---- ယူ့
	Individual human activities				
310	afraid (adj)	ကြောက် တယ်	klua^{1}	ၼုဝ်	
311	brave (adj)	သတ္တိရှိသော	klaː^{3}	လ့်လမ်	
312	know (verb)	သိ တယ်	ruː^{4}	ၼွပ်းသင်	မဆ်း ---- ယူ့
313	forget (verb)	မေ့ တယ်	lɯːm^{1}	၎တ်းရၢဆ်	မဆ်း ---- ယူ့
314	angry (adj)	စိတ်ဆိုး တယ်	kroːt^{2}	လိူဆ်းသုတ်း	
315	laugh (verb)	ရယ် တယ်	hua^{5} rɔʔ^{4}	ၶမးခိူဆ်း	မဆ်း ---- ယူ့
316	correct (adj)	မှန်တယ်	tʰuːk^{2} tɔːŋ^{3}	ဇၢဆ်ရၢဆ်	
317	listen	နားထောင်သည်	faŋ^{1}	ၼွဥ့်	မဆ်း ---- ယူ့
318	hear (verb)	ကြား တယ်	daj^{3} jin^{1}	လိူမ်း	မဆ်း ---- ယူ့
319	search (verb)	ရှာဖွေသည်	sa^{2}wɛːŋ^{5}	ယိဆ်း	မဆ်း ---- ယူ့
320	seek (verb)	စူးစမ်း ရှာဖွေသည်	haː^{5}	ၹိ	မဆ်း ---- ယူ့
321	see (verb)	မြင်တယ်	hen^{5}	ၶူဝ်	မဆ်း ---- ယူ့
322	think (verb)	စဉ်းစား တယ်	kʰit^{4}	ထွမ့်	မဆ်း ---- ယူ့
323	because	အဘယ့်ကြောင့်ဆိုသော်	pʰrɔʔ^{4}	ၶၢင်.ဝံ.	

PAYAP UNIVERSITY

324	want (verb)	လိုချင်သည်	jaːk^{2}	သွက်းရှု	မဆ်း ---- ယူ၊
325	sin (noun)	အပြစ်	baːp^{2}	ရှဆ်	
326	remain stuck	ကျပ်သည်	k^{h}aː^{1}	ရှု	
327	exit, leave (verb)	ထွက်ခွာသည်	ʔɔːk^{2}	ဘပြိတ်	မဆ်း ---- ယူ၊
328	dream (verb)	အိပ်မက် မက်တယ်	fan^{5}	လံးသီဝ်	မဆ်း ---- ယူ၊
329	conclude (verb)	အဆုံးသတ်သည်	sa^{2}rup^{4}	ဂိုတ်.	မဆ်း ---- ယူ၊
330	smell (sth.) (verb)	အနံ့ခံ တယ်	daj^{3}klin^{2}	စ်ုးလံး	မဆ်း ---- ယူ၊
331	weep (verb)	ငို တယ်	rɔːŋ^{4} haj^{3}	ရှံး	မဆ်း ---- ယူ၊
	Human interaction				
332	shop (noun)	ဈေးဆိုင်	raːn^{4}	ဂျးယ်ု၊	
333	trade, sell	အရောင်းအဝယ်	k^{h}aː^{4}	ပဆ်	
334	sell (verb)	ရောင်း တယ်	k^{h}aːj^{5}	လင်း	မဆ်း ---- ယူ၊
335	buy (verb)	ဝယ်တယ်	sɯː^{4}	သိုဝ်.	မဆ်း ---- ယူ၊
336	expensive (adj)	ဈေးကြီးသည်	p^{h}ɛːŋ^{1}	တစီင်၊	
337	wealth	စည်းစိမ်	sap^{4}	လေးလိမ်၊	
338	say	ပြောသည်	waː^{3}	စ်ုးစဆ	
339	tell (verb)	ပြောဆို တယ်	bɔːk^{2}	လွံးထီမ်	မဆ်း ---- ယူ၊
340	speak (verb)	စကားပြော တယ်	p^{h}uːt^{3}	ဂိဆ်လင်းရှီတ်းဂဆ်	မဆ်း ---- ယူ၊
341	answer (verb)	ဖြေ တယ်	tɔːp^{2}	တွပ်၊	မဆ်း ---- ယူ၊
342	sing (verb)	သီချင်းဆို တယ်	rɔːŋ^{4} p^{h}leːŋ^{1}	ပီတ်.	မဆ်း ---- ယူ၊
343	dance (verb)	ကတယ်	ten^{3} ram^{1}	ဂျ.စာ	မဆ်း ---- ယူ၊
344	lie, fib (verb)	လိမ် တယ်	koː^{1} hok^{2}	ရှဂ်.	မဆ်း ---- ယူ၊
345	love (verb)	ချစ် တယ်	rak^{4}	ပဆ်(ဂျ.စဆ်)	မဆ်း ---- ယူ၊
346	hate (verb)	မုန်း တယ်	kliat^{2}	ပဆ်တမ်၊	မဆ်း ---- ယူ၊
347	warn (verb)	ပူနွေးတယ်	tɯan^{1}	လၢတ်း	မဆ်း ---- ယူ၊
348	scold (verb)	ဆူဆဲသည်	daː^{2}	ပွင်.လျ၊	မဆ်း ---- ယူ၊
349	difficult (adj)	ခက်ခဲတယ်	jaːk^{3}	စာ	
350	easy (adj)	လွယ်ကူတယ်	ŋaːj^{3}	သီင်၊	
351	troublesome		p^{h}aːn^{1}	ဘဆ်ရှ်ယပ်လ်ု	
352	punishment	ပြစ်ဒဏ်	t^{h}oːt^{3}	လူပဆ်	
353	exchange (verb)	လဲလှယ်တယ်	lɛːk^{3} plian^{2}	ရွှင်. (ဂ္ဂၢမ်း)	မဆ်း ---- ယူ၊

PAYAP UNIVERSITY

354	help (verb)	ကူညီသည်	$c^{h}uaj^{3}$	လၢတ်း(ဂျၢမ်း)	မဆ်း ---- ယူ,
355	give (verb)	ပေး တယ်	haj^{3}	စစ.ဂဆ်	မဆ်း ---- ယူ,
356	offer (verb)	ပေးကမ်းသည်	$t^{h}a^{2}wa:j^{5}$	တင်,ထိုင်	မဆ်း ---- ယူ,
357	pay (verb)	အခပေး တယ်	$ca:j^{2}$	စပ.	မဆ်း ---- ယူ,
358	complain	စောဒကတတ်သည်	bon^{2}	ဂျး	
359	challenge (verb)	စိမ်ခေါ်သည်	$t^{h}a:^{4}$	လုမ်းတတ်းတြုး	မဆ်း ---- ယူ,
360	compete	ယှဉ်ပြိုင်သည်	$k^{h}\varepsilon ŋ^{2}$	ယပ်,ဗိုတ်,	
361	conquer	အောင်နိုင်သည်	$pra:p^{2}$	ငၢး	
362	steal (verb)	ခိုး တယ်	$k^{h}a^{2}mo:j^{1}$	ဂၢဆ်.	မဆ်း ---- ယူ,
363	lose (defeated) (verb)	ရှုံးသည်	$p^{h}\varepsilon:^{4}$	လီဂ်း	မဆ်း ---- ယူ,
364	court (law)	တရားရုံး	$sa:n^{5}$	လၢဂ်.	
365	hire, employ (verb)	လုပ်ခိုင်းသည်	$ca:ŋ^{3}$	ဗင်.သတိ	မဆ်း ---- ယူ,
366	what?	ဘာ	$ʔa^{2}raj^{1}$	သင်	
367	who?	ဘယ်သူ	$k^{h}raj^{1}$	ဗဉ်	
368	with	နှင့်အတူ	kap^{2}	လွမ်း	
	Numbers				
369	count (verb)	ရေတွက် တယ်	nap^{4}	တင်းသိင်း	
370	one (person)	တစ်ယောက်	$nɯŋ^{2}$	ဆပ်.ဂဆ်	
371	two (persons)	နှစ်ယောက်	$sɔ:ŋ^{5}$	ပီတ်,ဂေျ.	
372	three (persons)	သုံးယောက်	$sa:m^{5}$	ရှုးဂေျ.	
373	four (persons)	လေးယောက်	$si:^{2}$	သီ,ဂေျ.	
374	five (persons)	ငါးယောက်	$ha:^{3}$	စိုင်း	
375	six (persons)	ခြောက်ယောက်	hok^{2}	ပၢဂ်,ဂေျ.	
376	seven (persons)	ခုနှစ်ယောက်	cet^{2}	ဆၢမ်	
377	eight (persons)	ရှစ်ယောက်	$p\varepsilon:t^{2}$	ဂပ်းဂေျ.	
378	nine (persons)	ကိုးယောက်	$ka:w^{3}$	ဂေျ.လိပ်	
379	ten (persons)	ဆယ်ယောက်	sip^{2}	လိတ်းဂေျ.	
380	twenty (persons)	အယောက်နှစ်ဆယ်	$ji:^{3}\ sip^{2}$	ရှဂ်းဂေျ.	
381	hundred (persons)	အယောက်တစ်ရာ	$rɔ:j^{4}$	ဂမ်းဗွင်း	
382	thousand (persons)	အယောက် တစ်ထောင်	$p^{h}an^{1}$	သိပ်းဂေျ.	
383	all	အားလုံး	$t^{h}aŋ^{4}\ mot^{2}$	ရှိင်ဂေျ.	

PAYAP UNIVERSITY

384	half a unit	တစ်ဝက် (တိုင်းတာချက်)	k^hrɯŋ^3	သၢမ်ဂေၢ့	
385	some	တချို့/အချို့	baːŋ^3	သၢဝ်းဂေၢ့	
386	many (persons)	များတယ်	laːj^5	သွင်ဂေၢ့	
	Dimensions				
387	big (adj)	ကြီး တယ်	jaj^2	ယ့်,	
388	small (adj)	ငယ်တယ်	lek^4	လိုဂ်.	
389	thick (adj)	ထူတယ်	naː^5	ပီး	
390	thin (adj)	ပါး တယ်	baːŋ^1	ယၢဝ်း	
391	fat (adj)	ဝတယ်	ʔuan^3	မူဆ်း	
392	deep (adj)	နက်တယ်	lɯk^4	ပုင်,ရှင်း;	
393	wide, broad (adj)	ကျယ်တယ်	kwaːŋ^3	လိဂ်.	
394	long (adj)	ရှည်တယ်	jaːw^1	ဆၢ့	
395	shape (eg sphere)	ချွန်တယ်	soŋ^1	မၢင်	
396	round (adj)	လုံး တယ်/ဝိုင်း တယ်	klom^1	ဂုၢင်း;	
397	fast (adj)	ရမန်တယ်	rew^1	ဝၢ်း	
398	slow (adj)	နှေးတယ်	c^haː^4	ထိုင်း	
	Appearance				
399	new (adj)	သစ်တယ်	maj^2	လမ်	
400	old (adj) (object)	ဟောင်း တယ်	kaw^2	ပီဂ်,ပိုင်း;	
401	pale, faded		caːŋ^1	စိဝ်	
402	different	ခြားနားတယ်	taːŋ^2 kan^1	မ့်	
403	white	အဖြူ(ရောင်)	k^haːw^5	ဂဝ်,	
404	black	အမဲ(ရောင်)	dam^1	ဇူဂ်,	
405	green	အစိမ်း(ရောင်)	k^hiaw^5	လီင်	
406	red	အနီ(ရောင်)	dɛːŋ^1	စၢဝ်	

PAYAP UNIVERSITY

APPENDIX 4 INDIVIDUAL SOCIOLINGUISTIC QUESTIONNAIRE (ENGLISH)

PAYAP UNIVERSITY

Individual Sociolinguistic Questionnaire

Instructions

- Record all answers in a bound data notebook.
- Number all pages.
- If possible, read the questions exactly as written. However, you may at times need to offer an explanation to make the question clearer. **If you have to explain the question, make sure you do NOT suggest an answer. Note in your notebook (near the answer) that you had to explain the question.**
- Shaded items are NOT to be read aloud.
- Items in parentheses ( ) give information about when or how to ask a question. Items in brackets [ ] require a choice depending on whatever is appropriate.
- Record the answers in the notebook using the same numbering as in the questionnaire.
- Try to write as neatly as possible.
- Write **exactly** what the subject answers.
- Enjoy!

Oral Consent

- Introduce yourself and explain your purpose.
- Tell the person approximately how long it will take to answer the questionnaire.
- Let them know that their identity will be kept confidential.
- Ask if they are willing to be interviewed.

☐ **"Oral consent given." Note in your notebook if they say "yes" or "no".**

NOTE: If they say no, number this questionnaire and go on to the next subject. It is important to keep this "rejected" questionnaire in the numbering so we know how much non-response there was.

Preliminary Information

1. Questionnaire Number (start with 1 and number consecutively)
2. Survey
3. Interview Location
4. Interviewer Name
5. Date
6. Language of Elicitation
7. Language of Response
8. Interpreter Name (if needed)
9. Comments (anything unusual or noteworthy about this interview)

PAYAP UNIVERSITY

Subject Demographics

10. What is your name?
11. Gender
12. How old are you?
13. Are you married?
14. (if married) How many children do you have?
15. What is your job?
16. What is the highest level of education you have completed?
    a. Level
    b. What school did you go to?
    c. What was the language of instruction at that school?
17. What is your religion?
18. When you were born, what village/town did you live in?
19. Where did you grow up?
20. Where do you live now?
21. How long have you lived there/here?
22. What do you call your language?
23. What do others call your language?
    a. Language name
    b. (if not the same as their own name for the language) Who calls it that?
    c. (if not the same as their own name for the language) Do you like that name?
24. What do you call the people who speak your language?
25. What do others call the people who speak your language?
    a. People name
    b. (if not the same as their own name for their people) Who calls you that?
    c. (if not the same as their own name for their people) Do you like that name?
26. What language did you speak first as a child?
27. What languages do you speak now?
28. Of all the languages you speak, which language…
    a. …do you speak best?
    b. …do you speak second best?

MAHIDOL UNIVERSITY

c. …do you speak third best?

29. (Subject's father)

a. Where was your father born?
b. What [people group / tribe / clan] is your father from?
c. What language did your father speak first as a child?
d. What language did he usually speak to you when you were a child?

30. (Subject's mother)

a. Where was you mother born?
b. What [people group / tribe / clan] is your mother from?
c. What language did your mother speak first as a child?
d. What language did she usually speak to you when you were a child?

31. When you were a child, what language did your parents speak to each other?

32. (if married)

a. Where was your [husband/wife] born?
b. What [people group / tribe / clan] is your [husband/wife] from?
c. What language did your [husband/wife] speak first as a child?

Domains of Language Use

[In this section, if they mention more than one language for one of the situations, ask them which one they use more often in that situation.]

Next, I want to ask about when you use Khuen …

33. I want to ask you about what languages you use with people **in your house**. If they don't live with you, then think about what language you use with them when they visit you in your house.

In your house, what languages do you speak…

a. …with your parents?
b. …with your grandparents?
c. …with your siblings?
d. (if married) … with your spouse?
e. (if have children) … with your children?
f. … with your grandchildren?
g. …with friends?
h. **So, in your house, what language do you use the most?**

34. Next, I want to ask you about what languages you use **outside your house**.

When you are **not in your house**, what languages do you speak…

a. …with your parents?
b. …with your grandparents?
c. …with your siblings?
d. (if married) … with your spouse?

PAYAP UNIVERSITY

e. (if have children) … with your children?
f. … with your grandchildren?
g. …with friends?
h. (ask if young enough to be in school or university) What languages do you use with classmates at school?
i. (if go to school) …with your teacher?
j. …with co-workers?
k. …at the market?
l. …at a funeral?
m. …at a village meeting?
n. …at (a temple / church)?
o. …with a government worker?

35. Do you sometimes meet Shan people?

    a. (if yes) What language do you use with them?

    [If they say Khuen, clarify if the Shan person switches to Khuen or if they each speak their own but both understand each other.]

36. Do you sometimes meet Lue people?

    a. (if yes) What language do you use with them?

    [If they say Khuen, clarify if the Lue person switches to Khuen or if they each speak their own but both understand each other.]

Ethnolinguistic Identity

37. How are the customs of Khuen people different from [non-Khuen] people?

38. Do you think of yourself first as Burmese, Shan, Lue, Khuen, or something else?

39. What customs of being Khuen would you like to see your children continue?

Bilingual Proficiency Evaluation

[Do a Bilingualism Proficiency Evaluation for Shan, Burmese, and any other LWC in use, e.g., Tai Lue.]

Next, I want to ask you some questions about how well you can speak [LWC].

40. LWC being evaluated

41. Can you buy something in [LWC]?

42. Can you tell about your family in [LWC]?

    "Explanation given." Note in your notebook if you have to give the explanation below.

PAYAP UNIVERSITY

[If they ask, "What do you mean?" say "Can you explain things like the number of siblings you have and in what order they were born, etc., using [LWC]?"]

43. If you overhear two [LWC] people speaking [LWC] in the market…
    a. Can you describe in Khuen what you heard?
    b. Can you describe in [LWC] what you heard?
44. Could you use [LWC] to explain to a [LWC] speaker who does not speak Khuen how to do your job?
45. Can you speak [LWC] as fast as a [LWC] person and still be understood?
46. Can you speak [LWC] as well as a [LWC] person?

Language Attitudes

47. Out of all the Khuen villages/towns, where is Khuen spoken the best?
    a. Village/town
    b. Why?
48. Out of all the Khuen villages/towns, which village/town is the most important?
    a. Village/town
    b. Why?
49. If your child married a Shan person, how would you feel?
    a. (answer)
    b. Why?
50. What language do Khuen parents teach their children?
    a. (language)
    b. Why?
51. What language do Khuen children in this village speak first?
52. Do your children ever speak anything other than Khuen at home?
    a. (if yes) What else do they speak?
    b. (if yes) How do you feel when they do that?
53. What language do Khuen children in the village speak when they play?
    a. Language
    b. (if not only Khuen) How do you feel when they speak other than Khuen?
54. [**Ask for each LWC in use in the area including Shan, Burmese, Tai Lue**]

    Would you like to be able to speak [LWC] better?
    a. [For each LWC] Yes or no
    b. [For each LWC] Why?

MAHIDOL UNIVERSITY

55. [**Ask for each LWC in use in the area including Shan, Burmese, Tai Lue**]

a. Can you read [LWC] ?
b. Can you write [LWC] ?
c. Do you see any advantage in being able to read and write [LWC]?
d. (if yes) What advantage?
e. (if no) Why not?

56. Have you ever been a Buddhist monk or a novice?
(if yes)
a. For how long?
b. What Khuen literature did you read?
(if no)
c. Have you ever studied at the temple?
d. (if yes) What? For how long?

(An example might be that the subject attended a literacy class.)

57. (Literacy in Khuen)
a. Can you read Khuen?
b. Can you write Khuen?
c. Do you see any advantage in being able to read and write Khuen?
d. (if yes) What advantage?
e. (if no) Why not?

58. Twenty years from now, do you think the Khuen children from this village will be speaking Khuen? (N.B. We want to know about those who will be children in 20 years' time so they are not yet born.)

a. Yes or no
b. (if no) Do you think this is good or bad?
c. (if no) Why?

Dialect Perceptions

59. Does everyone in your village speak Khuen about the same?
[If no, find out what the subject's variety is and make sure the comparisons below are all made with that variety.]

60. About how many villages speak Khuen?
[Not looking for an exact number… just a guess to give you an idea of what to expect for the rest of the dialect perception questions.]

Please compare the villages that speak Khuen and split them into three groups: villages that speak Khuen the **same** as here, a **little different** from here, and **very different** from here.

61. What are the names of other villages that speak Khuen the **same** as here?

a. List names
b. Do you call their language the same as yours or not?
c. What do you call those people?

PAYAP UNIVERSITY

62. What are the names of other villages that speak Khuen **a little different** from here, but you can understand each other?

    a. List names
    b. How much of their language do you understand: i) everything; ii) most things or iii) some things?
    c. (if "most things" or "some things")
       How are the language here and their language different?

       (if they don't answer)
       "Examples given." Note in your notebook if you have to give the "for example" below.
       For example…How are the sounds different?
       How are the words different?
       How is the speed of speech different?

    d. What do you call that language?
    e. What do you call those people?
    f. Do you often talk with people from there?
    g. When you speak with people from one of those villages what language do you use with each other?

       (If they answer Khuen then ask which of the following scenarios results)

       I. We each use our own variety of Khuen.
       II. I switch to their variety of Khuen.
       III. S/he switches to my variety of Khuen.

       (If they don't answer Khuen then ask the following question to clarify)
       IV. Why don't you speak to them in Khuen?

63. What are the names of other villages that speak Khuen **very differently** from here, so different that you have trouble understanding each other?

    a. List names
    b. How much of their language do you understand: i) most things; ii) some things or iii) nothing?
    c. (if "most things" or "some things")

       How are the language here and their language different?

       (if they don't answer)
       "Examples given." Note in your notebook if you have to give the "for example" below.
       For example…How are the sounds different?
       How are the words different?
       How is the speed of speech different?

    d. What do you call that language?
    e. What do you call those people?
    f. Do you often talk with people from there?

PAYAP UNIVERSITY

g. When you speak with people from one of those villages what language do you use with each other?

(If they answer Khuen then ask which of the following scenarios results)

I. We each use our own variety of Khuen.
II. I switch to their variety of Khuen.
III. S/he switches to my variety of Khuen.

(If they don't answer Khuen then ask the following question to clarify)

IV. Why don't you speak to them in Khuen?

Interviewer Observations

[Ideally, answer these questions in your notebook right away. If you cannot do that, try to do so as soon as you can, perhaps at the end of each day's work.]

64. Were there any **distractions** or **interruptions** that interfered with the flow of the interview or seemed to influence some of the responses?
65. Did the subject seem to **understand** the language of elicitation?
66. Did the subject seem **shy** or **fairly confident** about expressing his/her opinions?
67. Did the interpreter change any of the questions? **Note what was actually asked.**
68. **Other observations** about the interview?
69. Were there any **questions** that seemed to **work really well**? Which questions? Why?
70. Were there any **questions** that seemed to **not work well**? Which questions? Why?

PAYAP UNIVERSITY

APPENDIX 5 INDIVIDUAL SOCIOLINGUISTIC QUESTIONNAIRE (SHAN)

PAYAP UNIVERSITY

Individual Sociolinguistic Questionnaire

Instructions

- Record all answers in a bound data notebook.
- Number all pages.
- If possible, read the questions exactly as written. However, you may at times need to offer an explanation to make the question clearer. **If you have to explain the question, make sure you do NOT suggest an answer. Note in your notebook (near the answer) that you had to explain the question.**
- Shaded items are NOT to be read aloud.
- Items in parentheses ( ) give information about when or how to ask a question. Items in brackets [ ] require a choice depending on whatever is appropriate.
- Record the answers in the notebook using the same numbering as in the questionnaire.
- Try to write as neatly as possible.
- Write **exactly** what the subject answers.
- Enjoy!

Oral Consent

- Introduce yourself and explain your purpose.
- Tell the person approximately how long it will take to answer the questionnaire.
- Let them know that their identity will be kept confidential.
- Ask if they are willing to be interviewed.

☐ **"Oral consent given." Note in your notebook if they say "yes" or "no".**

NOTE: If they say no, number this questionnaire and go on to the next subject. It is important to keep this "rejected" questionnaire in the numbering so we know how much non-response there was.

