

## SYLLABIC ɰ IN TAI-LUE AND NEIGHBOURING TAI DIALECTS

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The appearance of syllabic ɰ in Tai-Lue is a case of reduction of morphemes that are syntactically, semantically and phonologically weak. This three-pointed conspiracy is quite prominent in Lue where the number of morphemes that have been levelled to ɰ is probably greater than in other dialects. Early visitors among the Lue in Yunnan, in fact, described Lue speech as having a mumbling quality when compared to what they judged to be the clarity of Siamese (Central Thai) or Yuan (Northern Thai). While Siamese does not have an authentic ɰ, it does participate in the general process that we are describing. The reduction of Siamese /maak<sup>2</sup>/ to an unstressed syllable /mä/ as in /mä muan<sup>3</sup>/ 'mango' is an example of the closest that Siamese comes to the Lue phenomenon where we find Lue /ɰ<sup>2</sup>moon<sup>5</sup>/ [ɰ<sup>1</sup>moon<sup>5</sup>]. Northern Thai, closely documented on the colloquial level in Purnell and Hope 1962, is like Lue. Northern Thai, Purnell and Hope (1962:28) note, has "the prefix bà- or ò- to indicate fruit and some other roundish, lumpy objects". Shan shares with Lue the negative expressed as ɰ (Cushing 1914; Egerod 1957). Black Tai speakers reportedly use ɰ, but the actual data have not come to my attention. Likewise, one hears comments that the Cantonese negative, like Lue and Shan is a syllabic ɰ. If the geographic spread of syllabic ɰ is extensive, we may be dealing with an areal feature not limited to Tai dialects.

This paper<sup>1</sup> is restricted to data which are available to the author in order to trace, in part, the development of syllabic ɰ in Tai-Lue

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and to make occasional references and comparisons to other dialects: Siamese, Northern Thai, White and Black Tai, Shan, and Lao, all of which lie within the Southwestern branch of the Tai language family (Li 1960) and Tho, a Tai dialect spoken in N. Vietnam. As a point of reference, the relevant details of the matrix developed by Gedney 1964 illustrating the development of tones from Proto-Tai categories may be used.

#### Proto-Tai Tones

	A	B	C	D-long	D-short
<i>Voiceless</i> (-Initials at time of v1/vd split)	(1)	(2)	(3)		
<i>Voiced</i>	(4)	(5)	(6)		

*Smooth syllables*                      *Checked syllables*

#### CHART I

Lue spoken at Chieng Hung (Ch'e-li), Yunnan replicates the tonal splits numbered in Chart I. Lue of Ceng Tong (Li 1964) and Lue of Chiengkham, Thailand (Weroha 1974) have the same tonal pattern as Chieng Hung. Lue of Moeng Yong, Burma (Gedney 1969) is slightly different, but identical to the splits of Yuan and Khuen (Egerod 1959). The order and number of synchronic tones here, in fact, reflects the knowledge of an educated Lue informant.<sup>1</sup> The system of numbered tones facilitates comparisons across dialects. However, an alternate method used chiefly in Chinese linguistics is excellent for recording impressions of tonal shapes. Chart II combines the features of both systems.

#### The Tones of Tai-Lue spoken at Chieng Hung, Yunnan

	(A)	(B)	(C)	(D-long)	(D-short)
<i>*voiceless</i> (yin)	#1, high-level 755	#2, mid-rising 735	#3, low, glot., slt. 13	=2 1	=1 7
<i>*voiced</i> (yang)	#4, fall-ing V51	#5, mid-level +33	#6, low, level, slt. rise J11	=5 +	=5 +

*Smooth syllables*                      *Checked syllables*

#### CHART II

<sup>1</sup>Mr Seree Weroha, a Lue-speaking graduate student at the University of Michigan, provided data for his dialect for which I express my thanks.

We shall proceed now to elaborate the individual instances of syllabic  $\eta$  in Lue.<sup>1</sup>

I. The negative:  $\text{bau}^2 \uparrow$  or  $\text{m}^2 \uparrow$ . In an excellent study of Lue of Chiang Hung, Fu 1956 provides the following information on the negative. (Here I use my own transcription and add the tone numbers according to the combinations in Chart II.)

