

The Traditional Arts of Indonesia and Thailand: *Music, Dance, and The Learning Strategies*

*Abdul Rachman
Bintang Hanggoro Putra
Dhoni Zustiyantoro
Indrawan Nur Cahyono
Joko Wiyoso
Lesa Paranti
Mochammad Usman Wafa
Phakamas Jirajarupat
Pramot Teangtrong
Ratiphat Siriphong
Syabrul Syah Sinaga
Udi Utomo,
Yusuf Arifin*



**Editor:
Sunarto**

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Foreword

WE THANK GOD, Allah SWT, who has blessed us, so the Book Chapter entitled *Traditional Arts of Indonesia and Thailand: Music, Dance, and Its Learning Strategies* has been finally published.

This book chapter is the result of collaborative research between the Faculty of Language and Arts, Universitas Negeri Semarang and the Faculty of Fine and Applied Arts of SuanSunandhaRajabhat University, Thailand. A total of six research papers were written in this book chapter with topics that refer to the UNNIS Vision, namely the University of Conservation and International Reputation. With a conservation perspective, it means a perspective and behavior that is oriented to the three pillars of the conservation spirit, namely: 1) Values and Characters; 2) Arts and Culture; and 3) Natural Resources and Environment. International Reputation means a university that has a good image and reputation in international relations and becomes a reference for the *tri dharma* activities of higher education at the international level.

Broadly speaking, the scope of the material includes: 1) *Wilah* and *Pencen* Instruments in Indonesian and Thai Traditional Music: An Organology Study; 2) Traditional Music Learning Methods in Music Education Study Program Universitas Negeri Semarang and Music Department of Suan Sunandha Rajabhat University Thailand; 3) The Utilization of Sampling Technique of Gamelan and Thai Musical Instrument for Music Creation Collaboration; 4) The Comparison of Indonesian and Thailand Traditional Music in The Tuning System; 5) Semarangan Dance and Traditional Thai Dance: A Comparative Study of the

Gesture and the Meaning of Movements; and 6) Learning Method of Traditional Dance in Indonesia and Thailand.

We hope that with the publication of this Book Chapter, we can add references and insights about traditional Indonesian and Thai arts, both from the elements of music, dance, and the learning strategies, that can be used as a source reference by various parties. In addition, it is also expected the book can serve as a media to further strengthen the relationship between Universitas Negeri Semarang and Suan Sunandha Rajabhat University, Thailand. □

Dean
Faculty of Languages and Arts
Universitas Negeri Semarang

Dr. Sri Rejeki Urip, M. Hum.

Editor's Preface

EXPLORING MUSIC is across borders, it cannot be bound by national differences. This book is an example of how cooperation between Indonesia and Thailand can work in harmony. More specifically, the collaboration is carried out at the university level. Several teaching staffs of the Music and Dance Study Program, Faculty of Language and Arts (FBS), Universitas Negeri Semarang (UNNES), collaborated with several teaching staffs of Thai Dramatic Arts, Faculty of Fine and Applied Arts, Suan Sunandha Rajabhat University (SSRU), Bangkok, Thailand wrote this book chapter in harmony. The collaboration includes traditional art practices (music and dance), which are then implemented in student learning.

The purpose of learning traditional arts in higher education is to help students to shape and develop their character. Through traditional art learning, students at the music and dance study program can instill noble values into their future students as a provision for future teaching. The collaboration has a goal which is as an effort to understand each other's traditional Indonesian and Thai arts in the context of art education in universities. Every nation has traditional music that is always preserved through existing arts higher education institutions. Traditional music learning can take place effectively if it is carried out using learning methods that are in accordance with the characteristics of the material and process of existing traditional music performance.

This book begins with an article by Abdul Rachman, Pramot Teangtrong, Udi Utomo, Syahrul Syah Sinaga, and Indrawan Nur Cahyono, entitled "*Wiluh* and *Pencon* Instruments

in Indonesian and Thai Traditional Music: An Organology Study”.

According to Abdul Rachman (*et al.*) Gambang Semarang is one of the traditional Indonesian music that has a wilah instrument, namely the gambang, as well as a pencon-shaped instrument, namely: bonang. The Thai Pi Phat Ansamble also has a xylophone-like wilah instrument, namely the ranat ek, and a bonang-like pencon instrument, the khong wong yai. The similarity of the wilah and pencon instruments of the two traditional music may have similarities and may even be different from each other. In this article, they discuss the wilah and pencon instruments in the music of Gambang Semarang and the Pi Phat Ansamble in organology studies.

Then Udi Utomo, Pramot Teangtrong, and Indrawan Nur Cahyono wrote a piece entitled: “Traditional Music Learning Methods in Music Education Study Program Universitas Negeri Semarang and Music Department of Suan Sunandha Rajabhat University Thailand. This article discusses the method of learning Javanese Karawitan traditional music at the Drama, Dance, and Music Study Program and Thai Traditional Music at SSRU.

According to Udi Utomo (*et al.*) in the two study programs, it shows that: 1) the traditional arts courses taught at the Music Study Program of UNNES and the Music Department, SSRU, have the same goal, namely as an educational medium, equipping students with mastery of skills according to their needs, the field of profession that will be practiced, and as a medium of preservation; 2) based on the characteristics of traditional music learning methods, especially Javanese karawitan and traditional Thai music, Wong Piphat is very different from learning Diatonic music in general; and 3) the learning methods used in learning traditional Javanese Karawitan music and Wong Piphat Thai Traditional Music are the same, namely using demonstration and drill methods more

dominantly. While the lecture method, question and answer, and discussion are techniques used as a combination and complement during the learning process mainly in delivering knowledge material.

The third article was written by Mochammad Usman Wafa and Pramot Teangtrong, "The Utilization of Sampling Technique of Gamelan and Thai Musical Instrument for Music Creation Collaboration". As technology advances, music creation media can be done in various ways. One such method is the audio/sound sampling technique. This study aims to examine the use of sound sampling techniques on traditional Thai musical instruments and Gamelan in a collaborative effort to create music.

Mochammad Usman Wafa and Pramot Teangtrong noted that the stages of the sound sampling technique on traditional Thai musical instruments and Javanese Gamelan are starting from the selection of instruments to be recorded. The instrument is sampled sound per note so that the F tone is obtained in units of 440 Hz on each instrument. In the implementation of sampling, a series of melodies, the *saron*, xylophone, and *siter* instruments were taken as long as 2 bars 4/4 at a tempo of 110 bpm. Meanwhile, in the Thai musical instruments, the researchers found differences in the tempo of the play, because in practice the two instruments were ensemble instruments played together within the instrument. There are no benchmarks or *seleh*, which can be found on Gamelan instruments although in the end the recordings, it can also be used as samples. Therefore, all recorded sounds can be used as sound sampling as material for creating new musical creations sourced from traditional musical instruments from both parties.

Joko Wiyoso and Pramot Teangtrong concluded that Thai traditional music culture and Javanese Gamelan culture have similarities as well as differences. The similarity is seen from the physical form of the instruments used, although the names are

different but physically have the same shape, then the technique of sounding the instruments between Thai music and Javanese Gamelan is mostly both struck using a special bat. Furthermore, both do not apply tone standardization. Then, in determining the high and low tone, they only rely on hearing sensitivity and feeling. The difference between Thai music and Javanese Gamelan lies in the scale system used. Thai music only uses one scale with 7 notes, while Javanese Gamelan uses two Slendro scales with 5 notes and Pelog with 7 notes. Thai music is familiar with notation while Javanese Gamelan uses notation.

Then Bintang Hanggoro Putra, Phakamas Jirajarupat, Ratiphat Siriphong, and Yusuf Arifin, presented how the attitude of movement was compared between Semarangan dance style and Thai traditional dance, with their articles; “Semarangan Dance and Traditional Thai Dance: A Comparative Study of the Gesture and the Meaning of Movements”. Semarang-style traditional dance or better known as Semarangan dance has a characteristic attitude and meaning of motion, namely the existence of a blend of cultures that live in the city of Semarang. Cultural integration also occurs in Thai Traditional dance. Based on this, it is necessary to do research by comparing the Semarangan dance and Thai traditional dance. This is in line with the UNNIS vision for 2020 and also as an effort to accelerate the achievement of the IBS Strategic Plan related to cultural conservation by conducting research on the comparison of traditional arts in Indonesia and Thailand through the SSRU. These two universities have almost the same majors, namely the Music Study Program and the Dance Study Program at the Faculty of Language and Arts, UNNIS and Thai Dramatic Arts, Faculty of Fine and Applied Arts, SSRU.

The closing article was written by Lesa Paranti, Ratiphat Siriphong, and Dhoni Zustiyanoro, with the article: “Learning Method of Traditional Dance in Indonesia and Thailand”. One of the influential agents in the preservation of traditional dance

is university. The effectiveness of traditional dance learning in universities can be seen from the accuracy in choosing and using learning methods. In line with the vision of UNNES, which is to become a “Conservation University with International Reputation”, researchers have conducted collaborative research with the SSRU, especially in the Department of Thai Dramatic Arts. This article aims to examine and find a comparison of traditional dance learning methods (Dance Denok) at UNNES and traditional dance at SSRU.

Lesa Paranti (*et al.*) concluded that the learning methods applied in the classroom were adapted to the characteristics of the material, students, lecturers, and learning situations. The similarity of methods in the practice of learning the Denok dance at UNNES and the Rabam Thep Banterng Dance at SSRU, namely using collaboration methods of lecture, demonstration, drill, and question and answer. However, there are technical differences, where the implementation of the demonstration method at UNNES uses the priest (*imam*) method and the mirror method, while the SSRU does not apply these methods. Rabam dance learning at SSRU begins with the practice of singing song lyrics before learning the movements, while Denok dance lessons do not specifically study the lyrics but to use calculations first. The conclusion of this research is the learning method used is almost the same but there are technical differences.

As a first step, it is no exaggeration if the book deserves appreciation. A collaboration between 2 Art Universities needs to be seen as an effort of mutual understanding and mutual understanding in terms of traditional arts that have been established to enter the realm of higher education. Differences are always there, but it does not become a barrier to being able to communicate with each other, a cultural communication. ◻

Wilah and *Pencon* Instruments in Indonesian and Thai Traditional Music: An Organology Study

*Abdul Rachman,¹ Pramot Teangtrong,² Udi Utomo,³
Syahrul Syah Sinaga,⁴ Indrawan Nur Cahyono⁵*

A. Introduction

Southeast Asian society and culture are quite diverse. Different historical, cultural, and political realities have shaped rich and unique communities throughout the region. However, Southeast Asia is united by a common environment, a common set of historical events, and a common culture [1,2]. Music in Southeast Asia is heavily influenced by environmental raw materials and culture itself. The flexibility of bamboo and wood allows these materials to be useful in musical contexts [2,3,4].

Thailand and Indonesia, especially in Central Java, have many basic musical characteristics, which both have musical instruments made of bronze and are played in ensembles [6]. Some scientists say that the traditional music of Thailand and Central Java is familiar with those musical instruments consisting of a set of gongs called “gong chime culture”. In addition, those cultures also use Xylophones (arrangement of wooden logs) and Metallophones (arrangement of metal sticks)

^{1,3,4,5} Drama, Dance, and Music Department, Faculty Languages and Arts, Universitas Negeri Semarang, Semarang, Indonesia.

² Music Departments, Suan Sunandha Rajabhat University, Bangkok, Thailand.

as well as flutes, stringed instruments, and rhythmic percussion instruments such as drums or *kendang*, gongs, and cymbals. Each of the instruments mentioned is quite similar and also uses the same scale system, namely a scale composed of five notes called the pentatonic scale as in the Chinese mode [6–9].

Thailand has traditional music called Pi Phat Ensemble, which consists of *krui piang oa* (flute), *rak khang* (bell), gongs, drums (*kendang*), *ranat ek* (main gambang), *ranat ek tum* (gambang), *khong wong lek* (small bonang), *khong wong yai* (big bonang), *kim*, and *ching* [7,8]. Meanwhile, Indonesia, especially Central Java, has similar traditional music called Gambang Semarang, which consists of several instruments: the flute, *sukong*, *konghayan*, *gambang*, *bonang*, *gong*, drums, *kecrek*, and sometimes *saron* and *demung* are added [9–14, 15].

From the several instruments that exist in Thai traditional music, in this case, the Pi Phat Ensemble, and Indonesian traditional music, in this case, Gambang Semarang music, there are similarities, especially in the variety of *wilah* (metal/wood plates) instruments and *pencon* (knobbed-center) instruments. In the variety of *wilah* instruments, the similar instrument is the *ranat ek* with the *gambang*, while the similarity in the variety of *pencon* instruments is between the *khong wong yai* instrument and the *bonang*. The similarity of instruments, especially in the variety of *wilah* and *pencon* instruments from each of the traditional music of the two countries, can certainly be assumed to have characteristics that may differ from one another or may not rule out the possibility that there are similarities when examined from the organology. Therefore, a study of the organology of traditional Thai music with Indonesia, especially Central Java, needs to be conducted.

Sumrongthong & Sorrell (2000) research entitled “Melodic Paradoxes in the Music of the Thai pi-phat and Javanese Gamelan” discusses the melodic and improvisational systems used in each country. Research by Hughes (1992) entitled “Thai

music in Java, Javanese music in Thailand: 'Two case studies' discusses the adaptation of the scale system and melodic improvisation of each traditional music. There is also research by Mrazek (2008) that examines the comparative phenomenon of *ranat ek* and *gambang* instruments focused on ways, attitudes, and learning to play these instruments and their meaning.

Based on previous studies, it can be perceived that writing articles on organology studies of *wilah* and *pencon* instruments in Indonesian and Thai traditional music has never been conducted. Therefore this article discusses *wilah* and *pencon* instruments from both countries in organological studies focused on *wilah* instruments, namely *gambang* and *ranat ek*, and *pencon* instruments, namely *bonang*, and *khong wong yai*.

B. *Wilah* and *Pencon* Instruments in Gambang Semarang Music

Gambang Semarang is a performing art that is a combination of music, dance, sound, and comedy. As a traditional art, *Gambang Semarang* has an aesthetic concept both as an object that can be seen from the work of art and its subject or creator related to the creative process and philosophy. The aesthetic concept in *Gambang Semarang* includes elements of music, singing, dance, comedy, and literature (*pantun*). In other words, *Gambang Semarang* is not only a musical performance since it also contains elements of singing, dancing, comedy, and rhymes, which are sung alternately (reciprocated rhymes). Besides having an aesthetic concept, *Gambang Semarang* also has a certain order of presentation in its performances, namely: 1) Instrumental, as the opening act; 2) *Gambang Semarang* song as a sign of introduction; 3) Instrumental, vocal songs as dance companies; 4) Comedy; 5) Instrumental, vocal songs for dance accompaniment; 6) Ending songs [10,15,19–21].

The sequence of scenes for the Gambang Semarang performing arts above shows a combination of music, dance, singing, and comedy. The instrumental sequence, which is a musical presentation without a singer, the song Gambang Semarang, followed by singing and dancing and comedy, then returning to the song to accompany the dance and accompanied by a closing song, is a typical sequence of Gambang Semarang. The order of the presentation and the aesthetic concepts that apply to the Gambang Semarang performance are used as a base in the arrangement of Gambang Semarang art as Semarang's cultural identity.

In general, the *riikan* (instruments) in Gambang Semarang music used to accompany the art of Gambang Semarang is almost the same as the *riikan* in Javanese Karawitan, but not as complete as Javanese Karawitan. In Gambang Semarang music, it only takes a few *riikan*, namely gambang, bonang, gongs and kempul, drums, flutes, kecrek, konghayan, and tehyan (fiddle). However, many Gambang Semarang music groups began to add *riikan* saron and demung to their performances in its development. Even though it uses the same *riikan* as Javanese Karawitan, the scale used in Gambang Semarang music is different from the scale in Javanese Karawitan. Suppose the scale used in Javanese Karawitan uses the Pelog and Slendro (Javanese musical tuning system), which consists of the arrangement of the numbers, namely: 1 (*ji*), 2 (*ro*), 3 (*lu*), 4 (*put*), 5 (*mo*), 6 (*nem*), 7 (*pi*), the music of Gambang Semarang uses the pentatonic scale of Western music, namely: 1 (*do*), 2 (*re*), 3 (*mi*), 5 (*sol*), and 6 (*la*), without using a tone 4 (*fa*), and 7 (*si*). The next difference is that in Javanese Karawitan, the tonal if translated into western music, will have the basic tone of Bes = *do*, or sometimes A = *do*, while in Gambang Semarang music, the basic tone is D = *do*.

Symbol Notation	Javanese Karawitan Pronunciation	Western Tone Approach
1	Ji	Cis
2	Ro	D
3	Lu	E
4	Pat	Fis
5	Mo	Gis
6	Nem	A
7	Pi	B

Table 1. Javanese musical notation.

Symbol Notation	Javanese Karawitan Pronunciation	Western Tonal Approach
1	Do	D
2	Re	E
3	Mi	Fis
4	-	-
5	Sol	A
6	La	B
7	-	-

Table 2. Musical notation of Gambang Semarang.

Furthermore, the *riikan*/instruments used in the arrangement of Gambang Semarang music as Semarang's cultural identity is focused on the wooden bar instrument, namely the gambang and the *pencon* instrument, the bonang will be described.

Gambang

Gambang is one of the main *riikan* in the music of Gambang Semarang. *Riikan* gambang used in Gambang Semarang music is physically the same as that used in Javanese Karawitan, namely the *riikan* consisting of a series of *wiluh* (bar/plate) made of wood, totaling twenty pieces arranged

sequentially starting from the *wiluh* which is tuned lowest on the left side of the *pengruwit* (musicians), then massage to the right towards the higher tuning area. The wood used as the basic material for *ricikan* gambang usually uses teak wood, but some also use jackfruit wood, tamarind wood, and coconut wood. The wooden slats are arranged regularly on top of the resonator (*rancukan*), which is also made of wood shaped like a crate, where under the wooden slats are given a soft cushion (*buntalan*) which is usually made of coconut fibre to support the gambang blades with the goal is that the resulting sound production is clearer and smoother. On the right and left sides of the gambang plan, there is usually a section called *kijingan* whose function is to beautify the shape of the gambang itself, and most of these *kijingan* have carving motifs.

