- Baum, P.F. The Principles of English Versification . Cambridge: Harvard University Press, Mass., U.S.A. 1923.
- Brosnahan, L.F. and B. Malmberg. <u>Introduction to Phonetics</u>. Cambridge: W. Heffer Sons Ltd., 1970.
- Chatmen, S. A Theory of Metre. Mouton, The Hague, 1965.
- Dauer, R.M. "Stress-timing and Syllable-timing Reanalyzed, " in <u>Journal</u> of Phonetics 11:51-62, 1983.
- Dunlap, K. "Time and Rhythm," in Psychological Bulletin, Vol.13, 1916.
- Fraisse, P. The Psychology of Time, (translated by Jennifer Leith).

  London: Eyre Spottiswoode, 1964.
- Halliday, M.A. K. <u>Intonation and Grammar in British English</u>. Mouton, The Hague, 1967.
- Hiranburana, S. The Role of Accent in Thai Grammar. Unpublished Ph.D. thesis, University of London, 1971.
- Isaacs, E. "The Nature of Rhythm Experience, " in <u>Psychological Review</u>, Vol. 27, 1920.
- Ladefoged, P. Three Areas of Experimental Phonetics. London:Oxford University Press, 1969.
- Lehiste, I. "Rhythmic Units and Syntactic Units in Production and Perception," in <u>JASA</u>, Vol. 54, No. 5, 1973
- Luangthongkum, T. Rhythm in Standard Thai, Unpublished Ph.D. thesis, University of Edinburgh, 1977.
- Major, R. C. "Stress-timing in Brazilian Portugese, " in <u>Journal of Phonetics</u> 9: 343-351, 1981.
- Pike, K. L. The Intonation of American English. Ann Arbor: University of Michigan Press, 1946.
- . Language in Relation to a Unified Theory of the Structure of Human Behavior. Paris: Mouton, The Hague, 1971.
- Pointon, G. E. "Is Spanish really syllable timed?" in <u>Journal of</u>
  Phonetics 8: 293-304, 1980.
- Santirojprapai, V. Etude contrastive : groupe accentual en Français et en Thai Standard. Thèse pour le Doctorat de 3ème Cycle Présente à l'Université de la Sorbonne Nouvelle, Paris III.

- Stetson, R. H. "A Motor Theory of Rhythm and Discrete Sucession," in Psychological Review, Vol. 12, 1905.
- .Motor Phonetics: A sStudy of Speech Movements in Action.
  la haye mar tinus nishoff, 1928.
- Squire, C.R. " A Genetic Study of Rhythm, " American Journal of Psychology, Vol. 12, 1901.
- Steele, J. An Essay towards Establishing the Melogy and Measure of Speech.

  London, 1775.
- Stone, M. "Evidence for a rhythm pattern in speech production: observations of jaw movement," in Journal of Phonetics 9: 109-120,1981.
- Sumera, M. "The Concept of Isochrony: Some Problems of Analysis," in Work in Progress, No. 7, Department of Linguistics, University of Edinburgh, 1974.
- Triplett, N. and E. C. Sanford. "Studies of Rhythm and Meter,"in American

  Journal of Psychology, Vol. 12, 1901.
- Wallin, J. E. W. "Researches on the Rhythm of Speech, " In Studies from the Yale Psychological Laboratory, ed., E. W. Scripture, 1901.
- . "Experimental Studies of Rhythm and Time, " in <u>Psychological</u> Review, Vol. 19, 1912.
- Woodrow, H. "Time Perception, " in Handbook of Experimental Psychology.
  ., S. S. Stevens, New York: Wiley, 1951

#### REFLECTIONS ON RHYME AND VERSIFICATION IN THAI

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# 1. Air and assumption

In spite of the fact that Gedney already in 1967 pointed out that 'the whole subject of versification has immense relevance to the historical study of the Thai language' few modern linguists have taken interest in this field. I will in this paper take a few fumbling steps into the wilderness of Thai versification, focusing on the components and patterns of some of the metrical concepts, rules and verseforms, and ask questions, discuss possible answers, and sometimes also suggest solutions.

