



THE LANGUAGE SHIFT IN PROGRESS OF THAI SONG

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Abstract

The research question of this paper is: To what extent has the Thai Song language been influenced by the Thai language? The finding of this question is obtained by a sociolinguistic study of phonological variation and lexical replacement among Thai Song speakers of three age groups: old generation (over 60), middle generation (35-55), and young generation (18-30). Thai Song speakers residing at two locations in Nakhon Pathom province are selected as a case study of Thai Song in the western region of Thailand. The study of phonological variation reveals that Thai Song has progressively shifted to Thai in the speech of middle and young generations. The study of lexical replacement shows that young generation speakers use fewer Thai Song words than the older generations.

Key words: language contact, historical phonology, language shift, Thai Song, Thai Song Dam, Tai Dam, Lao Song

ISO 639-3 language codes: soa, blt

1. Introduction

Previous studies have shown that in the seven provinces of the western region of Thailand, namely, Kanchanaburi, Ratchaburi, Phetchaburi, Suphanburi, Nakhon Pathom, Samut Sakhon, and Samut Songkhram, there are six major Lao ethnic groups, which are, Lao Song/Thai Song, Lao Yuan, Lao Phuan, Lao Khrang, Lao Vieng and Lao Tay. All of these Lao groups, apart from Lao Yuan, migrated from Laos more than 200 years ago. A study of the language use and attitude of these Lao ethnic groups shows that, among all such groups in these provinces, Thai Song are the most strongly united and thus have the strongest language vitality across all provinces, except for Samut Songkhram province where few Thai Song speakers reside. A survey of areas inhabited by Lao ethnic groups reveals that, in the western region of Thailand, Thai Song villages number the most at 394 villages (Burusphat et al. 2011). This number reveals that Thai Song is the dominant Lao ethnic group in this region.

Despite their strong language vitality and preservation of some cultural traits such as ritual practices and costumes, Thai Song people have assimilated well into the Thai community. The Thai Song language has been influenced by Thai as a standard language. Because of this dominant national language, it is possible that a language shift from Thai Song to Thai may take place in the future. Therefore, the purpose of this paper¹ is to explore how much the Thai Song language has been influenced by the Thai language. It is

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hoped that the results of this study will help Thai Song community leaders become aware of the endangerment situation of Thai Song language and consider the implementation of a language revitalization program.

2. Origin and language affiliation

Thai Song people have been addressed by various names such as Thai Song, Thai Song Dam, Lao Song, Song, Tai Dam or Black Tai. The term “Tai” is distinguished from “Thai” in so far as: “Conventionally, Southeast Asianists use the term “Tai” in referring to any speakers of the Tai language family, reserving the aspirated “Thai” to designate only those citizens of the Kingdom of Thailand as a Siamese Tai state” (Sams 1988: 116). The term “Thai Song” is used in this paper.

The name “Thai Song Dam” refers to people dressed in black costumes. In the past, men wore black *Song* or trousers which became their ethnic name. Thai Song people migrated from Muang Thaeng (Myang Teng or Muoi)², Sipsongchutai (Sipsong Chao Tai) in the northern part of Laos. This place used to be under the Luang Prabang government (Sribusara 1987).

Because of common migration patterns and linguistic similarities between Thai Song and other Lao groups, later generations of Thai Song believed they were the same group as the Laos, and called themselves *Phu Laao* ‘Lao people’ (Chakshuraksha 2003). Linguistically, the Thai Song language is distinguished from the Lao language and other Lao ethnic group languages as a member of the Tai language group (Brown 1965). All languages belong to the Southwestern Branch of the Tai-Kadai language family (Li 1960).

The original settlement of Thai Song people in Thailand was in Phetchaburi province. Later on, Thai Song people moved to nearby provinces such as Kanchanaburi, Ratchaburi, Suphanburi, Nakhon Pathom, Samut Sakhon, and Samut Songkhram. In Nakhon Pathom province, there are many Thai Song communities which are strongly united, therefore this province has been chosen for the case study of this research.

In addition to their migration to Thailand, Tai Dam people also migrated from Son La (Muang La) in Vietnam to Laos. An interview with Bakam (2010), 78 years old, who lives in Vientiane, discloses that most Tai Dam people in Laos migrated from Son La more than 50 years ago.

3. Methodology

The research question of this paper is: To what extent has the Thai Song language been influenced by the Thai language? This study proposes the following hypotheses:

- a) Young generation speakers mix Thai sounds with Thai Song sounds more than older generations.
- b) Young generation speakers use fewer Thai Song words than older generations

The findings for the research question were obtained by means of a sociolinguistic study of phonological variation and lexical replacement among Thai Song speakers of three age-groups: old generation (over 60), middle generation (35-55), and young generation (18-30).

Variation Theory is used as a framework for this study. This theory holds that linguistic forms have variants that are alternatively used but their meanings remain the same. Variation Theory is an important part of sociolinguistics which asserts that there is no free variation. Linguistic variation is conditioned by social factors such as region, social class, educational background, or style (Snyder 1995). This study focuses on social variation. The primary concern is on variation as differences in pronunciation and word replacement. Age is chosen as an independent variable as it has been found in most Thai Song studies that age group is an important independent variable that conditions linguistic variation (Buranasing 1988, Liamprawat and Wattanasert 1996, and Saeng-ngam 2006). The phonological comparison is based on the work of L. Thongkum (2002).

The phonological variation of Thai Song was further compared with Tai Dam (Black Tai) dialect spoken in Muang La (L. Thongkum 2002). Supplementary Tai Dam data compiled by the researcher were

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² Muang Thaeng is presently Muang Dien Bien Phu in northwestern Vietnam.

also used. The Tai Dam informant was from Lae village, Muang La. She was female and 66 years old. She came to visit her relatives in Vientiane where the data were collected. The Tai Dam data were included in this study because some old forms which once shared by Tai Dam and Thai Song are still retained in Tai Dam while they are lost in Thai Song due to the influence of the Thai language.

This study used Fippinger and Fippinger's (1974) Tai Dam word list for a preliminary survey of phonological and lexical variation by age-group. Two hundred and twenty-two words were selected from this word list. The words were elicited in isolation, not in connected speech.

