THE THANG OF THE KHONG WONG YAI
AND RANAT EK :

A transcription and
analysis of performance practice in Thai Music

by

Somsak Ketukaenchan

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INTRODUCTION

Background
A review of the existing literature on Thai music, in both Thai and other languages, shows that there is much general information available but that very little specific attention has been paid to performance practice.

In common with much other traditional music in South East Asia, Thai music depends largely on an oral tradition, passed down from teachers to pupils. It is the musicians - the players - themselves who are the repositories of all the information about and knowledge of Thai music; and there has been little attempt to invite them to share their detailed knowledge or find a means of making it accessible.

Furthermore, in the past the pursuit of music as a profession, as a player or as a scholar working in the field of music, was not recognized in Thai society as serious employment (Phukhaothong 1989:3).* As a consequence of these attitudes, there have been no academic institutions in Thailand at which research into Thai music might be undertaken. It is only as recently as 1989 that for the first time a university - Mahidol University in Bangkok - has offered a post-graduate course in music, which includes Thai music as one of its areas of study.

In relation to this thesis, which I hope will itself initiate further research, I believe it will be helpful to the reader to acquaint himself/herself with one of the following general introductions to Thai music. A useful, easily available, though necessarily brief, introduction to Thai music and its history appears in The New Grove Dictionary (1980). The entry is the work of David Morton, whose pioneering 1976 study, The Traditional Music of Thailand, offers the broadest survey of such topics as instruments, history, form, etc.. A further generally informative though less easily accessible study, also in English, is Chen Duriyanga's Thai Music (1956).

* For the transliteration of Thai names and terminology into English, I have adopted the system used by Morton (1976). It should also be noted that in Thai the singular and plural forms of nouns are identical. Hence Thang can refer to one Thang or more than one. The context of the sentence will make clear whether the use is singular or plural.
In the existing literature on Thai music in Thai, the following studies are widely known and used: Uthit Naksawadee's *Trisadee Lae Pratibat Dontri Thai* (Theory and Practice in Thai Music, 1979), Montri Tramode's *Sap Sangkeet* (Thai Musical Terminology, 1964) and Sangad Phukhaothong's *Karn Dontri Thai Lae Thang Pai Su Dontri Thai* (Thai Music and the Thai Musical Approach, 1989). All these studies, with the exception of Tramode's, deal broadly with the history, instruments, forms and repertoires of Thai music. It should be mentioned, however, that Phukhaothong's is of special significance because he devotes some thought to considering what direction the analysis of Thai music might take and suggests changed and improved attitudes among Thai musicians, for example to teaching and the use of notation for study purposes.

When we turn from the general to the particular, i.e. the specific study of performance practice in Thai music, we find that only a very small literature is available.

In the first decades of the century, two celebrated German musicologists, Carl Stumpf (1848-1936) and Erich von Hornbostel (1877-1935), were the first to attempt a transcription and analysis of Thai music. The transcription was made from an early recording (on a cylinder) of a Thai ensemble visiting Berlin in September 1900. This again reminds us of the fact that Thai music depends largely on an oral tradition, passed down from teachers to pupils. Thus there was no written notation to which Stumpf might have had access.

It was not until after the end of World War II that the Fine Arts Department, Bangkok, published two transcriptions, in Western notation, one entitled 'Homrong Yen', from the repertoire of the overture ('Phleng Homrong'), the other entitled 'Tham Kwan', from the different repertoire of 'Phleng Ruang', the Thai 'Suite'. (Both transcriptions were written out in full score.) It should be explained that Thai music is broadly classified according to the particular social function or occasion, e.g. 'Phleng Naphat' (Sacred Music), or according to its form, e.g. 'Phleng Ruang' (the Thai 'Suite'). These constitute the various 'repertoires'.

In 1961, the Department published a volume entitled 'Thai Classical Music', chosen from the 'Phleng Sepha' -
'Entertainment' - repertoire. However, only the melodies of the compositions were reproduced, without indication of specific instruments. There has been further work of this kind, in the interests of preservation, e.g. the volume published in 1977 by Srinakharinwirot University, Bangkok, but again it is only the basic melodies that have been transcribed without assignment to particular instruments.

It follows that, because of the lack of any extensive transcription of Thai music, especially with regard to the notation of specific instruments, there has been no major study of performance practice, in Thai or any other language, and in particular no major attempt at analysis of the concept of variation or how it functions in the context of a specific instrument and a specific composition.

**Proposal**

The principal aim of my thesis is to take the first steps towards filling that gap. In order to assemble the necessary materials, I returned to Thailand in 1987/8 to undertake my field work.

I decided to focus my study on the two tuned percussion instruments which are the most important in the Thai 'Pi Phat' (percussion) ensemble, the 'Khong Wong Yai' and 'Ranat Ek'. It is on the Khong Wong Yai that the basic melody in a Thai composition is played, while the Ranat Ek is the leader among the other tuned percussion instruments.

Having selected the two instruments, my next task was to transcribe the performances of three specific pieces on the Khong Wong Yai and Ranat Ek, thereby documenting the players' individual versions (their 'Thang', a term which is discussed on p.7). For the purpose of my thesis, I chose the seven clearest out of the many performances I recorded. It is these performances that form my transcription (Vol.I) and appear on the two cassettes that I have included as an audio supplement to this thesis.

Having transcribed the individual performances, my next task - and undoubtedly the most important task of all - was to compare and analyse the seven Thang of the players. My conclusions form the substance of this volume. A comparison of the Thang among individual players has not before been
attempted and represents the central purpose of my thesis.

'Khaek Borathet', 'Chorakhe Hang Yao' and 'Sarathi' are three well-known pieces which form part of the Phleng Sepha (Entertainment repertoire). It is in this repertoire that the player can introduce a wide variety of performance techniques into his Thang, a possibility that is not appropriate to some other of the Thai repertoires, e.g. the repertoire of 'Phleng Naphat' (Sacred Music). I have chosen to examine only the 'Sam Chan', the longest variation, of the three pieces (see Chart 1, p.12) at a different length, in a different perspective and from a different point of view. I write in most detail about Khaek Borathet, introducing here a discussion of hand patterns, an aspect I do not deal with in my chapters on Chorakhe Hang Yao and Sarathi.

In my discussion of Sarathi I select specific features rather than repeat the broader survey of Khaek Borathet. If my discussion of the three pieces is taken as a whole, I hope to have covered most essential characteristics of the performers' individual versions on the Khong Wong Yai and Ranat Ek.

Throughout my thesis, I have attempted to think as a Thai musician and not to impose Western thinking and terminology on the Thai system. Of course I have had to use some Western concepts and terms to help relate the two cultural traditions where common ground exists. I hope my glossary of Thai terms (see pp.134-136) will provide some helpful clarification.

Naturally, I have had to concentrate in my thesis on the subject of performance practice. But what has emerged as a kind of sub-theme is the relationship between Thai music and how a Thai musician thinks and broader characterizing features of Thai society and culture. For example, the reader will notice how often the word 'smooth' is used in a musical context; and indeed the concept of 'smoothness' is an important one in Thai behaviour. In the same way, the preoccupation with proportion, with duration, and the balance between strict discipline and freedom, is characteristic of many features of Thai culture. Performance practice in Thai music, like the art itself, brings together all these leading and sometimes contrasting features into a satisfying integral relationship, which is one of the principal objectives of the Thai artist.
CHAPTER 1: KHONG WONG YAI

1.1 Description

The Khong Wong Yai is a tuned instrument which consists of sixteen gongs suspended on a circular rattan frame (see photograph, figure 1, p.6). The lowest tuned largest gong is approximately 17 centimetres in diameter. The size of the other gongs gradually becomes smaller as their pitches rise. The highest tuned and smallest gong is approximately 12 centimetres in diameter. The gongs are tuned to adjacent pitches and placed in sequence on the frame. The lowest tuned gong is on the player's extreme left as he sits in the circle, the highest tuned on his extreme right. The range of the instrument and the gongs' pitches are discussed on pp.2-3, Vol.I.

The traditional method of making this instrument is to hammer a special metal alloy, which has been heated, into the characteristic shape of a gong. In modern times, however, a mould is used, into which molten alloy is poured.

The pitch of each gong is tuned to begin with to a slightly higher pitch than is actually correct. The true pitch is finally secured by sticking a mixture of beeswax and lead to the inner surface of the nipple of the gong. The wax also helps effect a better tone.
Fig. 1    The Khong Wong Yai
The Khong Wong Yai is so-called in order to distinguish it from the 'Khong Wong Lek', the instrument which is made on the same principle as the Khong Wong Yai, but is smaller. In earlier times, the instrument was simply known as the Khong Wong, before the smaller type of instrument was developed. We know from Master Montri Tramode, a very well-known Thai scholar, that the Khong Wong was already in use by Court musicians during and after the Sukhothai period (1238-1350) (Tramode 1984: 3).

To play the Khong Wong Yai, the performer sits inside a circular frame, and firmly holds two short mallets, with round heads, approximately 9 centimetres in diameter, one in each hand. What a beginner learns first is a straightforward Thang appropriate to the Khong Wong Yai, therefore starting from the outset to learn the instrument's repertoire.

1.2 Thang Khong Wong Yai

'Thang', literally, means 'a way' or 'a path'. Thang, in Thai musical terminology, can be said to have several meanings, depending on the word that follows it. If Thang is used in addition to a musical instrument, it refers to an appropriate version of the basic melody which has been specifically imagined for the particular instrument. Professor Uthit Naksawadee (1979:15) describes Thang Khong Wong Yai as a 'basic melody' which is the very core of Thai music. He also points out that
every Thai composition is always first conceived by the composer as the Thang Khong Wong Yai and then taught at a later stage to the other players.

David Morton, in his short analytical description of the Thang Khong Wong Yai (1976:49), makes the following useful statements:

(i) 'The typical method of playing the main melody on the Khong Wong Yai is in octaves and broken octaves.'

(ii) 'In passages that are too fast to render efficiently in octaves, the single line of melody is divided between the two hands.'

(iii) 'Certain idiomatic passages include intervals of less than an octave, the fourth and second being particularly prominent.'

(iv) 'Another idiomatic way of handling certain conjunct passages is to prolong a pitch and then treat the following two pitches as a quick embellishment of the next following pitch, a technique called Sabat.'

(v) 'In passages near the top range of the Khong Wong Yai, where the right hand cannot complete the octave it continues to play on one of the top kettles as an ostinato until the melody descends to the point where it is again an octave or more below the top limit of the instrument.'
1.3 Main features of the Thang Khong Wong Yai

Thang Khong Wong Yai, broadly speaking, is made up of short phrases which can be grouped into four categories:

(i) A group which comprises two notes played simultaneously, either in octaves or other intervals, e.g. a fourth or sixth (Ex.1)*:

Ex.1

(ii) A group which consists of two notes played in broken octaves and, sometimes, broken fourths (Ex.2):

Ex.2

* The reader is reminded that the written pitches represent the pitches of the gongs of the Khong Wong Yai. See Vol. I, Note on the Transcription, pp. 2-3.
(iii) A group, the principal character of which is a fast solo line (Ex. 3):

Ex. 3

(iv) A group which uses the technique known as 'Kro'. Kro is the tremolo technique (for further discussion, see also p. 108, and Ex. 4):

Ex. 4

A combination of several groups is often found in the same passage (Ex. 5):

Ex. 5
Having looked in a very general way at the characteristic features of the Thang Khong Wong Yai, I shall now turn to an analysis of the Thang Khong Wong Yai for one of the specific compositions I have selected to study in this thesis, Khaek Borathet, composed by Pra Pradit Phairo (Khru Mi Khaek) during the reigns of Kings Rama III-V (1824-1910). The precise date of the composition is unknown. This short composition, which I have transcribed on pp.8-23 of Vol.I takes the form of the 'Thao', a kind of variation form which consists of three variations: first the longest variation ('Sam Chan'), then a shorter variation ('Song Chan'), and finally the shortest variation ('Chan Dio').* The two Sections of which each variation consists are constructed by means of the 'Na Thap Prop Kai', a rhythmic unit which is played either by a single drum or pair of drums. The Na Thap Prop Kai is usually abbreviated to 'Prop Kai', once its function has been understood. One Prop Kai appropriate to the Sam Chan comprises eight bars of 2/4 in Western notation. Two units of Prop Kai account for the duration of each

Section of Khaek Borathet. In fact, the two units are counted as two 'Chang Wa', Chang Wa being the correct term to use in Thai when counting objects of the category of rhythmic units.

**Chart 1.** The following breakdown of the form of Khaek Borathet shows how the vocal and instrumental parts are distributed in the two sections of each variation:

- **Sam Chan**
  - Section I
    - (a) Vocal
    - (b) Instrumental (repeated)
  - Section II
    - (a) Vocal
    - (b) Instrumental (repeated)

- **Song Chan**
  - Section I
    - (a) Vocal
    - (b) Instrumental (repeated)
  - Section II
    - (a) Vocal
    - (b) Instrumental (repeated)

- **Chan Dio**
  - Section I
    - (a) Vocal
    - (b) Instrumental (repeated)
  - Section II
    - (a) Vocal
    - (b) Instrumental (repeated)
Khaek Borathet is based on the pentatonic outline shown below as Ex.6. This particular pitch outline is perceived by Thai musicians as 'Sum Niang Thai', i.e. music in the 'Thai style'. It is a style which we meet in a large number of compositions.

