Thai Poetry: A Metrical Analysis

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INTRODUCTION

That poetry is traditionally categorized into five major types: $k^h loon$, $tc^h \check{a}n$, $k\grave{a}ap$, kloon, and $r\hat{a}aj$. The meter is described with fixed number of syllables and rhyming scheme, most preferably given in the form of a template. In addition, first and second tones are prescribed for $k^h loon$ on certain syllables, and fixed positions for heavy and light syllables are designated for $tc^h \check{a}n$ (cf. Appendix).

Variations on the subtype for each category are due to differences in the number of syllables and lines required, and also the number of tones prescribed for $k^h loo g$, and different heavy/light syllable patterns for $t c^h \check{a} n$. For every type and subtype, the

designated template has to be learned.

These seemingly diversified templates are in fact, analyzable with a set of metrical rules, which conform to the natural metrical structure of the language itself. This paper attempts to arrive at such phonological generalizations for Thai verse.

THE PROSODIC CONSTRUCT

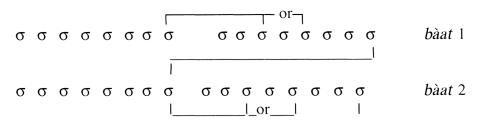
The prosodic construct of Thai poetry in traditional description consists of k^ham 'word' as the smallest prosodic unit. A number of k^ham are organized into a $w\acute{a}k$ 'phrase,' and one or more $w\acute{a}k$ make a $b\grave{a}at$, and a number of $b\grave{a}at$ make a $b\grave{o}t$, which is comparable to a stanza. For example, (1) below is a template for kloon 8, a subtype of kloon.

In general a k^ham is either a monosyllabic word or a syllable of a polysyllabic word. Hence, its equivalence is a phonological syllable. It is noted that this paper treats a $w\acute{a}k$ as a poetic "line" consistently. As such, the complicated rhyming scheme for each type and subtype is reducible to a minimal pattern of line-end rhyming with or without an internal rhyming pattern. Also, the rhythmic pattern can be analyzed as right-headed feet X-meter line (discussed in the next section).

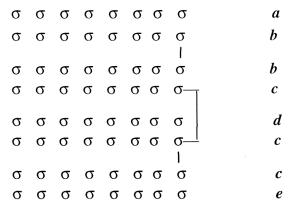
In (1), when a $w\acute{a}k$ is taken to be a poetic "line" despite the template, the rhyming scheme can be easily seen with a beautiful end-rhyme pattern of abbc. An octave of two quatrains shows an abbcdc e end-rhyme pattern in (2). Ignoring the internal rhyme, the abbc end-rhyme pattern is found to be most prevalent in all other types of Thai verse except $r\^aaj$ where end-rhyme does not occur. Slight variations of end-rhyme on major subtypes are mainly due to deletion of line a, i.e., the first line, or adding line b to the couplet yielding a0 b b c pattern. For example, a1 khoon 2, a2 khap tchan 16, malínii tchan 15, and shatt "ulwíkkiilit tchan 19" (Figures 4, 8, 14, and 15 in Appendix) are the same case of missing line a1, and a2 khap sùraan a3 khanan 28 and 32 (Figures 9 and 10 in Appendix) are both an octave-stanza with a1 b b c d c c e end-rhyme pattern, although line a3 is missing for a3 khap sùraan 28, leaving it with an overt seven-line stanza, and a4 in a5 in a6 b b c d c c e end-rhyme pattern.

An exception is a major subtype, $k^h loon 4$ (Figure 6 in Appendix), where the a b b c b d c e pattern is found for the eight-line stanza. Some other different versions of end-rhyme are found on minor subtypes, most of which can be traced to the canonical pattern of abce.

(1) kloon consists of eight kham in a wák, two wák in a bàat, and two bàat in a bòt.



(2) When each wák is taken to be a poetic "line," an end-rhyme pattern of a b b c d c c e is clearly seen as an octave of two stanzas, within which there are two couplets; b b and c c.



A METRICAL ANALYSIS

Tumtavitikul's (1997) account of the metrical structure of Thai, which is based on the Metrical Theory of Liberman and Prince (1977), can be summarized as in (3).