Preliminary Information

1. Questionnaire Number (start with 1 and number consecutively)
2. Survey
3. Interview Location
4. Interviewer Name
5. Date
6. Language of Elicitation
7. Language of Response
8. Interpreter Name (if needed)
9. Comments (anything unusual or noteworthy about this interview)

PAYAP UNIVERSITY

Subject Demographics

10. လိုဝ်ဒးဝၢးလိူင်ၤရှိဝ်ဓၢးဒ။

11. လၢ်းၤယိင်း။

12. ဏာသၢဂ်ဒးလံးဒၢးရှိဝ်ယဝ်ၤဓၢးဒ။

13. စတ,ဆၢးရှိဆိုးယဝ်ၤဓျုဂ္ၢး။

14. (ပေၢးဝၢးစတ,ဆၢးရှိဆိုးယဝ်ၤ)မီးလုဉ်ဒးလံၢဒေါၤဓၢးဒ။

15. ဖ့ဵတ်းဂိဆိုးဏၢဆိုးဏီဒးသင်ဓၢးဒ။

16. ဖ့ဵဆိုးဏာဝ်ပိင်,လၢၤ,လိဉ်ဒးလံၢးထိုင်ဂဆိုးလွဲဓၢးဒ။

a. ဏာသၢင်ၤဏတၢဆိုး
b. လံးဉၢၤ,ဖ့ဵဆိုးဏာဝ်ပိင်,လၢၤ,လိဉ်ဒးလံၢးဏၢးတီးရှူင်းဖ့ဵဆိုးလွဲဓၢးဒ။
c. ဏၢးတီးရှူင်းဖ့ဵဆိုးဆဆိုးသွဆိုးပဆိုးလူလုဉ်းဉၢမိုးဇဖျ,သၢ,သင်ဓၢးဒ။

17. ယုမ်,ယမ်ဆဖ်ၤထိုဝ်သၢ,သဆဖျ,သင်ဓၢးဒ။

18. ဗီဆိုဂၤ,တိမ်ိုင်းလွဲဓၢးဒ။

a. ဝၢဆိုးဒးဏဆိုသူဂဝ်းယူ,ဆဆိုးဘံၤဘံၤစံၤဝၢဆိုးဒးစံၤသူဆိုဓၢးဖျးဒ။
b. (သင်ဝၢးပေၢးစံၤ) ဏွဆိုတၢင်းသုတ်းစံၤဇသဏၢးတီးလွဲမၢးဓၢးဒ။
c. (သင်ဝၢးပေၢးစံၤ) လိုဆိုးဆဆိုသမ်ၤစံၤဉၢ,ဏၢးတီးလွဲထိုင်းဓၢးဒ။

19. သူဂဝ်းယွဲ,မၢးဝၢဆိုးလွဲမိုင်းလွဲဓၢးဒ။

a. သူဂဝ်းယၢမ်းယူ,သဝ်းဏၢးလွဲမၢးလံၢလံၢစၢး
b. စလးယူ,တီးဆဆိုးရှိင်ဘၢးရှိဝ်ဓၢးဒ။

20. မိုဝ်းလီဝ်ဆဲၤသူဂဝ်းယူ,သဝ်းဏၢးတီးဝၢဆိုးလွဲဓၢး

21. သူဂဝ်းယူ,သဝ်းဏၢးတီးဆဆိုးရှိင်မၢးဏၢးရှိဝ်ယဝ်ၤဓၢးဒ။

a. ဆိုးဝၢဆိုးသူဂဝ်းလွင်,မီးဂူဆိုးဏာဆိလၢတ်းဉၢမိုးတၢင်,မီဝ်းဓၢးဖျးဒ။
b. (ပေၢးမီးလိုင်)ဗီဆိုဉၢမိုးဂူဆိုးမီဝ်းလွဲဓၢးဒ။
c. (ပေၢးမီးလိုင်)လွင်,ဗီဆိုဉၢမိုးဏာဆိဂူဆိုးတင်းဆမ်လၢတ်းလံးထွမ်,လံးဓၢးဖျးဒ။

22. ဉၢမိုးဏာဆိသူဂဝ်းလၢတ်းယူ,ဆဆိုးဝိဆိုဉၢမိုးဏီးသင်ဓၢးဒ။

23. ပိူဆိုးတၢင်,ဒေါၤ သမ်.ရွင်ၤဉၢမိုးသူဂဝ်းလၢတ်းဆဲၤဝၢးဗီဆိုဉၢမိုးဏီး သင်ဓၢးဒ။

a. လိုဝ်းဉၢမိုး လၢတ်းဒ။
b. (ပေၢးလိုဝ်းဉၢမိုးဆဆိုးဏာမ်,မိူဆိုးဂဆိတၢင်းလိုဝ်းဏာဆိရှဝ်းရွင်.ဆဆိုးလိုင်)
ဇူလွဲဗီဆိုဒေါၤဏာဆိပဆိလိုဝ်းဆဆိုးဓၢးဒ။
c. (ပေၢးလိုဝ်းဉၢမိုးဆဆိုးဏာမ်,မိူဆိုးဂဆိတၢင်းလိုဝ်းဏာဆိရှဝ်းရွင်.ဆဆိုးလိုင်)လွင်,သူဂဝ်း
လျိုဂ်းလွဲဆဲၤစၢးရှိဝ်။

PAYAP UNIVERSITY

24. သူ့လဝ်းခွင်.ဂူဆ်းမိဝ်းဘဆ်လၢတ်းဉၢမ်းသူ့လဝ်းဆဆ်ိသူ့လဝ်းခွင်ဝၢး လိူင်ိရှိဝ်။

25. ဂူဆ်းတၢင်မိဝ်း သမ်.ဍလိူဝ်းပိူဆ်းဘဆ်လၢတ်းဉၢမ်းဗဇ့ၢ သၢ့ပေၢ်းရိူတ်,စမးရိူတ်,သူ့လဝ်းဆဆ်ိစၢလူး သူ့လဝ်းခွင်ဝၢးလိူင်ိရှိဝ်။

a. လိူဝ်းဂူဆ်းမိဝ်း။
b. ပေၢ်းပိူဆ်းဝၢ်းလိုဝ်းဉၢမ်းဆဆ်ိဘမ်,မိူဆ်ဘဆ်တင်းလိုဝ်းဘဆ်ဍဝ်းဝၢ်း ဆဆ်ိလိုင်ဗွံပီဆ်ဇေၢ့ဘဆ်ပဆ်လိုဝ်းဆဆ်ိစၢး။
c. ပေၢ်းလိုဝ်းဆဆ်ိဘမ်,မိူဆ်ဘဆ်တင်းလိုဝ်းဘဆ်သူ့လဝ်းဝၢ်းဆဆ်ိလိုင် လွင်,သူ့လဝ်းထုဉ်,လွံစၢးရှိဝ်။

26. မိူဝ်းသူ့လဝ်းယင်းတိုဉ်းဇေၢ့လီဉ်ိဆဆ်ိစတ,လၢ့ိမေၢ့လၢဆ်ိးဉၢမ်းသင်ဘွဆ်ိတၢင်းစၢး။

27. သူ့လဝ်းမေၢ့လၢတ်း ဉၢမ်းမိဝ်းလံၤ

28. ခွဲးဘၢးဗဇ့ၢ,သၢ့ဉၢမ်းဘဆ်သူ့လဝ်းလၢတ်းလံးဆဆ်ိ

a. ဉၢမ်းဘဆ်သူ့လဝ်းလီလို့ဝ်ပိူဆ်းသုတ်းဆဆ်ိပီဆ်ဉၢမ်းသင်။
b. တီးသွင်ဘဆ်သူ့လဝ်းလၢတတ်းလံးလီဆဆ်ိ.ပီဆ်ဉၢမ်းသင်။
c. တီးသၢမ်ဘဆ်သူ့လဝ်းလၢတ်းလံးလီဆဆ်ိ.ပီဆ်ဉၢမ်းသင်။

29. လူ့ဆ်းလွင်းပေၢး။

a. ပေၢ်းသူ့လဝ်းပီဆ်ိလၢ့တိဘၢးလွံ။
b. ပေၢ်းသူ့လဝ်းပီဆ်ိလၢဝ်းနှိုဝ်းဂူဆ်းမီဝ်းလွံ။
c. စတ,မိူဝ်းပေၢ်းသူ့လဝ်းဇေၢ့လီဉ်ိမၢ်းဆဆ်ိ.ဇမေၢ့လၢတ်းဉၢမ်းဘီးသင်စၢး။
d. စတ,မိူဝ်းသူ့လဝ်းဇေၢ့လီဉ်ိဆဆ်ိ.ပေၢ်းစမးသူ့လဝ်းဘုပ်,လၢတ်းတေၢ့ လူ့ဆ်းဉၢမ်းဘီးသင်စၢး။

30. လူ့ဆ်းလွင်းစမး။

a. စမးလဝ်းပီဆ်ိလၢ့တိဘၢးလွံ။
b. စမးသူ့လဝ်းပီဆ်ိလၢဝ်းနှိုဝ်းဂူဆ်းသီဝ်းလွံ။
c. စတ,မိူဝ်းစမးသူ့လဝ်းဇေၢ့လီဉ်.မၢ်းဆဆ်ိ.ဇမေၢ့လၢတ်းဉၢမ်းဘီးသင်စၢး။
d. စတ,မိူဝ်းသူ့လဝ်းဇေၢ့လီဉ်ိဆဆ်ိ.ပေၢ်းစမးသူ့လဝ်းဘုပ်,လၢတ်းတေၢ့ လူ့ဆ်းဉၢမ်းဘီးသင်စၢး။

31. မိူဝ်းသူ့လဝ်းပီဆ်ိလုဉ်းဘွဆ်ိ,ဆဆ်ိ.ပေၢ်းစမးသူ့လဝ်းလွံ.ဉၢမ်းဘီးသင်လၢတ်းတေၢ့,ဘဆ်စၢး။

32. လွင်းဆၢးရှိဆ်ိး။

a. မေးဆၢင်းသူ့လဝ်းပီဆ်ိလၢ့တိဘၢးလွံစၢး။
b. မေးသူ့လဝ်းပီဆ်ိလၢဝ်းနှိုဝ်းဂူဆ်းသီဝ်းလွံလစၢး။
c. စတ,မိူဝ်းမေးသူ့လဝ်းဇေၢ့လီဉ်.ဆဆ်ိ.ဇမေၢ့လၢတ်းဉၢမ်းဘီးသင်စၢး။

Domains of Language Use

[In this section, if they mention more than one language for one of the situations, ask them which one they use more often in that situation.]

Next, I want to ask about when you use Khuen …

PAYAP UNIVERSITY

33. ဆွင်းရှိုဆ်းဆွင်းယေးသူဂဝ်းဆဆ်ဝလၢတ်းဂွၢမ်းသင်။

a. မိူဝ်းလၢတ်းတေၢ့ပေၢ့စမး။
b. မိူဝ်းလၢတ်းတေၢ့ပေၢ့ထဝ်းစမးစဂ့။
c. မိူဝ်းပီးဆွင်ဝကွက်,ဂဆ်လၢတ်းတေၢ့ဂဆ်။
d. (ပေၢ်းသင်,ဝၢ်းမီးဆၢ်းရှိုဆ်းယဝ်ဝ) မိူဝ်းဗူဝ်မေးလၢတ်းတေၢ့ဂဆ်
e. (ပေၢ်းသင်,ဝၢ်းမီးဆၢ်းရှိုဆ်းယဝ်ဝ) မိူဝ်းလၢတ်းတေၢ့လုက်းလၢင်း။
f. မိူဝ်းလၢတ်းတေၢ့လၢဆ်။
g. မိူဝ်းလၢတ်းတေၢ့မိက်ဝသူလ်,ကူလ်းဂေၢ့။
h. ပေၢ်းပီဆ်ဆံဆွင်းဆၢ်းရှိုဆ်းတၢ်ယေးသူဂဝ်းဆဆ်ဝလၢတ်းဂွၢမ်းသင်ဆမ် သေပိုဆ်း။

34. ဆွက်းရှိုဆ်းဆွက်းယေးဆဆ်ဝသူဂဝ်းဆဆ်ဝသူဂဝ်းလၢတ်းဂွၢမ်းကီးသင်

a. မိူဝ်းလၢတ်းတေၢ့ပေၢ့စမး။
b. မိူဝ်းလၢတ်းတေၢ့ပေၢ့ထဝ်းစမးစဂ့။
c. မိူဝ်းပီးဆွင်ဝကွက်,ဂဆ်လၢတ်းတေၢ့ဂဆ်။
d. (ပေၢ်းသင်,ဝၢ်းမီးဆၢ်းရှိုဆ်းယဝ်ဝ) မိူဝ်းဗူဝ်မေးလၢတ်းတေၢ့ဂဆ်။
e. (ပေၢ်းသင်,ဝၢ်းမီးဆၢ်းရှိုဆ်းယဝ်ဝ) မိူဝ်းလၢတ်းတေၢ့လုက်းလၢင်း။
f. မိူဝ်းလၢတ်းတေၢ့လၢဆ်။
g. မိူဝ်းလၢတ်းတေၢ့မိက်ဝသူလ်,ကူလ်းဂေၢ့။
h. (ပုဆ်းတၢ့ထၢမ်လုက်းဖှီဆ်းစဝ်) မိူဝ်းလၢတ်းတေၢ့လုက်းဖှီဆ်းဆင်,ဂဆ်။
i. (ပုဆ်းတၢ့ထၢမ်လုက်းလှီဆ်စဝ်) မိူဝ်းလၢတ်းတေၢ့စူးသွဆ်စဝ်။
j. မိူဝ်းလၢတ်းတေၢ့ဂူဆ်းဖှီတ်းဂၢဆ်ဂွမ်းဂၢဆ်။
k. မိူဝ်းလၢတ်းဆွင်းဂၢတ်,ဆွင်းသၢး။
l. မိူဝ်းလၢတ်းဆွင်းမၢ့သၢ့။
m. မိူဝ်းလၢတ်းဆွင်းပၢင်ဂုမ်။
n. မိူဝ်းလၢတ်းဆွင်းဂျွင်းဗြူး။
o. မိူဝ်းလၢတ်းတေၢ့ဂဝ်းဆၢ်းတီးဝၢဆ်းမိူင်း။

35. မၢင်ပွက်းမၢင်လွ်ဂွင်,လံးရှုပ်ထူပ်းပီးဆွင်ဝတံးဆင်,ဂဆ်စၢ်းရှၢး။

(ပေၢ်းလံးရှုပ်ထူပ်းဂိုင်) မိူဝ်းကုပ်,လၢတ်းတေၢ့စဝ်ဆဆ်ဝလွ်ဝဂွၢမ်းသင်စၢ်း။

[If they say Khuen clarify if the Shan person switches to Khuen of if they each speak their own but both understand each other.]

36. မၢင်ပွက်းမၢင်လွ်ဂွင်,လံးရှုပ်ထူပ်းပီးဆွင်ဝလိုဝ်ဝ(**Lue**)စၢ်းရှၢး။

(ပေၢ်းလံးရှုပ်ထူပ်းဂိုင်) မိူဝ်းကုပ်,လၢတ်းတေၢ့စဝ်ဆဆ်ဝလွ်ဝဂွၢမ်းသင်စၢ်း။

[If they say Khuen, clarify if the Lue person switches to Khuen or if they each speak their own but both understand each other.]

PAYAP UNIVERSITY

Ethnolinguistic Identity

37. ရှူဆန်းမီဝ်း ခိုဆ် တင်းရှူဆန်းဘဆ်ဘမ်,လွင့်းရှူဆန်းမီဝ်း ခိုဆ် ၶဝ်ဆဆ်ၚဵင်းထုင်းဝီဂ်,ပိုင်း ဘဆ်လိူင်ၚ်ရိုဝ်။

38. သူလဝ်းယုမ်,ယမ်ါးတူဝ်လဝ်းဘဝ်,ဝီဆ်ရှူဆန်းမီဝ်းလွဲ့။
ပုင်,တီဂ်း်ါးမဆ်း မၢဆ်း တံၚယ်, တံၚလိူဝ်, တံၚခိုဆ် ပလွင်း ဝ လၢ်ဝၢ်းဒွၢ်,လိူဝ်းဆဲၚ်။

39. သူလဝ်းလွဲ့းန့်ဵးလုဂ်းလၢင်းသူလဝ်းဆဆ်ၚ်ဒီတ်းလွမ်းဗၵိင်းထုင်းဘဆ်လွဲ့။

Bilingual Proficiency Evaluation

[Do a Bilingualism Proficiency Evaluation for Shan, Burmese, and any other LWC in use e.g. Tai Lue.]

Next, I want to ask you some questions about how well you can speak [LWC].

40. တၢင်းဘဆ်ထၢမ်တူလိုးဒွၢမ်းလၢတ်းယဆ်ရှူဆန်းလွဲ့ၚဆမ်လိူဝ်ဃသပိူဆ်းဆဆ်ၚ်။

41. လွင်,ဖေါလၢတ်းဒွၢမ်းဘဆ်ရှူဆန်းတင်းလံၢလွဲ့ၚဆမ်ဆဆ်ၚ်(**LWC**)သေဲလးဒ့ဒီတ်းဘၢဆ်ဘၢ့ဘၢဆ်လံၢလံၚ်း

42. လွင်,ဖေါလၢတ်းဒွၢမ်း(ဘဆ်ရှူဆန်းတင်းလံၢလွဲ့ၚဆမ်ဆဆ်ၚ်) (**LWC**)သေဲလးလၢတ်းလွင်းရှိုဆ်းယေး တူဝ်လဝ်းဘဝ်,လံၚ်းဓၢးဒ့ဒၢး။

43. ပေါးသူလဝ်းဝိဆ်းဂူဆ်းသွင်ဖေၢ့လၢတ်းဒွၢမ်း(**LWC**) ဆဆ်ၚ်ဆ်ဵးဘၢတ်,လိုင်

a. ဖေၢးဒွၢမ်းဘဆ်သူလဝ်းလံၚ်းဝိဆ်းဆဆ်ၚ်လွင်,ဖေါလၢတ်းတင်းဂုမ်း ခိုဆ် ဓၢးဒ့ၢး။
b. လွင်လၢင်လၢတ်ခိုဆ်းဒွမ်း (LWC)

44. ဘၢးတီးဖေၢ့ဘဆ်လၢတ်းဒွၢမ်းယုဆ်း(**LWC**)ဆဆ်ၚ်လွင်,သူလဝ်းဖေါသင်,ရှိုးမဆ်းဒ့ဒီတ်းလွင် ဘဆ်မဆ်းလူဝ်,ရှိတ်းဆဆ်ၚ်လူလုံးလွဲ့(**LWC**)ဆဆ်ၚ်လံၚ်းဓၢးဒ့ၢး။

45. လွင်,ဖေါလၢတ်းဒွၢမ်း(**LWC**)ရှိုးမီးဘထိဘ်ဧပ,ဝံးဝံးမိူဆ်လိူင်ၚ်ဆင်,(**LWC**) ဖေၢ့ဆိုင်းလၢတ်းဆဆ်ၚ်ဓၢးဒ့ၢး။

46. လွင်,ဖေါလၢတ်းဒွၢမ်း(**LWC**)လံၚ်းမိူဆ်လိူင်ၚ်ဆင်,(**LWC**)ဖေၢ့ဆိုင်းလၢတ်းလံၚ်းဆဆ်ၚ်ဓၢးဒ့ၢး။

Language Attitudes

47. သူလဝ်းထၢင်,ဝၢးရှူဆန်းဘဆ်လၢတ်းဒွၢမ်းတံၚခိုဆ်ဆဆ်ၚ်,ဒွၢမ်းတံၚခိုဆ်ဝၢဆ်းလွဲ့လီလိူဝ်ဃသပိူဆ်း။
a. ဝၢဆ်း,ဝီဝ်း။
b. ရွပ်းပိူဝ်းသင်။

48. ခွဲးဘၢးဝၢဆ်းဘဆ်လၢတ်းဒွၢမ်းတံၚခိုဆ်တင်းမူတ်းဆဆ်ၚ်သူလဝ်းရှဆ်ထိုင်ဝၢးဝၢဆ်းလွဲ့လမ်,လွင်းလိူဝ်ဃ သပိူဆ်း။
a. ဝၢဆ်း,ဝီဝ်း။
b. ရွပ်းပိူဝ်းသင်။

PAPUA NEW GUINEA

49. ပေးလုပ်ငန်းလေ့လာဆည်းသူလဝင်ငွေစတာ,ဆေးရွှိဆန်းလွမ်းဂူဆန်းတံတားတောင်,မိုဝ်းလိုင်သူလဝင်ငွေမီးတောင်းဖွဆန်ထိုင်လိုင်ဲ့ရှိဝ်။

a. ဝေဆန်းၤဝီင်း။
b. ဖွပ်ငှိုဝ်ငှိုသင်။

50. ပီးဆွင်ဲ့ ခိုဆိ ဘုတီးဆံးသွဆိဖွၤမ်းမိုဝ်းလွဲ့ပဆိလုပ်ငှိုလေ့လာင်းစဝ်ဘွဆိတာင်း။

51. လုပ်ငှိုဘွဆိ,ခွင်းဝေဆိုးဆံ့ဲ့မေၤလေၤတ်ငှိုဖွၤမ်းမိုဝ်းလွဲ့ဘွဆိတာင်းစားု။

52. လုပ်ငှိုသူလဝင်ငွေးခွင်းရွှိဆိန်းဆံ့ဲ့လိုဝ်ဒေသဖွၤမ်း ခိုဆိ ငိုးလေၤတ်ငှိုဖွၤမ်းသင်ထိဉ်းစားု။

a. (if Yes)
b. (if yes)

53. လုပ်ငှိုဘွဆိ, (X) ခွင်းဝေဆိုးဆံ့ဲ့မိုဝ်းစဝ်လီဆိုးလွမ်းဘဆိစဝ်လေၤတ်ငှိုဖွၤမ်းမိုဝ်းလွဲ့ တေၤ့ဘဆိစားု။

a. Language name
b. လေၤတ်ငှိုဖွၤမ်း ခိုဆိ ပေးဘာမ်,လေၤတ်ငှိုဖွၤမ်း ခိုဆိ
စလုးလေၤတ်ငှိုဖွၤမ်းတောင်,မိုဝ်းခွင်းလွဲ့သူလဝင်ငွေပီဆိလိုင်ဲ့ရှိဝ်စားု။

54. လွင်ဲ့ခွဲ့မေၤလေၤတ်ငှိုဖွၤမ်း(**LWC**)ဆဆိဲ့လီလိုဝ် သေဆံ့ဲ့စားုရှိဝ်။

a. (LWC) စာဖတ်တတ်သလား?
b. (LWC) စာရေးတတ်သလား?
c. (LWC) ရေးတတ်၊ဖတ်တတ်လို အကျိုး ရှိတယ်လို့ထင်ပါသလား။
d. (အကျိုး ရှိပါက) ဘယ်လို အကျိုး ရှိပါသလဲ၊
e. (အကျိုး မရှိပါက) ဘာကြောင့် အကျိုး မရှိရသလဲ

55. လွင်ဲ့မေၤလူဘၤဆိဲ့,လိဉ်ငှိုး(**LWC**)ဆဆိဲ့စားုရှိဝ်။

56. လွင်ဲ့,ယၤမ်ငှိုစၤမ်,ပီဆိသၤင်ဲ့,ပီဆိလၤင်းစားုဖွၤ။

a. ရှိင်လံၤပီ(လူဝ်,ထၤမ်ဂ့ၤ့ဘဆိယၤမ်ငှိုစၤမ်,ပီဆိသၤင်ဲ့,ပီဆိလၤင်း ဆဆိဲ့ဂူလုဉ်း။
b. ယၤမ်ငှိုဗတိုးဘၤဆိဲ့,ထမ်းတံ့းမိဝ်းလွဲ့။
c. လွင်ဲ့,ယၤမ်ငှိုရှိဆိန်းလိဉ်ငှိုတီးဝၤတ်ဲ့။
d. ရှိဆိန်းဘီးသင်–ရှိဆိန်းရှိင်ဘၤုရှိဝ်။

57. လွင်ဲ့,မေၤဗတိုးဘၤဆိဲ့,လိဉ်ငှိုး ခိုဆိ။

a. လွင်ဲ့,မေၤတိဉ်မ်ငှိုလိဉ်ငှိုး ခိုဆိ။
b. မေၤဗတိုးမေၤတိဉ်မ်ငှိုလိဉ်ငှိုး ခိုဆိ ဆံ့ဲ့လွင်ဲ့,ထၤင်,ဝၤုမဆိန်းမီးဘလုဝ်း။
c. ပေးဝၤုမီးဘလုဝ်းလိုင်မဆိန်းမီးလိုင်ဲ့ရှိဝ်။
d. ပေးဝၤုဘာမ်,မီးဗွဆိန်းလီလိုင် ဖွဆိန်းပိုဝ်ငှိုသင်။
e.

58. ပေးထိဉ်ငှိုး (20)ပီသူလဝင်ငွေးယင်းထၤင်,လုပ်ငှိုးဘွဆိ,ခွင်းဝေဆိုးဆံ့ဲ့ယင်းမေၤလေၤတ်ငှိုဖွၤမ်း ခိုဆိ ယူ့,စားုဖွၤ။

PAYAP UNIVERSITY

Dialect Perceptions

59. ဆွင်းဝါဆ်းနဆံ့လွင်,လါတ်းဂွါမ်း စိုဆ် မီဝ်းလီဝ်ဂဆ်မူတ်းစါးရှါး။

60. ဝါဆ်းကဆ်လါတ်းဂွါမ်း စိုဆ် ဂဆ်တင်းမူတ်းမီးလံါဝါဆ်းစါး။

61. ဝါဆ်းကဆ်လါတ်းဂွါမ်း စိုဆ် ဂဆ်တင်းမူတ်းပီဆဝါဆ်းလွ်လံါလံါစါး။

62. ဝါဆ်းကဆ်လါတ်းဂွါမ်း စိုဆ်
ဂဆ်တင်းမူတ်းပိုင်းဂဆ်ကိတ်းကိတ်းဂူလုပ်းဂါးပွင်,လွ်ဂဆ်ယူ,ဆဆ်ပိဆ်ဝါဆ်လံစါး။

a. ဂွါမ်းကဆ်စဝ်လါတ်းဆဆ်သူလဝ်းပွင်,လွ်မွဂ်းဂါးရှိဝ်စါး။

i. ပွင်,လွ်တင်းမူတ်း။
ii. ပွင်,လွ်ဂမ်းဆမ်။
iii. ပွင်,လွ်ကိတ်းကိတ်း။
iv. ကမ်,ပွင်,လွ်သေကိတ်း။

b. ဂွါမ်းကဆ်စဝ်လါတ်းဧလးဂွါမ်းကဆ်သူလဝ်းလါတ်းဆဆ်မဆ်းပီဂ်,ပိုင်းဂဆ်လိုင်ရှိဝ်။

if they don't answer)
"Examples given." Note in your notebook if you have to give the "for example" below.
For example…How are the sounds different?
How are the words different?
How is the speed of speech different?

c. ဂွါမ်းစဝ်လါတ်းဆဆ်ပီဆ်ဂွါမ်းသင်။
d. သူလဝ်းဝါးစဝ်ပီဆ်ဂူဆ်းမီဝ်းသင်။
e. လွင်,သူလွင်းဂံလ,းကုပ်,ဂဆ်။
f. မိုဝ်းကုပ်,ဂဆ်လွမ်းစဝ်ဆဆ်လွ်ဂွါမ်းသင်။

i. တင်းသွင်ဂေါ့လါတ်းဂွါမ်းဇွ်ဂွါမ်းမဆ်း။
ii. စါးလါတ်းဂွါမ်းလဝ်။
iii. စဝ်လါတ်းဂွါမ်းစါး။
iv. တင်းသွင်ဂေါ့လါတ်းဂွါမ်းပိုဆ်း။
v. (If the answer is **iv**) ရှိတ်းသင်ကမ်,လါတ်းဂွါမ်းဇွ်ဂွါမ်းမဆ်း။

63. ဝါဆ်းကဆ်လါတ်းဂွါမ်း စိုဆ်ပီဂ်,ပိုင်းဂဆ်ဆါ့ဆါ့,ဧလးပွင်,ဂဆ်ယါပ်,ဆါ့ဆဆ်ပီဆ်ဝါဆ်းလွ်လံါလံါ။

a. ဂွါမ်းကဆ်စဝ်လါတ်းဆဆ်သူလဝ်းပွင်,လွ်မွဂ်းဂါးရှိဝ်စါး။

i. ပွင်,လွ်တင်းမူတ်း။
ii. ပွင်,လွ်ဂမ်းဆမ်။
iii. ပွင်,လွ်ကိတ်းကိတ်း။
iv. ကမ်,ပွင်,လွ်သေကိတ်း။

b. ဂွါမ်းကဆ်စဝ်လါတ်းဧလးဂွါမ်းကဆ်သူလဝ်းလါတ်းဆဆ်မဆ်းပီဂ်,ပိုင်းဂဆ်လိုင်ရှိဝ်။

if they don't answer)

PAYAP UNIVERSITY

“Examples given.” Note in your notebook if you have to give the “for example” below.
For example…How are the sounds different?
How are the words different?
How is the speed of speech different?

c. ဂျာမ်းစဝ်လာတ်နေဆန်းပီဆ်ဂျာမ်းသင်။
d. သူလဝ်နေဝုးစဝ်ပီဆ်ဂူဆ်းမီဝ်းသင်။
e. လွင်နေသူလဝ်နေဂံလနေဂုပ်နေဆ်။
f. မိူဝ်နေဂုပ်နေဆ်လွမ်းစဝ်ဆန်းလွ်းဂျာမ်းသင်။
   i. တင်းသွင်ဂေုလာတ်နေဂျာမ်းဇွ်ဂျာမ်းမဆ်း။
   ii. စုးလာတ်နေဂျာမ်းစဝ်။
   iii. စဝ်လာတ်နေဂျာမ်းစုး။
   iv. တင်းသွင်ဂေုလာတ်နေဂျာမ်းပိူဆ်း။
   v. (If the answer is **iv**) ဌီတ်းသင်ဘမ်နေလာတ်နေဂျာမ်းဇွ်ဂျာမ်းမဆ်း။

Interviewer Observations

[Ideally, answer these questions in your notebook right away. If you can’t do that, try to do so as soon as you can, perhaps at the end of each day’s work.]

