

Chung (Saoch) of Thailand and Cambodia: phonological and lexical comparisons¹

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Abstract

In the 1830s, during the Annam-Siam war in Cambodia, some Chung people were captured and sent to Thailand by Siamese troops, while others were still left in their original home. For almost two centuries, the two groups of Chung speakers have been isolated from each other. It is shown that each variety has diverged due to the long period of separation and language contact. As proposed in this study, Chung of Thailand are called Chung Yuy (CY) and of Cambodia Chung Yul (CL) because of different pronunciations of the word 'sky', representing the correspondence between words ending with /-j/ in CY and /-l/ in CL. The difference suggests that CY have undergone a merger of Proto-Pearic *-l and *-j, while CL still keeps the distinction. The loss of such contrast is motivated by CY's drift towards Thai. Though the change from *-stops to -nasals after glottalized vowels in CL is salient, it is an independent process and not found in CY and other Pearic languages. Lexically, there are four patterns of borrowing: (1) CY borrowed Thai and CL borrowed Khmer (2) CY borrowed Thai while CL kept old forms (3) CY and CL borrowed Khmer (4) CY kept old forms while CL borrowed Khmer.

1. Chung or Saoch language

The Chung [tʰu̯ʔŋ] language, hitherto known as Saoch², belongs to the Pearic branch of the Mon-Khmer (Thomas & Headley, 1970). The Pearic branch also includes languages known as Chong, Kasong, Suoi, Pear, Samre, and Somray, most of which are scattered along the Thai-Cambodian border (Fig. 1). 'Saoch' is a Khmer word which has a pejorative meaning in the minds of the Chung, therefore they prefer to use the word 'Chung' as their autonym. For this reason I will refer to the language as Chung instead of Saoch.

The original homeland of Chung is Kampong Som province in Cambodia. In the 1830s, some of the Chung people were captured by Siamese troops during the war between Siam and Annam. Chung prisoners of war were sent to Siam. Fig. 2 shows the approximate distance between Chung of

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²Huffman & Proum (1996: 137) defines Saoch as 'a tribal group' without further clarification.

Thailand and Cambodia, the first variety is located in Kanchanaburi on the Thailand-Myanmar frontier and the latter is located in Kampong Som on the south-western coast of Cambodia. For further description of historical and cultural background of the Chung people see Leclère (2002).

1.1 *Chung of Thailand*

Today the Chung community in Thailand lives in the small village of Ban Thung Na, located by the reservoir of Si Nakharin Dam in Si Sawat District of Kanchanaburi, a frontier province of Thailand (bordering Myanmar). This location was assigned by the Electricity Generating Authority of Thailand after the original Ban Thung Na was flooded as a consequence of dam construction in 1975. This is the same fate suffered by all villages around the reservoir, which had hitherto been located on both sides of the Khwae Yai River. With relocation, the original village names were maintained. The ironic effect on the life of Ban Thung Na villagers is that the name of the village means ‘rice fields’ in Thai, yet today no one can grow rice in the present Thung Na village because it is located on the hill slope, where the soil is mixed with gravel. Nonetheless, the village name reminds us that the ancestors of Thung Na villagers were rice cultivators.

