

Thai Classical Music Composition

Pleng Ruang Puja Nakhon Nan

Pattara Komkhum⁺ & Kumkom Pornprasit⁺⁺ (Thailand)

Abstract

Pleng Ruang Puja Nakhon Nan is a new composition for *Piphat* ensemble that is based upon the sacred *Puja* drumming of the northern province of Nan. It was composed as the results of an ethnographic research project with fieldwork conducted during fifteen months in Nan province. The study aims to understand Nan musicians, beliefs, rituals, and performance practices of *Puja* drums. Master Yan Songmuangkean served as a key informant as well as nine monks who were highly respected in Nan for their *Puja* drumming. According to interviews with *Puja* drummers, the Buddhist teaching was transferred to drumming patterns as a teaching strategy to Buddhist laymen to be reminded of mankind's illusion (sight, hearing, taste, smell, and touch). Thus, the *Pleng Ruang Puja Nakhon Nan* composition, which combines traditional Nan music with Central Thai musical practice was inspired by the Buddhist concept of reality that is encoded in *Puja* drumming patterns found in Nan province.

Keywords: *Pleng Ruang, Puja Drum, Thai Classical Music Composition, Pleng Cha.*

⁺ Pattara Komkhum, Grad Student, Chulalongkorn University, Thailand. email: peenai2004@hotmail.com.

⁺⁺ Kumkom Pornprasit, Associate Professor, Faculty of Fine and Applied Arts, Chulalongkorn University, Thailand. voice: +66 089-142-7033 email: pkumkom@yahoo.com.

Introduction

Pleng Ruang Puja Nakhon Nan is a Thai Classical instrumental composition.¹ Its title can be translated to mean worshipping traditions of Nakhon Nan. It was composed on the basis of observations made during 15 months of qualitative research in Nan Province. This ethnographic fieldwork included collecting data relating to religious and cultural beliefs, rituals, and the making and playing rules of the *Puja* drum. To understand the views of Nan's people, especially monks and laymen who played *Puja* drums, field data was collected through participation in local activities. This included intensive study of *Puja* drum playing with an important Nan native Kru (master) Yan Songmuengkan, and from nine monks who specialize in this music.² The melodies played by *Puja* drums were composed for the purpose of bringing people to the Buddhist realization that the nature of form, taste, odor, and sound are superficial. Following the standard practices of composing *Puja* drum melodies, the researcher has then developed *Puja* drum melodies and variation according to the Thai traditional rules of *Pleng Ruang* compositional methods. The prime consideration was that listeners to the new musical composition be able to identify this music as having origins in Nan.

Pleng Ruang Puja Nakhon Nan is composed by following the structure of the central Thai musical form known as *Pleng Ruang*. Its melodic, rhythmic and narrative elements have been adapted to the compositional and performing principles of the *Piphat Mai Kaeng* ensemble which comprises fixed-pitch percussion instruments (*Ranat* and *Khongwong Yai*) and the *Pi* which is a Thai oboe as well as finger cymbals (*Ching*) and drum (*Tapone*). *Piphat Mai Kaeng* is the variant of *Piphat* ensemble that mostly plays sacred and ritual music. Thai music is based on the realization and elaboration of a structural melody which is called *Neya Phleng*, which means the meat of the song (Sumrongthong, 2000:68). Each musician plays a variation of this melody that is specific to their instrument. Thus, each instrument is simultaneously performing an idiomatically specific variation of a core melody. This texture, which has been described by Morton as 'polyphonic stratification' (1970:3), is regarded by Thai musicians as heterophony (Garzoli, 2014: 95). The adaptation of *Puja* drumming melodies to the *Piphat* ensemble involved the translation of the drumming patterns into the style of the *Khong Wong Yai*, called *Thang Khong*, from where it is translated to the other instruments.³ Thai musical performance is primarily based on reinterpreting existing melodies and compositions that form a canon. Composers nowadays do create new music but it is unusual for new music to be composed in *Pleng Ruang* form due to the complexity of the form.

Because *Puja* drumming is not based on precisely tuned melodies, there is not a direct correspondence between drumming patterns and the part played by *Piphat* musicians. It is important to point out that the essence of the new composition is the transformed Nan elements which have been retained through the stylistic transformation. During the performance of *Puja* drumming the drummer recites the lyrics, therefore *Puja* drumming does not use onomatopoeic terms that are used to indicate intervals on the *Khong Wong Yai*. An important part of the translation of Nan melodies into the central Thai style was retaining the speech pattern associated with drumming in its adaptation to *Khong Wong Yai*.