My study rests on a fundamental assumption which - even if it is evident to most people - I would like to make explicit: metrical rules have an acoustic purpose - the ear is meant to hear them. There are modifications to this assumption: even if metrical rules were audible at the time when they were invented, changes in the language may later have transformed audible rules into inaudible ones. One would expect inaudible rules to be discarded as useless, but in languages with writing systems, it is possible to retain inaudible rules in written form as visual rules. Furthermore, in languages with writing system, visual, written rules, which never were meant to be heard, may be invented or borrowed. Poetic rules of this type must naturally be limited to an educated class which writes down the poetry and reads it. Evidently, a person who neither reads nor writes, cannot hear these visual rules, and is thus not in a position to appreciate them.

<sup>1.</sup> Gedney 1967: 794-795

A brief recapitulation of some basic concepts and rules in Thai metrics may be appropriate before we proceed.

# 2. Basic concepts in Thai versification 1

#### A. THE UNITS.

- 2.1 /phájaan/ syllable. From a versification point of view the syllable can be idivided into three parts: a) the initial part, consisting of initial consonant or consonant cluster; b) the final part, consisting of the rest of the syllable, except for the tone. In other words: the vowel and a possible final consonant; and c) the tone.
- 2.2 /sian wannajúg/ tone, of which there are 5 in modern Bangkok
  Thai, namely: /sian saaman/ mid tone; /sian ?eeg/ lowtone; /sian thoo/
  falling tone; /sian trii/ high tone; /sian cadtawaa/ rising tone/.
- 2.3 /kham taaj/ dead syllables; ending in -b, d, -g. -?. /kham pen/ live syllables; all syllables that are not dead syllables, i.e. syllables ending in long vowels, nasals (-n, -m, -n) or semivowels (-j, -w).
- 2.4 /kham eeg/ swords written with tonemark one ('), or any dead syllable.

/kham thoo/ words written with tonemark two ()
/kham suphâab/ live syllables, with no tonemark (tone-mark 'zero').

2.5 /kham khru? / heavey syllables; syllables ending in long vowels or any of the finals, except glottal stop (?). /kham lahu? / light syllables; all syllables that are not heavy syllables, namely those ending in glottal stop. These two concepts are relevant for the chan verseform only, which we borrowed directly form Sanskrit metrical.

### B. COMBINATORY RULES.

- 2.6 /bod/ verse, stanza composed of /baad verselines, composed of /wag/ hemistichs, composed of /phajaan/ syllables.
  Within the /bod/ is found the totality of rules pertinent to one verseform (althouth there are some rhyme rules linking the verses together as well).
- 2.7 /samphad/ rhyme; sound indentity.

<sup>1.</sup> Condensed from Upakid 1955.

- 2.8 /samphad pags n/ consonant rhyme, sound identity between initial consonants or consonant clusters in two (or more) syllables. /samphad sara / vowel rhyme, sound identity between the vowel and final consonant if any in two (or more) syllables. Today generally long and short vowels do not rhyme, although earlier this was quite common, if not the rule.
- 2.9 /samphad nord/ external rhyme, a compulsory rhyme which consists of vowel rhymes only. The compulsory rhymeschemes vary from verseform to verseform, ubut they all have one thing in common: compulsory rhyming syllables are always found in different himistichs. In other words, the external rhyme is external in relation to the hemistichs, and thus ties the hemistichs together. There are two types of external rhymes: a) from the end of one hemistich to the end of another, and b) from the end of a hemistich to the beginning of another.

  /samphad naj/ internal rhyme. A non-compulsory rhyme which is found within a hemistich. It is internal in relation to the hemistich. The internal rhyme is normally a consonant rhyme, but vowel rhymes occur as well. There are two general rules for the internal rhyme: they should not interfere with the external rhymes, and 'the more the better'.

  There are two kinds of internal rhymes:

/samphad chid/ clsoe rhymes: adjacent syllables are rhyming.
/samphad khan/ separated rhymes: one or more syllables separate the rhyming syllables.