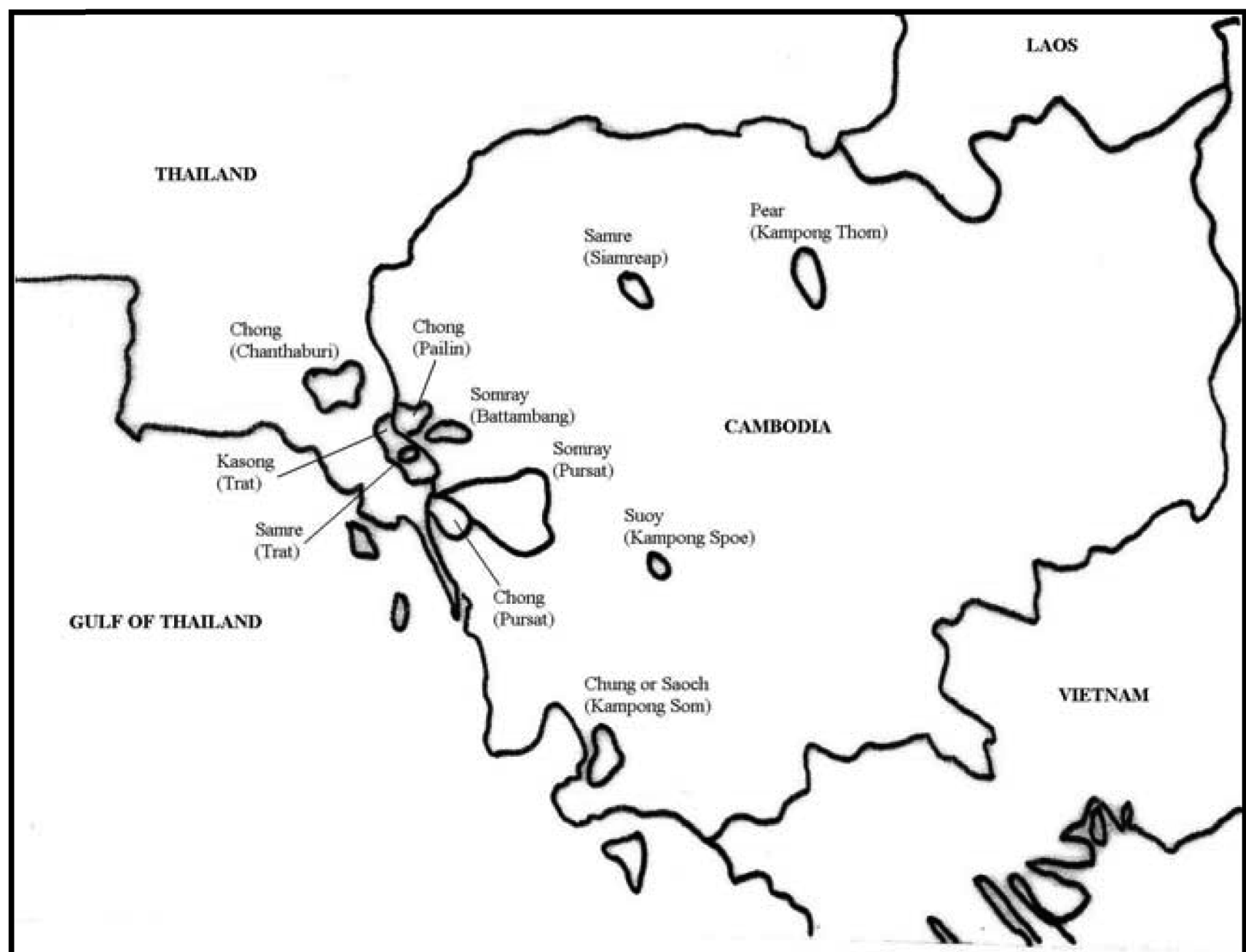


Figure 1. Geographic distribution of Pearic languages

[Adapted from Gordon (2005) Online version: <http://www.ethnologue.com/>]

A drastic effect on the Chung resulted from the additional relocation of other ethnic groups, including Karen, Lao, Khmu and Thai into the new Ban Thung Na. The Chung were abruptly changed from a majority in their village, to a minority. If these were the old days, say two or three generations ago, they might have moved on to find a new settlement area far away from 'outsiders' and maintained their social position. However, in the new Ban Thung Na they are a very small ethnic group referred to by others as 'Ut'.³ The language barrier has disappeared; whereas earlier, Ut people used their own language among themselves and only used Thai as a lingua franca, they are now expected to use Thai in a wider range of situations. Since being moved to the new location they have been comparatively stigmatized yet they accept their fate and suffer the humiliation of becoming a lower social stratum in the village where they had enjoyed the predominant status.

