DISCREPANCIES BETWEEN LEXICAL AND TONAL VARIATION: A CASE STUDY OF THE THAI DIALECT OF SAMUI ISLAND¹

M.R. Kalaya Tingsabdh², Sirirat
Choophan³, and Sunisa
Kitivongprateep⁴

Abstract

Over the past twenty five years the study of Thai dialects has concentrated on the geographical variation of either tones or

¹ This article pays tribute to two prominent Thai linguists – Professor Dr. Vichin Panupong on the occasion of her 72nd birthday anniversary and Professor Dr. Amara Prasithrathsint on her retirement from Chulalongkorn University. Professor Dr. Vichin Panupong – a native of Songkhla province – is herself a Southern Thai speaker. She is the most prominent scholar in Thai Dialectology. Professor Dr. Amara Prasithrathsint taught Sociolinguistics and other fields in linguistics e.g. ethnolinguistics and syntax for many years. She has encouraged numerous students to carry out research in some sociolinguistic aspects of Thai. This paper uses the methodology of both dialectology and sociolinguistics to investigate a Southern Thai dialect of Samui Island – a fitting tribute to these two scholars who have done so much to advance linguistic studies in Thailand.

² Assistant Professor, Department of Linguistics, Faculty of Arts, Chulalongkorn University, Bangkok, Thailand.

³ M.A. graduate, Department of Linguistics, Faculty of Arts, Chulalongkorn University, 2004.

⁴ M.A. graduate, Department of Linguistics, Faculty of Arts, Chulalongkorn University, 2005.

lexical items. In the 1990s another type of Thai dialect study began to take shape – a combination of geographical and social variation study. Age has been identified as the main factor influencing variation in Thai dialects. The new type of study has so far concentrated on lexical variation. This paper deals with both geographical and social variation and both lexical and tonal variation. The Thai variety investigated in this study is that of Southern Thai spoken on Samui Island in Surat Thani province. The areas covered are the seven sub-districts of the Samui Island district. Two parallel studies were undertaken culminating in two M.A. theses. Research planning and data collection in these two studies were carried out jointly. Results show that there is no geographical variation in Samui Thai either in tonal or lexical usage. When considering social variation, however, this study confirms that age plays a very important role. It clearly influences lexical variation in Samui Thai but it does not influence tonal variation. While the 60-70 years old speakers still use Southern Thai and Samui Thai lexical items and tones, the 10-20 years old speakers readily adopt Standard Thai lexical items but they still use the same tone system and tonal characteristics as the 60-70 years old speakers. It is suggested that future studies should investigate age-based tonal and lexical variation in Standard Thai and Thai dialects further to obtain a better picture of the process of ongoing change in Thai.

Introduction

Thai dialects have been intensively investigated over the past twenty five years. However, a review of those studies shows that almost all of them investigated just geographical variation and just one of these linguistic aspects – vocabulary, tone,

or consonant. There are some studies of social variation in Thai dialects (Maryprasith, 1992; Sapproong, 1994; Tantinimitkul, 2001). The variables most frequently selected are age, sex, education background, area of residence, and attitude toward the local dialect under study. The usual practice in these social variation studies is to deal with only a single linguistic variable e.g. a consonant, a tone, or a set of lexical items. This study of Samui Thai differs from the previous studies in that it is multidimensional in nature including lexical variation and tonal variation as well as variation by area of residence and age. The objective is to find out whether lexical variation matches tonal variation in those two social aspects.

The linguistic situation on Samui Island suits a study of this type. Samui Thai has its own distinct tone system (Brown, 1965; Diller, 1976; L.Thongkum, 1978) and its lexical items are a mixture of varieties of Southern Thai and Standard Thai. Moreover, Samui Island is a famous tourist destination for Thais and foreigners. The influence of Standard Thai on Samui Thai can be expected to be considerable.

This study will therefore investigate the extent to which Samui Thai is a mixed language. We will also compare the tone system and a set of lexical items in the speech of the young and the old residents in the seven sub-districts on Samui Island to see how the social variable and the linguistic variables interact.

