

A Cross-Cultural Composition with Myanmar and Western Musical Languages

WAI HIN KO KO

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR MASTER OF FINE AND APPLIED ART IN MUSIC AND PERFORMING ARTS FACULTY OF MUSIC AND PERFORMING ARTS BURAPHA UNIVERSITY 2021 COPYRIGHT OF BURAPHA UNIVERSITY Wai hin Ko ko

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The Thesis of Wai Hin Ko Ko has been approved by the examining committee to be partial fulfillment of the requirements for the Master of Fine and Applied Art in Music and Performing Arts of Burapha University

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In the 21st Century Myanmar, *mahar gita*, a once highly regarded and sophisticated form of Myanmar music, has fallen out of favor. No new *mahar gita* has been composed since Daw Saw Mya Aye Kyi, the last great *mahar gita* composer, passed away in 1968. There is little scholarly research and public interest has been on decline since Colonial times.

This study aims to address this and grow interest in *mahar gita* by 1) bringing *mahar gita* into today's contemporary context via cross-cultural composition, and 2) through providing transcribed scores and music analysis for younger generations of Myanmar musicians. The musical elements for this research are collected from four sources: 1) books and documents; 2) interviews with the *mahar gita* experts; 3) study with Myanmar music educator; and, 4) transcription of key works.

There are two key results. Firstly, a comprehensive discussion of the musical elements of the *pat pyoe* derived from the systematic analysis of the transcribed score of *Hman Ya Wai*, a *pat pyoe* song. Secondly, *pat pyoe* musical elements are combined with Western musical elements in *Kyatthayay*, a cross-cultural composition that brings *mahar gita* into contemporary context.

This study provides the starting point for future research that might include analysis other highly regarded *pat pyoe* songs for their musical characteristics or the study of the idiomatic playing techniques and orchestration of Myanmar traditional instruments.

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Chapter I Introduction

1.1 Statements and Significance

There are so many musical styles that Myanmar composers can experiment with today, thanks to easy access to the world's music via the internet and social media. In contrast, traditional Myanmar music has fallen out of favor including *mahar gita*, a genre that enjoyed high regard prior to Colonial times but today is rarely performed and has had little scholarly attention.

As a Myanmar contemporary music composer, I am interested in how the traditional Myanmar style of *mahar gita* can become a living art among the young generations. In this thesis, I undertake analysis of this style and argue that composing a cross-cultural piece with the musical elements from *pat pyoe*, a subgenre of *mahar gita*, alongside Western contemporary music may help young musicians in Myanmar relate to this musical genre in a modern context. I believe that this highly artistic and valuable musical style could be re-enlivened if more composers had the resources and social permission to creatively explore this music. This project is an important step in this direction.

1.1.1 A Brief Introduction to Mahar Gita

Mahar gita, literally translates as "great music" and is used to describe ancient songs of Myanmar and are rooted in poetry. *Mahar gita* songs were mostly composed by the court musicians who served the kings of Myanmar and the upper classes. The earlier songs of *mahar gita* were called "*than yoe*," which literally means "simple tune." During the *Konbaung* Dynasty (A.D. 1752-1885), a new *mahar gita* genre emerged called "*than san*," which translates as "unusual sound." *Than san* is the basis for *pat pyoe* style of *mahar gita* discussed in this thesis (Swe 2018).

1.1.2 A Brief Introduction to Pat Pyoe

Pat pyoe style of *mahar gita* was invented by Myawaddy Min Gyi U Sa (A.D. 1766-1853), a composer, playwright, general, court minister, and diplomat under five successive kings during the *Konbaung* Dynasty, A.D. 1752-1885 (Myint 1990). It combines fragments and ideas from previous genres of *mahar gita*, with new musical elements and structures. One such addition is the prelude of *pat lone* (small drums from the circle drum set which was not previously used in Myanmar Traditional Orchestras). The name *pat pyoe* means "starting with *pat* (small drums)" was coined to differentiate this style from previous forms of *mahar gita*.

1.1.3 The Decline of Mahar Gita

British Colonization in 1885 brought about both the exile of King Thibaw and the dismantling of old structures of musical patronage under which *mahar gita* had flourished (Amar 2004). All the royal musicians of the Mandalay Palace lost their positions. Many of them failed to make a living as musicians outside of the palace as citizens or non-governmental individuals were not accustomed to hiring musicians for entertainment nor could they afford to hire them for shows. Consequently, these court musicians and composers found themselves in a dire situation (Amar 2004).

The oral tradition of *mahar gita* continued to decline under foreign rule with fewer generations interesting in learning this tradition. The last known composer of *mahar gita* is Daw Saw Mya Aye Kyi (A.D. 1892-1968). In 1967, she publicly voiced her worries about the future of this genre given the lack of sustained commitment from the young generations in upholding this tradition (Amar 2004).

Today *mahar gita* is rarely heard apart from at weddings. On-stage or concert performances of *mahar gita* are extremely rare. Daw Khin Soe Win, a professional *mahar gita* vocalist, laments that few people listen to or enjoy performances of *mahar gita* except for "*Atine Mathi Mahar Awbar Bwe*" (also known as "*Akhar Daw*"), which is still played as a wedding song (Win 2019).

1.1.4 Excessive Focus on Preserving Mahar Gita

Since the 1950s, there has been a focus on preserving *mahar gita* in its traditional form as a kind of heritage artifact. In this view, traditional genres should not be modified, modernized, or distorted by mixing with other musical elements and by rearranging with a new structure and style. The concern being that Myanmar music will easily be overwhelmed by other popular musical practices, like recklessly adding Western chords and rhythm structures of popular music to *mahar gita*.

Lu Du Daw Amar urged the new generation of performers to present Myanmar classical music without distorting its original characteristics and essence (Amar 2004). Daw Saw Mya Aye Kyi was also worried that there were chances *mahar gita* might be modified and impacted by exotic musical elements (Amar 2004). A notable exception is Daw Khin Soe Win who encouraged a new creation or recreation of *mahar gita* in an appropriate way while remaining opposed to the idea of blending Myanmar classical music with 1970's disco style (Win 2019).

However, the predominant view has been preservation and protection. This attitude was made explicit in the 1950s when a committee was formed at the national level to unanimously decide the standardization and preservation of *mahar gita*. Due to their efforts, a government authorized collection of *mahar gita* was published. This collection has had a considerable influence on Myanmar traditional musicians, who have overwhelmingly chosen to keep *mahar gita* in its traditional form instead of creating new pieces.

1.1.5 Obstacles for Young Generations in Performing Mahar Gita

Two of the major obstacles in learning *mahar gita* are 1) the lack of reliable scores and 2) a top-down government-led approach to the revitalization of this artform.

The publication of a *mahar gita* national standard in the 1950s did not include music notation. In the government-led meetings, the participants focused exclusively on lyrics and syllables. There were aggressive brawls among the musicians in the committee over the controversial versions (Htut 2018). However, nobody notated the pieces into the staff notation system, which would have been a great help for the next generations of musicians.

As some *pat pyoe* can be 30 minutes long, the lack of reliable scores or notation is a major impediment to learning these pieces and creating new genres of *mahar gita*.

Since the publication of this national standard, some traditional musicians have attempted to transcribe some *mahar gita*. However, the transcribed scores are typically incomplete, do not accurately capture the expressive character of the music and mistakes abound due to a lack of knowledge of Western notation on the part of the transcribers. Most existing scores are a compromise. They transcribe the instrument parts without the vocal part of the singer. See, for example, U Shoon Myine's transcription of four *pat pyoe* (Myine 2000). This may be because the *mahar gita* singer typically improvises music based on the basic melody.

In 1993, the Myanmar Government started sponsoring *mahar gita* competitions nationwide in a bid to revive Myanmar classical music including *mahar gita*. They were not as successful as expected. Daw Khin Soe Win, who had served as a judge at those competitions for 20 years, noted that young candidates memorized and performed few *mahar gita* songs, and even then only for the competitions. They did not pursue this artform post-competition (Win 2019). Dr. Su Zar Zar, who won several awards at these competitions, commented on the failure of this initiative, saying these contests ran not for the sake of *mahar gita*, but only because of the Government policy (Yee 2020). The outcome may have been very

different if innovation, experimentation, and new composition were encouraged as part of this competition.

1.1.6 Approaches to Mahar Gita Today

1.1.6.1 Problems with Pop-Hybrid Mahar Gita

Today Myanmar composers such as Myint Moe Aung are experimenting with incorporating elements of *kyo* songs, a subgenre of *mahar* gita, into pop music. Typically, this involves taking a melody from *mahar* gita and decorating it with chords and rhythms from Western popular music harmony. While this may help with popularizing the genre, I argue that little of *mahar* gita remains in these songs as the texture and harmony of Western pop ballads are completely different from that of *mahar* gita.

A similar problem emerges in Diramore's Western string ensemble arrangements of *yodayar* song (*Yway Tanayar*), a subgenre of *mahar gita*. Ignoring the heterophony characteristic of *mahar gita*, these arrangements score the same melody on every instrument, flattening the texture and harmony. Both attempts are not even close to creating new repertoires based on *mahar gita*.

1.1.6.2 Innovating with Tradition: Model of the Pagoda

I argue that it is essential to study the texture and the original harmony of *mahar gita*, not just its melody, to innovate with this tradition. I use the model of the Buddhist pagoda, which provides a metaphor of how a new repertoire of *mahar gita* might be created while preserving older elements.

In the Buddhist culture in Myanmar, the pagoda is built to enshrine the relics of the Buddha himself. In some cases, different religious items that are placed inside the brick structure. Since the pagoda is considered scared, people who later renovate it avoid demolishing the old site. Instead, they built another layer over it so that they can add their good karma to it, without losing the work of the previous donor.

I adopt this approach with my thesis composition *Kyatthayay*, which is a hybrid of *pat pyoe* and Western contemporary music. Like the renovated pagoda, the authentic nature of *mahar gita* is decorated with the outer layer of Western music, keeping the original elements and nuances of the former. These include 1) flexibility of rhythm; 2) frequent changing tempo using accelerando, ritardando, fermata and rubato; 3) sudden changing of unusual meters to create the shape of a long melodic phrase with melisma; and, 4) the distinct texture and form of *mahar gita*. Elements of Western music are added to the frame to create this hybrid piece. For example, I use extended techniques of Western contemporary music with new harmonies based on the Burmese scales to create heterophonic and polyphonic textures. I also use specific tuning systems, micro-tonality, and non-western harmonization systems, which contribute to the hybridization of Western and Myanmar musical traditions.

I believe that the musical elements of *mahar gita* can be integrated into the Western compositional languages as a new presentation of the unique traditional form. For many years, most Myanmar musicians have only treated *mahar gita* as a historical document. My creative research shows that Myanmar traditional music can be integrated into a contemporary new hybrid composition, that promotes Myanmar cultural heritage to the world.

1.2 Objective

The Purpose of Creative Research is stated as follows:

 To compose *Kyatthayay*, for the *saung*, the *pattala*, the *maung*, and the viola with the musical elements of *pat pyoe* and Western Contemporary music.

1.3 Contribution to Knowledge

Although there are about a dozen books and a few articles on Myanmar music, references in English that explain the music theory, compositional structures, and nuances of Myanmar music are rare. This research introduces *mahar gita*, its identity, characteristics, nuances, and its history to the reader. Secondly, it provides transcriptions of *pat pyoe* songs, including detailed rhythmic and expressive nuances and a vocal part, which will be invaluable to those wishing to study this genre including composers, musicians, and scholars. Thirdly, it offers a step towards restoring Myanmar's traditional music to a living creative tradition within the global 21st Century multicultural world.

1.4 Scope of the Study

This study focuses on the *pat pyoe* genre of *mahar gita* for the purpose of creating a new hybrid musical work combining *pat pyoe* and Western contemporary music elements.

I chose *pat pyoe* because it is rich in Myanmar musical elements from the *mahar gita* tradition and neighboring countries. Since there are hundreds of *pat pyoe* songs, I selected one song to analyze in its entirety (*Hman Ya Wai* is analyzed in chapter 4) and fifteen songs to analyze in fragments (see Appendix C for analysis of *Myine Yan Shwe Hlian, Tharakar Kyay Nge Doe, Pan Tathin Thin, Hnyin Lay Ga Thway, Mya Maung Maung, Myine Chay Sone Thar, Than Yan Thar Kyu Bar Dot, Nyoe Nyoe Hsai Hsai, Bone Pyan Nay Nan, Htun Lin Hlyan Latt, Hkwar Pyar Thin, Chit Tha Mya Go, Phyay Naing Baung, Yawein Daung Yin Pyan, and Hmine Pyar Hmone Wai).*

As will be shown, every *pat pyoe* shares the same musical ideas and structure. I explain this in chapter 4 via my analysis of *Hman Ya Wai*, which is a typical *pat pyoe* composed by Mya Waddy Min Gyi U Sa.

I also used Western compositional techniques for this new piece as I have a long-standing interest in Western classical music firstly as a church musician, performing and composing western sacred music, and then as a composer of contemporary music. I was introduced to contemporary music during the Nirmita Composers' Workshops in 2016 and 2017, where I was encouraged to creatively experiment with elements from two different musical cultures: Myanmar traditional music and Western music. The Nirmita Composers Workshop was founded by Chinary Ung, a Cambodian- American composer, with his wife Susan Ung in 2013 to foster the next generation of composers and musicians throughout the Greater Mekong region and restore the practice of innovating with tradition.

As David Cope has remarked, "if there is one characteristic of the arts that remains constant, it is *change*" (Cope 1997). For me, the word "grow" is more reasonable than the word "change." Over the centuries, music has grown by adopting new elements. Today's contemporary music is enriched by multicultural elements, and traditional music is also enriched by contemporary Western music. This thesis, which includes creative research, contributes to the growth of *mahar gita* and crosscultural composing with Myanmar and Western musical elements.

1.5 Definitions of Term

A definition of key terms is provided for ease of understanding.

1.5.1 Mahar Gita

Mahar gita is a collection of sophisticated ancient songs created and composed by royal figures and mostly performed at the palaces by the court musicians. These songs were originally composed mainly of voice and harp with text. There are various ways to spell the *mahar gita* in English. *Mahar* and *gita* are written separately in this research, as they are two words–*mahar* means "great" and *gita* means "music." Some books spell *mahar* as *maha* omitting the alphabet "r." The sound of the word, *mahar* (including "r"), is closer to the actual Myanmar pronunciation. Therefore, the term "*mahar gita*" will be consistently used in this research.

1.5.2 Pat Pyoe

Pat pyoe is a genre of *mahar gita* that features musical ideas from other *mahar gita* genres. It was created by multi-talented Myanmar artist Mya Waddy Min Gyi U Sa (1766-1853). *Pat pyoe* was written separately as *pat* and *pyoe* in this paper since they originated from two Myanmar words. Some books spell *pat pyoe* as *pat pyo* omitting "e." The spell of *pat pyoe* including "e" is much closer to actual Burmese pronunciation.

1.5.3 Musical Elements of *Pat Pyoe*

This thesis regards the musical elements of *pat pyoe* as tuning, pitches, scales, melody, harmony, rhythm, textures, and form. It regards these elements as reflecting spiritual, philosophical, and sociocultural influences that express the unique cultural values of Myanmar people.

Chapter 2 LITERATURE REVIEW

The objective of this research is to compose a cross-cultural piece influenced by *mahar gita* and western music. In this chapter, I provide an introduction to Myanmar culture and music that contextualizes *mahar gita*. I give an overview of key concepts in Myanmar music and introduce the Myanmar instruments that I use in my creative research. I also undertake a short analysis of influential cross-cultural composition *Spiral XI: Mother and Child* by Professor Chinary Ung. This work is distinctive in its use of vocalization by the instrumentalist and has been an important influence on my thesis composition *Kyatthayay*. In chapter 5, I show how I apply techniques developed by Ung in *Spiral XI* in my hybrid work.

2.1 Myanmar Culture: Where Myanmar Music Was Conceived

Myanmar music has its own identity cultivated and shaped over several centuries, and influenced by its relationship with neighboring cultures. Table 1 shows six key dynasties that ruled Myanmar before colonization and their influence on music and arts. *Mahar gita* music emerged in the second last of these dynasties, the *Nyaungyang* Dynasty, with the subgenre of *pat pyoe* emerging just after in the *Konbaung* Dynasty.

Dynasty	Year	Music and Arts
<i>Pyu</i> Period	approx. B.C. 200- 9 th	<i>Pyu</i> music was established
	Century A.D.	and shared with
		neighboring countries such
		as the Tang court of
		Emperor Nanchoa.

I doit It I doit of Dynabites	Table	1:	Table	of D	ynasties
-------------------------------	-------	----	-------	------	----------

Pagan (Bagan) Dynasty		A.D. 800-	1300	<i>Pyu, mon,</i> and <i>bamar</i> musics are part of Myanmar artistic expression.				
Pinya Dynasty		A.D. 1299	-1363	Arts and culture declined;				
				karchin song appeared.				
Ava Dynasty	Pegu Dynasty	A.D.	A.D.	Myanmar saing waing				
		1304-	1353-	ensemble is developed.				
0		1527	1527					
Nyaungyang Dynasty		A.D <mark>. 1</mark> 597	-17 <mark>52</mark>	Mahar gita was created by				
				Win Gyi Badaythayazar.				
Konbaung Dynasty		A.D. 1752	-1885	Various mahar gita genres				
				developed, including <i>pat</i>				
				<i>pyoe</i> , by Mya Waddy <mark>M</mark> in				
		C		Gy <mark>i U</mark> Sa.				

2.1.1 Days before Mahar Gita

Myanmar arts and culture have long been influenced by cultural exchange. For example, Brahmanical culture was brought to Myanmar by the Indian artists and workers who came to work in this country from the time of *pyu* (Dway 2017). Examples include the discovery of a Buddhist Pali manuscript written in *Vengi-Kadamba* script of South India, on a gold-leaf within 5th-century pagodas and temples near Pyay (K 2006). Two main scales in *mahar gita, than yoe* and *pale,* are similar to Indian scales from *raga* namely *raag bihag* (*biawal thaat*) and *raag bhupali* (*kalyan thaat*).

In the *Pagan* period, Hindu influences were supplanted by the Theravada Buddhism of *mon* (Aung-Thwin and Aung-Thwin 2012). During this time Myanmar music, art, and culture reached its advanced status by the cultural trio of *pyu* (Brahamanical influenced), *mon* (Buddhist influenced), and *bamar* (early Burmese arts). Later *mahar gita* would develop a genre called *mon*, which is derived from the *mon* songs. Musical ideas from *mon* songs can also be found in the *pat pyoe*.

This cultural and artistic intersection gave rise to a time of rapid development in the following *Ava* and *Peagu* periods. Innovations include the creation of Myanmar traditional ensemble *saing waing* and the flourishing of Myanmar literature and poetry performance practices (Dway 2017). New forms of poetry emerged–*yadu and yagan*–that can be considered precursors to *mahar gita* (Swe 2018).

2.1.2 The Birth of *Mahar Gita* and *Siamese* Influence in the Late Dynasties

Mahar gita was invented during the *Naungyan* Dynasty (A.D. 1597-1752) by the poet and composer Win Gyi Badaythayazar. Early in his career, he wrote classical Myanmar poems and also poetic songs, which were to be recited in tune, such as *yadu* (see Appendix C, Score 16 voice part) (Htut 2018). The melody of the tune had to be composed in response to the vowel and consonants of the text. These poem driven song types–*kyo*, *bwe*, and *thachin khan*–became the earliest genres of *mahar gita* (K 2006). They were characterized by a gentle slow tempo, where the singer could meditate on the meaning of the lyrics. They were accompanied by the *saung*, the Myanmar traditional harp.

The *pat pyoe* genre of *mahar gita* emerged towards the end of the *Konbaung* Dynasty (A.D. 1752-1885) at a time when *mahar gita* was highly prized as a sophisticated, high culture performing art with court musicians and royalty participating in its creation in the court (Aung-Thwin and Aung-Thwin 2012). The king, queen, princes, princesses, and courtiers composed and performed *mahar gita* (Amar 2004).

Cultural influences from *Siam* entered the court during this time (K 2006). The *Siamese* theatrical art of Ramayana was brought into Myanmar arts, which had a profound and widespread influence. A new subgenre of song composed in Thai style named *yodayar* emerged within *mahar gita*

(see Appendix C, Score 11). Some *yodayar* songs were even composed in the old *Siamese* language and performed in the royal palace (K 2006).

Mya Waddy Min Gyi U Sa, the creator of *pat pyoe*, was born in the latter part of the *Konbaung* Dynasty (Myint 1990). He developed and created several genres of *mahar gita* with *pat pyoe* or *than san* being the most famous.

The *Konbaung* Dynasty was ended by the British Colonization in A.D. 1885 (Aung-Thwin and Aung-Thwin 2012).

2.1.3 Valuing Serenity or the Influence of Buddhist Spirituality

Theravada Buddhism was introduced to Myanmar in the *Pagan* Dynasty has had a profound influence on the culture and mindset of Myanmar people (K 2006). While meditating, someone has to be in his or her calmest and pure state of mind, so they can see the process of change in mind and body in detail. Myanmar people want to be calm and unhurried (K 2006). *Mahar gita* songs reflect this. The tempo is slow-paced. People carefully listen to this kind of music in a meditative way, enjoying both the meaning of the text, its musical delivery, and the accompanying music. Musically there are clear aesthetic preferences. For example, running notes are played smoothly without accents within the phrase to sound like a long, curved line. The momentum of the whole piece should be slow and calm. The dynamic range of *mahar gita* is not very wide within a piece (K 2006). I argue that this is a musical expression of the Buddhist value of calmness.

2.1.4 Delicacy for the Core Essence of Myanmar Arts

Another characteristic of Myanmar culture is delicacy and gentleness (K 2006). The Myanmar word "*ar na de*," which cannot be translated into other languages, in an expression of this (K 2006). It expresses delicacy, alongside concern and sympathy for other's feelings. Even in the water festival, the act of throwing water has to be gentle, and the purpose should be to give coolness to others. Gentleness is a nuance of *mahar gita*. Abrupt changes

cannot be found in *mahar gita*. Every change—one note to another, one word to another, the starting and ending of a phrase, and even modulating should be gentle.

2.1.5 Love of Nature and Humanity

Myanmar people love to live in the countryside with beautiful landscapes rather than in the modern city. During the religious festival, they retreat from busy and restless life and spend time with the family. They are not accustomed to sitting on the grand chair and wearing silk robes in a room full of sophisticated paintings (K 2006). They love laughter, freedom, a pure mind, and want to live a simple and comfortable life. The musical elements in *mahar gita* are quite close to Mother Nature. Melodies have to be wavy like the wind, long and sustained like the mountains, flowing smoothly like water, calm like earth, and warm like fire.

2.2 Myanmar Music

Myanmar music has distinct musical characteristics that I will draw out via discussion of the following: 1) *mahar gita* characteristics; 2) *saing waing* music characteristics; 3) solo vocal music vs *mahar gita* vocal performance; and, 4) idiomatic characteristics of selected Myanmar instruments.

In 2.3 I discuss key aspects of Myanmar music including harmony, scale, tuning, and pitch center. This will introduce the reader to Myanmar traditional music and provide a context for later chapters that address how these values can influence the creation of a new hybrid composition.

2.2.1 Mahar Gita Characteristics

Mahar gita are gentle songs for a vocalist (also playing percussion) and an accompanying melodic instrument for performance in an intimate chamber setting. Typically the melodic accompaniment instrument is either the *saung* (Myanmar traditional harp) or the *pattala*, a bamboo xylophone with twenty-two bamboo slats suspended over a resonating chamber (Keeler 2008).

During the performance, the vocalist controls the tempo of the song by playing *wa* (wood clapper) and *see* (small bell). The wood clapper is played every first beat of the quadruple meter and the small bell in the second and third beat of every measure. The tempo of *mahar gita* is always changing like the flow of a stream.

While there are seven-tones in the tuning system of *mahar gita*, in actual performance, five tones are mainly used and the other two tones are used as a secondary or passing tone. The melody has no wide jump. Unlike Western music, there is no concrete harmony system in *mahar gita*. Instead, harmonic pairs called *twe lone* play an important role (K 2006). These harmonic pairs can be played simultaneously or nearby. They originate from the playing techniques of Myanmar instruments: using two hands to play the drum circle, using two mallets to play the wooden xylophone, and using two fingers to play the Myanmar harp (K 2006). When the piano was introduced to Myanmar, local musicians initially played the piano with two fingers on each hand (Amar 2004).

Mahar gita has three-part texture: voice, percussion, and melodic accompaniment. Heterophony occurs between the voice and the activemelody part of the instruments. The vocalist and melodic accompanist improvise around a core melody. Complex heterophony occurs between the active line of the instruments and the voice part, with the lowest layer standing by itself according to the choice of harmonic pairs.

The first part of the song is usually introduced by the non-metered section and followed by the metered one until the coda (Keeler 2008). The coda usually happens to be a half non-metered and half metered section. Modulation may occur with the changing pitch center when the two different fragments from two different genres are connected in the same piece.

When Myanmar people appreciate *mahar gita*, they use some Myanmar adjectives: 1) *nu*, which means gentle and slow; 2) *chaw*, which means smooth without any accents or any disturbance in playing; 3) *nwe*, which

means wavy, loosely or freely; and, 4) *athan thar*, which means fine-tuned. So *mahar gita* is appreciated when it was played gently, slowly, smoothly, and freely. These are the nuances of *mahar gita*.

There are various genres in *mahar gita*. They are *kyo, bwe, thachin khan, bawleh, pat pyoe, yoedayar, mon,* and *dane than* (Dway 2017). Among them, *pat pyoe* was composed by rearranging different fragments from other genres. The genre of *pat pyoe* will be studied and analyzed in chapter 4.

2.2.2 Saing Waing Ensemble for Outdoor Music

This large ensemble is used in ceremonies and as the major accompaniment for theatrical arts. In the present day, it consists of a drum circle, which has twenty-two small pitched drums, a set of six small drums for the rhythm section, two big bass drums, cymbals, *see* and *wa* (a small cymbal and woodblock for the controlling tempo and togetherness), the brass gong circle (bright tone), the bronze stand (mellow tone), *palwe* (a bamboo flute), or *hneh* (a reed wind instrument).

Although the basic structure of music is the same as *mahar gita*, the music has a very different character. Surprise changes are frequent, with sudden and extreme loudness. The rhythm is always active with upbeat. With the use of chromatic tones (on two gong instruments in the present day), the sound is quite different from the *mahar gita*. Furthermore, *saing waing* may not include a vocalist, whereas song is integral to *mahar gita*.

2.2.3 Myanmar Vocal Music

Myanmar has two types of vocal music: 1) solo recitative poems and 2) songs with accompaniment. Recitative poems are recited by a soloist in tune without meter, while songs are sung with an accompaniment (Keeler 2008). In both forms, the voice pitch range is not wide with priority given to comfort and gentleness. Extreme high pitch and very low pitches are assumed to adversely affect the gentleness of the song and are avoided.

When very high pitches or low pitches are required due to the melody of the piece, the vocalist will sing the notes down or up the octave to preserve the quality of gentleness.

One characteristic of Myanmar music is *nwe*, which means wavy and flexible. The long curved melismatic melody, the slide, and portamento in the melody of Myanmar music reflect this characteristic. Although the vocalist should meditate on the text while he or she is singing and interpreting the text, improvisation is based on the sound of vowels and consonants. In singing both the recitative poem and the song, the vocalist should improvise the vocal line based on the vowel sounds and their length, and on the accents and articulation of the consonants (Swe 2018). In the case of the *pat pyoe*, melodic fragments can be chosen by the composer and rearranged into a new piece by adding a suitable text. Or a composer may start with the text and then choose the melodic fragments. Text-to-music or music-to-text approaches are normal.

2.2.4 Myanmar Musical Instruments

In this section I give an extended introduction to the instruments used in *mahar gita—saung* (harp), *pattala* (xylophone), *see* (either a small bell or cymbal), and the *wa* (either a small wood clapper or big wood block), as well as *muang* (a mellow chromatic gong), which is typically used in *saing waing*. I include *muang* because, in my creative research, I break with tradition and to combine *muang* with *saung* and *pattala* in the same composition. An idiomatic understanding of each of these instruments is important for understanding how my composition engages with Myanmar music traditions.

2.2.4.1 The Saung aka Saung Gauk (Myanmar Traditional Harp)

Saung has often been used by ancient composers when writing mahar gita. As a result, the compositional scales and modes of mahar gita are largely based on saung strings tuning and playing styles. Different from other harps, the saung has a horizontal resonator body and long carved neck. The resonator body is made of the *padauk* wood (*pterocarpans*), the neck is made of cutch wood (*acacia catechu*), and the resonator body is covered with tightly stretched deer hide (Shein 1969). The sound body is heavily lacquered in red and has four small circular sound holes (Shein 1969). The sound body is twenty-six or twenty-seven inches long in the ancient time, but nowadays, harp makers also construct thirty-one or thirty-two-inch long bodies (Shein 1969). The strings of *saung* are made from silk but today's harpists use nylon strings instead thanks to the better and longer durability (Shein 1969).

The *saung* had originally 13 strings and they could be tuned up or down by twisting and binding the string. Modern *saungs* usually have machine heads or tuning pegs to make the tuning easier and 16 strings. The additional strings give a graceful lower bass sound and may reduce the need to retune the harp between pieces (Shein 1969).

There are four types of tuning systems in the *saung*: *than yoe*, *oauk pyan, myin zine*, and *pale*. In Table 2 below, you can see these scales along with their pitch centers and arrangement on the harp from the lowest to the highest. In Figure 2, tuning systems are illustrated on the instrument.

Figure 1: Myanmar Traditional Harpist Ko Han Soe is Playing 16 Strings Saung.

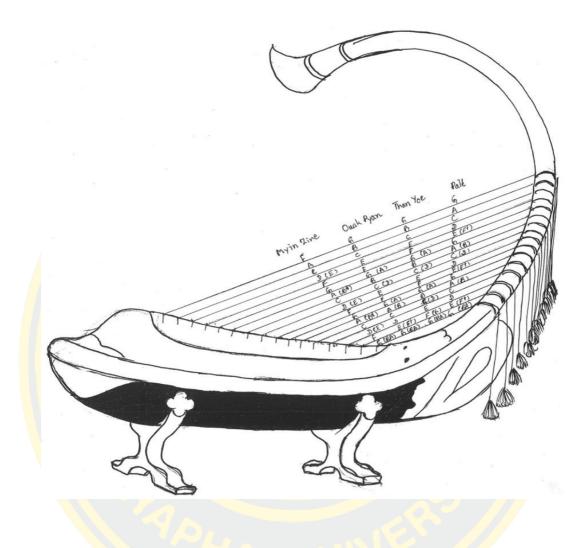


String No.	S 16	S 15	S 14	S 13	S 12	S 11	S 10	S 9	S 8	S 7	S 6	S 5	S 4	S 3	S 2	S 1
Than Yoe Pitch Center P1	P 4	P 2	P 1	P 6	P 5	Р 4	P 2	P 1	P 6	P 5	Р 4	P 2	Р 1	Р 6	Р 5	Р 4
Pitch Center C (Diatonic)	G	В	С	Е	F	G	В	С	E	F	G	В	С	E	F	G
Pale Pitch Center C	Р 4	Р 3	P 1	P 7	P 6	P 4	P 3	Р 1	P 7	Р 6	P 4	Р 3	Р 1	Р 7	P 6	Р 4
Pitch Center C (Diatonic)	G	A	С	D	Е	G	A	C	D	Е	G	A	C	D	Е	G
Lay Bauk Oak Pyan Pitch Center P4	Р 4	Р 2	Р 1	P 7	P 5	P 4	P 2	Р 1	Р 7	Р 5	Р 4	Р 3	Р 1	P 7	Р 6	Р 4
Pitch Center G (Diatonic)	G	В	С	D	F [#]	G	В	С	D	F [#]	G	А	С	D	E	G
Ngar Bauk Oak Pyan Pitch Center P5	P 3	P 2	P 1	P 6	P 5	Р 3	P 2	Р 1	P 7	Р 5	Р 4	P 2	Р 1	P 7	P 5	P 4
Pitch Center F (Diatonic)	A	B⊧	С	Е	F	A	B⊧	C	E	F	G	B⊧	C	D	F	G
<i>Myin Zine</i> Pitch Center P4	Р 5	Р 3	Р 1	Р 7	Р 5	Р 4	Р 3	Р 1	Р 7	Р 5	Р 4	Р 3	Р 1	Р 7	Р 5	Р 4
Pitch Center F (Diatonic)	F	A	C	D	F	G	А	C	D	F	G	А	С	D	F	G

 Table 2: Harp Tuning System

Note to Table 2: P = pitches, and S = strings





Note: Pitches in the parenthesis are the resulted pitches by bending strings.

As can be seen from *saung* string tuning, there are five primary tones in each tuning system. The other two notes are secondary tones and produced by bending the string by pressing with the left-hand thumb and the index finger. For example, in *pale* tuning, the secondary tones F# or F and B are produced by bending E strings and A strings.

2.2.4.2 Pattala (Myanmar Traditional Wooden Xylophone)

The Myanmar *pattala* has tuned slats in one row with the seven-tone Myanmar tuning scale. The range covers a full three octaves plus two notes at the treble end (Keeler 2008). The lowest note is the C below the middle C, C3, and the highest note is the E5. The slats are made of wood instead of bamboo for longer duration and brighter tone color. Instead of resonators for each slat, *pattala* has a hull-like wooden resonator for the whole row of slats slung over it. It is played by two padded beaters (K 2006). Unlike other Asian xylophone playing techniques, parallel octave moving is not frequent in playing. The tremolo playing of two hands is absent in the Myanmar *pattala* playing. For the convenience of playing running notes, the beaters are made to be much shorter. They are shorter than those of Thailand and Cambodia xylophones.

Figure 3: Pattala (Front View and Above View)





2.2.4.3 *Maung* (Mellow Gongs Stand)

Maung is not an instrument used in *mahar gita*. It is used in outdoor performance as part of the *saing wing* ensemble. In my creative research, I break with tradition in using this instrument alongside *saung* and *pattala* in a chamber music context. The *maung* is not usually taken out of the *saing wing* ensemble and put together with the *saung* and the *pattala* for playing *mahar gita*. I chose *maung* because of its chromatic scales and mellow color that can blend well with the indoor instruments.

Maung has a full three-octave range of chromatic scales starting from C2 to C5. As mentioned above, the gongs are attached to the wooden or

metal frame and they are played by the two padded mallets. It had only seven tones in ancient times. However, today's *maung* is chromatic, having been revised by Sein Bo Tint, a famous leader of *saing waing* ensemble.

Figure 4: *Maung* (Mellow Chromatic Gongs Stand)



2.2.4.4 See and Wa (Small Bell and Wood Clapper)

The see and wa are very important in controlling the tempo of mahar gita. Unlike saing waing, in mahar gita, a small bell acts as the see, which is played with the left hand of the vocalist, with the wa, a small wood clapper, played with the right hand. In nayi (quadruple), the first beat of the measure is signaled by playing wa (wood clapper) and the second and third beat by see (small bell). The fourth is always muted. In wa latt (duple), the first beat is shown by wa and the second beat by see. In walatt amyan, wa and see are alternatively played in every beat.

Figure 5: See and Wa (Small bell and Wood Clapper, which Control the Tempo in Mahar Gita)



2.3 Myanmar Music Theory

To create a hybrid work that includes musical elements of *pat pyoe*, I needed to understand Myanmar music theory. To date there has not been any published treatise on Myanmar music theory and, as discussed, oral traditions have been lost. To my knowledge, this is the first attempt to analyze *mahar gita* and provide a theory of Myanmar music. I address the musical elements of *mahar gita* under the topics of tuning system, pitch center, scale, harmony, rhythm, and nuances.

2.3.1 Tuning System in Myanmar Music

Myanmar music uses a 7-note scale ordered from high pitch to low pitch (descending) with 5 primary tones and 2 secondary tones. Historically, the notes have been linked to certain animal sounds. Table 3(Myint 1990) shows the names of these notes using the conventions of the Western diatonic scale, P1 (pitch 1)/C, P2 /B, P3/A, P4/G, P5/F, P6 /E, and P7/D, and their names.

Т	ab	<u>م</u> ا	2
T	av	IC	5

Pitch No.	Casual names of tones	Formal names of tones	Short form of Formal names	Animal for the Pitch
P1	Da Bauk Than	Pale	Le	Sound of Crane
P2	Hnapauk Than	Duraka Dwe	Du	Sound of Goat
P3	Thone Pauk Than	Pyi Daw Pyan	Pyi	Sound of Ox
P4	Lay Bauk Than	Oauk Pyan	Oauk	Sound of Cuckoo
P5	Nga Bauk Than	Myin Zine	Myin	Sound of Peacock
P6	Chauk Pauk Than	Chauk Thwe Nyunt	Chauk	Sound of Horse
P7	Khunapauk Than	Hnyin Lone	Hnyin	Sound of Elephant

Importantly, the tuning or frequencies of the Myanmar 7-note scale differs from Western diatonic music (see Table 4 and 5 below). All the frequencies vary from diatonic scale, with intervallic distances being around a quarter-tone wider or smaller than Western diatonic music (Nwe 1998).

Table 4: Diatonic Scale in Cents

Difference	200	200	100	200	200	200	100
С	D	Е	F	G	А	В	С
0	200	400	500	700	900	1100	1200

Table 5: Myanmar Seven Tones in Cents

Difference	199.4	172.6	16 <mark>1.4</mark>	1 <mark>83</mark> .4	171.8	145.9	165.0
P1	P7	P6	P5	P 4	P3	P2	P1
0	199 <mark>.4</mark>	372.0	533.4	716.8	888.6	1034.5	11 <mark>9</mark> 9.5

Furthermore, Myanmar traditional instruments tend not to have uniform tuning (Htut 2018). For example, the *pattala*, Myanmar xylophone, and *kyay pattala*, Myanmar bronze xylophone, often have slightly different frequencies for the same pitches (Kha and Aung 1966). See Tables 6, 7, and 8 below.

Table 6: C Major Pattala

Myanmar	P1	P7	P6	P5	P4	P3	P2	P1
Tones								
C major	С	D	Е	F	G	Α	В	С
Frequency	256	288	320	341	384	426	481	512
Difference	32	32	21	43	42	54	32	

Table 7: D Major Pattala

Myanmar	P2	P1	P7	P6	P5	P4	P3	P2	P1
Tones									
D major	C#	D	Е	F#	G	А	В	C#	D
Frequency	270	288	320	360	384	426	481	540	576
Difference	18	32	40	24	42	53	60	36	

Myanmar	P1	P7	P6	P5	P4	P3	P2	P1
Tones								
Frequency	252	283	318	336	383	422	460	505

Table 8: The balanced frequencies of the 7 tones of the two Pattala

2.3.2 Pitch Center

In my opinion, as Myanmar musicians use P1, P4, P5, and P2 (C, G, F, and D) as pitch centers, and they make a blended tuning of P6, P5, and P4 (E, F, and G) to avoid accidentals in transposition or modulation (chromatic scale was dissonant to Myanmar musicians' ears).