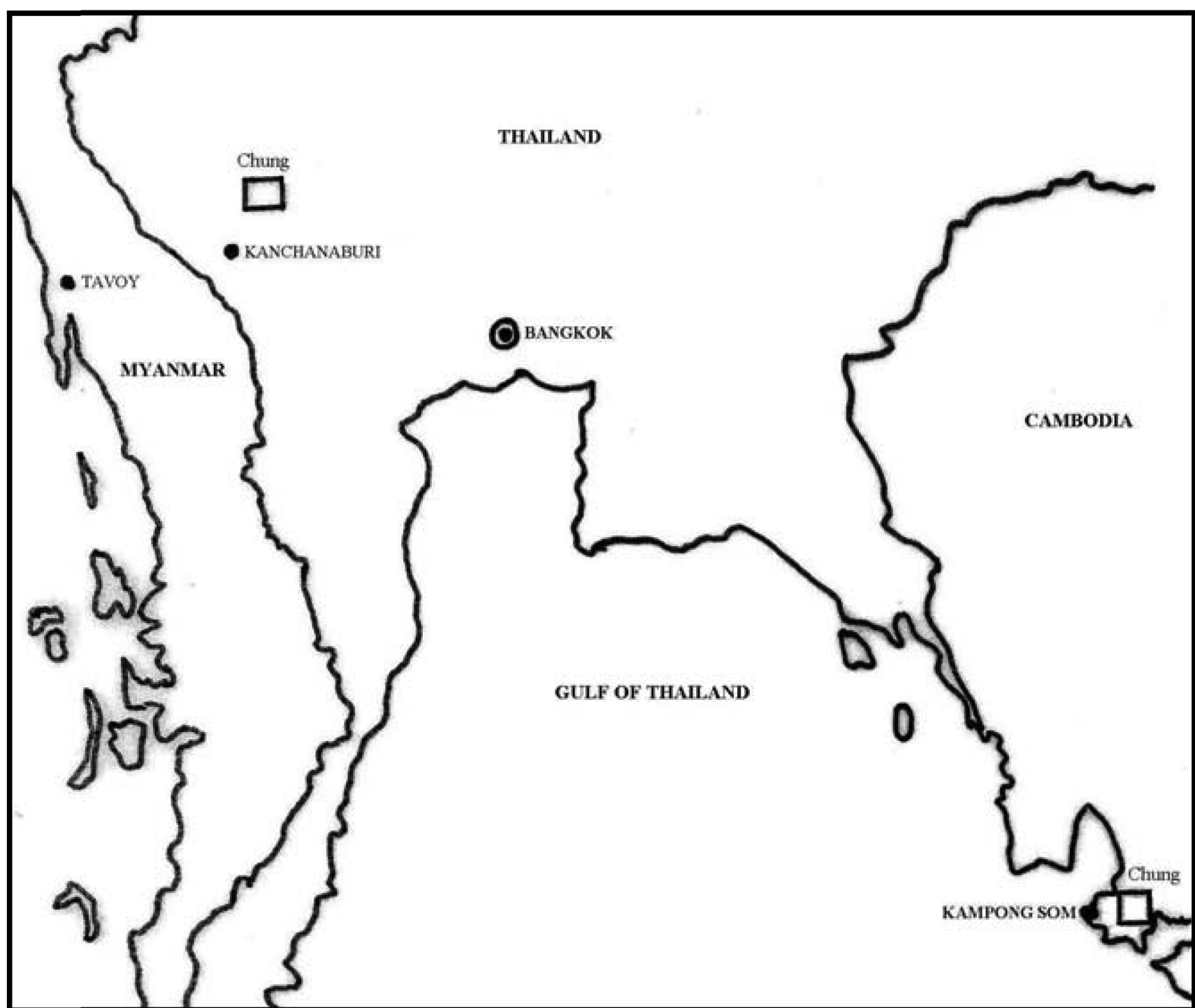


Figure 2. Chung language areas

In addition to monetary compensation, relocatees were each given a plot of land that is not big enough to sustain families of future generations. The period of forest clearing to obtain more cultivation land had ended for good. For the Chung people, this only meant cultural assimilation into Thai society. They need to seek jobs in the city that require better Thai conversational ability.

³Ut is supposed to be etymologically related to Saoch. As final palatal stop *-c* is not pronounceable in Thai, it is probable that Ut was derived from Saoch.

Compulsory education based on Thai language and culture is another factor that has accelerated the shift from Chung language to Thai. Use of the Chung on school premises was prohibited until recently. Chung people had also been made fun of by relocates of other ethnic groups. These factors contribute to an intergenerational disruption of the Chung language. The situation is most severe among the Chung of the school age generation. Most of the Chung population consists of older and younger generations living in the village whereas many of the Chung adults seek jobs in the city or work as hired labors for local employers.

1.2 *Chung of Cambodia*

The recent history of the Chung people in Cambodia can be divided into three stages: (1) Before the arrival of the Siamese army (1830s), (2) after the Siamese conquest and before the Pol Pot regime, and (3) during and after the Pol Pot regime.

Before the arrival of the Siamese army in 1830s, the Chung had been known to enjoy a tribal territory in what is now Veal Renh district. According to Chung oral history, they had a fort called Banteay Prey, which was not only their fortified settlement, but it was the source of water supply for Chung people who had settled along the sea coast. Chung people believed that their ancestors used this fort to resist the Siamese assault.

After being defeated by the Siamese, the Chung population dropped sharply. There was a Chung village called *Long Leh* on the seacoast of Kampong Som. They had lived in isolation from the Khmer people where they were able to maintain their language. Even the introduction of modern education after independence from French colonization did not affect the Chung language very much because Chung people could not enter the school system because they were regarded by Khmer as having below average intellectual ability. During the Khmer Rouge regime in the 1970s, Chung villagers were relocated away from the coast and some were killed by communist cadres. Now they have to live together with the Khmer who are superior to them both in numbers and economic well-being.

After the fall of Pol Pot, the general situation of Chung improved. However, there are few job opportunities in the city for Chung people. Thus, there are adults in the village who can still use the Chung language. Among the younger generation of Chung of school age, there is a language shift from Chung to Khmer, quite similar to Chung children in Thailand.

2. Chung phonological inventories

2.1 *Consonants*

The Chung consonantal inventory consists of 21 phonemes: /p, p^h, b, m, w, t, t^h, d, s, n, ɾ, l, c, c^h, ɲ, j, k, k^h, ŋ, ʔ, h/. According to distinctions in place of articulation, these consonants can be categorized as 5 labial

consonants /p, p^h, b, m, w/, 7 alveolar consonants /t, t^h, d, s, n, ɹ, l/, 4 palatal consonants /c, c^h, ɲ, j/, 3 velar consonants /k, k^h, ŋ/, and 2 glottal consonants /ʔ, h/. In terms of consonant classes or manner of articulation, the Chung consonantal inventory includes 13 obstruents--11 stops and 2 fricatives--and 8 sonorants--4 nasals, 2 liquids and 2 glides. Table 1 shows the distinctions of Chung consonantal phonemes in terms of place and manner of articulation.

Table 1. Chung consonantal phonemes

Manner and Place of Articulation						
Manner		Place				
		Labial	Alveolar	Palatal	Velar	Glottal
Obstruents	Stops	p p ^h b	t t ^h d	c c ^h	k k ^h	ʔ
	Fricatives		s			h
Sonorants	Nasals	m	n	ɲ	ŋ	
	Liquids		ɹ l			
	Glides	w		j		

2.2 Vowels

There are 9 short vowels and 9 long vowels in Chung. There are no occurrences of short vowels in open stressed syllables. In other words, there is no contrast of short and long vowels in open syllables. Diphthongs such as [iə, uə, uə] are rare and found only in some borrowings from Thai or Khmer. They are not considered native to Chung phonology.

Table 2. Chung vowel phonemes

Tongue Height	Tongue Position		
	Front	Central	Back
Close	i ii	ɯ ɯɯ	u uu
Mid	e ee	ɤ ɤɤ	o oo
Open	ɛ ɛɛ	a aa	ɔ ɔɔ

2.3 Registers

Chung is a non-tonal language. However, there are 4 suprasegmental phonemic contrasts based on the use of three “phonation types”, namely clear (modal) voice, creaky voice, breathy voice, and the combination breathy-creaky voice, which are similar to Chong, another Pearic language spoken in Thailand (Isara 2002). These suprasegmentals are called 'registers' in this study. They are:

- *R1* stands for clear voice
- *R2* creaky voice
- *R3* breathy voice
- *R4* breathy-creaky voice.

The articulatory-phonetic features, based on different glottal states for each register are distinguished in Table 3, and exemplified in Table 4. The description of laryngeal features as \pm Voice, \pm Spread Glottis and \pm Constricted Glottis follows Gussenhoven & Jacobs (2005: 57).