- (3) Thai Metrical Structure:
 - a. The metrical structure is built on syllables as the smallest units, and the structure is quantity-sensitive.
 - b. Syllable weight is based on rime-projection. Light syllable is defined with a single mora, a (C)V-syllable, in which glottal stop at syllable-final is taken to be phonetic and not present underlyingly. Any other syllable with more than one segment in the rime is considered heavy. An exception is a word-final light syllable, which, despite its internal structure, is inherently "heavy" by its right-edge position.
 - c. The metrical foot is right-headed and is built as a leftward spreading unbounded foot.

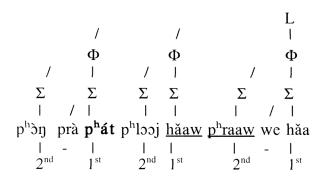
d. The metrical word is also right-headed and is built as a leftward spreading unbounded word.

Clearly from (3) Thai is predominantly a right-headed language with right-headed phonological feet and words. This natural characteristic of the language is relevant in Thai meter. The most obvious cases are the tc^h ăn where heavy and light syllables are prescribed. Although the subtypes of the heavy/light syllable pattern differ one from another, one thing all have in common is that for each line the meter is accounted for by consecutive right-headed feet of some kind. For example, todokkà tc^h ăn 12 (Figure 12 in Appendix) is an anapest dimeter, with --|--| rhythmic pattern. $int^h r$ áwí tc^h ian tc^h ăn 11 (Figure 11 in Appendix) is a spondic/anapest-bacchic meter, with a rhythmic pattern of |---| alternating with --|--| l. Most interestingly, malinii tc^h ăn 15 (Figure 14 in Appendix) consists of an unbounded right-headed foot and a degenerated foot in one line, and a degenerated foot and a cretic in another, and the stanza ends with a bacchic monometer. Caesuras will certainly assist the rhythmic flow in such case.

For all other types of poetry without the prescription of heavy/light syllables, iambic-cretic/anapest di/tri-meter is dominant. This is witnessed by the choice of words used and the rhythm read. This too bears evidence on the analysis into right-headed feet and words. For example, $kloon\ 8$ is a cretic-iambic-cretic meter, a trimeter line, $kloon\ 6$ is an iambic trimeter, $kloon\ 9$ is a cretic trimeter, and $k\grave{a}ap\ s\grave{u}raanjk^h\acute{a}naanj\ 28$ and 32 are both iambic-dimeter. (4) is an example of a $b\grave{a}at$ in $kloon\ s\grave{u}p^h\hat{a}ap$, which includes $kloon\ 6$, 7, 8, and 9, from $krommam \check{h}in\ p^h \acute{t}tt^h\acute{a}jaalonjkoon's\ s\check{a}mkrun$.

(4) A cretic trimeter in which a diverted bacchic is noted, and a cretic-spondeecretic meter.

(5) This is metrical structure of (4).



For each foot (Φ) , the syllable at the right-edge of Φ is the most prominent. The second most prominent syllable is the heavy syllable at the Σ level which is not Φ -prominent. And the ultimate prominence is the Φ -prominent syllable at the right edge of the line L, the L-prominent syllable. As such, the degree of prominence is established. This serves as the basis for internal rhyme as follows:

(6) Internal Rhyme:

- a. between adjacent lines (L): The L-prominence rhymes with a Φ -prominent syllable to its right in the adjacent line.
- b. between adjacent feet (Φ) : A Φ -prominence rhymes with a Σ -prominent syllable to its right in the adjacent foot (Φ) .

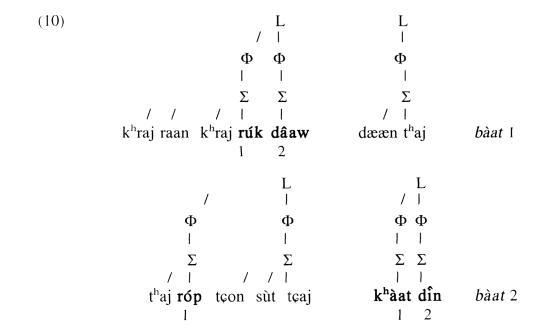
For example.

