

HOW MANY TONES FOR SOUTHERN THAI?

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Sometimes linguistic questions press themselves on us with all the urgency of common sense, and interpretive detachment is needed to wonder some about the questions themselves.¹ Given a tone language, it might seem reasonable to demand how many tones there are, and to be content only with an unambiguous integer as answer: Mandarin, 4; Vietnamese, 6; Black Miao of Yong-Cong, 8. In this paper we examine a case in which the question is unrevealing unless further qualified.

For the Tai language family (including what may be a few 'cousins') tone-count reports show a range:²

Dai, Be (Hainan 'cousins')	- 4
Central Thai; Lao varieties	- 5
Black and White Tai	- 6
Chuang of Ta-sing	- 7
Chuang of Yan-sho	- 8
Kam (a Kuei-chow 'cousin')	- 9

Especially to the north, Tai shows a predilection for the 6-tone system as evidenced by over 40 Chuang varieties, over 40 Pu-yi varieties, Nung, Saek, Sui and others. 5-tone systems are also frequent, and all Tai varieties for which reliable tone reports are available fall somewhere in the 3-to-9 range.

Although tones vary phonetically from place to place, tonal correspondence for much vocabulary is regular (less so for 'cousins'). If we lay aside for the moment several restricted cases, including syllables terminating in final stops, a fairly clear picture can be drawn. Vocabulary in a typical 6-tone language such as White Tai can be sorted into 15 correspondence categories. These are designated a-o in Figure 1 and depend both on tone and on status of initial consonant.

FIGURE 1
Tai 6-tone system

tone	[+aspirated] [-continuant]	[-aspirated] [-continuant]	[-aspirated] [+continuant]	other designations
1	a	b	c	M0-H0; A1; A1-3
2	d	e	f	M1-H1; B1; B1-3
3	g	h	i	M2-H2; C1; C1-3
4	-	j	k	L0; A2; A4
5	-	l	m	L1; B2; B4
6	-	n	o	L2; C2; C4

Examples: a: phaa₁ 'cliff'; b: kaw₁ 'to scratch';
 c: vaan₁ 'sweet'; d: phaa₂ 'to split'; e: kaw₂ 'old';
 f: vaan₂ 'to scatter, to sow'; g: thaa₃ 'to wait';
 h: kaw₃ 'nine'; i: law₃ 'whiskey'; j: taa₄ 'to paint';
 k: min₄ 'louse'; l: taa₅ 'landing'; m: law₅ 'to tell';
 n: taa₆ 'to defy'; o: law₆ 'enclosure'

In varieties of this type correspondence categories a, b and c coincide as to tone. This can be called a case of *tonal coincidence* and represented as /abc/. Figure 1 indicates that in languages like White Tai inherited Tai vocabulary items with aspirated-stop initial consonants are restricted as to tone. Some northern varieties have no aspirates at all. But there is no reason yet to be suspicious about asking or answering the number of tones, and these 6-tone systems can be abbreviated /abc/def/ghi/jk/lm/no/, with actual pitch levels and contours for any particular tone varying from place to place.

Nor is there much problem counting tones as one moves southward to varieties like Lao of Luang Prabang or Central Thai where j, l and n items now take on aspirated initials (as though sifted into the left column of Figure 1). The patterns of tonal coincidence for b and h are altered, and in addition we find cases of *tonal merger* in which homophony can result. This can be indicated by brackets; e.g. if /*im*]/ appears then items like the following become homonyms:

law (correspondence category i) 'whiskey'
 law (correspondence category m) 'to tell'

The net effect of these redistributions (from the point of view of Figure 1) may be a 5-tone system such as that of Luang Prabang Lao, /ac/bjk/e[dl][fm]/gi/hno/, or that of Central Thai, usually cited in the order /bjk/def/h[gl][im]/no/ac/.

Tai varieties below the Kra Isthmus can be called Southern Thai and in general have aspirated initials for *j*, *l* and *m* items as in the 5-tone systems above. However patterns of tonal coincidence and tonal merger are different. For major Southern varieties on the Pacific side of the Malay Peninsula tonal detail shifts areally as represented in Figure 2. In this case latitude is a convenient index and triplets of numbers from 1 to 5 indicate low to high features of pitch level and contour.³ Note that in all the varieties for correspondence categories *a*, *b*, *c*, *d*, *e* and *f* there are homophonic mergers [*ad*], [*cf*] and [*be*]; also [*ad*] everywhere coincides with [*cf*].

