

AN ANALYSIS ON GAMELAN THEATRE: SELECTED
PIECES FROM ARUS GANGSA

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**AN ANALYSIS ON GAMELAN THEATRE:
SELECTED PIECES FROM ARUS GANGSA**

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ABSTRACT

This research focuses on analysis of gamelan theatre produced by Rhythm in Bronze (RIB) in year 2014. As one of the leading gamelan ensemble in Malaysia, RIB is exploring on contemporary gamelan music and performances. Since year 2005, they had been experimenting with gamelan theatre and had showcased many performances on gamelan music and theatre, such as in *Monkey Business* (2005), *Alih PungGONG* (2007), *MaYa:Gong Illusion* (2011) and *Arus Gangsa* (2014) concerts. Qualitative method was employed; interviews and virtual fieldwork were carried out for data collection. Virtual fieldwork was done through selected recordings of performances from *Arus Gangsa* concert. Pieces were analyzed and discussed in order to comprehend the musical structure of gamelan theatre. Research looked into two inseparable aspects of gamelan theatre, which are the music and theatrical elements of the performance. Aspects of analysis include music and extra musical elements. Analysis on music focused on the musical structure, melody, instrumentation, timbre, dynamic and extended techniques while analysis on extra musical elements focused on the stage presentation, playing gesture and costume.

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GANGSA

ABSTRAK

Kajian menumpukan pada analisis dalam persembahan gamelan teater oleh Rhythm in Bronze (RIB) bagi tahun 2014. RIB merupakan salah satu kumpulan yang mengetuai bidang gamelan terutamanya dari segi muzik gamelan komtemporari. Sejak tahun 2005, RIB telah membuat banyak eksperimen dan mempersembahkan gamelan teater yang menggabungkan muzik gamelan komtemporari dengan elemen teater. Antara persembahan gamelan teater yang telah dipersembahkan oleh RIB ialah *Monkey Business* (2005), *Alih PungGONG* (2007), *MaYa:Gong Illusion* (2011) dan *Arus Gangsa* (2014). Kajian ini menggunakan kaedah kualitatif. Temu bual dan kerja lapangan telah dilakukan untuk mengumpul data. Kerja lapangan dilakukan melalui rakaman persembahan terpilih dari *Arus Gangsa*. Persembahan tersebut telah dianalisis dan dibincangkan untuk memahami struktur gamelan teater. Kajian ini memeriksa gamelan teater dari dua segi: muzik dan elemen tambahan. Analisis dalam muzik menumpukan pada struktur, melodi, instrumentasi, sifat bunyi, dinamik lagu dan teknik lanjutan manakala analisis pada elemen tambahan menumpukan pada persembahan pentas, gerakan semasa bermain dan kostum.

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CHAPTER 1 INTRODUCTION

1.1 Introduction

This study analyzed selected pieces from *Arus Gangsa* gamelan theatre by Rhythm in Bronze (RIB). In this study, gamelan theatre was viewed as a whole performance with collaboration of theatrical elements into the music. Analysis looked into two important aspects that built the gamelan theatre: the music and extra musical elements. In this chapter, an introduction to RIB and *Arus Gangsa* was included. Introduction to RIB includes the establishment of the ensemble and its development from contemporary gamelan ensemble to gamelan theatre. The justification of research subject selection and the limitation of the research were provided.

1.2 Background of Study

Founded in 1997, RIB is a contemporary gamelan ensemble integrating music from different cultures and presents it as Malaysian music. Music by RIB is from a diverse creative combination of Malay, Sundanese, Javanese, Balinese gamelan with Chinese drumming and percussion, Carnatic music, and also Malay and Sufi poetry.

Since 2005, transforming from ensemble that performs concertized contemporary gamelan music to that of gamelan theatre; RIB incorporates movement and acting into their music (Super Everything, n.d.). Gamelan theatre was suggested and proposed to RIB by the late Krishen Jit (P. Matusky, personal communication, 10 January 2017). Late Krishen Jit is a theatre practitioner who wrote and directed numerous theatre and play (Ling, 22 January 2015). *Monkey Business* was the first gamelan theatre production by RIB and Krishen Jit in year 2005 that incorporated music, movement, spoken text, acting and visible emotion while playing instrument (Ling, 22 January 2015). While

another gamelan theatre performance *Alih PungGong* that showcased in 2007 shows a combination of excerpt from *Bangsawan* theatre and gamelan music.

Analysis on gamelan theatre in this research is based on selected pieces from *Arus Gangsa* production in 2014. Gamelan theatre performance featured in *Arus Gangsa* shows a variation in style of contemporary gamelan music and stage presentation. *Arus Gangsa*, meaning bronze current or tides, is a gamelan theatre production performing a total of nine compositions using water as the theme. Due to its elegance and sense of expansiveness, the sound of gamelan played in traditional form in royal courts of Southeast Asia has been equated to “moonlight and flowing water” (*Arus Gangsa* program notes, 2014).

Composers of *Arus Gangsa* connect the acoustic qualities of the gamelan with the Water to display the ability of these ancient instruments for telling contemporary musical stories (*Arus Gangsa* program notes, 2014). The pieces performed in *Arus Gangsa* are *Return*, *Mirage*, *Sea-Mother*, *Rain Kisses*, *Hakikat Air*, *Mantera Nelayan*, *Corak Air*, *Love Story*, and *Genbabla*. Selected pieces chosen for analysis were composed in different styles with integration of distinct extra musical elements. For example, the piece *Corak Air* featured duet singing, *Return* adopted Balinese style playing, *Hakikat Air* had mobile stage presentation while *Mantera Nelayan* incorporated chanting with gamelan and the use of puppetry. The uses of props, lighting and puppetry created a unique visual effect for each performance. *Corak Air*, *Hakikat Air* and *Mantera Nelayan* used lyrics and text to narrate the stories.

1.3 Problem statement

Hybridized and theatricalized contemporary gamelan performances by RIB set a new phenomenon in Malaysia. However, there has been a lack of scholarly works to discuss it from a cultural and musical viewpoint. Research on contemporary gamelan music has been focusing on the analysis of new gamelan music composed by Western composer or Indonesian composer who resides in the West (Diamond, 1992).

There is little research that analyzes or comments on contemporary gamelan music of Malaysia, especially gamelan theatre that incorporates contemporary gamelan music and movement in a single performance. This creates a big gap in the literature of contemporary gamelan music. Therefore, this research focuses on the analysis of hybridized musical performance on gamelan theatre by RIB in *Arus Gangsa* production in year 2014.

1.4 Research Objectives

The objectives of this research are:

1. To discuss the exploration of modern playing techniques of Malaysian gamelan.
2. To analyze the musical performance of gamelan theatre through selected performances in *Arus Gangsa* production.
3. To discuss the cultural hybridization of selected pieces from *Arus Gangsa* in the genre of contemporary gamelan music.

1.5 Research Questions

In order to analyze and discuss the cooperation of theatrical elements in contemporary gamelan music by RIB and its development in Malaysian gamelan music, the following research questions were asked:

1. What are the musical structures of selected pieces in *Arus Gangsa*?
2. How is the instrumentation of gamelan in *Arus Gangsa*?
3. What are the roles of gamelan instruments in *Arus Gangsa* and how they differ from traditional Malay gamelan?
4. What are the playing techniques Rhythm in Bronze used for the pieces in *Arus Gangsa*?
5. How does the stage setting of *Arus Gangsa* differ from traditional or contemporary gamelan music setting?
6. What are the functions of different stage presentation?

1.6 Justifications and Limitations

Arus Gangsa was chosen as the subject of analysis because it featured complete repertoires of gamelan theatre based on one theme. It is the most recent major work by RIB and the composition showed a variety of musical cooperation and extra musical elements. Pieces chosen for analysis were *Hakikat Air*, *Mantera Nelayan*, *Return*, and *Corak Air*. These four pieces were selected as they showed different styles, musical structure and stage presentation. *Arus Gangsa* received five nominations in 12th Boh Cameronian Arts Award in 2015 (Toh, March 2015).

Analysis was based on selected pieces from *Arus Gangsa* concert available on the internet. Video recording of the entire concert is not available for analysis due to

creative rights of RIB. The original scores of *Arus Gangsa* were not available for analysis too, therefore transcription of melody excerpts through video recordings available from the internet were done.

In this research, modern staff notation is used in transcribing gamelan music, as it is more comprehensible instead of traditional cipher notation. Modern staff notation is able to show more complicated rhythmic patterns too. Below shows the comparison chart of traditional cipher notation and modern staff notation used in this analysis.



Figure 1.1: Modern staff notation used by gamelan in this research

1.7 Definition of Terms

Operational definition of terms used in analyzing and describing the musical structure of gamelan music, such as *balungan*, *gendhing*, *gongan*, *kotekan*, *colotomic structure* were included.

1.7.1 *Balungan*

Balungan is the “skeleton or frame” melody of a gamelan composition. “Balung” means bone in Javanese. It is played by the saron and slentem (Lindsay, 1979).

1.7.2 *Gendhing*

The term *gendhing* carries different meaning in different context. Generally, *gendhing* means gamelan composition, and formal gamelan structures (Hilder, 1992).

1.7.3 Gongan

Gongan is used to describe the largest phrase marked by gong *ageng* in gamelan composition. *Gongan* also means the distance between primary (lowest) gong strokes (Sumarsam, 1999). Instruments that are classified into the gongs category include gong *ageng*, gong *suwukan*, *kempul*, *kenong*, *kethuk* and *kempyang*.

These instruments formed gong structure in gamelan music: the *gongan* and *kenongan*. *Gongan* is the largest sections in the gong structure that were marked by gong *ageng*. Meanwhile, *kenongan* is the smaller section divided from *gongan*. *Kenong* marks the *kenongan* while *kempul* usually divides the *kenongan* by half. The pulses of the structure in between stronger beats are played by the *kethuk* and *kempyang* (Drummond, 2014).

1.7.4 Kotekan

Kotekan refers to the interlocking figuration employed in traditional and contemporary Balinese gamelan work (McGraw, 2013). *Kotekan* was used in *Corak Air* and *Return*.

1.7.5 Colotomic Structure

Colotomic structure refers to the indication of established time intervals by specific instruments (Encyclopedia Britannica, 1998). The music is punctuated by the sound of various sized gongs. Tenzer (2000) states that *colotomic structure* is the mark off of circular segments or cycles of musical time by various gongs.

CHAPTER 2 LITERATURE REVIEWS

2.1 Introduction

Literature reviews relating to the keywords of the research were included in this chapter. An overview and development of contemporary gamelan music in and outside Malaysia were made. Literature reviews about the role of gamelan music in traditional theatre and the evolution of theatricalized performances in 21st century were covered. Modes of analysis for contemporary art music were investigated to find a suitable analytical approach to gamelan theatre music.

2.2 Introduction To Gamelan Instruments

Gamelan is derived from Javanese word “gamel”. The term refers to the method of playing the instruments which means to strike or to handle (Lindsay, 1980). Gamelan ensemble comprises predominantly of percussive instruments, which are keyed metallophones and knobbed gongs. These instruments produced tone when struck with mallets (Spiller, 2004; Sumarsam, 1998).

In general, “a gong is a metal percussion instrument that has a circular flat surface” (Spiller, 2004, p.60). One of the characteristics of flat gongs is that they do not have a defined pitch. In order to focus the gong’s pitch, the center of the flat circular surface was carved as a raised knob called “boss”. The pitch of a gong was determined by its thickness, size and weight. The timbre of a gong defers accordingly to the softness and hardness of the mallet used. Knobbed gong instruments include *gong agong*, *gong suwukan*, *kempul*, *bonang*, and *kenong*.

As described by Spiller (2004), keyed metallophones or slab key instruments are rectangular metal bars placed on top of a stand or frame that normally acts as the resonating chamber. A metallophone has four to fifteen or more metal bars. The size of metal bars determine its pitch, given that the larger metal bars are lower in pitch while the smaller metal bars are higher in pitch. The rectangular metal bars are arranged that the lowest pitch is on the player's left side and highest pitch is on the player's right side.

Timbre of slab key instruments mostly depends on the hardness or softness of the mallet (Spiller, 2004). Traditional playing method for these instruments includes damping the sound of the ringing key by pinching or touching the key using left hand until it stops vibrating. Slab key instruments include *saron pekin*, *saron baron*, *saron demung*, and *slentum*.

Besides bronze instruments, *gambang* and *gendang* are of other types of percussion instruments in the gamelan ensemble. *Gambang* is a wooden xylophone played by a pair of mallet while *gendang* is a two-headed drum played with fingers or palm or both (Sumarsam, 1998). For traditional Malay gamelan or *joget* gamelan ensemble, there are eight instruments, including *saron pekin*, *saron baron*, *bonang*, *gambang*, *kenong*, *gong suwukan*, *gong agong* and the Malay *gendang* (Matusky, 1985).

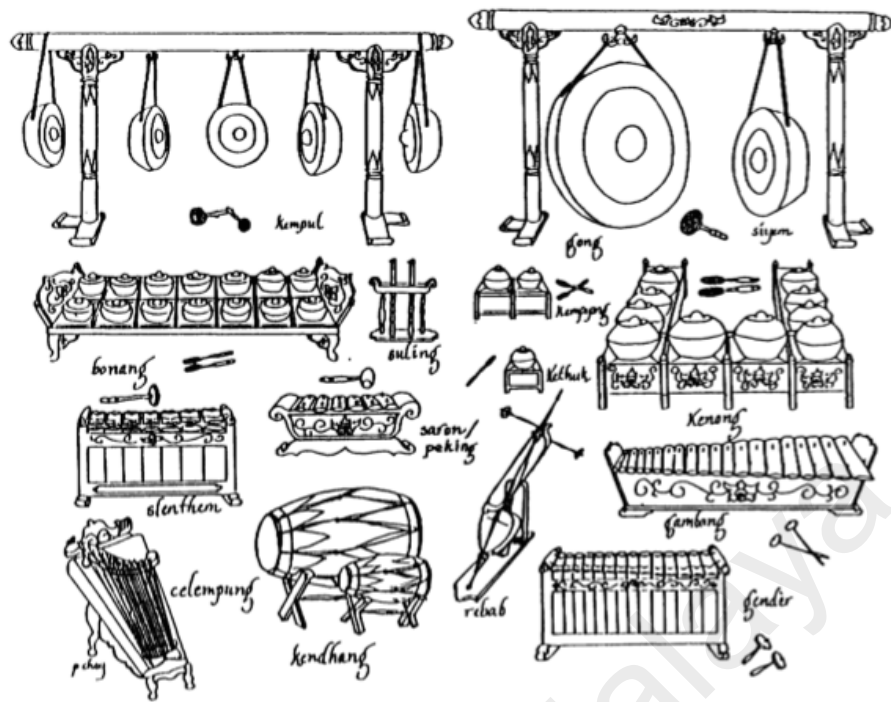


Figure 2.1: The Gamelan Instruments (Sutton, 1988, p.170)

2.2.1 The Tuning System and Notation

Most of the bronze ensembles in Java and Bali use *pelog* or *slendro* tuning systems. *Pelog* has seven pitches while *slendro* has five pitches. According to Spiller (2004), there are differences in terms of interval size between *pelog* and *slendro* tuning system. The interval sizes between each *pelog* pitch vary, while interval sizes of *slendro* pitch are about the same. Intervals between *pelog* pitches are from about 90 cents to more than 400 cents and *slendro* pitches are about 240 cents.

The five tones of *slendro* scales are now commonly refer to in numbers, that is 1, 2, 3, 5, 6 (Sutton, Suanda & Williams, 1998). The Malay gamelan, which received influence from the Javanese gamelan, uses *slendro* scales as well.

Spiller (2004) compares the tuning of piano to that of gamelan. He states that the white keys on any piano are tuned exactly the same, as the piano tuners use a single tuning standard for each note. There are standards for tuning in terms of pitch and intervals for each note in piano. For example, the standard pitch for the key labeled “A” near the middle of the piano is 440 vibrations per second. Unlike Western instruments that are interchangeable from one ensemble to another, gamelan instruments are always played as a set. Therefore, the pitch or size of intervals of the gamelan does not follow a single tuning standard.