Myanmar tuning can be seen as a condensed version of the diatonic scale except for pitch P5 and P2 (F and B). These narrow distances between notes make smother and more gentle movement of one tone to another without breaking the figure of the diatonic scale. In transposition, these distances become narrower and there is little obvious difference in P5 and P2, which helps to transpose without retuning the strings. For instance, when the pitch center is moved to P4 (G), F needs to be retuned to F# to follow the diatonic figure of the seven-tone scale. However, in Myanmar scale P5, F is already between F and F#. Moreover, the distance between the other tones in the scale are a little bit narrower than those of the diatonic scale. This P5 does not need to be raised to exact F# of the diatonic scale and half-way between F and F# is enough to follow the narrower diatonic figure of the Myanmar scale. Similarly, in the case of pitch center P4 (F), P2 (B) is already between Bb and B and P2 is enough to make a diatonic figure in the Myanmar scale.

When the word "figure" is mentioned, it means "Whole-Whole-Half-Whole-Whole-Half" in the diatonic scale. In Myanmar, this can be understood as "Wide-Wide-Narrow-Wide-Wide-Wide-Narrow." In the case of the pitch center P7, it is hard to solve the problem between C and C#. However, the frequency of P1 and P7 are a little less than actual C and D. You can modulate to these four-pitch centers during a song without changing the tuning of the harp. This is called blended tuning. Myanmar musician used this kind of tuning system. And they believe that ancient composers used all seven pitches as pitch centers of the ancient Myanmar compositions according to the ancient treatises (Amar 2004). Practically, *mahar gita* musicians commonly choose P1 (*pale*), P5 (*myin zine*), P4 (*oauk pyan*), and P7 (*hnyin lone*) as pitch centers of the *mahar gita* songs (Shein 1969).

In my composition, I employ a changing pitch center following the Myanmar way of modulating. The benefit of keeping the Myanmar tuning system is smoothness and gentleness in flowing one note to another. While I do not follow Myanmar tuning exactly, I do keep the P5, halfway between F and F#, and the P7 between Bb and B in accordance with the figure of Myanmar scale.

2.3.3 Scales in Myanmar Music

As I mentioned earlier, Myanmar musicians used only five tones out of seven frequently in their composition. The other two tones are used as neighbor tones or passing tones. Figuratively speaking, these 5 tones are like the white keys on the piano, while the 2 tones are like the black keys or are used in passing. When all these main five tones are played in an arpeggio, their resonance will harmonize each other. Myanmar composers also used these five tones to construct the harmonic pairs which I will explain under the topic of harmony.

These five tones can be assumed to be the basic scales in Myanmar music. The harp open strings are tuned to these five tones as they are the most frequently used. On a Myanmar harp, the other two tones in the seven-tone scale can be played by bending the strings with your left-hand fingers. The three scales of Myanmar music can be discovered from these four types of tuning system in *saung: than yoe, oauk pyan, myin zine,* and *pale*.

Pitch	С	D	E	F≉	G	Α	B	С
Center C			(approx.)	approx.			(approx.)	
Pale	P1	P7	P6	P5	P4	P3	P2	P1
Pitch								
Center P1								
Pitch	Fŧ	G	А	B¢	С	D	E	F
Center F [‡]	approx.		017	(approx.)			(approx.)	
approx.		E 1 A						
Myin <mark>Zine</mark>	P5	P4	P3	P2	P1	P7	P6	P5
Pitch	[]							
Center P5					2 (1		

 Table 9: Scale 1 (Derived from Pale and Myin Zine Tuning Systems)

In my explanation about scales of *mahar gita*, I will use movable 'do' for simplicity. *Pale* and *myin zine* are the same scales but have different pitch centers (P1 and P5 respectively). They include do-re-mi-so-la and the secondary tones fe and ti. In Table 10, the tones in the shading cells are secondary tones (which can be also said to be non-scale tones) are played by bending the *saung* strings. As the result, scale 1 is: do-re-mi-so-la.

Pitch	C	D	E	F≉	G	А	B	С
Center C			approx.	approx.			approx.	
Than Yoe	P1	P7	P6	P5	P4	P3	P2	P1
Pitch								
Center P1								
Pitch	F≉	G	А	B	С	D	E	F≉
Center F [‡]	approx.			approx.			approx.	approx.
approx.								
Ngar Bauk	P5	P4	P3	P2	P1	P7	P6	P5
Ouk Pyan								
Pitch								
Center P5								
Pitch	G	Α	B	С	D	E	Fŧ	G
Center G			approx.			approx.	approx.	
			··· r r - · · ·			rr	·····	

Lay Bauk	P4	P3	P2	P1	P7	P6	P5	P4
Oauk Pyan								
Pitch								
Center P4								

Than yoe tuning and the two lower octaves of *ouk pyan* tunings are the same but different in the pitch centers (P1, P5, and P4 respectively). Therefore, scale 2 in *than yoe* tuning and *ouk pyan* tunings includes domi-fa-so-ti and secondary tones re and la. These secondary tones are created by bending P1 and P4 in *than yoe* tuning or bending P5 and P1 in *ngar bauk ouk pyan* tuning or bending P4 and P7 in *lay bauk ouk pyan* tuning. For the *ouk pyan* tunings, the uppermost octave (*gama*) is tuned differently. In *lay bauk ouk pyan* tuning, the uppermost octave is tuned in *pale* scale. In *ngar bauk ouk pyan* tuning, the entirety of *lay bauk ouk pyan* tuning is transposed to new pitch center P5.

As an exception, when *lay bauk ouk payn* tuning is set, F (P5) is kept natural without raising for some pieces. In *saing waing* ensemble, this kind of tuning system is specially named *hkunhnathanchi* tuning. However, some harpists still called this tuning as *ouk pyan* tuning and some called it simply *lay bauk* tuning. The third scale can be derived from this tuning.

Table 11: Scale 3 (Derived from Lay Bauk Tuning System)

Pitch Center	G	А	B	С	D	E	F۶	G
G			approx.			approx.		
Lay Bauk	P4	P3	P2	P1	P7	P6	P5	P4
<i>Lay Bauk</i> Pitch center								
P4								

Scale 3 is in *lay bauk* tuning and the pitch center is P4 (do-mi-fa-so-ta with secondary tones re and la). These neighbor tones are resulted from bending P4 strings and P7 strings. As mention above, the uppermost *gama* is tuned in *pale* tuning (A, C, D, E, G) like in *oauk pyan* tuning so

that the harpist can play A and E without bending strings, but B and F could be played by bending strings of A and E in the uppermost *gama*.

Among *mahar gita* songs, *kyo, bwe, and thachin khan* are to be played in *than yoe* tuning. *Yodayar* and *mon* are usually played in *pale* tuning. And *pat pyoe* are played in *ouak pyan* tunings. In my new work, I will use all these three scales as the basic scales of my piece.

2.3.4 Harmony in Mahar Gita

Mahar gita harmony is based on a two-voiced harmony system called *twe lone* (harmonic pairs). As *mahar gita* was played by only two fingers (thumb and index fingers) on *saung*, the maximum notes that could be played simultaneously were only two (Shein 1969). Some Myanmar musicians believe that this is derived from the playing technique of *pattala* (Myanmar xylophone). Imitating *pattala* playing (using only two mallets), Myanmar harpists play *saung* using only two fingers. This resulted in two-voice harmony.

Mahar gita has a three-part texture. To create two parts in harmony, harmonic pairs are created by adding a lower line to the active higher line of melody, which has a heterophonic relationship with the voice part. Importantly, there is no direct reaction of the lowest line to the vocal line.

Mahar gita musicians have formulated a harmonic theory using harmonic pairs. For example, Win Gyi Badaythayazar, who composed the *mahar gita* music in the *Nyaung Yan* Dynasty, wrote songs called *kyo* to teach these harmonic pairs to the younger musicians (Swe 2018). By studying *kyo* songs, ancient *mahar gita* students became familiar with the six pairs and their usage (see Table 12 for names of Myanmar Harmonic Pairs).

Table 12: Harmonic Pairs

Myanmar	Htan	Tayar	Tay	Dayant	Dalu	Htone
Harmonic Pairs						
Diatonic Names	C and	C and C	E and	F and A	B and E	G and C
	D		В			
Intervals	M9th	Octave	P5th	M3 rd	P4 th	P4th
				(melodic	(melodic	
		015		Interval)	Interval)	

I discuss harmonic pairs and their function in *mahar gita* at length in chapter 4.

2.3.5 Meter in Mahar Gita

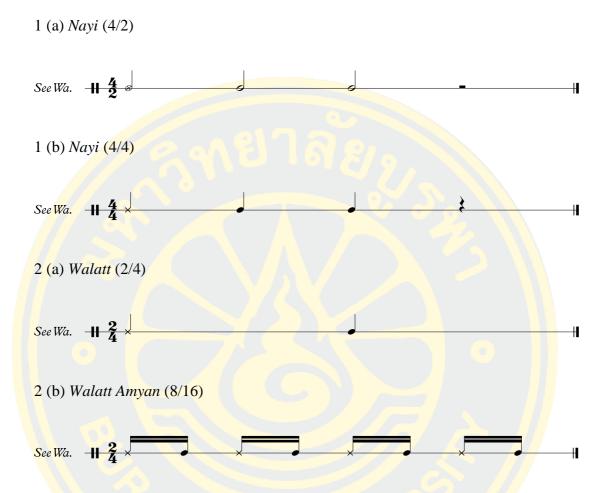
There are three kinds of meters in *mahar gita*: *nayi* (quadruple), *walatt* (Duple), and *walatt amyan* (8/16). *Nayi* is very common in *mahar gita* and it can be 4/2, 4/4, and 4/1 because any quadruple can be called *nayi*. However, 4/1 has its own special name, *nayi geh*, which means "wide *nayi*."

This music is performed without a conductor. Instead, the *see* (tiny cymbal or bell) and *wa* (woodblock or wood clapper) signal the beats according to the meter controlling the tempo. The tempo in *mahar gita* is not stable but is frequently changing and floating. *See* and *wa* plays a very important in defining the meter and controlling the tempo of the piece.

In *nayi* (quadruple meter), the first beat of the measure is signaled by playing *wa* (wood clapper) and the second and third beat by *see* (small bell). The fourth beat is always muted. See Figure 6. 1(a) and 1 (b).

In *wa latt* (duple), the first beat is shown by *wa* and the second beat by *see*. In *walatt amyan*, *wa* and *see* are alternatively played in every beat. The crossed headed note is for *wa* (wood clapper) and the normal headed note is for *see* (small bell). See Figure 6. 2 (a) and 2 (b).

Figure 6: Meters in Mahar Gita



Most *nayi* pieces are suitable to be transcribed in 4/4, which is easier and clearer for sight-reading. However, the *see* and *wa* would be played in 4/2 in actual performance, as this gives flexibility in playing and rubato-like or swing-like nuances. This is an important aesthetic value in Myanmar music. Myanmar people who love freedom, as I mentioned in 2.1.5. Playing *see* and *wa* on every beat and in a fast tempo would subdivide and narrow the space between one stroke and another of *see* and *wa*. This would constrain the performers, making them feel they cannot improvise freely and creatively. Hence the preference for a flexible rhythm arrangement between the wide strokes of *see* and *wa*. Fermata, rubato, and swinging are used to create flowing music. You can see the flexible rhythmic playing between wider strokes of *see* and *wa* in the scores of Appendix C.

2.3.6 Rhythm in Mahar Gita

As meters are quadruple and duple in *mahar gita*, beat division of mahar gita is clearly two. Mahar gita composers construct their rhythm based on this beat division. Two notes (quaver) in one beat are commonly used, and four notes (semiquaver) in one beat are used if the performer wants to decorate the line with more attractive rhythmic structures. The use of eight or sixteen notes in one beat can be found, but odd number notes in one beat (such as triplets, quintuplets, etc) are not part of the rhythm concept of *mahar gita*. In sections that have more rhythm flexibility, Myanmar musician may unintentionally use these kinds of rhythms. In metered sections, they used rubato-like and swing-like styles to create a floating effect. They also use rests on the beat to get an upbeat effect. Syncopation is very common. These can be seen in the abovementioned examples. Nonetheless, the rhythm of the vocal line and its interaction with accompaniment is complex because the vocal line originated in recitative, to which instrumental accompaniment was added. Myanmar polyphony emerges from two parts: voice and accompaniment. This will be discussed further in the analysis of *pat pyoe* in chapter 4.

2.3.7 Nuances of Mahar Gita in Notation System

In *mahar gita*, composers usually repeated a theme twice in different ways. The first time, the theme is played freely without any specific meter. The second time, the theme is played in a rhythmic *nayi* (4/2). As *mahar gita* was developed from reciting poems, the accompaniment has to follow and improvise under the leading of the voice part. The phrases in the theme are extended and decorated by different rhythmic elements such as pausing, use of fermata, changing nuances with rubato, changing the tempo by accelerando and ritardando, and swinging. Notating such nuances in detail requires advanced notation such as compound meters, syncopations, tempo changes, and odd-beat divisions. I discuss this further in chapter 4 via my analysis of *Hman Ya Wai*.

2.4 The Use of Vocalizations in *Spiral XI: Mother and Child* by Chinary Ung

The practice of playing an instrument and singing at the same time can be commonly found in Asian traditional and folk music. Indeed, Myanmar traditional musicians are accustomed to singing while they play an instrument, including in *mahar gita*.

Ung's use of this technique is of great interest to me as it provides a model for a contemporary approach to vocalization by an instrumentalist. In this chapter, I discuss ways that Ung blends voice and instrument using examples from *Spiral XI* and reflect upon similarities with *mahar gita*.

Before looking at specific examples, it is important to note that Ung does not use poetry in his vocalization parts. He chooses random syllables and words for their musical qualities and ability to blend with the instrument, as will be illustrated below (Nakano 2017).

One of the ways Ung combines voice and instrument is in homorhythm. In Figure 7, he integrates the percussive voice and arpeggio figures of the viola using a homorhythm. He uses hard consonants "T" and "K" for voice with percussive sounds to highlight the arpeggio notes of smooth viola sounds.



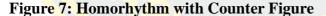
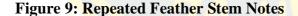


Figure 8 shows another use of homorhythm. This time with rhythmic unison between voice and the viola. In the first example, an open vowel "a" with the consonant "w" create a well-blended timbre between voice and violin. In the second example, he combines consonant "D," which has a much harder sound than an open vowel, with staccato notes of the viola. He contrasts this with the lighter consonant "K" combined with a vowel such as "i" and "o" and portamento that blends with the upper part of the viola double-stops. These examples show how the resulting sound color is influenced by a vowel and constant choice.

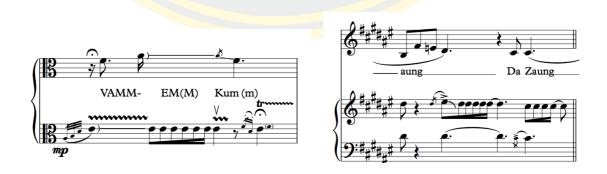


Another technique Ung uses is coloring a sustained note. In Figure 9, the nasal closed vowel "mm" is highlighted by the repeated rapid notes and trill in the part. The resulting sound is familiar to listeners of Myanmar music. The second stave in Figure 9 is mm. 31 from *Hman Ya Wai*, and shows the same technique of coloring a sustained vocal tone with a repeated instrumental note, but this time in the context



of Myanmar music.

Figure 8: Homorhythm in Unison and Harmony



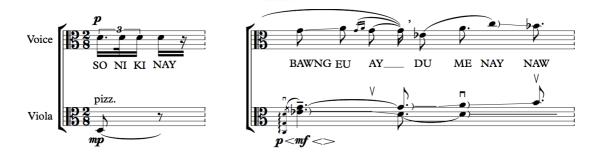
Ung is highly inventive in the way he uses timbre. One of the most beautiful combinations of colors is his use of sul ponticello and harmonic tone blended with the whistle voice (See Figure 10)



Figure 10: Using Sul Ponticello and Harmonic Tones to Blend with Whistle Voice

In addition to experimenting with timbre and articulation, Ung uses a variety of dynamics to blend the voice and instrumental parts. In general, the dynamic of parts mostly moves in parallel. Both parts tend to crescendo or diminuendo together (compare the dynamic signs of the viola and voice part in the figures above). In some soft sections of the vocal parts, he also uses soft pizzicato to intertwine the voice and instrumental parts successfully (see Figure 11, first example).

Figure 11: Balancing Dynamics and Blending the Nasal Vowels with the Instrument's Register.



Ung's approach to vocalizations reminds me of how Myanmar traditional music value musical interactions between voice and instruments. In *mahar gita*, the harpist and vocalist are often the same player. The vocalist often improvises and invents their own ornamentation accordingly to the meaning of each word and how the vowels and consonants are used in the texts.

Ung's music has been an important inspiration in my thinking about crosscultural music and how I can represent both Myanmar and Western musical cultures as a meaningful musical and cultural integration.

2.5 Conclusion

In this chapter, I have explained key features of music and culture of Myanmar as background and context for understanding how my contemporary composition *Katthayay* engages *mahar gita* and the Western contemporary music (discussed in depth in chapter 5). I have also discussed techniques of vocalization in *Spiral XI*, an innovative piece of a cross-cultural composer Chinary Ung, which is a composition model for my creative research. In the next chapter, I reflect on the processes of discovery and collecting musical elements in preparation for composing this work.

CHAPTER 3 The Concept of Musical Composition

Composing a music piece is much similar to cooking a decent meal. A decent meal needs the ingredients and a recipe. The same is true with composing a cross-cultural piece with the musical elements of *pat pyoe* and Western music. Here, two things are crucial: 1) the musical elements (of both *pat pyoe* and the Western music) and, 2) the compositional concept—how these elements will be applied in the piece. In this chapter, I explain how I discovered and collected music information about *pat pyoe* and how I developed the concept or musical plan of how *pat pyoe* and Western music elements would be blended in my composition *Kyatthayay*.

3.1 Discovering and Collecting the Musical Elements

As discussed in chapter 2, there are few published treatises or scholarly documentation of the musical elements of *mahar gita* and *pat pyoe*. As a result, the information required for my creative research necessitated going to different sources. For example, the frequencies of the seven tones of the Myanmar scale has been documented. But, the tuning systems of the instruments required interviews with Myanmar music experts. Myanmar instrument playing techniques could only be learned from Myanmar music teachers. Detail information about musical elements of *pat pyoe* were obtained from my analysis of transcribed music scores. I discuss each of these below.

3.1.1 Discovering the Musical Elements from the Books and Documents

To initiate the proposed research, I had to search for the musical elements of *pat pyoe* and Western contemporary music in the available references. However, there were many challenges in finding relevant resources for exploring *pat pyoe*. First of all, there is no music theory developed for *maha gita*. Since there was no formal music research that analyzes the *maha gita* genre, there is hardly any material for systematic study. Myanmar musicians, generation after generation, learn to play, sing, and create musical pieces simply by ear and by working along with their masters. After a desperate search for relevant resources, I found two books that could help me explain to some extent some music theories behind the compositions from the old days. They are "Mahar Gita Swe Nwe Chat" by U San Myint and "Myanmar Turiyar Mahar Gita" by U Sein Aye. Both books explain the musical elements of *mahar gita*, which could be of some help. For Western music, I picked "The Techniques of the Contemporary Composer" by David Cope.

3.1.2 Discovering the Musical Elements by Interviewing Experts

Although the books about *mahar gita* can explain some musical elements, much was missing. This included the characteristics of specific *mahar gita* genres, their forms, and the tuning system for each genre. I decided to interview experts to clarify the information I found in reference books and to examine the musical elements further. I did this in four stages: 1) select interviewees; 2) prepare questions; 3) make a schedule with the interviewees; and, 4) conduct the interviews.

As *mahar gita* is a Myanmar classical repertoire, I approached professional musicians and educators, with care to choose both vocalists and instrumentalists so that I could increase technical knowledge about both. I also considered how active they were in the *mahar gita* community and their ability to talk, without bias, on important issues that are taking place in this community. With all this considered, five participants are chosen for my interviews: Dr. Su Zar Zar Htay Yee, U Maung Maung Latt, Daw Khin Soe Win, Daw Theint Theint Swe, and Ko Han Soe. Among them, Daw Theint Theint Swe and Daw Khin Soe Win are *mahar gita* vocalists; Dr. Su Zar Zar is a harpist and musicologist; and, U *Maung Muang Latt* is a Myanmar music composer.

For the interview question structure, I was guided by Bold's discussion of a structured interview, a semi-structured interview, and unstructured interviews (Bold 2012). As the subject of the research topic is technical and specific scope, I choose structured and semi-structured questions. I categories the interview questions into three groups. The first group is the questions about the biography of participants, their beliefs, opinions, and encouragement for the new generations. Semi-structured questions are applied for this inquiry. The second group is the technical questions about the musical elements, theory, meaning, and historical and cultural background of *mahar gita*. Structured questions were used to examine the musical languages, and semi-structured questions were employed to examine the meaning and backgrounds. The third group of questions explored Myanmar instruments and their tuning systems. For this category, only structured questions were applied. All interview questions are reproduced in Appendix A. This information is helpful as a reference point in explaining the background and key concepts of Myanmar music.

3.1.3 Discovering Musical Elements by Studying with Music Educators

One of the best ways to learn the singing techniques of *mahar gita*, the playing techniques of the Myanmar instruments (with their pitch ranges, abilities, and tunings) is by studying with Myanmar music educators. Two educators helped me to study *mahar gita* and *pat pyoe*. They are Daw Kin Soe Win, one of the famous *mahar gita* vocalists in Yangon, and Ko Han Soe, who is a young talented traditional harpist and the son of Daw Kin Soe Win. For this research, I discussed *mahar gita* singing style and its characteristics with Daw Kin Soe Win. I learned about Myanmar instruments with Ko Han Soe, especially Myanmar traditional harp playing techniques. For the Western musical elements, I discussed composition with Dr. Koji Nakano, who is the chief advisor of this research paper for several sections.

3.1.4 Discovering the Musical Elements by Analyzing the Transcribed Music Score

Although there are already some transcribed scores of *pat pyoe*, the accuracy has been questioned by Myanmar scholars, and they have not been authorized by the Government for their accuracy. Therefore, I have not used them as reliable research materials.

Instead, I transcribed fragments of sixteen genres of *mahar gita* and analyzed and transcribed the entirety of *Hman Ya Wai*, a typical *pat pyoe* song.

This research agrees with the view of Myanmar music scholar U San Myit that *pat pyoe* is a fusion of various genres of *mahar gita*. Myit states that there are different sixteen *mahar gita* genres used in the *pat pyoe* (Myint 1990). He commented that another four kinds of music that could be included in the *pat pyoe* songs. As most Myanmar musicians cannot conclusively agree that these can be in *pat pyoe*, I focus on the sixteen confirmed genres of *mahar gita* in this research, which are transcribed and analyzed in Appendix C.

As my first step, I selected *pat pyoe* songs and fragments with the help of the Myanmar music experts. Improvisation is very popular among the Myanmar traditional musicians and each time music always varies. However, fixed music scores are needed for the structural and compositional analysis of *pat pyoe* songs. I discussed fixed versions of songs with the musicians carefully to decide on how they can reflect the meaning of historical *pat pyoe* songs.

Secondly, performers and a recording studio were engaged. These were Daw Khin Soe Win, an experienced *mahar gita* vocalist who knows these songs well, and, Ko Han Soe, a Myanmar traditional harpist. The recording session took place at the Oasis studio, which is one of the best for acoustic sound in Yangon.

Next, the date and time for the rehearsals and recording were scheduled. Finally, all the *pat pyoe* songs are recorded and transcribed into music score by the writer himself. They can be found in Appendix C and are carefully analyzed there.

3.1.5 Working with Others to Discover the Musical Elements of Pat Pyoe

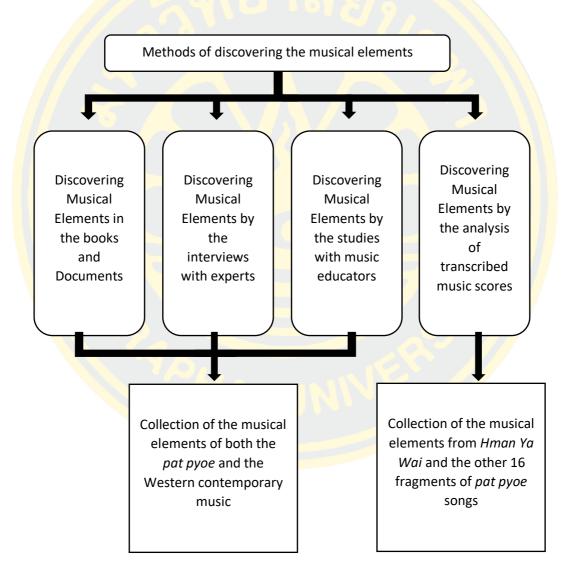
To document musical elements of *pat pyoe*, I worked with three participants who were selected for their comprehensive theoretical knowledge practical skills in *maha gita*. They were Daw Khin Soe Win, who has been a professional *maha gita* singer for over fifty years; Ko Han Soe, a national level award-winning professional Myanmar traditional harpist; and, Dr. Su Zar Zar, who earned her Ph.D. in music from Tokyo University of the Arts.

Daw Kin Soe Win, a professional *mahar gita* vocalist, has spent more than fifty years in this music society. She is one of the highly respected three legendary female *mahar gita* vocalists in Myanmar music society. She started singing and playing the *saung* since she was eleven. She is a censorship board member at the Myanmar Radio and Broadcasting Station. She has been a judge at the national competition of Myanmar music for every year since the 3rd competition.

Ko Han Soe, son of Daw Kin Soe Win, inherited *mahar gita* singing and *saung* playing from his father, Phyar Pone U Thein Han Gyi. U Thein Han Gyi was a virtuoso Myanmar harpist of his time who was honored by the Italian government by making a wax image of his hand and keeping at the museum. Learning under the instruction of such skillful harpist since he was ten, Ko Han Soe has become a professional Myanmar harpist in Yangon. He has won five gold medals for *mahar gita* singing and five for *saung* playing in the national competition of Myanmar performing arts. He is a befitting person for this research especially with the *mahar gita saung* playing.

Research on a specific musical genre requires an educated person in a related academic field. Dr. Su Zar Zar is the first one to have achieved a Ph.D. degree in music in all Myanmar. She graduated from the Tokyo University of the Arts and published five academic papers on Myanmar music and instruments. She is also the rector of the National University of Arts and Culture in Yangon. Her doctoral research was on improvisation in Myanmar music. She is also a passionate harp instructor. She has been doing several projects to promote Myanmar music.

Figure 12: The Explanation of the Collection Methods of the Musical Elements



3.2 Scrutinizing the Information and Analysis of the Musical Elements

After collecting information from the four different resources available, I compiled two sets of musical elements. The first one is a list of musical elements from both *pat pyoe* and Western contemporary music which is obtained from books, studying, and interviews. The other is the result of the analysis of the transcribed scores of *Hman Ya Wai*, a *pat pyoe*, and sixteen fragments of selected *pat pyoe* songs. I then carried out a thematic analysis by dividing the main subject into sub-topics.

3.2.1 Thematic Analysis

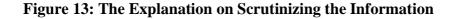
In my thematic analysis, I used two different processes for the two lists or sets of data: 1) coding musical elements from books and interviews, and 2) analyzing and identifying musical elements from the transcribed *pat pyoe* scores. In the first process, Myanmar musical languages and *mahar gita* music theory were extracted and put under several themes.

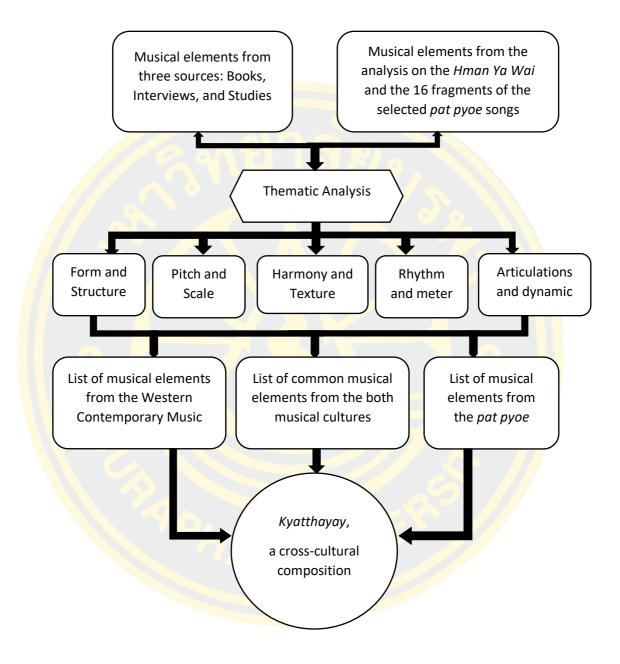
In the second process, there were two steps: transcribing *pat pyoe* songs and developing the musical elements from these transcribed scores. The first step was transcribing music scores with advanced international notation system to make the nuances and musical figures of *pat pyoe* songs take shape in detail. For instance, accidentals such as quarter sharp, quarter flat, quarter third sharp a quarter third flat were used to describe Myanmar nuances in pitches. Rhythm devices such as odd beat division and usual meter are applied in transcribing the scores. Any possible notation system that pictures the shape and style of Myanmar music is applied so that these transcriptions are of help for not only further research but also for performance. In the second step, information from the analysis of transcribed scores was reviewed. That is listed as the selected musical elements under the themes.

All the musical elements from these two collections are categorized under the five themes: 1) form and structure; 2) pitch and scale; 3) harmony and texture; 4) rhythm and meter; and, 5) articulation and dynamic. Bold suggested dividing the head theme into sub-themes in thematic analysis (Bold 2012). I have followed this approach in layering my analysis so that further detail can be progressively revealed.

Open coding is coding the data from the collected information without setting pre-themes before the coding (Bold 2012). This technique ensures the unexpected discovery of valuable data when the collection does not follow the theme. After collecting potential data, the theme is set based on the types of the resulted data. The five themes are set only after reviewing the results of the analysis of *pat pyoe* songs. During the research, several new themes that appeared later were always taken into account.

After evaluating many times, the thematic musical elements were categorized into three groups: 1) the musical elements of *pat pyoe;* 2) the musical elements of the Western contemporary music; and, 3) the common musical elements in both musical genres.





3.3 Figuring out the Possible Compositional Methods

According to the metaphor—composition as a cooking a decent meal, the three lists of musical elements are the ingredients. Then, the recipe resembles the compositional methods. For me, composition is a process but the order of the tasks is not very significant. However, this first thing I mostly do in my compositional process is thinking about the form and structure. After that, the consideration of the musical elements, instrumentation, and other facts follow. In every task and consideration, to create a new cross-cultural piece maintaining the essence and nuances of both *pat pyoe* and Western contemporary music is the most important principle for me in this process of composition. My concept of composition for the cross-cultural piece will be discussed under several topics including form and structure, pitch and scale, harmony and texture, rhythm and meter, articulation, and color. I discuss each below.

3.3.1 Considering the Form and Structure of the Piece

Another metaphor for composing is constructing a sophisticated building. In chapter 1, I discussed how Myanmar traditions and customs view the act of building a pagoda. I am intrigued by the idea of composing/creating a new structure from old repertoire. I decided to pursue this idea beginning with the core *pat pyoe* structure, and then elaborating on it like the layers of a stupa. According to the interviews with the experts, a typical *pat pyoe* generally has three parts: non-metered section, metered section, and halfmetered section. This form is well embedded in Myanmar culture. In chapter 4, I discuss how I modify the typical form of *pat pyoe* using this stupa creation concept.

3.3.2 Considering Pitch and Scales for the Piece

Setting certain pitches for the composition is one of the common practices in Western musical composition (Cope 1997). For *mahar gita*, seven pitches are already set in the instruments such as *pattala* although some pitch alternations could be made in the instrument like the *saung*. Therefore, the seven Myanmar pitches with some alternatives could be the selected pitches for the research piece.

Three pitches are obviously different from the Western diatonic pitches: E, F, and B. In the seven-tone pitch class for the new piece, the other tones except for E, F, and B are the same frequencies as the diatonic major-scale pitches. In the instrumentation of the piece, this kind of tuning system could be done on the *pattala*, the *saung*, and the viola but not on the *maung* because the *maung* is the chromatic instrument. In which way these two different tuning systems in the same piece were a considerable challenge for me. *Pattala* is in the Myanmar tuning system and *maung* is in the Western tuning system. I had to find a way to blend them. As some microtones can be created by bending the strings in the *saung*, it can follow both tuning systems at some points. The tuning is not a problem for the viola, which is not a fixed-pitched instrument.

All three Myanmar scales with the different pitch centers are applied in the new piece and such a way of using scales is typical for the *pat pyoe* composition. How Myanmar music chooses the important notes in the scales, how the pitches are altered, and how the scales modulate in the *pat pyoe* are considered throughout the process of the analysis and composition. I used a new way of harp tuning to enable all three scales to be played throughout the required modulations. The melody of the new piece is smooth and gentle to maintain the characteristics of *mahar gita* but it does not avoid the skips and jumps unnecessarily.

3.3.3 Uncovering the Methods for Harmony and Texture of the Piece

The harmonizing of *mahar gita* is based on the harmonic intervals called *twe lone*. There is no intentional application of chordal harmony in this music. How Myanmar musicians use these harmonic pairs for the different textures is learned throughout the analysis on the *pat pyoe* songs. To extend the basic system of Myanmar harmonic pairs into more complex harmony texture is a crucial task in the composition. For instance, complex non-Western chords that are built on the Myanmar scales in their variations are the possible harmony for the piece. However, the principles of *twe lone* harmonizing are always considered whenever a texture of harmony is built. Heterophony and polyphony are the common texture of the *pat pyoe* of *mahar gita*. Through the new harmonization, the textures of the new piece become more complex.

3.3.4 Thinking about the Rhythm and Meter for the Piece

The rhythm and meter of the *pat pyoe* songs are advanced and complex. For instance, the rhythmic devices such as feather stem and odd beat divisions (triplets, quadruplets, quintuplets, sextuplets, and septuplets) reflect the Myanmar nuances and create the momentum and speed of the melodic flowing. Traditionally these rhythmic nuances were produced in improvisation. I decided to use frequently changing unusual meters such as quintuple, and septuple and others to create long freely flowing lines. I added frequent tempo changes, fermata, rubato, and swinging to create Myanmar nuances within a fully notated score using notation conventions of Western music.

3.3.5 Articulations, Expressions, and Colors of the Sounds

Wide vibrato, portamento, accents, and phrasing are the articulations that reflect the *mahar git*a characteristic of the melodic and harmonic lines. In *pat pyoe* music, these expressions lead to gentleness, calmness, and the flow of music. I aimed to reproduce these nuances in my thesis composition.

I felt that western instrumental techniques such as staccato, legato, pizzicato, and tremolo could be used on the viola to complement these, along with vocalization. However, I also considered what kind of techniques could be applied on the Myanmar instruments. I wanted to experiment with Myanmar instrumentalists for all possible playing techniques (both Western and Myanmar) and use extended playing techniques to find suitable sound colors. My list of potential techniques included sul tasto, sul ponticello, harmonic tones, percussive effects, vocalization, and dropping the string or detuning the 4th string of the viola while bowing as a coloristic effect.

3.4 Ethical Consideration and Privacy Concern

Bold warned "balancing the benefits against the potential harm caused by the research should be at forefront of your thinking when preparing for and justifying your approach to the research" (Bold 2012). It is a good practice to consider whether a process is ethical or unethical before doing that process in qualitative research. Because sensitive issues might vary depending on one's opinion. The ethic of sincerity has to be adhered to throughout the process. Every time before asking a question or taking a new step, the question a researcher should always ask is "What does it mean to be ethical?" For this research, I have kept this question front of mind. I am aimed to be sincere and transparent in my research and to prevent unintentional harm cause to every participant.

Everybody has the right to their privacy. There could be personal questions but they have the right to refuse to answer them. Asking repeated questions that participants think are personal, or asking personal questions that are made to sound otherwise, is unethical. Asking the personal questions of the participant indirectly is also unethical. For my thesis, I never ask questions that the participant refused to answer. There may be some information that must be omitted for the participants who do not want it to include in the paper as they believe it to be personal. The participants must be fully informed of the process of the research.

Bold believes that both the participants and the researcher are the owner of the story (Bold 2012). Being faithful to the ownership of the participants also the privacy concern. I value and respect the ownership of the participants and will clearly describe their ownership in the paper.

3.5 Conclusion

In this chapter, I have discussed my methodology in researching *pat pyoe* and key questions I pondered my composition planning regarding form, harmony, texture, color, rhythm, and melody. In the next chapter, I will share the results of my *pat pyoe* research via a detailed analysis of *Hman Ya Wai*, a *pat pyoe* which displays many of the typical features of this style of *mahar gita*. Then in chapter 5, I show how this understanding shaped the composing of *Kyatthayay*, a work that successfully blends *mahar gita* and Western compositional ideas.

Chapter 4

The Analysis of Hman Ya Wai and Pat Pyoe Genre of Mahar Gita

As I mentioned in chapter 2, *pat pyoe* is an innovative subgenre of *mahar gita* that introduced new tuning and scales, and features the musical styles of prior *mahar gita*. To illustrate key features of *pat pyoe*, I undertake a detailed analysis of *Hman Ya Wai*, written by the first *pat pyoe* composer Mya Waddy Min Gyi U Sa. This work features six musical styles of *mahar gita* (*pat pyoe, bwe, nat than, dane than,* and *bawleh*). For an analytical survey of all sixteen musical styles of *mahar gita* in the context of *pat pyoe* repertoire, see Appendix D.

4.1 Hman Ya Wai, a Pat Py<mark>oe</mark>

Hman Ya Wai is considered a short *pat pyoe* or *pat pyoe galay* and is 9 minutes long. The title means "the glass palace." Its lyrics praise an unnamed king's glory and authority. The poem/lyrics are reproduced below in Burmese and English.