Ex.6

Throughout Khaek Borathet, the second half of each Instrumental section in each variation is sometimes identical (Ex.7):

Ex.7
Sometimes, however, as my transcription shows, players will not observe this practice and introduce individual variations.

In the case of the Thang Khong Wong Yai, the typical manner of playing this instrument strongly influences the shape of its melody. The Thang is most often played simultaneously in two parts (two hands), in which case the melody can be found either in the upper or the lower part. An illustration of this is as follows:

(i) If any passage contains intervals of the fourth, third, second or octave, simultaneously played, as shown in Ex.8(a) (where the fourth and octave are used), then the melody always appears in the upper part:

Ex.8(a)

Ex.8(a) introduces a more elaborate use of the fourth and second, but again the melody is in the upper part:

Ex.8(b)

Ex.8(b)
(ii) When the intervals of the sixth and fifth are simultaneously played in the high register, then the melody (Ex.9(b)) moves at that point to the lower part (Ex.9(a)):

Ex.9(a)

Ex.9(b)

In this particular case the range of the instrument would not permit the melody to sound in its true octave, as indicated in Ex.9(b). But even in cases where the pitch of the melody would necessitate octave transposition, the switch to the lower part is preferred because the consequent vertical combinations of pitches have particular charm and appeal to Thai musicians. The style in which these intervals of the sixth and fifth are treated is called in Thai 'Siaw', which means 'skewed'.

(iii) The broken fourth and octaves which appear in Ex.10(a) are characteristic of the Thang Khong Wong Yai.
Exx.10(b) and (c) illustrate simple versions which would be appropriate to the wind instruments and the strings:

Ex.10(a)

Ex.10(b)

Ex.10(c)

Ex.11 allows us to compare a simple version (on the upper stave) of the melody of Khaek Borathet (appropriate for a wind instrument, say, or the strings) with the complete Thang Khong Wong Yai of Sections I and II on the lower stave, illustrating what I have written above about the location of the melody in the upper or the lower part of the Thang according to performing
practice. The lower stave reproduces the Thang of P1 (Player 1):

Ex.11
2.1 Variation of the Thang

The Thang Khong Wong Yai may be said to consist of a group of short motives which are known in Thai as 'Wak'. Wak, literally, means 'a phrase': it does not imply a specific length. A melody of the duration of one rhythmic unit of Prop Kai, however, can be conveniently broken up into four Wak of equal length. Ex.12 shows the first rhythmic unit of Khaek Borathet, which, I am going to suggest, can be broken down into four Wak:

Ex.12

Throughout my analysis I use the terminology Wak A, B, C and D, which comprise a Chang Wa.

When repeating the Thang Khong Wong Yai, a player will sometimes play his version in a slightly different form. The reason for this is to display to other players and to his audience that he is a mature and creative artist. He is not content to repeat himself
but will introduce lively new ornaments and colours. At the same time, however, he has to keep the basic melody in mind, so that his repeat does not become over-elaborate and over-decorated. If he departs too far from the basic melody, or disguises it too thoroughly, he would only confuse the other members of the ensemble, and, as a result, could cause the whole piece to collapse. There are no rules about how one should repeat the Thang Khong Wong Yai, no rules, that is, about how much decoration or variation can be introduced. What the performer must do is to produce out of his past experience (through listening or observation) an appropriate version which above all will show good judgment of what is possible and practical within the context of an ensemble piece; and yet at the same time the version must not be without liveliness and originality.

I have identified in Ex.12 the four Wak into which I have suggested the first rhythmic unit of Khaek Borathet can be broken down. However, it is common and acceptable among Khong Wong Yai players in performances of Khaek Borathet (or any other piece) to choose to play Wak identical to Ex.12 or versions which are slightly or entirely different.

As I have written above, the melody of Khaek Borathet falls into two Sections, the instrumental section of each of which is repeated.
In Vol.I, I have transcribed the performances of seven players. In four cases, the repeats of Sections I and II of Khaek Borathet introduce no variations of the Thang that were heard the first time round. The remaining three players, however, vary the repeats of Sections I and II. Only one player (P4), as my Ex.7 shows, when performing Section II of Khaek Borathet plays a second half of the Section that is the same as the second half of Section I.

In Ex.12 above I set out the sequence of short phrases (Wak) into which the melody of Khaek Borathet can be broken down. Each player, however, can vary each Wak, according to tradition, experience, individual preference and inspiration. I shall try to show through analysis of the performances of Khaek Borathet by the seven Khong Wong Yai players their individual variations of the Wak which I suggest can be broadly divided into two types:

I: Variations which remain very close to the basic melody. Group I can itself be sub-divided into six groups:

(i) Where the rhythm alone is modified (Ex.13):

Ex.13

![Basic melody](image)

![Variation](image)
(ii) Introducing dotted rhythm in passages where both hands are employed simultaneously (Ex.14):

Ex.14

There is a practical reason for this variation technique. Some players prefer not to risk attempting to synchronize the left hand with the semiquaver at the octave and so choose the single upper pitch (D). However, some players are willing to play the simultaneous octave.

(iii) By the addition of pitches, in various categories:

(a) Repetition of one of the pitches within the motives that make up the melody (Ex.15(a)):

Ex.15(a)
(b) The adding of a lower part which creates the intervals of the fourth and octave (Ex.15(b)):

Ex.15(b)

\[ \text{\includegraphics{Ex15b.png}} \]

(c) Repetition plus simultaneous introduction of a lower part at the fourth and later at the octave. In bar 2 of Ex.15(c), the pitch C (upper stave) is approached from above by an interpolated octave D (lower stave).

Ex.15(c)

\[ \text{\includegraphics{Ex15c.png}} \]
(iv) By extending and elaborating the broken octave at the beginning of the Wak. I show two variations (Ex.16):

Ex.16

(v) Through syncopation (Exx.17(a) and (b)):

Ex.17(a)

Ex.17(b)
(vi) By the use of Kro, the tremolo technique (Ex.18):

Ex.18

(vii) Filling out the basic outline, so as to create rapid figuration (Ex.19):

Ex.19

II: Variations which depart from the basic outline, though the final pitch at the end of the Wak remains the same. My Exx.20(a)-(d) illustrate various types of this category:
Exx.20(a)-(d)
2.2 Patterns of the Thang Khong Wong Yai

When we examine the way in which seven musicians play their Thang in Knaek Borathet, we can perceive nine significant patterns:

Pattern 1 consists mainly of two motives made up of a simultaneous octave followed by a broken octave (Ex.21(a)):

Ex.21(a)

Some possible variations of Pattern 1 are as follows (Exx.21(b)-(d)):

Exx.21(b)-(d)
Pattern 2 is mainly composed in quavers and in two simultaneous parts, most often at the interval of the octave but sometimes incorporating other intervals, e.g. the fourth and sixth (Ex.22(a)):

Ex.22(a)

\[\text{Ex.22(a)}\]

Possible variations of this pattern are as follows (Exx.22(b) and (c)):

Exx.22(b) and (c)

\[\text{Exx.22(b) and (c)}\]

Pattern 3 is similar to Pattern 2, but differs slightly in various ways at the beginning of the Wak (Exx.23(a)-(c)); otherwise the second half of the Wak remains the same as in Pattern 2:

Ex.23(a)

\[\text{Ex.23(a)}\]
Ex. 23(b) and (c)

Pattern 4 consists of a simultaneous fourth on the first quaver, which can be followed either by a broken fourth or broken octave. This pattern can finally end with a simultaneous fourth or an octave (Ex. 24):

Ex. 24

Pattern 5 consists of simultaneous octaves at the beginning, followed either by broken octaves or broken fourths. This pattern always ends either with a simultaneous fourth or octave (Ex. 25(a)):

Ex. 25(a)
A possible variation of this pattern is as follows (Ex.25(b)):

Ex.25(b)

Pattern 6 is a combination of simultaneously played broken octaves and fourths, but in a sequence different from the patterns we have observed above (Ex.26):

Ex.26

Pattern 7 consists of a single melodic line built out of semiquavers (Ex.27):

Ex.27
Pattern 8 is again a single melodic line consisting of semiquavers and quavers (Ex.28(a)):

Ex.28(a)

Possible variations of this pattern are as follows (Exx.28(b) and (c)):

Exx.28(b) and (c)

Pattern 9 consists once more of a single melodic line at the beginning but concludes with a simultaneous fourth or octave (Ex.29):

Ex.29
2.3 Hand Patterns

How a musician uses his hands to play the Khong Wong Yai, i.e. the traditional method of hand patterns, is a highly important aspect of Thai music. The system of hand patterns is strictly taught to all beginners on the instrument when learning the Thang, and they increasingly understand the system as the lessons progress.

Although this oral tradition has been passed down for many hundreds of years, from master to pupil, the hand patterns system remains constant whatever the differences in the performing style or practice of the master. At present there seems to be general satisfaction with the system and no desire that it should be changed.

The hand patterns for the Khong Wong Yai very much depend on the shape of the specific melody. In my explanation of the rules of the system I shall use Khaek Borathet as my model.

(i) When the melody consists of two notes (or parts) simultaneously played, the right hand (R) must take the top note (or part) and the left hand (L), the lower (Ex.30):

Ex.30
(ii) When the melody consists of broken fourths or octaves, the right hand must take the top note, and the left hand the lower (see Ex.31):

Ex.31

The hand patterns illustrated in Rules (i) and (ii) are very simple instructions. But the patterns become increasingly complex when the melody appears as a single melodic line. The position of each hand is, again, fixed according to the type or shape of the specific melody, as I shall now explain.

(iii) When a passage consists exclusively of semiquavers, two systems of patterns can be involved. Ex.32(a) shows a symmetrical alternation of the right and left hands, a pattern which is imposed by the 'zigzag' profile of the passage. This indeed is the most practical way of playing this fast semiquaver passage:

Ex.32(a)
Occasionally, a player will add an ornament in the shape of a grace note, as in Ex.32(b) and (c), sometimes at the same pitch as the note to which it is attached, sometimes at a different pitch (e.g. bar 2 of Ex.32(c)), when the melody note is approached from above. In all cases, the grace notes must be played by the right hand:

Ex.32(b)

Ex.32(c)

(iv) In a flowing semiquaver passage which gradually ascends (as shown in Ex.33), the pitches are grouped into pairs, though in this particular case it is a single pitch from which the ascent starts. In the case of an ascent beginning with a pair of notes at the same pitch, it will again be the left hand which plays the pair. However, if the first note of that pair is pitched higher than the second note, then it will be taken by the right hand. If the first note is lower.
than the second, then it must be taken by the left hand. This clearly involves a more complicated performing technique, thus the single pitch is often preferred:

Ex.33

![Musical notation for Ex.33](image)

(v) In a semiquaver passage that descends (Ex.34), the hand patterns are similarly treated as when the passage ascends. The right hand takes the first note, and then the left and right hands alternate in taking pairs of successive notes, the left hand always taking the final pair:

Ex.34

![Musical notation for Ex.34](image)

There are three passages in Khaek Borathet which combine semiquavers and quavers (as shown in Exx.35-37). The hand patterns in these examples can be analysed by breaking down the melody into small motives:

Ex.35

![Musical notation for Ex.35](image)
(vi) This particular passage (Ex.35) can be sub-divided into two motives (indicated by the dotted line), one descending, where the hand pattern follows Rule (v), the other ascending.

In the case of the ascending motive, there are two features to be observed. First, the pitches D and E (after the dotted line) are designed to form a smooth transition - or 'bridge' - between the two motives. Second, in the sequence of ascending pitches, the hand patterns must always be that the left hand takes the first three pitches D, E and F, and the right hand the succeeding pair, G and A.

Ex.36

(vii) Ex.36 shows another combination of semiquavers and quavers. In the first half of the passage, the hand patterns follow Rule (v) (cf. Ex.34). In the second half, the hand pattern for three pitches, C, D and E, is the same as that used for the last three pitches in Ex.35 (Rule (vi)). For the 'bridging' pitches G and C, however, the left and right hands alternate in order to negotiate the leap of a fourth.
Ex.37

(viii) Ex.37 illustrates a further combination of semiquavers and quavers. The hand patterns in the second half are in accordance with Rule (v). In the first half, which is rhythmically identical with the second half of Ex.35, one might have expected to find the corresponding hand pattern. But in fact in place of \( L \ R \ L \ L \ R \ R \) we find \( L \ R \ L \ R \ R \). The reason for this is the leap of a fourth which opens the first half and which for practical reasons must employ a \( L \ R \) alternation. In Ex.35, the second half opens with a stepwise ascent, a pair which can be taken gracefully by the left hand. This is of special importance in a fast tempo.
CHAPTER 3: THANG KHONG WONG YAI FOR CHORAKHE HANG YAO

Thai music was significantly developed during the reign of King Rama IV (1851-1868); and it was for the first time during this period that music was performed as an independent concert. The programme of a concert in those days usually consisted of an overture followed by the same four compositions which always had to be included in the programme, and to round off the concert, a traditional farewell song. Chorakhe Hang Yao is, in fact, the second of the compulsory compositions. Neither the year in which Chorakhe Hang Yao was composed nor the composer is known. What we do know, however, is that the development of the Sam Chan - the longest variation in the Thao form - occurred during the second half of the nineteenth century (Tramode 1984:22). So the third variation of Chorakhe Hang Yao was presumably composed at some stage after 1850.

