MELODIC ORGANIZATION AND IMPROVISATION IN THAI MUSIC, WITH SPECIAL REFERENCE TO THE THAANG RÁNAṬ EÈK

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Thesis submitted for the Degree of Doctor of Philosophy

University of York

1997
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Abstract

This thesis is concerned with the analysis of thaang rānaāt eēk (the melodic path of the principal Thai xylophone) and associated methods of improvisation. The first chapter provides general information on Thai melodic percussion instruments: their history, instrumental characters, role, range, and notation systems. The second chapter is concerned with the performance theory of the rānaāt eēk, including the method of learning, practising and improvising. The next chapter examines improvisation on the rānaāt eēk in terms of its idiomatic patterns and phrases (thaang). The major part of the thesis is an analysis of a famous standard of the Thai classical repertoire, phleeng Saāhūkāan, with a detailed consideration of improvisation options for each of its 55 melodic sentences. The final chapter further refines this analysis by grouping similar melodic sentences and considering the most appropriate thaang rānaāt eēk. The conclusion assesses these analyses in relation to the broader issues of improvisation in Thai classical music.
Acknowledgements

I am very grateful to Dr Somsak Ketukaenchan, who advised me to study at York. Reading his unpublished doctoral thesis (The thang of the khong wong yai and ranat ek: a Transcription and Analysis of Performance Practice in Thai Music, University of York, 1989) gave me many more ideas about what and how to study, as well as how to extend our understanding of improvisation, with special reference to thaang ránaät eèk (which is my special interest). I must express my deepest gratitude to Khruu (Master) Prasit Thavorn, not only for his teaching but for his kindness and generosity in allowing me to live in his home, sharing everyday life with him and his family between 1983 and 1987. It was during this period that I learnt most of what I know about Thai music theory, as well as technique of the ránaät eèk. My thesis therefore provides details of learning, practising and improvising ránaät eèk which are mostly based on the theories and performance skills of this national artist, acknowledged as one of the best ránaät eèk performers in Thailand. This gratitude should also be extended to Khruu Luuang Pradit Phailoh (Sorn sinlapabanleeng) who passed on a rich legacy to my teacher of knowledge relating to the ránaät eèk. I should like to thank Dr Neil Sorrell for his supervision and understanding during my study. This dissertation would not be complete or in a more easily-readable form without his kind assistance. I am also grateful to Khruu Boonchouye Sowat, Senior Lecturer in the Music Department, Chulalongkorn University, Bangkok, who helped me transform my hand-written notation into the computer versions used in the thesis. Khruu Pichit Chaiseree, Assistant Professor in the Music Department, Chulalongkorn University, always unhesitatingly met my requests for help from Thailand, in matters of books, other musical materials and information.

Finally, I should like to thank my sponsors, the Academic Division and Alumni Foundation of Chulalongkorn University, and The University of York, who made my study in England possible.
Transliteration of Thai terms

The Cornell University Library system is used in this thesis with corrections to some small errors I have noticed. Other scholars, notably David Morton (1964) in Robert Jones’s adaptation, and Jearaditharporn (1973) in her own adaptation, have used this system. My system, given below, also allows for some simplification of the typing and reading processes, which is especially desirable in a tone language such as Thai.

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Notation

Thai traditional music is transmitted orally and learnt by rote. As a result of contacts with the West and its culture from the middle of the 19th century, attempts were made to notate the music. Staff notation was used for the Thai military band. In this century, the famous musicologist Phra Chen Duriyanga published Thai classical music in staff notation. He expressed his motivation in the following statement:

It is still vivid in my memory, that one day in 1929, he [H.R.H Prince Damrong Rajanuphab] requested me to call on him at his palace, Vang Voradis. He was then, if I remember well, the president of the Royal Institute, the Rachabandit Sapha, as it was then called in Siamese. His Royal Highness expressed to me his great anxiety over the gradual disappearance of the traditional Siamese music, through the death of Siamese music masters, and asked me if I could do something to prevent further loss and to preserve the national music from extinction. I replied to him that it was a great honour for me to be useful in this line of work, and for the sake of the nation and art, I would try my best to devise a system, in which this traditional music could be rendered into Western notation and later edited. (Duriyanga 1948:1)

He was, of course, aware of the fact that the Thai tuning system, based on an equidistant heptatonic division of the octave, does not lend itself readily to Western staff notation, which tends to assume a basis in equal temperament (another equidistant division of the octave, though radically different).

Nowadays, at least three different notation systems are widely used in Thailand, for teaching beginners, for example in schools, and for publications. A cipher system, similar to that universally used for Indonesian gamelan music, is popular. Another uses Thai letters in an equivalent to the sol-fa system. Staff notation is used in several publications and has found favour among scholars, both in Thailand and throughout the world. It has the advantages of being easily accessible and clear in rhythmic details, as well as giving the best visual impression of melodic shapes. These outweigh the problem of tuning discussed earlier. In any case, it can be said that any notation system will involve significant compromises. For these reasons staff notation has been adopted in this thesis.
As a guide to the actual pitches, I give below the 22 notes of the ránaât eêk, as they are shown in this thesis, with their frequencies (Hertz):

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<th>Note (from low to high)</th>
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CHAPTER ONE

An introduction to Thai musical instruments

Thai musical instruments may be classified under the standard four groups of the Sachs-Hornbostel system. Since the focus here is on the rāṇaṭṭ eṅk, more information will be provided on it and the other instruments of the tuned idiophone ('percussion') group, the other Thai instruments being mentioned only for context.

The only plucked chordophone commonly used in the Thai musical ensemble is the chākheē. It is assumed that it was named because its shape resembles that of a crocodile (chhrakkheē.) There are three kinds of bowed chordophones, known as sōŋ : sōŋ duuâng, sōŋ uû and sōŋ saăm saây. Aerophones fall into two main types: end-blown flutes (khlûy) and reed instruments (pîi). Various membranophones are used according to the kind of piece and ensemble. The most respected drum is the small hand-beaten barrel drum with two heads, called tâphoon. It is the one most directly related to this thesis, as it is used to keep the rhythm cycle in phleeng Saāthūkaan (analysed later).

Thai idiophones, however, require more detailed discussion here. Tuned and untuned 'percussion' instruments constitute the major part of the Thai instrumentarium, in that respect relating the main Thai traditional ensembles to those of the other southeast Asian countries, most notably the gamelans of Indonesia and Malaysia. The untuned instruments include the ching (cymbals) and grâp (wooden clappers). The group of six tuned instruments, discussed in more detail below, is the most important and includes the rāṇaṭṭ eṅk, which is the focus of this thesis.
1.1) Ránaâêt eèk

Xylophones are found throughout southeast Asia, notably in Thailand, Cambodia, Indonesia, the Mǒon or Peguan region of southern Burma (Myanmar) and elsewhere in Burma. The Thai believe (for example Yupho 1960: 12-14) that the rânaâêt (a xylophone) evolved from the grâp, two small pieces of wood used to keep the rhythm. Several grâp were made and put in a series, but the notes were coarse and out of tune. They were then laid on two tracks or supports. Further improvements were made and the grâp were constructed in different sizes and supported to allow the notes to resonate freely. To accomplish this, a heavy string was treaded through holes made near the ends of the grâp. The grâp were then placed close together and hung on a supporting stand. Two long, slender beaters with knobs at the end were used. The instrument could now be used to play melodies. Further improvements were made to the shape of the grâp, and a mixture of beeswax with lead shavings was applied to the underside of each one, permitting fine tuning and improving the tone. (The use of tuning wax is common to all of the main tuned idiophones discussed in this section, the only exceptions being the metal versions of the rânaâêt eèk and rânaâêt thûm.) This original instrument was called rânaâêt, and the constituent grâp were named luûk rânaâêt. The full series of grâp which are strung on the cord, forming a continuous flat surface, is called phqqfi. The luûk rânaâêt were made at first of two varieties of bamboo called phâl bông and phâl tong. Later, varieties of hard wood were used, such as mâi ching chân, mâi mâhaât and mâi phâyuuung, but mâi phâl bông has always been preferred because of its beautiful tone.

The supporting resonator case has a shape similar to that of a Thai river boat, curving upwards at each end. This boat-shaped case is called raang rânaâêt. The two pieces which close each end are called khooh, literally 'mask,' (the same word used for masked drama.) This boat-shaped body rests on a squat, pyramid-shaped base, the bottom of which is 22.5 cm
(9") square and the height 8 cm (4"). This base often has carved designs on it. The same
type of support is used under large ceremonial bowls, such as the phaan waeh faá, and may
have been copied from them. The entire instrument may also be referred to by the generic
name for xylophones: raang. In the first Thai musical ensembles only one ránaát was used,
with fewer wooden bars than the present model. More bars were gradually added until the
number became too large for one stand to hold conveniently. So another ránaát was devised to
contain the lower notes. This new model was called ránaát thûm (low ránaát) and the original
instrument which retained the higher notes was called ránaát eèk (first or principal ránaát).

The typical traditional ránaát eèk has 21 bars. The range is shown below (Figure 2).
The final note in brackets is increasingly found on modern instruments. The lowest in pitch is
38 cm (15") long, 5 cm (2") wide and 1.5 cm (1/2") thick. The bars decrease in size but
become thicker as the pitch rises. All are hung on a cord which passes through holes at the
nodes: 7.9 cm (2.75 - 3.50") from the ends. The whole 'keyboard,' spanning about 120 cm
(47.5"), is suspended over the boat-shaped body from two metal hooks inserted into the wood
at each end of the case. Some patterns in this thesis show the full range of the modern
instrument. The majority, however, are conceived for the traditional 21-bar version (as in the
main analysis of phleeng Saathúkaan in chapters 4 and 5). The player needs to know how to
adapt patterns which would naturally want go beyond the range (at either end) of this
instrument. Basically there are two options: transposition up or down one (or two) octaves;
reducing the octave gap between the mallets.
The ránaät player is a leader of the pìt phaát (percussion) ensemble, taking responsibility for performing the introduction to pieces and indicating changes of tempo. The main playing style is a regular sequence of notes in octaves, known as kèp.
1.2) Ránaât thûm

The rânaât thûm originated during the reign of King Rama III (1824 - 1854) and was modelled on the rânaât. The bars are made of similar kinds of wood, or bamboo, but they are longer and wider. The body has a different shape from that of the rânaât. It does not have the boat shape or pivot on a small support but is shaped like an ordinary oblong wooden box, about 126 cm (49.5") by 29 cm (11.6"), with the two ends (khoôn) slightly curved at the top, and there are short legs at each corner to which castors are sometimes attached. The 17 or 18 bars are suspended in the manner of the rânaât. The mallets have larger heads than those of the rânaât eèk, and only soft sticks are used on the rânaât thûm.
A somewhat wayward syncopated playing style is used for the rânaät thûm in order to enliven the sound of the complete ensemble. As a result, the rânaät thûm is sometimes considered the clown of the ensemble. Techniques of playing in octaves or other intervals by both hands simultaneously or alternately are used.

Ex. 2 A typical rânaät thûm melody
1.3) Ránaât eèk lèk

Although the ránaât eèk and ránaât thûm xylophones are standard instruments, metal versions of each were created. The latter add the suffix 'lèk' (iron) and sometimes the former use the suffix 'mai' (wood) to distinguish them, although it is always assumed that they are referred to when no suffix is used. The heavier metal bars are not strung in the manner of the wooden ones but rest on the resonator case and are held in position by pins through holes at the nodes. Tuning is done by filing the underside of the bar. The shape of both the ránaât eèk lèk and ránaât thûm lèk is similar to that of the ránaât thûm (mai). The mallets have bamboo sticks with heads made from thick pieces of untanned hide cut into circles, similar to those of the two khoong wong (discussed later).

The ránaât eèk lèk originated in the reign of King Rama IV (1854 - 1868). At first the bars were made of brass and the instrument was called ránaât thqong. Later, they were also made of iron or an alloy, but in any case they closely resemble those of the ránaât (mai).

Figure 4 The ránaât eèk lèk
The technique of beating in simultaneous octaves is used, similar to the technique usually employed on the ránaât (mai), but the metal instrument does not share the other's leading role.

Ex.3 A typical ránaât eèk lèk melody

1.4) Ránaât thûm lèk

The idea for this instrument, a lower-pitched version of the ránaât eèk lèk, is attributed to the brother of King Rama IV who was known during that reign as the 'second king'. There are 16 or 17 bars, larger than those of the ránaât lèk.

Figure 5 Ránaât thûm lèk
The technique of performing rānāṭ thūm lèk is different from that of the rānāṭ thūm (mai) because of its brighter sound and the greater sustaining power of the undamped sounds. The rānāṭ thūm lèk player chooses the important note in each sentence and embellishes it as a bass part in the ensemble. The technique of syncopation is still used but not as often as on the rānāṭ thūm (mai).

Ex. 4 A typical rānāṭ thūm lèk melody

1.5) Khoọg wong vai

The khoọg wong - 'circle of gongs'- is a development from the single gong, pair of gongs and row of gongs, the framework, placed on the floor and about 24 cm (9.5") high, is almost a complete circle or oval, inside of which the player sits and it is made of a type of large, round rattan. The large inner and outer pieces of rattan, between which the gongs are suspended, are 20 cm (8") apart at the end with the lowest-pitched gongs, narrowing to 17.5 cm (7") at the end with the highest-pitched gongs. There are 16 small knobbed gongs, the largest being about 17 cm (6.25") in diameter, and the smallest 12.5 cm (5"). They are placed with the knob upwards, in ascending order of pitch. The player sits inside the circular frame to play the instrument. The pair of beaters consist of circles of thick, untanned hide into the centre of which a wooden handle is inserted. The khoọg wong probably originated before the rānāṭ because there are old wood carvings which picture pī phaṭ percussion ensembles
which contain the kʰɒ̯ŋ wɔŋ but do not show the rānət. In the olden times, such as in the Ayutthaya period (A.D. 1350-1767) there was probably only one size of kʰɒ̯ŋ wɔŋ in the pî phàt ensemble. Later, when another smaller-sized kʰɒ̯ŋ wɔŋ was devised, this older and larger one was called kʰɒ̯ŋ wɔŋ yai (large gong circle).

Figure 6 Kʰɒ̯ŋ wɔŋ yai

The kʰɒ̯ŋ wɔŋ yai plays the simplest melodies, closest to the basic melody, in order to lead the other instruments and clearly indicate the position of the melodic sentences in the piece. (More will be said on this topic in chapter 3.)
Ex. 5 A typical khǭng wong yai melody

1.6) Khǭng wong lék

It appears that the khǭng wong lék ('small gong circle') was invented during the reign of King Rama III (1824-1854) by skilled musicians. They decided to make an exact, though smaller, copy of the khǭng wong yai to be played in the same pîil-phaât ensemble. (Smaller models of both instruments were designed for use in the máhoorii ensemble, in which a softer sound is required to balance with the predominant strings). The height of the standard khǭng wong lék is 20 cm (8''). There are 18 gongs, the largest of which measures 13 cm (5.25'') in diameter, and the smallest 9.5 cm (3.75''). The beaters are slightly smaller versions of those used on the khǭng wong yai.
The technique of performing *khỏng* wong lék is a kèp style, similar to that of the ránaät. The *khỏng* wong lék, however, is usually played with the hand alternately (sàp) and in a variety of intervals, usually smaller than an octave.

Ex. 6 The kèp style on the *khỏng* wong lék

The information on these six important instruments is summarised in the table below, for easy reference.
### Table of Thai tuned (melodic) percussion instruments

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Material</th>
<th>Pitch range</th>
<th>Method of Playing</th>
<th>Musical Functions</th>
</tr>
</thead>
<tbody>
<tr>
<td>ránaát cēk</td>
<td>wood</td>
<td>middle 3 octaves 21-23 bars</td>
<td>basically octaves, both hands together</td>
<td>leader, sometimes plays the introduction to a piece</td>
</tr>
<tr>
<td>ránaát thum</td>
<td>wood</td>
<td>low 2 octaves 17-18 bars</td>
<td>usually fourths or octaves, both hands together or alternately</td>
<td>uses rhythmic irregularities to comic effect</td>
</tr>
<tr>
<td>ránaát cēk lēk</td>
<td>metal</td>
<td>middle 3 octaves 20-21 bars</td>
<td>basically octaves, both hands together</td>
<td>adds emphasis to its wooden counterpart (but does not play introductions)</td>
</tr>
<tr>
<td>ránaát thum lēk</td>
<td>metal</td>
<td>low 2 octaves 16-17 bars</td>
<td>usually fourths or octaves, both hands together or alternately</td>
<td>sparse sounds in the bass register of the ensemble</td>
</tr>
<tr>
<td>khoóry g wong yal</td>
<td>metal</td>
<td>middle 2 octaves 16 gongs</td>
<td>octaves or a variety of intervals, both hands together or alternately</td>
<td>closest to the basic melody</td>
</tr>
<tr>
<td>khoóry g wong lēk</td>
<td>metal</td>
<td>high 2 octaves 18 gongs</td>
<td>fourths or a variety of intervals, alternate hands</td>
<td>enlivens and enhances the upper register</td>
</tr>
</tbody>
</table>
CHAPTER TWO

Ránaát eèk

2.1 Learning the ránaát eèk

Having examined the ránaát eèk in the context of other Thai instruments, the next stage is to discuss how the musician learns to play the instrument, both in the beginning stages and at a more advanced level, when techniques of improvisation are gradually absorbed. As will be seen, the training is both rigorous and methodical, and this fascinating aspect of Thai culture has never been documented.

Among the Thai melodic percussion instruments, the ránaát eèk is unique because the method of playing in octaves throughout the piece distinguishes its technique from those of the khómoonga wong yai, khómoonga wong lék, and ránaát thúm. These other instruments can play by alternating left and right hand and by varying the interval between them.

Tíi khuû paaët is the technique of playing in octaves on the ránaát eèk. There are two ways of doing this: tìi króø, where the hands alternate, slowly or in a fast tremolo manner, and tìi khuû paaët thamadaa, where the hands play simultaneously.

i) Sitting position (nâng)

Before even holding the mallets, the student must practise how to sit. There are two postures.

a) Nâng khát samaathí (crossing legs) or the Buddha posture

This sitting position enables the base of the body to support and control the balance of the body, maintaining it upright and stable when playing either at the lower end (with the left hand) or at the higher end (with the right hand).
In this position, one leg is inserted beneath the body of the ránaât eêk and the big toe can be used to stop the instrument from shaking or swivelling. The other foot is inserted under the opposite thigh, preferably under the buttock, since this helps to raise the body and give more weight, energy and clarity to the sound, which becomes essential in the advanced stages. Moreover, the knee of the front leg can be raised to stop the movement of the keys. The player’s body must be upright from the base to the top of the head, to create an elegant appearance.

b) Ñâng pháp phiãp (traditional sitting style)

This style of sitting is the traditional Thai posture for formal occasions, such as the ceremonies of the Royal family.
This sitting position also ensures that the legs and base of the body are ideally positioned to support the body vertically. To this end, a technique called nāng chaǎk is used, in which the legs are placed at a right-angle, with the left foot resting against the right knee (some prefer to reverse this, and even alternate them). Care must be taken to avoid placing the foot under the knee, as this would restrict the blood circulation.

By comparison to nāng khát samaatií, nāng pháp phiįāp is less useful in advanced performance because the player cannot use particular parts of the body to control the balance and movement of the rāṇāṭ ēek, but it is more suitable for showing the polite way of sitting in the Thai traditional style. Because of the length of some Thai pieces, the rāṇāṭ ēek player must practise ways of changing the sitting position during the performance, without disrupting the flow of the music.
ii) **Holding the mallet (chàp mài)**

As a first step, the beginner should learn and practise basic techniques of placing the fingers and thumbs and correctly aligning the sticks against the palms. Any deviation from the fundamental position would prevent the student from becoming an advanced player.

Figure 3 Holding the mallets

Figure 3 shows the correct way of holding the mallet. (Where one hand only is shown, it can be assumed that both hands hold the two mallets in the same way.) If the stick deviates from the correct position, along the centre of the palm, the sound will lose its focus, and the mallet might even slip from the hand, especially in fast tempi.
Figure 4 shows the position of the forefinger and thumb. The forefinger knuckle must be directly above the mallet stick, in order words the hand must not twist at all. The tip of the thumb rests against the side of the stick, opposite the first point of the other three fingers, which grip the stick from below. The end of the stick maintains contact with the underside of the wrist and the first couple of the inches of the forearm.

Khruu Prasit Thavorn, a leading authority on Thai music and expert performer on the ránaát eèk who was also honoured in 1988 with the title Silápin haëng chaât (National Artist), described, during my lessons with him, the techniques of holding the mallet by comparison to the shape of bird’s beak. He in turn acquired this knowledge from his teacher, Luuang Pradit Phairoh (Sorn Silapabanleeng), who was the most famous musician and ránaát eèk teacher during the reigns of Kings Rama VII-IX (1881 - 1954).
Four ways of holding the mallet are:

a) Paàk kaa (crow’s beak)

The way of holding the mallet as shown in figure 4 is called paàk kaa (crow’s beak). This technique is best suited to beginners; not only is it the easiest, but also it helps strengthen the fingers, especially the first. The first finger and thumb are straight, and hold the mallet between the tips, which must touch each other, the thumb gripping the side of the stick and the first finger pressing from above. The other fingers curl under the stick, their grip countering the downward force of the first finger and pressing the end of the stick against the middle of the heel of the hand. When using the paàk kaa grip, the whole arm (rather than just the forearm or from the wrist) must be used, as though the mallet is an extension of the arm, in a straight line. This aspect is called tii thǎng khaaeēn (beating with the whole arm). In practice, the movement comes from the forearm, and the elbows must remain next to the player’s body. In order to ensure that this happens, some teachers insert books under the student’s armpits. Nevertheless, the player must feel the energy coming from the shoulder, which is why this technique is so-called and conceptualised.
b) Paåk kai (chicken’s beak)

Figure 5 Paåk kai (chicken’s beak)

This is almost identical to the paåk kaa grip, but the first fingertip lies a little lower, i.e. it rests against the side of the stick, rather than on top of it. Although the fingers must be stressed correctly in both grips, the wrists may be slightly relaxed, allowing a very small movement, in the paåk kai style, which further distinguishes it from the paåk kaa style. Furthermore, while the tii thång khaaeēn technique (using the forearm) is used for paåk kaa, in paåk kai the technique is modified to permit a slight movement of the wrist, and is known as tii khrūng khrūng khaaeēn (using the wrist and the forearm).
c) Paàk nòk kaaëèw (parrot’s beak)

Figure 6 Paàk nòk kaaëèw

Here the first fingertip moves lower than in paàk kàì, so that the thumb presses the stick against the first joint of the finger. Otherwise, the fingers are stressed the same as in the paàk kàì grip, and the forearm and wrist motion of tìi khùnjì g kòopping khùnjì g khaæèn (described later) is retained.
This resembles the paàk kaa grip, in that all fingers and thumb are in the same position, but with one crucial difference: the first finger, instead of being straight, is now bent inwards at the first joint, with the result that the downward pressure is significantly increased. With this tight grip on the stick, a more relaxed version of the tii khruŋ khọq khruŋ khaæcn technique, permitting more swing by the wrist and forearm, is employed. Because of the wider swing of the mallet, this technique is used when a louder and sharper sound is required, even at fast tempi. It can also be used to save energy, because the movement can come almost entirely from the wrist.
iii) Methods of beating (tii)

The following is a more detailed description of techniques already mentioned in connection with ways of gripping the mallets. There are four beating techniques, classified according to parts of the body.

a) Tii tháng tuuaw (beating with the whole body)

The pàhk kaa grip is used, which, as discussed earlier, involves the energy of the whole arm, although the elbows remain close to the body and the forearm swings through an angle of 45 degrees. (Care must be taken to ensure that the mallets always remain level, stopping together at their highest point, and striking the keys simultaneously at their lowest.) In addition, especially in the early stages of learning, the vigorous action will shake the whole body, and the player must indeed feel that the energy is coming from the whole body. In the beginning, it is easier to practise in the middle of the three octaves. Care must always be taken to ensure that the elbows remain close to the body. (Beginners tend to allow them to bend away from the body.)

Figure 8 The incorrect position of the elbows
When the mallet strikes the key, the angle at the elbow should be an approximate right-angle, known in Thai as mum châk. Khruu Prasit Thavorn (oral communication: 1990) has emphasised the importance of the correct angle (tii châk, meaning right-angled beating) from the beginning stages. It is also a way of ensuring that both mallets strike at the same time, making a single sound (‘teng’), rather than the slightly spread ‘ting-neng’, which would be incorrect and must be rectified before the beginner can proceed to the next stage.