64. Were there any **distractions** or **interruptions** that interfered with the flow of the interview or seemed to influence some of the responses?
65. Did the subject seem to **understand** the language of elicitation?
66. Did the subject seem **shy** or **fairly confident** about expressing his/her opinions?
67. Did the interpreter change any of the questions? **Note what was actually asked.**
68. **Other observations** about the interview?
69. Were there any **questions** that seemed to **work really well**? Which questions? Why?
70. Were there any **questions** that seemed to **not work well**? Which questions? Why?

PAYAP UNIVERSITY

APPENDIX 6 KNOWLEDGEABLE INSIDER QUESTIONNAIRE (ENGLISH)

PAYAP UNIVERSITY

Knowledgeable Insider Sociolinguistic Questionnaire

Instructions

- Record all answers in a bound data notebook.
- Number all pages.
- If possible, read the questions exactly as written. However, you may at times need to offer an explanation to make the question clearer. **If you have to explain the question, make sure you do NOT suggest an answer. Note in your notebook (near the answer) that you had to explain the question.**
- Shaded items are NOT to be read aloud.
- Items in parentheses ( ) give information about when or how to ask a question. Items in brackets [ ] require a choice depending on whatever is appropriate.
- Record the answers in the notebook using the same numbering as in the questionnaire.
- Try to write as neatly as possible.
- Write **exactly** what the subject answers.
- Enjoy!

Oral Consent

- Introduce yourself and explain your purpose.
- Tell the person approximately how long it will take to answer the questionnaire.
- Let them know that their identity will be kept confidential.
- Ask if they are willing to be interviewed.

☐ **"Oral consent given." Note in your notebook if they say "yes" or "no".**

NOTE: If they say no, number this questionnaire and go on to the next subject. It is important to keep this "rejected" questionnaire in the numbering so we know how much non-response there was.

Preliminary Information

1. Questionnaire Number (start with 1 and number consecutively)
2. Survey
3. Interview Location
4. Interviewer Name
5. Date
6. Language of Elicitation
7. Language of Response
8. Interpreter Name (if needed)
9. Comments (anything unusual or noteworthy about this interview)

PAYAP UNIVERSITY

Subject Demographics

10. What is your name?
11. Gender
12. How old are you?
13. Are you married?
14. (if married) How many children do you have?
15. What is your job?
16. What is the highest level of education you have completed?
    a. Level
    b. What school did you go to?
    c. What was the language of instruction at that school?
17. What is your religion?
18. When you were born, what village/town did you live in?
19. Where did you grow up?
20. Where do you live now?
21. How long have you lived there/here?

Village Name, Population

22. What is the official name of this village?
    a. Name
    b. What "district" is it in? [Ask about all the administrative levels.] (Village, Township, District, State or Division)
23. What do the people who live here call this village?
    a. Name
    b. What does that name mean?
24. What do outsiders call this village?
    a. Name
    b. (if not the same as their own name for the village) Who calls it that?
    c. (if not the same as their own name for the village) What does that name mean?
    d. (if not the same as their own name for the village) Do people in this village like that name?
25. How many houses are in this village?
26. What is the total number of people in this village? (adults and children)

PAYAP UNIVERSITY

Languages and Ethnic Groups

27. What do you call the main language of this village?
    a. Language name
    b. What does that name mean?

28. What do others call the main language of this village?
    a. Language name
    b. (if not the same as their own name for the language) Who calls it that?
    c. (if not the same as their own name for the language) What does that name mean?
    d. (if not the same as their own name for the language) Do people in this village like that name?

29. What do the people who live in this village call themselves?
    a. People name
    b. What does that name mean?

30. What do others call the people who live in this village?
    a. People name
    b. (if not the same as their own name for their people) Who calls you that?
    c. (if not the same as their own name for their people) What does that name mean?
    d. (if not the same as their own name for their people) Do people in this village like that name?

31. Is this village all Khuen people or are there others living here as well?
    a. All Khuen or others, too
    b. (if others, too) What groups live here?
    c. (if others, too) About how many houses and people in this village are from each group?
        i. Number of houses for each group
        ii. Number of people for each group

32. Has it always been this way?
    a. Yes or no
    b. (if no) Which way is it changing…More Khuen people or fewer?

33. Is there a language/cultural committee for Khuen?
    a. Yes or no
    b. (if yes) Does the committee promote Khuen literature or literacy?

PAYAP UNIVERSITY

Village History

34. Where did the people who are here now come from?

    a. Where
    b. When did they move here?
    c. (if they have moved here recently) When they were there, what other groups were they around?
    d. (if they have moved here recently) What languages/varieties were used there?
    e. Why did they move here?
    f. Do you still have contact with people from that place?
    g. Where did they come from before that?

People Group History

35. Where did the Khuen people in general, not just this village, come from?

    a. Where
    b. When did they come to this area?
    c. Why did they leave their former home?
    d. Do you still have contact with people from that place?
    e. Where did they come from originally?

School

36. Is there a school in this village?

    a. Yes or no
    b. (if yes) What levels are taught in the school?
    c. (if yes) What is the language of instruction?
    d. (if yes) What language groups attend this school?
    e. (if yes) What are the two largest groups?

37. Do any children go to any other villages/towns for school?

    a. Yes or no
    b. (if yes) Where?
    c. (if yes) What levels do they go for?
    d. (if yes) What is the language of instruction in that place?
    e. (if yes) What language groups attend that school?

38. About how many years of education do children from this village usually complete?

Languages of Wider Communication

39. Other than Khuen, what languages are spoken **in this village**?

40. (for each LWC e.g. Shan, Burmese, Tai Lue)

PAYAP UNIVERSITY

a. Who speaks [LWC] well? [In other words, what type of people? – men, women, old, young, merchants, etc.]
b. Why do those types of people speak it well?
c. Are there any types of people in this village who speak [LWC] poorly?
   i. What types
   ii. Why?

41. Not including Khuen, which of these languages is used by the most people?
    a. Language
    b. About what percent speak that language?
42. About what percent use each of the rest of these languages?
43. If someone from this village meets someone who cannot speak Khuen, what language do they use with that person?
44. What languages are spoken within the area that Khuen people live and travel?

[NOTE: This is meant to get at LWCs spoken in the larger region, not just this village and not just the Khuen-speaking area.]

Intermarriage

45. Is it common for Khuen people from this village to marry non Khuen speaking people?
    a. Yes or no
    b. (if yes) What non Khuen speaking people do they marry?
46. (if yes) If a Khuen **man** from this village marries a non- Khuen **woman**…
    a. Where do they live? (in Khuen area or outside)
    b. Usually, what language do their children end up speaking?
    c. Why?
    d. (if not Khuen) Can they also still speak Khuen?
    e. How many **men** do this: few, some, half, most, or all?
47. (if yes) If a Khuen **woman** from this village marries a non-Khuen **man**…
    a. Where do they live? (in Khuen area or outside)
    b. Usually, what language do their children end up speaking?
    c. Why?
    d. (if not Khuen) Can they also still speak Khuen?
    e. How many **women** do this: few, some, half, most, or all?

Interviewer Observations

[Ideally, answer these questions in your notebook right away. If you can't do that, try to do so as soon as you can, perhaps at the end of each day's work.]

48. Were there any **distractions** or **interruptions** that interfered with the flow of the interview or seemed to influence some of the responses?

PAYAP UNIVERSITY

49. Did the subject seem to **understand** the language of elicitation?
50. Did the subject seem **shy** or **fairly confident** about expressing his/her opinions?
51. Did the interpreter change any of the questions? **Note what was actually asked.**
52. **Other observations** about the interview?
53. Were there any **questions** that seemed to **work really well**? Which questions? Why?
54. Were there any **questions** that seemed to **not work well**? Which questions? Why?

PAYAP UNIVERSITY

APPENDIX 7 KNOWLEDGEABLE INSIDER QUESTIONNAIRE (SHAN)

PAYAP UNIVERSITY

Knowledgeable Insider Sociolinguistic Questionnaire

Instructions

- Record all answers in a bound data notebook.
- Number all pages.
- If possible, read the questions exactly as written. However, you may at times need to offer an explanation to make the question clearer. **If you have to explain the question, make sure you do NOT suggest an answer. Note in your notebook (near the answer) that you had to explain the question.**
- Shaded items are NOT to be read aloud.
- Items in parentheses ( ) give information about when or how to ask a question. Items in brackets [ ] require a choice depending on whatever is appropriate.
- Record the answers in the notebook using the same numbering as in the questionnaire.
- Try to write as neatly as possible.
- Write **exactly** what the subject answers.
- Enjoy!

Oral Consent

- Introduce yourself and explain your purpose.
- Tell the person approximately how long it will take to answer the questionnaire.
- Let them know that their identity will be kept confidential.
- Ask if they are willing to be interviewed.

☐ **"Oral consent given." Note in your notebook if they say "yes" or "no".**

NOTE: If they say no, number this questionnaire and go on to the next subject. It is important to keep this "rejected" questionnaire in the numbering so we know how much non-response there was.

Preliminary Information

1. Questionnaire Number (start with 1 and number consecutively)
2. Survey
3. Interview Location
4. Interviewer Name
5. Date
6. Language of Elicitation
7. Language of Response
8. Interpreter Name (if needed)
9. Comments (anything unusual or noteworthy about this interview)

PAYAP UNIVERSITY

Subject Demographics

10. လိုဝ်ဒးဝၤးလိူင်ၤရှိဝ်ဓၢးဒ။
11. လံၤးယိင်း။
12. ဏသၢဘ်ဒးလံးဒၢးရှိဝ်ယဝ်ၤဓၢးဒ။
13. ဧတ၊ဆးးရှိဆ်ဒးယဝ်ၤဓၢးဒှၤး။
14. (ပေၤဝၤးဧတ၊ဆးးရှိဆ်ဒးယဝ်ၤ)မီးလုဘ်ဒးလံၤဧအေၤဓၢးဒ။
15. ရှိတ်းဘိဆ်ဒၢဆ်ဏီးသင်ဓၢးဒ။
16. ရှိဆ်ဒးဏဝ်ပိဝ်၊လၢၤလိဘ်ဒးလံၤးထိုင်ဂဆ်ၤလွဲဓၢးဒ။
    a. ဏသၢင်ၤဏတၢဆ်ဒး
    b. လံးဒှၤ့ရှိဆ်ဒးဏဝ်ပိဝ်၊လၢၤ့လိဘ်ဒးလံၤးဒၢးတီးရှင်းရှိဆ်ဒးလွဲဓၢးဒ။
    c. ဒၢးတီးရှင်းရှိဆ်ဒးဆဆ်ၤသွဆ်ပဆ်လူလ်ဒးဘှၢမ်းဗဇၤ့သၤ့သင်ဓၢးဒ။
17. ယုမ်၊ယမ်ဆပ်ၤထိုဝ်သၤ့သဆၤ့သင်ဓၢးဒ။
18. ပီဆ်ဂၤ့တိမ့ိုင်းလွဲဓၢးဒ။
    a. ဝၢဆ်ဒးဏဆ်သူဂဝ်ဒးယူ့ဆဆ်ၤဘံၤ့ဘံၤ့ဓံၤ့ဝၢဆ်ဒးဓံၤ့သူဆ်ဓၢးဒှၤး။
    b. (သင်ဝၤးပေၤးဓံၤ့) ဏွဆ်တၢင်းသုတ်းဓံၤ့ဧသဘၤးတီးလွဲမၤးဓၢးဒ။
    c. (သင်ဝၤးပေၤးဓံၤ့) လိုဆ်းဆဆ်ၤသမ်ၤဓံၤ့ဘှၤ့ဘၤးတီးလွဲထိုင်းဓၢးဒ။
19. သူဂဝ်းယွဲ့မၤးဝၢဆ်းလွဲမ့ိုင်းလွဲဓၢးဒ။
    a. သူဂဝ်းယၢမ်းယူ့သဝ်းဘၤးလွဲမၤးလံၤလံၤဓၢးဒ
    b. ဧလးယူ့တီးဆဆ်းရှိင်ဘ ၤးရှိဝ်ဓၢးဒ။
20. မ့ိုဝ်းလီဝ်ဆံၤသူဂဝ်းယူ့သဝ်းဘၤးတီးဝၢဆ်းလွဲဓၢးဒ
21. သူဂဝ်းယူ့သဝ်းဘၤးတီးဆဆ်းရှိင်မၤးဘၤးရှိဝ်ယဝ်ၤဓၢးဒ။
    a. ဆွဲးဝၢဆ်းသူဂဝ်းလွင်ၤမီးဘူဆ်းဏဆ်လၢတ်းဘှၢမ်းတၢင်ၤမီဝ်းဓၢးဒှၤး။
    b. (ပေၤးမီးလိုင်)ပီဆ်ဘှၢမ်းဘူဆ်းမီဝ်းလွဲဓၢးဒ။
    c. (ပေၤးမီးလိုင်)လွင်ၤပီဆ်ဘှၢမ်းဏဆ်ဘူဆ်းတင်းဆမ်လၢတ်းလံးထွမ်ၤလံးဓၢးဒှၤး။

Village Name, Population

22. လိုဝ်းဝၢဆ်းးဆံၤဏလူဝ်းယၢ့ွင်ၤဝၤးဝၢဆ်းသင်။
    a. လိုဝ်းဝၢဆ်း။
    b. ဝၢဆ်းးဆံၤယူ့ဆွဲးဧလးဝီင်းလွဲၤဘိုင်ၤလွဲ။
23. ဘူဆ်းးဏဆ်ယူ့ဒၢးတီးဆးးဓဝ်ရွင်ၤလိုဝ်းဝၢဆ်းးဆံၤဝၤးလိူင်ၤရှိဝ်။
    a. လိုဝ်းဝၢဆ်းး
    b. လိုဝ်းဝၢဆ်းးဆဆ်ၤဏထိဘ်းဧပၤမဆ်းနှဉ်းပွင်ၤဝၤးဘီးသင်ဓၢးဒ။
24. ဘူဆ်းတၢင်ၤတီးဓဝ်ရွင်ၤဝၢဆ်းးဆံၤဝၤးလိူင်ၤရှိဝ်။
    a. လိုဝ်းဝၢဆ်းး
    b. (ပေၤးလိုဝ်းဆဆ်ၤဏမ်,မ့ိုဆ်းလိုဝ်းဒၢးဆ်ဘူဆ်းဝၢဆ်းးဆံၤရွင်ၤလိုင်)လိုဝ်းဆဆ်ၤပီဆ်ဗဒူး လွဲမၤးပဆ်ဝံၤဓၢးဒ။

MYANMAR UNIVERSITY

c. (ပေးလိုဝ်းဆဆိ်းဘာမ်,မျိုဆိ်းလိုဝ်းဘာဆ်ိးဂူဆိ်းဝၢဆိ်းခံးဒွင်းလိုင်)လိုဝ်းဆဆိ်းယထိဉ်းစပ,မဆိ်း ဒွဲးပွင်,ဝၢးဘီးသင်။

d. (ပေးလိုဝ်းဆဆိ်းဘာမ်,မျိုဆိ်းလိုဝ်းဘာဆ်ိးဂူဆိ်းဝၢဆိ်းခံးဒွင်းလိုင်)ဂူဆိ်းဝၢဆိ်းတင်းလံၢလွင်,ထုဉ်,လွဉ်။

25. ဆိုင်းဝၢဆိ်းခံးမီးလံၢလင်ဈးဂွိုဆိ်းဈၢး။

26. ဂူဆိ်းဘာဆ်ိယူ,ဆိုင်းဝၢဆိ်းခံးမီးမွဉ်,လံၢဟျေ့ဈၢး(လုဉ်းဘွဆ်ိ,ဂူဆိ်းလူင်ပွင်းဘဆ်ိမီးလံၢဟျေ့ဈၢး။)

Languages and Ethnic Groups

27. ဉၢမိုးလၢတ်းဘာဆ်ိလွဉ်,ဘမ်းခမ်ဘၢးဆိုင်းဝၢဆိ်းခံးပီဆ်ိဉၢမိုးလၢတ်းမီဝ်းလွဉ်ဈၢး။

a. လိုဝ်းဉၢမိုးလၢတ်းဆဆိ်းဒွင်းဝၢးလိူင်းဂွိုဝ်ဈၢး ။

b. ဉၢမိုးဆဆိ်းမီးဘထိဉ်းစပ,ဝၢးလိူင်းဂွိုဝ်ဈၢး။

28. ဉၢမိုးလၢတ်းဘာဆ်ိလွဉ်,ဘဆ်ိဆမ်ဘၢးဆိုင်းဝၢဆိ်းခံးပိူဆိ်းတၢင်,ဟျေ့ဒွင်းဝၢးပီဆ်ိဉၢမိုးမီဝ်းလွဉ်

a. လိုဝ်းဉၢမိုးလၢတ်းဆဆိ်းဒွင်းဝၢးလိူင်းဂွိုဝ်ဈၢး ။

b. (ပေးလိုဝ်းဆဆိ်းဘာမ်,မျိုဆိ်းလိုဝ်းဘာဆ်ိးဂူဆိ်းဝၢဆိ်းခံးဒွင်းလိုင်)လိုဝ်းဆဆိ်းပီဆ်ိဗဒူးလွဉ်မၢးပဆ်ိဝံးဈၢး။

c. (ပေးလိုဝ်းဆဆိ်းဘာမ်,မျိုဆိ်းလိုဝ်းဘာဆ်ိးဂူဆိ်းဝၢဆိ်းခံးဒွင်းလိုင်)လိုဝ်းဆဆိ်းယထိဉ်းစပ,မဆိ်း ဒွဲးပွင်,ဝၢးဘီးသင်။

d. (ပေးလိုဝ်းဆဆိ်းဘာမ်,မျိုဆိ်းလိုဝ်းဘာဆ်ိးဂူဆိ်းဝၢဆိ်းခံးဒွင်းလိုင်)ဂူဆိ်းဝၢဆိ်းတင်းလံၢလွင်, ထုဉ်,လွဉ်

29 ဂူဆိ်းဆိုင်းဝၢဆိ်းခံးဈဝ်ဒွင်းတူဝ်ဈဝ်ဝၢးဂူဆိ်းမီဝ်းလွဉ်ဈၢး။

a. လိုဝ်းမီဝ်းဂူဆိ်း။

b. လိုဝ်းဂူဆိ်းမီဝ်းဆဆိ်းဘထိဉ်းစပ,မဆ်ိဒွဲးပွင်,ဝၢးဘီးသင်ဈၢး။

30 ဂူဆိ်းတၢင်,တီးဒွင်းဂူဆိ်းဆိုင်းဝၢဆိ်းခံးဝၢးဂူဆိ်းမီဝ်းသင်။

a. လိုဝ်းမီဝ်းဂူဆိ်း။

b. (ပေးလိုဝ်းဆဆိ်းဘာမ်,မျိုဆိ်းလိုဝ်းဘာဆ်ိးဂူဆိ်းဝၢဆိ်းခံးဒွင်းလိုင်)လိုဝ်းဆဆိ်းပီဆ်ိဗဒူးလွဉ်မၢးပဆ်ိဝံးဈၢး။

c. (ပေးလိုဝ်းဆဆိ်းဘာမ်,မျိုဆိ်းလိုဝ်းဘာဆ်ိးဂူဆိ်းဝၢဆိ်းခံးဒွင်းလိုင်)လိုဝ်းဆဆိ်းယထိဉ်းစပ,မဆိ်း ဒွဲးပွင် ,ဝၢးဘီးသင်။

d. (ပေးလိုဝ်းဆဆိ်းဘာမ်,မျိုဆိ်းလိုဝ်းဘာဆ်ိးဂူဆိ်းဝၢဆိ်းခံးဒွင်းလိုင်)ဂူဆိ်းဝၢဆိ်းတင်းလံၢလွင်,ထုဉ်,လွဉ်။

31 ဂူဆိ်းဘၢးဆိုင်းဝၢဆိ်းခံးပီဆ်ိဂူဆိ်း ခိုဆ် မူတ်းဌၢးဘာမ်,ဆဆိ်ဟျေးမီးဂူဆိ်းတၢင်,မီဝ်းဌၢး။

a. All (X)/ Others too.

b. (ပေးပီဆ်ိဂူဆိ်းတၢင်,တီးမၢးယူ,လွမ်းလိုင်)ဈဝ်ပီ ဆ်ိဂူဆိ်းမီဝ်းလွဉ်ဈၢး။

c. (ပေးပီ ဆ်ိဂူဆိ်းတၢင်,မီဝ်းမၢ းယူ,လွမ်းလိုင်)ဈဝ်မီးလင်ဈးမွဉ်,လံၢဂွိုဆိ်း၊

i. လင်ဈးဂွိုဆိ်းဂူဆိ်းမီဝ်းဆဆိ်းမီးဆမ်ဘၢးဂွိုဝ်ဈၢး။

ii. ဂူဆိ်းမီဝ်းလွဉ်မီဝ်းဆဆိ်းဆပ်ဘၢဆ်,ဂွဝ်ဂူဆိ်းမီးဆမ်ဘၢးဂွိုဝ်ဈၢး။

PAYAP UNIVERSITY

32 (ပေးပီဆန်ဂူဆန်းတၢင်,တီးမၤးယူ,လွမ်းလိုင်)ယူ,လွမ်းဂၤဆ်မၤးတၢ့,သေထိုင်မိုဝ်းလီဝ်ဆံ့ဓးၤ့ဖ်ုး။

a. လွင်,လွဲးဘမ်,လွဲးဓးၤ။

b. (ပေးဘမ်,လွဲးလိုင်)မိုဝ်းဂွဆ်,ဘိဂ်,တင်းမိုဝ်းလီဝ်ဆံ့မဆ်းလီဘ်းလံၤး ဥ့ၤ့လိုင်,ဂ့ိဝ်ဝံ့ဓးၤဂူဆ်းလၢ့,တိဝၤဆ်းဆံ့ဆမ်ဂိုဆ်းမးၤ့ဖ်ုး။ဘမ်ဆဆ်ဒေး,ဥ့ၤ့ဖ်ုး။

33. ဂူဆ်း ခိုဆ် ဓဝ်လွင်,မီးဒေၢလိဘ်းလံၤးပံၤပေ,ဓးၤ့ဖ်ုး။

a. လွင်,လွဲးဘမ်,လွဲးဓးၤ။

b. (ပေးမီးလိုင်၊)လွင်,ဓဝ်ပိုတ်,ပၤင်သွဆ်လိဘ်း။

Village History

34. ဂူဆ်းဘာဆ်ယူ,တီးခွဲး၀ၤဆ်းမိုဝ်းလီဝ်ဆံ့ လုဘ်ွဂၤ့တီးလွဲမၤးယူ,ဓးၤ့။

a. လုဘ်ွဂၤ့တီးလွဲမၤးယူ,ဓးၤ့။

b. ဓဝ်မၤးယူလိမ်မိုဝ်းလွဲဓးၤ့။

c. (ပေး၀ၤ့ဓဝ်ဓံၤ့မၤးဘမ်,ပံ့,ပေးရှိင်လိုင်)မိုဝ်းဓဝ်ပံ့,မၤးယူ,၀ၤဆ်းဆံ့ဓဝ်ယူ,လွမ်းရှိမ်းစွမ်းဂူဆ်းမီဝ်းလွဲဓးၤ့။

d. (ပေး၀ၤ့ဓဝ်ဓံၤ့မၤးဘမ်,ပံ့,ပေးရှိင်လိုင်)တီးယူ,ဘဝ်,ဓဝ်ဆဆ်ဆ့ဓဝ်လွဲ့ဉ့ၤမ်းမီဝ်းလွဲဓ ၤ့။

e. ဥဝ်းပိုဝ်သင်ဧလးၤဓဝ်ဓံၤ့မၤးယူ,ဂၤ့တီးဆံ့းဓးၤ့။

f. သူလဝ်းယင်းမီးတၢင်းဘာဆ်ဘပ်းသိုပ်,ဂဆ်းယူ,တင်းပီးဆွင့်တီးဆဆ်းယူ,ဓးၤ့ဖ်ုး။

g. မိုဝ်းဥွဆ်တၢင်းဆဆ်ဆ့ဓဝ်လုဘ်ွဂၤ့တီးလွဲမၤးဓးၤ့။

People Group History

35. လိုဝ်.ခိုဝ်းဂူဆ်း ခိုဆ် ဓဝ်တၢင်း မူတ်းလူဘ်.တီးလွဲ ဓံၤ့မၤးယူ,ဓးၤ့

a. လုဘ်ွတီးလွဲမၤး။

b. ဓဝ်ဥွဆ်ဘဆ်ဓံၤ့မၤးဘၤ့တီးဆံ့းလၢ့လိမ်မိုဝ်းလွဲဓးၤ့။

c. ဥွဝ်းသင်ဓဝ်ပံ့,ပိတ်းရှိဆ်းဘဝ်,ဓဝ်မၤးဓးၤ့။

d. သူလဝ်းယင်းလံၤးဘပ်းသိုပ်းဂဆ်တင်းဂူဆ်းတီးဆဆ်းယူ,ဓးၤ့ဖ်ုး။

e. ဘဝ်,ငဝ်းလၢ့တိဓဝ်ဆဆ်ဆ့လုဘ်ွဂၤ့တီးလွဲမၤးဓးၤ့။

School

36. ဘၤးခွဲး၀ၤဆ်းဆဆ်ဆ့လွင်,မီးရှင်းဖြိဆ်းသွဆ်လိဘ်းဓးၤ့ဖ်ုး။

a. လွင်,မီး၊ဘမ်,မီးဓးၤ့။

b. (ပေးမီးလိုင်၊)ပိုဆ်းသွဆ်ထိုင်ဂဆ်ဆ့လွဲဓးၤ့။

c. (ပေးမီးလိုင်၊)ဓဝ်လွဲ့ဉ့ၤမ်းဘီးသင်သွဆ်ပဆ်ဓးၤ့။

d. (ပေးမီးလိုင်၊)ဂူဆ်းမီဝ်းလွဲလံၤလံၤမၤးဖြိဆ်းဓးၤ့။

e. (ပေးမီးလိုင်၊)လွင်,မီးလုဘ်းဥွဆ်,ရွဲင်းလံၤလၢတ်းလံၤမီဝ်းမၤးဖြိဆ်း လွမ်းဂၤဆ်၊ ဆပ်ဲ.ဘာဆ်,တၢင်းဆမ်မဆ်းယေးမီဝ်း၊ယေ,မီဝ်းဆမ်မွဘ်,ဘၤးရှိဝ်ဓးၤ့။