After the preliminary survey, a wordlist of eighty words and thirty-nine words was prepared for a study of consonants and vowels respectively. This wordlist was taken from *Old Tai Dam (Black Tai) Lexicon* (Manuscript) in which Old Tai Dam 1 (OTD1) and Old Tai Dam 2 (OTD2) were reconstructed by L. Thongkum (2002) Using this wordlist, the data were collected from two locations, village number six (Huathanon village-HTN), Donphutsa sub-district, Dontoom district and village number nine (Sakaeray village-SKR), Donyayhom sub-district, Muang district, Nakhon Pathom province. These two locations were chosen for this case study for four reasons. First, no previous studies of Thai Song language in these locations have been found. Second, these two Thai Song communities are strongly united. Third, the older generation, the middle generation and some young generation speakers still use Thai Song language in their villages. Finally, the community leaders and villagers are very cooperative. The gender and ages of the six informants are as follows:

Table 1: Genders and ages of the six informants

Age groups	Huathanon		Sakaeray	
	Age	Gender	Age	Gender
Old generation (G1)	66	Male	74	Male
Middle generation (G2)	40	Female	39	Male
Young generation (G3)	22	Female	21	Male

The words collected from speakers of all generations were compared to find how far pronunciation varied according to age-group. This linguistic variation was further compared with Thai and the Tai Dam language spoken in Vietnam. The comparison is limited to segmental features, i.e. initial consonants and vowels, excluding tones. Old Tai Dam initials constructed by L. Thongkum (2002) were provided to see how the Old Tai Dam initials were reflected in Thai Song, Tai Dam, and Thai.

The study of lexical replacement was carried out by identifying the typical Thai Song words from the wordlists. These words are unambiguously not Thai loans. The words that were cognates and showed a sound correspondence between Tai Dam, Thai Song and Thai were excluded. For example, the word [tɕa:ŋ³¹] (Tai Dam) ~ [tɕa:ŋ^{441?}] (Thai Song) ~ [tɕ^ha:ŋ⁵⁵] (Thai) 'elephant' was left out because all languages share the same cognates. On the other hand, words such as [hoŋ³⁵] (Tai Dam) ~ [ma²⁴⁵hoŋ⁴⁴] (Thai Song) ~ [ma⁵⁵la⁵⁵kɔɔ³³] (Thai) 'papaya' were kept for lexical analysis as the Tai Dam and Thai Song words are not cognate with Thai. The word selection resulted in 45 Tai Dam/ Thai Song words. Out of these 45 words, the researcher counted the Thai words and Thai Song words each informant used. The final step was to calculate the frequency percentage of Thai and Thai Song words used by each informant and display the result in graphs.

4. Thai Song and Tai Dam Phonology

Most studies of Thai Song in Thailand report that there are nineteen single initial consonants (Ananthrawan 1978, Panka 1979, Wattanaprasert and Liamprawat 1988, Maneewong 1987, Unakornsawat 1993, and Suesorsit 1992) as presented in table 2 compared with the consonant phonemes of Standard Thai in table 3. The consonants followed by a dash occur only in the initial position of words.

Table 2: The consonant phoneme inventory of Thai Song

p		t		k	ʔ
ph -		th -		kh -	
b -					
			c -		
	f -	s -			h-
m		n	ɲ -	ŋ	
		l -			
w			j		

Table 3: Consonant phoneme inventory of Standard Thai

p		t		k	ʔ
ph -		th -		kh -	
b -		d-			
			c -		
			ch-		
	f -	s -			h-
m		n		ŋ	
		r-			
		l -			
w			j		

Below is a list of lexical examples where the two languages have different phonemes in the same etymon.

Thai Song	Standard Thai	Gloss
nɛw ³³	jiaw ⁴²	‘urine, to urinate’
caan ⁴¹	k ^h laan ³³	‘to crawl’
ɲaa ³¹	jaa ⁴²	‘grass’
kɛw ⁴¹	k ^h iaw ⁵⁵	‘to chew’
kwan ⁵⁵	k ^h wan ³³	‘smoke’
saj ²⁵	k ^h aj ²²	‘egg’
haɪ ²³³	raak ⁴²	‘root’

Gedney (1964) also found nineteen single initial consonants in Tai Dam spoken in Son La but some consonants are different. The consonants /ph-/ and /w-/ are absent and the consonants /d-/ and /v-/ are present in his work. The study of Tai Dam language in Son La by Fippinger and Fippinger (1974) is similar to that of Gedney (1964) except that the consonant /kh-/ is represented as /x-/ in Fippinger and Fippinger’s work. The consonant [d-] is absent in Thai Song because it occurs in free variation with [l-] so it is analyzed as an allophone of /l-/. On the other hand, Daecha (1986) treats [d-] ~ [l-] as allophones of /d-/. The consonant /v-/ in Tai Dam has become /w-/ in Thai Song. This is evident in the work of Panka (1979) which found a free variation of [w-] and [v-] in only one word, i.e. [viaʔ⁴⁴] ‘work’.

Most studies of Tai Dam and Thai Song have found the same initial clusters /kw-, khw-, ŋw-/ except for the work of Fippinger and Fippinger (1974) which found /xw-/ instead of /khw-/. Few words with /ŋw-/ have been found.

Tai Dam and Thai Song languages have the same final consonants /-p, -t, -k, -ʔ, -m, -n, -ŋ/. The final /-ʔ/ corresponds to /-k/ preceded by long vowels or diphthongs in Thai as in [piʔ⁴⁵] (Thai Song) and [pi:k²²] (Thai) ‘wing’. Some studies report that there are nine final consonants because the final vowels /-u/ and /-i/ are treated as the finals /-w/ and /-j/ respectively (Ananthrawan 1978, Daecha 1986, Panka 1979, Wattanaprasert and Liamprawat 1988, Suesorsit 1992, and Unakornsawat 1993).

All Thai Song studies report that there are nine short single vowels /i, e, ε, ɨ, ɤ, a, u, o, ɔ/ with their long vowel counterparts, whereas the contrastive vowel length is found only in /a/ and /a:/ in Tai Dam (Gedney 1964 and Fippinger and Fippinger 1974).

The number of diphthongs found in Thai Song studies varies according to different analyses of final vowels. Most studies have four diphthongs /ia, ɨa, ua, ai/ whereas Tai Dam has three /ia, ɨa, ua/ because the final vowel /i/ is treated as the final consonant /ɨ/ (Gedney 1964 and Fippinger and Fippinger 1974). Panka (1979) does not analyse /u, i, ɨ/ as final consonants so there are fifteen diphthongs and three triphthongs in her study.

The tonal analysis of Huathanon dialect is compared with Tai Dam (Fippinger and Fippinger 1974) as follows:

Table 4: Tai Dam and Thai Song tones

Tones No.	Tai Dam	Thai Song (Huathanon dialect)	Tai Dam sample words
1	lower-mid level [22]	low rising [213]	pi: ²² ‘year’
2	high rising [45]	low rising to high [215]	si: ⁴⁵ ‘four’
3	low level or falling and glottalized [21ʔ]	low falling and glottalized [21ʔ]	xaw ^{21ʔ} ‘rice’
4	high level [55]	high rising falling [452]	ma: ⁵⁵ ‘to come’
5	higher-mid level [44]	mid level [33]	pi: ⁴⁴ ‘older sibling’
6	mid falling and glottalized [31ʔ]	mid falling and glottalized [31ʔ]	ma: ^{31ʔ} ‘horse’