Figure 1. Piphat ensemble performing *Pleng Ruang Puja Nakhon Nan*.

This composition used the four forms that comprise *Pleng Ruang*, *Pleng Cha*, *Plengsaung Mai*, *Plengrew*, and *Plenglaa* (Miller, 1998:278).⁴ *Pleng Ruang* is a fixed structure in Thai classical music.⁵ Within the context of the principles of *Pleng Ruang*, this new composition uses numerous compositional techniques that are standard practice in Thai classical. This includes techniques of modulation called *Oad* and *Phan*, techniques for shortening phrases (*Tat Thom*), and a technique called *Look Thao* which is used for emphasizing certain melodic pitches. The use of varying degrees of melodic dissonance is also used which emphasizes *Koo Kradang* (dissonant intervals), *Koo Sanoh* (consonance intervals), and *Koo Gueng Kradang* (less dissonance intervals). *Pleng Cha* is played at auspicious ceremonies and in rituals where monks attended to give feelings of deference and sacredness. *Pleng Ruang Puja Nakhon Nan* is characterized by the newly composed *Pleng Cha* and the newly composed *Naathab* (rhythmic cycle). These were prepared under the supervision and guidance of recognized masters of Nan music including *Kru Yan* and have met their approval (Yan, Interview January 15, 2014).

Eastern Lanna is the area in the upper north of Thailand that was formerly part of the old Lanna Kingdom that came under the influence of Bangkok in the 1870's (Thongchai, 1997:102). Travelling to the area is difficult due to its mountainous landscape and because it is not a passage way to any other provinces, therefore, Eastern Lanna has remained isolated and maintains its richness of art and culture. These have been carried down from generation to generation and the cultural heritage undergoes continual refinement and enhancement in rituals, religious faith, and languages by its surroundings and people's way of life. Nan culture is rich in art and culture. The area still contains ancient remains, temples, antique treasures, local tribes, and their wisdom, while in other areas, details of the musical customs and rituals of Eastern Lanna are preserved. Although

attempts have been made at preserving the northern Thai culture, it is still perceived to be under threat (Miller, 1998:310-15).

Glong Puja

The *Glong Puja* is the sacred drum set that is found in most temples in northern Thailand where it is used for worship. A set of *Glong Puja* consists of four drums of different sizes. The four drums must be made from the same tree. The largest is called *Glong Mae*, which means mother drum. The three smaller drums are called *Look toob*, which means sound of the offspring drums. The diameter of *Glong Mae* can be as wide as 1 meter. When it is struck, it produces a sound that can be heard over long distances. *Glong Puja* sets that can be seen today are more than 100 years old. Less old sets are believed to be at least several decades. (Yan, Interview, January 15, 2014). The *Glong Puja* is played with gongs and cymbals that mark the pulse.⁶



Figure 2. Image of a Glong Puja at Wat Nam Lad in Nan province.

A set of *Glong Puja* is considered a sacred treasure. According to Master Yan, sacred texts and prayers have been inscribed on the inside of the drum's head and body. The age of the drums indicate that it is a long standing tradition to consider the *Glong Puja* as highly sacred. These texts were also written to charm listeners, and provide instructions that women and children are forbidden from striking the drum. Extreme care should be taken when transporting the drums and they should not pass in front of the abbot's residence or the temple's primary Buddha image (Yan, Interview, February 22, 2011). The drums are placed on a stand and positioned in a special structure called a *Hor Glong Puja* (*Puja Drum Tower*). The orientation of the drums must be on the east-west axis. While there are similar drums in other parts of northern Thailand, Nan is unique because the drums are placed in this special way and the drums are positioned from largest to smallest in a row whereas in other regions they are positioned in two pairs.

Glong Puja must be played with reverence. It is forbidden to strike the drums frivolously, and, as with other Thai instruments, the player must demonstrate respect to the teacher. This is done through the *Wai Kru* ritual before playing commences as well as whilst performing.⁷ The *Glong Puja* is played on various occasions. It is performed on the occasion of the full moon days, which are important in the Buddhist calendar, to inform Buddhist villagers when they should purify their bodies, words, and minds, to prepare offerings for monks, to attend temples to hear sermons, and to observe religious precepts. The *Glong Puja* is also played to celebrate merit making done by of community members and community celebrations.