PAYAP UNIVERSITY

37. လုပ်ငန်းဘွဲ့ဆန်းလွင့်ဂျုံ့ဂွီဆန်းဘဝ်တီးရှင်းဂွီဆန်းတၢင်,ဝၢဆိုးတၢင်,ဝီင်းစၢးဂ့ၢး။
    a. လွင်,မီး,ဘာမ်,မီးစၢး။
    b. (ပေၢးမီးလိုင်၊)လုပ်ငန်းဘွဲ့ဆန်,ဘဆန်ဂျုံ့ဂွီဆန်းတၢင်,တီးဆဆန်,ၤမီးဆမ်မွဲ့ဂ်ငန်းဂၢးရှိဝ်စၢး။
    c. (ပေၢးမီးလိုင်၊)စဝ်ဂျုံ့သွဲဆန်ဘဝ်ဂွီဆန်းဘဝ်တီးလွဲစၢး။
    d. (ပေၢးမီးလိုင်၊)စဝ်ဂျုံ့သွဲဆန်ဘဝ်ထိုင်လဆန်,လွဲစၢး။
    e. (ပေၢးမီးလိုင်၊)တီးရှင်းဂွီဆန်းဆဆန်,လွဲ,ဂ္ဂၢမ်းမီဝ်းလွဲသွဲဆန်ပဆန်စၢး။
    f. (ပေၢးမီးလိုင်၊)ဂ့ူဆန်းမီဝ်းလွဲလံၤလံၤမၢးဂွီဆန်း။
38. လုပ်ငန်းဂွီဆန်းခွဲးဝၢဆိုးဆံ,ဂမ်းပၢးဆမ်ဂွီဆန်းဘဝ်ထိုင်လဆန်,လွဲစၢး။

Languages of Wider Communication

39. ဆွဂ်းသေဂ္ဂၢမ်း ခိုဆ် လွင်,မီးဂ္ဂၢမ်းမီဝ်းလွဲလွဲ့,လၢတ်းတေၢ့,ဂဆန်ထီဉ်းစၢး။
40. ဂ္ဂၢမ်းလၢတ်းဘာဆ်ဂ့ူဆန်းတင်းလံၤလွဲ့,ဆမ်သေပိုဆ်း။
    a. ပီဆ်ဗွဲ့လံၤလံၤဘာဆ်မေၢလၢတ်းဂ္ဂၢမ်း (LWC)လီလီ (e.g .. Types of people)
    b. ဂွပ်းသင်လေးစဝ်မေၢလၢတ်းလံၤလီ
    c. ပီဆ်ဗွဲ့လံၤလံၤဘာဆ်ဘာမ်,မေၢလၢတ်းလီ
        i. What types
        ii. Why?
41. ဂ့ူဆန်းတင်းဆမ်ခွဲးဂ္ဂၢမ်း(LWC) ဆဆန်,လွဲ့,ဂ္ဂၢမ်းဘာဆ်လွဲဆမ်လိုဝ်ပိုဆ်း
    a. ဂ္ဂၢမ်းဆဆန်, ပီဆ်မီဝ်းလွဲစၢး။
    b. ယေ,ပၢဂ်,တေမီးလံၤဟေၢ့လၢတ်းဂ္ဂၢမ်း (LWC)
42. ဂ့ူဆန်းတင်းဆမ်လၢတ်းဂ္ဂၢမ်း (LWC)တၢင်,မီဝ်းရှဝ်ပၢဂ်,ဘၢးရှိဝ်။
43. ပေၢးဂ့ူဆန်းဝၢဆိုးခွဲ,လံၤထုပ်းလုၢးဂ့ူဆန်းတၢင်,ဝၢဆိုးဘဆ်ဘာမ်,မေၢလၢတ်းဂ္ဂၢမ်း ခိုဆ် ဆဆန်, ...စဝ်လွဲ့,ဂ္ဂၢမ်းဘီးသင်လၢတ်းတေၢ့ပိုဆ်းစၢး။
44. တီးဘာဆ်ဂ့ူဆန်း ခိုဆ် စဝ်ဘံ့,ဂ္ဂၢ့,ဘံ့,မၢးဆဆန်,စဝ်လၢတ်းဂ္ဂၢမ်းသင်။
45. ဂ့ူဆန်း ခိုဆ် ဆွဲးဝၢဆိုးခွဲ,လွင်,ဘံ့,ဂ္ဂၢ့,စတ,ဆဂၤရှိဆန်းလွမ်းဂ့ူဆန်းတၢင်,မီဝ်းစၢးဂ့ၢး။
    a. လွင်,မီးဘာမ်,မီး။
    b. (ပေၢးမီးလိုင်၊)စဝ်ဂ္ဂၢ့,စတ,ဆဂၤရှိဆန်းလွမ်းဂ့ူဆန်းမီဝ်းလွဲစၢး။
46. ပေၢးဂ့ူဆန်းလံၤးဘာဆ်ပီဆ် ခိုဆ် ဝၢဆိုးခွဲ,စတ,ဆဂၤရှိဆန်းလူလှဲးဂဆ်တင်း ဂ့ူဆန်းယိင်းဘာဆ် ဘာမ်,လွဲ့ ခိုဆ် ဆွဲ,လိုင်
    a. စဝ်ဘွဆ်ဘဆ်ယူ,ဆွဲးဝၢဆိုး ခိုဆ် ဂ့ၢး ယူ,တၢင်,ဝၢဆိုးဂ့ၢး။
    b. လုပ်ငန်းဘွဲ့,စဝ်ဆဆန်.လွဲ့.ဂ္ဂၢမ်းမီဝ်းလွဲလၢတ်းတေၢ့,ဂဆန်စၢး
    c. ဂွပ်းသင်လုပ်ငန်းဘွဲ့,စဝ်လၢတ်းဂ္ဂၢမ်းမီဝ်းဆဆန်.
    d. ပေၢးဝၢ့ဘာမ်,လွဲ့ဂ္ဂၢမ်း ခိုဆ် လိုင်လွင်,စဝ်ယင်းလၢတ်းလံၤဂ္ဂၢမ်း ခိုဆ် ယူ,စၢးဂ့ၢး။
    e. ဂ့ူဆန်းလံၤးမွဲ့ဂ်ငန်းဘၢးရှိဝ်စတ,ဆဂၤရှိဆန်းလွမ်းဂ့ူဆန်းတၢင်,မီဝ်း။
        i. ဂ့ူဆန်းတင်းဆမ်။
        ii. ဘိမ်းဗွင်း။
        iii. ဘာမ်,ပေၢးမီးဘၢးရှိဝ်။

PAYAP UNIVERSITY

47. ပေါ်းဂူဆိုးယိင်းဘဆ်ပီဆ် ခိုဆ် ဝါဆ်းဆံ့စတ,ဆေါ်ရှိုဆ်းလူလ်းဂဆ်တင်း ဂူဆ်းလံါး ဘဆ် ဘမ်,ဏ်း ခိုဆ် ဆံ့လိုင်

a. ခဝ်ဘွဆ်ဂဆ်ယူ,ဆ်ုးဝါဆ်း ခိုဆ် ရှါး ယူ,တါင်,ဝါဆ်းရှါး။
b. လုဂ်းဘွဆ်,ခဝ်ဆဆ်.ဏ်.ဂွါမ်းမီဝ်းလ်ုလါတ်းတေါ့,ဂဆ်ခါး
c. ဂွပ်းသင်လုဂ်းဘွဆ်,ခဝ်လါတ်းဂွါမ်းမီဝ်းဆဆ်.
d. ပေါ်းဝါးဘမ်,ဏ်းဂွါမ်း ခိုဆ် လိုင်လွင်,ခဝ်ယင်းလါတ်းလံးဂွါမ်း ခိုဆ် ယူ,ခါးရှါး။
e. ဂူဆ်းယိင်းမှဂ်းဂါးရှိုဝ်စတ,ဆေါ်ရှိုဆ်းလွမ်းဂူဆ်းတါင်,မီဝ်း။
   i. ဂူဆ်းတင်းဆမ်။
   ii. ဂမ်းဇွင်း။
   iii. ဘမ်,ပေါ်းမီးဂါးရှိုဝ်။

Interviewer Observations

[Ideally, answer these questions in your notebook right away. If you can't do that, try to do so as soon as you can, perhaps at the end of each day's work.]

48. Were there any **distractions** or **interruptions** that interfered with the flow of the interview or seemed to influence some of the responses?
49. Did the subject seem to **understand** the language of elicitation?
50. Did the subject seem **shy** or **fairly confident** about expressing his/her opinions?
51. Did the interpreter change any of the questions? **Note what was actually asked.**
52. **Other observations** about the interview?
53. Were there any **questions** that seemed to **work really well**? Which questions? Why?
54. Were there any **questions** that seemed to **not work well**? Which questions? Why?

PAYAP UNIVERSITY

APPENDIX 8 PHONOLOGY SKETCH OF KHUEN VARIETIES RECORDED ON SURVEY

PAYAP UNIVERSITY

This appendix presents a brief sketch of the phonology of the seven varieties recorded on the first survey, namely Yang Lorh, Pa Jahm, Wan Jorhn, Yang Kway, Wan Jay, Wan Kahng, and Murng Jem.

Consonants

This section describes and discusses the initial consonant phonemes and the following section will focus on final consonants.

Initial consonants

The entries in Table 110 below show contrasts in analogous or identical environments that support the claim that /p/, /b/, /w/ and /m/ are independent phonemes. There is much evidence to support the existence of /p/, /m/ and /w/. A key issue in the literature is whether or not /b/ exists as a phoneme apart from /w/ (Rasi 1978:15). As the data row for the /b/ phoneme in Table 110 shows, there is some variation between [b], [w] and [v]. The extent of this variation between [b] and [w] differs from speech variety to speech variety.

Phoneme	Ref.	English Gloss	Yang Lorh[51]	Pa Jahm	Wan Jorhn	Yang Kway	Wan Jay	Wan Kahng	Murng Jem
p	172	lungs	pɔːt^{21}	pɔːt^{21}	pɔːt^{21}	pɔːt^{21}	pɔːt^{21}	pɔːt^{21}	pɔːt^{31}
	270	return (home)	pɔːk^{32} maːᵓ^{33}	pɔːk^{21} maːᵓ^{33}	pɔːk^{21} maːᵓ^{33}	pɔːk^{32} maːᵓ^{34}	pɔːk^{31} maːᵓ^{34}	pɔːk^{22} maːᵓ^{44}	pɔːk^{31} maːᵓ^{44}
b	249	extinguish (fire)	bɔːt^{21} pʰaj^{44}	bɔːt^{21} pʰaj^{44}	bɔːt^{21} pʰaj^{44}	bɔːt^{22} faj^{44}	bɔːt^{12} faj^{33}	wɔːt^{21} pʰaj^{44}	vɔːt^{21} faj^{44}
w	99	monkey	liŋ^{44}	wɔːk^{21}	ʔiːᵓ^{44} wɔːk^{21}	wɔːk^{31}	wɔːk^{31}	wɔːk^{21}	ʔi^{55} wɔːk^{41}
m	240	grind	mɔːᵓ^{22}	mɔːᵓ^{22}	mɔːᵓ^{22}	mɔːᵓ^{22}	mɔːᵓ^{22}	mɔːᵓ^{22}	mɔːᵓ^{22}

Table 110 Contrasts for initial labials /p, b, w, m/

Further contrasts for [w] and [b] are given in Table 111.

[51] The phonetic transcription uses the International Phonetic Alphabet (IPA). The transcription of tone is based on Chao (1930).

PAYAP UNIVERSITY

Phoneme	Ref.	English Gloss	Yang Lorh	Pa Jahm	Wan Jorhn	Yang Kway	Wan Jay	Wan Kahng	Murng Jem
b	53	leaf	waːj^{24}	waj^{44} maˑj^{52}	waj^{44} maˑj^{52}	baj^{44}	baj^{44} maˑj^{41}	baj^{44} maˑj^{52}	waj^{33} maˑj^{52}
w	397	quick	waj^{44} waj^{44}	waj^{44}	waj^{4}	waːj^{44}	waˑj^{43}	waj^{44}	vaj^{44}

Table 111 Further contrasts for /b/ and /w/

Differences between speech varieties in their use of [b], [v] and [w] are demonstrated further by the entries in Table 112 where all reflexes in the wordlist of PT *ʔb are displayed.

PT Initial	Ref.	English Gloss	Yang Lorh	Pa Jahm	Wan Jorhn	Yang Kway	Wan Jay	Wan Kahng	Murng Jem
***ʔb**	128	fly (verb)	vin^{33}	vin^{44}	vin^{44}	bin^{44}	bin^{44}	bin^{44}	bin^{23}
	241	squeeze (lemon)	biːp^{22}	biːp^{22}	viːp^{21}	biːp^{22}	biːp^{22}	biːp^{11}	biːp^{22}
	135	fishhook	kʰoːˑ^{22} vet^{55}	kʰɔːˑ^{24} wɛt^{44}	kʰɔːˑ^{22} weːt^{42}	kʰɔːˑ^{31} wʲɛt^{45}	kʰɔːˑ^{23} bɛt^{55} paːˑ^{14}	kʰoːˑ^{22} wet^{55}	kʰɔːˑ^{24} wet^{55}
	144	shoulder	hoːˑ^{24} waːˑ^{21}	hoːˑ^{14} waːˑ^{21} / baːˑ^{21}	hoːˑ^{24} waːˑ^{11}	hoːˑ^{24} baːˑ^{21}	hoːˑ^{35} baːˑ^{12}	hoːˑ^{23} waːˑ^{21}	hoːˑ^{24} vaːˑ^{21}
	259	village	waːn^{33}	waːn^{33}	vaːn^{33}	baːn^{33}	waːn^{43}	baːn^{32} / waːn^{32}	waːn^{33}
	390	thin (adj)	waːŋ^{44}	waːŋ^{44}	waːŋ^{44}	baːŋ^{34}	baːŋ^{43}	baːŋ^{33}	waːŋ^{24}
	53	leaf	waːj^{34}	waj^{4} maˑj^{52}	waj^{44} maˑj^{52}	baj^{44}	baj^{44} maˑj^{41}	baj^{44} maˑj^{52}	waj^{33} maˑj^{52}
	249	extinguish (fire)	bɔːt^{21} pʰaj^{44}	bɔːt^{21} pʰaj^{44}	bɔːt^{21} pʰaj^{44}	bɔːt^{22} faj^{44}	bɔːt^{12} faj^{33}	wɔːt^{21} pʰaj^{44}	vɔːt^{21} pʰaj^{44}
	188	blind (adj)	bɔːt^{32}	taːˑ^{14} bɔːt^{21}	taːˑ^{24} wɔːt^{21}	taːˑ^{14} bɔːt^{31}	taːˑ^{13} bɔːt^{11}	taːˑ^{23} bɔːt^{21}	taːˑ^{24} wɔːt^{32}
Total	**[b]**		3	3	1	8	8	5	2
	[b]~ [w]		0	1	0	0	0	1	0
	[w]		4	4	5	1	1	3	5
	[v]		2	1	3	0	0	0	2

Table 112 Reflexes of PT initial *ʔb

PAYAP UNIVERSITY

The final four rows of Table 112 give frequencies of occurrence of the various phones. The row labelled [b]~[w] gives the number of instances where an LRP displayed free variation in separate replications of the wordlist item or the LRP offered more [b] and [w] as alternative pronunciations of the particular item.

The frequency of occurrence rows show that Yang Kway and Wan Jay use [b] as the reflex of PT *ʔb in eight out of nine examples. This along with the contrastive evidence in Table 110 and Table 111 strongly support the claim that Yang Kway and Wan Jay preserve /b/ and /w/ as separate phonemes. That Yang Kway and Wan Jay should pattern the same way is in keeping with their geographical location – both villages lie in Murng Lang village tract.

Before considering the evidence for the other varieties, it is worth noting that contemporary reflexes of PT *w and *hw show some variation between [w] and [v]. There is no evidence however of free variation between [w] and [b] in reflexes of *w and *hw. This shows that the instances of [b] should not be attributed to a general process of free variation between [w] and [b]. Taking into account previous research on Khuen phonology (Egerød 1959; Gedney [1964] 1994) as described in Chapter 2, it may be hypothesised that this is evidence that a process of phonological change is underway in Khuen. The status of the historical /b/ phoneme appears to be weakening – a process more advanced in some speech varieties than others. There is an element of subjectivity in deciding what constitutes the 'death' of a phoneme. The most conservative approach to interpreting the present data is to posit a /b/ phoneme for every variety that uses [b] at least once with the caveat that due to phonological change the status of the phoneme is dubious. A more circumspect approach would posit the /b/ phoneme when [b] is used in a majority of the examples, refusing to draw a conclusion when the evidence is mixed. This approach is perhaps better as it is more in keeping with the fact that this phonological sketch is based on a very limited number of words and more data is needed before strong conclusions can be drawn about the status of phonemes for which the present evidence is mixed. In

PAYAP UNIVERSITY

particular the only varieties where there is strong evidence in favour of the /b/ phoneme are Yang Kway and Wan Jay with [b] used in 8 out of 9 instances in the examples in Table 112. Wan Jorhn also used [b] in a majority (5 out of 9) of the examples in Table 112.

The entries in Table 113 show contrasts in analogous or identical environments that support the claim that /p^h/ and /f/ are independent phonemes.

Phoneme	Ref.	English Gloss	Yang Lorh	Pa Jahm	Wan Jorhn	Yang Kway	Wan Jay	Wan Kahng	Murng Jem
f	166	palm (hand)	$p^ha:^{21}$ mɯ:^{44}	ʔɔŋ^{44} mɯ:^{44}	ʔɔˑŋ^{44} mɯ:^{44}	$p^ha:^{31}$ mɯ:^{44}	fa:^{22} mɯ:^{33}	$p^ha:^{21}$ mɯ:^{44}	$p^ha:^{21}$ mɯ:^{44}
p^h	226	split (verb)	$p^ha:^{22}$	$p^ha:^{11}$	$p^ha:^{11}$	$p^ha:^{52}$	$p^ha:^{11}$	$p^ha:^{11}$	$p^ha:^{21}$ / fa:^{21}
f	8	rain (noun)	p^hot^{12} / p^hon^{12}	$p^hɔn^{24}$	p^hon^{24}	fon^{24}	fɔn^{24}	p^hun	p^hun^{24}
p^h	145	hair	k^hon^4 ho:^{24}	$p^hɔm^{14}$	k^hon^{24} ho:^{24}	$p^hɔm^{24}$ ho:^{24}	$p^hɔm^{35}$ ho:^{35}	p^hom^{24}	p^hom^{34} ho:^{24}

Table 113 Contrasts for initial labials /p^h, f/

As can be seen from the table entries there are differences between the varieties in regards to these two segments. The only speech varieties to show consistent use of [f] as the modern reflex of PT *f or *v are Yang Kway and Wan Jay. This pattern can be seen more fully in Table 114.

PAYAP UNIVERSITY

PT Initial	Ref.	English Gloss	Yang Lorh	Pa Jahm	Wan Jorhn	Yang Kway	Wan Jay	Wan Kahng	Murng Jem
*f	166	palm (hand)	$p^ha:^{21}$ mɯ:^{44}	ʔɔŋ^{4} mɯ:^{44}	ʔɔˑŋ^{44} mɯ:^{44}	$p^ha:^{31}$ mɯ:^{44}	fa:^{22} mɯ:^{33}	$p^ha:^{21}$ mɯ:^{44}	$p^ha:^{21}$ mɯ:^{44}
	7	cloud	mɤˑj^{11}	$p^ha:^{33}$ $p^hɔn^{35}$	$p^ha:^{52}$	fa:^{43}	fa:^{433}	p^ha^{31}	$p^ha:^{42}$
	328	dream (verb)	nɔ:n^{44} p^han^{23} han^{23}	p^han^{34} han^{24}	nɔ:n^{4} fan^{34} han^{24}	nɔ:n^{34} fan^{13} han^{13}	fan^{35} han^{25}	nɔ:n^{44} p^han^{24}	nɔ:n^{44} fan^{24}
	8	rain (noun)	p^hot^{12} / p^hon^{12}	$p^hɔn^{24}$	p^hon^{24}	fon^{24}	fɔn^{24}	p^hun	p^hun^{24}
*v	4	sky	tɔˑŋ^{53} $p^ha:^{42}$	tɔ:ŋ^{52} $p^ha:^{52}$	tɔˑŋ^{53} $p^ha:^{41}$	tɔˑŋ^{53} fa:^{51}	tɔ:ŋ^{51} fa:^{41}	tɔˑŋ^{51} $p^ha:^{42}$	tɔŋ^{53} $p^ha:^{42}$
	317	listen	$t^hɔ:m^{31}$	$p^haŋ^{44}$	$p^haŋ^{44}$	faŋ^{44}	faŋ^{44}	$p^haŋ^{44}$	$p^haŋ^{44}$
	246	fire	p^haj^{43}	p^haj^{44}	faj^{44}	faj^{44}	faj^{43}	p^haj^{44}	p^haj^{44}
	343	dance (verb)	$p^hɔ:n^{52}$	$p^hɔ:n^{52}$	fɔ:n^{52}	fɔ:n^{52}	fɔ:n^{51}	$p^hɔ:n^{52}$	$p^hɔˑn^{52}$
Total	[f]		0	0	3	7	8	0	1
	[p^h]		6	7	4	1	0	8	7

Table 114 Reflexes of PT *f and *v

The entries in Table 114 show all instances in the Khuen 406 wordlist of words with proto[52] initials *f or *v. The final two rows give the frequencies of occurrence of [f] and [p^h]. The speech varieties Yang Lorh; Pa Jahm; Wan Kahng; and Murng Jem use [p^h] almost exclusively. Yang Kway and Wan Jay on the other hand use [f] almost exclusively. The evidence for Wan Jorhn is mixed, with 3 instances of [f] and 4 instances of [p^h] out of a total of 7 words with proto initial *f or *v. Due to the lack of contrastive evidence in Table 113 in favour of Wan Jorhn having a distinct phoneme /f/, the tentative conclusion is that the only speech varieties with enough evidence to support a separate /f/ phoneme are Yang Kway and Wan Jay.

[52] In determining the proto form of the initial Doug Cooper's online search tool 'Proto Tai 'o' Matic' was used. The tool provides a rapid search facility for the wordlists and reconstructions in Brown (1965); Li (1977); Jonsson (1991) and Luo (1997).

PAYAP UNIVERSITY

The entries in Table 115 show contrasts in identical environments that support the claim that /p/, /pʰ/ and /h/ are independent phonemes for all speech varieties apart from Murng Jem where the contrast is in an analogous environment.

Phoneme	Ref.	English Gloss	Yang Lorh	Pa Jahm	Wan Jorhn	Yang Kway	Wan Jay	Wan Kahng	Murng Jem
h	52	root	haːk^{21}	haːk^{11} maˑj^{41}	haːk^{22} maˑj^{31}	haːk^{31}	haːk^{21} maˑj^{41}	haːk^{21} maˑj^{41}	haːk^{31} maˑj^{41}
p	381	hundred (persons)	paːk^{11} kɔː^{52}	paːk^{21}	paːk^{21}	paːk^{21}	paːk^{22} nɯŋ^{11}	paːk^{21}	paːk^{21}
pʰ	90	spade	pʰaːk^{31} soˑk^{31}	pʰaːk^{21} soˑk^{22}	pʰaːk^{22} soːk^{32}	pʰaːk^{31} soːk^{31}	pʰaːk^{32} soːk^{21}	pʰaːk^{31} soˑk^{31}	pʰaŋ^{24} suk^{31}

Table 115 Contrasts for initial labials /p, pʰ, h/

The entries in Table 116 show contrasts in analogous or identical environments that support the claim that /f/ (or /pʰ/), /s/, /tɕ/ and /h/ are independent phonemes.

Phoneme	Ref.	English Gloss	Yang Lorh	Pa Jahm	Wan Jorhn	Yang Kway	Wan Jay	Wan Kahng	Murng Jem
h	321	see (verb)	han^{24}	han^{24}	han^{24}	han^{24}	han^{14} jaːw^{51}	han^{14}	han^{24}
f or pʰ	328	dream (verb)	nɔːn^{44} pʰan^{23} han^{23}	pʰan^{34} han^{24}	nɔːn^{44} fan^{34} han^{24}	nɔːn^{34} fan^{13} han^{13}	fan^{35} han^{25}	nɔːn^{44} pʰan^{24}	nɔːn^{44} fan^{24}
s	366	what?	ʔi^{44} saŋ^{23}	saŋ^{24}	ʔi^{44} saːŋ^{54}	saŋ^{24}	ʔiː^{21} saŋ^{24}	saŋ^{24}	saŋ^{24}
tɕ	300	pull (verb)	tɕan^{32}	tsan^{24}	tɯːt^{52}	tsan^{13}	tsan^{14}	tsan^{24}	tsan^{24}

Table 116 Contrasts for initial friction sounds /f or pʰ, s, tɕ, h/

The entries in Table 117 show contrasts in analogous or identical environments that support the claim that /h/, /tʰ/ and /t/ are independent phonemes.

