

THE EMERGENCE OF LENGTH DISTINCTION OF MID-FRONT VOWEL e-ee IN THAI

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INTRODUCTION

The Proto-Southwestern Tai vowel system, reconstructed by Li (1977: 259-261) and by Sarawit (1973: 97), shows the length distinction of all high vowels and mid-low vowels as follows:

*i	*ii	*ɨ	*ɨɨ	*u	*uu
*e				*o	
	*ɛɛ	*a	*aa		*ɔɔ

When compared to the vowel system of the daughter languages in Southwestern Tai group, it is found that in all the daughter languages except Thai only the mid-low vowel a-aa possess the length distinction. The vowel system of the Thai language is different from those of other Tai languages in that it consists of nine pure vowels all of which contrast in length. Thai vowel system can be shown as follows:

i	ii	ɨ	ɨɨ	u	uu
e	ee	ə	əə	o	oo
ɛ	ɛɛ	a	aa	ɔ	ɔɔ

Li (1977:260-261) claims that the vowels ee ɛ oo ɔ might have been introduced into the Thai vowel system through borrowing or secondary developments.

In order to prove Li's claim, the documents of

the Sukhothai period (the Inscription I) and of the present period (the Royal Institute Dictionary B.E. 2525) are investigated. It is found that in the Sukhothai period only two written types are found to represent the vowel e or ee: <e- > ทะเล "sea"; <e-# > เต็ม "full", four written types are used, however, in the present period: <e- > เจดีย์ "pagoda"; <e-# > เหตุ "cause"; <e-^h-# > เด็ด "to pluck"; <e- >เตะ "to kick". It is hypothesized, therefore, that the length distinction of the vowel e-ee emerges at some time between the Sukhothai and the present period. The study to locate the more specific time of the emergence of length distinction of mid and low vowels in Thai is thus very interesting.

This study attempts to investigate the time when length distinction of mid-front vowel (e-ee) emerged, and to find out whether borrowing is the significant factor for such emergence.

RESEARCH METHODOLOGY

In this study, the written forms used for the vowel e-ee (<e- >; <e-# >; <e-^h-# >; <e- >, which may be accompanied with each markers : ' ' " + " ') are drawn from ten selected documents during five periods (the Sukhothai, Ayudhaya, Beginning of Bangkok, Middle of Bangkok, and present period). After that the data are compared with lexical items in other Tai dialects and also in other languages in order that the types of words can be specified. Finally the emergence of length distinction of mid-front vowel e-ee is hypothesized.

THE OCCURRENCE OF WRITTEN FORMS USED FOR e-ee

The data are grouped according to 2 factors: forms and types of words.

First the data are put into 5 groups according to different forms of vowel e-ee. This is to study the development of these written forms which are as follows:

1. <เ- > : เณ "to incline"
2. <เ-# > : เณศ "trick"
3. <เ-# > ~ <เ-# > : เณ~เณ "to be"
4. <เ-# > : เณศ "ball of cotton"
5. <เ- > : เณ "short"

The third type above shows the variation of written forms <เ-# > and <เ# >.

The following table shows the count of different written forms of vowel e-ee in 5 periods.

PERIOD	B.E.	DOCUMENTS	WRITTEN FORMS USED FOR e - ee					
			<เ- >	<เ-# >	<เ-# >	<เ-# > ~ <เ-# >	<เ- >	TOTAL
Sukhothai	1835	Inscrip. I	2	9	-	-	-	11
	1884-1910	Srichum	4	27	-	-	-	31
Ayudhya	2229	Kosa Paan	12	27	3	3	-	45
	2271	Pamok	1	11	-	-	-	12
Begin. of	2347	3 Laws	33	101	14	2	-	150
Bangkok	2368-70	Rama III	23	77	11	2	1	114
Middle of	2397	Dict. Ling	200	263	5	97	12	577
Bangkok	2434	Dict. 2434	191	336	6	75	4	612
Present	2470	Dict. 2470	233	350	-	130	17	730
	2525	Dict. 2525	222	409	-	137	20	790

TABLE 1: Occurrence of Written Forms Used For e-ee

<เ- >, <เ-# >, <เ-# > ~ <เ-# >, <เ-# >, <เ- >

It is shown that only 2 forms <เ- > and <เ-# > occur in the Sukhothai period. During the period of Ayudhya and Middle of Bangkok, there is the variation

of forms <๑-๕>~<๑-๕>. And at the same time, there is the occurrence of the form<๑-๕>. The form <๑-๕> appears last in the Beginning of Bangkok period.