Table 3. Phonetic features of Chung registers

Phonetic Features	Clear(<i>R1</i>)	Creaky(<i>R2</i>)	Breathy(<i>R3</i>)	Breathy-Creaky(<i>R4</i>)
\pm Voice	+	+	+	+
\pm Spread Glottis	-	-	+	+
\pm Constricted Glottis	-	+	-	+

Table 4. Examples of Chung register contrasts

Clear(<i>R1</i>)	Creaky(<i>R1</i>)	Breathy(<i>R3</i>)	Breathy-Creaky(<i>R4</i>)
/tak/ ‘big’	-	/tək/ ‘trap’	-
/taak/ ‘bean’	/taa ^ʔ k/ ‘tongue’	/tək/ ‘water’	-
/saap/ ‘bland’	/saa ^ʔ p/ ‘dawn’	-	-
/mənuul/ ‘knee’	-	kənɯul ‘seven’	-
-	-	/mlɯuŋ/ ‘eel’	/mlɯu ^ʔ ŋ/ ‘salty’

3. Phonological correspondences

There are some significant phonetic/phonemic differences between the Chung spoken in Cambodia and in Thailand. These include a correspondence between words ending with /-j/ and /-l/. I suggest here that it is convenient to call the two varieties “Chung Yuy” and “Chung Yul,” based on different pronunciations of the word ‘sky’. The choice of this word is arbitrary, since the etymology of ‘sky’ is not of greater importance than other words in the same class.

This section shows how much Chung Yuy and Chung Yul differ from each other in terms of phonology. The list of phonological correspondences includes §3.1 Consonant Clusters, §3.2 Pre-syllables, and §3.3 Final Consonants.

3.1 Consonant clusters

This subsection deals with differences between consonant clusters in Chung Yuy and Chung Yul. It is observable that consonant clusters in Chung Yul are more varied and complex than in Chung Yuy.

It is also found that the clusters /tɿ- cɿ- cɿ-/ found in Chung Yul are absent in Chung Yuy.

Table 5. Differences in Consonant Clusters

Chung Yuy	Chung Yul	Gloss
jaŋ	claŋ	‘cooked rice’
kɿaŋ	cɿaŋ	‘stilt’
kɿooc	cɿooc	‘horn’
kɿok	cɿok	‘pig’
kɿɔp	tɿɔp	‘eggplant’

However, the consonant clusters composed of labials and liquids are similar in Chung Yuy and Chung Yul.

ɱiak - ɱiak ‘silver’.
 mlɿu - mlɿu ‘betel’.
 mlɿeŋ - mlɿeŋ ‘beautiful’.

3.2 Pre-syllables

This subsection deals with differences between pre-syllables in Chung Yuy and Chung Yul. It can be seen that consonant clusters in Chung Yul are more complex than in Chung Yuy. It is remarkable that in the case of Chung Yul, pre-syllable structure is more complex and varied, while it is rather simple in Chung Yuy, which has /kə-/ as pre-syllable in almost all cases.

Table 6. Differences in pre-syllables

Chung Yuy	Chung Yul	Gloss
təkaa	cəkaa	‘mouth’
kəpook	tɿəpook	‘hole’
kətɿit	pətɿit	‘chili’
kəɿɿɿŋ	pɿəɿɿɿŋ	‘ear’

3.3 Final consonants

This subsection deals with differences between final consonants in Chung Yuy and Chung Yul. It covers the following differences:(1) /-j/ - /-l/ and (2) /-p, -t, -c, -k/ -- /-m, -n, -ŋ, - ɿ/.

3.3.1 /-j/ and /-l/

As discussed above, there is a phonological correspondence between words ending with /-j/ and /-l/ in Chung Yuy and Chung Yul respectively. However, it is not a simple correspondence: there are words ending with /-j/ that are similar in Chung Yuy and Chung Yul. This means that there is a distinction between /-j/ and /-l/ in Chung Yul while there is not in Chung Yuy. This suggests a merger of /-j/ and /-l/ in Chung Yuy (for reconstruction of Proto-Pearic see Headley 1985).

Table 7. Correspondence between /-j/ - /-l/ in CY and CL

Chung Yuy	Chung Yul	Gloss
haaj	haal	'rice'
juuj	juul	'sky'
kənuuj	kənuul	'seven'
kɤj	kɤl	'sit'
mənuuj	mənuul	'knee'
c ^h ooj	c ^h ool	'plant (v.)'

Table 8. Correspondence between /-j/ - /-j/ in CY and CL

Chung Yuy	Chung Yul	Gloss
.ɲu [?] j	.ɲu [?] j	'melon'
kɔ [?] j	kɔ [?] j	'long (time)'
c ^h oo [?] j	c ^h oo [?] j	'treetop'

3.3.2 /-p, -t, -c, -k/ and /-m, -n, -ŋ, -ŋ/

There is a distinctive pattern of phonological correspondence between words ending with /-p, -t, -c, -k/ and /-m, -n, -ŋ, -ŋ/ in Chung Yuy and Chung Yul after creaky vowels, such that in Chung Yul stops and nasals merge to all nasals. Based on Headley's (1985) reconstruction, it could be generalized that *-STOPS > -NASALS / V[?] ___ # in Chung Yul.

This pattern is exemplified in Tables 9 - 12.