4.1.1 Burmese Version

မှန်ရဝေ

မှန်ရဝေ-စံနေရာ-မျာ့ထီးမို့လေး။ ကျွန်းများပေါင်။ တန်ဆောင်ဖလ်ရှိန်ညီးလို့လေး။ ကြီးစေအာဏာ။ နှုန်းနေသွယ်ဖြာ။ သောင်းဒီပါ ဗွေမြင့်မှာ၊ ပြည်ပြည်မင့်း ကိုးကွယ်ရာ။ ။ ဘုန်းတဲ့ဘုန်းတေဇာ။ နှုန်းတဲ့နှုန်းနေဖြာ။ သီဟာလေ-ရွှေနန်းဦး။ ညီလာစုံ ဗိုလ်ပေါင်းဖူး။ ။ တပုံသာထူး။ သောင်းရွေမျာ့မှုး။ ။ ကြည်နူးစေငှာ။ ဒီပါသပြေကျွန်းမှာတဲ့လေ။ ထုံးစဉ်လာ။ ဗြဟ္မာရေတော်သွန်းချိန်မို့လေး ။ ။ ရံဝန်းညီလာ၊ ခွန်လှိုင်းဘွယ့် တိုင်းသိင်္ဂါမှာလေ၊ ပျော်မြန်းစေဘို့သာ။ ။

(သဖြန်)။ ။မတ်ပေါင်းငယ်ကာ။ နရိန္ဒာခေါင်ဆင့်တဲ့။ ရာမင်းမင့်းဘုန်း။ ။ တန်ခိုးတော်လျှံ၊ ပြောင်ဆဒ္ဒန်ပိုင်စိုးတဲ့။ မြတ်မျိုး ဧကရာမို့။ ကဲသာလို့နှုန်း။ (Latt 1964)

4.1.2 English Translation

The Glass Palace

Because Thou art the one who reigneth the throne in the glass palace as the lord of Thy people, the reflection of Thy glory, through the glass, is glittering as far as the territories of the planets (continents).

Thy great sovereignty covers everything pervasively like the rays of the sun. Thou art the one who reigneth the highest on the earth (*Jambudipa* continent),

Thou art the one who the kings of the nations rely.

Thy blaze of glory is scorching by the rate of the sun's heat.

Thou art the one who is sitting on the lion throne at the front part of the glass palace.

Ministers, generals, and all of the members of congress bows down to thee. Unlike the others, thou art the lord of thousands of royal servants.

According to the customs, it's the time to pouring out the holy water joyfully.

Like Brahmas' pouring out of holy water for the glory of the King. This is for the great joy of the people in the golden land with rich taxes.

Tha Phyan

Thou art the highest lord of men (*Narendra*) surrounded by the young leaders.

Thy authority is upon the hundreds of kings (or ministers). Thy power is overflowing and thou art above everything. For thou art emperor of emperors who owns strong and magnificent elephants (*Saddan*).

*Notes to the Translation:

According to the cosmology of *Abhidama*, *Jambudiapa* is one of the four

continents where humans dwell.

Tha Phyan: Special ending in the mahar gita

Narendra: Sanskrit Language which means "lord of men."

Saddan: The novel and strongest elephant whose ivory is glowing six colors.

4.2 Form and Structure of Hman Ya Wai Part A

Pat pyoe commonly has a three-part form or A, B, C structure. *Hman Ya Wai* is no exception. It features:

- *pat pyoe khan*, a specific instrumental introduction performed in a very flexible rhythm called "*atweh*" (see Appendix C, Score 1, mm. 1-16);
- B. a middle main section, which comprises fragments of different *mahar gita* styles (see Appendix C, Score 1, mm. 17-210);
- C. *thaphyan*, the special ending with *atweh* (flexible rhythm) (mm. 211-264).

Notably, in *Hman Ya Wai* the first stanza of the middle section (mm. 17-38) is also performed in *atweh* (flexible rhythm) and its musical texture of the instruments is the same as that of the first section or *pat pyoe khan*.

In my view, the opening material of the middle section is sufficiently similar to the first that can be said to form a larger *atweh* section. This changes the overall form to A) *pat pyoe kan* and first stanza with a flexible rhythm; B) middle section showcasing different *mahar gita* styles with an angular rhythm; and, C) *thaphyan* with flexible rhythm.

This use of angular rhythm in the middle section is typical of *pat pyoe* songs, especially if they are in 4/4.

The middle section of *Hman Ya Wai* can be further subdivided into five subsections that feature five musical styles or *mahar gita* subgenres. These are *pat pyoe* (mm. 1-54; mm. 63-70; mm. 79-85), *bwe* (mm. 54-62; mm. 70-78; mm. 86-101), *nat than* (mm.102-118), *dane than* (mm. 118-134; mm. 170-210), and *bawleh* (mm. 134-170).

Pat pyoe was fondly called by some musicians "*tay badethar*," which was literally means "song variety." It was up to the composer to choose the best musical styles to suit the text.

The different lengths of *pat pyoe* depend upon the length of the middle section or how many different musical styles are included. Transitions are critical in joining these different musical styles. A long *pat pyoe* could be 30

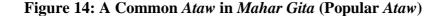
minutes or more. A medium *pat pyoe* is 15 minutes while a short *pat pyoe* is less than 10 mins.

4.3 Transitions in the Middle Sections of Hman Ya Wai

An important musical concept related to transitions in *mahar gita* is that of *ataw*. *Ataw* is a short instrumental phrase, which paves the way to the entrance of the main melodic structure. The last long notes of *ataw* are usually the pitch center of the next phrase. In the *than yoe* scale, "do" and "mi," the most stable notes, and are usually the pitch centers of the *than yoe*-scale phrases. In the *pale* scale only "do" is used as a pitch center. Thus, most of the *ataw* are invented with the last note of either "do" or "mi" to establish the pitch center of the next phrase. Refer to Chapter 2.3.3 for a discussion of *than yoe* and *pale* scales in Myanmar music. Although *ataw* literally means "a preparatory phrase," it can be used either before a phrase or at the end of a phrase. They also act as a transition between sections.

4.3.1 Popular Ataw as a Transition in Hman Ya Wai

There are various forms of *ataw* phrases. Among them, there is a very popular form of *ataw* with last note "do" is widely used in *mahar gita*. Figure 14 shows an example of *ataw*, which is a transition between several sections of *Hman Ya Wai* (also see Table 13). I give the name "popular *ataw*" to prevent confusion with other different *ataw* phrases discussed later. I should note that while "C" is commonly the pitch center in *mahar gita*, the pitch center in the transcribed scores is "B." It was transposed a half-step down to suit the vocalist's range. Therefore, the analysis of music based on the transcribed score in this chapter will be done in the key of "B."





Measure No.	Location	Function	
Mm. 36 to 38	Between the first stanza and its repetition	As a pivot phrase functioning both as the ending phrase and preparatory phrase. When the <i>ataw</i> is ending phrase, the voice part usually sings the sentence particles such as <i>"lay."</i> It helps balances the rhythm momentum of two different kinds of rhythm (i.e. flexible and regular rhythm sections).	
Mm. 52 to 54	Between the <i>pat</i> <i>pyoe</i> and <i>bwe</i> sections	It helps establishes pitch center during modulation (as the pitch center of <i>bwe</i> genre is usually "fa," it modulates to pitch center "fa").	
Mm. 108 to 110	Between the phrase in <i>nat than</i> section and its repetition	As a pivot phrase functioning both the ending phrase and preparatory phrase. When the <i>ataw</i> is ending phrase, the voice part usually sings the sentence particles such as <i>"lay"</i> but here <i>"phoo"</i> is sung in the same melody of <i>"lay."</i>	
Mm. 116 to 118	Between the <i>nat</i> <i>than</i> and <i>dane than</i> sections	Transition without modulation.	

 Table 13: Popular Ataw as the Transition and its Function

4.3.2 Other Ataw Phrases as Transitions

Other types of *ataw* phrases used in *pat* pyoe are ending phrases and genre-specific *ataw* phrase.

For example, the short phrase in Figure 15 (mm. 67-69 of *Hman Ya Wai*) is an ending phrase. It doesn't have a preparatory role like other *ataw* however, it can hint at change to come.

Figure 15: Ending Phrase as a Common Ataw in Mahar Gita



In *mahar gita*, each subgenre often has its own distinct *ataw* phrases. When this kind of *ataw* is being played, musicians and audiences who listen to *mahar gita* can easily guess what genre will follow. For example, *bawleh* and *dane than* genres have their own *ataw*. Figure 16 shows a short *ataw* of *bawleh* style music and Figure 17 is that of *dane than* style music in *Hman Ya Wai*.

Figure 16: Bawleh Ataw in Mahar Gita



 Table 14: Other Ataws as the Transition and Their Function

Ataw	Measure No	Location	Function	
name				
Ending Phrase	Mm. 68 to 70	Between <i>pat pyoe</i> sub- phrase and <i>bwe</i> phrase	As a transition during pitch- center modulation ("mi" to "fa") between two different musical styled phrases.	
Ending Phrase	Mm. 84 to 86	Between <i>pat pyoe</i> sub- phrase and antecedent before a <i>bwe</i> phrase	As a transition between two different musical styled phrases with a common pitch "mi."	
Bawleh Ataw	Mm. 124 to 126	Sandwiched between two <i>dane than</i> style phrases	Hinting at the next genre (the next genre after <i>dane than</i> is <i>bawleh</i> in this composition).	
	Mm. 132 to 134	Between the <i>dane than</i> and <i>bawleh</i> sections	Both as a preparatory phrase for <i>bawleh</i> section and as the extension of the <i>dane than ataw</i>	

Dane	Mm. 170 to	At the end of the	As a preparatory phrase to the
than	171	bawleh section and	dane than musical style
inan		before the dane than	
Ataw		section	

4.4 Cadences of *Hman Ya Wai*

The discussion of the complete and sub-cadences of Myanmar music is best preceded by a brief recap of *mahar gita* scales and *twe lone* harmonic pairs introduced in chapter 2.

Mahar gita uses a two-part or three-part texture, where two or three notes are combined to make cadences. Typically, composers of *mahar gita* harmony would try to avoid triads instead they use a single note together with two doubled notes (for example, "so" and doubled "do"). These combinations of two notes are called *twe lone* (harmonic pair). They are *tayar* (octave or unison), *tay* (perfect fifth), and *htone* (perfect fourth), and *tayaw*, which is a second type of perfect fifth harmonic interval discussed further below (Swe 2018).

In the following analysis, I use a movable "do" system to analyze the transcribed scores which are in the *than yoe* and *pale* scales of Myanmar Classical Music, which have specific active and stable pitches. *Than yoe* is "do-mi-fa-so-ti-do" and *pale* is "do-re-mi-so-la-do." The first scale degree "do" (*da bauk than*) and second scale degree "mi" (*chauk pauk than*) are assumed as the most stable pitches in both scales. "Re" and "la," in the *pale*, and "fa and ti," in the *than yoe*, are regarded as the least stable or the most active tones. "So" can be said as the medium active tone.

Complete cadences are built on the stable pitches "do" and "mi." The long phrases of *mahr gita* always end with complete cadences. There are usually three divisions, which can be called "sub-phases" in a long phrase. Each sub-phrase has its own cadence-like point and they are like short pauses within a long phrase. Therefore, it is suitable to call these points as sub-cadences, and the whole phrase usually ends up with the complete cadence. Tables 15 and 16 provide a summary of the cadences and sub-cadences in *Hman Ya Wai*. Most of the cadences and sub-cadences in *mahar gita* are not usually longer than two beats.

Tables: Cadences and Sub-Cadences in the Order of Stability

No.	Name	Interval	Lower Note	Upper Note	Remark
1	Da bauk tayar	Octave or Unison	Do (B)	Do (B)	Only as a complete cadence
2	Da bauk tay <mark>a</mark> w	Perfect Fifth	Do (B)	So (F#)	Either as a complete or sub-cadence
3	Da bauk and chauk pauk	Major Third	Do (B)	Mi (D#)	Considerable
4	Chauk pauk tayar	Octave	Mi (D#)	Mi (D#)	Either as a complete or sub-cadence
5	Chauk pauk tay	Perfect Fifth	Mi (D#)	Ti (A#)	Either as a complete or sub-cadence

Table 15: Complete Cadence

Table 16: Sub-Cadences

No.	Name	Interval	Neighbor Notes added	Lower Notes	Upper Note	Rem <mark>ar</mark> k
1.	Da bauk tayaw	Perfect fifth	none	Do (B)	So (F#)	Either as a sub or complete cadence
2.	Chauk pauk tayar	Octave	none	Mi (D#)	Mi (D#)	Either as a sub or complete cadence
3.	Chauk pauk tay	Fifth	none	Mi (D#)	Ti (A#)	Either as a sub or complete cadence
4.	Da bauk htone	Perfect Fourth	none	So (F#)	Do (B)	Only as sub- cadence
5.	Chauk pauk and lay pauk	Minor Third	none	Mi (D#)	So (F#)	Only as sub- cadence
6.	Lay bauk tayar	Octave	La (optional)	So (F#)	So (F#)	Only as sub- cadence
7.	Ngar bauk tayar	Octave	So (optional)	Fa (E)	Fa (E)	Only as sub- cadence
8.	Ngar bauk htone	Perfect Fourth	So (optional)	Do (B)	Fa (E)	Only as sub- cadence

9.	Da pauk tayar with neighbor tone (a)	Octave	Re (added)	Do (B)	Do (B)	Only as sub- cadence
10.	Da pauk tayar with neighbor tone (b)	Octave	Ti (added)	Do (B)	Do (B)	Only as sub- cadence
11.	Da pauk tayaw with a neighbor tone	Perfect Fifth	La (added)	Do (B)	So (F#)	Only as sub- cadence
12.	Hnapauk	Unison	none	Ti (A#)	Ti (A#)	Only as sub- cadence

4.5 Phrases of Hman Ya Wai

Unlike Western classical music phrases, Myanmar traditional music phrases can be at any length. The length of a phrase depends on the sentences of the text and its meaning. Most of the phrases in the *pat pyoe* are nine measures long and some are even longer (as long as thirty-three measures). Long phrases are divided into subphrases with short rests for the vocal part. However, they are not meant to be sung as two different phrases. Vocalists are expected to sing sub-phrases smoothly as much as possible.

Myanmar people are usually in the habit of dividing a thing or an idea into three sections or parts when they talk about it. For example, when they talk about the rainy season, they always say "*moe oo* (the onset of the raining season), *moe lal* (the middle of the raining season), and *moe hnaung* (the end of the raining season)." When they explain the feature of a boat, it is mentioned as "*hlay oo* (the head of a boat), *hlay wam* (the body of a boat), and *hlay hmyee* (the tail of a boat)." Therefore, a phrase of *mahar gita* comprises of three sub-phrases: the head of the phrase, the body of the phrase, and the tail of the phrase.



Figure 18: The First Phrase in the First Stanza of Hman Ya Wai

For example, Figure 18 shows an eight-measure phrase from *Hman Ya Wai*. It can be divided into:

- head of the phrase (from the 1st beat of mm.1 to the 3rd beat of mm. 2),
- the body of the phrase (from the 4th beat of mm. 2 to 4th beat of mm. 5),
- and the tail (from the 4th beat of mm. 6 and on the 1st beat of mm. 8).

Note the mini rest in the fourth measure is not a sub-phrase division. These sub-phrases have their own distinct characters as will be described below.

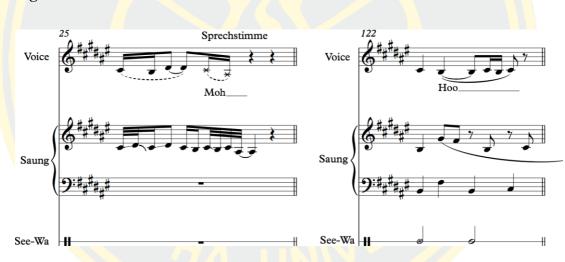
4.5.1 The Head of Phrase

The head of a phrase is usually the opening word of the sentence and it could be repeated two or three times. In *Hman Ya Wai*, the double-headed phrase could be found in the fifteen-measure long first phrase of *bwe* section (mm. 54-68), the eleven-measures long second phrase of *bawle* style section (mm. 142-152), and the eighteen-measure long phrase of the second *dane than* section (mm. 170-187). Typically, the head phrase in *pat pyoe* is musically similar or varied. However, different heads in a phrase are not common. The following two examples illustrate this. The *bwe* section of the *pat pyoe* entitled *Tharakar Kyay Nge Doe*, features two head phrases that are two halves of the first short sentence in the phrase (see Appendix C, score 3, mm. 1-15). In the *pat pyoe* entitled *Nyoe Nyoe Hsai Hsai*, a twenty-three-measure triple-headed phrase can be seen (see Appendix C, score 6, mm. 3-25).

4.5.2 The Body of the Phrase

The body of a phrase could be of any length and is divided into many short or tiny sub-divisions separated by a short rest. The number of subdivisions depends entirely on the words, meaning, and grammar of the text. The *bawleh* section of another *pat pyoe* entitled *Nyoe Nyoe Hsai Hsai* illustrates this (see Appendix C, Score 6, mm. 3-25). The anatomy of the phrase is—triple-head (mm. 1-13), which is the adverbial phrase of the text; the body, which has three sub-divisions: a proposition phrase (mm. 13-17), the subject (mm. 17-19), and the clause (mm. 19-21); and, the tail, the verb (mm. 21-23). Composers always try not to separate the compound words or clause because the meaning could be changed.

A body of a phrase may have many sub-divisions. However, the ending of the body is signaled by the sub-cadence and a special syllable. There are eight vowel sounds in *mahar gita* compositions. U Nan Nyunt Swe once mentioned how they can be divided into two groups: *digha* vowels (long vowels) and *rassa* vowels (short vowels) (Swe 2018). Among short vowels, there are very short vowels similar to staccato in Western music. These short vowels are usually the last syllable of the body of the phrase.



In *Hman Ya Wai*, the syllable "*Moh*," on the late half of the second beat in mm. 25 is the combination of consonant "m" with a very short vowel. It is notated with a cross note-head because the vowel is so short that the pitch becomes unclear. These kinds of vowels usually are to signal the end of the body of a phrase. The tiny and short ornamentation of the syllable "*Htoo*" on the 3rd and 4th beat of mm. 122 in *Hman Ya Wai* is also another way to signal the end of the body of a phrase. These two ways of ending the body of a phrase for the coming of the tail.

Figure 19: Measures 25 and 122 from Hman Ya Wai

4.5.3 The Tail of Phrase

A tail part of a phrase is occasionally quite short and might be only one word or one syllable. They may have their own style or they can be a common *ataw*. Sometimes a special *ataw* is used to signify the end of a specific music style of *mahar gita*. The tail of *Hman Ya Wai* (mm. 37-38) is a very common popular *ataw* of Myanmar classical music (see Figure 14), and it is usually found to be attached to the word "*lay*" of voice part. The phrases in *Hman Ya Wai* are not very complex and normally follow the rules except the second phrase of the *bwe* section.

4.6 The Form and Structure of *Hman Ya Wai* Part B Phrasing

As mentioned in the previous section, *pat pyoe* can be divided into three sections: A, B, and C: the head, the body, and the tail. I will now map phrasing and tuning onto these sections.

The head or A section has three phrases: the first phrase is *pat pyoe khan*, and the second and third phrases comprise the first stanza in *atweh* or flexible rhythmic style.

The body or B section comprises five subsections of different *mahar gita* genres. Each section has generally two phrases and they are repeated twice except for the *pat pyoe* section and the second *dane than* section. The *dane than* section is repeated twice but it contains only one phrase. Although the *pat pyoe* section includes two phrases, they are not repeated. It is worth noting that the placement of subsections is influenced by scale/tuning order. For example, if *ouk pyan* tuning (a combination of *than yoe* and *pale*) is used in the head of the piece, then the *than yoe* scale follows as can be seen in the following table (see Table 17). As subgenres of *bwe* use the scale of *than yoe* it precedes *nat than* and *dane than* which can be performed in *than yoe* and/or *pale* scales. They act as a bridge to *bawleh* which can only be performed in *pale* scale. See chapter 2.3.3 for a discussion of scales in Myanmar music.

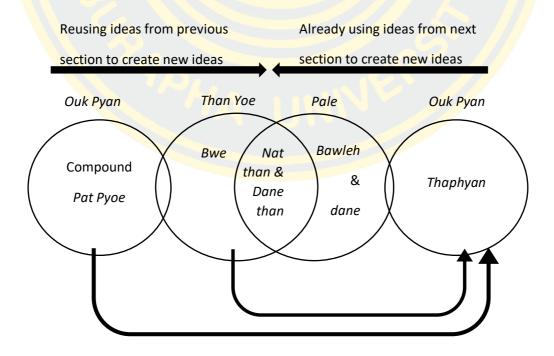
The tail or section C has two phrases and the first one is repeated. For the first time, the first phrase is in *atweh*, and in the second time, it is in regular rhythm.

For the second phrase, starting from the second half of the body, it changes into *atweh*. In the tail, the late last syllable is repeated three times as the special cadenza.

Measure No.	Five subsections of Section B (following stanzas of the text)	Subgenre of <i>mahar gita</i>	Larger sections depend on the tuning system
Mm. 39 to 70	<i>Pat pyoe</i> section	Pat pyoe	Second half of compound <i>pat pyoe</i> section (<i>Ouk pyan</i>)
Mm. 70 to 101	<i>Bwe</i> section	Bwe and pat Pyoe	Compound <i>bwe</i> section (<i>Than yoe</i>)
Mm. 102 to 134	<i>Nat than</i> and <i>dane than</i> section	<i>Nat than</i> and <i>dane than</i>	Compound <i>dane than</i>
Mm. 134 to 168	Bawleh section	Bawleh	section (<i>pale</i>)
Mm. 168 to 210	Dane than section	Dane than	\mathbf{O}

Table 17: Five Subsections of Section B

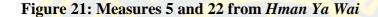
Figure 20: The Structure of Hman Ya Wai



4.7 Recycling Musical Ideas and Fragments

As introduced in chapter two, one can think of Myanmar music like a new stupa built up over the old one. In *pat pyoe* the music moves forward via the recycling of musical ideas and fragments including those from previous musical styles (see overview in Figure 20. The following examples illustrate this.

In the first stanza section (*atweh*), both the body and the tail of phrase I in the *saung* part (mm. 22-29) reuse musical ideas from the *pat pyoe khan*.





In the *saung* part, the musical idea presented in mm. 21 is a variation of mm. 4 in the *pat pyoe khan*. Mm. 23-25 vary a musical idea presented on the 3rd beat of mm. 12-14 in the *pat pyoe khan*. Mm. 26-29 (the tail of phrase I) is a variation of the music on the 2nd beat of mm. 8 to 1st beat of mm. 12, omitting mm. 9 (see Appendix C, score 1).

Musical ideas from the previous section are recycled into new phrases. For example, the heads of the new phrases are the new musical ideas, and the bodies and tails were the variation and rearrangement of the old ones. The sections of the middle part are connected to each other in this way until the *dane than* section.

Importantly, a fragment from the first *dane than* section (from the 2nd beat of mm. 124 to the 1st beat of mm. 126) is the special *ataw* of the *bawleh* genre. The musical idea of the upcoming section is already used in the first *dane than* section. The direction is reversed from the next section to the previous section.

As the *thaphyan* is the ending part of the *pat pyoe*, it is connected to each previous section. For example, mm. 253-261, uses feather stems derived from a rhythm idea frequently found in *pat pyoe kan* and *atweh*. The rhythm is flexible and the *saung* part reuses some musical ideas from *pat pyoe khan*, which is also a flexible rhythm. It is important to note that the voice part of the sections, except for *pat pyoe* section, has its own identity and does not vary or recycle musical ideas between sections. Rather it is the instrumental part that connects the whole *pat pyoe* through the process of variation discussed.

4.8 The Characteristics of Melody in *Pat Pyoe*

4.8.1 Vocal melody in *Pat Pyoe*

Mahar gita vocal melodies use speech-like phrasing that combines short rests with a longer pause at the phrase end. In speaking, the short rests are not noticeable compared to a full stop at the end. This is how *mahar gita* vocalists maintain continuity and smoothness over long phrases.

The vocal melody goes up or down mostly in step-wise motion through the pitches of scales and helping tones. Some skipping may occur in scale pitches without using helping tones. When composing a vocal line, the focus has traditionally been on smoothness and delicacy.

The connection between two notes is preferred to the clarity and exactness of the pitch. There is a slight portamento to a specific point of frequency that sounds, waits, and continues to the next pitch in a smooth or gliding manner. Portamento is frequent in the vocal melody. This can be seen in the *pat pyoe* entitled *Hmine Pyar Hmone Wai* (see Figure 22 below and Appendix C, score 2).

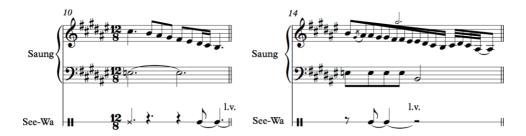


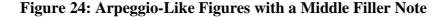
Figure 22: The First Phrase of Hmine Pyar Hone Wai in the Voice part

4.8.2 Instrumental Melody in Pat Pyoe

The instrumental melody on *saung* is characterized by two parts with an active upper part with a melodious line. Unlike the voice part, it is not so common to have rests within a phrase in the *saung* part. The rest and pause moments only occur at the end of the phrases. In the B section, the upper melodious line is very angular in the common time. This is in contrast to the *atweh* (flexible rhythm) sections of A and C sections. To loosen the angularity, some rhythmic devices and scales are employed. Both the skipping and stepping could be found in this line. The rhythm devices are crucially important in the melody of the instrument part. Flowing through the seven-tone scale in accelerando and the arpeggio-like with a middle filler note figures are commonly found. However, the lines still follow the important characteristic of *mahar gita* melody which includes rhythmic accelerando and arpeggio-like figures.



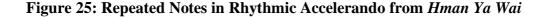


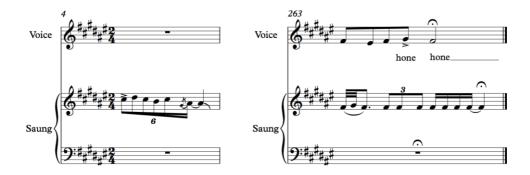




Arpeggio-like figures can be found throughout the *saung* line. In Figure 24, the arpeggio like figure is created between two notes: "fa" and "do" (*Ngar bauk tayaw*). In this figure, "do" is a middle filler note between the octave interval of "fa" (*Ngar Bauk Tayar*). "La" and "so" before "fa" are ornamentations. Likewise, in Figure 24 mm. 4, "so" is a filler note between the octave interval of "do" (*Da Bauk Tayar*), while "mi" and "re" are an ornamentation of the melody "do." While all three notes of the tonic triad (domi-so) can be found, they do not occur simultaneously as triads are avoided in *mahar gita*.

As *saung* is the plucking instrument, it cannot produce long, sustained tones. To create a seemingly long melodious line with only one note, the note is repeated many times in accelerando. As "fa" in the mm. 263 (see Figure 25) cannot be sustained long with the *saung*, the note is repeated many times in accelerando. Instead of using the *tremolo* and *trill*, the acceleration happens in the repeated notes and the speed becomes still and dwell in the last long note. To notate this, feather stems are used. This kind of rhythm technique could also be found in Chinary Ung's *Spiral XI* (see chapter 2.5).





4.9 The Concept of Harmony in Hman Ya Wai

In Burmese music, some intervals are more important than chords. The formation of Burmese harmony is based on paired notes (as discussed in chapter 2). These intervals are called *twe lone* (harpists usually call them *kyo twe*). They are the result of the scales employed in a phrase or a piece. In *Hman Ya Wai*, two scales (*than yoe* and *pale*) stand on its own with a phrase or a section. When *than yoe* scale is used, the *twe lone* from *than yoe* scale are important. Likewise, the *twe lone* from *pale* scale are important. Likewise, the *twe lone* from *pale* scale are important when it is applied in the piece. The *twe lone* in *Hman Ya Wai* formed from the *than yoe* and *pale* scales, can be seen in tables below.

Table 18: Octaves from Than Yoe Scale (Tayar)

Name	Da bauk tayar	Chauk pauk tayar	Ngar bauk tayar	Lay bauk tayar	H <mark>nap</mark> auk tayar
Upper pitch	do	mi	fa	so	ti
Lower pitch	do	mi	fa	SO	ti

Table 19: Fifth from Than Yoe Scale (Tayaw)

Name	Da bauk tayaw (P5 th)	Tay* (P5th)Ngar bauk tayaw (P5th)		Hnapauk tayaw (d 5 th)
Upper pitch	SO	ti	do	fa
Lower pitch	do	mi	fa	ti

Note*: A common interval, which is frequently found as a complete cadence, and have the special name "*tay*."

When it comes to discussing the fourth interval, the upper pitch is more important than the lower pitch. Unlike Western music, the lower pitch is not the root note. Although fourth harmonic intervals are called *htone*, there is no specific Burmese name for third harmonic intervals. This is probably because Burmese musicians in those days believed that the third harmonic intervals are not quite consonant. However, some third harmonic intervals are often found in *mahar gita*.

Name	Da bauk htone (P4 th)	Chauk pauk htone (P4 th)	Ngar bauk htone (P4 th)	Hnapauk htone (A4 th)
Upper pitch	do	mi	fa	ti
Lower pitch	SO	ti	do	fa

Table 20: Forth Intervals from Than Yoe Scale (Htone)

 Table 21: Third and Sixth Intervals from Than Yoe Scale

Intervals	M3 rd	m6 th	m3 rd	M6 th	M3 rd	m6 th
Burmese pitches' Names	Da bauk & Chauk pauk	Chauk pauk & Da bauk	Chauk pauk & Lay bauk	Lay bauk & Chauk pauk	Lay Pauk & Hnapauk	Hnapauk & Lay bauk
Upper pitch	mi	do	SO	mi	ti	so
Lower Pitch	do	mi	mi	SO	so	ti

Table 22: Second and Seventh Intervals from Than Yoe Scale

Intervals	m2 rd	M7 th	M2 rd	m7 th	m2 rd	M7 th
Burmese pitches' Names	Chauk pauk & Ngar bauk	Ngar bauk & Chauk pauk	Ngar bauk & Lay bauk	Lay bauk & Ngar bauk	Hnapauk & Da bauk	Da bauk & Hnapauk
Upper pitch	fa	mi	SO	fa	do	ti
Lower Pitch	mi	fa	fa	SO	ti	do

Table 23: Octaves from Pale Scale (Tayar)

Name	Da bauk tayar	Khunhana pauk tayar	Chauk pauk tayar	Lay bauk tayar	Thone bauk tayar
Upper pitch	do	re	mi	so	la
Lower pitch	do	re	mi	SO	la

Table 24: Fifth from Pale Scale (Tayaw)

Name	Da bauk tayaw	Khunhapauk tayaw	Lay bauk tayaw	Thone bauk tayaw
Upper pitch	SO	la	re	mi
Lower pitch	do	re	SO	la

Table 25: Fourth from Pale Scale (Htone)

Name	Da bauk htone	Chauk pauk htone	Ngar bauk htone	Hnapauk htone	
Upper pitch	do	re	SO	la	
Lower pitch	SO	la	re	mi	

Note: All Fifth and Fourth in Pale Scale intervals are Perfect Fifth and Fourth

Table 26: Third and Sixth intervals from Than Yoe Scale

Intervals	3 rd	6 th	3 rd	6 th	3 rd	6 th
Burmese Names of Pitches	Da bauk & Chauk pauk	Chauk pauk & Da bauk	Chauk pauk & Lay bauk	Lay bauk & Chauk pauk	Thone Bauk & Da Bauk	Da bauk & Thone bauk
Upper pitch	mi	do	SO	mi	do	la
Lower Pitch	do	mi	mi	SO	la	do

Table 27: Second and Seventh intervals from *Than Yoe* Scale

Intervals	2 rd	$7^{ ext{th}}$	2 rd	7 th	2 rd	7 th
Burmese Names of pitches	Da Bauk & Khunhna- pauk	Khunhna- pauk & Da bauk	Khunhna- pauk & Chauk pauk	Chauk pauk & Khunhna- pauk	Lay Bauk& Thone bauk	Thone bauk & Lay bauk
Upper pitch	re	do	mi	re	la	SO
Lower Pitch	do	re	re	mi	SO	la

Like other forms of Burmese music, *mahar gita* uses interval strength– consonance and dissonance–to structure the music. The intervals which are used as the complete cadences are the most stable and consonant intervals in *mahar gita*. They are *dabauk tayar, chauk pauk tayar, dabauk tayaw, tay, dabauk htone, and chauk pauk htone*.

The second-most consonant and stable intervals are octaves, fifths and fourths. Among them, *hnapauk tayaw* and *hnapauk htone* are not found very often in *mahar gita*.

The third and the sixth are assumed to be neither consonant nor dissonant. The third can be found more frequently than the sixth intervals.

That leaves the second and the seventh intervals, which are definitely dissonant. Their role is to help the composition go forward. "Re" and "la" are already non-*twe lone* tones and assumed dissonances because they are not scale notes.

To understand the harmony of *mahar gita*, it is easiest to address the two lines of the *saung* part first, and then address the interaction of *saung* and vocal part, which I do in part 4.10 discussing texture.

Figure 26 shows the first phrase from the *pat pyoe* section of *Hman Ya Wai*. The *pale* scale has been used for this phrase. The upper stave is its original version and the lower one is simplified for the purpose of analysis. Acronyms will be used to show the degree of consonant ("S" for stable and consonant, "C" for consonant, "c" for weak consonant, and "D" for dissonant).



Figure 26: An Excerpt from *Hman Ya Wai* with Analysis of Interval Strength

On the first beat, the consonant interval (*lay bauk tayar*) moves to the weaker interval (3rd). On the second beat, the consonant interval moves to the stronger and more stable interval. On the third beat, the dissonant resolves to the weak consonant interval and then resolves again to another degree of consonant interval. This is how consonant and dissonant develop a strength to progress within a beat. However, the composer develops this simple form to a more complex form as shown in the upper stave. Lower pitch "so" is made of a long note against the upper active rhythm, and notes are ornamented with grace notes (secondary tones). By bending the *saung* string, the portamento occurs from the weak consonant to the stronger one. This treatment creates the aesthetic value of *mahar gita*.

On the fourth beat of the first measure, two consonant intervals (fourth and third) can be found but they are played alternatively between two parts. However, this is not the "hocketing." Hocketing is the distribution of a melody line among the layers or parts. In this case, the alternative playing occurs in the harmonic intervals but not as a melody line. This might be called that the arpeggio of the harmonic intervals (*twe lone*). The same idea is applied on the fourth and third beats of the second measure—the arpeggio octaves (mostly upward).

"So," which is on the first beat of the second measure, is actually in unison. However, it is not possible to play unison on the *saung*. Therefore, it is accented to produce a louder sound like unison. On the second beat of the same measure, the two notes, which is the second interval, occurs in the upper voice because of the sustain of the grace note, and it just an ornamentation. The fourth interval (eleventh) arpeggio occurs downwardly in the same beat. In these two measures, the upper active line uses only the *pale*-scale tones except the grace note in the second measure. That grace note "ti" is the neighbor tone as a dissonance ornamentation.



Figure 27: An Excerpt from Hman Ya Wai with Arppegio-Like Figures

Figure 27 shows a phrase from *bwe* phrases in the middle section of the work. In the angular middle section of the *pat pyoe*, there are specific rules for harmony. Beat division is always two and in the quadruple meter. The effects of consonant and dissonant occur within a beat. In these measures, the modal modulation occurs from pitch centers "do" to "fa." Therefore, the first interval can either be a stable consonant (*da bauk tayar*) or only a consonant interval. The pitch center moves back to "do" on the second beat of the fourth measure. The second measure sounds like the arpeggio of the IV triad. This arpeggio technique is applied to avoid the ringing of three different tones simultaneously and making a triad. It continues to maintain interval strength as usual rather than a triad. That arpeggio continues into the third measure, where it is rooted on the different lower note "so" (B). Since there is no concept of the triad in *mahar gita*, it cannot be interpreted as an inversion.

Different from the usual interval arpeggios that are mentioned above (see Figure 26), the arpeggio-like figure in this measure includes more than two notes. There can be said to be two kinds of arpeggio in *mahar gita*: An arpeggio that occurs with two notes, which could be called the interval arpeggio; and, an arpeggio which occurs one note against two or three notes over different intervals, which can be regarded as an arpeggio-like figure. This latter kind can be found frequently in *bwe* and *kyo* genre. However, one note against descending or ascending through a specific

scale (without omitting any scale degrees) cannot be regarded as an arpeggio-like figure.

Usually, interval arpeggios (ninth or second, eleventh or fourth, and octave) happens in the fourth measure. Compound intervals can be categorized in the group, which is their simple intervals. For example, the eleventh is the same as the fourth.

Figure 28: Excerpts from *Hman Ya Wai* with the Analysis of Independent Two Lines Meeting at a *Twe Lone*



Figure 28 is an example of two musical lines with some independence, that end up traveling in the same direction and resolve to the octave (*ngar bauk tyar*) to establish a new pitch center. This new pitch center maintains interval strength (attention is still given to the vertical connection). A suspension occurs in the lower part at the first beat of the second measure. Starting from the second beat of the second measure, a one-note against a seven-tone descending scale occurs. Unlike the third measure, the lower sustained note is divided into some repeated notes in a certain rhythm and the upper line is descending in the second measure. In the third measure, the line ascends and descends through *than yoe* scale against one sustained note. Finally, the phrase ends in a cadence (the third interval of *da bauk* and *chauk puak*).

In *mahar gita*, the duration of consonance, especially the stable ones, is not long. This transferring of intervals usually happens in less than a beat. This is because flow is prized. While every consonants interval has a level of stability, interval arpeggios are used if the composer wants to weaken that stability. To avoid the tertian chord by meeting of third intervals among the lines, arpeggio-like figures (one note against few notes including the third intervals) are employed. While attention is still given to the interval strength between two notes, harmony between three tones still happens in the resonance of the tones. Therefore, it can be stated that *mahar gita* avoids mass harmony as much as possible. The two parts in the *saung* have their own close connections, without the vocal part. The way the vocal part is combined with these two lines of instruments will be discussed under the topic of the texture in section 4.10.

Table 28: Techniques of Harmonizing Twe Tone

- 1) Alternating consonance and dissonance within a beat
- 2) Interval arpeggio by two notes
- Arpeggio-like figures (one note against a few other notes including third intervals)
- 4) Ascending or descending a certain scale against one note in the lower line (either divided or undivided in rhythm)
- 5) Two lines flowing independently to the same meeting point (stable cadences)

4.9.1 The Function of the Lower Note in the Saung

The lower note of the *suang* has a specific harmonic function. It decides the degree of consonance of the interval. Sometimes it works to highlight the important pitch among the multiple notes of the upper line. This is done via doubling, called making *tayar* or making stable and consonant intervals with the related pitches in a certain scale. Since the important pitches are those of the scale the phrase is based on, all the notes in the lower line must be the scale pitches. By highlighting through the scale pitches, the lower line influences the whole phrase and creates unity. Therefore, the lower line is not quite melodious. Moreover, the lower line is not just another version of the upper line, unlike heterophony. And it is not an expanded melody line, like in a medieval *motet*.