Khruu Prasit Thavorn also stated that awareness (kaan kamnōt ruû) of how to play the rânaât eèk depends on the simultaneous recognition (maaeèn) of the ears (huû), eyes (taa) and heart (chai), hands (müû) and their interrelationship. The reliance on the ears is obvious. The use of the eyes might seem unusual in what is traditionally an oral culture, but they are important to keep a constant check on the correct position of the arms and mallets. The reference to the heart would seem to relate more to the emotions than the intellect, as would also be expected in the West. Thai culture, however, does not separate the heart from the head in the same way, so a question like ‘what are you thinking?’ would be translated by ‘what is in your heart?’ rather than ‘what is in your head?’ The head is more associated with storing information and memorising than with creative thought.

b) Tii thâng khâaeèn (beating with the whole arm)

When practising this technique, after mastering tii thâng tuuaw, the wrists and fingers must be tensed and straight. The arms are used to control the direction of the mallet as in the tii thâng tuuaw style, but only half of the energy is required, as the two names would suggest. The arms are slightly relaxed, with the result that their movement no longer has the effect of shaking the whole body. The tii châk technique is still used, in order to ensure an even sound. During practice, the forearms swing quite emphatically, and this is reduced in actual performance, which will also reduce the loudness.
c) Tii khr̄ŋ g khőqî khr̄ŋ g khaaeën (beating using half wrist and half arm)

This technique is generally used as a third step of beating practice after the previous two have been mastered, and is the preferred technique for performance, as opposed to just practice. It gives a smoother and softer sound, which is appropriate for a wide range of pieces, especially those in phleeng thaang phûûn style (discussed in chapter 3).

d) Tii khőqî (beating using only the wrists)

The use of the wrists alone requires minimum energy, compared to the first three techniques. When practising, the speed must be increased step by step, until it is as fast as possible, since the aim of this technique is performance in tempi which are too fast for
the other techniques. Even though the quality of sound in this technique is not as good as the tii khrung khoq khoq khrung khaae'n, it is useful to preserve the player’s energy when performing at high speed for long periods.

Figure 10 Tii khoq

When performing in fast tempo, some ranaat eek players would not be able to produce a clear sound on every key properly, though they must maintain the luuk tok (focal note, discussed in chapter 3) clearly. The technique of glossing over the other keys (to save energy, the mallets are allowed to slide across them) is called tii khiay (casual beating). The only advantage of tii khiay is that it enables the player to continue to the end of the song, without needing to rest. A ranaat eek player who could not even reach the end of the song without stopping while resorting to this inferior technique would be chastised for what is known as tii chon taaiy, which means ‘playing while dying.’ ‘Chon’ literally means ‘poor’, so its use as a prefix to a thaang implies that the performer is not very competent, if at all, in improvisation and cannot fit an appropriate thaang to the basic melody. According to Khruu Montri Tramote (1964: 7) ‘chon’ means the incapacity of the performer who cannot play to the audience’s expectation’ (my translation).
2.2 Practising rânaât eèk

After understanding the sitting position and the method of beating, the next step is how to prepare and preserve the player's energy. As a leader of the ensemble and the performer on the most difficult instrument, the rânaât eèk player must learn this, and also develop the ability to practise very hard. Practice methods vary according to the school of playing and the individual teacher, but they may all be divided into three parts:

i) Physical practice

The objective of physical practice is to prepare the most important parts of the body which are normally used when playing rânaât eèk, namely the fingers, wrists and arms. The more difficult the technique, the more repetitive practice is required for each of these parts of the body.

a) Finger practice

The first fingers are the most important, and determine the style and name of the mallet-holding technique, e.g. paàk kaa, paàk kàl, paàk nòk kaàeèw, etc. The thumbs support the first fingers, and the other three fingers help control the mallets, ensuring that they remain in the middle of the palms. The method of practice for the fingers is to grip the mallet firmly with the fingertips of one hand, and use the other hand to try and dislodge the mallet by shaking the arm that holds it.

b) Wrist practice

There are three kinds of wrist position involved in rânaât eèk playing, appropriate to the piece being performed:
• Tensing

The wrists are tensed, as though in a splint, making the hands and the forearms in a straight line. This method produces a loud and hard tone, because the body’s energy is transmitted directly to the hands. It is practised by shaking one arm with the other, ensuring that the wrist remains rigid. This is essential to master the beating technique, called tii thang khaaeen (described above), and the wrists must be strengthened through it, before proceeding to the next stage;

• Releasing

The objective of this is to make the sound less aggressive than that produced by tensed wrists. The wrists are allowed to move a little up and down, which releases some of the body’s energy before it reaches the fingers. This not only gives a smoother sound but also reduces the player’s stress. It is practised in a similar way to the tensed wrist technique, but a small movement of the wrist is sought, with an attendant reduction of stress. This is essential to master the beating technique, called khrung khooi khrung khaaeen (described above);

• Relaxing

The aim of this technique is to relax the wrists, in order to be able to perform in a fast tempo. It must be practised with the wrists free to rotate, while still maintaining control of the fingers and their grip of the mallet. Although this would appear to be the easiest and most natural of the three wrist positions, in fact it is quite hard to learn how to relax the wrists after so much effort has been expended on the other techniques, especially that which involves keeping the wrists completely tense. The relaxed position does not
produce as good a sound quality as the others, but it is needed when the ránaât eëk player is running out of energy, and is the appropriate wrist position for the tìi khììày beating technique (described above)

c) Arm practice

The arms are significant for the way they can regulate the amount of energy passing through the wrists to the fingers. The degree of tension depends on the circumstances of the particular performance situation. The stress between the two arms must be equal, so care must be taken to ensure that they are balanced while practising, otherwise asynchronous beating, described by the sound ting neng, would occur, instead of the sound teng, which is sought in the octave playing style (see above, page 24). Four of the commonest ways to build up the strength of the arms are discussed below. They were used in the past, but less so today, because they are considered too demanding of the student’s time and patience:

- Inserting lead inside the tops of the mallets.

  An equal amount of lead is inserted inside the tops of both mallet before they are wrapped in cloth. The aim of this technique is to make the arms get used to carrying the heavy weight so that when performing with the normal mallet, the ránaât eëk player can play more easily and without stress.

- Wearing iron bracelets.

  Special iron bracelets are put on the wrists, which also strengthens the arms, and makes their movement easier and faster when the bracelets are removed. This method could be painful for the beginner in the first week but the pain will abate when the muscles become accustomed. It is very important to note that the weight of each bracelet must be
the same, otherwise the familiarity with unbalanced weights would cause some defects in performance, such as a correspondingly unbalanced sound.

- Covering the keys with a blanket.

The blanket is used for covering the keys of the ránaât eèk entirely, in order to make the practice more arduous. This also assists technique in two ways: when practising by beating on the blanket without looking at the keys for some time, the ránaât eèk player learns to judge the distance between the arms in each octave; the player can naturally increase the speed of playing when performing on the normal keys because the surface is smoother than when covered with the blanket. Khruu Prasit Thavorn makes an analogy between this method of practice and a running exercise performed on the beach in Thailand: ‘Playing on the blanket is similar to running on the sand: more energy must be put in to overcome the resistance, so afterwards it is easier to run fast on normal surfaces’ (personal communication, 1990).

- Peeling a coconut shell

Some music schools require the students to practise by beating a coconut shell with the ránaât eèk mallets until it is broken and the fruit inside revealed. This technique builds up the arm muscles, and also strengthens the fingers. The technique of tii ruua (tremolo, described below) is used for this style of beating practice.

Any single method discussed above requires a minimum period of an hour a day of constant practice. The teacher recommends which method or methods (it could be one or more) is/are most appropriate for this daily practice.
ii) Memorisation

Because Thai music is an oral tradition, it relies principally on the performer's ability to memorise huge amounts of music. For this reason memorisation is regarded as an integral part of learning and practising.

Phra Chen Duriyanga (1948:2) wrote about the role of memory in the Thai musical learning process:

All Siamese musicians received their training in playing and singing orally from their teachers, through constant playing and singing in their presence. They had nothing else to rely upon except their own memory which they perhaps possessed in a very remarkable degree, and if they happened to forget any passage, they could fall back on their teachers. It was only through much laborious grinding that they gained their technical experience and practical knowledge in the arts of playing and singing.

Generally, the way of studying Thai music is by rote. The student will be taught each lesson step by step by the teacher, without notation. The most important thing for the student to consider is the way of imitating and memorizing the sentences of the thaang ránaat eëk before proceeding towards improvisation, which requires a more advanced technique. Moreover, the thought processes involved in improvisation depend on the assimilation, allowing an intuitive grasp of the ránaat eëk's repertoire.

The process of memorizing the thaang ránaat eëk comprises imitation of the teacher, assiduous repetition, and the ability to recognise similarities and differences in the learnt material. In the early stages, the student is given a small phrase, of approximately half a sentence, by the teacher and required to play it back. The process continues with the second half of the sentence, and then both halves are connected. Repetition, to the teacher's satisfaction, ensures that the whole sentence is memorised before proceeding. The same thing is then applied to the next sentence. Once a sentence has been learnt, the next sentence is similarly learnt. At this point, the student must think about the direction of each sentence, how they are similar, i.e. to what extent repetition is used, and how they may be differentiated. This can be done in a variety of ways, and the student can use any aide-memoire, for example visualisation, as discussed below.
Silkstone recounts his observation of the learning process according to the method of memorisation:

The teacher plays a phrase of a quarter of a Metrical Cycle and then pauses. He (or she) then plays it again while the student joins in. He then continues into the next phrase while the student listens. At the end of the second phrase the teacher pauses again, he goes back to the beginning, and the student joins in while he plays both phrases. The student stops at the end of the second phrase and listens as the teacher goes on into the third phrase and pauses. Teacher and student then start from the beginning, and continue in this manner until the student can play the whole movement through in unison with the teacher. If at any point the student fails to remember a new phrase, the teacher either repeats it, or repeats just half of it, and then adds the second half when the student has absorbed that. Sometimes, if the student’s playing is not sufficiently confident, teacher and student repeat a segment of the piece over and over again without adding any new phrases. Sometimes, later in a lesson, the teacher will return, not to the beginning of the movement, but to somewhere in the middle (starting at the beginning of a Metrical Cycle) so that the new passages are repeated often without going over what has already been reliably memorised (1993: 36-37).

The steps of memorizing may be shown by the following examples (Ex.60):

Ex.1 Thaang ránaât eèk first bar (repeat)

This melodic line is often visualised thus:
Ex. 2 Thaang ránaţ eèk second bar (repeat)

This melodic line is often visualised thus:

Ex. 3 One sentence of thaang ránaţ eèk (repeat)

This combination of Ex. 1 and Ex.2 is often visualised thus:
iii) **Improvisation**

Improvisation - *kaan praee tamnopng* in Thai music - refers to the transformation of the basic melody according to the way (thaang) of each instrument (discussed in chapter 3). Improvisation in Thai music need to be learnt and practised and is totally involved with the process of memorisation. This clearly conflicts with certain Western understandings of the term: for example, Michael Kennedy (1994: 428) writes that

Improvisation (or extemporization) is performed according to the inventive whim of the moment, i.e. without a written or printed score, and not from memory.

Robina Beckles Willson (1976:189-90) has also stated about improvisation in jazz that

> As the jazzman improvised freely on the agreed harmonic basis of a tune, he not only produced cross rhythms with the other players, but also dissonant clashes.

Kennedy's definition of improvisation, which rules out memorisation, does not adequately define the meaning in Thai music in which the memory plays an essential part in the process. Although there is some kind of harmonic basis in Thai music (enshrined in the concept of *luûk tôk*, discussed in chapter 3) Willson’s mention of dissonant clashes is also inapplicable to Thai improvisation.

Mantle Hood (1975:26) proposed a different definition of improvisation which allows for memorisation, both as a mental process and a kinetic (muscular) one:

Improvisation cannot proceed without reference to memory both abstract and kinetic (or muscular). It may or may not refer to sketches or manuscripts. From improvisation to improvisation the process of revision, polishing, and cultivation may take place without writing.

The difference between Thai and western improvisation has been discussed by Ketukaenchan (1986:133) as follows:
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.

Before any attempt is made at improvisation, the student must first memorise many patterns. Next, the student will be taught the method of choosing the appropriate way to arrange the thaang patterns to fit each sentence of the song. The improvisation on ránaât eèk can be learnt step by step as discussed below.

a) Imitation

First of all, the student learns how to fit various improvising patterns of thaang ránaât eèk into each sentence of the basic melody by observing and then imitating the teacher. Later on, the student must try to fit correctly each pattern to a sentence on his/her own, so, through increasing experience, a greater variety of patterns evolves.

b) Arrangement

After understanding and recognizing all the patterns studied, the student tries to apply each pattern to fit different sentences of the basic melody, or find different patterns for the same sentence of the basic melody.

c) Spontaneous decisions

Two main kinds may be distinguished:

- applying thaang ranaât eèk which have already been learnt to the basic melody;
- creating new patterns (during performance). This skill can be acquired through the methods of practice outlined below.
TH sap (following the basic melody)

The essence of learning improvisation is to proceed methodically from extremely basic beginnings. Firstly, the teacher gives a technique of TH sap: subdividing the regular notes of the main melody. The aim of this technique is to make the student get used to the way of performing the fast regular notes which characterise the ránaät eèk beating style, and to make both hands more stable before practising the real thaang ránaät eèk which can involve leaps. So, the simplest possible first step will be merely to beat each note of the main melody twice.

Ex. 4 Basic melody

Ex. 5 TH sap on the thaang ránaät eèk to fit Ex.4
Development of the tii sàp technique

The basic tii sàp technique is gradually transformed into something more closely resembling a real thaang ránàât èëk by slight variations of a few notes. The important principle is that the change is only very little at a time, so that the student can fully absorb the process without rushing into complications.

Ex 6 Basic melody

\[ \text{Ex. 7} \]

In the above example the bracketed section remains very close to the basic melody, while the beginning and end attempt a more adventurous response.

This method of simple variation is only applied to the sentences of the piece which are deemed the simplest. The remainder are left in the basic tii sàp version for the time being.
- Extensions to the tii sàp technique

* Improvising a sentence

After understanding the way of performing the regular note-patterns of the thaang kèp, the student will then start improvising the sentences which involve the technique of adding notes.

The technique of adding a few notes into the tii sàp technique as described earlier can be the starting point for the beginner to understand clearly the way of improvisation. This is because after receiving the exercises of adding some notes, the student will become automatically used to the way of adding notes to each sentence, and then understanding of the first level of improvisation will be gradually developed and improved.

Normally, the sentence of the basic melody is always repeated several times in each piece, hence, the more the student practises, the more variations of thaang ránàât eèk patterns may be considered. The lessons of one piece, in which the student develops earlier exercises and imitates an example of adding notes to the tii sàp technique, can be applied to another piece which uses a similar sentence.

* Improvising a poetic sentence

The patterns of improvisation constantly apply to the poetic style such as klø̂n tāi luuāt, klø̂n yǒ̂ibble tākhèp, etc. (which will be discussed in chapter 3). The student must be very clear about the ways in which the different poetic sentences converge and diverge, as, for example, in Exs.8-10 below:
Ex. 8 Klə̀qn təì luuât

This shows the shape of the klə̀qn təì luuât which is characterised by conjunct motion, both in ascent and descent.

Ex. 9 Klə̀qn yŋgŋ tə̀khèp

Ex. 10 Klə̀qn dooeen tə̀khèp

Exx. 9 and 10 share the same overall undulating characteristic, but their beginnings are different. Moreover, as explained below in chapter 3, each klə̀qn, has a name which describes its motion, and this assists the student to memorise its musical features.
2.3) Difficulties of practising improvisation

i) Restrictions of range

The patterns learnt for one piece can become problematic in another piece if the overall pitch is different, because the transposition can take the pattern outside the range of the instrument.

The same basic melody at different pitches, showing the adjustments necessary to keep within the range of the ránaât eëk

Ex.11 Basic melody

Ex.12 Thaang ránaât eëk to fit this could be
Ex. 13 Basic melody, transposed up

Ex. 14

The transposed version of the thaang ránaät eëk in Ex. 14 is unavailable because the notes indicated by * are not on the instrument.

A possible variant to take account of this problem would be

Ex. 15
ii) Repetition

As already explained, the basic melody consists of various melodic patterns or sentences which sometimes appear many times in the same piece. Occasionally, a pattern can be repeated immediately, in other words the basic melody may be played with the same phrase or sentence twice or more without any change; however, the ránaát eèk must not repeat the same thaang to fit the basic melody, but instead find variations. If two repeated sentences of thaang ránaát eèk are not far apart, the repetition would create a certain tedium, which should be avoided. The following examples show how different possibilities of thaang ranat ek may be improvised to fit identical basic melodies.

Ex.16 The same sentence repeated

Ex.17 Possibility 1
Ex. 18 Possibility 2

These two possibilities can therefore be used to avoid the problem of repetition. It is important to note that the placing of each sentence depends on the characteristics and poetic styles (klqon) of adjacent sentences. (This important topic will be discussed in chapter 3.)

2.4 Advanced techniques

The discussion above of physical practice, memorisation and improvisation is directed at beginners. It remains to survey some of the options available to the advanced performer. After mastering the initial stages of beating, which are based on the parallel octave tii khuû paaët style, the player moves on to more advanced techniques, which are divided into two main groups: those techniques which are based on the tii khuû paaët style (and which extend it), and those which are not.

i) Techniques based on the tii khuû paaët style

a) Sèbât

Sèbât (literally shaking, fluttering) means the embellishment of one note by the insertion of notes (usually no more than five) within the same time. There are five variants of the sèbât technique:
• Sàbàt luûk dìiaw

This is sàbàt on one note, in other words the main note in the tii khuû paaeët style is embellished by the same note repeated very rapidly a given number of times, as shown in the following examples. The function is to make the music more exciting, and it is frequently used in solo items and certain special pieces. In the examples one hand is shown, and it is understood that both hands play the same material, an octave apart. The first example (Ex.19) is a basic pattern of unadorned notes, and subsequent examples (Exx.20 to 35) show various sàbàt techniques applied to it.

Ex.19 Khuû paaët unembellished

Ex.20 Sàbàt luûk dìiaw (two short notes)
Ex. 21 Sàbat luûk diiaw (three short notes)

Ex. 22 Sàbat luûk diiaw (four short notes)

Ex. 23 Sàbat luûk diiaw (five short notes)

• Sàbat soõg luûk

This is sàbat on two notes, in other words the main note in the tii khuû paaët style is embellished by a second note, usually adjacent, repeated very rapidly a given number of times, as shown in the following examples. Of course, the main note can be approached either from above or below.
Ex. 24 Sàbàt sôòŋ g luûk (two short notes above)

Ex. 25 Sàbàt sôòŋ g luûk (three short notes above)

Ex. 26 Sàbàt sôòŋ g luûk (four short notes above)

Ex. 27 Sàbàt sôòŋ g luûk (two short notes below)
Ex. 28 Sábât sqōŋ luũk (three short notes below)

Ex. 29 Sábât sqōŋ luũk (four short notes below)

- Sábât saām luũk

This is sábât on three notes, in other words the main note in the tii khuũ paaeët style is embellished by two other notes, usually adjacent, repeated very rapidly a given number of times, as shown in the following examples. As in sábât sqōŋ luũk the main note can be approached either from above or below.

Ex. 30 Sábât saām luũk (three notes descending)
Ex. 31 Sàbát sa₃m lu₅k (three notes ascending)

These are the commonest forms. It is possible, though very rare, to leap from the short notes (in other words the second note) to the main note, and the gap can vary from small to large.

- Sàbát sîl lu₅k

  This is sàbát on four notes, in other words the main note in the tîi khu⁸ pa₃eêt style is embellished by three other notes, following the same principles as sàbát sa₃m lu₅k

Ex. 32 Sàbát sîl lu₅k (four notes descending)
Ex.33 Sābāt sīl luūk (four notes ascending)

- Sābāt haā luūk

This is sābāt on five notes, in other words the main note in the tīi khuū paaēēt style is embellished by four other notes, following the same principles as sābāt sīl luūk.

Ex.34 Sābāt haā luūk (five notes descending)

Ex.35 Sābāt haā luūk (five notes ascending)
b) Tii krəŋ

- Tii krəŋ khuũ paaeɛt (the technique of tremolo in octaves)

Tii krəŋ is one of two techniques of tremolo (the other being tii ruua), and khuũ paaeɛt specifies the interval of one octave (other intervals may be used). Its main function is to prolong notes, creating the illusion of sustained notes. Its use is governed by conventions, determined by the composer or director of the ensemble, and the student must learn these.

It is very important to note that, when practising tii krəŋ technique, the left hand must always start what is a rapid alternation of the hands. (Tii krəŋ is never performed by both hands striking simultaneously.) The correct sound, starting with the left hand, is called ting neng. The reversal of the hands (commencing with the right) gives the sound described as neng ting, which is regarded as incorrect by the great masters, although some players mistakenly perform it. The notation below (and elsewhere in this thesis) follows the usual Thai method of showing the correct way of performing tii krəŋ.

Ex.36 Tii krəŋ khuũ paaeɛt

![Musical notation](image-url)
The technique of tii kr99 may be divided into two general styles.

- Tii kr99 yaàp (rough tremolo) in which the note is preceded by a group of four to seven short notes

Ex.37 Tii khuû paaët without tii kr99

Ex.38 Tii kr99 yaàp to fit the khuû paaët in Ex.37

- Tii kr99 láqìiàt

The note is preceded by a group of more than seven short notes. In practice the number (including the main note) is a multiple of eight. The following example, therefore, represents the simplest solution:
c) Tii khayi (embellishing the thaang)

In the same way as improvising thaang rānaät eëk, the improvised melodies are used as the basic melodies for the tii khayi method. Four or eight notes are improvised to embellish every note in each sentence for example:

Ex. 40 Basic melody

Ex. 41 Normal improvised sentence of thaang rānaät eëk (without tii khayi)
The objective of tii khayî is to add spice to the normal thaang rânaât eêk, thereby pleasantly shocking the audience, and to change the emotion of the sentence from smooth to unexpected, even aggressive. Generally, the sâbât technique is used in the percussion ensemble called wong pil phaât maf khaêng, which performs with hard mallets.

ii) Techniques of performing not based on the tii khuû paaët (octaves) style.

a) Tii ruua (tremolo style)

The techniques of tii ruua require the same basic practice as tii kr99 because of the similarity of performing even though it is not performed in octaves. There are various kinds of tii ruua which depend on the piece and aims of the composer. In ordinary pieces (performed by ensembles rather than as solos) the tii ruua technique is used for embellishing some special sentences. Occasionally, the conductor who acts as coach of the ensemble, will suggest embellishing some sentences by using the different styles of tii ruua to make the piece more colourful.
Ex. 43 Basic melody

Ex. 44 Ruua luûk diiaw to fit Ex. 43

b) Tii ruua khaáp luûk khaáp dûûk

Ex. 45 Basic melody

Ex. 46 Ruua khaáp luûk khaáp dûûk (a mixture of unison and broken octaves) to fit the basic melody in Ex. 45
According to Tramote (1964:6) khaâp luûk khaâp dôôk refers to a method of performing in solo rânaât êêk pieces and consists of an alternation of kep and ruu. The aim is to show the difficulty of the soloist’s advanced technique.
CHAPTER THREE

Thaang rânaât eèk

3.1 Definition of 'thaang'

'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 (Ketukaenchana 1989:7). For example, thaang can indicate a characteristic embellishment of melody as described by Silkstone:

Thaang kroo - slow, 'sustained - melody' realisation of Fixed - Melody phleen in an ensemble.
Thaang wâan - slow, 'sweet - melody' realisation of a Foundation - Melody phleen in a solo.
Thaang kêb - medium to fast tempo, 'full - melody' realisation of a Foundation - Melody phleen in an ensemble or solo (i.e. a continuous stream notes) (Silkstone 1993:22)

Khruu Montri Tramote (1964: 17) offers three definitions of Thaang:

The word thaang has various meanings which can be separated into three kinds:
1)Thaang can refer to the characteristic way of realising a melody on each instrument [i.e. Instrumental style], such as the styles (thaang) of the ranâad eeg [high xylophone], the ranâad thûm [low xylophone], and the soo [the various bowed string-instruments]. No two instruments realise a melody in the same manner; each has its own distinctive way.
2)Thaang can refer to specially invented ways of realising the melody of a phleen - such as those by Khruu A or Khruu B, or for a solo or ensemble - which will each be different even if played on the same instrument.
3)Thaang can refer to the pitch-level at which a phleen is being played (key). There are established and generally accepted names for each pitch-level. (tr. Silkstone 1993:20)

Because the rânaât eèk has a greater range than the other percussion instruments, there are more possibilities of patterns in playing and improvisation. The experienced player must understand the following constraints in improvisation.
3.2 Nụqá phleeng (basic melody)

‘Nụqá ‘ means 'meat' or indirectly means an essential part or a core of something.