To play this gambang *ricikan*, you need a tool to hit, which is called *tabuh* (mallet). The mallet (*tabuh*) used consists of two parts, namely the body (handle) and the head. The overall length of this *tabuh* is about 30-40 cm. The body part is usually made of cow or buffalo horn to make this part more flexible when played, while the head is a circle made of wood but on the surface is wrapped in rope (*pluntur*). The edge of the head is wrapped with *pluntur* to make the resulting sound production softer and clearer because it is this part that is struck against the surface of the gambang.

How to Play the Gambang Instrument

How to play the gambang instrument is the player sitting cross-legged behind the instrument. The player holds two percussions/mallets/beaters by grasping the body/rod of the mallet, where the body/rod of the mallet is placed in the middle of the palm groove with the middle finger and thumb holding/clamping the mallet rod, but at the same time, the thumb is also in contact with the side of the index finger, while the index finger is in a straight position above the body/rod of

the mallet about a third of the length of the mallet, the right elbow tends to be bent to a right angle, the left elbow tends to be bent to the left angle so that the position of the right and left arms resembles a triangle.

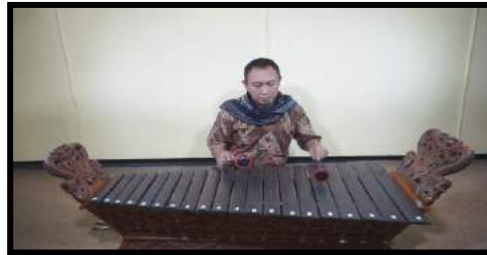


Figure 1. *Rikikan gambang*.
(Source: Rachman, 2021)

Rikikan gambang has one of the most basic and basic ways of playing, which is called the *gembyang* pattern, which is playing two notes simultaneously at a one-octave interval where the lower notes are played by the left hand while the notes with a distance of 1 octave higher are played by the right hand. For example, if the left hand plays the 5th note (*sol*), the right-hand plays the 5th note (*sol*) an octave higher and is hit simultaneously. Usually, this *gembyang* pattern plays a series of melodies that follow the song's melody with a rhythmic 1/8's, which means that there are two strokes in one beat. If the movement of the melody of the song goes up (ascending), then the gambang plays the pattern of *gembyang* stepping up, and vice versa if the movement of the melody of the song steps down (descending), the pattern of the melody of the *gembyang* also steps down with the rules of playing rhythmic 1/8's. However, in its development, many gambang players on Gambang Semarang music later developed a pattern of playing with various patterns to make the rhythm more dynamic and support the song being sung to make it more interesting.



Figure 2. Example of the basic accompaniment pattern of *rickikan* gambang. (Source: Rachman, 2021)

Gambang's Tone Composition

Rickikan gambang has a *wilab* arrangement of 20 pieces so that the composition of the tones on the *rickikan* gambang can cover up to more than three octaves. The arrangement of *wilab* starts from the lowest note and is located on the left side of the player, starting from the leftmost note 5 (*sol*) two dots below it, then to the right the higher the tone with a continuous sequence of tones is 6 (*la*), 1 (*do*), 2 (*re*), 3 (*mi*), 5 (*sol*), 6 (*la*), 1 (*do*), 2 (*re*), 3 (*mi*), 5 (*sol*), 6 (*la*), 1 (*do*), 2 (*re*), 3 (*mi*), 5 (*sol*), 6 (*la*), 1 (*do*), 2 (*re*), and finally 3 (*mi*) colons above it.

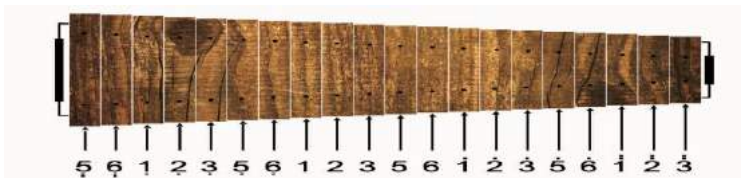


Figure 3. The composition of the gambang tone. (Source: Rachman, 2021)

Order of the Bars from left to right	Western Tuning System (A ⁴ =440 Hz)	Western Tone Approach	Symbol Notation	Solmization
1	110 Hz	A	5	Sol
2	123.5 Hz	B	6	La
3	146.8 Hz	D	1	Do
4	164.8 Hz	E	2	Re
5	185 Hz	F#	3	Mi
6	220 Hz	A	5	Sol
7	246.9 Hz	B	6	La
8	293.7 Hz	D	1	Do
9	329.6 Hz	E	2	Re
10	370 Hz	F#	3	Mi
11	440 Hz	A	5	Sol
12	493.9 Hz	B	6	La
13	587.4 Hz	D	1	Do
14	659.2 Hz	E	2	Re
15	740 Hz	F#	3	Mi
16	880 Hz	A	5	Sol
17	987.8 Hz	B	6	La
18	1174.8 Hz	D	1	Do
19	1318.4 Hz	E	2	Re
20	1480 Hz	F#	3	Mi

Table 3. Tuning system (scale) *riikan* gambang.

Bonang

The *riikan* bonang used in Gambang Semarang music is the same as the *riikan* bonang in Javanese Karawitan, namely the *riikan pencon* group, which is curved in shape, has a flat surface and has a *pencon* in the middle (knobbed-center), and has a hollow design that also functions as a resonator [22–24]. In general, *riikan* bonang is made of bronze, but there are also those made of brass and iron, although the best sound is made of bronze in terms of sound production. The size of the *pencon* on the *riikan* bonang varies related to the high and low sound produced, namely the lower the tone, the size of the *pencon* on the *riikan* bonang will be greater, and conversely, the higher the

pitch, the smaller the size of the *pencon* on the *ricikan* bonang [22,23,25,26].

The number of *pencon ricikan* bonang used in Gambang Semarang music is ten pieces arranged in two lines, the first line is five *pencon*, and the second line is five *pencon*. However, in its development to meet the need to accompany various songs, several Gambang Semarang groups also added two more *pencons* to the *ricikan* bonang, so that the number became twelve *pencons* with an arrangement of six *pencons* in each line. Some Gambang Semarang music groups added another *pencon* intending to be more flexible in using a series of accompaniment patterns when accompanying songs. These *pencons* are placed on a table-like design that has four legs and is provided with a rope base that has been linked from end to end to produce a clear and smooth sound. Like the gambang plan, the bonang plan also has a *kijingan* section located on the right and left in the form of carvings to add to the beauty of the plan.

To play this *ricikan* bonang, you need a tool to hit, which is called percussion. The percussion used has a length of about 30 cm. At the end of the percussion, the surface is wrapped in a rope loop (*pluntur*) to make the resulting sound production softer and clearer because this is the part stuck on the bonang's surface.

How to Play the Bonang Instrument

How to play the Bonang instrument is that the player sits cross-legged behind the instrument. The player holds two percussions/mallets/beaters by grasping the mallet, where the body/rod of the mallet is placed in the middle of the palm groove with the middle finger and thumb holding/clamping the mallet rod, but at the same time, the thumb is also in contact with the side of the index finger, while the index finger in a straight position is attached to the body/rod of the mallet about a third of the length of the rod of the mallet.



Figure 4. *Ririkan bonang* on Gambang Semarang music.
(Source: Rachman, 2020)

Almost the same as *ririkan gambang*, *ririkan bonang* also has one of the most basic and basic ways of playing, which is called the *gembyang* pattern, which is to play two notes at the same time at a one-octave interval, but somewhat different from the *ririkan gambang*, in the *ririkan bonang* the tone is low and high can be played by the right hand or vice versa because the composition of the notes on the *ririkan bonang* is different from the *ririkan gambang*. In the *ririkan gambang*, the low notes are always played by the left hand, and the high notes are always played by the right hand, in contrast to the *ririkan bonang* because the right and left hands can play low or high notes. The next difference is the rhythm played; if the *gembyang* basic pattern played by the *ririkan gambang* plays a $1/16s$ rhythm constantly, the *ririkan bonang* basic pattern plays a $1/8s$ rhythm constantly on the upbeat. The next difference is that if the basic pattern of *gembyang ririkan gambang* follows the song's melody, the basic pattern of *gembyang ririkan bonang* follows the *seleh berat* of even strokes and or the final *gutru* of the song where each *gutru* has four beats. However, in its development, many *ririkan bonang* players on Gambang Semarang music then developed a playing pattern with various patterns of play to make the rhythm more dynamic and support the song being sung to make it more interesting and attractive.



Figure 5. Example of the basic accompaniment pattern of *ricikan* bonang.
(Source: Rachman, 2021)

Bonang's Tone Composition

In general, *ricikan* bonang has ten *pencons* arranged into two rows, namely the top and bottom rows, where each row consists of five *pencons*. In the top row, the *pencon* arrangement starts from a high 6 (*la*) note on the far left then sequentially to the right, namely a high 5 (*sol*) tone, followed by 3 (*mi*) high, 2 (*re*) high, and ends with 1 (*do*) low. So the arrangement of the *pencon* on the top row moves to the right the tone is getting lower. While the *pencon* arrangement in the lower leftmost row starts from a low 3 (*mi*) note, then moves to the right a low 2 (*re*) tone, then a high 1 (*do*) tone, then a low 5 (*sol*) tone, and at the far right end of the note 6 (*la*) low. In other words, the composition of the bottom row of *ricikan* bonang notes is irregular. According to the players, this arrangement of *pencon* provides convenience for the players when playing some basic patterns and development during playing a song. However, there are also *ricikan* bonang players who arrange them differently.

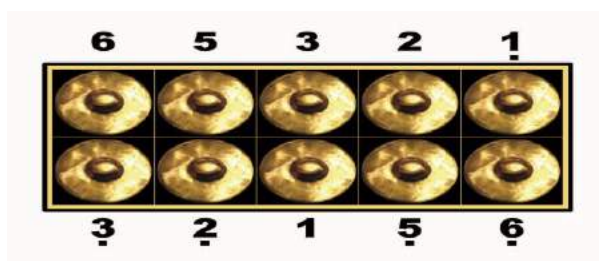


Figure 6. The composition of the *ricikan* bonang.
(Source: Rachman, 2021)

Order of the Bars from left to right	Western Tuning System (A=440Hz)	Western Tone Approach	Symbol Notation	Solmization
1	493.9 Hz	B	6	La
2	440 Hz	A	5	Sol
3	370 Hz	F#	3	Mi
4	329.6 Hz	E	2	Re
5	146.8 Hz	D	1	Do

Table 4. *Riikan* bonang tuning system (scale) top row.

Order of the Bars from left to right	Western Tuning System (A=440Hz)	Western Tone Approach	Symbol Notation	Solmization
1	185 Hz	F#	3	Mi
2	164.8 Hz	E	2	Re
3	293.7 Hz	D	1	Do
4	220 Hz	A	5	Sol
5	246.9 Hz	B	6	La

Table 5. *Riikan* bonang tuning system (scale) bottom row.

C. *Wilah* and *Pencon* Instruments on Pi Phat Ensemble Instrumen

Thai classical music is the ensemble and repertoire of the court. Most of these ensembles are influenced by the Khmer ethnic group (in southeastern China) and some of the old-style repertoire from India. There are three main classical ensembles, Pi Phat, Kraung Sai, and Mahori. The composer is not named until the beginning of the Bangkok period. The repertoire is passed down from generation to generation entirely through oral tradition, not through traditional music written in notation but passed down through performances that tend to be the same throughout history until the turn of the century when great composers began to record and pass on their music in the form of written culture in the form of music notation. However,

musicians consider the notated music generic and often add their variations and improvisations, which means it is no longer original. All of these ensembles have similar elemental theoretical instrumentation. They all share the Ching and Krap symbols to mark the main beat. They also use a different type of klong drum to outline the rhythm, and most pieces end with a strung gong. Classical instruments play either a melody or help mark the form of a song; there is no harmony. The rhythm of Thai music has a steady and regular tempo with a regular pulse. It usually has a simple duple gauge and no swing or sync. Thai classical ensembles are similar to many other orchestras in Southeast Asia, for example, Bali and Java [5,23–25].

Pi Phat is a kind of Thai musical ensemble consisting mainly of “percussion instruments”, namely ranat ek, ranat thum, ranat thum lek, khong wong yai, and khong wong lek; wind instruments - such as the pi, khlui, and time-keeping instruments’ such as the ta-phon, klong that. Pi Phat adheres to cultural aspects, including musical instruments used in ensembles, beliefs, values, norms, customs, traditions, and rules. Pi Phat ensembles are performed at royal ceremonies and public celebrations in music concerts or as an accompaniment to Khon (mask dance drama), Nang Yai (grand shadow puppet show), Lakhon (dance drama), Hun Krabok (bamboo puppet theatre), and Li-ke (folk dance drama). The Pi Phat ensemble is also performed at times of mourning associated with death rituals - funeral rites in which Buddhist monks perform funeral chants and cremations [26,27].

Pi Phat Ensemble Instrumentation

Pi Phat is a Thai musical ensemble consisting mainly of percussion instruments, namely ranat ek, ranat thum, ranat thum lek, khong wong yai, and khong wong lek; wind instruments such as the pi, khlui, and tempo marking instruments such as the ta-phon, and the klong that. This section will focus more on

discussing only two instruments, namely ranat ek and khong wong yai.

Ranat Ek

Ranat ek is a melodic instrument in the Pi Phat ensemble built from two main parts, namely 'phuen ranat' and 'rang ranat'. Phuen ranat is usually shortened to 'phuen'. Phuen is the slat of wood, while rang ranat is the resonator of the phuen itself. Phuen generally consists of twenty-one wooden blades/keys. However, in its development, many phuen were found which had additional blades/keys to expand the range of the instrument.

Ranat ek has a similar appearance to a xylophone. The oak keys/blades do not touch the instrument's base but hang on a drawbridge-like rope attached to two parallel strings above a boat-shaped resonator. Oak blades are generally made of *sonokeling*/rosewood (*Dalbergia Oliveri*; Thai: ไม้ชิงชัน; mai ching chan), but some are made of bamboo, metal, and glass. The size of the blades/keys of the oak shutters varies to produce different sounds arranged sequentially from the left to the largest and longest size, then moving to the right, getting shorter and smaller in size. Ranat ek is played by hitting it with two mallets made of wood. Mallet has a length of about 25-30 cm which consists of two parts, namely the body and head, where the head is circular. A loud mallet produces a sharp and bright sound, usually used for fast-paced playing, while a softer mallet called maai nuam creates a soft and smooth sound, used for songs with a slower tempo.

How to Play Ranat Ek

How to play the oak ranat instrument is that the player sits cross-legged or squats behind the instrument. The player holds two mallets/bats by tightly gripping the mallet, the mallet bar is placed in the middle of the palm groove with the middle finger

holding the rod, while the thumb touches the side of the middle finger, and the index finger is in a straight position above the mallet rod about a third of the length. Mallet, right elbow bent to a right angle, left elbow bent to a left angle.



Figure 7. How to play ranat ek instrument.
(Source: Teangtrong, 2020)

Ranat ek has one of the most basic and basic ways of playing known as "*tikep*". *Tikep* is a unique method of playing an oak ranat by hitting the left and right hands evenly and simultaneously by sounding the same note, but separately from each other (playing the octave technique). Individual notes, such as do (low) and do (high), and because the pairs are eight balls apart (a bar/stem term used in Thailand), this method is called *kbw 8*.



Figure 8. Example of a *tikep* accompaniment pattern on the ranat ek.
(Source: Teangtrong, 2020)

Ranat Ek's Tone Composition

Ranat ek has 22 keys, which are arranged from the lowest note (far left) and towards the higher right. The arrangement of ranat ek notes consists of three octaves, starting from the F^1 (*sol*) to F^3 (*sol*) three octaves after.

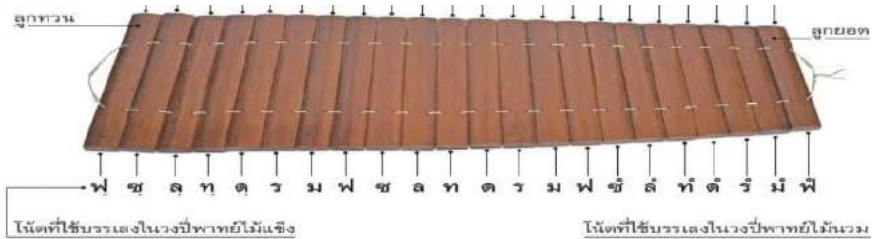


Figure 8. The composition of ranat ek's notes.
(Source: Teangtrong, 2020)

Order of the Bars from lowest/left to right	Thai Notation	Solmization	Western Notation
1	ซ	Sol	F
2	ล	La	G
3	ท	Ti	A
4	ด	Do	Bes
5	ร	Re	C
6	ม	Mi	D
7	ฟ	Fa	Dis
8	ซ	Sol	F
9	ล	La	G
10	ท	Ti	A
11	ด	Do	Bes
12	ร	Re	C
13	ม	Mi	D
14	ฟ	Fa	Dis
15	ซ	Sol	F
16	ล	La	G
17	ท	Ti	A
18	ด	Do	Bes

19	ร	Re	C
20	ม	Mi	D
21	พ	Fa	Eis
22	ช	Sol	F

Table 6. Table of intervals of ranat ek from the lowest note to highest note.

Order of the Bars from lowest/left to right	Thai Tuning System	West Tuning System (A=440Hz)	Western Tone Approach	Thai Notation	Solmization
1	350 Hz	349 Hz	F (sol)	ช	5
2	381 Hz	370 Hz	Fis (+)	ล	6
3	412 Hz	415 Hz	Gis (-)	ท	7
4	460 Hz	466 Hz	Ais (Bes)	ด	1
5	520 Hz	523 Hz	C	ร	2
6	562 Hz	554 Hz	Cis	ม	3
7	621 Hz	622 Hz	Dis (Eis)	พ	4
8	700 Hz	698 Hz	F	ช	5

Table 7. The tuning system (scale) of ranat ek's instruments in one octave.