### 3. Rhyme-carrying capacity

When either vowel or consonant segments are identical in two syllables, the Thai ear will notice this identity, although there are limits to how far the memory of the ear can be stretched. If there are too many intervening syllables between identical segments in two syllabels, then the ear will have forgotten the first segment before it arrives at the second, and thus not notice the identity. In Thai vowel and consonant rhymes behave differently in this respect syllables with rhyming vowels may be located further apart than syllables with rhyming consonants. Rhyming consonants are located ajacent or very close to each other. If more than two syllables occur between the two identical initial consonants they are not regarded as rhyming any more.

One could say that a characteristic of the consonant rhymes is that they have a low 'rhyme-carrying capacity' in Thai. The vowel rhymes, on the other hand, may be located much further apart. Somehow the vowel rhymes must be more frapping to the Thai ear, since it can retain the memory of them over longer stretches than the consonant rhymes. They have in other words a high 'rhyme-carrying capacity'. Due to this long-distance rhyming capacity, the vowel rhymes have naturally been assingned a function which has been the essential function in Thai poetry for a long time: to tie the hemistichs together. The sort-distance consonant rhymes, on the other hand, are added just for ornamentation.

The rhymes are not noticed because of their identity only. Conventionsthat is the metrical rules - have also perdisposed the ear to expect certain syllables to rhyme in certain patterns and positions.

I have been talking about vowels and consonants, but what about the tones? What function do they have in Thai poetry? In the following sections I will concentrate on this problem.

## 4. Khloong

If we look at the rules for khloong in Figure 1 we notice that the ideal rhyme scheme contains

- a. a fixed number of syllables arranged in patterns
- b. rules for which syllables should rhyme with each other
- c. rules for the position of tonemarks

Figure 1: The ideal rules for khloon sii suphaab

4.1 We observe that external <u>vowel</u> rhymes and the tonemark rules hardly overlap. They appear to be two <u>entirely independent systems</u>. This is consistent with the division of the syllable into three metrical segments, where the vowel and the tone are considered to be two independent segments, meaning that two syllables with the same vowel (and final) rhyme, disregarding their tones. (In Chinese, on the other hand, the vowel and tone are regarded as one segment, implying that two syllables can only rhyme if both the vowel and the tone are identical.)

4.2 We also observe that the tones do not rhyme in the same way as vowels (and consonants) do, because they do apparently not rhyme with each other. There are rules for which syllables should have certain tone marks, but there are no attempts in the traditional metrical m manuals to link syllables with the same tonemarks with each other. Thus the tone rules are qualitatively different from the vowel and c consonant rhymes.

Let us stop for a moment and consider this problem from a historical point of view. At the time when the metrical rules for tonemarks were written down the language had three tones, marked with tonemarks zero, one and two. Thus syllables with tonemark one always had the same tone etc. The tonemark rules was a logical way and unambigious way to write the tone rules, because there was a one-to-one correspondence between tones and tonemarks. Later the situation changed: the number of tones increased and there was no longer a one-to-one correspondence between a tone and a tonemark. What was once tone rules became visual tonemark rules or 'artificial orthographic tour de force' as Gedney so apthy calls them. This seems straightforward enough, still I cannot help but wonder why artificial, visual rules have been retained for so many centuries?

The very fact that they have been retained points at how important the introduction of the writing system was. The rules once written down became 'untouchable', even if the development of the sound system made them totally irrelevant, and thus they have lived on as barren written islands in an teeming ocean of sounds. This written and visual bias would have been possible to understand if it had been confined to a small, educated class, but the fact is that it is found in the dialects as well. All the dialects have kept these outdated tonemark rules. This fact gives me a creeping feeling that perhaps these rules are not so outdated and not only visual after all? But if not, what is their function?

<sup>1.</sup> Gedney 1967:

The only possible answer I can think of is: music. These tonemark rules may today - as they originally did - have something to do with the way khloon was performed, namely with the accompanying recitation or song melody.

This hypothesis is pure speculation, and further investigations and fact are needed to prove it, but a relationship between word tone and musical melody would nicely explain not only why the tones apparently do not rhyme with each other, but also why there existed tone rules at all. In other words, in order to explain the tone rules we will have to expand the area of versification studies also to include music. Or to put it negatively: would it not be strange if music had no influence on the peetic form at all, and if there was an influence from music, where would it be more natural to expect this influence than in the tone?