Although there is a standard in *pelog* and *slendro* tuning, Javanese gamelan tuner will have their own version of tuning on different set of instruments. McDermott (1986) believed that traits of tolerance that runs in Javanese society through their culture, philosophy and arts affect the way they analyze and their aesthetic value. Differences and unique characters in terms of tuning in each set of gamelan are expected.

The oldest staff notation of *gendhing* (generic term for gamelan composition) seems to have been formulated by a group of court musicians of Surakarta in late nineteenth century (Ishida, 2008). It is called *nut rante* or chain notation, which only notates the composed melody. Perlman (1991) suggests that the chain notation was suitable in notating the *gendhing* melody because of its ability to notate the multi-octave *balungan* melodies. Notes above the line show pitches in the medium or upper octave while notes below the line show pitches in the low octave.

Balungan refers to the skeleton melody of the gamelan music. However, Ishida (2008) states that the popularity of chain notation remained limited, as it was difficult to read and write. The use of notation was to preserve the art but not to instruct the musician.

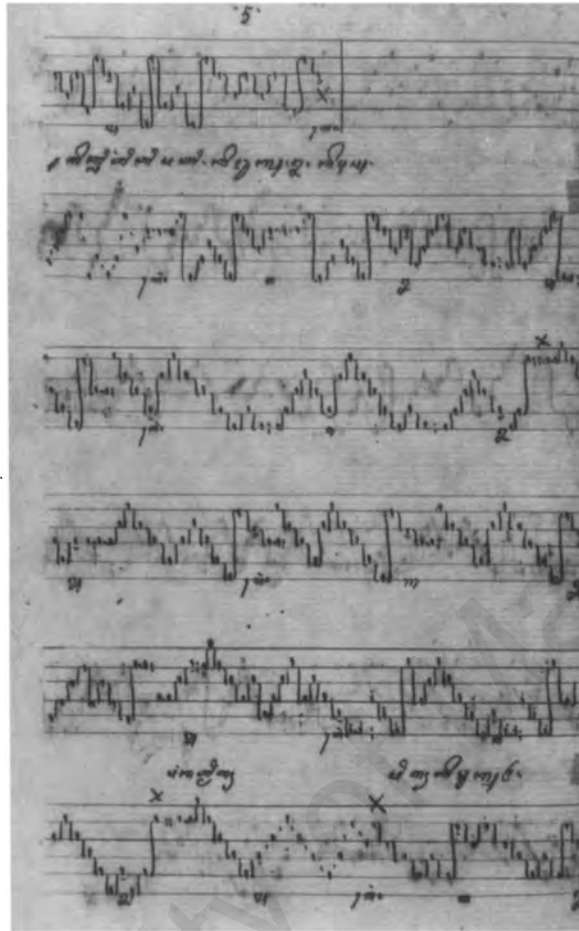


Figure 2.2: The *nut rante* or chain notation. Part of *Gending Titipati slendro pathet nem* (from *Nut rante gendhing* Surakarta, Musuem Sonobudoyo) (Ishida, 2008).

Early notation for gamelan was used in order to preserve the *gendhing*, and as a limited way of learning aid (Sumarsam, 1995). “The introduction of notation for gamelan also changed the development of *gendhing* theories in a certain direction” (Sumarsam, 1995, p.111).

Surakarta nobleman then introduced the *nut angka* notation, as the chain notation was inconvenient during gamelan rehearsals with amateur players, (Ishida, 2008). Numbers were given to indicate pitches. Pitches of *pelog* were numbered one to seven

while *slendro* were numbered one to six (from low to high). From early 20th century, *nut angka* continue to be the notation of composed melody and was widely adopted by both professional and amateur players (Ishida, 2008). Chart below shows *nut angka* notation of *slendro* scales.

1	2	3	5	6
---	---	---	---	---

Sumarsam (1995) discussed on how westernization had very great effects on the Javanese gamelan music in the Javanese courts during the nineteenth and twentieth centuries. Western ideas such as musical notation and fixed composition, and the idea of noble and classical arts had effects on the gamelan music, especially those gamelan music taught and performed at Indonesian music institutes sponsored by the government (Spiller, 2004). According to Spiller (2004), “although it is not necessarily immediately apparent to casual Western listeners, modern Javanese gamelan music places much more emphasis on a fixed melody and less emphasis on simultaneous variation” (p.267).

2.2.2 Musical Structure

Polyphony is a distinguish compositional device in gamelan music. Polyphonic stratification is one of the musical textures that occurs when different layers of single melody moving together at different densities (Spiller, 2004). The term polyphony means multiple melody lines, while stratification refers to the texture of music when the melody lines stacked together. The Javanese gamelan music is organized into four functional layers: *colotomic* framework, abstracted melody, elaborated melody and drumming (Spiller, 2004).

Besides polyphony, heterophony is also often a characteristic of gamelan music. Heterophony describes the musical texture when melodic variants of same tune are play together (Encyclopedia Britannica, 2017). Heterophony is one of the basic fundamental in the music of oral tradition where multi-linear texture comes together in the music (Pärtlas, 2016). It can be found in many cultures as a form of music making and as an element of more complex multipart practices.

Gamelan music of Indonesia is characterized by a complex heterophony, with different types of variation played by different instruments (Encyclopedia Britannica, 2017). The multiple part of heterophony in gamelan differs from the single part vocal heterophony of the East Slavs, Finno-Ugric peoples and the others (Pärtlas, 2016).

Different parts in gamelan have different functions, where the variation techniques are specialized. One of the parts is identified as the theme of the variation, and the simultaneous melodic variants are harmonized at certain beats or certain rhythmic form (Pärtlas, 2016).

Composed melody and the slow moving part decide the arrangement and musical structure. Gamelan compositions have identical metrical unit and were composed in several structures (Sumarsam, 1999). Gong marks the beginning and the end of a *gendhing*, and also the elementary unit in the *gendhing* structure called *gongan*. *Kenong* divides *gongan* into two or four smaller units. *Kenong* may also play the main melody to guide the melodic flow.

Balungan is the basic melodic outline of a piece that is played on several instruments. *Balungan* is often played by *saron*. Spiller (2004) described *saron* as keyed instruments with six or seven keys that can play one octave of *slendro* or *pelog* tuning. The *saron* family includes *saron demung* that is tuned one octave lower than *saron*

baron that is in one octave lower than *saron pekin*.

Matusky (1985) described the musical structure of *joget* gamelan and instruments that are responsible for playing different role in the ensemble. The *saron baron* plays the skeleton melody while *pekin*, *gambang*, and *bonang* ornate the skeleton melody. “The large gongs such as the *kenong*, *gong suwukan* and *gong agung* function as time markers in the musical system, and the *gendang* provides specific rhythmic patterns in the musical pieces” (Matusky, 1985, p.165).

“Pacing and density of gong stroke” (Tenzer, 2000, p.388) was explained as various effects of *gongan* and what Gold (2005, p.109) refers to as a way to shape “dramatic mood and degree of tension”. There are “gong patterns that tend to call forth warlike sentiments, regal splendor, spiritual refinement and other responses” (Tenzer, 1991, p.44). “The largest phrase of a melody is marked by a large gong (*gong ageng/ gong gede*)” (Lindsay, 1979, p.9).

According to Spiller (2004), the drummer is usually responsible for coordinating rhythmic activities that include acceleration and deceleration of tempo, to start or end a piece, or in transition of section or to other piece. Some ethnomusicologists even compare the role of a drummer in a gamelan ensemble to that of a conductor in Western orchestra. This is because a drummer’s role is similar to the conductor: helps other musicians to coordinate their parts and sets the tempos. However, unlike a conductor, a drummer in gamelan ensemble leads with aural signal rather than hand waving.

One of the special features in Balinese gamelan music is its interlocking two-part figuration (McPhee, 1949). The interlocking technique is a creative approach and elaboration towards the music. This technique is played by a group of performers to create melodic or rhythmic patterns. Each performer creates an unbroken continuous

melody though the playing of a single tone. The interlocking technique, or *kotekan* in Balinese term, is also known as hocket. Hocketing is common in medieval European singing and African pigmy music (McPhee, 1949).

McGraw (2008) mentioned that the analysis of beat in most of the Balinese music is relatively obvious as a consistent and undeniable pulse that is usually performed by the *kajar*. The *kajar* is a small horizontal gong chimes that act as a timekeeper. A staccato “tuk” sound is produced from the *kajar* by striking the chime with mallet and damped it with left hand. Lindsay’s *Javanese Gamelan* gives an overview on the historical background of Javanese gamelan, introduction of instruments and its tuning, notation, structure of Javanese gamelan music, and its role in society. The role of instruments is also clearly stated in this book.

2.3 History of Gamelan in Malaysia

The function of traditional gamelan music is to accompany ceremonies and celebrations that include weddings, birthdays, funerals, village cleansing rituals and social community events (South Bank Centre, 2011).

The first appearance of gamelan in Malaysia was dated in the year 1811 as a result of marriage between royal families of Riau-Lingga Islands of Indonesia and Pahang (Matusky & Chopyak, 1998; Mohd Anis Md Nor, 1993). A set of gamelan instruments, musicians and dancers were brought to the court of Pahang. In mid 19th century, the tradition of gamelan music and dance had developed and were named gamelan Pahang or *joget* Pahang (Matusky, 1985).

In early 20th century, marriage between Sultan Sulaiman of Terengganu and Tengku Mariam, daughter of Sultan Pahang caused a relocation of the gamelan sets in court of Terengganu (Matusky, 1985). Gamelan music and dance flourished in the court of Terengganu under patronage of Sultan Sulaiman and Tengku Mariam. Since then, gamelan music and dance began to derive away from Javanese tradition and acquired Malay characteristics. “These characteristics include specific dance movements, aspects of costume, a change in the tuning of the gamelan, specific instrumentation, and the use of melodies not originating from Javanese tradition” (Matusky, 1985, p.164).

Several traditional gamelan ensembles were formed in conjunction with Tengku Mariam’s enthusiasm towards gamelan music. Terengganu gamelan music accompanied court dance and was entertainment for the royalty; however, it was stored away during World War II (Matusky & Tan, 2004). Gamelan music was then revived in 1966 under the effort of renowned historian and researcher on Malay culture, Tan Sri Mubin Sheppard, as he encountered a set of gamelan instruments that was kept at Istana Kolam in Terengganu (Soon, 2017).

The discovery of gamelan instruments led to reunion of the former musicians, and reestablishment of new dancers under the guidance of Mak Nang, once the lead dancer of the court. The Malay gamelan was reborn and was brought to University of Malaya, Kuala Lumpur to be performed in front of the public for the very first time, at the International Conference on Traditional Drama and Music of Southeast Asia. Since then, the Malay gamelan started to emerge as an independent instrumental performance rather than accompaniment for dances or *wayang* (Ahmad Farid Abd. Jalal, 2008).

According to Mayer (2017), *joget* gamelan of today has suffered from extreme obscurity, to becoming an overexposed symbol of the nation, similar to any other Malay traditional performing arts. Mayer too described the *joget* gamelan that was “performed

at large-scale extravaganzas, parades, theatres and dinner-dance shows to assert the ‘Truly Asia’ national narrative” has lost its original attraction. Gamelan music is often prerecorded in theatrical showcases nowadays. It seems that presence of gamelan ensemble on stage brought inconvenience to the general aesthetics of performance.

2.4 Development of Contemporary Gamelan

The emergence of contemporary gamelan in America began when local composers came up with the idea to explore the unusual sonic landscape of the gamelan, structuring a musical composition texturally or formally in an alternative way (Miller & Lieberman, 1999).

The central figure for American gamelan Lou Harrison has developed music for Western instruments that imitate the generalized sound of gamelan. Contemporary gamelan composition by Lou Harrison was dated from 1970s (Miller & Lieberman, 1999). According to McDermott (1986), American composers focused in the modality, regularity and melody, while traditional Indonesian elements appeared occasionally. The compositions by American composers are generally based on simplicity.

Gamelan in the West are mostly played by the local, not Indonesian (McDermott, 1986). Even though the repertoire remains largely Indonesian, there is emergence and rapid growth of new music usually composed by members of the respective gamelan group (McDermott, 1986).

Lou Harrison, Jody Diamond, Daniel Schmidt, Barbara Benary and JaFran Jones are among the American composers that start writing new gamelan music (McDermott, 1986). It was further written in McDermott’s article that members from respective

gamelan group start composing new gamelan music, causing a rapid growth in the repertory.

This is the case with gamelans that were started by Lou Harrison at Mills College and San Jose State University; with gamelans in the bay area Jody Diamond and Daniel Schmidt; with the Gamelan Pacifica at Seattle's Cornish Institute, the Gamelan Son of Lion led by Barbara Benary in New York, the gamelan at Bowling Green University in Ohio, directed by JaFran Jones, and in the gamelan at Lewis and Clark College in Oregon (McDermott, 1986, p.17).

The changes towards Central Javanese gamelan style are not widely accepted in 1980s (McDermott, 1986). However, from the recordings that McDermott (1986) came across in year 1978 at the library of Mangkunegaran Palace in Solo, it is found that there were differences in performances dated in late 1920s and early 1930s. The recordings of palaces performances were found to have differed from traditional gamelan music in the aspect of female vocal solo, male chorus and *gender* part.

Innovation in Indonesian contemporary music is when composers make experiment with the music by adding new resources, mostly relating to the gamelan or other traditions of the island. This heterogeneous mix contemporary music of Indonesia was categorized under the genre of Indonesian *kontemporer* (Tenzer, 2000). Among the actions of creating *kontemporer* music are mass instrument groupings, extended playing techniques, combination between different ensemble and tradition, use of electronics, mixed media, conceptual or performance art, and structured improvisation (Tenzer, 2000). Structured improvisation mentioned by Tenzer (2000) is composes with specific rules; need not follow the rules of Javanese gamelan or other local tradition. *Kontemporer's* presence is important at institution such as the Jakarta Art Center and at various conservatory campuses.

The development of new Indonesian music and discourse on the term *musik kontemporer* was believed to have occurred in the late 1970s (Sumarsam, 2013). Globalization and economic progress had fostered the performing art scene of Indonesia, through the formation of Jakarta Art Center in the year 1968. Certain musical event sponsored by the Jakarta Art Center had aid in the development of new music in Indonesia (Sumarsam, 2013).

The Center had sponsored on all sort of musical events, including new music concerts and new music composition competition, to encourage young composers to perform their new works. The most prominent event held by the Center is the 1979 Young Composers' Week (*Pekan Komponis Muda*, PKM). Composers were invited to perform at the festival representing their respective institutions: ASKI Surakarta; ASTI Bali; ASTI Yogyakarta; AMI Yogyakarta; SMKI Bandung, SMKI Surabaya; and LPKJ.

The performance of compositions from respective art institutions focused mainly on regional gamelan, which show the dominance of gamelan-based new music at the festival (Sumarsam, 2013). More than half of the works presented during the six years of the festival were gamelan based. The study of tradition from new perspective and orientation of new compositional technique among young musician is much encouraged.

Sumarsam (2013) added “the notion of exploring traditional music as the basis for creating new music sets the tone for the development of Indonesian music” (p.47). Music critics Suka Hardjana states that majority of the new works performed at the PKM for the gamelan consist of idiomatic expansions of traditional music (Sumarsam, 2013). One of the examples is Supanggah's first new composition *Gambuh*, presented at the 1979 PKM. Supanggah states that his work originated from the material of traditional *kariwatan* (instrumental and vocal music of gamelan).

The traditional *kariwatan* has strong potential for musical development but lacks in volume, timbre, tempo, and dynamic. Supanggah's work departs from conventional elements such as freedom for each musician to interpret within the structure of *gendhing* and the rich sound quality of the gamelan instruments (Sumarsam, 2013).

Another new gamelan music example given by Sumarsam (2013) is *Gendèr* by Suwardi, which featuring a *gendèr* metallophone modeled after a vibraphone, together with five normal *gendèr*. Suwardi states that: "we explore all possibilities to produce new sounds by altering the instruments, or striking, dampening the slabs unconventionally or conventionally, and to mix *slendro* and *pelog* tuning" (Sumarsam, 2013, p.49).