5. Phonological variation by age-group

5.1. Initial consonants

The variation of initial consonants is presented in tables 5-10. The first column consists of Old Tai Dam (OTD) initials at the first stage with sample Thai words having the initials. The second column is composed of Old Tai Dam initials at the second stage. Both stages of Old Tai Dam initials were reconstructed by L. Thongkum (2002). The third column includes Modern Tai Dam (MTD) initials found in the work of L. Thongkum (2002). The Thai Song column is split into six columns, i.e. the first generation (G1), the second generation (G2), and the third generation (G3) of Sakaeray village and Huathanon village. The consonant variation is discussed as follows:

5.1.1 The d - ~ l - ~ n - variation

Table 5: the d - ~ l - ~ n - variation

OTD 1	OTD 2	MTD	Thai Song					
			Sakaeray			Huathanon		
			G1	G2	G3	G1	G2	G3
*ʔd- da:w ³³ ‘star’	*d-	d-/l-	d-	d-/l-	d-	d-	d-	d-
*ʔd- dom ³³ ‘to smell’	*d-	d-/l-	n-	d-	n-	n-	n-	d-

Thai Song has three variants of /d/, that is, [d - ~ l - ~ n-]. The original reflex of OTD1 *ʔd is [d-] as pointed out by Gedney (1964) that the change from [d-] to [l-] took place in Tai Dam dialects sporadically so this should be a recent change. So Thai Song speakers must have used [l-] before moving to Thailand. This inference is affirmed by the statement made by Maneewong (1987) that her main informant did not use /d-/ whereas young generation speakers used it. Using /d-/ is wrong because Thai Song ancestors did not use /d-/. In other words such as [lan²¹⁴] ‘nose’ which is no longer used in Thai with the same meaning, all Thai Song speakers use [l-] with no variation with [d-]. In other cognate words such as [daaw²¹⁴], [l-] has changed back to [d-] with the influence of the Thai sound [d-]. The middle-age speaker of SKR dialect still uses [d-] in free variation with [l-] while other speakers have completely replaced [l-] with [d-]. In particular words such as [dom²¹⁴] ‘to smell’, the OTD1 *ʔd- is represented by [n-] in the speech of G1, G2 in HTN dialect and G1, G3 in SKR dialect. The change from [d-] to [n-] might be caused by the final nasal [-m] as remarked by Weera Ostapirat (p.c.) that Sui also uses [n-] when it is followed by nasal finals. The initial [n-] has changed back to [d-] in the speech of G2 in SKR dialect and G3 in HTN dialect because of the influence of the Thai consonant [d-].

5.1.2 The c - ~ k- ~ k^h- variation**Table 6:** the c - ~ k- ~ k^h- variation

OTD 1	OTD 2	MTD	Thai Song					
			Sakaeray			Huathanon		
			G1	G2	G3	G1	G2	G3
*j- k ^h ra:ŋ ³³ ‘to moan’	*c-	c-	c-	c-	k-	c-	c-	c-
*j- k ^h ra:m ³³ ‘indigo’	*c-	c-	c-	c-	k-	k ^h -	k ^h -	k ^h -

Thai Song reflects the OTD1 *j- as [c-] such as in the word [caŋ⁴¹] ‘elephant’. However, in particular words such as [caam⁴⁵²] ‘indigo’, [c-] is replaced with the Thai sound [k^h-] as in the speech of all speakers in HTN dialect. As for the word [caŋ⁴⁵²] ‘moan’, [c-] is kept by all speakers except G3 speaker of SKR dialect. This speaker replaces [c-] with the Thai sound [k^h-] which is further adapted to [k-] because [k^h-] in Thai corresponds to [k] in Thai Song.

5.1.3 The ŋw- ~ w- ~ ŋ- ~ h- variation

Table 7: the ŋw- ~ w- ~ ŋ- ~ h- variation

OTD 1	OTD 2	MTD	Thai Song					
			Sakaeray			Huathanon		
			G1	G2	G3	G1	G2	G3
*ŋw- (mua ⁴²) wa:n ³³ ‘yesterday’	*ŋw-	ŋw-	ŋw-	ŋw-	ŋw-	ŋw-	w-	ŋw-
*ŋw- ŋap ⁵⁵ / hap ²² ‘to close (a door)’	*ŋw-	ŋw-	ŋw-	ŋw-	h-	ŋw-	ŋ-	ŋ-

The initial [ŋw-] is used only in a few words. L. Thongkum (2002: 93) lists only three words in her work (KhawYoy dialect), that is, [ŋwaa⁵⁵] ‘yesterday’, [ŋwap³³] ‘to close (a door)’, and [ŋwaaŋ⁴¹] ‘to turn the face (in order to look)’. All Thai Song speakers of SKR and HTN dialects do not know the last word so it is excluded from this study. All speakers, except the G2 speaker of HTN dialect, still retain the initial [ŋw-] in the word [ŋwaa⁵⁵] ‘yesterday’. The G2 speaker of HTN dialect replaces [ŋw-] with the Thai sound [w-]. As for the word [ŋwap³³] ‘to close (a door)’, the G1 and G2 speakers of SKR dialect and the G1 speaker of HTN dialect keep [ŋw-] while the G3 speaker of SKR dialect and G2 and G3 speakers of HTN dialect replace [ŋw-] with the Thai sounds [h-] and [ŋ-] respectively.

5.1.4 The *h-* ~ *ŋ-* variation**Table 8:** the *h-* ~ *ŋ-* variation

OTD 1	OTD 2	MTD	Thai Song					
			Sakaeray			Huathanon		
			G1	G2	G3	G1	G2	G3
*h- ŋa:j ²⁴ ‘to turn something up, to lie face up, to open up’	*h-	h-	h-	h-	ŋ-	h	ŋ-	ŋ-
*h- ŋɔ:n ²⁴ ‘comb (of fowls)’	*h-	h-	ŋ-	ŋ-	ŋ-	h-	ŋ-	ŋ-

Thai Song reflects the OTD1 *h- as [h-] as seen in the word [hak³⁵] ‘to break, broken off’. In this case, [h-] shows no variation by age-group but for the words whose initials were reconstructed by Li (1977) for Proto-Tai initials as [*hŋ-], there is a variation of *h-* ~ *ŋ-*. The G1 and G2 speakers of SKR dialect and G1 speaker of HTN dialect retain [h-] in the word [haaj²¹⁴] whereas the G3 speaker of SKR dialect and G2 and G3 speakers of HTN dialect replace [h-] with the Thai consonant [ŋ-]. The G1 speaker of HTN dialect is the only one who keeps [h-] in the word [hɔn²¹⁴] ‘comb (of fowls)’. Others replace [h-] with the Thai consonant [ŋ-].

5.1.5 The *h-* ~ *l-* variation**Table 9:** the *h-* ~ *l-* variation

OTD 1	OTD 2	MTD	Thai Song					
			Sakaeray			Huathanon		
			G1	G2	G3	G1	G2	G3
*h̄- ruŋ ⁵⁵ ‘rainbow’	*h-	h-	h-	l-	l-	h-	l-	l-

Thai Song reflects the OTD1 *h̄- as [h-] such as in the word [ham⁴⁵²] ‘bran’. But in some words such as [huŋ⁴⁵²] ‘rainbow’, the G2 and G3 speakers of both locations replace [h-] with the Thai sound [l-], a simplified form of /r-/.