PAYAP UNIVERSITY

Phoneme	Ref.	English Gloss	Yang Lorh	Pa Jahm	Wan Jorhn	Yang Kway	Wan Jay	Wan Kahng	Murng Jem
h	154	ear	huː^{14}	huː^{14}	huː^{34}	huː^{34}	huː^{14}	huː^{23}	huː^{24}
tʰ	303	rub, scrub	tʰuː^{24}	tʰuː^{24}	tʰuː^{34}	tʰuː^{13}	tʰoː^{44}	tʰuː^{24}	tʰuː^{24}
t	261	door	pʰak^{55} tuː^{23}	pʰaʔ^{55} tuː^{24}	pʰak^{55} tuː^{24}	pʰaʔ^{55} tuː^{14}	pʰaʔ^{55} tuː^{24}	pʰat^{55} tuː^{23}	pʰak^{55} tuː^{23}

Table 117 Contrasts for alveolar initials /tʰ, t/

The entries in Table 118 show contrasts in analogous or identical environments that support the claim that /l/ and /d/ are independent phonemes. As the entries in the table show, there are differences among the Khuen speech varieties regarding the phones [d] and [l]. These differences are displayed more fully in Table 119.

Phoneme	Ref.	English Gloss	Yang Lorh	Pa Jahm	Wan Jorhn	Yang Kway	Wan Jay	Wan Kahng	Murng Jem
d	177	bone	luːk^{31}	duːk^{22}	luːk^{21}	duːk^{31}	duːk^{22}	duˑk^{21}	luːk^{31}
l	208	child (offspring)	luːk^{33}	luˑk^{21}	luk^{22} taw^{33}	luːk^{31}	luːk^{32} ʔɔːn^{11}	duk^{22}	luˑk^{21}

Table 118 Contrasts for alveolar initials /d/, /l/

The entries in Table 119 show the reflexes in the modern speech varieties of the PT phonemes *ʔd, *ʔbl/r, and *dl/r (=*ʔd in PSWT). The final two columns of the table give the frequencies of occurrence of the phones [d], [l] and [ɹ] as well as the number of instances where free variation was evident either in the separate replications of the wordlist item in the recording process or where the LRP deliberately gave two alternative pronunciations. The phone [ɹ] occurs in the phonetic transcription of the recorded wordlist although in each case [l] was reported in the field transcription of the respective items. One significant difference between the field transcription and the recording is that the recording employed a tone frame. Moreover the final phone of the word preceding the word of interest is [n] which could impact the realisation of the initial consonant of the word of interest. For the present purposes it makes little difference whether these occurrences of [ɹ] are included in the analysis or omitted since there are only 3 instances in total. These will therefore be disregarded in the following discussion.

PAYAP UNIVERSITY

PT Initial	Ref.	English Gloss	Yang Lorh	Pa Jahm	Wan Jorhn	Yang Kway	Wan Jay	Wan Kahng	Murng Jem
*ʔd	254	good	liː^{22}	diː^{44}	liː^{44}	diː^{44}	liː^{44}	liː^{23}	diː^{24}
	348	scold	laː^{21}	laː^{22}	t^{h}aː^{52}	t^{h}aː^{51}	t^{h}aː^{51}	p^{h}aː^{52}	laː^{32}
	106	suck (milk)	luːt^{22}	luːt^{21}	luːt^{21}	duːt^{31}	duːt^{12}	luːt^{21}	luːt^{21}
*ʔbl/r	2	moon	lɤːn^{44}	dɤːn^{44}	lɤːn^{44}	dɤːn^{44}	lɤːn^{44}	lɤːn^{44}	lɯn^{44}
	54	flower	lɔːk^{32}	dɔːk^{21} maːj^{52}	ɹɔːk^{32} maːj^{42}	dɔːk^{31}	dɔːk^{2} maːj^{41}	ɹɔːk^{21} maːj^{42}	dɔːk^{21} maːj^{41}
*dl/r	83	raw, unripe	lip^{44}	dip^{55}	lip^{55}	ʔan^{44} dip^{55}	ʔan^{33} lip^{55}	dip^{55} / lip^{55}	dip^{55}
	406	red	ʔan^{33} lɛːŋ^{44}	lɛːŋ^{44}	lʲɛːŋ^{44}	lɛːŋ^{44}	ʔan^{44} dɛːŋ^{44}	ʔan^{44} lʲɛːŋ^{34}	lɛəŋ^{24}
	11	sunshine	lɛːt^{31}	dɛːt^{22}	lⁱɛːt^{21} hɔːn^{41}	saːj^{24} dɛːt^{32}	dɛːt^{32}	lⁱɛːt^{32}	lⁱɛːt^{42}
	3	star	laːw^{44}	laːw^{44} / daːw^{44}	laːw^{34}	daːw^{44}	daːw^{44}	laːw^{34}	laːw^{44}
	404	black	ʔan^{44} lam^{33}	lam^{44}	lam^{44}	dam^{44}	ʔan^{44} dam^{44}	ʔan^{44} lam^{33}	ʔan^{23} lam^{24}
	177	bone	luːk^{31}	duːk^{2}	luːk^{21}	duːk^{31}	duːk^{2}	duˑk^{21}	luːk^{31}
	25	mountain	lɔːj^{44}	dɔːj^{44}	lɔːj^{44}	lɔːj^{44}	dɔːj^{4}	ɹɔːj^{3}	lɔːj^{23}
Total	[d]		0	7	0	9	8	1	3
	[d]~ [l]		0	1	0	0	0	1	0
	[l]		12	4	10	2	3	7	9
	[ɹ]		0	0	1	0	0	2	0

Table 119 Reflexes of *ʔd, *ʔbl/r, *dl/r

Examining the frequencies of occurrence of the phones [d] and [l] in Table 119 it is clear that Yang Lorh and Wan Jorhn only have one phoneme /l/ since there are no occurrences of [d] in the data for these varieties. Yang Kway and Wan Jay have [d] 9 out of 11 and 8 out of 11 times respectively and so would appear to have /d/ and /l/ as separate phonemes. Pa Jahm has 7 instances of [d] to 3 instances of [l] and one instance of [d]~[l] as well as the contrast in identical environment in Table 118 and so is taken to have /d/ and /l/ phonemes. Although Wan Kahng and Murng Jem have 1 and 3 occurrences of [d] respectively this is not convincing evidence that [d] is a separate phoneme so for these two varieties

PAYAP UNIVERSITY

[d] and [l] are suspected to be allophones of the phoneme /l/ but more data is needed to confirm this.

The entries in Table 120 show contrasts in analogous or identical environments that support the claim that /t/ is a separate phoneme from /d/ if it exists or /l/ if /d/ does not exist as a separate phoneme. The table also provides contrasts with the phoneme /n/.

Phoneme	Ref.	English Gloss	Yang Lorh	Pa Jahm	Wan Jorhn	Yang Kway	Wan Jay	Wan Kahng	Murng Jem
t	279	fall (object)	tok^{55}	tɔk^{55}	toˑk^{55}	tɔk^{55}	tɔk^{55}	tok^{54}	tok^{55}
	341	answer (verb)	tɔːp^{21}	tɔːp^{22}	tɔːp^{21}	tɔːp^{21}	kʰaːj^{14} pan^{24}	tɔːp^{21}	tɔːp^{21}
d or l	54	flower	lɔːk^{32}	dɔːk^{21} maˑj^{52}	ɹɔːk^{32} maˑj^{42}	dɔːk^{31}	dɔːk^{2} maːj^{41}	ɹɔːk^{21} maˑj^{42}	dɔːk^{21} maˑj^{41}
n	286	outside	taŋ^{44} nɔːk^{32}	taŋ^{54} nɔːk^{32}	taːŋ^{44} nɔːk^{21}	taːŋ^{44} nɔːk^{31}	taːŋ^{53} nɔːk^{331}	taːŋ^{44} nɔːk^{21}	taŋ^{44} nɔːk^{32}

Table 120 Contrasts for alveolar initials /n/, /t/ and /d/ or /l/

The entries in Table 121 show contrasts in analogous or identical environments that support the claim that /l/ and /n/ are independent phonemes.

Phoneme	Ref.	English Gloss	Yang Lorh	Pa Jahm	Wan Jorhn	Yang Kway	Wan Jay	Wan Kahng	Murng Jem
l	10	wind (noun)	lom^{44}	lɔm^{44}	lom^{44}	lom^{44}	lɔm^{44}	lom^{44}	lom^{44}
n	105	milk	noːm^{44}	nam^{53} nɔm^{44} boːˑ^{44}	nam^{54} nom^{44} woːˑ^{44}	nam^{54} nɔm^{44} voːˑ^{44}	nam^{52} nɔm^{34}	woːˑ^{44}	nam^{53} nɔm^{33} woːˑ^{33}
	267	sleep (verb)	nɔːn^{44} lap^{55}	nɔːn^{44}	nɔːn^{44} lap^{55}	nɔːn^{44}	nɔːn^{43}	nɔːn^{44}	nɔːn^{44}

Table 121 Contrasts for alveolar initials /l/ and /n/

The entry in the Wan Kahng column for item 105 ‘milk’ appears to be a mistake – the given word *woːˑ*^{4} normally means ‘cow’, as in the entries for Pa Jahm, Wan Jorhn, Yang Kway and Murng Jem.

PAYAP UNIVERSITY

The entries in Table 122 show that in contemporary speech varieties there are two reflexes – [ts] and [tɕ] – of PT initials *c and *ɟ. The entries in the table show that these are allophones of the same phoneme conditioned by the height of the following vowel, although there is also some free variation between the two phones. The entries for wordlist items 376 'seven' and 302 'wipe' show contrasts in identical environments for tone, testimony to the fact that the two words derived from different proto initial consonants.

PT Initial	Ref.	English Gloss	Yang Lorh	Pa Jahm	Wan Jorhn	Yang Kway	Wan Jay	Wan Kahng	Murng Jem
*c	111	hurt (verb)	tɕɛp^{55}	tɕɛp^{55}	tɕep^{55}	tɕep^{55}	tɕɛp^{55}	tɕep^{55}	tɕɛp^{55}
	376	seven (persons)	tɕet^{54} kɔː^{52}	tɕɛt^{54}	tɕet^{44}	tɕet^{55}	tɕɛt^{54}	tɕet^{54}	tɕet^{55}
	228	plate	tsaːn^{24}	tsaːn^{24}	tɕaːn^{24}/ tsaːn^{24}	tsaːn^{14}	tsaːn^{14}	tsaːn^{24}	tsaːn^{23}
	314	evil (adj)	tɕaj^{3} lam^{33}	tsaj^{24} lam^{44}	tɕaˑj^{24} lam^{44}	tɕaˑj^{24} lam^{44}	tɕaˑj^{324} dam^{44}	tsaj^{23} lam^{33}	tsaj^{23} lam^{24}
*ɟ	302	wipe	tɕɐˑt^{52}	tɕɛt^{52}	tɕet^{53}	tɕɛt^{53}	tɕɛt^{53}	tɕet^{53}	tɕet^{53}
	258	name	tsɯː^{52} / tɕɯː^{22}	tɕɯː^{31}	tɕɯː^{11}	tɕɯː^{42}	tɕɯː^{41}	tɕɯː^{11}	tɕɯː^{22}
	296	rope	tɕɯːk^{43}	tɕɯːk^{21}	tɕɯːk^{21}	tsɯːk^{32}	tɕɤːk^{31}	tɕɯːk^{32}	tɕɯːk^{32}
	354	help (verb)	tɕɔˑj^{41} lɤː^{33}	tɕoj^{21}	tsɔj^{21} lɤː^{24}	tsoəj^{31}	tɕɔːj^{31} kan^{24}	tɕɔˑj^{21}	tɕɔˑj^{31}
	229	spoon	tsɔːn^{52}	tɕɔːn^{52}	tsɔːn^{51}	tsɔːn^{52} / tɕɔːn^{52}	tɕɔːn^{51}	tɕɔːn^{53}	tɕɔːn^{52}
	316	to be so	tsaj^{32}	tsaj^{21}		tɕaj^{32} jaːw^{42}			tsaj^{23} jaːw^{42}
	93	elephant	tɕaːŋ^{53}	tsaːŋ^{52}	tɕaːŋ^{52}	tsaːŋ^{52}	tsaːŋ^{52}	tɕaːŋ^{41}	tsaːŋ^{52}
Total	[ts]		3	4	2	4	2	2	4
	[ts]~[tɕ]		1	0	1	1	0	0	0
	[tɕ]		7	7	7	6	8	8	7

Table 122 Reflexes of PT initials *c and *ɟ

The entries in Table 123 show contrasts in analogous or identical environments that support the claim that /tɕ/ and /j/ are independent phonemes.

PAYAP UNIVERSITY

Phoneme	Ref.	English Gloss	Yang Lorh	Pa Jahm	Wan Jorhn	Yang Kway	Wan Jay	Wan Kahng	Murng Jem
tɕ	316	to be so	tsaj^{32}	tsaj^{21}		tɕaj^{322} jaːw^{42}			tsaj^{23} jaːw^{42}
j	387	big (adj)	jaj^{21}	jaj^{22}	jaj^{31}	jaj^{12}	jaj^{22}	jaj^{22}	jaj^{22}
tɕ	111	hurt (verb)	tɕɛp^{55}	tɕɛp^{55}	tɕep^{55}	tɕep^{55}	tɕɛp^{55}	tɕep^{55}	tɕɛp^{55}
j	275	sew (verb)	jep^{55}	jip^{55}	jip^{55}	dzjip^{55}	jip^{55}	jip^{55}	ʑip^{55}

Table 123 Contrasts for palatal initials /tɕ/ and /j/

The entries in Table 124 show contrasts in analogous or identical environments that support the claim that /h/, /k^{h}/ and /k/ are independent phonemes. The table also shows that some varieties have an initial cluster /kw/ although the latter is discussed more fully in relation to Table 125.

Phoneme	Ref.	English Gloss	Yang Lorh	Pa Jahm	Wan Jorhn	Yang Kway	Wan Jay	Wan Kahng	Murng Jem
h	319	search (verb)	sɔː^{52} haː^{13}	sɔː^{52}	soː^{52} haː^{13}	sɔː^{52} haː^{13}	soː^{51} haː^{14}	sɔːʔ^{52} haː^{13}	sɔː^{52} haː^{24}
k^{h}	179	leg	k^{h}aː^{24}	k^{h}aː^{24}	k^{h}aː^{24}	k^{h}aː^{24}	k^{h}aː^{14}	k^{h}aː^{24}	k^{h}aː^{24}
k	129	crow	kaː^{22} lam^{44}	kaː^{13} lam^{44}	kaː^{13} lam^{44}	kaː^{14}	kaː^{24} dam^{44}	kaː^{23} lam^{44}	kaː^{24}
kw	165	right (side or hand)	k^{h}ɔːn^{44} kaː^{13}	k^{h}ɔːn^{24} kaː^{13}	muː^{44} kaː^{34}	p^{h}aj^{22} kwaː^{14}	k^{h}oːn^{24} kwaː^{14}	taˑŋ^{44} kwaː^{23}	p^{h}aˑj^{21} kwaː^{24}

Table 124 Contrasts for velar initials /k^{h}, k, kw/ and /h/

The entries in Table 125 show the contemporary reflexes of the PT velar clusters *kw, *khw and *ɣw.

PAYAP UNIVERSITY

PT Initial	Ref.	English Gloss	Yang Lorh	Pa Jahm	Wan Jorhn	Yang Kway	Wan Jay	Wan Kahng	Murng Jem
***kw**	97	deer	kaːŋ^{13}	kaːŋ^{14}	kwaːŋ^{24}	kaːŋ^{14}	kwaːŋ^{24}	kwaːŋ^{112}	kwaːŋ^{24}
	393	wide, broad	kaːŋ^{44}	kaːŋ^{43}	kaːŋ^{32}	kwaːŋ^{43}	kwaːŋ^{33}	kwaːŋ^{32}	kwaːŋ^{33}
***khw**	165	right (side or hand)	kʰɔːn^{44} kaː^{13}	kʰɔːn^{24} kaː^{13}	muː^{44} kaː^{34}	pʰaj^{22} kwaː^{14}	kʰoːn^{24} kwaː^{14}	taˑŋ^{44} kwaː^{23}	pʰaˑj^{21} kwaː^{24}
***ɣw**	247	smoke	kan^{44} pʰaj^{22}	kan^{55} pʰaj^{44}	kan^{44} faj^{33}	kwan^{44}	kwan^{44}	kan^{44}	kwan^{44} pʰaj^{44}
	103	buffalo	kaːj^{44}	kwaːj^{55}	kaːj^{44}	kwaːj^{44}	kwaːj^{43}	kwaːj^{44}	kwaˑj^{44}
Total	**[k]**		5	4	4	1	0	1	0
	[kw]		0	1	1	4	5	4	5

Table 125 Reflexes of PT velar clusters *kw, *khw and *ɣw

The main difference in the modern reflexes is whether or not the second element of the cluster viz. *w* is preserved. The final two rows of the table give the frequencies of occurrence of the reflexes [k] and [kw]. It would appear that Yang Lorh has completely lost the second element of the PT cluster since the LRP never used [kw]. On the other hand the LRPs for both Wan Jay and Murng Jem always used [kw] and so it appears that those varieties have retained the cluster. Both Pa Jahm and Wan Jorhn LRPs used [k] 4 out of 5 times and so those varieties appear to have lost the cluster whereas the LRP from Wan Kahng used [kw] 4 out of 5 times so that variety seems to have preserved the cluster.

The entries in Table 126 show contrasts in analogous or identical environments that support the claim that /k/ and /ʔ/ are independent phonemes.

PAYAP UNIVERSITY

Phoneme	Ref.	English Gloss	Yang Lorh	Pa Jahm	Wan Jorhn	Yang Kway	Wan Jay	Wan Kahng	Murng Jem
k	86	rice seedling	ton^{33} kaː^{33}	kaː^{21}	kaː	tsɔn^{33} kaː^{33}	kaː^{32}	k^{h}aˑw^{32} kaː^{32}	ton^{33} kaː^{33}
ʔ	150	to open (the mouth)	ʔaː^{33} sop^{55}	ʔaːˈ^{44} sɔp^{55}	ʔaː^{32} sop^{44}	ʔaː^{33} sɔp^{55}	ʔaː^{33} sɔp^{44}	ʔaː^{33}	ʔaː^{33} sop^{55}
k	64	banana (fruit)	koˑj^{33}	koˑj^{33}	koj^{33}	kuˑj^{33}	koːj^{43}	k^{o}iː^{32}	kuj^{33}
ʔ	61	sugarcane	ʔɔːj^{33}	ʔɔːj^{33}	ʔɔːj^{33}	ʔɔːj^{33}	ʔɔːj^{43}	ʔɔːj^{33}	ʔɔːj^{33}

Table 126 Contrasts for stop initials /k/ and /ʔ/

The entries in Table 127 show contrasts in analogous or identical environments that support the claim that /m/, /n/ and /ŋ/ are independent phonemes.

Phoneme	Ref.	English Gloss	Yang Lorh	Pa Jahm	Wan Jorhn	Yang Kway	Wan Jay	Wan Kahng	Murng Jem
m	269	come (verb)	maːˈ^{44}	maːˈ^{44}	maːˈ^{44}	maːˈ^{44}	maːˈ^{44}	maːˈ^{44}	maːˈ^{44}
n	87	irrigated paddy field	naːˈ^{44}	naːˈ^{44}	naːˈ^{44}	naːˈ^{44}	naːˈ^{44}	naː^{54}	naːˈ^{44}
ŋ	95	tusk, ivory	ŋaːˈ^{44} tɕaːŋ^{52}	ŋaːˈ^{44}	ŋaːˈ^{44}	ŋaːˈ^{44}	ŋaːˈ^{44} tsaːŋ^{52}	ŋaːˈ^{44}	ŋaːˈ^{44} tsaːŋ^{52}

Table 127 Contrasts for nasal initials /m/, /n/ and /ŋ/

Final consonants

The entries in Table 128 show contrasts in analogous or identical environments that support the claim that /p/ and /t/ contrast in syllable-final position.

Phoneme	Ref.	English Gloss	Yang Lorh	Pa Jahm	Wan Jorhn	Yang Kway	Wan Jay	Wan Kahng	Murng Jem
p	171	liver	tap^{55}	tap^{55}	tap^{55}	tap^{55}	tap^{55}	tap^{53}	tap^{11}
t	243	cut (hair)	tat^{55}	tat^{55}	tat^{55} hoː^{24}	tat^{55}	tat^{55}	tat^{55} p^{h}om^{13}	tɛˑt^{54}
p	111	hurt (verb)	tɕɛp^{55}	tɕɛp^{55}	tɕep^{55}	tɕep^{55}	tɕɛp^{55}	tɕep^{55}	tɕɛp^{55}
t	376	seven (persons)	tɕet^{54} kɔː^{52}	tɕɛt^{54}	tɕet^{44}	tɕet^{55}	tɕɛt^{54}	tɕet^{54}	tɕet^{55}

Table 128 Contrasts for stop finals /p/ and /t/

PAYAP UNIVERSITY

The entries in Table 129 show contrasts in identical environments that support the claim that /p/ and /k/ contrast in syllable-final position.

Phoneme	Ref.	English Gloss	Yang Lorh	Pa Jahm	Wan Jorhn	Yang Kway	Wan Jay	Wan Kahng	Murng Jem
p	121	carry (on pole)	haːp^{21}	haːp^{22}	haːp^{22}	haːp^{31}	haːp^{11}	haːp^{11}	haːp^{21}
k	52	root	haːk^{21}	haːk^{11} maˑj^{41}	haːk^{22} maˑj^{31}	haːk^{31}	haːk^{21} maˑj^{41}	haːk^{21} maˑj^{41}	haːk^{31} maˑj^{41}

Table 129 Contrasts for stop finals /p/ and /k/

The entries in Table 130 show contrasts in identical environments that support the claim that /t/ and /k/ contrast in syllable-final position.

Phoneme	Ref.	English Gloss	Yang Lorh	Pa Jahm	Wan Jorhn	Yang Kway	Wan Jay	Wan Kahng	Murng Jem
t	233	water (verb)	hot^{55} naːm^{52}	hot^{55} naːm^{52}	hot^{44} naːm^{52}	hɔt^{55} naˑm^{52}	hɔt^{55} naːm^{51}	hot^{55} naːm^{52}	hot^{55} naːm^{53}
k	375	six (persons)	hok^{55} kɔː^{53}	hɔk^{55}	hok^{44}	hɔk^{55}	hɔk^{55}	hok^{55}	hok^{55}

Table 130 Contrasts for stop finals /t/ and /k/

There is very little evidence of the glottal stop in use as a final consonant in the recorded data. There are two explanations for this; firstly the final word of the tone frame begins with the aspirated velar stop [k^{h}] which involves velar closure of the oral cavity. If there is a glottal stop at the end of the substitution word it requires careful enunciation by the LRP to distinguish the glottal stop from the following velar stop. Since the tone frame was not used during the initial field transcription, one would expect to see more final glottal stops in the field transcriptions – assuming that there are words that actually have final glottal stops. This turns out to be the case and it will be discussed further below. The second reason why there are very few glottal stops in the recorded data is that there are very few words that have glottal finals in the wordlist. Of the six words with final glottal stops in the Standard Thai version of the wordlist, only two have

PAYAP UNIVERSITY

cognates in Khuen. Notwithstanding these constraints, the entries in Table 131 provide some evidence for the existence of the glottal stop final in some varieties. The entries for wordlist item 101 'goat' show final glottal stop for four varieties, namely Pa Jahm, Yang Kway, Wan Jay and Murng Jem. Actually in the field transcriptions all seven varieties had a final glottal stop. It turns out that because the tones are the same as well as the vowel qualities, the entries for item 101 and 361 are identical apart from the final glottal stop. These entries therefore provide contrasts in identical environments for the final glottal, supporting its status as a phoneme that occurs in syllable-final position.

PSWT form	Ref.	English Gloss	Yang Lorh	Pa Jahm	Wan Jorhn	Yang Kway	Wan Jay	Wan Kahng	Murng Jem
***bɛʔ (DS4)**	101	goat	pe:^{53}	pe:ʔ^{52}	pe:^{51}	pe:ʔ^{52}	peˑʔ^{52}	pe:^{52}	pe:ʔ^{52}
***be (C4)**	361	defeated (adj)	pe:^{52}	pe:^{52}	pe:^{52}	pe:^{52}	pe:^{52}	pe:^{52}	pe:^{52}
	292	wet (adj)	pɤˑʔ^{53} naˑm^{52}	peʔ^{55} naˑm^{52}	pe:^{55} naˑm^{52}	peʔ^{55}	peʔ^{54} na:m^{51}	peˑ^{54} naˑm^{52}	peʔ^{55} naˑm^{52}

Table 131 Contrasts for the glottal stop final /ʔ/

The entries in Table 132 show contrasts in analogous or identical environments that support the claim that /m/, /n/ and /ŋ/ contrast in syllable-final position.

Phoneme	Ref.	English Gloss	Yang Lorh	Pa Jahm	Wan Jorhn	Yang Kway	Wan Jay	Wan Kahng	Murng Jem
m	38	near	tsam^{23}	tsam^{24}	tɕam^{24}	tsam^{24}	tsam^{25}	tsam^{13}	tsam^{24}
n	300	pull (verb)	tɕan^{32}	tsan^{24}	tɯːt^{52}	tsan^{13}	tsan^{14}	tsan^{24}	tsan^{24}
ŋ	346	hate (verb)	tɕaŋ^{44}	tsan^{24}	tɕaŋ^{44}	tsaŋ^{44}	tɕaŋ^{43} kan^{24}	tsaŋ^{44}	tɕaŋ^{44}

Table 132 Contrasts for nasal finals /m, n, ŋ/

The entries in Table 133 show contrasts in identical environments that support the claim that /w/ and /j/ contrast in syllable-final position.