$\text{bau}^2 \uparrow$ or $(\eta^2 \uparrow)$	$\text{pay}^1 \downarrow$ 'not go'
	$\text{maa}^4 \downarrow$ 'not come'
$\text{bau}^1 \downarrow$ or $(\eta^1 \downarrow)$	$\text{paak}^2 \uparrow$ 'not say'
	$\text{laa}^3 \downarrow$ 'not far'
	$\text{maa}^5 \downarrow$ 'not rotten'
	$\text{laan}^6 \downarrow$ 'not bald, blunt'

Fu and his co-workers do not go on to comment on the  $\eta^1$  and  $\eta^2$  variants of the negative. It appears that tonal assimilation or dissimilation is taking place; the question is to what. Referring to Chart II and combining synchronic and diachronic information, the  $\eta^2$  variant is seen as unaltered by a following "A" (1,4) tone, while the  $\eta^1$  complement is marked by a following "B,C" (2,5,3,6) tonal environment. In a diachronic sense, these two  $\eta$  variants are assimilating or dissimilating to an earlier stage in Lue where the tones A, B, and C were undifferentiated, i.e. before undergoing the \*voiced-voiceless initials bifurcation. Synchronically we arrive at the same end result by looking at the entry point of the six tones. Provisionally taking  $\eta^2$  as the base form, it can be said that it is unaltered when followed by tones that begin at the highest point or level 5. But by a modified "flip-flop" rule,  $\eta^2$  is deflected up to  $\eta^1$  when followed by tones whose entry points are mid (level 3) or low (level 1). That is  $\eta^2$  (-high) changes to  $\eta^1$  (+high) when followed by any tones whose entry point is -high. The rule, which will be revised below, could read

$$\eta^2 \rightarrow \left\{ \begin{array}{l} \eta^2 / \text{---} + \text{high entry point} \\ \eta^1 / \text{---} - \text{high entry point} \end{array} \right\}$$

Schematically, the diachronic-synchronic tonal environments conditioning the variation in  $\eta$  appear in Chart III.

<sup>1</sup>Field research in Thailand was supported by a Fulbright-Hays dissertation grant; the National Research Council of Thailand facilitated my work among the Tai-Lue.

Diachronic	A (high)	B (mid)	C (low)
Synchronic	 +high entry	 -high entry point	

CHART III

## II. The prefix *maak*<sup>2</sup> 1 'fruit; classifier for spherical objects'.

In Fu 1956, we find the following list for the prefix *maak*<sup>2</sup> 1 (again the revised transcription is used):

<i>maak</i> fuuŋ 7		ŋ fuuŋ 7 'plums'
<i>maak</i> kɔɔ 1	<i>mak</i> kɔɔ 1	ŋ kɔɔ 1 'chestnuts'
<i>maak</i> huu 1	<i>mak</i> huu 1	ŋ huu 1 'strawberry'
<i>maak</i> fay 4		ŋ fay 4 'fire fruit'
<i>maak</i> moon 1	<i>mak</i> moon 1	ŋ moon 1 'mango'
<i>maak</i> pau 1	<i>mak</i> pau 1	ŋ pau 1 'coconut'

The ŋ<sup>1</sup> and ŋ<sup>2</sup> variants derived from *maak*<sup>2</sup> precede the same tones as the syllabic negative did. Indeed, the list is arranged accordingly. Implied in the Fu 1956 data on *maak*<sup>2</sup> are the following rules. First, D-long, the checked syllable with a long vowel (Chart II), becomes D-short under conditions of light stress.

$$-VV \longrightarrow -V / \text{---} -\text{stress}^1$$

Again, following Chart II, we see that accompanying the change in vowel length is a change of tone.

$$\text{D-long tone 2} \longrightarrow \text{D-short tone 1}$$

The final -k of the form which has become *mak* is deleted.

$$-k \longrightarrow \emptyset / \text{---} \#$$

This gives us the syllable with light stress that we find in Siamese: mǎ. Applying a further reduction of stress in Lue, the vowel is deleted and any vestige of tone with it.