5.1.6 The *m-* ~ *l-* variation**Table 10:** the *m-* ~ *l-* variation

OTD 1	OTD 2	MTD	Thai Song					
			Sakaeray			Huathanon		
			G1	G2	G3	G1	G2	G3
*ml lu:m ³³ (ta: ³³) ‘to open (one’s eyes)’	*m-	m-	m-	m-	m-/l-	m-	m-	m-

Thai Song reflects the OTD1 *ml as [m-] in the word [muŋ⁴⁵²] ‘open (one’s eyes)’. Most speakers at both locations retain [m-] while the G3 speaker of SKR dialect fluctuates between [m-] and the Thai sound [l-].

5.2. Vowels

While the initial consonants in Tai Dam and Thai Song are mostly consistent with those in Thai, vowel correlation appears sporadic, occurring randomly in individual words as seen in table 11.

Table 11: Vowel variation by age-group

OTD 1	OTD 2	MTD	Thai Song					
			Sakaeray			Huathanon		
			G1	G2	G3	G1	G2	G3
*mitD met ⁵⁵ ‘seed’	*mitD2	mit ³³	i	e	e	i	e	e
*nipD yep ⁵⁵ ‘to sew’	*nipD2	nip ⁴⁴	i	i	i	i	i	e
*khiwA (me:n ²⁴) k ^h iaw ²⁴ ‘smelly’	*khiwA1	khiw ¹¹	i	i	i	i	iə	iə
*_khepD (ta ³³) k ^h a:p ²² ‘centipede’	*_khepD1	cap ²⁴ khep ²⁴	e	e	e	e	e	a
*khewA k ^h iaw ²⁴ ‘green’	*khewA1	khew ²² khiəw ¹¹	ɛ	ɛ	ɛ	ɛ	iə	ɛ
*ʔewA ʔe:w ³³ ‘waist’	ʔewA1	ʔew ¹¹	ɛ	ɛ	ɛ	ɛ	ɛ	e
*pewA ple:w ³³ (faj ³³) ‘flame’	*pewA1	pew ¹¹ piəw ²²	ɛ	ɛ	ɛ	ɛ	e	e
*hlewA le:w ²⁴ ‘fluid, liquid’	*lewA1	liəw ¹¹ dew ¹¹ lew ²²	ɛ	ɛ	ɛ	ɛ	e	ɛ
*sa-ʔɤkD sa ³³ -ʔuk ²² ‘hiccup’	*sa-ʔɤkD1	sa-ʔɤk ²⁴	ɤ	ɤ	ɤ	u	u	u
*lɤkD luk ⁵⁵ ‘deep’	*lɤkD2	lɤk ³³ dɤk ³³	ɤ	ɤ	ɤ	ɤ	u	u
*ʔɤkD ʔok ²² ‘chest’	*ʔɤkD1	ʔɤk ²⁴	ɤ	ɤ	ɤ	ɤ	ɤ	o
*hɤŋA huŋ ²⁴ ‘jealous’	*hɤŋA1	hɤŋ ¹¹	ɤ	ɤ	ɤ	ɤ	ɤ	u
*ʔotD ʔut ²² ‘to stop, to plug (a hole)’	*ʔotD1	ʔot ²⁴	o	o	u	u	u	u
*ʔoŋC ʔuŋ ⁴² (mu: ³³) ‘palm’	*ʔoŋC1	ʔoŋ ²¹	o	u	u	u	u	u

Table 11 shows that the vowels [i, e, ɛ, ɤ, o] in particular words are varied by age-group. All speakers of SKR dialect retain most of the typical Thai Song vowels except for the words [mit³³] ‘seed’ for which the G2 and G3 speakers use the Thai vowel [e]; [ʔot²⁴] ‘to stop, to plug (a hole)’ for which the G3 speaker uses the Thai vowel [u]; and [ʔoŋ²¹] ‘palm’ for which the G2 and G3 speakers also use the Thai vowel [u].

At Huathanon village, the use of Thai vowels by all three generations of speakers increases. The G1 speaker keeps Thai Song vowels in most of the words except [sa-ʔɤk²⁴] ‘hiccup’, [ʔot²⁴] ‘to stop, to plug (a hole)’, and [ʔoŋ²¹] ‘palm’. The G2 speaker uses fewer Thai Song vowels than the G1 speaker. She keeps the Thai Song vowels in five words, namely, [nip⁴⁴] ‘to sew’, [(cap²⁴) khep²⁴] ‘centipede’, [ʔew¹¹] ‘waist’, [ʔɤk²⁴] ‘chest’, and [hɤŋ¹¹] ‘jealous’. The G3 speaker replaces all of the Thai Song vowels with the Thai vowels except in the two words [khew²²] ‘green’ and [lew²²] ‘fluid, liquid’.

It should be noted that, in some words, no vowel variation is found because the speakers of all generations have replaced the Thai Song vowels with Thai vowels as seen in table 12.

Table 12: Thai song vowels with no variation

OTD 1	OTD 2	MTD	Thai Song					
			Sakaeray			Huathanon		
			G1	G2	G3	G1	G2	G3
*pʉtD pə:t ²² ‘to open’	*pʉtD1	pʉt ²⁴	ə	ə	ə	ə	ə	ə
*mʉkD mʉk ²² ‘ink’	*mʉkD2	mʉk ³³	ʉ	ʉ	ʉ	ʉ	ʉ	ʉ

The consonants and vowels which have been varied by age-group have been discussed. As mentioned earlier, the analysis of phonological variation is based on two wordlists, that is, a 222 wordlist and a wordlist of eighty words and thirty-nine words, so more phonological alternations may be found if more words are further studied. The next section will present the lexical replacement of the three generations of speakers.

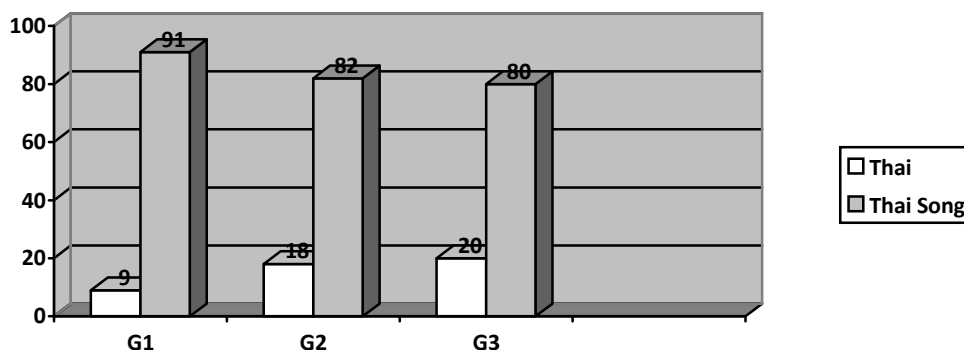
6. Lexical replacement

A wordlist of 45 words (see the appendix) which are different in Thai Song and Thai forms was used for the study of lexical replacement. The lexical data were analyzed by counting the occurrences of Thai Song and Thai words used by each generation speaker at both locations. The frequency percentage of lexical items in each language was calculated. The results are shown in figures 1 and 2 respectively.