Second, in order to find out whether different written forms are dictated by different types of words, the data are grouped into 3 groups according to types of words as follows:

1. Cognates : the Tai cognates specified by Sarawit (1973) and Li (1977), for examples:

เจ็ด	[cet]	"seven"
เปลว	[pleew]	"flame"

2. New Formations : the words which are non-cognate or non-loanword, for examples:

สะเก็ด	[sa-ket]	"fragment"
เลก	[leek]	"man"

3. Loanwords : the words borrowed from other languages, for examples:

เซ็น	[sen]	"to sign"
เทวา	[thee-vaa]	"angel"

The table 2 (next page) shows the counts of types of words in different forms of vowel e-ee in 5 periods.

The data show that the form<๑-> was first used for Pali and Sanskrit loanwords and later for new Thai words. The form <๑-๕> is used for cognates, new formations and loanwords. But at the time during the Ayudhya period and the Beginning of Bangkok period some cognates, new formations and loanwords gradually changed their written forms of vowel from <๑-๕> to <๑-๕>. There was a time when <๑-๕> occurred in free variation with <๑-๕>. However, between <๑-๕> and <๑-๕> the form <๑-๕> increases in more and more occurrences

till the present period. It seems that the form <ɿ-ɛ> abruptly appears at the Middle of Bangkok period. However, there is only a little amount of the words in this form.

DOCUMENTS	WRITTEN FORMS USED FOR e - ee														
	<ɿ->			<ɿ-#>			<ɿ-#> ~<ɿ-#>			<ɿ-#> ^u			<ɿ-ɛ>		
	C	N	L	C	N	L	C	N	L	C	N	L	C	N	L
Inscrip.I	-	-	2	6	-	3	-	-	-	-	-	-	-	-	-
Srichum	-	1	3	10	2	15	-	-	-	-	-	-	-	-	-
Kosa Paan	-	1	11	14	4	9	1	-	2	1	1	1	-	-	-
Pamok	-	-	1	1	3	7	-	-	-	-	-	-	-	-	-
3 Laws	-	9	24	16	31	54	7	1	6	1	-	1	-	-	-
Rama III	-	2	21	10	20	47	6	-	5	1	-	1	-	1	-
Dict.Ling	-	99	101	8	107	148	-	2	3	28	50	19	-	10	2
Dict.2434	-	43	148	8	69	259	1	4	1	26	32	17	-	4	-
Dict.2470	-	80	153	11	128	211	-	-	-	37	60	33	-	14	3
Dict.2525	-	92	130	8	182	219	-	2	-	34	72	31	-	15	5

TABLE 2 : Occurrence of Written Forms Used For e-ee
 <ɿ->, <ɿ-#>, <ɿ-#>~<ɿ-#>^u, <ɿ-#>^u, <ɿ-ɛ>
 in Cognates, New Formations and Loanwords
 in 5 Periods

(C=Cognates; N=New Formations; L=Loanwords)

THE OCCURRENCE OF DISTINCTIVE FORMS

In considering whether the different sounds are different phonemes, the principle of phoneme analysis is used, that is the minimal pairs (for examples: ฟ้า [p^hen] "full" - ฟ้า [p^heen] "noon") must be found. Since the research is based on written forms, minimal pair used in this article is a pair of written forms which are

similar in initial letter, final letter and tone marker, but different in vowel letter. For examples:

เดิน "white louse" - เदन "mud"

เวิด "to wipe" - เวชฐ "older brother"

All pairs of distinctive written forms are grouped according to types of words in each pair. The capital letters C, N, L, will be used as abbreviations of cognates, new formations, and loanwords respectively. (The abbreviations used for any group consist of two capital letters which convey meanings, for examples: C-C = both forms are cognates ; C-L = one is cognate, another is loanword). The seven groups of pairs of distinctive written forms are C-C, C-N, C-L, N-L, N-N, L-L, and L-N. All of them are shown in table 3.

Types of Pairs of Distinctive Written forms	Pairs of Forms <เ-๕>-<เ-๕>	Documents			
		Dict. Ling.	Dict. 2434	Dict. 2470	Dict. 2525
1. C-C	เดิน เดิน	+	-	-	-
2. C-N	เหลน เหลน	+	-	-	-
	เลก เลก	+	+	+	+
	เอน เอน	+	+	+	+
	เดก เดก	-	-	-	+
3. C-L	เพด เพท	+	-	-	-
	เมด เมศ	+	-	-	-
	เลน เลน	+	+	+	+
	เทด เทต	+	+	+	+
	เมด เมท	-	+	-	-
	เลด เลส	-	+	-	-
	เจด เจต	-	+	-	+
	เชด เชชฐ	-	+	+	+
	เดด เดช	-	+	+	+
	เลบ เลป	-	+	+	+