Both Supanggah and Suwardi's new gamelan music presented in 1979 and 1984 shows exploration on timbre, tunings, dynamic and rhythm and alteration of instruments. Composers for new gamelan music try to deviate from traditional gamelan idioms such as "structure, pleasant endings, interpretation of *irama*, volume and sound texture" (Sumarsam, 2013, p.49).

From late 1960s into 1980s, "most gamelan ensemble in Malaysia before Rhythm in Bronze and probably before Sunetra Fernando begun to write contemporary gamelan composition, were playing traditional *Joget* gamelan style". The only gamelan ensemble playing anything other than traditional *Joget* gamelan style would be the gamelan group Sunetra Fernando taught in University of Malaya (P. Matusky, personal communication, 12 December 2016).

As mentioned by Matusky (2004), young Malaysian performers and composers that study music in major conservatories and universities in United States and Europe returned home during 1980s and 90s. Those composers were trained in the 20th century

compositional method that focused on techniques developing in the music field after World War II. According to the author, those compositional techniques include “the use of serial composition, atonality, polyrhythm, new formal structures and electronic and other new tone colors” (Matusky, 2004, p.393).

Furthermore, young Malaysian composers continuously explore new ways of playing traditional musical instruments and new approach in traditional Asian music cultures. These young composers then reflected their own personal taste in developing the new musical style but at the same time trying to maintain a Malaysian identity (Matusky, 2004). Compositions by local composer such as Tan Sooi Beng, Michael Veerapen and Suhaimi Mohd Zain in contemporary gamelan music reflected this description by Matusky in her own program notes written in 2002, for *Rhythm in Bronze* concert.

The early beginning of contemporary sound of Malaysian gamelan is when University of Malaya acquired a gamelan set. A staff member of the university’s Cultural center, ethnomusicologist and composer Sunetra Fernando decided to make full use of the gamelan set by getting together a group of friends to learn gamelan music (Yun, 2011).

Contemporary gamelan music in Malaysia was believed, to introduce by Sunetra Fernando during her teaching in University of Malaya (P. Matusky, personal communication, December 12, 2016). As Yun (2011) stated, in 1993, University of Malaya acquired a gamelan set and Fernando, staff member of Cultural Center, ethnomusicologist and composer gathered her friends to learn and play the gamelan.

In 1995, Fernando officially took on the leadership of the ensemble and it was named Gamelan Club. Formation of Gamelan Club brought about collaboration between Fernando, theatre director Krishen Jit and dance choreographer Marion D’Cruz.

Fernando's education background exposed her to contemporary gamelan works (when she studied in University of York in England) as well as traditional joget gamelan repertoire she learnt from Komplek Budaya Negara (National Cultural Complex). As a result, Gamelan Club played a variety of Javanese, Sundanese, Balinese style and joget gamelan repertoire.

Gamelan Club actively performed as musical accompaniment for theatre production since their formation such as Scorpion Orchid (1995), Storyteller (1996) and Trees (1997). They performed a combination of traditional and new composition by Malaysian and Indonesian composers, and that marks the early beginning of new contemporary voice of Malaysian gamelan. In 1997, Gamelan Club staged its first full length concertized gamelan concert named Rhythm in Bronze.

A year after, Fernando leaves Gamelan Club and forms another gamelan ensemble called Rhythm in Bronze (RIB). RIB tends to explore the sound of the instrument and create a different tone color. They incorporate the major ethnic musical traditions to create a new Malaysian identity (Seneviratne, 2007).

2.5 Theatricalized performances in Malaysia

There are numerous challenges faced in sustaining interest and preserving traditional art form among the younger generation (Wan Nor Jazmina; Nor Izzati Abdul Ghani; Ramle Abdullah, 2016). Activists from these traditional art strive to ensure that the performances are preserved despite of modernity.

There were numerous performances in Malaysia that combined theatrical elements with dance and music, such as *Raja Tangkai Hati* in 2003 staging traditional Malay performing arts *mak yong* in Malaysia's National Theatre with a twist of modern elements (Foley & Sabzali, 2012). Dama Orchestra is a Malaysian orchestra that produced a lot of performances incorporating theatrical element in music, such as *Liu Yun: Portrait of a Songstress* (2001), *Fragrance of the Night* (2002), *Love without End* (2003), *September Tale* (2005), *Butterfly Lovers* (2006), *Glitz and Glamour* (2010), *The Moon Speaks for My Heart* (2011) (Loo & Loo, 2014).

The Next (2012) by Hand Percussion, Malaysia renowned percussion ensemble integrate Malay Gamelan and theatrical movement expression in their performance (Leng, 2013). The concept of drama-dance in Malaysia involved important elements such as nonverbal narration or drama that are performed through dance and music (Mohd Anis Md Nor, 1985). On the other hand, gamelan theatre by RIB presents stories through musical performances.

The reasons for incorporating theatre elements in dance and music differ in each ensemble. Dama Chinese Orchestra reported a financial hardship and could hardly generate sufficient funds from merely performing activities to sustain and keep the orchestra function (Loo & Loo, 2014). The artistic director Pun Kai Loon then shifted the focus of Dama orchestra from classical Chinese music to *shidaiqu* and into theatre as a necessity for survival (Loo & Loo, 2014).

The shifting from classical Chinese orchestra performance to dramatized *shidaiqu* has proved successful and the increase in patronage has enabled the survival of Dama Orchestra (Loo & Loo, 2014). "Unfortunately, that has caused an increase in production & venue cost, and the various groups all trying our hardest to vie for that little slice of 'funding' pie and to attract the audiences and contributions" (*Arus Gangsa* program

notes, 2014, p.1). Apart from the creative approach in performing arts, it was hoped that through the creation of gamelan theatre, RIB could get more patronage or attract more audiences for their survival in the society.

The research on in depth discussion of the hybridization of theatrical elements in contemporary gamelan ensemble was supported by Patricia Matusky's article on "Rhythm in Bronze, New Music for Malaysian Gamelan". Matusky (2001) stated that the new combination of instruments and musical collaboration by Rhythm in Bronze reflected the cultural diversity and music heterogeneity of Malaysia.

Music recorded in the compact disc from concert held by Rhythm in Bronze in 1999 were given details of its composer, style, fusion of foreign drumming pattern or instruments. Development of music by Rhythm in Bronze changes from concertised pieces to gamelan theatre (Matusky, 2001).

2.5.1 Theatrical Approach in Gamelan Performance

Popular theatre originated from French saying "theatre populaire" means theatre for people (Schechter, 2003). The aim of popular theatre is to make this performing art that used to be just accessible by the middle-class and above society, more reachable. Popular theatre also aimed to be more comprehensive and handy to working class population (Harris, 2012).

Harris (2012) mentioned that instruments used by popular theatre include music, mask, puppetry, circus, parody and propaganda and interaction with audience. These techniques create a theatrical language that is more understandable by different classes of society that has different cultural background. Rhythm in Bronze combines gamelan

music with techniques of popular theatre such as puppetry, narration and props to create performances that are relatively more approachable than concertized contemporary gamelan music.

2.6 Analysis in Gamelan Music

Spiller (2004) states that one of the common characteristics of Javanese and Balinese music is the organization of musical layers. It is arranged to produce a harmonious whole and yet each of the layers is different from one another.

McGraw (2013) analyzed and compared the temporal and dynamic profile of traditional and contemporary Balinese gamelan music using two different approaches. The temporal analysis was sketched using Balinese aesthetic and theoretical concept of *Ombak*, wave, as the primary analytical frame. Meanwhile, the analysis of dynamics in Balinese music was compared using theoretical method developed for Western repertoire (McGraw, 2013). Colotomy, temporality and dynamics function as an interwoven ribbon in traditional repertoires (Repp, 1998).

Gravitational pull of gong tightened the interwoven ribbon in traditional repertoire but it is found that these traditions were occasionally absent in the contemporary music repertoire (McGraw, 2013). In traditional repertoires, the dynamic profile tends to drop suddenly to get out of the way of the relatively quiet colotomic gong markers which, often linked to a decreasing or stretching of tempo (McGraw, 2013). Tenzer (2000) notes the importance of relationship between colotomic and dynamic structure that decrease in loudness are often applied nearing gong and other significant structural markers.

Simultaneous playing of many elaborations on the slow-moving skeleton melody *balungan* forms the complex layers of polyphony in gamelan music (Spiller, 2009). The rhythmic coordination between *balungan* and its elaboration are different from the expectation of Western musical sensibility. According to Spiller (2009), ethnomusicologist Benjamin Brinner and Marc Perlman had termed this difference as end-weighted in contrast with the Western front-weighted rhythm.

Miller (2001) further explained that end-weighted rhythmic organization means the last beat has the most metric weight rather than the first of a group of beats. This characteristic of Javanese gamelan music is essential in discussing the rhythm organization for contemporary gamelan music in *Arus Gangsa*, on whether the composer still adopts the end-weighted feature or has moved away from it.

Analysis on Malaysian contemporary gamelan music can be found in Matusky's (2004) book, describing a performance named *Sembuh Sudah* composed by Sunetra Fernando. Analytical method employed by Matusky includes an analysis on the structure, tonality, rhythm, timbre and discussion on other elements that distinguish the composition from the traditional ones. For example, Matusky described Sunetra Fernando's *Sembuh Sudah* and *Three Pieces for Scorpion Orchid and 10-sen* as a combination of Javanese and Malay gamelan in terms of harmonic structure, texture and mode.

Tan Sooi Beng is one of the composers of contemporary gamelan music in Malaysia. Tan Sooi Beng's music for gamelan uses polyphonic textures and musical structures of Malaysian or Southeast Asian music. One of Tan's compositions *Perubahan* for gamelan focuses on multi layering of rhythms of the *gendang* and Chinese *shigu* drums (Matusky, 2004). The motives and tunes of *Perubahan* played on the gamelan

instruments carry Chinese melodic structures and sometimes played in a heterophonic texture (Matusky, 2002).

2.7 Analytical Model

Paul Carr (2012) listed the elements of music for basic analysis that includes melody, harmony, lyrics, poem, texture, tempo, meter, timbre and dynamic.

Gamelan music selected in this study has a combination of folk and art music. The analysis subject shows that it has the concept of popular music too, in the sense of reviving interest. The characteristics of the music show a crossing of typology according to the axiomatic triangle (folk, art and pop) listed in Tagg's article (1982, p.42). Therefore the author chose to analyze the selected music by RIB based on Tagg's analytical model and checklist.

The analytical model referred in this thesis is the revised version of analytical model Tagg proposed in 1982. According to Tagg (1982 & 2015), the most important component of an analytical model to popular music is:

- (1) A checklist of parameters of musical expression
- (2) The identification of musemes as minimal units of expression and or their compounds (stacks and strings) by means of interobjective comparison
- (3) The establishment of figure/ground (melody/accompaniment) relationships
- (4) The transformational analysis of melodic phrases
- (5) The establishment of patterns of paramusical process, and

(6) The falsification of conclusions by means of commutation (hypothetical substitution) (Tagg, 1982 & 2015)

Whereas, the tools for analysis were listed by Tagg as:

1. Aspects of time
2. Melodic aspects
3. Orchestration aspects
4. Aspects of tonality and texture
5. Dynamic aspects
6. Acoustical aspects
7. Electromusical and mechanical aspects (Tagg, 1982, p.47-48)

Tagg (1982 & 2015, p.47-48) further listed down the elements for each aspect in the checklist. Checklists relating to time aspects include durations of section within analysis object. The pulse, tempo, meter, periodicity, rhythmic texture and motifs of the subject should be observed in analysis. Analysis object refers to a distinguishable piece of music in audible form. Analysis from melodic aspects includes song and pitch range, rhythmic motifs, tonality, contour, and timbre. Meanwhile, orchestration aspects look into the type and number of voices, instruments, parts, phrasing, timbre and accentuation.

Intensity of the sound, accentuation and audibility of parts were grouped under dynamic aspects. Tonal center and tonality of the analysis object, its harmonic expression and rhythm, harmonic and chord change, connections between voices, parts and instruments, compositional texture and method were included in the aspects of tonality and texture in Tagg's (1982 & 2015) checklist.

Characteristics of every performance venue, its resonance, distance between the place where sound is produced and the listener, and irrelevant sound were all listed in the acoustical aspects. The checklist of analytical tool provided by Tagg is to ensure that every important guideline of musical expression is included as it helps to determine the musical structure of analysis object. Aspects of time, melody, orchestrational and texture will be used as the main guidelines for analysis of gamelan music in this research.

Tagg suggested transcription of music, in order to take multiple musical factors into consideration. Suggested by Tagg (2013), paramusical synchrony is a technique of jotting down the time code of certain phrases that the researchers intend to analyze. If an analysis object has lyric, stage performance or dance, or motion picture, its musical structure can be appointed by referring to the extra musical elements that occur at the same time with the music. The time code classification method in denoting the musical structure assists reader to find the relevant musical structure in the recording without much time.

Tagg (2013) suggest the placement of digital time code and paramusical synchrony as two simple ways in denoting musical structure. It further explained that with the use of time code, anyone could mark the musical structure without having to use the muso jargon. Muso jargon means the technical term used by musician who is over concerned with techniques.

2.8 Conclusion

An introduction towards gamelan instruments, its tuning and notation provides an insight into the gamelan, especially Javanese gamelan. Literature review has been done on Javanese gamelan due to its' influence on the Malay gamelan. RIB, the analysis subject of this research uses most instruments from the Malay and Javanese gamelan set.

Traditional Malay gamelan set only contains eight instruments: *sarun barung*, *sarun peking*, *gambang kayu*, *keromong*, *kenong*, *gong suwukan* and *gong agung* (Matusky, 1985). However, the gamelan set used by RIB does not follow necessarily the setup of traditional Malay gamelan, there are additional gamelan instruments from other regions such as *sarun demung* and *slentum*. Knowing the terminologies of music structure and texture used by several authors in analyzing gamelan music is useful in analysis of this research.

An overview on the history of gamelan music in Malaysia and the development of contemporary gamelan music in America, Indonesia and Malaysia were included in this chapter. Comparison on the development of contemporary gamelan music in different regions brings about the issue of composers' musical background and intention in composing new gamelan music. For example, new gamelan music by American composers tends to explore the sound of the gamelan instrument with integration of Western musical elements.

Meanwhile, contemporary gamelan music in Indonesia deviates from the traditional gamelan music while keeping it within a framework. Contemporary gamelan music in Malaysia appears due to the effort of local composers, trained in Western compositional technique, in composing modern gamelan music.

Literature review then looked into theatricalized performances in Malaysia and theatrical approach in gamelan. Several authors have done analysis on gamelan music about its musical structure, texture, melody, instrumentation, and timbre.

McGraw (2013) and Spiller (2004 & 2009) analyzed on Balinese and Javanese gamelan music respectively. Analysis on Malaysian contemporary gamelan music was described by Matusky (2004) in her book "Music of Malaysia". Besides, an analytical model provided by Tagg was used, which provides checklists on parameters of musical expression.

University of Malaysia

CHAPTER 3 METHODOLOGY

3.1 Introduction

This chapter outlines the research methodology for this study. This study focuses on analysis of musical performance of gamelan theatre by Rhythm in Bronze; therefore a qualitative theoretical framework was employed. A research that produces descriptive data is results of qualitative methodology (Taylor, Bogdan & DeVault, 2016).

Several approaches were used such as virtual fieldwork, interview, transcription, and video analysis. Virtual fieldwork was based on recorded performances of Rhythm in Bronze from internet. Selected pieces from *Arus Gangsa* production dated in 2014 were analyzed from its musical and extra musical aspect.

3.2 Qualitative Research

According to Qoetz and LeCompte (1984), qualitative research is defined as a set of approaches to investigation. These investigations depend on data collected through communication, observation, tactility, hearing, smell, and taste (LeCompte & Preissle, 1994). Creswell (2014) states that qualitative research is a method of exploring and understanding the meaning assigned to a social or human problem by individuals or groups. On the other hand, Hancock (1998) claims that qualitative research develops explanations to social phenomena and to seeks answer for questions about:

1. Why people behave the way they do
2. How opinions and attitudes are formed
3. How people are affected by the events that go on around them
4. How and why cultures have developed in the way they have

5. The differences between social groups (Hancock, 1998, p.2)

Data of qualitative research are usually kept in descriptive account. Documentation of qualitative data is in field notes, recordings, transcriptions from audio and videotapes, written records, pictures or films (LeCompte & Prissle, 1994).