Table 9. /-p/ v. /-m/ in creaky-voice and non-creaky-voice registers

Chung Yuy	Chung Yul	Gloss
saa [?] p	saa [?] m	'dawn'
caa [?] p	caa [?] m	'fishy'
kuu [?] p	kuu [?] m	'frog'
k ^h aa [?] p	k ^h aa [?] m	'scratchy'
ree [?] p	ree [?] m	'miss'
saap	saap	'bland'
tək ^h aap	tək ^h aap	'bamboo'
hɔɔp	hɔɔp	'eat'
sɛɛ [?] m	sɛɛ [?] m	'Siamese'
p ^h loo [?] m	p ^h loo [?] m	'wax'
kɯum	kɯum	'winnow'
ŋaam	ŋaam	'sweet'
pəsom	pəsom	'star'

Table 10. /-t/ v. /-n/ in creaky-voice and non-creaky-voice registers

Chung Yuy	Chung Yul	Gloss
caa ^ʔ t	caa ^ʔ n	‘knife’
cee ^ʔ t	cee ^ʔ n	‘deer’
coo ^ʔ t	coo ^ʔ n	‘vomit’
kaa ^ʔ t	kaa ^ʔ n	‘near’
səŋee ^ʔ t	səŋee ^ʔ n	‘dark’
toot	toot	‘head’
ʔuut	ʔuut	‘wood’
pəsiit	pəsiit	‘mushroom’
mət	mət	‘eye’
kəmaət	.ləmaət	‘rhino’
ʔiin	ʔiin	‘have’
k ^h een	k ^h een	‘child’
p ^h oo ^ʔ n	p ^h oo ^ʔ n	‘four’
cuu ^ʔ n	cuu ^ʔ n	‘delicious’
tɤn	tɤn	‘that’

Table 11. /-c/ v. /-ŋ/ in creaky-voice and non-creaky-voice registers

Chung Yuy	Chung Yul	Gloss
kəɔ ^ʔ c	kəɔ ^ʔ ŋ	‘rice soup’
kmuu ^ʔ c	kmuu ^ʔ ŋ	‘ghost’
k ^h .loo ^ʔ c	k ^h .loo ^ʔ ŋ	‘lime’
suu ^ʔ c	suu ^ʔ ŋ	‘ant’
sa ^ʔ c	sa ^ʔ ŋ	‘cold’
məsuuc	məsuuc	‘abscess’
ʔic	ʔic	‘feces’
cɤuc	cɤuc	‘flesh; meat’
piç	piç	‘sleep’
ŋaç	ŋaç	‘fall’
ʔeŋ	ʔeŋ	‘I’
ʔɔŋ	ʔɔŋ	‘keep’
k.ɤaŋ	k.ɤaŋ	‘alcohol’

Table 12. /-k/ v. /-ŋ/ in creaky-voice and non-creaky-voice registers

Chung Yuy	Chung Yul	Gloss
ploo ^ʔ k	ploo ^ʔ ŋ	‘mud’
kaa ^ʔ k	kaa ^ʔ ŋ	‘crow’
soo ^ʔ k	soo ^ʔ ŋ	‘mango’
mluu ^ʔ k	mluu ^ʔ ŋ	‘salty’
paak	paak	‘ascend’
c ^h ak	c ^h ak	‘seed’
tək	tək	‘boat’
tək	tək	‘water’
klooŋ	klooŋ	‘bone’
too ^ʔ ŋ	too ^ʔ ŋ	‘fear’
kūŋ	kūŋ	‘belly’
kū ^ʔ ŋ	kū ^ʔ ŋ	‘long’
cū ^ʔ ŋ	cū ^ʔ ŋ	‘people’

4. Lexical comparisons

This section shows similarities and contrasts, with emphasis on the contrasting aspect, in the vocabularies of Chung Yuy and Chung Yul. The lexical inventory of Chung in both varieties can be divided into two situations, the first where both Chung Yuy and Chung Yul keep old forms, and the second is the situation where borrowing has occurred.

4.1 Chung Yuy and Chung Yul retaining old forms

The first situation is where one finds similar lexical correspondences between Chung Yuy and Chung Yul. Given the phonological differences between Chung Yuy and Chung Yul explained in the last section, it can be easily seen that many words that are different in the two varieties simply reflect different phonological changes. The following are samples of words that illustrate these phonological changes. They are clearly not loans from Thai or Khmer.

Table 13. CY and CL retain old forms

Gloss	Chung Yuy	Chung Yul	Thai	Khmer
‘six’	kətooŋ	kətooŋ	hòk	prammuəy
‘seven’	kənuuj	kənuul	cèt	prampil
‘eight’	kətii	.ətii	pèet	prambəy
‘nine’	kəncəa	kəncəa	kâw	prambuən
‘ten’	raaj	raaj	sìp	dəp
‘eye’	mət	mət	taa	pneek
‘head’	taot	taot	hǔə	kbaal
‘mouth’	təkəa	cəkəa	pàak	mǔət
‘teeth’	k ^h ooj	k ^h ooj	fan	tmeep

4.2 Borrowings from Thai and Khmer

This subsection deals with linguistic features that are likely influences from Thai and Khmer. First come lexical borrowings, which are frequently to be found in both varieties of Chung. Varying patterns of borrowing are found in the comparative lexicons. Those patterns are divided into four groups as follows:

- (1) Chung Yuy borrowed from Thai, while Chung Yul borrowed from Khmer,
- (2) Chung Yuy borrowed from Thai, while Chung Yul keeps old forms,
- (3) Both Chung Yuy and Chung Yul borrowed from Khmer, and
- (4) Chung Yuy keeps old forms, Chung Yul borrowed from Khmer.