The melodies of Nan's *Glong Puja* are called *Rabam*. These *Glong Puja* compositions are transmitted orally from generation to generation. This repertoire is unique to Nan and differs from drumming patterns of other areas. The *Rabams* that are unique to Nan include *Rabam Sik Tu Pi Sik*, *Rabam Saonoy Gebphak*, *Rabam Suer Khob Chang*, and *Rabam Long Nan Cha* and *Rabam Long Nan Rew* and *Rabam Toob Tang*, (or *Ma Tueb Khok*) (Yan, Interview, February 22, 2011).



Figure 3. On the left the author interviewing Master Yan Songmuangkean and right the author practicing on the *Glong Puja*.

Rabam Sik Tu Pi Sik, *Rabam Saonoy Geb Phak*, *Rabam Suer Khob Chang*, and *Rabam Long Nan* originated in Nan and are well-known in the region. They are essentially the same melodic-rhythmic pattern but are known by different names by different groups in the Nan region. When this melody is played fast it is called *Faad Sae*, or *Rabam Ma Yeab Fai*. It is a louder drum pattern in the style known as *Sabad Chai*. This pattern was originally used to call for courage in war. Buddhism plays an important role in composition of melodies for the *Puja* drum and creators of music draw on their creativity and faith in Buddhism. Their music is played as offerings to the Lord Buddha in Nan's religious ceremonies in which local adherents express their religious faith and to show their reverence to the Enlightened Master.

Glong Puja has a number of playing styles. These differ according to the occasion in which they are performed. At normal ceremonies, the *Sabad Chai*-style patterns such as *Faad Sae* or *Toob Tang* are played to rejoice in auspiciousness, success, and merit makings. Only the *Glong Mae* is played to announce more serious occasions, like the death of the abbot or unrest in the area. Specific compositions are played

on the *Glong Puja* as offerings to the Lord Buddha and to call villagers to the temple for Buddhist ceremonies that occur on holy days in the religious calendar.

Pleng Ruang Puja Nakhon Nan is in the tradition of Thai sacred music and was composed to accompany rituals.⁸ It is composed in the traditional Thai classical structure of *Pleng Ruang Pleng*. The study of historical evidence on the way of life of Nan's people reveals that preserving their cultural heritage is important. *Glong Puja* is an important part of their cultural identity of the local area. The researcher is thus inspired to compose *Pleng Ruang Puja Nakhon Nan* to perpetuate the unique cultural heritage of Nan in the context of Thai classical music.

As stated above, this research has resulted in a composition that combines elements of traditional Nan drumming music with compositional principles from central Thai classical music. This intercultural musical fusion aims to preserve the essence of the Nan musical tradition while presenting it in form of Thai classical music. Intercultural musical fusion is a creative act that sets in train musical and cultural processes that have become features of Thai music. Numerous composers have sought to interpret other musical styles and traditions in the context of Thai music. This is formalized in the *Awk Samnieng Phasa* practice of imitating the music of other nations.⁹ The fusion process involves addressing potential obstacles to musical fusion at a number of levels. I will briefly address the three possible levels of incompatibility that Garzoli has described as possible barriers: Intonation, idiomatic style, and cultural context. (See Garzoli, 2014 for a discussion of the issues associated with intercultural musical fusion).

While the gongs of the *Puja* set are tuned, they are not tuned to precise pitches and therefore do not correspond with the pitches of the *Khong Wong Yai*. This is not a significant obstacle because the rhythm and the vocal texts were the important musical elements that formed the basis of the *Khong Wong Yai* melody rather than the pitches of the drums. The stylistic idiom of *Puja* drumming is part of the larger Thai musical tradition and the patterns used are translatable to other Thai musical forms because they share common fundamentals of rhythmic organization, including the role of the cymbals in making the pulse. The geographical and cultural context of the Nan musical elements has clearly shifted as it has been adapted from a rural temple tradition into the complex formal structures that underpin Thai classical music. However, the two musical traditions have similarities in regard to their attitude towards Buddhism, the treatment of instruments as sacred and the ontological interpretation of music as sacred.