There are three words that all generations at both locations replace with Thai words. They are, /nam⁶ be³/ ‘sea’, /thɔ³/ ‘rabbit’, /siŋ² saaw¹/ ‘spider’ which are replaced with the Thai words [thə³² le.²⁴³], [kə³² ta:j¹⁵], [mæ:ŋ²⁴³ mum²⁴³] respectively. Note also that the Thai Song tones are used in Thai words. As for the word /piəŋ² faa³/ ‘cloud’, only the G1 speaker of SKR dialect uses the Thai Song word [k^{h1}i.²²² fa:³¹²] which is similar to /piəŋ² faa³/. The G2 and G3 speakers tend to replace some words with Thai words. For example, the G2 and G3 speakers of SKR dialect replace [kau²¹⁴] ‘swollen’ with the Thai word [buam²¹⁴]. Both of them use more Thai words than the G2 and G3 speakers of HTN dialect.

Figures 1 and 2 show that the G1 speakers at both locations use Thai Song words the most. The G2 and G3 speakers at both locations use Thai Song words more than Thai words. However, the G2 and G3 speakers of SKR use fewer Thai Song words than those of HTN. That is, the former replaced more Thai Song words with Thai words than the latter.

This analysis of lexical replacement reveals that middle-aged and young speakers borrowed Thai words the most and it is expected that more Thai words will be borrowed into Thai Song. There are some words that are seldom used, for example, [ŋwa³⁵] ‘to turn one’s face to the right or left’ and [khwɛ³³] ‘first time’. It can be predicted that these words will disappear from Thai Song in the near future.

**Figure 1:** the percentage of Thai and Thai Song (HTN) words used by each generation

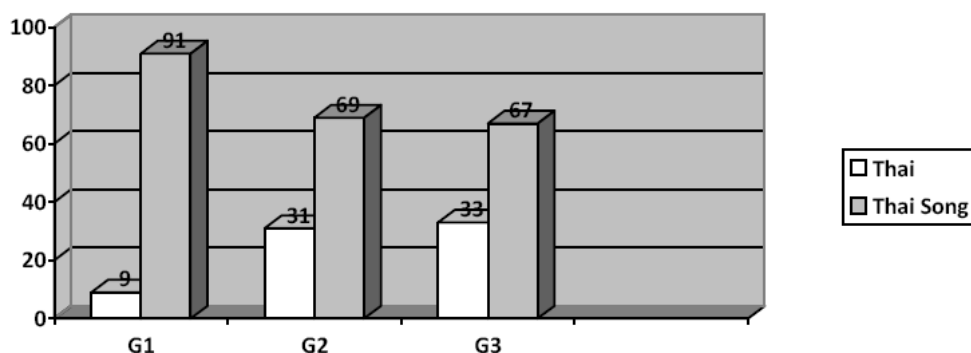


Figure 2: the percentage of Thai and Thai Song (SKR) words used by each generation

It should be noted that most speakers of HTN dialect use more Thai Song words than those of SKR dialect. On the contrary, the use of Thai vowels by the speakers of HTN dialect exceeds the use of Thai vowels by the speakers of SKR dialect. More studies should be done to find out whether phonological change occurs faster than lexical change or vice versa. The study of lexical replacement is based on forty-five words. If further studies use more words, some interesting pattern of lexical replacement, such as semantic fields of lexical borrowing, may be disclosed.

7. Conclusion and discussion

Phonological variation and lexical replacement in this study has been examined from a sociolinguistic point of view. The focus of this study is on age as a social variable controlling linguistic variation and lexical replacement. This work is a case study of differences in pronunciation and word replacement in only two locations, Huathanon village, Donphutsa sub-district, Dontoom district and Sakaeray village, Donyayhom sub-district, Muang district, Nakhon Pathom province. Further quantitative research should be done at larger locations so that the subjects might represent the whole Thai Song community.

The purpose of this study was to find out to what degree the Thai Song language in these two locations has been influenced by the Thai language. It has been found that Thai Song has progressively shifted to Thai in the speech of G2 and G3 generations as evidenced in the study of phonological variation and lexical replacement. The phonological variation shows the variation of initial consonants by age-group as listed in table 13. It is clear that most middle and young generation speakers tend to replace the typical initial consonants with Thai consonants as hypothesized.

Table 13: Variation of initial consonants by age-group

OTD 1	OTD 2	MTD	Initial consonant variation by age-group
*ʔd-	*d-	d-/l-	d ~ l ~ n-
*j-	*c-	c-	c ~ k ~ k ^h -
*ŋw-	*ŋw-	ŋw-	ŋw ~ w ~ ŋ ~ h-
*h-	*h-	h-	h ~ ŋ-
*ɦ-	*h-	h-	h ~ l-
*ml	*m-	m-	m ~ l

It is also interesting to note that some initial consonants are not varied by age-group as the Thai Song speakers of all generations at both locations use the same consonants which agree with the OTD2 consonants but some consonants are different from MTD as seen in table 14. It is questionable whether the Thai Song speakers used the same consonants as MTD speakers before migrating to Thailand and then replaced them with the Thai consonants afterwards, or always preserved these consonants as Thais do. According to the Wave Theory (Bailey 1973), an innovation takes place at the point of origin and spreads to neighboring areas like waves. The innovation barely reaches the outermost ring of the waves. Consequently, the farther a group

of people moves away from its homeland, the more likely the language will preserve older forms. The innovation does not affect the group whose language is spoken at the outer ring of the wave. As the Tai Dam area in Vietnam is the point of origin, any linguistic change taken place there might not reach Thai Song speakers in Thailand. So, the change from OTD2 *ph to [f-]; *b to [b-/v-]; and *w to [w-] should have occurred after Thai Song speakers settled in Thailand since the Thai Song there continue to keep the original forms. Furthermore, it was pointed out by a Vietnamese researcher that the consonant [ph-] does not exist in Vietnamese. As Tai Dam speakers also speak Vietnamese, they have replaced [ph-] with [f-]. So, this evidence confirms the fact that the Thai Song consonants in table 14 are not from Thai but are original consonants of Thai Song.

