Fall 2022

# Analysis of Selected Pieces Influenced by Taiwanese Aboriginal Music for Solo Violin and String Quartet

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# ANALYSIS OF SELECTED PIECES INFLUENCED BY TAIWANESE ABORIGINAL MUSIC FOR SOLO VIOLIN AND STRING QUARTET

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Bachelor of Music
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Submitted in Partial Fulfillment of the Requirements

For the Degree of Doctoral of Musical Arts in

Violin Performance

University of South Carolina

2022

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## ABSTRACT

This is an analysis of three pieces that contribute to solo violin and string quartet repertoire through the lens of intervallic relationships, rhythmic and gestural motifs, and instrumental technique. Briefly delving into the Aboriginal history of Taiwan and illuminating aural concepts inherent within each tribe, the research blends musicological research, theoretical analysis, and intuitive performance-based interpretations to meld and expand the technical and musical possibilities of the violin with the essence and impact of these songs.

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# Chapter 1: Introduction

Up until 5,000 years ago, there was an extended period of animal and gatherer migration from mainland China into Taiwan. After this ended, which could be due to the physical separation of Taiwan from China, migration of the Austronesian peoples began, bringing about the ancestors of Taiwan's current Aboriginal people. (Shzr, 2012)

During this period, Chinese travelers published works on Aboriginal people's music while they were on the island. Then, the arrival of the Dutch East India Company, which was the first known colonization of Taiwan in the south-western area, happened soon after a set of Portuguese traders arrived in Asia to set up trade connections between China and Japan. The Dutch provided a different view than the earlier Chinese accounts with descriptions of the agrarian culture among the Aboriginal villages and the observance of the community's matrilineal kinship system in which the women took charge of the millet farming while the men hunted in the woods and went off to war raids with other tribes. Staying until 1661, the Dutch introduced oxen to the culture and began to demand taxes from the deerskin trade happening between the Aboriginal people, Chinese, and Japanese merchants. Other products that were taxed included rice, millet, and sugar cane farming. All of this was successful through the Dutch's tactful maneuvering of the tension between the Aboriginal people and the Chinese settlers. (Shzr, 2010)

The next stage of Taiwan's development began with the arrival of the Chinese military leader, Zheng Chenggong. This was during a time of political tension in mainland China between the Ming and Qing groups, therefore Zheng's migration to Taiwan was a forced one. Bringing over a group of 30,000 that soon expanded, the Aboriginal people became a minority on the island and China ended all relations with Taiwan. To fund Zheng's war efforts against the Qing, more taxes were implemented in Taiwan's agriculture and trade, allowing the Han settlers to regain more land while driving the Aboriginal peoples up into the mountains. As a result, this period gave rise to more accounts of Aboriginal song: rice planting songs, wedding songs, musical instruments (such as the jaw harp and musical bow), and festival dancing. Songs that were seen in Aboriginal tribes not only served as forms of celebration and religious acts, but also expressed daily happenings, whether good or bad. (Shzr, 2010)

Due to the unfair and brutal treatment of the Han to the Aboriginal people, the Aboriginal people began to stage riots and head-hunted their oppressors, a prevailing practice within the tribes. To counter these uprisings, the Qing officials decided to lower their tax rate and attempted to create official boundaries between the Han and the Aboriginal land. Like the Dutch, the Chinese maneuvered internal Aboriginal ethnic tensions to expand their portion of the land. (Shzr, 2010)

Approximately 40 years later, the Sino-Japanese War came to rise, in which it resulted with Taiwan having to be handed over to Japan under the Treaty of Shimonoseki. Japanese's governance of Taiwan lasted until the end of World War II. Excluding the accounts from the Qing dynasty, the first modern ethnographic classifications of the Aboriginal people were made and are still mainly used today: Atayal, Saisat, Bunun, Tsou, Rukai, Paiwan, Puyuma, Amis, and Yami. During this time,

the Plain Aboriginal people, which included tribes that settled in the plains and not the mountains, had generally assimilated int the Han society and so the Japanese perceived them to be a part of the Chinese and not as separate Aboriginal tribes. This period also produced many significant writings on Aboriginal music, along with some sound recordings. Field investigations were led by Japanese folklorists and musicologists: Hisao Tanabe, Takatomo Kurosawa, Toshio Takenaga, and Buniji Sado. Particularly, Kurosawa had ventured to 150 Aboriginal villages in the 1940s and collected up to 200 songs that added up to 78 hours of recording time on 26 discs. His collection, Takasagozoku No Ongaku (Music of the Mountain Peoples in Taiwan) classifies folksong and instruments. Aboriginal songs are organized by form and context which consists of ceremonial songs, shamanic incantations, work songs, love songs, drinking songs, festival songs, and ballads. Some examples of song form have been written to be homophonic (antiphonal, recitative, folksong), harmonic, (consonance, natural chordal harmonies, free harmony) and polyphonic (organum, canon, bass drones, and counterpoint). (Shzr, 2010)

When the war ended in 1945, Taiwan's standing became involved in a tug-of-war between the opposing groups of the Chinese Communist Party and the nationalist Kuomintang party. Eventually, Chiang Kai-shek of the Kuomintang party took over Taiwan during this moment of precarity allowing research on the Aboriginal peoples to continue with the Han scholars from the 1960s to 1980s. They addressed cultural characteristics to specific groups that initially identified as Gaoshanzu (mountain tribes). After the establishment of the Council of Indigenous Peoples at the Executive in 1996, the Aboriginal people were officially renamed to Yuanzhumin, which is the direct translation of Aboriginal in mandarin. The research elaborated on local mythology,

architecture, hunting and fishing techniques, farming rituals, kinship systems, funereal practices, and other rituals. There are also surveys that included classifications of musical instruments, such as: nose-flutes, musical bows, jaw harps, wooden drums, xylophones, metallic rattles, and jingles – much of it still stays relevant today. (Shzr 2010)

## Chapter 2: Background on the Amis Tribe and Amis Song

Among the Taiwanese Aboriginal peoples, the Amis is the largest group with a recent census claiming numbers to be around 210,000.[1] Referring to themselves as Amis or Pangcah, depending on the region that they're from, their most notable feature is their closeness to the water. Aboriginal tribes are mainly distinguished between the 'mountain aborigines' and the 'plain aborigines' - the Amis are of the latter. (Digital Museum of Taiwan of Taiwan Indigenous Peoples)

The Amis communities are organized through the age-set system and the matrilineal kinship organization. There are many rituals and rites that the Amis Aboriginals take part in that are mainly related to the life cycle, agriculture, the changing seasons, and the conceptual relief from evil and adversity. There is a “millet-female-household” group and a “fishing and hunting-male-politics” group to organize food production and culture in the communities. (Digital Museum of Taiwan of Taiwan Indigenous Peoples)

Amis music is typically described as traditional polyphonic music. To pair with the music, Amis singers incorporate choreographed dance steps. These cultural aspects

[1] “Amis.” 原住民族委員會全球資訊網. Accessed April 10, 2022. https://www.cip.gov.tw/en/tribe/gridlist/50AABE9D1284F664D0636733C6861689/info.html?cumid=D0636733C6861689.

are also mainly related to daily functions: cultivating land, companionship and mating, farming, fishing and hunting. (Digital Museum of Taiwan of Taiwan Indigenous Peoples)

## LADHIW

Ladhiw refers to a specific vocal concept in Amis song. It depicts the aural atmosphere of a natural phenomenon (ex. a flock of birds in the trees chirping brilliantly), since it has been described as an engagement of 'Milaladhiw', which is a derivative of the term. Shzr (2010), in search of a more clearly articulated concept of Ladhiw, went ahead to conduct a small experiment during their first stages of fieldwork. They played examples of sounds to members of an Amis community and following sounds were described as ‘Ladhiw’:

- women singing while involved with agricultural work (such as peeling vegetables)
- songs sung during a ritual/festival/celebration
- a drinking session while songs and choruses are sung to dancing activity

Ladhiw is best understood within the framework of the daily life. Amis villager, Kaysang, interviewed by Shzr said:

> Ladhiw isn't just a part of our everyday life - it is our everyday life. It's something babies and children come to know as they grow up in the village. I cannot imagine our lives without ladhiw - when we are happy we sing, when we are sad, we sing. Everything we do, we have a song. You can't take it away from us when we are dancing, or drinking, or celebrating a festival - it would feel incomplete. Song makes our life. [2]

Amis musician and composer-archivist, Lifok, who is based in Taitung, describes traditional song as having no texts. However, lead singers often include ad-lib lyrics such

[2] Kaysang, “Beyond Innocence: Interview with Kaysang,” by Shzr Ee Tan, *Beyond Innocence* (July 2000), pg. 50.

as the non-lexical words 'Ina Narowan'. Here is a list of categories that fall under the description of traditional song (also known as Geyao) in Amis music:

- Ritual songs
    1. Song of shamans
    2. Songs of the Fengnianji
    3. Rain prayer songs
- Everyday songs
    1. Wedding songs
    2. Songs for the founding of new buildings
    3. Socializing songs
- Work Songs
    1. Rice-planting songs
    2. Weeding songs
    3. Songs of the fields
    4. Songs for felling logs
    5. Songs for carrying logs.
- Recreational songs

In Amis performance practice, although it is tradition for one person to lead and two or three others to follow, it is also not unusual for solo singers to appear in modern performance. As each melody has its own dance movements, each melody tends to be rhythmic, simple, clear-cut, and accompanied by hand gestures. Western musicologists have supported that the evolutionary age of a melody corresponds to the degrees of polyphony, canonic imitation or harmony that is present. Amis song has developed to an

extent in which its traditional songs has evolved to be part of a separate category known as modern Amis music. Amis music are often performed within these contexts:

Large-scale (Village) activities

1. Weddings
2. Ceremonies for founding new buildings
3. Send-off parties for army conscripts

Small-scale (Family) activities

1. Recreational
2. Hosting guests
3. Socializing
4. Banquets

(Shzr, 2010, 52-54)

Most Ladhiw are strophic, in duple time, and include a mixture of syllabic and melismatic settings. In addition to the solo introduction, there is a featured chorus that is repeated and consists of variable non-lexical lyrics. Some songs are subdivided into irregular bar lengths and irregular lengths of phrasing. Sometimes, the song is completely sung before repeated as a chorus. Amis songs include a heavy pulse with strong rhythmic drives, which lends itself to many forms of movement: clapping, foot-stomping and dancing. Songs can also be built on free, multipart polyphony, in unison or in canonic imitation with parts occasionally overlapping with one another. The vocal quality of

Ladhiw can be described as raspy and nasal, especially in the higher registers when the women vocalize the upper parts of the polyphonic moments. One might also hear a type of melodic gliding to lower the endnotes in specific phrases. (Shzr, 2010)

All Ladhiw are built on iterations of pentatonic scales that are the building blocks for recitative, responsorial, and free counterpoint singing. In addition to the iterations of pentatonic scales, there are many modal groupings that can be found by breaking down tetrachords extrapolated from the pentatonic scales. (Shzr, 2010)

Amis music also includes freely-improvised segments that vary rhythmically and melodically. The improvised line often begins with a fanfare that uses different combinations of fourth and fifth intervals. When sung together, the layering of notes and superimposed lines create harmonies that sometimes result in narrower intervals, such as the major and minor second interval. This specific polyphony, when sung in different registers, can simultaneously sound out both tetrachords and vertically articulate each note of the mode, creating interactive relationships between each part. Sun Chun-Yen, Taiwanese musicologist, frames different voices in the polyphony as:

- Mili'eciw (song leading)
- Milecad (follow-up singing)
- Misa'aletic (shrill voicing)
- Misa' akaway (high-register singing)
- Micada (low-register follow-up) (Shzr, 2010, 67)

Shzr loosely groups two distinct types of texts that are commonly found in Ladhiw:

1. lexical texts (featuring known words with directly understood meanings)

2. non-lexical texts (featuring non-lexical utterances with no directly translated meanings and is sometimes also referred to by other scholars as 'vocables') (Shzr, 2010, 70)

Examples of non-lexical syllables include *Iya o haiyan, haiyo hey ha hay, and naruwan naruwan*. These texts are used in a quasi-improvisatory manner and depending on the push and pull of the melody, can be differently combined in syllabic and melismatic settings. Other Ladhiw non-lexical syllables also include ancient and undecipherable sounds, in which their meanings remain secret or forgotten. The olic defines he second group of texts, in which they are ad-lib lyrics that are tagged on instead of or in addition to non-lexical lyrics. They're often heard in public settings and are similar to recitatives - illustrated as a melody with a pattern that winds down in repeated notes. These passages are tagged onto the beginnings and endings of Ladhiw with an allotted space that is usually unmetered for declamatory and sometimes improvised and continuous recitative-like delivery. Dissimilar to the functions of the previously mentioned non-lexical syllables in which they fill out melodic phrases; here, the repeated melodic gestures are used to fill out the used text. (Shzr, 2010)

So, how would one vocalize it? According to the 1960s Amis pop star, Lu Jingzi, who has been recognized as having the characteristic 'Amis' voice, says:

> There's that very deliberate Amis akusento accent. Some syllables have to be stressed deliberately, like a loud 'hhhaay!!' and not a soft 'hay...'. [3]

In Fafokod, a farmer who sung with the local Catholic church discusses melodic ornamentation, vibrato, and portamento:

[3] Lu Jingzi, “Beyond Innocence: Interview with Lu Jingzi,” by Shzr Ee Tan, *Beyond Innocence* (July 2000), pg. 75.

> You've got to have that 'trembling' quality. Either that or you'll have to slide around - Amis melody doesn't go in a straight line; it has to be pulled up and down like a winding river.[4]

Lifok also illustrates the Amis sound world through birdsong in his book, *Traditional Culture of the Amis*. Birds that are mentioned are the cilot, tateciw, alilis, ankak, 'ekong, and aciw. Amis song is often characterized with an inherent 'life force' and animal cries and birdcall divinations have been written to be prophecies in the Amis and other Aboriginal groups. The birdcall divinations are related to larger ideas of religion and supernatural power, also known as kawas (a kind of deity or life-force) and paysin (taboo). Generally, the core of the Amis sound will also encapsulate some aspect of movement that is created by:

1. Life (as human-derived song and speech or animal cries)
2. Forces of nature (thunder, rain, rustling of trees, etc.) (Shzr, 2010, 55)

[4] Yoshiko, "Beyond Innocence: Interview with Yoshiko," by Shzr Ee Tan, *Beyond Innocence* (July 2000), pg. 75.