Creswell, LeCompte and Prissle (2014 & 1994) mentioned that qualitative research has a group of specific research design, including narrative research, phenomenological research, grounded theory, case studies, field studies, community studies, life histories, document analyses, ethnographies, and clinical studies (see LeCompte & Prissle, 1994, p.142). The size of population and the restriction of research site decide the implementation of research designs.

Four main types of research design were discussed by Hancock (1998), which includes phenomenology, ethnography, grounded theory and case study. Phenomenology research commences when there's a realization about gap in human's understanding and the need of explanation. Author further explained that phenomenology is the study of phenomena. It is a method of describing something that exists as part of the world. According to the author, although phenomenology research does not provide definite explanations, it does increase awareness to improve understanding.

According to Hancock (1998), ethnography is a methodology for descriptive studies of cultures and people. Data collection techniques for ethnography research include both formal and informal interview, and participant observation. On the other hand, grounded theory is the establishment of a new theory. The new theory is established through collection and analysis of data on a phenomenon.

Creswell (2014) states that case study occur when the researcher had an in-depth analysis of a case, usually is a program event, activity, process of an individual or more. In order to describe a person, an organization or an institution, case study is often being used the research design as it provides rich and complete information (Hancock, 1998).

Case study research has different deepness, depending on the event. The simplest case study is an explanation and description on an event while the more complicated one is the analysis of a social situation over a period of time. The most complex case study allows analysis on the particular group over a period of time to reflect changes and adjustment (Hancock, 1998). The design of inquiry used in this thesis is case study. The case study on the analysis of performances of *Arus Gangsa* was carried out.

Direct interaction with individuals in a group setting or individually is required in the data collection for qualitative research (Hancock, 1998). It is different from quantitative approach; the data collection techniques for qualitative approach are time consuming. Thus, data were usually collected from a smaller numbers of people rather than using questionnaire survey like in quantitative research.

Creswell (1994) provides the procedure of qualitative research that includes “advancing the assumptions of qualitative designs, indicating the type of design, reflecting on the researcher’s role, discussing data collection, developing data recording procedures, identifying data analysis procedures, specific verification steps, and delineating the narrative outcomes of the study” (p.143-144).

Creswell (1994 & 2014) mentioned that the researcher usually interpreted the meaning of the data that collected in the participants’ setting. Observations, interview, documents and visual images are the strategy of data collection in a qualitative research. The structure of final report written for qualitative research is flexible.

3.2.1 Observation and Virtual fieldwork

Observation is one of the processes of data collection in qualitative study. The types of observations are further categorized into complete participant, observer as participant, participant as observer and complete observer (Creswell, 1994). When the researcher keeps his or her role hidden, complete participant is apply. When the role of researcher is known in the research setting, he or she participates as an observer.

If the role of participation is on top of the role of observation, then the researcher focus more on the role of participant in the setting. Complete observer means the researcher observes without participating. The type of observation used in this thesis is complete observer where the recorded performances of *Arus Gangsa* were watched with no participation.

According to Timothy Rice (2008), “the field which we work is a metaphor” and there is not a place where researcher must go to carry out the fieldwork. Cooley, Meizel & Syed (2008) discussed the validity of metaphorical or ‘virtual fieldwork’. Metaphorical fieldwork involved doing it at home in front of the computer, watching a television program, listening to a radio broadcast and using technologies that provide data to the researcher.

The internet provides a simple virtual topography of sites to users and allows surfing from site to site easily by clicking on different links (Sade-Beck, 2004). Virtuality of the internet is not separated from reality (Miller, 2004, p. 80). The internet serves as another media for observation. Virtual fieldworks were carried out on the research on gamelan theatre as the internet provides the recordings on performance of *Arus Gangsa* production.

3.2.2 Interview

There are several interview designs, including structured, unstructured, semi-structured, open-ended, focus group and virtual interview (Creswell, 2014). Among all the interview designs, semi-structured interviews attract researchers' interest and are widely used (Flick, 2006).

Due to limited secondary sources on detailed information about *Arus Gangsa*, interviews were conducted to obtain more information. Informants were purposefully selected, that would best answer the research questions. Semi-structured interviews with the composer and music director of *Arus Gangsa* Jillian Ooi, composer Teuku Umar Ilany, and director and lighting designer Loh Kok Man were included. Interview questions for Jillian Ooi and Teuku Umar Ilany were designed to get primary data regarding the concept and structure of music in *Arus Gangsa*.

Interview with Loh Kok Man was to obtain data on extra musical elements of *Arus Gangsa* including the stage presentation, lighting design and used of puppet costume. In order to visualize the development of contemporary gamelan music in Malaysia, interviews were also conducted through emails with ethnomusicologist Patricia Matusky.

Lewis (2006) described that email response stimulate detailed and more descriptive replies as it allows participants to think about the questions in greater scope. Face to face interviews were carried out with Jillian Ooi, Teuku Umar Ilany and Loh Kok Man while virtual interview was carried out with Patricia Matusky.

3.2.3 Transcription

Transcription is a centered practice to qualitative research and it is often viewed as selective, theoretical, interpretive and representational (Davidson, 2009). Video analysis enables the researcher to virtually re-visit the field repeatedly, gaining greater insight and interpretation of the events (Markle, West & Rich, 2011).

Transcription on excerpt of music in gamelan theatre was carried out. Notes, tempo, dynamic and rhythmic pattern for specific section were jotted down for analysis. There are four selected pieces from *Arus Gangsa* production: *Corak Air*, *Return*, *Mantera Nelayan* and *Hakikat Air*.

In relation to Tagg's (1982 & 2015) method of examining songs through the aspect of time; duration of each section of the performance was listed for analysis. Tables were used to organize data that was obtained through transcription.

3.2.4 Data Analysis

The process of data analysis varies (Tesch, 1990). Researchers were required to develop categories and make comparison and contrasts during data analysis (Creswell, 1994). Triangulation helps in corroboration or confirmation of findings (LeCompte & Preissle, 1994).

The validity of study findings is strengthened when two or more methods for measuring the same phenomena provide mutually reinforcing results. The results of a study should be compared and contrasted to other similar studies to improve their validity (Johnston, Lara, Mario, & Pantelides, 2010).

Data analysis on gamelan theatre was carried out. Analysis was done based on four pieces in *Arus Gangsa* including *Corak Air*, *Return*, *Mantera Nelayan* and *Hakikar Air* that featured differences in style and extra musical elements. Analysis refers to several analytical methods including the approaches used by McGraw (2013) in analyzing Balinese contemporary music and Miller (2001) in analyzing Javanese gamelan music.

An analytical model for popular music presented by Tagg (1982 & 2015) was used as a reference to outline the framework for analysis. Tagg provides a checklist of parameters of musical expression, which includes analyzing the music in aspect of time, melodic, orchestration, tonality and texture, dynamic, acoustical, electro musical and mechanical aspects.

Technical analysis of musical performance of gamelan theatre includes an investigation on the tempo, texture, melodic motifs, rhythmic motifs, instruments part, playing techniques, and relationship between voices, parts and instruments (Tagg, 1982).

Besides technical analysis of music, analysis on extra musical elements will be included as it is an essential part of gamelan theatre. The stage setting, layout of instruments, playing gestures and costumes was discussed and presented in Chapter 4.

CHAPTER 4 ANALYSIS AND DISCUSSION

4.1 Introduction

In this chapter, four performances in *Arus Gangsa* gamelan theatre were analyzed from two aspects: musical and extra musical elements. Pieces were examined from its form, texture, melody, instrumentation, timbre, dynamic, rhythm and extended playing technique. Analysis on extra musical elements includes observation on the stage setting, choreography and costume. Four performances namely *Corak Air*, *Return*, *Mantera Nelayan*, and *Hakikat Air* were analyzed and categorized into respective subtitle.

4.2 *Corak Air*

Corak Air, or literally ‘water ripples’, is a composition by Teuku Umar Ilany, one of the members of RIB for the *Arus Gangsa* production. The description of this piece was written in *Arus Gangsa* program notes,

This piece tells the story of a warrior who goes to war, leaving his wife behind. The battle leaves him critically wounded. With his remaining strength he tries to return home but get only as far as the great lake across from his home. With his dying breath, sending his final message via water ripples, of his love to his wife (*Arus Gangsa* program notes, 2014, p.5).

The video recording used for analysis was taken from YouTube website. The URL of this piece was provided in the Table 4.2.1 below.

Table 4.2.1: Information of *Corak Air*

Item	Description
Title	<i>Corak Air</i>
Composer	Teuku Umar Ilany
Source	YouTube
URL	https://www.youtube.com/watch?v=QPCjGXQx6Ko

The analysis on musical elements such as musical form, texture, melodic transcription, tempo, dynamics and extra musical elements such as stage presentation will be divided under several subtitles. Subheading 4.2.1 includes the discourse on *Corak Air*'s musical form, texture, tempo and melody.

4.2.1 Musical Form, Tempo and Melodic Ideas

The form of *Corak Air* was analyzed by referring to the revised edition of Tagg's (1982 & 2015) analytical model for popular music in the aspect of time. The time and duration of each section that carries different melody, rhythmic patterns or tempo, having different extra musical elements or stage presentation were jotted down and tabulated in Table 4.2.2.

Table 4.2.2: Time and duration for each section of *Corak Air*

Section	Time	Duration (seconds)	Description
A	0'00"- 0'42"	42	Gamelan, percussion
B	0'43"- 1'07"	24	Female solo voice and gamelan
	1'08"- 1'32"	24	Male solo voice, gamelan and chorus
C	1'33"- 4'08"	155	Gamelan, percussion
D	4'09"- 5'36"	87	Gamelan, male solo voice
	5'37"- 7'23"	107	Gamelan, chorus, male solo voice, percussion

Corak Air was built on ostinato and interlocking rhythm where the lyrical chorus sung by the members was accompanied by percussive gamelan. The piece starts with an eight bars introduction by the gamelan that played with rather slow tempo and soft volume, minimal and repetitive rhythmic pattern. Figure 4.2.1 shows the melodic transcription of instrumental introduction of *Corak Air*.

The image displays a musical score for the instrumental introduction of *Corak Air*. It consists of eight staves, each representing a different instrument in the gamelan ensemble: Gendang, Gong, Slenthems, Bonang, Saron Demung, Saron Baron, Saron Pekin, and Kenong. The music is written in 4/4 time and features a repetitive, interlocking rhythmic pattern. The Gendang and Gong parts are primarily percussive, while the other instruments play melodic lines. The score is presented in a clean, black-and-white format with a watermark for 'University of Malaya' overlaid diagonally.

Figure 4.2.1: Instrumental introduction of *Corak Air* from recording

Section B highlighted the female and male voice solo while gamelan ensemble was given the role as the accompaniment. Changes in dynamic and tempo did not occur until the beginning of Section C. The gamelan music remained soft in volume with minimum rhythmic pattern. Percussion is omitted during the female voice solo and appears during 1'08" where the male singer starts singing. Both female and male singing part has equal distribution of time: each lasts for 24 seconds. Figure 4.2.2 shows the melodic transcription of female and male singing part.

Female
Male

Per - gi - lah ka - sih Ku - se - rah - kan sa - yang Pah - la - wan

6
F
M

me - lang-kah Do - a ku ber - sa - ma - mu
Te - nang - lah ka - sih Cin - ta - ku

12
F
M

Echo by all players
a - ba - di ke - nang - kan di - ri ku di da

Figure 4.2.2: Melodic transcription of singing part in Section B

Section C is purely gamelan music without any singing. Acceleration of tempo increased the momentum of the song and led the melody towards a short percussion solo at 2'17". The *bonang* leads the Section and play the melody while the *saron* family joins in after 4 bars. Figure 4.2.3 and Figure 4.2.4 shows the melodic transcription of *bonang* and *saron* parts. Several melodic lines combined to show polyphony texture. Tempo rubato reflected different texture of the song. The tempo of the song is relatively slower during the beginning when gamelan acts as the accompaniment for singing. Then, the tempo increased and it developed into multiple layering of gamelan voices with exciting and relatively bustling percussion.

Section C ended with gradually slowing down of tempo and unison playing of all instruments. There is a pause and silent moment before Section D begins.

The musical score consists of three systems. The first system shows the Bonang part with a continuous eighth-note melody and the Saron part with a simple rhythmic accompaniment. The second system starts at measure 5, marked 'accel.', and shows the Bonang part with a more complex melody and the Saron part with a similar accompaniment. The third system starts at measure 9 and continues the Bonang and Saron parts.

Figure 4.2.3: Melodic transcription of *bonang* and *saron* parts during 1'34'' from *Corak Air's* recording

The musical score is a single line of music in 3/4 time, featuring a complex melody with eighth and sixteenth notes.

Figure 4.2.4: Melodic transcription of *saron* parts during 2'00'' from *Corak Air's* recording

Section D is similar with Section B where the gamelan plays the role of accompaniment. The *demung*, *slentum*, *kenong* and *gong* lead the beginning of Section D while the male solo voice and chorus sung the text written below:

Male singer:

“Corak air Sampaikanlah wasiatku;

Corak air Rentaslah zarah beribu

Sampaikanlah Salam terakhir”

Chorus:

“Corak Air” (*Arus Gangsa* program notes, 2014, p.5)

The musical form and arrangement of *Corak Air* was found to be similar with general popular song musical form. It starts with introduction into verses, chorus, bridge and outro where music fades away. Figure 4.2.5 shows the summary of musical structure of *Corak Air*.

SECTION	A	B	C	D	
	Intro	V ¹ V ²	Climax	Closing	
TEMPO	slow	slow	accel. fast	rit. slow rit	
BPM	62	77	230	57	
Time	0'00''	0'43''	1'33''	4'09''	7'23''
BPM= Beats per minute					

Figure 4.2.5: Summary of musical structure of *Corak Air*

The tempo of *Corak Air* differs greatly in Section C, if compared to Section A, B and D. According to the recording, there is a slight increase in tempo from 62 beats per minute in Section A to 77 beats per minute in Section B. The tempo of the song accelerates at the end of Section B to 230 beats per minute in Section C. Slowing down of tempo occurs at the end of Section C, to 57 beats per minute in Section D. Figure 4.2.6 shows the overall tempo graph of *Corak Air*.

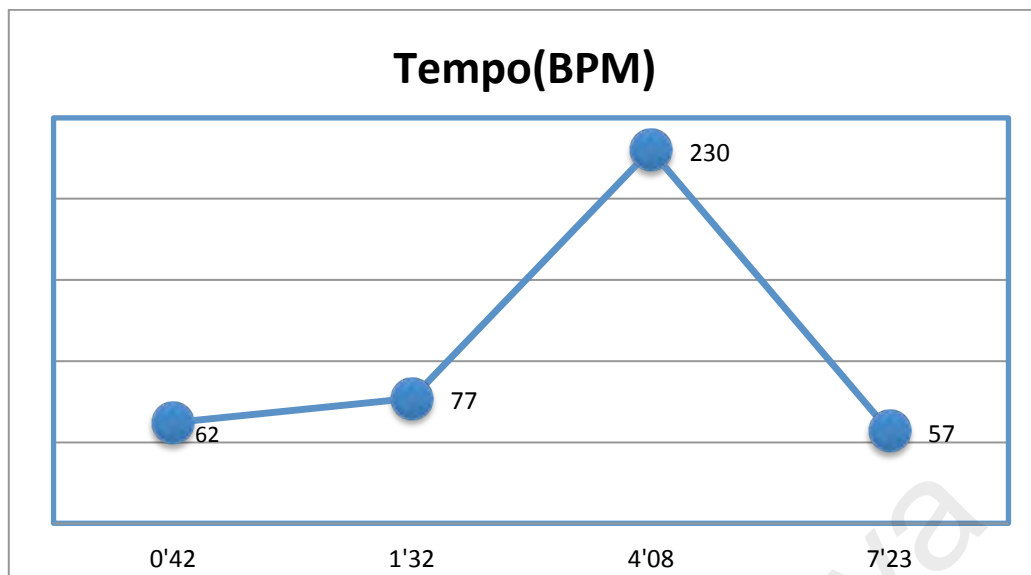


Figure 4.2.6: Tempo graph of *Corak Air*

The piece began with eight bars introduction by the gamelan and the first melodic idea was in the form of a female solo voice, which comes in with minimum accompaniment by the gamelan after the introduction. The music grew when leading male singer comes in with echo singing of other members. Development of the song to the climax was driven by polyrhythm and apparent dynamic change. Repetitive and continuous playing of *kesi* kept the tempo of the song when other instruments developed into more complicated melody lines and rhythm. Section C employed a different style where melodic instruments of gamelan such as the *pekin*, *baron*, *demung*, *bonang* and *gambang* were superimposed above these interlocking rhythms. In this section, while other instruments played a complicating rhythm in interlocking style, half-note rhythm was sustained by the *kesi* throughout the phrase. *Kesi* act as the tempo keeper, similar as the conductor of that particular section.