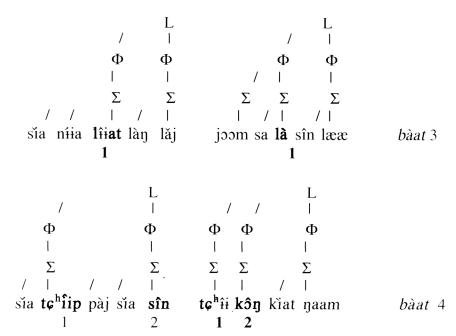
- (7) From (5), L-prominent $r\acute{a}t$ rhymes with Φ -prominent $p^h\acute{a}t$ of the adjacent line and Φ -prominent $w\check{a}n$ rhymes with Σ -prominent $t\wp^h\acute{a}n$ of the adjacent foot (Φ) , so does Φ -prominent wii with Σ -prominent $t\wp^i$, and $h\check{a}aw$ with p^hraaw .
- (6) is consistent with the predominant internal rhyming patterns across types in which the last syllable of one line rhymes with either the second, third, fourth, fifth, or sixth syllable of an adjacent line to its right (cf. Appendix). The rhyming possibilities seem to be dependent on the right-headed metrical constituents of the adjacent line. For an example, in kloon 6 as an iambic trimeter; the last syllable of the first line rhymes with either the second or fourth syllable of the second line, for these syllables of the second line are Φ-prominent and (6)a is satisfied as shown in (8).

In another example, $tod \delta kka t \epsilon^h \delta n$ 12, an anapest dimeter, the last syllable of the first line rhymes with the third syllable of the second line, satisfying (6)a as shown in (9).

One interesting thing that has to be accounted for is the tones prescribed for k^hloon . It is noted that the first and second tones required are, at present, phonologically Low or Falling, and High or Falling tones respectively. Historically, however, the first tone is postulated to have been falling and the second tone, rising, having developed from different laryngeal finals (Li, 1977). Phonetically, it is well studied that Thai contour tones require a longer syllable duration in production as well as in perception (Abramson, 1962; Tumtavitikul 1992). The inference is that the first and second tones required, in spite of their phonetic development, may possibly serve to indicate prominent syllables, hence the metrical structure of the poem.

For example, a stanza from King Rama VI's $s\grave{a}j\check{a}am$ manús $\grave{a}ti?$ highlights the syllables in the tonal positions prescribed by the template for k^hloon 4 (Figure 6 in Appendix) as having Φ -prominence as shown in (10).





 Σ -Percolation is noted in (10) whereby non-right-edge degenerated strong syllables become metrically weak at the Σ -to- Φ level.

SUMMARY

The analysis in the preceding section has shown that Thai meter can be accounted for by a set of metrical rules conforming to the phonological constraints of the Thai language, in which a right-headed metrical constituent hierarchy is predominant. Moreover, the analysis also has predictability with respect to the types of right-headed foot structure permitted in each type and subtype of poetry, given the template.

While heavy/light syllables in $tc^h \check{a}n$ overtly define the foot-structures and the tones prescribed in $k^h loop$ designate the Φ -prominent syllables, the numbers of $k^h am$ indicate possible numbers of feet and their types in a line such that the following tendency applies:

(11) $2 k^h am$ in a line indicates an iambic/spondic monometer.

3	"	"	a cretic/anapest/bacchic monometer.
4	11	11	an iambic-dimeter.
5	"	"	an iambic/spondic- cretic/anapest/bacchic line.
6	"	"	either an iambic trimeter or a cretic/anapest dimeter.
7	"	"	either an iambic-anapest/cretic-iambic line, or a
8	"	. "	trimeter of comparable right-headed feet. either a cretic-iambic-cretic line, or a trimeter of
9	11	"	comparable right-headed feet. a cretic trimeter.

In brief, I summarize the generalizations governing Thai poetry in (12).

- (12) a. The prosodic construct observes the natural metrical structure of Thai as given in (3).
 - b. The end-rhyme is the most-to-most prominent-syllable rhyme and its canonical pattern is a b b c. Most deviations can be traced to this canonical pattern.
 - c. The internal rhyme depends on the metrical constituent hierarchy as given
 - d. The meter is always right-headed X-meter with a tendency as given in (11).

In all, it seems that the goal of arriving at the phonological generalizations of Thai versification has been achieved. What this analysis implies seems to go beyond that goal. These generalizations argue for the creative use of the underlying linguistic competence of the native speakers of Thai.