## Chapter 3: Analysis of Returning Souls

*Returning Souls (Four Pieces on Three Formosan Amis Legend)* written by Taiwanese composer Shih-Hui-Chen in 2010 is a set of four movements for solo violin. Shih-Hui was offered a Fulbright Scholar grant and studied the music of the Han and Aboriginal peoples of Taiwan while she lived there for a year. Embarking on a collaboration with anthropologist and filmmaker, Hu Tai-Lu, a film project was created titled *Returning Souls*. It documents the recovery of lost tribal icons from the Amis tribe and ties three of their tribal legends with today's realities, such as: national land policies, religious beliefs, community identity and clan rivalries. These icons, which were wooden pillars with the carvings of Amis ancestors, were removed from their community in 1958 after a hurricane. With a fear of the wrecked pillars disintegrating, anthropologists decided to displace them to the Academia Sinica Museum for display. That action provoked a sense of nostalgia and longing from the Amis community, as they believed the souls of their ancestors were also taken away. Therefore, the film depicts the efforts of the Amis community to retrieve the icons back to their village. In Shih-Hui's program notes, she writes that "the main melody of the project is taken from an improvised song by one of the tribal elders in the film and serves as an introduction and unifies the entire piece".[5]

[5] Shih-Hui Chen, "Returning Souls," program notes, accessed April 10, 2022.

## Introduction

Sun: The Glowing Maiden

*An ancient ancestor of the Amis tribe gave birth to many children. The last child was "The Glowing Maiden", a girl whose body glows (symbolizing the sun).*

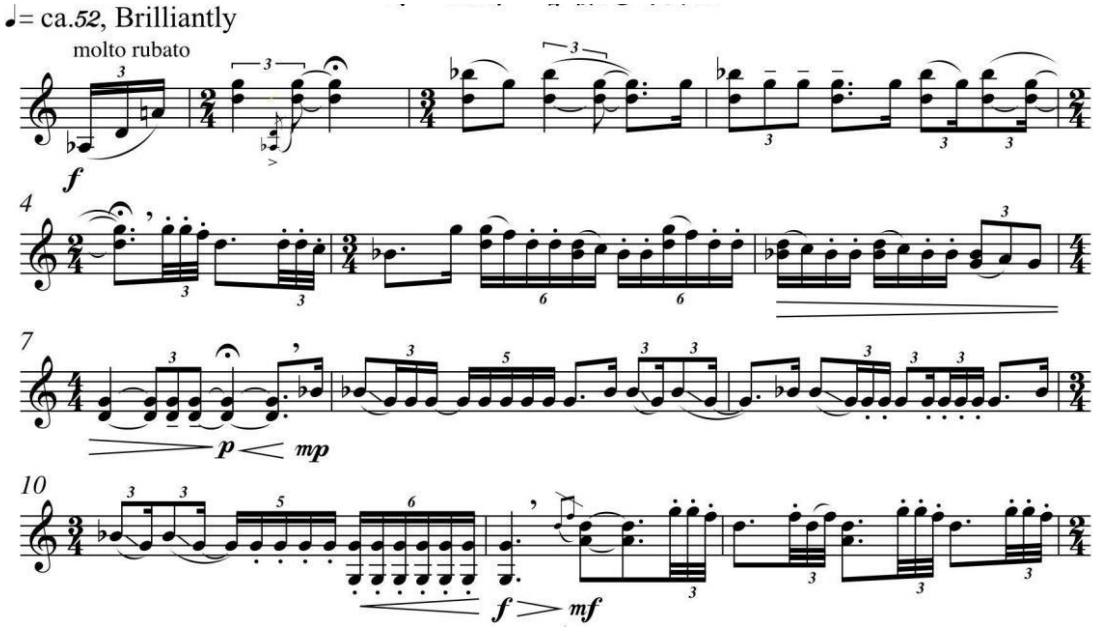



Figure 3.1 Measures 1-12 of the Introduction

The first measure begins with a combination of the intervals of a perfect-fifth and a tritone in the pitches of A♭, D, and A in which it conveys a dichotomy of uneasiness and brightness in the instrument's timbre. Throughout the entire piece, one will notice that Shih-Hui uses the dissonance and consonance of intervals to strongly convey emotion and the extramusical effects that encompasses the essence of each myth. After the first measure, the introduction begins with the characteristic Amis fanfare with the interval of a perfect-fourth on the pitches D and G, which is also a part of the pentatonic scale heard throughout the introduction: B♭, C, D, F, G. Soon after, Amis polyphony is

introduced throughout in intervals of sixths, fourths, and thirds. Referring to the *olic*, the line slowly winds itself downwards and lands on a fourth during these moments of repose that are brought out through written-in fermatas and a pause mark, emulating a sense of natural breath and improvisation within the extended melodic line. The melodic line lingers on a B♭ and D before returning to the initial perfect-fourth. Although written in metered form, the gesture of each vocal utterance varies in rhythm and is not dictated by a need to reset, end, or to arrive by the bar line. It is important to note that the pitch G is intentionally accented in bar 4, imitating the *akusento* accent that is often heard in Amis tribal singing. In terms of the general pacing, there is an inherent sense of forward movement that might be felt as one urges, prays, or invokes a greater deity. In measure seven, the first instance of a response to the initial call begins with the last sixteenth note displaced in a lower octave and the expressive glissando that repetitively falls into the pitch G ends in a determined and resonant G-octave in measure 11. The tail-end of the first improvisation begins on the tail-end of the second beat in measure 11, in which it begins again with the fanfare on the pitches of D and A. In the figure below, the elaborated melodic line now lingers on the pitches F and D before briefly resting on the pitch C. Then, the introductory gesture returns and revives the beginning call, but now in a slightly different form. This time, the introductory gesture is repeated twice to add more drama going into the first fanfare. That movement carries through to the next set of improvisations, in which the pickup to the minor-sixth is now sooner anticipated with a sixteenth note and reaches a repeated and accented B♭, yet another imitation of the *akusento* accent in measure 17. That change in contour is both a direct response to the beginning and a foreshadowing of the movement's end. An expected fermata is not

included in measure 18 and instead quickly descends the line to a lower G – however, this time in quietness and calm. The coda begins in measure 22 as it imitates the expressive glissando from before in the lower octave and with slower pacing. The expressive dynamic of the movement has also begun its descension into a pianissimo. One last evocation of the call and response characteristic can be heard between measures 22 and 23 before finally arriving at the tonal center of G. The musical and narrative tension in the beginning is once again brought out in the form of a dissonant seventh and paired with the jabbing of a loud left-hand pizzicato on an A♭ that foreshadows the rhythmic pacing and energy of the next movement.

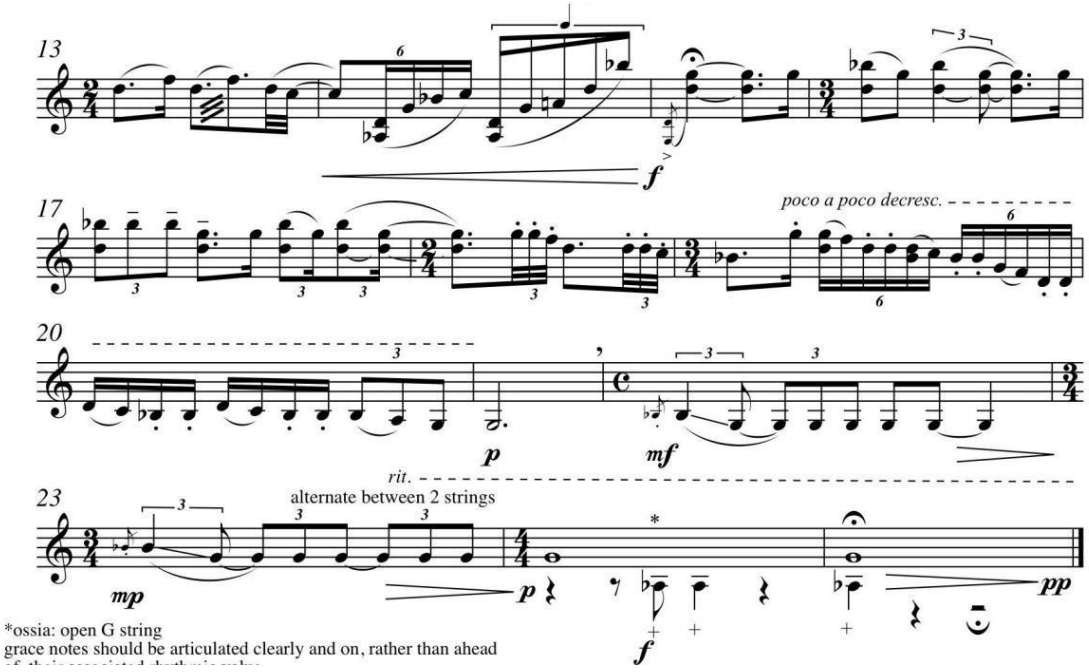



Figure 3.2 Measures 13-25 of the Introduction

## Legend I:

The Great Flood: The Descending Shaman

*Sister and Brother are the only two humans to escape the Great Flood with their lives. They later marry and give birth to strange creatures like lizards and snakes; a descending shaman brings blessings that allow the pair to give birth to normal humans.*

This movement is divided into three sections with the first representing Lifok's concept of Amis sound encapsulating movement through the sounds of nature, the second referencing the motives heard in the introduction, and the third responding in a timbral register that evokes the supernatural and glory of a higher deity.

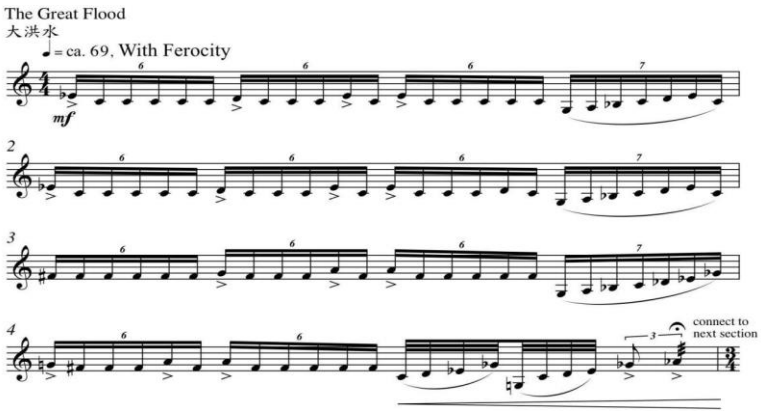



Figure 3.3 Measures 1-4 of Legend I

The first section, titled The Great Flood, is full of turbulence represented in the asymmetrical placing of three sextuplets against one septuplet in each bar. Shih-hui adds further tumult in the phrase with accented notes in which it adds even more drive within this slew of notes as they tend to propel the player to swing right into the next bar. The notes that are accentuated traces the interval of a minor-second with the pitches being E♭

and D in the first two measures. The tension expands as it rises in pitch to the pairing of the pitches G and A in measures three and four, only to be held back a half step lower towards the end of measure four.

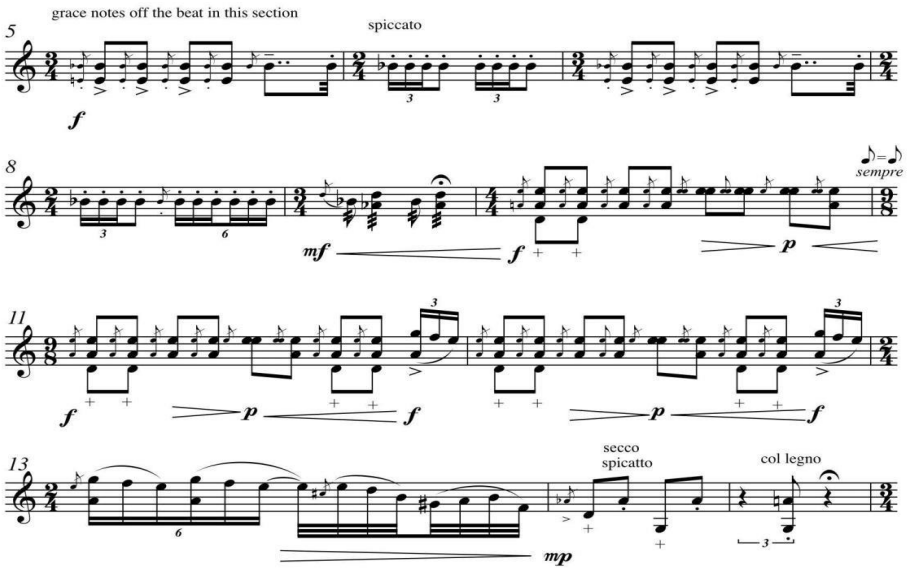



Figure 3.4 Measures 5-15 of Legend I

In the latter half of this section, tritones and a lack of an anchoring tonic contrasts the vocal-like melody heard in the previous movement, thus affirming the essence of this section to be mainly percussive and for the violin to imitate natural sounds of the great flood. As it closes, Shih-Hui alludes to the introduction in measure 13 with a fleshed-out interval of a third heard in the previous melodic improvisation. The left-hand pizzicato returns to bring the ending of this section with a wooden sounding interval of a seventh. Then, as the movement evolves into the marriage scene of the Sister and the Brother, an audible similarity can be heard with a few differences. Shih-Hui depicts the strange creatures (lizard and snakes) with two different pentatonic scales – G♯, A♯, B, D, and F in measure 18 and G, A, B, C, and E♭ in measure 26. Each scale is executed with a sense

of pacing that is presented with quasi-improvised notation which allows for varying forms of acceleration and ritardando. *Akusento* accents are heard throughout and placed in similar gestures from the earlier movement. Tritones and asymmetry are also clear in this second section which evokes uncertainty and unpredictability within the motivic gestures. Whereas, in the first movement, each call and response were delineated in three-measure phrases, apart from the coda that lengthened the final pitch of 'G'.