FIGURE 2

Southern Thai tonal detail

	<i>ad</i>	<i>cf</i>	<i>be</i>	<i>gi</i>	<i>h</i>	<i>jk</i>	<i>lm</i>	<i>no</i>
10°N	532	532	231	333	333	231	234	221
9°N	543	543	343	"	"	331	"	"
8°N	454	454	344	443	"	321	223	211
7°N	455	455	"	"	"	"	222	"

Examples: *ad*: *phaa* 'cliff', 'to split' (i.e. homonyms);
cf: *waan* 'sweet', 'to scatter'; *be*: *kaw* 'to scratch',
 'old'; *gi*: *thaa* 'to wait'; *laaw* 'whiskey'; *h*: *kaaw*
 'nine'; *jk*: *thaa* 'to paint'; *mien* 'louse'; *lm*: *thaa*
 'landing'; *laaw* 'to tell'; *no*: *thaa* 'to defy'; *laaw*
 'enclosure'

The majority of Southern Thais speak varieties in this general range. Above and in pockets below the zone there are separate characteristics, and on Samui Island *h* coincides with *lm*. The West Coast has a smaller, historically less stable population; Figure 2 is still applicable, but with a measure of areal mixing. Cf. Court (1975) for one such dialect; his Note 5 raises in a general way some of the questions discussed below.

How many tones are there in Southern Thai?

To answer this, clearly we must first distinguish areal subtypes. For a First Approximation discrete contours and pitches in Figure 2 can simply be counted for each areal variety. Near 10°N /*[be]jk/* and /*gih/* are each phonetically single tonal entities, so the 5-tone system /*[ad][cf]/[be]jk/gih/lm/no/* is distinguished. Farther south there is first a 6-tone, then a 7-tone system. The former has been reported by Jones (1965),⁴ and the latter by Haas (1958) for Nakhon Srithammarat and by Henderson (1959) for Songkhla, etc.

If we are counting phonetic tonal entities we need to expose a tacit assumption made above. So far only isolated or phrase-final stressed syllables have been subject to counting. In real speech contexts tone languages are notorious for their tonal sandhi and Tai languages are no exception.

A Second Approximation might be undertaken along this line inquiry. Gandour (1975) has called attention to loss of rising contour in certain Phuket forms (viz. *1m*) and Vichin Panupong (1972) has presented measurements for Songkhla pretonic syllables from categories *a*, *d*, *c*, and *f*, which undergo contour reversal (from about 455 to 54 or 43) as do those from *b* and *e* (344 to 32). For Songkhla (7°N) speech Vichin thus enumerated 9 discrete tonal entities, viz. 7 tonic plus 2 pretonic alternates.

Probably 'at least 9' would be a safer count. In Songkhla speech citation-form tonic homonyms occur in the *g* and *i* categories, e.g.

maay-443 'to burn'; 'preverbal negative form'; 'phrase-final question particle'

In slow unnatural articulation the following sequence is ambiguous:

maay-443 maay-443

Interpretations are (a) '*Is it burning?*' and (b) '*It is not burning*'. However in natural rapid speech placement of phrase stress disambiguates (b) by assigning a shortened noncontour alternate for the preverbal negative form.

Court (1975:70) has distinguished a grand total of nineteen etic tones for Satun; this includes canonical forms, free variants and sandhi forms.

Other examples could be cited. The problem is when in principle to stop counting. The more opulent a tone system becomes on the basis of tone sandhi, the more confident one is that for most purposes tone counting should involve notions of contrast and complementarity. One assumes that sandhi can be 'taken care of' by automatic rules of some sort. Lexically contrastive use of tone on the other hand is a basic phonological constituent for tone languages.

A Third Approximation is required to represent the tonal economy of the lexicon. Although some may consider it antediluvian, the tonal phoneme (toneme, distinctive prosodeme, etc.) is here the issue, and data in Figure 2 can be subjected to rather classical structural analysis. We note that items of categories *b*, *e* and *h* have unaspirated stops as initial consonants, and such initials are in complimentary distribution with those in other categories. This suggests reduction to 5-tone systems for the 7°N, 8°N and 9°N varieties. The 10°N variety is phonetically