Chorakhe Hang Yao, like Khaek Borathet, takes the traditional form of the Thao (see p.11). Each variation consists of three sections which are constructed by means of the Prop Kai rhythmic unit (see also p.11).
Chart 2. The following breakdown of the form of Chorakhe Hang Yao shows how the vocal and instrumental parts are distributed in the three sections of each variation:

- **Sam Chan**
  - Section I
    - (a) Vocal
    - (b) Instrumental (repeated)
  - Section II
    - (a) Vocal
    - (b) Instrumental (repeated)
  - Section III
    - (a) Vocal
    - (b) Instrumental (repeated)

- **Song Chan**
  - Section I
    - (a) Vocal
    - (b) Instrumental (repeated)
  - Section II
    - (a) Vocal
    - (b) Instrumental (repeated)
  - Section III
    - (a) Vocal
    - (b) Instrumental (repeated)

- **Chan Dio**
  - Section I
    - (a) Vocal
    - (b) Instrumental (repeated)
  - Section II
    - (a) Vocal
    - (b) Instrumental (repeated)
  - Section III
    - (a) Vocal
    - (b) Instrumental (repeated)
I have just pointed out that Khaek Borathet and Chorakhe Hang Yao are constructed out of the same Prop Kai rhythmic unit, but the musical ideas we encounter in Chorakhe Hang Yao demand more detailed explanations.

3.1 Sum Niang of Chorakhe Hang Yao

In Section I, the melody is composed in the Sum Niang Thai (Thai style) which I have already discussed on p.13. The melody of the fifth Wak (see Ex.38) introduces the pitch F as a passing note; and therefore gives the impression that this particular Wak is making use of another scale or style. But this event is, in fact, just one of many compositional techniques that a Thai composer uses to make an interesting effect in his composition.

Ex.38

The melody in Section II, as shown in Ex.39, clearly shifts from the Sum Niang Thai (Thai style) into the style which is known as Sum Niang Khamen - the Khamen
style. The main five pitches which define this style may be represented in Western notation as Ex.40 illustrates.

Ex.39

Ex.40

Ex.41

- 40 -
In Section III (Ex.41), the melody shares much the same Sum Niang as occurs in Section II. However, the basic pitches of the melody at the end of the first, second, third and fourth Wak are respectively G, D, D, and G, a departure from the pattern we encounter in Section II. This can be clearly seen by comparing the pitch outline of Section II (Ex.42(a)) with the pitch outline of Section III (Ex.42(b)).

Exx.42(a) and (b)

If we compare the Khamen style (Ex.40) with the pitches which define the Thai style (see Ex.6, p.13), we find that in the case of the Khamen style the series of pitches has been transposed to F; and it is this pitch which functions in a comparable way to the C of the Thai style, i.e. as a kind of 'tonic' or principal pitch. In Section III (Ex.42(b)) it is the accent on pitches G, D, D and G which creates the illusion of the Thang making use of a new scale for the first four Wak. But from the fifth, transitional Wak onwards, the melody re-affirms the Khamen style.
The pitch B, when it appears in the Thang of the fifth Wak, is treated as a passing note in exactly the same way as I have already described in Section I (see p.39); what is different is the pitch level.

3.2 The thao

The 'thao', occasionally called 'Luk thao', is written with a small 't' in order to avoid confusion with the capitalized Thao, which designates the overall form of Khaek Borathet and Chorakhe Hang Yao. Naksawadee (1979: 77) describes the thao as 'a short melody, the function of which is to acts as a "bridge", to make a smooth link between one Wak and another, or for the purpose of extending the duration, so that the Thang will synchronize precisely with the rhythmic unit'. Horton (1976: 243) describes the thao as a 'fill-in, extending phrase'.

The duration of the thao appropriate to Sam Chan usually comprises half a Prop Kai rhythmic unit, i.e. 4 bars of 2/4 (see Ex.43). The thao is quite often found in the same rhythmic pattern as shown in Ex.43, but at a different pitch level, as in Ex.45. Furthermore, the thao can sometimes be found in patterns quite distinct from Exx.43 and 45, e.g. Ex.44(c). For this reason, it is often difficult to distinguish what is thao and what is melody. The location of the thao, in fact, has to be taught to the pupil by the master.
I shall now attempt to explain the operation of the thao in Chorakhe Hang Yao. The diagram below (Chart 3) shows the locations of the thao in Section I(a) (vocal) and I(b) (instrumental) of Chorakhe Hang Yao. Each horizontal line is equivalent to one Prop Kai rhythmic unit. The letters indicate the pitches on which each half rhythmic unit ends.

**Chart 3.** shows the locations of the thao:

```
<table>
<thead>
<tr>
<th>Section I(a)</th>
<th>Section I(b)</th>
<th>Section II(a)</th>
<th>Section II(b)</th>
</tr>
</thead>
<tbody>
<tr>
<td>thao</td>
<td>thao</td>
<td>thao</td>
<td>thao</td>
</tr>
<tr>
<td>A</td>
<td>C</td>
<td>D</td>
<td>A</td>
</tr>
<tr>
<td>c</td>
<td>d</td>
<td>c</td>
<td>F</td>
</tr>
<tr>
<td>d</td>
<td>A</td>
<td>F</td>
<td>d</td>
</tr>
<tr>
<td>A</td>
<td>C</td>
<td>d</td>
<td>A</td>
</tr>
<tr>
<td>D</td>
<td>A</td>
<td>G</td>
<td>G</td>
</tr>
<tr>
<td>G</td>
<td>D</td>
<td>A</td>
<td>G</td>
</tr>
<tr>
<td>c</td>
<td>A</td>
<td>d</td>
<td>A</td>
</tr>
</tbody>
</table>
```

-43-
In Thai music, the pitch level at which a composition is played can vary; for example when the composition of an ensemble demands it, e.g. if the Pi Phat is combined with strings (the Mahori ensemble) the pitch then is automatically lowered in order to accommodate the strings. The singer of course is the first soloist to be heard. Thus it is that the thao performs the practical function of ensuring that the singer is given the correct pitch with which to start or a pitch which will allow him or her to locate the correct pitch. There are some methods by which the singer in a performance can calculate the pitch from the preceding composition in the performance. In the case of Chorakhe Hang Yao, the first thao in Section I(a) in fact provides the singer with all the pitches of which the vocal melody is comprised (see Ex.43):

Ex.43
The same thao which has appeared in I(a) is now used to link the end of the vocal melody of I(a) to the beginning of the instrumental melody of I(b); and at the same time this thao completes the obligatory length of the Section's first rhythmic unit. If the thao is omitted, the sound of the music might be thought to be quite normal: a perfectly acceptable sequence results when the end of the vocal part of I(a) is succeeded by the instrumental melody which forms the second half of the first rhythmic unit of I(b). The problem that arises, however, is this: the overlapping between the instrumental melody (minus the thao) and the complete rhythmic unit (which is of a fixed duration). There is a specific term to describe this situation: 'Khrom' (unsynchronized).* So the major importance of the thao in I(b) is its function in expanding and completing the duration of the first rhythmic unit of the section, while its transitional function is of less importance.

Since the thao used in Section I(a) and I(b) is constructed around pitch C, I shall call it the thao on pitch C (see Ex.44(b)); and I shall call the thao used

* It is a situation most often met with among beginners, especially among players of the untuned percussion instruments who can easily misjudge their entries and thus find themselves continuing with the rhythmic unit after the melody has been completed; or, if their entry has been too early, then the rhythmic unit would come to an end prematurely. Khrom is closely associated therefore with the inexperienced player.
in II(b) the thao on pitch G (see Ex.44(c)). It is this thao that I shall discuss next.

Exx.44(a)-(c)

At the beginning of Section II(a) (Vocal), surprisingly, the thao on pitch C reappears. Theoretically, the thao at II(a) should use the thao on pitch C, which is used in II(b) (Instrumental: see Ex.43(c) and Chart 3, p.43) and recognized to be the proper thao for this Section. The explanation of this irregularity is that the transition of the Wak at the end of I(b) (Instrumental; see Ex.44(a)) to the thao on pitch G sounds discontinuous while the sequence of this Wak and the thao on pitch C makes a perfect continuity.

After singing I(a), the singer does not need the thao at II(a) in order to indicate the pitch. But the thao has to be there, played by the instrumentalists: the singer, in this piece in particular, does not sing the thao, and if it were not played, the result would be
silence, except for the drums and Ching supplying the rhythmic unit. This is musically unacceptable.

In certain cases the players, after a complete performance of the Sam Chan, will repeat it in its entirety while introducing comprehensive variations of the instrumental sections. In such cases, when the ensemble returns to Section I(a), to embark on the variations, the thao has to be constructed around pitch F (see Ex.45). The reason for this is that Section III(b) has ended on pitch F, and once again, in order to secure continuity, which is one of the principal concerns of the Thai musician, the thao has to be adapted, i.e. transposed:

Ex.45
3.3 Variation of the Thang

I shall now examine the performances of Chorakhe Hang Yao given by the seven Khong Wong Yai players (see also my transcription of their performances, pp. 24-47). As will be observed, the repeats of the three sections of each individual Thang remain largely the same as their first statement. One player (P6), however, introduces an extensive variation at the repeat of Section III, although the repeats of his Sections I and II have been free of variations. While it is true that the majority of players do not introduce variations into their sectional repeats, it is important to note that each player presents his own approach to the melody, for example, compare the Thang of P5 with that of P4. I shall now want to look at this aspect in greater detail.

SECTION I

Wak A of the first Chang Wa

Two quite contrasted Thang are introduced:

1) The Thang for which six players show a preference (see Ex. 46(a)), where the basic model is clearly shared by all players, despite the obvious individual variations (see Exx. 46(b), (c), and (d)). It
is my experience that this Thang is widely known and taught:

Exx.46(a)-(d)

2) The Thang in fast running notes (the 'Kep' style)* for which one player shows a preference (Ex.47):

Ex.47

Although this Thang is acceptable to players, it is not widely used.

* Further discussion of the Kep style can be seen on pp.101-108.)
Wak B of the first Chang Wa

As in the case of Wak A, two principal Thang can be recognised here:

1) The Thang for which five players show a preference (see Ex.48(a)). My Exx.48(b) and (c) illustrate the same kind of minor individual variations of the Thang as in Exx.46(b)-(d).

Exx.48(a)-(c)

2) The Thang in fast running notes (the Kep style), for which two players show a preference (Ex.49):

Ex.49
The Thang illustrated in Exx.48(a) and 49 are both widely used and taught.

Wak C of the first Chang Wa

Again, two main Thang are involved:

1) The Thang which ends on pitch A (see Ex.50(a)). As before, my Exx.50(b) and (c) show the variants of the basic model introduced by individual players:

Exx.50(a)-(c)

2) The Thang that ends on the pitch G (see Ex.51).

Ex.51

When I first studied the Chorakhe Hang Yao I was taught both Thang, ending on pitch A and pitch G. My teacher explained to me that the Thang which ends on
pitch A (Ex.49) is widely used for the 'Khruang Sai' (string) ensemble because it is best suited to the limited range of the instruments. In the case of the Pi Phat (percussion) ensemble, however, where the range of the tuned percussion is altogether wider, both Thang, on pitch A and G, are technically effective. Of course, when the percussion instruments are playing with the string instruments, it is the Thang on A which will predominate, because A is most appropriate for the strings. But it is interesting to observe that when the Khong Wong Yai players were demonstrating their Thang to me, i.e. in the absence of the string ensemble, three players out of the seven instinctively chose the Thang on G (see the transcription, p.25), while the majority stuck to A. Naturally, these three players would revert to the Thang on A when playing with the Khruang Sai. However, in general, and according to my experience, it is the Thang on G that is preferred for use by the Pi Phat ensemble. Therefore, the pitch at the end of Wak C will be determined by the constitution of the ensemble involved, i.e. it will be A when performers are string players (or string players plus percussion) and G when it is a percussion ensemble that is involved. This is an interesting example of the flexibility of Thai compositional techniques, so many of which have their origins in the character and potentialities of the instruments.
Wak D of the first Chang Wa

Two Thang can be observed:

1) The Thang which leads the preceding Wak (which had ended on A) to pitch D, see Exx. 52(a) and (b):

Exx. 52(a) and (b)

2) The Thang which again leads to D, but this time from the pitch G which has ended the preceding Wak (see Exx. 53(a) and (b)):

Exx. 53(a) and (b)

The Thang above (Exx. 53(a) and (b)), and the Thang of the preceding Wak, show in fact a special relationship: neither Thang makes complete sense in isolation. It is only when the two Thang are heard as
one continuous unit that musical sense is achieved (see Ex.54). We observe that in this case pitch A is delayed by one beat and preceded by the pitch G. It is then from the postponed A on the second beat of the bar that Wak D makes its way to the concluding pitch D. This one bar presents an interesting example of how in Thai music a rule is simultaneously observed and modified:

Ex.54.

\[\text{\textcopyright 2023}\]

Wak A of the second Chang Wa

All the players performed the same identical Thang. It is only at this one place in my research that the seven players all played the same notes in the same rhythm.

Likewise, in Wak B, C and D, the Thang remains the same (with slight differences in rhythm) for all players. Also, during the repeat of this Section (see my transcription, pp.28-31), as I have mentioned earlier, none of the seven players introduces any variations.
SECTION II

Wak A and B of the first Chang Wa

It should be remembered that the Thang of these two Wak is identical with the thao which has been used for the Wak A and B of the first rhythmic unit of Section I(a) and (b) (see my discussion on pp.43-46).