Tonemarks today denote more than one tone, still tonemark two is associated with something high, and tonemark one with something low. Thus if there was a connection between the word tones and musical tones, the presence tof a compulsory tonemark one on a certain syllable might just have meant: 'sing or recite on a low musical tone'. In other words, the rules for tonemarks one and two could be interpreted to be a simple form of musical notation. This notation was not complete, though, because only a few specific syllables were covered by tonerules thus the melody accompanying the khloon verses were only fixed at certain syllables, while in the rest of the poem the melody was not defined.

Be this as it may, if there is no connection between tone rules and melody, we are still left with the unanswered questions: What was the function of the tone rules? Why was it so essential to have certain tones at fixed places in the khloon?

4.3 Let us stop for a moment and look at another old Thai verseform: raaj. Figure 2: Ideal rhyme scheme for raaj booraan

As can bee seen from Figure 2 there are no syllables outside the external rhyme which have compulsory tonemarks, but the rules for the external rhymes themselves have been enlarged to include identity in tone as well as in vowel. In raaj verses, syllables with tonemarks zero one, two and dead syllables are required to rhyme with tonemarks zero, one, two and dead syllables respectively. One could say that tones alone cannot rhyme with each other (as in khloon), but to gether with vowels they can (as in raaj). In other words, tones as such a apparently have no rhyme carrying capacity.

Another way to put it, is to say that in raaj the syllable is just divided into two segments: a) initial consonant and b) the rest (i.e. vowel plus tone), while in khloon the syllable is divided into three segments. Which of those two ways of dividing the syllable is the oldest? A study of the old literary work Phra Lo-presumably 16 (?) century - which consists of alternating khloon and raaj verses, reveals nothing in this respect: both principles occur side by side. So one would have to go further back in time, and also include regional literature, to find further evidence.

4.4 There is another puzzling observation to be noted: ir khloon there are rules for tonemarks one and two, but there are no compulsory rules for tonemark zero.

4.4.1 One possible explanation could run along these tones: 'There did actually exist rules for tone zero, but they were for some reasons not explicit, and they later disappeared without a trace.' To test whether there could be any abasis for such an assumption, I scanned through 17 khloon verses of Phra Lo<sup>2</sup>, and noted down the tone in each syllable. The result is presented in figure 3. The ideal rhyme scheme is the same as the one in Figure 1. Each syllable has been assigned a letter and number for identification. Dead syllables have been counted as tonemark one.

<sup>1.</sup> Upakid 1955: 85-86

<sup>2.</sup> Verses nr. 485-501, lilid phral 1966: 123-127.

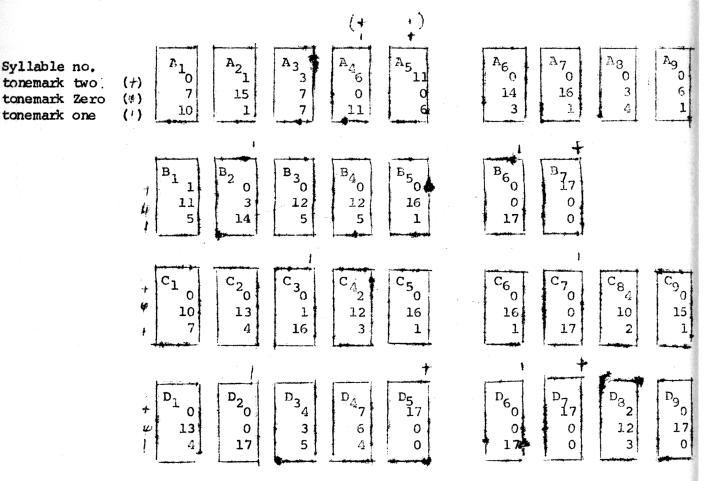


Figure 3: Distribution of tonal categories in 17 khloon verses from Phra Lo.