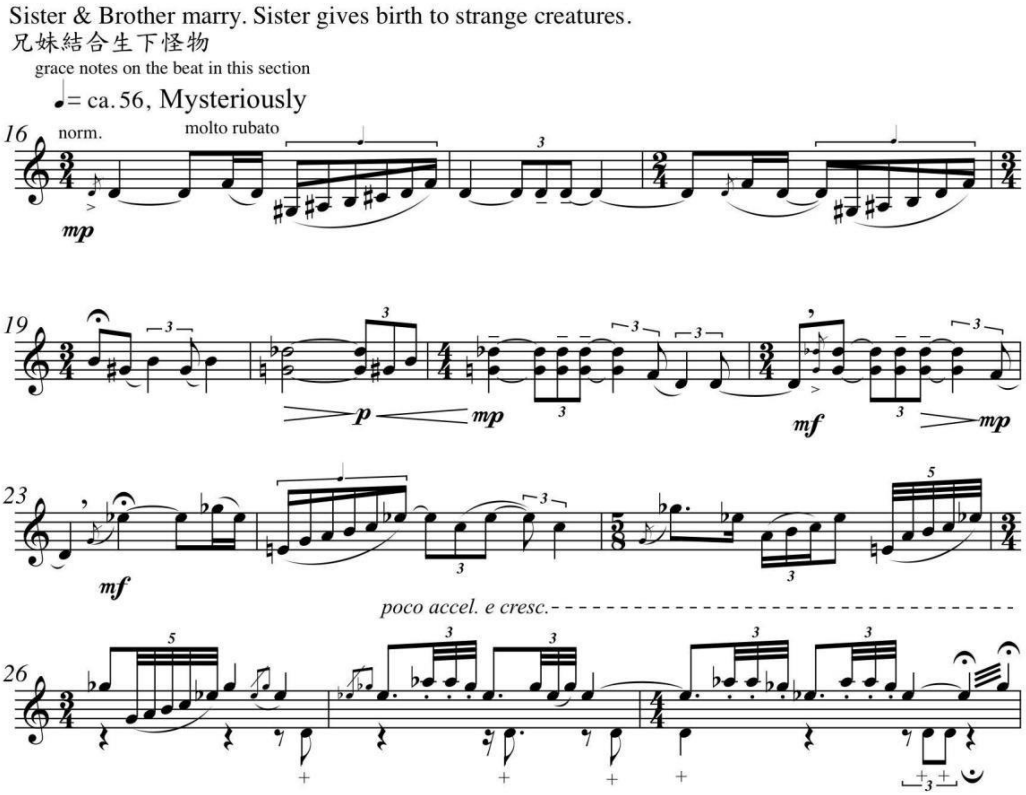



Figure 3.5 Measures 16-28 of Legend I

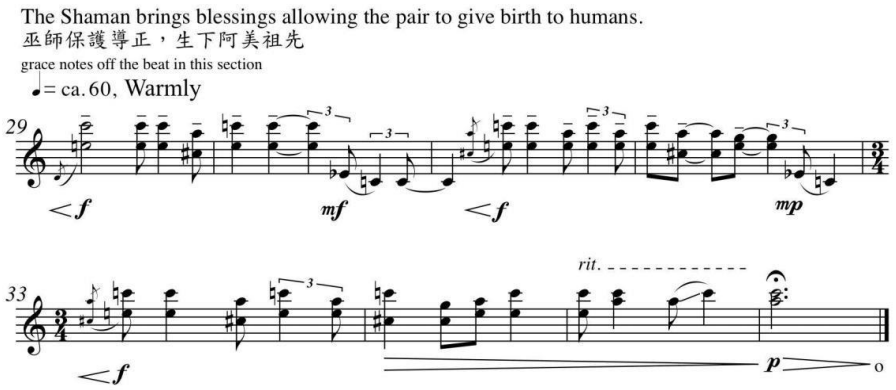



Figure 3.6 Measures 29-36 of Legend I

In the concluding section, in which the Shaman brings blessings so that the pair can give birth to humans, the contour of the movement has ascended into the higher timbres of the instrument. The melodic line has reached its highest point so far with the pitches C and E♮ with *akusento* accents consistently being played in the first iteration.

## Legend II

Head Hunting: The Ascending Stars

*Two brothers are instructed by their father to headhunt someone who is spoiling their fresh water supply. They later find out that they unknowingly beheaded their own father and were scorned by their mother for their heinous act. The elder brother shows remorse. He stomps his foot, and his body sinks further and further into the ground, while his spirit ascends to the sky and becomes stars.*

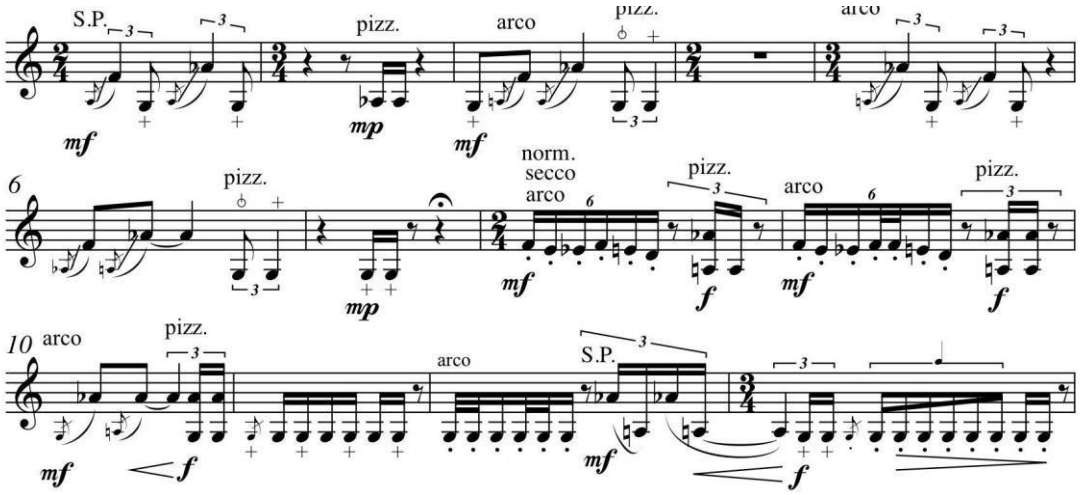



Figure 3.7 Measures 1-13 of Legend II

In four sections, this movement fully embraces dissonance, glissandi that emulates an Amis non-lexical gesture (*hi-yah!*), percussive elements, and a strong rhythmic drive. Beginning with the 'head-hunting' section, the first thirteen measures juxtapose an interval of a minor- third with the pitches A♭ and F against a drone and percussive-like G. When descending lines are used, it outlines the chromatic four-note gesture of the pitches D, E♭, E♮, and F. Chromaticism can also be heard in the grace notes as they swing between the pitches A♭ and A♮.

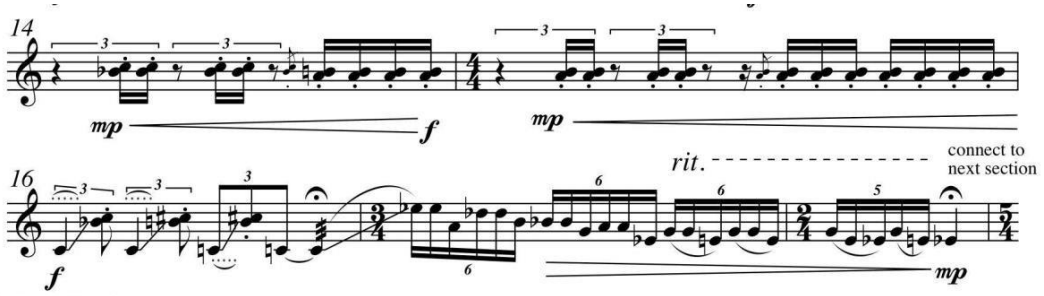



Figure 3.8 Measures 14-28 of Legend II

The dissonance is further emphasized in measures 14-18 through the usage of consistent intervals of seconds and sevenths. In the last two measure of this section, an off-kilter pentatonic scale is outlined: G, A, B♭, D♭, and E♭.

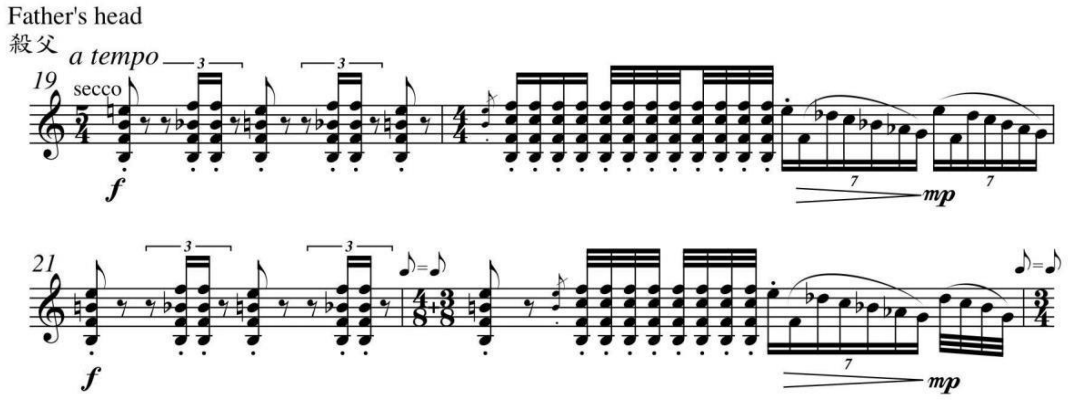



Figure 3.9 Measures 19-23 of Legend II

As we transition to the section in which the father is beheaded, Shih-Hui unleashes dissonance to its fullest potential by bringing back the turbulent scalar gestures heard in the second movement, more violent glissandi, sharp pizzicato, ricochet, and a polyphony in which each voice and the combinations of them emulate musical tension. The tetrachords heard in measure 19-22 can be taken apart by perceiving the lower two voices as a drone with the interval of a tritone for the chromatically ascending upper two voices. Their rhythmic drive is like the second movement in which the scalar gestures propel the player to dive right into the next bar. Then, a moment of call and response appears in measure 26-29 with a change in register and even more dissonance before returning to the off-kilter pentatonic scale heard earlier in measure 17, but now an octave higher. In the final figure below, Shih-Hui outlines the sinking of the body into the ground with glissandi that dramatically descends into the final chords. In this tritone-

filled passage, the player is to also stomp in time soon after executing the glissandi – bringing yet another form of ritualistic drama into this piece.

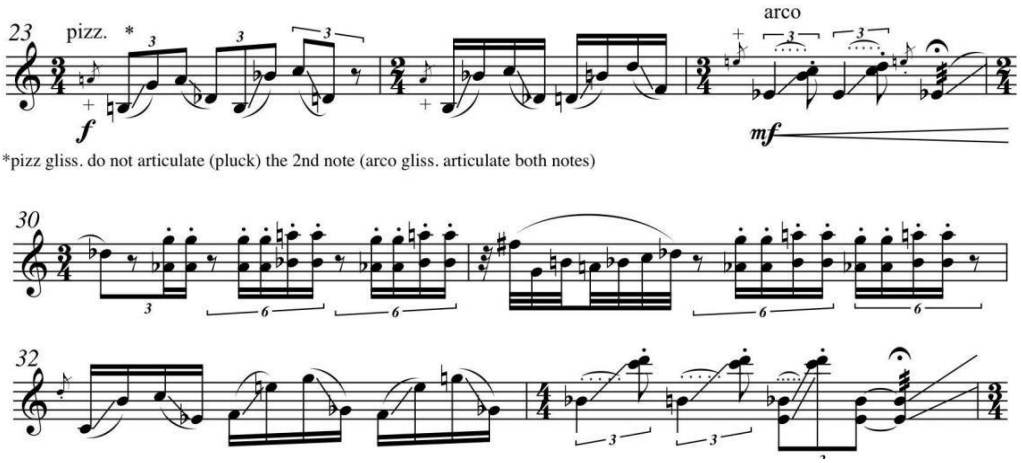



Figure 3.10 Measures 23-24 and 30-32 of Legend II

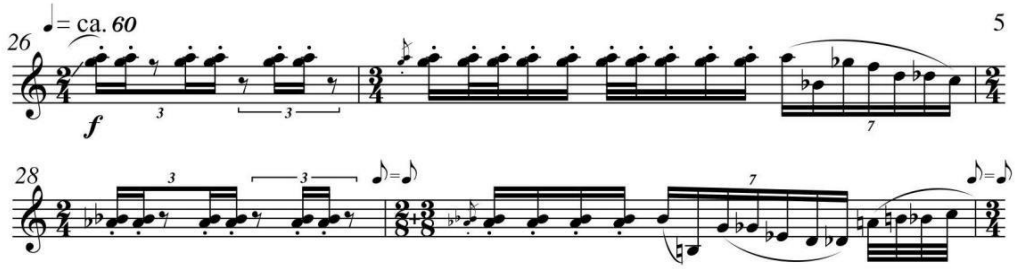



Figure 3.11 Measures 26-29 of Legend II

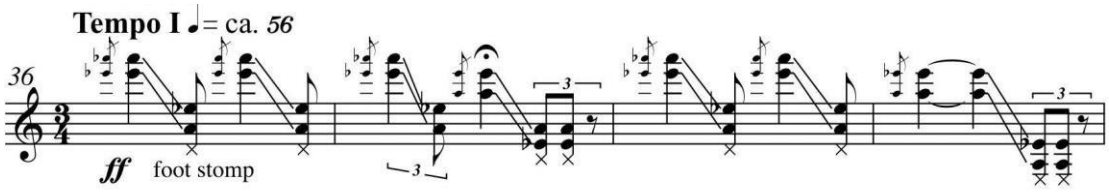



Figure 3.12 Measures 36-39 in Legend II

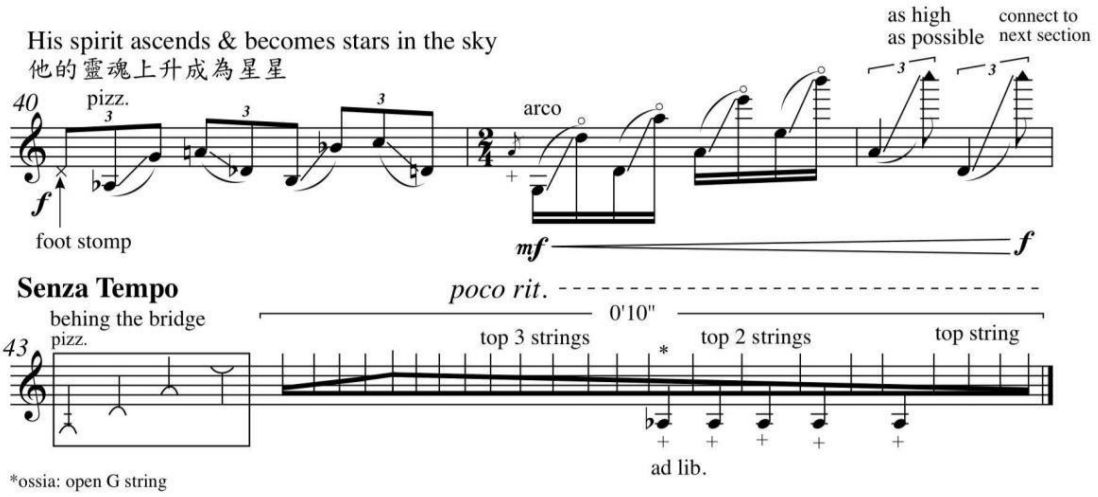



Figure 3.13 Measures 40-43 in Legend II

At the end, the ascending of the spirit begins with a foot stomp and a recall to a musical gesture that was introduced in the second section of this movement. To emulate the stars, conventional sounds are swapped out for glissandi up to harmonics, glissandi up to the highest note possible, and the player eventually finishes behind the bridge with a quasi-improvised plucking of the strings and with an A♭ alternating ominously on the bottom.