Khong Wong Yai

The khong wong yai (Thai: พ้องวงใหญ่, pronounced [kʰwɔːŋ wɔŋjâj]) is an instrument consisting of a collection of small gongs arranged in an almost complete circle. The khong wong yai is used in the Pi Phat ensemble to provide the main melody as a guide for other instruments from very complex ensembles. Each gong on khong wong yai is set with beeswax under the gong. Khong wong yai can be played with a soft mallet or a hard mallet. Khong wong yai has 16 porous gongs set in a rattan frame and played with two mallets. The shape of the mallet is almost the same as the mallet of *ruikan* gambang in Gambang Semarang music, which consists of two parts (body and head) but is made of wood with a length of about 20-30 cm.

How to Play Khong Wong Yai

How to play khong wong yai is that the player sits cross-legged in the middle of the gong circle, the player's body is straight facing the center of the gong circle. The way to hold a mallet (gong stick) is to hold the mallet not too tightly. The mallet stick is placed in the middle of the palm groove with the middle finger holding the stick, and the thumb is positioned to touch the side of the middle finger; the index finger is straight while keeping the tip of the index finger close to the wooden head. While the way to hit it is to hit the gong in a way that can be used to control the sound of the gong, then turn the hands down while playing with both arms at the side, the right elbow is bent to the right angle, and the left elbow is bent to the left corner.



Figure 9. How to play the khong wong yai instrument.
(Source: Teangstrong, 2020)

Khong Wong Yai's Tone Composition

Khong wong yai has 16 balls/gongs, which are arranged from the lowest note (far left from the player's point of view) and towards the right, the higher the tone of the gong. The composition of the khong wong yai tone consists of two octaves where the lowest note (leftmost side of the player) is a low C/2 (*re*) tone, and the highest note is a high D/3 (*mi*) which is located on the right side of the player. The order of the notes is

2 – 3 – 4 – 5 – 6 – 7 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 1 – 2 or C – D – E♯ – F – G – A – B_{es} – C – D – E♯ – F – G – A – B_{es} – C – D.

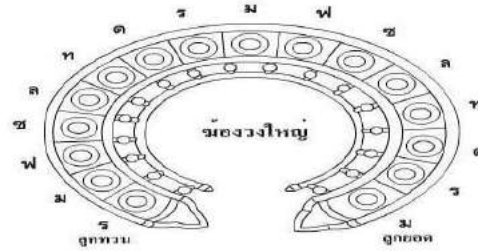


Figure 10. Khong wong yai tone composition.
(Source: Teangrong, 2020)

Order of the Bars from lowest/left to right	Thai Tuning System	West Tuning System (A ⁻ -440Hz)	Western Tone Approach	Thai Notation	Solmi zation
1	350 Hz	349 Hz	F (sol)	ซ	5
2	381 Hz	370 Hz	F _{is} (+)	ล	6
3	412 Hz	415 Hz	G _{is} (-)	ท	7
4	460 Hz	466 Hz	A _{is} (B _{es})	ด	1
5	520 Hz	523 Hz	C	ร	2
6	562 Hz	554 Hz	C _{is}	ม	3
7	621 Hz	622 Hz	D _{is} (l _{is})	พ	4
8	700 Hz	698 Hz	F	ซ	5

Table 8. Tuning system (scale) of khong wong yai instruments in one octave.

Order of the Bars from lowest/left to right	Thai Notation	Solmization	Western Notation
1	ร	Re	C
2	ม	Mi	D
3	พ	Fa	E♯
4	ช	Sol	F
5	ล	La	G
6	ท	Ti	A
7	ด	Do	Bes
8	ร	Re	C
9	ม	Mi	D
10	พ	Fa	E♯
11	ช	Sol	F
12	ล	La	G
13	ท	Ti	A
14	ด	Do	Bes
15	ร	Re	C
16	ม	Mi	D

Table 9. Khong wong yai instrument intervals.

D. Conclusion

The *wiluh* instruments in the Gambang Semarang music and the Pi Phat ensemble, in this case, are the gambang and the ranat ek, as well as the *pencon* instruments in the Gambang Semarang music and the Pi Phat Ensemble, in this case, the bonang and khong wong yai if examined from the organological elements, they have several similarities and differences. In the *wiluh* instrument, the similarities include the physical form, the basic ingredients, the attitude and how to play it, the basic playing pattern, the role in the overall music, and the mallet used. But the difference is the tuning system used, the number of the *wiluh*, the shape of the resonator. While on the *pencon* instrument, the similarities include the physical form of the gong, the basic ingredients, attitude, and how to play it.

However, it also has some differences, including the tuning system, the playing pattern, the size of the gong and mallet, the number of the *pencon*, the role in the musical playing, and the form of the stand instrument (*rancakan*). □

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**Traditional Music Learning Methods in
Music Education Study Program
Universitas Negeri Semarang and
Music Department of Suan Sunandha
Rajabhat University Thailand**

*Udi Utomo,³ Pramot Teangtrong,⁴ Indrawan Nur
Cahyono³*

A. Introduction

Universitas Negeri Semarang (UNNES) as one of the higher education institutions has a vision to become a university with conservation insight and international reputation. This vision is very strategic and becomes the main reference in the implementation of education, the implementation of research, and community service, as well as the development of *good governance* through the implementation of integrated quality management, and the implementation of mutually beneficial institutional cooperation (*mutualism symbiosis*).

In implementing conservation principles, UNNES refers to seven existing pillars, namely: 1) biodiversity conservation; 2)

^{3, 3} Drama, Dance, and Music Department, Faculty Languages and Arts, Universitas Negeri Semarang, Semarang, Indonesia.

⁴ Music Departments, Suan Sunandha Rajabhat University, Bangkok, Thailand.

green architecture and internal transportation systems; (3) waste management; 4) the paperless policy; 5) Clean energy; 6) conservation of ethics, art, and culture; and 7) as well as conservation cadre. Conservation of ethics, art, and culture as one of the pillar components of conservation becomes a priority and becomes a very fundamental issue. Therefore, efforts to preserve ethics, art and culture must be carried out continuously so that the character and identity of the nation remained firmly maintained.

According to a report by the Asia-Pacific Cultural Center for UNESCO (ACCU), there are several types of art conditions that must be conserved, such as: 1) art that has creative, exceptional, and extraordinary value; 2) art that is unique, exceptional, and has a contribution to historical and traditional culture; and 3) art that potentially disappears as the number of practitioners begins to diminish, the authenticity of history begins to disappear, cultural significance begins to disappear, and art is lost due to the modern rules and legislation. Therefore, art conservation is an attempt to slow or prevent the death of certain arts.

Music Education Study Program, Faculty of Language and Arts is one of the performing arts study programs at UNNES. Therefore, in the context of art preservation, this study program has a very strategic position. The curriculum developed in the Music education Study Program should refer to the existing vision and mission. For example, the curriculum content in addition to the areas of study that are universal and global must accommodate the wealth of traditional art and even make a distinguishing expression with performance arts education study programs in other institutions. As one of the performing arts education study programs in central Java, the curriculum developed in the Music education Study Program contains traditional music courses, such as: 1) Karawitan Knowledge; 2) Javanese Karawitan 1; 3) Javanese Karawitan 2; 4) Tembang

Jawa; 5) Central Java Popular Music; 6) Central Java Coastal Music; 7) Karawitan Bali; and 8) Keroncong.

Regarding the curriculum policy in accommodating traditional arts in Thailand, the music department faculty of fine and applied arts of Suan Sunandha Rajabhat University (SSRU) Thailand also applies a similar method. Traditional music learning in this Study Program is also intended as a succession of traditional and preservation of art in current and subsequent generations. Traditional Thai music as the cultural wisdom of Thai society is expressed in the form of songs, instruments, playing methods, singing methods that serve to meet the needs of emotions, rituals, and religious activities. In Thai society, music has values, such as: 1) a fun entertainment that has positive value to reduce stress, evoke healthy moods, and minds; 2) a medium to help to strengthen community unity and shaping the spirit of patriotism; 3) a medium to create an atmosphere of peace in society; 4) a medium that reflects the way of life, social conditions, lifestyle of the people at different periods; 5) supporters of ritual activities in various religious ceremonies, and customs; 6) national identity; and 7) noble cultural heritage creates ancestors that must be inherited in order to continue to survive.

Based on the urgency of the existence of traditional music courses in both institutions of higher education, this article discusses the methods of learning traditional Javanese Karawitan music and traditional Thai music which is very different from the usual methods of learning modern music or western diatonic traditional music. In the context of learning, methods are one of the important components in addition to other components, such as: 1) objectives; 2) material; 3) teacher; 4) students; 5) media and learning facilities, and 6) assessment of learning. In general, there are several methods that can be used in learning, such as: 1) lecture methods; 2) methods of discussion; 3) methods of demonstration; 4) lecture

method plus; 5) methods of recitation; 6) experimental methods; 7) the study tour method; 8) skill training methods (*drill*); 9) team teaching methods; 10) peer teaching method; and 11) problem-solving method. The selection of a method in learning depends largely on the goals and characteristics of learning. Therefore, accuracy in choosing and combining learning methods depends heavily on the knowledge and experience of the teacher.

Lecture learning methods are suitable for use in learning with certain characteristics such as providing information, especially if the learning materials to be delivered are difficult to obtain. Interactive discussion methods are learning methods that are able to improve understanding of concepts and skills in solving problems. Demonstration learning methods are effective methods to help students find answers to certain problems. While the plus lecture learning method is a teaching method that uses more than one method, namely the lecture method combined with other methods. The recitation learning method is one of the teaching methods that is done by requiring students to create a resume with their own sentences. This method has the advantage that the knowledge gained by learners is the result of learning itself, so it will be remembered longer. In addition to this, through this method learners have the opportunity to increase courage, initiative, responsibility, and independence.

In contrast to the characteristics of some teaching methods, experimental learning methods are a way of managing learning in which students conduct experimental activities by experiencing and proving for themselves something they learn. While the study tour method is a teaching method by inviting learners to visit an object to expand knowledge about something they learn. After that, it is only given the task of making reports, discussing, and posting the results of the visit accompanied by educators. Skill training method (*drill method*) is a teaching

method that is done by providing repetitive skills training to learners, and invite students directly to the place of skill training to see the process, purpose, function, usefulness, and benefits of something and train it. A method of team learning is a teaching method in which the educator has more than one person whom each has a different task. The peer teaching method is a method in which the learning process is done by involving students as teachers. While the problem-solving method is not just a teaching method but is a method of thinking because it uses other methods that begin with the stage of finding data to the conclusion. Therefore, the problem-solving method is a method that is considered able to stimulate students to think and use insight without looking at the quality of opinions conveyed.

B. The Javanese Traditional Music “Karawitan” Learning Methods in the Music Education Study Program of Universitas Negeri Semarang

The learning process of Javanese Karawitan Courses is different from learning the practice of other musical instruments, especially musical instruments based on western or diatonic musical idioms. As one example, in western musical instruments such as pianos, guitars, inflatable instruments, percussion, etc., learning cannot be separated from the use of musical notation. Even music notation is the only source of learning during the learning process. Conversely in Karawitan music, both in Javanese Karawitan, Balinese Karawitan, and Sundanese Karawitan; although also known as the notation system, but the function is different. The use of notation in this art is only for *balungan gending* that is useful as a reminder for *karawitan* players, so they will not forget. Therefore, the difference in paradigm has resulted in the difference in the learning method.

The implementation of learning of Javanese Karawitan courses, especially at the initial stage is done by *kupingan*. *Kupingan* as a strategy is a learning process that relies on listening skills which results will be used as a basis in the process of mimicking. In the implementation of Javanese Karawitan 1 that took place in the UNNES Music education Study Program, teachers used to lecture, demonstration, and drill methods either conducted in the form of simulations or real practice. Based on the sequence of learning materials for one semester, the use of variations in learning methods applied in the learning of the Javanese Karawitan 1 Course, as follows.

Meeting	Material	Learning Methods
1 and 2	Knowledge of the practice of playing a Gamelan musical instrument (<i>wilah</i> and <i>pencon</i> shape) along with its types, the tools used, and how to play it.	Lectures, demonstration, and question and answer by prioritizing the process of <i>kupingan</i> (without Notation) in the learning.
3	The practice of playing Karawitan musical instruments using <i>gendang lancaran</i> .	<i>Drill</i> (exercise) with simulation form.
4	Playing the performance pattern of all instruments are trained in the whole form on <i>Lancaran Kotek</i> (<i>laras Slendro Patbet Manyuro</i>).	<i>Drill</i> (training).
5 to 7	Practice playing <i>Lancaran Kotbek</i> using all existing musical instruments.	<i>Drill</i> (training).
8	Midterm Test	
9 to 10	Introducing <i>lancaran laras Pelag</i> by using vocals.	Lectures, demonstration, <i>drill</i> , and Q and A, accompanied with the introduction of notation on the process of learning.

11 to 15	Playing <i>lancaran laras Pelog</i> Drill using a song, by using vocals
16	Final Exam

Table 1. The Sequence of Materials and Methods of Learning of Javanese Karawitan I Courses in UNNES Music Education Study Program

In the beginning, when the students practice playing Karawitan musical instruments, the process is done by playing some of the melodic patterns of *lancaran* repeatedly. It starts by playing a note along the same two lines and continues on the next line (second row) with the same repetition of the same tone. This process is done with the aim that students can immediately memorize the tone position on various types of *wilah* dan *pencon* instruments as well as how to play it.

After the students are able to play *the lancaran* melodic pattern through the simulation process, then a combination of *lancaran* melodic patterns is played so that it becomes a complete set of performances. After the entire *gendhing* part is mastered, the lecturer writes the melodic notation of the song being played. The written melodic notation is intended to provide understanding to students in interpreting the work of a *gendhing*.

The *process of practicing gendhing lancaran* in this lecture is carried out intensively for seven meetings, namely at the 3rd to 7th meetings. This is done because the students are required to master all existing musical instruments. The training process (*drill*) is carried out in turn to all types of musical instruments.

At the beginning of the 9th meeting, the learning methods used remained the same, namely lectures, demonstrations, and *drills* (exercises). But at this meeting, the *gendhing* notation was immediately introduced since the initial learning process. This is done because the material studied is getting more difficult. At the time of playing *gendhing lancaran* in the previous lecture, the technique of playing *bonang* musical instruments only uses

gembyang. While starting at the 9th meeting, the *imbal* technique was implemented.

When the students learn *tembang*, the process directly uses melodic notation. The goal is that students can read and notate. While the sequence of the learning process was done after all students can play the *luncuran laras* that they studied. At the end of the lecture, the results of learning for one semester are shown with mastery of the ability to play Gamelan musical instruments while singing *tembang*.

C. Wong Piphat Traditional Music Learning Method at Suan Sunandha Rajabhat University Music Department

In general, the learning methods applied in the Music Department of the Faculty of Fine and Applied Arts of Suan Sunandha Rajabhat University (SSRU) Thailand have been regulated in existing learning documents. The method of learning should refer to the development of predetermined learning outcomes, such as: 1) the establishment of morality and ethics; 2) the development of knowledge; 3) intellectual skills; 4) interpersonal performance and accountability; and 5) numerical analysis, communication, and information technology skills.

In the context of the implementation of the Thai Music Skills Course 1 at the Music Department of the Faculty of Fine and Applied Arts at Suan Sunandha Rajabhat University (SSRU) Thailand, the learning method used is no different from what is done in the learning of Javanese Karawitan 1 in the UNNIS Music education Study Program. Based on the data obtained, the learning plan implemented in the odd semester of 2020/2021 can be explained in the following table.

Meeting	Material	Learning Methods
1	1) Introduction of courses and lecture 2) Basic principles of playing Khong Wong Yai 2) The basic principle of playing Ranat ek 3) The basic principle of playing Ranatthum 4) Basic Principle of playing Khong Wong Lek	Lectures & Q&A
2	Chapter 1. Ritual Opening Song (Plang Homrong Chao) 1) The song and meaning of Plang Homrong Chao 2) Type of song Plang Homrong Chao 3) Song role of Plang Homrong Chao	Lectures & Q&A
3 s.d 7	Rehearsals and reviews of all parts of Plang Homrong Chao's song	Lecture, discussion, demonstration, & <i>drill</i>
8	Midterm Test	
9	Chapter 2. Three-Part Rhythm Song (Sam Chan) 1) The history and meaning of Sam Chan's song 2) The role of Sam Chan's song 3) Khmen Sai Yok Practice	Lecture & Q&A
10	Three-Part Rhythm Training (Sam Chan)	Lecture, discussion, demonstration, & <i>drill (exercise)</i>
11	Chapter 3. Vine Song (plang Thao) 1) History and meaning of Vine songs 2) Vine song roles	Lectures & Q&A

Meeting	Material	Learning Methods
12 dan 13	Vine (Plang Thao) 1) Rehearsals of Khaek Bon Thet 2) Ar noo Tao song rehearsal	Lecture, discussion, demonstration, & <i>drill</i> (exercise)
14	Chapter 4. Hati Song (Plang Tap) 1) History and meaning of Plang Tap songs 2) Kinds of Plang Tap songs 3) Plang Tap song role	Lectures & Q&A
15	Song1: Phleng Ching Song	Lectures, discussions, demonstrations, & <i>drill</i> (exercises)
16	Song 2: Chon Khe Hang Yao	Lecture, discussion, demonstrations, & <i>drill</i> (exercises)
17	Final Exam	

Table 2. The sequence of materials and methods of learning courses Thai Music Skills 1

In playing traditional Thai music, players must remember the melody appropriately. They should know how to play and the function of the instrument they play based on the characteristics of the song. When playing traditional Thai music, it is not uncommon for a player to see a musical note (notation). Even at the beginning of its development, no song was notated or documented as it is today. The performers per musical instrument during the performance rely entirely solely on memory (memory) both on the melodic components of the song being played and the accompanying accompaniment patterns.

In addition to these musical aspects, in playing traditional Thai music, players must also pay attention to other principles, such as: 1) the correct sitting or standing position; 2) performing

in a graceful personality; 3) the position of the back straight and chest upright; 4) maintaining concentration and remaining relaxed (not tense); and 5) playing musical instruments based on correct techniques. Based on this, it is not much different from the process of transfer of knowledge and skills carried out by teachers to students who are carried out in learning Javanese Karawitan 1 courses in the UNNES Music education Study Program.