Background

Samui is an island situated about 20 kilometres off the eastern coast of

Southern Thailand. It is a district in Surat Thani province covering an area of 247 square kilometers – the third largest island in the country. There are 7 sub-districts in the district of Samui Island: Ang Thong, Mae Nam, Bo Phut, Lipa Noi, Taling Ngam, Na Mueang, and Maret. Among these sub-districts, Taling Ngam, Na Mueang, and Maret are largely inhabited by the local people. The others are mainly tourist areas. There is an airport on the island with several flights per day linking it with Bangkok and some other major cities. Car ferries link the island to the mainland with fifteen services per day.

Samui Thai is a variety of Southern Thai. The identification is based on its tone system. Using the tone-box method⁵ one finds in Samui Thai the distinct Southern Thai pattern of tone splits and mergers i.e. one tone occurs in A1 and B1 and another tone in A2, B2, A3 and B3 (see Diagram 1). All of the three varieties of Southern Thai shown on the diagram have this characteristic. Such splits and mergers clearly differ from those of Standard Thai shown in Diagram 2. Samui Thai tone system differs from that of Eastern Southern Thai and Western Southern Thai in one important aspect – a single tone occurs in B4, C2 and C3. In the other varieties one tone occurs in B4 and another in C2 and C3. It should be noted that this special pattern in Samui Thai also occurs in Standard Thai. The phonetic characteristics of the column A tones in Southern Thai are also distinct. The tone in A1-B1 (T1 in Diagram 1) is high-falling, in A2-B2-A3-B3 (T2) is mid-falling, in A4 (T3) is low-falling. Previous studies (Brown, 1965; L.Thongkum, 1978) show that the column A tones in Samui Thai have these phonetic characteristics.

⁵ Gedney, 1972.

As far as the lexical items in Samui Thai are concerned, Ache (1986) found the lexical items from Eastern Southern Thai and Western Southern Thai (Chittham, 1970; Pankhuenkhat, 1988; Boonthip, 1992) in Samui Thai. She also discovered that several isoglosses separating these two sub-dialects of Southern Thai were located on the mainland near Samui Island. Moreover, our own preliminary investigation showed that Samui Thai had its own lexical items that were not used elsewhere. Moreover, we observed that Standard Thai words were adopted in Samui Thai. This is to be expected as the variety is exposed quite intensively to that

prestigious variety due to the status of Samui Island as a tourist destination. Such a rich mixture of types of lexical items drew our attention to this variety.

Past studies have proved that age has much influence on the variation in Thai dialects (Maryprasith, 1992; Sapproong, 1994; Tantinimitkul, 2001). This study will investigate variation by age to detect the process of ongoing change in Samui Thai. The most important question that we would like to answer is whether lexical variation and tonal variation are parallel to one another.

Diagram 1 The three patterns of tone splits and mergers of Southern Thai found in Surat Thani and Nakhon Si Thammarat ⁶

Eastern Southern Thai						Western Southern Thai						Samui Thai					
	A	B	C	DL	DS		A	B	C	DL	DS		A	B	C	DL	DS
1	T1			T5		1	T1			T5		1	T1			T5	
2	T2			T6		2	T2					2	T2			T4	
3						3						3					
4	T3	T4	T7			4	T3	T4	T6			4	T3	T4	T6		

Diagram 2 The pattern of tone splits and mergers of Standard Thai ⁷

	A	B	C	DL	DS
1	T1				
2		T3	T4		
3	T2				
4		T4	T5		

⁶ Adapted from Brown, 1965 and L.Thongkum, 1978. In this paper only the tones on the live syllables are considered since those on the checked syllables are treated as allotones of the tones established in the context of the live syllables.

⁷ Adapted from Brown 1965 p.162.

Methodology

Local residents were selected by areas of residence - the seven sub-districts of the Samui Island district - and by age-groups - 10-20 years old and 60-70 years old. There were ten speakers per age-group per sub-district in our study of lexical variation and three speakers per age-group per sub-district in our study of tonal variation. Fewer informants were interviewed in the tonal study because tonal analysis involves considerable amount of analysis per speaker. The three speakers in the tonal study are also the informants in the lexical study. In all there are 140 informants in the lexical study and 42 informants in the tonal study. All of the informants must be born on the island and have lived there permanently. Those who had stayed elsewhere longer than one year were not selected.

The tone questionnaire consists of 15 monosyllabic words. All of them begin with an initial voiceless stop. Nine of these words are open syllables ending in /aa/ - khaaA1⁸, taaA2, thaaA4, khaaB1, paaB2, thaaB4, phaaC1, paaC2, thaaC4. They were included in the questionnaire to check the tones on live syllables i.e. the syllables ending in long vowels or nasals.