ACKNOWLEDGMENT

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REFERENCES

- Abramson, A. S. (1962). The vowels and tones of Standard Thai: Acoustical measurements and experiments. Bloomington: Indiana University Center in Anthropology, Folklore, and Linguistics, Pub. 20.
- Li, F-K. (1977). A Handbook of Comparative Tai (Oceanic Linguistics Special Publication No. 15). Honolulu.: The University Press of Hawaii.
- Liberman, M., & Prince, A. (1977). On stress and linguistic rhythm. *Linguistic* Inquiry, 8, 249–336.
- Sukhothai Thammathiraj University Textbook Series. (1984). ภาษาไทย 5: การอ่าน [Thai Language 5: Reading]. Bangkok: Sukhothai Thai Thammathiai University.
- Tonglaw, K. 1987. หลักภาษาไทย [Thai Usage]. Bangkok: Ruam Sarn.
- Tumtavitikul, A. (1992). Consonant onsets and tones in Thai. Unpublished doctoral dissertation, University of Texas at Austin [UMI Order No. 9239357].
- Tumtavitikul, A. (1997). The metrical structure of Thai in a non-linear perspective. In A. S. Abramson (Ed.), South-East Asian linguistics in honour of Vichin Phanupong (pp. 309–324). Bangkok: Chulalongkorn University Press.

APPENDIX

Traditional Templates for Thai Poetry
(Adapted from Tonglaw, 1987, and Sukhothai Thammathiraj University
Textbook Series. (1984) ภาษาไทย 5)

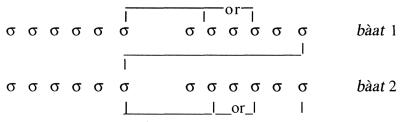


Figure 1. kl > 0.00 6 consists of six $k^h am$ in a $w \acute{a} k$, two $w \acute{a} k$ in a $b \grave{a} a t$, and two $b \grave{a} a t$ in a $b \grave{o} t$.

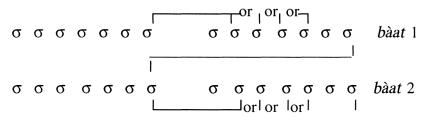


Figure 2. kloon 7 consists of seven k^ham in a wák, two wák in a bàat, and two bàat in a bòt.

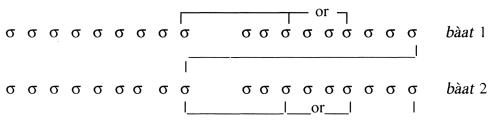


Figure 3. kloon 9 consists of nine k^ham in a wák, two wák in a bàat, and two bàat in a bòt.

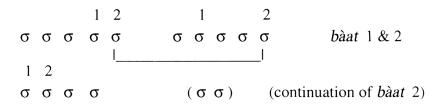


Figure 4. $k^h loon 2$ consists of five $k^h am$ in the first two $w \acute{a} k$, and four $k^h am$ in the third $w \acute{a} k$, with three $w \acute{a} k$ (or $14 k^h am$) in a $b \grave{o} t$. (Numbers 1 and 2 represent the first and second tones respectively, and the parentheses imply optional extra syllables.)

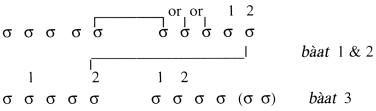


Figure 5. $k^h loon 3$ consists of five $k^h am$ in a $w \acute{a} k$, with four $k^h am$ in the last $w \acute{a} k$, and four $w \acute{a} k$ in a $b \acute{o} t$. A $w \acute{a} k$ makes a $b \acute{a} a t$ for the first two $w \acute{a} k$.

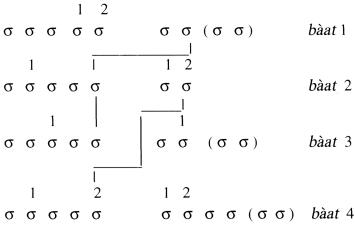


Figure 6. $k^h loon 4$ consists of five alternates with two $k^h am$ in a $w \acute{a} k$, with four $k^h am$ in the last $w \acute{a} k$; each pair of $w \acute{a} k$ makes a $b \grave{a} a t$. There are four $b \grave{a} a t$ in a $b \grave{o} t$.

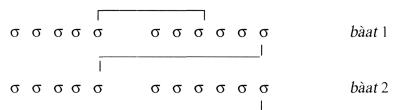


Figure 7. $k\grave{a}ap\ jaanii\ 11$ consists of five alternates with six k^ham in a $w\acute{a}k$; each pair of $w\acute{a}k$ makes a $b\grave{a}at$; two $b\grave{a}at$ make a $b\grave{o}t$. There are $11\ k^ham$ in a $b\grave{a}at$.