## Legend III

The Glowing Maiden: Returning Souls

*In the film, although struggling with many obstacles, the young people in the Amis tribe uplift their own spirits as they recover their ancestors' souls.*

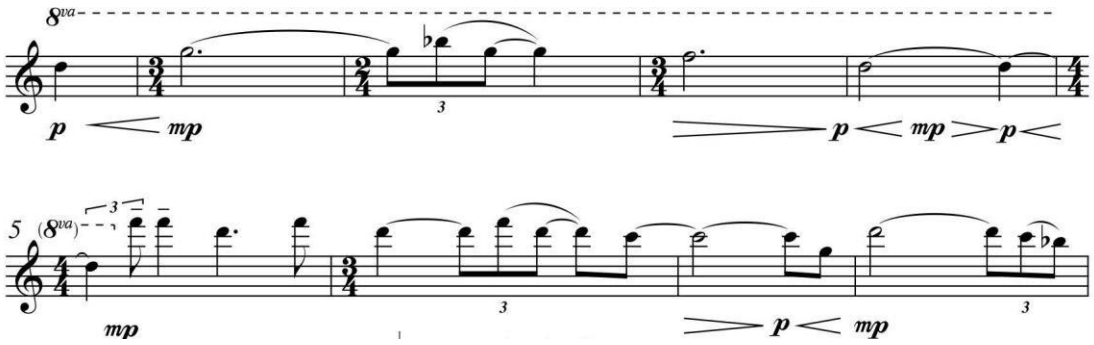



Figure 3.14 Measures 1-8 in Legend III

In the final movement, the first real glimpse of a lyrical line is heard. Shih-Hui allows this line to shine in the upper echelons of the violin with a rhythmic pacing that is much more stretched and less active than the previously improvised melodic lines.

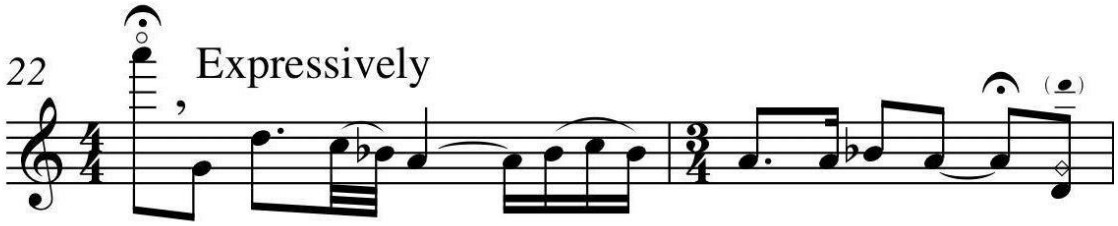



Figure 3.15 Measures 22-23 in Legend III

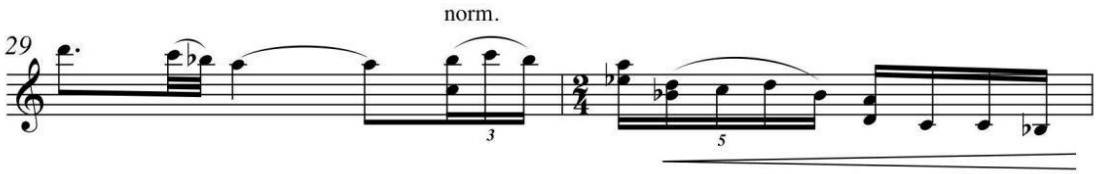



Figure 3.16 Measures 29-30 in Legend III

This motif is heard again in its fragmented form in measure 22-23 and in its responsorial form in measures 29-31, but an octave higher.

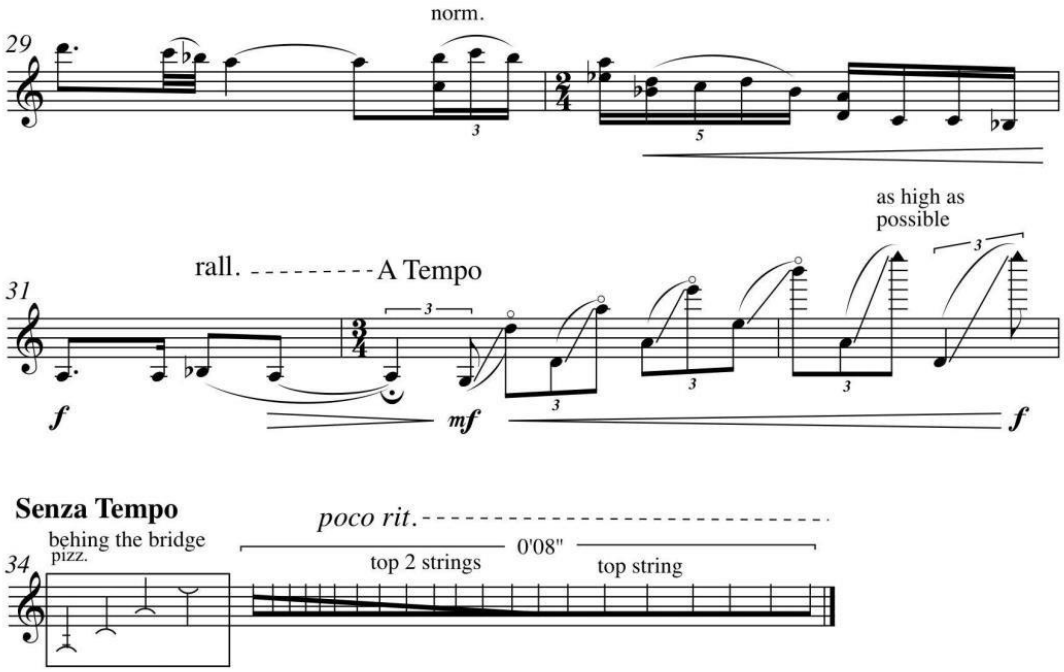



Figure 3.17 Measures 29-34 in Legend III

Even so, there is no audible resolution as it pivots back into the original fanfare motive and the improvised lines heard in the first movement. Its recapitulated form is heard again, but in fragments that are played in harmonics through measures 24-28. Like an earlier moment, the entire piece ends with an ascension to the stars – however, this time there is no ominous A♭. Perhaps, it can be said that the A♭ has resolved its tension to a just calming A found on the downbeat of measure 32.

## Chapter 4: Brief Background on the Siraya Tribe

Since the occupation of the Dutch and the Spanish, the Siraya tribe were the first ones to have contact with the foreigners in Taiwan. Unlike the Amis, the Siraya lived in the plains, thus identifying as the Plains Aborigines. Through assimilation of culture and religion, the Siraya tribe forged close relations with the Dutch and were also taught how to write and to translate the Bible into the Siraya language through romanization - which is almost of no existence today. Eventually, the 1662 defeat of the Dutch to the Han people governed by Zheng Chenggong pushed the Siraya community into the mountain area. The usurping of the land and resources by the Han people quickly accelerated the loss of their culture, customs, and habits until the 90's. From then on, the Siraya tribe has been in collaboration with many cultural organizations arranging public festivals and rituals in hopes of gaining national recognition as an official tribe. [6]

[6] Siraya National Scenic Area Administration. "The Origins of Siraya." Siraya National Scenic Area Administration. Accessed April 10, 2022. https://www.sirayansa.gov.tw/en/about-siraya/origins.

## Chapter 5: Analysis of Provintia

In the next piece, *Provintia*, the characteristic contours and tendencies of the Siraya melodies are sprinkled throughout, in addition to the erhu-influenced timbres and remnants of the Dutch national anthem. Chih-sun Chihchun Lee's program notes states:

Provintia (also called Fort Provintia, Chihkan Tower) is one of Taiwan's ancient monuments, which is in Tainan City. Provintia was built by the Dutch in 1653, on the ground of the Taiwanese Siraya Indigenous people. The fort was originally used for protecting the Dutch people during their colonization of Taiwan. Later in 1668, the Ming Dynasty ruler, Zheng Jing, took over Provintia, and then rebuilt the building on top of the old one that was destroyed during the war. The new building incorporated some traditional Chinese design and was used as a school and hospital during World War I and II. In recent years, the Taiwanese government has recognized Provintia as one of the most important historical monuments in Taiwan.

This piece was originally written for the Chinese erhu (a two-string fiddle) and have now converted it into this violin version. *Provintia* goes through a time tunnel as it describes the historical events of this significant architecture. The main musical materials are extracted from the Taiwanese Siraya aboriginal people's music and Dutch music. The beginning of the piece signifies the 350 years history of this building. The original purpose of Fort Provintia has been the focal point for the middle section of the piece, throughout the several wars that it lasted. The ending describes the view of the Provintia,

which is one of the most beautiful sunset locations in all of Taiwan, with the soft touch of the sunset brightening and softening over its past violence of war. [7]

To further understand the essence and atmosphere of the piece, it might be beneficial to first delve into the unique compositional style of the composer, Chihchun Chi-sun Lee. Based in South Korea, Lee's musical journey began in a Presbyterian church in Kaohsiung on Taiwan's southwest coast, in which both of her parents are musicians. Starting off with a middle school rock band, Lee eventually found herself studying composition in Taipei, Ohio University, and the University of Michigan. Perusing the list of Lee's works, one will note that her works are diverse, eclectic, and full of surprising combinations: tuba, zheng and percussion ensemble; orchestra and Taiwanese Traditional Puppet Theatre; liuqin and piano; Paiwan Double Nose Flutes, violin and cello; and other unique blends of western instruments and Eastern Asian instruments. When asked of her motivations, Lee mentioned curiosity, playfulness, and an affinity for the unexpected.

> "As a child, I was never able to sit still. I always feel the need to seek new stimulation. So, compositionally, I like to look for new techniques, sound colors, textures, and push myself to break through. If no one else has tried something before, I get excited and want to be the first." [8]

*Provintia* incorporates three main elements to illuminate the atmosphere that Chih-Chun strives for: timbre and extramusical effects, intervallic-based gestures, and synthesis. The piece has a semblance of the ternary form. In Part A, Dutch and Siraya melodies and the erhu-like gestures are firstly presented. Unlike Amis song, Siraya melodies often take

[7] Chih-Chun Chisun Lee, "Provintia", program notes, accessed April 20, 2022.
[8] Ru, CJ. "With BSO Premiere, Composer Honors Taiwan's Diverse People and Sounds - the Boston Globe." BostonGlobe.com. The Boston Globe, January 15, 2020. https://www.bostonglobe.com/2020/01/15/arts/with-bso-premiere-composer-honors-taiwans-diversepeople-sounds/.

on glissandi and leaps to unpredictable arrivals that encapsulate all of today's categorized intervallic forms. The rise and fall of the melodies jump between consonances and dissonances without a tangible concept of structure resulting in another sense of improvisation. Throughout these interweaving moments of improvisation from one note to another, there is also dynamic contrast within the articulation and inflection of the melodies.

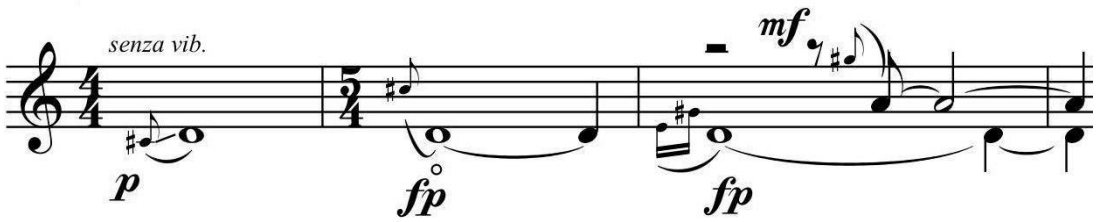



Figure 5.1 Measures 1-3 of Provintia

Paying homage to the original version of *Provintia* written for erhu, the piece starts on a quick half-step glissando into the pitch D, which is the standard pitch for a two-stringed erhu. To further solidify the presence of the erhu, the pitch of the second string comes into the spotlight in measure three.

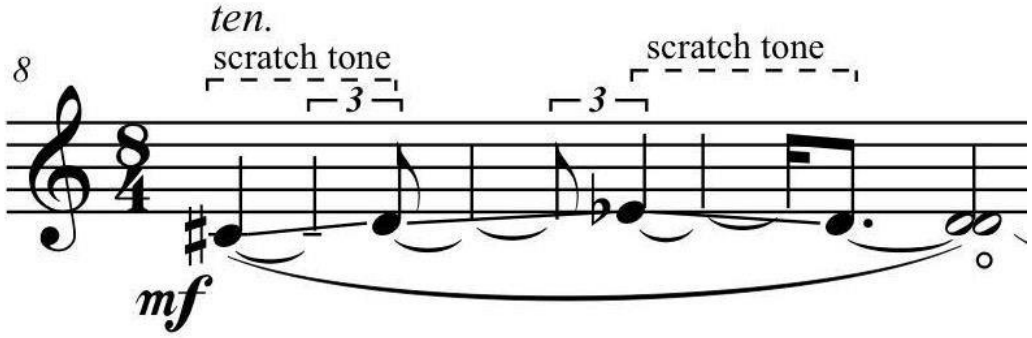



Figure 5.2 Measure 8 of Provintia

In measure eight, we catch our first glimpse of a gesture in which Chih-chun expands on to create extramusical effects of turbulent 'time-travel. This chromatic

gesture is to be played with a scratch tone which can be produced by a heavy amount of bow weight countered with slow bow speed and a selected contact point.