Some Thai people make an analogy between nụqá as the meat of the fruit and speech which contains more nụqá than nām (water): it makes better sense and is more attractive to the ear than one which contains more nām. Phleeng means a composition. 'nụqá phleeng' means the core of a composition, referring to the basic melody.

Nụqá phleeng, discussed in this chapter, refers to the basic melody which is not transformed as a thaang of a particular instrument. In practice, the basic melody is a concept which shapes the piece, and is not performed literally on any instrument. The thaang khoọng wong yai comes closest and is therefore sometimes treated as virtually synonymous with the basic melody. (In this rather paradoxical situation, for Westerners at least, wherein the real melody of a piece is not actually heard but rather felt, a useful comparison may be made with the balungan, often considered the basic melody, of Javanese gamelan music which is played by the saron group of instruments yet with certain modifications, so it is not quite the same as the unplayed true melody which guides the musicians.)

The knowledge of the nụqá phleeng as played by the khoọng wong yai is essential to the other performers before they can even start to improvise.

The melody of the nụqá phleeng usually consists of four quarter phrases (wák lék) or two half phrases (wák), making one musical 'sentence' (pràyọûk). The concept of the sentence is crucial to this thesis, and forms a major part of the analyses in chapters 4 and 5.

Thaang in this thesis follows the simplest definition, referring to the way of performing on a particular instrument, and its characteristic realisation / embellishment of the basic melody.
The prāyōḍk is usually constructed in wāk taṭam - wāk tōpp (question-answer) form. It is important that an appropriate answering phrase is given to each questioning one, for example:

WL = wāk lēk (small phrase)
W = wāk (full phrase)
It is important to note that the wák taäm - wák tōṅp (question-answer) analogy is only to explain the relative position of the wák (ie. first and second) rather than any intrinsic questioning or answering characteristic. Therefore, the two wák of this example could be reversed and still referred to as question and answer.

3.3) Thaang ránaät eëk

The way of playing ránaät eëk is to improvise on the basic melody to create its own thaang. Typically, it performed in a regular pattern in octaves, known as kēp, which fills the gaps in the basic melody. This predominant performance technique is represented by semiquaver figurations in 2/4. A possible thaang ránaät eëk to fit Ex.2 could be:

Ex.3

Ex.4
The comparison between ṇuṅṭā phleeng and thaang ráanaṭ eṅk in Exx.3-4 shows important points of convergence (shown by *). These focal points of the melody are called luṅk tōk (cadential note). They help to keep all the performers together from one structural point to the next, thereby maintaining the clear melodic shape directed by the basic melody. Each luṅk tōk must therefore be prepared in the melodic line of the ráanaṭ eṅk. This can present problems of anticipation, since the player must always be aware of the melody ahead and find a suitable line to reach the next luṅk tōk.

i) The direction of thaang ráanaṭ eṅk and ṇuṅṭā phleeng

Some ways of improvising on a sentence of ṇuṅṭā phleeng, observing the luṅk tōk (final note here) are shown in the following examples:

Ex.5 ṇuṅṭā phleeng
From the examples above, Ex. 6a shows the appropriate harmonization between thaang ránaät eèk and nqū phleeng because both melodies proceed directly from the first note to the same luûk tòk in the same direction, whereas Ex. 6b proceeds by contrary motion.

Ex. 6a is more suitable than Ex. 6b because it retains the shape of the nqū phleeng better, and therefore assists its clarity. Moreover, it can assist the other instrumentalists if they are lost. The drawback of Ex. 6b is that, because it does not keep as well to the nqū phleeng, it is relatively unhelpful in following its shape and actual notes. However, it does not mean that Ex. 6b is absolutely wrong when performing because there are various appropriate thaang ránaät eèk which depend on the performance style and objectives of the ránaät eèk player.
ii) **Two principal aims of performance on the ránaät cèk**

a) Retaining the same luûk tòk

The ránaät cèk player chooses the same luûk tòk as the nûqá phleeng when the nûqá phleeng permits the ránaät cèk to continue from that note without a leap, for example:

Ex.7 Nûqá phleeng

Ex.8 Thaang ránaät cèk

This follows the shape of the basic melody.

b) Transposing thaang ránaät cèk (up/down)

In the next example, the basic melody rises above the range of the ránaät cèk. It therefore cannot follow the shape of the basic melody, but instead transposes down one (or sometimes two) octaves.
Ex. 9 Nuŋá phleeng

Ex. 10 Thaang ránaát eēk

iii) Thaang ránaát eēk in poetic style

Several poetic styles can be used to improvise on a nuŋá phleeng for example:

Ex. 11
These show how internal symmetry creates a good poetic style. Playing Ex 12 immediately after Ex.11, however, would disrupt the symmetry and such a mixture of patterns would normally be rejected.

In Thai tradition this balance is extremely important, and is related to language, in particular poetic rhyme, for example:

Ex.13

\[
\begin{align*}
\text{proek sôp phâkaa soôh} & \quad \text{qîl kunchoôn qan plôt plong} \\
\text{thoothon saneèng khong} & \quad \text{sâmkhâ mây nai kaay mii} \\
\text{nôôrâchârt tî waang waay} & \quad \text{mâlaay sîn thâng qin sii} \\
\text{sâtît thuûâw taaê chuûâw} & \quad \text{diî pradàp wai nai loogaa.}
\end{align*}
\]

The balance of the rhyming sounds called kloôn is essential to Thai poetry, and, in a comparable fashion, to Thai music.
In the thaang ránaát eèk, there are various kinds of thaang patterns which are called kløon. The kløon of the ránaát eèk is named according to its parallel movement, as in the example below:

Ex. 14

This kløon is called kløon Wi luuAt, which means walking on a tight-rope, because of the stepwise movement. The objective of this kløon is to continue the sound from note to note without the leap. The ránaát eèk player must be careful when using this kløon style because it is very difficult to balance the energy of both hands.

Ex. 15

This kløon is called kløon tal luuAt, which means walking on a tight-rope, because of the stepwise movement. The objective of this kløon is to continue the sound from note to note without the leap. The ránaát eèk player must be careful when using this kløon style because it is very difficult to balance the energy of both hands.

This kløon is called kløon tal maf, which means walking on a small and narrow wooden bridge. The feature of kløon tal maf is the mixture of the opening four-note motif, later repeated sequentially, with step-wise movement analogous to walking across the narrow bridge with the mixture of normal steps and one foot in front of the other (in the manner of a tight-rope).
This klóon is called klóon dooeen tâkhèp, which describes the action of sewing, because of the sequential repetition of the initial four-note motif.

This klóon is called klóon yŏγn tâkhèp, which also describes the action of sewing, though the pattern is different from that of klóon dooeen tâkhèp in Ex.16, while retaining the sequential repetition of the initial four-note motif.
This klōn is called klōn lōqf taakaày, which means trapping the fish, thereby altering its course.

This klōn is called klōn ròqý luuk soð, which describes a chain because of the repetition of the first four notes and the second three-note motif, which are like the alternating upper and lower links of a chain.

This klōn is called klōn phan, which is unique because of the complicated
characteristic of the whole prayôk. This klôôn cannot be broken down into wák because it is conceived as a continuous unit. In other words, the luûk tûk at * is not the same as in the núqá phleeng. It is used specially, by more experienced players, to demonstrate their virtuosity and imagination in complex disguises of the núqá phleeng, which in turn will challenge the other musicians and audience.

Ex. 21

\[
\begin{align*}
\text{This klôôn is called klôôn sòôñ tåkhêp which means the technique of sewing with hidden stitches. The intention of this klôôn is similar to that of klôôn phan by hiding the núqá phleeng, but this style of klôôn is more special because it is essential as a symbol of thaang ránaåt eèk.}
\end{align*}
\]

Ex. 22

\[
\begin{align*}
\text{This klôôn is called klôôn sàp. 'Sàp' describes the action of chopping. It is}
\end{align*}
\]
also used on the không wong lék by both hand alternately. It can also be applied to
reiterations of the same note (both hands together) since Thai musicians consider this
to be as much of a chopping action.

iv) Thaang ránaât eêk in various kinds of compositions

a) Thaang ránaât eêk in phleeng thaang phươţi (or phleeng damnooën tamnqong)

Thaang, in this case, refers to a version of a composition. ‘Phươţi’ literally
means ground, surface, base or foundation. When Thai says ‘phươţi phươţi’ it could
mean very common, or very basic. Phleeng thaang phươţi (or phleeng damnooën
tamnqong) means a composition which allows the performer to improvise thaang of
his / her own throughout the piece.

The method of playing the ránaât eêk in phleeng thaang phươţi is to play in
kêp style. The difficulty of using klqon ránaât eêk in this style of composition is the
similarity of the sentences of the basic melodies. The ránaât eêk player must avoid
performing the same klqon for the same basic melody because it would make not only
the repetition tedious but also make the audience aware of the ránaât eêk player’s
inexperience. The ránaât eêk player should have the ability to anticipate similarities in
the basic melody and improvise suitable thaang avoiding repetition.

Ex.23
Ex. 24

Ex 25

Exx. 23-25 (basic melodies) seem to be different from each other, but in their general shape and luūk tōk they are similar. The thaang rānaāt eēk (Ex. 26-28) can each be used for any of these basic melodies (though the same one would not be repeated).

Ex. 26
b) Thaang ránaât eêk in phleeng thaang krọọ

Krọọ is the technique of playing long, sustained notes on tuned percussion instruments by means of a tremolo (alternating hands). It is usually played in octaves, but sometimes in fourths or seconds.

When playing the ránaât eêk in phleeng thaang krọọ, the ránaât eêk player must copy the nuqá phleeng or slightly embellish it. Occasionally, thaang phụqrí sentences are inserted into the basic melody (Ex. 31). This combination is typical of the way in which kroo is used, and the whole sentence could be referred to as phleeng thaang krọọ.
Ex 29 Thaang kroō

Ex 30 Thaang phụń

The mixture of the sentence of phleeng thaang kroō and the sentence of phleeng thaang phụń could appear in the phleeng thaang kroō for example:
The appropriate way to play ránaá̄t eèk for such a sentence which has a mixture of phleeng thang krő́ and phleeng thang phứń is to play thang krő́ with that part of the basic melody which also has krő́, and play the thang phứń part using the kèp style. The thang ránaá̄t eèk to fit Ex. 31 could therefore be:

Ex. 32

| thang krő́ | thang kèp |
c) Thaang ránaát eèk in phleeng thaang luûk Íòò luûk khàt

'Íòò' means doing something by imitating; 'khàt' means doing something in contrast, in a different way, or by interrupting. Phleeng luûk Íòò - luûk khàt is the composition consisting of the sentences performed in Íòò and khàt style. Luûk Íòò luûk khàt is a technique in which the instruments play in dialogue.

In the Thai percussion ensemble, when playing phleeng luûk Íòò - luûk khàt, the melodic instruments are divided into two groups, which are called phûak naá (consisting of ránaát eèk, pî nai, khoong wong lék and ránaát eèk lék) and phûak lâng (consisting of ránaát thûm, khoong wong yai and ránaát thûm lék). These combinations may be altered by the director.

The phûak naá instruments perform a phrase which is repeated by the phûak lâng instruments, either by exact repetition (luûk Íòò) or by an answering phrase (luûk khàt).

Basic melody luûk Íòò:

Ex.33a Phûak naá
Ex. 33b Phuák lãng

Basic melody lười khảt:
Ex. 34a Phuák nả

Ex. 34b Phuák lãng
Thaang ranaat eek to fit luuk tawk in Ex.33a could be:

Ex.35a

or:

Ex.35b

In Ex.35a, the ranaat eek performs in normal kep style, but in Ex.35b performs by slightly embellishing the second half of the second bar. This technique is called mot kooh changwa (finishing before the beat).

After playing the thaang ranaat eek in Ex.35a or Ex.35b, the performer could play the last luuk tawk using a different technique called leen chang wa, which is divided into two styles:

Firstly, yuun changwa is a technique of supporting and emphasising the last luuk tawk with a fixed rhythmic pattern which gives a clear sense of resolution.

Secondly, iak changwa is a technique of interrupting or accompanying the rhythm of the phuak lang (answering phrase).
d) Thaang ránaát eèk in phleeng sâmniiang phaasā (foreign melodic style)

'Sâmniiang' means dialect and 'phaasā' means language. The meaning of phleeng sâmniiang phaasā in musical terms is the style which expresses the character of a foreign melody in a Thai piece.

Morton (1965:21) has discussed the derivative idea of phleeng sâmniiang phaasā as follows:

Thus the main stream of Thai traditional music as it is known today is probably a composite of musical elements from several cultures; blended with early Thai music itself are influences from Chinese, Indian, and Khmer music. Musical influences from other neighboring cultures--Burma and Malay, for example--were possibly also absorbed into the evolving Thai traditional style. It has been the custom in Thai music to use old traditional melodies as the bases of new compositions, the result being in reality an arrangement, rather than an original piece per se. Not only traditional Thai melodies, but often melodies borrowed from neighboring cultures were used by the Thai composers. To show the origin of these pieces, the name of the original country or culture is retained as the first word of the title, even though the resulting composition is distinctly Thai. Melodies have been borrowed from all the cultures surrounding Thailand -- Chinese, Burmese, Javanese, Khmer or Cambodian, Mon, Laotian, and possibly Indian. But regardless of the strong influences from other cultures and the borrowing of melodies, Thai music developed into a distinct musical system that is one of the principal members of the family of high musical cultures of Southeast Asia.

There are three strategies available to the composer: to use sâmniiang phaasā material for the entire basic melody; to use 'normal' Thai material for the entire basic melody; the use a mixture of the two. It must be clear to the ránaát eèk player which strategy has been adopted. In the second instance he or she will use Thai thaang for the entire piece, but in the other two he or she must use thaang sâmniiang phaasā for the entire piece. Even when the basic melody is a mixture, the ránaát eèk player must understand that the composer's aim is to permeate the entire piece with a particular
sâmniàng phaäsá. Usually the title of the piece will make clear which sâmniàng phaäsá has been used, for instance, phleeng chiin khûm yai (‘chiin’ means Chinese), phleeng lâow phaaeen (‘lâow’ means Lao), or phleeng khâmeén yai (‘khâmeén’ refers to the Khmer of Cambodia).

The following examples (Exx. 38a-f) show different sâmniàng phaäsá styles of basic melody. From these short extracts, it will almost certainly be difficult for the outsider to notice the distinctive features of each style. Thai musicians will, however, sense them though practice and experience. Even more importantly, they will have a feeling for the overall context in which each extract occurs, so the extract will remind them of a larger piece of music which had the distinctive style in question.

Ex.38a Normal Thai style

Ex.38b Sâmniàng phaäsá khâmeén (Khmer style)
Ex. 38c Sämniang phaää laaow (Lao style)

Ex. 38d Sämniang phaää khaaëk (Malaysian style)

Ex. 38e Sämniang phaää chiin (Chinese style)

Ex. 38f Sämniang phaää phârâng (Western style)
The following thaang ránaât ēk (Exx. 39a-f) can all be used with the Thai basic melody (Ex.38a). In addition, each one can be used with its corresponding sāmniiang phaasā basic melody, though not with any other. Ex.39g is just a rare extra, to give an example of yet another foreign style, and it can be played with Ex.38a.

Ex.39a Thai style

Ex.39b Sāmniiang phaasā khâmeen (Khmer style)

Ex.39c Sāmniiang phaasā laaow (Lao style)
Ex.39d Sāmniāng phaāśā khaaeēk (Malaysian style)

Ex.39e Sāmniāng phaāśā chiin (Chinese style)

Ex.39f Sāmniāng phaāśā phārāng (Western style)

Ex.39g Sāmniāng phaāśā yīī pūn (Japanese style)
In general, Thai musicians consider Thai klões and the sâmniang phaasă khaeëk to be distinguished from the others (mainly pentatonic) by a predominantly heptatonic feel. It is very important to note that basic melody in Thai traditional piece requires Thai klọn exclusively.

e) Thaang ránaăt eèk in special sentences

In addition to the thaang already discussed, the player must learn how to improvise in pieces containing special sentences.

- Thaang ránaăt eèk in thaõ styles

Thaõ is a melodic sentence which usually fits a half rhythmic unit known as naãtháp pröp kai. (In the subsequent notations this appears as a duration of four bars. The drumming pattern which identifies it need not be shown here.) But a thaõ sentence, when used, must come only at the beginning of a section.

Usually, this thaõ is used in a famous variation form of Thai music called phleeng thaõ (the two words should not be confused) built in three sections in three different tempi, from slow to fast (marked by doubling of the rate of ching-chap cymbal pattern, and contracting length of phrases). It also includes a large number of phleeng naãtháp pröp kai, and the following examples (Exx.40-45) are of half nathap prop kai in the relevant section, each one being half the length of the previous one. The first section of phleeng thaõ, in the slowest tempo, is called saãm chán (level three).

Ex.40 Basic melody thaõ saãm chán
Ex. 41 Thaang ránaät eèk thaò saām chán

The next section, in roughly double the tempo of the saām chán, is called sōoŋ chán (level two).

Ex. 42 Basic melody thaò sōoŋ chán

Ex. 43 Thaang ránaät eèk thaò sōoŋ chán

The last section of phleeng thaò, in the fastest tempo, is called chán diiaw (level one).
Moreover, thañ are divided into two style. Exx. 40 - 45 are examples of thañ mal khaâm (without leap), which must begin with conjunct phrases. The other style of thañ is called thañ khaâm (leaping), which means that there will be a leap at the beginning. In Ex. 46 the opening melodic sequence is C-D-F (rather than C-D-E, as in Ex. 40)
Ex. 47 Thaang ránaát eèk thaô khaâm saâm chán

Ex. 48 Basic melody thaô khaâm soppţg chán

Ex. 49 Thaang ránaát eèk thaô khaâm soppţg chán

Ex. 50 Basic melody thaô khaâm chán diiaw
Ex. 51 Thaang ránnát eëk thaö khaâm chán diiaw

The ránnát eëk player must choose a style to mark the difference between these two kinds of thao. In the case of thaö khaâm, the luûk tôk (D at the beginning of the second bar) is given additional emphasis by using the sáp technique (repeating the note) instead of performing a more complicated thaang.

- Thaang ránnát eëk in yoon style

Yoon is the construction of melodic sentences which maintain the same luûk tôk. The thaang ránnát eëk in yoon style may be divided into two types: one that keeps very close to the basic melody, merely sustaining the long notes by the use of kroo; the other where a more elaborate and idiomatic thaang ránnát eëk is improvised. Ex. 52 shows the beginning of a yoon passage in which the repeating luûk tôk is A. Ex. 53 shows the first type of thaang ránnát eëk, and Exx. 54-56 show the second type.

Ex.52 Basic melody
Ex. 53 Thaan gáat eék

Ex. 54 Thaan gáat eék

Ex. 55 Thaan gáat eék

Ex. 56 Thaan gáat eék
Yoon is a very complicated aspect of Thai music, and far more could be written on it. Since, however, it does not occur in phleeng saathúkaan, which is the focus of this thesis, the brief introduction here (as one of the many essential areas of the ránaát eëk player’s knowledge) will suffice.
CHAPTER FOUR

The analysis of thaang ránaát eèk in phleeng Saáthúkaan

To clarify the understanding of improvisation on the ránaát eèk, this chapter aims to analyse the possibilities of the thaang ránaát eèk improvising method by referring to phleeng Saáthúkaan: a piece consisting of 55 basic melodic sentences (referred to as S1, S2, etc.) which is the first compulsory piece for the beginning percussionist. The accompanying cassette recording will give the reader a good idea of how the piece sounds when played by an expert Thai ensemble (the musicians from the Faculty of Fine and Applied Arts, Chulalongkorn University, Bangkok). The ránaát eèk player (who is clearly audible above the others in the ensemble) is in fact one of my former students. What he plays is, therefore, what I taught him, following what I learnt from Khruu Prasit Thavorn, though it is not exactly what appears in the notations in this thesis.

First a general introduction to the legend surrounding it and its current performance context will be given. Secondly, seven possibilities of improvisation on the individual sentences will be offered (referred to as RS, and the number referring to the sentence and the list from 1 to 7, eg. RS1.1, being the first thaang ránaát eèk for S1, RS1.2, being the second thaang ránaát eèk for S1, etc.), along with an explanation of the characteristics of each thaang. I have chosen to limit the number in each sample to seven, because this seems to be the ideal number to allow the main basic shapes to emerge, both in broad outline and in detail. Moreover, the number is auspicious in Thai culture. Thirdly, a selection of the most suitable thaang will be made. The source of the basic melody and all thaang ránaát eèk (by oral communications, of course) is my teacher Khruu (Master) Prasit Thavorn, a celebrated master of performance and acknowledged scholar acclaimed as Thailand’s greatest living musician. There are other schools of
playing in Thai classical music, so I cannot claim that my sample is exhaustive. I do believe, however (and confidently expect other Thai musicians to agree with me), that the examples in my thesis are unsurpassed. It is interesting to note that Somsak Ketukaenchan, whose own thesis largely inspired my own, also chose seven thaang in his analysis. They come from different masters, thereby offering a particular insight into the breadth of the tradition. My approach, as a specialist on the rānāāt eōk, is significantly different, apart from its obvious homogeneity. I have chosen to go as deeply as I can into the subject of kloōn and the poetic style and identify not only which thaang is being used but why.

4.1 The legend of phleeng Saāthúkaan

This story was related to me by Khruu Pichit Chaiseree (oral communication, 1993).

Once upon a time in the kingdom of heaven, all the angels (theeváadaa) were listening attentively to the teaching of the Buddha, as was usual during nights of the full moon. The Lord Siva commanded the angels to dance and entertain him nearby, but none was interested, preferring to listen to the Buddha. This caused Siva to be angry and jealous of the Buddha. He went to meet him and challenged him to play a game of hide-and-seek. If he won, all the angels would have to return with him and entertain him as dancers. But if the Buddha won, Siva would allow the angels to continue listening to his dharma. First Siva hid, but the Buddha found him. Then the Buddha hid by turning himself into the dust on Siva’s head, sticking to one of his hairs. As a result, Siva could not find him and gave up, asking the Buddha to appear to him. But the Buddha made a condition that he would not appear unless Siva arranged a performance of phleeng Saāthúkaan for him. Siva responded by arranging it according to the Buddha’s wish. Finally,
the Buddha turned himself back to normal. Despite his anger, Siva allowed the angels to continue listening to the Buddha’s teaching according to the wager.

From that time on, phleeng Saãhûkaan has been traditionally performed to entreat the Buddha to be present at a ceremony and give his protection. But nowadays, phleeng Saãhûkaan is also used for performance in various other ceremonies, although it is still respected as a symbol of the God of Thai music and when it is performed both musicians and audience will make the ‘wai’ gesture (hands together in front of the face, which is the traditional Hindu / Buddhist sign of greeting or respect, universally adopted in Thailand).

4.2 The usage of phleeng Saãhûkaan

Being a sacred piece, phleeng Saãhûkaan is used not only in sacred ceremonies, but also as the opening section of the special overture form called phleeng hoöm roong, which is divided into three main types:

i) phleeng hoöm roong chaö (morning suite);

ii) phleeng hoöm roong klaang wan (afternoon suite);

iii) phleeng hoöm roong yen (evening suite).

Any of these three types consists of various kinds of pieces, but phleeng Saãhûkaan is performed before the others as the starting piece of the performance.

This is because of the Thai belief that every performer has his or her own teacher to whom he or she must pay respect and acknowledge the generous teaching, before the performance starts.
The ways of honouring the teacher can be divided into three:

i) by performing the wâi gesture with thoughts of gratitude;

ii) by asking for his or her blessing;

iii) by invoking the teacher's protection during performance, and to guard against a bad one.