4.10 Texture of Hman Ya Wai

In *mahar gita*, the texture is always shifting between heterophony and polyphony even within a unit of a musical idea. This can be clearly seen when the relationship between the voice and the *saung* parts is discussed. I use several extracted phrases from the *Hman Ya Wai* to illustrate this.

Figure 29: Excerpt of the Hetrophonic and Polyphonic Textures from *Hman Ya Wai*



The first measure of Figure 29 is from the *pat pyoe khan* section of *Hman Ya Wai*. The upper line is going down to reach its destiny "fa." On the very first beat, the harmonic interval is an octave (*tayar*), and at the last note or meeting point, the interval is the fourth (*htone*). Throughout the transferring journey of *tayar* to *htone*, harmonic intervals on every beat are treated with *mahar gita* harmonizing (*twe lone*). Actually, the upper line is the descending of *than yoe* scale (mi-do-ti-so-fa) and ornamented by the neighbor and secondary tones. Because of the fourth interval (*htone*), two lines make a polyphonic texture.

The second measure of Figure 29 shows this harmonizing technique within mm.8 of *pat pyoe khan*. Starting from the second beat, the upper line goes upward from "mi" to "so" and ornamented by the secondary tones (fe and re). It also has the destiny (so). However, there is no harmonic interval changing during the journey to its destiny (so) and all the important intervals are the octaves (*tayar*). That is why it looks like heterophony. The choice of harmonic interval (*twe lone*) decides whether the texture is heterophony or polyphony.

Figure 30: Excerpts of the Texture between the Descending Upper Line and *Twe Lone* in Lower line from *Hman Ya Wai*



Figure 30 shows three examples from the *pat pyoe khan* section that illustrates how intervalic transference impacts the texture. Initially, the intervals travel from the fifth (*tayaw*) to the octaves (*tayar*) and the seven-tone scale descends to its destiny "fa." However, there is a skip between "la" and "fa." The whole second measure signifies the fifth interval (*tayaw*). The starting note (do) is an octave higher of its destiny note (do) in the descending journey, and it makes a full descending seven-tone scale. Both descending scales in the first two measures start with a secondary tone (re). The lower root is a single sustained note in the second measure but in the case of the first and third measures, it is divided into repeated notes in a different rhythm. In the second beat of the third measure, the same idea of descending comes out from the tenth (the third) to octave (*tayar*). The fourth and fifth beats of the third measure are all the fifth interval (*tay*). Other intervals in the third measure are octaves.

In heterophony, the vertical relation of the lines is not considered that important. However, in *mahar gita* texture, the vertical relationship of the line is carefully treated with *twe lone* harmonizing. As the texture is always shifting between heterophony and polyphony depending on the *twe lone* used in the two lines, this kind of texture is given the name "*twe lone*" texture.

4.10.1 Alternation Between Two-Part and Three-Part Texture

When the voice part comes together with the two lines of the *saung* part, the texture of the *pat pyoe* becomes complex. Normally, the texture has three lines: a vocal line and two *saung* lines. However, the texture often shifts throughout the piece by reducing lines. To better understand this, the first stanza in the *atweh* of *Hman Ya Wai* is first discussed

Figure 31: Mm. 17-20 and mm. 24-25 from Hman Ya Wai







In the first stanza in the *atweh*, the *saung* part has only one line (see mm. 17-18 and mm. 24-25). This means the three-line texture of *pat pyoe* becomes only two lines. In mm. 17-18, the *saung* line is a variation of the voice line which creates heterophony. In mm. 19-20, the lower line of the *saung* part

enters and makes a three-line texture. However, the texture is still heterophony in accordance with the *twe lone* harmonizing technique of *mahar gita*. The interval between the lower and upper lines of the *saung* are mostly in octaves (*tayar*). And the upper line is still the variation of the voice part in mm. 19-22. Therefore, the whole sub-phrase from mm. 17-20 is in heterophony.

In mm. 24-25, the interval between the voice part and the upper line of the *saung* is changed from the fifth (*tayaw*) to the octave (*tayar*). Due to the shifting of these intervals, polyphony occurs in mm. 24. The upper line of the *saung* is descending through the *than yoe* scale ornamented with the secondary tones "re" and "la." It can be said that the two lines are flowing independently. Starting from the fourth beat of mm. 25, the *saung*'s line is the variation of the voice part and makes them heterophony again. Therefore, the number of the lines and the texture of the *pat pyoe* is frequently changing in such ways throughout the entire piece.

4.10.2 The Function of the Lowest Line and the Meeting Points of the Lines in the *Twe Lone* Texture

In order to understand the function of the lowest line and discuss the meeting points of the lines in the texture, Figure 32 shows a phrase from *Hman Ya Wai* together with its skeleton structure. This phrase is from the *dane than* section of *Hman Ya Wai*. *Pale* scale (do-re-mi-so-la) is used as the base and secondary tones are "fa" and "ti." The lower two staves are analyzed versions of the upper two, which are the original from the section. The crossed notes are meeting points of the lines. The diamond notes of mm. 120 is the passing tone in the voice line.



Figure 32: The First Phrase from Dane Than Section of Hman Ya Wai



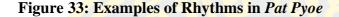
When the original and analytical forms of the phrase are compared, it is clear that how the texture is created by using secondary tones, rhythm devices, and *twe lone* harmonizing. The lowest line is the movement of the single note from the scale and it highlights the important notes in the upper two lines. It not only gives the direction to music but also forms the unity of the music by using only the scale tones.

How the harmonic intervals (*twe lone*) changes between the three lines is worthy of study. They meet at the definite important points in the texture. The intervals at the point are usually consonant intervals such as the octave, the fifth, and the fourth (*tayar*, *tayaw*, and *htone*). Other intervals can be found but they are not very common.

In summary, all the harmony in the *pat pyoe* is treated in the *twe lone* way, harmonizing through the interval strength and creating heterophony and polyphony via important meeting points between the lines, which change from three lines to two lines and vice versa.

4.11 Rhythm and Meters

To understand the rhythm and meters of *pat pyoe*, the rhythm flexibility in *mahar gita* has to be examined first. In *mahar gita*, one beat can be of any length and it can be divided in any way. All the resulted rhythms are assumed as the same although they are not exactly the same.





In Example 1, the rhythm is simple, the beat division is two, and it is evenly divided. In Example 2, although the beat is not equally divided, in *mahar gita* performance practice they are assumed to be the same rhythm because there are two notes in one beat. Regardless of how a beat in *mahar gita* is divided, the duration of the notes is not fixed within one beat. This is an example of rhythm flexibility in *mahar gita*. The rhythm in Example 2 can be often seen as like swing in jazz music. The rhythm in Example 3 also has the same kind of flexibility but with a different beat division. When a beat is divided like what is shown in Example 5, the compound meter occurs. However, *mahar gita* musicians do not see it as a compound meter because there are only two notes in the beat and it does not matter whether it is divided evenly or not.

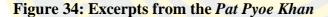
In Myanmar classical music, a beat can be extended. Although the rhythm in Example 4 is in a triple meter, it was considered only as duple meter by *mahar gita* musicians and the third beat is regarded only as the extension of the second beat. As the result, they become included odd number meters such as 3/4 and 5/4, and compound meters such as 6/8, 9/8, 12/8, and 15/8. As *mahar gita* musicians do not regard them as compound meters and odd number meters, the music is not counted according to these meters. 3/4 will be counted as 2/4 and 5/4 as 4/4 assuming the last

beat as an extension of the beat. In Myanmar music, it can be said that there are only simple meters: 2/4 (*walatt*) and 4/4 (*nayi*). This way of counting is applied only in the section which has both simple and compound meters together such as *thapyan*. The very flexible rhythm section like *pat pyoe kan* and *atweh* have their own way of counting.

In a *pat pyoe*, multiple meters (both compound and simple) are included in the *pat pyoe khan* and *atweh*. In these sections, the beat is not counted according to the meters as in the middle section. *See-Wa* signals some points like a conductor for togetherness but still following the four-beat pattern. The following example measures are from *pat pyoe khan*. *See-Wa* signals are shown with *wa* notated by the crossed note head and *see* notated by the normal note heads.

If the *See-Wa* signals are considered as the beats, they are flowing and the duration of the beats is not the same. It can be said that one beat can be of any length in *mahar gita*, especially in the flexible rhythm sections such as *pat pyoe khan*, *atweh*, and *thaphyan*. *The See-wa* beats are marked by the dotted slurs and numbers in Figure 34.





4.12 Conclusion

In this chapter, I have reviewed the distinct characteristics of *pat pyoe* including its form, texture, the inner musical connections between musical phrases, the conventions around pitch, modulation, cadence, and harmony. In chapter 5, I undertake an analysis of my cross-cultural composition, *Kyatthayay*, showing how it has been influenced by *pat pyoe* and western musical languages. I argue that it is possible to successfully blend Myanmar and western musical elements to create a hybrid work that appeals to 21st century audiences.



Chapter 5

The Analysis of Cross-Cultural Composition *Kyatthayay* with the Musical Languages of *Pat Pyoe* and Western Musical Elements

In this chapter, I analyze my thesis composition entitled *Kyatthayay*, a crosscultural piece that uses musical elements of *pat pyoe* together with Western musical languages (see score in Appendix B). This work is a quartet for *saung*, *pattala*, *maung*, and viola.

5.1 Instrumentation of the Piece and discussion of Extended Techniques in *Kyatthayay*

As discussed in chapter 2.2.4, *saung* is a Myanmar/Burmese traditional harp with sixteen strings. The strings can be bent to raise the pitch using the thumb or finger of the left hand. Raising a tone or a semitone is common, and microtones are also possible. In *Kyatthayay*, both Myanmar and Western tuning are used and some Myanmar microtones are played on the *saung* by bending the strings. Bowing the strings, muting the string with palm, bending two strings simultaneously, knocking the sound body, striking the with palm, and snapping fingers are applied as the innovative extended techniques on the *saung* in the *Kyatthayay*.

Pattala is the Myanmar traditional xylophone, with twenty-four wooden or bamboo slats. It has a mellow tone. For *Kyatthayay*, I use a traditionally tuned *pattala* with a Burmese E and B that is slightly flatter than the diatonic E and B. The F is slightly sharper than the diatonic F (see discussion in chapter 2 for further details). New non-traditional techniques used on *pattala* in *Kyatthayay* include playing with the wooden stick of the mallet (instead of the rubber head), and glissando.

The *maung* has twenty-five chromatic mellow gongs attached to a wooden frame, and it is played with mallets. As this piece is a hybrid piece, I use modern-day Western chromatic-tuned *maung* for greater pitch flexibility. I also used soft dynamics to produce a rounded, more resonance sound than usual. This was a creative approach to timbre and orchestration. As the viola is a well-known instrument in music, it will not be explained in detail. However, there are specific reasons why the viola was chosen for this piece. Among other Western instruments, its timbre is very close to the color of the *mahar gita* voice. Also, all the other instruments except for the viola used in this piece are percussive so the viola adds a smoothing quality to the overall sound.

Furthermore, the viola range really suits a *pat pyoe* song, which is neither too high nor too low. Its range helps in color blending with other instruments in this piece. Sometimes, the viola plays Myanmar tuning together with the *pattala*. At other times, it plays Western tuning together with the *maung* in the piece. I use molto sul ponticello, sul ponticello, sul tasto, *jeté*, double stop, harmonic tones, harmonic glissando, Bartok staccato, overpressure bowing techniques as well as knocking on the body as a percussive sound in *Kyatthayay*.

Although I originally intended to use *see* and *wa* in this piece, they were later omitted because the meters of this piece are not based on the Burmese traditional meters *nayi* nor *walatt*. However, *Kyathhayay* does follow the *atweh* rhythm of *pat pyoe*.

5.2 The Subject of the Piece

Kyatthayay is a Burmese word, which means "filled with all of goodness and blessings." It is derived from *kyauk* (mon) and *śrī* (Sanskrit) and is synonymous with grace, glory, and honor (Myanmar Language Comission 1999). This piece was composed during the world pandemic when people were sad, anxious, uneasy, and feeling hopeless because of Covid-19. In such dark times, my impulse was to cultivate a spirit of goodness and blessings. In Myanmar culture, people do good things (*kuso*) such as listening to an audio of a sermon of a monk, offering flowers and water to the image of Buddha, and filling the water pots until it overflows. They believe that these actions create *kyatthayay*. As a Christian, I wondered what kind of good deeds I could do to bring about *kyatthayay* in these *akyatthayay* times (opposite of *kyatthayay*). Two bible verses: proverbs 18:12 and Ephesians 4:2 abruptly appeared in my mind. "Humility goes before honor," and "with all humility and gentleness, with patience, bearing with one another in love" (NRSV). Humility is the most important thing for me to spread *kyatthayay* in such uneasy hours. This piece expresses my response to this pandemic with humbleness for spreading *kyatthayay*. Gentleness, patience, and love are compacted in humility. During these dark hours, people can become selfish, angry, greedy, and ignorant. I was trying to break this evil with humbleness, gentleness, patience, and love. I believe that starting from myself, *kyatthayay* will appears through this piece.

Vocalization is applied in this composition as Myanmar traditional musicians are accustomed to singing while they are playing instruments. For this vocalization, a short poem is composed and it was sung and recited in this piece.

5.3 The Poem for Vocalizations

5.3.1 Burmese Version

ကျက်သရေ တိုးပါလို့ လင်းလက်၊ တက်နေဝန်းကဲ့သို့ပမာလေး။ တိုးပွားလို့ဖြာ၊ ကောင်းချီးမဟာ၊ မာန်လျော့လျှင်လေး။

ကျက်သရေတိုးကာ၊ စည်ပင်ဝေဖြာ နေဝန်းလျှံပမာလေး။ လောဘကင်း၊ ဒေါသကင်း၊ မောဟကင်း၊ အော် မာန်မာနကင်းပါမှ၊ ကျက်သရေ ရှိလိမ့်လေး။

နှလုံးသားန<mark>ည့်မှသာလျှင်၊ ကျက်သရေတိုးကာ စည်ပင်ဝ</mark>ေဖြာ မာန်လျှော့ရင်း ဝပ်တွား။

5.3.2 Transliteration

Kyatthayay toe barlo Lin la(tt) ta(k) nay won ke tho pamar lay Toe bwar lo phyar, kaung gyi mahar Mhan shaw(t) yin lay

Kyatthayay toe gar si bin wai phyar Nay won hlyan pamar lay Law ba kin, daw tha kin, maw ha kin Aw! Mhan marna kin bar mha Kyatthayay shi lain(t) lay

Hnlone thar nu nyant mha thar hlyin Kyatthayay toe gar si bin wai phyar Mhan shaw(t) yinn wit twar

5.3.3 English Translation

The blessings are growing (*kyatthayay*) like the shining sun rising in the sky. With the radiance, they would become blessings of magnificent if only arrogance is subdued.

The blessings are spread with their radiance like the flames of the sun. If greed, anger, and ignorance are abandoned, only then will there be the blessings (*kyatthayay*).

If only one's heart is gentle, the blessings would abound. My pride and self are being flattened down unto the ground.

5.3.4 The Influence of Chinary Ung's *Spiral XI* and Myanmar Traditional Singing on Vocalization in *Kyatthayay*

As discussed in chapter 2.5, Chinary Ung, a leading Asian composer, employs vocalization for the instrumentalist as an innovative approach in his compositions. Myanmar musicians have been accustomed to singing while they are playing instruments as this is a very old tradition in *mahar gita*. By considering these two facts, I was convinced to add a vocalization in the *Kyatthayay* as both a traditional and innovative approach. There are two types of vocal music in Myanmar music: 1) recitative poems and 2) songs (see chapter 2.2.3). As a creative approach, I ask the musicians in *Kaytthayay* to not only recite and sing, as would be done traditionally, but also to whisper and shout.

I have discussed how Ung's uses rhythmic devices, consonants, and vowels in vocalization in a variety of contexts including via applied homorhythms with a counter figure and homorhythm in unison. Now I will show how this has influenced my use of vocalization in *Kyatthayay*.

Figure 35: The Use of Counter and Similar Contour Figures with Vocalization in *Kyatthayay*



In the above figure, vocalization is to be recited without pitches. In mm. 3, the rhythmic figure of vocalization is against the other lines. Ung uses this kind of figure with a percussive voice, but this counter figure is employed with a long unpitched recitation in *Kyatthayay*. The short vowel "at" is applied together with the consonant "ky" in the accented first beat of the measure. Long vowel "ay" is together with half consonant "y" for the dotted quarter note beat. For the very long ascending and descending unpitched glissando, the open vowel "oe" with the weak consonant "t" is sung. In the last quarter note beat of the measure, the medium-long vowel "oh" is recited with consonant "1." The counter-rhythmic unpitched recitation fills the gap of resonance in the traditional *twe lone* texture and makes beautifully blended timbre.

In mm. 64 of *Kyatthayay*, the vocalization takes a similar contour to the *pattala* part. It highlights notes in the *pattala*-line.



Figure 36: Homorhythm in Unison and Harmony; and Polyphonic Layers of Voice in the Vocalization of *Kyatthayay*

In *Kyatthayay*, I also explore polyphonic layering of vocalization as a creative approach for the new piece. Although the text of vocalization has meaning, the rhythm, the vowel, and the consonant is carefully treated as in Ung's *Spiral XI*. This polyphonic layering has a majestic effect.

5.4 The Structure and Form of *Kyatthayay*

There are seven sections in *Kyatthayay*: A, B, C, C', B', A', and D. Like the *pat pyoe khan* of *Hman Ya Wai, Kyatthayay* starts with an introduction section A (from mm 1 to 34). The music is through-composed and not repeated. Vocalization layers are slowly added with the voice parts becoming more involved in the second phrase of the opening section. Both the first and second phrases are in *atweh* following the *pat pyoe kan* tradition as explained in chapter 4.6.

Section B is in the angular rhythm like the tradition of *pat pyoe* songs (angular section follows *atweh* section). While *pat pyoe* songs, always use quadruple meter (*nayi*) for angular sections, *Kyatthayay* uses quintuple and septuple meters applied alternatively to reduce the angularity.

The sections C (mm. 60-79) and C' (mm. 79-115) are sandwiched between or bordered by sections B (mm. 46-59) and sections B' (mm. 116-132). A' (mm. 132-143) follows B' so that the whole structure is one of nested mirror image sections (see Figure 37). Note transitions are discussed in 5.4.1.

This approach is inspired by the way the *bawleh* section is sandwiched between two *dane than* sections in *Hman Ya Wai*, and the concept of building a new bigger stupa over an old one. C and C' are the center of the piece. Sections A and B and its variations B' and A' are built over them like a bigger stupa over an old one.

Section D (mm. 143-156) forms a tail or ending section like the *thaphyan* from *pat pyoe*.

As discussed in chapter 4, *pat pyoe* has a three-part form based on the concept of head, body, and tail. In *Kyatthayay*, section A is the head, which is in *atweh*; section B through to section A' is the body, which is in *atweh* and angular rhythm alternatively; section D is the tail, also in *atweh*. It can be said that the form of *Kyatthayay* is based on the form of *pat pyoe*. Furthermore, in the middle section, there

are series of sub-sections like the sub-genre phrases featured in the middle section of the *Hman Ya Wai*, whose form was analyzed in chapter 4.6.

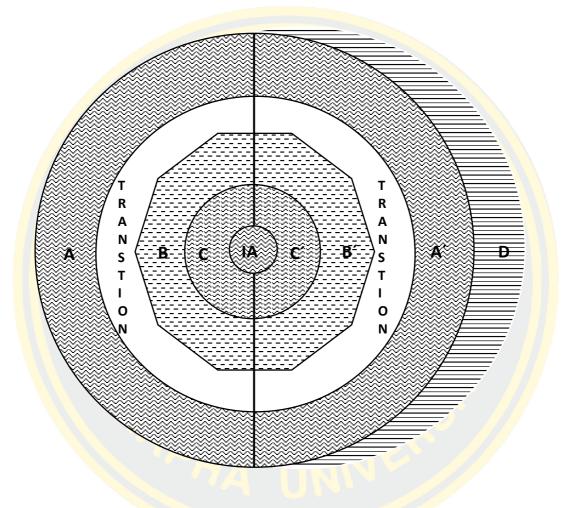


Figure 37: Form of Kyatthayay as the Layers of a Stupa.

5.4.1 Transitions and Continuity for Musical Phrases and Sections

As discussed in chapter 4, transitions play an important role in *pat pyoe*. They bring together different musical styles and help create flow and continuity. In *Katthayay*, I use a variety of types of transition phrases including popular *ataw* style, a triple head phrase with tempo accelerando, and modulatory transition phrases. I discuss each of these below.

The popular *ataw* featured in *Hman Ya Wai* can be found in the transition between the first phrase and the second phrase in section A of *Katthayay*

(mm. 21-25). This transition is in the tail of the first phrase and follows the tradition of singing *lay* (see discussion chapter 4.3.1). It uses a very common rhythm pattern in *pat pyoe* and the cadence *dabauk tayaw*. These are immediately recognizable for listeners familiar with this style. The music modulates to *ngarbauk tayaw* in the head of the second phrase by using the same *twe lone* and rhythm pattern, which is also characteristic of *pat pyoe*. A finger snap in this measure conducts the entrance of the second phrase.

Between sections A and B (mm. 35-45), I use a different kind of transition phrase between two different rhythm styles (*atweh* and regular rhythm) and tempo to balance them. Unlike the *ataw*, this phrase has triple heads (mm. 35-37), a body (mm. 38-43), and a tail (mm. 44-45). The triple heads in quintuple meter are created by using a motive (do-ti-do-re-mi-ti) that becomes a running-note line in *pattala* in the next section. The body and tail build the regular ostinato in quintuple and septuple meters alternatively, preparing the regular rhythm pattern of upcoming section B. The *ataw* usually changes its tempo to connect between the *atweh* and angular sections in *pat pyoe*. Following that characteristic, this transition accelerates its tempo, especially in the *saung*, for the next section by using rhythm values. The tempo acceleration takes place in mm. 42-43.

As discussed in chapter 4, one of the roles of transition phrases is to help establish a new pitch center. I discussed how the transition between *bwe* and *nat than* sections in *Hman Ya Wai* transfers the pitch center "do" of the into pitch center "mi" without any interruption, as they are adjacent notes in the *than yoe* scale. I use this technique in several places in *Kyatthayay*.

For example, between sections B and C, *chauk pauk tayar* cadence (octave "mi") of section B modulates to the new pitch center *khunhapauk tayar* (octave "re") in the first phrase of section C. "Mi" and "re" are the adjacent notes in the *pale* scale. The first phrase (mm. 46-55) and the second phrase (mm. 55-59) of section B are linked by the pivot measure (mm. 55). Measure fifty-five is the last measure of the tail of the first phrase and it is also the first measure of the head of the second phrase. The *twe lone* of mm. 25 is *dabauk tayar* (P5 on P1) and it also becomes the pivot *twe lone* of both phrases. The continuity between the three short phrases in section C will be discussed later in 5.5 of this chapter.

The same technique is applied in the transition between sections C and C'. Measure 79 is the pivot measure and it has the pivot *twe lone* (*tay*) as the last measure of section C and the first measure of section C'. The last note of section C' is *dabauk* "do" (mm 115). The *twe lone* of the first measure (mm 116) of section B' is *ngar bauk*, (P5) "fa." Actually, section C' ends with the complete cadence *tay* but the *saung* and viola parts continue to reach *dabauk* and make the cadence a weaker interval (sixth interval). Through that note "do," the music modulates to *ngar bauk* "fa." This kind of modulation can be found between the *pat pyoe* section and *bwe* section of *Hman Ya Wai*.

I also used new ornamentation to color transitions in *Kyatthayay*. For example, I combined a common modulation from *mahar gita* with tremolo ornamentation that is never found in *pat pyoe*. This transition occurs between the first phrase and second phases of B' section and B sections (which have the same harmonic structure). However, section B' ends with tremolo expression on the last note (mm 131) in *hnapauk* (P2). Tremolo is not found in *pat pyoe*. However, transferring *hnapauk* to *ngar bauk* (P5) is very common in *mahar gita*. *Hnapauk* modulates to *ngar bauk tayaw* in mm. 129 and starts section A' (which follows B'). Similarly, mm. 142 is the common measure of section A' and D. Section A' ends with complete cadence *tay* of pitch center *lay bauk* (P4), "so." That *tay* is also the opening *twe lone* of section D. This pattern of transition and continuity within the phrases and sections in *Kyatthayay* is indebted to *pat pyoe*.

5.4.2 Inner Musical Connections among Sections

When building a stupa or *zedis*, Burmese people enshrine the relics of Buddha at the center of the stupa structure. These relics are the holiest part of the stupa and the pagodas are enclosed in a compound called the *aran*,

with gateways called *mok* at the four cardinal directions. *Zedis* are also places for meditation and praying.

To represent this central holy space, *Kyatthayay* uses an inversion of an important motive from section A to make a heart-core phrase. Like the relics enclosed in a pagoda, this inverted A phrase (IA) is surrounded by the layer of C and C': then by B and B' and A and A' as the outermost layer. D is attached to the A' and features motives from the heart-core phrase (see Figure 37).

In *Kyatthayay*, the music in sections C and C['] expresses the struggles between ego and self-denial, and between arrogance and humility. These sections picture the progress of accepting every change that life brings, embracing new things, and breaking one's pride. The heart-core phrase (inverted A) breaks this struggle and portrays inner calmness. Figure 37 shows the relationship between the heart-core section as an inverted version of motives in section A.

5.5 The Idea of Musical Phrase

The phrases in *Kyatthayay* are influenced by the phrase construction in a *pat pyoe*. They have three parts—the head, the body, and the tail. Following *pat pyoe*, phrases can be any length. However, they do follow a specific structure of head, body, and tail. Figure 38 below shows a typical phrase in *Kyatthayay*. Within that structure, there are single and doubled headed phrases. The body of the phrases could be either a single sub-phrase or a compound sub-phrase, which comprises of several short sub-phrases.

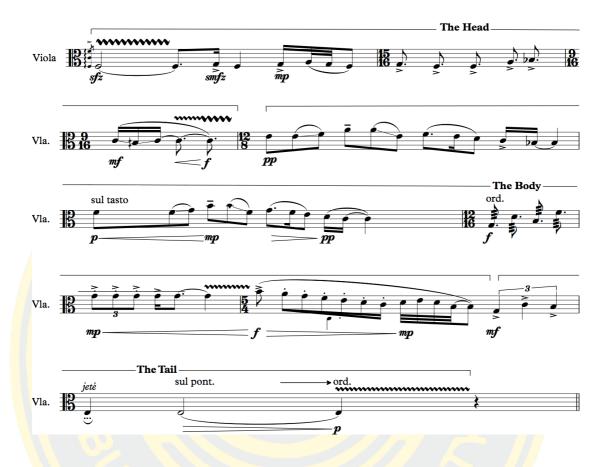


Figure 38: A Phrase from Kyatthayay with Its Features

I will now give a summary of the different phrase structures used in each section of *Kyatthayay* and explain their relationship to *pat pyoe*.

5.5.1 Section A

Section A has two unequal length phrases. The first phrase is twenty-five measures long (mm. 1-25) and is doubled-headed. The second phrase is nine measures long (mm. 26-34) and single-headed. Tables 29 and 30 show the structure of phrase 1 and phrase 2. The poem is used in vocalization by the instrumentalists in section A. According to the meaning of the text which is the declaration of *kyatthayay* (the blessing), section A is to be performed solemnly.

Musical changes in section A give nuances to the text. In the first phrase, the first sentence of the poem is used in both recitative and singing styles. The dynamic gets louder and louder portraying the sunrise. In the second half of the first phrase, the vocalization gives the message to reduce arrogance. Following this message, the expression of the music gets softer again. Like *pat pyoe kan*, the rhythm is in *atweh* and multiple meters are used in the first phrase.

The second phrase is the solemn announcement of *kyatthayay* and it has to be performed majestically. To be a grand announcement, the pitch center "do" modulates to "fa," which is the pitch center of the *bwe* section in *Hman Ya Wai*. Like the first stanza in *Hman Ya Wai*, the rhythm of the second phrase is also in *atweh* and multiple meters are used.

Part of the Phrase	Measures	Scales Used
Head 1	Mm. 1-2	The dominating scale is
A short transition	Mm. 3	than <mark>yo</mark> e.
from head 1 to head 2		
Head 2	Mm. 4-10	The dominating scale is
		<i>pale</i> scale from mm. 7-
		10.
Body	Mm. 11 to the 3 rd beat of mm.	The dominating scale is
	21	tha <mark>n yoe</mark> .
Tail	4 th beat of mm. 21-22	
Extended tail or ataw	Mm. 23-25	

Table 29: Structure of Phrase I

Table 30: Structure of Phrase II

Part of the Phrase	Measures	Pitch Centers and Scales
Head	Mm. 26-28	Pitch center "fa," than yoe
		in <i>nagar bauk</i> .
Body	Mm. 29 to the 3 rd beat of	Pitch center "fa" and "so,"
	mm. 33	than yoe in ngar bauk and
		lay bauk.
Tail	From the 3 rd beat of mm.	Pitch center "mi," than yoe
	33-34	in dabauk.

Part of the Phrase	Measures	Function
Head	Mm. 35 - 37	The head may be divided
		into three small heads (mm
		35, 36, and 37); quintuple
		meter.
Body	Mm 38 - 43	Using the motive from the
Tail	Mm 44 - 45	head and prepare a regular
		beat rhythm section for the
		upcoming angular section.
		Quintuple and Septuple
		alternatively.

Table 31: Transition between Section A and B

5.5.2 Section B

Section B also has two phrases. The first phrase of section B is ninemeasure long (mm. 46-55). The first phrase starts with the pitch center "fa" and shifts back to pitch center "do" on the seventh beat of mm. 47 in the *than yoe* scale. The second phrase is a five-measure phrase and the pitch center is "fa" and it shifts into "re" in the *pale* scale. However, the *pale* scale's pitch center is "fa" so this phrase could be also described as myin *zine* (see chapter 2, Table 9). Although changing pitch center to "re" is not the tradition of the *pat pyoe* songs, this modulation is used to picture the inner self which is trying to accept new changes. In other words, the composer was trying to break boundaries and accept new things or events. In this section, no vocalization is used but the viola part takes the role of the main melody, and that melody is composed in the characteristics of the vocal melody in the *pat pyoe* songs. The overlapping-phrases technique is not clearly employed in this section, unlike Hman Ya Wai. Like the middle sections in Hman Ya Wai, the rhythm of this section has a little angularity, but it takes place in quintuple and septuple meters.

Table 32	Structure	of Phrase I
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Musical Function and Idea	Measures	Pitch Center, Scale and Modulations
Head	Mm. 46-49	The pitch center is "fa" in <i>than yoe</i> (<i>ngar</i> <i>bauk ouk pyan</i>) and shifts to "do" in <i>than yoe</i> (<i>dabauk</i>).
Body	Mm. 50-53	<i>Than yoe</i> scale.
Tail	Mm. 54-55	Mm. 55 is the ending of the first phrase and the beginning of the second phrase.

Table 33: Structure of Phrase II

Musical Function and Idea	Measures	Pitch Center, Scale, and Candance
Head 1	Mm. 55	<i>Pale</i> scale with pitch center "fa." (<i>myin zine</i>)
Head 2	Mm. 56	The variation of the head 1 in the pitch center "re."
Body	Mm. 57	Pale scale with pitch center "fa" again.
Tail	Mm. 58-59	<i>Than yoe</i> scale and ends with the complete cadence <i>tay</i> .

5.5.3 Section C

Sections C and C' are the center of the piece. Vocalization returns in these sections. The text gives the message to abandon *lowba* (greed), *dowsa* (anger), *mowha* (ignorance), and *māna* (pride) so that *kyatthayay* can occur. The text is recited and accompanied by music. In section C, there are three short mini-phrases and they have their own heads, bodies, and tails as the parts of a phrase. However, these mini-phrases are combined together and therefore they form a larger phrase. Therefore, it can be said that section C has either three phrases or one phrase. The compound phrase is twenty measures long. The vocalization and the instrument parts overlap to make a long phrase according to the phrase tradition of *pat pyoe*.

These mini-phrases are a duet and their pitch center is "so" (*lay bauk*). The music in this duet arrangement becomes more personal as befitting representation of mental struggle. The first four-measure long mini-phrase is the duet of *saung* with the vocalization by the *pattala* player. The second eight-measure long mini-phrase is a duet of the *pattala* with vocalization by the *saung* player. In the first part of the eight-measure long third miniphrase, is a duet of the *maung* and percussive playing of the viola but in the later part, a duet occurs between the *maung* and vocalization by the *saung* player. In the last measure, the other parts enter to make a full quartet again. The last measure of section C is the beginning measure of section C'. Both sections are in *atweh* and they are composed in multiple meters.

Musical	Parts of	Measures	Features of the Phrase
Function	the <mark>m</mark> ini-		
and Idea	ph <mark>ra</mark> ses		
Head	he <mark>ad</mark>	From the 1 st beat to the	<i>Pale</i> scale with the pitch
		4 th beat of mm. 60	center "so."
	bo <mark>dy</mark>	From the 5 th beat of	Duet with the <i>saung</i> and the
		mm. 60 to the 2nd beat	vocalization of the <i>pattala</i>
		of mm. 62	player and ends with the
	tail	From the 4 th beat of	cadence <i>tay</i> .
		mm. 62 to mm. 63	
Body	head	Mm. 64 to the 2^{nd} beat	<i>Than yoe</i> scale with pitch
		of mm. 65	center "so" (ouk pyan).
	body	Mm. 66 to the 2 nd beat	Duet with the <i>pattala</i> and the
		of mm. 67	vocalization of the saung
	tail	From the 3 rd beat of	player.
		mm. 67 to mm. 71	
Tail	head	Mm. 72-73	New pitches come in and duet
	body	Mm. 74-76	with the <i>maung</i> and the viola.
	tail	Mm. 77-79	Later, other instruments come
	lall	IVIIII. //-/9	in to make quartet again. Mm.
			55 is the first measure of the
			upcoming section.

Table 34: The Structure of Phrase

5.5.4 Section C'

Section C' is the variation of section C. All three mini-phrases in section C are varied in a quartet arrangement. Although there are a few vocalizations, no text is given for this section. Instead, this section features

new pitches and new ways of harmonizing, which are different from *twe lone* harmonizing of *mahar gita*. This expresses the acceptance of the new things and new events (either good or bad) in the composer's life.

Before the last mini-phrases of this section, there is a short phrase, which is to be performed very quietly. This phrase is the heart-core of the whole piece and it is the moment to meditate on change in life (either positive or negative). A short motive from section A is inverted, broken down, and reused in this phrase. This motive appears again in the last section of the piece as a connection to the whole.

The third mini-phrase was built using harmony and texture that is very different from those of the *pat pyoe* songs. This mini-phrase portrays the composer's acceptance of hard times. It expresses the process of attempting to overcome negative impacts in his life.

Musical	Parts of the	Measures	Features of the Phrase
Function	mini-		
and Idea	phrases		
Head	head	Mm. 79-80	The first mini-phrase of section C
	body	Mm 81 to the	varies in another texture here.
		2 nd beat of mm.	Unlike section C, the pale scale with
		82	pitch center "mi" is used, and later, it
	tail	3 rd beat of mm	modulates to pitch center "so" and
		82 to mm 83	ends with the complete cadence tay
			of pitch center "so."
Body	head (b)	Mm. 84-87	The second mini-phrase of section C
	body (b)	Mm. 88	is varied in another texture here.
	tail (b)	Mm. 89-90	Unlike section C, the body of the
			mini-phrase in section C is omitted
			here and the first part of the tail of
			that phrase varies and becomes the
			body of the phrase.
			The witch contar and coolee wood in
			The pitch center and scales used in
			this mini-phrase is complex and will
			be discussed later. Vocalization is
	1 1	1.01.00	added by labial consonant "mm."
Heart	head	Mm. 91-92	Some motives from section A are
Core	body	Mm. 93-102	reused in the new texture. Some
Phrase			chords are used but in an arpeggio.

Table 35: The Structure of Phrase

Heart	tail	Mm. 103-106	The same motives from section A are
Core			inverted and repeated in the new
Phrase			texture.
Tail	head	Mm. 107	The third mini-phrase of section C is
	body	Mm. 108-113	varied in texture and harmony that
			are very different from <i>pat pyoe</i> .
	tail	Mm. 114-115	Contemporary extended techniques
			for the instruments are applied.
			Vocalization is added by labial
			consonant "mm."

5.5.5 Section B' and A'

Section A and B are repeated in another variation after the compound section C. However, their locations are reversed as the mirror images–B^{\prime} and A^{\prime}. Vocalization is added to the tail of the second phase of section B^{\prime}. The text is the "if only" clause and it gives the opening to the upcoming section. Although the whole section B is repeated in variation, only the second phase of section A is repeated. When this phrase of section A is repeated, there are not many changes except the extension of the tail, which, according to the tradition of the *pat pyoe*, creates a smoother transition into section A^{\prime}. The lowest string of the viola is dropped to "B" at the end of the tail to picture the surrender and humility. Therefore, section B^{\prime} has two phrases, and section A^{\prime} has only one phrase.

Musical Function and	Measures	Features of the Phrase
Idea		
Head	Mm. 116-119	Pitch center is "fa" in than yoe
		(ngar bauk ouk pyan) and
		shifts to "do" in than yoe
		(dabauk).
Body	Mm. 120-123	<i>Than yoe</i> scale. The tempo
		was reduced to 45 bpm and up
		to 60 bpm to create a smooth
		transition.
Tail	Mm 124-125	Mm. 125 is the ending of the
		first phrase and the beginning
		of the second phrase.

Table 36:	The Structure	of Phrase I	I in Section B´
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Musical Function and	Measures	Features of the Phrase
Idea		
Head 1	Mm. 125	<i>Pale</i> scale with pitch center "fa," <i>myin zine</i> .
Head 2	Mm. 126	The variation of the head 1 in the pitch center "re."
Body	Mm. 127	<i>Pale</i> scale with pitch center "fa" again.
Tail	Mm. 128-131	<i>Than yoe</i> scale. The phrase ends with the complete cadence <i>tay</i> of pitch center "do." The new extension is added to the tail according to the tradition of the <i>pat</i> <i>pyoe</i> . The vocalization is added to the tail.