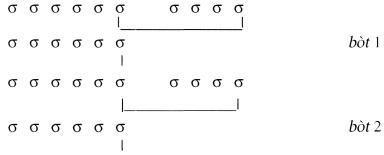


Figure 8. $k \dot{a} a p t c^h \dot{a} b a \eta$ 16 consists of six alternates with four $k^h a m$ in a $w \dot{a} k$; three $w \dot{a} k$ make a $b \dot{o} t$. There are 16 $k^h a m$ in a $b \dot{o} t$.

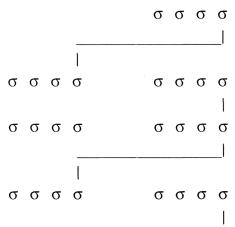


Figure 9. $k \grave{a} a p s \grave{u} r a a g k^h \acute{a} n a a g 28$ consists of four $k^h a m$ in a $w \acute{a} k$; seven $w \acute{a} k$ (or 28 $k^h a m$) make a $b \grave{o} t$.

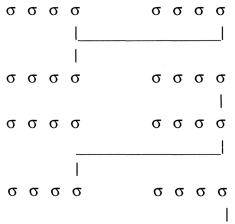


Figure 10. $k\grave{a}ap \, s\grave{u}raank^h\acute{a}naan \, 32$ consists of four k^ham in a $w\acute{a}k$; eight $w\acute{a}k$ (or 32 k^ham) make a $b\grave{o}t$.

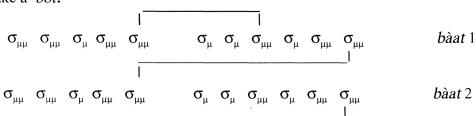


Figure 11. $int^h \acute{a}r\acute{a}w\^{i}tc^h \acute{a}n tc^h \check{a}n$ 11 consists of five alternates with six $k^h am$ in a $w\acute{a}k$; each pair of $w\acute{a}k$ makes a $b\grave{a}at$; two $b\grave{a}at$ make a $b\grave{o}t$. $\sigma_{\mu\mu}$ and σ_{μ} represent heavy $(k^h \acute{a}r\acute{u})$ and light $(l\acute{a}h\grave{u})$ syllables respectively.

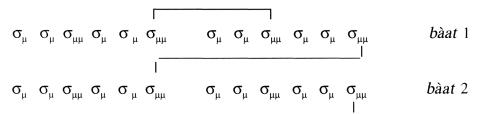


Figure 12. $tod \delta k k a$ t chăn 12 consists of six $k^h am$ in a w ak; each pair of w ak (or 12 $k^h am$) makes a b at; two b at make a $b \delta t$.

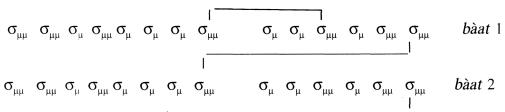


Figure 13. wásǎntàdìlòkà t¢^hǎn 14 consists of eight alternates with six k^ham in a wák; each pair of wák (or 14 k^ham) makes a bàat; two bàat make a bòt.

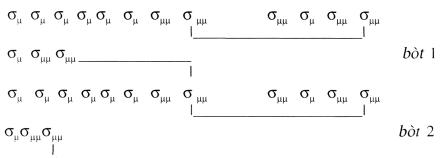


Figure 14. malínii tc^h ăn 15 consists of eight, four, and three k^h am in the first, second, and third wák respectively; the three wák (or 15 k^h am) make a bàat that is also a bòt.

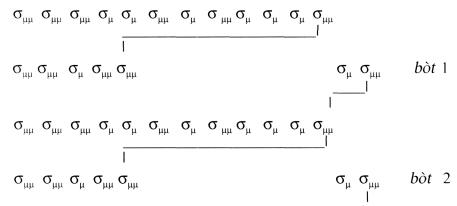


Figure 15. $s att^h unl aw ikkii lita t c and 19$ consists of 12, 5, and 2 $k^h am$ in the first, second, and third w ak respectively; the three w ak (or 19 $k^h am$) make a b ak that is also a b ak.

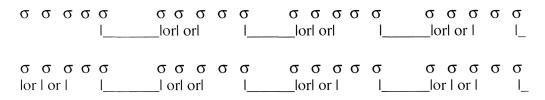


Figure 16. \hat{raaj} booraan consists of a minimum of five k^ham in a $w\acute{a}k$, and a minimum of five $w\acute{a}k$ in a $b\grave{o}t$. A $b\grave{o}t$ may end with a $w\acute{a}k$ that contains only two k^ham .