Wak C of the first Chang Wa

Three slightly different Thang can be observed:

1) The Thang for which three players show their preference (P1 and 2 choose Ex.55(a) and P4, Ex.55(b)):

Exx.55(a) and (b)

2) The Thang preferred by one player (P5, Ex.56(a)). My Ex.56(b) shows a variation introduced by the same player when making the repeat:

Exx.56(a) and (b)
3) The Thang for which two players show a preference (P6 and 7, Exx.57(a) and (b)):

Exx.57(a) and (b)

The Thang shown in Exx.55 and 56 are probably more widely used because they provide a smoother and more practical transition from the end of the preceding Wak to the beginning of the succeeding Wak. My music examples below illustrate this point:

Exx.58(a) and (b)

In Ex.58(a) a smooth transition can be achieved either from the octave C or simultaneous fourth (C and G) by moving either to a broken octave D or A. On the other
hand, the alternatives in Ex.58(b) demand exceptional skill from the player. If he brings the preceding Wak to an end on the fourth, then he has simultaneously to move both hands downwards to the lower octave for the repetition of that interval. If he has ended on the octave C, then his right hand has to make a downwards octave leap while his left hand moves a fourth downwards. It is the negotiating of these wide leaps which accounts for the technical difficulties, especially when, as in Section II, the tempo of the music is gradually increasing. We may wonder why the player I have transcribed as P6 when making the repeat avoided the difficult transition he previously had undertaken as shown in Ex.58(b). I think undoubtedly he was influenced by his memory of the technical difficulties involved, while forgetting in fact that the thao at the repeat concluded on a pitch, G, which could have allowed him to achieve his first idea for the transition without a wide leap. Ex.59(a) shows what P6 plays at the repeat: Ex.59(b) shows what he could have played:

Exx.59(a) and (b)
This illustration taken from P6 is perhaps of special interest because it shows how a Thai musician acts to solve or circumvent the problems he encounters as he performs.

In the case of P7, Ex.57(b) illustrates the very witty way in which, technically, he avoids the 'difficult' transition (or progression) we have examined above in the case of P6. He adopts the Thang shown in Ex.56(a) so that it emerges as a Thang which has the character of a single line of melody without simultaneously played intervals, with the result that the first note - C - of this Wak can be comfortably taken by the left hand, the very note which was the last note of the preceding Wak in the same octave. This is an elegant solution of the problem which P6 creates for himself.

Wak D of the first Chang Wa

The Thang of all seven players is virtually identical here, but for some slight variants in a few places.

Wak A of the second Chang Wa

Throughout, all players for the most part play the same Thang, but there are two points worth making:

1) At the beginning of the Wak five players (P1, 3, 4, 6 and 7) play the first two pitches (F and G) at a
fast speed which is the technique known as 'Sabat'\(^*\) (Ex.60(a)). On the other hand, the other two players (P2 and 5) play these two pitches at a normal speed (Ex.60(b)):

Exx.60(a) and (b)

\[\text{Diagram of Ex.60(a) and (b)}\]

2) The Siaw technique occurs at the second bar of this Wak when the D and F are played simultaneously (see Ex.60), and the direction of the Thang rises upwards from D on the first beat to F. But as the range of the Khong Wong Yai does not permit F to appear at the higher octave, the D therefore remains in the upper part as an ostinato. At the repeat of this Wak (see my transcription, p.38), only one player (P6), surprisingly, avoids the Siaw technique, by substituting in his Thang E for F, which allows him to play E at the upper octave (see Ex.61):

\[\text{Diagram of Ex.61}\]

\(^*\) For further discussion of the Sabat, see p.106.
At the beginning of the repeat of Section II (my transcription, p. 36), the thao on pitch C, as discussed earlier, on p. 45, is altered to G. The first Wak of this thao on G is played by all seven performers with only very slight variants (compare Exx. 62(a), (b), and (c)): Exx. 62(a)-(c)

It is interesting to observe that the simultaneous playing of the fifth is specially introduced here in the middle register at the beginning of the Thang as shown in Exx. 62(a), (b) and (c). The intervals of the fifth (and also the sixth), generally speaking, are used when the upper and the lower parts of the Thang, because of the range of the instrument, cannot be simultaneously played in a high register at the interval of an octave.
On the other hand, the fourth, again broadly speaking, is the interval that is customarily used in this middle register; and therefore it is the fourth that we would expect to hear at the beginning of this thao on pitch G. In my view, the reason for the use of the fifth here in the middle register is this: that the fifth makes a strong, surprising and charming effect, which in addition emphasises the pitch around which this thao is built, and at the same time, marks the beginning of the thao.

Four players (P1, 2, 4 and 6) make use of the interval of the second, simultaneously playing the pitches D and C (at the beginning of the thao on pitch G, illustrated in Ex.62(c)); and D is, in fact, added here in order to make a particular effect. Three players (P3, 5 and 7), however, prefer to play this passage without the second (see Ex.62(a)). Two players (P5 and 7) prolong the fifth (G and C), and then play the succeeding two pitches in the style of Sabat (see Ex.62(b)).

In Wak B of this thao on pitch G, six players (P1, 2, 3, 4, 5 and 6) prefer to play in the regular Kep style (see Ex.63(a)) while only P7 introduces an individual Thang in which he reduces the quality of fast notes by prolonging the simultaneous interval of the fourth, following it with Sabat, and then with simultaneous octaves (see Ex.63(b)):
Exx. 63(a) and (b)

\[\text{(a)}\]
\[\text{(b)}\]

**SECTION III**

**Wak A and B of the first Chang Wa**

The Thang of all seven players is virtually identical here, but for some slight variants in a few places (see transcription, p. 40).

**Wak C of the first Chang Wa**

Four slightly different Thang can be observed (see Exx. 64(a), (b), (c) and (d)):

Exx. 64(a)-(d)

\[\text{(a)}\]
\[\text{(b)}\]
\[\text{(c)}\]
\[\text{(d)}\]
The Thang shown in Ex.64(a) is preferred by four players (P3, 4, 5 and 6), and is most widely used among players generally. In Ex.64(c), P2 achieves a variant of the Thang in Exx.64(a) and (b) by employing the Sabat technique, which is substituted for the simultaneous playing of the fourth. The Sabat here observes the outline of the Thang, but arrives at the same pitch goal, D, by prolonging the A and succeeding it by the three ascending pitches, two of them fast notes, which is a characteristic rhythmic feature of Sabat. Ex.64(d) shows once more how P7 introduces an individual Thang. He chooses not to adopt the conventional Kep style at the beginning of the Wak but introduces the simultaneous playing of the third (on pitches F and D), prolongs it and then follows it with Sabat.

Normally, one would have expected the melody pitch D to have been simultaneously played with the fourth below, i.e. as in Ex.65:

Ex.65

\[ \text{\includegraphics{ex65.png}} \]

But in terms of practical performance an awkward downwards leap for both hands would be involved in playing the fourth. Therefore, P7 adopts a characteristically ingenious solution, as shown in
Ex.64(d). He makes an addition by repeating the pitch F with his right hand, while with his left hand playing the obligatory pitch D. This not only ensures a smooth hand progression but at the same time introduces the agreeable and fresh effect of the simultaneous third.

**Wak D of the first Chang Wa**

Two slightly different Thang can be observed (see Exx.66(a) and (b)):

Exx.66(a) and (b)

```
(a)
(b)
```

An interesting feature here is the use of a simultaneous second in the first example and a continuation of the Thang which develops rather strikingly away from the more basic model offered in Ex.66(b). At the same time, we note that the prominent fourths and octaves of Ex.66(b) are also present in Ex.66(a). The broken fourth in the first bar of Ex.66(b) is in fact the result of the range of the instrument, i.e. the lower octave is not available. But the fourth having been introduced compulsorily, it is then
succeeded by a further broken fourth, even though the lower octave is now available. The reason for this is the logic of a sequence pattern of the fourths, followed by a sequence of octaves. This gives Ex.66(b) its good proportions and character. The same principle is active in Ex.66(a), though the concept of the Thang is, as I have suggested, more complex and irregular in structure.

Wak A of the second Chang Wa

Three different Thang are introduced:

1) The Thang in the Kep style (see Ex.67), for which four players (P1, 2, 4 and 6) show a preference:

Ex.67

2) The Thang introduced by P7, where the simultaneous playing of the fourth and octaves is conspicuous (see Ex.68):

Ex.68

Both Thang illustrated by Exx.67 and 68 are contrasted in their hand patterns and rhythm (indeed, the
hand patterns are a result of the rhythmic structure of each Thang), but the pitch outlines of both Thang are remarkably close. Both Thang begin with the pitch F, move upwards to D, and then downwards to G, which is the obligatory pitch on which this Wak has to end. One also observes that although the rhythmic character of each Thang is very different, the Kep style meaning that many more fast notes have to be accommodated, the duration of each Thang is identical.

3) Ex.69(a) shows the Thang which two players (P3 and 5) prefer, where the techniques of Kep and simultaneous intervals are combined. Ex.69(b) illustrates the variant of the Thang shown in Ex.69(a), which P3 introduces when repeating the section (see the transcription, p.42):

Exx.69(a) and (b)
Wak B of the second Chang Wa

Three different Thang can be observed:

1) The Thang which is preferred by four players, P1, 2, 4 and 6 (Ex.70), maintains the Kep style shown in Ex.69(a). P4, however, starts the Wak on pitch E instead of C. In all other respects, his Thang is the same as his colleagues':

Ex.70

```
\begin{music}
\include{music.png}
\end{music}
```

2) The Thang for which P7 shows a preference (Ex.71): simultaneous intervals and broken octaves are used for this Thang:

Ex.71

```
\begin{music}
\include{music.png}
\end{music}
```

3) The Thang for which two players (P3 and 5) show a preference (Ex.72(a)). The Kep and simultaneous intervals are used for this Thang. Ex.72(b) illustrates the variant of the Thang shown in Ex.72(a), which P3 introduces when repeating the section:
Exx. 72(a) and (b)

Wak C of the second Chang Wa

Two slightly different Thang can be observed:

1) The Thang for which six players (P1, 2, 3, 4, 5 and 7) show a preference (see Ex. 73):

Ex. 73

2) The Thang which is introduced by P6, where he adapts the Thang shown in Ex. 73 by using simultaneous octaves during the first half of the Wak (see Ex. 74), while the second half of the Wak remains identical with the second half of Ex. 74:

Ex. 74
Wak D of the second Chang Wa

The Thang of all seven players is virtually identical here, but for some slight variants in a few places.

At the repeat of Section III, six players play the same Thang as the first time round, but P6 introduces a special, individual Thang which is clearly distinguished from the others'. The variation that P6 introduces here does not just differ from how he and the other six players treated Sections I and II, but makes use of the two techniques which often are employed in extensive variations. I shall now examine the Thang P6 creates for the repeat of Section III.

Wak A of the first Chang Wa

Two symmetrical and identical motives, mainly in the Kep style, make up this Wak (Ex.75):

Ex.75
Ex. 76

It is clear that in the creation of this Thang, P6 intended to introduce into this Wak the idea of 'dialogue' ('Luk Lo'), where two groups of instruments in an ensemble imitate one another. P6's intention was confirmed when he played this repeat together with the Ranat Ek player soon after he demonstrated to me his Thang for the Khong Wong Yai. My Ex. 76 transcribes their
'duet', from the beginning until the end of the repeat. It shows clearly the technique of Luk Lo in which the solo Ranat Ek makes the first statement and that statement is then imitated by the Khong Wong Yai. Of course only one player is involved in this Thang, not two. P6 solves the problem by converting the 'dialogue' into a continuous solo line which at the same time preserves the element of imitation (Luk Lo). We also observe that P6 substitutes at the end of the Wak, pitch D for the obligatory pitch G, a substitution which the rules permit.

Wak B of the first Chang Wa

The Thang of this Wak is identical to the Thang of the preceding Wak (see Ex.75). This means that P6 treats his Luk Lo according to tradition when a sequence of Luk Lo (e.g. Ex.68) is always played twice and in this case supplies the correct obligatory pitch D at the end of this Wak.

Wak C of the first Chang Wa

The Thang of this Wak comprises two rhythmically symmetrical motives (see Ex.77):

Ex.77
P6 intends to play this Wak in the style known as 'Luam', where two groups of the instruments in an ensemble play the same Thang (or nearly the same) but overlapping one with the other. This technique is clearly illustrated in Ex.76. At Wak C of the first Chang Wa, the part of the Ranat Ek (on the upper stave) and Khong Wong Yai overlap with one another. The Thang of this Wak is played in Luam style throughout and P6 maintains the pitch D, which is indeed the obligatory pitch with which this Wak has to end.

Wak D of the first Chang Wa

This Wak, like the preceding Wak, consists of two symmetrical motives (Ex.78), which develop from the rhythmic model set up in Ex.77 by the addition of pitch D at the beginning of each motive. P6 still keeps to the style of Luam for this Wak, as shown in Ex.76. It is interesting to observe that the Thang Ranat Ek for this Wak occurs in rather complex and witty forms. While the Thang Khong Wong Yai sticks firmly to the two motives (Ex.78), the Thang Ranat Ek compresses these two motives into one:

Ex.78
This is a typical example of a player using his own imagination and skill to develop away from the basic Luam style while at the same time preserving its essential feature, i.e. the idea of overlapping. Ex.79, on the other hand, shows a simple example of the Luam style which is my own Thang for the Ranat Ek to complement the Thang Khong Wong Yai of P6:

Ex.79

\[\text{Ex.79}\]

\[
\begin{array}{c}
\text{Ranat Ek (con 8 va.)} \\
\text{Khong Wong Yai}
\end{array}
\]

Wak A and B of the second Chang Wa

P6 still maintains the Luam style for these two Wak, but he introduces here a dotted rhythm and reduces the number of pitches in each bar (Ex.80).