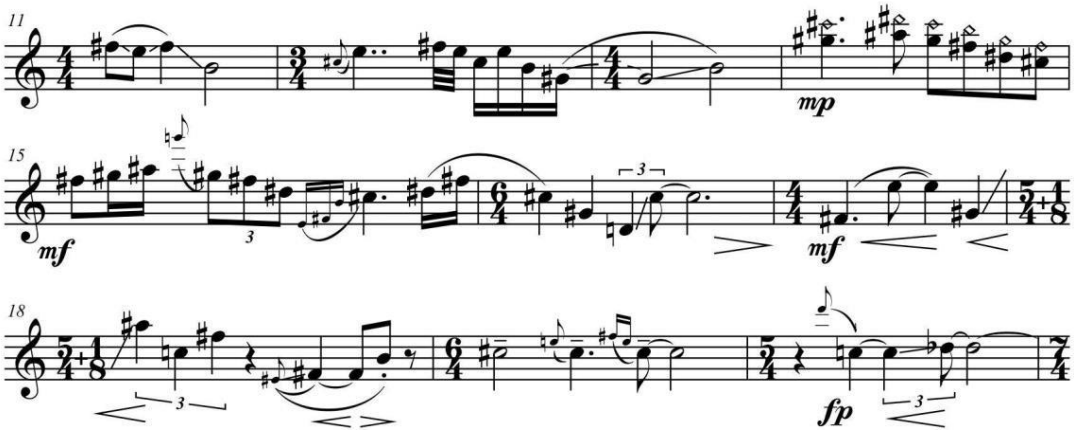



Figure 5.3 Measures 11-20 of Provintia

Soon after, we begin to witness how Chih-chun uses a process of musical synthesis to create a truly unique sound world. Two pentatonic scales are introduced: the first one being B, C♯, E, F♯, and G♯ and the second one including C♯, D♯, F♯, G♯, and A♯. These pitches are heard amidst the leaping gestures of the Siraya sound produced through timbral characteristics heard in the erhu, such as consistent glissandi and snappy grace notes.

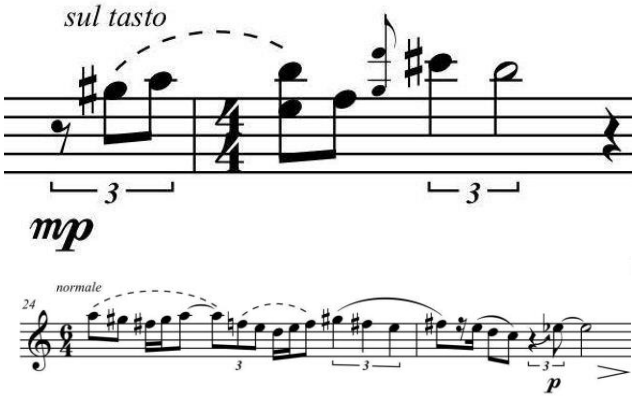



Figure 5.4 Measures 22 and 24-25 of Provintia

In measure 22 and measure 24-25, we notice our first encounter of a Dutch melody that Chih-Chun uses, which bears much resemblance to the Dutch national theme. The scalar contour along with the stepwise intervallic motion, although slightly distorted, is reminiscent of the simple stepwise motions heard in the national theme as it rises and ascends throughout the melody. For reference, here is a transcription of the Dutch national theme:

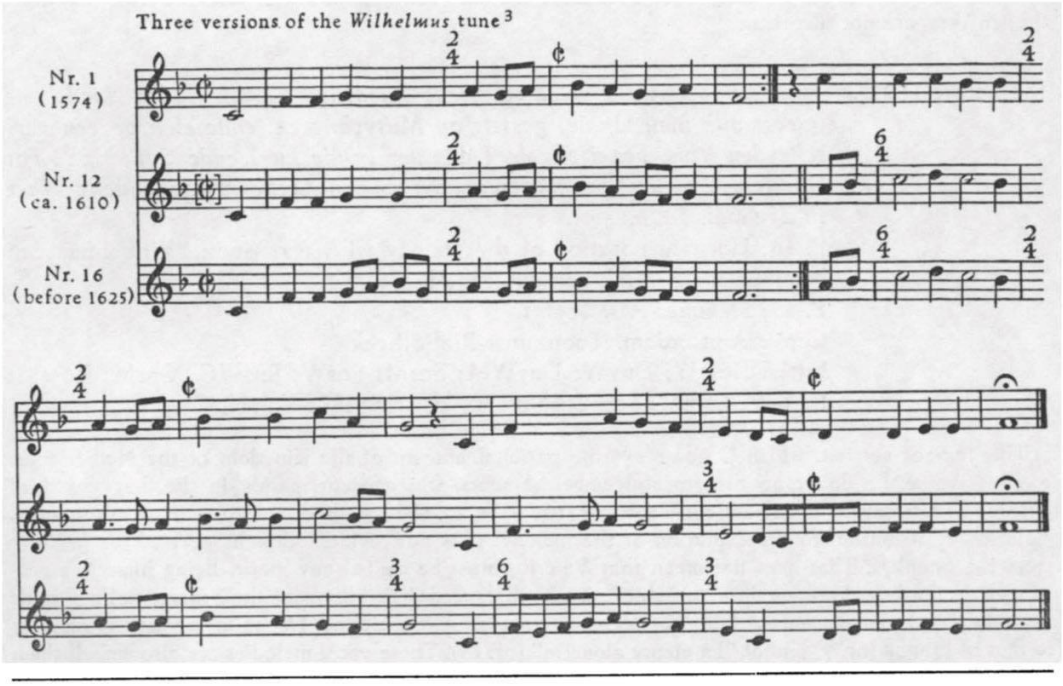



Figure 5.5 Transcription of the Dutch National Theme[9]

Then, from measures 32-39, Chih-Chun blends Sirayan percussive elements and extramusical possibilities through extended techniques on the stringed instrument shown here:

[9] "Early Sources of the Dutch National Anthem (1574—1626)." Accessed April 12, 2022. https://www.jstor.org/stable/23504604.

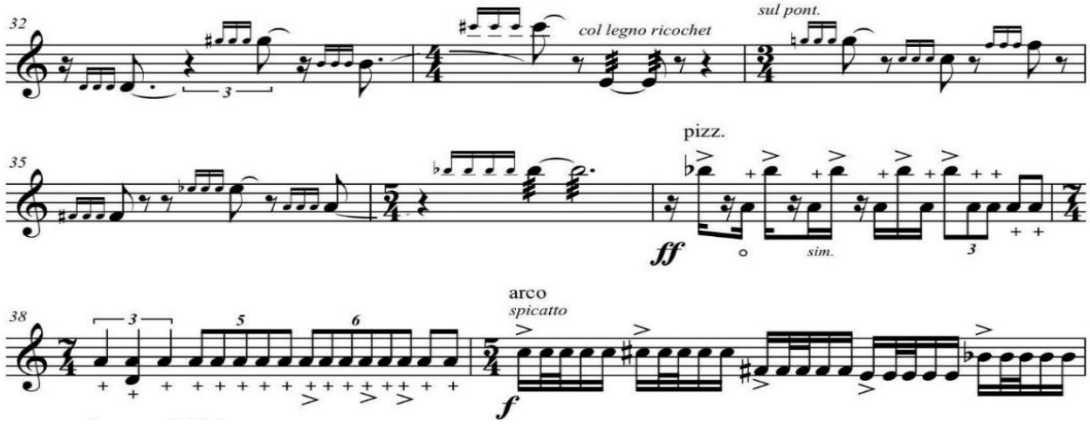
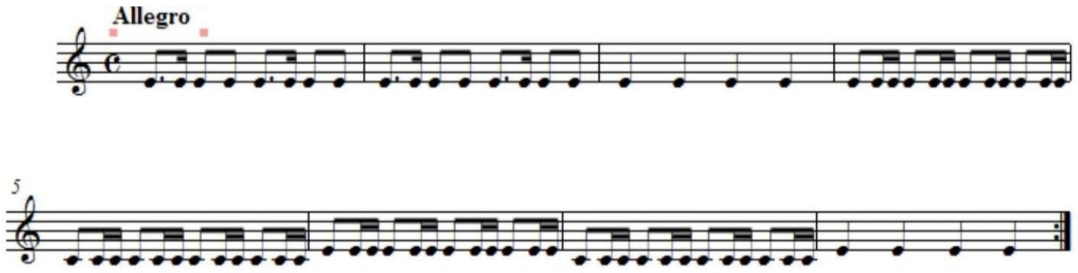



Figure 5.6 Measures 32-39 of Provintia

Some of the extended techniques that characterize the Sirayan percussive elements include col legno ricochet, which is the controlled release and bouncing of the bow on the wooden part of the bow. To execute, one would use a similar way of playing the ricochet on the hair of the bow, but with the bow tilted outwards in which the wooden part of the bow has direct contact with the string. Other techniques that create percussive effects include the rhythmic alternation of the left-hand and regular pizzicato (played with the right hand) and specific accents for yet another layer of emphatic articulation, seen in measures 37-38.

Part B is introduced in measure 38 and can loosely be delineated into four sub-sections. Beginning with the leaping Sirayan gestures, it evokes a rhythm that is commonly heard on the TUBTUB – a bamboo slit drum. The onomatopoeic name means "to knock". Made from a bamboo tube with a pair of thin wooden beaters and varying in size, the hollowness of the instruments is the main producer of resonance. Traditionally, it was used as a message device by drumming specific rhythms to the

village as it hung under a tree.[10] According to a transcription found in Lan's dissertation, here are the typical rhythms:




[11]

Figure 5.7 Transcription of KILLIG rhythm

In the figure below, more turbulence and 'winding' back into history are shown through these gestures that return in various iterations and expand on the introductory gesture in measure eight with the scratch tone.

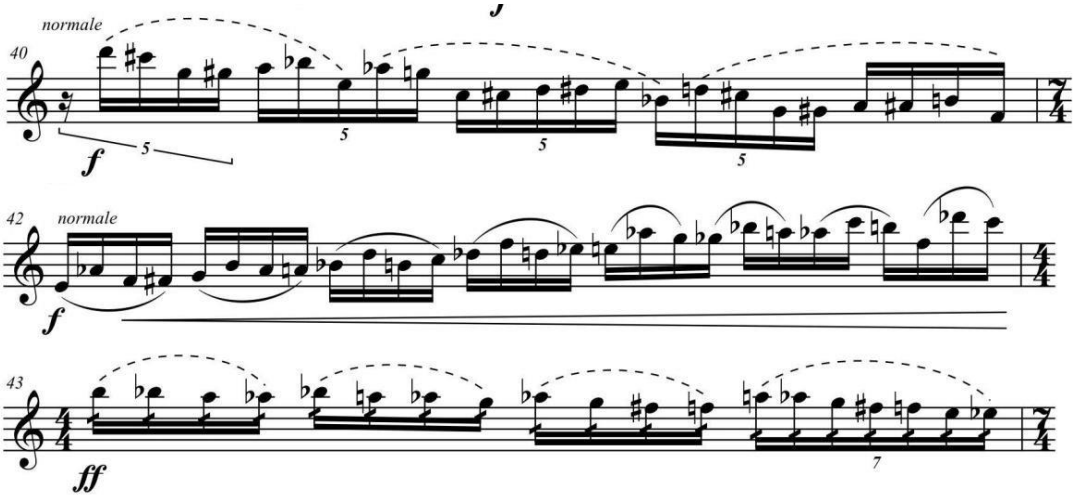



Figure 5.8 Measures 40-43 of Provintia

[10] Lancini Jen-Hao Cheng, "Taxonomies of Aboriginal Musical Instruments", Dissertation, University of Otago, 2014.

[11] Lancini Jen-Hao Cheng, "Taxonomies of Aboriginal Musical Instruments", Dissertation, University of Otago, 2014

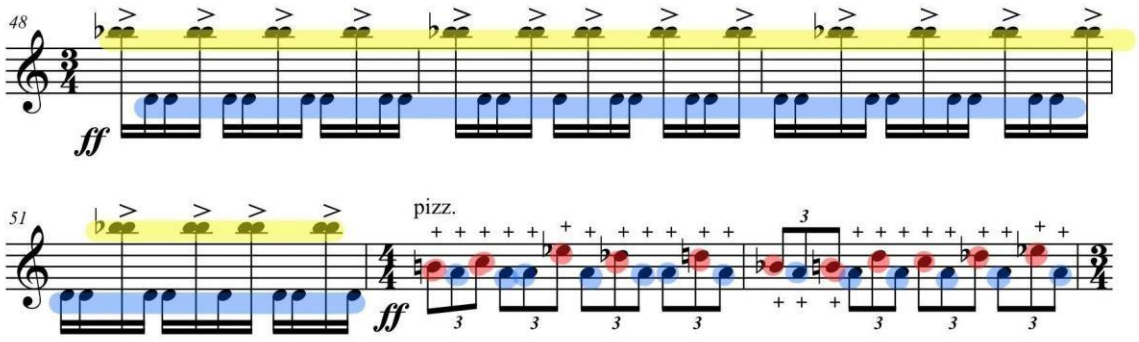



Figure 5.9 Measures 48-53 of Provintia

In measures 48-53, Chih-Chun synthesizes the erhu with the timbre of another Sirayan instrument while referencing to the intervals found in the ‘winding’ theme. The yellow-highlighted notes are of the Sirayan instrument (called the KILIKILI/SACKIG), the blue-shaded notes are of the erhu, and the red-colored notes are of the ‘winding’ theme. The unison B flats emulate the timbre of the KILIKILI/SACKIG instrument, which is a forged bell. There are two types of the forged bell: one including a striker inside and the other with just a separate beater. These were traditionally worn by men to signal incoming messages as well.