Apart from being performed as a first piece in each phleeng hoôm roong above for paying homage to the teacher, *phleeng Saăhûkaan* is used as a first lesson for the student for the following reasons:

i) *phleeng Saăhûkaan* consists of the basic patterns of the basic melody of which a large number of sentences are performed in almost every phleeng. It is considered an archetype of the basic melodic patterns;

ii) the great length of *phleeng Saăhûkaan* enables the teacher to evaluate whether the student has enough patience and ability to continue studying until the end of this piece. Only the student who can finish studying *phleeng Saăhûkaan* is accepted for further study;

iii) because *phleeng Saăhûkaan* consists of complicated repeating sentences the student has to concentrate on the place of each sentence carefully to avoid getting lost. At the same time, the repeating sentences are useful for practising improvisation on each instrument, especially in studying thaáng ránaât eēk.

**4.3 The rhythmic pattern of phleeng Saăhûkaan**

*Phleeng Saăhûkaan* requires the participation of instruments to mark the rhythmic structure: chîng (small cymbal) and tàphoon (drum). The basic melody is in saăm chán, which corresponds to the first part of phleeng thaō, performed in a
slow tempo. Since this is not actually a phleeng thaō, the tempo is much faster.

The rhythmic patterns on the Thai drums are called naathāp. In phleeng Sāṭhūkāan one naathāp is used, and played on the tāphoon:

Naathāp phiseēt 0 = ching (the two cymbals struck and left to vibrate; the closed chàp sound is not used in this piece).

(Narkong 1992:57) (See Appendix 2 for the full version)
4.4 Form of *phleeng Saāhúkaan*

*Phleeng Saāhúkaan* consists of 55 sentences. There is a large repeated section within it: the sentences S2-19 are repeated in S34-51. It is therefore possible to perform shorter versions without destroying the sense of the piece. They are selected from the available 55 sentences according to rules established by tradition (which are too complicated to explain here and outside the scope of the thesis). Two of these possible performance schemes are shown as follows (but other short forms are possible):

i) full form: S1-S55 (S = sentence);

ii) short forms: S1 then S34-55.

4.5 The analysis of thaang ránaât eēk in *phleeng Saāhúkaarn*

The analysis of the possibilities in improvising thaang ránaât eēk will be given sentence by sentence from 1 to 55 respectively in order to illustrate the thought processes involved in improvisation. The process of analysing the thaang ránaât eēk in *phleeng Saāhúkaan* must take account of the improvising methods in each sentence with reference to the fundamental knowledge described in chapter three. For each sentence, a representative sample of possible thaang will be given, from which the best will be selected, with supporting reasons. There are five main criteria for the choices of most appropriate thaang:

i) smooth join (to the preceding thaang);

ii) contrary motion from the basic melody;

iii) motion across a wide range of the ránaât eēk;

iv) complete kloon, which usually gives a good poetic style (as explained in chapter 3);

v) correct luûk tôk.
S1 is a special starting sentence which is usually played by the leading instrument such as pìi (Thai oboe), or the ránaât eēk. In the third bar, the main melody is the lower part. In all other cases it should be assumed that it is the upper of two notes. In case the conductor needs the ránaât eēk to be the leading instrument, the ránaât eēk player must play the introductory thaang ránaât eēk style instead of the normal kèp (regular stream in octaves). The possibilities of improvisation on the thaang ránaât eēk to fit this sentence are:

RS1.1

The technique of sábàt saâm luûk is used at the starting point, followed by kèp style, interrupted in the second bar by tii krqø (tremolo).
RS1.2

The technique of tii kroo is used at the starting point. In the fourth bar of both RS1.1 and RS1.2 the thaang ránaát eēk appears a third below the basic melody. This is a special feature only at this point in the piece, and may be explained as a way of making the thaang ránaát eēk as smooth (conjunct) as possible.

RS1.3

The technique of såbát saām luūk is used at the starting point.
Kèp is used in the entire sentence. The full improvising sentence appears from the first note without the indication to inform the other instrumentalists of the starting point.

The first bar is identical to the first bar of RS1.3. The second bar shows the technique of khàyì (rapid notes).
The first bar is identical to the first bars of RS1.3 and RS1.5, followed by fragments of klọọn dooẹn tàkhẹp in the second bar, and klọọn yọọn tàkhẹp in the last two bars.

Sàbàt technique is used in the first bar, followed by klọọn sàp.

RS1.1 - RS1.7 are possibilities for improvising the thaang rànaàt èèk to fit the basic melody (S1). But according to the restrictions of traditional practice relating to this special piece, the rànaàt èèk may only perform the introductory form of thaang at this starting point, which applies to RS1.1, RS1.3, RS1.5, RS1.6 and RS1.7. The remaining two, RS1.2 and RS1.4, are not accepted at this point because the former uses the krọọ (tremolo) style and the latter uses kèp style.
throughout, and both would be less appropriate to begin this piece. Even though RS1.3, RS1.5, RS1.6, RS1.7 are among the possibilities, each contains some drawbacks, as follows:

RS1.3: the improvisation in the kèp style begins too early, which also means that the important melodic and rhythmic features at the beginning of the second bar (clearly heard in RS1.1) are lost;

RS1.5: the khàyit technique is used in the second bars, but it is not appropriate as an introductory sentence in this piece, where a normal kèp style is preferred;

RS1.6: the improvisation in kèp style begins too early, and klơnn yỏõń tàkhèp is not usually considered appropriate for the introductory sentence;

RS1.7: again, the improvisation in kèp style begins too early, and klơnn sỳp is not appropriate for the introductory sentence in this piece.

S2

RS 2.1
The first half of the thaang ránaât eēk RS2.1 is improvised by using klqon dooeen tâkhèp style but omitting the first note. To a certain extent, this is in order to leave a little gap for the player to jump across the three notes which separate the end of RS1.1 from the beginning of RS2.1, but a more important reason is to make it clear that the kèp style is starting in S2. So the small gap makes this structural point clearer and gives a more elegant sense of a real beginning to the piece.

RS2.2

The first half of this sentence starts with a klqon similar to that in RS2.1, but does not use the omitted note technique, and the second half is different in its descending shape.

RS2.3

Klqon tal luuât is used to improvise the whole sentence, omitting the first note, as in RS2.1.
Klōn tāi luuât is also used in the first half of the sentence, but the interval of a third is used instead of the normal octave, at the fourth note of the first bar.

Klōn tāi luuât is used for the entire sentence. The symmetrical arrangement of this thaang can be clearly seen: the opening and closing bars are identical (a), as are the middle two bars (b).

Klōn sāp is used in the first half of the sentence, followed by klōn tāi luuât in the second half.
The first half of the sentence starts in the same way as the first half of RS2.5, but the second half starts by disrupting the klōn tāi luuât style, by leaping a fifth.

Of these seven thaang rānaât eèk (RS2.1-RS2.7), RS2.3 is the most appropriate to fit S2, for the following reasons:

the klōn tāi luuât is used for virtually the whole sentence, which gives the smoother shape and maintains the poetic style (explained in chapter 3) better than the other thaang;

the second half moves into the upper register, thereby exploiting the range of the instrument;

the omitted note technique (at the very beginning) makes this sentence unique, and makes the start of thaang kêp style more obvious.

Even though RS2.1 omits the first note, it contains a mixture of klōn which is less appropriate than a complete klōn as in RS2.3. Although RS2.2 and RS2.4-7 are in good poetic styles, they do not feature the omitted note and therefore do not provide a clear signal that the kêp style is beginning, and for that reason they are less appropriate than RS2.3.
Mixed klōn are used in this sentence, klōn tal luaṭ is used in the second half, in contrary motion to the corresponding part of S3.

Mixed klōn are used in this sentence, the first half is the same as RS3.1 but it continues by following the direction of the basic melody more closely, and ends the sentence on the same note.
RS3.3

Kløon tai luuât is used for the entire sentence.

RS3.4

Kløon tai luuât is used for the entire sentence, the last two bars ascending to the high register.

RS3.5

Kløon tai luuât is used for the whole sentence.
RS3.6

\[
\begin{array}{c}
\text{RS3.6, kloon tal luuät is used in the first two bars, and kloon sap is used in the last two bars.}
\end{array}
\]

SR3.7

\[
\begin{array}{c}
\text{Kloon tal luuät is used in the second bar though the rest, with a repeated pattern in the second and third bars.}
\end{array}
\]

Of these seven possibilities (RS3.1-RS3.7), RS3.5 is the most appropriate thaang ránaät eëk to fit S3, for the following reasons:

Kloon tal luuät is used in a full sentence, which gives a smooth poetical sentence following the previous appropriate thaang ránaät eëk, which was RS2.3;

the second half of RS3.5 is in contrary motion, compared to the basic melody, which brings the thaang ránaät eëk to the lower octave at the end, thereby creating a nice contrast with what occurred in S2;
the second appropriate thaang ránaáêt cëk for S3 is RS3.3 because it shows certain similarities with RS3.5, namely at the beginning and end, and in the contrary motion in the middle. A poetic style is also achieved through the repetition of the pattern shown by the brackets.

RS3.1, RS3.2 and RS3.6 are mixed klőõn, and are therefore less appropriate. Although RS3.4 consists of a complete klőõn, the direction of the ending note is in the same as the ending note of the basic melody which is a less attractive solution. RS3.7 is also less appropriate because its repetitive patterns would become tedious.

S4

RS4.1

Klőõn tal luuáêt is used for the whole sentence
RS4.2

'a' and 'b' appear in kļoņ roņī luūk soō style, followed by kļoņ tā lūuāt in the last two bars.

RS4.3

Kļoņ sāmnīiang khāmeēn, phaasaā style, appears in 'a' and continues with kļoņ tā lūuāt in the last three bars.

RS4.4

Kļoņ lōgī taakhaāy is used for the entire sentence.
The first half is kl'oön tač luuât, followed by kl'oön sâp.

Mixed kl'oön are used in this sentence.

The second half is similar to the second half of RS4.2
Of these possibilities, SR4.1-RS4.7, RS4.4 is the most appropriate thaang to fit S4 because it contains a complete kļoon lоoč taakhaаy which is used for the first time, and it starts in the low register (continuing from the previous sentence) and ascends to the upper register with a variety of melodic shapes, thereby exploiting smoothly the range of the instrument. It is also the most appropriate version to continue the previous sentence (either RS3.3 or RS3.5) without a leap.

RS4.1 and RS4.7 are less appropriate because they have a leap when continuing from the previous thaang. RS4.2, RS4.3, RS4.5 and RS4.6 are less appropriate because each one contains mixed kļoon and are not in good poetic style.

\[ S5 \]

\[ RS5.1 \]

Kļoon sàp is used for the entire sentence.
RS5.2

Kloqn såp is used in a different way from that of RS5.1: it starts on a higher note and continues with a different, and more obvious sequential pattern, based on shorter phrases.

RS5.3

This combines a sequence of four ascending notes in the first two bars, followed by kloqn tål luuát in the last two bars.

RS5.4

A complete kloqn tål luuát is used for the whole sentence.
RS5.5 is a complete klōn tai luuât, descending to the lowest register. The left hand cannot play the last note at the octave, but must remain on its penultimate note (shown by ‘*’).

RS5.6

This uses klōn sâp, but varies it in each bar.

RS5.7

This uses a kind of reverse set of repeated phrases, as indicated by the letters ‘a’ and ‘b’.
Among RS5.1-RS5.7, the most appropriate thaang rânaât èèk to fit S5 is RS5.4 because it maintains the poetic style of the single klōṇ, and follows the previous thaang (RS4.4) smoothly.

RS5.1 and RS5.3 consist of a leap when continuing from the previous thaang, RS5.2 and RS5.6 are klōṇ sàp in a version normally played on the khṑng wong lék. Although RS5.5 is a complete klōṇ tal luuât, it has a problematic ending note, and RS5.7 consists of repetitive fragments. These six thaang are therefore less appropriate to fit S5.

S6

RS6.1

Klōṇ sàp appears at the beginning and is followed by klōṇ tal luuât.
Repeating pairs of notes appear in the first half-sentence, which then continues with a descending line to end in the lower register.

The first half is kløn dooeen tåkhèp, followed by kløn tål luuât in the second half.

The first half is by kløn tål maf, followed by kløn tål luuât.
RS6.5

Klơqn tằn mạf is used for the entire sentence.

RS6.6

Klơqn đơơecn tấkʰɛp is used for the whole sentence.

RS6.7

Klơqn sập is used for the whole sentence.
Of RS6.1-RS6.7, the appropriate thaang ránaât eêk to fit S6 are RS6.4 and RS6.6 because they are complete poetic styles, and create the best continuity from the previous thaang (RS5.4). Although RS6.5 and RS6.7 also contain complete klqûn, they do not create as good continuity from RS5.4. RS6.1-3 are mixed klqûn, and are therefore less appropriate.

S7

The first two bars are klqûn tal luuât, and then becomes indistinct, because the thaang is not in poetic style and does not use any recognisable klqûn.
RS7.2

This consists of klọn sàp for the first bar, followed by three bars of klọn tal luuát.

RS7.3

The low octave is used, starting with klọn dooeen tâkhhèp for the first half, and klọn tal luuát in the second, remaining in the low register.

RS7.4

A complete klọn tal luuát is used for the whole sentence.
The first half is klọọn sàp, followed by klọọn tàl luuât in the second.

The first half is klọọn dooeen tàkhèp, followed by klọọn tàl luuât in the second.

The first half is klọọn phán, followed by klọọn tàl luuât in the second.
Among the thaang RS7.1-RS7.7, the most appropriate to fit S7 are RS7.4 and RS7.7 because the first notes of both thaang involve only a small leap from the end of the previous thaang (RS6.5 or RS6.6). RS7.4 contains a complete klōn tal luuát, starting in the high register and then descending to the lower register smoothly. If the performer wishes suddenly to change the mood of the audience RS7.7, which is klōn phan, is a good choice, because its complicated pattern will impress.

RS7.1-3, RS7.5 and RS7.6 are less appropriate because they consist of mixed klōn. Moreover, RS7.1 and RS7.3 do not continue from the previous thaang smoothly (without a leap).

S8

RS8.1

The first half is klōn tal luuát, and the second is klōn sāp.
RS8.2

Special, more elaborate klōn, normally reserved for solo performance, are used in this sentence.

RS8.3

Klōn tal luuát is used in the first bar, and klōn sâp is used from the second bar to the end.
RS8.4

The first half is klōn dooën tâkhek and the second is klōn yōon tâkhek

RS8.5

This is a kind of klōn tai luūat, moving in a repetitive wave-form. The second and the third bars are identical.

RS8.6

The klōn here is a type of klōn saṃniiangphaasaā (regional style, discussed in chapter 3), in this case klōn saṃniiangphaasaā mǒon.
This starts with klōn.sap, followed by various kinds of klōn which are not in poetic style, and the constituent klōn are only presented in fragments.

Of RS8.1-RS8.7, RS8.1 is the most appropriate thaang to fit S8, despite the fact that it mixes two kinds of klōn, because it starts in the lower register which creates a continuity from the previous thaang (RS7.4 and RS7.7) without any leap. Even though RS8.2 is also a complete klōn, it is a special klōn used for only a solo piece, and therefore it is not suitable for this piece. RS8.3-7 are less appropriate because they continue from the previous thaang with a leap.
The principal feature of this thaang ránaát eěk is that it remains in the lowest register from the second bar to the end.

KLöɔŋ tạl luuuát is used for the entire sentence.

KLöɔŋ tạl luuuát is again used, but the second bar is repeated in the third.
These two thaang, RS9.2 and RS9.3, also reveal important aspects of the poetic style. They are so similar apart from their opening bars. In RS9.2, the opening bar descends to the low A because this shape is needed to balance that of the third bar. In the corresponding parts of RS9.3, a similar balance is maintained by keeping the tessitura higher.

RS9.4

Thaang ránaât cëk in klöqn sâp style is used for the whole sentence.

RS9.5

Klöqn tal luuât is used in the first half, followed by klöqn dooeen tâkhêp in the last two bars.
RS9.6

A more elaborate and flamboyant thaang ránaát cèk, typical of the solo style, is used.

RS9.7

This features a three-note ascending pattern at the beginning of the first three phrases, and also the repetition of the second bar in the third.

Of these thaang ránaát cèk (RS9.1-RS9.7), the most appropriate ones to fit S9 are RS 9.2 and RS9.3, because both thaang contain complete klènn tāi luuát and make smoother transitions from RS8.1 than the others. The next choice of appropriate thaang to fit S9 is RS9.7 because it creates a beautiful poetic style by using the three-note ascending pattern, in the first three bars. The last bar, however, contains another style of klènn which makes this sentence less appropriate than RS9.2 and RS9.3.
RS9.1 is less appropriate because it contains mixed klǫn and remains in the low register. RS9.4 is a klǫn săp used on the khoön g wong lék, while RS9.5 and RS9.6 continue from the previous thaang with a leap. These four thaang are therefore less appropriate to fit S9.

A similar klǫn săp, indicated by the brackets, is used to start each half sentence. Fragments of klǫn tal luuát appear in the second and fourth bars.
RS10.2

The entire sentence is klóon sàp, in the low octave.

RS10.3

Various kinds of klóon are used in this sentence.

RS10.4

This has a clearly symmetrical shape: the first half is a sequence based on four ascending notes, while the second half inverts this idea, creating a sequence based on four descending notes.
The main characteristic is the leap (followed immediately by a smaller one, in the same direction) at the beginning of the third bar.

Two klōn tāi luuāt are used, the second being a transposition of the first (first two and last two bars, respectively).
Of RS10.1-RS10.7, the most appropriate thaang to fit S10 is RS10.5 because it is the finest poetic thaang and can continue the previous thaang (RS9.2, RS9.3) without any leap. RS10.1, RS10.3 and RS10.7, while theoretically possible, are less appropriate to fit S10 because they mix various kinds of kljqn in the same sentence. RS10.2, RS10.4 and RS10.7 would not proceed smoothly from the previous thaang, therefore, they are less appropriate.

RS11.1

Kljqn tål luuát is used for the entire sentence

RS11.2

The first half is kljqn rqqý luúk soð, while the second half is kljqn tål luuát.
RS11.3

The second half is again klōn tāi luuat, but the first half rises sequentially from the low note, with a falling group of three notes at the end of the second bar to revert to the shape of the main melody.

RS11.4

The first two bars are klōn ṭọọy luūk soō in the low register, followed by klōn sap in the third bar and a mixed klōn in the fourth.

RS11.5

Klōn saămniang phaasaā Khmer is used in the first two bars, followed by klōn tāi luuat for the last two bars.
RS11.6

The entire sentence is klọn t'àl luuât

RS11.7

Klọn sàp is used for the whole sentence, but the leap at the beginning of the third bar detracts from its effectiveness.

Of RS11.1-11.7, RS11.3 is the best thaang to fit S11 because it contains a complete klọn t'àl luuât and can continue the previous thaang (RS10.5) smoothly without any leap. RS11.1-2 and RS11.6 continue from the previous thaang with a leap, while RS11.4 and RS11.5 are mixed klọn, and these five thaang are less appropriate. Even though RS11.7 is a complete klọn sàp, it is less appropriate because of the leap in the third bar.
Kługn sàp is used for the first three bars, and kłoon tāl luuát for the fourth.

Four ascending notes are used in each bar, and the second and third bars are identical. There is also a problematic leap at the beginning of the third and fourth bars.
RS12.3

Klöön yoon tākhēp is used for the whole sentence.

RS12.4

Klöön tal luuāt, in the lowest register, is used for the entire sentence.

RS12.5

This is complete klöön sāp, but borrowing the style which is usually characteristic of the khōoŋ g wong lēk.
Klōòn tāl luuât is used for the whole sentence, with identical second and third bars.

Of RS12.1-12.7, RS12.7 is the most appropriate thaang to fit S12 because it is a complete klōòn tāl luuât which can continue the previous thaang (RS 11.3) smoothly. Although RS 12.4 and 12.6 are also complete klōòn tāl luuât, RS12.4 uses only the lowest register, while the repeated bar in RS12.6 is relatively inelegant.

RS12.1-3 do not continue from the previous thaang smoothly, while RS12.5 is a kloon sâp which is played on the khoọng wong lêk, and these four thaang are therefore less appropriate.
Klōn sàp is used in the first two bars, followed by mixed klōn in the last two bars.

This is all klōn tâu luuât, but in the lowest register.
Klọ̀n dooẹn tàkhẹ̀p is used in the first two bars, followed by klọ̀n tài maf in the last two.

Klọ̀n lọọ̀t taakhaày is used in the first two bars. The poetic style is shown by the distinctive shape of the first three notes, repeated in the second bar, and a repetition of four notes in the third and fourth bars.
RS13.5

Klọn tål luuát is used for the whole sentence, with a leap in the middle.

RS13.6

Klọn dooeen tákèp is used for the whole sentence.

RS13.7

Klọn tál luuát is used for the entire sentence.
Of RS13.1-13.7, RS13.4 is the most appropriate thaang to fit S13 because it consists of a beautiful poetic style without any repetition, leap or deviation from the main melody. Even though RS13.5-7 are also complete klōqn, they do not fit S13 as well, because they do not continue from the previous thaang without a leap. RS13.1 and RS13.3 are mixed klōqn which are also less appropriate, while RS13.2 is not chosen because it remains in the lowest register.

S14

RS14.1

A complete klōqn tâl luuât is used for the entire sentence

RS14.2

Klōqn tâl luuât, in the lowest register, is used for the whole sentence.
The first two bars consist of klóon tál maf, continuing with a different klóon after the leap at the beginning of the third bar.

This sentence is klóon tál maf, with a sequential repetition of four notes in the first three bars.

This is klóon roòy luûk soó, remaining in the lowest register.
RS14.6

Klōn tài luuāt is used throughout, and in the lowest octave after descending from its starting point.

RS14.7

Mixed klōn sâp are used in the first two bars, followed by klōn tài luuāt for the last two bars.

Of RS14.1-14.7, the most appropriate thaang ranaât eēk to fit S14 is RS14.4 because it consists of a complete poetic style, using the sequential repetition and a wide range. Although RS14.1 and RS14.6 use a wider range than RS 14.4 they do not continue from the previous thaang (RS13.4) without a leap. RS14.3 and RS14.7 consist of mixed klōn, RS14.2 is a complete klōn tài luuāt but remains in the lowest register, and RS14.5 is not suitable because of its repetitive question-answer style. These six thaang are therefore less appropriate.
This is klōn sàp, played in the style of a thaang khōng wong lēk, and it is used for the whole sentence.

The first bar is klōn sàp the second and third bars are klōn tāi māi, followed by a fragment of klōn tāi luuät in the last bar.
RS15.3

Klqon lqgt taakhaay is used for the entire sentence.

RS15.4

Klqon tal luat, in the lowest register, is used for the whole sentence.

RS15.5

The similar descending pattern, shown by the brackets in the first, third and fourth bars, are indicative of a good poetic style.
RS15.6

Klôôm tâi luuât is used in the first two bars, followed by klôôm phan in the last two.

RS15.7

Klôôm yôôôô tâkhêp is used in the first two bars, followed by klôôm tâi luuât in the last two bars.

Of RS15.1-15.7, the most appropriate thaang to fit S15 are RS15.3 and RS15.7 because they are in a complete poetic style which continues the previous thaang in RS14.4 without any leap. RS15.7 would be the best choice if the performer wished to lead the thaang ranaât êêk to the high pitch in order to make a difference from the previous thaang (RS14.4) of which the last bar is effectively an inversion of the corresponding part of this thaang. Although RS15.1, RS15.4, RS15.5, RS15.6 show good poetic style, RS15.1 is
less appropriate because the klōnn sâp borrows the khôông wong lêk style. The other three thaang necessitate a leap at the point of continuation from the previous thaang (RS14.4).

RS16

KLōnn sâp is used in the first two bars, followed by mixed klōnn in the last two.

RS16.2

First two bars are klōnn tâl luuát, starting on the same note that concluded the previous thaang (RS15.3). The last two bars are klōnn sâp.
Klōn lọọf taakhày is used in the first half. Each bar contains a pattern of four descending notes in the second half.

Klōn sọọf tàkhẹp is used in the first two bars, followed in the last two by klōn sàp.

A pattern of four ascending notes appears four times in the first two bars, followed
by mixed klønn for the last two bars.

RS16.6

Klønn tài luuât, in the upper register, is used in the first half, followed by Klønn klønn tài maf in the second half.