The most likely case is the first pattern, based on the assumption that both varieties have been separated from each other for almost two centuries in somewhat different environments. Chung Yuy has been overwhelmed by the Thai language, and Chung Yul by Khmer. Given such a sociolinguistic situation, it is the most likely that this borrowing pattern is the norm.

Table 14. Borrowings I: CY borrowed Thai, CL borrowed Khmer

Gloss	Chung Yuy	Chung Yul	Thai	Khmer
‘well’	bɔɔ tʰaak	ʔəndouŋ	bɔɔ nám	ʔəndouŋ
‘point to’	c ^h ii	cəŋʔool	c ^h ii	cəŋʔaal
‘trousers’	kaaŋkeenŋ	k ^h aw	kaaŋkeenŋ	khao

Table 15. Borrowings II: CY borrowed Thai, CL keeps old forms

Gloss	Chung Yuy	Chung Yul	Thai	Khmer
‘gold’	t ^h ɔ:ŋ	mʌat	t ^h ɔɔŋ	miəh
‘hoe’	cɔɔp	swaak	cɔɔp	caap

Table 16. Borrowings III: CY and CL borrowed & Khmer

Gloss	Chung Yuy	Chung Yul	Thai	Khmer
‘sing’	kəm.ɿɛɛŋ	cəm.ɿɛɛŋ	rɔɔŋ p ^h leɛŋ	cəmriəŋ
‘pillow’	k ^h ənɽɽj	k ^h ənɽɽj	mɔɔn	knəəj
‘custard apple’	tɿip	tiəp	nɔɔjnàa	tiəp

Table 17. Borrowings IV: CY keeps old forms, CL borrowed Khmer

Gloss	Chung Yuy	Chung Yul	Thai	Khmer
'bean'	kətaak	səndaek	t ^h ùə	sandaek
'pus'	t ^h uŋ	ktuh	nǒŋ	ktuh
'shoulder'	mliiŋ	smaa	lài	smaa
'moustache'	kəmiiŋ	puk əkaa	nùət	puk mǒet
'weave'	t ^h aaŋ	tbaaŋ	sǎan	tbaaŋ

The first borrowing pattern shows the situation in which loans from Thai and Khmer replaced the vocabulary in Chung Yuy and Chung Yul respectively. The second borrowing pattern shows the situation in which loans from Thai replaced the vocabulary in Chung Yuy, while Chung Yul did not borrow from Khmer. The third borrowing pattern shows the situation in which loans from Khmer are still preserved in the vocabulary of Chung Yuy and Chung Yul respectively. The fourth borrowing pattern shows the situation in which loans from Khmer replaced the vocabulary of Chung Yul, while Chung Yuy still preserves old forms. This pattern on the side of Chung Yul should illustrate recent borrowings from Khmer.

From the borrowing patterns analyzed above, it is hypothesized that both Chung Yuy and Chung Yul had been able to maintain their languages without much external influence until recently. Both varieties borrowed from Thai and Khmer only lexically, in certain lexical domains.

4.3 *Semantic differences between Chung and Khmer cognates*

In this subsection I will discuss the semantic differences between Chung and Khmer cognates. It is also concerned with the lexicon, yet it deals with more subtle change in the language structure than measuring the amount of loan words.

For the general case of borrowing, the task at hand is to find phonological criteria to help distinguish Mon-Khmer cognates from Khmer borrowings. Besides, it should be the case that Thai borrowings add to Khmer borrowings in the Chung Yuy lexicon, yet it does not look apparently so. On the contrary, it appears that Thai borrowings had replaced some of Khmer loans. Therefore, one needs to supplement the phonological criteria for distinguishing Thai and Khmer borrowings in Chung. One way to do this is to take cognates in Chung and Khmer and study their semantic differences. This is an appropriate method when we investigate long and intimate contact relationship, as is the case for Khmer and Chung. The semantic differences between Chung and Khmer cognates can be divided into two categories: (1) Same Morphemes but Different Meanings, and (2) Same Meanings but Different Morphemes. I do not find similar cases while investigating Thai borrowings in Chung. If this is the case, I think that investigating 'semantic differences' in shared cognates could be a way of identifying old and recent lexical borrowings.

4.3.1 Same Morphemes but Different Meanings

I present here six examples of semantic differences in Chung and Khmer cognates found in similar morphemes, which have different meanings.

In the first example, the morpheme for ‘mouth’ in Chung is the cognate of the morpheme for ‘chin’ in Khmer. But the reverse is not true. This is in contrast with the second example in which the word for ‘provision’ in Khmer became ‘husked rice’ in Chung. An interesting fact is that, Thai borrowed this morpheme from Khmer but still keeps the original meaning.

In the third example, there is a word for ‘sea shrimp’ in Khmer which corresponds to ‘shrimp paste’ in Chung. This is related to the word /kheej/ in Thai, which could be used to mean both ‘shrimp paste’ and the tiny ‘sea shrimp’ that is the raw material for making shrimp paste. However, only the word /kheej/ ‘sea shrimp’ could be used to mean /kàpì?/ ‘shrimp paste’ in Thai, while the word /kàpì?/ ‘shrimp paste’ could not be used to mean /kheej/ ‘sea shrimp’. This could be similar to the case of Chung in which the word for ‘sea shrimp’ in Khmer became ‘shrimp paste’ in Chung.

The fourth example is similar to the third one, not only for the shift of meaning from Khmer ‘forceful’ to Chung ‘fast’, it is also linked to Thai borrowing from Khmer that keeps more to the Khmer original meaning.

The fifth example shows a case of semantic ‘broadening’ as the morphemes for ‘orange’ and ‘sour’ in Chung correspond to only one Khmer morpheme for ‘sour’. This is similar to the sixth example in which the morphemes for ‘rope’ and ‘rattan’ in Chung correspond to only one Khmer morpheme for ‘rope’.