Ex.80

\[\text{Ex.80}\]
The Thang Ranat Ek for these two Wak, as shown in Ex.76, is again an example of an individual Thang which develops significantly away from the original idea of overlapping which is fundamental to the Luam style. We also observe at Wak B in the Ranat Ek part the same principle of compression that I described above (p.72) in relation to Wak D of the first Chang Wa. In Ex.81 I show my own Thang Ranat Ek for these two Wak combined with the Thang Khong Wong Yai of P6. The example provides us with a straightforward illustration of the relationship between two instruments in the Luam style.

Ex.81

P6 brings his extensive variation to an end at Wak B of the second Chang Wa. Thereafter, his Thang is identical with what he played first time round.
Sarathi Sam Chan (Third Variation) was composed by Pra Pradit Phairo (Kru Mi Khaek) (1826-1910), who was also the composer of Khaek Borathet. The actual date of the composition is not known precisely. Sam Sao, an old traditional tune in the Song Chan form, was believed to exist during the Ayuthaya period (1350-1767), which Pra Pradit Phairo used as a model for his third variation. He then named it Sarathi.

Saratni, like Chorakhe Hang Yao, takes the traditional form of the Thao. Each variation consists of three sections which are constructed by means of the Prop Kai rhythmic unit. In Sections I and II, the duration of each Section is four Chang Wa (four rhythmic units), but in Section III there are five Chang Wa. This overall duration - for the Thai musician, not too long and not too short - plus the intrinsic quality and interest of the composition, combine to make Sarathi especially appropriate as a composition in which the masters can create complex Thang for the solo instruments, e.g., the Khong Wong Yai, Ranat Ek, etc.. The complexity of the Thang for the solo instruments, and of the techniques involved, could be an independent study in its own right. Some of these elaborate techniques can be observed in my transcriptions of the Thang for the Khong Wong Yai and Ranat Ek.
The following breakdown of the form of Sarathi shows how the vocal and instrumental parts are distributed in the three sections of each variation.

**Chart 4.** The diagram below gives the basic model for the variation form of Sarathi:

```
(a) Vocal
(b) Instrumental (repeated)

Sam Chan
Section I

(a) Vocal
(b) Instrumental (repeated)

Section II

(a) Vocal
(b) Instrumental (repeated)

Section III

(a) Vocal
(b) Instrumental (repeated)

Song Chan
Section I

(a) Vocal
(b) Instrumental (repeated)

Section II

(a) Vocal
(b) Instrumental (repeated)

Section III

(a) Vocal
(b) Instrumental (repeated)

Chan Dind
Section I

(a) Vocal
(b) Instrumental (repeated)

Section II

(a) Vocal
(b) Instrumental (repeated)

Section III

(a) Vocal
(b) Instrumental (repeated)
```
4.1 Sum Niang of Sarathi

Three styles - Sum Niang Thai, Sum Niang Mon and Sum Niang Khamen - are involved in Sarathi. Pra Pradit Phairo ingeniously makes use of more than one Sum Niang in each section. The way in which the composer integrates these Sum Niang is highly effective and much admired by his fellow musicians. This, perhaps, is one of the other reasons, apart from length, that inspired the masters later to create an advanced, complex Thang, based on Sarathi, for solo instruments.

I shall now examine how the composer linked these three styles together.

Section I
First Chang Wa

This Chang Wa is conceived in the Thai style. It is interesting to observe that the composer makes use of all seven pitches in Wak A and B (see my transcription, p.48). These two Wak, therefore, in my experience, skilfully combine two sequences of pitches. Wak A is based on the pentatonic outline, as shown in Ex.82:

Ex.82

\[ \text{Ex.82} \]
Wak B is based on the pitch outline as shown in Ex.83:

Ex.83

It will be observed that in Wak A Pra Pradit Phairo introduces the pitch C (the fourth degree in the outline shown in Ex.82), while in Wak B, he introduces the pitch F (again as the fourth degree, see Ex.83). A striking feature here is that by introducing C into the sequence of Ex.82, the composer is also establishing the new pitch level, C, to which the pentatonic outline of Ex.83 (Wak B) is to be transposed. At the same time the introduction of F in Wak B completes the sequence of seven pitches.

I have shown that two pitch outlines are involved in Wak A and B as composed by Pra Pradit Phairo. If he had composed Wak A with the Thang that I have imagined as Ex.84(a), then only one pitch outline would have been involved in both Wak A and B, i.e. the pitch sequence shown in Ex.83, with the fourth degree, would have served both Wak.

Exx.84(a) and (b)
Wak A and B comprise a thao (see p.42). If this thao had been traditionally composed, Wak A could have concluded on the pitch C. However, Pra Pradit Phairo wants to depart from tradition and introduce the concept of 'modulation' into this first Chang Wa. He indicates his intention by modifying both the rhythmic pattern from \(\frac{3}{8}|\frac{1}{8}\) (as in the traditional thao (see Ex.43)) to \(\frac{4}{8}|\frac{3}{8}|\frac{1}{8}\) (as shown in Ex.84(b)), and the pitch, e.g. Wak A concludes on pitch A, not the traditional C. But of course Pra Pradit Phairo brings the complete thao to an end on the 'correct' pitch, C, at the conclusion of Wak B. Thus Pra Pradit Phairo combines innovation and tradition.

Second Chang Wa

If we consider the structure of the melody in many of its aspects, i.e. intervals, rhythm and hand patterns, we could conclude that this Chang Wa, like the first, remains in the Thai style. On the other hand, if we consider the aspect of pitch, we might conclude that the first half of this Chang Wa is in the Khamen style, because the Thang of Wak A and B of this second Chang Wa shifts, in fact, to the pitch which is shown below (Ex.85):

Ex.85

\[
\text{\includegraphics{Ex85.png}}
\]
Whenever a melody is played on Thai instruments at this pitch, it will in some degree remind a Thai musician of the Khamen style, since it is generally understood that most of the pieces composed in the Khamen style are based on the pitch outline of Ex. 4. The way in which the Thang of this Chang Wa shifts to the new pitch outline that I have just described is, however, very smooth and brief, and occurs in the 'weak' Wak (Wak A and B) as compared with the second half of the Chang Wa. The Thang then moves to the pitch outline which is shown in Ex. 83. For these reasons, therefore, the shift in pitch introduces no more than a hint or touch of the Khamen style. In all other essential respects the Thang is recognizably Thai.

Third Chang Wa

This Chang Wa is clearly conceived in the Mon style. The basic pitch outline associated with the Mon style is shown below (Ex. 86):

Ex. 86

Wak A and B of this Chang Wa are the thao, the melody of which strongly reveals the characteristics of the Mon style. The Thang in Wak C and D, however, make no use of the Mon model; but they are still recognized as
being in the Mon style because they are built out of the same pitch outline which identifies the Mon style and because, in their location, they extend the Mon thao, though in fact the rhythm and hand patterns are basically Thai in character.

**Fourth Chang Wa**

The first half of the Chang Wa (Wak A and B) firmly remains in the Mon style. The rhythm and hand patterns are recognizably Mon, and the pitch outline is identical with the preceding third Chang Wa (Ex.86). The Thang in the second half of this Chang Wa, however, shifts to a pitch outline which is identical with the first half of the second Chang Wa (Ex.85). This is a typical 'modulation' which can be commonly found in many other compositions in the Mon style, i.e. Khaek Mon, whose composer was again Pra Pradit Phairo. This explains why the second half of this fourth Chang Wa is recognized as being in the Mon style. It should be noted that this same Thang is often used in other compositions in the Khamen style, e.g. Sai Pra Chan. This is because the Mon and Khamen styles sometimes share a common pitch outline. Whether the Thang is recognized as Mon or Khamen in character depends on the context in which the Thang is employed.

**Chart 5.** This summarises the sequence of pitch outlines used in Section I of Sarathi. The letters
indicate the first degree of the individual pitch level. The numbers indicate the Chang Wa:

\[
\begin{array}{cccccccc}
1 & 2 & 3 & 4 \\
G & C & F & C & B & B & B & F \\
\text{Style:} & \text{Thai} & \text{Khamen} & \text{Mon}
\end{array}
\]

It is very difficult for a composer to write Thai music in a traditional style when several pitch outlines are involved in a section. Pra Pradit Phairo, however, seems to have no trouble in achieving this in his composition, Sarathi, though there are no less than four pitch outlines involved.

**Section II**

Unlike the first section, there are fewer pitch outlines involved in Section II. The Thang in the first, second and third Chang Wa is firmly rooted in the pitch outline (F) shown in Ex.58. This pitch outline, as I have pointed out earlier, is again associated with the Khamen style. The Thang at Wak C and D of the fourth Chang Wa, however, shift to the other pitch
outline (G) shown in Ex.82, which is associated with the Thai style. In addition, the structure of the Thang, from the point of view of rhythm and hand patterns, also strongly emerges in the Thai style, although some minor elements of the Khamen style are retained. In fact, in all essential respects the Thang of Section II is recognizably Thai.

Section III

There are three pitch outlines involved in this Section. The first, second and third Chang Wa are based on the pitch outline C shown in Ex.83. There is a shift to another pitch outline F for the fourth Chang Wa. Although this again is associated with the Khamen style, the structure of the Thang remains identifiably in the Thai style, there being a lack of essential Khamen characteristics. The concluding fifth Chang Wa returns to pitch level G, and thus confirms the overall Thai character of the Thang for this Section.
4.2 Variation of the Thang

Though the duration of Sarathi is much longer than that of Khaek Borathet and Chorakhe Hang Yao, the individual Thang for the Khong Wong Yai of Sarathi which were demonstrated to me by the seven players, are remarkably similar in character. No player, for example, introduces any variation into his repeat of Section I and II. In the case of Section III, the first and second Chang Wa of which are identical, only two players introduce a variation at the second Chang Wa. The other five players, however, repeat the Thang which they first introduced at the first Chang Wa. For the rest, the Thang of all players from the third to the fifth Chang Wa remain virtually identical.

Why is it that none of the seven players introduces significant variations at the repeat of each section? I believe the reasons for this absence of improvisation is that Sarathi has such a special melodic structure, e.g. its pitch outlines, rhythmic patterns, etc., that it is very difficult for the player to improvise or create variations which are appropriate, i.e. remain faithful to the mood and character of the original melody. So, to be on the safe side, they mostly play Sarathi according to what they have been taught. It is very likely, therefore, that what we hear today is the Thang that the composer of Sarathi himself composed.
Such minor variations of the Thang of Sarathi as are introduced by the players can be categorised as follows:

1) The Thang which is played in a different rhythm while the outline of its melody remains mostly the same (Ex.87(a):

Ex.87(a)

In Ex.87(a), the upper stave illustrates the Thang when played in a straightforward rhythm. The lower stave illustrates a syncopated rhythmic variation which occurs at the beginning and end of the Wak.

Ex.87(b)
Ex. 87(c) and (c) illustrate a similar type of variation to Ex. 87(a).

The use of syncopation is an essential technique and one that is widely used by all players on the Khong Wong Yai. There is no specific rule as to when syncopation should be introduced: the player has to depend on his own judgement and experience, and on what he has learned from his master. But we observe that syncopation most often occurs at the beginning of the Wak, though in fact Ex. 87(b) occurs in the middle of the Wak and Ex. 87(c) in the middle and at the end.

2.) The Thang which results from filling out the existing straightforward rhythm with repeated faster notes (Ex. 88(a)):
In the case of Ex.88(b), however, in the first bar of the lower stave the player modifies the dotted rhythm of the upper stave and adds the octave; and where repeating the E in the second bar adds the pitch a fifth below. It is also interesting to observe that in Ex.88(b), which, like Ex.88(a), is a Thang in common use among players, it is possible for bar 1 of the upper stave to be succeeded by bar 2 of the lower stave or vice versa. A further point to note is that the shape these variations take is always influenced by the practicalities of performance on the Khong Wong Yai.

Ex.88(b)
We also encounter individual Thang, distinct from those in common use. Ex.88(c) is one of these, though it follows the type already shown in Ex.88(a) above.

Ex.88(c)

In Ex.88(d) we find a combination of syncopation, repeated notes and a more elaborate left hand part. We also observe how this Thang continues the rhythmic energy and impetus of the opening Sabat which leads so skilfully into the syncopation and ensuing motive in bar 2:

Ex.88(d)
In Ex.88(e) (lower stave) the player elaborates in octaves on the version shown in the upper stave, though remaining faithful to the pitches D and E, but at the same time secures a smooth descent to pitch G at the beginning of bar 2 by introducing pitches C and A:

Ex.88(e)

This contrasts strongly with the leap of a sixth downwards in the upper stave, from E to G. A conspicuous feature of this Thang is the balance it achieves between the descent of bar 1 and the ascent of bar 2, which also ends with an exact inversion of the last three descending notes of bar 1. We note further that the player while employing octaves in bar 1, as a proper demonstration of his performing ability on the Khong Wong Yai, in bar 2 keeps to the model shown in the upper stave, because otherwise his own Thang would become too personal and too decorative. It was this consideration, I believe, that this player had in mind.
3) The Thang which differs slightly in its melodic structure. These Thang can themselves be sub-divided into groups:

(i) Variations which mostly share the same rhythmic pattern but offer alternative pitches. In the lower stave of Ex.89(a) the player finds a new approach in bar 1 to pitch G in bar 2, which in all other respects is identical in both staves. In Ex.89(b), however, the player makes a new ascent to pitch A in bar 2, carries the ascent to C, and then begins a complementary descent to pitch F (compare also Ex.89(e) above), in which simultaneous octaves replace the broken octaves in the upper stave. No doubt the reason for the move to pitch C was to avoid a sequence of unacceptable repeated simultaneous octaves on A. Ex.89(c), bar 1, speaks for itself.