RS16.7

Klønn tài luuât, is used in the first two bars, followed by a sequential repetition of four descending notes in the last two bars.

Among RS16.1-16.7, there are two appropriate thaang to fit S16. RS16.4 is one because it introduces klønn soøy tàkhèp to the piece, and it is therefore wise to take this opportunity of making a welcome addition to the repertoire of this point. It follows smoothly from RS15.3. The most appropriate thaang to follow from RS 15.7 is 16.7. Despite its mixed kløon, it has no other problems and continues the previous thaang (RS15.7) without a leap. (It would not be appropriate to continue from RS15.3 because of
the leap). RS16.1-3 and RS16.5-6 are mixed klqon which consist of some drawbacks as follows: RS16.1 and RS16.5 could cause a leap when continuing from either RS15.3 or RS15.7; RS16.2 consists of the same note as the last note of RS15.3; RS16.3 has a leap in the second bar; RS16.6 deviates from the basic melody. These five thaang are therefore less appropriate than RS16.4 and RS16.7.

S17

RS17.1

The first two bars are similar to those of RS16.4, transposed down, but the remaining two bars follow a similar course.

RS17.2
This is effectively a repetition of RS17.1 but an octave lower. It is exact in the first two bars, while the last two contain modifications to achieve a poetic style and also to keep within the range of the instrument.

RS17.3

Klợn sàp is used in the first two bars, followed by klợn tạ luumát in the last two.

RS17.4

This starts with a sequential pattern of four ascending notes, four times in the first two bars. Klợn tạ luumát follows in the last two bars.
RS17.5

Klōon yöpā tākhēp is used in the first two bars, followed by a sequence of four descending notes, four times, in the last two bars.

RS17.6

Klōon sāp is used in the first three bars, followed by the last half of the sequence at the end of RS17.5.

RS17.7

Klōon tāl luuāt is used in the first two bars, followed by the same sequence as in the second half of RS17.5.
Among RS17.1-17.7, the most appropriate thaang to fit S17 is RS17.2 because it is in a good poetic style and continues the previous thaang (RS16.7) without a leap. It is not suitable to follow RS16.4 because it repeats the same special klōon in the first half, but in the lower register. RS17.4 is in a good poetic style, and it can be used to follow RS16.4 in order to avoid the repetitive special klōon.

RS17.1 would commence with a big leap, continuing from either RS16.4 or RS16.7, and is therefore less appropriate. Although RS17.3 and RS17.7 proceed from the previous thaang without a leap, they actually start on the same note as last note of RS16.4, which must be avoided. RS17.5 is less appropriate to follow RS16.7 because it repeats the same poetic style as the second half of RS16.7 in its own second half. RS17.7 is a klōon sâp which is normally played on the khôpqg wong lék, and is therefore less appropriate.

S18

Klōon sâp is used in the first bar, klōon tâi luuât in the second, followed by the four-note descending sequence of RS17.5 and RS17.7.
RS18.2

Klöön tål luuat is used in the first two bars, followed by mixed klöön in the last two.

RS18.3

Klöön doocen tàkhèp is used in the first two bars, followed by klöön tål luuat in the last two.

RS18.4

The brackets reveal a Klöön róoy luük soø, which is then reversed.
Kloqn tāl luuat, over a wide range, is used for the whole sentence.

Kloqn tāl luuat is used for the entire sentence. First bar is the same as the first bar of RS18.5.

Kloqn sāp is used for the entire sentence.
Of RS18.1-18.7, the most appropriate thaang to fit S18 are RS18.5 and RS18.6 because they are complete klōon tāl luuât which use a wide range and continue the previous thaang (RS17.4) smoothly without any leap. Although RS18.3 also uses a wide range, it is not a complete klōon and the last two bars repeat the last two bars of RS17.4, which disrupts the smooth sequence of the thaang. RS18.4 is not appropriate because the symmetrical repetition of its klōon would sound tedious. RS18.1-2 are less appropriate because of the mixed klōon.

RS19

Klōon tāl luuât is used in the first two bars, and klōon sāp in the last two.
RS19.2

Klöön tal luuat is used for the entire sentence.

RS19.3

Klöön tal luuat is used in the first two bars, followed by klöön sáp in the last two.

RS19.4

Klöön lqoõ taakhaây is used in the first two bars, followed by a sequence of four ascending notes, four times, in the last two bars.
Mixed kløvn are used in this sentence.

The last note in the previous thaang ránaät ečk (RS18.5 and 6) is repeated for the first note. The first two bars are kløvn tal luuät, followed by kløvn sãp in the last two.

This features pairs of repeated notes, occurring twice in each bar.
Of RS19.1-RS19.7, the most appropriate thaang to fit S19 are RS19.2 and RS19.4 because they show good poetic styles, which can continue the previous thaang (RS18.5, RS18.6) without any leap. RS19.4, which ends in the upper register, is an especially good choice to contrast with the previous thaang (RS18.5, RS18.6) which followed the direction of the basic melody. Even though RS19.6 ends on the same note as RS19.4, a problem arises at the beginning, which repeats the last note of RS18.5 and RS18.6.

RS19.1, RS19.3 RS19.5 and RS19.6 are less appropriate because of the mixed klønn. RS19.7 is a special klønn which is used in solo pieces, so it is not appropriate to this piece (in which normal klønn are required).

S20

\[
\begin{align*}
\text{RS20.1} & \\
\end{align*}
\]

This features repeated notes in the first three bars, and identical second and third bars. The last bar is klønn sáp.
RS20.2

A complete kløn tål luoat, across a wide range, is used for the whole sentence.

RS20.3

The second and third bars are identical, and the whole sentence uses a limited range.

RS20.4

This uses kløn tål luoat which appears in a wave style.
Klōn tāl luuät is used for the whole sentence.

A complete klōn tāl luuät is used for the entire sentence, and the second and third bars are identical.

Klōn tāl luuät is used in the first two bars, followed by klōn dooeen tākhēp in the last two bars.
OF RS20.1-RS20.2. RS 20.2 is an appropriate thaang to fit S20 to continue from the previous thaang (RS19.4) because it is a complete klöön tal luuat which continues from RS19.4 without any leap. RS20.4 is also appropriate to continue without any leap from RS19.2 in a further complete klöön tal luuat. Although RS20.1, RS20.3 and RS20.6 are complete klöön, they each contain repetitions of their second and third bars, which is inappropriate.

RS20.5 contains a leap when continuing from either of the previous chosen thaang, while RS20.7 contains mixed klöön, so neither thaang would be considered appropriate.

S21

The main feature is a sequential repetition of four ascending notes in the first bar, followed by a sequence of four descending notes through the remainder of the thaang.
Mixed klōn are used in this sentence.

Klōn tal luuât, in the wave style, is used in this sentence.

Mixed klōn are used in this sentence.
Klønn sâp is used for most of this, in fact from the second bar.

Mixed klønn are used in this sentence.

The last three bars contain a structure of a 'klønn røyy luûk soð.'
Among RS21.1-RS21.7, the most appropriate thaang to fit S21 is RS21.1 because it is a good poetic style which continues the previous thaang (either RS20.2 or RS20.4) smoothly (without any leap). Although RS21.3 is also a complete kloñn tāi luuāt, a leap occurs when continuing from the previous appropriate thaang ranaāt eēk.

RS21.7 would also be considered an appropriate thaang if it did not repeat the final note of the previous thaang (RS20.2 or RS20.4) at the beginning.

RS21.2 and RS21.4-6 are not appropriate because they consist of mixed kloñn and are not in good poetic styles.

S22

Kloñn yqqñ tākhēp is used in the first two bars, followed by kloñn tāi luuāt in the last two.
The first and second bars contain a sequential repetition of the phrase in brackets, followed by klōn tal luuāt in the third and fourth bars.

KLōn tal maf is used for the whole sentence.

KLōn sāp is used for the whole sentence.
Klqon tål luuát is used for the entire sentence, with a repetition of the second bar in the fourth.

The first half of the sentence is klqon sap, followed by klqon tål luuát in the second half.

A complete klqon sap is used for the whole sentence.
leap. The main point is that it is the only complete klōn sâp among RS22.1-RS22.7, and the first opportunity to present this particular klōn in the piece.

Although the RS22.3, RS22.4 and RS22.5 are also complete klōn (though not klōn sâp), RS22.3 would begin with a bigger leap when continuing from RS21.1, and the style of RS22.4 suits the khoóng wong lék more than the rânaât eêk. RS22.5 is in the low register. RS22.2 and RS22.6 are mixed klōn which are not in good poetic styles, therefore, they are less appropriate.

S23

Mixed klōn are used in this sentence.
Kloññ tal luuát is used in the first two bars, followed by a sequence of four descending notes four times in the last two bars.

Mixed kloññ are used in this sentence.
The sequence of four descending notes, used in the last half of RS23.2, is the main feature of this klǒn, and its second half is identical to that of RS23.2.

Mixed klǒn are used in the first two bars, and klǒn sàp in the last two.

A special klǒn, for solo performance, is used for the entire sentence.
Of RS23.1-RS23.7, the most appropriate thang to fit S23 is RS23.2 because it shows the best poetic style. Although it does not consist of a complete kloon, it fits the basic melody best and continues the previous thang RS22.7 without any leap. RS23.5 also exhibits a good poetic style, but in performance the four-note descending pattern throughout the sentence would be tedious, and therefore it is less appropriate than RS23.2.

RS23.1 and RS23.4 would continue form the previous thang with leap, while the first note of RS23.3, RS23.5 and RS23.7 repeats the final note of the previous thang (RS22.7), and RS23.6 is not in a good poetic style, so these six thang are not appropriate to fit S23.

S24

RS24.1

Klōn saâmniang phaasaâ Khmer is used in this sentence.
RS24.2

Klōn tāi luuāt is used in the first two bars, followed by klōn sāp in the last two.

RS24.3

Klōn tāi luuāt, over a wide range, is used for the whole sentence.

RS24.4

Klōn tāi luuāt is used in the first two bars, followed by klōn sāp in the last two.
Klōn tāi luuat, in the low register, is used for the whole sentence.

Klōn phan, over a wide range, is used for the entire sentence.

The first two bars are klōn tāi luuat, followed by klōn rō̌y luûk soô in the last two, after the wide leap at the beginning of the third bar.
Of RS24.1-RS24.7, the most appropriate thaang to fit S24 are RS24.3 and RS 24.6 because: RS 24.3 is a complete klōn tāl luuât, using a wide range. RS24.6 is a complete klōn phan, which also uses a wide range. Even though it would continue with a large leap from the previous thaang (RS23.2) this is acceptable in view of the fact that this klōn phan is so special.

RS24.2, RS24.4-5, and RS24.7 are less appropriate because they are not in a good poetic style. RS24.1 is not appropriate because klōn saămniang phaasaă Khmer is not suitable for this piece, in which only klōn saămniang phaasaă Thai should be played.

S25

Klōn tāl luuât is used for the entire sentence.
This is also a mixture of klQQn: a fragment of klQQn yQQn takhép appears in the second bar, and the last two bars are identical to the last two bars of RS25.1.

KlQQn tal luuá t, over a wide range, is used for the whole sentence. The last bar is same as the corresponding bars of RS25.1 and RS 25.2, an octave lower.

KlQQn dooeen takhép is used in the first two bars, followed by mixed klQQn.
The first bar is repeated a fourth higher in the second, followed by a phrase of klʊn tā luuat in the third bar and a phrase of klʊn səp in the last.

Klʊn səp is used for the entire sentence.

Klʊn tā luuat is used for the entire sentence. The fourth bar is identical to the
fourth bar of RS25.3 (and similar to that of RS25.4).

Of RS25.1 - RS25.7, the most appropriate thaang to fit S25 are RS 25.3 and RS25.7 because they are complete klōn tāi luuāt which continue from the previous thaang, RS24.3 and RS24.6, without any leap. RS25.3 is preferable to RS25.7 because it covers a wider range.

RS25.1, RS25.4, RS25.5 and RS25.6 are less appropriate because of the leap from the previous thaang, while RS25.2 consists of mixed klōn, which therefore makes it also less appropriate.

S26

RS26.1

Klōn sāp is used in the first two bars, followed by klōn tāi luuāt in the last two.
Mixed klqon are used in this sentence.

Klqon sàp is used for the whole sentence.

Klqon lqatisf taakhaay is used for the first three bars, followed by a phrase of klqon tal
luuát in the last bar.

Klőn săp, featuring a variety of shapes, is used in this sentence, followed by klőn tai luuát.

The second bar is effectively a repeat of the first, a fourth higher. The last two bars contain a descending sequence of four notes, four times.
The first two bars contain an ascending sequence of four notes, four times.

The last two invert this shape, giving an identical half sentence to the last two bars of RS26.6.

Of RS26.1-RS26.7, RS26.7 is the most appropriate thaang to fit S26 because it is a complete poetic style with a contrary shape in each half sentence and it continues RS25.3 and RS25.7 smoothly without a leap. Although RS 26.3 and RS26.5 also are complete klōn, they are kinds of klōn sáp which are usually played on the khọng wong lek.

RS26.1 consists of mixed klōn. RS26.2, while RS26.6 would continue with a leap when continuing from the previous thaang, and RS26.4 repeats the final note of the previous thaang, so these thaang are less appropriate.

S27

RS26.1 consists of mixed klōn. RS26.2, while RS26.6 would continue with a leap when continuing from the previous thaang, and RS26.4 repeats the final note of the previous thaang, so these thaang are less appropriate.

Klōn sáp is used in the first two bars, followed by klōn tạ lụọt in the last two.
RS27.2

Special thaang, used in solo performance, is used in this sentence.

RS27.3

Klʊŋ tā luuát is used for the entire sentence, and the second and third bars are identical.

RS27.4

Klʊŋ tā luuát is used for the entire sentence.
Klọnn doo-en ṭăkhẹp is used in the first two bars, followed by klọnn tạ lụnụt in the last two.

Klọnn tạ lụnụt is used for the entire sentence. The main phrase of each bar is identical, but the cadential notes are different, yet paired in a symmetrical way: one pair in the middle and the other pair at either end.

Klọnn tạ lụnụt is used from the second bar to the end, and the second and third
bars are identical.

Of RS27.1 - RS27.7. RS 27.4 is the most appropriate thaang to fit S27 because it is a complete kļoņ tāi luuāt and continues the previous thaang RS26.7 without a leap. RS27.5 also could be considered an appropriate thaang but it consists of two different kļoņn, and is therefore less suitable than RS 27.4.

The remaining thaang are less appropriate for the following reasons:
the first note of RS27.1 repeats the final note of the previous thaang; RS27.2 is a kļoņ which is used in a solo piece; RS27.3 would continue from the previous thaang with a leap; RS27.6 is not in a good poetic style because of the repetition; RS27.7 consists of a mixture of kļoņn and also has a leap in the second bar.

S28

Kļoņ sçoń tākhēp is used in the first two bars, followed by kļoņ tāi luuāt in the last two.
Mixed klōn are used in this sentence.

Klōn tāl luumāt, in the low register, is used for the entire sentence.

Klōn yōpp tākhēp is used in the first two bars, followed by klōn doocen tākhēp in the last two.
Klöqn tāl maf is used for the entire sentence.

Klöqn yóóń tākhēp is used in the first two bars, followed by mixed köón in the last two.

Klöqn tāl luuat is used for the entire sentence.
Of RS28.1-RS28.7, RS28.3 and RS28.7 are the most appropriate thaaung to fit S28 because they continue from the previous thaaung (RS27.4, RS27.5) without a leap, and they are complete kl.lastIndexOf. Although RS28.5 is also a complete kl.lastIndexOf it does not continue from the previous thaaung smoothly.

RS28.1, RS28.4 and RS28.5 are less appropriate because of the leap at the beginning. RS28.2 and RS28.6 are less appropriate because they are mixed kl.lastIndexOf.

RS29.1

Kl.lastIndexOf is used in the first two bars, followed by kl.lastIndexOf sáp in the last two.
The last two bars feature a sequential pattern of four descending notes, four times.

Klöön tal luüät is used for the entire sentence.

Klöön dooën tàkhèp is used in the first two bars, followed by klöön tal luüät in
the last two.

RS29.5

This uses mixed klqon, and the second bar is repeated in the third. The last bar is identical to the corresponding one of RS29.2.

RS29.6

A klqon which is usually associated with solo performance is used in this sentence.

RS29.7

Mixed klqon are used in this sentence.
Of RS29.1-RS29.7, the most appropriate thaaing to fit RS29 is RS29.3 because it is a complete klọọn tạ lụuạt which continues the previous thaaing. RS28.3 and RS28.7, without a leap. Even though RS29.6 is also a complete klọọn with a good poetic style, it is a special klọọn and is usually for solo performance.

RS29.1-2, RS29.4-5 and RS29.7 are less appropriate because they consist of mixed klọọn. The first note of RS29.2 repeats the last note of the previous thaaing, and RS29.7 commences with a leap, so these thaaing are also less appropriate.

S30

\[ \text{Musical notation image} \]

RS30.1

\[ \text{Musical notation image} \]

Klọọn sàp is used in the first two bars, followed by klọọn tạ lụuạt in the last two.
RS30.2

The first three bars of this sentence are identical to the first three bars of RS30.1, but the last bar ascends to end an octave higher than the previous thaang.

RS30.3

The first two bars are a transposition up of the corresponding part of RS 25.5 (and the second bar is also a sequential transposition of the first). The last two bars are klō̄n tāl luuāt.

RS30.4

First two bars are identical to the first two bars of RS30.3, followed by the
sequence of four descending notes, four times, in the last two bars.

RS30.5

A complete klong sap is used in this sentence.

RS30.6

This is identical to RS26.7.

RS30.7
Phrases of kłożn sąp are used in the first and fourth bars, and kłożn tài luất is used in the second and third bars.

Of RS30.1- RS30.7, the most appropriate thãang to fit S30 are RS 30.1 and RS30.2. Even though they are not in the best poetic style, they are the only thãang which continue the previous thãang RS29.3 without a leap. RS30.5 and RS30.6 would be appropriate, were it not for the fact that they start on the same note as the final note of the previous thãang (RS29.3).

RS30.3, RS30.4 and RS30.7 are less appropriate because of the leap at the beginning. RS30.5 and RS30.6 are also less appropriate because the first note of each thãang repeats the final note of the previous thãang.

S31

RS31.1

Kłożn sąp is used in the first two bars, followed by mixed kłożn in the last two bars.
The first bar is identical to the first bar of RS31.1, but the second bar descends to the lower register. The unusual feature of two leaps (in the same direction) at the beginning of the third bar brings the thaang back to the middle register, from which point it continues with klōon tā luuāt.

Klōon dooeen tākhēp is used in the first two bars, followed by klōon tā luuāt in the last two.
Mixed kloon are used in this sentence.

The first two bars are kloon tāl luuāt, followed by mixed kloon for the remainder.

Kloon rooy luūk soō is used in the first two bars, followed by mixed kloon in the last two.
RS31.7

Kløn yoon tâkhêp is used in the first two bars, followed by kløn tai luuat in the last two.

Of RS31.1- RS31.7, RS31.7 is the most appropriate thaang to fit S31 because it is a good poetic style and continues the previous thaang (RS30.1) without a leap. If the choice for the previous thaang were RS30.2, then the most appropriate thaang of this set to follow it smoothly would be RS31.3.

Although RS31.5 would proceed as smoothly from RS30.1, it is a mixture of kløn which is not in a good poetic style. Similarly, RS31.1, RS31.2, RS31.4, RS31.6 would proceed as smoothly from RS30.2, but they are also mixed kløn, hence all of these thaang are less appropriate.

S32
RS32.1

Klōn tai luuāt is used for the entire sentence.

RS32.2

Klōn saṃniiang phaasaā khaaēek is used for the entire sentence.

RS32.3

A special klōn for solo pieces is used in this sentence. RS32.4 klōn tai luuāt is used for the entire sentence.

RS32.4

Klōn tai luuāt is used for the entire sentence.
Klọọn tā luuát is used in the first three bars, followed by klọọn sâp in the fourth bar. The first bar is repeated a fourth higher in the third bar.

Klọọn rọọy luuk soó is used for the entire sentence.

Klọọn tā luuát is used for the entire sentence.
Of RS32.1-RS32.7, the most appropriate thaang to fit S32 is RS32.5 because it maintains the luûk tòk (discussed in chapter 3) at the beginning of the fourth bar, and it is also in a good poetic style. Although RS32.2 maintains the same luûk tòk, it is klqon sarñniang phaasàa khaèk, a dialect klqon and therefore unsuitable for phleeng Sañhúkaan.

RS32.1 and RS32.4 are complete klqon tai luuât, but they consist of the wrong luûk tòk in the fourth bar. RS32.3 is a klqon which is normally used in solo pieces. RS32.6 and RS32.7 would commence with a leap when following the previous thaang. These thaang are therefore less appropriate to fit S32.

S33

RS33.1

Klqon sàp is used in the first two bars, followed by mixed klqon in the last two.
The first half of the sentence is klçon sap, followed in the second half by a sequence of four descending notes, four times.

Mixed klçon are used in the first two bars, followed by klçon yqqûi tâkhêp in the last two.

Klçon tai luuât is used for the entire sentence.
RS33.5

Klōŋ tā luuát is used in the first two bars, and last two are identical to the second half of RS33.2.

RS33.6

Mixed klōŋ are used in this sentence.

RS33.7

Klōŋ tā luuát is used in the first half, followed in the second by klōŋ yōŋ.
tâkhêp, in the low register.

Of RS33.1-RS33.7, RS33.5 is the most appropriate thaang to fit S33 because it is in a good poetic style. Although a leap is involved when continuing from the previous thaang, it remains the best choice. RS33.4 would be an appropriate thaang because it is a complete klôñ tâi luuât, but it would start by repeating the final note of the previous thaang, and should therefore be avoided.

RS33.1 and RS33.2 contain a leap and are not in a good poetic style, while RS33.3, RS33.6 and RS33.7 are mixed klôñ, so these thaang are less appropriate.

S34

RS34.1

Klôñ tâi luuât is used for the entire sentence.
RS34.2

Klöön dooeen tākhēp is used in the first two bars, followed by klöön tā luuät in the last two.

RS34.3

Klöön tā luuät is used in the first two bars, followed by the sequence of four descending notes, four times, in the last two bars.

RS34.4

Klöön tā luuät is used for the entire sentence, in a wave-form, and the second
half is identical to the second half of RS34.1.

RS34.5

A special klqon, for solo pieces, is used for the whole sentence.

RS34.6

Klqon tā luuät is used for the whole sentence, with the first bar repeated in the fourth, and the second bar repeated in the third.

RS34.7

The first half is klqon dooeen tākhēp, followed by klqon tā luuät.
Of RS34.1-RS34.7, RS34.1 is the most appropriate thang to fit S34 because it is a complete klşôn tài luuât and continues the previous thang (RS33.5) without a leap. Even though RS34.7 consists of two klşôn, it can be considered as a second choice because it continues the previous thang smoothly. RS34.4, RS34.5 and RS34.6 are also complete klşôn, but they are less appropriate for the following reasons: there would be a leap at the beginning of RS34.4 (from the previous thang, RS33.5); RS34.5 is a klşôn which is normally used in a solo piece; RS34.6 consists of repetitive phrases.

S35

RS35.1

The first half is klşôn dooeen tâkhêp, followed by klşôn yọọń tâkhêp in the second half.
RS35.2

Klōn tāl luuát is used in the low register for the entire sentence.

RS35.3

Klōn tāl luuát is used for the entire sentence, and the last three bars are identical to the last three bars of RS35.2.

RS35.4

Klōn tāl luuát is used in this sentence, and the last bar is identical to the last
bar of RS35.2 and RS35.3.

RS35.5

Klőn phan is used for the entire sentence.

RS35.6

Klőn tài luuát is used for the entire sentence, and the second half is identical to the second half of RS35.2 and RS35.3.

RS35.7

The first half contains mixed klőn, followed by klőn tài luuát in the second half.
Of RS35.1-RS35.7, the most appropriate thaang are RS35.2 and RS35.6 because they are complete klqon. RS35.6 is a complete klqon tal luuat which continues the previous thaang (RS34.1 and RS34.7) without a leap. Although RS35.2 is a complete klqon and continues the previous thaang without a leap, it covers a narrower range, and is therefore less appropriate.