The other six words-khaatDL1, paatDL2, thaapDL3, khatDS1, patDS2, thapDS4 - were included to check the tones in the long and short checked syllables i.e. the syllables ending in stops preceded by long or short vowels. Two lists of words were constructed. The first list consists of 10 tokens of each of the nine live syllable words and the second 10 tokens of each of the six checked syllable words. The tokens appear at random. It is taken care that two adjacent tokens always differ.

Data collection of tones was carried out by Kitivongprateep in 2004. Forty-two speakers on Samui Island were interviewed: six per sub-district divided into two age-groups - three in the 10-20 years old group and three in the 60-70 years old group. Pictures were used to elicit the required words. Each informant was asked to pronounce all of the words in the two wordlists. The recording of five tokens of each word was analyzed acoustically to obtain the fundamental frequency values. Praat - the speech analysis software - was used for this purpose. The remaining five tokens were kept as back-ups and used when any selected token could not be analyzed. To normalize duration, measurement was done at every 10 % point from 0% to 100%. The values obtained from the

⁸ The tones of the words are indicated at this point by location of the tone boxes in which they occur.

five tokens of each word were recorded in a table using Microsoft Excel. Average values at the 11 points of measurement were calculated and converted into semitone using the formula: $=12 \cdot \text{LOG}(\text{the average value at each point in Hertz}/440.2)$. Using only the average semitone values of all of the words, line graphs were drawn. Whenever two line graphs were almost identical, they were regarded as showing the same tone and one was discarded⁹. Eventually the tonal characteristics of all of the tones for each person were obtained in the form of line graphs. At the same time the tone splits and mergers were worked out for each person.

At the next step, the tonal characteristics of the three informants in the same age-group and the same sub-district were compared. A set of a single speaker was selected to represent the group on the basis of its sharing of most features with the others (see Figure 5). Then the tonal characteristics of each tone in the speech of all of the representatives were compared to find out the discrepancies – if any – between the two age groups of each sub-district and among the seven sub-districts.

The lexical questionnaire was constructed using several sources (Southern Thai Studies, 1982; Saeneetontikul, 1985; Phinthong,

1989; Payomyong, n.d.; The Royal Institute, 2003). It contains 200 questions – one semantic unit per question. The questionnaire consists of four groups of semantic units – 50 units per group. Each group was designed to check one aspect of lexical variation in Samui Thai.

Group 1 The semantic units in this group are represented by the same lexical items in the four main Thai dialects – Northern Thai, Northeastern Thai, Central Thai, and Southern Thai as shown below. They are included in the questionnaire to confirm that Samui Thai uses Common Thai lexical items as well as the other types of lexical items to be elicited in the other three groups of semantic units.

Thai varieties	Meaning	
	“hand”	“root”
Central	/muu ^T /	/raak ^T /
Northern	/muu ^T /	/raak ^T /
Northeastern	/muu ^T /	/raak ^T /
Southern	/muu ^T /	/raak ^T /

Group 2 The semantic units in this group are represented by different lexical items in Western Southern Thai and Eastern Southern Thai. They are included in the questionnaire to check whether we can conclude on the basis of the lexical items elicited whether Samui Thai is an Eastern Southern Thai or a Western Southern Thai variety or a mixed variety of Eastern and Western Southern Thai.

⁹ It is not certain whether auditory judgment is better than the method used in this study. Further investigation is required.

Thai varieties	Meaning	
	“fin”	“now”
Western	/doon ^T /	/yuu ^T
Southern		k ^h reen ^T /
Eastern	/set ^T /	/tiam ^T
Southern		yuu ^T /

Group 3 The semantic units in this group are represented by different lexical items in Standard Thai and Common Southern Thai i.e. the variety used in all or most varieties of Southern Thai including Samui Thai. They are included to check the extent to which Standard Thai lexical items have been adopted in Samui Thai and replacing the Common Southern Thai lexical items.