Ex.89(a)
In Exx. 89(a), (b) and (c) above, the Thang shown in the upper staves are those most widely used by players, while the lower staves are individual creations.

(ii) Variations in which, as in Ex. 90(a), the Thang as shown in the upper and the lower staves remain very close, especially in rhythmic patterns. In the lower stave on the first beat of bar 2, the dotted rhythm of the upper stave is brought into line with the even pattern of semiquavers - the Kep style - which the player adopts as the basis of his variation. In Ex. 90(b), bar 1 is identical in both versions, but in
bar 2 of the lower stave, the player delays the beginning of the ascending scale (from pitches F to C) to the second beat, which means arriving on the C, correctly, on the first beat of bar 3. In the upper stave, the scale has started earlier, which has meant, rather interestingly, that the final C is anticipated by the last quaver in bar 2, an octave lower, an intentional effect created by the player and one typical of the Mon style. Ex.90(c) shows a rhythmic modification of the Kep style (in the upper stave) and the introduction of simultaneous intervals of the second and the third. Ex.90(d) shows the reverse situation: the lower stave is in the Kep style. We also observe that the Thang of the lower stave concentrates on one aspect of the directional outline of the Thang of the upper stave; i.e. the Thang from the start continually descends until it reaches pitch A at the beginning of bar 3.

Ex.90(a)
All these Thang as shown in Exx.90(a) - (d) are in common use among players on the Khong Wong Yai.
(iii) Thang which very significantly depart in melodic (and sometimes rhythmic) outline from the version which is in common use among players, e.g. Exx.91(b) and (c), both of which are variations of Ex.91(a):

Exx.91(a), (b) and (c)

Ex.91(d) shows how far on occasion the variation can depart from the model: compare the lower and upper staves, though one notices that the variation in the Kep style is careful to continue to accent the pitch E which is conspicuously part of the upper stave. At the same time the variation in bars 3-5 introduces an interesting ascent and descent to the obligatory concluding pitch.

Ex.91(d)
5.1 Description

Ranat Ek, a tuned percussion instrument constructed out of two principal parts, one known as the 'Phuen Ranat' and the other as 'Rang Ranat'.

'Phuen Ranat' is usually abbreviated to 'Phuen' once its function has been understood. A Phuen generally comprises a set of twenty-one wooden keys. It is quite common, however, to find that a large number of Phuen have an extra key added, to extend the upper range of the instrument. The keys which form the Phuen are made of either bamboo or some varieties of hard wood. The lowest toned key is approximately 38 centimetres long, 5 centimetres wide and 1.5 centimetres thick. The keys gradually get smaller and thicker as the pitches become higher. These figures are approximate. In fact, the Phuen can be found in slightly different sizes, which depend on the condition of the material and the personal preference of the makers. The rack of keys is supported by a piece of cord which passes through two holes at the two ends of each key. The pitch of each key is at first made slightly higher than it should be, by adjusting its thickness; the correct pitch is finally secured by sticking a mixture of beeswax and lead to the underside of the key.
Fig. 2 The Ranat Ek
'Rang Ranat Ek' is usually abbreviated to 'Rang'. Its function is to support the Phuen and to act as a resonating sound box. A Rang can be simply made, with plain surfaces. On the other hand, if it is preferred, it can be elegant and attractive, in which case its outer surfaces are gracefully carved and inlaid with various materials like mother of pearl, ivory and gold leaf.

The Phuen has to be suspended across the Rang before the Ranat Ek is ready to play. The instrument is played with a pair of mallets, with round heads, approximately 4 centimetres in diameter. Generally speaking, for the Pi Phat ensemble a hard-head mallet is used with the Ranat Ek, but if a more gentle sound is required for some reason, then a soft-head mallet is used.

The Ranat Ek is so-called in order to distinguish it from the Ranat Thum (the lower-pitched xylophone) and the other two metallophones (the Ranat Ek Lek and the Ranat Thum Lek). In earlier times, the instrument was simply known as the 'Ranat', before the other types of instrument were developed.

There is no evidence to explain how and when the Ranat was first made. The first appearance of this instrument is found in a painting from the late Ayuthaya period, around 1730. We learn from the painting that the Ranat that was used in those days looks very much like the modern instrument. Therefore we have good
reason to believe that the Ranat must have existed and then been developed for a considerable period before 1730. It is thought that the Ranat must have developed from various primitive untuned percussion instruments made of bamboo, such as the 'Krong', 'kro' (spelled with a small 'k' to distinguish it from the Kro (tremolo)) and 'Krap'. Some Thai scholars have suggested that the Ranat Ek was probably in use in an early period of Thai history, only among commoners, however, not at court. Nor was it considered to be an important instrument until the court had recognized its popularity and accepted its use.

**Traditional method of learning**

Among the Thai percussion instruments, the Ranat Ek is recognized to be the most important. It is this instrument that always plays the leading role in the Pi Phat ensemble; for example, by setting the tempo for an ensemble and making an introduction or a transition when an ensemble takes over from a singer. Moreover, it is the Ranat Ek player who will often select a suitable repertoire for the ensemble, when none has been fixed in advance.

Because the instrument demands tremendous energy, high skills and the ability to create a good Thang, the Ranat Ek has the reputation of being the most difficult of all the Thai percussion instruments. A good Ranat Ek
player needs to start training very seriously from his early childhood onwards, in order to develop the strength of the arm muscles which is needed for the player to be able to cope with challenging techniques, e.g. playing as many notes as eight per beat in simultaneous octaves at a very high speed and fortissimo. In the past it has been the tradition that only men could play the Ranat Ek. It was considered that the physical demands of the instrument were not appropriate for women to undertake, who were perceived rather as performers on a gentler instrument like the 'So' (the Thai fiddle). Today however the perception is changing and although there are not many, some excellent Ranat Ek players are to be found among women.

In order to master the Thang Ranat Ek, a beginner has firstly to learn the Thang Khong Wong Yai. Once the basic melody has been thoroughly memorised, the master then offers the pupil a Thang which is appropriate to the instrument's style and also tailored to the individual player. A beginner stays very close to his master while developing his Thang on the Ranat Ek and increasing his repertoire. When he possesses a sufficient repertoire, and his technique and Thang have matured, he then leaves his master to enter the musical world on his own and takes his place in society.
5.2 Techniques on the Ranat Ek

To play the Ranat Ek, a performer customarily sits upright on the floor, cross-legged, with the right leg across the left. It is traditional in Thai culture for the right to have precedence over the left. It should be noted that it is also a custom and common for Thai people to sit on the floor. Sitting upright and cross-legged, for the Thai makes an impression of confidence which men mostly prefer. The other common position, but one that is a shade more relaxed, is to sit with legs folded back, either to the right or left, with the feet pointing in the same direction, a position preferred by most women or youngsters in an adult context. It is interesting to observe that whereas the upright, cross-legged position is adopted in the Pi Phat ensemble, for the gentler string sound of the Khruang Sai, the more relaxed posture is often found.

Although the idea that musicians should sit on chairs has been experimented with, with their instruments, when necessary, raised on desks, it has not won popularity among Thai performers.

When a Ranat Ek player holds the two mallets, it is very important that all the fingers of each hand firmly grip each mallet and participate in the control of the action when striking the keys.

Before learning a proper Thang, a beginner must practise playing slowly upwards and downwards on the
Phuen in simultaneous octaves to perfect the synchronization. Meanwhile, a player learns to produce, at the very first stage, a balanced sound, equal as between his right and left hand, which he entirely controls with his arms, not wrists. When the simultaneous playing of octaves has been secured, a player then begins an easy exercise or a simple Thang. Practising an exercise or a piece, without break, for no less than an hour per session, is indispensable for the player who is determined to succeed. Sessions usually occur very early in the morning - a time which is cool and quiet, and when one's own mind is fresh and clear.

The two main techniques

I) The Kep: as I have already mentioned, this is a technique (or style) of performance on the Ranat Ek which converts the main melody into symmetrical groups of four pitches (i.e. semiquavers) on each beat of the bar (in 2/4). The rhythm is constant but the pitches may vary. This semiquaver figuration, which is played by both hands on the Ranat Ek in simultaneous octaves, is also used by the other tuned percussion instruments.

Generally speaking, the Ranat Ek is associated in a composition with only one of the two main techniques - either the Kep or Kro. The majority of compositions in the Thai repertoire for the Ranat Ek are played in the Kep style, which is the oldest. A very interesting
point to be made about Kep is that it is a style which allows the player a lot of freedom, i.e. he can design for himself a sequence of pitches, in semiquaver figuration, corresponding to the basic melody. The Thang Ranat Ek in the Kep style can appear in a composition in a very simple or highly decorative form; and because Kep permits both simple and complex Thang, there is no need for a special composition for use by beginners on the Ranat Ek, who will learn the simple Thang, introduced to them by their masters, whichever composition is being studied. This characteristic freedom - which is also shared by other instruments - might be said to reflect Thai society, which is often described as 'loosely knit' (Phukhaothong 1989: 19).

How the Kep technique for the Ranat Ek functions in relation to the basic melody is still unclear and awaits theoretical explanation. In my experience, a good Ranat Ek player instinctively knows how to produce the Kep technique, but finds it difficult to give an account of how he does it. Furthermore, because Thai music is an oral tradition, there is very little material or evidence to study, only the music itself; and to understand the techniques involved, one has to learn them through performance. It is now important that theoretical evidence should be collected and the relevant materials transcribed, so that we can begin to know more about how the system of the Thang operates.
Characteristic models of the Kep

An explanation of eight possible models of the Kep on the Ranat Ek has been published by Master Prasit Thavon (Thavon: 1979), a well-known Ranat Ek player. The eight models of the Thang Ranat Ek he discussed in his article were named and taught to him by his teacher, Luang Pradit Phairo (Son Silapabanleng), a great Ranat Ek player and composer (1881-1954). At a later time these eight models were demonstrated on the Ranat Ek to the public in Bangkok by Master Prasit (and his pupils) at the Music Centre of the Bangkok Bank (6 June 1987). The eight different models are built out of the same basic melody, which is shown as No.9 in Ex.92 on p.104.

The eight models have titles, each beginning with the word 'Klon', which refers to a sequence or pattern of words used in Thai poetry: and the same word is sometimes used when the structure of the Thang is discussed. The meaning of the titles is as follows:

No.1: 'Klon Sab'. 'Sab' literally means 'to chop', e.g. food, a piece of meat or vegetable. The idea of 'Sab', of 'chopping', is illustrated by the emphasis in model No.1 on two identical and adjacent semiquaver patterns (see No.1, Ex.92). This creates a chopping effect.
No.2: 'Klon Tai Luat'. 'Tai' means 'to climb': 'Luat' means 'a length of wire'. To climb on a length of wire, one should perhaps proceed smoothly. Thus this model is built out of a smooth sequence of pitches, which move either upwards or downwards, mostly step by step.

No.3: 'Klon Tai Mai'. 'Tai' means, as before 'to climb': 'Mai' means 'a length of wood'. So this model is similar to the model of Klon Tai Luat, but with slightly different features.

No.4: 'Klon Lot Ta Khai'. 'Lot' means 'to get through': 'Ta Khai' means 'a net'. This model is constructed out of the sequences of four notes, which are carefully interrupted by a wide leap, the 'gap' in the net.

No.5: 'Klon Doen Ta Khep'. 'Doen' means 'to walk' or 'to travel': 'Ta Khep' means 'a seam'. According to Master Prasit this refers to a seam in a piece of cloth which has a zigzag shape; and it is a zigzag motion that guides the shape of this model.

No.6: 'Klon Yon Ta Khep'. 'Yon' means 'to reverse': 'Ta Khep' means, as explained above, 'a seam'. This model, as its title suggests, is similar to No.5 but the pitches move upwards and downwards in slightly different patterns. We also observe that the second half of this model 'reverses' the direction of the first half.
No.7: 'Klon Roy Luk So'. 'Roy' means 'to compile': 'Luk So' means 'a length of chain'. This model is constructed out of a chain of eight pitches written across the bar. The four 'links' comprise the 'chain'.

No.8: 'Klon Son Ta Khep'. 'Son' means 'to hide' or 'conceal': 'Ta Khep' means, as before, 'a seam'. This model is clearly similar to Nos.5 and 6 but 'conceals' the pattern by using a different shape.

The Thang Ranat Ek by Master Prasit, which I have transcribed on p.104, are very useful for the analysis of how these Thang are constructed, because they are, in their entirety, built out of an identical basic melody, the duration of which consists of half a Prop Kai rhythmic unit. The structure of these Thang can be examined as follows:

(i) The duration of each Thang is also identical to the duration of the basic melody which was used for this demonstration (compare No.9, p.104).