Table 37: The Structure of Phrase II in Section B[´]

 Table 38: The Structure of Phrase in Section A'

Musical Function and Idea	Measures	Features of the Phrase
Head	Mm. 132-134	The pitch center "fa," <i>than yoe</i> in <i>nagar bauk.</i>
Body	Mm. 135-139	The pitch center "fa" and "so," <i>than yoe</i> in <i>ngar bauk</i> and <i>lay bauk</i> .
Tail	Mm. 140-143	<i>than yoe</i> scale with pitch center "so," <i>lay bauk ouk</i> <i>pyan</i> and the phrase ends with complete cadence <i>tay</i> .

5.5.6 Section D

Like the *thaphyan* of a *pat pyoe*, section D is the ending section of the *Kyatthayay* and the rhythm is *atweh*. It has only one phrase. The head of the phrase follows the texture of the last measure in section A[´] and this texture is developed as the texture of the whole section. In the body of the phrase, the motive form section A is inverted and used again on the last three beats

of mm.145 up to the first beat of the following measure. Starting from that measure, this inverted motive is constantly included in the last three beats of every measure and the first beat of the next measure (see Figure 49). Little by little the interval of this motive narrows until it becomes only one long note "B" in mm. 154. This narrowing of interval expresses the humility of the composer, flattening himself until he reaches the ground. In the last measure of the piece, all of the sounds ring and resonate until they are connected to the space to express the timelessness of self-denial (therefore, the ending bar line in the last measure of the piece is omitted).

The meaning of the Burmese adjective *tweh* is saggy. The term *atweh* is the noun form of that adjective. The word pictures the saggy action of the rhythm in *mahar gita*. Saggy things need to be balanced to maintain their shape in nature. The composer believes that self-denying and humbleness maintains the balance of life while he passes through positive and negative life experiences. In this section, the measures are extended and contracted to picture this balancing. They are extended from sextuple meter to septuple one, and then to nonuple. Then they are contracted until they end up in quintuple meter.

Musical Function and Idea	Measures	Features of the Phrase
Head	mm. 144	Taking the texture of the last measure of section A [^] and developing the texture of the section.
Body	mm. 145-154	Reusing the inverted motive from section A and narrowing down measure by measure the interval until it becomes only one note. Measures are extended up to nonuple meter and contracted back to quintuple meter.
Tail	mm. 155-156	The sound of the last measure rings and resonates until it is connected to the space to express the timelessness of the self-denial.

Table 39: The Structure of Phrase in Section D

In sum, *Kaytthayay* is composed with the characteristics of *pat pyoe* that includes *pat pyoe khan* or introduction, the middle sections, and *thaphyan*, which is the final ending section. The rhythm in the introduction and the ending are in *atweh* as the tradition of the *pat pyoe*. In *pat pyoe* songs, the middle section is typically in angular rhythm. However, section B reduces the angularity by using quintuple meter and septuple meter alternatively and other sections are in *atweh* in multiple meters. Following the characteristics of the *pat pyoe*, the form of *Kyatthayay* is modified by the concept of enshrining the relics of the Buddha in the stupa "A, B, C, C', B', A', D." The heart-core phrase is embraced in section C'. By this placement, the music of *Kyatthayay* makes inner connections among sections. Like the *pat pyoe* song, reusing musical ideas helps make musical connections among the phrases.

The phrases also follow the structure of the phrases in the *pat pyoe* songs-the head, the body, and the tail. The heart-core phrase in the section C' and transitions also follows the structures of *pat pyoe*-phrases. In compound section C, the structure of the phrases becomes more complex by building mini-phrases, which have all three parts (the head, the body, and the tail) within the parts of the whole phrase.

5.6 Pitches and Scales in *Kyatthayay*

Kyatthayay uses the basic two scales of *mahar gita: than yoe* (do-mi-fa-soti) and *pale* (do-re-mi-so-la) with modulations. When *than yoe* is used with the pitch center "so," the scale is "so-ti-do-re-fe-so." This scale is tuned in the *lay bauk ouk pyan* tuning in the lower two octaves of the *saung*. Burmese musicians usually called this scale as *lay bauk ouk pyan* instead of *than yoe* in "so." When the *pale scale* is used, the helping tone is "fe" instead of "fa." Because of the presence of "fe" frequently instead of "fa," "fa" and "fe" becomes alternate pitches in *Kyatthayay*. Again, when *than yoe* scale is applied with the pitch center "fa," the scale is "fa-la-tado-mi-fa," and this scale is called *ngar bauk ouk pyan* by Burmese musicians. When the *pale* scale is used with the pitch center "fa," the scale is "fa-la-tado-mi is "ti" instead of "ta." Therefore, "ta" and "ti" are also alternate pitches in this piece. The *pale scale* with pitch center "so" (so-la-ti-re-mi) would have the helping tone "de" instead of "do." Thus, other possible alternate pitches are "do" and "de." There is no specific name for the *pale scale* with pitch center "so." It has been mentioned that there is a phrase with pitch center "la" in the *thaphyan* of *Hman Ya Wai*. There is also a phrase with the pitch center "la" in *Kyatthyay*. If so, the possible alternative pitches for this phrase is "so" and "se."

In fact, *than yoe, pale, lay bauk ouk pyan*, and *ngar bauk ouk pyan* are the names of the tuning systems in the *saung*. There are only two basic scales in *mahar gita*– "do-mi-fa-so-ti" and "do-re-mi-so-la." and they are used in different modulations with alternative tones. To be specific, they were named as *than yoe* and *pale*.

Pitches	P1	Secondary	P2	P3	P4	Secondary	P5	P1
		Tone 1				Tone 2		
Than	do	re	mi	fa	SO	la	ti	do
yoe								
Ngar	fa	SO	la	ta	do	re	mi	fa
bauk								
<mark>ouk</mark>								
pyan								
Lay	SO	la	ti	do	re	mi	fe	so
bauk								
ouk								
pyan				1000				
No	la	ti	de	re	mi	fe	se	la
Specific								
Name								

Table 40: Scales based on *Than Yoe*

Table 41: Scales based on Pale

Pitches	P1	P2	P3	Helping	P4	P5	Helping	P1
				Tone 1			Tone 2	
Pale	do	re	mi	fe	SO	la	ti	do
Myin Zine	fa	SO	la	ti	do	re	mi	fa
No Specific Name	SO	la	ti	de	re	mi	fe	SO

Four alternative tones based on these scales are: "fa" and "fe," "ta" and "ti," "do" and "de," and "so" and "se." Based on these scales that are used in *Kyatthayay*, the lower octave of the *suang* is tuned into *than yoe* and the upper two octaves are tuned into *ouk pyan* tuning. Therefore, the tuning of the *saung* is "so-ti-do-mi-fa-so-tido-re-fe-so-la-do-re-mi-so" from the lowest octave to the highest one.

5.6.1 Scale Modulations and Alternative Pitches

As has been discussed in chapter 4, in *pat pyoe* scale modulations are frequent and can occur occurs even in a phrase with or without changing the pitch centers. Whenever a scale modulates, there will always be a pitch alternation. The *than yoe* and the *pale* scale can be applied together (*ouk pyan* tuning) in a phrase of a *pat pyoe*. When the *pale* scale dominates the part of the phrase, "fa" alters to "fe" and it functions as the helping tone. It happens without changing pitch centers as both scales are based on "do."

The pitch alternation also occurs when the pitch centers are changed while the same scale is applied. In the head of the first phrase of section B, the pitch center "fa" modulates back to pitch center "do" while *than yoe* scale is being applied with both pitch centers. The pitch "ta" alters to the pitch "ti." The first head the second phrase in section B is in *myin zine* scale (*pale* scale with pitch center "fa"). When the pitch center is changed into the *lay bauk ouk pyan* scale (*than yoe* scale with pitch center "so"), the pitch "fa" alters to "fe" to make *lay bauk ouk pyan*. However, after the first and second beat, the phrase immediately changes back into *myin zine* scale by alternating "fe" to "fa" again. The possible alternative pitch is "de" when the *pale* scale with pitch center "so" is applied. That alternative pitch "de" is used in the *maung* part when the pitch center is changed to "so" although the scale on those beats are not in *pale*.

Even though this alternation of the pitches is majorly related to its own scale and modulations, these alternative tones are applied more freely in *Kyatthayay*, especially in section C^{\cdot}.

In section C', all the possible alternative pitches (fe, ta, de, and se) are applied freely regardless of the scale modulations to express the new things and events that enter into the composer's life (see Figure 39).

Figure 39: A Phrase of *Kyatthayay* which is Comprises of the Alternative Pitches in Freedom



5.7 Cadences

All the complete cadences and sub-cadences that are found in *Hman Ya Wai* are used in *Kyatthayay* (see chapter 4.4). They are ornamented with the secondary tones and neighbor tones; and used among the arpeggio-like figures of the instruments' complex texture, avoiding the creating of a massive chord. The *dabauk tayaw* cadence (do and so) and *tay* cadence (mi and ti) are used as complete cadences in Figure 40 within the new texture of *Kyatthayay*.



Figure 40: The *Dabauk Tayaw* and *Tay* Cadences in the New Texture of *Kyatthayay*

There can be changes in naming when the pitch centers and scales are modulated. For example, *tay* is the harmonic interval cadence, which includes "mi" and "ti" in the *than yoe* scale with pitch center "do." For the *than yoe* scale with pitch center "so" (*lay bauk ouk pyan*), the cadence which includes "ti" and "fe" is used as *tay* although their actual name can be *hnapauk tayaw*. The stability of the cadence is decided according to *pat pyoe*'s tradition.

5.8 Melody

As discussed in chapter 2, smoothness and delicacy are prized in *mahar gita*. The melody of *Kyatthayay* mostly follows those attributes except for some phrases. According to the nature of the *pat pyoe* melody, it is constructed through either the scale notes or the seven tone scales, which include two helping tones. In the *pat pyoe*, the melody is given to the vocal part as it is a song. However, in the *Kyatthayay*, the melody is either distributed among the instruments (see Figure 42) or placed in the viola part (see Figure 41).

Figure 41: Some Melody Parts of Viola in Kyatthayay



The viola plays two types of *pat pyoe* melody: one is from the vocal line and another one is from the upper active line of the *saung*. In the first two measures of Figure 41, the melody takes the form of the vocal melody in the *pat pyoe*, and in the third measure, it takes the melodic form of the upper active line of the *saung*.

When the melody is broken down and distributed among the instruments, it brings out the color combinations of the instruments, creating either a texture of the heterophony or unison. Figure 42 shows how melodic motive is used across instrumental parts in heterophony.





5.9 Rhythm and Meters in Kyatthayay

As discussed, there are two main types of rhythm in the *pat pyoe*: *atweh* or flexible rhythm, and angular rhythm, which depends upon *see-wa* for performance. In *Kyatthayay*, the composer tries to reduce the angularity as much as possible. Except for Sections B and B', all the sections are composed in *atweh*. In order to be *atweh*, repeated notes with feather beams, descending scales with feather beams, and odd beat divisions such as triplets, quintuplets, and sextuplets are used to create rhythmic flexibility.

According to the concept that one beat can be of any length in *mahar gita*, a beat or a motive can be extended by a pause. When a beat with two quaver value is extended by a quaver-long pause, that beat becomes a dotted crochet beat. In this way, compound meters can be used as an *atweh* rhythm. When the last note of the quadruple meter is extended by a crochet-long pause, that meter would have an extra beat and becomes quintuple meter. Therefore, the various meters, whether compound or simple, are used in the *Kyatthayay* to make *atweh* rhythm. Figure 38 shows how these rhythmic devices and meters are applied to a melodic phrase of *Kyatthayay*. Section B and B' used regular *see-wa* rhythms (angular rhythm) like the middle sections of the *pat pyoe*. However, the quintuple and septuple meters are used alternatively in the *Kyatthayay* to reduce the angularity.

5.10 The Concept of Harmony in Kyatthayay

In *Kyatthayay*, I use the *twe lone* harmonizing way of *mahar gita* based on the interval strength. As discussed in chapter 2.3.4, there are four degrees of consonance or dissonance in *mahar gita*: stable and consonant (S), consonant (C), weak consonant (c), and dissonant (D). The consonant degree of the *twe lone* has been amply discussed. There are five techniques in *twe lone* harmonizing way, (1) alternation consonance and dissonance within a beat, (2) the interval arpeggio by two notes, (3) arpeggio-like figures (one note against a few notes including third intervals), (4) ascending or descending a certain scale against one note in the lower line (either divided or undivided in rhythm), and (5) two lines flowing independently to the same meeting point (stable cadences).



Figure 43: Example from *Kyatthayay* that uses *Twe Lone* Harmonizing Techniques 1-3



Figure 44: Example from *Kyatthayay* that uses *Twe Lone* Harmonizing Techniques 4-5

I apply Western musical elements such as cluster chords and some tertian chords in *Kyatthayay*. However, they are built from the scales and some alternative pitches of *pat pyoe*. Moreover, they do not also follow the tonal harmony system. In section B and B', the cluster chords are used on the *maung*. In section C and C', some tertian chords are used as a spacious arpeggio in the rhythm devices of the *pat pyoe*. *Twe lone*, chords and the melody are put together to make the texture of *Kyatthayay*.





5.11 Musical Textures in Kyatthayay

Heterophony and polyphony are the original textures of the *pat pyoe*. *Kyatthayay* uses these, plus homophony. In the heterophony of Myanmar instruments, the same melody is played on all the instruments but they are played in different ways with their own *twe lone* harmony lines. Therefore, each instrument has two lines–one is the more active line, which can be called melody, and another one, which is more basic, is the *twe lone* harmony line. The colors of the instruments enrich the heterophonic lines.



Figure 46: Heterophonic Texture in *Kyatthayay*

In *Kyatthayay*, section A follows this kind of texture. The *maung*, the *pattala*, and the viola play in heterophony. However, the *saung* part enriches the texture by vocalization and long notes played with a bow, which is an extended technique. The harp glissando in mm. 6 and 7 signals a change in texture in mm. 8 towards homophony. Then from mm. 14, the texture becomes polyphonic (see Figure 47). The polyphony in the second phase of section A is due to the *twe lone* used. The *pattala* and *saung* parts are heterophonic. Each has its own *twe lone*. Additionally, the *pattala* part imitates the *saung* part a beat later. The viola part is in rhythmic unison with the

upper *saung* part. Viola and *saung* share the same *twe lone: ngar bauk tayaw* in the first measure and *htapauk tayaw* in the next (see Figure 47). This kind of complex texture can be seen as another kind of *twe lone* structure in *Kyatthayay*.



Figure 47: A Complex *Twe Lone* Texture in *Kyatthayay* by Combining Different Textural Lines

In the later part of the transition and section B, a homophonic texture is used. The melody is given to the viola part in the first phrase and the *suang* part in the second phrase. And other parts stand as the supportive harmony and they also function as the ostinatos repeating every two measures. Moreover, some clusters chords, which were built from the scale tones and alternative pitches of the *pat pyoe*, are employed in the *maung* part (Fig 45). Motive, ostinato, homophony, and cluster chords are the musical elements from Western music and are not part of the tradition of the *pat pyoe*.

Section C features a three-part texture following *pat pyoe* (vocal part, active instrument upper line, and *twe lone* line). However, the vocalization is not the main melody line, and it includes unpitched sub-phrases. The extended techniques such as unpitched vocalization and percussive playing on the viola are used for the color combinations of the instruments in the texture.

In the *pat pyoe* songs, it is very common to repeat a short fragment from a line in another line after it had just played. In Section C', this type of repetition or echoing occurs between the *saung* and the viola parts. And *twe lone* intervals in arpeggio are in the *maung* and the *pattala* parts. These two textures can be found in the first and second mini phrases of section C'. Homophony is created on the poly pitch-center harmony in mm. 89-90.



Figure 48: Homophonic Texture with Poly-Pitch Center in *Kyatthayay*

For the heart-core phrase of the *Kyatthayay*, the motive is repeated amongst the instrumental parts with tertian chord arpeggios in the *maung* part. Percussive extended techniques are applied among the instruments. The melody is broken down and distributed among the parts (see Figure 42). The last mini phrase of Section C[′] maintains the texture of the heart-core phrase. Wide jumping and interval skipping in the melodic line occurs especially in the *maung* and viola parts. Therefore, the texture of this section can be said to be a mixed texture (heterophony, polyphony, and homophony). Section A and B are repeated inversely as section B[′] and A[′]. This time, the homophony and polyphony are balanced in their textures. As mentioned previously, this section is the most contemporary and different from *pat pyoe* tradition. In section D, the viola part takes a motive from section A and narrows the intervals until it becomes one note. *Twe lone* are applied among the parts. They are found as arpeggio forms in the *maung* part, and not quite active but straight lines in the *pattala* and *saung* part. These lines create homophony and polyphony together.



Figure 49: Ending Phrase from Kyatthayay

Table 42: Musical Languages of Pat Pyoe

- 1) *Pat pyoe* form (three sections: *pat pyoe kan*, the middle section, and *thaphyan*).
- 2) Each phrase is composed of a head, body, and tail.
- 3) Sub-phrases are overlapped in different parts, which create a longer phrase.
- 4) Mahar gita scales and pitches.
- 5) Pitch alternation in the modulations of *pat pyoe* scales.
- 6) Rhythmic devices of *pat pyoe* (unusual divisions of a beat, odd meter, and feather rhythm)
- Constructing a melody following the traditions of *pat pyoe* (using rhythm devices, scales, and pitches of the *pat pyoe*).
- 8) *Twe lone* cadences.
- 9) Harmonizing twe lone.
- 10) Three parts texture of *mahar gita* (Both heterophony and polyphony depending on the use of *twe lone*).

Table 43: Western Musical Elements

1) Motive

- 2) Inverted motive
- 3) Narrowing down the intervals of the motive (see Figure 49)
- 4) Ostinato
- 5) Cluster Chords
- 6) Tertian chords in spacious arpeggio
- 7) Poly-pitch centered harmony (see Figure 48)
- 8) Breaking down a melodic line and distributing among the parts
- 9) Extended techniques (percussive playing, dropping the string, bowing, harmonic tones, bow pressure, and pitched or unpitched vocalization)
- 10) Ornamentations (trill, tremolo, and inverted mordent """)

5.12 Conclusion: Blending Myanmar and Western Musical Elements

When musical elements from different cultures are combined in a composition, it can be a challenge to find ways they can be blended into one voice. *Pat pyoe* and Western music have different historical, cultural, socio-political, and philosophical backgrounds. The present writer uses four ways to combine these musical elements from different cultures. They are: (1) finding the common ground; (2) modifying the original ideas; (3) maintaining the uniqueness; and, (4) embracing each other.

To combine the music from the two different cultures, it is crucial to find the common ground. Elements such as structure, form, phrase, cadences, pitch-class or scales, melody, and texture are found in both musics. I have discussed how *pat pyoe* has its own structure and form. And how the structure of *Kyatthayay* modifies this. It also has three main sections: Introduction (Section A), the middle Sections (Section B, C, C', A, and B'), and the ending (Section D). In the *pat pyoe*, the middle section is the compound section of various genres in *mahar gita*. Instead of continuing this genre-fusion tradition, *Kyatthayay* features a new middle section where the heart-core phrase surrounded by the inverse sections taking inspiration from the custom of enshrining Buddha's relics in the center of a stupa.

Cadences are found both in *pat pyoe* and Western music. The cadences of western music are based on the chords and their progressions whereas the *pat pyoe* cadences are *twe lone*, which are built by the *mahar gita* scale pitches. *Twe lone* cadences are used in the *Kyatthayay*.

The concept of phrase is found in both Western and the *pat pyoe* music. However, unlike Western music, *pat pyoe* phrases are extended long phrases constructed by the mini sub-phrases, and they have typical three parts: the head, the body, and the tail. *Kyatthayay* is composed of this kind of *pat pyoe* phrases.

Both musics have melody. However, the melody of *pat pyoe* is composed using the pitches, scales, and rhythmic devices of *mahar gita*.

Composing by pitch class or scales is found in both Western and the *pat pyoe* music. However, the way in which scale and pitch are used in *pat pyoe* songs is different from that of Western music. Scale modulations frequently occur in the

phrases and sections of the *pat pyoe* songs. In *Kyaytthayay*, scale modulations and pitch-center modulations frequently occur. When the scale and pitch center modulations occur, the pitch alternation takes place. These alternative pitches are used with or without the modulations in the *Kyatthayay* as the original pitch classes of the *pat pyoe* are modified.

The original three-part texture of *pat pyoe* is modified into a new texture in the *Kyatthayay* by adding more parts. When the common musical ideas are found, some are used in maintaining the original ideas but some are modified in the new composition.

Pat pyoe has unique musical elements, which are different from Western musical languages. They are *twe lone* harmonies, unique rhythmic ideas, and the use of a long phrase made of sub-phrases that are overlapping. These sub-phrases are frequently used throughout sections B, C, C' and B' in *Kyatthayay*. On the other hand, I also use Western compositional ideas such as motive, inverted motive, ostinato, narrowing intervals (see Figure 49), and ornamentations (trill, tremolo, and inverted mordent).

Cluster chords or tertian chord in *Kyatthayay* are constructed by the pitches and alternative pitches of the *pat pyoe*. Tertian chords are composed in spacious arpeggios to reduce the chord harmony-like sounding. Polytonality occurs when two musical harmonic progressions which have different tonal centers simultaneously. In a sub-phrase of the *Kyatthayay*, two *twe lone* harmony phrases, which also have different pitch centers simultaneously, create a poly-pitch center for harmony.

Hoketing is the Western musical idea when a melody is distributed in different parts. In *Kyatthyay*, the *pat pyoe* melody is broken down and then distributed to the different parts of its musical texture.

This illustrates how I have used Western musical ideas such as harmony and polytonality, along with the musical languages of *pat pyoe*, to embrace both Western and Myanmar musical cultures in composing *Kyatthayay*.

Chapter 6 Conclusion

6.1 Discussion

The objective of this creative research was to compose a cross-cultural work for Myanmar traditional and Western classical instruments for 21st century audiences and musicians. My creative process was informed by analysis and research into *mahar gita* and the subgenre of *pat pyoe*. In chapter 4, I undertook a comprehensive analysis of *Hman Ya Wai*, a *pat pyoe* written by Mya Waddy Min Gyi U Sa. I also analyzed sixteen fragments from other *pat pyoe* songs (see Appendix D). As part of my composition process. I brought together musical elements from *pat pyoe* songs and elements of Western classical and contemporary music to create *Katthayay*, which I believe speaks to the multicultural world of today.

6.1.1 Reflections on Pat Pyoe Creation Vs. Tradition

During my composing process, I found myself considering what musical elements of *pat pyoe* were not suitable anymore (or sounded cliché), what elements felt relevant in 21st century and should be continued on, and, finally, what elements were key part of *mahar gita* heritage and therefore intrinsically valuable as a tradition.

Reflecting on this further, after spending much time analyzing this repertoire, I feel that three types of musical elements are important: 1) unique elements that are distinct to *pat pyoe*, and make it a recognizable genre; 2) advanced technical elements within *pat pyoe* that could be used as in new creations; and finally, 3) elements are unnecessarily restrictive and deserving of modification and creative adaptation.

In creating a new piece out of *mahar gita*, maintaining some uniqueness of the *pat pyoe* is crucial not to weaken the natural values of the *pat pyoe*. I argue that the characteristic of phrases and the melody of the *pat pyoe* are the unique musical elements that make *pat pyoe*. In the case of phrases, these are the compound long-phrases, which are composed of short subphrases. They have three parts: the head, the body, and the tail. The phrase ends with a complete cadence and sub-phrases are paused by the subcadences. Using *ataw* phrases as the transitions between the phrases and the section in the *pat pyoe* is a logical and practical way of creating transitions.

Another unique characteristic of *pat pyoe* is its melody composed in accordance with the two nuances of *mahar gita*: subtlety (*nu*) and wavy (*nwe*) avoiding the abrupt changes. The portamento is frequently used to obtain smooth transferring from one pitch to another. They are the features of the *pat pyoe* that make the genre distinct and they have to be maintained as the uniqueness of *pat pyoe*. In composing a new piece out of *mahar gita*, these parts of composition can help modern audiences learn to appreciate and cherish *mahar gita* tradition, as well as better understand the uniqueness of ancient Myanmar music.

There are also advanced technical musical elements of *pat pyoe* that are relevant today and could enrich 21st century world music. I argue that these elements are rhythm and meter. In *pat pyoe*, the duration of a beat and how a beat is divided is fairly flexible. Because of this flexibility, odd-number meters and compound meters are part of *Hman Ya Wai*. This kind of rhythm flexibility is named *atweh*. In *atweh* sections, even a fragment could be a beat and the beats are not of equal length. These rhythms–with the unusual beat divisions, feather stems and fermata–are the elements make *pat pyoe* melody, harmony, and texture stand out. These musical languages are strong musical elements that could engage the new audiences of today across the world.

However, I would argue that some musical elements of the *pat pyoe* do need to be changed or modified for modern day audiences. One of these is the form of *pat pyoe*. A typical *pat pyoe* has three parts: introduction in *atweh (pat pyoe khan)*, the middle section in angular rhythm (fusion section of different *mahar gita* genres), and the ending in *atweh (thaphyan)*. However, such a rather simple form can be modified into a new complex and advanced form, especially in hybrid approach with western music.

Another aspect of *pat pyoe* that would benefit from new elements is scale and pitch-center modulation. The melody of the *pat pyoe* songs is composed by the *mahar gita* scales: *than yoe*, *pale* and *hkunhnathanchi* with their helping tones. As discussed in chapter 4, modulation of scale and pitchcenter can occur within a phrase as well as within a section. While this is sophisticated technique, the resulting sound is causes new compositions to no different from old Myanmar music. I propose that the function of these scales, their secondary tones, and alternative tones can be applied in new ways to create new melodies and harmonies that are fascinating and more challenging for the 21st century audiences.

6.1.2 Welcoming New Elements

In the *Kyatthayay*, I explored how three elements from *pat pyoe* just discussed (unique elements, advanced techniques and unnecessarily restrictive elements) could be combined with the Western musical elements to create a rich cross-cultural piece. I used four compositional approaches to blend these elements. These were 1) finding the common ground, 2) modifying the original ideas, 3) maintaining the uniqueness and 4) embracing each other (see chapter 5).

To do this, I reviewed core musical elements in both musical cultures. For example, phrases, cadences, and melody from the *pat pyoe* compared to Western music. These elements are applied as common ground for the *Kyatthayay*. In constructing the melody of *Kyatthayay*, the melody both in the vocalization and viola part is composed according to the characteristics and principles of the *pat pyoe* melody but incorporates new elements from the Western music. Keeping the nuances and characteristic of the *pat pyoe* melody, the Western melodic elements such as motive, inverted motive, and narrowing down the intervals of melody to create new variation are applied to the melody of *Kyatthayay*. In the melody of viola part, the Western musical technique such as sul tasto, double stops, *jeté*, harmonic glissando,

tremolo, and dropping the viola string are used as the ornaments to the original *pat pyoe* styled melody.

The musical elements of *pat pyoe* such as extended long phrases and rhythm devices, frequent meter changes are already advanced techniques of composition. Musical ideas such as motive, inverted motive, ostinato, and narrowing the intervals are the distinct Western musical languages that cannot be found in the *pat pyoe* genre. The two musical cultures enrich each other by introducing such unique musical ideas to both musical worlds in one composition: *Kyatthayay*.

The form of *Kyhatthayay* is modified into a more complex form in accordance with the concept of Burmese traditional architecture while the original three-part form of *pat pyoe* is maintained. Alongside *atweh*, a quadruple meter with regular rhythm is usually applied in the middle section of the *pat pyoe*. Although regular metered rhythm is relevant in the modern context, using quadruple meter in every *mahar gita* pieces can become quite dull and boring. This regular rhythm section is modified by alternating between two odd-number meters. Using multi-meters is very common in both *pat pyoe* and Western music but using odd-number meters alternatively in the middle section is very new to the *pat pyoe* music. *Mahar gita* scales from *pat pyoe* are modified by modulating the pitch centers in the piece and the alternative pitches of the scales are used more freely.

The harmony of *Kyatthayay* embraces harmonizing principles of both cultures: the *twe lone* harmony of the *pat pyoe* and the Western harmony. These elements are integrated into each other and make the variety of complex textures and richer harmony in *Kyatthayay*.

The instrumentation of *Kyatthayay* is the *saung*, and *pattala*, which are *mahar gita* instruments; the *maung* is an instrument form the *saing waing* ensemble; and the viola is a Western musical instrument. The *maung* is chosen because of its chromatic pitches. The limitations of the instruments impact on the pitch choices and orchestration for the composition. The two tuning systems of both Myanmar and Western are merged together in the *Kyathhay*. The *pattala* is exclusively in Myanmar traditional tuning whereas

the *maung* is totally in the Western tuning. The *saung* and viola function as the facilitators between the two different tunings by playing in both tunings properly. This is how two different musical cultures: *pat pyoe* and Western music are engaged, enriched, embraced, and consolidated each other in the *Kyatthayay*, a cross-cultural piece.

6.1.3 Discussing the Comments of Myanmar Music Experts on *Kyatthayay*

Daw Kin Soe Win, a *mahar gita* expert, appreciates the composition *Kyatthayay*. She commented that she was very happy to listen the middle part of the piece where the duet of the voice and an accompaniment was played. She said that she could feel more *mahar gita* nuances in that duet part of the piece. However, she offered a recommendation regarding the form of the piece. She noted that it would be better if the solo introducing of each instrument came at the beginning of the form, with the other instrument joining later, so that the piece will be enjoyable when all the instruments are played together. From these comments, I learned that the sound of more than one instruments in a complex texture is not so familiar to *mahar gita* audience who usually listen to the duet version of the piece. The *Kyatthayay* is a new form modifying the old *pat pyoe* in the light of Myanmar architecture of building pagoda. Therefore, introducing each instrument should be considering for the form of upcoming pieces in this repertoire. The beautiful duet sections can be longer than that of *Kyatthayay*.

Dr. Su Zar Zar, a Myanmar musicologist, recognized that *Kyatthayay* is a futuristic and creative piece. She appreciates the use of extended techniques on the Myanmar traditional instruments such as bowing the *saung* string, knocking the sound body of *the saung*, and playing the *pattala* with the stick of mallets. She suggested that in composing with the positive word *"kyatthayay*," the sound of the piece should be brighter and clear. However, she thinks that the climax and the momentum of the piece are not active enough. From her encouragement, I have learned that finding new sound

colors on the Myanmar instruments is a valuable contribution to this new repertoire in *mahar gita*. Although "*kyatthayay*" is the positive word, the piece *Kyatthayay* is about the journey of struggle between the arrogance and the humility to have "*kyatthayay*." Therefore, the darker intense sounds are included to represent the inner battle of the composer. I feel that the piece *Kyatthayay* remains spiritual and meditative, and, even at its intense moments, still has calm and stable nuances of *mahar gita*. In my next composition, I would like to explore a climax that pushes these boundaries.

Taken together, these comments from Myanmar experts on *Kyatthayay* are positive. I feel that it is an appreciated, creative, and futuristic piece for the new repertoire of *mahar gita*. I hope that it will be helpful guide for the younger generation composers interested in creating new hybrid *pat pyoe* songs and other Myanmar music influenced pieces.

6.2 Conclusion

Mahar gita is an invaluable treasure for Myanmar both historically and musically. Its present form is influenced by many cultures throughout the history. As discussed in chapter 2, *mahar gita* reached its peak in the last two dynasties before the British Colonization with the creation of *pat pyoe* genre by Mya Waddy Min Gyi U Sa, which features musical ideas from all prior *mahar gita* song genres. This includes *pyu* music from the earliest period, musical knowledge of the neighboring nations such as *mon*, *Siamese*, and Indians, and the artistic innovations of abundantly creative court in the last two dynasties before colonization.

Pat pyoe lost the attention of the younger generations since the time of British Colonization. Despite its declination and obstacles, it still exists in the modern society but there is no new creation in this genre after the composer Daw Saw Mya Aye Kyi passed away in 1968.

As a Myanmar composer living in the 21st Century, I argue that to make this valuable music to be a living art today it must also be made relevant. Although there were different approaches to show a new possibility of *mahar gita*, I chose to

compose a cross-cultural work with the musical elements of *pat pyoe* and Western compositional techniques to show a new direction of Myanmar traditional music.

I chose Western music alongside with *pat pyoe* for this new creation because of my musical background as a church musician. I have been immersed in Western sacred music composition since my childhood. Therefore, western church music is a ground where I can stand firmly to compose such a cross-cultural piece. Through my experiences in Nirmita composers' workshops in 2016 and 2017, I was introduced with contemporary compositions and encouraged to create experimental hybrid compositions between Myanmar and Western music traditions.

Kyatthaya is the first cross-cultural, hybrid composition for over 50 years. While some musical elements which are not relevant to the modern day are modified, I believe that this piece has strong root in *mahar gita* and is enriched through use of Western musical elements, which are already part of the worldwide music scene today.

This piece makes a fresh contribution for both *mahar gita* and the Western music traditions. New musical elements are created by merging these two different music traditions. This creative composition introduces the advanced musical elements of *pat pyoe* (such as the way of using rhythm and meters) and unique musical elements (such as the tuning, pitches, and *twe lone* harmony) to new audiences. The newly invented musical ideas with both cultures contribute to both genres, plus the modern-day cross-cultural music repertoire. Cross-cultural composing is an area of interest for musicians and researchers worldwide. Further study of mahar gita and cross-cultural composing is an avenue open to younger Myanmar musicians who want to study *mahar gita* and share it with the world. The innovative way of playing traditional instruments in this piece also suggests new avenues of exploration to younger Myanmar composers for their future works. Taking the renovated pagoda (*zedi*) as a paradigm for the structure and the whole composition can also be an ideal approach for both younger Myanmar musicians and cross-cultural composers around the world. With more cross-cultural repertoire, *mahar gita* could live again as a living music among modern audiences. Kyatthayay is an important step towards this.

In composing *Kyatthayay*, a cross-cultural piece, I discovered musical elements of *pat pyoe* from every available source. As discussed in chapter 3, there

was no fully comprehensive existing scholarly information of *mahar gita* and *pat pyoe*. Therefore, I decided to do this research to fulfill this requirement. *Mahar gita* music theory is systematically listed in this research, drawing on all possible sources. The transcribed scores in Appendix C are intended not only as a tool for analysis but as scores for performance. Together, these scores and music analysis are a significant legacy for the future. Through studying these score as well as performing them, the advanced and strong musical elements of *pat pyoe* can be brought to live by younger Myanmar musicians, who may bring the uniqueness of the *pat pyoe* into their future compositions. In this manner, young musicians and composer can reenliven *mahar gita* again.

Growing is the sign of living. I believe that every art or music should be growing and living. *Mahar gita* has reached its present form by being nourished by neighboring cultures. In modern day context, a new repertoire of *mahar gita* including *pat pyoe* could easily be a living art of today and into the future.

6.3 Suggestion

With this study, I would like to give some suggestions to the researchers who are interested in related topics and the composers who are interested in Myanmar music or Myanmar instruments.

6.3.1 Suggestion for the Researchers

As mentioned in the previously, there are very little research on Myanmar music, especially *mahar gita*. Many areas of *mahar gita* are still left to be researched academically. There are the four long-sized *pat pyoe* (circa. 30-45 mins.), which are regarded as the highest musical values among Myanmar traditional musicians with a variety of Myanmar musical elements. These songs can be analyzed related with the topic of *pat pyoe* as a continuous study of this research for the future research. In this study, I did analysis on the other genres of *mahar gita* as the parts of the *pat pyoe* songs. For the future researchers, any one of these genres could be the focus of an

academic study. I have exclusively explained about the four Myanmar traditional instruments: the *saung*, the *maung*, the *pattala*, and the *see-wa* with their idiomatic playing techniques. Since there is no orchestration book for Myanmar instruments, the scholarly study on the Myanmar traditional instruments would be the great help for the composers as the future research.

6.3.2 Suggestion for Composers

This study is also aimed to be the guide for the composers who are interested in composing based on *mahar gita* or composing for the Myanmar traditional instruments. *Kyatthayay* was performed and recorded live for this research. Based on the issues that arose through the rehearsals and performance, I would like to recommend a few things for composers.

This performance tradition of *mahar gita* gives freedom to the musicians to improvise as well as choose articulations and dynamics for the music. In rehearsing *Kyatthayay*, I found that having dynamic details in the score was confusing for the performers. However, when I let them interpret by themselves, the exact dynamic and articulation that I wanted could not be produced. For example, all instruments tended to perform at the dynamic level. I had to remind the players, where I wanted exact dynamic and articulations and I made special marks on their scores. Because of this, dynamic signs were omitted in some transcribed scores of this research. Therefore, I recommend composers give a general guide to dynamics instead of fully scoring these.

Idiosyncrasies of Myanmar traditional instruments also needs to be carefully considered. One limitation I noticed only at the rehearsal was that for the *saung*, if the two bended strings are played together, the sound is fairly muted. *Saung* players are accustomed to playing one open string and one bended string together to prevent a totally muted sound. Although it is easy to play the chord on the open string, playing the chords with bended strings is not very beautiful. Simultaneously bending the two strings of very wide intervals cannot be played. If two open string are played with the right fingers without bending the strings, one more string can be played by the right index finger. Therefore, maximum notes that can be produce simultaneously on the *saung* is three notes and all three notes should be played on the open strings.

Composers also need to consider that many Myanmar traditional musicians cannot read the notation and they learn to play only by ear. Therefore, to memorize a very long piece is a big challenge and many hours of rehearsal with the conductor or the composer is required. Playing some instruments and singing can help a lot in learning the piece. As *Kyatthayay* is a fourteen-minute long piece, the Myanmar musicians had some challenges in memorizing the piece.

Notation type is also important. For some players, number or graphic notation may be preferred. Where performers can read western notation, sight reading can be challenging. For longer pieces such as *Kyatthayay*, I suggest using number notation or graphic notation for Myanmar traditional musicians, and when composing new hybrid work, I recommend a substantial rehearsal period. As a guide, the rehearsal of *Kyatthayay* took 28 hours. APPENDIX A INTERVIEW PROTOCOL

Interview Questions

1. Personal Questions

The questions in the parenthesis are follow up or alternative questions.

- 1) Can you introduce yourself?
- 2) What is your role in *mahar gita* performance?
- 3) Since when did you start to perform mahar gita?
- 4) Who are your teachers in learning *mahar gita*? (How do they teach? And did you learn any notation?)
- 5) How many years have you been performing *mahar gita*? (What is the unforgettable moment through this journey?)