The *Pleng Ruang* form that is the structural framework for the composition is an ancient form of instrumental music that is believed to have been developed in the fourteenth century (Panya, 1999:75). The 'Pleng Ruang' repertoire can be classified into four subtypes: *Plengcha*, *Sawng Mai*, *Plengching* and *Plengrew* (The Royal Institute, 1977). The *Plengruangplengcha* compositional form is underpinned by specific principles and patterns, including meter and *Naathab* (drum rhythms) that must be strictly followed. Its structure must comprise the four following sections:

1. *Pleng Cha Probkai*
2. *Pleng Sawng Mai*
3. *Pleng Rew Sawng Mai*
4. *Pleng La* (Farewell song)

It has become a standard practice in Thai music to adapt the European Solfeggio notation system to Thai music. In the Thai system, the sounds are represented with letters from the Thai alphabet and are written in Thai script.



Figure 5. The notes of the Khong Wong Yai in Thai script.

Thai alphabetic characters and their correspondence with the Solfeggio system.

| | | | | | | |
|----|----|----|----|----|----|----|
| ด | ร | ม | ฟ | ช | ล | ท |
| Do | Re | Mi | Fa | So | La | Ti |

Structure of *Pleng Ruang Puja Nakhon Nan*

The following section shows the structural framework of the new composition. To illustrate the relationship between the original *Glong Puja* melodies and the new *Khong Wong Yai* melodies used in *Pleng Ruang Puja Nakhon Nan*, I have included tables that show the *Puja* drum pattern, vocal text, and new *Khong Wong Yai* melody in the *Pleng Cha* section (see below).

Pleng Cha:

The first melody = *Sik Tu Pi Sik* section 1 and 2 (example 1)

The second melody = *Suer Khob Chang* section 1 and 2 (example 2)

Pleng Sawng Mai:

The first melody = *Sao Noy Geb Phak*

The second melody = *Long Nan Cha*

Pleng Rew:

The first melody = *Saonoy Geb Phak* (Shortened from *Pleng Saung Mai*)

The second melody = *Long Nan Rew*

Pleng La: The traditional moderato tempo *Pleng La* melody is. The Thai alphabet is used in notating Thai music. The pitches of the *Khong Wong Yai* are indicated below.

The lyrics of *Rabam Sik Tu Pi Sik* reflect the central Buddhist ethos of mindfulness. They encourage monks who have thoughts of negativity, silliness, and anger, all of which represent desire, to remain content and mindful.

Translation of the lyrics

1. Sik Tu Pi Sik Monk, Leave the monkhood!
2. Sik Tu Pi Sik Monk, Leave the monkhood!
3. Tu Pi Mai Sik Unless you don't,
4. Tu Pi Nun Pai How silly you are!

Example 1: *Glong Puja* Composition: *Rabam Sik Tu Pi Sik*, compared to first *Pleng Cha* passage.

Rabam Sik Tu Pi Sik: 1st and 2nd phrases

| | | | | | | | | |
|----------------------------------|-----|----------|--------|---------------|-----|----------|-----------|--------------|
| Lyrics | --- | --- Sik | --- Tu | - Pi - Sik | --- | --- Sik | --- Tu | - Pi-Sik |
| | - | | | | - | | | |
| <i>GlongRabam (SikTu Pi Sik)</i> | | | | | | | | |
| Hand | --- | --- left | --- | - left - left | --- | --- left | --- right | - left -left |
| | - | | right | | - | | | |
| <i>GlongPuja</i> | --- | --- 1 | --- 3 | - 2 - 1 | --- | --- 1 | --- 3 | - 2 - 1 |
| | - | | | | - | | | |
| <i>Khong Wong Yai(PlengCha)</i> | | | | | | | | |
| <i>Right hand</i> | --- | ---๑ | ---๓ | -๒-๑ | --- | ---๑ | ---๓ | - ๒-๑ |
| | - | | | | - | | | |
| <i>Left hand</i> | --- | ---๑ | ---๓ | -๒-๑ | --- | ---๑ | ---๓ | - ๒-๑ |
| | - | | | | - | | | |