The detailed learning method shown in the table presents that every learning material knowledge always adapts the lecturing and Q and A methods. While at moment, the learning practice of Javanese Karawitan began with demonstration, followed by imitating and practicing either individually and in a group. Meanwhile, the demonstration method and deep learning of Music Thailand 1 is done in meeting 3 to 7, 10, 12, 13, 15, and 16. However, the method of lectures and discussion are remained to be used to complete and optimize the process of learning.

D. Characteristic Differences of Methods Used in Traditional Music Learning in Music Education Study Program of Universitas Negeri Semarang and Music Department of Suan Sunandha Rajabhat University Thailand

In the implementation of learning Javanese traditional music, especially the Javanese Karawitan 1 and Javanese Karawitan 2 in Music Education Study program at UNNES and traditional Thai music taught in Music Department Faculty of Fine and Applied Arts of Suan Sunandha Rajabhat University (SSRU) Thailand has basically no significant difference. The methods of lectures, Q&A, demonstrations, and exercises are predominantly carried out by teachers of traditional music courses in both study programs. Lectures are predominantly conducted when the teacher delivers learning materials that are

factual and conceptual knowledge about traditional music being taught. While the demonstration was conducted to demonstrate the technical practice of a musical instrument, the drilling method or exercises conducted independently or under the guidance of lecturers, performed either individually, in groups, or a number of players needed to play traditional music in full team setting. Although the discussion process at certain times is carried out in learning in both study programs, the Thai Music Skills 1 course is structured in a more structured way. The discussion method is carried out at the 3rd meeting to 7, 10, 12 to 13, 15, and 16.

Every method by its characteristics has its own uniqueness. The lecturing method, for example, is very appropriate to be applied to informational learning. The discussion method is interactive which is more effective to increase the understanding of conceptual and problem-solving in learning traditional music. The Q and A method that is used is appropriate to complete the method of lectures and discussion. While the demonstration method is effective to help the student to look for an answer about issues of learning traditional music. In this context, the main point is how to play the musical instrument in a proper technique. As for the application, the drilling is occasionally used by the lecturers to give simultaneous practice to the students [5].

E. The Adaptation of Traditional Music Learning Methods in the Music Education Study Program of Universitas Negeri Semarang and Music Department of Suan Sunandha Rajabhat University Thailand during the Covid-19 Pandemic

Since March 2020, the worldwide education system has undergone a tremendous change. As the only way to prevent the spread of Covid-19, almost the entire world implements a policy of learning from home while still ensuring that learners can

follow learning even online. Therefore, a digital *platform* is used in learning as one of the efforts to keep the learning process going [7]. Although this learning situation has lasted for more than a year, it does not mean that the learning is without obstacles both from the aspect of facilities and infrastructure and existing resources. The limitations and unevenness of the internet network, lack of training for teachers, and the unfamiliarity of students learning independently are quite severe obstacles to the practice of education today [8].

The main issues are around the limitations of traditional music instruments had by students. Traditional music instruments usually are owned by formal institutions, like universities, or *sanggar*. However, to ensure that learning is effective and held in a proper way, some adaptations were done. The method of lectures, Q and A, and discussion which was done in the classroom, was conducted using *Zoom*. In order to support that, the tutorial video was created by lecturers to lead the students to learn about musical instruments.

The method of demonstration, which is usually done face-to-face, at this time is also replaced by video tutorials that contain techniques to play traditional musical instruments that are taught. This method is done so that students can still practice based on examples exhibited by teachers or other traders. Of course, this method has advantages, because the demonstrations conducted by teachers can be seen repeatedly by students after completing online lectures. Here are some video tutorial images used to support lectures during the Covid-19 pandemic.



Figure 1. Instrument Learning Tutorial Video Javanese Karawitan 1 in the Music Education Study Program of Universitas Negeri Semarang during the Covid-19 Pandemic



Figure 2. Video tutorial practice of playing *lancaran* using Karawitan instrument courses in the Music education Study Program of Universitas Negeri Semarang during the Covid-19 Pandemic



Figure 3



Figure 3 & 4. Video tutorial demonstration of techniques for playing Thai musical instruments (Khong Wong Yai) at Music Department Suan Sunandha Rajabhat University Thailand during the Covid-19 pandemic

The use of video tutorials on traditional musical instruments teaching developed by teachers in both study programs is considered sufficient to help students when they have to practice both individually and in groups. During this

pandemic, the training process was carried out with colleagues who have the skills to play traditional musical instruments. Even some of them practiced with the owners of musical instruments in their respective areas. Some of the difficulties experienced by students during training were discussed and asked teachers during online lectures. The efforts of lecturers in adapting several teaching methods into digital technology are very appropriate in line with the development of technology that exists today. Moreover, the advantages of video tutorials as a medium of learning have been proven to be effective in various contexts, fields, and levels of learning [9],[11][10],[11][12].

F. Conclusion

Traditional arts courses taught in UNNIS music education study program and the Music Department of Suan Sunandha Rajabhat University (SSRU) Thailand share similar goals. In addition to being a medium of education, both courses are directed to master skills for students in accordance with the profession they will pursue, as well as a medium of cultural preservation.

By its characteristics, the traditional music learning method, especially Javanese Karawitan and traditional Thai music *Wong Piphat* were very different from learning diatonic. This has resulted from the different characteristics of *laras*, rhythm, musical pattern, and composition that exist are different from its theoretical aspect and its cultural basis. The learning methods used in traditional Javanese Karawitan and Traditional Thai Music *Wong Piphat* are not different, by dominantly implementing the demonstration method and drill. The method of lectures, Q and A, and discussion are combined and used for ensuring the process of learning to run well. During the covid-19 pandemics, the methods used are lectures and demonstration. □

③

The Utilization of Sampling Technique of Gamelan and Thai Musical Instrument for Music Creation Collaboration

Mochammad Usman Wafa⁵ , Pramot Teangtrong⁶

A. Introduction

The development of the creation and the way of enjoying the music today undergoes various developments in all fields, both in terms of instrumentation and recording system. A real example is, people used to enjoy music directly by visiting the place where the music is presented. Currently, people can enjoy music without having to visit the place where the music is presented. The media used to enjoy music also varies, i.e. radio, television, and when it has inserted in digital media, music can be enjoyed through smartphone devices, iPods, and other streaming media. Likewise, in terms of music creation, artists do not have to use original instruments in creating music, the creation activity can be done through the technique of recording the sound of the original instrument, and then the sound is used as sampling to be composed into a work of music. This technique is known as audio sampling.

⁵ Drama, Dance, and Music Department, Faculty Languages and Arts, Universitas Negeri Semarang, Semarang, Indonesia.

⁶ Music Department, Suan Sunandha Rajabhat University, Bangkok, Thailand.

Jackson [1] describes the audio/sound sampling technique as the use of recordings both from the original instrument source and/or source from the recording of an existing instrument. Audio sampling is a technology used to convert analog sound (native sound) to a digital sound format using ADC (analog to digital converter) equipment that is then recorded or saved to a disc/storage. Basically, all audio sounds, both vocals, and certain sounds are created in a form of vibration. This indicates that all audio has its own waveform. Generally, the waveform is called an analog signal. But the technique allows these signals to be changed and processed for a better result. This technique allows the change of analog signals into digital bits. This technique is called sampling. When these bits turn into a digital signal, then this signal will have better quality, have less noise, and can also be processed for certain needs.

Related to this, the use of sampling technology can be used to create new music that is sourced from sounds that have been recorded in such away. So that sampling of the sound can be reproduced both in terms of *timbre* and scale. In addition, the advantages obtained by using sampling techniques are the efficiency. This practice is not expensive because the original instrument is not needed.

One of the musical instruments that can be used as sampling is a traditional musical instrument. Various kinds of traditional musical instruments in the world have several similarities, for example, traditional Thai musical instruments and Javanese Gamelan which is seen from its physical form made of metal and wood. Then the shape of the blade and *pencon* have almost the same shape. In terms of *titi nada*, Hughes said that Thai instruments use seven tones in 1 octave, while the Javanese Slendro tuning uses five tones.

Research in the form of Gamelan has been widely done, not only about musical phenomena but also about cultural and

physical phenomena. This approach is identical with Turner and Bruner [3] that a phenomenon is a reality, experience, and expressions, known as life as lived, life as an experience, and life as told. The Karawitan approach from physics is meant to reveal a reality. In addition, Karawitanology is used to express an expression, while the cultural approach is used to express Karawitan as experience. The approaches of these three phenomena are realized by the digitization of Gamelan. Reflecting on this, in accordance with the work process of this research, the sound of instruments is used by composers to create a digitalization of sound.

In this regard, the idea of Wartyo [4] concluded that Gamelan digitalization is one of the answers that Javanese music instruments continue to be developed in answering the challenges of an increasingly modern era and besieged by technological invasions. Gamelan which has a Javanese cultural identity is full of Islamic values with various variations created by Sunan Kalijaga. Digitization of Gamelan is done with *e-Gamelan standalone*, internet-based *e-Gamelan*, and *e-Gamelan on mobile devices*.

The results of further investigations, [5] Mc. Graw compared the sound installations of Gamelan Robot (gamelatron) and traditional Gamelan, as it was done in the American Gamelan subculture, to determine atmospheric concepts used in ethnomusicology. Mc. Graw argues that at the influencing level between gamelatron and Gamelan provides a similar experience called “feeling-relationship atmosphere”, thus referred to the divergent level of understanding due to differences in some discursive binaries i.e. live/recorded, human/machine, individual/group, subject/object, and body/prosthesis.

More importantly, the results of Ujahyanto’s research entitled *Analysis by Synthesis Model of Synthetic Gamelan Sound Generation Application* suggest archiving Gamelan music in

digital form because, in this digital era, we will facilitate the spread and introduction to the younger generation. Archiving in digital form can be done automatically by entering the notation of songs written on paper into the Gamelan sound generation application. Gamelan sound generation requires several parameters, namely notation or drums, the type of instrument used, the beating tool used, the beating technique, the strength of the punch, and the tempo of the song. In this study, only a few parameters were observed, i.e. basic frequency, harmonic frequency, phase, tempo, and type of instrument being played. The type of Gamelan sound that is raised is fully synthetic and semi-synthetic. In research, using this analysis-by-synthesis method, it was obtained that for the sound produced full *synthetic* is still not satisfactory, especially can not mimic the sound of clinking typical of the metal that is hit. While the semi-synthetically produced Gamelan sound has qualities equivalent to the Gamelan sounds produced by Gamelan growers.

If traced to the results of 'Ijahyanto's research, the results of the Gamelan sound generation application are still based on the notation, the main tone ladder in accordance with the Gamelan frequency interval, so that a composer in developing musical compositions is still limited.

The results of Hughes's research [2], bringing up differences in the musical compositions of Thai traditions and Javanese Gamelan in a repertoire, Sumrothong [7] reveals the paradoxical melody between Phi-Phat Thai and Java Gamelan. Both results of the study corroborated that similar research is the tangent of Thai traditional musical instruments and Javanese Gamelan in the realm of physical composites.

Related to this, as an effort to collaborate on music creation between Universitas Negeri Semarang and Suan Sunandha Rajabat University, by looking at previous studies and research, there was an opportunity to utilize sound sampling techniques to create musical works derived from Javanese

Gamelan sounds and Thai traditional musical instruments. Therefore, this article provides information about the characteristics of the instrument, the stages of sound sampling techniques, and sound sampling information as material/ source of musical works.

B. Instruments for Javanese Gamelan Sampling (*Pelog*)

At this stage, researchers choose *pelog* instruments based on the basic materials of their manufacture, namely: *saron*, *gambang*, *rebab*, *siter*. The explanation is as follows:

1. Saron is a Gamelan musical instrument made of metal. Saron belongs to the group of *ritikan kasar* instruments. In order to produce the sound, the *saron* is strucked by using a mallet (*tabuh*).
2. Gambang is one type of Gamelan instrument made of wood. Gambang is strucked by using a mallet made of rubber, to get a soft timbre. Gambang is a group of *allusion* instruments.
3. Rebab is a Gamelan instrument made of wood, animal skin, and a sounding tool made of animal hair or synthetic fibers. How to sound it is like on a violin instrument, by swiping. A rebab is a group of *allusion instruments*.
4. Siter is a musical instrument whose source of sound comes from strings plucked by the finger of the *wiyaga*.

Thai Music

Thai music is an art and culture that tells the story of Thailand that is separated from the products of various other arts and cultures. Thai music is unique in the nature of musical instruments. The instrument is extraordinary and beautiful, having a characteristic that indicates that Thai instrument is unique. The playing style of the instrument has been passed down for many generations by teachers for generations. The

distinctive nuances of Thai music are melodious, so they are able to play a variety of joyous, sad, and dignified emotions.

Thai music performs in various community activities in accordance with the living conditions and beliefs where they live, for example, to perform religious ceremonies, or to accompany a performance. Thai music is important for the lifestyle of Thai people from the past until now. In reality, Thai people use Thai music to commemorate, such as house moving, service making, dragon ordination ceremony, wedding ceremonies, celebrations, and festivals. And followed by other performances that accompanied the music.

Thai music has a wide variety of elements forming musical compositions. As for the elements, as follows:

1. Music is a sound made by humans. In general, music is produced by the sound of musical instruments and human singing.
2. Melody refers to the low, high, short, long, bass, and treble music performed together to form the melody of the song.
3. Rhythm refers to consistent movement, whether slow, moderate, or fast.

Thai Musical Instruments

The sound system of a Thai musical instrument is theoretically a system that divides all mechanical sounds in which the distance between sounds is the same. The Thai solmization, *do-re-mi-fa-sol-la-si*, is spaced 1 full sound, no half-tone found in international music. In the past, Thai instrument calibration used a sense of hearing by Thai musicians to calibrate/tune sound. Today, there are three types of combinations of Thai music orchestras: pipes, strings, and orchestras. Therefore, like Gamelan in general, there is no standardization of sound that determines the system/ size of each tone.

The *tuning* system in the instrument group, has the principle of calibration of the instrument, as follows:

1. Pi Pat

The instrument that cannot be tuned in the Pi Pat band is the Pi Nai, which is a fixed sound instrument. Therefore, sound must be made and Pi Nai is the basis for calibration of other instruments. Metal “tin” is used to calibrate wood and metal instruments. If the instrument has a high tone, a little treatment will be applied to the bottom to make the sound lower. And if the instrument has a low tone, the instrument is given a treatment that will remove the tone little by little to get a higher tone. The use of these 2 calibration methods is applied until each note sound on the instrument is aligned with each instrument. It is currently very popular to calibrate the xylophone to have a sound that matches the Pi as a sound sample. And then it was taken as a sound model for calibration of other instruments.

2. Stringed Instruments

Instruments that cannot be *tuned* with stringed instruments, such as Jab U-U and Talib, are instruments that cannot be *tuned* independently. Therefore, as a basic benchmark, one can sound a distilled voice to equalize the sound. Similarly, the violin knob can be used to tighten or loosen the strings in order to get the sound high from the desired violin.

3. Orchestra

Orchestras use the same sound calibration principles as stringed orchestras. It is important to equalize the sound so that the instrument performs on the same level to produce a harmonious musical game.

Referring to the purpose of the research, for the needs of sound sampling, the instrument used is Ranad Ek which is made

of wood, and Khong Wong Yai, which is an instrument made of metal with a shape resembling *banung*.

Gamelan Sound Sampling

The first step is for the researchers to identify musical instruments, the second is sampling technique per tone, then the third is sampling technique per *beat*. In the implementation of sampling, in accordance with the needs of sampling results, adapting sampling techniques written by Wissen and Herbertsson, namely sampling techniques per tone and sampling per *beat*.

1. Sampling technique per tone

In this technique, the sampling process is carried out on four Gamelan instruments with the following tone details.

No.	Instruments	Keys
1.	Saron	1 2 3 5 7
2.	Gambang	1 2 3 5 7
3.	Rebab	1 2 3 5 7
4.	Siter	1 2 3 5 7

Table 1. Sampling per tone

In the sampling technique per tone, researchers recorded the sound of the instrument based on the tone played. In carrying out the recording, the researchers chose the B7's *Karawitan* studio at the Faculty of Languages and Arts of UNNES because the *Gamelan* used are inside the studio and can minimize *noise* both indoors and outdoors.



Figure 1. Process of *Sampling* of Rebab Sound

In figure 1, it can be explained that the recording process to get a sound sampling of the rebab instrument using the Iconpro Cube 2 *audio interface/ soundcard* recording tool and *handheld* recording tool. Recording tools through IconPro Cube 2, MXI, condenser mics are used to get indoor sound *ambiance*, and Tascam Dr5x to get the sound directly of the rebab instrument.

Rebab sound recording technique is also used to record other instruments, namely; saron, gambang, siter. Researchers adjusted the location of the *microphone* placement to capture the desired sound so that the clarity of the sound obtained is clear and full.



Figure2. Example of data sampling on Saron Pelog instrument, 1 tone

In the implementation of the saron instrument sampling activity (Figure 2), after sampling each tone on the saron bar, the researcher took the third tone of the saron blade, which shows the I^1 tone in units of 440 Hz, - 20 cents.

2. Sampling Technique Per *Beat*

In this technique, sampling is done for several years, so that after undergoing a digital process, the sound occurs *looping* after being repeated [9]. The sampling process is to get uniformity of tempo, then it was determined of 110 bpm (*beats per minute*). The method for getting recording sound sampling is the case when sampling instruments per note.

The Gamelan instrument is then continued through the editing process to get the desired sampling sound, which is a full sound, in accordance with the sound requirements for further use as sampling.



Figure 3. Sampling the Sound ff Siter

The implementation of sound sampling with *the sampling beat* technique on the siter instrument (Figure 3), is done by recording along 2 times 4/4, at a time of 110 bpm. In the play, the siter uses a benchmark tone *of 1* (in the 1st tone, according to the *tuner analyzer*, indicating the tone I'). Similarly, in sampling the gambang instrument (Figure 4), it was done with the same tone benchmark on the siter instrument. Other Gamelan instruments, namely rebab and saron use sampling techniques *per beat* with the same tone benchmark.