RS35.1 and RS35.7 consist of mixed klqon, while RS35.3-5 would not continue from the previous thaang smoothly, so they are less appropriate for S35.

RS36.1

Klqon tal luuat is used for the entire sentence.
RS36.2

Klọọn tâi maf is used for the entire sentence.

RS36.3

Klọọn rọọ́y luūk soō in the first half, followed by klọọn tâi luūât in the last two bars.

RS36.4

Klọọn tâi maf is used for the entire sentence.
RS36.5

The first half is klọọn yọọ́ tǎkhẹ́p, followed by klọọn tǎi luuát in the second half.

RS36.6

Mixed klọọn are used in this sentence.

RS36.7

Klọọn tǎi luuát is used for the entire sentence.
Of RS36.1-RS36.7, the most appropriate thaang to fit S36 are RS36.2, RS36.4 and RS36.7 because the first two are complete klɔ̄n tāi maf, while RS36.7 is a complete klɔ̄n tāi luuăt, and all these thaang continue from the previous thaang RS35.2 and RS35.6 without a leap.

Although RS36.1 is also a complete klɔ̄n tāi luuăt, it consists of a leap when continuing from the previous thaang. RS36.3, RS36.5 and RS36.6 are also less appropriate, because they are mixed klɔ̄n.

S37

RS37.1

An ascending sequence of four notes, four times, is used in the first half, followed by klɔ̄n tāi luuăt in the second half.
Kløøn tål luøøt, in the first half, followed by kløøn løøi taakhaøy in the second half.

Kløøn tål luøøt, in the upper register, is used for the entire sentence.

Kløøn tål luøøt, over a wide range, is used for the entire sentence.
Two different types of klōn săp are used in each half of the sentence.

Klōn tāl luuāt is used in the first half, followed by mixed klōn in the second half.

Klōn ṭtōy luūk soō is used in this sentence. The first bar is repeated in the fourth,
and the second bar in the third.

Of RS37.1- RS37.7, RS37.4 is the most appropriate thaang to fit S37 because it is a complete klœn tài luuat, covering a wide range and continuing the previous thaang (RS36.2, RS36.4 and RS36.7) without a leap. RS37.2 could be considered a good thaang, except for the fact that its first note repeats the last note of the previous thaang. Although RS37.3 is a complete klœn and continues the previous thaang without a leap, it is used only in the high register, and is therefore less appropriate.

RS37.1 and RS37.5 would continue from the previous thaang with a leap, RS37.6 is a mixture of klœn, and RS37.7 contains repetitive phrases, so these thaang are less appropriate.

S38

RS38.1

The first bar is klœn sáp, followed by klœn tài luuat for the remainder.
RS38.2

Klçoŋ tə luuát is used for the entire sentence.

RS38.3

Klçoŋ tə luuát is used for the entire sentence, and the last bar is identical to the last bar of RS38.2.

RS38.4

Klçoŋ sa̱amnìiŋ phaásaá khameéñ used for the entire sentence.
RS38.5

Klōn tāl luuāt is used for the entire sentence.

RS38.6

A different klōn tāl luuāt is used for the entire sentence.

RS38.7

A further klōn tāl luuāt is used for the entire sentence.
Of RS38.1-RS38.7, RS38.7 is the most appropriate thang to fit S38 because it is a complete klōn tal luuätzlich and continues the previous thang (RS37.4) without a leap.

Although RS38.4 is a complete klōn, it is a klōn saāmniang phaasaā which is not suitable for this traditional classical Thai piece, because it is in a regional style. RS38.3 and RS38.6 are also complete klōn tal luuätzlich, but they would continue from the previous thang with a leap. RS38.2 and RS38.5 are also complete klōn tal luuätzlich, but they do not fit S38 as well as RS38.7 because of their wrong luūk tōk in the second bar.

S39

KLōn tal luuätzlich is used for the whole sentence.
Klöön rооу́ lůу́k sόо is used in this sentence. The first bar is repeated in the fourth bar, and the second bar is repeated in the third.

Klöön dооееn tάехеp is used in the first two bars, and klöön tάl lůuάt in the last two.

Klöön tάl lůuάt is used for the entire sentence, in the low register.
RS39.5

Kļūņ tāl lūuāt is used for the entire sentence, and the last bar is identical to the last bar of RS39.4, but an octave higher.

RS39.6

Kļūņ tāl lūuāt is used for the entire sentence, in the upper register.

RS39.7

The first half is kļūņ lņoĩ taakhaāy, followed by kļūņ tāl lūuāt in the second half.
Of RS39.1-RS39.7, the most appropriate thaang to fit S39 is RS39.1 because it is a complete klōn tài luuat and continues the previous thaang (RS38.7) without a leap. Another choice would be RS39.7. Even though it is not a complete klōn, it is klōn lōk tūkhaay which has hardly been chosen before as the appropriate thaang. Its use now is an effective way of introducing variety and avoiding tedious repetition of the same klōn. Although RS39.5 is also a complete klōn, it is used only in the upper register. Although RS39.2 is in a good poetic style, it contains too much repetitive material.

RS39.3 and RS39.4 would continue from the previous thaang with a leap, while RS39.6 contains a wrong luuk tok at the beginning of the fourth bar, so these thaang are less appropriate.

S40

RS40.1

Klōn saṃniiang phaasaák Khmer is used for the entire sentence.
The first two bars are mixed klọn, followed by klọn tài luuát in the last two.

Klọn dooecn tákhep is used in the first two bars, followed by mixed klọn in the last two.

Mixed klọn are used in this sentence.
RS40.5

Klöon təi luuat is used for the entire sentence, and the last two bars are identical to the last two bars of RS40.4.

RS40.6

Klöon lọọ təakhaay is used for the entire sentence.

RS40.7

Klöon təi luuat is used for the entire sentence. The second and third bars are identical, and there is a similarity between the first and fourth bars.
Of RS40.1-RS40.7, the most appropriate thaang to fit S40 are RS40.5 and RS40.6 because they are complete klôn tâ luuât and klôn lôp taakhaây, respectively.

and continue the previous thaang, either RS39.1 or RS39.7, without a leap. RS40.1 is a complete klôn but it is klôn saâmniang phaasa Khmer, in a regional style, and therefore unsuitable for this piece. RS40.2 is less appropriate because of mixed klôn.

Although RS40.7 is a complete klôn, it consists of repetitive phrases and is therefore not a good choice.

RS40.3, RS40.4 and RS40.7 are less appropriate because they would continue from the previous thaang with a leap.

S41

RS41.1

The first two bars are klôn tâ luuât, followed by mixed klôn in the last two bars.
RS41.2

Klöön tâl luuât is used in the first two bars, followed by klöön dooen tâkhêp in the last two bars.

RS41.3

Klöön tâl luuât is used in the first half. The first bar is identical to the first bar of RS41.2. The remaining three bars are klöön yoon tâkhêp.

RS41.4

Klöön tâl luuât is used for the whole sentence.
Kloŏn tài luuăt is used for the whole sentence. The second and third bars are identical, while the last bar is identical to the fourth bar of RS41.4.

Kloŏn sâp is used for the whole sentence, and the second and third bars are identical.

A special kloŏn for solo pieces is used for the whole sentence.
Of RS41.1-RS41.7, the most appropriate thaang to fit S41 is RS41.4 because it is a complete klông tâi luât and continues the previous thaang without a leap. RS41.2, although two different klông, could be a second choice because it remains in a good poetic style and also continues the previous thaang without a leap. Although RS41.3, RS41.5, RS41.6 and RS41.7 are in good poetic styles, RS41.3 consists of a leap in the middle of the sentence, RS41.5 and RS41.6 contain repeated phrases, and RS41.7 is a special klông which is more appropriate to solo pieces. These four thaang are, therefore, less appropriate than RS41.4 and RS41.2.

S42

RS42.1

Klông dooecn tâkhêp is used in the first two bars, followed a descending sequence of four notes, four times, in the last two bars.
The first bar is klōqn sāp, the second bar is a transposition up a fourth of the first bar, and the last two bars are identical to the last two bars of RS42.1.

The first bar, which is identical to the first bar of RS42.2, is klōqn sāp, the second bar is klōqn tāl luuāt, while the third and the fourth bars are klōqn yōnī tākhēp.
RS42.4

Kłęơn sâp is used in the first half, followed by kļoon tăł luuát in the third bar, and the fourth is again kļoon sâp.

RS42.5

Kļoon sâp is used in the first two bars, followed by kļoon tăł luuát in the last two.

RS42.6

A sequence of four ascending notes is used in the first half, followed by a sequence
of four descending notes in the second half.

RS42.7

Klqøn sàp is used for the whole sentence.

Of RS42.1-RS42.7, the most appropriate thaaŋ to fit S42 is RS42.2. Although it contains two different klqøn, it continues the previous thaaŋ (RS41.2 and RS41.4) without a leap. RS42.1 also consists of two different klqøn but the first note repeats the last note of the previous thaaŋ, which is less appropriate.

RS42.2, RS42.3 and RS42.4 consist of fragments of three klqøn in each sentence, therefore they are not in a good poetic style, while RS42.5-7 does not continue the previous thaaŋ smoothly, so these thaaŋ are less appropriate.

S43
Mixed klōn are used in this sentence.

Klōn lōqt taakhaey is used for the whole sentence.

Klōn tāi luuāt is used for the entire sentence.
RS43.4

A different klqon tål luuât is used for the entire sentence.

RS43.5

Klqon dooën tâkhep is used for the entire sentence.

RS43.6

Mixed klqon are used in this sentence.
Klōn tāl luuat is used for the entire sentence.

Of RS43.1-RS43.7, the most appropriate thaang to fit S43 are RS43.2, RS43.3, and RS43.5 because they are complete klōn and continue the previous thaang (RS42.2) without a leap. Although RS43.1, RS43.4, RS43.6 and RS43.7 are also complete klōn, they would continue from the previous thaang with a leap.

S44

Mixed klōn are used in this sentence.
Mixed klōn are used in this sentence. The second bar is a transposition up a fourth of the first, and the last two bars are mixed klōn sāp.

Klōn sāp is used for the entire sentence.
A sequence of four ascending notes, four times, is used in the first two bars, and the last two bars are klọọn tăi luuát.

Klọọn tăi luuát is used for the entire sentence, and the last bar is identical to the last bar of RS44.5.

Klọọn y프프 tăkhẹp is used in the first two bars, followed by klọọn phan in the last
Of RS44.1-RS44.7, RS44.1, RS44.4, and RS44.6 are the most appropriate 
thaaang to fit S44 because they are complete klōn and continue the previous thaaang 
(RS43.2 and RS43.5) without a leap. Of the three, RS44.6 is especially suitable at this 
point, because the ascending motion at the end creates a nice contrast with the previous 
thaang (RS43.2 and RS43.5), which concluded with a descending motion.
RS44.5 could be chosen, despite its mixed klōn, as it creates a nice contrast with the 
previous thaaang (RS43.3). RS44.3 consists of mixed klōn and is therefore less 
appropriate. RS44.7 consists of two klōn, and is less appropriate because klōn yǒo̤n 
tākhēp and klōn phan are similar in that each would conceal the basic melody and confuse the 
other performers.

S45

RS45.1

Klōn tā luuât is used for the entire sentence.
Kløen tæ luuāt is used for the entire sentence. The first and fourth bars are identical to the first and the fourth bars of RS45.1, but the style of the kløen tæ luuāt is different.

Kløen tæ luuāt is used for the entire sentence, and the last two bars are identical to the last two bars of RS45.1, and the style is again different.
Kлон тал лучт is used for the entire sentence.

Mixed клон are used for the first two bars, followed by клон тал лучт in the last two.

Kлон тал лучт is used for the entire sentence, and the last two bars are identical to
the last two bars of RS45.5.

RS45.7

Klöon lọqị taakhaỳy is used in the first bar, followed by klöon tai luuat in the last three bars.

Of RS45.1-RS45.7, the most appropriate thåang to fit S45 are RS45.1, RS45.2 and RS45.3 because they are complete klöon and continue the previous thåang (RS44.2 and RS44.4) without a leap. RS45.4 is also an appropriate thåang to continue from either RS44.5 or RS44.6, for the same reason. RS46.5, RS46.6 and RS46.7 are less appropriate because they would continue from the previous thåang with a leap.

S46
Mixed kløn are used in this sentence.

Kløn tāi luuát is used for the entire sentence.

Kløn tāi luuát is used for the entire sentence.
Kløgn tæl maf is used in the first half, followed by kløgn yøøn tåkhøp in the second half.

Kløgn tæl luuåt is used for the entire sentence.

Kløgn løøf taaqhaåy is used for the first half, followed by kløgn tæl luuåt in the
second half.

RS46.7

Kloçon tái luuât is used for the entire sentence.

Of RS46.1-RS46.7, the most appropriate thang to fit S46 are RS46.3 and RS46.7 because they are complete kloçon and continue the previous thang (RS45.1-3) without a leap. Moreover, RS46.3 fits S46 more smoothly, according to the luûk tôk, than the others even though they are also in good poetic styles.

RS46.1 and RS46.5 are less appropriate because the first note repeats the final note of the previous thang (RS45.4), and they would commence with a leap when following RS45.1-3. RS46.6 contains the wrong luûk tôk in the second and fourth bars which should be avoided. RS46.4 is less appropriate because it is a mixture of kloçon.

S47
RS47.1

The first two bars have a similar shape. The last two bars are kløn săp.

RS47.2

Kløn tål maf is used for the entire sentence. The second bar is a transposition of the first.

RS47.3

Kløn loqf taakhaay is used for the entire sentence.
RS47.4

Klōon sāp is used for the first two bars, followed by mixed klōon in the last two bars.

RS47.5

Klōon yqqū tākēp is used in the first two bars, followed by klōon tā luuāt in the last two bars.

RS47.6

Klōon lōqē taakhaāy is used for the whole sentence.
RS47.7

Kłożn sąp is used for the entire sentence.

Of RS47.1-RS47.7, the most appropriate thaang to fit S47 is RS47.3 because it is a complete kłożn lọqf taakały and continues the previous thaang (RS46.3) without a leap. RS47.2 and RS47.6 are appropriate to continue RS46.7 because they continue the previous thaang (RS46.7) without a leap and they are also in good poetic styles.

RS47.1, RS47.4 and RS47.5 are less appropriate because they consist of mixed kłożn. RS47.7 is kłożn sąp in kłọqf wong lẹk style, which is less appropriate.

S48
RS48.1

Klōn sáp is used for the entire sentence. A distinctive pattern is the first four notes, which is repeated five times.

RS48.2

The first half is klōn tài luuât, followed by a sequence of four descending notes four times in the second half.

RS48.3

Klōn tài luuât is used for the entire sentence.
The second bar is a transposition of the first, and the rest is identical to the second half of RS48.2.

Klōn tài luuât is used in the first half, followed by mixed klōn.

Klōn sōnh tákʰɛp is used in the first two bars, followed by klōn sâp in the last
two bars.

RS48.7

The first two bars are identical to the first two bars of RS48.6, and thereafter this sentence is distinguished by its ascending motion to the upper octave.

Of RS48.1-RS48.7, the most appropriate thaang to fit S48 are RS48.6 and RS48.7 because they continue the previous thaang RS47.2, RS47.3, and RS47.6 without a leap. The second half of RS48.7 ascends to the higher octave, therefore it could be chosen in order to create a contrast with the preceding sentence. RS48.1 benefits from the use of klōn sàng throughout, but the repeated four-note pattern would be judged too tedious.

RS48.1 contains repetitive patterns of klōn sàng throughout the sentence which would be tedious. RS48.2 is less appropriate because the first note repeats the final note of the previous thaang. RS48.3 and RS48.5 are less appropriate because there will be a leap when continuing from the previous thaang.
Kløgn sopp tåkhèp in RS48.6 is used again in the first two bars, followed by kløgn sopp for the last two.

Kløgn tal luuat is use for the entire sentence.
RS49.3

Klông tái luuát is used in the first two bars, followed by klông sáp as in the second half of RS49.1.

RS49.4

Klông tái luuát is used in the first half of the sentence in the lower octave, while the second half is klông sáp, also in the lower octave.
RS49.5

Klōn tāl luāt is used in the first two bars, followed by a sequence of four descending notes.

RS49.6

Klōn sōnh tākhép as in RS49.1, but an octave lower, is used in the first two bars, followed by mixed klōn in the last two.

RS49.7
Klöön sáp is used in the first two bars, followed by klöön tål luuât in the last two bars.

Of RS49.1-RS49.7, the most appropriate thang to fit S49 are RS49.1 and RS49.3 because they continue the previous thang, RS48.7, without a leap. Although RS49.2 is a complete klöön tål luuât, the repeated note at the beginning of the third bar is a drawback.

RS49.4-7 are less appropriate for the following reasons: RS49.7 is a mixture of klöön, moreover used within a narrow range; RS49.5 repeats the final note of the previous thang (RS48.7) at the beginning; RS49.6 and RS49.7 contain mixed klöön which are not in a good poetic style.

S50

A mixed klöön sáp is used for the entire sentence.
RS50.2

Klögn dooeen tâkhpè is used in the first two bars, followed by klögn tâ luuât in the last two bars.

RS50.3

Klögn tâ luuât in used for the entire sentence.

RS50.4

Klögn tâ luuât is used for the entire sentence. The second and third bars are
Klọọn tài luuạt is used in the first two bars, followed by klọọn sàp in the last two.

Klọọn rọọ́y luúk sọọ is used for the entire sentence. The second bar is identical to the third and the first bar is identical to the fourth.

Mixed klọọn are used for the entire sentence.
Of these RS50.1-RS50.7, the most appropriate thaang to fit S50 is RS50.3 because it is a complete klơ̂n tài luuát which continues the previous thaang RS49.3 without a leap. RS50.1 and RS50.2 consist of two different klơ̂n and are therefore less appropriate. Even though RS50.4 is also a complete klơ̂n tài luuát, the repetition in the second and third bars could make it tedious and the same could be said of RS50.6 which is also based on repetition, though in a question-answer style. The second half of RS50.5 is identical to the second half of the previous thaang (RS49.1 and RS49.3) which should be avoided. RS50.7 contains mixed klơ̂n and a big leap in the fourth bar which is not a good poetic style.

S51

RS51.1

Klơ̂n tài luuát is used in the first two bars, followed by klơ̂n sâp in the last two bars.
RS51.2

Klöön dooeen ṭàkhèp is used in the first two bars, and klöön tà luuát in the last two.

RS51.3

Klöön lọọf taakhaày is used in the first two bars, followed by mixed klöön sàp in the last two bars.

RS51.4

Klöön tà luuát is used in the first half. It starts with the same pattern as RS51.1,
but continues in contrary motion in the second bar. The last two bars are a sequence of four notes repeated four times.

RS51.5

The first two bars are klōn tāl luuāt, and the last two bars are identical to the last two bars of RS51.3.

RS51.6

Klōn tāl luuāt is used in the first two bars, followed by klōn sāp in the last two bars.
RS51.7

Kløn roqy luûk sod is used for the entire sentence.

Of these RS51.1-RS51.7, the most appropriate thaang to fit S51 is RS51.1 because it continues the previous thaang (RS50.3) without a leap and consists of a good poetic style. Although RS51.2, 51.3, 51.4, 51.7 could also continue the previous thaang without a leap, RS51.2 does not fit the luûk tâk at the beginning of the fourth bar; RS51.3 consists of a mixed kløn sáp which is less appropriate; RS51.4 contains a leap at the beginning of the third bar; RS51.7 remains too much within a narrow range. RS51.5 and RS51.6 would commence with a leap when following the previous thaang and are therefore less appropriate.

S52
RS52.1

Kloşn tâi luuât is used for the entire sentence. The second and third bars are identical.

RS52.2

Kloşn tâi luuât is used for the whole sentence. The third bar is identical to the third bar of RS52.1.

RS52.3

This repeats the Kloşn tâi luuât of RS52.1, but an octave lower.
RS52.4

Klöön tal luuat is used for the entire sentence. The second and third bars are identical.

RS52.5

Klöön tal luuat is used in the first half of the sentence, followed by klöön phan in the second half.

RS52.6

Klöön tal luuat is used for the entire sentence in the low register. The second and
third bars are identical.

RS52.7

Klønn tal luuat is used for the entire sentence. The first two bars are identical to the first two bars of RS52.2.

Of RS52.1-RS52.7, the most appropriate thang to fit S52 is RS52.2 because it is a complete klønn tal luuat and continues the previous thang (RS51.1) without a leap. It is, moreover, the only thang which ends in the upper octave, thereby creating a contrast with previous few sentences. RS 52.7 is the second choice, and it ends on the same pitch as the basic melody. Although, RS52.3, RS52.4 and RS52.6 are also complete klønn, they contain repeated bars, which is not as satisfactory. RS52.5 consists of two different klønn, which make it less appropriate.

S53
Klöön dooeen ūkhēp is used in the first two bars, followed by klöön tāl luuât in the last two bars.

Klöön tāl luuât is used for the entire sentence.

Klöön tāl luuât is used for the entire sentence.
Klōn tāl luuāt is used for the first two bars, and klōn sāp is used for the last two. The second bar is identical to the second bar of RS53.3.

Klōn tāl luuāt is used for the entire sentence.

Klōn tāl luuāt is used for the entire sentence.
RS53.7

Klōon tāl luuāt is used for the entire sentence.

Of RS53.1-RS53.7, the most appropriate thang to fit S53 is RS53.6 because it is a complete klōon and continues the previous thang (RS52.2) without a leap. RS53.1 and RS53.4 consist of two different klōon in each sentence and are therefore less appropriate. RS53.7 is suitable to continue from RS52.7 for the same reason. Although RS53.2, 53.3, 53.5 are also complete klōon tāl luuāt, they would involve a leap from the previous thang.

S54
RS54.1

A sequence of four descending notes four times is used in the first two bars, followed by klqon tål luuat in the last two bars.

RS54.2

Klqon róóý luûk soô is used for the entire sentence.

RS54.3

Klqon tål luuat is used for the entire sentence.
Klōn tāl luuāt is used for the entire sentence. The first two bars are identical to the first two bars of RS54.3.

Mixed klōn in the lower register are used throughout this sentence.

Klōn sāp is used in the first two bars, followed by klōn tāl luuāt in the last two.
RS54.7

Kλοόν ται luuát is used for the entire sentence.

Of RS54.1-RS54.7, the most appropriate thaang to fit S54 is RS54.7 because it is a complete kλοόν ται luuát and continues the previous thaang (RS53.7) without a leap. RS54.1 consists of a big leap at the beginning of the third bar, which should be avoided. Although RS54.2, 54.3, and 54.4 are also complete kλοόν, the repetitive question-answer style of kλοόν ται luuát soo in RS54.2 could be tiresome, while RS54.3 and RS54.4 do not have the same luûk tòk as the basic melody at the beginning of the second and fourth bars. RS54.5 and 54.6 are both mixed kλοόν, and are therefore less appropriate.

S55

Because this is the last sentence, the latter half is a special concluding phrase which mixes kλοόν and krqq (tremolo). The discussion of each sentence which follows is restricted to the kλοόν portion.
RS55.1

Klqqn tal luuât is used in the first two bars of the sentence. There is an interruption of the kèp by omitted note shown by ‘*’ in the second bar, followed by krqq from the fourth bar through the end.

RS55.2

The same klqqn tal luuât is used in the first two bars, the fourth bar through the end are also krqq.

RS55.3

Klqqn tal maf is used in the first two bars, followed by mixed klqqn.
Kløøn yøøn tàkhèp is used in the first two bars, the fourth bar and the ending note are kroø.

Kløøn tal luuøt is used in the first three bars, the last three notes are kroø.

No kløøn is used in this sentence. kroø technique is used in the first two bars and also the last bar.
Klöön tal luuät is used in the first three bars, the last three notes are krōq.

Of RS55.1-RS55.7, the most appropriate thaang to fit S55 is RS55.1 because it gives the clearest signal to the rest of the ensemble that phleeng Saăthukaan is about to finish, by interrupting the fluent kèp style at the beginning of the third bar. Its technique is correct according to the rules of ending a piece. RS55.2 - RS55.5 and RS55.7 do not give as clear a signal. On the other hand, RS55.6 overdoes the signal, thereby jumping the gun, and is much less subtle than RS55.1.
CHAPTER FIVE

Basic melody and thang ránaât eêk groupings in phleeng Saâthúkaan

In order to analyse the method of improvisation on the ránaât eêk in phleeng Saâthúkaan, the basic melodies will first be grouped into identical or similar sentences, with the thang ránaât eêk (one or more, according to the reasons given in chapter 4) chosen as most appropriate, in order to clarify and distinguish the reasons behind the consideration of each thang ránaât eêk. This will show how and why different thang ránaât eêk may be used for identical or similar sentences.