(ii) The pitches at the end of each Thang are identical with the pitch (F) at the end of the basic melody. This is the only pitch of structural importance and, like duration, is adhered to in all the Thang. The concluding pitch F is extremely important because it declares the relationship of each Thang, conceived in the Kep style, to the basic melody. If some other pitch or pitches were used to conclude the Thang, this
would result in the Thang not relating to the basic melody. This system guarantees that musicians will be able to recognize the correct composition when a Ranat Ek player is performing solos without the accompaniment of the basic melody.

(iii) Each model might be said to comprise a continuous sequence of groups of four pitches, i.e.

Model No.1

![Model No.1](image)

Model No.2

![Model No.2](image)

(iv) The groups of four pitches are freely chosen, but we observe that most of them make use of pitches derived from the basic melody (see models Nos.1, 2, 4, 5, 6 and 7, p.104).

(v) The groups of pitches in models Nos.3 and 8 are largely independent of the pitches of the basic melody. But the unity between these Thang and the basic melody is confirmed when the concluding pitch proves to be F, which is the final pitch of the basic melody.
(vi) Generally speaking, and whether or not the pitches involved are close to or distant from the basic melody, each model proceeds in a smooth progression, with no leaps in excess of a fifth. The exception is model No.4 in which there are leaps as wide as a seventh and an octave. The big leaps, of course, are part of the character of this particular Thang.

II) The Kro: this is a technique, already mentioned earlier (see p.10), which enables a player to achieve a lyrical melody in which pitches of long duration are sustained by alternating rapidly the two mallets on the Phuen, most often an octave apart. The Kro always begins with the left hand. As I have said before, the Kro technique can be applied to all other tuned percussion instruments. This technique - which has something in common with the Western tremolo - was established in the early twentieth century by the most famous of Ranat Ek players, Luang Pradit Phairo (Son Silapabanleng), who also composed a large number of compositions which make prominent use of the Kro technique: and because of this significant feature, these compositions are known as 'Phleng Kro', a composition in the Kro style. Ex.93 compares my Thang Ranat Ek, played (a) with the Kro and (b) in the Kep style, both Thang being built out of (c) the identical basic melody:
5.3 Decorative features

(i) The Sabat Technique: Sabat means 'to shake'.

I have mentioned earlier that this term refers to a passage where an extra pitch is added (or sometimes two pitches). As a consequence, shorter note values are introduced. Ex.93 illustrates the Thang Ranat Ek with the Sabat technique (a) which is built out of a passage in the Kep style (b):

Exx.94(a)-(b)
A player can use the Sabat technique in an actual performance as much as he likes, and I shall discuss this further on pp.125-126.

(ii) The 'Khayi' technique: 'Khayi' means 'to crush'. This term refers to a passage which is built out of demisemiquaver figuration. Here again, a player can use this technique according to his preference. Ex.95 compares (a) the Khayi and (b) Kep techniques, both Thang being built out of (c) the identical basic melody.

Exx.95(a)-(c)

A Ranat Ek player commonly uses the Sabat and Khayi techniques to decorate his Thang while performing in an ensemble. When he turns to a virtuoso solo piece, then his Thang is expected to become highly elaborate, with the introduction of other complex techniques which I do not propose to discuss in this study.
CHAPTER 6: THANG RANAT EK FOR KHAEK BORATHET

If one has little knowledge of Thai music, one may find it difficult to understand the relationship between a basic melody and its version on the Ranat Ek. The difficulties will significantly increase when the Thang Ranat Ek is played without the accompaniment of its basic melody. Even when the Thang Ranat Ek is accompanied by the basic melody in an ensemble, the relationship can still be difficult to perceive, as my transcription of the Thang of the seven players in Khaek Borathet already shows.

When I made my tape recordings of the Thang Ranat Ek in Thailand, between 1987 and 1988, I did not give the players any instructions, apart from naming the compositions which I proposed to them, in which they would demonstrate their Thang for me. The result was that there are a number of individual approaches to the Thang Ranat Ek for Khaek Borathet. These may be discussed as follows:

(i) P1, 3, 4 and 5 instinctively preferred to use soft mallets, while P2, 6 and 7 chose to play with hard mallets.

(ii) P1, 3, 4, 5 and 6 played their Thang with one repeat of each section. P2 and 7, however, demonstrated their Thang with five repeats of each section, thinking that it would be useful for me to have demonstrated more
than one possible appropriate version of the repeat of each section. I have transcribed here only one repeat of both these players, P2 and 7, in order that their Thang can easily be compared with the other players'.

6.1 Four techniques as used in Khaek Borathet

If one examines the transcription of the Thang Ranat Ek in Khaek Borathet (pp.100-115), one finds that Kro, Kep, Sabat and Khayi are the only techniques used by the seven players. The Kro technique only occurs at the beginning and end of a composition. The Sabat and Khayi techniques are used principally as decorative figuration, for the most part in a slow tempo. When the tempo gradually increases, these techniques are less practicable, and so disappear, and the Kep is resumed, which is the principal technique for this composition.

The Kro technique

All Ranat Ek players make use of the Kro technique at the beginning and end of a composition. By comparison with the Kep, the Kro technique gives us a Thang that is much closer to the basic melody (this, indeed, was one of the reasons for the development of the Kro); and, therefore, it helps the other players in the ensemble to recognize the correct tempo which the Ranat Ek player is establishing, especially in circumstances (at a ceremony, for example) when there has not been time to rehearse.
There are some points to be made about the Kro technique as used in Khaek Borathet which are as follows:

The Kro technique can be used in different locations, but usually within the first Chang Wa. Furthermore, it is mostly used only with pitches of longer duration than a semiquaver, e.g. a quaver or crotchet.

Apart from one's own experience and preference, there is no rule, again, for how the Kro should be used. However, we observe that P1 and 4 use the Kro only on one pitch, A, i.e. altogether less than the other players. P1 was playing his Thang for me as a solo, with the accompaniment missing, so there was no need for him to establish the tempo for anybody other than himself. On the other hand, while P4 in fact played his Thang with the accompaniment of the basic melody (the Thang Khong Wong Yai), there was no need for him either to indicate the tempo by significant use of the Kro, since it had already been set in advance of the recording being made.

P2, 3 and 5, similarly, use the Kro technique between Wak A and B of the first Chang Wa. The three players play their Thang solo, again without accompaniment, but they make much more substantial use of the Kro than do P1 and 4, as if they were indeed intending to indicate their
tempi to their colleagues in an ensemble. In the case of P7, the Kro his Thang reveals is interestingly expanded to a much greater degree than any of his colleagues, although again he was playing solo without accompaniment. P6, on the other hand played his Thang with the basic melody. But this is a very interesting example. In Wak A, he displays a virtuoso use of the Khayi technique. In Wak B, when the Thang Khong Wong Yai enters, he turns from the Khayi to the Kro, in order to establish the correct tempo. What we learn from all the examples so far analysed is that all the players used the Kro, whether their Thang was played solo or accompanied.

To bring their Thang in Khaek Borathet to an end, P3, 4, 5 and 6 slow down their tempi and make use of the Kro to conclude Section II (see my transcription, p.115). P1, however, prefers to finish off his Thang with the Kep style, and makes no use of the Kro. The Thang of P2 and 7 remain in the Kep style, with no indication of a conclusion, because both of them, as I have explained earlier, continue playing additional repeats.

The Kep technique

Apart from the decorative techniques, Sabat and Khayi, the Kep is the technique predominantly used for
Khaek Borathet by all seven players. The discussion of the Kep below may not follow the order in which the techniques occur in the transcription; but it is more helpful to the reader to perceive the elements of the Kep before approaching the Sabat and Khayi.

**Limitation of the Kep technique**

In a composition, these limitations constitute two fundamental constraints: the fixed length of the rhythmic unit and the obligatory pitches. In the case of Khaek Borathet, each section is constructed out of two Prop Kai rhythmic units (for a discussion of the Prop Kai, see p. 11). My transcription, pp. 100-115, clearly illustrates that the length of the Thang Ranat Ek, as played by the seven players, is absolutely identical with the length of two Prop Kai rhythmic units.

The obligatory pitches, which are incorporated by the composer into the Thang Khong Wong Yai, are located at the end of Wak B and Wak D of each rhythmic unit. Chart 6 below shows the obligatory pitches of Khaek Borathet and their locations:
Chart 6

Section I

Section II
Section I

<table>
<thead>
<tr>
<th></th>
<th>Wak A</th>
<th>Wak B</th>
<th>Wak C</th>
<th>Wak D</th>
</tr>
</thead>
<tbody>
<tr>
<td>KKY</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>E</td>
</tr>
<tr>
<td>RE</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>E</td>
</tr>
<tr>
<td>KKY</td>
<td>C</td>
<td>E</td>
<td>E</td>
<td>C</td>
</tr>
<tr>
<td>RE</td>
<td>C</td>
<td>E</td>
<td>E,C</td>
<td>C</td>
</tr>
</tbody>
</table>

Section II

<table>
<thead>
<tr>
<th></th>
<th>Wak A</th>
<th>Wak B</th>
<th>Wak C</th>
<th>Wak D</th>
</tr>
</thead>
<tbody>
<tr>
<td>KKY</td>
<td>C</td>
<td>A</td>
<td>A</td>
<td>D</td>
</tr>
<tr>
<td>RE</td>
<td>C,A</td>
<td>A</td>
<td>A,D</td>
<td>D</td>
</tr>
<tr>
<td>KKY</td>
<td>C</td>
<td>E</td>
<td>E</td>
<td>C</td>
</tr>
<tr>
<td>RE</td>
<td>C</td>
<td>E</td>
<td>E,C</td>
<td>C</td>
</tr>
</tbody>
</table>

Duration and the obligatory pitches, which Chart 6 above illustrates, comprise the two fundamentals that define a composition. All the seven players, therefore, strictly keep to the 'structural frame' as the basis of their improvisation.

Other pitches which are used to form part of the characteristic Kep figuration in each Wak are a matter of detail, which, in fact, depends upon the preference of the individual player. However, we observe that the pitches occurring at the end of Wak A and C in each rhythmic unit mostly correspond to those of the basic melody. Chart 7 compares the pitches which are revealed.
at the end of each Wak of the Thang Khong Wong Yai and the end of the Wak of the Thang Ranat Ek.

Models of the Kep as used for Khaek Borathet

If we compare the Thang of the seven players with Master Prasit's models (see pp.103-108), we find that none of them is as long as two Wak, which is the duration basic to all the models. What do we find, however, are occasional and probably accidental correspondences between the players' Thang and Master Prasit's models. Exx.96, 97 and 98 illustrate examples of these correspondences:

Ex.96

Ex.97
We have to draw the conclusion here that the players did not significantly base their Thang on the Prasit models but in fact were exercising their own preference and imagination. Ex.99 below shows a completely independent Thang in which no correspondence with a Prasit model can be seen, accidental or otherwise.

Although the shape of the Thang depends on the individual player, what is revealed as the common element among the seven players is that each sequence of pitches in each Wak is principally constructed out of the pitches which occur in the basic melody. Another almost equally important consideration is the smoothness of the sequence, which will avoid the wide leaps which might
otherwise create difficulties for the player in a fast tempo.

The four Thang shown below in Ex.100 illustrate a smooth progression, in which the most prominent steps are seconds and thirds, and only occasionally, fourths and fifths. We observe that the pitches on the accented beats of the Thang of P1, 3 and 4 are mostly identical with those which occur in the basic melody. The first half of the Thang of P1, 3 and 4 illustrate how the individual players create their own Thang out of the two pitches, G and A, which form the first half of the basic melody.

Ex.100
The second half of these players' Thang is quite differently organized, the result of using a different sequence of pitches. On the other hand, the way in which P2 constructs his Thang is relatively independent of the basic melody. His structural pitches on the accented beats do not correspond to those of the basic melody until he reaches the end of the Wak. However, we note that his Thang conforms to the obligation to achieve a smooth progression.

6.2 Added pitches

The basic melody of Khaek Borathet, as I have pointed out on p.13, is constructed out of a pentatonic sequence of pitches, C, D, E, G and A. However, the added pitch B occasionally appears on a weak beat (see the transcription, pp.8 and 16). For the Thang Ranat Ek of Khaek Borathet the use of the added B is often found among the Thang of the seven players, while the pitch F is also occasionally used. Whether to use these two pitches or not depends, again, on individual preference. The two pitches often contribute to making a smooth progression which simplifies playing at a fast speed.

Ex.101 below illustrates a comparison of Wak D of the second Chang Wa from Section II of Khaek Borathet, with and without the added pitches:
We observe, on the other hand, that the Thang of P1 and 4 in Ex.101 have a similarity of direction. Both Thang begin on pitch D, move upwards, and finally end on the pitch C. In contrast, P1 makes use of both added pitches, F and B, in his Thang, while P4 uses only pitch B in the second half. Like P4, P2 uses only pitch B, but he uses it one octave lower. In the case of P6, pitch B
is introduced in the first half of the Thang and he makes use of pitch F in his brilliant Khayi figuration in the second half. The Thang of P3 and 5 are identical, and without added pitches. Finally, the Thang of P7 comprises many notes because he mostly builds his Thang out of the Khayi figuration. Nonetheless, he manages to avoid using the added pitches.