Another notable point is the OTD *kh which is reflected in the speech of all Thai Song speakers at both locations as [kh-]. It seems undoubtedly that this consonant is an original Thai Song consonant, which is the same as the Thai consonant. But further data from a 94 year old speaker at Bangkung village, Muang District, Suphanburi Province shows the reflex [x-] which agrees with Fippinger and Fippinger's (1974) finding as mentioned in section 4. Consequently, it might be possible that Thai Song speakers in the western region of Thailand used to have [x-] but replaced it with the Thai consonant [kh-] or internally modified it as [kh-]. Another consonant which is also lost is [v-] which has become [w-]. As mentioned in section 4, Panka (1979) found a free variation of [w-] and [v-] in the word [viaʔ⁴⁴] 'work'. In this study, only [w-] is found. Contrary to the loss of consonants, Jiranathanaporn et al (2003) and Daecha (1986) found /ch-/ in some words such as /chut³⁵/ 'pull, drag'. These words are Thai loanwords. The initial /ch-/ is evidently a Thai consonant because the voiceless unaspirated initials are a typical feature of Thai Song and Tai Dam. This feature distinguishes Thai Song or Tai Dam from Thai and Lao which fall into the voiceless aspirated initial group (Chamberlain 1975). Jiranathanaporn et al. (2003) and Daecha (1986) also include /d-/ in their phonological inventory as the typical consonant [l-] has been completely replaced by the Thai sound [d-].

Table 14: the initial consonants with no variation

OTD 1	OTD 2	MTD	Thai Song					
			Sakaeray			Huathanon		
			G1	G2	G3	G1	G2	G3
*ph- p ^{h:24} 'ghost'	*ph-	f-	ph-	ph-	ph-	ph-	ph-	ph-
*ʔb- bin ³³ 'to fly'	*b-	b-/v	b-	b-	b-	b-	b-	b-
*ʔb- duan ³³ 'moon'	*b-	b-/v	b-	b-	b-	b-	b-	b-
*hw- wi ²⁴ 'comb'	*w-	b-/v-	w-	w-	w-	w-	w-	w-
*w- wa ³³ 'measure of length (2 meters)'	*w-	b-/v-	w-	w-	w-	w-	w-	w-

The study of vowel variation in the thirty-nine words shows that the vowels [i, e, ε, ɤ, o] in particular words are varied by age-group. In some words, there is no vowel variation by age-group because the speakers of all generations have replaced the Thai Song vowels with the Thai vowels.

Despite the gradual change of Thai Song consonants and vowels to Thai, it has been found that Thai Song speakers of all generations at both locations still preserve some typical features of Thai Song phonology. First, the palatal nasal /ɲ-/ such as in the word [ɲa:^{22ʔ}] 'grass' is preserved by speakers of all generations in both Thai Song communities. In particular words such as [ɲin⁴⁵²] 'to hear', the Proto-initial *ɲ- is represented as /ɲ-/ in Tai Dam and in the speech of the G1 speaker (HTN). Other generation speakers at both locations use /ɲ-/. Second, the dropping of liquids in the Proto-labial and velar clusters *pl-, *bl/r-, *ʔbl-, *ml-, *kl-, *kr-, *khr-, *gl- remains, as seen in /p-, p-, b-, m-, k-, k-, s-, c-/ respectively. Third, the final glottal /-ʔ/, which corresponds to /-k/ preceded by long vowels or diphthongs in Thai, is kept, for example, in the word [luʔ³²] 'child'. And finally, the diphthong [aɪ] is a typical feature of Thai Song

phonology which has been kept at all locations. This diphthong has merged with [ai] in Thai but is still marked by a special symbol [may⁵⁵ muan⁵⁵].

The study of lexical replacement supports the second hypotheses that “Young generation speakers use fewer Thai Song words than the older generations”. This finding agrees with the work of Liamprawat and Wattanaprasert (1996) who used 200 words for their study of lexical usage among three generations of Thai Song speakers in Nongsonghong sub-district, Banphaew district, Samut Sakhon province. They found that the G1 speakers used 90 percent of Thai Song words whereas the G2 and G3 speakers used 68.5 and 23.5 percents respectively. In addition, the G1 and G2 speakers used Thai Song words more than Thai words whereas the G3 speakers used Thai words more than Thai Song words. This is different from the present study in that speakers of all generations at HTN and SKR use Thai Song words more than Thai words as seen in figures 1-2. Saeng-ngam (2006) also found the same result as this study. She used 70 words for her study of lexical usage among three generations of Thai Song speakers in Nongprong sub-district of Khao Yoy district in Phetchaburi province. The lexical study reveals that all three generations of Thai Song speakers used Thai Song words more than Thai words and young generation speakers used fewer Thai Song words than the older generations. She concluded that change in lexical usage has slowly begun to occur in the Thai Song spoken at this location and lexical change is occurring faster than tonal change. Buranasing (1988) also found that lexical changes are mostly evident in second and third generation Thai Song speakers in Ban Don sub-district of U-Thong district in Suphanburi province because of the influence of standard Thai.

Despite the positive attitudes towards the Thai Song language among the middle-aged and elderly, it can be concluded from the phonological variation and lexical replacement that language shift in progress has occurred. The major cause of language shift is the mass media which encourages the use of the Thai language in Thai Song communities. Other factors involved in language shift include limited domain of language use, change in social life, and negative attitudes towards the Thai Song language by the young generation. This is supported by Chakshuraksha’s (2003) study in which she found factors that promote shift. These include the practice of intermarriage, formal schooling in schools far from the community and the widespread presence of electronic media in the village. Charoenchai (2008) has also found that technology influences change in the lexical usage of Tai languages, including Thai Song, in Lopburi province. The widespread use of Bangkok Thai lexical items in Lopburi is due to the arrival of modern technology. Buranasing (1988) suggests that the reason Thai loanwords can be found in the Thai Song language is because young generation speakers have become assimilated into Thai society and thus, their native language has also been influenced by Thai. Besides, they do not want to appear different from the Thai majority so they have adjusted their native pronunciation to that of Thai, such as the use of liquid clusters which are absent in the Thai Song language but have been introduced into the Thai Song phonology of Suphanburi dialect.

Consequently, it is anticipated that, in future, the Thai Song language will be used less and less. Over the next 30-40 years, the linguistic vitality of the language may decline.

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Appendix

The Thai Song wordlist used for the study of lexical replacement

In the column of Huathanon and Sakaeray village, the first line consists of words used by the G1, G2, G3 speakers of Huathanon and the second line includes those of Sakaeray village. It should be noted that most of the Thai Song words in this wordlist are typical Thai Song words and some words are shared by Thai Song and Lao.