The criterion for this grouping is the occurrence of the same luûk tôk (though not necessarily at the same octave) at the beginning of the third bar in each sentence, and again at the end of each sentence. (As explained in chapter 3, the luûk tôk at these points have special importance.) Although the focus will be on the first choice, other choices will also be discussed, with reasons given for their selection, albeit in a lower ranking. Several sentences will not fit into the grouping according to the criterion given, and they will considered individually after the groups.

Group 1

This group consists of two identical basic melodies: S2, S34; two similar basic melodies: S27 and S29; also five thang ránaât eêk: RS23, RS27.4, RS27.5, RS29.3, and RS34.1. Although the basic melodies S2 and S34 are identical the corresponding thang ránaât eêk are slightly different (for the sake of variety).
The other two, S27 and S29, are different in the first two bars but the last two bars are identical to the last two bars of S2 and S34. The thaang ránaät eèk, RS2.3 and RS29.3, are similar, though not identical, in the first two bars. RS27.4 and RS34.1 are different only in the first bars, which means that the corresponding thaang ránaät eèk are different at this point.

The ránaät eèk player should try to improvise the thaang ránaät eèk to fit also the luûk tòk at the beginning of the second bar if possible, in order to help emphasise the basic melody and maintain the stability of the ensemble, since he or she is the leader of the performance.

**Group 2**

This group consists of five identical basic melodies: S3, S13, S35, S45, and S53, and eleven thaang ránaät eèk: RS3.3, RS3.5, RS13.4, RS35.2, RS35.6, RS45.1, RS45.2, RS45.3, RS45.4, RS53.6, and RS53.7.

Although the basic melodies of all this group are identical, most of the thaang ránaät eèk are different. Two, however, RS3.5 and RS35.6, are identical, but there is no sense of repetitiveness, owing to the large gap between them. The ending notes of RS53.6, RS53.7, RS45.1-3 are an octave higher than those of RS3.5, RS3.3, RS13.4, RS35.2, RS35.6, RS45.4.

RS3.3 and RS3.5 begin in the same way, but the former continues with a contrasting shape in the second bar, which gives a more satisfying form overall. RS3.3 moreover repeats its less satisfying second bar in the third. RS3.5 may be paired into two bars in the upper 5 octave and two in the lower, which reverses the pairing of the previous thaang (RS2.3), making a larger symmetrical structure in a good poetic style. Such a structure could not be obtained if RS3.3 were chosen.

Comparing RS35.2 with RS3.5 and RS3.3, the first two bars of RS35.2 are different from the first two bar of RS3.5. The last two bars of RS35.2 are identical to the last two bars of RS3.5 but slightly different from the last two bar of RS3.3. Thus different thaang rānaāt eēk which fit the same basic melody can be created by changing small fragments in each sentence to avoid repetition. Although RS35.6 is identical to RS3.5, it should be considered as the first choice because it uses a wider range than RS35.2.

RS45.1, RS45.2, RS45.3 are klqqn ta luuat but RS45.1 is the smoothest and consists of a good poetic style in two wave-form pairs. RS45.4 would also be the first choice if it followed RS44.6 because they would connect without any leap. Moreover, RS45.4 starts descending to the lower register from the third bar, creating contrary motion from RS44.6 which ascends to the higher register in the fourth bar. RS45.2 and RS45.3 could be considered as second choices because they are normal klqqn ta luuat, but without the attractive features of RS45.1 and RS45.4.

In RS53.6 start on the highest note in the group, which gives the smoothest join from RS52.2, which finishes a fourth above. The luûk tôk (first note) in the third bar of RS 53.6 is identical to the luûk tôk at the end of RS52.2, and the second bar of RS53.6 is identical to the fourth bar of RS52.2. These repetitive features help create a good poetic style.

On the other hand, while the luûk tôk of the last bar of RS53.6 is the same as the luûk tôk of the third bar of RS52.2, the thaang to fit these two identical luûk tôk are different. The conclusion to be drawn from this is that if the same thaang were used, there would be too much repetition, which would detract from the poetic style established by the other repetition just discussed. RS53.6, using this balance of repetition and avoidance of repetition, is therefore selected as the first choice to fit S53. RS53.7 would be the first choice if it followed RS52.7, because it would do so without a leap and because it uses a wide range.
Group 3

This group consists of seven identical basic melodies: S4, S11, S14, S36, S43, S46, S54, one similar basic melody: S32; and thirteen thaang ráanaát eèk: RS4.4, RS11.3, RS14.4, RS32.5, RS36.2, RS36.4, RS36.7, RS43.2, RS43.3, RS43.5, RS46.3, RS46.7, and RS54.7, of which two, RS4.4 and RS36.2 are identical.

This repetition is, however, not readily noticeable owing to the large gap between the two sentences. The last two bars of RS11.3 are similar to the last two bars of RS4.4 and RS36.2, and identical to the last two bars of RS36.7. The first two bars of all four are different, and because of this the four sentences will not sound repetitive.

In RS14.4, the sequential repetition of four notes shows an enhanced poetic style. RS14.4 is identical to RS36.4, apart from the three notes after the first note in the second bar. This can be seen as the ráanaát eèk player intentionally changing small fragments in order to avoid wholesale repetition.

The first bar of RS32.5 is identical to the first bars of RS46.3 and RS54.7. RS32.5 contains a mixture of klőøn tæ luuát (first and third bars) and klőøn sàp (second and fourth bars). This balance makes it especially attractive and first choice, even though the other six thaang are also complete klőøn in good poetic styles. It also has the correct luûk tòk at the beginning of the fourth bar. This also applies to RS32.2, which, however, would not be considered an appropriate thaang for S32 because it is a klőøn saûmniang phaaasà which is not suitable for phleeng Saûthúkaan, requiring Thai klőøn.

RS36.2, RS36.4 and RS36.7 can be considered as the first choices because they are complete klőøn. The first two, which are klőøn tæ maf, would be better choices than RS36.7, which is klőøn tæ luuát, if the performer wishes to avoid the repetition of this klőøn, which occurred in the previous two sentences (RS34.1, RS35.6).
RS43.3 is the only thaang which is in the lower register, so it could be considered as the first choice if a contrast of register is required. RS43.2 should also be the first choice because it covers a wider range.

RS43.5 which is klaon dooeen tâkhêp would be first choice, were it not for the wrong luûk tôk in the third bar (shown as the note B in the thaang ránaât eèk RS43.5, against G in the basic melody S43). Nevertheless this thaang could still be the first choice if the performer really wants to present this relatively unusual thaang for the sake of variety. RS46.3 should be considered as the first choice because it continues the previous thaang RS45.1, RS45.2 and RS45.3 smoothly without a leap. (It could also follow RS45.4, though the leap involved would not be to every performer's taste.) Although RS46.7 continues the previous thaang without a leap, it contains the drawback of a wrong luûk tôk at the beginning of the fourth bar, and therefore could be a second rather than first choice.

RS46.3 and RS54.7 are identical, except for their third bars. This again shows the performer's intention to create an element of change and avoid wholesale repetition.

The last bar of RS46.7 is identical to the last bar of RS43.3 but the first three bars are different. RS46.7 is the first choice if a wide range is required. It can continue from three of the four chosen thaang, RS45.1-3, but not from RS45.4 because the leap involved would be too large.

**Group 4**

This group consists of six identical basic melodies: S5, S12, S15, S37, S44, S47 and twelve thaang ránaât eèk: RS5.4, RS12.7, RS15.3, RS15.7, RS37.4, RS44.2, RS44.4, RS44.5, RS44.6, RS47.3, RS47.2, RS47.6. Among these twelve are two sets of identical thaang: RS12.7 and RS37.4; RS15.3, RS44.2 and RS47.3. Although RS12.7 is identical to RS37.4, the distance between the two sentences precludes a sense of repetition.
In the other set of identical thaang (RS153, RS44.2 and RS47.3) the repetition of the first two can be ignored for the same reason, but if the performer wished to avoid even this element of repetition RS15.7 could chosen in preference to RS15.3. On the other hand, the repetition of RS44.2 in RS47.3 must be avoided because they are close enough for it to be heard. There are two ways to solve this problem:

if RS44.2 is retained, the appropriate thaang ránaát eêk to fit S47 would be either RS47.2 or RS47.6 (instead of RS47.3):

if RS47.3 is retained, the appropriate thaang ránaát eêk to fit S44 would be RS44.4 or RS 44.6.

The first bar of RS5.4 is identical to the first bar of RS37.4, while the third bars are identical but an octave apart. The difference between the two sentences lies in their second and fourth bars, which are not only in different registers but also in contrary motion. They both end on the same note.

To ensure the smoothest link, the first choice to continue from RS46.3 would be RS47.3, while RS47.2 and RS47.6 would be the best choices to continue from RS46.7.

The two thaang RS44.5 and RS44.6 end an octave above RS44.2 and RS44.4, and the contrast of register from the previous thaang (RS43.3), which ended low, make the former pair first choices. RS44.2 would also be appropriate to continue from RS43.2 and RS43.5, and RS44.4 from RS43.3, because the transitions would avoid leaps. However, they are less attractive than RS44.5 and RS44.6 because the sequence of thaang does not contain the same contrast of register.

**Group 5**

This group consists of two identical basic melodies: S6, S38 and three different thaang ránaát eêk: RS6.4, RS6.6 and RS38.7.
RS6.6 is the most appropriate thang ránaât eêk because it is a complete klônn dooêen tâkhêp and this is its first appearance in the piece. This makes it the first choice to fit S6 despite the wrong luûk tôk at the beginning of the second bar, and is also the reason why it is preferred to RS6.4, which is also appropriate but is the same type of klônn as the previous thang. RS38.7 is identical to RS6.4 from the second bar. The contrasting material in the first bars is enough to avoid a sense of repetition.

**Group 6**

This group consists of two identical basic melodies: S7 and S39, and four thang ránaât eêk: RS7.4, RS7.7, RS39.1 and RS39.7.

RS7.4 and RS39.1 are identical klônn tai luuât, though far enough apart for the repetition not to be noticeable. If, however, the player wishes to avoid the repetition RS39.7 could be substituted for RS39.1, or else RS7.7 could be substituted for RS7.4.

The first half of RS7.7 is a rare klônn called klônn phan which makes the first of its two appearances in the piece. It could therefore, also be the first choice if the ránaât eêk player seeks a contrast with the previous klônn.

RS39.7 consists of klônn lôoî taakhaây in the first half, followed by klônn tai luuât in the second. It could also be the first choice to fit S39 because it follows the previous thang (RS38.7) without a leap.

**Group 7**

This group consists of four identical basic melodies: S8; S18; S40; S50, and six thang ránaât eêk: RS8.1; RS18.5; RS18.6; RS40.5; RS40.6 and RS50.3.

Although RS8.1 consists of two different kinds of klônn (klônn tai luuât and klônn sàp) it should be selected as the first choice to fit S8 because it continues the previous thang,
RS7.4 or RS7.7, without a leap. Although another possibility is RS8.2, which is a complete klong and continues from the previous thaang without a leap, it is an exceptional klong reserved for solo pieces, and is therefore less appropriate.

RS18.5 and RS18.6 are klong t'ai luuât, in which the first bars are identical, while the second and third bars are in contrasting motions.

The second bar of RS18.6 is identical to the second bars of RS40.5, RS40.6 and RS50.3, the first and last of which are klong t'ai luuât while RS40.6 is a complete klong lqgf taakhaây, although it contains a fragment of klong t'ai luuât in the second bar, which is the same as the second bar of RS18.6. This small amount of borrowing does not, however, disrupt the essential character of klong lqgf taakhaây.

Either of the two appropriate thaang rânaât eëk to fit S40, RS40.5 and RS40.6, could be the first choice depending on the choice of the previous thaang (RS39.1 or RS39.7). If RS39.1, which is a klong t'ai luuât, is chosen, the first choice for S40 should be RS40.6, which is a klong lqgf taakhaây. On the other hand, if RS39.7, which is a klong lqgf taakhaây, is chosen, then RS40.5, which is a klong t'ai luuât, should be the first choice in order to avoid the repetition of klong in successive sentences. Even though RS50.3 is identical to RS40.5 except in the first bars, the repetition is not obvious because of the distance between the two sentences.

Group 8

This group consists of three identical basic melodies: S9, S20, S41 and six appropriate thaang rânaât eëk: RS9.2, RS9.3, RS20.2, RS20.4 RS41.4 and RS41.2.

RS9.2 is identical to RS20.4 which is klong t'ai luuât, and identical to RS20.2 except in the first bar. The second bar of RS9.2 is identical to the second bars of RS9.3 and RS41.2. The last two bars are identical to the last two bars of RS9.3, RS20.2 and RS41.4.
The direction of the first bar of RS20.2 is descending, while that of the first bar of RS20.4 is both descending and ascending. The luũk tòk at the beginning of the second bar of RS20.4 is clearly wrong, and therefore this thaang should not be considered as the first choice. Instead, RS20.2 should be selected because it is a complete klʊƞ, continues from the previous thaang (RS19.4) without a leap, and contains the correct luũk tòk.

The second half of RS41.4 is identical to the second halves of RS9.3, RS20.2 and RS20.4. RS41.2 consists of klʊƞ tali luuAt in the first two bars, followed be klʊƞ dooeen tǎkhęp. It should be considered as a second choice to fit S41 because of the mixture of two klʊƞ. RS41.4 should be considered the first choice because it is a complete klʊƞ and continues from the previous thaang (RS40.5 and RS40.6) without a leap. Moreover, it exploits a wider range which makes it more attractive.

**Group 9**

This group consists of two identical basic melodies: S10 and S42 and two different thaang rānaät eēk: RS10.5 and RS42.2.

RS10.5 makes the best transition from RS9.2 because the fourth bar is in descending motion, which contrasts with the ascending motion RS9.2 and RS9.3 at that point, even though the last notes of the basic melodies, S9 and S10, are the same.

RS42.2 consists of two different poetic styles: klʊƞ sàp in the first half, followed a descending sequence of four notes, four times, in the last two bars. The mixture of klʊƞ in not a drawback in this sentence because it continues from the previous thaang, either RS41.2 or RS41.4, without a leap. RS42.6 is in a better poetic style because of its symmetrical arrangement of an ascending sequence (four notes, four times), followed by a descending sequence (also four notes, four times). It would not be chosen, however, because of the leap involved at the beginning (continuing from the same thaang).
**Group 10**

This group consists of two identical basic melodies: S16 and S48, and four appropriate thaang rânaât eèk: RS16.4, RS16.7, RS48.6 and RS48.7.

RS16.4 is identical to RS48.6, and the first half is identical to the first half of RS48.7. RS16.4 and RS16.7 could both be the first choice, depending on the choice of the previous thaang: if RS153 is chosen, the first choice would be RS16.4, and if RS153 is chosen, RS16.7 would be preferred and make a smooth join. The repetition of RS16.4 in RS48.6 is not obvious because of the distance between two sentences. Of RS48.6 and RS48.7, RS48.7 is preferable because its concluding shape contrasts attractively with the end of the previous thaang.

**Group 11**

This group consists of two identical basic melodies: S17, S49 and four appropriate thaang rânaât eèk: RS17.2, RS17.4, RS49.1 and RS49.3.

RS17.2 is similar to RS49.1 but an octave lower. RS17.4 starts with a sequential pattern of four ascending notes, four times in the first two bars, followed by klôn tal luuât. Of these two sentences, RS17.2 is the first choice to continue from the previous thaang, if it is RS16.7, but it is not appropriate to continue from RS16.4 because it contains a special klôn which had already been used in RS16.4, so this repetition should be avoided. RS17.4 could be the first choice to continue from the previous thaang, either RS16.4 or RS16.7, because there would be no such repetition. Moreover, the sequential pattern of four ascending notes in the first two bars makes a pleasing balance with the sequential pattern of four descending notes in the last two bars of the previous thaang, RS16.7.

The first half of RS49.1 is similar to the first half of RS17.2 but in the upper octave, and the second half is identical to the second half of RS49.3. RS49.1 is not appropriate to continue from RS48.6 because it repeats a similar type of klôn for the whole sentence and the
join would also involve a leap, but it can be the first choice to continue from RS48.7, where neither repetition nor leap would occur. RS49.3 could also be selected as the first choice to fit S49 because it continues the previous thaang (RS48.7) smoothly and consists of klōn tal luuât in the first two bars which contrasts with the first two bars of the previous appropriate thaang, RS48.6 and RS48.7.

**Group 12**

This group consists of two identical basic melodies: S19, S51, and three appropriate thaang ránaât eèk: RS19.2, RS19.4 and RS51.1.

The first bar of RS19.2 is identical to the first bar of RS51.1 but the second bar ascends to the upper octave.

RS19.4 should be considered as the first choice. Even though it contains a mixture of klōn lôqî taakhaây and a sequential pattern of four ascending notes, it is the only thaang which ends in the higher register which makes a pleasing contrast with the previous thaang, and also with the basic melody at this point.

RS51.1 is the only choice to fit S51 because it is the only complete klōn tal luuât, and it also continues the previous thaang RS50.3 without a leap.

**Group 13**

This groups consists of two identical basic melodies: S26, S30 and three different thaang ránaât eèk: RS26.7, RS30.1 and RS30.2.

RS26.7 contains two sequential patterns: four ascending notes in the first half, followed by four descending notes in the second half. This thaang should be the first choice because its poetic style is different from the previous thaang: RS23.2, RS24.3. RS24.6 RS25.3 and RS25.7 which are all complete klōn tal luuât. Once again, contrast is a major criterion of choice.
The first three bars of RS30.1 are identical to the first three bars of RS30.2. Their fourth bars follow contrary motions, so the two thaang end an octave apart. RS30.2 should be the first choice to fit S30 because it concludes with a contrary motion to the basic melody, and also to the previous thaang RS29.3 (which ends in the lower register). RS30.1 is acceptable, though only as the second choice because the second half of the sentence contains wave shapes similar to those in the second half of RS29.3.

Group 14

This group consists of two similar basic melodies: S33 and S55 and two different thaang ránaât eëk: RS33.5 and RS55.1. S33 is the last sentence of the first part of phleeng Saâthúkaan (before it repeats, as explained at the beginning of chapter 4).

Even though RS33.5 contains a mixture of two klóon: klóon tâi luuât in the first half and a sequence of four descending notes in the second half, and continues from the previous thaang with a leap of a 5th, it should be the first choice because its two klóon are in better poetic styles than those of the other six possibilities.

The difference between RS33.5 and RS55.1 is the technique of performance: kép is used throughout RS33.5 while RS55.1 consists of kép only for its first one and a half bars. RS55.1 is the only appropriate thaang to fit S55, the last sentence of phleeng Saâthúkaan.

The interruption to the kép style (which dominates the entire piece) indicates the ending signal. Although RS55.6 similarly signals the end of the kép style and of the piece, through the use of the kroó (tremolo) style (also discussed in chapter 3), it occurs too early and could confuse the other players. The kroó style needs to be prepared, rather than following straight from the kép style, as happens here.
Individual sentences

The remaining sentences of this piece which cannot be grouped as similar or identical basic melodies are: S1, S21, S22, S23, S24, S25, S28, S31 and S52. These sentences will be analysed individually.

S1

This sentence is unique as an introductory sentence to phleeng Saáthúkaan. RS1.1 is the best choice to fit S1 because it uses the sabát saâm luûk technique, which is traditionally used to start phleeng Saáthúkaan.

S21

An appropriate thaang ránaât èëk to fit S21 is RS21.1, which is based on sequential patterns of four notes. RS21.2- RS21.7 contain mixed klòôn. RS21.3 would continue from the previous thaang (RS20.2 or RS20.4) with an unacceptable leap, while RS21.5 and RS21.7 would start by repeating the last note of the same previous thaang, which is also unacceptable.

Another advantage of choosing RS21.1 is to contrast with the frequent use of klòôn tål luûât just prior to this stage of the piece (RS18.5, RS18.6, RS19.2, RS20.2, and RS20.4).

S22

RS22.7 is the most appropriate thaang ránaât èëk to fit S22. It is a complete klòôn sàp, which is used for the first time in this piece. RS22.4 is also a complete klòôn sàp but its style is associated more with the khôông wong lék. RS22.6 contains klòôn sàp but only in the first half, and is considered less appropriate than the complete version.
RS23.2 consists of klōn tāi luuāt in the first half, followed by a sequential pattern of four notes in the second half. We saw a similar sequence in RS21.1. An unwanted sense of repetition is, however, avoided because the overall contours are different: descending in the case of RS21.1 and ascending in the case of RS23.2.

The two appropriate thaang to fit S24, RS24.3 and RS24.6, are in good poetic styles: klōn tāi luuāt and klōn phan, respectively. The latter, moreover, is being used for the first time in this piece, and is therefore the first choice (for the sake of variety), even though there is nothing wrong with RS24.3. Although RS24.1 is also a complete new type of klōn (not hitherto used in the piece) it is a klōn saññiiangphaasaā khāmeēn that should be used in phleeng saññiiangphaasaā khāmeēn rather than in the typical phleeng Thai, such as phleeng Saāthūkaarn.

The two choices are RS25.3 and RS25.7, which are both complete klōn tāi luuāt, identical in their second halves but in contrary motion in their first halves. The greater range of RS25.3 makes it first choice.

RS28.3 and RS28.7 could each be considered as first choice, depending on the choice of the previous thaang. They are both the same type of klōn, but in different registers. Since the last two bars of RS27.4 were in the upper register, the better choice would be
RS28.3, since its lower register creates contrast. By the same reasoning, if RS27.5 had been chosen, RS28.7 would be the first choice.

S31

RS31.3 consists of kl'ožn dooeen tākhēp at the first half, followed by kl'ožn tāi luuât. This sentence could be considered as the first choice for S31 because it continues from the previous thaang, RS30.2, without a leap, and moreover creates contrary motion at the end of the sentence.

RS31.7 is also could be considered as the first choice if the previous appropriate thaang were RS30.1 because it would continue without a leap. Both thaang, however, conclude with descending motion, which is less attractive than the combination of RS30.2 and RS31.3.

S52

RS52.2 and RS52.7 are kl'ožn tāi luuât, identical in the first three bars but ending in contrary motion. Both thaang have been chosen as appropriate thaang rānät eēk to fit S52 because they are complete kl'ožn tāi luuât and have the right luūk tōk at the beginning of the second bars, whereas the other five thaang contain wrong luūk tōk at this point. The better choice is RS52.2 because its motion at the end is contrary to that of the basic melody (discussed in chapter 4). It would make a pleasing contrast with the previous thaang, RS51.1, which ended in the same register as the basic melody (S51).
CONCLUSION

After a consideration of the instrument, its technique and the subject of thaang ránaát eèk, chapter 4 selected the most appropriate thaang ránaát eèk for one large piece (phleeng Saathukaan). 93 appropriate thaang ránaát eèk were chosen from the 385 possibilities, based on seven per sentence of the basic melody. In the choices resulting from the analysis of the basic melody and the thaang ránaát eèk of phleeng Saathukaan, we saw emerge certain (repetitive) principles which guide the choices made by the ránaát eèk player in his or her improvisation. Chapter 5 narrowed the choices of possible thaang ránaát eèk made in chapter 4 to a single most appropriate thaang (i.e. from 93 to 55).

In chapter 4, 55 thaang ránaát eèk emerged as the first choices, and 38 thaang ránaát eèk as the second choices. Of the 93, 32 are mixed klqon and 61 are complete klqon as follows: 43 klqon tai luuât; 6 klqon lqof taakhaay; 4 klqon tai mai; 2 klqon dooeen tåkhèp; 2 klqon phan; 2 klqon såp; 2 klqon sôph tåkhèp. Thus seven of the nine available klqon for the ránaát eèk are used. (Klqon røqy luûk soô and klqon yôqî tåkhèp do not appear in their entireties.)

Klqon tai luuât is used by far the most often. This is because klqon tai luuât is the only klqon which contains a greater variety of patterns than the other klqon. It is also regarded as an example of the best style of Thai music. It was shown in chapter five that each sentence of klqon tai luuât contains small fragments which can be rearranged to create different kinds of klqon tai luuât. Flexibility of embellishing each sentence is therefore easily possible, so the performer prefers this to the other klqon, in which the patterns are limited and hence the over-use of such klqon would become tedious.
Some poetic styles have no name, but are valued as equivalent to complete klōn. For example RS26.7 (and several others) are in a good poetic style, consisting of a sequence of four ascending then descending notes.