Thai varieties	Meaning	
	“pumpkin”	“belt”
Southern	/naam ^T	/saai ^T
	tau ^T /	ʔeu ^T /
Standard	/fak ^T	/k ^h em ^T
	t ^h ooŋ ^T /	k ^h at ^T /

Group 4 This group consists of the semantic units that are represented by the lexical items that appear just in Samui Thai. They are included to check whether these Samui Thai lexical items are still used by the natives of Samui or whether they have been discarded. If so, we would also like to know which lexical items have replaced them - whether those in Standard Thai or Common Southern Thai.

Thai varieties	Meaning	
	“deep-fried doughstick”	“vermicelli”
Samui	/k ^h ii ^T	/sen ^T
	kuai ^T /	nom ^T /
Southern	/kuai ^T	/taŋ ^T
	tø ^h ok ^T /	hon ^T /
Standard	/paa ^T t ^h ooŋ ^T	/wun ^T
	koo ^T /	sen ^T /

The data for the lexical study were elicited by Choophan in 2004. One hundred and forty speakers on Samui Island were interviewed: twenty per sub-district including ten in the 10-20 years old group and ten in the 60-70 years old group. The forty-two informants interviewed in the tonal part of this study were also included in this part. Pictures were used to elicit the 200 words. The data in the four groups were analyzed separately. Chi-square was used to check whether the different frequency of occurrence found was statistically significant. Bar graphs of the frequency of different types of lexical items in groups 2-4 were shown.

Results

This study shows very clearly that lexically Samui Thai is a mixed variety. It uses Common Thai, Western Southern Thai, Eastern Southern Thai, Common Southern Thai, Samui Thai, and Standard Thai lexical items.

In this study the lexical items elicited for each group of semantic units were analyzed separately since each group was designed to provide specific information on lexical usage in Samui Thai. Each of the four groups yields 7,000 lexical items (50 semantic units x 140 speakers).

In the first group of semantic units Samui Thai uses Common Thai lexical items like the other Thai varieties. Only 4, or 0.1%, of the 7,000 items are not Common Thai words.

The second group of semantic units shows that Samui Thai uses both Western Southern Thai and Eastern Southern Thai lexical items – the former occurring more than the latter: 2,954 to 2,216 items or 42.2% to 31.7% respectively. In this second group many informants use Standard Thai lexical items instead of the Southern Thai ones: 1,271 or 18.2%.

Analysis of the third group shows that Common Southern Thai lexical items are still widely used in Samui Thai:

5,766 items or 82.3%. Nonetheless it is found that some speakers use Standard Thai lexical items instead of the Southern Thai ones: 1,052 items or 15.1%.

In the fourth group of semantic units, it is found that Samui Thai lexical items are still used: 4,176 items or 59.7%. Surprisingly, those who do not use Samui Thai lexical items prefer Standard Thai to Common Southern Thai ones: 1,881 to 523 items or 26.9% to 7.4% respectively.

A comparison of lexical usage in groups 2, 3, and 4 among the seven sub-districts shows that none is statistically significant (see Table 1-3).

Table 1 Lexical usage in group 2 by sub-districts

		Ang Thong	Mae Nam	Bo Phut	Maret	Na Muang	Taling Ngam	Lipa Noi
Western Southern Thai	frequency	416	422	402	431	412	433	438
	Percentage	41.6	42.2	40.2	43.1	41.2	43.3	43.8
Eastern Southern Thai	frequency	312	341	302	309	310	313	329
	Percentage	31.2	34.1	30.2	30.9	31.0	31.3	32.9
Common Southern Thai	frequency	48	50	48	58	56	47	42
	Percentage	4.8	5.0	4.8	5.8	5.6	4.7	4.2
Standard Thai	frequency	196	159	225	173	181	176	161
	Percentage	19.6	15.9	22.5	17.3	18.1	17.6	16.1
Unclassified	frequency	28	28	23	29	41	31	30
	Percentage	2.8	2.8	2.3	2.9	4.1	3.1	3.0
Total	frequency	1000	1000	1000	1000	1000	1000	1000
	Percentage	100.0	100.0	100.0	100.0	100.0	100.0	100.0