Table 3 (continued)

Types of Pairs of Distinctive Written forms	Pairs of Forms ⟨(一書)⟩-⟨(一書)⟩	Documents			
		Dict. Ling.	Dict. 2434	Dict. 2470	Dict. 2525
3. C-L	หม หม	-	-	+	-
	เจ็ด เจ็ด	-	-	+	-
	เกล็ด เกล็ด	-	-	+	+
	เม็ด เม็ด	-	-	+	+
	เล็ด เล็ด	-	-	+	+
	เป็ด เป็ด	-	-	-	+
	เป็ด เป็ด	-	-	-	+
4. N-L	เล้ง เล้ง	+	-	-	-
	เดด เดด	+	+	+	+
	เข็ด เข็ด	+	-	+	+
	เก้ง เก้ง	-	+	+	+
	กะเล็ด กะเล็ด	-	-	+	-
	เพ้ง เพ้ง	-	-	+	+
	เกร้ง เกร้ง	-	-	+	+
	ละเป้ง ละเป้ง	-	-	+	+
	เก้ง เก้ง	-	-	-	+
5. N-N	เม้ง เม้ง	-	-	-	+
	เคลง เคลง	+	-	-	-
	เขน เขน	+	+	+	+
	เว้ง เว้ง	-	+	-	-
6. L-L	ระเป้ง ระเป้ง	-	+	+	+
	เพ้ง เพ้ง	+	+	-	-
	เข้ง เข้ง	+	-	+	+
	เว้ง เว้ง	+	-	+	+
	เส้ง เส้ง	+	+	+	+
	เก้ง เก้ง	+	+	+	+
	เว้ง เว้ง	-	+	-	-
	เข้ง เข้ง	-	-	-	+

Table 3 (continued)

Types of Pairs of Distinctive Written forms	Pairs of Forms <๑-๓>-<๑-๓>	Documents			
		Dict. Ling.	Dict. 2434	Dict. 2470	Dict. 2525
7. L-N	๑๑๑ ๑๑๑	-	+	-	-
	๑๑๑ ๑๑๑	-	+	+	+
	๑๑๑ ๑๑๑	-	+	+	+

**TABLE 3 : Occurrence of Distinctive Written Forms
Grouped by types of words**

From table 3, it is shown that there are 46 pairs of distinctive written forms. 80 per-cent of them are the pairs which consist of loanwords. This reveals that borrowing is, most possible, the important factor for the emergence of length distinction of mid-front vowel in Thai.

CONCLUSION

The development of length distinction of mid-front vowels e-ee may be concluded as follows:

I: The presence of form <๑-๓> and absence of form <๑-๓> in Sukhothai period reveal that Proto-South-western Tai *e might be pronounced long or short. The variation of *e might be free variation (*e can be freely pronounced as long or short vowel) or conditioned variation (*e can be pronounced long or short depending on syllable structures). Such variation may be in a long process and may stay until the Beginning of Bangkok.

II: During the Ayudhaya period and the early of Middle of Bangkok period, the occurrence of written forms <๑-๓>~<๑-๓> and of <๑-๓> manifest the fluctuation of the vowels /e/-/ee/. The written form <๑-๓> is

finally used for short vowel /e/, while <ɪ-#> for long vowel /ee/.

III: In the Middle of Bangkok period, there is an increase of new formations in written forms <ɪ-> <ɪ-#> <ɪ-#̣> and <ɪ-ɛ>. This mean that there is 2 distinctive phonemes /e/ and /ee/.

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#### DATA SOURCE

- Sukhothai** : 1. caa-rík phôo-khũn raam-kham-ḥc̣ɛɲ (The Inscription I)  
 2. caa-rík wát ṣii-chum (Srichum Insription)
- Ayudhya** : 3. pra-wát koo-ṣaa-paan lé? còt-ṃaii ḥeet kaan ḍaen thaɲ pai fa-ṛaɲ ṣeet (Autobiography and Letter of Kosa Paan)  
 4. caa-rík wát p̣aa-ṃook (Wat Pamok Inscription)
- Beginning** : 5. ḳòt-ṃaii traɲ ṣaam duɲ (The Three Sealed Laws)
- of Bangkok** 6. c̣òt-ṃaii ḥeet ṛát-cha-kaan tḥii ṣaam (King Rama 3 Records)
- Middle** : 7. Dictionarium Linguae Thai Sive Siamensis
- of Bangkok** 8. Dictionary B.E.2434, The Ministry of Education
- Present** : 9. Dictionary B.E.2470, The Ministry of Educa  
 10. The Royal Institute Dictionary B.E.2525

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