$$mǎ \longrightarrow \text{ŋ} / \text{---} -\text{stress}^2$$

Finally tone is "regenerated" for the syllabic ŋ through dissimilation (polarisation) according to the rules presented in section 1 above, but now revised as:

$$\eta \left\{ \begin{array}{l} m^2 / \text{---} +\text{high entry point tone} \\ m^1 / \text{---} -\text{high entry point tone} \end{array} \right\}$$

The rule now appears to be one of simple dissimilation. Further refinement can be made when we consider that the original tone of  $maak^2$  (or  $bau^2$ , the negative) is -high entry point (level 3). Then it is a case of tonal polarisation where  $\eta^{-\text{high}}$  will be followed by syllables that are +high and, conversely,  $\eta^{+\text{high}}$  is the flip-flop that results when a syllable carrying a -high entry tone follows it. The final version of the rule should probably read this naturalness condition into it.

$$\eta \longrightarrow [\alpha H] / \text{---} [-\alpha H]$$

The essential soundness of this analysis is supported by statements made by Hyman and Schuh (1974:see 4.4) in a discussion of some universals of tone rules.

Tone polarization is a type of rule that applies to synchronic toneless morphemes and gives them the tone opposite to that of a neighboring syllable, e.g. a high tone before a low tone, but a low tone before a high tone...What frequently is the case with polarization processes is that morphemes lose their original tonal identity and take their tone according to context.

We have discovered tonal polarisation in  $\eta$  only by abstracting two tone features: +high and -high ( $\pm H$ ). This may suggest that in a distinctive feature matrix for Tai tones that  $\pm H$  is all that is needed (see Sarawit 1973:88), for example. The  $*vd./vl.$  split implies  $\pm H$ , and the Siamese writing system indicates the same: high class consonants (+H) have an inherent rising tone, low and mid class (-H) an inherent mid tone. In other words, we have made Lue a two-tone language.

In this two tone scheme,  $\eta$  has been shown to assume either tone from a later environment. This flexibility is not a result of fiat, but of naturalness. The phoneme  $\eta$  is not an obstruent. Therefore it has no inherent depressing (-H) or raising (+H) effect on syllable tone despite its voicedness. It is a sonorant, a "swinger" that accommodates easily to the flip-flop. Or in reverse, it is because of the neutrality of  $\eta$ - with respect to tone that it naturally accommodates itself to  $\pm H$ .

It may be appropriate to digress for a moment to note that the neutrality of the class of obstruents is reflected in the present-day Siamese writing system. There is a rule which converts an obstruent (-H) from the "low class" series to the "high class" series (+H). In Proto-Tai, the latter are reconstructed as \*voiceless (aspirated) obstruents:  $*hm-$ , etc.

Comments by Hyman and Schuh (1974) on the tonal features of sonorants illuminate the Lue  $\eta$  and the general outlines of Tai tonal developments.

What we conclude is that sonorants are neither of a high tone nor of a low tone nature, but rather allow whatever natural tone process it may be to occur. In the blocking hypothesis, voiceless obstruents do not permit a low tone to spread through them, while voiced obstruents do not allow a high tone to spread through them. Since sonorants do not have any resistant tonal propensities of their own (i.e. they are neutral, flexible), they allow both high and low tone to spread through them - whatever is natural.

III. Vocative prefix  $\eta$ . Two socially distinct uses of the vocative prefix  $\eta$  are found.

In addressing the elders in the family, the young Lue of Chieng Hung uses the syllabic  $\eta$  as a prefix with kinship terms. The number of terms and the exact meaning and form may vary from village to village and even family to family. The following three from my own field notes are basic. The polarisation rule applies here as well.