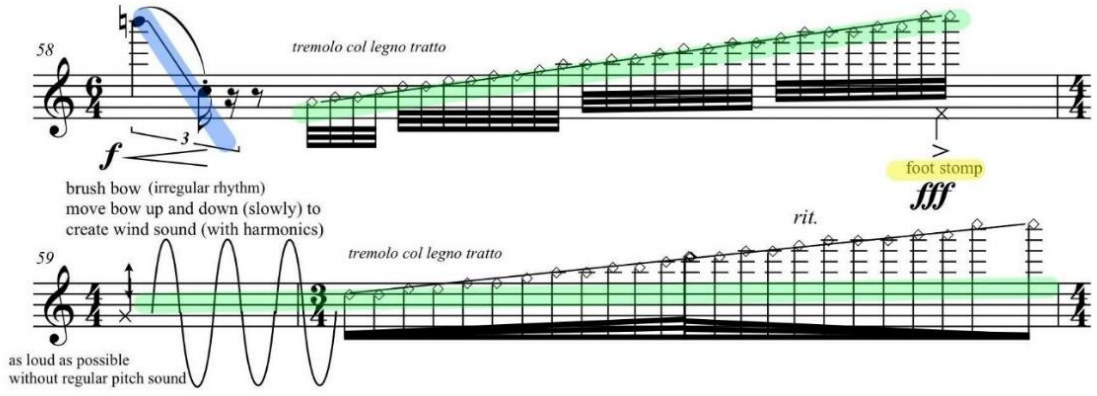



Figure 5.10 Measures 58-59 of Provintia

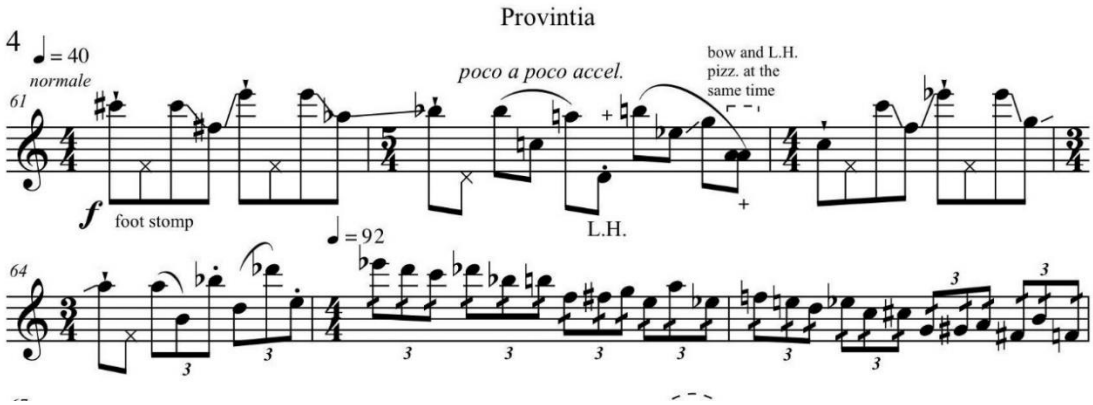



Figure 5.11 Measures 61-66 of Provintia

In measures 58-63, Chih-Chun synthesizes extended techniques, physical movement, erhu gestures, and Sirayan leaps. To create the wind sound in measure 59, the instrumentalist will have to irregularly sweep the bow forward and backwards, alternating between the extremities of the fingerboard and the bridge, for harmonics to sound in the stroke. Lightness should be felt in both hands – in the right hand for minimal pressure and grazing across the strings and in the left hand to avoid any actual pitches from sounding out. The shape of the notation can help guide the player with the frequency and length of each forward or backward stroke. In addition to the wind effect, the player is to also execute a stroke called the tremolo col legno tratto, in which the player will be bowing the tremolo fully on the wooden part of the bow. So, like the earlier ricochet stroke played as col legno tratto, similar movements needed to execute a tremolo on the hair of the bow will remain as the bow is tilted outwards for the wooden part to have direct contact with the string. Foot stomps are also incorporated in this section of the piece, in which it provides another rhythmic and timbre element into the mix of pizzicati, glissandi, articulated notes, and extramusical sound effects.

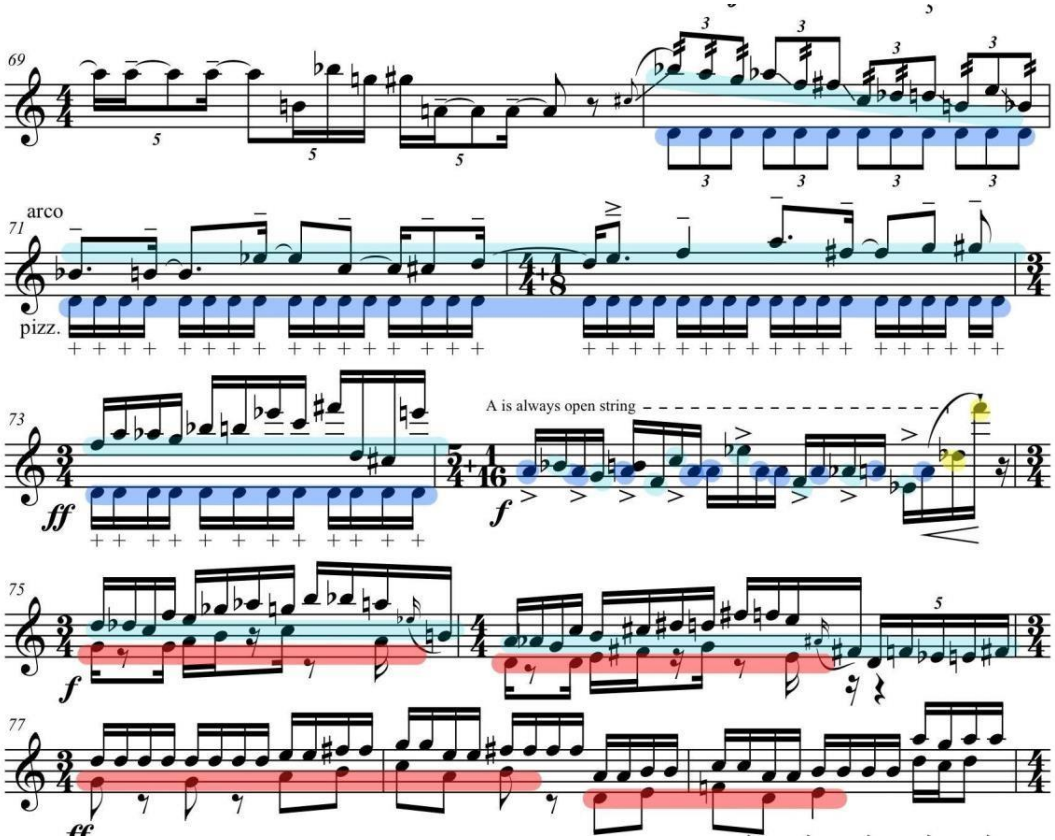



Figure 5.12 Measures 69-79 of Provintia

Another moment of synthesis between the erhu, the ‘winding’ effect, and the Dutch melody is shown above. In this example, the light blue-covered notes are of the winding theme, the dark blue-shaded notes are of the erhu, the red-colored notes are of the Dutch national theme, and the yellow-highlighted notes are of the characteristic Sirayan leap.

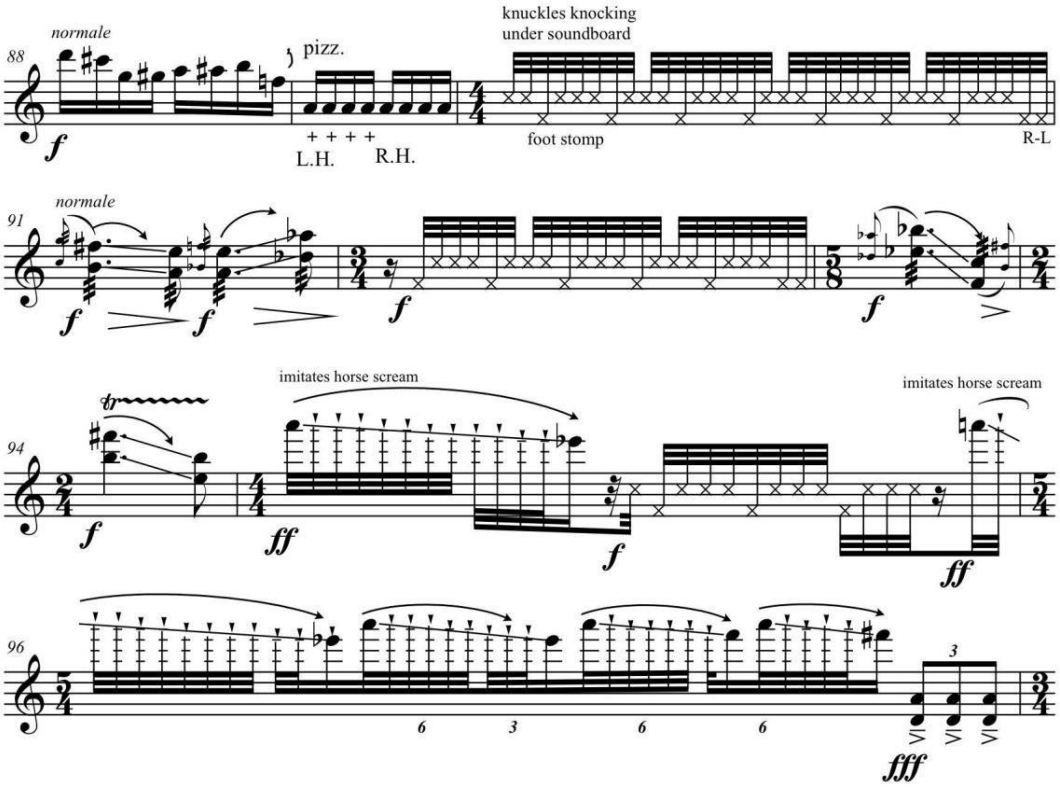



Figure 5.13 Measures 88-96 of Provintia

Later, Chih-chun introduces a completely new sound world that imitates the galloping and neighing of horses. It is to be played with the player's knuckles under the soundboard punctuated by a foot stomp after every 3 knocks, excluding the two pick-up notes in the beginning of the gesture. To transition smoothly, it might be wise to give a small pause after measure 88 for the bow to be placed on a nearby stand, so that the alternating plucks can simultaneously serve as an interlude and a transformation into this new technique and effect. Also shown in this figure is the usage of glissando to imitate a horse scream. To execute, in addition to the consistent vibrato-like motion and gliding downwards of the left hand, the bow should articulate in rhythm to bring out the individual horse 'neighs'.

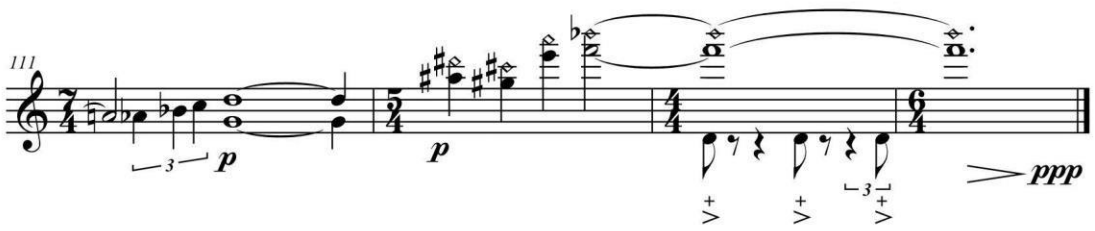



Figure 5.14 Measures 111-114 of Provintia

The return to the beginning begins in measure 107. Chih-chun illuminates her ‘soft touch of the sunset brightening and softening over its past violence of war’ by ending the piece with quiet harmonics that ascend to a high and almost inaudible B♭ and punctuated by the left-hand pizzicato on the pitch D – the note that began this movement.

## Chapter 6: Background on the Bunun Tribe

The Bunun (pinyin: *Bunong*) tribe, meaning "human being" in their language, are also known as the Vonum tribe and the "high-mountain peoples". They are the fourth largest Aboriginal group in Taiwan, speak the Bunun language, and are known for their complex polyphonic vocal music. Having linguistic and genetic ties to the people of the Philippines and other Polynesian groups, the Bunun tribe has lived in Taiwan for more than 8,000 years before the arrival of the Han chinese. They approximately make up 2% of the Taiwan's population. Originally, the tribe lived in small family units on the western plains of Taiwan. Then, they gradually moved and dispersed throughout the mountains in the Renai and Hsinyi Townships of the Nantou County, which is among Taiwan's Central Mountain Range. After entering the mountains, they divided into six sub-tribes: Take-baka, Take-vatan, Bubukun, Take-todo, Take-banuan, and the Take-pulan. The tribe uses a complicated clan system, in which its identity and structure are determined through blood relation. The largest category is known as the "tribal system" or "community", and the "tribe" and "family" are the smallest ones. The Bunun tribe is generally patrilineal; each center clan tribe has a tribal elder. The three types of leaders are as follows:

1. Priest of agricultural rituals; observes celestial phenomena and weather, maintains social order, and mediates disputes

2. Leader of the Ear Shooting Ritual - usually the best hunter
3. Political leader; warrior and commander; takes charge of warfare, headhunting, and clan revenge

In addition to their hostility towards outsiders, they were known to be fierce warriors and headhunters. Always looking for new hunting grounds, the Bunun were constantly on the move and practiced slash-and-burn agriculture. Their staple foods included millet, yam, and game; they also collected nuts, edible wild herbs, mushrooms, wood fungus or ferns. Their main beverages included millet wine and sweet corn wine. [15]

Traditionally, the Bunun were followers of animism. For them, the sky was the locus of supernatural power and heavily influenced their lunar cycles, which formed a relationship to momentous events of the culture, such as harvest times, pig slaughtering, hunting rites, etc. Many of these rituals were closely related to millet cultivation. Additionally, the traditional Bunun calendar, divides the months and years by the various stages of the millet's growth. The Bunun were also the only Aboriginal people to have developed a form of writing to record the cycles. Although most Bunun rituals have been abandoned due to the invasion of the Japanese and Westerners, the Ear-Shooting Ritual. remains as an important season ritual. The Pasibutbut is a ritual that is sung during this event. [12]

[12] Digital Museum of Taiwan Indigenous Peoples-Bunun. Accessed April 11, 2022. http://www.dmtip.gov.tw/web/en/page/detail?nid=6.