2. Questions about Mahar Gita

- 1) What is *mahar gita* and pat pyoe? (What are the characteristics of *mahar gita*?)
- 2) How do you decide a song if it is *mhar gita*?
- 3) What instruments are involved in *mahar gita* performing? (Can you tell their tuning?)
- 4) How many kinds of the see and wa playing are there in mahar gita?
- 5) In what occasion, *mahar gita* is performed?
- 6) How many sub-genres are there in *mahar gita*? (What are their distinct?)
- 7) What are the subjects of *mahar gita* and *pat pyoe* songs? (How much important the text is to the audience of *mahar gita*?
- 8) How do you decide if it is a good *mahar gita* performance?

a) Mahar Gita in the History

 Who were the composers of *mahar gita*? Or do you know any composer of *mahar gita*?

- 2) Who could perform *mahar gita* in the ancient time?
- 3) When *mahar gita* and *pat pyoe* were born?

b) Mahar Gita Today

- 1) Do you think *mahar gita* is popular among present day people?
- 2) What is the opinion of you on decline of *mahar gita*?
- 3) Do you know who are responsible for the decline of *mahr gita*?
- 4) Do you think *mahar gita* should be performed nowadays?

c) *Mahar Gita* in the Future

1) What do you want to say to the new generation *mahar gita* musicians?

3. Questions about Myanmar Instruments

- 1) What are the distinct characteristics of the *saung* and *pattala*?
- 2) What are the playing techniques?
- 3) Can they play other songs except *mahar gita*?
- 4) How many tuning ways are there for the *saung*?
- 5) How do you choose harmonic pairs for *mahar gita* performance?
- 6) What is the pitch ranges of the *saung*, *maung*, and *pattala*?
- 7) How do you improvise in *mahar gita*?

APPENDIX B

NEW CREATIVE COMPOSION *KYATTHAYAY*

Wai Hin Ko Ko

Kyatthayay

"All the Blessings"

Full Score

Program Notes

Kyatthayay is a Burmese word derived from mon (*kyauk*) and sanskrit (*sare*) that means "filled with the all goodness and blessings." This word is synonymous with grace, glory, and honor.

I composed this work during the Covid-19 crisis, a very dangerous global pandemic. In Myanmar culture, we perform specific actions to promote goodness and blessing, especially during troubled times. These actions may include listening to the chanting of monks, filling a drinking water pot until it overflows, or saying a prayer in front of the image of Buddha or praying to God early in the morning. Myanmar people believe that saying and doing good things creates *Kyatthayay*. During Covid-19, I was always wondering what could I do to have *Kyatthayay* in these *Akyatthayay* (opposite of *Kyatthayay*) times. As I am a Christian, two bible verses came up into my mind: proverbs 18:12 and Ephesians 4:2– "Humility goes before honor;" "with all humility and gentleness, with patience, bearing with one another in love." For me, humility was the most important thing to spread *Kyatthayay* in these dark hours of pandemic. This piece is composed as a humble gentle response to this bad situation. I hope it will spread *Kyatthayay* and the values of patience and love.

This piece opens with the introduction which pictures the spreading *Kyatthayay* and the middle part expresses the struggle between humbleness and arrogance or pride. To be humble, the self must change. This piece imagines this process as a timeless inner battle, with struggle and movement that gradually flattens and gets closer to earth and nature, which evoked when the resonance of the last notes ring into the space. For the vocalization, I composed a poem as follow:

Burmese Texts	English Translations
Kyatthayay toe barlo	The blessings are growing
Lin la(tt) ta(k) nay won ke tho pamar lay	Like the shinning sun rising in the sky
Toe bwar lo phyar,	With the radiance, they would become
Kaung gyi mahar	blessing of magnificent,
Mhan shaw(t) yin lay	If only arrogance is subdued.
Kyatthayay toe gar si bin wai phyar	The blessings are spreading with their
Nay won hlyan pamar lay	radiance like the flames of the sun.
Law ba kin, daw tha kin, maw ha kin	If greed, anger, and ignorance are
Aw! Mhan marna kin bar mha	abandoned,
Kyatthayay shi lain(t) lay	Only then will there be blessings.
Hnlone thar nu nyant mha thar hlyin	If only one's heart is gentle,
Kyatthayay toe gar si bin wai phyar	The blessing would abound.
Mhan shaw(t) yinn	My pride and self are being flattened
Wit twar	down unto the ground.

This piece is a part of my thesis entitled "A Cross-Cultural Composition with Myanmar and Western Musical Languages." Myanmar musical nuances from *mahar*

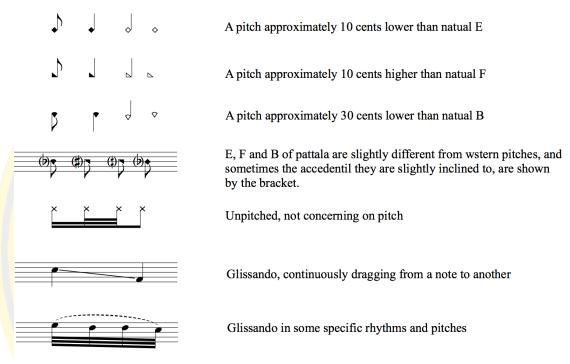
gita (such as Burmese texture and modes) and Western contemporary compositional languages are blended together in this piece.



Performance Directions

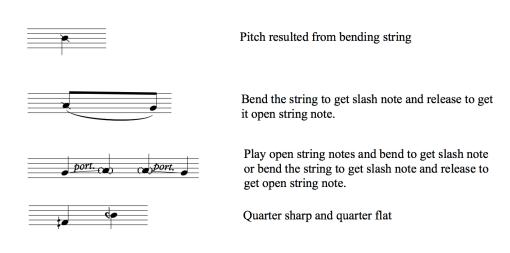
Pattala

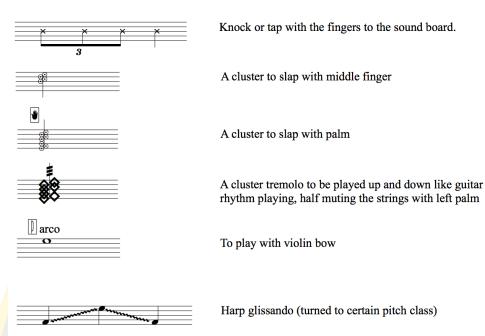
Pattala is a Myanmar traditional xylophone made by 24 wood slats. It has three octaves rage added with extra D and E in diatonic scale, starting from C3. However, it is a fixed pitch instruments and obviously different in E, F, and B from western diatonic scale. In this piece, these three notes are notated with special note heads.



Saung

Saung is a Myanmar traditional harp with 16 strings. The tuning for the piece is G-B-C-E-F-G-B-C-D-F-G-B-C-D-E-G. Note the other pitches are created by bending the string with the left finger or thumb which will rase the note by up to a tone.





Maung

A set of mellow gongs attached to a wooden frame to be played by mallet, it has three octaves in chromatic scale.



More emphasize on overtone and harmonic, not on attack.



Play with palm.



Rapidly and alternatively palying with ajacent above note

Viola

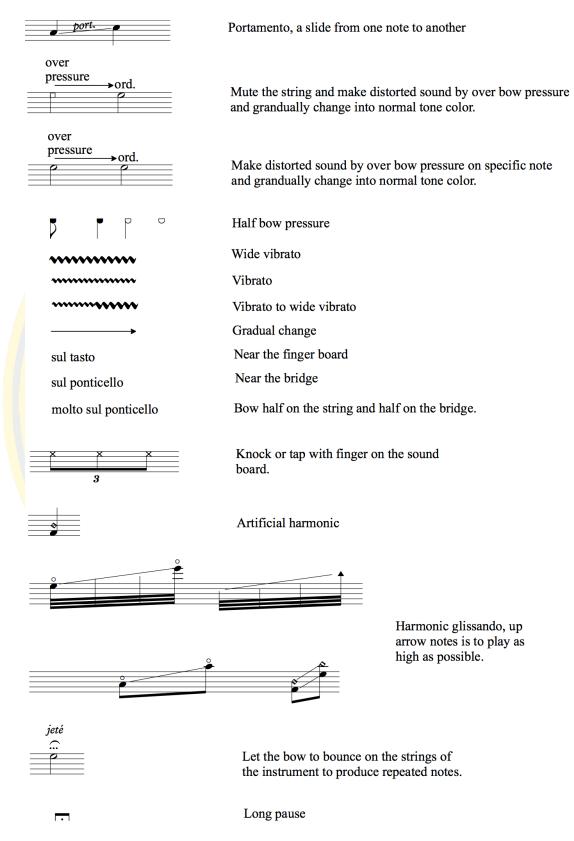




E, approx. 10 cents lower than natural E, F, approx. 10 cents higer than natrual F, and B, approx. 30 cents lower than natural B. These notes to be blend with the fixed pitches, E,F and B of Pattala in unison phrases.

Inverted mordent: an ornament to be played as a figure in cue notes

Quarter sharp and quarter flat



The Note for Vocalization

All indicated pitches can be ajustable an octave higher or lower according to the vocal range of each musician.







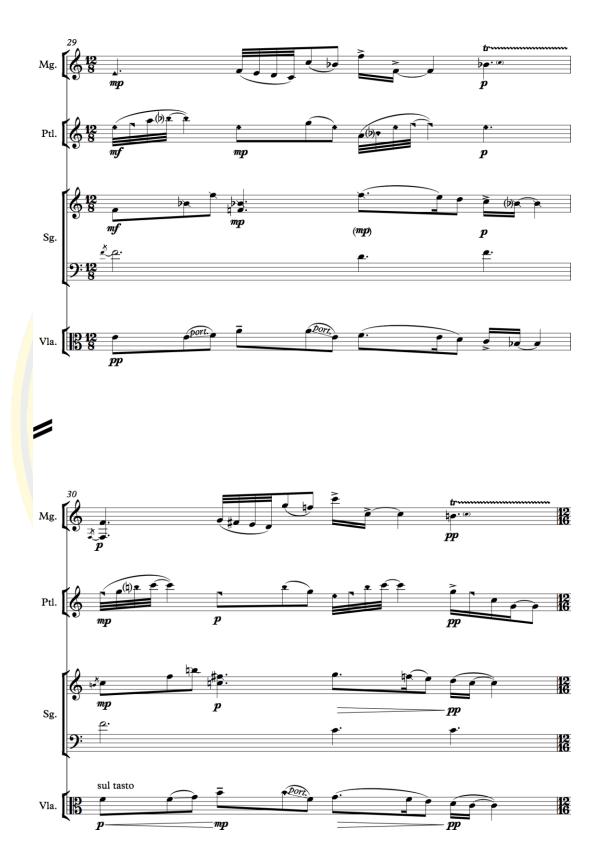












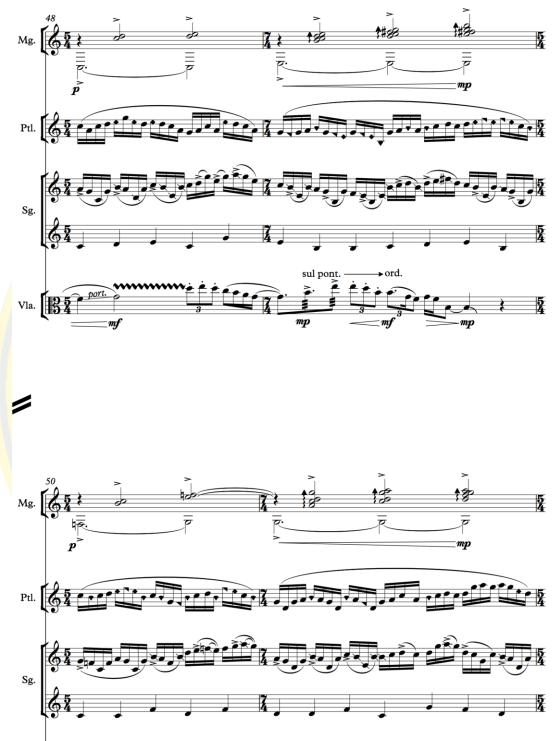












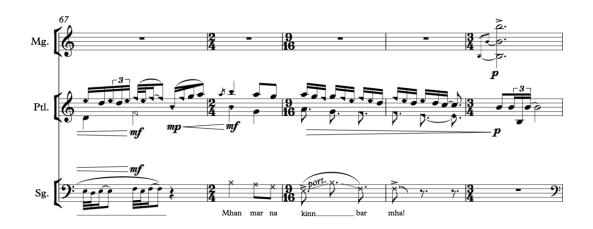




























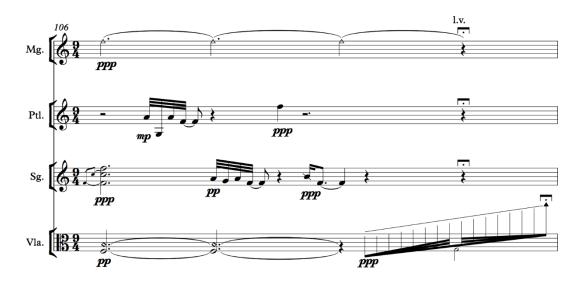


3:

pp

Vla. p















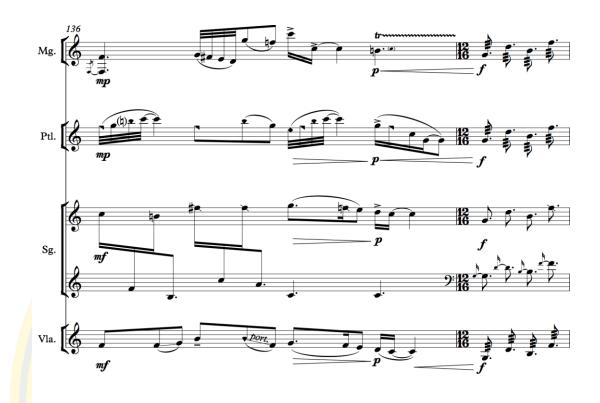


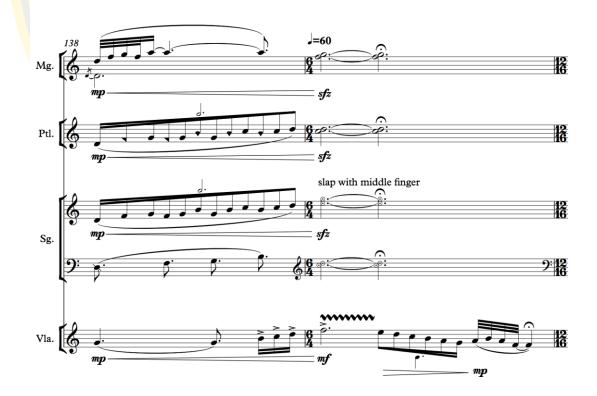


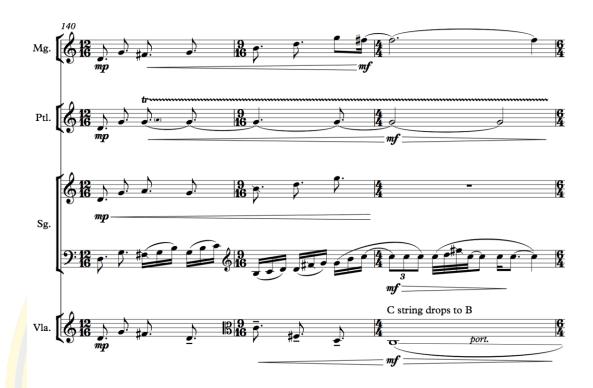


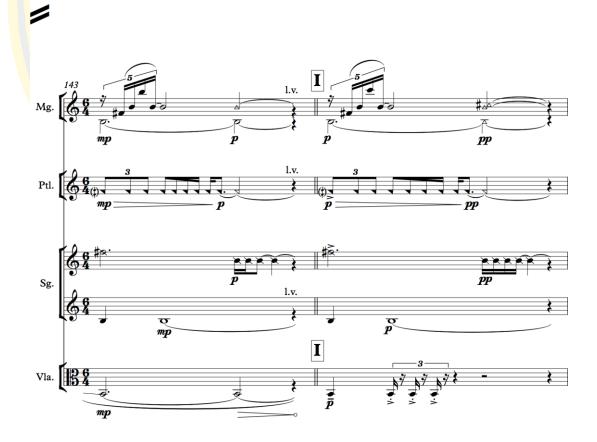


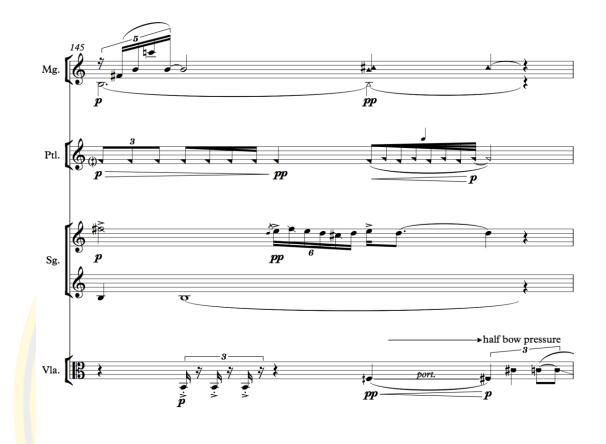


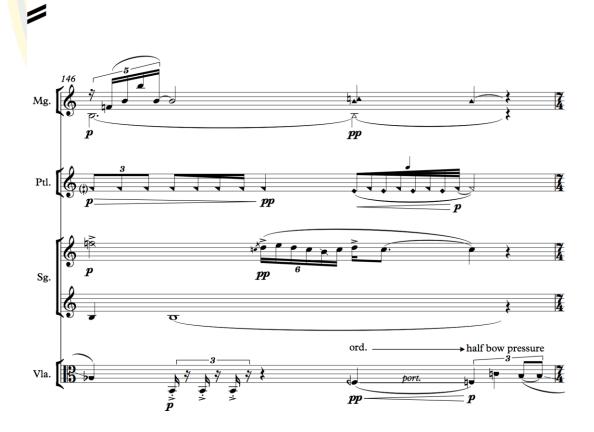




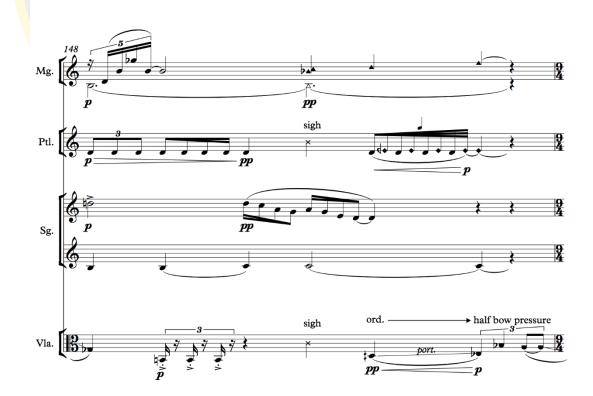




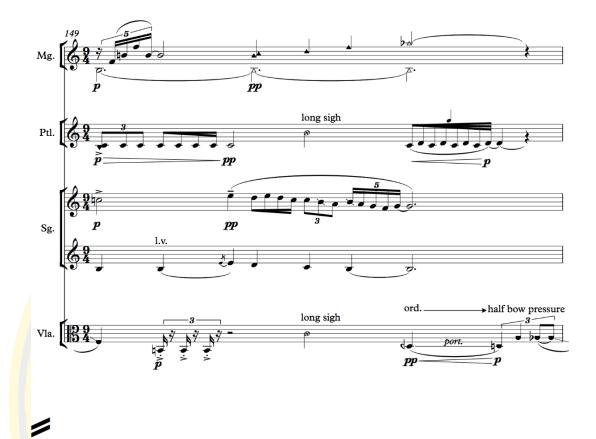


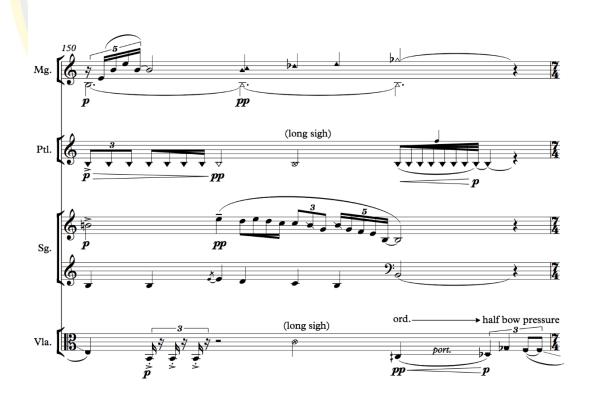






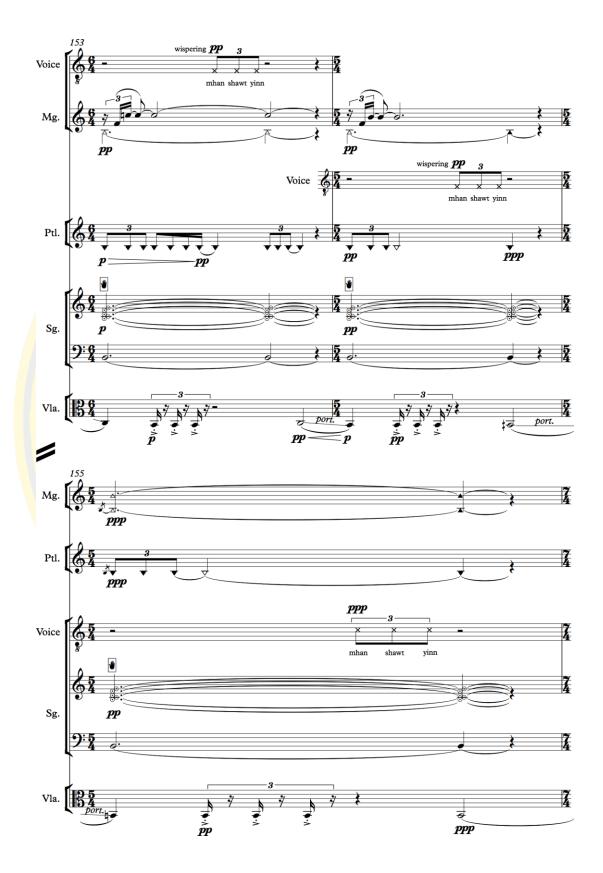
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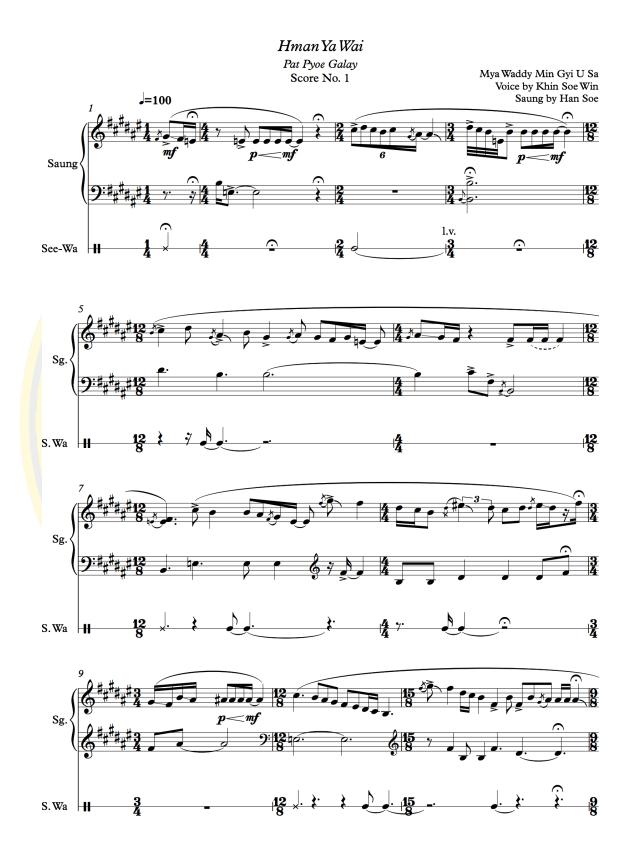