6.3 Klon Fag

Chart 7, p.117, clearly shows that most of the pitches at the end of each Wak of the Thang Ranat Ek correspond to the pitch with which the basic melody concludes. In the case of Wak A and C, however, we observe that the pitches of the Thang Ranat Ek do not match up with those of the basic melody. But if we examine Exx.102(a)-(c) below, we find, continuation of the Thang that succeeds the concluding 'wrong' pitch, that the correct pitch has been introduced: e.g. in Ex.102(a), E soon follows C, while in (b), A follows D, and in (c), C follows E. In other words, 'Klon Fag' is a technique which deliberately delays the introduction of the correct concluding pitch to a later stage, thus correcting the 'wrong' impression made by the placing of the irregular pitch on the strong beat of the bar in question. This typical device is known as Klon Fag. We notice that the technique is only occasionally used. Its purpose is always to introduce contrast, variety and an
element of the unexpected, an interruption (but not an abandonment) of the familiar symmetries.

Exx.102 (a)-(c)

The Klon Fag as shown in Exx.102(a), (b) and (c) are occasionally used by P1, 2 and 6. These can be found in the transcription, pp.103, 107, 109, 112 and 113.
6.4 Decorative features as used in Khaek Borathet

I) The Sabat technique

P2, 5, 6 and 7 make use of the Sabat technique in their Thang, while this technique plays no part in the Thang of P1, 3 and 4. The Sabat technique introduced by P1, 3 and 4 occurs in three different types, as discussed below:

(i) The Sabat technique which is built around selected pitches. See Ex.103, where the arrows identify pitches A and C:

Ex.103

This typical Sabat, used for Khaek Borathet, is generally built on the pitches C, D, E, G and A, i.e. the pentatonic pitches on which the melody of Khaek Borathet is based.

(ii) The Sabat technique consisting of three pitches, grouped in either a rising or falling direction (see Ex.104):

Ex.104
(iii) The Sabat technique consisting of a group of three pitches, in which one pitch is placed above or below the other pitches (see Ex.105):

Ex.105

This is a more difficult technique for the player and if it is to make a good effect, it has to succeed. For this reason it is not widely used among players.

P2 makes use of the Sabat technique in almost every Wak of Section I, but he does not use Sabat to the same degree in Section II. Generally, he prefers to use Sabat of type (i) and occasionally type (ii). He does not use type (iii). The Sabat of type (i) and (ii) are also preferred by P5, but he does not make use of them as frequently as P2. P6, like P2, makes extensive use of the Sabat alternating with the Khayi technique in Section I. All three types of the Sabat can be found in their Thang, though type (iii) shows up less often than the others.

II) The Khayi technique

The Khayi technique in Khaek Borathet varies greatly in extent. The smallest group in the Khayi technique comprises four demisemiquavers. Ex.106 illustrates the
location of this type in a Wak:

Ex.106

More extensive durations of the Khayi technique are shown in Exxs.107, 108, 109 and 110 below.

Ex.107 illustrates the Khayi technique when it consists of six demisemiquavers in each group:

Ex.107

Ex.108 illustrates a group of ten demisemiquavers:

Ex.108

Ex.109 illustrates a group of twelve demisemiquavers:

Ex.109
Finally, Ex.110 illustrates a group of sixteen demisemiquavers:

Ex.110

\[ \text{\includegraphics[width=0.5\textwidth]{ex110.png}} \]

The Khayi technique is used only by P2, 6 and 7. P2 used Khayi in his Thang only twice, while P6 and 7 brilliantly demonstrated in Section I their Khayi technique which often alternates with Sabat.

The Khayi and Sabat are the techniques which demand the most energy and skill. However, they also offer an ensemble the possibility of highly effective tone colour. There is, again, no instruction as to how these two techniques should be employed. It is left to a player's individual judgment.

6.5 Thang Ranat Ek for Chorakhe Hang Yao

The same techniques of Kro, Kep, Sabat and Khayi are used for the Thang Ranat Ek by all seven players, who make a similar approach as described in the introduction to Khaek Borathet. We note that the Thang of P6 at the repeat of Section III significantly differs from his colleagues' approach, because he plays this repeat in the style of Luk Lo and Luk Khat in order to synchronize his Thang with the basic melody, which offers him a special
accompaniment in an extensive variation. (I have discussed this variation on pp.69-74).

The Kro technique is found for the same purpose as in Khaek Borathet, at the beginning and end of this composition. It is interesting to observe that only P5 completely abandons the Kro and introduces the Kep from the very beginning of his Thang. However, he concludes his Thang with the Kro at the end of Section III.

The Kep, which is the major technique used in the Thang for Chorakhe Hang Yao, is based on two elements: the fixed duration of the Prop Kai rhythmic unit and the obligatory pitches found at the end of Wak B and C of each unit. These two elements are in fact the same, in principle, as those used in Khaek Borathet, and which all seven players keep in mind as the 'structural frame' for their improvisation.

A sequence of pitches in a Wak is generally constructed according to the individual player's preference, but all players share a common concern to achieve a smooth progression.

The Sabat and Khayi techniques are extensively used in the Thang in Section I of Chorakhe Hang Yao only by P2 and P6. In contrast, P7, who makes significant use of these two techniques in Khaek Borathet, here uses only one Sabat and nothing of the Khayi in his Thang. The type and duration of the Sabat and Khayi techniques used in
Chorakhe Hang Yao are much like those used in Khaek Borathet.

6.6 Thang Ranat Ek for Sarathi

The techniques of Kro, Kep, Sabat and Khayi are, again, introduced in the Thang Ranat Ek for Sarathi by the seven players, who show a similar approach as already demonstrated in the two other compositions discussed above.

As is customary, the Kro technique is almost always found only at the beginning and end of Sarathi. As for the Kep, which is the major technique used in the Thang, all seven players introduce individual figuration which is very close to the Kep style they employ in Khaek Borathet and Chorakhe Hang Yao. Occasionally, however, in this relatively long piece, we observe a shape in a Thang which corresponds for some length with certain of Master Prasit's models (see Exx.111(a) and (b) below):

Ex.111(a)
As in the other two compositions, it is in Section I of Sarathi that Sabat and Khayi are extensively introduced. At the first Chang Wa of Section I, P2 constructs a very impressive Khayi with the duration of a complete Wak - longer than any invention of his colleagues. This is worth illustrating with a music example (Ex.112):

P7 also stands out here for his use of Sabat and Khayi throughout the whole of Section I (excluding the repeat: see my transcription, pp.140-147). P6, on the other hand, makes no use of the Sabat and Khayi here, but
for a particular reason: he has chosen to play this composition with soft mallets, as if in the context of the Mahori (i.e. an ensemble which combines percussion, fiddles and woodwind).
CONCLUSION

My examination of the Thang Khong Wong Yai and Ranat Ek enables us to draw certain conclusions about the nature of Thai music. It is clear, first of all, that the individual player's Thang is governed by strict rules which affect pitch, duration, symmetry and proportion. In particular, the Thang must synchronize with the rhythmic unit, especially in the three compositions I have chosen. It is the duration of the rhythmic unit that determines the duration of the Thang. Fixed duration and the system of obligatory pitches constitute the two fundamentals of Thai music, and it is the composer who provides the outline which the performer uses as the basis for his own inventiveness and imagination. It is here that one finds evidence of 'improvisation'. But in Thai music, 'improvisation' is far less extensive and free than in some other types of music in which improvisation is generally recognized as having a major role to play. The Thai musician has to observe very strict rules, thus his 'freedom' is limited. At the same time this presents a special challenge to his imagination and skill. It is for this reason I prefer 'variation' to 'improvisation'. Finally, one may conclude that in this combination of the obligatory and the free, Thai music is altogether characteristic of the nation's culture.
### GLOSSARY OF THAI WORDS

(excluding proper names and descriptive titles)

<table>
<thead>
<tr>
<th>Thai Word</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chan Dio</td>
<td>The shortest variation of the Thao</td>
</tr>
<tr>
<td>Chang Wa</td>
<td>The correct collective term in Thai to describe the category proper to the rhythmic unit</td>
</tr>
<tr>
<td>Ching</td>
<td>A pair of finger cymbals</td>
</tr>
<tr>
<td>Kep</td>
<td>A prominent performance technique which is customarily represented by semiquaver figuration in 2/4</td>
</tr>
<tr>
<td>Khayi</td>
<td>A performance technique, developed from the Kep, which is customarily represented by demisemiquaver figuration in 2/4</td>
</tr>
<tr>
<td>Khong Wong Yai</td>
<td>A tuned percussion instrument consisting of 16 gongs. The Khong Wong Lek is a small version of this instrument</td>
</tr>
<tr>
<td>Khrom</td>
<td>The term used to describe the situation when the melodic instruments are out of synchronization with the drums</td>
</tr>
<tr>
<td>Khruang Sai</td>
<td>The ensemble in which fiddles predominate</td>
</tr>
<tr>
<td>Klon</td>
<td>This term is sometimes used instead of Thang, in particular when considering the detailed structure of the Thang</td>
</tr>
<tr>
<td>Klon Fag</td>
<td>A performance technique in which the obligatory pitch at the end of the Wak is postponed</td>
</tr>
<tr>
<td>Krap</td>
<td>Wooden percussion instrument</td>
</tr>
<tr>
<td>Kro</td>
<td>The tremolo technique in Thai music</td>
</tr>
<tr>
<td>kro</td>
<td>An old type of percussion instrument made of bamboo</td>
</tr>
<tr>
<td>Thai</td>
<td>English</td>
</tr>
<tr>
<td>------</td>
<td>---------</td>
</tr>
<tr>
<td>Krong (กิรแรง)</td>
<td>An old type of percussion instrument made of bamboo</td>
</tr>
<tr>
<td>Luam (เทคโนโลย)</td>
<td>The technique of overlapping between the two groups of instruments</td>
</tr>
<tr>
<td>Luk Lo (ลูกเลือ)</td>
<td>The technique of dialogue between two groups of instruments</td>
</tr>
<tr>
<td>Mahori (มหารี)</td>
<td>The ensemble which combines percussion, fiddles and woodwind</td>
</tr>
<tr>
<td>Na Thap Prop Kai (หน้าทับปูไก่)</td>
<td>One of the main rhythmic units used for the Thao form</td>
</tr>
<tr>
<td>Phleng Homrong (เพลงใหม่รอง)</td>
<td>The repertoire of the Thai overture</td>
</tr>
<tr>
<td>Phleng Kro (เพลงกรอง)</td>
<td>A composition in which the Kro technique predominates</td>
</tr>
<tr>
<td>Phleng Naphat (เพลงน้ำ Hạ)</td>
<td>The repertoire of Thai Sacred Music</td>
</tr>
<tr>
<td>Phleng Ruang (เพลงเรียง)</td>
<td>The repertoire in which a continuous sequence of compositions in different tempos is played, hence the equivalent in Thai music of the 'Suite'</td>
</tr>
<tr>
<td>Phleng Sepha (เพลงเสพยา)</td>
<td>The entertainment repertoire of Thai music</td>
</tr>
<tr>
<td>Phuen Ranat (พิภนระนา)</td>
<td>The set of keys for the Ranat, suspended over a resonator</td>
</tr>
<tr>
<td>Pi Phat (ปิผ่าย)</td>
<td>A percussion ensemble in which percussion predominates</td>
</tr>
<tr>
<td>Prakhob (ปราประ)</td>
<td>The technique which describes stopping or damping the resonating note on the Khong Wong Yai</td>
</tr>
<tr>
<td>Ranat Ek (ระนาอีก)</td>
<td>The higher pitched xylophone made of wood</td>
</tr>
<tr>
<td>Ranat Ek Lek (ระนาอีกเล็ก)</td>
<td>A higher pitched metallophone</td>
</tr>
<tr>
<td>Ranat Thum (ระนาทูม)</td>
<td>The lower pitched xylophone</td>
</tr>
<tr>
<td>Ranat Thum Lek (ระนาทูมเล็ก)</td>
<td>A lower pitched metallophone</td>
</tr>
<tr>
<td>Thai Term</td>
<td>English Term</td>
</tr>
<tr>
<td>-----------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>Rang Ranat</td>
<td>The resonating box</td>
</tr>
<tr>
<td>Sabat</td>
<td>A performance technique which ornaments the Thang</td>
</tr>
<tr>
<td>Sam Chan</td>
<td>The longest variation of the Thao</td>
</tr>
<tr>
<td>Siaw</td>
<td>This term describes the situation when the range of the instrument precludes the playing of the melody in simultaneous octaves</td>
</tr>
<tr>
<td>So</td>
<td>A general term for Thai fiddles</td>
</tr>
<tr>
<td>Song Chan</td>
<td>The medium length variation of the Thao (between the Sam Chan and Chan Dio)</td>
</tr>
<tr>
<td>Sum Niang</td>
<td>A general term used when referring to the style of a composition</td>
</tr>
<tr>
<td>Thang</td>
<td>This term has various meanings but in this thesis it designates the version of the basic melody appropriate to the specific instrument.</td>
</tr>
<tr>
<td>Thao</td>
<td>A major compositional form consisting of three variations, the Sam Chan, Song Chan and Chan Dio</td>
</tr>
<tr>
<td>Thao</td>
<td>A musical phrase which is used as a bridge to create a smooth transition between the Wak of a composition or to extend the duration of the Thang so that it synchronizes with the rhythmic unit</td>
</tr>
<tr>
<td>Wak</td>
<td>This means in Thai a short phrase. Throughout my analysis, I have divided the Thang into Wak</td>
</tr>
</tbody>
</table>
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