Figure 4. Sampling the sound of Gambang's game

Sampling of the Sound of Thai Musical Instruments

In this collaborative research, the research data was only obtained through Web Meetings, so that the collection of detailed data still requires coordination and a long duration of research. Therefore, researchers used audio data obtained through traditional music video recordings conducted at Suan Sunandha Rajabhat University Thailand's Music Department. As for the stages is presented as follows:

1. Equipment

The traditional 'Thai musical instruments' sound recording is done in a traditional musical instrument studio, using *built-in* recording equipment from a video camera. From the results of the recorded audio, researchers conducted an analysis so that the results could be used as instrument sound sampling.

2. Implementation

In the recording, the initial stage is done by playing the instrument per tone to get a note register of each instrument. It was then continued by playing a variation of the game of each instrument.

3. *Sound* sampling

From the results of sound recordings of the musical instrument, researchers then take and process it on *Software Logic* to get a sampling of the sound. Some instruments that have been recorded both audioloy and visually, among others are: 1) pi nai; 2) ranat ek; 3) ranat thum; 4) khong wong yai; 5) khong wong lek; 6) thaplon thai; 7) klong that; and 8) klong khaek, which is a piece of equipment played in an ensemble. So, it requires uniform *tuning* except for thaplon thai, klong that, klong khaek, which are the type of percussion equipment that serves as an accompaniment of melodic and tempo instruments, as well as certain rhythm transfer markers such as a drum in the Gamelan

instrument. The following outlines the sampling results of ranat ek and khong wong yai, which are instruments made of wood and metal.

a. Ranat Ek

Ranat ek is an instrument made of wooden blades, consisting of 22 blades, 3 octaves, played using a stick beating tool totaling 2 pieces (Figure 5). At the tone sampling, researchers took 1-tone from the second octave. After measurement using the *Multimeter Tuner Analyzer* (Figure 6), it shows the tone of *I'* in units of 440 Hz, -14 cents. That is, the tone is close to the similarity of the frequency with a sampling of saron sounds expressed at the beginning, namely in the tone region *I'*.



Figure 5. Instrument Ranat Ek



Figure 6. Data Sampling Ranat Ek 1 Tone

b. Khong Wong Yai

Khong wong yai is an instrument made of metal. If the bonang instrument is located in front of the player, the arrangement of khong wong yai instruments surrounds the instrument player. The number of *pencons* /tones consists of 16 pieces, and 2 octaves (Figure 7). The instrument is struck, with a tool resembling a mallet in general. At sampling per tone (Figure 8), researchers selected the tone on the third *pencon* khong wong yai. Frequency measurements using *the tune analyzer* show the 1st tone in units of 440 Hz, -19 *cents*.



Figure 7. Khong Wong Yai Instrument



Figure 8. Khong Wong Yai sampling data, 1 tone

In the sampling of the sound of the melodic sequence of the two instruments, researchers found incompatibility at the tempo of the game, because in practice both instruments are

ensemble instruments played together with other instruments and there is no benchmark or *seleh*, which can be found in Gamelan instruments. Although in the video documentation there is also a solo game, but in reality, there is no fixed bar unit that guides the play so it seems out of tempo. However, the results of recording melodic sequence sound on Thai musical instruments can be used as sound sampling, for further use.

Based on the results of the study, the signals obtained through the analog recording process in the form of sound sampling can be converted into digital representations as Martin Russ said that sampling is a process of conversion from analog to digital[10], meaning that the sound sampling results can be utilized in such a way and can be processed according to the needs of music creators digitally. The sampling results can be used in the stages of making music works in a digital music context, namely; 1) sound creator, 2) sound mixer, 3) recording (sound storage), and 4) reproduction, which is the beginning of the results of the music-making cycle on other occasions [11].

3. Conclusion

Traditional characteristic instruments of Gamelan and Thai music instruments share similarities in several aspects which include the material, timbre, and function of each instrument. Both have musical limitations if it is played individually, but if it is played orchestrally, it will seem more varied.

The utilization of sound sampling techniques on traditional Thai musical instruments and Javanese Gamelan is starting from the selection of recorded instruments. The selection of instruments is based on similarities that are seen physically, namely khong wong yai, khong wong lek, and *saron* (which is made of metal), in addition to Ranat ek, ranat thum, and *gambang*, which is made of wood. In addition, the siter instrument is also recorded for sampling sound. The instrument

is taken sampling sound per tone so that the F^1 tone is obtained in units of 440 Hz on each instrument. In the sampling of rhythmic melodies (*beat*), saron instruments, gambang, siters are taken sounds along 2 to 4/4 at a time of 110 bpm while Thai musical instruments researchers find inequality in the tempo of the game, because in practice both instruments are ensemble instruments played together with other instruments and there is no benchmark or *seleb*, which can be found in Gamelan instruments; although in the end the recording can also be used as sampling. Therefore, sampling of the sound can be used as material to create new musical creations sourced from traditional musical instruments on both sides. □

④

The Comparison of Indonesian and Thailand Traditional Music in The Tuning System

Joko Wiyoso,⁷ Pramot Teangtrong⁸

A. Introduction

The vision of Universitas Negeri Semarang (UNNES) is to become a University of Conservation Insight and International Reputation. This vision is very strategic and becomes the main reference in the implementation of education, research, and community service, the development of good governance through the implementation of integrated quality management, and the implementation of mutually beneficial institutional cooperation (mutualism symbiosis).

The vision of UNNES has a basic meaning that comes from the word “conservation insight and international reputation”. The meaning of having a conservation insight is a perspective and behavioral attitude that is oriented to the principle of conservation (preservation, maintenance, care, preservation, and development) of natural resources and socio-cultural values. UNNES in implementing the Tridharma of Higher Education refers to the principles of conservation (protection, preservation, and sustainable use) of natural

⁷Department of Drama, Dance, and Music, Faculty of Language and Arts, Universitas Negeri Semarang, Semarang, Indonesia.

⁸ Music Department, Suan Sunandha Rajabhat University, Bangkok, Thailand.

resources and cultural arts, as well as environmentally friendly. Thus, the development of UNNES as a conservation-oriented university contains several objectives. First, support the government's efforts in implementing the management of living natural resources and ecosystems. Second, protect, preserve, and sustainably utilize natural resources in the UNNES environment and its surroundings through education, research, and service activities for the creation of a balanced ecosystem in it. Third, foster a responsible mental attitude, behavior, and participation of all UNNES citizens in efforts to conserve biodiversity, and preserve the environment as well as arts and culture.

Conservation in the fields of ethics, art, and culture aims to maintain, preserve, and develop local ethics, arts, and culture to strengthen national identity. The pillar program of ethics, arts, and culture include excavation, maintenance, seeding, and giving life force to local ethics, arts, and culture through the maintenance, documentation, education, dissemination, and promotion of its elements.

Especially regarding conservation in the field of art, one must understand very well that art is an inseparable part of human life in general because art helps humans to interpret the reality of life that they experience. Not only that, it turns out that art can also provide aesthetic and metaphysical experiences to art creators as well as art connoisseurs and society as a whole.

According to a report made by the Asia-Pacific Cultural Center for Unesco (APCCU), several types of artistic conditions must be conserved: 1) Art must have exceptional and extraordinary human creative value; 2) Art that is unique and has a contribution to history and cultural traditions, and 3) Art has the potential to disappear because the number of practitioners is starting to decrease, historical authenticity is starting to disappear, cultural significance is starting to disappear and art is being lost due to the threat of modern laws and regulations.

International reputation means a university that has a good image and reputation in international relations and becomes a reference in the Tridharma activities of higher education at the international level. The vision of becoming a university of international reputation is UNNIS determination to be known and excel not only at the national level but in international relations. Being famous and then achieving can not be separated. To be known in academic circles, all UNNIS academic communities are always required to participate or be involved in various international activities and collaborations. The intended international activities are seminars and competitions, encouraging increased publications, research works in internationally reputable journals, and developing journals at UNNIS into internationally indexed journals. International cooperation between universities abroad allows lecturers to continue their studies at various universities in various countries. Principled on the balance between strengthening and renewal, as well as the commitment of a conservation-insight university, UNNIS believes that it will gradually become part of a world-class university.

One of the lecturers participation in supporting the achievement of an international reputation, as mentioned above, is to be involved in international collaborations. One form of collaboration that can be done is to conduct joint research with lecturers from one of the universities in the world. Of course, the selection of universities takes into account the similarities of the study programs contained in them.

The Faculty of Fine Applied Arts of SuanSunandha Rajabhat University Thailand has similarities with the Faculty of Language and Arts of Universitas Negeri Semarang. These faculties both have study programs in the fields of music and dance. Based on the characteristics, there are similarities between Thai culture and Indonesian culture, especially Central Java. Therefore, to support the vision of UNNIS, this article

discusses the comparison between traditional Javanese music, especially Karawitan, with traditional Thai music, especially about the tuning system.

Traditional Thai music and Javanese Gamelan enter into the gong music culture (gong-chime). Considering the musical culture of the gong (gong-chime), the distribution area is in the Southeast Asia area. This is in line with Jammongsarn's opinion which explains that the formulation of the traditional Thai music ensemble has similarities with the pin peat and mahori ensembles from Cambodia (Khmer), but structurally has similarities with other gong musical ensembles (gong-chime) that are widespread in Southeast Asia such as Bali and Java [1].

Traditional Thai music, in addition to having similarities with the music of other countries that are included in the gong music culture, it turns out that traditional Thai music has also undergone a process of transculturation. It is suspected that the transculturation process in Thai traditional music occurred between Thai music and other music, such as China, Myanmar, Khmer (Cambodia), Europe (West), and Java [1].

Based on digital literacy through the internet, the physical form of some traditional Thai musical instruments also has similarities with some of the physical forms of Javanese Gamelan instruments. Traditional Thai musical instruments have instruments in the form of pencon or small gongs and instruments in the form of *bilah*, while in Javanese Gamelan also have instruments that have the physical forms of pencon and *bilah*, besides that, both also have instruments made of a mixture of wood and leather in the form of a drum or *kendang*.

Cultural contact between Thai music and Javanese Gamelan seems to have been going on for quite a long time, namely since the visit of Thai kings to Java (Surakarta Palace). The visits took place in 1896 and 1901 [2]. From the events of the visit, there began to be a mutual influence in the musical culture of the two kingdoms. At the Surakarta palace, when

welcoming the visit of the Thai king Prajadhipok in 1929, for the first time the song (*gendang*) Ladrang Siyem Laras Slendro Patet Nem was staged. This song is inspired by a Thai song entitled *Sanrasoen Phra Barami* [1].

The phenomenon that occurs in traditional Thai music above is certainly interesting to be the topic of a more in-depth study to find out the relationship between traditional Thai music and Javanese Gamelan. Especially regarding the tuning system between the two traditional music. The tuning referred is an activity carried out to determine the notes on a musical instrument.

Based on exploration from various sources, several similar studies have been found, including research conducted by Hughes (2008) entitled "Thai music in Java, Javanese Music in Thailand: Two case studies". The research focuses on the case of two songs, namely Ladrang Siyem for Gamelan and Yawa Kao for Thai music. There is a part of Ladrang Siyem which is thought to be influenced or adapted from the song Sanrasoen Phra Barami from Thailand, then there is a part of the song Yawa Kao that is influenced or adapted from Ladrang Bima Kurda from the Javanese Gamelan. Borrowings or adaptations that apply to Javanese Gamelan are accommodated as an integral part of typical musical composition, while those that occur in Thailand are still viewed or treated as foreign works (Javanese Gamelan) that are borrowed. The next research is entitled "An Application of Thai Music for General and Instrumental Music Programs", which was conducted by Volk (2006). This study examines the possibility of adapting Thai music ensembles of mahori and kruang sai into Western music in a school music program. This study recommends to use a violin instrument to link the *saw duong* and *saw oo* instruments from Thai music. Mrazek (2008), in the article entitled "Xylophones in Thailand and Java: A Comparative Phenomenology of Musical Instruments", describes his experiences while studying, playing

ranatekin Thailand and xylophone in Central Java, then compares the two instruments. The physical characteristics and sound mechanics of the *ranat* oak and xylophone sound similar, but in reality, they become very different musical instruments if played according to the experience of the musicians and the musical concept of each of these instruments.

Based on the research that has been done above, it shows that the research topics carried out have different focus of study, so that the problems in the research to be carried out are still worthy of research, then the results of this study certainly add to the repertoire of results of studies on traditional music (ethnomusicology) in the world.

B. Javanese Gamelan and Phi Phat

Javanese Gamelan Ensemble

Gamelan, which in a soft language is called *gangsa*, is a physical musical ensemble whose instrument (*ranikan*) is dominated by instruments sourced from metal (bronze) which is tuned in 2 tuning systems, namely Laras Slendro and Laras Pelog. In addition, in the Gamelan there is also an instrument with sound sources made of wood, strings, air (inflatable instrument), and membranes.

There are 4 (four) forms of metal sound sources in Gamelan, namely: *bilah*, *pencon*, *piringan* (disk), and *gulungan*. The sound source of the metal material in the form of *bilah* can be seen from its surface (the part that is beaten/hit). There are 3 (three) types of surfaces, namely: *sigar penjalin*, *gijir sapi*, and *kruwangan* or *blimbingan*. All the sound sources of *bilah* are arranged horizontally, lined up in order of note by note from low to high frequency, placed on *rancakan* (a place to put Gamelan) made of wood. *Bilah* instruments have 2 (two) types of *rancakan*, namely *rancakan* that also functions as resonators of all the notes in a row, and *rancakan* that functions to accommodate the resonators of each blade above it. The

resonators on each *bilah* are cylindrical tubes arranged just below each *bilah*. *Risikan* whose place functions as the resonator consists of *risikan demung*, *saron barung*, and *saron penerus*, then the *risikan* whose place as a place to put the resonator consists of *slentem*, *gender barung*, and *gender penerus*.

There are 2 (two) sources of sound from metal in the form of *pencon*, namely *pencon lanang* and *pencon wadon*. The sound sources of *pencon lanang* are all arranged horizontally, while the sound sources of *pencon wadon* are arranged horizontally and vertically. The *pencons* arranged horizontally are placed on *runcakan* equipped with a rope as a support for the *pencon*, and the sound source comes from the *pencon* itself without the need for a resonator. *Risikan* that falls into this category are *risikan kenong*, *ketuk*, *kempyang*, *bonang barung* and *bonang penerus*. *Pencon* arranged vertically by hanging on a tree commonly is called *gawungan* or *gayor*, using ropes specifically named *pluntur* with the size to adjust the shape of *pencon* (large and small). *Risikan* that falls into this category is *risikan kempul* and *gong*.

The disk-shaped (*piringan*) sound source usually applies to *risikan* paired, one part is placed on a pedestal or mat, the other part is held by the player. While the *gulungan* sound source also applies to *risikan* paired, played by two players, held and beaten specifically, and with special techniques as well. So for a sound source in the form of *gulungan*, do not use a base or a placemat.

The sound source of the Javanese Gamelan ensemble strings is made of brass wire. For the way to play plucked strings, wires stretched across the resonator that also functions as body types of *risikan* of the string. The wires are stretched in a row and under it is given a thin oblique metal which has a function as an intermediary for vibrations from the wire to the resonator. Likewise with the source of the sound of the strings, which are played by swiping, using a brass wire stretched on a special resonator frame made of coconut shells or wood, covered with a thin membrane of leather, and usually using a

cow tripe membrane. To maintain the intensity of the wire tension, a rotary instrument is used which is located above which also functions as a tone stem or *kupingan*. Then as a conductor between the wire and the resonator, there is fiddle equipment made of wood called *srenten*. Vibration wire on *ritikan* sourced from the bow are made of horse tail feathers or plastic strings stretched over a long thin wood to resemble a bow (*kosok, rangkuno*).

The sound source of the Gamelan instruments from the air element is made with special bamboo. The way to determine the tone is by making holes in the bamboo with a certain distance from each hole, and to adjust the blowing of the tone, an air path is made at the end and a ring is given. The formation of sound is due to blowing and splitting by thin walls, causing air vibrations.

The sound source of the membrane instruments (*ritikan*) is in the form of a cylinder, the material is made of wood. To be able to determine the desired type and timbre, the inside is made of cavities of various shapes, both sides are tensioned using a rigging system.

The process of determining the tones in the Gamelan instrument is known as *nglaras* or *melaras* Gamelan (Gamelan tuning). This activity is a job that requires tuning skills and sensitivity to tone. *Melaras* requires accuracy, the ability to unite various characteristics of sound, as well as sensitivity to the environment to be mixed in unity and singularity. The tuner is also required to have instinct, sensitivity to tone, and a high sense of musicality, as well as special techniques in tuning Gamelan. In addition to some of the competencies above, usually a tuner before starting his work begins with religious activities, namely doing *tirakat* or *laku prihatin* asking for grace from God Almighty so that he can produce a good harmony and give spirit to the results of the harmony [6,7].

Until now there is no working standard or theory about Gamelan tuning, the tuner generally works based on instincts and skills acquired from experience. According to Risnandar (2018), in the process of tuning a Gamelan, there are several stages, including, *mbabon*, making *embat*, the process of making notes.

Mbabon is to determine *laras* (the tone) that will be used as the source of the Gamelan tone to be tuned. Making *embat* is the process of determining the distance between notes in each *laras*, both Slendro and Pelog. Tuners generally have a measure of how far and near the pitch can be made. The tool used to determine the pitch distance is the intelligence of the sense of hearing that has been trained so that it has a special ability to determine the right pitch difference. The tuning experts use the terms of the feeling *penak* and *ora kepenak* to assess the results of *embatan*, and if the tone range exceeds a predetermined tolerance, it is called *sliring* and *blero* [6]. After the process of making *embat* is complete, the next stage is determining or tuning the notes contained in the Gamelan. Usually, it starts with tuning the notes on *ricikan gender barung*.