APPENDIX C MUSIC SCORES



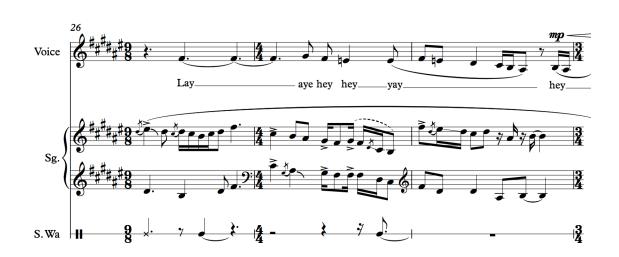




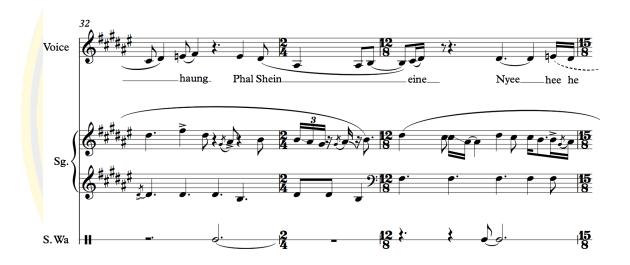


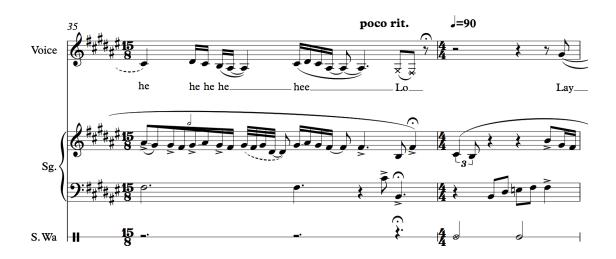


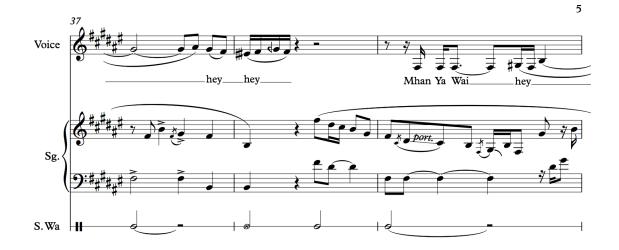


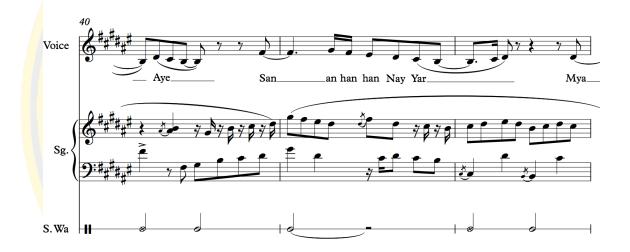


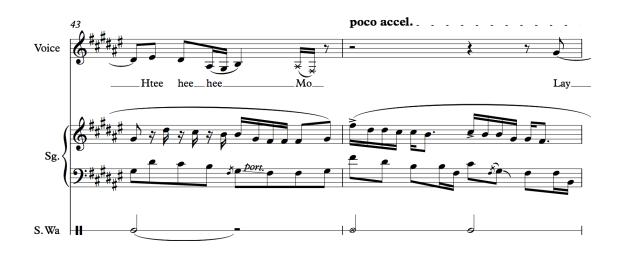


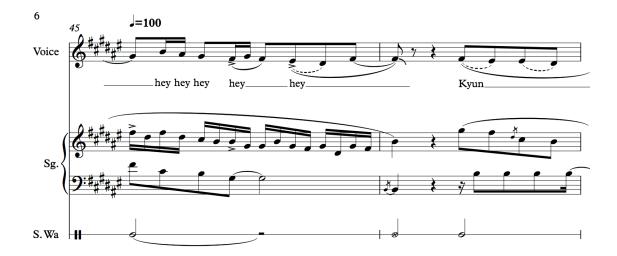


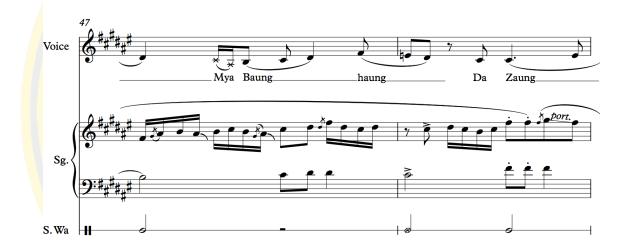


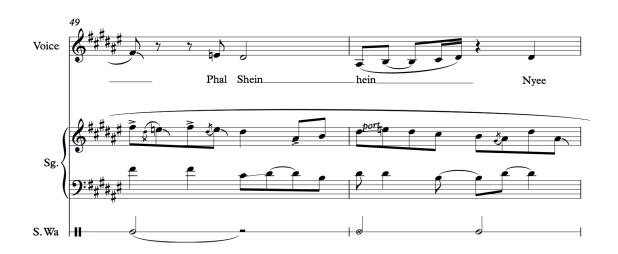




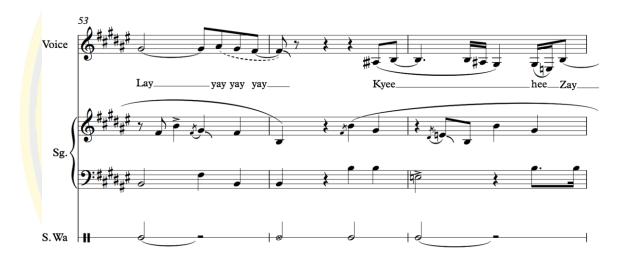


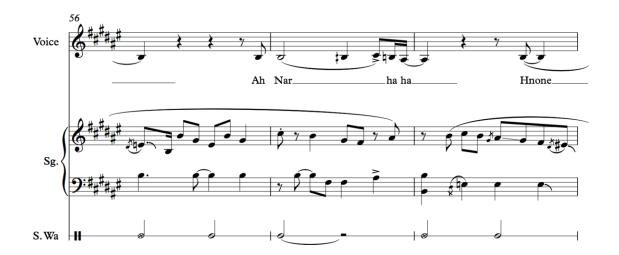






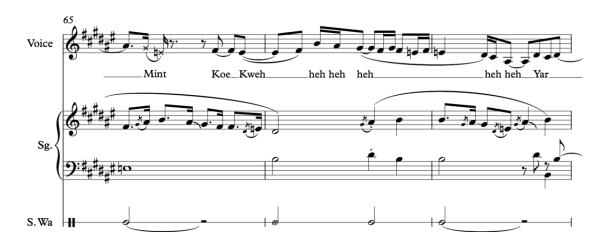




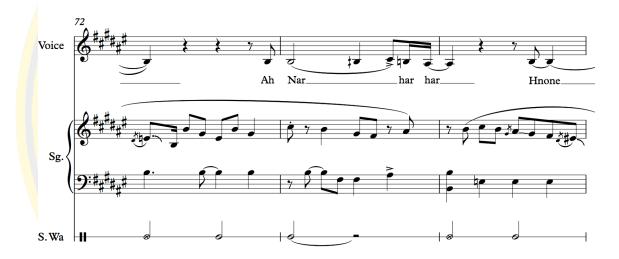


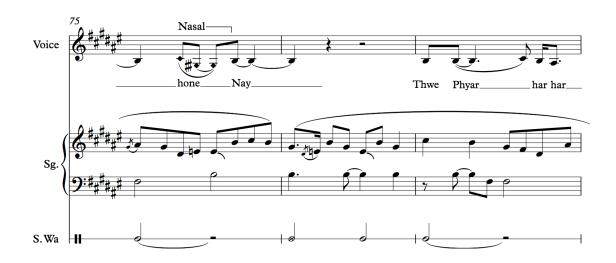














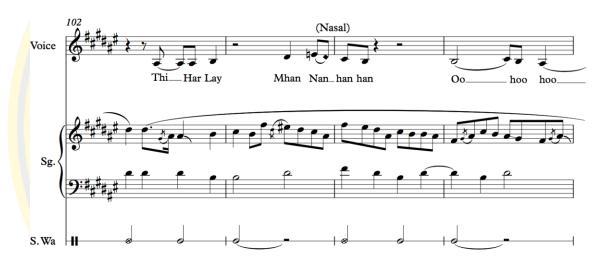


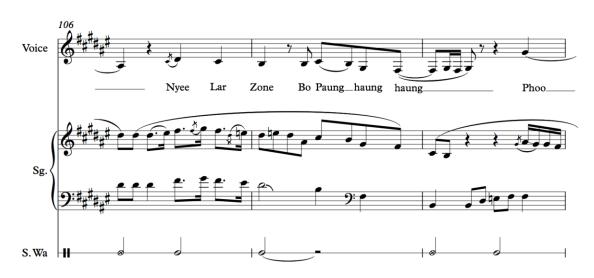


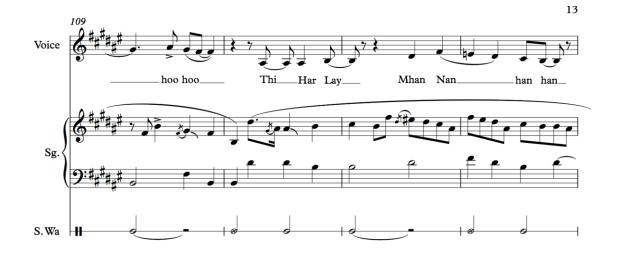


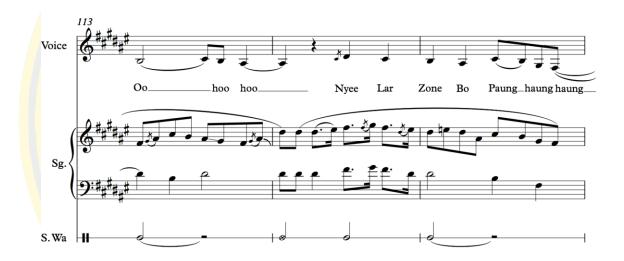


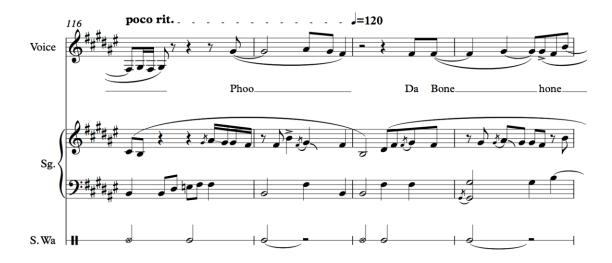


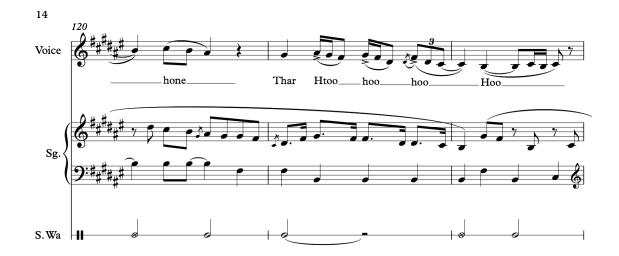


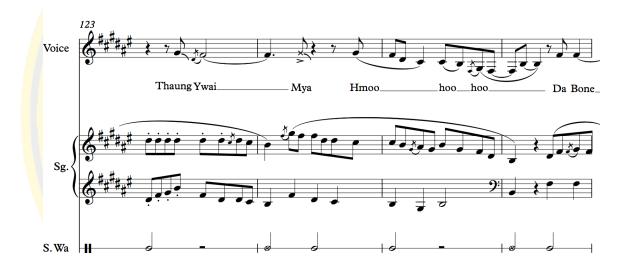




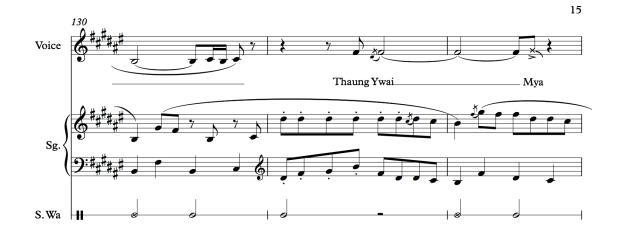


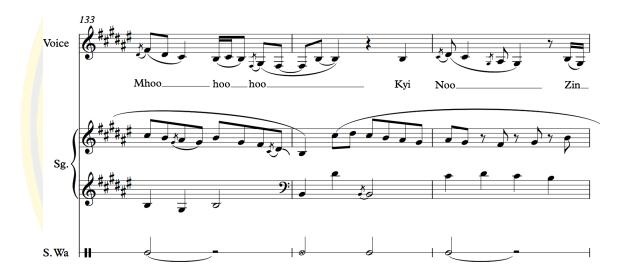


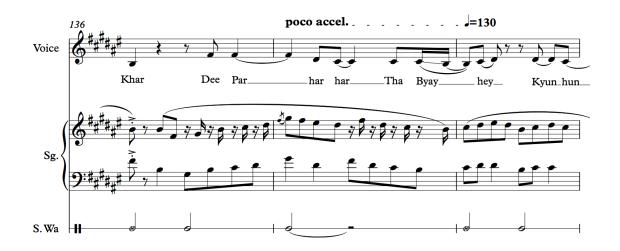


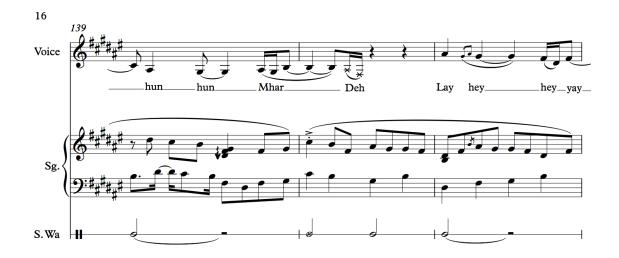


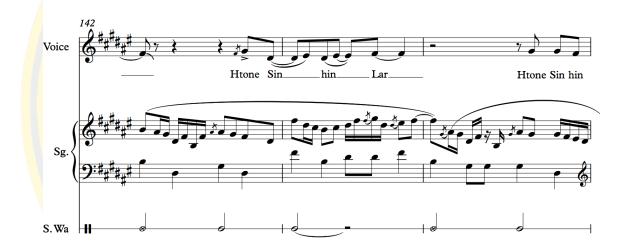


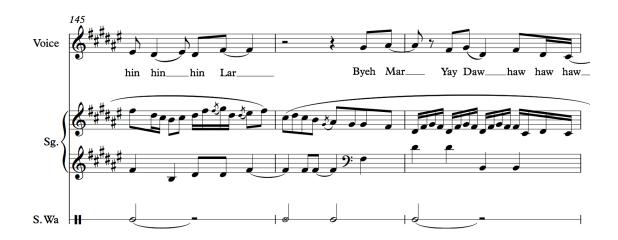


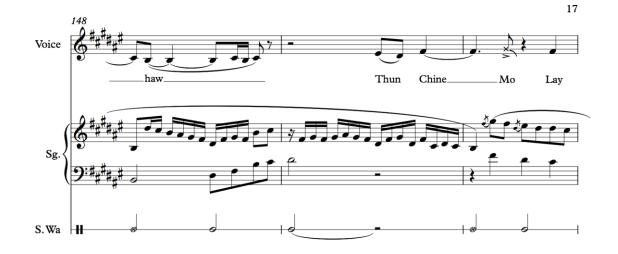


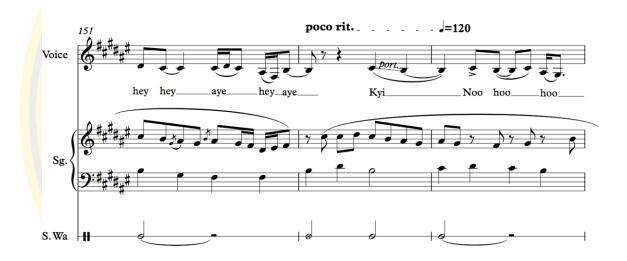


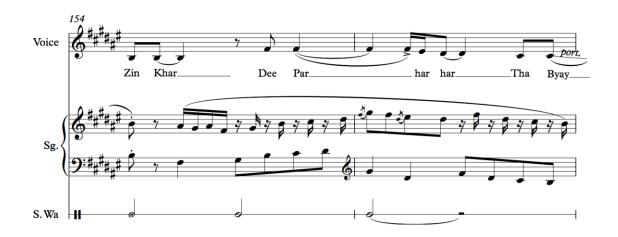


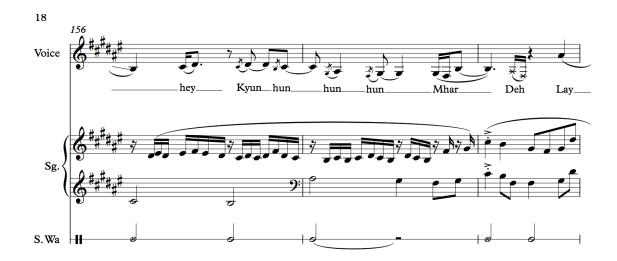






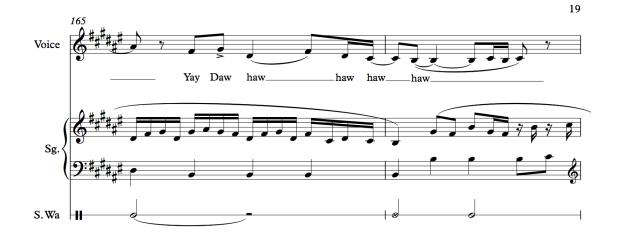


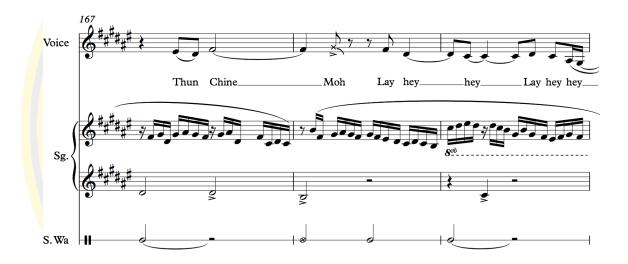


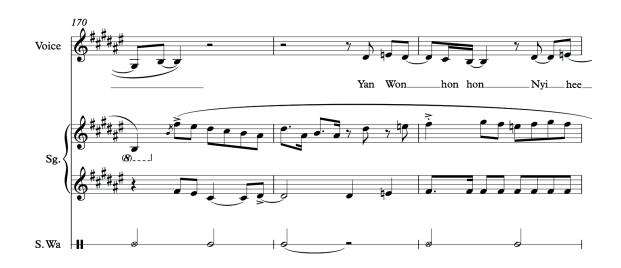






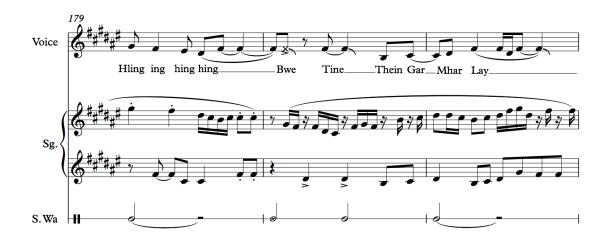


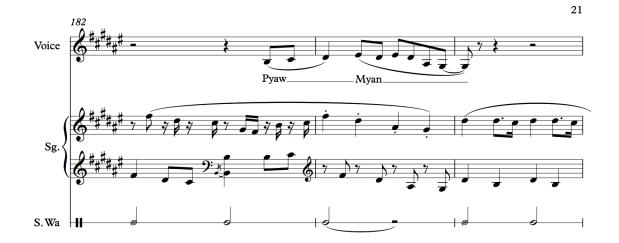


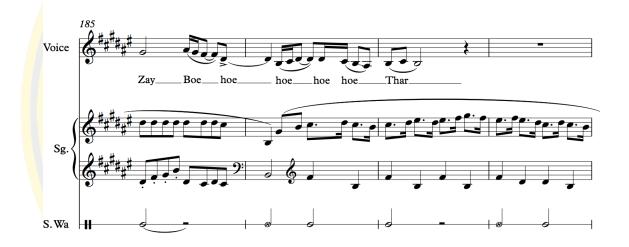




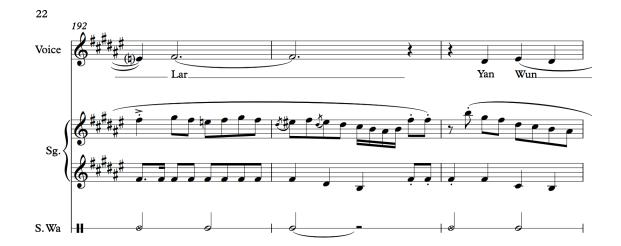








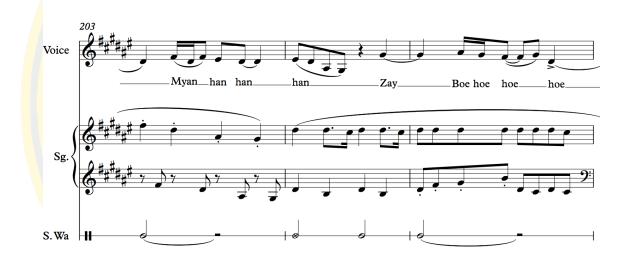


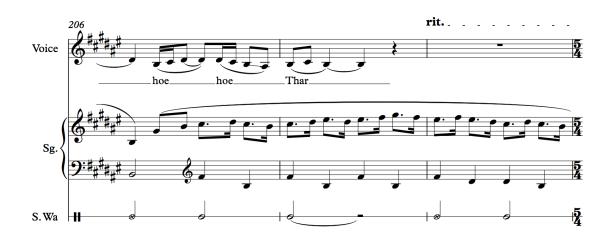


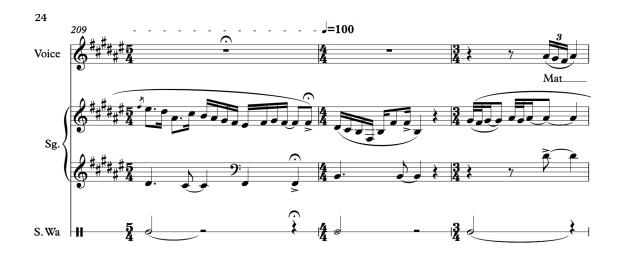








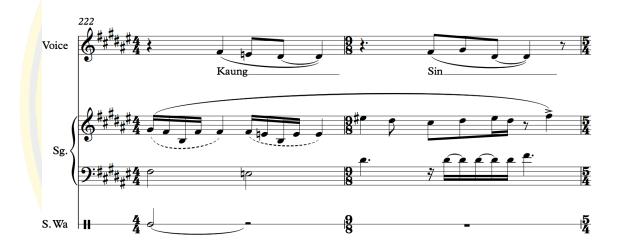




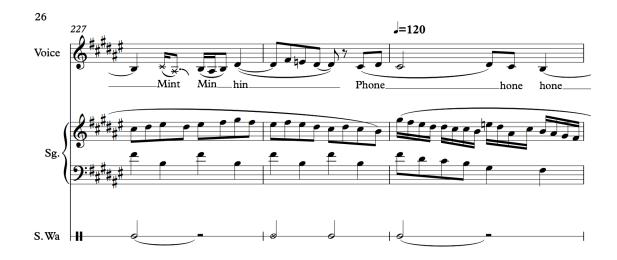


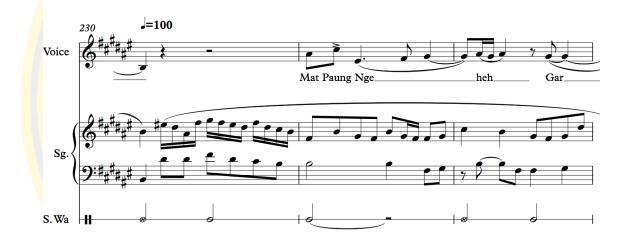


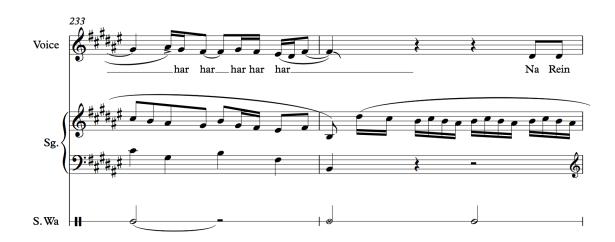


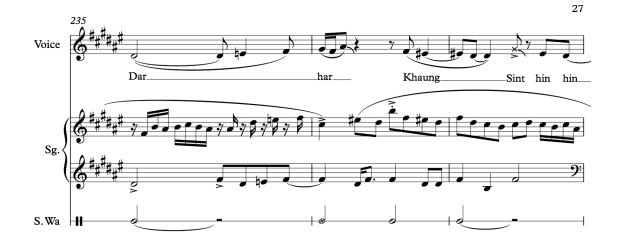




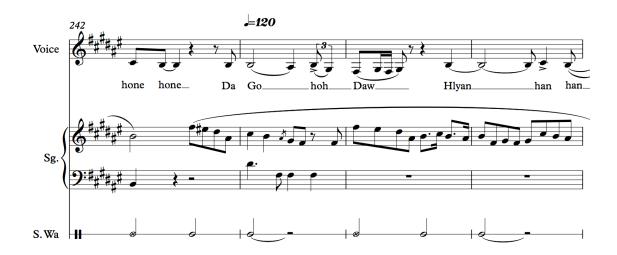


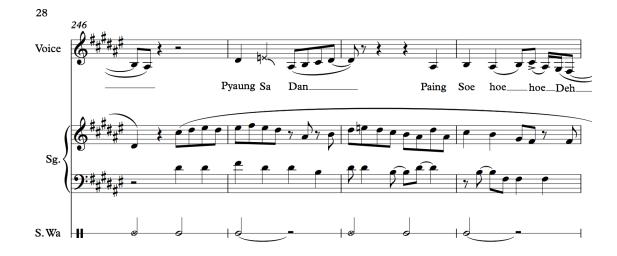


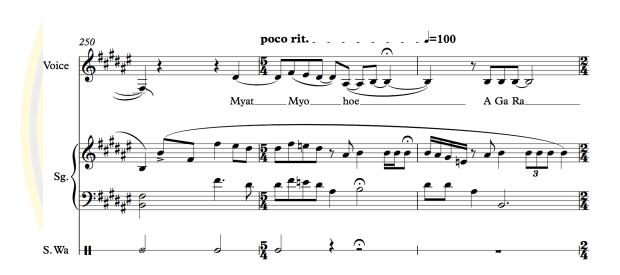


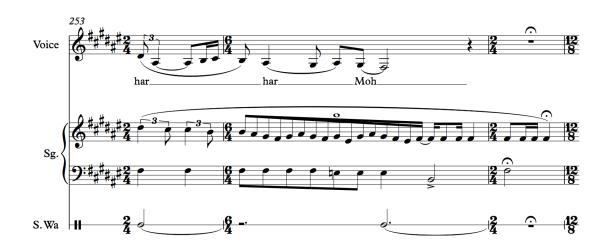


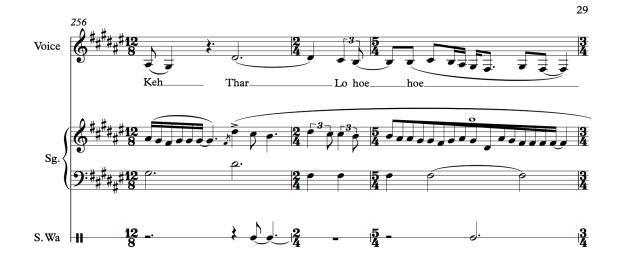




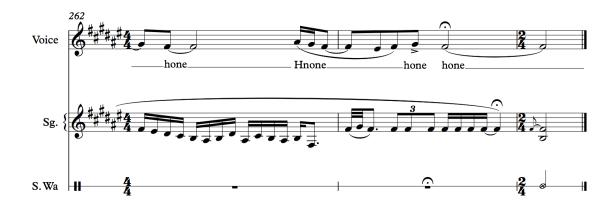










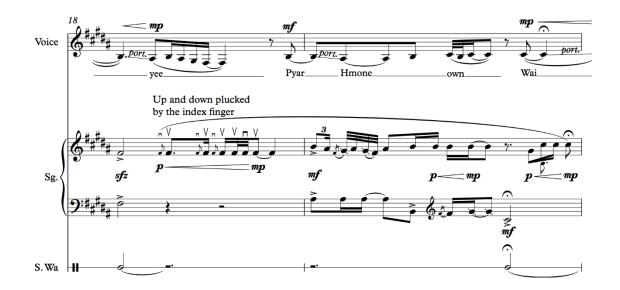


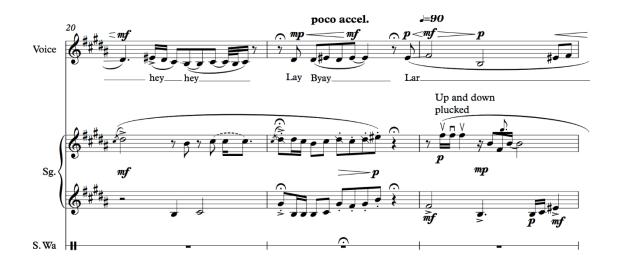


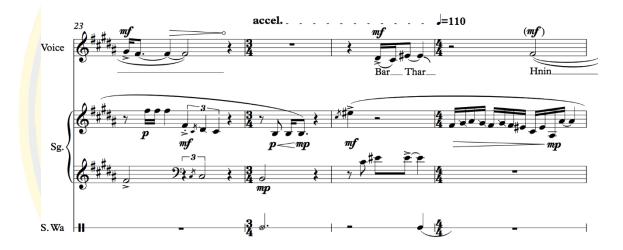
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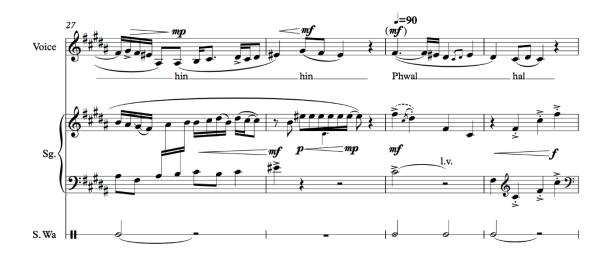








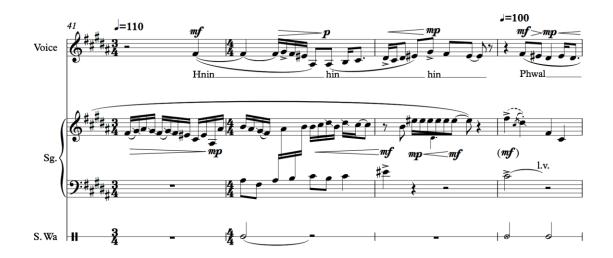












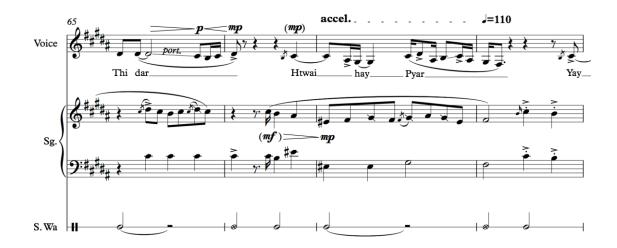




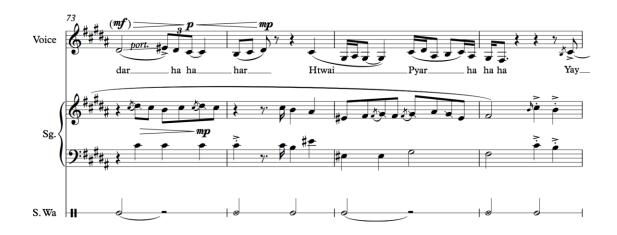




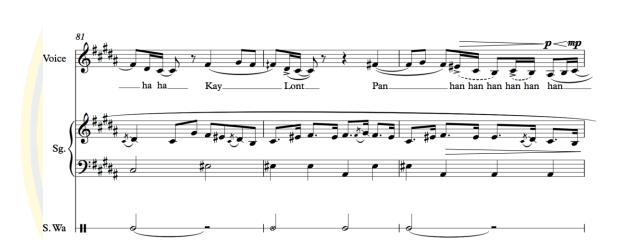


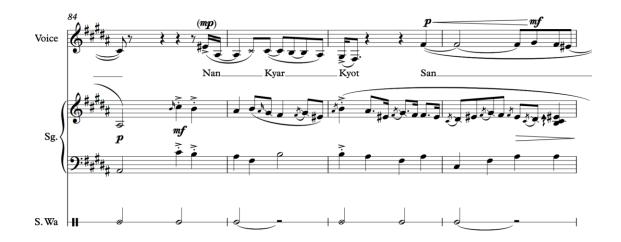




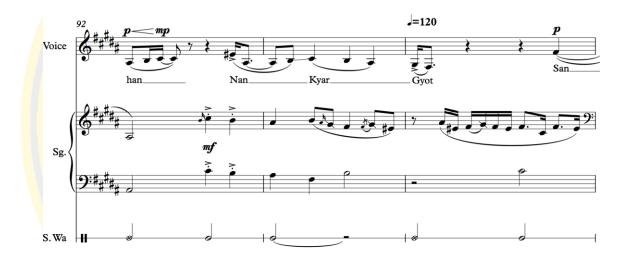


















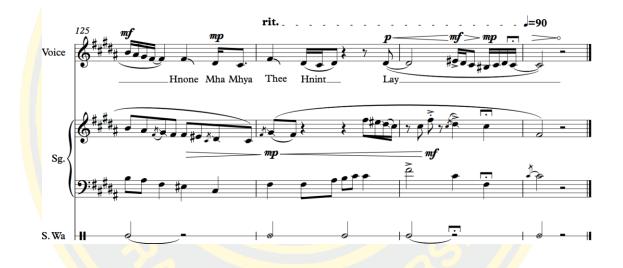








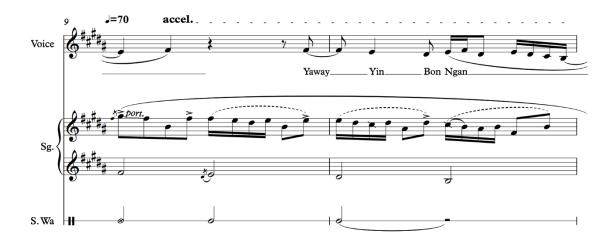


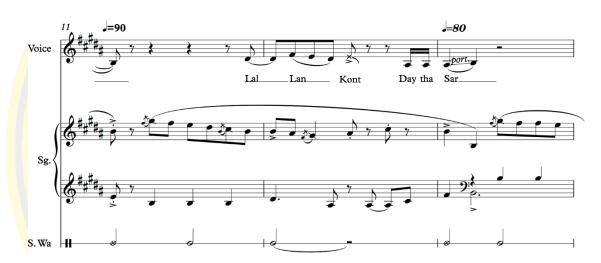


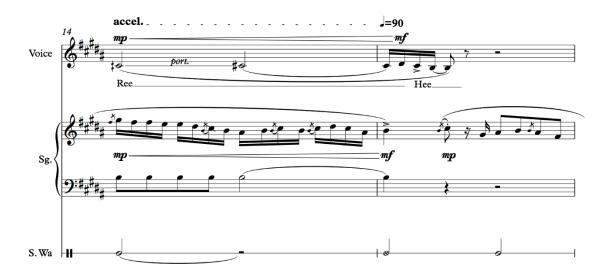


S. Wa

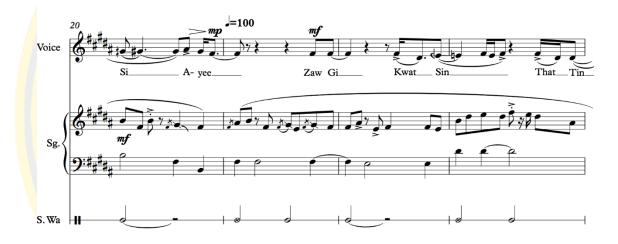
A Fragment from Tharakar Kyay Nge Doe Bwe Section of Pat Pyoe Galay

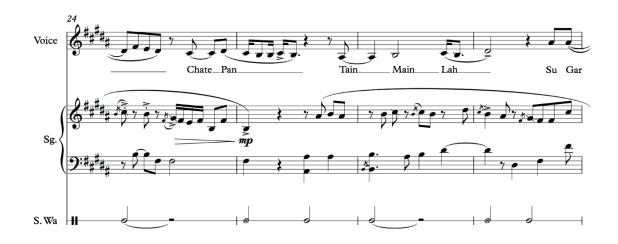






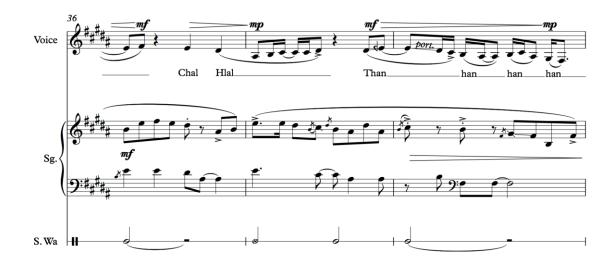








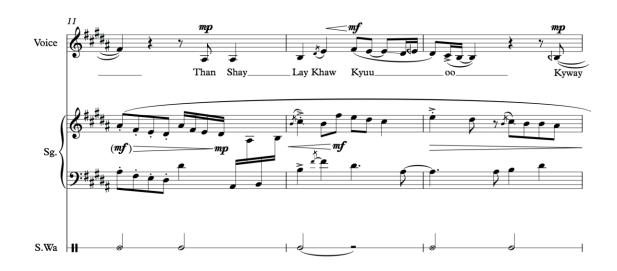


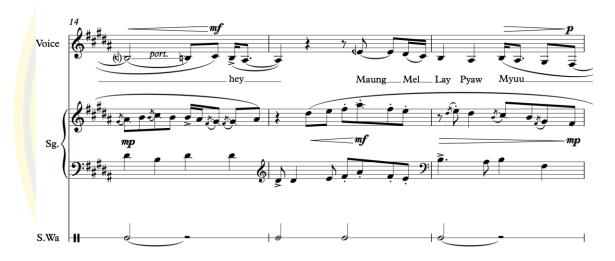






A Fragment from Myine Yan Shwe Hlyan

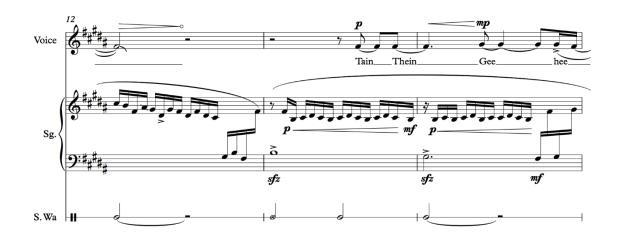


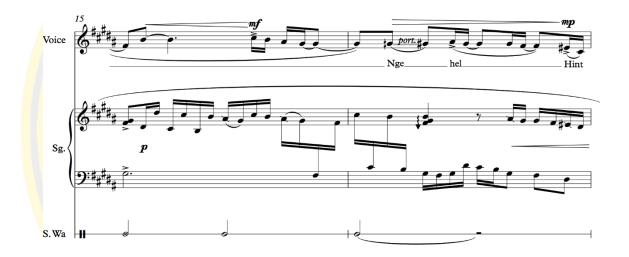




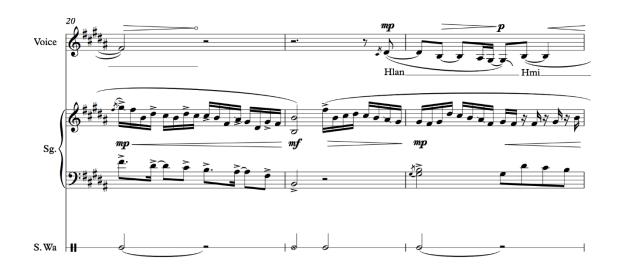




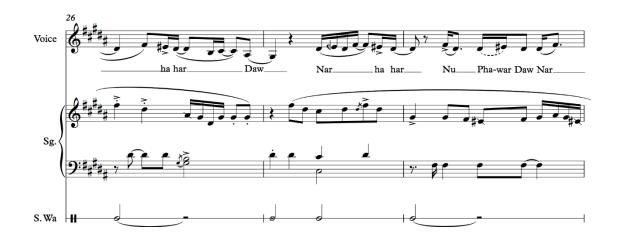


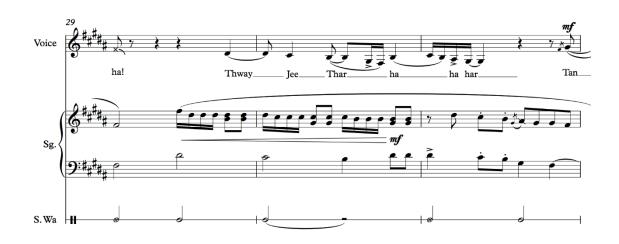




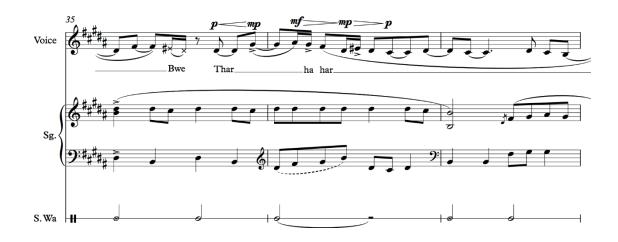








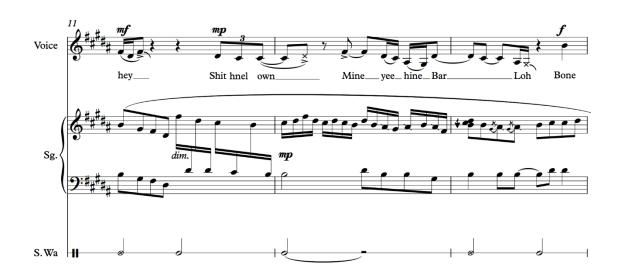




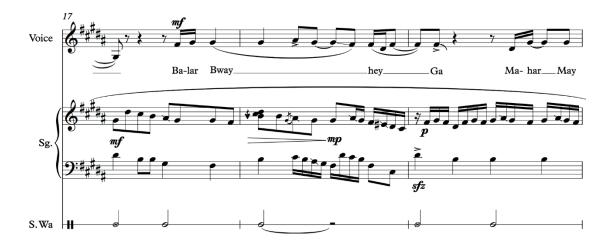




A Fragment from Nyoe Nyoe Hsai Hsai Bawleh section of Pale Pat Pyoe Galay

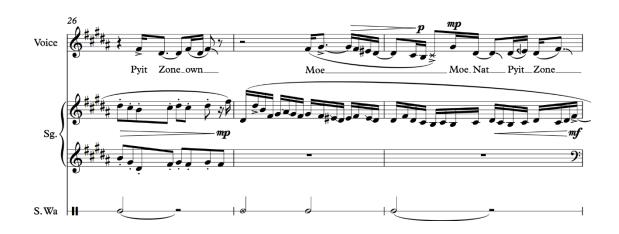




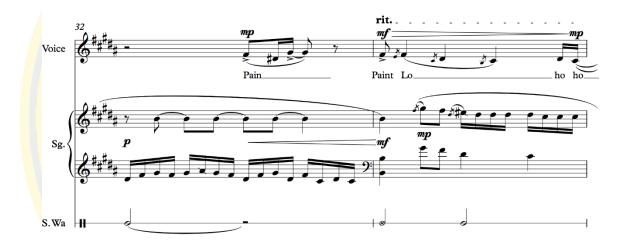


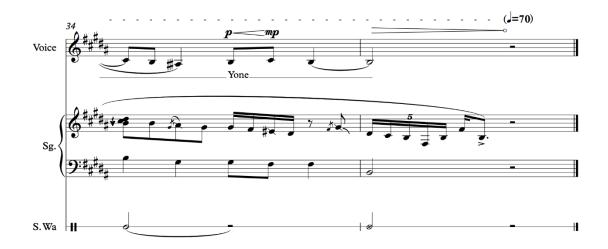










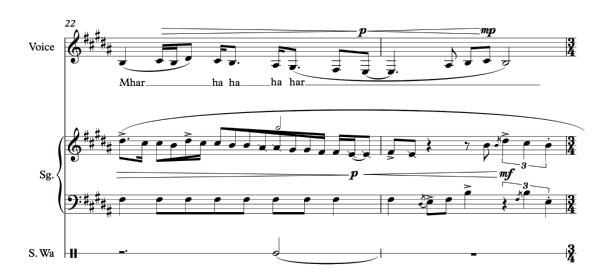


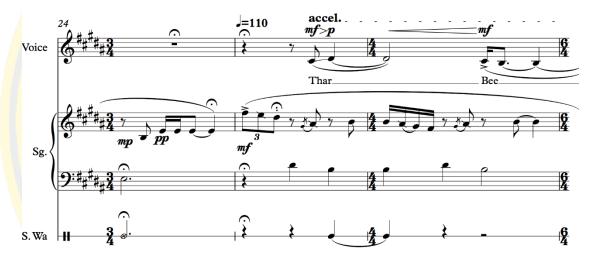


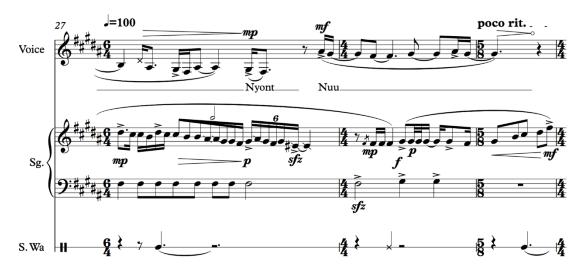
A Fragment from Kwar Pyar Thin

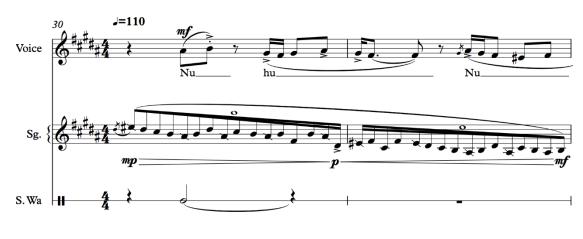


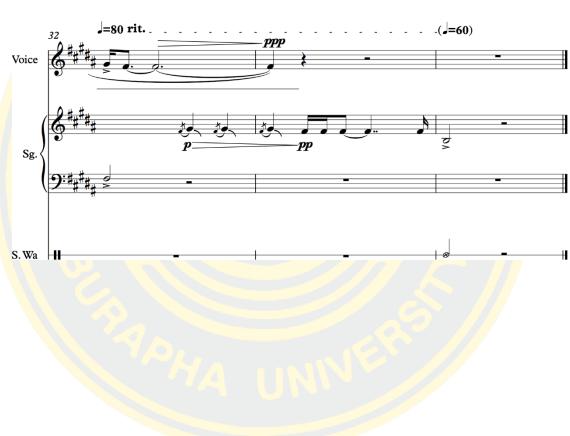














A Fragment from Myine Yan Shwe Hlain Kyo Section of Pat Pyoe Galay Score No. 8



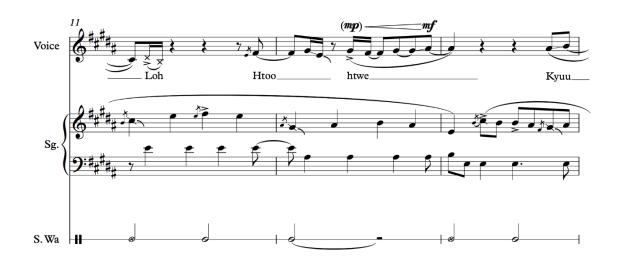


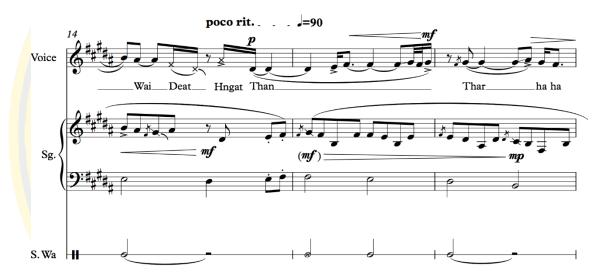




S. Wa

A Fragment from *Pan Tathin Thin*

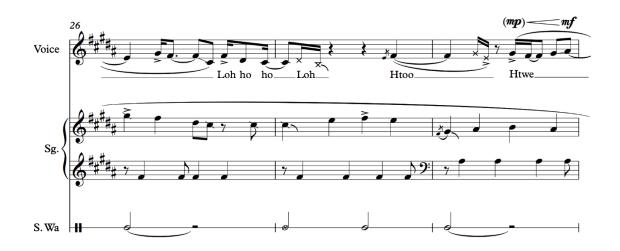


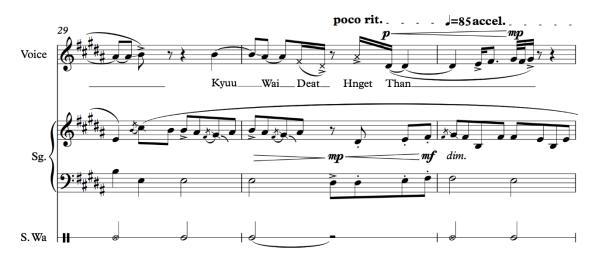
















A Fragment from Mya Mya Maung Maung

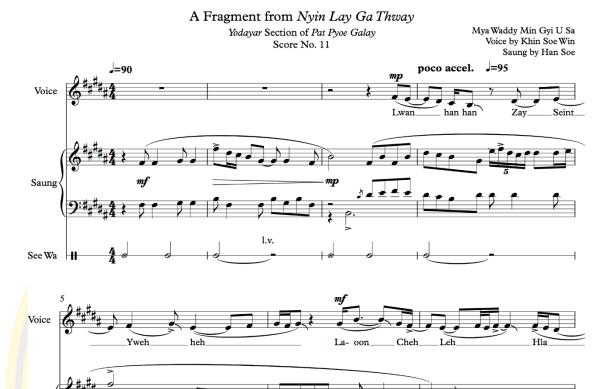


273

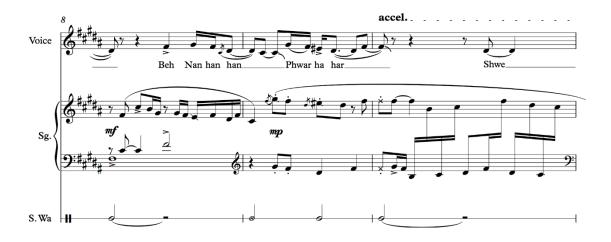
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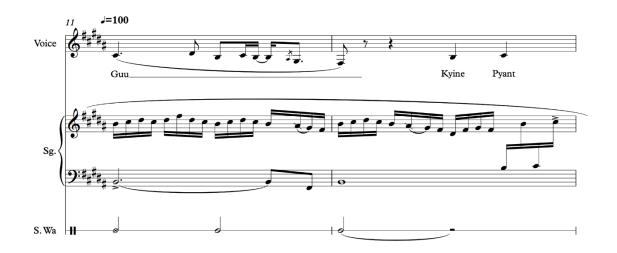