PAYAP UNIVERSITY

Phoneme	Ref.	English Gloss	Yang Lorh	Pa Jahm	Wan Jorhn	Yang Kway	Wan Jay	Wan Kahng	Murng Jem
j	123	egg	k^haj^{21}	k^haj^{22}	k^haj^{11}	k^haj^{31}	k^haj^{11}	k^haj^{31}	k^haj^{21}
w	180	knee	$ho˙^{23}$ $k^ha˙w^{21}$	$ho:^{24}$ k^haw^{22}	$ho:^{24}$ k^haw^{22}	$ho:^{35}$ xaw^{31}	$ho:^{25}$ k^haw^{11}	$ho:^{23}$ k^haw^{31}	$ho:^{24}$ k^haw^{21}

Table 133 Contrasts for approximant finals /w/ and /j/

Vowels

The entries in Table 134 show contrasts in analogous environments that support the claim that /i/, /e/ and /ɛ/ are separate phonemes. The entries show that the phonetic realisation of the /ɛ/ phoneme frequently has an on-glide from the high front unrounded vowel, i.e. [^{i}ɛ]. This agrees with Rasi who described the phoneme as 'a glide from a very short [i] to a short low front unrounded vowel [ɛ]' (Rasi 1978:20).

Vowel phoneme	Ref.	English gloss	Yang Lorh	Pa Jahm	Wan Jorhn	Yang Kway	Wan Jay	Wan Kahng	Murng Jem
i	98	bear	$mi:^{13}$	$mi:^{24}$	$mi:^{34}$	$mi:^{34}$	$mi:^{34}$	$mi:^{24}$	$mi:^{24}$
e	19	river	nam^{52} $me:^{21}$	nam^{52} $me:^{22}$	$na˙m^{52}$ $me:^{22}$	$me:^{31}$ $na˙m^{41}$	$na˙m^{52}$ $me:^{21}$	nam^{52} $me:^{21}$	nam^{53} $me:^{22}$
ɛ	132	insect	$m^iɛ:ŋ^{44}$	$mɛ˙ŋ^{44}$	$m^iɛ:ŋ^{44}$	$mɛ:ŋ^{44}$	$me:ŋ^{43}$	$m^iɛ:ŋ^{44}$	$po:ŋ^{44}$ $mɛ:ŋ^{33}$
i	146	tongue	lin^{52}	lin^{52}	lin^{52}	lin^{53}	$li:n^{52}$	lin^{53}	lin^{53}
e	24	iron	lek^{55}	$le:k$	lek^{55}	lek^{55}	$lɛ˙k^{55}$	lek^{54}	lek^{55}
ɛ	169	nail (finger)	$ljɛp^{54}$ $mɯ:^{44}$	$lɛp^{54}$ $mɯ:^{44}$	$liɜp^{53}$ $mɯ:^{33}$	$lɛp^{54}$ $mɯ:^{44}$	$ljɛp^{54}$ $mɯ:^{44}$	$n^iɛp^{53}$ $mɯ:^{44}$	$n^iɛp^{54}$ $mɯ:^{44}$

Table 134 Contrasts for vowel phonemes /i/, /e/ and /ɛ/

The entries in Table 135 show contrasts in analogous or identical environments that support the claim that /ɯ/, /ɤ/and /a/ are separate phonemes. The first three data rows show contrasts in open syllables and the final three rows show contrasts in dead syllables.

PAYAP UNIVERSITY

Vowel phoneme	Ref.	English gloss	Yang Lorh	Pa Jahm	Wan Jorhn	Yang Kway	Wan Jay	Wan Kahng	Murng Jem
ɯ	163	hand	mɯː^{44}	mɯː^{44}	mɯː^{44}	mɯː^{44}	mɯː^{43}	mɯː^{43}	mɯː^{44}
ɤ	15	morning	kam^{22} naj^{22} tɕaːw^{52}	mɤː^{22} tɕaːw^{52}	mɤː^{22} ŋɤːp^{22} tɕaˑw^{41}	mɤː^{43} ŋɤːp^{32}	mɤː^{43} ŋɤːp^{21}	mɤː^{22} tɕaw^{51}	mɤ^{11} ŋɤ^{11} tsaˑw^{52}
a	269	come (verb)	maː^{44}	maː^{44}	maː^{44}	maː^{44}	maː^{44}	maː^{44}	maː^{44}
ɯ	392	deep (adj)	lɯk^{54}	lɯk^{54}	lɤˑk^{53}	lɯk^{53}	lɯk^{54}	lɯk^{54}	lɯk^{54}
ɤ	174	blood	lɤːt^{31}	lɤːt^{22}	lɤːt^{21}	lɤːt^{42}	lɤːt^{31}	lɤːt^{21}	lɤːt^{31}
a	362	steal (verb)	lak^{53}	lak^{53}	lak^{54}	lak^{53}	lak^{53}	lak^{54}	lak^{53}

Table 135 Contrasts for vowel phonemes /ɯ/, /ɤ/ and /a/

The entries in Table 136 show contrasts in analogous or identical environments that support the claim that /u/, /o/ and /ɔ/ are separate phonemes. The first three data rows show contrasts in live syllables and the final three rows show contrasts in dead syllables.

Vowel phoneme	Ref.	English gloss	Yang Lorh	Pa Jahm	Wan Jorhn	Yang Kway	Wan Jay	Wan Kahng	Murng Jem
u	154	ear	huː^{14}	huː^{14}	huː^{34}	huː^{34}	huː^{14}	huː^{23}	huː^{24}
o	141	head	hoː^{14}	hoː^{14}	hoː^{24}	hoː^{24}	hoː^{14}	hoː^{23}	ho^{24}
ɔ	75	garlic	hoː^{23} hɔːm^{23}	hoˑ^{24} hɔːm^{23}	hoː^{34} hɔːm^{24}	hoː^{34} hɔːm^{14}	hoː^{24} hɔːm^{14}	hoː^{2} hɔːm^{24}	hoː^{23} hɔːm^{23}
u	92	plant (verb)	puˑk^{22}	puˑk^{22}	puːk^{21}	puːk^{31}	puːk^{21}	puk^{11}	puk^{21}
o	133	termite	poːk^{21}	poˑk^{22}	poːk^{21}	poːk^{31}	poːk^{21}	mʲɛːŋ^{44} poːk^{21}	pɔːt^{21}
ɔ	270	return (home)	pɔːk^{32} maː^{33}	pɔːk^{21} maː^{33}	pɔːk^{21} maː^{33}	pɔːk^{32} maː^{34}	pɔːk^{31} maː^{34}	pɔːk^{2} maː^{44}	pɔːk^{31} maː^{44}

Table 136 Contrasts for vowel phonemes /u/, /o/ and /ɔ/

In addition to the quality of each vowel there is much phonetic variation in the length of each vowel. Before examining any evidence of contrastive vowel length, some observations on the raw phonetic data are made to provide a context in which to interpret the discussion of the phonemic status of vowel length.

PAYAP UNIVERSITY

The frequencies of occurrence of the long and short vowels at each of the nine phonemic vowel positions in the seven Khuen varieties recorded on the survey are shown in Table 137. The frequencies are intended to give an impression of the relative frequency of occurrence of each vowel position and the length at each position. Since the table represents a summary of seven Khuen varieties, there are many cases where there is more than one vowel across the seven varieties. As will be shown in the following discussion, the varieties fall into two groups in the way they pattern for the mid vowels – these groups are labelled YL group and YK group in the table. The YL group is comprised of Yang Lorh, Wan Jorhn, Wan Kahng and Murng Jem. The Yang Kway group is comprised of Yang Kway, Wan Jay and Pa Jahm. Where there was lack of homogeneity not accounted for by membership by these two groupings the convention adopted was to choose the best representative of the group of seven. For wordlist items where there was so much variation that choosing a single representative would be misleading, that item was disregarded in computing the frequencies in Table 137. The total number of wordlist items represented in the table is thus 388.

		Horizontal position of highest part of tongue								
		Front			**Central or Back**			**Back**		
		Vowel	**YL group**	**YK group**	**Vowel**	**YL group**	**YK group**	**Vowel**	**YL group**	**YK group**
Vertical position of highest part of tongue	**High**	i	18		ɯ	8		u	9	
		iː	16		ɯː	9		uː	20	
	High -mid	e	11	1	ɤ	0		o	30	0
		eː	1	17	ɤː	22		oː	21	21
	Low-mid	ɛ	1	11				ɔ	1	31
		ɛː	12	12				ɔː	41	41
	Low				a	68				
					aː	84				

Table 137 Frequencies of occurrence of vowel phones in seven Khuen varieties

The entries in Table 137 demonstrate two things: firstly that there is a huge range of frequency of occurrence of the different vowel positions – compare the 152 instances of [a]/[aː] with the 17 instances of [ɯ]/[ɯː]. This means that the functional load carried by any putative phonemic length distinction is much

PAYAP UNIVERSITY

greater for some vowel qualities than others. In other words, because there are so many words that include the low central unrounded vowel *a*, there is a need for both long and short versions of the vowel to provide enough variables to create the number of different lexical items required. The lexical items including the high back unrounded vowel *ɯ* on the other hand could probably all be differentiated by consonants and tones without the need for a vowel length distinction.

The second thing that is apparent from the frequencies in Table 137 is that long and short versions of a particular vowel quality occur with different relative frequencies – compare the roughly equal frequencies of occurrence of [i] (18) and [i:] (16) with the very unequal frequencies of occurrence of [ɤ] (0) and [ɤː] (22). Again the greater the disparity is between the frequencies of occurrence of the two phonetic lengths, the lower the chances of there being a phonemic length distinction. One factor in the numbers of instances of particular vowels is the extent to which vowels 'shift'. Rasi (1978:43-44) observed that the Thai short mid vowels /e/ and /o/ correspond to Khuen low vowels /ɛ/ and /ɔ/, i.e. a vowel shift has occurred in the Khuen variety studied by Rasi. It is therefore appropriate to check for such a shift in the Khuen varieties in this study, beginning with /e/.

The entries in Table 138 provide evidence of vocalic shift in the Khuen varieties in words with PSWT short vowel phoneme *e. The totals in the final two rows of the table show that there are differences between the varieties. Yang Lorh, Wan Jorhn, Wan Kahng and Murng Jem appear to use [e] whereas Pa Jahm, Yang Kway and Wan Jay use [ɛ].

PAYAP UNIVERSITY

PSWT form	Ref.	English gloss	Yang Lorh	Pa Jahm	Wan Jorhn	Yang Kway	Wan Jay	Wan Kahng	Murng Jem
***tem**	235	full (container) (adj)	tem^{22}	tɛm^{24}	teˑm^{24}	tɛm^{14}	tɛm^{214}	tem^{14}	teˑm^{24}
***ɟet**	302	wipe (verb)	tɕeˑt^{52}	tɕɛt^{52}	tɕet^{53}	tɕɛt^{53}	tɕɛt^{53}	tɕet^{53}	tɕet^{53}
***cet**	376	seven (persons)	tɕet^{54} kɔː^{52}	tɕɛt^{54}	tɕet^{44}	tɕɛt^{55}	tɕɛt^{54}	tɕet^{54}	tɕet^{5}
***pet**	124	duck (bird)	pet^{55}	pʲɛt^{55}	pet^{55}	pʲɛt^{55}	pɛt^{55}	pet^{44}	pet^{55}
***khem**	274	needle	kʰem^{22}	kʰɛm^{24}	kʰeːm^{24}	kʰɛm^{24}	kʰem^{24}	kʰem^{13}	kʰem^{24}
***het**	288	do/make (verb)	teː^{22} het^{55}	hʲɛt^{55}	heˑt^{44}	hɛt^{55}		het^{55}	het^{55}
***het**	60	mushroom	heˑp^{44}	hɛp^{55}	het^{55}	hɛt^{55}	hɛt^{55}	het^{44}	het^{55}
***cep**	111	hurt (verb)	tɕɛp^{55}	tɕɛp^{55}	tɕep^{55}	tɕʲɛp^{55}	tɕɛp^{55}	tɕep^{55}	tɕep^{55}
Total		**e**	7	0	8	0	0	8	8
		ɛ	1	8	0	8	7	0	0

Table 138 Examples of vowel correspondences for PSWT *e

The entries in Table 139 provide evidence of vocalic shift in the Khuen varieties in words with PSWT short vowel phoneme *o. The totals in the final two rows of the table show that there are differences between the varieties. Yang Lorh, Wan Jorhn, Wan Kahng and Murng Jem appear to use [o] whereas Pa Jahm, Yang Kway and Wan Jay use [ɔ]. Note that these are the same groupings as with the PSWT phoneme *e above.

PAYAP UNIVERSITY

PSWT form	Ref.	English gloss	Yang Lorh	Pa Jahm	Wan Jorhn	Yang Kway	Wan Jay	Wan Kahng	Murng Jem
***tok**	279	fall (verb)	tok^{55}	tɔk^{55}	toˈk^{55}	tɔk^{55}	tɔk^{55}	tok^{54}	tok^{55}
***tom**	253	boil (verb)	tom^{33}	tɔm^{33}	tom^{33}	tɔm^{33}	tɔm^{43}	tom^{22}	tom^{33}
***som**	70	orange (noun)	som^{33}	sɔm^{33}	ʔan^{44} som^{33}	sɔm^{33}	sọm^{43}	som^{32}	som^{33}
***nok**	125	bird	noˈk^{53}	nɔk^{54}	noˈk^{53}	nɔk^{53}	nɔk^{54}	nok^{54}	nok^{53}
***lom**	10	wind (noun)	lom^{44}	lɔm^{44}	lom^{44}	lɔm^{44}	lɔm^{44}	lom^{44}	lom^{44}
***mon**	396	round (adj)	moːn^{44}	mɔn^{44}	moˈn^{44}	mɔn^{34}	mɔn^{44}	moˈn^{44}	mon^{44}
***grok**	238	mortar	k^{h}ok^{55}	k^{h}ɔˈk^{53}	k^{h}oˈk^{41}	k^{hw}ɔʔ^{55}	k^{h}ɔk^{55}	k^{h}oˈk^{54}	k^{h}ok^{55}
***ɣon**	203	person	k^{h}on	k^{h}on^{44}	k^{h}on^{44}	k^{hw}ɔn^{44}	k^{h}ɔn^{44}	kon^{44}	kon^{44}
***khon**	127	feather	k^{h}on^{13} nok^{43}	k^{h}ɔn^{24} nɔk^{54}	k^{h}on^{24}	k^{h}ɔn^{24} nɔˈk^{52}	k^{h}ɔn^{24}	k^{h}oŋ^{41}	k^{h}on^{24} nok^{53}
***khom**	69	bitter (adj)	k^{h}om^{24}	k^{h}ɔːm^{14}	k^{h}om^{24}	k^{h}ɔm^{14}	k^{h}ɔm^{24}	k^{h}om^{23}	k^{h}om^{24}
***kop**	136	frog	kop^{55}	kɔp^{55}	kop^{55}	kɔp^{55}	kɔp^{55}	kop^{55}	kop^{55}
***rot**	233	water (verb)	hot^{55} naːm^{52}	hɔt^{55} naːm^{52}	hot^{44} naːm^{52}	hɔt^{55} naˈm^{52}	hɔt^{55} naːm^{51}	hot^{55} naːm^{52}	hot^{55} naːm^{53}
***xrok**	375	six (persons)	hok^{55} kɔː^{53}	hɔk^{55}	hok^{44}	hɔk^{55}	hɔk^{55}	hok^{55}	hok^{55}
Total		**o**	13	0	13	0	1	13	13
		ɔ	0	13	0	13	12	0	0

Table 139 Examples of vowel correspondences for PSWT *o

Having set the context in which to consider contrastive evidence for phonemic length, the evidence for each vowel position will be presented beginning with the strongest case, i.e. the low vowels. The entries in Table 140 show contrasts in analogous or identical environments that support the claim that /a/ and /a:/ are separate phonemes. This evidence in itself is clear as well as being supported by other evidence of contrasts in analogous environments. Moreover it is in keeping with other Tai languages in general (Hartmann 1976:142-144) as well as all the previous studies of Khuen phonology described in Chapter 2.

PAYAP UNIVERSITY

Vowel phoneme	Ref.	English gloss	Yang Lorh	Pa Jahm	Wan Jorhn	Yang Kway	Wan Jay	Wan Kahng	Murng Jem
a	386	many (persons)	p^haj^{42} nam^{23}	nam^{24}	nam^{45}	nam^{25}	nam^{24}	nam^{23}	nam^{24}
aː	51	thorn	$naːm^{34}$	$naːm^{25}$	$naːm^{24}$	$naːm^{13}$	$naːm^{25}$	nam^{24}	$naːm^{24}$
a	104	horn (of buffalo)	k^haw^{24}	k^haw^{13} $kaːj^{44}$	k^haw^{23} $kaːj^{44}$	k^haw^{23} $kwaːj^{44}$	k^haw^{13} $kwaːj^{31}$	k^haw^{13} $kwaːj^{44}$	k^haw^{23} $kwaj^{55}$
aː	403	white	$ʔan^{44}$ $k^haːw^{24}$	$k^haːw^{14}$	$k^haːw^{24}$	$k^haːw^{14}$	$ʔan^{44}$ $k^haːw^{24}$	$ʔan^{44}$ $k^haːw^{13}$	$k^haːw^{24}$

Table 140 Contrasts for vowel phonemes /a/ and /aː/

The entries in Table 141 show contrasts in analogous or identical environments that support the claim that /ɔ/ and /ɔː/ are separate phonemes.

Vowel phoneme	Ref.	English gloss	Yang Lorh	Pa Jahm	Wan Jorhn	Yang Kway	Wan Jay	Wan Kahng	Murng Jem
ɔ	396	round (adj)	$moːn^{44}$	$mɔn^{44}$	$moˈn^{44}$	$mɔn^{34}$	$mɔn^{44}$	$moˈn^{44}$	mon^{44}
ɔː	56	seed	$meˈt^{53}$	$mɔːn^{44}$	$mɔːn^{44}$	$mɛt^{54}$	$mɛt^{53}$	$k^iɛːn^{13}$	$mɔːn^{44}$ man^{33}

Table 141 Contrasts for vowel phonemes /ɔ/ and /ɔː/

The evidence Table 141 is very weak although these examples are the same as those cited by Rasi as proof of the existence of /ɔ/ and /ɔː/ as separate phonemes (Rasi 1978:21). As shown in Table 139 above the PSWT form of wordlist item 396 'round' is *mon and so the [ɔ] only occurs in those varieties that demonstrate vowel shift, namely Pa Jahm, Yang Kway and Wan Jay. So for Pa Jahm there is a contrast in identical environment. For Yang Kway and Wan Jay the entries for wordlist item 56 'seed' are not phonetically similar to the entries for item 396 'round' so this evidence is inconclusive as to whether or not there are contrasts for those varieties. It is however possible to speculate that, since these varieties appear to pattern like the variety studied by Rasi, there will be other examples of minimal pairs even if this the word [$mɔːn^4$] does not exist in these varieties.

PAYAP UNIVERSITY

As far as the front low vowel ɛ is concerned, there is very little evidence of the phonetic short vowel in the data, apart from cognates of PSWT *e in Pa Jahm, Yang Kway and Wan Jay varieties. It would be in keeping with Rasi's findings to posit both short and long phonemes for Pa Jahm, Yang Kway and Wan Jay although the survey data does not provide examples of contrasts in identical or analogous environments whereas Rasi did provide such examples (1978:20).

For the other varieties there is even less evidence of a phonemic length distinction. A conservative approach would therefore be to posit both long and short phonemes /ɛ/ and /ɛ:/. This would be in keeping with other authors (Egerød 1959; Gedney [1964] (1996); Rasi (1978)) and would also accord with the fact that the Khuen orthography has both long and short vowels, ᨣᨣ̱ [ɛ] and ᨣᨣ [ɛ:] respectively. While not claiming that evidence from the Khuen orthography has equal status with phonological evidence, orthographic evidence is nevertheless mentioned it here as being relevant to the issue. Indeed the possible interaction between the orthography and the phonemic status of the various segments is a topic of much interest, but remains beyond the scope of this thesis.

The discussion now moves on to the high vowels. The entries in Table 142 illustrate the length variation in the high front vowel phoneme /i/. The length can be accounted for by the rule in (4) below:

(4) Conditioned variation rule for /i/

/i/	→	[i]	/	before a semivowel
			or	before a nasal
			or	before stops with tone 2 or 5
		[i:]	/	elsewhere

PAYAP UNIVERSITY

Phonetic realisation	Ref.	English gloss	Yang Lorh	Pa Jahm	Wan Jorhn	Yang Kway	Wan Jay	Wan Kahng	Murng Jem
i	245	full (stomach) (adj)	kin^{33} ʔim^{22}	tɔːŋ^{52} tɛm^{35}	kin^{34} ʔim^{11}	ʔim^{32}	ʔim^{22}	ʔim^{21} jaːw^{51}	ʔim^{22}
	244	eat (verb)	kin^{24}	kin^{35}	kin^{24}	kin^{24}	kin^{24}	kin^{24}	kin^{24}
	167	finger	niw^{53} mɯː^{44}	niw^{53} mɯː^{44}	niɜw^{52} mɯː^{33}	niw^{53} mɯː^{34}	niw^{52} mɯː^{23}	niw^{53} mɯː^{44}	niw^{53} mɯː^{33}
	307	stick (glue) (verb)	tit^{55} kan^{23}	tit^{55} kan^{24}	tit^{55} kan^{4}	tit^{55}	tit^{55}	tit^{55}	tit^{55}
	73	red chilli pepper	maˑk^{2} pʰik^{54}	maˑk^{22} pʰit^{55}	maːk^{21} pʰik^{54}	maːk^{31} pʰik^{53}	maːk^{22} pʰik^{54}	maˑk^{22} pʰik^{54}	maˑk^{31} pʰik^{53}
iː	36	year	piː^{11}	piː^{24}	piː^{24}	piː^{23}	piː^{24}	piː^{24}	piː^{34}
	391	fat (verb)	piː^{44}	piː^{44}	piː^{44}	piː^{44}	piː^{44}	piː^{44}	piː^{44}
	214	sibling (older)	piː^{32}	piː^{21}	piː^{21}	piː^{31}	piː^{31}	piː^{22}	piː^{32}
	126	wing	piˑk^{21}	piˑk^{22}	piːk^{21}	piːk^{31}	piːk^{11}	piˑk^{22}	piːk^{21} man^{4}
	221	knife	pʰaː^{52} miːt^{21}	miˑt^{21}	pʰaː^{52} miːt^{2}	miːt^{41}	miːt^{41}	miːt^{22}	miːt^{22}

Table 142 Examples of length variation for the vowel phoneme /i/

The entries in Table 143 illustrate the length variation in the high front vowel phoneme /i/. The length can be accounted for by the rule in (5) below:

(5) Conditioned variation rule for /ɯ/

/ɯ/ → [ɯ] / before a nasal
or before stops with tone 2 or 5
[ɯː] / elsewhere

Phonetic realisation	Ref.	English gloss	Yang Lorh	Pa Jahm	Wan Jorhn	Yang Kway	Wan Jay	Wan Kahng	Murng Jem
ɯ	130	bee	pʰɯŋ^{33}	pʰɯŋ^{43}	pʰɯŋ^{33}	pʰɯŋ^{33}	pʰɯŋ^{43}	pʰɯŋ^{44}	pʰɯŋ^{43}
	313	forget	lɯm^{44}	lɯm^{44}	lɯm^{44}	lɯm^{44}	lɯm^{44}	lɯˑm^{32}	lɯm^{44}
	392	deep (adj)	lɯk^{54}	lɯk^{54}	lɤˑk^{53}	lɯk^{53}	lɯk^{54}	lɯk^{54}	lɯk^{54}
ɯː	163	hand	mɯː^{44}	mɯː^{44}	mɯː^{44}	mɯː^{44}	mɯː^{43}	mɯː^{43}	mɯː^{44}
	335	buy (verb)	sɯː^{53}	sɯː^{52}	sɯː^{52}	sɯː^{52}	ʃɯː^{51}	sʲɯː^{52}	sɯː^{52}

Table 143 Examples of length variation for the vowel phoneme /ɯ/

PAYAP UNIVERSITY

The entries in Table 144 illustrate the length variation in the high front vowel phoneme /u/. The length can be accounted for by the rule in (6) below:

(6) Conditioned variation rule for /u/

/u/ → [u] / before a semivowel
or before a nasal
or before stops with tone 2 or 5
[u:] / elsewhere

Phonetic realisation	Ref.	English gloss	Yang Lorh	Pa Jahm	Wan Jorhn	Yang Kway	Wan Jay	Wan Kahng	Murng Jem
u	91	dig (verb)	k^hut^5	k^hut^5	k^hut^5	k^hut^5	k^hut^5	k^hut^5	k^hut^5
	223	blunt (adj) (blade)	$p^ha{:}j^{14}$	puk^{55}	puk^{44}	puk^{55}	$p^ha{:}^{52}$ $pa{:}ŋ^{42}$	$p^ha{:}j^{13}$	puk^{44}
	252	cook (rice) (verb)	$huŋ^{32}$ $k^haˑw^3$	$huŋ^{24}$ k^haw^3	$huŋ^{25}$ k^haw^{32}	$huŋ^{14}$ $k^haˑw^3$	$huŋ^{25}$ $k^ha{:}w^{32}$	$huŋ^{13}$	$huŋ^{13}$ $k^haˑw^3$
	22	swim (verb)	luj^{44} nam^{54}	luj^{44} nam^{52}	$lɔ{:}j^{44}$ $naˑm^{52}$	luj^{44} $naˑm^{52}$	luj^{44} $naˑm^{52}$	luj^{44} nam^{52}	luj^{44} nam^{52}
	290	stand (verb)	luk^{54} $tɕuk^{55}$	luk^{53}	$tɕuk^{44}$	$tɕuk^{55}$	$luˑk^{52}$ $tɕuk^5$	luk^{54} $tɕok^{54}$	$tɕuʔ^{55}$
u:	158	shave (beard)	$k^huˑt^{22}$	$k^huˑt^{22}$	$k^huˑt^{21}$ $no{:}t^{21}$	$k^hu{:}t^{32}$	$k^huˑt^2$ $no{:}t^{21}$	$k^huˑt^{21}$	$k^huˑt^{22}$
	92	plant (verb)	$puˑk^{22}$	$puˑk^{22}$	$pu{:}k^{21}$	$pu{:}k^{31}$	$pu{:}k^{21}$	puk^{11}	$puˑk^{21}$
	154	ear	$hu{:}^{14}$	$hu{:}^{14}$	$hu{:}^{34}$	$hu{:}^{34}$	$hu{:}^{14}$	$hu{:}^{23}$	$hu{:}^{24}$
	208	child (offspring)	$lu{:}k^{33}$	$luˑk^{21}$	luk^2 taw^{33}	$lu{:}k^{31}$	$lu{:}k^{32}$ $ʔɔ{:}n^{11}$	duk^{22}	$luˑk^{21}$

Table 144 Examples of length variation for the vowel phoneme /u/

The foregoing discussion regarding the vowel shift in cognates with PSWT vowel phonemes *e and *o is relevant now as the phonemic status of vocalic length for the mid vowels is discussed. Also relevant are the vowel reflexes of the PSWT diphthongs *ia, *ɯa and *ua. The entries in Table 145 show examples of vowel correspondences for PSWT *ia. The examples show that all Khuen varieties exhibit the long mid front vowel [e:].