No.	Gloss	Thai	Black Tai	Huathanon and Sakaeray villages		
				G1	G2	G3
1.	cloud	[me:k ⁴²]	/piəŋ ² faa ³ /	[me:k ³²]	[me:k ³²]	[me:k ³²]
				[k ^h i: ^{22?} fa: ^{441?}]	[me:k ³²]	[me:k ³²]
2.	sea	[t ^h a ³³ le: ³³]	/nam ⁶ be ³ /	[t ^h ə ³² le: ^{45?}]	[t ^h a ³² le: ⁴⁵]	[t ^h a ³³ le: ⁴⁵]
				[t ^h ə ³² le: ^{45?}]	[t ^h a ²² le: ⁴⁵]	[t ^h a ³³ le: ⁴⁵]
3.	papaya	[ma ⁵⁵ la ⁵⁵ kə: ³³]	/hoŋ ² /	[maʔ ⁴⁵ hoŋ ²¹⁵]	[maʔ ³² ho:ŋ ²¹⁴]	[maʔ ⁴⁵ hoŋ ²¹⁵]
				[maʔ ⁴⁵ hoŋ ²¹⁵]	[maʔ ⁴⁵ hoŋ ²¹⁴]	[maʔ ⁴⁵ ho:ŋ ²¹⁵]
4.	rabbit	[ka ³³ ta:j ²²]	/thə ³ /	[kə ³² ta: ²¹⁵]	[ka ²¹ ta:j ²¹⁵]	[kə ³³ ta: ²¹⁵]
				[kə ³² ta: ²¹⁵]	[ka ²¹ ta: ²¹⁵]	[ka ³³ ta: ²¹⁵]
5.	spider	[mæ:ŋ ³³ mum ³³]	/siŋ ² saaw ¹ /	[mæ:ŋ ^{45?} mum ^{45?}]	[mæ:ŋ ^{45?} mum ^{45?}]	[mæ:ŋ ^{45?} mum ^{45?}]
				[mæ:ŋ ^{45?} mum ^{45?}]	[mæ:ŋ ^{45?} mum ^{45?}]	[mæ:ŋ ^{45?} mum ^{45?}]
6.	mouth	[pa:k ²²]	/sop ² /	[sop ⁴⁵]	[sop ⁴⁵]	[sop ⁴⁵]
				[sop ⁴⁵]	[sop ⁴⁵]	[sop ⁴⁵]
7.	tooth	[fan ³³]	/xew ³ /	[k ^h æw ^{22?}]	[k ^h æw ²¹]	[k ^h æw ^{22?}]
				[k ^h æw ^{22?}]	[k ^h æw ^{21?}]	[k ^h æw ^{22?}]
8.	abdomen	[p ^h uŋ ³³]	/pum ¹ /	[pum ²¹⁴]	[pum ²¹⁴]	[pum ²¹⁵]
				[pum ²¹⁴]	[puŋ ^{45?}]	[pum ²¹³]
9.	thigh	[ton ⁴² k ^h a: ²⁴]	/paan ³ xaa ¹ /	[kok ⁴⁵ k ^h a: ²¹⁴]	[kok ⁴⁵ k ^h a: ²¹⁴]	[kok ⁴⁵ k ^h a: ²¹³]
				[kok ⁴⁵ k ^h a: ²¹⁴]	[ton ²¹ k ^h a: ²¹⁴]	[ko:n ^{45?} k ^h a: ²¹³]
10.	fat	[ʔuan ⁴²]	/pi ⁴ /	[pi: ^{45?}]	[pi: ^{45?}]	[pi: ^{45?}]
				[pi: ^{45?}]	[ʔuan ^{21?}]	[pi: ^{45?}]
11.	speak	[p ^h u:t ⁴²]	/paʔ ² /	[paʔ ⁴⁵]	[paʔ ⁴⁵]	[paʔ ⁴⁵]
				[paʔ ⁴⁵]	[paʔ ⁴⁵]	[paʔ ⁴⁵]
12.	think	[k ^h it ⁴⁴]	/ŋam ² /	[ŋam ²¹⁵]	[ŋam ²¹⁵]	[ŋam ²¹⁵]
				[ŋam ²¹⁵]	[k ^h it ⁴⁵]	[ŋam ²¹⁵]
13.	swim	[wa:j ⁴² na:m ⁵⁵]	/ləy ⁴ /	[ləj ^{45?} na:m ^{441?}]	[wa:j ²¹ na:m ⁴⁴¹]	[wa:j ²² na:m ³¹]
				[wa:j ³² na:m ^{441?}]	[wa:j ³² na:m ⁴⁴¹]	[wa:j ²² na:m ³¹]
14.	throw	[k ^h wa:ŋ ⁴²] [wian ²²]	/thim ³ /	[bæ:n ²¹⁵]	[bæ:n ²¹⁵]	[bæ:n ²¹⁵]
				[bæ:n ²¹⁵]	[bæ:n ²¹⁴]	[wian ²¹⁵]
15.	visit	[jam ⁴²]	/yaam ¹ /	[ja:m ²¹⁴]	[ja:m ²¹⁵]	[ja:m ²¹³]
				[ja:m ²¹⁴]	[ja:m ²¹⁴]	[ja:m ²¹³]
16.	tell a lie	[ko: ³³ hok ²²]	/yam ¹ /	[k ^h i: ^{22?} bæw ^{22?}]	[k ^h i: ²² bæ:w ²¹]	[k ^h i: ^{22?} bæw ^{22?}]
				[k ^h i: ^{22?} bæw ^{22?}]	[bæ:w ^{21?}]	[bæw ³²]
17.	look at	[du: ³³]	/bɿŋ ² /	[bɿŋ ²¹⁵]	[bɿŋ ²¹⁵]	[bɿŋ ²¹⁵]
				[bɿŋ ²¹⁵]	[bɿŋ ²¹⁵]	[bɿŋ ²¹⁵]
18.	father	[p ^h ə: ³³]	/aay ³ /	[ʔa: ^{22?}]	[ʔa: ^{21?}]	[ʔa: ^{22?}]
				[ʔa: ^{22?}]	[ʔa: ^{21?}]	[ʔa: ^{21?}]