$$\chi^2 = 32.698 \quad df = 24 \quad p > 0.001$$

Table 2 Lexical usage in group 3 by sub-districts

		Ang Thong	Mae Nam	Bo Phut	Maret	Na Muang	Taling Ngam	Lipa Noi
Common Southern Thai	frequency	819	834	812	819	829	829	824
	Percentage	81.9	83.4	81.2	81.9	82.9	82.9	82.4
Standard Thai	frequency	151	142	160	154	149	146	150
	Percentage	15.1	14.2	16.0	15.4	14.9	14.6	15.0
Unclassified	frequency	30	24	28	27	22	25	26
	Percentage	3.0	2.4	2.8	2.7	2.2	2.5	2.6
Total	frequency	1000	1000	1000	1000	1000	1000	1000
	Percentage	100.0	100.0	100.0	100.0	100.0	100.0	100.0

$$\chi^2 = 3.346 \quad df = 12 \quad p > 0.001$$

Table 3 Lexical usage in group 4 by sub-districts

		Ang Thong	Mae Nam	Bo Phut	Maret	Na Muang	Taling Ngam	Lipa Noi
Samui Thai	frequency	608	630	570	607	582	585	594
	Percentage	60.8	63.0	57.0	60.7	58.2	58.5	59.4
Common Southern Thai	frequency	54	61	63	99	86	80	80
	Percentage	5.4	6.1	6.3	9.9	8.6	8.0	8.0
Standard Thai	frequency	278	240	297	240	277	280	269
	Percentage	27.8	24.0	29.7	24.0	27.7	28.0	26.9
Unclassified	frequency	60	69	70	54	55	55	57
	Percentage	6.0	6.9	7.0	5.4	5.5	5.5	5.7
Total	frequency	1000	1000	1000	1000	1000	1000	1000
	Percentage	100.0	100.0	100.0	100.0	100.0	100.0	100.0

$$\chi^2 = 32.698 \quad df = 24 \quad p > 0.001$$

When comparing the lexical usage of the two age-groups, we found that in groups 2, 3, and 4 the older speakers use Southern Thai lexical items - including the Common, the Western, and the Eastern Southern Thai - more than the younger speakers, while the

younger speakers clearly prefer the Standard Thai lexical items to the Southern Thai ones. Such variation is statistically significant in all of the three groups (see Tables 4-6). Variation in lexical usage by sub-districts and by age-groups is shown as bar graphs in Figures 1-3.

Table 4 Lexical usage in group 2 by age-groups

		10-20 years old	60-70years old	Total
Western Southern Thai	frequency	1423	1531	2954
	Percentage	40.7	43.7	42.2
Eastern Southern Thai	frequency	990	1226	2216
	Percentage	28.3	35.0	31.7
Common Southern Thai	frequency	112	237	349
	Percentage	3.2	6.8	5.0
Standard Thai	frequency	917	354	1271
	Percentage	26.2	10.1	18.2
Unclassified	frequency	58	152	210
	Percentage	1.6	4.3	2.9
Total	frequency	3500	3500	7000
	Percentage	100	100	100

$$\chi^2 = 365.315 \quad df = 4 \quad p < 0.001$$

Table 5 Lexical usage in group 3 by age-groups

		10-20 years old	60-70years old	Total
Common Southern Thai	frequency	2550	3216	5766
	Percentage	72.8	91.9	82.3
Standard Thai	frequency	818	234	1052
	Percentage	23.4	6.7	15.1
Unclassified	frequency	132	50	182
	Percentage	3.8	1.4	2.6
Total	frequency	3500	3500	7000
	Percentage	100	100	100

$$\chi^2 = 438.069 \quad df = 2 \quad p < 0.001$$

Table 6 Lexical usage in group 4 by age-groups

		10-20 years old	60-70years old	Total
Samui Thai	frequency	1612	2564	4176
	Percentage	46.1	73.2	59.7
Common Southern Thai	frequency	332	191	523
	Percentage	9.5	5.5	7.4
Standard Thai	frequency	1310	571	1881
	Percentage	37.4	16.3	26.9
Unclassified	frequency	246	174	420
	Percentage	7.0	4.9	6.0
Total	frequency	3500	3500	7000
	Percentage	100	100	100

$$\chi^2 = 557.719 \quad df = 3 \quad p < 0.001$$

Figure 1 Usage of Lexical Items in Group 2 by Sub-district and by Age-group

Figure 2 Usage of Lexical Items in Group 3 by Sub-district and by Age-group

Figure 3 Usage of Lexical Items in Group 4 by Sub-district and by Age-group

Analysis of the tones yields quite different results. All of the speakers of both age-groups in all seven sub-districts use the same system with 6 tones i.e. three falling tones – high

falling /khaa1/, mid falling /taa2/, and low falling /thaa3/; two level tones – high level /phaa5/ and low level /thaa6/; and one rising tone /thaa4/ (See Figure 4). Moreover, there is just a single pattern of tone splits and mergers

of Samui Thai in this study (see Diagram 3). It is exactly the same pattern as found in the previous studies (Brown, 1965; Diller, 1976; L.Thongkum, 1978). Both the tonal

characteristics and the pattern of tone splits and mergers identify Samui Thai with Southern Thai. No trace of Standard Thai influence is found in this study.