## PASIBUTBUT

Pasibutbut can be translated into two parts: "*pasi*" meaning "harmonious sharing" and "*butbut*" meaning "mutual support". It is a prayer for the millet harvest, for the tribe to have good health, and for safety and peace within the tribe. Typically sung by up to twelve male members of the Bunun tribe, performance practice requires the singers to face inwards with the arms linked to form a circle. As the song continues, they slowly move the circle in a unified direction. The rotation is to mirror the upward spiral in pitch, and so when they finally arrive at that joyous and transcendent harmony in which the pitch is stabilized, the Bunun calls it maslin, or "beautiful sound". This ritual song has earned recognition in 1952 by UNESCO. [13]

Music scholars have mentioned that the music of the Bunun people is typically based on the notes 'C, E, G'. However, it is much more complex than that as the Pasibutbut is complex also includes the pitch 'D' in its harmonic progression. Additionally, the music consists of the following intervals: thirds, fourths, fifths, and a plethora of overtones. An assumption is made that this concept is framed around 'Movable Do' as opposed to 'Fix Do'. The overall structure is loosely described as a song that is started by the lead singer with the remaining three voices contributing to the opening pitch to create rich harmonies. It begins quiet and low in pitch and then continues to gradually increase in volume and microtones. Once the piece reaches a tonal climax at the end, the lead singer begins to steer the direction of the piece towards the

[13] "Introduction to the Bunun Pasibutbut." IB Music Investigation: Taiwan aboriginal and Western Renaissance music, January 23, 2015. https://ibmusictc.wordpress.com/introduction-to-the-bunun-pasibutbut/.

ending cadence. [14] To briefly visualize the rising nature of each voice in relation to one another from a field recording taken by Kurosawa, the following is displayed:

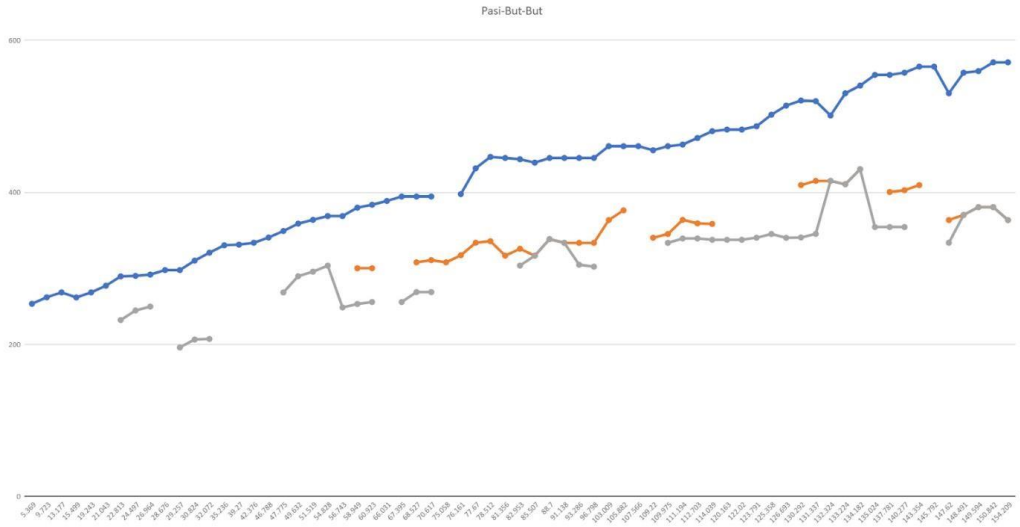



Figure 6.1 Visualization of the Pasibutbut

When Kurosawa (1943) asked about the origin of these harmonies, he received this response from an elderly Bunun member,

> Our ancestral gods learned these from the bees singing inside a hollow hole of a tree on the mountain. This chorus does not have any particular norm; notwithstanding, they improvise in accordance with the leader's intonation, resulting in an admirable chorus. (Kurosawa)

Other origins have been described as:

1. the sound of a flock of migrating birds flying low through robust millet fields
2. the sound of a beehive

[14] "Introduction to the Bunun Pasibutbut." IB Music Investigation: Taiwan aboriginal and Western Renaissance music, January 23, 2015. https://ibmusictc.wordpress.com/introduction-to-the-bunun-pasibutbut/.

3. a group of hunters, coming upon a waterfall, begins singing with it and discovers the secret of its sound [15]

Drone-like characteristics can also be observed in the Pasibutbut. This includes ideas of 'background noise', support tones, and recitation while it also denotes unity, stability, and a transcendental impulse. The form of a drone can be multifaceted - is it a continuum or a constant sound pitch? It could be more effective to perceive the characteristics of a continuum as the essence of the Pasibutbut and that any form of constancy is only a relevant method that is used to illuminate the evolution of the song's structure. American musicologist, Alan Lomax, argues that a drone is still present when it changes positions, but does not hold the essence of a melodic motive. When multiple drones are layered on top of one another, it begins to bear resemblance to functional polyphony.[21] Tamaz Gabizonia (2015) provides ways in how a drone can be characterized with this list:

1. individually or collectively
2. recitativelike or continually
3. instrumentally or vocally
4. with contrast function (from other voice parts) or with a single function
5. statically and dynamically (Gabisonia, 1970, 143)

[15] Ronald Robboy, "Pasibutbut"," program Notes for Formosa String Quartet, January 20, 2019, UCLA School of Music, accessed April 11, 2022, [2121] Gabisonia, Tamaz. "Semiotic Dimensions of Drone in Traditional Music." EPRINTS. The International Research Center for Traditional Polyphony, January 1, 1970. http://eprints.iliauni.edu.ge/9225/.

All these aspects should embody with a vocal role and have the capacity to create varying combinations with each other. In the Pasibutbut, one would describe it as a 'total choral drone'. Each drone (voice) takes turns in serving as a stable background for the ascension of the main pitch-line to expand, which begins with the bass voice sung by the leader in the ritual. Russian composer and musicologist, Asafyev states that this phenomenon can be described as such:

> The strive to prolong the musical material is intrinsically connected to the strive to help us perceive the architectonics of the blurred tones in memory, in other words: melodic movement and pedal. [22]

Another function of the drones present in the Pasibutbut is to pair a harmonic role to the evolving voice as it provides modal support with a referential tonic tone in which it results in a form of improvisation within the upper voices. In general, Gabisonia (1970) states that the function of the drone can be qualified in two ways:

1. dynamic, active (intensive, even annoying, charged with energy), buzzing, prolonged
2. Static and passive (calming, meditational, passive background) (Gabizonia, 1970, 144)

With the characteristic blending of the higher, middle, and lower voices of the Pasibutbut, one could argue to categorize it to be more of the latter. However, the calmness does allow for musical drama to build throughout the song, such as tension and resolution. In this case, the cathartic blooming at the end of the Bunun ritual song displays just that.

## Chapter 7: Analysis of Pasibutbut for String Quartet

Wei-Chieh Lin, composer of *Pasibutbut* for string quartet, follows a similar trajectory and in accordance with his program notes, it can be seen the pitch material starts on a G with the other voices joining with a recurring responsorial descending motif of the pitches E, D, and C. He encourages the listener and player to perceive the identity of these pitches as overtones in a harmonic series and so they should correspond as parts of one single timbre, not as different voices. As the bass beings to incrementally rise, so do the others. In a set of program notes written for a Pasibutbut performance by the Formosa String Quartet, Lin states:

> So, what is this perfect harmony? Well, technically speaking, it is when all the voices can fit in a single overtone series. When these notes come together, and when they are from the same overtone series, what you hear is not a chord, not a harmony in the traditional sense, but a single timbre, a special phenomenon, where the individual voices disappear and form a single unity instead. I believe this pure harmony is the goal of the Pasibutbut.

Lin's *Pasibutbut* is an "abstracted image, one that engages some of the same sonic and structural ideas at the same time that it honors the Indigenous culture that inspired it". The extended techniques, such as the trills, accents, ricochets, glissando, sul ponticello, harmonics, and quartertones are to evoke the various human singing qualities that one would hear in the Bunun ritual. The composition's structure is divided into three sections in which it is fast-slow-fast musical form. In the first section, the pitch rise gradually accelerates. The color darkens as the middle section arrives, with fewer

open strings being used, thus affecting the resonance of the overall timbre. As the piece reaches the end, one will notice that the rate of the pitch rise is much slower, and that full resonance is given back to the instruments with the cello and viola settling into their low C strings and the violins soaring high on their E strings. Each section is bound by descending whole tones above the rising bass pitch, mainly driven by the second violin. Below is key that clarifies how the colors are organized in the musical analysis to highlight the evolution of the pitches between the bass/leading voice and its relational descending three-note motif:

Table 7.1 A Key for Color Analysis of *Pasibutbut*

| Color | Pitch representation |
|---|---|
| Purple | Bass/leading voice |
| Yellow | Descending motif/responsorial voices |
| Blue | Maslin (the final joyous harmony!) |

.

## Part A

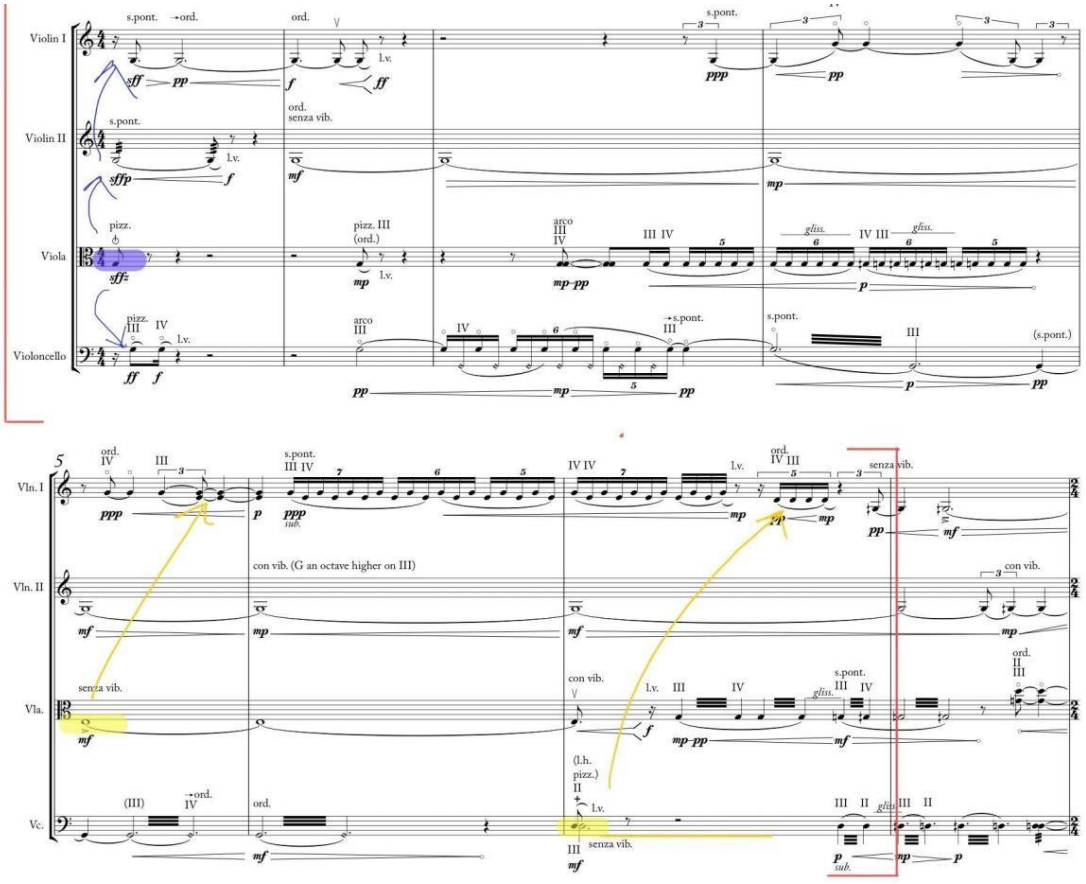



Figure 7.1 Measures 1-8 of Pasibutbut

Lin begins the ascension on the bass note of G, as seen in the viola line and violin II. That G is immediately played in the outer voices. Then, in measure 5, outlining the triadic characteristic of the Pasibutbut, in which it is followed by a gestural descending-motif (often in two or three notes), the pitch E (a third below the G) is recognized in the viola line. As mentioned before, to create a sense of connection between each voice, such as how one would notice in an Pasibutbut ritual performance, the changing pitches are often immediately mirrored in another voice. In this instance, the E in the viola line is

immediately echoed in violin I. Then, two bars later, the second note in the descending motif is played on the bass, which is then mirrored in the upper voice.

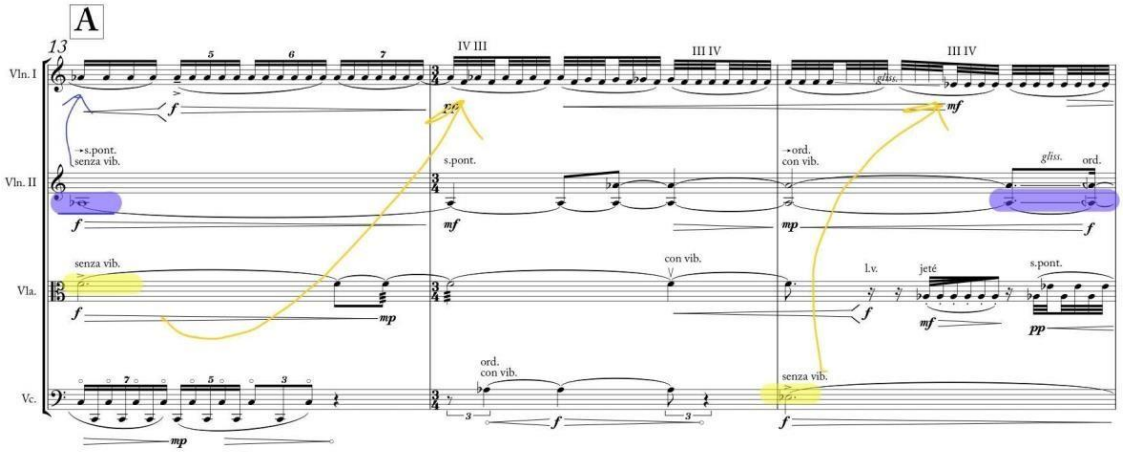



Figure 7.2 Measures 13-15 of Pasibutbut

In measure 13, the bass voice has risen a half step to an A♭, as shown in violin II. The descending motif is now starting on the pitch F, as highlighted in the yellow in the viola voice and soon mirrored in violin I. The second descending note is heard in the cello and mirrored again in violin II. Towards the end of measure 15, one will notice that the bass note is beginning to slowly ascend in pitch microtonally.

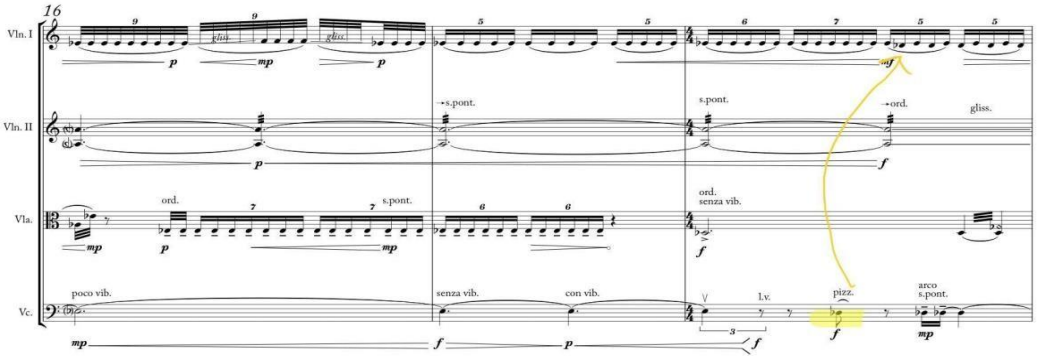



Figure 7.3 Measures 16-18 of Pasibutbut

In this figure, the last note of the descending motif, which is on the pitch D♭, is again played on the cello with Violin I mirroring the pitch-change. In the figure below, Violin II raises the bass voice to an A♮ while the first note of the next descending motif on an F♯ is heard in Violin I. Soon after, that F♯ bounces downwards into the viola and cello line. Continuing on, the final two notes of the descending motif are first heard in the viola, on the pitch E. Then, in Violin I, a D is played. Both pitches are soon mirrored in all the other voices, except for Violin II. Violin II consistently rises in the bass voice until it travels the intervallic distance of a major-second to the pitch of B♭.