Table 18. Chung and Khmer cognates: Same morphemes but different meanings

Gloss	Chung Yuy	Chung Yul	Thai	Khmer
‘mouth’	təkaa	cəkaa	pàak	mǽet
‘chin’	təkɣam	təkɣɔm	k ^h aaŋ	caŋkaa
‘husked rice’	səbɛɛŋ	səbɛɛŋ	k ^h âaw sǎan	ʔaŋkaa
‘provision’	---	---	sàbiəŋ	sbiəŋ
‘shrimp paste’	k ^h ii	k ^h ii	kàpì?	kaapi?
‘(tiny) sea shrimp’	---	---	kheej	kii
‘fast’	k ^h laŋ	k ^h laŋ	rew	liən
‘forceful’	---	---	k ^h lǎŋ	k ^h laŋ
‘orange’	cɯ [?] u	---	sôm	krouc
‘sour’	cɯ [?] u	cɯ [?] u	prîəw	mɛuu
‘rope’	kəsaj	kəsaj	c ^h ûək	ksae
‘rattan’	kəsaj	kəsaj	wǎaj	pdaw

4.3.2 Same meanings but different morphemes

In a restricted sense, the following examples do not show semantic differences, but similarities of meanings in different morphemes. Such examples show the subtlety of semantic similarity between Chung and Khmer, which is not found in a similar manner in Chung and Thai.

Table 19. Chung and Khmer cognates: Same meanings but different morphemes

Gloss	Chung Yuy	Chung Yul	Thai	Khmer
‘major wife’	tək ^h ən t ^h eem	tək ^h ən t ^h eem	miə lǔəŋ	prəpǔən daəm
‘minor wife’	tək ^h ən c ^h ooʔj	cək ^h ən c ^h ooʔj	miə nóʔj	prəpǔən coŋ
‘thunderbolt’	kət ^h eh cak	kət ^h eh cak	fáa p ^h àa	rǔəntěəh baŋ

These examples look like a case of loan translation (*calque*), especially for the words for ‘major wife’ and ‘minor wife’ in Chung and Khmer. All the Chung, Thai, and Khmer languages seem to have the concepts for ‘major wife’ and ‘minor wife’. Yet they use different metaphors to present such concepts. In Khmer and Chung, they use the same set of metaphors: tree trunk for a major wife, and treetop for minor wife. In Thai, it is the distinction between /lǔəŋ/ ‘important; formal; big’ and /nóʔj/ ‘minor; small’ that is used for distinguishing between ‘major’ and ‘minor’ wives.

Another example is the concept of ‘thunderbolt’ or ‘thunderstrike,’ which is represented in Chung and Khmer as ‘shooting’ of firearms or canons from the verbs /cak/ in Chung and /baŋ/ in Khmer. On the contrary, it is represented in Thai as ‘splitting’ or ‘cutting in two’ by the verb /p^hàa/, which is normally used with cutting instruments like an axe of a chopping knife. In fact, it is semantically wrong to use the word /jin/ ‘shoot’ as part of ‘thunderbolt’ as in Chung and Khmer.

5. Conclusion

In terms of phonological changes attested differently in Chung Yuy and Chung Yul, there are three significant ones that can be summarized as follows: (1) simplification of clusters and pre-syllables in Chung Yuy, (2) merge of /-j/ and /-l/ in Chung Yuy, and (3) /-stops/ > /-nasals/ after Creaky Vowels in Chung Yul. I propose that the first two are changes resulting from contact with the Thai language, while the third one is interpreted as an independent change triggered by system-internal tendency.

As observed in §3.1 and §3.2, there is a simpler pattern of consonant clusters and pre-syllable in Chung Yuy than in Chung Yul. Such patterns also are similar to Thai. On the contrary, the patterns of consonant clusters and pre-syllables in Chung Yul are more varied and complex, which better represent the historical forms of Chung language, which had inherited sesqui-syllabicity as a Mon-Khmer feature. Therefore, I suggest that phonological simplification

in Chung Yuy was motivated by contact with the Thai language. One might also interpret Chung Yuy's tendency to drop the pre-syllable altogether as a move towards mono-syllabicity.

The most striking phonological contrast between Chung Yuy and Chung Yul can be found in words with creaky-voice register. In this set of words, one finds systematic correspondence between final /stops/ in Chung Yuy and final /nasals/ in Chung Yul: /p, t, c, k/ versus /m, n, ɲ, ŋ/. This change in Chung Yul is unique because I have not found it at all in other Pearic languages, including Chung Yuy. It must be a recent change after the separation between Chung Yuy and Chung Yul less than two hundred years ago. Because of this change, there is no contrast between stops and nasals in final position in words with creaky voice. From a perceptual point of view, it is easy to recognize the creaky voice combined with nasal release.

Since sound patterns in Chung and Khmer are more similar than between both languages and Thai, it is rather more difficult to pinpoint which areas in Chung phonology are influenced by Khmer. Some lexical borrowings with Khmer pronunciation seem to be the norm. On the contrary, register contrasts in Chung set the language apart from Khmer in terms of phonology.

Varying patterns of borrowing are found in the comparative lexicons. Lexically, there are four patterns of borrowing: (1) CY borrowed Thai and CL borrowed Khmer (2) CY borrowed Thai while CL kept old forms (3) CY and CL borrowed Khmer (4) CY kept old forms while CL borrowed Khmer.