Melody of Section B was presented through vocal. Text sung by the female and male singers were in Malay. Usage of lyrics in *Corak Air* clearly shapes the story of piece; it was presented like a conversation between the warrior and his wife. Below shows the text sung in Malay language by both singers during Section B:

Female:

“Pergilah, kasih; Kuserahkan sayang

Pahlawan melangkah; Doaku bersamamu”

Male:

“Tenanglah, kasih; Cintaku abadi

Kenangkan diriku; Di dalam Corak air” (Arus Gangsa program notes, 2014, p.5)

4.2.2 Extended technique

Besides using traditional method of playing (hitting with mallet at the “boss”), Section C of *Corak Air* required *bonang* to play at its flat circular surface, with edge of the mallet that were not covered with cord to produce a muted sound. Different timbre was created using mallet. The muted sound produced by *bonang* in Section C act as the rhythmic fill-in while the *demung*, *baron* and *pekin* played the melody. This technique was shown in Figure 4.2.7. At Section C, *kenong* player hit the instrument with mallet while left hand holding the “boss”. The player hit the *kenong* with full force. This playing technique was shown in Figure 4.2.8.



Figure 4.2.7: Extended technique used by *bonang*. Section C, 2'52" from *Corak Air*'s recording

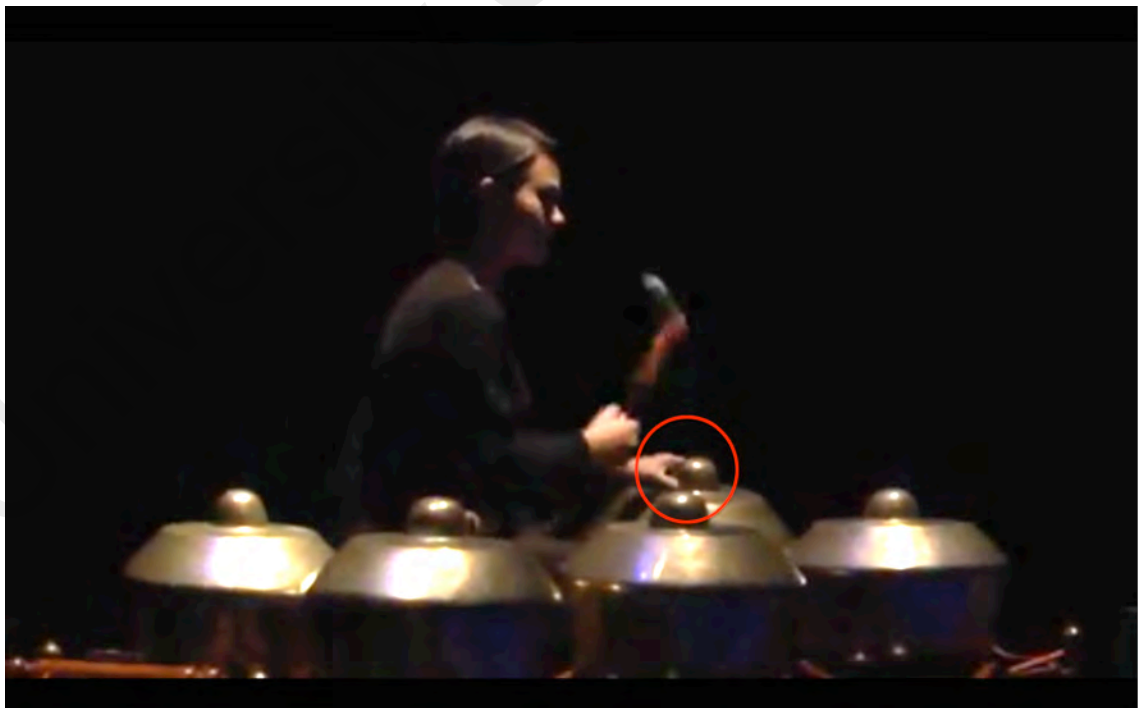


Figure 4.2.8: Extended technique used by *kenong*. Section C, 3'00" from *Corak Air*'s recording

Traditional damping method is still used by the *demung* and *baron*. The *demung*, *baron* and *pekin* uses double mallet occasionally. During the introduction, *demung*, *baron* and *pekin* played with two mallets, different from traditional *Joget* gamelan that uses single mallet. The *demung*, *baron*, *pekin*, *slentum* and *bonang* uses double mallet to strike two notes at once to increase the intensity of the sound. Utilization of double mallet for the *demung*, *baron*, *pekin* and *slentum* is one of the creative approaches in playing contemporary gamelan music as Suwardi states that alteration of striking method produces new sound that is essential in creating new gamelan music (Sumarsam, 2013).

4.2.3 Stage Presentation

The stage presentation of *Corak Air* was different from other concertized gamelan performance, where instruments were arranged in linear and players sat facing the audience. In *Corak Air*, the setup of instruments was in circle and players sat facing each other, surrounding a round canvas as shown in Figure 4.2.9.

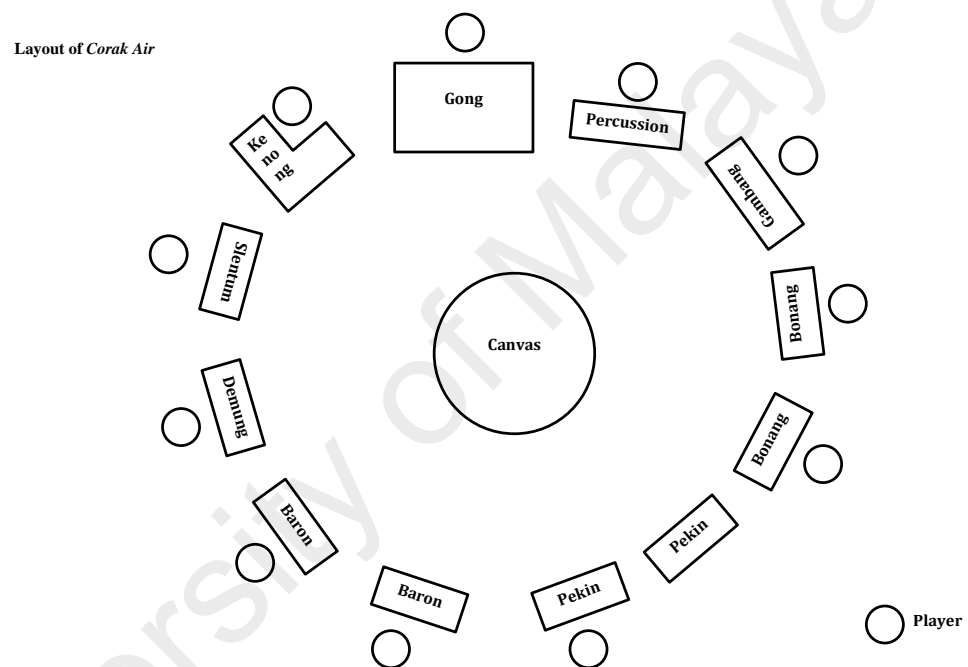


Figure 4.2.9: The layout of *Corak Air*

It is observed that this setup is part of the theatre performance, where music flows and connects within the circle. During Section A, B and C, the canvas was entirely blue in color while during Section D, blue smoky swirl pattern was shown. Lighting on Section A, C and D was dim and on all players. There were spotlights on the female and male singer during Section B while the rest of the players played in the dark. Spotlight

on the singers signified that they were the focus of the section. Aligned with the description of *Corak Air*: “with his dying breath, sending his final message via water ripples, of his love to his wife” (Arus Gangsa program notes, 2014, p.5), effects were made on the canvas through lighting to depict the sending of message in Section D. In order to create the visual effect of sending message, white circular image representing message and memories continuously move from the male singer to the female at the end of the song, while the male singer sang in solo with vocal accompaniment from other players. The images that constantly appeared signified the memories of love between the warrior and his wife returned home (Loh, personal communication, 23rd June 2017). The visual effect of Section D was shown in Figure 4.2.10.



Figure 4.2.10: Visual effect of Section D. 5’02” from *Corak Air*’s recording

4.3 *Return*

Return is a composition by Adilah Junid, one of the members of RIB. The description of this piece was written in *Arus Gangsa* program notes,

Return depicts the journey of water from the looming clouds that spatter raindrops to a torrential downpour that gathers in streams, dances through trees and down over rocks. Streams swirl into each other, currents cross and finally, water is returned to the calm, open lakes and sea (*Arus Gangsa* program notes, 2014, p.6).

Visualization of landscape through music is apparent in this piece; the music mimics the water in several forms, “from rain falling on leaves in the forest, to gurgling rivulets and peaceful waters” (*Arus Gangsa* program notes, 2014, p.6). Compositional ideas of *Return* might receive influence from the Balinese gamelan. It is common that Balinese gamelan compositions are sonic imitation of the “sounds, movements, and visual imagery of nature, real or imagined, in direct or abstract ways that may or may not be recognizable” (Sum, 2015). For example, *Merak Ngelo* (Peacock swaying from side to side) and *Cicak Megelut* (Gecko Embracing) were inspired by the movement of creatures while *Salju* (Snow) was composed after the composer experienced a winter season in Canada (Sum, 2015).

The video recording of *Return* used for analysis was taken from YouTube website. The URL of this piece was provided in Table 4.3.1.

Table 4.3.1: Information of *Return*

Item	Description
Title	<i>Return</i>
Composer	Adilah Junid
Source	YouTube
URL	https://www.youtube.com/watch?v=bmKYcNEUK3k

4.3.1 Musical Form, Tempo and Melodic Ideas

Similar to that of *Corak Air*, each section of *Return* that are different in terms of melody, tempo and play technique were jotted down for analysis. Data was tabulated in Table 4.3.2 below.

Table 4.3.2: Time and duration for each section of *Return*

Section	Time	Duration (seconds)	Description
A	0'35"- 0'59"	24	Imitation of melody
B	1'00"- 2'06"	66	Fast section
	2'07"- 2'39"	32	<i>Kotekan</i> style by <i>bonang</i>
	2'40"- 2'55"	15	Sudden slow down of tempo
C	2'56"-6'00"	184	Slow section

Return is the only analysis in this research that has purely gamelan music, without singing. It shows contrapuntal style with three layers of melodies flowing together. There is also appearance of interlocking melodies where each instrument plays a small phrase repetitively to form a complete melody. Balinese style is adopted, as interlocking melody is an emphasis on Balinese music. Hereby, instruments are divided into three parts, each playing different style of melodies. The lower pitch range instruments such as the *gong*, *slentum* and *kenong* provide fundamental bass with repetitive rhythm that act as coherent element for the other individual melodic lines.

The duration of each section varied. The piece starts with a short motif played by the *pekin* and is repeated by the *slentum*, *baron*, *demung*, and *bonang* in imitation. This approach elaborates the melody, like water ripples created by a drop of rain onto the water surface. Motif played by the *pekin* was shown in Figure 4.3.1.



Figure 4.3.1: Motif played by *pekin*. 0'37" from *Return*'s recording

During Section B, *kotekan* in Balinese music was adapted by the *bonang*. *Kotekan* is “high speed ornamental figuration” (Tenzer, 1991, p.44). Balinese gamelan mallets that are thinner and lighter were used by the *bonang* to produce short and detached sound to mimic the falling of raindrops. Sound produced by the *bonang penerus* (higher pitch *bonang*) and the *bonang barung* (lower pitch *bonang*) is short and muted, different from its' usual ringing feature. There is a sudden slow down in tempo during the end of Section B that leads to the slower Section C. *Kotekan* by the *bonang* was shown in Figure 4.3.2. The *pekin* played another melody that was contrapuntal to the *bonang*'s *kotekan*. It appears during 1'24" in *Return*'s recording. Contrapuntal melody by the *pekin* was shown in Figure 4.3.3.



Figure 4.3.2: Melodic transcription of *bonang*'s part from *Return*'s recording at 1'08''

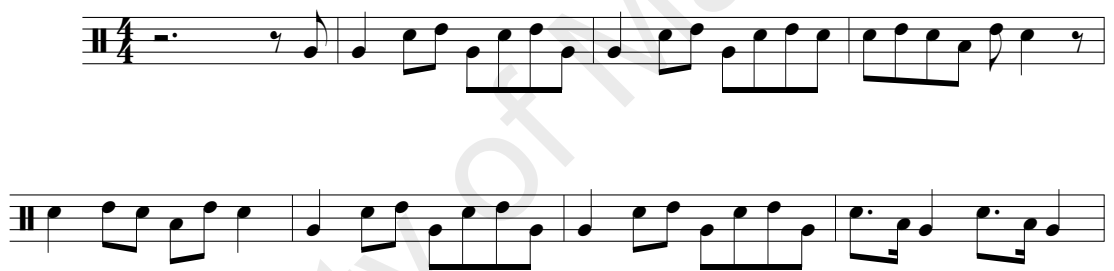


Figure 4.3.3: Melodic transcription of *pekin*'s part from *Return*'s recording at 1'24''

Section C was contrapuntal and the section started with melody from the *slentum*, which was then taken and repeated by the *demung*. Sutton (1991) mentioned that majority of the repertoire today consist of some singing and soft instrumentation, especially in those Solonese tradition. In order to let the softer instruments and vocal stand out, some of the compositions omit the *saron* family and the *bonang*. “In this case, *balungan* is sounded only on the *slenthem*” (Sutton, 1991, p.32). However, there is no vocal part in *Return*, it was believed that main melody was played by the *slentum* to make a vast contrast between Section B that was hustle and packed, with Section C that was slower and flowing. *Kotekan* by the *bonang* during Section B reappear at 3’57” till 4’30” in Section C. Figure 4.3.4 shows the summary of musical structure of *Return*.

SECTION	A	B	C	
	Intro	Climax	Closing	
TEMPO	slow	fast	slow	rit.
BPM	67	120	55	
Time	0’35”	1’00”	2’56”	6’00”
BPM= Beats per minute				

Figure 4.3.4: Summary of musical structure of *Return*

The tempo of *Return* on Section A is 67 beats per minute. It changed to 120 beats per minute in Section B with *kotekan* style of playing. Section C remains calm with 55 beats per minute. Figure 4.3.5 shows the tempo graph of *Return*.