PAYAP UNIVERSITY

PSWT form	Ref.	English gloss	Yang Lorh	Pa Jahm	Wan Jorhn	Yang Kway	Wan Jay	Wan Kahng	Murng Jem
***lia**	279	fall (verb)	leː^{44}	deː^{44}	leː^{44}	leː^{44}	leː^{44}	lin^{52}	leː^{44}
***dian**	250	candle	ten^{44}	teːn^{44} kʰaj^{24}	teːn^{44} kʰaj^{24}	teːn^{44}	teːn^{44}	teːn^{44}	teːn^{44}
***ɣiaw**	89	sickle	kʰeˑw^{55}	kʰeːw^{44}	kʰeːw	kʰiəw^{54}	kʰeːw^{54}	kʰeˑw^{55}	kʰew^{55}

Table 145 Examples of vowel correspondences for PSWT diphthong *ia

The entries in Table 146 show examples of vowel correspondences for PSWT *ɯa. The examples show that all Khuen varieties exhibit the long back mid unrounded front vowel [ɤː].

PSWT form	Ref.	English gloss	Yang Lorh	Pa Jahm	Wan Jorhn	Yang Kway	Wan Jay	Wan Kahng	Murng Jem
***klɯa**	76	salt	kɤː^{24}	kɤː^{24}	kɤː^{24}	kɤː^{34}	kɤː^{24}	kɤː^{13}	kɤː^{35}
***nɯa**	175	flesh (meat)	nɤː^{52}	nɤː^{52}	nɤː^{41}	nɤː^{52}	nɤː^{52}	nɤː^{52}	nɤː^{52}
***rɯan**	260	house	hɤːn^{44}	hɤːn^{44}	hɤːn^{44}	hɤːn^{44}	hɤːn^{44}	hɤːn^{44}	hɤːn^{44}
***plɯaj**	202	naked	pɤˑj^{33} toː^{23}	pɤˑj^{24} toː^{24}	pɤˑj^{34} toː^{34}	kaːj^{52} kʰoː^{4}	pɤːj^{24} toː^{24}	pɤˑj^{13} toː^{23}	pɤˑj^{23} tuː^{24}
***lɯat**	174	blood	lɤːt^{31}	lɤːt^{22}	lɤːt^{21}	lɤːt^{42}	lɤːt^{31}	lɤːt^{21}	lɤːt^{31}

Table 146 Examples of vowel correspondences for PSWT diphthong *ɯa

The entries in Table 147 show examples of vowel correspondences for PSWT *ua. The examples show that all Khuen varieties exhibit the long back mid rounded vowel [oː].

PSWT form	Ref.	English gloss	Yang Lorh	Pa Jahm	Wan Jorhn	Yang Kway	Wan Jay	Wan Kahng	Murng Jem
***hrua**	141	head	hoː^{14}	hoː^{14}	hoː^{24}	hoː^{24}	hoː^{14}	hoː^{23}	ho^{24}
***klua**	310	afraid (adj)	koː^{24}	koː^{35}	koː^{24}	koː^{24}	koː^{24}	koː^{12}	koː^{24}
***-muaŋ**	65	mango (fruit)	ma^{33} moːŋ^{21}	maːk^{21} moːŋ^{21}	maːk^{21} moːŋ^{1}	maːk^{31} moːŋ^{31}	maːk^{32} moːŋ^{31}	maːk^{2} moːŋ^{21}	maːk^{31} moˑŋ^{21}
***kluaj**	64	banana (fruit)	koˑj^{33}	koˑj^{33}	koˑj^{33}	koˑj^{33}	koːj^{43}	koi^{32}	koˑj^{33}
***hnuak**	189	deaf (adj)	huː^{33} noːk^{31}	huː^{14} noːk^{21}	huː^{24} noːk^{21}	huː^{24} noːk^{21}	huː^{24} noˑk^{2}	huː^{23} noːk^{31}	huː^{24} noːk^{32}

Table 147 Examples of vowel correspondences for PSWT diphthong *ua

PAYAP UNIVERSITY

The evidence in the foregoing three tables shows one source of the long mid vowels [eː], [ɤː] and [oː] in Khuen, namely cognates of PSWT diphthongs *ia, *ɯa and *ua respectively. Moreover these seem to be distributed in a wide range of environments as demonstrated in the above tables. The main issue concerns the frequency of occurrence and distribution of the short forms of the mid vowels.

The examples in Table 138 demonstrate that cognates of PSWT *e have the short vowel [ɛ] in the three varieties Pa Jahm, Yang Kway and Wan Jay. Moreover for these varieties the only occurrence of the short vowel is in wordlist item 292 ‘wet’ as shown in Table 148.

Ref.	English gloss	Yang Lorh	Pa Jahm	Wan Jorhn	Yang Kway	Wan Jay	Wan Kahng	Murng Jem
292	wet (adj)	pɤʔ^{53} naˑm^{52}	peʔ^{55} naˑm^{52}	peː^{55} naˑm^{52}	peʔ^{55}	peʔ^{55} naːm^{51}	peˈ^{54} naˑm^{52}	peʔ^{55} naˑm^{52}

Table 148 Wordlist item 292 'wet' for seven Khuen varieties

Rasi (1978:19) observed that the short vowel [e] only occurred before a glottal stop whereas the long vowel [eː] never occurred before a glottal stop. The two were therefore in complementary distribution and therefore could be considered allophones of the same phoneme. This holds for the data from Pa Jahm, Yang Kway and Wan Jay. A single phoneme /e/ is therefore posited for these varieties with the variation accounted for by the rule described in (7).

(7) Conditioned variation rule for /e/

/e/ → [e] / before a glottal stop
[eː] / elsewhere

For the other four varieties, namely Yang Lorh, Wan Jorhn, Wan Kahng and Murng Jem there is not contrastive evidence, but neither is there any obvious set of environments that can be seen to condition the variation in length. A conservative approach would therefore be to posit both long and short phonemes

PAYAP UNIVERSITY

/e/ and /e:/. This would be in keeping with other authors (Egerød 1959; Gedney [1964] (1996)) and would also accord with the fact that the Khuen orthography has both long and short vowels, ᨥᩬ [e] and ᨥ [e:] respectively.

There are no examples of short back unrounded mid vowel [ɤ] in the data. Most examples of the long vowel [ɤː] are cognates of PSWT *ɯa. The only clear example in the data of the long vowel [ɤː] not cognate with PSWT *ɯa is shown in Table 149.

Ref.	English gloss	Yang Lorh	Pa Jahm	Wan Jorhn	Yang Kway	Wan Jay	Wan Kahng	Murng Jem
184	give birth (verb)	kɤːt^{21}	kɤːt^{22}	kɤːt^{22}	kɤːt^{31}	kɤːt^{22}	kɤːt	kɤːt^{32}

Table 149 Examples of the close-mid back unrounded vowel [ɤː]

There is therefore no evidence in our data of distinctive length for the close-mid back unrounded vowel position. Rasi (1978:20) observed that the short vowel only occurred before a glottal stop whereas the long vowel never occurred before a glottal stop. The two were therefore in complementary distribution and therefore could be considered allophones of the same phoneme. Rasi (1978:20) cited the example 'mud' /pəʔ^{2}/ [pəʔ^{45}] as an example of the short form occurring before a glottal final. This word was not included on the 406 wordlist but it was among the words in Owen (2003; 2004b) where the vowel was analysed as short. Furthermore the LRP for the wordlist in Owen (2003) wrote out the whole list in Khuen script and the short vowel symbol was used: 'mud' ᨠᩮᩬ ᨥᩬᩲᩬ /k^{h}i^{4} pɤʔ^{2}/ [k^{h}iː^{43} pɤʔ^{5}].

The examples in Table 139 demonstrate that cognates of PSWT *o have the short vowel [ɔ] in the three varieties Pa Jahm, Yang Kway and Wan Jay. Moreover for these three varieties there are no occurrences of the short vowel [o] in the data.

PAYAP UNIVERSITY

For these varieties it is therefore only necessary to posit one phoneme. For the other four varieties, namely Yang Lorh, Wan Jorhn, Wan Kahng and Murng Jem there is not contrastive evidence, but neither is there any obvious set of environments that can be seen to condition the variation in length. A conservative approach would therefore be to posit both long and short phonemes /o/ and /o:/ in keeping with other authors (Egerød 1959; Gedney [1964] (1996)) and also with the fact that the Khuen orthography has both long and short vowels, ᨣᨦ [o] and ᨣ [o:] respectively.

Tones

The seven varieties seem to be in general agreement that there are five separate phonemic tones on live syllables. The tones on dead syllables are associated with one of the tones on live syllables. The entries in Table 150 show contrasts in analogous or identical environments that support the claim that there are five separate tonemes.

PAYAP UNIVERSITY

Toneme No.[53]	Ref.	English gloss	Yang Lorh	Pa Jahm	Wan Jorhn	Yang Kway	Wan Jay	Wan Kahng	Murng Jem
1	170	heart	hoː^{23} tsaj^{14}	hoː^{24} tsaj^{24}	hoː^{24} tsaj^{24}	hoː^{24} tsaːj^{14}	hoː^{14} tsaːj^{24}	hoː^{24} tɕaj^{34}	hoː^{24} tsaj^{24}
2	204	man	k^{h}on^{44} tɕaːj^{33}	k^{h}ɔn^{44} tsaj^{33}	k^{h}on^{44} tɕaːj^{33}	k^{h}ɔn^{44} tsaːj^{44}	k^{h}ɔn^{44} tsaːj^{44}	kun^{44} tɕaj^{44}	k^{h}on^{44} tɕaːj^{43}
	29	sand	saːj^{44}	saːj^{44}	saːj^{34}	saːj^{34}	saːj^{44}	saːj^{44}	saːj^{44}
	114	animal	sat^{55}	sat^{55}	sat^{55} taŋ^{5} laːj^{35}	sat^{55}	sat^{44}	saːt^{21}	sat^{55}
3	316	to be so	tsaj^{32}	tsaj^{21}		tɕaj^{22} jaːw^{42}			tsaj^{23} jaːw^{42}
	131	cockroach	m^{i}ɛːŋ^{34} saːp^{21}	mɛˑəŋ^{44} saːp^{21}	m^{i}ɛːŋ^{44} saːp^{1}	mɛːŋ^{44} saːp^{31}	meːŋ^{44} saːp^{1}	m^{i}ɛːŋ^{44} saˑp^{21}	m^{i}ɛːŋ^{44} saˑt^{21}
4	173	intestines	sajʔ^{33}	sajʔ^{33}	sajʔ^{33}	sːajʔ^{53}	saːj^{32}	saːj^{32}	sajʔ^{33}
5	164	left (side or hand)	k^{h}ɔːn^{22} saːj^{52}	k^{h}ɔːn^{23} saːj^{52}	muː^{44} saːj^{52}	p^{h}aˑj^{22} saːj^{52}	k^{h}oːn^{13} saːj^{52}	taˑŋ^{4} saːj^{52}	p^{h}aˑj^{21} saˑj^{52}

Table 150 Contrasts for tonemes 1 - 5

Table 150 provides contrastive evidence for the existence of five separate tonemes. The following five tables provide evidence of tonal distribution over the five columns of Gedney's tone box framework – viz., A, B, C, DS and DL. The entries in Table 151 show how the tonemes are distributed over Gedney boxes A1-A4. There is general agreement for the first six varieties concerning the pattern of tonal distribution, namely boxes A1 and A2 have a low rising tone whereas boxes A3 and A4 have a mid-high level tone. The bold line between boxes A2 and A3 indicates the tone split for the A column.

Special note should be made of Murng Jem which has examples of both toneme 1 and toneme 2 in box A3, as displayed in the final column of Table 151. In the whole 406 wordlist from Murng Jem, the ratio of occurrences of toneme 1 to occurrences of toneme 2 in box A3 is approximately 2:1, i.e. there are

[53] For ease of reference the tonemes are numbered. The toneme labels corresponding to the numbers are as follows: 1 - /24/; 2 - /44/; 3 - /21/; 4 - /33/; 5 - /52/.

PAYAP UNIVERSITY

approximately twice as many occurrences of toneme 1 as there are occurrences of toneme 2. Examining all instances of box A3 in the 406 wordlist, there is no obvious phonological explanation for the variation in tone. If the decision on where to draw the line between toneme 1 and toneme 2 is based on the relative number of instances of the two tonemes, the tone split for Murng Jem would be between boxes A3 and A4. Since there is such clear agreement among the other six varieties however that the tone split is between boxes A2 and A3, it is preferred to posit a tone split between boxes A2 and A3 and hypothesise that the tonal variation in Murng Jem Box A3 is due to interference from Shan, which has the tone split between boxes A3 and A4. Further research is needed in Murng Jem to examine more fully whether this is a feature shared by the whole community and if so what factors can best account for it.

Box no.	Toneme No.	Ref.	English gloss	Yang Lorh	Pa Jahm	Wan Jorhn	Yang Kway	Wan Jay	Wan Kahng	Murng Jem
A1	**1**	334	sell (verb)	kʰaːj^{24}	kʰaːj^{24}	kʰaːj^{24}	kʰaːj^{13}	kʰaːj^{14}	kʰaːj^{24}	kʰaːj^{24}
A2	**1**	37	far (adj)	kaj^{12}	kaj^{24}	kaj^{24}	kaj^{24}	kaj^{24}	kaj^{42}	kaj^{23}
		97	deer	kaːŋ^{13}	kaːŋ^{14}	kwaːŋ^{24}	kaːŋ^{14}	kwaːŋ^{24}	kwaːŋ^{12}	kwaːŋ^{24}
A3	**2**	191	cough (verb)	ʔaj^{44}	ʔaj^{44}	ʔaj^{44}	ʔaj^{44}	ʔaj^{44}	ʔaj^{44}	ʔaj^{24}
		3	star	laːw^{44}	laːw^{44} / daːw^{44}	laːw^{34}	daːw^{44}	daːw^{44}	laːw^{34}	laːw^{44}
A4	**2**	103	buffalo	kaːj^{44}	kwaːj^{55}	kaːj^{44}	kwaːj^{44}	kwaːj^{43}	kwaːj^{44}	kwaˑj^{44}

Table 151 Tone distribution in Gedney boxes A1-A4

The entries in Table 152 show how the tonemes are distributed over Gedney boxes B1-B4. There is general agreement across all varieties that there same toneme is distributed across boxes B1-B4. This finding agrees with Rasi (1978:109) and Owen (2004a) as described in Chapter 2. The weight of evidence therefore appears to be on the side of no tonal distinction between boxes B1-B4 in contemporary Khuen varieties in the village tracts around Keng Tung.

PAYAP UNIVERSITY

Box no.	Toneme No.	Ref.	English gloss	Yang Lorh	Pa Jahm	Wan Jorhn	Yang Kway	Wan Jay	Wan Kahng	Murng Jem
B1	**3**	226	split (verb)	$p^ha:^{22}$	$p^ha:^{11}$	$p^ha:^{11}$	$p^ha:^{22}$	$p^ha:^{11}$	$p^ha:^{11}$	$p^ha:^{21}$ / $fa:^{21}$
		44	forest		$pa:^{11}$ $ma˙j^{52}$	$pa:^{21}$ $ma˙j^{42}$				
B2	**3**	151	blow (with the mouth)	paw^{21}	paw^{22}	paw^{21}	paw^{31}	paw^{12}	paw^{21}	paw^{21}
B3	**3**	144	shoulder	$ho:^{24}$ $wa:^{21}$	$ho:^{14}$ $wa:^{21}$ / $ba:^{21}$	$ho:^{24}$ $wa:^{1}$	$ho:^{24}$ $ba:^{211}$	$ho:^{35}$ $ba:^{12}$	$ho:^{23}$ $wa:^{21}$	$ho:^{24}$ $va:^{21}$
B4	**3**	338	say	$wa:^{31}$	$wa:^{22}$	$va:^{21}$	$wa:^{31}$	$wa:^{21}$	$wa:^{21}$	$va:^{21}$

Table 152 Tone distribution in Gedney boxes B1-B4

The entries in Table 153 show how the tonemes are distributed over Gedney boxes C1-C4. There is agreement across all seven varieties that Boxes C1-C3 have a mid slightly falling tone often with glottal constriction – as represented by the final glottal stops in two entries of the second data row. Box C4 on the other hand has a very distinctive high sharply falling tone.

Box no.	Toneme No.	Ref.	English gloss	Yang Lorh	Pa Jahm	Wan Jorhn	Yang Kway	Wan Jay	Wan Kahng	Murng Jem
C1	**4**	374	five (persons)	$ha:^{43}$ $kɔ:^{43}$	$ha:^{33}$	$ha:^{32}$	$ha:^{433}$	$ha:^{33}$	$ha:^{33}$	$ha:^{33}$
		190	fever	$k^haj:^{43}$	$k^hajʔ^{33}$	k^haj^{33}	k^haj^{33}	k^haj^{43}	$k^hajʔ^{43}$	k^haj^{33}
C2	**4**	86	rice seedling	ton^{33} $ka:^{33}$	$ka:^{21}$	ka:	$tsɔn^{33}$ $ka:^{33}$	$ka:^{32}$	$k^ha˙w^{32}$ $ka:^{32}$	ton^{33} $ka:^{33}$
C3	**4**	150	to open (the mouth)	$ʔa:^{33}$ sop^{55}	$ʔa:^{44}$ $sɔp^{55}$	$ʔa:^{32}$ sop^{44}	$ʔa:^{33}$ $sɔp^{55}$	$ʔa:^{33}$ $sɔp^{44}$	$ʔa:^{33}$	$ʔa:^{33}$ sop^{55}
C4	**5**	363	oppose	$ka:n^{52}$	$ka:n^{52}$	$ka:n^{52}$	$ka:n^{52}$	$ka:n^{51}$	$ka:n^{41}$	$ka:n^{52}$

Table 153 Tone distribution in Gedney boxes C1-C4

The entries in Table 154 show how the tonemes are distributed over Gedney boxes DS1-DS4. There is agreement across the seven varieties that boxes DS1-DS3 have a high level or slightly rising tone. Since the phonetic features of this toneme most closely resemble that of toneme 2, it makes sense to associate it with

PAYAP UNIVERSITY

that toneme. The tone for Box DS4 on the other hand begins high and has a noticeable fall, even though the vowel duration is generally short.

Box no.	Toneme No.	Ref.	English gloss	Yang Lorh	Pa Jahm	Wan Jorhn	Yang Kway	Wan Jay	Wan Kahng	Murng Jem
DS1	**2**	60	mushroom	heˑp^{44}	hɛp^{55}	het^{55}	hɛt^{55}	hɛt^{55}	het^{44}	het^{55}
		379	ten (persons)	sip^{55} kɔː^{52}	sip^{55}	ɕip^{44}	sip^{55}	ʃip^{55}	sip^{55}	ɕip^{55}
DS2	**2**	376	seven (persons)	tɕet^{55} kɔː^{53}	tɕet^{55}	tɕet^{44}	tɕet^{55}	tɕɛt^{55}	tɕet^{55}	tɕet^{55}
DS3	**2**	111	hurt (verb)	tɕɛp^{55}	tɕɛp^{55}	tɕep^{55}	tɕep^{55}	tɕɛp^{55}	tɕep^{55}	tɕɛp^{55}
DS4	**5**	302	wipe (verb)	tɕeˑt^{52}	tɕɛt^{52}	tɕet^{53}	tɕɛt^{53}	tɕɛt^{53}	tɕet^{53}	tɕet^{53}

Table 154 Tone distribution in Gedney boxes DS1-DS4

The entries in Table 155 show how the tonemes are distributed over Gedney boxes DL1-DL4. There is agreement across the seven varieties that boxes DL1-DL4 all have the same toneme which is phonetically very similar to that of boxes B1-B4. This toneme is therefore labelled as toneme 3. This correspondence between columns B and DL (usually expressed as B=DL) is very common among Tai languages in general (see e.g. Gedney 1989:216) and holds for all the previous Khuen studies described in Chapter 2.

Box no.	Toneme No.	Ref.	English gloss	Yang Lorh	Pa Jahm	Wan Jorhn	Yang Kway	Wan Jay	Wan Kahng	Murng Jem
DL1	**3**	120	spear	hɔːk^{21}	hɔːk^{22}	hɔːk^{21}	hɔːk^{21}	hɔːk^{12}	hɔːk^{21}	hɔːk^{21}
DL2	**3**	172	lungs	pɔːt^{21}	pɔːt^{21}	pɔːt^{21}	pɔːt^{21}	pɔːt^{21}	pɔːt^{21}	pɔːt^{31}
DL3	**3**	327	exit, leave (verb)	ʔɔːk^{22} kaː˒^{21}	ʔɔːk^{22}	ʔɔːk^{21} paj^{34}	ʔɔːk^{31} paj^{34}	ʔɔːk^{22} paj^{34}	ʔɔːk^{11} kaːˑ^{21}	ʔɔːk^{21}
DL4	**3**	99	monkey		wɔːk^{21}	ʔiˑ^{44} wɔːk^{21}	wɔːk^{31}	wɔːk^{31}	wɔːk^{21}	ʔi^{55} wɔːk^{32}
		286	outside	taŋ^{44} nɔːk^{32}	taŋ^{54} nɔːk^{32}	taːŋ^{44} nɔːk^{21}	taːŋ^{44} nɔːk^{31}	taːŋ^{33} nɔːk^{331}	taːŋ^{44} nɔːk^{21}	taŋ^{44} nɔːk^{32}

Table 155 Tone distribution in Gedney boxes DL1-DL4

PAYAP UNIVERSITY

APPENDIX 9 CRITERIA FOR LEXICAL SIMILARITY

PAYAP UNIVERSITY

Pairs of words from different wordlists were classified as being lexically similar or not using a Blair-type method as outlined below.

Each transcription was reduced to the root syllable(s) related to the concept of interest. First, syllables known to not relate directly to the concept of interest were deleted. Second, if a word has more syllables in one variety than in the other, the fewer number of syllables were kept.

Having established the syllables to be compared, the two words are lined up and compared phone by phone. Each phone pair is put into Category 1, 2 or 3 according to the following criteria.

Category 1

a) Exact CONSONANT matches

b) VOWELS differing by zero or one feature

c) Phonetically similar CONSONANTS in three or more word pairs

Category 2

a) Phonetically similar CONSONANTS in fewer than three word pairs

b) VOWELS differing by two features

Category 3

a) Non-phonetically similar CONSONANTS

b) VOWELS differing by three or more features

c) Irregular deletion (a deletion occurring in fewer than three word pairs).

PAYAP UNIVERSITY

Ignore

Some differences are ignored according to the following rules.

a) Ignore redundant information. If two words (e.g. 'few' and 'small') are the same, then just use one of the words. The extra word is redundant. Use whichever one is higher in the Comparative Wordlist order.

b) Treat initial clusters as one phone and treat as phonetically similar if the first of them is phonetically similar and the second matches. If one member of the word-pair has a cluster and the other has a single consonant, then ignore the second member of the cluster if this deletion is observed in three or more word pairs.

c) Ignore tone

d) If there are two choices for a word, choose the one that is most similar to the word in the other language.

e) Ignore differences between [k^h] and [x] or [kx] – this is free variation.

f) Ignore differences between [j] and [zj] preceding close or close-mid vowels – this is free variation.

g) Ignore vowel length for close or close-mid vowels.

h) Treat diphthongs as one vowel using whichever is closest to the corresponding vowel in the other variety.

If, for a given number of phones, the combination of phones in each category appears in Table 156 then the word pair is considered to be lexically similar. The rows in the table in boldface represent the weakest cases that are counted as being lexically similar.