Figure 4 The Tonal Characteristics of the Six Tones of Samui Thai

Diagram 3 The pattern of tone splits and mergers of Samui Thai

	A	B	C	DL	DS
1	T1		T5		
2	T2		T4		
3					
4	T3	T4	T6		

To compare the tonal characteristics in Samui Thai in the speech of the 60-70 year old speakers and the 10-20 year old speakers in all of the seven sub-districts, we first of all compare the three speakers in the same age-group

and the same sub-district and select the system of one speaker who can best represent the group. The graphs showing the tonal characteristics of all of the representatives are then placed together (see Figure 5).

Figure 5 Tones of Samui Thai spoken by 10-20 years old and 60-70 years old speakers in the seven sub-districts.

Figure 5 (contd.)

Angthong (old)

Angthong (Young)

Maret (Old)

Maret (Young)

Na Muang (Old)

Na Muang (Young)

Figure 5 (contd.)

It is found that the tonal characteristic of each tone is very similar in all of the speakers – both young and old and in all of the sub-districts – as follows:

Tone 1 High falling as in /khaa1/

This tone in all cases except one is either high rising falling or high level falling. The end point is low. In just one case it is mid. The one exception of the tonal characteristic of this tone is in the speech of the old speakers in the Maret sub-district. In this case it is high gliding up and gliding down. Its end point is high.

Tone 2 Mid falling as in /taa2/ This tone is always mid rising falling. The end point is low. The highest point of this tone is in most cases at the middle of the syllable. In a few cases it is further back. There is one exception. This tone in the old speakers in the Maret sub-district is not mid falling but mid rising.

Tone 3 Low falling as in /thaa3/ This tone is low rising falling in most cases. The highest point could be quite high and it is around the middle of the syllable. Only in the speech of the old speakers of Lipa Noi, this tone does not rise much above the starting level. In all of the cases the starting point is between mid and low and the end point is low.

Tone 4 Rising as in /thaa4/ This tone is always low rising. The starting point is between mid and low. In some cases the tone dips a little before rising. The end point is mostly high but could be between mid and high. The end sometimes has a slight fall.

Tone 5 High level as in /phaa5/ This starting point and the endpoint of this tone are almost the same between high and mid. There could be some gliding up or gliding down.

Tone 6 Low level as in /thaa6/ This tone is very similar in shape to Tone 5. The starting point and the end point are between mid and low.

This study shows that the tonal characteristics of all of the tones are very similar in both age-groups and in all of the sub-districts except Maret. The two tones in Maret – tone 1 and tone 2 - that do not fall have to be investigated further. Individual variation is the likely cause of the other discrepancies.

Conclusion

This study confirms that Samui Thai contains both Western Southern Thai and Eastern Southern Thai lexical items. The items in the former variety occur more frequently than those in the latter. The occurrence of the lexical items that are peculiar to Samui Thai is confirmed. Standard Thai lexical items are also widely used. Variation by age in lexical usage is very clear. The younger speakers increasingly use Standard Thai lexical items in their speech. The lexical items that are losing a lot of ground to

Standard Thai are the ones used only on Samui Island.

The investigation of the tone system of Samui Thai gives quite a different picture. The tone system of Samui Thai is still in tact in the speech of both the younger speakers and the older speakers in all of the seven sub-districts.

This study confirms that studying just one linguistic aspect of a variety does not give a true picture of how it is transforming under the influence of a more prestigious variety. Phonological and lexical variation should always be investigated together to detect the process of ongoing change more effectively. In the case of Samui Thai, the influence of Standard Thai has initially affected the lexicon. It would be interesting to check a few years from now whether the tone system and the tonal characteristics of Samui Thai will be modified under the influence of Standard Thai.

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