Javanese Gamelan has a scale system known as *laras*. It has two main *laras*, namely the *Laras Slendro* and *Laras Pelog*. *Laras Slendro* is a tone sequence system consisting of five notes in one *gembyang* with an almost evenly spaced pattern. While *Laras Pelog* is a tone sequence system consisting of five (or seven) tones in one rhyme using unequal pitch spacing patterns, namely three (or five) short distances and two long distances [8]. While Pengrawit (1975) provides an illustration or *uncar-uncar* of the interval of the *Laras Slendro* and *Laras Pelog*, as follows,

1 - 2	2 - 3	3 - 5	5 - 6	6 - 1
240	240	240	240	240
<i>cent</i>	<i>cent</i>	<i>cent</i>	<i>cent</i>	<i>cent</i>

Table 1. Interval of Laras Slendro

1 - 2	2 - 3	3 - 4	4 - 5	5 - 6	6 - 7	7 - 1
150	150	225	150	150	150	225
<i>cent</i>	<i>cent</i>	<i>cent</i>	<i>cent</i>	<i>cent</i>	<i>cent</i>	<i>cent</i>

Table 2. Interval of Laras Pelog

The intervals listed between the tone mentioned above are not absolute in size, this is made just to illustrate that in Laras Slendro the intervals are equivalent, while in Laras Pelog the intervals are different. So, the measure of the intervals above is just *ancer-ancer* (estimated) or more or less like that. Because if we make direct observations in the field by measuring the tone intervals of both Laras Slendro and Laras Pelog, we will find shifts in the interval. Likewise, when two different *ricikan* in the same Gamelan instrument are measured, the inconsistency of the interval is found. The interval is not significant to the extent of off-key or *blero*, the inconsistency is still within acceptable musically. Differences in pitch in Gamelan instruments are understandable in karawitan because in karawitan there is no standardized tone system.

Pi Phat Ensemble

Thai music is studied based on the type of instruments used, which is a combination of instruments with various sound sources. There is a sound source from the instrument itself or idiophone, there is an instrument whose sound source is from a membrane or membranophone, then an instrument whose sound source is from the air or aerophone. The following is a classification of Thai musical instruments based on the sound source.

Idiophone instrument group consists of ranat ek(ระนาดเอก), ranat thum(ระนาดทุ้ม), khong wong yai (ฆ้องวงใหญ่), khong wong lek (ฆ้องวงเล็ก), and ching (ฉิ่ง). The technique of sounding these instruments is by hitting with a bat. Membranophone instrument group consists of taphonthai (ตะโพนไทย), klong that (กลองทัด), and klong khack (กลองแขก). These three instruments are made of a combination of wood and leather. Then the instrument, that the sound source is air, is called pi nai (ปี่ใน), a kind of flute with six (6) holes.

Traditional Thai music has one scale with 7 notes. Thai music does not recognize tone standardization so that the determination of the tones in traditional Thai musical scales is not set rigidly or using strict measuring instruments. To ensure the desired high and low notes they use a kind of paste (playdough) that is pasted inside the *pencon* for the *pencon* instrument and behind the *bilah* instrument for the *bilah* instrument.

Based on information from a source person in Thailand, it was stated that traditional Thai music was not used to reading notation or using notation. The notation used in this case refers to Western musical notation using the solmization notation system. Here are the notes.

Do - ด	Re - ร	Mi - ม	Fa - ฟ	So - ช	La - ล	Ti - ท
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The following is a traditional Thai musical tuning system based on the notes in the ranat ek instrument.

Do - ด 460 Hz	Re - ร 520 Hz	Mi - ม 562 Hz	Fa - ฟ 621 Hz	So - ช 350 Hz	La - ล 381 Hz	Ti - ท 412
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C. The Comparison of the Tuning Systems and Some Musical Aspects

Based on the sound source, Javanese Gamelan and Thai traditional music have similarities. The two traditional music mostly belong to the category of idiophone musical instruments whose sound source comes from the instrument itself. Traditional Thai musical instruments consist of ranat ek, ranat thum, khong wong yai, khong wong lek and ching. Meanwhile, the Gamelan instruments consist of slentem, demung, saron, saron penerus, bonang barung, bonang penerus, ketuk, kempyang, kenong, kempul, gong, gender barung, gender penerus, gambang (xylophone), and kecer. In addition to idiophone instruments, traditional Indonesian and Thailand music (Javanese Gamelan) also have membranophone and aerophone instruments. The types of membranophone instruments in traditional Thai music consist of taphonthai, klong that, klong khaek. While the Javanese Gamelan consists of kendang ketipung, kendang ciblon, and kendang gede. The types of aerophone instruments in Thai traditional music consist of pi nai, while in Javanese Gamelan, *suling* (the flute).

The similarities in physical forms between the two traditional music are in the form of pencon and bilah shaped. The pencon shaped instrument in traditional Thai music includes khong wong yai and khong wong lek. While the pencon instruments in Javanese Gamelan consist of bonang barung, bonang penerus, kethuk, kempyang, kenong, kempul and gong. The bilah-shaped instrument in traditional Thai music consists of ranat ek and ranat thum. While the Javanese Gamelan consists of slentem, demung, saron barung, saron penerus, gender barung, gender penerus and gambang. Specifically, the khong wong yai and khong wong lek instruments have similarities with the bonang barung and bonang penerus instruments, while the ranat ek and ranat thum instruments have similarities with the gambang instrument.

The grouping of instruments based on their musical tasks, in traditional Thai music, is divided into two groups, namely instruments that work on melody and instruments that work on rhythm. In Javanese Gamelan music, the grouping is divided into three, namely structural instruments, balungan instruments, and garap instruments. The dominant tempo controller in Thai traditional music is the ching instrument, while in Javanese Gamelan is the kendang instrument.

The traditional Thai musical scale system consists of 7 notes in one octave. However, from the historical aspect, traditional Thai music does not fully use notation. However, if it is notated sequentially, for example, on the ranat ek instrument, the sequence of notes is *sol, la, ti, do, re, mi, fa*, and so on. While the Javanese Gamelan has two scales or laras, namely Laras Slendro and Laras Pelog. Laras Slendro has five notes in one gembyang (octave), namely: 1 (*ji*), ro (*ro*), 3 (*lu*), 5 (*mau*), 6 (*nem*). Then, Laras Pelog has 7 tones, namely: 1 (*ji*), 2 (*ro*), 3 (*lu*), 4 (*pat*), 5 (*want*), 6 (*nem*), 7 (*pi*). The notation system used in Javanese Gamelan adopts a number notation system or in Gamelan commonly called *kepatihan* notation, its meaning operationalizes the numbers 1 (*siji*) to 7 (*pitu*). The phenomenon of the notation system in Javanese Gamelan is still relatively new, before the notation system was adopted in Javanese Gamelan, it seems that the musical culture between Thailand and Javanese has similarities, namely promoting hearing and feeling in learning to play this music, or the 3 N method, namely *niteni* (remember), *nirake* (imitate), *nambahi* (add or develop).

The tuning systems of traditional Thai and Javanese music have something in common, namely, they both do not adhere to a standardized tone system. This can be seen from the technique in determining the tone or *nglaras* which both rely on hearing sensitivity and feeling only without involving frequency measuring aids.

D. Conclusion

Traditional Thai music culture and Javanese Gamelan have similarities in the aspect of the tuning system. However, the Javanese Gamelan music uses two-scale systems (*laras*), namely Laras Slendro and Laras Pelog. Laras Slendro consists of five tones, while Laras Pelog consists of seven tones. Whereas in Thai traditional music, there is only one tuning system consisting of seven notes.

The tuning process in Javanese Gamelan and Thai traditional music does not use sound frequency measuring aids. However, the process is more relying on the human sense of hearing (*kupingan*). □

⑤

Semarangan Dance and Traditional Thai Dance: A Comparative Study of the Gesture and the Meaning of Movements

*Bintang Hanggoro Putra,¹ Phakamas Jirajarupat,²
Ratiphath Siriphong,³ Yusuf Arifir⁴*

A. Introduction

The ability to move that is owned by every human being can produce various meanings depending on the purpose. According to Soedarsono [1], motion is the most primary sign of human beings and is the oldest medium to express their desires or is a form of spontaneous reflection of human inner movement. Soedarsono's understanding can be interpreted that motion is a representation of desire and inner reflection. Soedarsono further explained that dance is an expression of the human soul which is expressed through rhythmic and beautiful movements. Therefore, every movement in dance can be ascertained to contain a certain meaning, so as in traditional dance.

In Indonesia, traditional dance is closely related to elements of religion, belief, magic that have existed since

¹Pendidikan Sendratasik, Fakultas Bahasa dan Seni, Universitas Negeri Semarang, Semarang, Indonesia.

^{2,3} Music Departments, Suan Sunandha Rajabhat University, Bangkok, Thailand.

primitive times [2]. This shows that the meaning of dance depends on the culture of the supporting community. As Pierre Bourdieu said [3].

The habitus, the durably installed generative principle of regulated improvisations, produces practices that tend to reproduce the regularities immanent in the objective conditions of the production of their generative principle.

Similarly, the traditional Semarang style dance or better known as the Semarangan dance. The interesting thing about Semarangan dance is that there is a mix of cultures that live in the city of Semarang. Semarangan dance is influenced by Javanese, Chinese, Arabic, and European cultures [4] so that it makes a different color from other traditional dances in Indonesia. The variety of movements found in Semarangan dance are *ngeyek*, *ngondek*, *julan tepak*, and *geyol*. The hand gesture *ngincup* is a typical gesture of Semarangan dance [5].

Cultural integration also occurs in traditional Thai dance. The influence of Chinese and Hindu culture is very closely related to traditional Thai dance. In addition, many traditional Thai dances function as ceremonial dances for religious rituals [6];[7].

Based on the description above, it is necessary to conduct a study that discusses the comparison of Semarangan dance and traditional Thai dance. This is in line with the vision of Universitas Negeri Semarang (UNNES) in 2020, namely a university with a conservation insight and international reputation. The aspiration towards a conservation-minded campus with an international reputation is manifested in the implementation of education, research, and community service through the university's strategic plan that refers to the principles of conservation (protection, preservation, and sustainable use) both conservation of natural resources and environment and cultural arts. In addition, it also answers various challenges in facing the currents of modernization and

globalization which require the Faculty of Language and Arts (FBS) of Universitas Negeri Semarang (UNNES) as the holder of the pillars of cultural conservation to take various intelligent anticipatory steps. One of the challenges is how to create programs that are useful in contributing to the success of the cultural conservation program while at the same time supporting internationalization. Within that framework, it is necessary to conduct collaboration in the form of collaborative research between UNNES and universities abroad.

One of the efforts to accelerate the achievement of the FBS Strategic Plan related to cultural conservation is to conduct research on the comparison of traditional arts in Indonesia and Thailand through Suan Suandha Rajhabat University. These two universities have almost the same study programs, namely, at FBS UNNES, there is a Dance Education study program, while at the Faculty of Fine and Applied Arts Suan Sunandha Rajabhat University there is Thai Dramatic Arts.

Based on this background, this article will discuss how to compare gestures and meanings of movements between Semarangan style dance and traditional Thai dance. It is important to do this study because empirically it can add a new discourse about the comparison of Semarangan dance with Thai traditional dance which can then be useful for the development and deepening of studies, especially in foreign countries dances courses and choreography so that it can be used as a reference. In addition, in practical terms, this article is important as an effort to conserve traditional art that is growing in popularity.

B. Semarangan Dance

Semarangan traditional performing arts are a hybrid of Chinese, Arabic, and Javanese arts. The influence of Chinese and Arabic culture is quite prominent in Semarang because these two ethnic groups are historical communities [8]. In line with

that, Putra [9] said that the characteristics of Semarangan dance are agile and dynamic.

Semarangan dance has a typical range of movements in the form of *ngondhek*, *ngeyek*, and *genjot*, and do not forget also the movement *linggar* that differentiate the Semarangan dance from other dances. *Ngondhek* is a circular movement to the right and to the left that has a trajectory resembling figure eight. *Ngeyek* is a movement of the hips to the right and left in a broken way. *Genjot* is a body movement that springs up and simultaneously moves the hips to the right and left. Then, *linggar* is a hand movement that the tips of the thumb and index finger are put together to form a circle, then the three fingers, namely the middle finger, ring finger, and little finger are opened outward in a tenuous position. According to an assessment of the aspect of motion in terms of space, energy, and time, Semarangan dance has the beauty of dynamic motion, but does not eliminate the impression of *kenes* and *sigrak* [10];[11].

C. Traditional Thai Dance

Dance is one of the main forms of Thai cultural expression which is influenced by various cultures that produce various dance forms. In general, four main dance forms apply to each region of the country namely the center, north, northeast, and south. Among these dance forms, people from the center of the region were developed by the kingdom. The dances of each region have developed socio-culturally over the centuries with very few intersections among them. Thus, the regional styles differ from each other [12].

Traditional Thai dance is a combination of graceful body movements alongside elaborate costumes and music. There are five different forms of Thai dance: *khn*, *li-khe*, *ram wong*, *lakhon lek*, and *lakhon*.

1. *Khn* is a traditional Thai masked dance. In the past, it was only done for the royal family. Now, this is done

outside the palace, however, it is still considered one of the highest art forms in Thailand.

2. *Lai-khe* is the most popular dance form in Thailand. These shows are a combination of many different elements, from elaborate costumes to slapstick humor and sexual innuendo, throughout the show. It is meant to be funny, interesting, and very popular in villages all over Thailand.
3. *Rum wong*, which means dancing in a circle, is one of the most popular Thai dance forms. This is a Thai folk dance, and as the name suggests, men and women gather in pairs and dance in a circle. The movements are slow and graceful, and it is one of the most social forms of dance of the six people.
4. *Lukhon lek* is another form of Thai dance that uses puppet props in performances. Although this art form is rarely practiced, it was once a very popular performance. Unlike shadow puppets, these puppets are accompanied by people in the performance. Puppets usually stand about two feet tall, and they are brought to life by those who perform with them. Dolls can do everything from singing to dancing and more.
5. *Lukhon*, in contrast to the Kohn style of Thai dance, the *Lukhon* performers are mostly women. Instead of having individual roles in a show, the women work together and perform as a group. Many stories are told through this show through acting, song, and dance. Costumes and stage settings are usually much more lavish in the *lukhon* than in some other forms of Thai dance. The lower half of the body does not move as much as the upper half, with graceful and lively hand movements throughout the performance [13].

Thai dance is a kind of social performance accompanied by rhythmic classical music. It was a slow, smooth, regular rhythm, with various dancing poses. This is a continuous exercise that requires less stress on the knee and ankle joints. So, it should be so suitable for parents. Thai dance is also correlated with the context of the community culture [14].

D. Gestures of Semarangan Dance Movements

The gesture of the Semarangan dance movements comes from the four existing standard movements, namely: *jalan tepak*, *ngondheks*, *ngeyek*, and *geol*.

4.1 *Jalan Tepak*

The gesture of the leg walking with the leg slapped *encot*, the hands *seblak sonder* alternately according to the footsteps.



Figure 1. The gesture of *Jalan Tepak*
(Source: Putra, 2020)

4.2 *Ngondheks*

The gesture of the hands *woluk-wulik* in front of the chest, the legs like *ingsutan* right-left, the body follows the movement of the legs.



Figure 2. The gesture of *Nḡondbek*.
(Source: Putra, 2020)

4.3 *Nḡeyek*

The gesture of the movement is to turn to the left; walk to the right side, the right hand is stretched, moved up and down, the left hand is *nḡincup* with the palms pointing (looking up) in front of the eyes.



Figure 3. The gesture of *Nḡeyek*.
(Source: Putra, 2020)

4.4 *Geol*

The movement is the legs with both knees tightly closed, moved to the right and left, hands crossed in front of the stomach. This movement is done by not changing places but changing low and high levels with a fast tempo.



Figure 4. The gesture of low-level
Geol
(Source: Putra, 2020)



Figure 5. The gesture of high-level
Geol
(Source: Putra, 2020)

E. Meaning of Semarang Dance Movements

The meaning of the four standard movements in the Semarang dance is as follows.

1. *Jalan Tepak*

The *jalan tepak* movement is interpreted as the agility of the people of the city of Semarang as a coastal city and a trading city. Agility in this movement results from the tipping footwork.

2. *Ngondhek*

The *ingsutan* movement of the legs followed by body movements is a symbol of the typical movement of Chinese dance. The movement is *Ngondhek* interpreted as the melting of Chinese culture in the city of Semarang.

3. *Ngeyek*

The movement, which is done while shifting to the right with the hand waving up and then down, is interpreted as a picture of the Javanese sea waves that stretch to the north of the city of Semarang.

4. *Geol*

The movement performed by alternating low-high levels quickly is interpreted as a description of the geological condition of the city of Semarang that has many fault areas.

F. Gestures and Meanings of Traditional Thai Dance Movements

Based on the results of interviews with Dr. Phakamas Jirajarapat and Mrs. Ratiphap Siriphong, Lecturers of Dance at Thai Dramatic Arts, Faculty of Fine and Applied Arts, Suan Sunandha Rajabhat University, Thailand, obtained the following data.

No	Movement/Lyric	Description	Meaning
1	<i>Lao-kuh-pra-but</i> (เหล่าข้าพระบาท)	Dancers sit on their heels and put their left hand on their lap. The right hand points the index finger out of the body.	All of us
2	<i>Kho-wa-ro-kad-dheva-rat-adi-sorn</i> (ขอวิโรกาสเทวฤทธิ อดิศร)	Moving right knee up and put two palm hands in between the chest.	May we beg you the great god,
3	<i>Kho-fon-krai-ram- rai-tawai-korn</i> (ขอพื่อนสายร่ำรำถ วายกร)	Standing up and step the left leg into the front. Spreading the both-hands to make the hand straight and lean the head to the left	We will dance with our hands for entertaining the god.
4	<i>Bam-ruc-pin-amor- Patarakalar</i>	The right leg steps up the front and sending	Dancing for the God Patarakalar

	(บำเรอเป็นอมระประดาดระกาหลา)	the left leg to the back and lift the calf of the lower leg to the calf of the upper leg. Both palm hands are put in the middle of the chest.	
5	Pu-song-pra-khun Ying-boon-baramc- Pur-dhevabodi-suk- som-romya-taleng- thepa-sima-piman (ผู้ทรงพระคุณยิ่งบุญ บารมีเพื่อเทวดัสขส มรมาเยลิ่งเทพพลิม พิมาน)	The left leg steps up and sending the right leg to the back and lift the calf of the lower leg to the calf of the upper leg. The right-hand moves up over the head and turning the palm hand up. Straight left hand.	The great god who has a superpower of a miracle.
6	Samran-ructai (สำราญฤทัย)	Straight both hands and arms. Step up with the left leg. Leaning the head to the left.	For the happiness of the god.
7	Surasak-prasit- Surarit-kamjai- Songsaran-Prakai- Songsabai-Pratai (สุรศักดิ์ประสิทธิ์สุรฤ ทัยก่าายทรงสราย พระกายทรงสมายพระ ทัย)	Standing with two legs, right hand moves to beside the head and turning palm hand up. Leg hand moves to the front, leaning the head to the right.	May god happiness and has strong power.
8	Tawai-Insi (ถวายอินทรีย์)	Sitting on the floor and left knee up. Straight both arms and doing Jeab's hand.	May I worship the god with my body
9	Tang-malec-bucha (ต่างมาลีบูชา)	Standing on the right leg and sending the left leg to the back and lift the calf of the lower leg to the calf of the upper leg. Leaning head to the right. The left-hand does the Jeab hand in the front of the face. The right hand does Jeab's hand at the back.	My body is like a flower to worship god.
10	Tawai-Duangta (ถวายดวงตา)	Stepping the left leg in the front and lean the head into the left side.	May I worship God with my eyes?