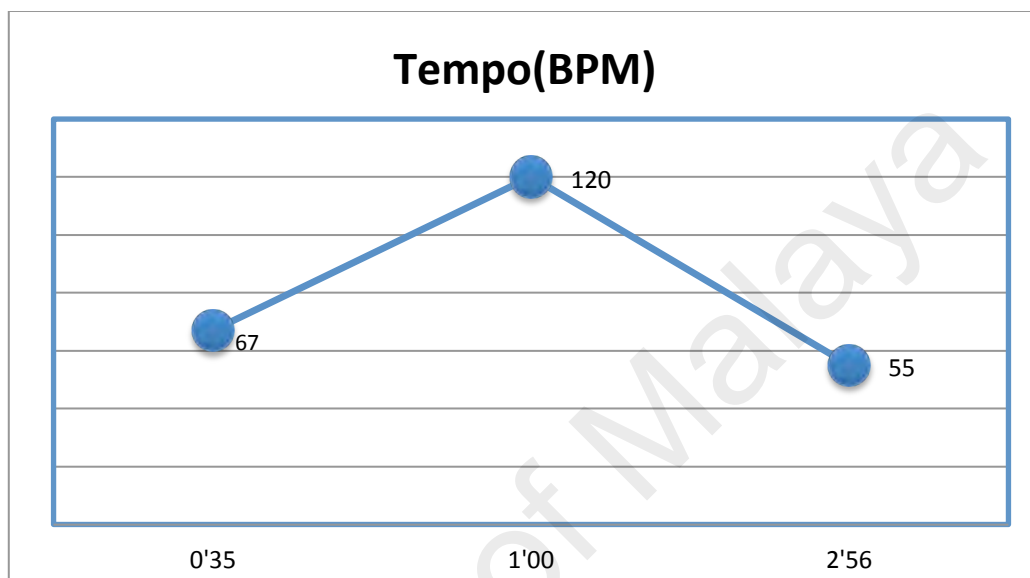


Figure 4.3.5: Tempo graph of *Return*

4.3.2 Role of Instruments

Return emphasize on exploring different timbre of the *bonang*. Apart from traditional *Joget* gamelan that one set of *bonang* is played by only one player, *Return* has two players playing one set of *bonang*, resulted in four players playing two sets of *bonang*. Moving away from its function as the melodic leader in traditional gamelan ensemble, the *bonang* plays the melody and accompaniment at the same time in *Return*. The syncopated rhythmic accompaniment by the *bonang* fills in the spaces between melodies while leaving enough space for other instrument to be heard.

In conventional gamelan music, the gong takes the role of time marker. “The gong plays the most infrequently- perhaps hitting every thirty-second *balungan* note” (Lindsay, 1979, p.33). However, the function of gong changes in *Return*, not only as a phrase marker but its syncopated rhythm provides groove to the whole song. Gong forms the colotomic structure that “act as the foundation for the other instruments’ part” (Spiller, 2004, p.77). Figure 4.3.6 shows the melodic transcription of gong’s part at 1’38”.



Figure 4.3.6: Melodic transcription of *Return*’s gong part. 1’38” till 1’53” from *Return*’s recording

“The *balungan* is played by the *sarons* and the *slentem*” (Lindsay, 1979, p.32). *Balungan* in Lindsay’s term refers to skeleton melody or the abstraction of the sound of the whole gamelan orchestra. In *Return*, the *slentem* take over the role of *gendang* to signal the change of tempo and time signature. “The drummer controls the tempo... signaling the entrance of elaborating instruments” (Lindsay, 1979, p.35). However, *slentem* signal the transition between Section A and B where there is a change in tempo

from comparatively slow to fast. *Slentum* plays four bars of repeating syncopated motif followed by main theme played by the *bonang*. *Slentum* also signal the start of Section C and end of the song. Figure 4.3.7 shows the transcription of motif played by the *slentum* at 0'59.



Figure 4.3.7: Motif played by the *slentum*. 0'59" from *Return*'s recording.

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4.3.3 Extended Techniques

The *bonang* uses a mixture of Javanese and Balinese gamelan mallet. Players switch mallets to create different timbre. It is also observed that the *slentum* uses Balinese buffalo horn mallet. Figure 4.3.8, 4.3.9 and 4.3.10 shows the mallet used by the *bonang* and the *slentum*.



Figure 4.3.8: *Bonang* players use Balinese gamelan mallets



Figure 4.3.9: *Bonang* players use Javanese gamelan mallets



Figure 4.3.10: *Slentem* player uses Balinese buffalo horn mallet

4.3.4 Stage presentation

The instruments in *Return* were arranged in a circle surrounding the canvas with the players facing one another, similar to the setting of *Corak Air*.

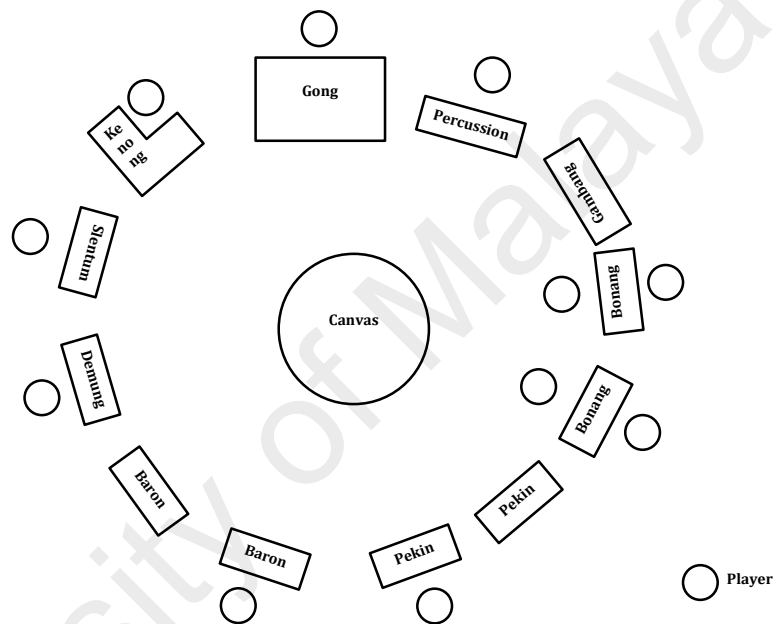


Figure 4.3.11: The layout of *Return*

It is observed that in *Return*, the production employed lighting and gobo to create effect that is metaphoric, to describe each section of the song. Different lighting effects were shone on the canvas that helps to illustrate the music. The idea of projecting images on the canvas was from the stage director Loh Kok Man (Ooi, personal communication, 30th May 2017). The canvas was being illustrated as a pond (Loh, personal communication, 23rd June 2017). Therefore, images of living substances inside

the pond such as frog, fish and seaweed were shown. During Section B, in order to illustrate the interlocking rhythm played by the *bonang*, gobo lighting of different sizes of blue circle twinkling projected on the canvas to imitate the raindrops. Moving images of blue koi fish, frog and seaweed described the harmony and liveliness in the pond.

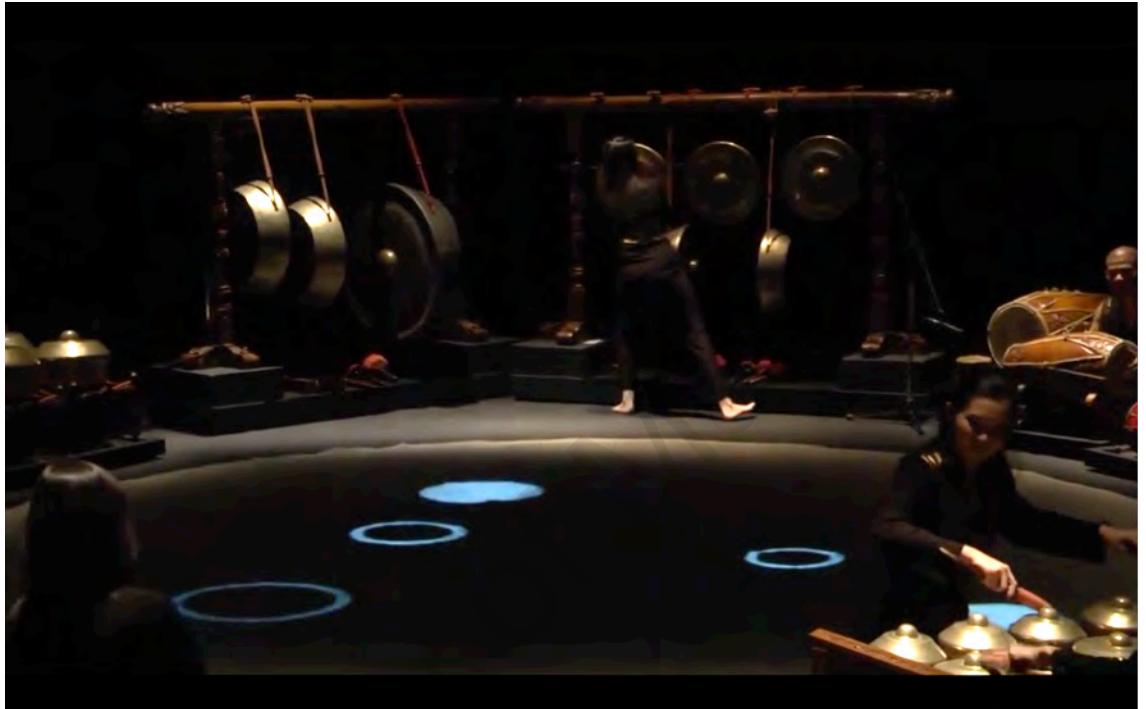


Figure 4.3.12: Metaphorical raindrops shown on canvas at Section B. 2'18" from *Return's* recording



Figure 4.3.13: Images of seaweed and frog as shown in Section C. 4'27" from
Return's recording

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4.4 *Mantera Nelayan*

Mantera Nelayan is one of the compositions by member and artistic director of RIB, Jillian Ooi. The composer states that she composed most part of this piece when she was under water, in a field trip to an island (Ooi, personal communication, 30th May 2017). The description of this piece was written in *Arus Gangsa* program notes,

This piece evokes imageries of the ocean and fishermen at work in the sea - pushing their boats off the beach at dawn, steering, sailing, heading for their fishing spots, pulling up empty nets and finally, the fishermen join their voices in a traditional mantra asking for bounty and for protection from the Spirits of the Sea. Parts of the lyrics are derived from actual mantras documented so well by Haron Daud in his *Ulit Mayang: Kumpulan Mantera Melayu* (1999). Some liberty has been taken with the words to avoid inadvertently invoking the spirits referenced in the mantra (*Arus Gangsa* program notes, 2014, p.9).

The video recording of *Mantera Nelayan* used for analysis in this thesis was taken from YouTube website. The URL of this piece was provided in Table 4.4.1.

Table 4.4.1: Information of *Mantera Nelayan*

Item	Description
Title	<i>Mantera Nelayan</i>
Composer	Jillian Ooi
Source	YouTube
URL	https://www.youtube.com/watch?v=HT-a-m5Kwag

Table 4.4.2 shows each section in *Mantera Nelayan*, that has changes in melody, tempo and instrumentation.

Table 4.4.2: Time and duration for each section of *Mantera Nelayan*

Section	Time	Duration (seconds)	Description
A	0'00" ----- 0'22"	22	Gamelan
	0'23" ----- 1'40"	77	Singing and gamelan
B	1'41" ----- 2'36"	55	Gamelan
	2'37" -----4'07"	90	Percussion and gamelan
C	4'08" ----- 4'18"	10	Gamelan, transition in time signature, sudden slow down
	4'19" ----- 5'05"	47	Percussion and gamelan
D	5'06" ----- 7'00"	113	Tutti singing, percussion and gamelan

4.4.1 Musical Form, Tempo and Melodic Ideas

The musical form of *Mantera Nelayan* was contemporary as there is no specific structure. The composer did not stick to any musical form when she composed for this piece (Ooi, personal communication, 30th May 2017). *Mantera Nelayan* incorporated Malay fishermen mantra with gamelan music. Section A shows the introduction of the piece, which begins with a short section by the gamelan and then male vocal comes in, which sang the first section of lyrics. The first melodic idea comes in the form of male vocal. The lyrics sung by the singer were adapted from Malay mantra and was composed by Jillian Ooi. Figure 4.4.1 shows the melodic transcription of the chorus in Section A. Lyrics were changed from the actual mantra because with reference to the original mantra, the members believed that if they utter the real names, it actually calls upon the spirit (Ooi, personal communication, 30th May 2017). The gamelan accompaniment in Section A was relatively slow and soft. There were only *gong*, *kenong* and Chinese cymbal that acted as the accompaniment for the male chorus. The

Chinese cymbal was used to produced sound resemble the sea waves. Repetition occurred within the section. Below shows the lyrics of *Mantera Nelayan* sung in Section A:

“Asal laut dari air; Asal air dari buih

Asal buih dari ombak; Asal ombak dari petir

Waiinaha wainnahu; Kupinta dari Langit

Kupinta dari Alun; Berkat laut” (Arus Gangsa program notes, 2014, p.9)

The figure shows a melodic transcription of the singing part in Section A, consisting of five staves of music. The music is written in bass clef with a 4/4 time signature. The lyrics are in Indonesian and are written below the notes. The transcription includes measure numbers 5, 9, 13, and 17. The lyrics are: "A - sal la - ut da - ri a - ir", "sal a - ir da - ri bu - ih", "A - sal bu - ih da - ri om -", "bak A - sal om - bak da - ri pe - tir Wai - i - na - ha wa - i - n -", "n - a - hu Ku - pin - ta da - ri la - ngit Ku - pin - ta da -", "ri a - lun Ber - kat la - ut".

Figure 4.4.1: Melodic transcription of singing part in Section A

Section B is contrapuntal with few lines of melodies flowing together. This section is purely gamelan music without singing. A short motif played by the *bonang baron* is taken over by the *bonang penerus* and the *kenong*. The *kenong* and *bonang* plays double notes to produce continuous harmonization and act as accompaniment for the melody. Melody is repeated in sequence by several instruments. There is a sudden slow down in tempo and transition in time signature to three times in Section C. Percussion is absent during the sudden slow down but reappear during 4'19". Section D is the closing section where members sung the lyrics below:

“Waiinaha wainnahu; Ikan baru aku seru

Umpan buruk umpan baru; Jatuh lubuk makan selalu

Wahai Mambang berkuku (Karnitin); Pahlawan Raja (Maharaja) di laut

Engkau jangan mengacauku; Dan juga apa perbuatanku (di laut)” (Arus Gangsa program notes, 2014, p.9)

In *Mantera Nelayan*, the role of instruments is different from the conventional gamelan. The gong acts as a melodic instrument as the composer tries to break the barrier to get a different feeling from traditional gamelan (Ooi, personal communication, 30th May 2017). Figure 4.4.2 shows the summary of musical structure of *Mantera Nelayan*.

SECTION	A	B	C	D
	Intro	Body	Body	Closing
TEMPO	slow	moderate	moderate	moderate
BPM	57	120	118	114
Time	0'00"	1'41"	4'08"	5'06" 7'00"
BPM= Beats per minute				

Figure 4.4.2: Summary of musical structure of *Mantera Nelayan*

The tempo of *Mantera Nelayan* increases by nearly two times from Section A to Section B. The singing part of Section A is free of time signature and the musicians control the tempo. Tempo of Section A is about 57 beats per minute. After a pause, the *bonang* starts playing and leads the music into Section B, which is 120 beats per minute. The percussion enters in Section C and brings the tempo slightly slower to 118 beats per minute, transition of time signature occurs. While in Section D, the tempo becomes slightly slower to 114 beats per minute. Figure 4.4.3 shows the tempo of *Mantera Nelayan* in each section.