No.	Gloss	Thai	Black Tai	Huathanon and Sakaeray villages		
				G1	G2	G3
19.	mother	[mæ: ⁴²]	/em ⁴ /	[ʔem ⁴⁵²]	[ʔem ⁴⁵²]	[ʔem ⁴⁵³]
				[ʔem ⁴⁵²]	[ʔem ²¹⁴]	[ʔem ⁴⁵³]
20.	corn	[k ^h a:w ⁴² p ^h o:t ⁴²]	/xaw ³ li ⁴ /	[k ^h aw ²²² san ²¹⁴ li: ⁴⁵²]	[k ^h aw ²¹ sa ²¹⁴ li: ⁴⁵²]	[k ^h aw ²²² sa ²¹³ li: ⁴⁵³]
				[k ^h aw ²²² sa ²¹⁴ li: ⁴⁵²]	[k ^h aw ²¹ sa ²¹⁴ li: ⁴⁵²]	[k ^h aw ²¹ sa ³² li: ⁴⁵³]
21.	chopstick	[ta ³³ kiap ²²]	/thu ² /	[t ^h u: ²¹⁵]	[t ^h u: ²¹⁵]	[t ^h u: ²¹⁵]
				[t ^h u: ²¹⁵]	[ta ²¹ kiap ²¹⁵]	[ta ²¹ kiap ²¹⁵]
22.	firewood	[fu:n ³³]	/luə ¹ /	[lua ⁴⁵²]	[lua ²¹⁵]	[lua ²¹³]
				[lua ⁴⁵²]	[lua ²¹⁴]	[fu:n ⁴⁵³]
23.	trousers	[ka: ŋ ³³ ke:ŋ ³³]	/suəŋ ³ /	[suaŋ ²²²]	[suaŋ ²¹]	[suaŋ ³²]
				[suaŋ ²²²]	[suaŋ ²¹]	[suaŋ ³²]
24.	work	[t ^h am ³³ ŋa:n ³³]	/yet ⁵ /	[ʔet ⁴⁵ wia ²]	[ʔet ⁴⁵ ŋa:n ⁴⁵²]	[ʔet ⁴⁵ wia ²]
				[ʔet ⁴⁵ wia ²]	[ʔet ⁴⁵ wia ²]	[ʔet ⁴⁵ wia ²]
25.	play	[le:n ⁴²]	/in ³ /	[ʔin ²²²]	[ʔin ²¹]	[ʔin ²²]
				[ʔin ²²²]	[ʔin ²¹²]	[ʔin ²¹]
26.	language	[p ^h a: ³³ sa: ²⁴]	/kwaam ⁴ /	[kam ⁴⁵²]	[p ^h a: ²² sa: ²¹⁴]	[p ^h a: ⁴⁵³ sa: ²¹³]
				[kam ⁴⁵²]	[p ^h a: ²² sa: ²¹⁴]	[p ^h a: ⁴⁵ sa: ²¹³]
27.	twenty	[ji: ⁴² sip ²²]	/saaw ⁴ /	[sa:w ⁴⁵²]	[sa:w ⁴⁵²]	[sa:w ⁴⁵³]
				[sa:w ⁴⁵²]	[sa:w ⁴⁵²]	[sa:w ⁴⁵³]
28.	many	[la:j ²⁴]	/laay ¹ /	[ʔe: ²¹⁵]	[ʔe: ²¹⁴]	[la:j ²¹³]
				[ʔe: ²¹⁵]	[ʔe: ²¹⁴]	[ʔe: ²¹⁵]
29.	long	[ja:w ³³]	/hi ⁴ /	[hi: ⁴⁵²]	[hi: ⁴⁵²]	[hi: ⁴⁵³]
				[hi: ⁴⁵²]	[hi: ⁴⁵²]	[hi: ⁴⁵³]
30.	white	[k ^h a:w ²⁴]	/lɔn ² /	[lɔ:n ²¹⁴]	[k ^h a:w ²¹⁴]	[k ^h a:w ²¹³]
				[lɔ:n ²¹⁴]	[k ^h a:w ²¹⁴]	[k ^h a:w ²¹³]
31.	swell	[buam ³³]	/kəw ¹ /	[kau ²¹⁴]	[kaw ²²]	[kaw ³²]
				[kau ²¹⁴]	[buam ²¹⁴]	[buam ²¹³]
32.	dirty	[puan ⁴²]	/uəy ² /	[ʔuaj ²¹⁵]	[ʔuaj ²¹⁵]	[puan ²²]
				[ʔuaj ²¹⁵]	[puan ²¹]	[puan ²¹²]
33.	straight	[troŋ ³³]	/si ⁵ /	[su: ³²²]	[toŋ ³³]	[su: ³²]
				[tɕɤŋ ³²]	[su: ²²]	[tɕɤŋ ³²]
34.	far	[klaj ³³]	/lak ² /	[lak ⁴⁵]	[lak ⁴⁵]	[lak ⁴⁵]
				[lak ⁴⁵]	[lak ⁴⁵]	[lak ⁴⁵]
35.	near	[klaj ⁴²]	/cham ¹ /	[kæ:m ⁴⁵²]	[kæ:m ⁴⁵²]	[kæ:m ⁴⁵³]
				[kæ:m ⁴⁵²]	[kæ:m ⁴⁵²]	[kæ:m ⁴⁵³]
36.	same	[muan ²⁴]	/pɛ ² /	[k ^h u: ⁴⁵²]	[k ^h u: ⁴⁵²]	[k ^h u: ⁴⁵³]
				[k ^h u: ⁴⁵²]	[ku: ⁴⁵²]	[k ^h u: ⁴⁵³]
37.	where?	[thi: ⁴² naj ²⁴]	/kaa ⁴ ləw ¹ /	[ka ⁴⁵² lau ²²²]	[ka ²² law ²²]	[ka ³³ law ⁴⁵]
				[ka ⁴⁵² lau ²²²]	[ka ²² law ²²]	[ka ⁴⁵ law ³³]
38.	who?	[k ^h raj ³³]	/fəw ³ /	[p ^h au ⁴⁵²]	[bɔ: ²² p ^h aw ²²]	[p ^h a:w ⁴⁵³ p ^h aj ⁴⁵]
				[p ^h au ⁴⁵²]	[p ^h u ²¹ law ²²]	[bɔ ² p ^h aj ³³ / p ^h a:w ³³]
39.	what?	[ʔa ³³ raj ³³]	/saŋ ¹ /	[ta ³² haŋ ⁴⁵²]	[ta ²¹ haŋ ²²]	[ta ² haŋ ³⁴]
				[to: ³² haŋ ⁴⁵²]	[ta ²¹ haŋ ²²]	[ta ² haŋ ³³]
40.	in	[naj ³³]	/cuəŋ ¹ /	[kuan ²¹⁴]	[kuan ²¹⁴]	[taŋ ⁴⁵ kuan ²¹³]
				[kuan ²¹⁴]	[k ^w uan ²¹⁴]	[kuan ²¹³]

No.	Gloss	Thai	Black Tai	Huathanon and Sakaeray villages		
				G1	G2	G3
41.	not	[maj ⁴²]	/baw ² /	[bo: ⁴⁵²]	[baŋ ⁴⁵]	[baŋ ⁴⁵]
				[bo: ⁴⁵²]	[bo: ²²]	[boŋ ⁴⁵]
42.	pretty	[sua ^{j24}]	/can ¹ /	[mæ: ^{441?} di: ²¹⁴]	[mæ: ²² di: ²¹⁴]	[mæ: ³² di: ²¹³]
				[mæ: ^{441?} di: ²¹⁴]	[mæ: ²² di: ²¹⁴ , tean ²²]	[mæ: ³² sua ^{j213} / ŋa:m ⁴⁵³]
43.	short (length)	[san ⁴²]	/ten ² /	[ten ^{22?}]	[ten ⁴⁴¹]	[ten ^{22?}]
				[ten ^{22?}]	[ten ^{21?}]	[ten ²¹]
44.	like	[te ^h ɔ:p ⁴²]	/mak ⁵ /	[mak ³²]	[mak ⁴⁵]	[teɔ:p ³²]
				[mak ³²]	[mak ³²]	[te ^h ɔ:p ²²]
45.	with (accompa niment)	[dua ^{j42}]	/naŋ ³ /	[nam ⁴⁵²]	[nam ⁴⁵²]	[nam ⁴⁵³]
				[nam ⁴⁵²]	[nam ⁴⁵²]	[nam ⁴⁵³]