Rabam Sik Tu Pi Sik: 3rd and 4th phrases

| | | | | | | | | |
|------------------------------------|------|----------|---------|--------------|--------|----------|-----------|-------------|
| Lyrics | ---- | -- Tu Pi | --- Mai | --- Sik | --- Tu | --- Pi | --- Nun | --- Pai |
| <i>Glong Rabam (Sik Tu Pi Sik)</i> | | | | | | | | |
| Hand | ---- | --- left | --- | - left- left | ---- | --- left | --- right | - left-left |
| | | | right | | | | | |
| <i>Glong Puja</i> | ---- | --- 1 | --- 3 | -2-1 | ---- | --- 1 | --- 3 | - 2 - 4 |
| | | | | | | | | |
| <i>Khong Wong Yai (Pleng Cha)</i> | | | | | | | | |
| <i>Right hand</i> | --- | - ๑ -- | ---- | --- ๑ | ---- | --- | ๑ ๓ -- | --- ๑ |
| | - | | | | | | | |
| <i>Left hand</i> | --- | -- ๓ ๑ | --- ๓ | --- ๑ | --- ๓ | --- ๑ | --- | --- ๑ |
| | - | | | | | | | |

The lyrics of Rabam Suer Khob Chang discusses the uncertainty of life from the perspective of the Dharma teachings. This stanza describes how a creature as large as an elephant, can be attacked by a tiger, a story that implies the uncertainty of wealth, power and health.

Translation of the lyrics

- 1. Suer Khob Chang A tiger bites an elephant.
- 2. Puen Khao Kham Khau They are under a tamarind tree.
- 3. Khob Lau Lau It bites over and over again.
- 4. Puen Khao Khamoom They are under a Malacca Tree.

The second Pleng Cha passage is based on the Glong Puja composition Rabam Suer Khob Chang and is adapted to following Khong Wong Yai melody.

Example 2: Glong Puja pattern Rabam Suer Khob Chang compared with second Pleng Cha passage.

Rabum Suer Khob Chang: 1st and 2nd phrases

| | | | | | | | | |
|-----------------------------------|------|----------|----------|----------|-------|--------------|----------|----------|
| Lyrics | ---- | --- Suer | --- Khob | ---Chang | ---- | -- Puen Kao | --- Kham | ---Khau |
| Hand Position | ---- | ---- | --- left | ---right | ---- | --left right | --- left | ---right |
| Glong Puja | ---- | ---C | --- 1 | ---4 | ---- | -- 13 | --- 2 | ---4 |
| <i>Khong Wong Yai (Pleng Cha)</i> | | | | | | | | |
| Right hand | --- | --- ล | --- ช | --- ร | - ด - | --- ู๋ | --- ม | --- |
| Left hand | --- | --- ล | --- ช | --- ล | -- ฬ | - ฬ - ล | ---- | --- ฬ |

Rabum Suer Khob Chang: 3rd and 4th phrases

| | | | | | | | | |
|-----------------------------------|------|----------|-----------|----------|--------|--------------|----------|----------|
| Lyrics | ---- | --- Khob | ---Lau | ---Lau | ---- | -- Puen Kao | --- Kham | ---Pom |
| Hand | ---- | --- left | --- right | ---right | ---- | --left right | --- left | ---right |
| Glong Puja sequence | ---- | --- 1 | --- 2 | ---2 | ---- | --13 | --- 2 | ---4 |
| <i>Khong Wong Yai (Pleng Cha)</i> | | | | | | | | |
| Right hand | ---- | ---- | --- ม | ---ม | - ด -- | --- ู๋ | ---- | ม - ช |
| Left hand | ---- | --- ฬ | ---- | ---- | -- ฬ | - ฬ - ล | - ฬ - ด | ---- |

The *Rabam Saonoy Geb Phak* and *Rabam Long Nan* in the *Sawng Mai* section have delicate cadences that are characterized by greater emphasis on the upbeats. These melodies are adapted to the *Pleng Sawng Mai* section. These two melodies have retained their original rhythmic contours but they have been modified according to Thai classical music theory into *Pleng Saung Mai* form of Thai classical music.

Pleng Rew melodies in each of the subtypes of *Pleng Ruang* are shortened version of the *Pleng Look Tok* and *Pleng Saung Mai* forms, in keeping with this standard musical practice. The researcher thus shortened the two melodies into *Pleng Rew* in this passage. The piece concludes with a *Pleng La* passage that functions as a standard coda in Thai classical music. It is performed at a moderate tempo and accordance with traditional performance practice, the *La* section follows the specific melodic pattern known to Thai classical musicians.