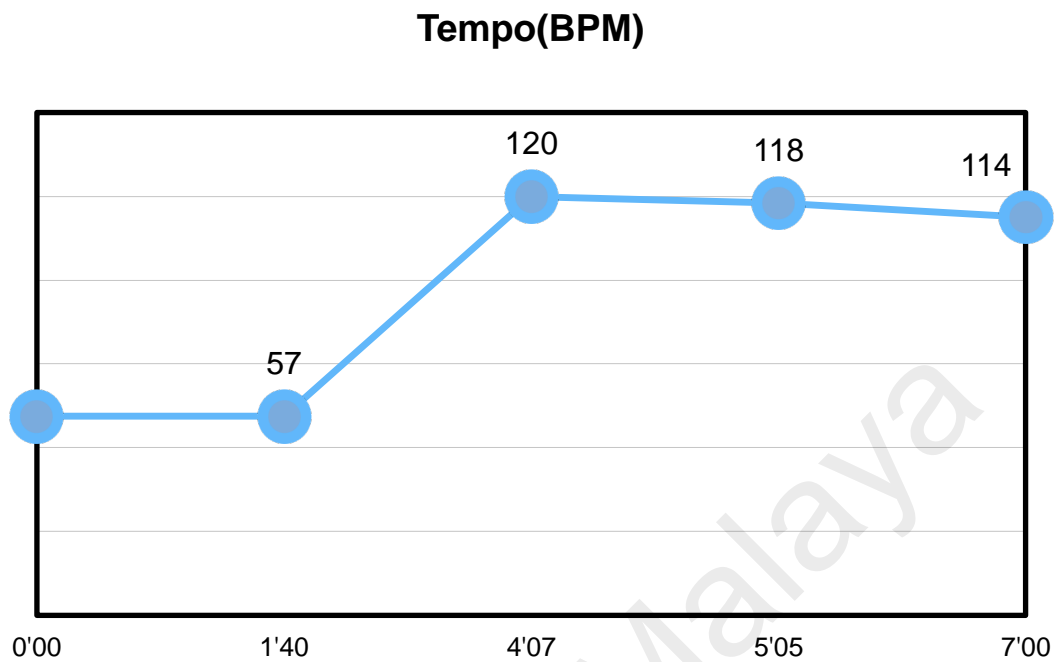


Figure 4.4.3: Tempo graph of *Mantera Nelayan*

4.4.2 Stage Presentation

The stage presentation of *Mantera Nelayan* is different from *Corak Air, Return* and *Hakikat Air*. For *Mantera Nelayan*, players were arranged to sit in blocks while singers stand one floor above the stage. The set up of the instruments in blocks is considered as part of the stage presentation (Loh, interview, 23rd June 2017). Players with puppet costume push their instruments out to the stage while one of the members stands in the middle of the stage to narrate the story of the song. The instruments are equipped with wheels to enhance the movement of players. Figure 4.4.4 shows the stage presentation while Figure 4.4.5 shows the stage layout of *Mantera Nelayan*.



Figure 4.4.4: Stage presentation of *Mantera Nelayan*

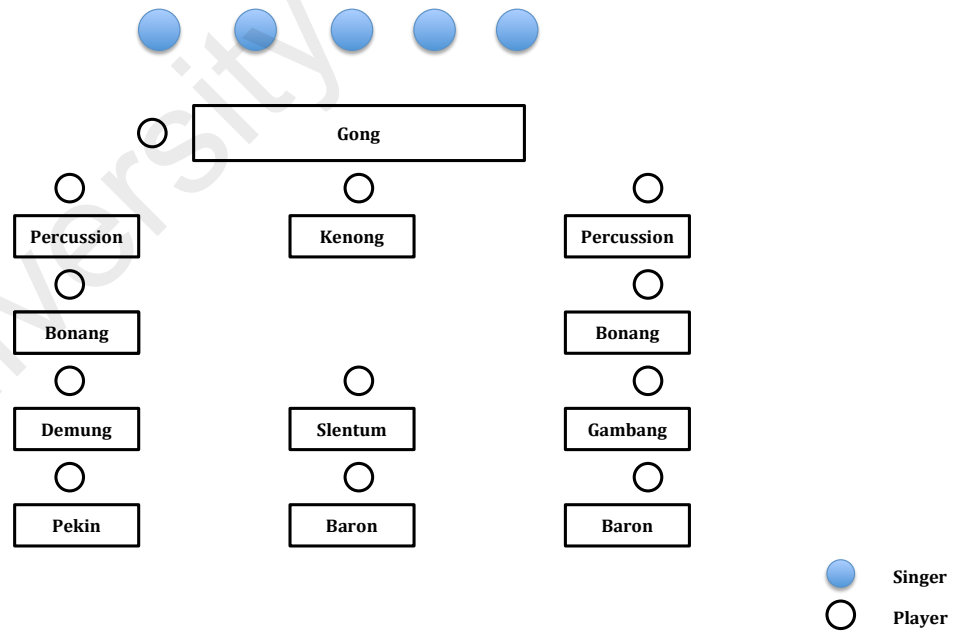


Figure 4.4.5: The layout of *Mantera Nelayan*

4.4.3 Costume

In *Mantera Nelayan*, the gamelan players become puppeteers who wear the sleeves of a human-size puppet dressed as fishermen or fishing village women to perform the piece. They are not able to look at their instrument directly as they are blocked by the human size puppet in front of their body and played from memory (Ooi, personal communication, 30th May 2017). According to Ooi, the players depend mostly on motor memory with occasional glance at the side of the puppet for visual confirmation of striking at the right place of the instrument. The idea of wearing puppet costume was suggested by the director Loh Kok Man, as he wanted new “faces” to perform *Mantera Nelayan* and at the same time gave audience a different visual effect (Loh, interview, 23rd June 2017). Loh imagined old folks playing this song, rather than young looking people (Ooi, personal communication, 30th May 2017).



Figure 4.4.6: Costume wore by players in *Mantera Nelayan*

4.5 *Hakikat Air*

Hakikat Air is one of the compositions by British composer Adrian Lee in 2013 for RIB's concert *Laras Gong*. It was replayed in *Arus Gangsa* because of its timeless quality and apt reference to water. The description of this piece was written in *Arus Gangsa* program notes,

The piece is structured as a song-cycle, where Stephanie Van Driesen and the chorus sing of Rumi's sublime vision of surrender to life, using the metaphor of water. The music opens in a solemn mode, with voice in cohesion with Javanese-style gamelan. Then an instrumental section driven by polyrhythms builds up to an ecstatic momentum. The final poem sung in chorus brings the piece to a stark, still and ritual-like close (Arus Gangsa program notes, 2014, p.6).

The video recording of *Hakikat Air* used for analysis was taken from YouTube website. The URL of this piece was provided in Table 4.5.1.

Table 4.5.1: Information of *Hakikat Air*

Item	Description
Title	<i>Hakikat Air</i>
Compose	Adrian Lee
Source	YouTube
URL	https://www.youtube.com/watch?v=1w2ynne4GgQ

4.5.1 Musical Structure, Tempo and Melodic Ideas

Time and duration for each section that has different elements in *Hakikat Air* were jotted down and labeled accordingly. Table 4.5.2 shows the data collected from the video recording.

Table 4.5.2: Time and duration for each section of *Hakikat Air*

Section	Time	Duration (seconds)	Description
A	0'54"-2'20"	86	Solo singing and gamelan
	2'21"- 4'07"	106	Singer start pulling the canvas
B	4'08"- 5'58"	110	Gamelan
C	5'59"- 6'45"	46	Solo singing and gamelan
			Solo singer start moving her instrument
	6'46"- 7'38"	52	Solo singing, echo singing and gamelan
			Echo singer start moving their instruments
	7'39"- 7'49"	10	Percussion solo
			Stage light twinkling
D	7'50"-9'00"	70	Gamelan (everyone plays in unison except for <i>kenong</i> , <i>bonang</i> and <i>gong</i>)
E	9'01"-10'22"	81	Tutti singing and gamelan
	10'23"-13'00"	157	Gamelan

Hakikat Air is structured as a song cycle. Song cycle is defined as a collection of related songs that form a single musical entity (Merriam Webster, 2017). This piece starts with singing by Stephanie Van Driesen, one of the members of RIB, with simple accompaniment by the gamelan. The gamelan players sit surrounding the singer, and she walks around the canvas while singing. On 2'21", the singer bend down and pulls the canvas towards her. She holds the canvas in her arms while singing the first section below:

“Duhai titik, fanakan diri,

Dan terima segenap Samudra

Duhai titik, rangkul kurnia ini,

Sejahtera dalam dakapan Segara.

Ah, siapa demikian bertuah? Titik dilamar laut semesta!

Dengan nama Ilahi, serah dan terima!

Beri setitik, ambil selautan mutiara.” (Arus Gangsa program notes, 2014, p.6)

The singer wraps the canvas around her arms. During 3’32”, she passes the canvas to the stage crew while holding to some high notes without lyrics and gracefully walks to her instrument.

On Section A, the *demung*, *baron* and *pekin* play in unison, with *bonang* playing syncopated rhythm. *Demung* and *baron* play with single stroke while *pekin* plays with double stroke. Figure 4.5.1 shows the melody played by *demung*, *baron* and *pekin* in Section A, which act as the accompaniment for solo singing.

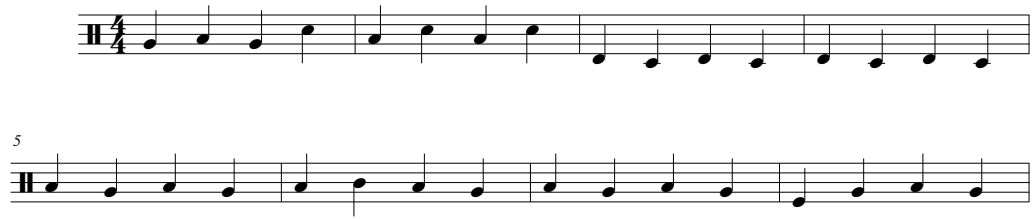


Figure 4.5.1: Melodic transcription of *demung*, *baron* and *pekin* part on 2'00''

There is an increase in tempo at the end of Section A, to signify the transition of the song into Section B. The percussionist made the transition clear when he doubles the drumbeats to increase the energy of the section. Section B is pure gamelan music with no singing. The melody played by the *slentum* and *saron* family is repeated. Figure 4.5.2 shows the melodic transcription of the unison part by the *slentum* and *saron* family. This melody is repeated in Section E during 7'52'' from *Hakikat Air*'s recording.

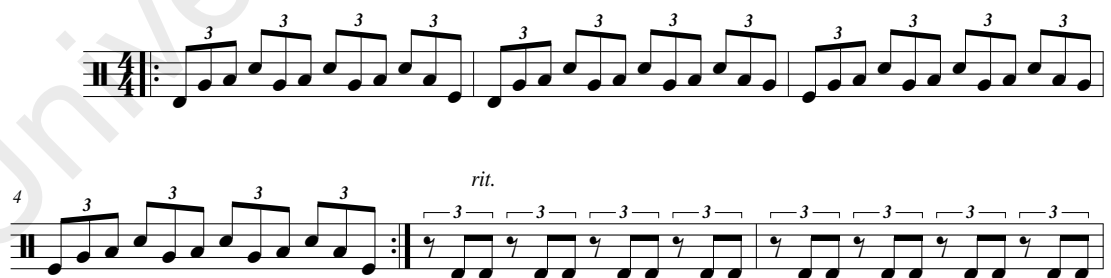


Figure 4.5.2: Melodic transcription by *slentum* and *saron* family during 4' 10'' from *Hakikat Air*'s recording

During Section C, there is mobile stage presentation. Players start to move their instruments towards the middle of the circle. It starts with the *slentum* players moving and singing solo part. Then, the *demung*, *baron*, *pekin* and *bonang* join in as echo singers while moving their instrument around.

On Section D, the players that move their instruments around in earlier section are now back to their original position. There is a slow down at the end of section D. The gong players hit the lowest note to signify the end of Section D and the beginning of Section E. The *demung*, *baron*, *pekin* and *slentum* play the melody in unison.

There is a *tutti* singing part at 9'25". The song ends in Section E that has only gamelan music. Below shows the lyric sung by the members at 9'25" in Section D:

"Melangkahlah kau ke telaga.

Bak bumi dan bulan berputar,

Berlegar sekitar ain tercinta.

Segala memancar dari pusat." (Arus Gangsa program notes, 2014, p.6)

SECTION	A	B	C	D	E
	Intro	Body	Climax	Recap	Closing
TEMPO	slow	moderate	fast	slow rit.	slow
BPM	58	72	144	70	60
Time	0'54"	4'08"	5'59"	7'50"	9'01" 13'00"
BPM= Beats per minute					

Figure 4.5.3: Summary of musical structure of *Hakikat Air*

The tempo of *Hakikat Air* are moderate in Section A, B, D and E. During Section A, the singer controls the tempo causing the structure to be free and *ritardando* appears frequently. The average tempo for Section A is 58 beats per minute. While in Section B, when the instruments play in unison, there is apparent dynamic change. The average tempo for Section B is 72 beats per minute. During Section C, where climax of the song occurs, the average tempo is 144 beats per minute. Section D and E are slow section with an average of 70 and 60 beats per minute. Figure 4.5.4 shows the tempo graph of *Hakikat Air*.

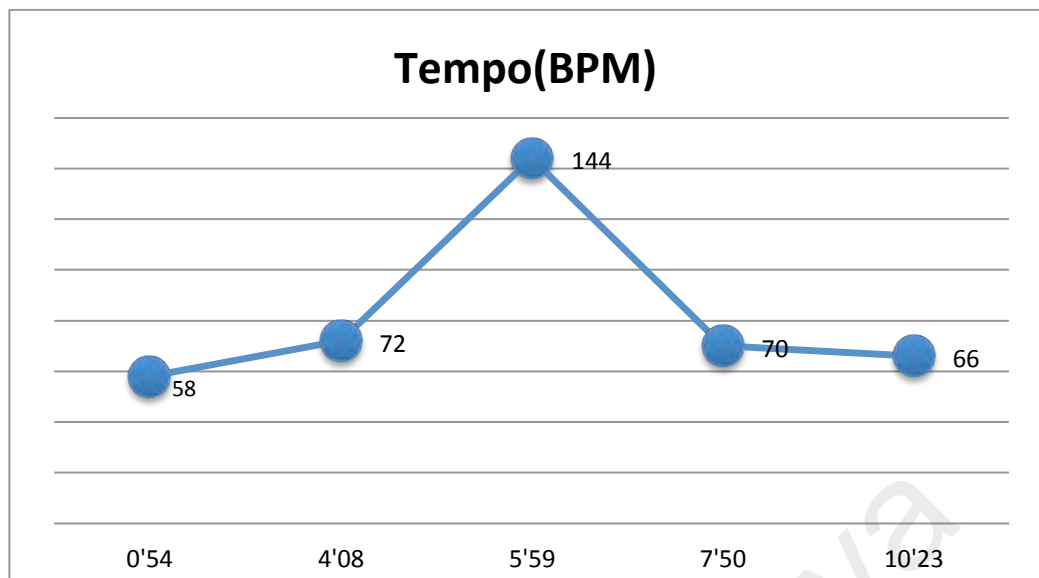


Figure 4.5.4: Tempo graph of *Hakikat Air*

4.5.2 Stage Presentation

The stage presentation of *Hakikat Air* is similar to that of *Corak Air* and *Return* where members sit in a circle surrounding the canvas. Yellowish light with grey smoky pattern was shone on the canvas. Figure 4.5.5 shows the stage presentation of *Hakikat Air*. The singer narrates the introduction of this piece before the performance. She stood in the middle of canvas and sang the first part of the lyrics in Section A. Before entering Section B, the singer bend her body down and pulls the canvas into her arms. The action of keeping the canvas signifies the ending of first half of the performance (Loh, personal communication, 23rd June 2017). Figure 4.5.6 shows the image of singer keeping the canvas.

At Section C, where there was mobile stage presentation. Players moved their instruments towards the middle of the stage. At 7'39", the stage light went off suddenly and twinkling spotlight shone on the percussionist, signifying his percussion solo (see

figure 4.5.7). The players moved their instrument back to the original position during the percussion solo. Movement of players visualized the end of Section C and gave dynamic to the stage (Loh, personal communication, 23rd June 2017).



Figure 4.5.5: Stage presentation of *Hakikat Air*



Figure 4.5.6: Singer pulling the canvas while singing during Section A. 3'20" from *Hakikat Air*'s recording



Figure 4.5.7: Lighting during percussionist solo at Section C

4.5.3 Extended Technique

At the beginning of Section E, the *slentum* and the *demung* used double mallet to strike two notes and to roll on the instruments. The technique is similar to how drummers used two drumsticks to roll on the cymbal. On top of the rolling of the *slentum* and *demung*, which produces a sustaining low pitch sound, the *gambang* and *bonang* players knock on a metal bar with *bonang* mallet to produce a high-pitch tune.

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4.6 Instrumentation

The four performances selected for analysis has similar instrumentation. The piece *Corak Air*, *Mantera Nelayan* and *Hakikat Air* have same instrumentation while *Return* has different one. The difference in instrumentation is that *Return* does not include *gambang* in the composition and use two players for each *bonang penerus* and *bonang baron*. In percussion section, the main instrument that appears mostly in every performance is the Malay *gendang* and *kesi*. Table 4.6 shows the number of players playing each instrument in different pieces.