$\eta^1 + p\dot{o}o^5$  'dear father'  
 $m\ddot{e}e^5$  'dear mother'  
 $p\ddot{i}i^5$  'dear sister (under 35)'

The use of the  $\eta$  vocative prefix connotes respect and, according to some informants, affection. We cannot be sure what the original morpheme was. According to Weroha (personal communication), the children of the Chiengkham, Thailand area first use the diminutive prefix  $?ii^2$  for 'daddy, mommy, etc.'. At about age 4, they switch to the  $\eta$  prefix. In most, if not all Tai dialects, the prefix  $?ii^2$  is a normal prefix indicating female gender. In Northern Thai we find the following forms cited by Purnell (1963:71):

$?ii\ p\dot{o}o$  'Daddy; Dad'  
 $?ii\ m\ddot{e}e$  'Mommy; Mom'  
 $?ii\ f\dot{o}o\eta$  'F\dot{o}o\eta' (used by her parents)

Purnell comments (1963:71) that in these examples  $?ii$  "denotes affection or endearment and is used by a child speaking to or of his parents, or by a parent speaking to or of his daughter".

Otherwise, in Northern Thai,  $?ii$  is a feminine prefix which can also "denote inferiority or mild contempt". For our purposes the most significant remark made by Purnell (1963:71) is: "A few speakers tend to say  $?i\dot{m}p\dot{o}o$ ;  $?i\dot{m}m\ddot{e}e$ ". Here we see the intrusion of an  $m$  in a labial environment. This suggests one source for the development of the Lue  $\eta$  in  $\eta^1 p\dot{o}o^5$ , etc. After the  $m$  has intruded, the original  $?ii$  is dropped in Lue. Or,

$?ii^2 p\dot{o}o^5 > ?i\dot{m}p\dot{o}o^5 > \eta^1 p\dot{o}o^5$  (by polarisation)

While the Lue youngster may use  $?ii^2$  as prefix to 'Mom, Dad, Sis', as an adult he continues to use the same form ( $?ii^2$ ) as a prefix to

paternal grandparents. There is an ?ii<sup>1</sup> variant which appears to parallel the tonal polarisation exhibited by the ŋ<sup>1</sup> variant of ŋ<sup>2</sup>. Several of my informants were careful to point out this single instance of the ?ii<sup>1</sup> prefix. In all instances where ?ii<sup>2</sup> remains unchanged (does not flip flop), the following noun is feminine. Semantic considerations may not permit the loss of the feature +feminine inherent in ?ii<sup>2</sup>. In the single exception, the following noun is +masculine, and the only important semantic feature of the prefix is now +diminutive. In fact, since sex identity is involved, the tonal alternation emphasises the distinction either by an exception or by polarisation. At any rate, the forms are as follows, with the possibility of polarisation applying to the former but not to the latter.

+H/-H:	?ii <sup>2</sup>	puu <sup>2</sup>	'Gramps, Granddaddy (paternal)'
-H/-H:	?ii	yaa	'Granny'

The second instance of the vocative ŋ has the semantic feature +male, +intimate (informal). Two informants gave baa<sup>3</sup> as the unreduced syllable. Usually baa<sup>3</sup> means 'crazy'. To call a young boy or one's close male friends in Lue, these forms are used.

baa <sup>3</sup>	ba	ŋ <sup>2</sup>	caay <sup>4</sup>	'boy!' (to call a boy)
		ŋ	sak <sup>1</sup>	'Sak!' (to call Sak, a friend)

This is not a fully satisfying reconstruction because it raises too many questions. Possibly, my informants, who were both young and accustomed to using only the ŋ variant, could not recall the older form from their inactive vocabulary. In checking cognates in Lao, White Tai and Shan, two solutions are suggested: baaw<sup>2</sup> 'young man' or bak<sup>1</sup> 'young male, animal or human'. The evidence favours the latter.

In White Tai the cognate of baaw<sup>2</sup> 'young man' is used as a noun or an adjective, not a prefix. We find in Dieu and Donaldson 1970 the following:

bao	a male teenager, bachelor, young man
bao on	a young man aged from 15 to 19
bao ke	a bachelor between 20 and 30
bao thau	a bachelor over 30 years of age
po bao	a young man
tao bao	a young man of noble birth

The Lao-Lao dictionary published by the Lao Ministry of Education (1962) lists the following relevant form (my translation):

baa	'a word used in front of the male gender, still young; used in the same manner as the prefix thaw'
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That same dictionary goes on to say the *baa* has become *bak*. This latter variant is defined in Marcus 1970 as '*Mr., Mister*'. The Reinhorn 1970 Lao-French dictionary shows the connection between the two forms.