 $\widehat{}$ S. Wa

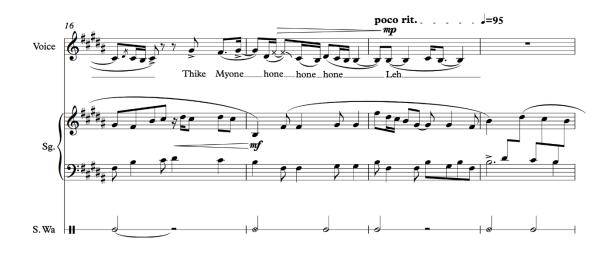




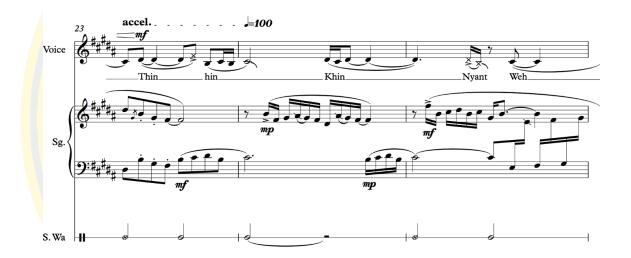




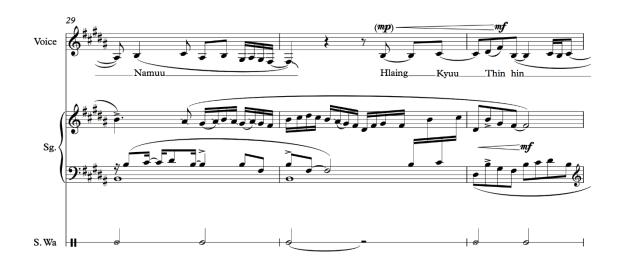


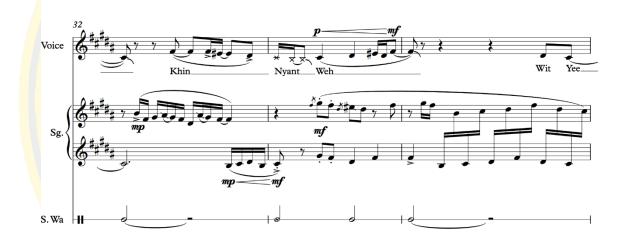


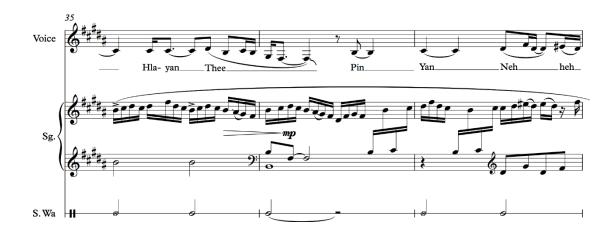


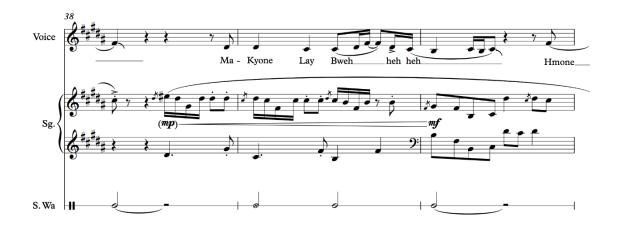


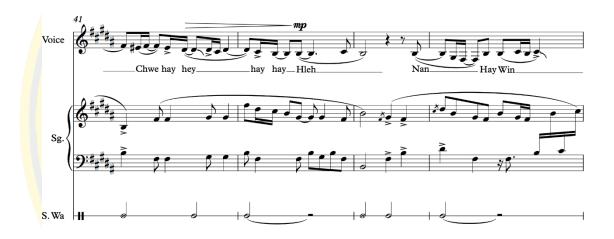


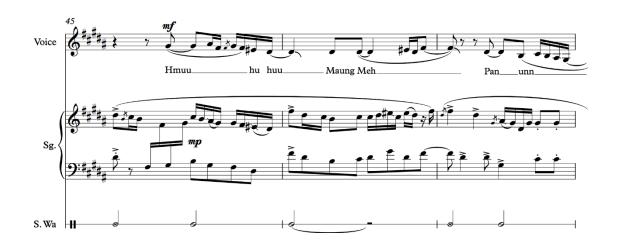












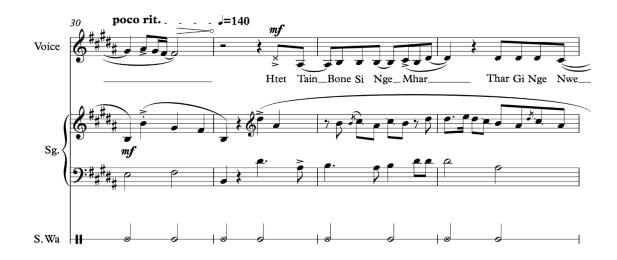


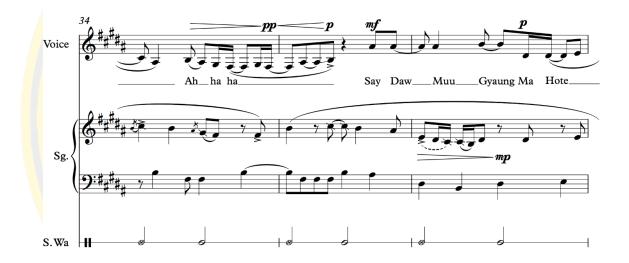


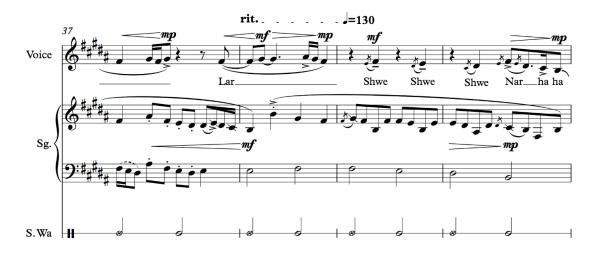




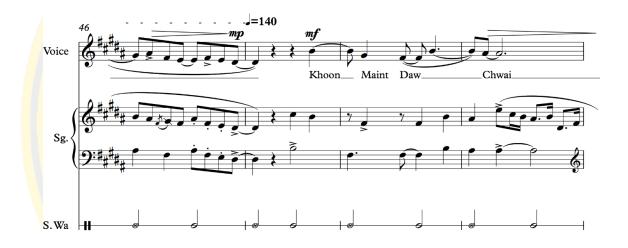


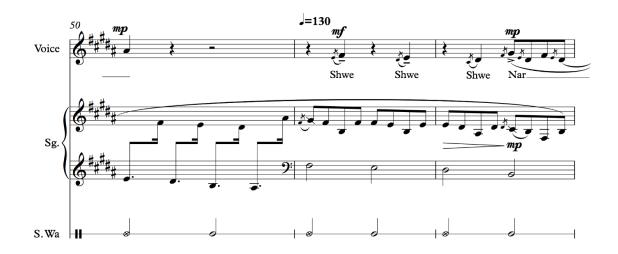




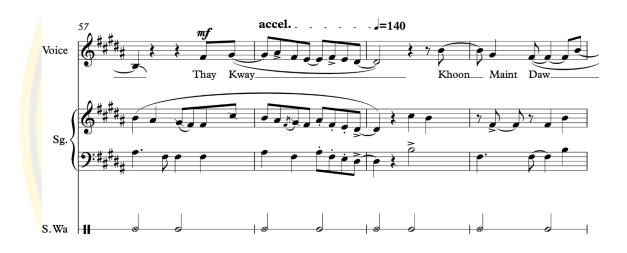


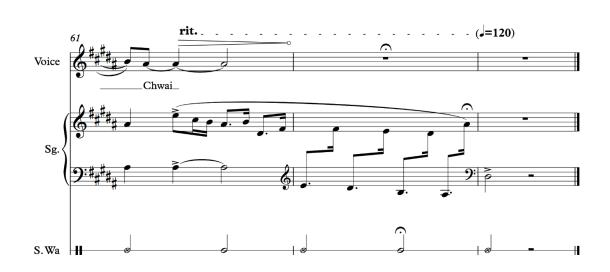






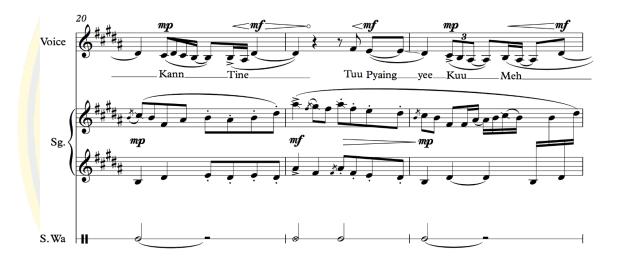


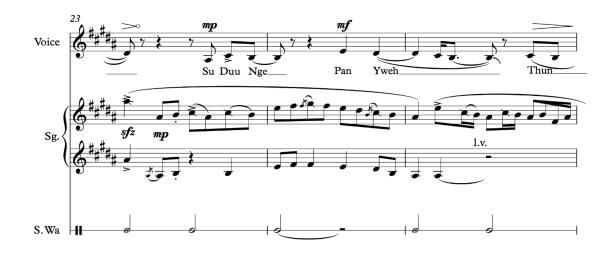


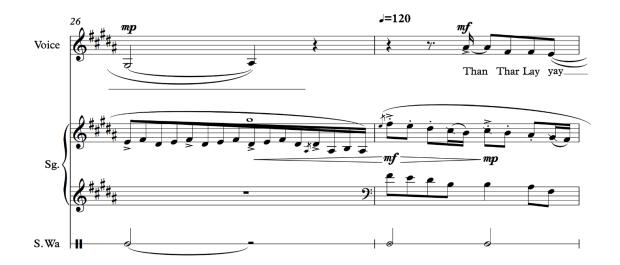


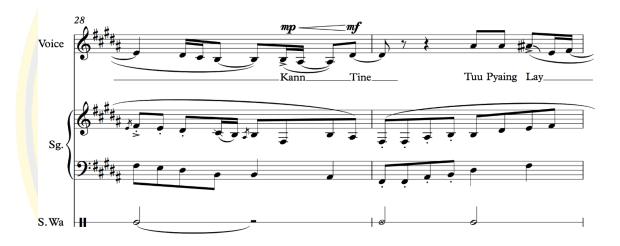


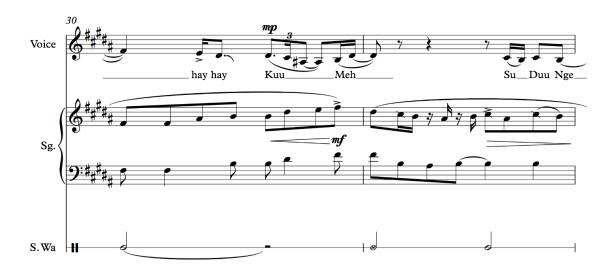


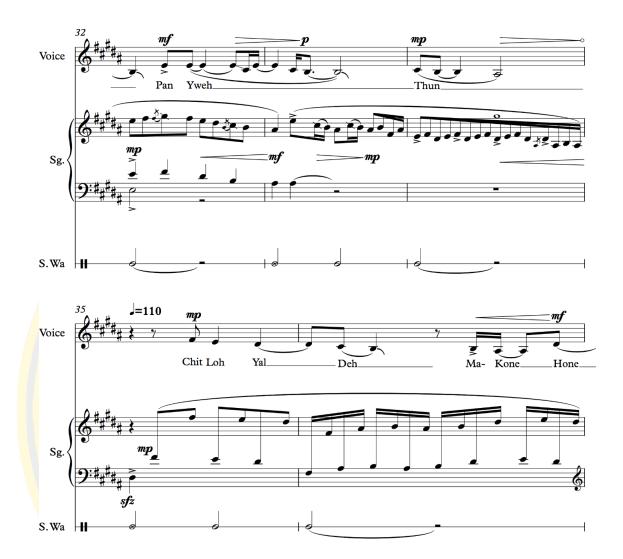




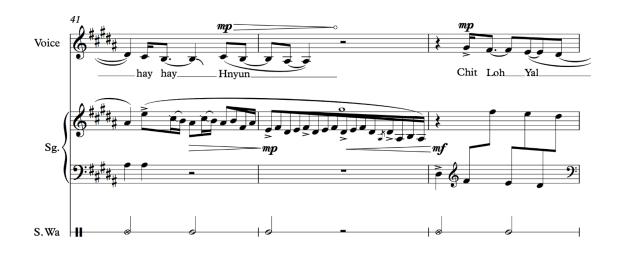


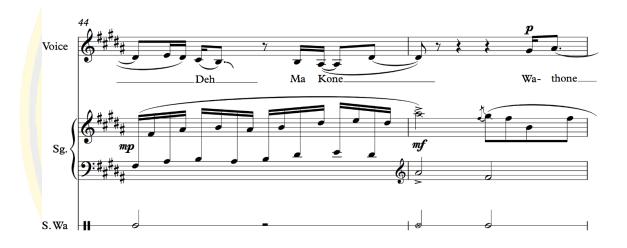


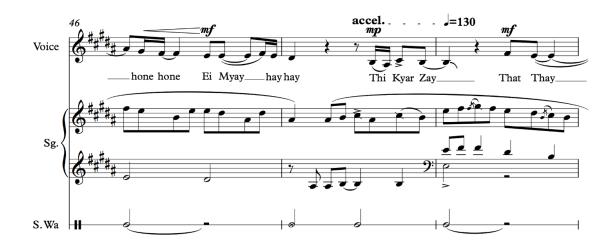


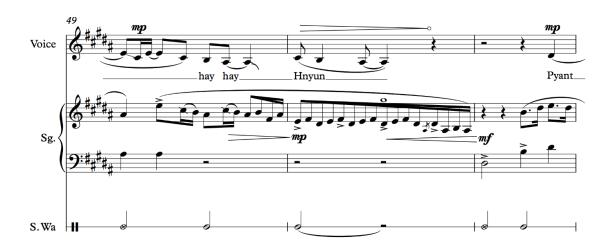




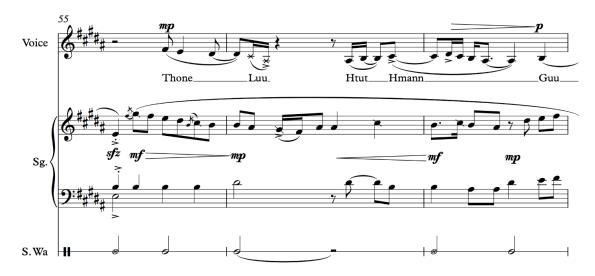




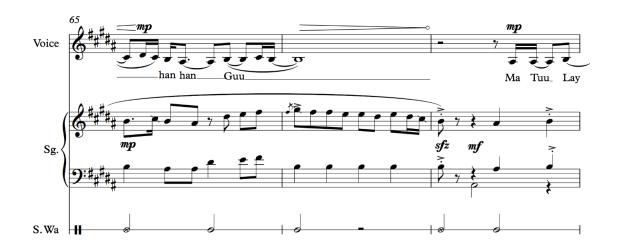




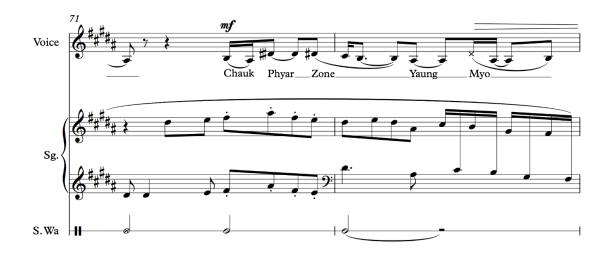


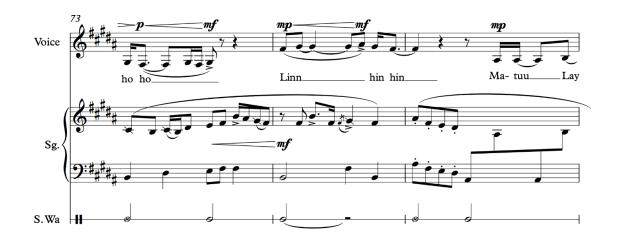








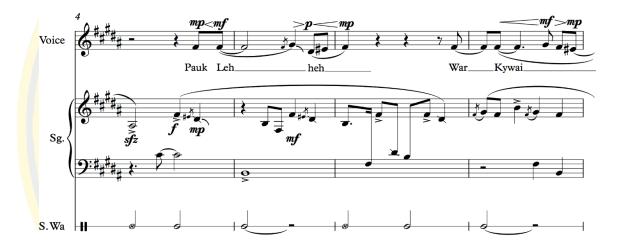




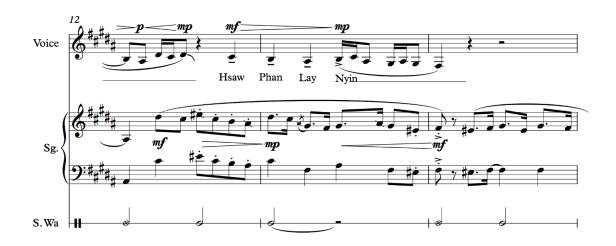








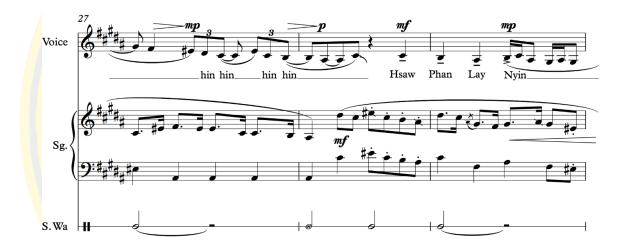


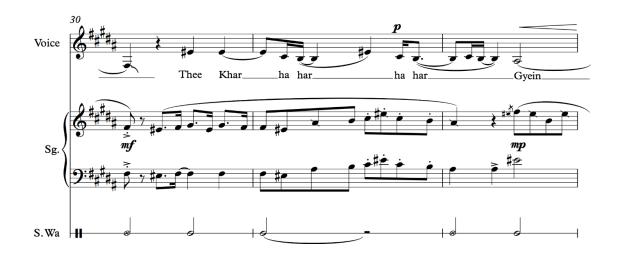






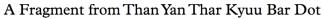


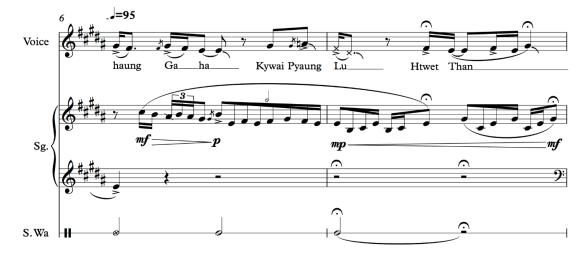




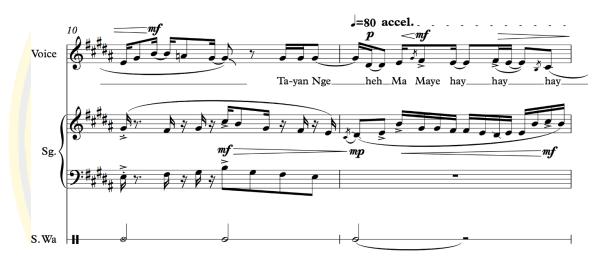


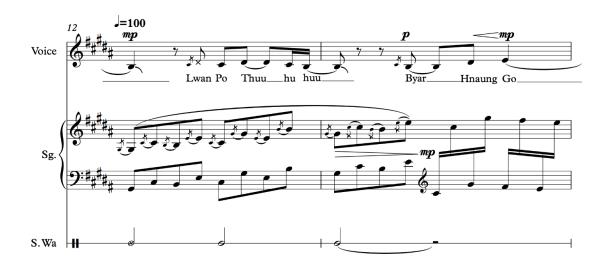


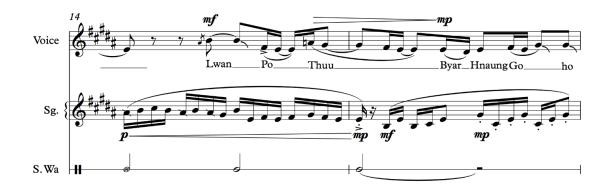


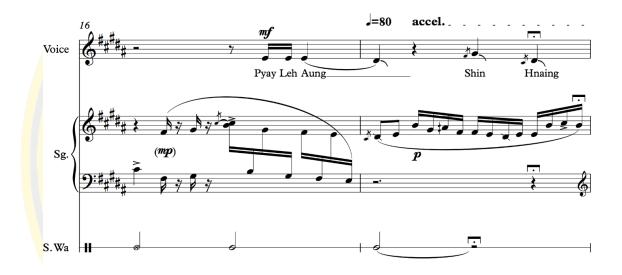


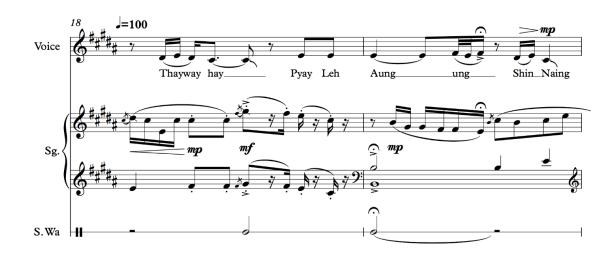


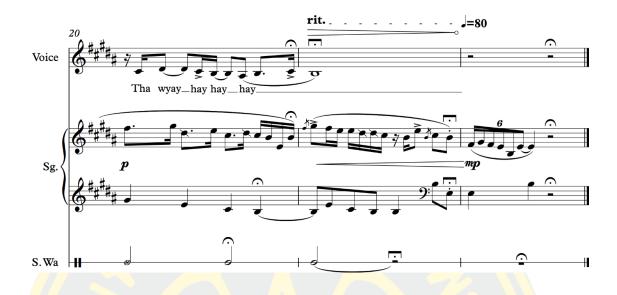




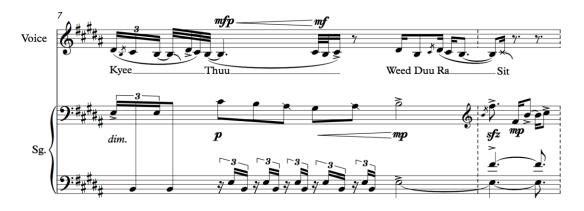


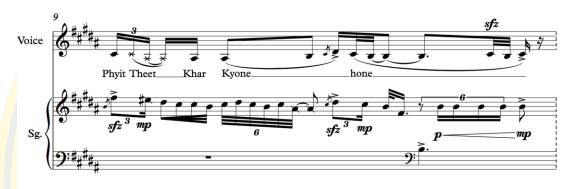




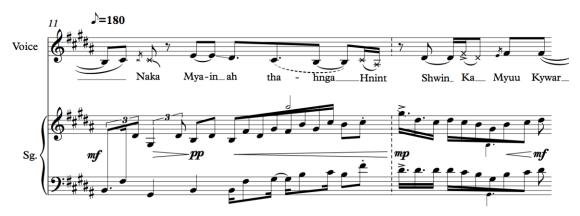




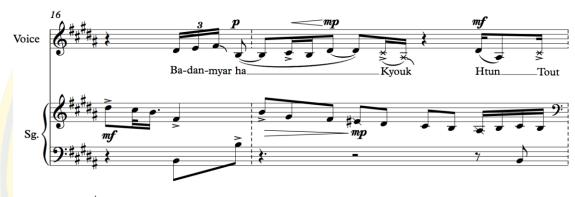


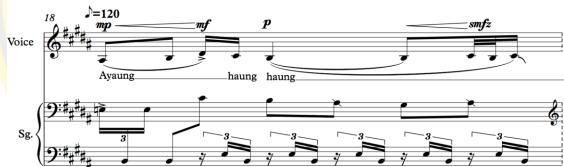


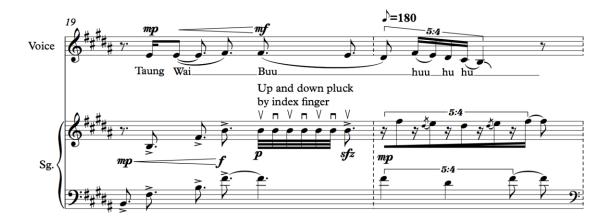


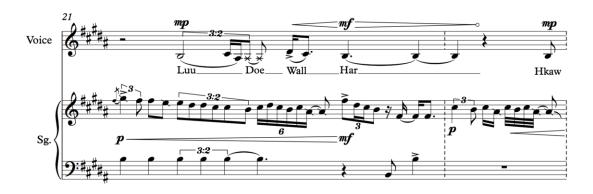








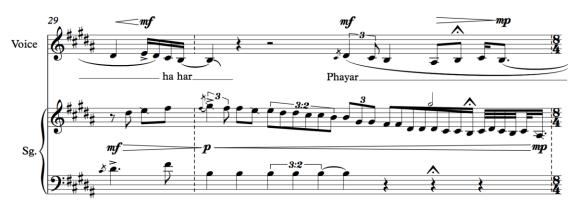


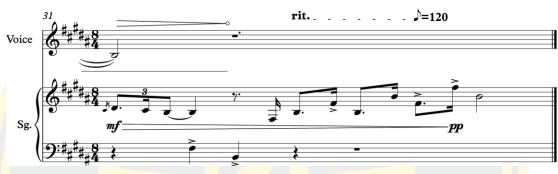










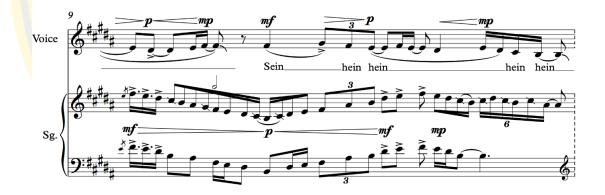


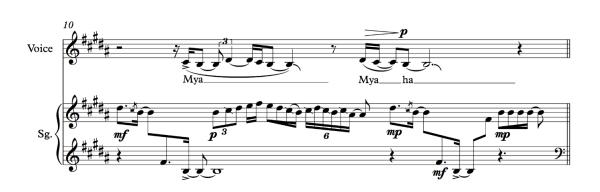


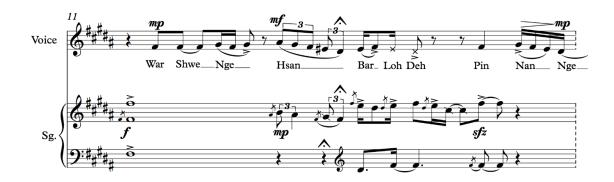




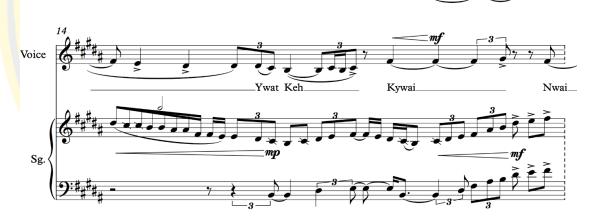


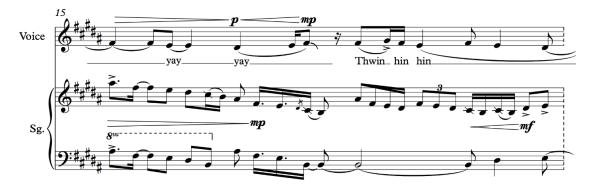


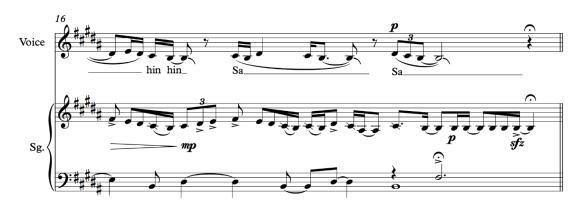


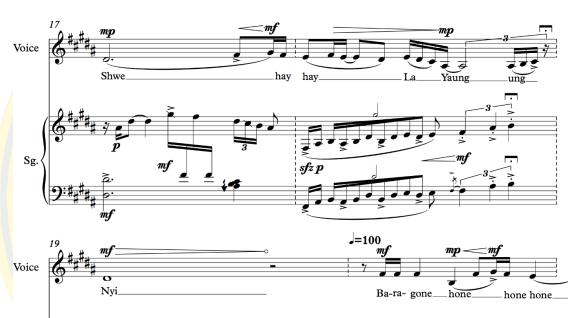


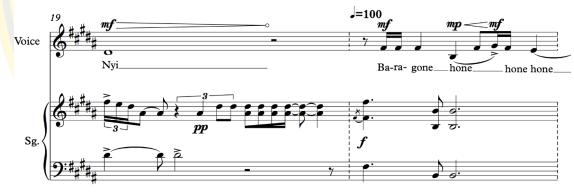


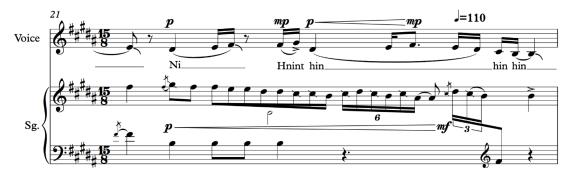






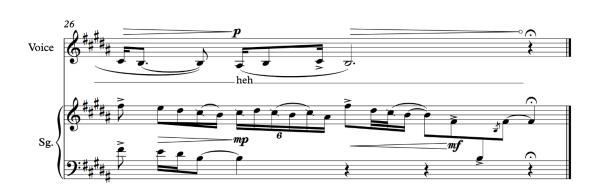












APPENDIX D

OBSERVAION ON *PAT PYOE* **SCORES**

As it has been discussed in chapter 2, there are sixteen different music styles or subgenres that *mahar gita* composers used to create the *pat pyoe* songs. They are *kyo, bwe, thachin khan, pat pyoe, thaphyan, mon, yodayar, bawleh, nat than, dane than, lay htwe than kat, law ka nat, hlay daw than, tay htet, yadu,* and *leh.* I briefly discuss these genres in the context of the following 16 scores found in Appendix C.

Hmine Pyar Hmone Wai (Appendix C, Score No. 2) is a long-sized *pat pyoe*, which is also composed by Mya Waddy Min Gyi U Sa. The pitch centre of the *pat pyoe* is F# (so) and it will be based on *ouk pyan* tuning (both *than yoe and pale*), which is different from *Hman Ya Wai*. Otherwise, it shares many of the same features.

Tharakar Kyay Nge Doe (Appendix C, Score No. 3) is a *bwe*-styled section from a short *pat pyoe*, which is also composed by U Sa. Although the pitch center of the *pat pyoe* is B (do), the transcribed section starts with the pitch center E (fa) according to the principle of the *bwe* music style. It is composed using *than yoe* scale and has three phrases. The head of the first phrase is especially in *atweh*, and the second phrase has a long body. The third phrase is a normal phrase, which has the head, the body, and the tail.

Myine Yan Shwe Hlyan (Appendix C, Score No. 4) also a nat than-styled section from short pat pyoe with the pitch center B (do). It is another piece composed by U Sa using than yoe scale. The transcribed fragment begins with the popular ataw shown in Figure 14, chapter 4. It has only one phrase and is repeated twice. Except for text, both the voice and saung parts of this section are almost exactly the same as the nat than section from Hman Ya Wai.

The composer of *Phyay Naing Baung* (Appendix C, Score No. 5) is anonymous. This is a *dane than*-styled section from medium size *pat pyoe*. It has the pitch center B (do) and is based on the *pale* scale, which is the basic pitch class of *dane than* music. The transcribed part starts with a special *ataw* and ends with the same *ataw*. It has two phrases and both of them have two heads. The two heads of the first phrase are two short sentences and the two heads of the second phrase are only a word.

The composer of *Nyoe Nyoe Hsai Hsai* (Appendix C, Score No. 6) is also anonymous and this is a *bawleh*-styled section from a short *pat pyoe*, which has the pitch center B (do). As it is a *bawleh*, *pale* scale is applied in this *pat pyoe*. The transcribed score has two phrases and the second phrase is repeated twice. The first phrase has three heads and they are variations of each other at different pitch levels. Likewise, the second phrase has also two heads, and they are also variations of each other. However, they are at the same pitch level.

Khwar Pyar Thin (Appendix C, Score No. 7) is a *thaphyan*-styled section from a medium-size *pat pyoe* and composed by U Sa. According to the way in which *thaphyan* is composed, it is created with the *ouk pyan* tuning (both *than yoe* and *pale*), and the pitch center is B (do). *Thaphyan* sections are usually the ending part of the *pat pyoe*. However, the transcribed *thaphyan* is not the ending of *Khwar Pyar Thin* but a

mini-section of the middle section. It has two phrases. The first phrase has two long heads, which are the parts of a word. The head, the body, and the tail of the second phrase are long and the last word in the tail is repeated four times as a cadenza.

Myine Yan Shwe Hlyan (Appendix C, Score No. 8) is a *kyo*-styled section from a small-size *pat pyoe* that describes the beauty of a girl from the palace with the scenery of winter in the background. *Kyo* genre is categorized together with *bwe* and *thachin khan* due to their use of pure *than yoe* scale without unusual pitches. *Myine Yan Shwe Hlyan* is a *kyo*, it was composed in *than yoe* scale, and its helping tones "re" and "la." Although there is no scale modulation in the section, modal modulations occur in the pitch levels "do," "so," and "fa." It is a one-phrase long section and ends with a complete cadence *tay*. The meter of the section is *nayi*. Two chord-like figures are seen in the first beat of the measure 11 and 19. Surprisingly, they are cluster as they are built by the adjacent scale tones of *than yoe scale* but in harp glissando. It may the futuristic chord usage in a *pat pyoe*.

Pan Tathin Thin (Appendix C, Score No. 9) features thachin kan style. The tempo of thachin khan is usually between 70 to 90 beats per minute and intended to invoke the feeling of grandness. Pan Tathin Thin is a small-size pat pyoe and its composer is anonymous. This section is written to express the aroma of the flower, the breeze, and the singing of birds in the forest. The meter of the section is nayi (quadruple). As the example section is the thachin kan music style from that pat pyoe, it is in than yoe scale. Its melody starts with pitch "do," ends with pitch "so" when the saung part ends with pitch "do," and makes the final cadence dabauk tayaw. It starts with popular ataw in the saung part and ends with it. The ataw is applied as the transition between the first time and second time of the phrase. The phrase is a typical mahar gita phrase and the *twe lone* harmonizing in the section is simple.

Mon section from Mya Mya Maung Maung (Appendix C, Score No. 10). As described in chapter 2, the music of mon people has been part of Myanmar music since the time of the Pagan era. As a tribute to this, the mon genre in mahar gita adopted mon music style. Mya Mya Maung Maung starts with mon ataw, a particular ataw for the mon music genre, and also ends with that ataw. It is also used as a transition between the first time and the second time of the phrase. The author of this pat pyoe is unknown or anonymous. Although the music is composed in the pale scale, the pitch center of the section is changed to "fa," which is neither a scale tone nor a helping tone of the scale within the phrase (measure 6). Because of this modulation, "fa" is used instead of helping tone "fe." Therefore, the pitches in this section are the scale tones of the pale scale, the helping tone "ti," and the modulated pitch center "fa." For this pitch class, the saung is tuned in pale scale but the string which is usually tuned in "mi" note is altered to "fa" in the lowest octave of the saung. This type of tuning is called patsaboe by Myanmar musicians.

Yodayar section from *Hnyin Lay Ga Thwe* (Appendix C, Score No. 11). *Yodayar* is a term used to describe Thai people by the ancient *bamar*. Like *mon* music, Thai music became a part of *mahar gita* in the later part of *Kone Baung* dynasty. This music is from a *pat pyoe* entitled *Hnyin Lay Ga Thwe* composed by U Sa. The text uses flowers as a metaphor for the beauty and aroma of his love. The section starts with *yodayar ataw* and the first and second phrases end with that *ataw*. The third phrase of the section ends with another *ataw*. As the *pale scale* (do-re-mi-so-la) is similar to the scale of Thai classical music, the section is dominated by the *pale scale*, and the *yodayar ataw* is in *pale* scale (mm. 1-3). Surprisingly, the first half of the first phrase is composed in *than yoe* scale using the pitch "fa" immediately after the *yodayar ataw*. The *saung* is tuned in *patsaboe* like in *mon* section (*pale* scale with "fa" in the lowest octave of the *saung*).

Lay Htwe Than Kat Section from Htun Linn Hlyan Latt (Appendix C, Score No. 12). This pat pyoe is composed by a female musician vocalist Meh Loap. It is about a monk parakeet, a kind of parrot. As this kind of parrot could imitate the human's speaking, the composer pictured this bird as a messenger. The Lay Htwe Than Kat section describes the joyful and playful manners of the bird and is lively in style. The seewa (jingle and wood clapper) of the section is walatt (duple meter). The section has three typical pat pyoe phrases and each phrase is repeated. The section starts with popular ataw and the same ataw is applied between phrases. When the ataw is played by the saung, the word "lar" is sung following the tradition of "lay." The staccato playing and singing in the third phrase could express the liveliness and lovely manner of the bird (mm. 43-44, 55 and 56).

Law ka nat than section from Chit Thahmya Go (Appendix C, Score No. 13). The name *law ka nat* is called to a heavenly host who guards the earth. His image is typically drawn like a figure holding the *see* (jingle) by his feet. Myanmar people believe that his music could make peace between two enemies. The example is an extract from *Chit Thamya Go*, composed by the queen Ma Mya Lay. It has five mini *pat pyoe*-phrases and each of them is repeated. The first phrase starts with the pitch "fa" and ends with the pitch "mi" by the tay cadence. The second and third phrases start with the pitch "so" and end with the pitch "ti" by the *tay* cadence. The fourth phrase starts with the pitch "mi" and ends with the pitch "do" by the cadence dabauk tayaw in the first iteration and dabauk tayar in the repeat. The fifth phrase starts the pitch "ti" and ends with the pitch "so." The section is composed in the than yoe scale the texture and *twe-lone* harmonizing in this section are somewhat complex. The lovely conversation between the voice part and the *saung* part can be seen in the first phrase as the text expresses the scenario of saying vow by the couple in the pagoda. The *twe lone* are unusually played in the upper part of those measures. The meter of the section is *navi*.

Hlay daw than section from *Yawein Daung Yin Pyan* (Appendix C, Score No. 14). *Hlay daw than* is the tune that was sung by the boatmen. This type of tune was normally sung when kings travelled with an army of boats. This *pat pyoe* is composed by May Waddy Min Gyi U Sa and uses the *lay bauk ouk pyan* scale (*than yoe* in "so"). The musical ideas in this section are mostly the same as those of *Hman Ya Wai*. The phrase starts with the pitch "do" and ends with the pitch "mi" through the *tay* cadence. As the pitch center of the section is "so," the *tay* cadence for the section includes the notes "ti" and "fe." The meter is *nayi* and the section starts with the second *see* of the *see-wa*.

Tay Htet section from Than Yan Thar Kyuu Bar Dot (Appendix C, Score No. 15). Before the mahar gita existed, there was a kind of music called tay yoe in Myanmar. This kind of music was not successfully preserved, and much information has been lost (Kyi 1986). However, some musicians modified those songs with the ornamentations and named them tay htet. Therefore, tay htet can be understood as a music style with fine ornamentations in both the instrument and the voice parts. This example was composed by U Sa for *Enao*. The section is composed in *myin zine* scale (*pale* scale in "fa"). In terms of the *pale* scale, the pitch center is "do." However, in terms of *myin zine* scale, the pitch center of the section is "fa." It has only one phrase and a sub phrase in the body of the phrase and the tail is repeated. It starts and ends with pitch "so" and the section ends with *htone* cadence. As a tay htet music style, the voice line and the active line of the *saung* are highly decorated with embellishments. The *twe lone* harmonizing and the texture of the section is complex. In the *saung* part, there is a homorhythmic texture in mm. 9, and a rhythmic three-lines texture in mm. 4, unison running lines in mm. 12. Hoketing of a single line within two lines is also a distinctive texture of this section. The meter is *nayi* and the section starts with the second see of the see-wa.

Yadu section from *Myine Chay Sone Thar* (Appendix C, Score No. 16). There are two main types of music in *mahar gita*: *sotālankāra* (in a singing style) and *vacanālankāra* (in recitative style). *Yadu* uses this later style. The rhythm is speech-like and is performed *atweh*, without regular tempo and meters, with some notes unpitched. *Yadu* is usually performed acapella but an instrument can accompany if it is desired. *Yadu* is usually composed in appreciation of a king, a royal family, or a respected monk, and they are performed in ceremonies. The author of this example is anonymous. The text is written in the style of conversation between a prince and his servant commenting on the beauty of a forest and its rivers. The phrases of *yadu* are very long compound phrases, this section has only one long phrase. It is composed in various scales of *pat pyoe* and the rhythm is very complex without any definite meter. The texture is also complex, and heterophony is mostly applied throughout the whole piece.

Leh section from Bone Pyan Nay Nan (Appendix C, Score No. 17) Like Yadu, Leh is the musical style under the umbrella of vacanālankāra. The leh section is the fragment from the long-size pat pyoe entitled Bone Pyan Nay Nan, which is composed by U Sa. The text of the section is about the fall season and it has only one long phrase. The musical elements and the characteristics of the music in this section are very similar to those of the yadu section of Myine Chay Sone Thar.

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