		Both hands do the Jeeb hand on the side of the head.	
11	Tang-prateep-Chamrat-kai (ต่างประทีปจรัสไช)	Standing on the right leg and sending the left leg to the back and lift the calf of the lower leg to the calf of the upper leg. Both hands do the Wong hand on the side of the body.	My eyes are the light of the candle for worshipping god.
12	To-kham-ampai- (ถ้อยคำอำไพ)	Standing and bend the left knee a little bit. Pointing the right index finger at the mouth. Right-hand does Jeeb in the back. Leaning the head to the right.	My beautiful words
13	Tang-dhup-hom-junjan (ต่างธูปหอมจันทน์)	Standing and bend the right knee a little bit. The right-hand does Jeeb in the back and the left-hand does the Jeeb in front of the mouth. Leaning the head to the left.	My beautiful words are presented as the scented stick.
14	Tawai-duangrit (ถวายดวงจิต)	Sitting on the floor and left knee up. Putting the left hand in form of Jeeb in the center of the chest. Putting the right hand at the waist.	May I devote my heart to the god?
15	Achalit-worakhun (อัษฎษลิตวรคุณ)	Sitting on the floor and left knee up. Keeping both palm hands together and put the hands over the forehead.	I pay respect to god with all my heart.
16	Tee-song-karun (ที่ทรงกรุณ)	Sitting on the floor and left knee up. Both palm hands move to the side of the body. Leaning head to the right.	God is always kind to us.
17	Pong-kha -ma-tae-ban (พองขำมาแต่บรรพ)	Standing on the left leg and sending the right leg to the back and lift the	From the past

		calf of the lower leg to the calf of the upper leg. Leaning head to the right. Left-hand does the Jeeb hand at the back. Right-hand points the index finger beside the head.	
18	Tawai-cheewan (ถวายชีวิต)	Sitting on the floor and left knee up. Leaning the head on the left. Putting the left hand in form of Jeeb in the center of the chest. Putting the right hand at the waist.	May I devote my soul to the god?
19	Wrong bath (รองบาท)	Sitting on the floor and left knee up. Leaning the head to the right. Turning both palm hands and move hands forward.	My soul will serve you.
20	Jon-banlai (จนบรลัย)	Sitting on the floor and left knee up. Leaning head to the left. Straight both hands and turning palm hands upward.	Until die.
21	Rom-kam-ron- tamnong-lamnam- ma-fon-ma-ram-hai- nurreng-jai (ร่วมกันร้องทำนอง ลำนามาพ้อนมารำให้ รื่นเริงใจ)	Standing and use bend right knee a little bit. Left-hand does Jeeb in the back and the right-hand does the Wong beside the head. Leaning the head to the right.	Let's sing and dance for god's happiness
22	Haiptom-haipreng- reng-lamdab- plensub-tuang-tee- neelai-weinpai-dai- jangwakan (ให้พร้อมให้เพรียงเร ียงลำดับเปลี่ยนสับท วงทีหนึ่งไล่เวียนไปได้ จังหวะกัน)	Stepping the left leg in the front and lean the head into the left side. Turning the right palm hand down the floor and straighten the arm. Left hand put in the center of the waist.	Dancing together
23	Kwaotodsanit- maibidmaipan (เข้าทอดสนิทไม่บิดไ้)	Stepping the right leg in the front and lean the head into the right side.	We dance together.

	ม้วน)	Straight the left arm and do Jeab. Right hand put in the centre of the waist.	
24	Pookpan-sukkasem (ผูกพันสุขเกษม)	Standing and bend the left knee a little bit. Leaning the head to the left side. Both hands do Jeab hand at the shoulder.	We are dancing with happiness.
25	Perm-pream-preeda (ปลื้มเปรมปรีดา)	Standing on the right leg and sending the left leg to the back and lift the calf of the lower leg to the calf of the upper leg. Leaning the head to the right side. Putting left hand beside the head and straight.	We are delightful and pleasant.

Table 1. The meaning of traditional Thai dance movements

G. The Comparison of Gestures of Movements between Semarangan Style Dance and Thai Traditional Dance

The gesture of movement in dance is an iconic symbol of the dance itself. Therefore, the gesture of movement is a form that can be seen from nature, gesture, and form of dance. Based on the data obtained, Semarangan style dance and traditional Thai dance have similarities and differences. The similarity of motion can be seen from the low stance of the legs. In Semarangan style dance it is called *mendak*. In a traditional Thai dance is in the movement *Tang-dhup-bom-junjan* (ต่างรูปหอมจุนจัน). Another similarity can be seen from the gesture of the hands. The hand gesture *ngincup* in the Semarangan dance style is similar to the hand gesture in *Perm-pream-preeda* (ปลื้มเปรมปรีดา).

The difference in the gesture of movement between the Semarangan style dance and traditional Thai dance is in the step

of the foot. In the Semarang style dance, the steps tend to be performed at a fast tempo and fall to the ground. This kind of movement can be seen in the various movements of *Jalan Tepuk* and *Ngeyek*. Whereas in traditional Thai dance, the step is performed with a slow tempo and lifted his feet, as seen in *Kwaotodsanit-maibidmaipan* (เข้าทอดสนิทไม่บิดไม่ผัน) and *Pongkha-ma-tue-bun* (ฟองขำมาแต่บรรพ).

H. The Comparison of the Meaning of Movements between Semarang Style Dance and Thai Traditional

Semarang style dance and traditional Thai dance when studied have different functions. The Semarang style dance functions as an entertainment dance, while the Thai traditional dance functions as a ritual dance. The difference in the function of the two results in differences and similarities in the meaning of movements.

The similarity of the meaning of movements lies in the movement that shows the human relationship with God or offerings. That meaning in Semarang dance is found in the prayer movement, while in traditional Thai dance it is found in the movement *Kho-wa-ro-kad-dheva-rit-adi-sorn* (ขอโอกาสเทวฤทธิอติศร), which is moving the right knee up and placing two palms between the chests, that means “May we beg you, the great God”.

The difference between the meanings of Semarang dance and traditional Thai dance lies in the nature of the movement. The agile movements that exist in the Semarang style dance are meaningful as a symbol of the joy of the community, while the traditional Thai dance moves are soft because it means offering to God.

I. Conclusion

The comparison of Semarangan dance style and traditional Thai dance in gestures and the meaning of movements can be seen from the similarities and differences. The similarity in the gesture of movement between the Semarangan style dance and the traditional Thai dance is seen from the low stance of the legs and the gesture of the hands. The difference is in the gesture of the footstep motion. In the Semarangan style dance, the steps tend to be performed at a fast tempo and fall to the ground. This kind of movement can be seen in the various movements of *Jalan Tepak* and *Nggyek*. Whereas in traditional Thai dance step is performed with a slow tempo and lifted his feet, as seen in *Kwaotodsanit-maibidmaiipan* (เข้าทอดสนิทไมบิดไมผัน) and *Pong-cha-ma-tae-ban* (พองเข้ามาแต่บรรพ).

The similarity of the meaning of movements lies in the movement that shows the human relationship with God or offerings. That meaning in Semarangan dance is found in the prayer movement, while in traditional Thai dance it is found in the movement of *Kho-wa-ro-kud-dheva-rit-adi-sorn* (ขอโอกาสเทวฤทธิ์อติสร) which is moving the right knee up and placing two palms between the chest means “may we beg you, the great God”.

The difference between the meaning of Semarangan dance and traditional Thai dance lies in the nature of the movement. The agile movements that exist in the Semarangan style dance are meaningful as a symbol of the joy of the community, while the traditional Thai dance moves are soft because it means offering to God.□

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Learning Method of Traditional Dance in Indonesia and Thailand

Lesi Paranti,¹⁰ Ratiphath Siriphong,¹¹ Dhoni Zustiyanoro¹²

A. Introduction

Every country including Indonesia and Thailand has various traditional dances that have to be preserved as an effort to keep its national identity. Indonesian and Thailand's cultures are classified as Southeast Asian groups of culture so that there are several similarities of movement gestures between Indonesian and Thailand's traditional dances. Various traditional dances in Indonesia and Thailand are potentially a challenge, especially in their preservation. A long time ago, the learning of dance in Thailand was conducted in the palace using the traditional learning method [1]. It is as well as in Indonesia before the independence era. In the modern era nowadays, dance can be learned in schools from elementary to higher institutions. One of the agents which have a role in dance preservation is the university. Universities in Indonesia and Thailand can be categorized as higher institutions specialized to

¹⁰ Drama, Dance, and Music Department, Faculty of Languages and Arts, Universitas Negeri Semarang, Semarang, Indonesia.

¹¹ Department of Thai Dramatic Arts, Suan Sunandha Rajabhat University, Bangkok, Thailand.

¹² Javanese Education and Literature Department, Universitas Negeri Semarang, Semarang, Indonesia

create artists and also art teacher candidates. Therefore, the university has a role in conservation and regeneration.

One of the universities in Indonesia having efforts in preserving traditional dance is Universitas Negeri Semarang through its vision that is becoming a conservation university with an international reputation. The effort of conservation includes natural resources, value, character, and also culture conservation. Culture conservation is carried out by teaching dance in the Department of Drama, Dance, and Music which focuses on dance and music learning. As a university located in Semarang City, Universitas Negeri Semarang (UNNES) has an important role in preserving the traditional dances especially Semarangan dance.

Universitas Negeri Semarang also continues striving to establish itself at the international level. Researchers have conducted collaborative research with an overseas university which is Suan Sunandha Rajabhat University, Thailand. Some considerations in selecting the partner were: 1) The university has a dance study program for bachelor's degree which is the Department of Thai Dramatic Arts studying some traditional dances in Thailand. 2) Cultures that are still in one Asian group of a culture where there are cultural similarities so that it can be a comparison in the implementation of dance learning.

Learning dance in university needs to pay attention to the discourse and future needs. The effectiveness of dance learning in university is determined by various factors, one of which is selecting the appropriate learning methods. Learning methods are the ways used in delivering learning materials so that learners can receive and understand the material presented.

A learning method is a tool to create an enjoyable teaching and learning process and also to create educational interactions between teachers and learners [2]. The appropriate learning method will create effective dance learning according to the characteristics of the material and resources. The right

learning method can explore students' abilities and potentials better [3]. There are three principles that need to be considered in the effort to determine learning methods. The three principles are 1) there is no one learning method that is superior for all purposes in all conditions; 2) different learning methods have different and consistent effects on learning outcomes; and 3) learning conditions can have a consistent influence on teaching outcomes [4]. Therefore, lecturers need to combine several learning methods according to the characteristics of the material, students, and conditions in the classroom. Several types of dance learning that are widely used both in schools and universities include lectures, demonstrations, question and answer, drills, and discussions [5]. The lecture method is usually used when the lecturer wants to provide an explanation of certain theories or information verbally [6]. This method requires lecturers to be more active. The demonstration method is a teaching method by demonstrating or showing a process that is being studied to students. The demonstration method is widely used in dance learning practices because it makes it easier for students to learn the material [7]. The question and answer method is a way of presenting lessons in the form of questions that has to be answered so that it can focus on students' attention and train to develop thinking ability [6]. The drilling method is used with the technique of giving students the opportunity to try repeatedly the material being studied [2]. This method is effective to improve skills in performing a dance. The discussion method is a way of presenting lessons by delivering a problem to be discussed and solved together by students. This method provides opportunities for educational interaction among the students to solve problems together. Nowadays in the practice of learning dance in universities, lecturers need to combine appropriate learning methods.

Research related to dance learning conducted is used as a reference as well as comparison and even provides information about dance learning models in schools [8–10]. Therefore, this

article as a result of research has the opportunity as an additional reference to traditional dance learning methods in universities. In the Dance Education Study Program of UNNES, the study of dance learning methods was carried out in learning the Semarang Style dance, the sub-subject of Denok Dance in the Central Java Dance 1 course. Meanwhile, in the Department of Thai Dramatic Arts SSRU, the study was focused on learning Thai Traditional Dance, namely Rabam Thep Ban Terng.

B. Denok Dance Learning Method at Universitas Negeri Semarang

One of the Semarang-style dance materials studied at UNNES is the Denok dance. This dance is studied in the Central Java Dance 1 course. The Denok Semarang dance was created by Drs. Bintang Hanggoro Putra in 1991. He is a lecturer at the Department of Drama, Dance, and Music, Universitas Negeri Semarang. Therefore, students are very lucky to be able to learn Denok dance directly from its creator. Denok Dance was appointed as an identity dance of Semarang City in 1995 through the Decree of the Mayor of Semarang. This dance is also used for cultural arts subjects in Semarang City.

The dynamics of movement in Denok dance express the agility of young girls in Semarang City. Denok is taken from the term *nok* which is a term for girls in Semarang. The movement of the feet and hands up and down is a symbol of the geographical area of Semarang which is in the form of highlands and lowlands. The structure of Denok dance is divided into three parts following the shape of the melody and the rhythm of the song. The posture is called *mendhuk*, which is lowering the body by bending the knees. Among the various movements, there is a connecting motion called *sendi* with a hand motive called *ngincup*. Ngincup is the meeting of the thumb and index finger, but it does not stick together while the other fingers are straight to the side. The characteristic of movement type in

Denok dance consists of *jalan tepak*, *ngeyek*, and *ngondhek*. That characteristic needs to be concerned by anyone who learns to perform Denok dance [11].

The structure of Denok dance is divided into three parts, namely part A, B, and C. The movement type in part A includes: *jalan tepak*, *hormat*, *ngondhek*, *tangan wolak walik*, *sendi*, *ngeyek*, *gertakan 1*. The movement type in part B consists of *ngondhek jongkok*, *sendi*, *lampah sesonderan*, *sendi*, *ngeyek racik*, and *gertakan 2*. The type of movements for part C, including: *jalan tepak lembahan*, *hormat jalan*, *ngondhek pundak*, *sendi dobel*, *ngeyek maju mundur*, *gertakan 3*, *geol*, *sendi*, and *lembahan*. The structure of Denok dance becomes a consideration in the distribution of material at each meeting.

Denok dance lesson in Central Java Dance 1 class is carried out in four meetings. The reason is that there are three dance materials in Central Java Coastal Dance 1 class, besides that the duration of Denok dance is relatively short, which is about three minutes so it doesn't take a long time to learn. The learning outcome in this material is that students are able to demonstrate Denok dance according to: *wiraga*, *wirama*, and *wirasa*. *Wiraga* is the skill of demonstrating movement according to the standard (*puksem*), *wirama* is the skill of adjusting movement to the music accompaniment, and *wirasa* is the skill in animating a dance. The number of students in one study group is about 25 students. Based on learning outcomes, material characteristics, and conditions in the classroom, the lecturer applies several learning methods in each meeting. The description of the material, methods, and activities in each meeting will be explained in the table below.

Meeting	Material	Method	Learning Activity
1	1. Background of Denok Dance 2. Movement Part A and B	Lecture and demonstration	1. Lecturer introduces Denok Dance through PowerPoint 2. The lecturer explains and plays Denok Dance video 3. The Lecturer demonstrates movement Part A and B followed by the students
2	1. Review of movement part A and B 2. Movement Part C	Demonstration and Drill	1. Lecturer reviews the student's mastery of movement by showing the wrong and right movements 2. Lecturer demonstrates movement Part C followed by the students 3. Students practice repeatedly
3	Confirmation of movement	Drill, question, and answer	1. The lecturer checks the students' mastery 2. Question and answer
4	Denok Dance Practice Exam	Performance Assessment (practice)	1. Students demonstrate the ability to perform Denok Dance individually using 3 criteria, namely: <i>miraga</i> , <i>mirama</i> , and <i>mirawa</i> 2. Lecturer gives evaluation

Table 1. Materials, methods, and learning activities of Denok Dance

The table above shows that in each meeting lecturer applies more than one method. The learning method applied is a combination of lecture, demonstration, drill, and question, and answer methods. In the first meeting, the lecturer used the lecture method to explain the history and synopsis of Denok Dance through PowerPoint media and Denok dance videos, then the demonstration method to provide practice material of

Denok dance parts A and B. Based on the data, the implementation of the demonstration method used two ways, namely the *imam* and the mirror method. The *imam* method is a teaching method like a priest/ *imam*, which is demonstrating or performing dance movements by turning their backs on the students and then the students follow the movement (see Figure 1).



Figure 1. The priest/ *imam* method in learning dance
(Source: Research Documentation, 2017)

The *imam* method is more effective if the lecturer faces the mirror so that students are still able to see the details of the movement of the front body. In addition to the *imam* method, the lecturer also uses the mirror method, which demonstrates the movement facing the student, then the lecturer's movement is opposite to the student's movement or called *ngima*. For example, if the movement of the right foot is forward, the lecturer demonstrates the forward movement of the left foot. This technique is very effective because it makes the students easier to imitate, but requires skills for the lecturer to be able to demonstrate the opposite movements. Both of these methods are effective because it makes the students easier to do.