bà	1. <i>voc.</i> populaire d'un garçon.
bàk	1. <i>v.</i> tailler, encocher; <i>n.</i> une encoche le callet, l'épaulement (le callet du gland, le gland)

In Shan (Cushing 1914) the cognate of *bak* is *mák* ~ *wák* *v.* to notch, to slash into; *n.* the head of the penis, vulgar. Lue has *bak*<sup>1</sup> '*to notch*'. In Lao and Lue the change must have been *bàk* > *bà*. The total picture in Lue mirrors the reduction of *maak*<sup>2</sup>.

Lue: *bak*<sup>1</sup> > *bă* > *ṃ* '*prefix used for young males, informal*'

IV. Syllabic *ṃ*<sup>6</sup> for *ṃiṃ*<sup>6</sup> '*day (linear time)*'. In Siamese, Lao, Northern Thai, Lue and Shan, the seven days of the week employ the morpheme *wan*<sup>4</sup> or *van*<sup>4</sup>. In Shan, *wan* also means *sun*, an indication of the etymology of the word and its astrological origins. In White Tai, Dieu and Donaldson 1970, a cognate of this shape does not appear. Perhaps a Chinese loanword is employed instead. In those Tai dialects where a form of *wan* '*day*' is used, it implies the use of a calendar or the concept of cyclical time represented therein. At least as far east as the Tho dialect of the Red River region we find the morpheme *van* '*jour*' (*day*) (Nguyen-Van-Huyen 1941). But alongside the concept of cyclical time we find the notion of linear time represented by the morpheme *miṃ*<sup>6</sup> in Lue and recognisable cognates in Tho, White Tai, Lue, Lao, Shan and perhaps other dialects. In White Tai temporal linearity is seen in the following forms (from Dieu and Donaldson 1970:227):

<i>mṃ</i>	<i>a day</i>
<i>mṃ ni</i>	<i>today</i>
<i>mṃ ṃn</i>	<i>tomorrow</i>
<i>mṃ hṃ</i>	<i>the day after tomorrow</i>
<i>mṃ mṃh</i>	<i>in three days</i>
<i>mṃ mṃn</i>	<i>in four days</i>
<i>mṃ lōng</i>	<i>in five days</i>
<i>mṃ ngoa</i>	<i>yesterday</i>
<i>mṃ sṃn</i>	<i>the day before yesterday</i>
<i>mṃ sṃn</i>	<i>three days ago</i>
<i>mṃ sṃn</i>	<i>four days ago</i>

In Shan and Lue the term can refer to *time* in general as well as *day*. In Northern Thai the form *mya* '*time; season*' is given by Purnell 1963, but it is not associated with '*day*'. The semantic shifts and overlaps found in the appearance of *van* and *miṃ* in these neighbouring dialects



recapitulate many of the groupings of dialects based on phonology alone. On the basis of sharing the concept of days measured in linear time, Shan, Lue and Lao can be linked to White Tai and Tho on the one hand, but disassociated from Siamese and Northern Thai on the other where *wan* is used exclusively for the concept 'day'.

The point of these comparisons has been primarily to find the original morpheme for the syllabic ɰ in Lue which appears as the prefix in forms such as ɰ vaa<sup>4</sup> 'yesterday', ɰ phuk<sup>1</sup> 'tomorrow', etc. In Lue, then, the change has been mɰi<sup>6</sup> > ɰ as evidenced by the colloquial expression "kaw<sup>3</sup>mɰi<sup>6</sup> sip<sup>1</sup> van<sup>4</sup>" - 'nine or ten days'. It is assumed that this additional token of the syllabic ɰ would exhibit polarised tones. The data, unfortunately, are not available.

The use of cyclical and linear days is compared in the following charts.