In the syllables where tonemarks one and two are compulsory we naturally find a 100% score (except  $B_2$ ). This just confirms that the poet has followed the rules. But we are looking for high scores of tonemarks zero in some of the remaining syllables. Before we do this, let us consider some additional rules for khloon verses which are mentioned in Upakid's manual on metrics, namely that syllables  $A_7$ ,  $B_5$  and  $C_5$  should not have tonemarks one, two or three (-but dead, short syllables, including those with tonemark three, are permissible). This negative rule implies - to put it positively - that the syllables in question should have tone mark zero (or four). Furthermore, syllable  $D_6$  should preferably have tone zero (or four).

We note that these two additional rules are not definite, positive rules, but negative or 'preferably' rules. I do not know how old these additional rules for khloon are, but they look very much like the type of tone-rules one finds in the more recent verseform kloon.

One should also note that the preference for tone zero in syllables A<sub>7</sub>, B<sub>5</sub> and C<sub>5</sub> overlap with the external vowel rhyme for the same syllables. This overlapping of tone rules and vowel rhyme is also found in syllables B<sub>7</sub> and D<sub>5</sub> as well. Thus identity in vowels is accompanied by identity in tones in these syllables, -just as in the râaj verses. I therefore still feel the tone rule for these syllables to be qualitatively different from the tonemark-one-and-two-rules, which occur alone without the co-occurrence of vowel rhymes.

The fact that dead, short syllables occur in positions where one would expect zero syllables, is puzzling as well.

If we go back to the Phra Lo statistics in Figure 3 we detect a very high score (16 or 17 out of a total of 17) for tonemark zero in the syllables  $A_7$ ,  $E_5$  and  $D_9$ , as might have been expected, but also in  $C_6$ . Furthermore there is a strong tendency to zero syllables (score 14 or 15) in the syllable  $A_2$ ,  $A_6$  and  $C_9$ . In the remaining syllables tonemark zero either dominates, or the distribution between the tonemarks are more or less even, — although it appears that there are particularly many syllables where the score of tonemark two is 0.

A tentative conclusion based on this meagre amount of data must still be that there is some statistical evidence for assuming that implicit rules or strong tendencies for the use of tonemark zero in certain syllables did exist in practice.

On the other hand, of course, one must not forget that the overall frequency of tonemark zero-words is - for some reason - much higher than the frequency of tonemark one and tonemark two words, so a predominance of zero words in the poetry is to be expected. Still, total zero domination in certain syllables is noteworthy.

It is by the way interesting to count the intentional changes of tonemarks in Phra Lo. We detect many more changes into two, than into one and zero, as if the poet has been lacking two-words (see Figure 4). Figure 4: Frequency of changes in tonemarks, Phra Lo

From	<b>%</b> ero	one	two	
Zero	$\times$	6	31	
one	Ü	$\times$	ي. يان	
two	5	5	$\times$	
Total	5	11	115	

We note especially that the changes from one to two (84) is much higher than from two to one (5).

4.4.2 While we are thinking in terms of statistics, let me put forward another hypothesis which -if correct - could explain both why there exists tone rules and why there only are rules for tones one and two. A predominance of zero-words in the vocabulary leads naturally to a dominance of zero-words in poetry. Such a dominance may - in a poetical context - have been considered monotonous. In order to break this monotony and insure tonal variety in the poems, rules for the use of the statistically most seldom tones - that is tones one and two - were introduced.

4.4.3 In spite of the two possible explanations forwarded above, I still feel that it is strange that a language had three tones, but only explicit and prominent rules for two of them. Does the tonemark rules not imply that there must have been a difference between tone zero on one hand and tones one and two on the other? And if so, what was the neture of this difference? What was the nature of the tones? Were some tones more 'tonal' than others? Did they not have the same status, since they were not covered by the same rule I leave the reader to speculate further along these lines.

# 5. Khloon without vowel rhymes

In his study of 'oonkaan chon n naam' Cit Phumisak points out that tones and rythm were the essential principles in early khloon poetry issLaos, while vowel rhymes were of less importance. In fact, in the so-called 'kham phahaa' from Laos - kind of khloon dan - there are no vowel rhymes whatsoever, only rules for the number of syllables and for the position of the tones. According to Cit it is only in Laos, Northeast Thailand and among the lyy one finds poetry without external vowel rhymes. Neither in Central, North nor Southern Thailand does this type of poetry occur. In Figure 5 the ideal rules for laotain khloon dan is shown.