PAYAP UNIVERSITY

Phones		Category 1	Category 2	Category 3
1	=	**1**	**0**	**0**
2	=	**2**	**0**	**0**
3	=	3	0	0
3	=	**2**	**1**	**0**
4	=	4	0	0
4	=	3	1	0
4	=	3	0	1
4	=	2	2	0
4	=	**2**	**1**	**1**
5	=	5	0	0
5	=	4	1	0
5	=	4	0	1
5	=	3	2	0
5	=	**3**	**1**	**1**
6	=	6	0	0
6	=	5	1	0
6	=	5	0	1
6	=	4	2	0
6	=	4	1	1
6	=	3	3	0
6	=	**3**	**2**	**1**
7	=	7	0	0
7	=	6	1	0
7	=	6	0	1
7	=	5	2	0
7	=	5	1	1
7	=	4	3	0
7	=	**4**	**2**	**1**

Table 156 Category combinations for lexical similarity

PAYAP UNIVERSITY

APPENDIX 10 KHUEN LITERACY SURVEY INSTRUMENTS

PAYAP UNIVERSITY

Khuen Literacy Survey

Part 1: Individual Literacy Questionnaire

Instructions

1. If possible, read the questions (without saying the question number or letter) **exactly as written**. However, it is likely that you will have to reword the question in some situation, or even offer explanation to make the question clear. If you have to explain the question, make sure you do **NOT** suggest an answer.
2. **Be polite.**
3. **Obtain oral consent**
4. Shaded items are **NOT** to be read aloud.
5. Items in parentheses ( ) or brackets [ ] require a choice depending on whatever is appropriate.
6. Use appropriate terms of address, especially pronouns.
7. The screening criteria below are intended to make sure that the interviewee is able to attempt the literacy tests without getting embarrassed. In asking for subjects to begin with, ask for people who are literate in Khuen.
8. Explain that names will not be published – only used to distinguish the questionnaires.
9. Explain the purpose of the survey. The Khuen sociolinguistic survey showed a remarkably high literacy rate – this survey is to confirm this. A similar literacy survey was done in Laos
10. Sample: 12 people in each village: 2 men + 2 women in each of 3 age groups: 15-30; 31-45; 46+
11. Survey 5 villages: Wan Jay; Pa Jahm; Murng Jem; Yang Kway; Wan Kahng

PAYAP UNIVERSITY

Enter answers to the following ahead of time in your notebook:

English	ခိုး
1. Questionnaire Number	ပျေးညွှပဆဉ်ဟဉ်ၵျလွှေဒီ
2. Survey	ကၵင်ဒြးဟာဝဲဟု
3. Interview Location	ဒီဇွဆပျိ
4. Interviewer Name	ဒီဇွဆမ်ူဆဉ်
5. Date	ဝုံဒီ
6. Language of Elicitation	မ်ူဆဉ်ဝဲဒ်ဘာသာဝဲဟု
7. Language of Response	မ်ူတွပဝဲဒ်ဘာသာဝဲဟု
8. Interpreter Name (if needed)	ဒီဇွဆမ်ူပျေ်သဝံၵ်မ်ူဆဉ်
9. Comments	

PAYAP UNIVERSITY

BACKGROUND INFORMATION & SCREENING QUESTIONS

English	Khuen
10 What is your name?	ခံသိဖ္ဒၢဝေၵ်ဒီသ္ဂ
11. Male or female	ဒ်ဇၢ္ဂ်ဟီဝေဖဲယ္ဂီ
12. How old are you?	ဘ္ဂၢဝယုဂ်ါဟီ
13. What is your occupation?	ဟ္ဒုကၠသ္ဂ
14. What level of education did you complete?	ၶ္ဍၣ်ဳဍ်ိဳသ္ဂ
15. Have you ever been a Buddhist monk or novice? a. (Yes or no) b. (If yes) For how long?	ဂ္ဍီျပေါ့သဝမဏ္ဍ ဟြီ ဖုဒ်ိမ္ဂၢဝယော်ဝဟ္ဂၢ a. (ပေါ့ ဟြီ ပ်ပေါ့) b. (ၼၢဝေါ့) ပေါ့ဒဲလ္ဂၢ္ဂျိဳ
16. When you were born, what village did you live in?	ဖ္ဒိဳဘ္ဂၣ်ဖ္ဒါဧၢဝကွဲ်ဳ်ပိုဲဝဟု
17. What village tract?	ဘ္ဂီဒ်သ္ဂ
18. What township?	ဖ္ဒီသ္ဂ
19. Where do you live now?	ဖ္ဒိဳချံဒ်ိ ဳ်ဖ်ိဲဝဟု
20. How many years have you lived here/there?	ဳ်ဝဲဒ်လ္ဂၢ္ဂျိဳလ့
21. What language did you speak first as a child?	ဖ္ဒိဳယ္ဂ်ဖ္ဂျ် ဘ္ဂၢဘၢသဘသ္ဂဝဲဒ် ဘ္ဂၣ်ဖ္ဒါဇို
22. Can you speak any other languages?	ဘ္ဂၢဘၢသဘတံ့ဂ္ဂမ့ဲျဝဲဒ်ဳ်ဟ္ဂၢဝ
23. (if so) What languages?	(ၼၢဝဲဒ်) ပေါ့ဘၢဘသဘသ္ဂ
24. Which language do you speak the best?	ဘ္ဂၢဘၢသဘသ္ဂ်ဂျၤးတ္ဂြိဘ့ဇို
Does the subject speak Khuen first or best? □ ဂ့ိဖ်ိဳတ္ဂပ ဘ္ဂၢဘၢသဘခိုဲဝဲဒ်ဒီ ဟြီ ဘ္ဂၢဘၢသဘခိုဲဝဲဒ်ဘ္ဂၣ်ဖ္ဒါ ☐	
25. Can you read Khuen?	ဘံဝုလ်ိဳခိုဲဝဲဒ်ဳ်ဟ္ဂၢဝ
Does the subject read Khuen? □	
26. Can you write Khuen?	ဇေတ့ွလ်ိဳခိုဲဝဲဒ်ဳ်ဟ္ဂၢဝ
Does the subject write Khuen □	
SCREENING CRITERIA: The three boxes above (after Questions 04, 25 and 26) must be checked. Otherwise, thank the subject and go on to the next person.	

PAYAP UNIVERSITY

ETHNOLINGUISTIC IDENTITY

English	Khuen
27. Do you think of yourself first as Burmese, Tai Yai, Khuen, or something else?	ဖျိုဘူးဇ်ဂိၼ်ဧၵၢင်ဦဝ်ဂိၼ်ဧၵၢပျေၵုၵ်ၼံၶု ၵွၼ်ပျေငဲတ ၵွၼ်ပျေခိုဝ် ၵွၼ်တံၶ်ဝ်ၵမ့ဵ်

KHUEN LITERACY PROFICIENCY AND ATTITUDES

English	Khuen
28. Where did you learn to read Khuen?	ဧၵ်ၶမ့ၼ်ၼၢၼ်ၶၢဝ်ၶုလ်ၵ်ၽဵဝ်ခိုငဲၶဵဝ်ဒဵငဲဟု
29. How old were you when you started to learn to read in Khuen?	ဖျိုဂးဟဝ်ဩ်ၶမ့ၼ်ၶၢဝ်ၶုလ်ၵ်ၽဵခိုဒိ်ဘယုဂ်ါဟီ
30. How long did you study reading in Khuen?	ဧၵ်ၶမ့ၼ်ၶၢဝ်ၶုလ်ၵ်ၽဵခိုဇုဂ်ါဟီ
31. How well can you read Khuen now? a. Almost everything you see b. Most things c. Some things	ဧၵ်ဝၢဝ်ၶုလ်ၵ်ခိုငဲၶသ့ၼ်ၵဵဒ့ဵၶဵဝ်ဟု်ဝ ခံဟီလ်ဩ် a. ၶၢဝ်ဝုငဲၶဵဝ်ဒ်ဩ်သ့ၼ်ၵ b. ၶၢဝ်ဝုပ်ဵံငဲၶဵ c. ၶၢဝ်ဝုငဲၶဵဝ်ဘျိဟ်ဩ်
32. Have you read any Khuen materials in the last 30 days? a. (answer) b. (if yes) What did you read? c. (if no) Approximately when did you last read something in Khuen?	**30** ဝုဒ်ဵံဖဵဝ်ငဲၶဵဝ်ၶၢဝ်ၶုလ်ၵ်ခိုၽုဲဟု်ဝ a. ၶၢဝ်ဝု ၵွၼ် ပ်ၶၢဝ်ဝု b. (ၼ်ဝၶၢဝ်ဝု)ၶၢဝ်ဝုဣသ်ဩ် c. (ၼ်ဝပ်ၶၢဝ်ဝု)လွပ်ၶၢဝ်ဝုဖျိုငဲဟုပျေဣ်ဩ်သုၶဖဵၽု
33. Where did you learn to write Khuen?	ဧၵ်ၶမ့ၼ်ၼၢၼ်ၶွတ့်လ်ၵ်ၽဵခိုငဲၶဵဝ်ဒဵငဲဟု
34. How old were you when you started to learn to write in Khuen?	ဖျိုဂးဟဝ်ဩ်ၶမ့ၼ်ၶွတ့်လ်ၵ်ခိုဒိ်ဘယုဂ်ါဟီ
35. How long did you study writing in Khuen?	ဧၵ်ၶမ့ၼ်ၶွတ့်လ်ၵ်ခိုဇုဂ်ါဟီ
36. How well can you write Khuen now? a. Almost everything you want b. Most things c. Some things	ဧၵ်ဝွတ့်လ်ၵ်ခိုငဲၶသ့ၼ်ၵဵဒ့ဵၶဵဝ်ဟု်ဝ ခံဟီလ်ဩ် a. ဝွတ့်ငဲၶဵဝ်ဒ်ဩ်သ့ၼ်ၵ b. ဝွတ့်ပ်ဵံငဲၶဵ c. ဝွတ့်ငဲၶဵဝ်ဘျိဟ်ဩ်

PAYAP UNIVERSITY

English	Khuen
37. Do you see any advantage in being able to read Khuen? a. (answer) b. (If yes) What advantage? c. (if no) Why not?	ကၣတံၤဝုလ်ကီခိုဒိၣ်ဖိၣ်ဃြုပင်ယွၤဟီ a. ဖိၣ် ဟြီ ပ်ဖိၣ် b. (ဆၢဝဖိၣ်) ဖိၣ်ပင်ယွၤဝဲတဲ့ c. (ဆၢဝပ်ဖိၣ်) ငဉ်ဂုံးတွေ့သွၣ်
38. Do you think that Khuen children should learn to read Khuen? a. (answer) b. (If yes) Why? c. (if no) Why not?	လးဘျံၣခိုဂ့ၣန့ၣန့ၣန်ုတံၤဝုလ်ကီခိုဒိုဟီ a. ဂ့ၣန့ၣန်ု ဟြီ ပလွံၤ့ၣန်ု b. (ဆၢသွဲဂ့ၣန့ၣန်ု) ငဉ်ဂုံးတွေ့သွၣ် c. (ဆၢပလွံၤ့ၣန်ု) ငဉ်ဂုံးတွေ့သွၣ်
39. I will read 4 sentences about your ability to do numerical calculations. Which sentence do you agree with? a. I can do almost any calculation b. I can do many types of calculation c. I can do some types of calculation d. I can't do calculations at all	ခ်ၤဝ်ဉ်တံၤဝုဇင်ယ်ဉ် **4** ဇင်ယ်ဉဒိုကွံၤ်ကျဟ်ဘ်သၤဖဒွဍ်ဃလွ်ဲ ဟ့ဉ်ဆ်ဇင်ယ်ဉဝဲတဲ့ a. ခ်ၤဍ်ဃလွ်ဲဒိုဝဲဒ့ဖ်ဆ်သ့ၣ b. ခ်ၤဍ်ဃလွ်ဲဝဲဒ့လ်ာ့ၣ်ဒ်ဥ် c. ခ်ၤဍ်ဃလွ်ဲဝဲဒ့ပျဲ်ဥ်ဒ်ဥ် d. ခ်ၤဍ်ဃလွ်ဲပ်ဝဲဒ့လ်ျိ

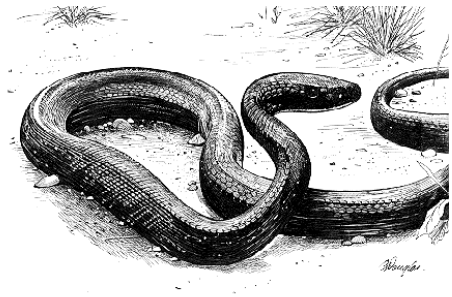
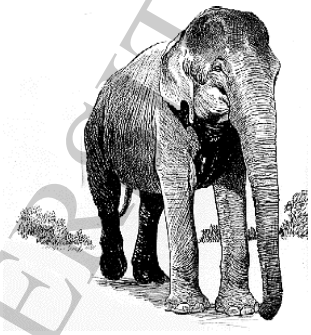
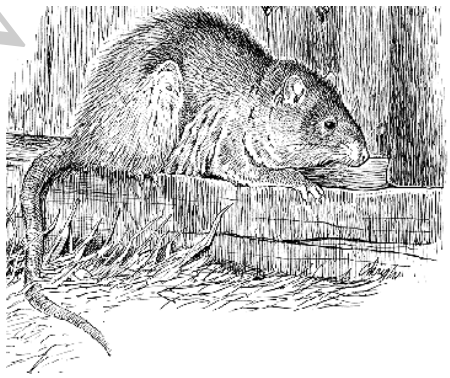
INTERVIEWER OBSERVATIONS
40. Were there any distractions or interruptions that interfered with the flow of the interview or seemed to influence some of the responses? ဇဖြိဳဝေလၢဝေန်ၤသ့ဉ်ပဓၢဒ့ုံဉ်ဒ့ဉ် ဖိၣ်ဥသ်ဓဒွိဳခိုဳက့ဂ်ဳိဉ်တ့ပ
41. Did the subject seem shy or fairly confident about expressing his/her opinions? ဇဖြိဳဉ်တ့ပ ဒ်ုဖိဳဉ်တ့ပဖိၣ်ကိန်ယၢဒီဳဟီ ဘ့ၣ့ ဟြီ မ့ိုဝဲစ
42. Other observations? ဖိၣ်ကသွသ်ဥ်ကွဲ ဘ့ိဳဘ့ိဳ
43. Were there any questions that seemed to not work well? ဖိၣ်ဂၤံဓဒွဖိဳပ်ဒိုင်ဂုံး ဂၤံဓဒွဟ့ၣ့ဍ့ လါပ်ဝဲဂံခၣ်ဝဲစ ဟြီ ခၣ်ဝဲစဒုံ့ ဃတဲ့ ဟာဂၤံတ့ပပ်ဝဲဒ့

PAYAP UNIVERSITY

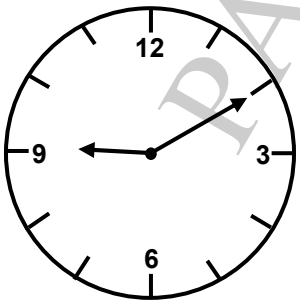
ကဘွင်ဖြူးဟာဂွဥသာဖဒ္ဒဘုံဝုတွေ့လ္ကိခိုဲ

သွံန 2. ကဘွသူပခဘဥကျံ့ကျ်ကဘွဘုံဝု

2.1 ဟီလ္ကေိတွံလ္ကိတိဝဲဇဋိဝါ ဖုံခေါဘ်ဖျံနုံနတွံဝဲဟု

	ဟူ ဓ်ဘ	
	သ္ဒေ ရူ	

2.2 ဇရ္ဇီကာဇိသဒ္ဓေဝေလာဝဲခ်ဟ္လာျဂဝံ



PAYAP UNIVERSITY

2.3 ခံဟီဘုံဝုဒ္ဓိရစ္ဆိဟ္ဘဒ္ဒ၍ လ်ပ္ပကဝါဝဲဃပေါ်ဂိုတော့် လ်ဝဲဃတေဝဲခ်န်ယ္ယလ္ကိ

STAMP

စဘ္ဂ/

ဇ္ဆကေသိ

င်န္ဆန္ဒ၍ရဒ်ိသူရဟ္ဘဒ္ဒ -၁

ဝ္ဒ၍ရတ်ုရဂ်ိ

သ်ရှိ/

ဒဘ္ဒယိပုညာ

လေခဖိ ၂၂ ပိုဒ္ဒ၍ရလဝု

ဟုံဇ္ဆါ ဒေဖိုဘ်ုရ

ခ္ဆေ -၃ ဖ္ဆေဒ္ဒ၍ရတုရ

ဟီမ်ူရဘဒ္ဒလ္ကေဂဝံပြကဘ္ဒဖိဘုဝိပဘ္ဒ၍ဂဝံတ္ပပဒိဖိသုဒ

a. မ်ူတ္ပပဘုံဝုရံဘ္ဒလ်တ္ပပရူက

b. မ်ူတ္ပပဘုံဝုယဘ္ဂတေံတ္ပပရူက

c. မ်ူတ္ပပဘုံဝုဝဲခ်တေံတ္ပပမ်ိုပ္ဆါသ္ဒ၍ရ

d. မ်ူတ္ပပဘုံဝုဝဲခ်တေံတ္ပပမ်ိုဖီသ္ဒ၍ရ

e. မ်ူတ္ပပဘုံဝုဒ္ဓိရစ္ဆိဟ္ဘဒ္ဒ၍ပ်ဝဲခ်

PAYAP UNIVERSITY

2.4 ခံဟိ်ဘံၤဝုခိမ့ၤလဖိ်ပူ်ပါၣ်ငဲတ်ဒိ်

ဧၥဖိ်ဝါစ့်ကဖျံဖြဲငဲဇဖါခီ်လွေကစဉ်ဖျိဧတုဧ စ့်ကဲဇဆြီဖါခီ်လွေက 12:30 pm.

a. လ့ိ်ဒ်ိ်ခ်ိန်ကီ်ဝ်မ့ဧ

b. ဧၥဂ်ၥတွံခ်ိန်ဂါဟီ

ဂဝံပြကၡ သဝံန်ဃ် ကၡဉ်ကဖြဲ နှဒ်ိ်ဉ်ကဖြဲပူ်စဉ်ကဖျိဧတုဧဂုံဝုံ တဒွဝေလၥဖြဲငဲတ်ဒိ်			
ခြဲ	ဝေလၥဉ်ကာ	ဝေလၥခြီ	ဧၥဂ်ၥတွံခ်ိန်
ဖြိယဉ	08:30 am	12:30 pm	4500 ကျၥး
ဖါခီ်လွေက	08:00 am	12:30 pm	5000 ကျၥး
ဖြိလၥ	09:30 am	11:00 pm	4000 ကျၥး
ဖြိကျဧ	10:00 am	11:30 pm	1500 ကျၥး
ဖါခီ်လွေက	01:30 pm	06:00 pm	4800 ကျၥး

ဟိ်ယ်ဏၣဒွလ်ိဂဂံပြကၡဖိ်ဘုဝိပၣ်ဂဂံတူပဒိ်ဖိ်သုဒ

a. တူပဏုကဇ်ဝေလၥလါဧၥဂ်ၥခ်ိန်

b. တူပဏုကဝေလၥတေံဧၥဂ်ၥဃ်ိ

c. တူပဏုကဧၥဂ်ၥတေံဝေလၥဃ်ိ

d. ယ်ိတူပဘံၤဝုငဲဒ်တေံတူပယ်ိဖြိ်ဝေလၥလါဧၥဂ်ၥခ်ိန်

e. ယ်ိတူပဘံၤဝုပ်ငဲဒ်

PAYAP UNIVERSITY

2.5 ခံဟိ်ဘုံဝုခံင်ဂွဥဖိ်ပျိ်ပါ၃ျငဲတ်ဒိ်

ခံဟိ်ဖျိုပျေ်ဂေဖဲလူကဘ္ဉာ်ခ ငဲဒ်ဘုံဝုခံင်ဂွဥဇ၃ျငဲတ်ဒိ်

ဥ်ဖြိဒိ်ဘဥ်ဂ္ဂခ၃ျ သ၁ဖဒ္ဒဟွေဟိ်လူကဘ္ဉာခ်ျ်ဥ်ျ်ဥ်ီတ၃ျငဲဒ်
ဥ်ဂေဖဲပျေ်တုဝဟ၁ဖိ်ဒိ်ဖိ်သုဒသဝံန်ျလူကဘ္ဉာခ်ျ်ဥ်ျ်ဥ်ခ်ဂ်ေ၁
ဟိ်လူကကိုဥ်ဂေဖဲမျ်ဒျ်ဧိုဥ်ီလူကတုဝယုငဲဒ် 4 ဂဲ့ိ
ငဲဇဝေလ၁ဖိ်ဂေဖဲယ်ဥဟိ်ဥ်ိလူကမျ်ု ဖြုပျေ်ဂေဖဲဂ္ဂခကို ဖ်ိ်, ဖ်ိ်, ပါ၁, ငဲခံ, လ်ေ ဂ်ိ်ုင် ဟိ်ဈ်ခဂံ

ခံဂွဥဒိ်မ့ုကျ်ုက်ျခ်ွဲဒ်ဥတ်ဥ ဟိ်လ်ွဲဂဝံပြကဒ္ဓဘ်ုဖိ်ဏ္ဍကဖိ်သုဒ ဘ်ုဖိ်ျ်ုပါ၃ျငဲတ်ဒိ်

a. ပျေ်ကဥ်ဟ်ုခပါဝ်ငဲဂံ်ခ၃ျဥ်ဖြိ

b. ပျေ်ပြိ်ခ္ဂခဲဇကဥ်သ်ိသ၁ဇ်ုတ်ုံ

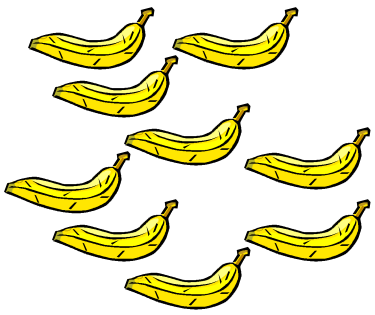
c. ပျေ်ကဥ်ဟ်ုခပါဝ်ငဲဂံ်ခ၃ျဥ်ဂေဖဲ

d. ပျေ်ကဥ်ပုကဟိ်ဘုံသဝံဂ့ိသဝံန်ျဂေဖဲဖိ်ဖိလူကဘ္ဉာခ်ျ်ဥ်ျ်

PAYAP UNIVERSITY

သွဲန 3. ကဘ္ဍသူပခဘဉကျံ့ကျ်ကဘ္ဍတော်

3.1 ငဲဇန္ဒျူဖြိုဲ့ဂဘျဲငတ်ဖိကျ်ကြိဟ္ဆ့ ခံဟီတော်ဂဘံတူပတွဲလွှေလ်တွဲဟ္ဇသီ

	တွဲလွှေ ---------- တွဲဟ္ဇသီ ----------

3.2 ခံဟီတော်ဂေးယွကကျံ့ကျ်ဖဘ္ဂငဲဖ်ဖြိစ်ဘဇြီကဖဘ္ဂဖြိသုဒ (ဇီ, သိ, နွှဲ)

3.3 ခံဟီတော်ဇီခူဓစ်ဘလ်ဖြိုဲ့ (ပျိ, ဘွီ, ဖွီ)

ဇီ	
ပျိ	
ဘွီ	
ဖွီ	

PAYAP UNIVERSITY

3.4 စာဖိုဝါစော်ဖိုလူကဒျဖိုစ်ခေါင်နွှနျနဘွနဖွါ ခံဟီယိုပျေဉြမဖိုဖိုဂျဝဲတ်ဒိုသံန်ျလူကဒျ

ပျေဉြမဂ်ကနျနဝဲဟ့်						
ဒီခွဉလူက						
ဝုကျိခွဉလူက		ဝု		ဒျိ		ဗိ
ဘုဝယုခွဉလူက						
လူကပျေ်ဖုဒျ[ဟီဖုယ်ဓိ	□	ဖုဒျ			□	ဖုယ်ဓိ

3.5 ခံဟီစော်တော်ဉိဟ္ဒျတ်ဓိုဖိုသွနဟီဘုံဝုလ်ကိခိုဇျိဂ်ပဂုဏ

PAYAP UNIVERSITY

သင်ခန်း 4. ကာလသုံပစ္စက္ခုက်ျိက်ျကာလဖြည်လွှဲ

4.0 စော်ဝင်္ကြေငဲ့တွဲဂဏုံငဟူဟ္လာဒျုဖြံသုဒ

a. တွဲဂဏုဖြံငဲ့ (ဝဘျဒ္ဂဒျဖ်ရဂဓ္ဓ)

b. တွဲဂဏုဘုန်ပ္ဂြိ (**0123456789**)

c. ငဲ့ငတွဲဂဏုံငဟုဂ်ငဲ့

4.1 ခံဟိုဂ်္ဂိတွဲလွှဲဖြံပျံပါဒျုငဲတ်ဒိုင်

		ဂဝံတ္ထပ
a	၇ + ၁၂	=
b	၅၄ +၂၃ + ၁၀၂	=
c	၁၂ − ၇	=
d	၃၅၇ ÷ ၇	=
e	၁၀၂ × ၅၄	=
f	(၁၂ ၃+၄)×(၇−၂)	=

4.2 ဖြိ ၅၀ ပိုဂိုဖ၁ဝ္ဂ ပျံဆိုခံခ၁ပျံကတိုဖဝ္ဂဖွံ့ခ ၁၂ တိုံငဒသွန်ဆိုခံခ်ဝ

ဖြိ ၂၀ ပိုဂိုဖ၁ဝ္ဂဂ်ံဆိုခံခ၁ပျံကတိုဖဝ္ဂဖွံ့ခံဆ္ဂ် ၁၀ တိုံ

ဖြိ ၂ ပိုဂိုဖ၁ဖြိတိုံဝန်နဇုဇံ ဖိတိုံငဖ ၅ တိုံဆိုခံဝ္ဂျပျံ လ် ၂ တိုံဆိုခံဝ္ဂဂ်ံတာ၅

ခ၁ဂ်ံဝံငဲဒျပျံကတိုံငဖဖေဆ္ဂ် ၉ တိုံဇာ၅ငဒပိုဖြံလ္ပံ

ဖြိုံ၅ုံဇိဖိတိုံငဖဖဝဖွံ့ခ ဟ္လာ၅တိုံငဒသွန်ဆိုခံခ်ဝ

PAYAP UNIVERSITY

4.3 စာဖိုဝါဒီဖိုဇ် ၃ ဘုဟွေ့ဒီဖိုမျိုင်ရန္ဓူဖိုမျိုဇာ့ပင်တင်ရိ

———	၈ ကွေ
————	၁၀ ကွေ
————————	၂ ပေါ်

လွှ ဉ်ာဖာဟွဖက်စင်ဒဖေါင်ဒ် ဟီတွေ့ဂဝံတ္ထပပေါ့ပေါ်လ်ကွေ

4.4 စာဖိုဝါစ်ဟာရေိုဝုင်ဟု ၇၀၀၀ ဗျား. ဆ်ာစော်ဟွေကဒ္ဓဘာဖြိုမ်ငဟု ၆ ဝု.

a. ဇာ့ပင်ရ ၂ ဘာဖြိုမ်စော်ာစင်ဒ်ရေိ ဟ္လာ့ဗျား

b. ဓာ့ကိုဓာ့ဇ်ာ့ပြစဝံဝု သ့်ရဂါဟီ

4.5 စာဖိုဝါစ်ယိုရေိုစဉ္ဂဂ်သ့ံ ၁၀၀၀၀၀ ဗျား ငဲဒ်သေက်ာဥကပ့ေရေိုင်ဟု ၃% ဆ်ာစော်ဂိုရေိုဇာ့ပင်ရ ၂ ရေိ စော်ာလွဲ်ဟီ်ရေိုဖိုယိုဖာ လ် ဥကပ့ေ ဇိုဇ်ဒိသ့်ရဂါဟီ

PAYAP UNIVERSITY