A. Cyclical time: days of the week

	Siamese	Lao	N. Thai	Lue
Sunday	wan ʔathít	wan ʔaathit	wan tít	van tít
Monday	wan can	wan can	wan cǎn	van cán
Tuesday	wan ʔaŋkhaan	wan ʔaŋkhaan	wan kaan	kǎan
Wednesday	wan phút	wan phūt	wan pūt	put
Thursday	wan pharfhàt	wan paphàt	wan phát	phát
Friday	wan sùk	wan suk	wan súk	súk
Saturday	wan sǎw	wan saw	wan sǎw	sǎw

Even here, the propensity for Northern Thai and Lue to reduce or remove syllables is illustrated in the forms for Sunday, Tuesday, Thursday.

B. Linear Time: days before and after, etc.

	day before yesterday	yesterday	day	today	tomorrow	day after tomorrow
Siamese	mǎa waan sɰn	mǎa waan	wan	wan níi	phrúŋ níi	mǎrɰn níi
Lao	mǎi koon	mǎi waan níi	mǎi	mǎi níi	mǎi ʔɰn	
Lue	mǎi/ɰ sɰn	mǎi/ɰ vǎa	mǎi	mǎi níi	mǎi/ɰ phuk	mǎi hɰi
N. Thai	wan sɰn	wan waa	wan	wan níi	wan phüük	wan hɰi

Clearly Lao and Lue are more closely related along the dimension of time expression.

V. Residual forms of Lue syllabic  $\eta$ . Two final items are listed here.

a)  $\eta$  tuu<sup>1</sup> 'door'

b)  $\eta$  saŋ<sup>1</sup> 'what', e.g. kin<sup>1</sup>  $\eta$ <sup>2</sup> saŋ<sup>1</sup> 'what are you eating?'

Although no corroborating evidence can be found for the first form, semantically speaking, it might be cognate with the Siamese form /pàak/ 'mouth'. For the second form, the origin of the  $\eta$  is again /baw<sup>2</sup>/ as is evidenced in the forms elicited from an informant chanting a narrative.

baw<sup>2</sup>saŋ<sup>1</sup>taay<sup>1</sup> saŋ<sup>5</sup> kee <sup>3</sup>nəə<sup>1</sup>look<sup>5</sup>loo<sup>4</sup>kaa<sup>1</sup>

'what died away completely from the earth?'

bă-saŋ<sup>1</sup> taay<sup>1</sup> saan<sup>4</sup> ciin<sup>3</sup>

'what made everything die completely?'

What we witness here is not the functioning of the usual negative particle, but a question particle which must be a relative and transformation (syntactic) of the Northern Thai (and Lao) cognate bǎɔ.

VI. Summary. The pursuit of syllabic  $\eta$  across dialect boundaries in the Tai domain has proven interesting from the standpoint of phonology. It has been shown that in the process of reduction under conditions of radically reduced stress and semantic and syntactic entropy, the original tone of a syllable can be lost and a new one assigned on the simple basis of polarity. Two Lue "architones", +High and -High, have been abstracted from the set of 6 synchronic tones by assessing the entering level of each tone measured on the conventional scale of 1 (low) to 5 (high).<sup>1</sup> The flip-flop behaviour of  $\eta$  indicated that only two heights or tones are relevant:  $\pm$ H.

In actually reconstructing archaic (but not proto-) forms, the unreduced syllables from which the several syllabics derived, lexical comparisons have revealed a greater unity between Lue and Lao than I had anticipated. Similarly, Northern Thai is linked more closely to Siamese to the south than it is to Lue to the north. These isolated instances of lexical comparisons do not have the advantage of displaying the neater regularities of phonological differences and similarities. At best, lexical parallels are mere intimations of cognitive similarities between speech communities. On a cumulative basis, however, such evidence would be more than circumstantial. Nevertheless, it would appear that syllabic  $\eta$ , its lexical sources, and its geographic spread are an important feature in any study of vernacular Tai dialects.

<sup>1</sup>In this regard it is reassuring to compare Hashimoto 1971 which posits a  $\pm$  Low tonal environment for explaining vowel alternation in the Foochow dialect of Chinese.

To Professor Wm. J. Gedney, to whom this paper is dedicated I owe a debt of gratitude for the use of his personal files and library on Tai dialects. I have benefitted greatly from his many suggestions about the major and minor positions I have taken in this paper.