The apparent scenario is that the Chung language had retained Khmer borrowings over a period of time before some speakers were captured and sent to Thailand. Then, speakers on the Thai side started replacing the Khmer borrowings with Thai, retaining their native lexicon. Back in Cambodia, Chung speakers still borrowed from Khmer at the same rate.

From the data discussed in §4.3, it is the case that old borrowings (Khmer), if not shared Mon-Khmer cognates, tend to be more susceptible to semantic change---through semantic narrowing, broadening, and shift---than recent borrowings. In the latter case, it seems that the relatively short period of contact between Thai and Chung Yuy has not allowed for much semantic change.

Based on such hypothesis, I submit that the study of semantic change or differences could be a useful way of investigating the genetic and contact relationship between Chung and Khmer. Even Thai borrowings could be identified in such a manner. However, the application of this method has not yet been tried for the comparative study of Mon-Khmer languages in terms of semantic relationship between morphemes in particular semantic domains, as in the case of Tibeto-Burman languages for which this method had been utilized (Matisoff 1978).

REFERENCES

- Anttila, R. 1972. *An Introduction to Historical and Comparative Linguistics*. New York, Macmillan.
- Anttila, R. 1989. *Historical and Comparative Linguistics*. Amsterdam, John Benjamins.
- Arlotto, A. 1972. *Introduction to Historical Linguistics*. Boston: Houghton Mifflin.
- Baradat, R. 1941. *Les Samrê ou Pêar, Populations Primitives de l'Ouest du Cambodge*. Paris: EFEO.
- Diffloth, G. 1989. "Proto-Austroasiatic creaky voice." *MKS* 15:139-154.
- Ferlus, M. 1980. "Formation des registres et mutations consonantiques dans les langues mon-khmer." *MKS* 8:1-76.
- Fox, A. 1995. *Linguistic Reconstruction: An Introduction of Theory and Method*. New York, Oxford University Press.
- Edmondson, J. A. 1996. "Voice qualities and inverse filtering in Chong." *MKS* 26:107-116.
- Gordon, Raymond G., Jr. (ed.), 2005. *Ethnologue: Languages of the World, Fifteenth Edition*. Dallas, Tex.: SIL International. Online version: <http://www.ethnologue.com/>.
- Gussenhoven, C. and H. Jabobs. 2005. *Understanding Phonology*. London: Arnold.
- Headley, R. K. 1977a. "A Pearic vocabulary." *MKS* 6:69-149.
- Headley, R. K. 1977b. "An English-Pearic vocabulary." *MKS* 7:61-94.
- Headley, R. K. 1985. "Proto-Pearic and the classification of Pearic." In Suriya Ratanakul, David Thomas and Suwilai Premssirat, eds., *Southeast Asian Linguistic Studies*, pp. 428-478, presented to Andre-G. Haudricourt. Bangkok, Thailand, Mahidol University.
- Huffman, F. E. 1970. *Cambodian System of Writing and Beginning Reader*. Ithaca, NY, Southeast Asia Program, Cornell University.
- Huffman, F. E. 1985. "The phonology of Chong." In Suriya Ratanakul, David Thomas, Suwilai Premssirat, eds., *Southeast Asian Linguistic Studies*, pp. 428-478, presented to Andre-G Haudricourt. Thailand: Mahidol University.
- Huffman, F. E. and Im Proum. 1996. *Cambodian-English Glossary*. Bangkok: D.K. Book House.
- Isara Choosi. 2002. "Dialects of Chong." *MKS* 32:55-70.
- Leclère, A. 2002. "Les Sâauch." In Michael Tranet, ed., *Les Proto-Khmer du Cambodge*. Phnom Penh: Atelier d'Impression Khmère.
- Martin, M. A. 1974a. "Remarques générales sur les dialectes Pear." *ASEMI* 5(1):25-37.
- Martin, M. A. 1974b. "Equissee phonologique du Somree." *ASEMI* 5(1):97-106.
- Martin, M. A. 1975. "Les dialectes Pear dans leurs rapports avec les langues nationales." *JSS* 63(2):86-95.
- Matisoff, J. A. 1978. *Variational Semantics in Tibeto-Burman*. Philadelphia, Institute for the Study of Human Issues.
- Petit-Huguenin, P. 1905. "Vocabulaire du Por [Pear] [Samre]." *JSS* 2:23-30.
- Pornsawan Ploykaew. 2001. "The phonology of Samre." *MKS* 31(31):15-27.

- Pornsawan Ploykaew 2001. "Samre Grammar." M.A. thesis, Institute of Language and Culture for Rural Development, Mahidol University.
- Sokhamphu, Kham. 1978. "The case of diversity in Cambodian dialects." *JSS* 63.
- Sunee Kamsuansin. 2002. "Kasong Syntax." M.A. thesis, Institute of Language and Culture for Rural Development, Mahidol University.
- Thel, T. 1975. "The case of diversity in Cambodian dialects: Bibliography." *JSS* 63(2):156-166.
- Therapan L-Thongkum. 1992. "An instrumental study of Chong registers." In J. H. C. S. Davidson, ed., *Mon-Khmer Studies in Honour of Harry Shorto*, pp. 141-60. London: School of African and Oriental Studies.
- Thomas, D. 1964. "A survey of Austro-Asiatic and Mon-Khmer comparative studies." *MKS* 1:149-163.
- Thomas, D. and R. K. Headley. 1970. "More on Mon-Khmer Subgroupings." *Lingua* 25(4):398-418.
- Varasarin, U. 1984. "Les elements khmers dans la formation de la langue siamoise." *Langues et Civilisations de ASEMI* 15, SELAF.

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