In addition to *imam* and mirror methods, there are also techniques for presenting movements fit to the rhythm. Lecturer uses the *qaringan* technique, which is demonstrating movement

without music accompaniment, usually using the count or rhythm of a musical instrument such as a gong or using the lyrics of the song. Denok Dance has lyrics which is easy to follow and helpful to stimulate the memory of its movements. After using the *garingan* technique, then the lecturer uses the real accompaniment.

In the second and third meetings, the drill method was begun to use to sharpen the student skills. The implementation of the drill method is carried out by rolling, that each row takes turns moving forward so that each student feels in the front position. This technique also makes it the lecturers easier to check the skill mastery of each student. The question and answer method were also used to know the ability of students to understand the material given. Students who are assumed to lack mastery will be given input to be better in the next. Lecturer's review is also given to some of the mistakes which are often made by the students. In the fourth meeting, the lecturer conducted an assessment by giving a performance test. Students demonstrate the ability to perform Denok Dance individually using 3 criteria, namely *wiraga*, *wirama*, and *wirasa*. Lecturer gave evaluations after the exam aimed at the students to know the strengths and weaknesses of the exam results.

C. Rabam Thep Ban Terng Learning Method in Suan Sunandha Rajabhat University

One of the traditional Thai dances learned at Suan Sunandha Rajabhat University Thailand is Rabam Thep Ban Terng Dance. The term "rabam" refers to a dance performed at a special function or occasion. Movements in Rabam dance can be slower or faster. Hand movements in traditional Thai dance are very important in expressing the meaning of dance. The term Rabam always implies a dance performed by two or more dancers. The term "Thep ban terng" means the happiness of God.

The synopsis of Rabam Thep Ban Terng dance describes the gods and goddesses in heaven who dance to make Patarakalar happy. Patarakalar is Inoa's grandfather who died later becoming a great god in heaven. The dancers in this show dance with graceful movements and these dance movements have their own meaning. The Rabam Thep Ban Terng dance performance presents dance with music and lyrics, so the audiences have to listen to the songs and lyrics and watch the dance moves carefully. This dance belongs to traditional Thai dance dramas and is able to be used as a dance to bless people in general as well as on special occasions. However, this dance will not be performed in a mourning ceremony. The Rabam Thep Ban Terng was a dance choreographed by great Thai traditional dance masters in 1956. This dance is included in the traditional Thai dance drama called "Lakhon Nai" or palace dance drama in the Inao story. In the past, this show was created to be presented in a dance drama, but now Rabam dance can be performed separately from dance drama.

The Rabam Thep Ban Terng dance is learned at SSRU in the Rabam Thep Ban Terng course taught by Mrs. Ratiphat Siriphong. The number of students in one class is around 50 students because the classrooms are large and able to accommodate a large number of students. The purpose of this course is to provide students with knowledge about the theory and practice of the Thai dance Rabam Thep Ban Terng which is the basis for practicing advanced skills of Thai dance and becoming qualified artists in the future. The lecturer divides the material into five meetings.

Meeting	Material	Method	Learning Activity
1	Basic knowledge of Rabam Thep Ban Terng	Lecture and discussion	<ol style="list-style-type: none"> 1. The lecturer introduces the history of Rabam Thep Ban Terng through PowerPoint 2. The lecturer explains and demonstrates the dance movements of Rabam Thep Ban Terng 3. The lecturer initiates the students to discuss the function and composition of Rabam Thep Ban Terng 4. Lecturer concludes the result of the discussion
2	Song lyrics and movements of Rabam Thep Ban Terng Dance part 1	Demonstration and drill	<ol style="list-style-type: none"> 1. Lecturer practices singing the song lyrics of Rabam Thep Ban Terng then followed by students 2. The lecturer starts the practice of Rabam Thep Ban Terng Dance part 1 accompanied by lyrics and then followed by students 3. Students practice, repeat and review their own movements until they do the right
3	Rabam Thep Ban Terng Dance part 2	Demonstration, drill and question and answer	<ol style="list-style-type: none"> 1. The lecturer checks the student's mastery of the material delivered 2. The lecturer practices Rabam Thep Ban Terng Dance part 2 then followed by the students 3. Question and answer
4	Confirmation of Rabam Thep Ban Terng Dance	Drill and question and answer	<ol style="list-style-type: none"> 1. Students demonstrate the ability to dance Rabam Thep Ban Terng Dance 2. The lecturer gives a

			review as a test provision 3. Question and answer
5	Practice Test of Rabam Thep Ban Terng Dance	Performance assessment (practice)	There are 2 types of assessment, namely: 1. The ability of students to sing the song lyrics of Rabam Thep Ban Terng; and 2. The ability to dance the Rabam Thep Ban Terng Dance. Assessment is done by dividing groups of four students. Each person is facing a different direction

Table 2. Description of Materials, Methods, and Learning Activities of Rabam Thep Ban Terng Dance

The table above shows that in each meeting more than one learning method was used, depending on the material and situation in the classroom. The method used was a collaboration of lecture, discussion, demonstration, drill, and question, and answer methods. In the first meeting, the lecture method was used to explain the history of Rabam Thep Ban Terng to students. Then, the lecturer invited the students to discuss the function and composition of Rabam Thep Ban Terng. This activity is able to enhance cognitive and affective abilities. Students were invited to think more analytically and dare to express their opinions.

In the second meeting, demonstration and drill methods were applied. In this meeting, the lecturer taught how to sing Rabam Thep Ban Terng's song or lyrics and the movement of part 1. It is very important to master the lyrics because each verse of it contains a certain meaning which is visualized through dance movements so that before learning the movements, the students have to first master the lyrics of the

song. After that, the movement practice lesson part one was begun by applying the demonstration method. Based on the data, the lecturer demonstrated the movement in front of the students. All students sit and watched first, then demonstrated it together. The lecturer practiced in front of the students or used the *imam* method. The priest/ *imam* method made it the students easier to see the shape of the movement from behind, but it was less fit for students whose position was far behind (see Figure 2).



Figure 2. The Lecturer Used the *priest/Imam* Method in Learning Dance
(Source: Research Documentation, 2020)

In addition to the imam method, the lecturer also used the mirror method (moving in opposite directions) to make the students easier to see the details of the movements. Uniquely, the lecturer used hand clapping as a sign of changes of movement variety. Then, the students were given the opportunity to imitate repeatedly and the lecturer gave assistance. The application of the drill method was considered effective enough to enhance students skills. The lecturer went around making corrections to students whose movements were incorrect.

In the third meeting, the application of the method was quite the same as in the second meeting. In the middle of the meeting, the lecturer gave students the opportunity to ask questions on unclear points. Due to a large number of students, the lecturer needed to be more careful in observing the abilities of each student.

The fourth meeting was confirmation for students before the practice exam. The number of participants was quite a lot, which is around 50 students, so the lecturer divided into groups. Each group consisted of 6-8 students. It was easier for the lecturer to give assistance in a group (see Figure 3).



Figure 3. The lecturer did Assistance in Groups
(Source: Research Documentation, 2020)

In this meeting, the lecturer applied the drill and question-and-answer methods. Then, the lecturer gave a review as a provision for students to prepare for the exam. In the fifth meeting, the practice test of Rabam Thep Ban Terng dance was held. There were two types of assessment, namely: 1) The ability of the students to sing the song lyrics of Rabam Thep Ban Terng; and 2) The ability to dance Rabam Thep Ban Terng. The assessment was done by dividing groups consisting of 4 students. Each student was facing a different direction.

D. Comparative Study on the Application of Traditional Dance Learning Methods at UNNES and SSRU

Based on the research results, there are similarities and differences in the application of traditional dance learning methods at UNNES and SSRU. Here are some similarities:

1. The lecturer began the material by giving an understanding of the dance history and information that will be studied using the lecture method assisted by PowerPoint and dance videos.
2. The lecturer used the demonstration method in giving examples to the students, and then students followed the lecturer's movements. Both applied the *imam* and mirror method to make the students easier to do.
3. The lecturer applied the drill method so that the students are able to feel the appropriateness of movement techniques and accompaniment well.
4. The lecturer gave assistance when implementing the drill method so that the students were able to realize their weaknesses.
5. The lecturer used the question and answer method to enhance the students' skills and give opportunities to the students to ask.
6. The lecturer did an evaluation using the performance test type after the dance finished.

The differences in the application of traditional dance learning methods at UNNES and SSRU, namely:

1. In learning Denok dance at UNNES, the lecturer did not teach the students to sing the song lyrics first. The lecturer taught movements using counting, imitating the sound of musical instruments such as gong, or singing some parts of song lyrics. This kind of technique is called *guringan* (without music accompaniment). While learning Rabam Thep ban terng at SSRU had

uniqueness, which is the lecturer first taught the students to sing the Rabam song lyrics before practicing dance movements. The lecturer did hand clapping as a sign of changes of movement variety.

2. Mentoring on an individual was done easier in Denok dance because the number of participants was only 25 students. While individual mentoring in Rabam dance class tended to be more difficult because the number of participants was quite large that was 50 students. Therefore, the lecturer divided into groups during confirmation to make the lecturer easier to do assistance. Students were also able to learn from their friends.

E. Conclusion

Traditional dance learning in universities has an important role in traditional dance conservation efforts. The success of the learning process is able to be determined one of which is by the application of appropriate learning methods. The learning methods of Denok dance at Universitas Negeri Semarang and Rabam dance at SSRU had similarities, which were using collaboration of lecture, question and answer, demonstration, and drill methods. While the difference was, in learning Denok dance, the lecturer did not teach the students the song lyrics of the existing dance accompaniment. The lecturer taught Denok dance movements by using a count or commonly called *garingan* (without music accompaniment). Meanwhile, in learning Rabam dance at SSRU, the lecturer began by teaching singing lyrics Rabam dance before practicing dance movements. When teaching dance movements, the lecturer did hand clapping as a sign of the change of movement and variety of it.

In the current Covid-19 pandemic situation, the application of traditional dance learning methods has many changes technically because learning is carried out online.

Therefore, creativity in combining various methods and utilizing digital media appropriately is highly needed for the learning can take place effectively and efficiently in accordance with the needs and demands of the era.□

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Bioteks



Abdul Rachman was born in Rembang, January 20, 1980. He earned his master of art education from Universitas Negeri Semarang. His majors are Kroncong, Percussion, and PIP Percussion. His research interests cover musicology, ethnomusicology, and music performance. His academic experiences were presenting and publishing several scientific papers in international seminars, reputable national journals, and reputable international journals. He also took part in visiting lecturer and collaborative research activity in Music Department, Suan Sunandha Rajabhat University Thailand. He owns 11 Intellectual Property Rights (IPR) resulted from researches and community services. He is also active as a reviewer and editor at *Harmonia: Journal of Arts Research and Education*.



Bintang Hanggoro Putrawas born in Madiun, February 8, 1960. He earned his Master's Degree from the Performing Arts Study Program, Gajah Mada University, Yogyakarta. He teaches Choreography, Dances Composition, and Central Java Traditional Dances. His research focus is the development, preservation, and creation of dance, especially traditional dance. His monumental dance work is entitled "Denok dance" which was designated as a typical dance of the city of Semarang in 1995. His achievement in the field of dance choreography is proven by an award from IJ:PRID (*Anugerah Lembaga Prestasi Indonesia-Dunia*), 'The

Indonesia-World Achievement, as the Director of National Moral Messages through Collaborative Dance entitled 'Krida Sang Garuda' using 55-meter-long fabric property".



DhoniZustiyantoro was born in Demak, January 18, 1988, Masters in Literature at Diponegoro University. His majors are Literature Theory, Javanese Prose, Editing and Editorial, and Creative Writing. His academic experiences comprise publishing research articles in various scientific journals, writing several books that have been published by several leading publishers.



Indrawan Nur Cahyono was born in Wonogiri on September 21, 1984, taking a bachelor's degree in Karawitan at ISI Surakarta. He was involved in several pieces of research in the field of music, produced several Intellectual Property Rights on musical compositions, performed at several national and international traditional music festivals.



Joko Wiyoso was born in Wonogiri on October 4, 1962. His last education was Master from the Postgraduate Program at Gajah Mada University, Jogjakarta. He is a lecturer at the Department of Drama, Dance and Music, Faculty of Language and Arts, Universitas Negeri Semarang. He teaches Surakarta Karawitan, as well as Javanese song and Dance Music courses. He is active in doing some researches concerning performing arts.



Lesa Paranti was born in Banyumas, June 27, 1990. She completed her master's degree in the Study Program of Performing Arts and Fine Arts at Gadjah Mada University. She currently teaches at the Department of Drama, Dance, and Music, Universitas Negeri Semarang. The courses she teaches are Dance Appreciation, Introduction to Cultural Studies, and Curriculum and Material Development. She has conducted researches related to the conservation of traditional arts. One of the books she created resulted from her research and community service activity entitled *Lembu'Tanon: An Iconic Dance of the 'Tanon Dancing Tourism Village*. In addition, she is active as an editor at the Dance Journal entitled *JurnalSeni Tari (JS'T)*.



Mochammad Usman Wafa was born in Kudus, December 4, 1980. He studied for a master's degree in Art Education at UNNIS. He teaches at the Department of Drama, Dance, and Music majoring in Music Technology, Composition, and Percussion Classes. Several pieces of research had been done by focusing on the study of music media technology and children's music. The book he wrote was entitled *Kreasi-Musik-Teknologi? (Creative-Music-Technology?)*. Currently, he acts as editor of the Scientific Journal entitled Music Journal or *JurnalSeniMusik (JSM)*. In addition, he is also an alumnus of Jogja Audio School, he is also active in the music for media community and sound design.



Phakamas Jirajaruphat is a lecturer at Thai Dramatic Arts, Faculty of Fine and Applied Arts, Suan Sunandha Rajabhat University, Bangkok, Thailand. Bachelor's Degree: Bachelor of Fine and Applied Arts, Chulalongkorn University, Thailand, Master's Degree: Master of Arts Chulalongkorn

University, Doctor's Degree: Ph.D. (Drama and Theater Studies) Royal Holloway, University of London, England. Teaching Thai Traditional Dance. Academic Experiences: Presenting and Publishing some articles on Journal and International Conference.



Pramot Teangtrong is a lecturer at Music Departments, Faculty of Fine and Applied Arts, Suan Sunandha Rajabhat University, Bangkok, Thailand. Bachelor's Degree at Bachelor of Arts, Bansomdejchaopraya Rajabhat University, Master's Degree at Master of Arts, Chulalongkorn University.

Teaching Thai Traditional Music. Academic Experiences: Presenting and Publishing some articles on Journal and International Conference.



Ratiphath Siriphong is a lecturer at Thai Dramatic Arts, Faculty of Fine and Applied Arts, Suan Sunandha Rajabhat University, Bangkok, Thailand. Bachelor's Degree: Bachelor of Fine and Applied Arts, Bunditpatanasilpa Institute, Master's Degree: Master of Arts in Performing Arts, Suan Sunandha Rajabhat University.

Teaching Thai Traditional Dance. Academic Experiences: Presenting and Publishing some articles on Journal and International Conference.



Syahrul Syah Sinaga was born in Cilacap, August 4, 1964, Doctor of Arts Education at Universitas Negeri Semarang. He teaches basic subjects such as Art Anthropology, Harmony, and Marching Band. His field of research is in Music Education. Among his academic experiences are the presentation and publication of research results in several international seminars, national journals, and international journals.



Yusuf Arifin was born in Wonosobo, May 4, 1998, is a student at the Drama, Dance, and Music Department of Universitas Negeri Semarang.



Udi Utomo was Born in Wonosobo, August 31, 1967. He pursued a doctorate in the Education Research and Evaluation Study Program, Universitas Negeri Yogyakarta. Teaching in Study Program. S1 Drama, Dance, and Music Education, Study Program. Master of Arts Education, and Study Program. Master of Basic Education. In charge of Art Education Evaluation Courses, Art Learning Innovations, Educational Music, and Scientific Writing. Several research works focus on the study of Art Learning, Art Learning Assessment Practices, and Development of Art Assessment Instruments. Books that have been written: 1) Classical Music and its Fans: Studies in Sociological Perspectives; 2) Educational Music; and 3) Performance Assessment: Theory and Its Implementation in Learning to Sing and Play Musical Instruments. In addition to research, he is currently active as an Advisory Board at the Harmonia Journal: Journal of Arts Research and Education (Scopus), and a non-permanent reviewer in several accredited journals.

The Traditional Arts of Indonesia and Thailand:

Music, Dance, and The Learning Strategies

According to some literature, relations between Indonesia and Thailand have existed since the 8th century since the Srivijaya Kingdom reached its peak. The two kingdoms, The Srivijaya and Chulalongkorn, communicated and visited each other and this was where cultural communication was established. King Chulalongkorn had a deep impression of the Srivijaya Kingdom, and said: "They made me happy in a place which was very far from my kingdom... a pleasant place with the hospitality of the people..."

It is no exaggeration that this Book Chapter, with the title, The Traditional Arts of Indonesia and Thailand: Music, Dance and Learning Strategies, is a continuity of what was done by King Chulalongkorn, eight centuries ago. In this context, the relationship is under the umbrella of education, between the Music and the Dance Education Study Program, Faculty of Languages and Arts, Universitas Negeri Semarang, with the Faculty of Fine and Applied Arts of Suan Sunandha Rajabhat University, Thailand. The form of this collaboration includes the practice of traditional arts (music and dance), which is then implemented in student learning.

With the publication of this Book Chapter, hopefully, there will be mutual understanding in culture. Differences among countries exist, but that is not an excuse not to know each other. Instead, the difference makes harmony and uniqueness. Hopefully, this Book Chapter will be a trigger for the academic world to always prioritize literacy of culture, either individually or in collaboration with foreign writers.



Sunarto. Doctor of Philosophy, a lecturer of Musicology and Philosophy at Bachelor Degree Program of Drama, Dance, and Music, Faculty of Languages and Arts, Universitas Negeri Semarang; Teaching Staff at Master and Doctoral Programs in Art Education, Postgraduate Program, Universitas Negeri Semarang; Writing and editing several books; writing scientific articles in national and international journals.



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Penerbit Lontar Mediatama
Cendrasasih Magrovo No.216 D Banguntapan Bantul
Yogyakarta Telp. 081226777224
Email : Lontarmediatama@yahoo.com

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