Conclusion

The objective of composing *Pleng Ruang Puja Nakhon Nan* was to create a new *Pleng Ruang* which combined elements of sacred drumming music from Nan with traditional Thai music principle. The methodological basis of the work was observations made during the fieldwork that explored musical archetypes that define the Nan musical style. The composition is comprised of four important sections that are associated with the structure of *Pleng Ruang*; *Pleng Cha*, *Sawng Mai*, *Pleng Rew* and *Pleng La*. The translation of Nan drumming to *Piphat* ensemble involved reinterpreting the melodic-rhythmic-narrative elements of *Puja* drumming from the perspective of *Khong Wong Yai* technique and according to *Pleng Ruang* compositional principles. Because the new composition is in *Pleng Ruang* form, the musical composition retains defining sacred Buddhist qualities of the original *Puja* material. This would be lost if the music were interpreted through composition principles associated with other Thai repertoire. This composition is a new addition to the repertoire of Nan music that will ensure the ongoing vitality of the art and culture of Eastern Lanna. The composition is a blend of the richness of central and northern Thai musical cultures. It is especially reflective of the traditional Nan practice of performing the *Rabam Glong Puja* as a means of demonstrating reverence to Buddhist doctrine.

Acknowledgements

I would like to thank Chulalongkorn University for awarding me the ‘H.M. King Bhumibhol Adulyadej’s 72nd Birthday Anniversary Scholarship.’ I would also like to thank Professor Bussakorn Binson (Sumrongthong), Associate Professor Kumkorn Pornprasit, Associate Professor Pornprapit Phoasavadi, Associate Professor Pakorn Rodchangpheun, Yan Songmuangkean, Professor Suppakorn Disatapundhu, and Professor Kamol Phoasavadi. I would also like to thank Dr. John Garzoli for additional advice and editorial assistance.

Endnotes

- 1 The term *pleng* is the Thai term for composition or song.
- 2 *Kru* is the Thai version of the Sanskrit term 'guru'. It is a special term given to teachers.
- 3 *Thang* means path or way in Thai. It has multiple meanings in Thai music. In this context it means the particular way a melody is adapted to the playing style of the different Thai instruments.
- 4 *Rueng* is a musical form, *cha* means slow, *suang mai* is a rhythmic structure, *rew* means fast, *laa* is a concluding section, sometimes called the farewell section.
- 5 For a complete explanation of Thai Classical music see Morton 1976, Myers-Moro 1993, Panya 1999, and Miller 2008.
- 6 The cymbals play a similar role as the finger cymbals (*ching*) in Thai classical music.
- 7 Wai Kru ritual, is a teacher honouring ritual that is performed throughout Thailand.
- 8 This composition is also called *Puja Nakhon Nan*.
- 9 *Phasa* means language.

References

- Garzoli, John. "Intonational, Idiomatic, and Historical Factors That Shape Contemporary Thai Fusion Music." PhD diss., Monash University, 2014.
- Miller, Terry E. "Thailand." In *The Garland Encyclopedia of World Music: Southeast Asia*. Edited by Terry E Miller. New York: Routledge, 1998.
- Miller, Terry E. and Sean Williams eds. "Thailand." In *Garland Handbook of Southeast Asian Music*. New York: Routledge, 2008.
- Montri Tramote. Sapsangkiit. *Music Terminology*. Bangkok: Department of Fine Arts, 1988.
- Morton, David. "Thai Traditional Music: Hot-House Plant or Sturdy Stock." *Journal of the Siam Society* 58 no. 2 (1970).
- Morton, David. *The Traditional Music of Thailand*. London: University of California Press. Ltd, 1976.
- Myers-Moro, Pamela A. *Thai Music and Musicians in Contemporary Bangkok*. Monograph/Center for Southeast Asia Studies. Berkeley: Center for South and Southeast Asia Studies, University of California at Berkeley, 1993.
- Panya Roongruang. *Thai Classical Music and Its Movement from Oral to Written Transmission, 1930-1942: Historical Context, Method, and Legacy of the Thai Music Manuscript Project*. Kent State University, 1999.

Sumrongthong, Bussakorn, and Neil Sorrell. “Melodic Paradoxes in the Music of the Thai Pi-Phat and Javanese Gamelan.” *Yearbook for traditional Music* 32 (2000): 67-80.

The Royal Institute. “Pleng Ruang.” In *Encyclopedia of Thai Music: Vocal Music, Musical Instruments and Performance*, 1st ed., Bangkok: The Royal Institute, 1997.

Thongchai Winichakul. *Siam Mapped: A History of the Geo-Body of a Nation*. Bangkok: University of Hawaii Press, 1997.

Yan Songmuangkean, Interviews. January 15, 2014, February 22, 2011, August 3, 2011.