<sup>1</sup> Cit 1981: 187-88, 194.

Figure 5: Rules for the laotian Kkhloon

		V				
0	0	0			0	
0	0		0	0	0	ð
	0		0	0	0	ó
0	ő	<b>₩</b> 0	0	ő	ó	0

We notice, by the way, that the laotian convention of arranging the syllables into a 3-4 pattern differs from the Thai one, where the pattern is 5-2.

The Lao khloon were read in various recitation tones (tham-nongivan taken taken) and allowed a greater freedom in adding words to the hemistichs, both in front (kham phone), after kham song) and even in the middle (kham sign). It was also common to use only two or three of a possible total of four verselines to make up a verse. Further more, dead syllables werecounted as tone one.

One might have suspected that if a kind of poetry does not have external vowel rhymes to tie the hemistichs together, then the tones might take over that function. But it certainly does not look that way in this old laotian khloon dan. The tones do apparently not link up with eachother, they do not rhyme, and do not tie the hemistichs together.

So we are still left with the same basic problems as before: what was the function of the tone rules? and what was the nature of the tones? - because there are no rules for tone zero in this very old verseform either.

# 6. Some historical trends

On the basis of my own impressions from metrical studies, strongly supported by Cit Phymisak's statements in 'coonkaan chan naam', I will venture to put forward a rough sketch of the development of the basic metrical concepts: rythm, tones and vowel rhymes.

Rythm has always been a fundamental principle in Thai poetry, although there appears to be a development from frelative freedom and variation to more fixed and definite rules concerning the number of syllables in the hemistichs.

Tones. Both in Northern Thailand, Laos and the Northeast there existed rules for tones as far back as one has evidence of poetry. The fact that there also in some dialects existed very old poetical forms with tone rules only and no vowel rhyme, may indicate that the have always tone rules had the same characteristics: certain syllables have certain tones; there were only explicit rules for tones one and two, tones alone did not rhyme with each other.

<u>Vowel rhymes</u> are very old as well, but they are less prominent and there were less strict rules for their number and position in the old poetry than in later periods, when vowel rhymes became the prominent principle in poetry.

The tendency has thus been for rythm to keep or increase its importance, for tone rules to decline while vowel rhymes have become more prominent. An explanation to the rather sudden decrease in the importance of the tones may be found in the 'Great Sound Shift', when the number of tones in creased and messed up the old tone rules, which afterwards only could be retained as visual rules.

We note that the writing system functioned as a conservative and stabilizing force, making the metrical rules more definite. But the increasing number of regulations of metrics also run parallel to the development in society as a whole where feudal power and centralization gradually increased. Finally the absorbtion in the Sanskrit and Pali metrical manuals, for a long time reduced the interest in local and regional poetry. Fortunately, this trend has turned. The interest in regional society and culture is blossoming, and we are now in a much better position to study local literature and metrics then only two decades ago. Such studies are imperative in order to be able better to understand the development of Thai metrics.

# 7. Post script

I have in this paper not referred to the results of reconstruction based on dialects and the writing system, but confined myself to speculate on the basis of well-known metrical data only, and kept my thoughts within the field of versification.

I realize that a farang writing about Thai metrics must be like an elephant in a house of glass: - bound to leave behind a trail of broken crystal. There are so many variants and exceptions in Thai poetical forms, that I for certain must have trampled on quite a few of them, and my speculations may thus turn out to have been premature. Still, my hope is that the type of questions I have asked, and the way I have reasoned about them have been sufficient food for thought to inspire - or provoke - further studies in the field of Thai metrics.

## 8. Works consulted

Cid Phumisak - Poonkaan chit n naam. D.K., Bangkok 1981 Gedney, W.J. - Thailand and Laos. Current Trends in Linguistics 1967. Lilid phrais: Bitbrian khosn krasuan sygsaathikaan, Bangkok 1966. Upakid Sinlapasan - lag phaasaa thaj. Bangkok 1955.