Table 4.6: Instrumentation of selected pieces in *Arus Gangsa*

Name of Pieces	<i>Corak Air</i>	<i>Return</i>	<i>Mantera Nelayan</i>	<i>Hakikat Air</i>
Instruments	Number of players			
<i>Bonang Penerus</i>	1	2	1	1
<i>Bonang Baron</i>	1	2	1	1
<i>Saron Demung</i>	1	1	1	1
<i>Saron Baron</i>	2	1	2	2
<i>Saron Pekin</i>	1	1	1	1
<i>Kenong</i>	1	1	1	1
<i>Slentum</i>	1	1	1	1
<i>Gambang</i>	1	X	1	1
Gong	1	1	1	1
Percussion	2	2	2	2

X= absent from the song

4.7 Discussion

From the analysis, it is found that the music composed is generally polyphonic, contrapuntal and interlocking. Each instrument plays a role in building a complete melody. Compared to other contemporary compositions, the melodic ideas of these four compositions are clearly heard. Although gamelan is classified as a percussive instrument, artistic director of RIB Jillian Ooi states Malay gamelan is a very melodic one. She thought “contemporary musicians usually hit it like a drum but our Malay style of traditional tunes are very beautiful” (Ooi, in Aref Omar, 2014).

In *Corak Air*, voices act as a coherent component in linking all the section together. Musical form for the compositions is not restricted as composers focus in exploration of timbre and rhythmic figuration. However, *balungan* and *gongan* are still observed in contemporary composition to preserve the feeling or *rasa* of gamelan music. From the four compositions, it is observed that function of every instrument could be interchangeable. For example, in *Return*, the *slentum* take the role of drummer to act as the transition of tempo and to signify the entrance of new section. The important function of drummer in the ensemble is to keep the tempo to fill in the melodic spaces and to intensify the music scene by speeding up or doubling the beats.

Analysis of the data reveals that RIB took gamelan a step forward with new innovative ideas that contribute to theatricalized gamelan, adding more visual features for enjoyment. The main theatricalized elements used in *Arus Gangsa* based on the four performances is the use of narration, puppetry, stage presentation and extended technique. Narration of the story “should be seen as a form of ‘dramatic’ performance as they centre around the dynamic of the central active and less active observers, and also essentially involve not only the ears but the eyes” (Gunnell, 2006, p.9). Narration before every performance in *Arus Gangsa* provides audience an image of the music and

therefore visualization of the music is made easier. The use of human-size old folks puppet in *Mantera Nelayan* to replace the appearance of the young looking members is a new approach in gamelan performances. Gamelan is commonly used as the accompaniment for puppet shadow play but RIB combines these two elements: gamelan and puppetry to create a new cultural hybridized performance.

Stage presentation is also one of the features that contribute towards the development of gamelan theatre. In *Corak Air*, *Hakikat Air* and *Return*, the players are presented in a circular setting where everyone sits in a circle and surrounding a big round canvas. Gobo lighting and images visualizing the music was shone on the canvas, imagining the canvas as a pond that bears aquatic lives. Apart from visualizing the canvas as a pond, the stage director Loh Kok Man believes that gamelan music is an approach to converse with God; therefore circular stage presentation is created because he wanted a ritual-like formation (Loh, personal communication, 23rd June 2017). Different lighting design and images are applied to different pieces, in order to bring out the imagination of composers regarding their composition.

Besides visualizing the music, stage lighting that helps to feature soloist is rare in traditional gamelan as well. RIB make changes to feature a soloist in a theatrical setting where it differs from conventional gamelan that players share a common role in an ensemble. For example during *Hakikat Air*, there is a percussion solo in Section C at 7'39", the lighting is designated so that audience focused on the percussionist (see figure 4.5.7).

During the first half of the performance, songs were presented in circling layout. Music played fills up the circular space and musical cues and communication is made easier between the members. The special stage presentation of *Hakikat Air* happened during 2'20" and 6'00" in its recording. During 2'20", the singer pull the canvas and

holds it in her arm while singing. She pass the canvas to the stage crew during 3'30" when she finishes the first part of the lyric, to resemble a closing for first half of the *Arus Gangsa* production. During 6'00", there is mobile stage presentation where the members sang the chorus of the song and move the instruments within the circle.

Mantera Nelayan was presented during the second half of the concert. The layout was completely different. Players were arranged in a rank of three or two to form a rectangular layout. Puppets were used as a tool to represent the villagers in a fishing village in Kelantan, a place where the mantra comes from.

Extended technique used in *Arus Gangsa* includes large playing gesture and combination of Javanese and Balinese mallets in different pieces. Usage of different mallets is to explore different timbre of the gamelan. For example, *bonang* mallets are used by the *slentum* and the *demung* in *Mantera Nelayan* in order to get the sound that the composer imagined (Ooi, personal communication, 30th May 2017). It is observed that large and expressive playing gesture in gamelan theatre shows a big difference from that of traditional gamelan. Traditional gamelan is played in an elegant way that the arm of the players should remain close to the instrument (Nasir Hashim, personal communication, 10th April 2017). According to Yun (2011), these gestures are effective in communicating musical cues, as there is no conductor in the ensemble. Figure 4.7.1 shows the expressive gesture by *kenong* player in *Corak Air*.



Figure 4.7.1: Expressive playing gestures by *kenong* player in *Corak Air*.

The performances in *Arus Gangsa* combined music, narration, movement, puppetry and lighting in one performance that makes it different from conventional gamelan playing. Referring to Yun's (2011) research on RIB's gamelan theatre, research on *Arus Gangsa* shows more exploration on extra musical elements, especially on stage mobility and puppetry. *Monkey Business*, RIB's first gamelan theatre production in the year 2005 received feedback from two opposite ends. *Monkey Business* narrates personal stories of the members and it is to evoke contrasting reactions within a highly experimental gamelan performance (Yun, 2011). Similar to that of *Arus Gangsa*, *Monkey Business* had narration before every performance and the gamelan instruments were equipped with wheels for greater mobility.

RIB's second exploration on gamelan theatre was in the year 2007 in a production named *Alih PungGong*. *Alih PungGong* adapted the structure of *Bangsawan* theatre and was based on theme of feminism (Yun, 2011). *Arus Gangsa* shows the development of

gamelan theatre by RIB. In *Arus Gangsa*, the music composed was based on one theme. Visualization of music is more obvious with the aid of gobo lighting.

The costume wore by members was designed by Dominique Devorsine (Aref Omar, 2014). Female performers wore long sleeve black top with gold colored stripe on the shoulder and gold colored diamond shape on the middle and long black pants. Male performers wore sleeveless black tops with gold colored lining on the collar and arms. Performers were all bare foot, as they need to sit on the ground with legs fold together or sitting on a low seat.

Similarities and differences between the four pieces *Corak Air*, *Return*, *Hakikat Air* and *Mantera Nelayan* were shown in Table 4.7.1.

Table 4.7: Similarities and differences of the analysis subject

Items	Similarities	Differences
Form		<i>Hakikat Air</i> has structured song cycle
		<i>Mantera Nelayan</i> has free musical form
Texture	Polyphonic and contrapuntal	
Rhythm	Interlocking	
Melody	<i>Corak Air</i> , <i>Hakikat Air</i> and <i>Mantera Nelayan</i> had linear melody	<i>Return</i> has interlocking melody
Style		Four songs occupied different style
		<i>Corak Air</i> and <i>Mantera Nelayan</i> keep the sound of Malay gamelan
		<i>Return</i> adopt Balinese style gamelan
		<i>Hakikat Air</i> adopt Javanese style gamelan
Tempo	Rubato tempo	
Dynamic	Always changing	
Stage presentation	<i>Corak Air</i> , <i>Return</i> , <i>Hakikat Air</i> had circular layout	<i>Mantera Nelayan</i> has nine-block layout

CHAPTER 5 CONCLUSION

5.1 Overview

This chapter summarizes the issues and analysis of this research. This research looked into *Arus Gangsa*, one of the RIB's productions on gamelan theatre in 2014. Selected pieces such as *Corak Air*, *Return*, *Hakikat Air* and *Mantera Nelayan* were analyzed from two aspects: musical and extra musical elements. Data obtained from analysis were discussed and compared to traditional and contemporary gamelan music. Comparisons were made to examine the development of gamelan theatre from traditional and contemporary gamelan music. Also, to discuss whether the creation of gamelan theatre by RIB received any influence from other form of contemporary gamelan music.

5.2 Summary of findings

In this study, some literature concerning the contemporary gamelan music in Malaysia, Indonesia and the West were reviewed. Matusky (1985) writes on the major instruments and form of Malay traditional music. The article provides an overview on history, form and instrumentation of traditional Malay gamelan. Matusky (2002) also wrote about the performances of contemporary gamelan music by RIB that premiered in 2001. On the other hand, research by Sumarsam (1995) and Spiller (2004) on historical background and development of Javanese gamelan provides adequate information for researcher to differentiate both Javanese and Malay gamelan.

Contemporary gamelan music in the West, especially by American composer such as Lou Harrison and Jody Diamond involved exploration on the gamelan tuning and

finding alternative for the musical texture and structure. Western composer also try to cooperate Western instruments with the gamelan. For example, compositions by Lou Harrison from 1978: *Threnody for Carlos Chdvez* for viola and gamelan, and *Main Bersama-sama* for French horn and gamelan (Miller & Lieberman, 1999).

Contemporary gamelan music in Indonesia focused on creating something new from tradition, including mass instruments groupings, extended playing techniques and improvisation on its musical structure (Tenzer, 2000). Contemporary gamelan music written by Malaysian composers usually involved cross cultural instrumentation and musical elements and in developing new musical style that has Malaysian identity. Matusky (2002 & 2004) gave examples on Malaysian contemporary gamelan music composed by Sunetra Fernando, Michael Veerapen, Suhaimi Mohd Zain and Tan Sooi Beng.

Recent contemporary gamelan music by Malaysian composer that involved cross-cultural instrumentation will be *Anggun* composed by Akmal Muhammad in 2015. *Anggun* featured Chinese traditional instruments: *Guzheng* and *Pipa*, and the gamelan. This repertoire was premiered in *Pertandingan Muzik Gamelan Melayu Peringkat Kebangsaan* (National Malay Gamelan Music Competition) that held at Terengganu in 2015. It is also observed that contemporary gamelan ensemble in Singapore and Indonesia uses the gamelan to play popular music such as *Marry You* by Bruno Mars, *Rolling in the Deep* by Adele, *Despacito* by Luis Fonsi and Justin Bieber. The Malay gamelan appeared in one of the performances by Jinbara (Malaysia rock band) in *Pentas IKON*, a music television program by Malaysia broadcasting television network ASTRO in 2007. *Kasihnya Laila* was the pop song performed by Jinbara with the accompaniment of pop band, and gamelan ensemble from Universiti Teknologi MARA (UiTM).

Besides innovation and creativity on the music, visualization became more and more important in performing arts. There are many gamelan ensembles that have theatrical elements in their performance. For example, several gamelan ensembles in Malaysia institution such as *Gema Gamelan Waqafan (GEMAWAN)* by *Kolej Islam Sultan Alam Shah* (Sultan Alam Shah Islamic College) add extra gesture into their playing, in the piece *Cinta Si Penyamun* and *De' Ignition*. However, the gesture was only restricted in making the performance more interesting and it did not carry any metaphoric meanings or help to visualize the music like in *Arus Gangsa*. Academic writings on other theatricalized performances by Foley and Kahn (2012), Leng (2013), Loo and Loo (2012) bring about the research questions on theatricalized performance by RIB.

Findings on selected pieces in *Arus Gangsa* showed that contemporary gamelan music by RIB reverse the idea of simplicity in traditional gamelan. Thus, the study gathered that by looking at RIB, gamelan theatre features elements such as performing gamelan on a designated stage presentation and layout. Stage presentation is important to distinguish the performances from concertized contemporary gamelan or gamelan theatre. For example, *Hakikat Air* was an old composition by Adrian Lee and was premiered in *Laras Gong* concert in 2003. RIB had also performed it in Dewan Filharmonik Petronas (DFP) in 2004 and during Borneo World Music Expo in 2013. *Hakikat Air* performed in DFP was in concertized stage setting, and singer stand still on the right side of the stage facing audience. While in Borneo World Music Expo, the song was performed in concertized stage setting without gobo lighting. The piece *Corak Air* was also performed by RIB at Georgetown Festival 2017, in concertized stage setting and without visualization of music through images and lighting design.

The stage director Loh Kok Man plays an important role in structuring and presenting the performance to the audience. The design of images and gobo lighting

projected on the canvas for *Corak Air* and *Return* is metaphorical and helps in visualization of the music. For example, raindrops appear on the canvas when the *bonang* played in *kotekan* style. It helps in telling the audience that the *bonang* are mimicking the sound where raindrops hit the rocks. The stage presentation in *Arus Gangsa* is one of the important factors that distinguished RIB from other contemporary gamelan ensemble.

The application of props and puppetry that suggest a scene behind the music also contributes to gamelan theatre. However, *Arus Gangsa* is not viewed as a theatre performance. Each piece can be viewed as an individual entity that is put together in a performance under one theme. Overall, *Arus Gangsa* does not have a story line and music shall remain as the main character of the show (Ooi, personal communication, 30th May 2017). *Arus Gangsa* is a musical performance with addition of theatrical elements to help in visualizing the music. The term “gamelan theatre” was labeled by RIB as they put theatrical elements into gamelan music and tried to explore possibilities of gamelan and theatre.

Musical ideas and motif were expanded and developed into more complicated parts. Yet, the harmonization of the gamelan sound was preserved. Music composed by the RIB had complex rhythmic figuration, were flexible and had great tension. The adaptation of extended playing techniques; sudden tempo and dynamic changes become a characteristic in most of the composition. Each instrument had a fixed role in the traditional gamelan, melody were played in unison, with improvisation on the *bonang* or *gambang* for the Malay gamelan. In terms of Western music theory, the note value of traditional Malay gamelan music is usually one beat for the *balungan* and half beat for *pekin* and *gambang* that play in double strokes. On the other hand, contemporary

gamelan music is free to use any combination of rhythm: triplets, semiquavers, and dotted notes were found in the pieces by RIB.

5.3 Suggestions for Future Research Questions

Research in contemporary gamelan music in a Malaysian context is wide as the compositions are creativity of the composers and players influenced by social and cultural factor. There are many possibilities in contemporary music as the compositions are not restricted in terms of musical structure, style, time signature, tempo and dynamic. Cross-cultural hybridization in music is also possible. Research on aesthetic and musical background of the composer could be done as the composition could be influenced by composer's musical knowledge and aesthetic background.

Further research of contemporary gamelan music in social or cultural context is essential documenting the development of local performing arts in Malaysia. Using gamelan as an instrument in playing popular music, and combining gamelan with Western instruments in performance had become a trend in Malaysia and this may invite scholarship. This phenomenon give rise to the research questions on how and why traditional instrument had changed its role to fit into the globalized society.

5.4 Conclusion

This qualitative study achieve its goal in answering the three research objectives: 1) to study the background of Rhythm in Bronze in Malaysia, 2) to analyze hybridized musical performance of gamelan theatre through selected performances in *Arus Gangsa* production and 3) to discuss the cultural hybridization of *Arus Gangsa* and similar works from Rhythm in Bronze in the genre of contemporary gamelan music. The study contributes in a way by documenting the stage presentation, instrumentation, musical structure, tempo, melodic ideas, extended technique and costume used in four works of *Arus Gangsa* by RIB. The sketching of stage layout that was provided in Chapter 4 serves as an example or guideline for other gamelan ensemble that would like to experimenting with new formation or sound.

As a summary, RIB delivered a concept 'gamelan theatre' and to the author, it is a new phenomenon that develops the gamelan-performing genre to another extent. RIB shows that combining theatrical elements in gamelan performances is made possible. To act and to perform music at the same time is a huge challenge for musicians. It delivers music more efficiently through images and promotes both performing art: gamelan music and theatre. *Arus Gangsa*, with its large playing gesture, narration before every piece, application of costume, different stage layout, lighting, images on canvas and acting marked a huge development in Malaysian contemporary gamelan music.

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