Although mixed klōn are normally considered inferior to complete klōn, they have often emerged as first choice. For example, in RS15.7, which consists of two different klōn (yqqń tākhēp and tal luuat), the performer may like to introduce klōn yqqń tākhēp to the piece for the sake of variety, but only part of it is appropriate to this piece, so it must be mixed with another klōn. In the same way, the klōn yqqń tākhēp in RS15.7 cannot be used for the full sentence because it would create a sense of a solo piece (which is not suitable for phleeng Saāfhīkaa). Mixed klōn are sometimes chosen because they continue the previous thaang better than some complete klōn, an example being RS42.2. Occasionally they are chosen for their register or motion, for example RS48.7 which moves in contrary motion from the basic melody in the last two bars.

Five main criteria governing the choice of the most appropriate thaang rānaāt eēk were given at the beginning of chapter 4. They can now be expanded to a total of eight. The other three did not recur throughout the analysis since they relate to special requirements only at the beginning or end of the piece:

1. special introductory sentence;
2. interruption;
3. smooth join;
4. contrary motion from the basic melody;
5. wide range;
6. complete klōn;
7. correct luuk tōk;
8. suitable to end the piece.
1. Special introductory sentence

The special sentence (RS1.1) is a typical introductory thaang ránaât eèk which is suitable for phleeng Saâthûkaan. The sabât saâm luûk technique is often used to start pieces which are in the same style as phleeng Saâthûkaan, and especially in solo pieces. It is counted as an advanced technique, and requires great skill of the performer.

2. Interruption

Interruption, by omitting a note, is found in RS2.3 in the beginning of the sentence. This kind of technique is occasionally used in order to make a smooth join between two sentences in which different techniques are performed. For example, in RS1.1 and RS2.3, after finishing the krôô technique at the end of the former, the omitted note appears in the beginning of the latter as a join to the kèp technique used in it. Moreover, this technique makes RS2.3 more elegant than would using a normal kèp without the omitted note.

3. Smooth join

Approximately 95% of the 93 appropriate thaang ránaât eèk have been chosen because they continue the previous thaang without a leap. Six sentences, however, have been chosen as appropriate thaang even though they contain a leap: five sentences contain a leap of a 5th (RS17.4, RS22.7, RS24.6, RS33.5, RS44.6) and one (RS46.3) contains a leap of a 6th. Even though a thaang ránaât eèk which contains a leap is usually less appropriate, the choice depends on the performer’s judgement in each circumstance. For example, in order to introduce a new kloôñ to the piece, the performer choses RS22.7 (a kloôñ sàp) which is used or the first time, and the same criterion applies to RS24.6 (which is a kloôñ phan).
4. Contrary motion from the basic melody

There are 15 sentences preferred for their contrary motion to the basic melody. The attraction of providing the contrary motion is to create some contrast, since most thaang ránaât eêk follow the same direction as the basic melody.

5. Wide range

Because the ránaât eêk has the widest range among Thai melodic percussion instruments, it is believed that the more the available keys are exploited, the more the performer's wisdom is valued. The fact, however, that only six sentences among those chosen here are referred to as wide in range does not mean that the performer's wisdom is lessened, because there are many more factors that can make a sentence as attractive, or more so, as discussed earlier.

6. Complete klôñ

There are six sentences chosen for this reason. The majority of complete klôñ are klôñ tai luuât, which appears for the first time in the second sentence. For this reason, it does not create any significant contrast with previous material and it cannot be chosen later according to the criterion which applies here.

It has already been pointed out that klôñ tai luuât consists of many small melodic fragments, which can be rearranged during performance to create different versions of the klôñ. This greater flexibility makes this klôñ especially attractive, which explains its extensive use in this piece.
7. Correct luûk tôk

There is only one sentence for which the correct luûk tôk is given as a reason for its choice. This raises the question whether any thaang could be chosen if it contained a wrong luûk tôk: this would be very rare. The point of singling out this criterion here is that the luûk tôk may be the only factor to distinguish between two or more thaang which may be suitable in every other respect. Obviously the choice would then fall on the thaang which has correct luûk tôk in addition to everything else.

For example, RS32.5 is chosen because it is the only thaang which contained the right luûk tôk in every bar, while the other five possibilities, although they are also complete kloôn and in good poetic styles, contain wrong luûk tôk in the third bar. (RS32.3 also had correct luûk tôk but it was eliminated because it is not a suitable kloôn for this piece.)

8. Suitable to end the piece:

RS55.1 is the final sentence which contains fragments of kloôn t'ai luuât, as well as the omitted note and krôp techniques to indicate the ending signal. This style of ending sentence is conventionally used in this type of piece. The kèp style in the first one and a half bars provides a continuity from the kèp of the previous sentence (RS54.7). The omitted note then signals the change from the kèp style to the krôp technique of the third and fourth bars, which helps reduce the speed and indicate the end of the piece.

The process of narrowing down the possible thaang rânaât eèk to a final single choice (as was accomplished in chapter 5) may be summarised in the following table:
<table>
<thead>
<tr>
<th>Appropriate Thaang ranašt eék (RS)</th>
<th>Type of kloon</th>
<th>Reasons for choice</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>none</td>
<td>- special introductory thaang ranašt eék, not a kloon, but still the best choice.</td>
</tr>
<tr>
<td>2.3</td>
<td>complete kloon tal luuát</td>
<td>- wide range (exploiting the range of the ranašt eék) - omitted note technique - smooth join (from the previous thaang) - complete kloon</td>
</tr>
<tr>
<td>3.5</td>
<td>complete kloon tal luuát</td>
<td>- contrary motion from the basic melody - smooth join - complete kloon</td>
</tr>
<tr>
<td>4.4</td>
<td>complete kloon loq'</td>
<td>- kloon used for the first time - smooth join (from RS3.5) - complete kloon</td>
</tr>
<tr>
<td>5.4</td>
<td>complete kloon tal luuát</td>
<td>- smooth join - complete kloon</td>
</tr>
<tr>
<td>6.6</td>
<td>complete kloon dooceen tākhēp</td>
<td>- kloon used for the first time - smooth join - complete kloon</td>
</tr>
<tr>
<td>7.4</td>
<td>complete kloon tal luuát</td>
<td>- contrary motion from the basic melody - smooth join - complete kloon</td>
</tr>
<tr>
<td>Appropriate Thaang</td>
<td>Type of kloon</td>
<td>Reasons for choice</td>
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</tr>
<tr>
<td>ranaat cek (RS)</td>
<td></td>
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<tr>
<td>8.1</td>
<td>mixed (kloon tal luuat, sap)</td>
<td>- smooth join</td>
</tr>
<tr>
<td>9.2</td>
<td>complete kloon tal luuat</td>
<td>- smooth join</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- complete kloon</td>
</tr>
<tr>
<td>10.5</td>
<td>complete kloon tal luuat</td>
<td>- smooth join</td>
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<tr>
<td></td>
<td></td>
<td>- complete kloon</td>
</tr>
<tr>
<td>11.3</td>
<td>complete kloon tal luuat</td>
<td>- smooth join</td>
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<tr>
<td></td>
<td></td>
<td>- complete kloon</td>
</tr>
<tr>
<td>12.7</td>
<td>complete kloon tal luuat</td>
<td>- smooth join</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- complete kloon</td>
</tr>
<tr>
<td>13.4</td>
<td>mixed kloon (loof taakhaay, tailuuat)</td>
<td>- smooth join</td>
</tr>
<tr>
<td>14.4</td>
<td>complete kloon tal mar</td>
<td>- kloon used for the first time</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- wide range</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- smooth join</td>
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<tr>
<td></td>
<td></td>
<td>- complete kloon</td>
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<tr>
<td>Appropriate Thaang Type of kloon</td>
<td>Reasons for choice</td>
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<td></td>
</tr>
<tr>
<td>ranaat eek (RS)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| 15.7 mixed kloón (yóófi tēkhēp, tal luuát) | - contrary motion from the basic melody  
- smooth join |
| 16.7 mixed kloón (tal luuát, sequence of four descending notes) | - smooth join (from RS15.7) |
| 17.4 mixed kloón (four ascending notes, tal luuát) | - good poetic style |
| 18.5 complete kloón tal luuát | - smooth join (from RS17.4)  
- complete kloón |
| 19.2 complete kloón tal luuát | - smooth join  
- complete kloón |
| 20.4 complete kloón tal luuát | - smooth join (from RS19.2)  
- complete kloón |
<p>| 21.1 mixed kloón (sequence of four ascending, descending notes) | - smooth join |</p>
<table>
<thead>
<tr>
<th>Appropriate Type of kloon</th>
<th>Reasons for choice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thaang ranaät eëk (RS)</td>
<td></td>
</tr>
<tr>
<td>22.7 complete kloon sáp</td>
<td>- kloon used for the first time - complete kloon</td>
</tr>
<tr>
<td>23.2 mixed kloon (tal luoát, sequence of four descending notes)</td>
<td>- smooth join</td>
</tr>
<tr>
<td>24.6 kloon phan</td>
<td>- kloon used for the first time - contrary motion from the basic melody - complete kloon</td>
</tr>
<tr>
<td>25.3 complete kloon tal</td>
<td>- wide range - smooth join - complete kloon</td>
</tr>
<tr>
<td>luoát</td>
<td></td>
</tr>
<tr>
<td>26.7 no name</td>
<td>good poetic style (sequence of four ascending, descending notes) and smooth join</td>
</tr>
<tr>
<td>27.4 complete kloon tal</td>
<td>- smooth join - complete kloon</td>
</tr>
<tr>
<td>luoát</td>
<td></td>
</tr>
<tr>
<td>28.3 complete kloon tal</td>
<td>- smooth join - complete kloon</td>
</tr>
<tr>
<td>luoát</td>
<td></td>
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<tr>
<td>Appropriate Thaang Type or kloon Reasons for choice</td>
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<td>-----------------------------------------------</td>
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<td>Thaang ranaât eêk (RS)</td>
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<td>29.3</td>
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<td>luuât</td>
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<td>- smooth join</td>
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<td></td>
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<td>30.2</td>
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</tr>
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<tr>
<td>- smooth join</td>
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<td>31.3</td>
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<tr>
<td>mixed kloon (dooèen tâkhêp, tal luuât)</td>
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<td>- smooth join</td>
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<tr>
<td>- complete kloon</td>
<td></td>
</tr>
<tr>
<td>32.5</td>
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<tr>
<td>- right luûk tûk in the fourth bar</td>
<td></td>
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<tr>
<td>- smooth join</td>
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<tr>
<td>33.5</td>
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<tr>
<td>mixed kloon (tal luuât, sequence of four</td>
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</tr>
<tr>
<td>descending notes)</td>
<td></td>
</tr>
<tr>
<td>- good poetic style</td>
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</tr>
<tr>
<td>34.1</td>
<td></td>
</tr>
<tr>
<td>complete kloon tal</td>
<td></td>
</tr>
<tr>
<td>luuât</td>
<td></td>
</tr>
<tr>
<td>- smooth join</td>
<td></td>
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<td>- complete kloon</td>
<td></td>
</tr>
<tr>
<td>35.6</td>
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<td>complete kloon tal</td>
<td></td>
</tr>
<tr>
<td>luuât</td>
<td></td>
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<tr>
<td>- contrary motion from the basic melody</td>
<td></td>
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<tr>
<td>- smooth join</td>
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<td>- complete kloon</td>
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<tr>
<td>36.2</td>
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<td>complete kloon tal</td>
<td></td>
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<tr>
<td>mai</td>
<td></td>
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<tr>
<td>- smooth join</td>
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<tr>
<td>- complete kloon</td>
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<tr>
<td>Appropriate Thaang ranaat eek (RS)</td>
<td>Type of kloon</td>
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<tr>
<td>37.4</td>
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</tr>
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<td>38.7</td>
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</tr>
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<td>39.1</td>
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</tr>
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<td>40.6</td>
<td>complete kloon lo¢i taakhaaly</td>
</tr>
<tr>
<td>41.4</td>
<td>complete kloon tal luuät</td>
</tr>
<tr>
<td>42.2</td>
<td>mixed kloon ( sâp, sequence of four descending notes)</td>
</tr>
<tr>
<td>Appropriate Thaang</td>
<td>Type of kloon</td>
</tr>
<tr>
<td>-------------------</td>
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</tr>
<tr>
<td>ranāät eēk (RS)</td>
<td>complete kloon tal luuāt</td>
</tr>
<tr>
<td>44.6</td>
<td>complete kloon tal luuāt</td>
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<tr>
<td>45.4</td>
<td>complete kloon tal luuāt</td>
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<tr>
<td>46.3</td>
<td>complete kloon tal luuāt</td>
</tr>
<tr>
<td>47.3</td>
<td>complete kloon lopp taakhaâ¥</td>
</tr>
<tr>
<td>48.7</td>
<td>mixed kloon (special kloon sâp, tal luuāt)</td>
</tr>
<tr>
<td>Appropriate Thaang ranaät eèk (RS)</td>
<td>Type of Kloon</td>
</tr>
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<td>------------------------------------</td>
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</tr>
<tr>
<td>49.3</td>
<td>mixed kloón (tal mai, săp)</td>
</tr>
<tr>
<td>50.3</td>
<td>complete kloón tal luuát</td>
</tr>
<tr>
<td>51.1</td>
<td>mixed kloón (tal luuát t, săp)</td>
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<tr>
<td>52.2</td>
<td>complete kloón tal luuát</td>
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<tr>
<td>53.6</td>
<td>complete kloón tal luuát</td>
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<tr>
<td>54.7</td>
<td>complete kloón tal luuát</td>
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<tr>
<td>55.1</td>
<td>none</td>
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</tbody>
</table>
The main implication of the reasons behind the choices (reflecting the thought processes involved in improvisation on the ránaât eêk) is that the principal concern is to maintain a smooth conjunction between adjacent sentences. Among the chosen thaang ránaât eêk, only six contain leaps at the point of transition. This can be justified by the fact that a leap is not always a problem as long as it does not tax the ránaât eêk player’s technique and the poetic style is retained. It is important to be aware of the characteristic of poetic style required in the particular piece. Special techniques are required for the introductory sentence and the equally important final sentence. Sabât saâm luûk (introductory sentence) can be found in any piece of a similar type to phleeng Saâthúkaan. The interruptions (introductory and final sentences) can be used in every piece which contains the kep style throughout. They can elegantly lead into the kep in the first or second sentence, and also bring the kep style to a satisfactory conclusion in the final sentence. Contrary motion between the thaang ránaât eêk and the basic melody is one of the most attractive options in improvisation. It provides a welcome contrast, attracting the audience’s attention, because the majority of thaang ránaât eêk move in the same direction as the basic melody.

Exploiting the range of the ránaât eêk is also an essential improvising skill, which demonstrates the performer’s wisdom and experience. The idea of introducing new kloûn into the piece is beneficial in changing the atmosphere and avoiding tedium. The right luûk tôk is usually essential at the beginning of the third bar and at the first beat after the last bar, which are the most important points of the basic melody, so they must also be focal (unison) points. The ránaât eêk player should also try to improvise to fit the other two luûk tôk (at the beginning of the second and fourth bars) if possible, in order to help maintain the outline of the basic melody and the stability of the ensemble, since he or she is the leader of the performance. However, one or both of these secondary luûk tôk could be ignored if the whole kloûn works especially well with the basic melody of that sentence as a whole.
For example, klō̂n phan and klō̂n yō̂n tākhēp, which are effective when they are used, do not follow these luûk tōk. It must be remembered that phleeng Saāthūkaan is only one of thousands of pieces of many different kinds that an experienced and artistic performer might be expected to know, so many other factors may guide the process of improvisation in Thai music. Those given in this thesis may be considered the principal ones, sufficient to afford an insight into the whole subject which lies at the heart of the tradition. They relate, of course, primarily to one piece (phleeng Saāthūkaan) so all aspects have not been considered in equal depth, and some others were mentioned only in passing (in chapter 3). The length and archetypal nature of phleeng Saāthūkaan make it especially suitable for detailed study, affording a focus for the ideas set out in this thesis.
Appendix 1

Cassette recording of phleeng Saăthúkaan

This is a private recording, made especially for this thesis in Bangkok on 7 September 1997. I am grateful to Khruu Boonchouye Sovat for convening the members of the ensemble and for bringing the recording to me. As explained in chapter 4, its purpose is to give the reader an idea of how the piece sounds in performance. It is possible to relate it to the outline given in the thesis, but what is played will not correspond exactly to the notations given.

The performers are

Пі най - Juthamas Porprasit
Раааат еёк - Sumroeng Panpeong
Раааат ухум - Boonchouye Sovat
Кхогоо вонг яаи - Chow Karnvicha
Таафоон - Vitaya Nujoy
Чинъ - Vitaya Sriphong

Date: 7 September 1997
Chulalongkorn University's Cultural Centre, Thailand
Appendix 2

Phleeng Saãthúkaan: Basic melody and final choice of thaang rénaát ēék

S1

RS1

S2
### Appendix 3

*Naátháp phleeng saáthúkaan as played on the tháphoon*

<table>
<thead>
<tr>
<th>Táphoong</th>
<th>Intro</th>
<th>- tóp ting</th>
<th>- tóp theéng</th>
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<td>--- theéng</td>
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<tr>
<td>Part 1</td>
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</table>

Part 2

<table>
<thead>
<tr>
<th>Táphoong</th>
<th>- tóp ting</th>
<th>- tóp theéng</th>
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</tbody>
</table>

Part 3

<table>
<thead>
<tr>
<th>Táphoong</th>
<th>- tóp ting</th>
<th>- phrooéng-theéng</th>
</tr>
</thead>
<tbody>
<tr>
<td>--- talíit</td>
<td>- tóp</td>
<td></td>
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<tr>
<td>---</td>
<td>-</td>
<td>- phrooéng-theéng</td>
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<td>- theéng</td>
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</tbody>
</table>
Part 1-4 (three times), followed by part 1 and the last four lines of part 4.

(Notated in Thai by Khruu Phichit Chaiseree on 13 July 97)
Glossary of the important Thai terms used in this thesis

chăn diiaw จันเกี่ยว  
fastest tempo in phleeng thaō

changwà จังหวะ  
tempo

ching ฆัง  
cymbals

damnooentamnogng ด่านเหย่าห่วง  
similar to phleeng thaang puun

grap กระ  
wooden clappers

kèp แกบ  
regular stream of fast notes played in octaves
on the rānaāt eēk, or
alternate hands (sāp) in a variety of intervals
on the khoong wong lék

khooŋ โคน  
the two pieces which close each end of the
raang rānaāt

khoong wong lék วงวงเล็ก  
small gong circle, 18 gongs, plays in sāp

style

khoong wong yai วงวงใหญ่  
large gong circle, 16 gongs, plays closest to
the basic melody

khruu ครู  
teacher

kloon คล้อง  
sentence played against the basic melody,
arranged in symmetically balanced phrases
(poetic style). Most kloon for the rānaāt eēk
now have names, but some poetic styles
have not yet been named.
<table>
<thead>
<tr>
<th>Klōn</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Klōn dooeen tâkhêp</td>
<td>Klōn with sequential repetition of the initial four-note motif</td>
</tr>
<tr>
<td>Klōn lêc takałağıy</td>
<td>Klōn characterised by sudden leaps</td>
</tr>
<tr>
<td>Klōn phan</td>
<td>Klōn with a more complicated style to conceal the basic melody</td>
</tr>
<tr>
<td>Klōn roqy luûk sod</td>
<td>Klōn with a shape like the alternating upper and lower links of a chain</td>
</tr>
<tr>
<td>Klōn sap</td>
<td>Klōn which describes the action of chopping. It is also used on the khoông wong lêk:</td>
</tr>
<tr>
<td>Klōn soqû tâkhêp</td>
<td>Klōn with a similar aim to that of klōn phan: to disguise the basic melody.</td>
</tr>
<tr>
<td>Klōn tâl luûat</td>
<td>Klōn characterised by conjunct motion</td>
</tr>
<tr>
<td>Klōn tâl maf</td>
<td>Klōn with longer conjunct phrases repeated sequentially</td>
</tr>
<tr>
<td>Klōn yôqû tâkhêp</td>
<td>Klōn of which the pattern is similar to that of klōn dooeen tâkhêp but in a different phase</td>
</tr>
</tbody>
</table>
krōp กระ the technique of playing sustained notes by means of tremolo

lák changwà ลำช่างรวด playing off the beat

luûk ránaät ฤกษ์นาถ bar of the ránaät

luûk tòk ฤกษ์ตก cadential note(s) or focal point(s) of the melody

maí ไม้ wood

naâthâp นาท้าบ rhythmic patterns on the Thai drums

naâthâp phîsêt นาท้าบพิเศษ special naâthâp to a particular composition

nâng นั่ง sitting position

nâng khât samaathi นั่งขัดสมาธิ sitting position (crossing legs) in the Buddha posture.

nâng phîp phiipâp นั่งพินิจ traditional sitting style

nûû phleeng นู๊ปหبلغ the basic melody which is not transformed as a thaang of a particular instrument

phleeng เงลง a piece / composition

329
a special kind of suite

style of composition in which the instruments play in dialogue.

composition in a foreign of regional style

a composition which allows the performer to improvise his/her own throughout the piece (for example phleeng saāthúkaan)

following instrument(s) in dialogues

leading instrument(s) in dialogues

set of bars of the ránaăt

reed instrument

percussion ensemble

musical sentence

supporting resonator case

the principal Thai xylophone with 21 keys, usually playing in octaves and taking responsibility for performing the introduction to pieces

the metal counterpart of the ránaăt eèk
<table>
<thead>
<tr>
<th>English</th>
<th>Thai</th>
</tr>
</thead>
<tbody>
<tr>
<td>low pitched xylophone with 18 keys, which</td>
<td>ระนาวดิ้น  ละแม่สุนทริม</td>
</tr>
<tr>
<td>plays in syncopation</td>
<td></td>
</tr>
<tr>
<td>the metal counterpart of the ระนาวดิ้น</td>
<td>ละแม่สุนทริมหลังกิจ</td>
</tr>
<tr>
<td>ruua khaâp luûk khaâp dûk</td>
<td>ระนาวดิ้นหลังกิจที่การก่นด้วน</td>
</tr>
<tr>
<td>advanced technique with kep and ruua</td>
<td></td>
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<tr>
<td>(tremolo) style</td>
<td></td>
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<tr>
<td>slowest tempo in phleeng thaâ</td>
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<tr>
<td>a sacred piece, special for beginners and</td>
<td></td>
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<tr>
<td>advanced performers alike</td>
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<tr>
<td>the embellishment of one note with ‘short’</td>
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<td>notes (usually no more than five) preceding</td>
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<td>it</td>
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<tr>
<td>medium tempo in phleeng thaâ</td>
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<tr>
<td>the most respected drum</td>
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<tr>
<td>path or way. The pattern(s) of a particular</td>
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<tr>
<td>instrument, or style of a master.</td>
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<tr>
<td>way of performing on the ระนาวดิ้น eëk</td>
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<td>a melodic sentence which usually fits 1/2</td>
<td></td>
</tr>
<tr>
<td>rhythmic unit known as naâthâp prôp kâl</td>
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</tr>
<tr>
<td>composition consisting of three different</td>
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<tr>
<td>tempi, from slow to fast.</td>
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<tr>
<td>thaâ with gap at the beginning</td>
<td></td>
</tr>
<tr>
<td>thaâ without gap at the beginning (i.e.</td>
<td></td>
</tr>
<tr>
<td>conjunct)</td>
<td></td>
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</tbody>
</table>
the embellishment of one note with a cluster of four or eight notes. It differs from attività in that there are more notes and the cluster is played suddenly loud

dak khayil' ติ้กขายิ่ง

dak kroq ติ้ก lucr

the action of performing tremolo, usually in octaves (khul' paeet)
dak ruu ติ้กรู้ more advanced technique of tremolo, restricted to certain pieces

wai ไว้

Thai greeting

wak วะก

a phrase within a musical sentence

wak lek วะกเล็ก

half phrase within a musical sentence

yoon โยน

melodic sentences which maintain the same luok tok

yoo nai changwà ยูนไนชนะ

playing on the beat
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[All three are names of pieces]

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