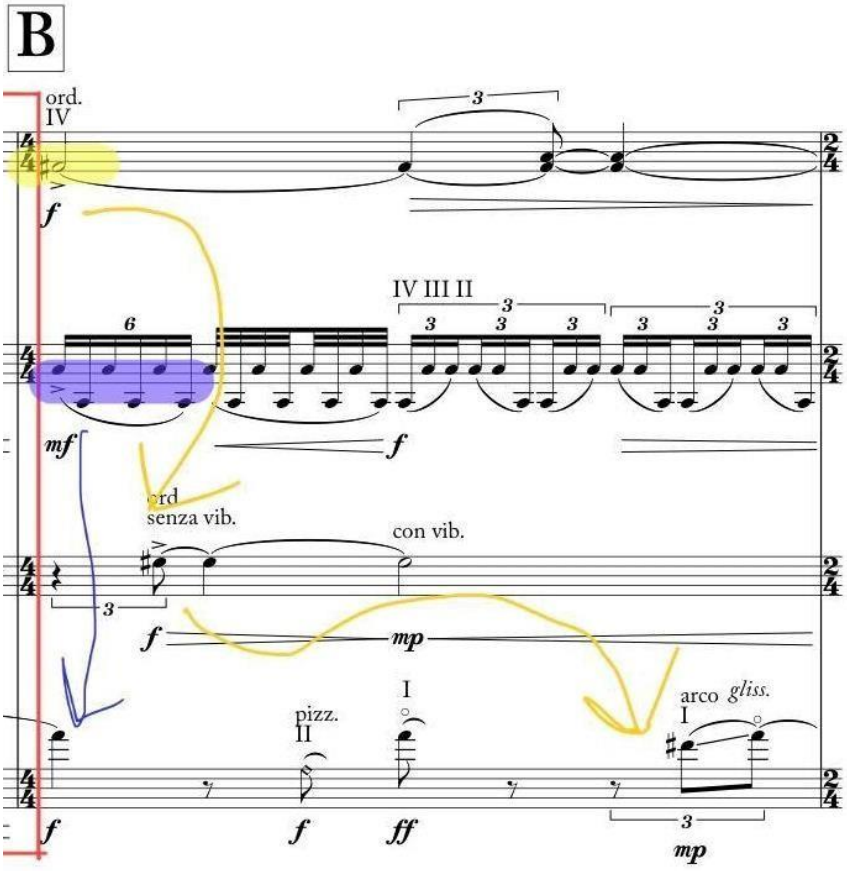



Figure 7.4 Letter B of Pasibutbut

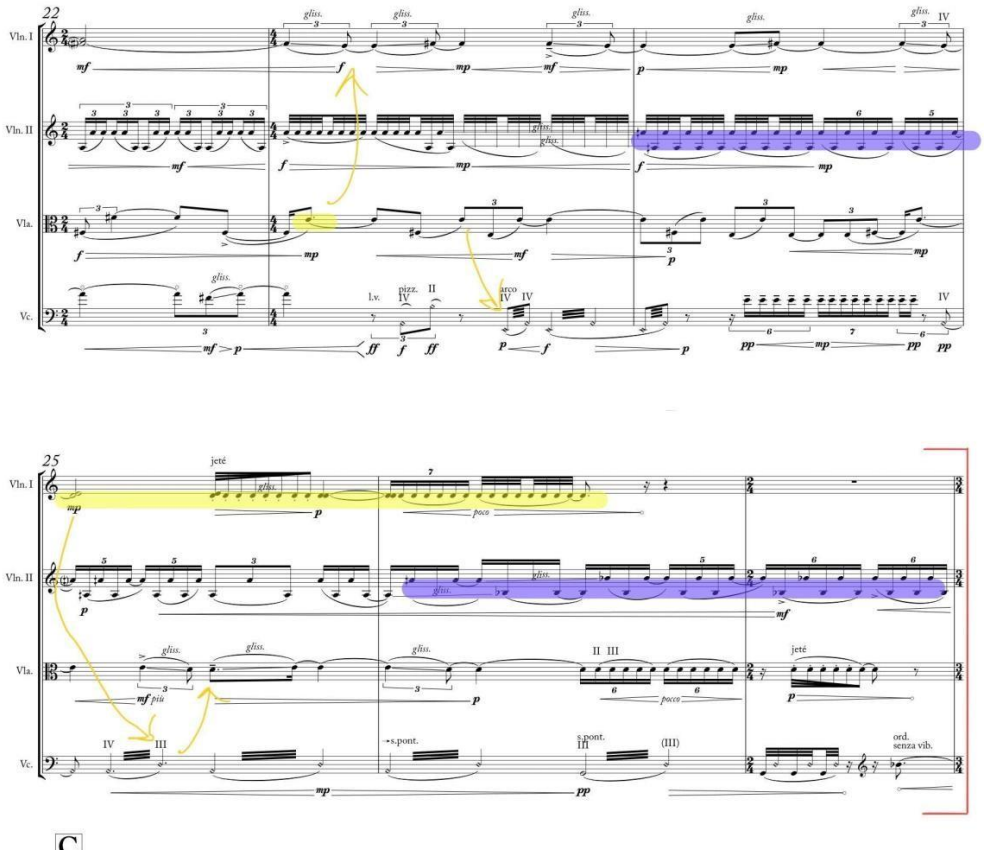



Figure 7.5 Measures 22-27 of Pasibutbut

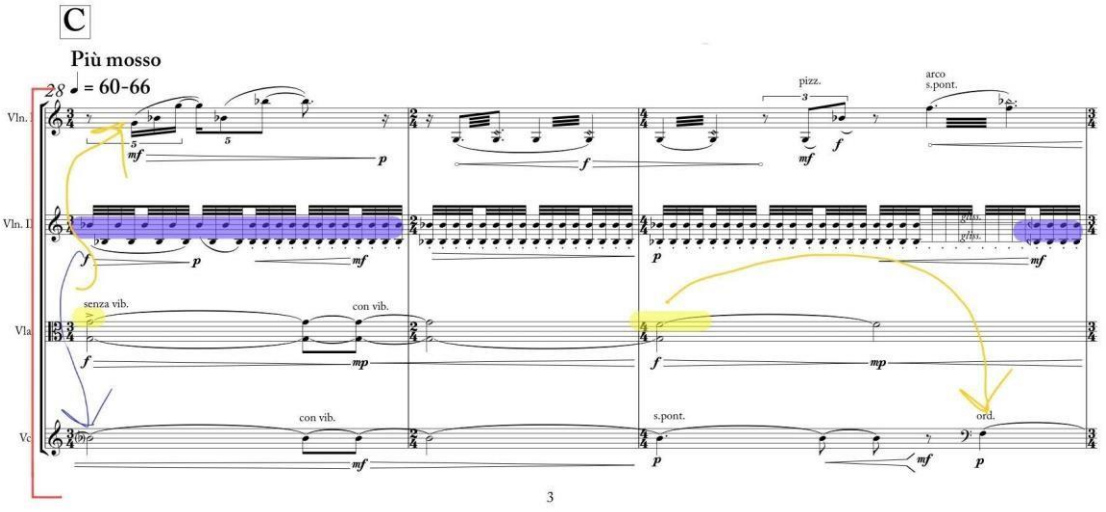



Figure 7.6 Measures 28-30 of Pasibutbut

Then, in measure 28, the rhythmic drive of the bass voice, still in Violin II, begins to increase in speed providing a stronger sense of flow for the other voices. The next descending motif begins in the viola line on the pitch G, with the second pitch of F, heard again in the same voice. The last note of the descending motif, an E♭, is finally heard in the cello, as seen in the figure below. One will also notice that the bass note has now leaped in register as it continues to rise in pitch, creating a heightened sense fervor within the sound world.

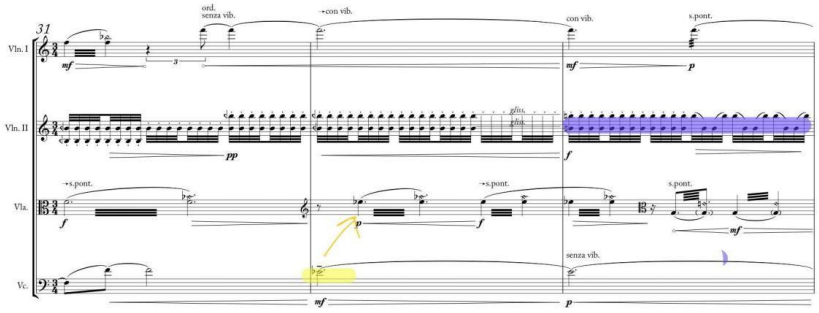



Figure 7.7 Measures 31-33 of Pasibutbut

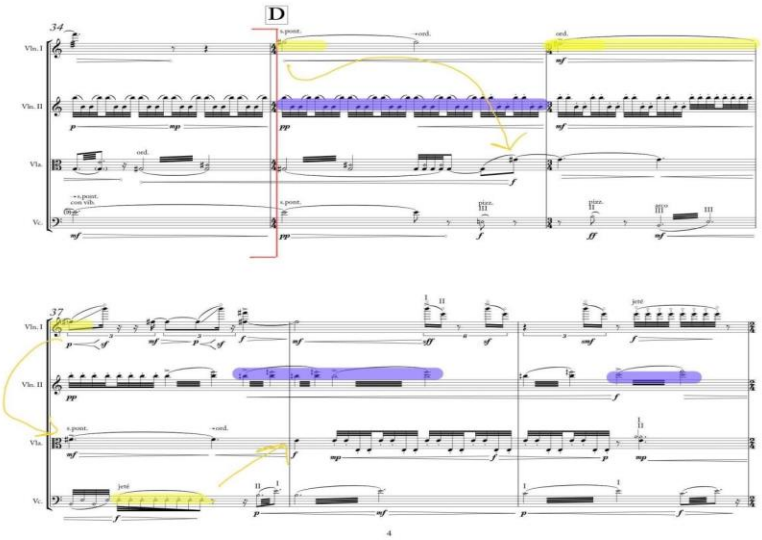



Figure 7.8 Measures 34-39 of Pasibutbut

As Violin II continues to rise and build more excitement by transitioning into tremolo with a shrill timbre, through the usage of false harmonics, the next descending motif begins in the first violin on the pitch of G♯. The third note in the descending motif, which is an E♮ found in the cello, joins the brighter timbres by having it played as a natural harmonic in the cello's line.

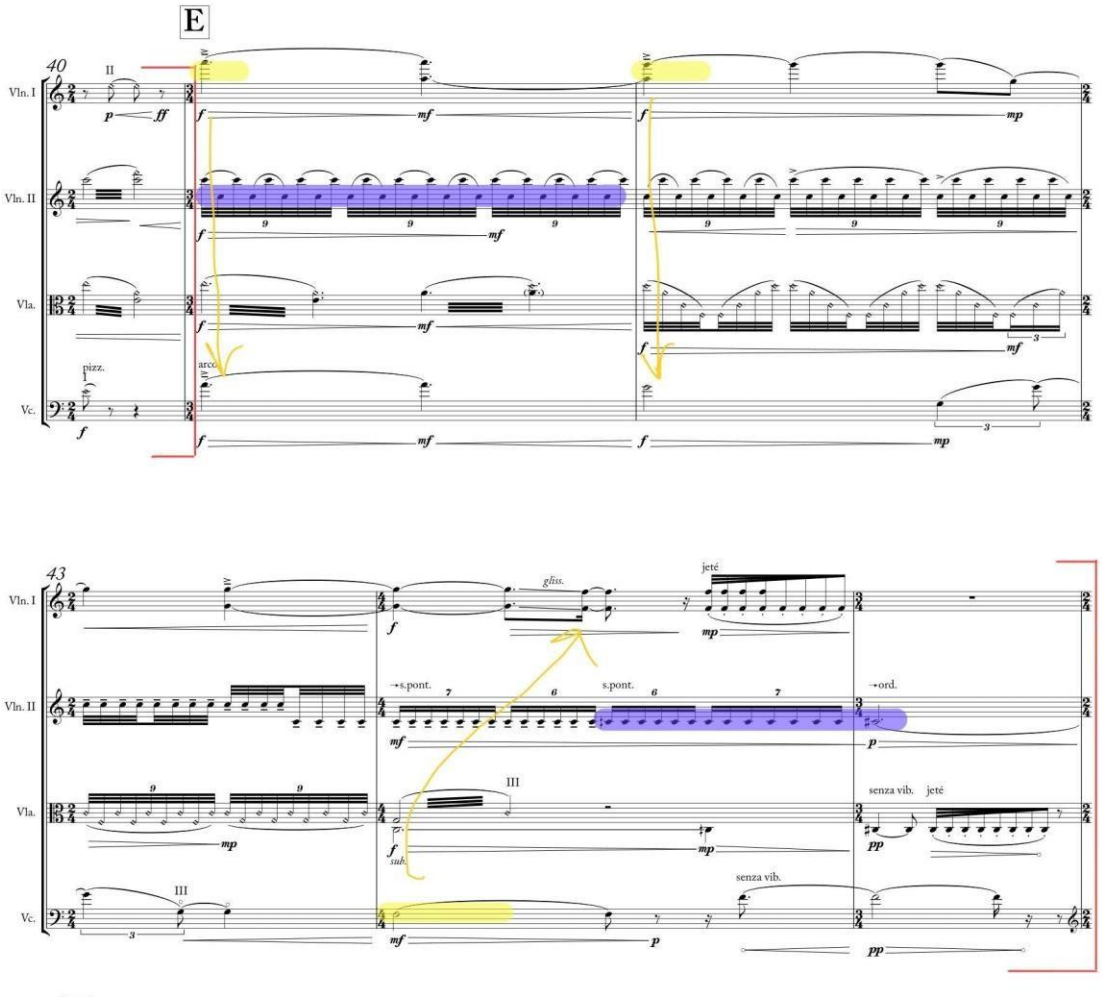



Figure 7.9 Measures 41-45 of Pasibutbut

In the final portion of Part A, it ends on its own high-point with the first violin playing in the highest register while bringing out the next descending motif starting

on the pitch A. In preparation for the next section, Violin II returns to the lower register as it reaches a C♯.

**Part B**

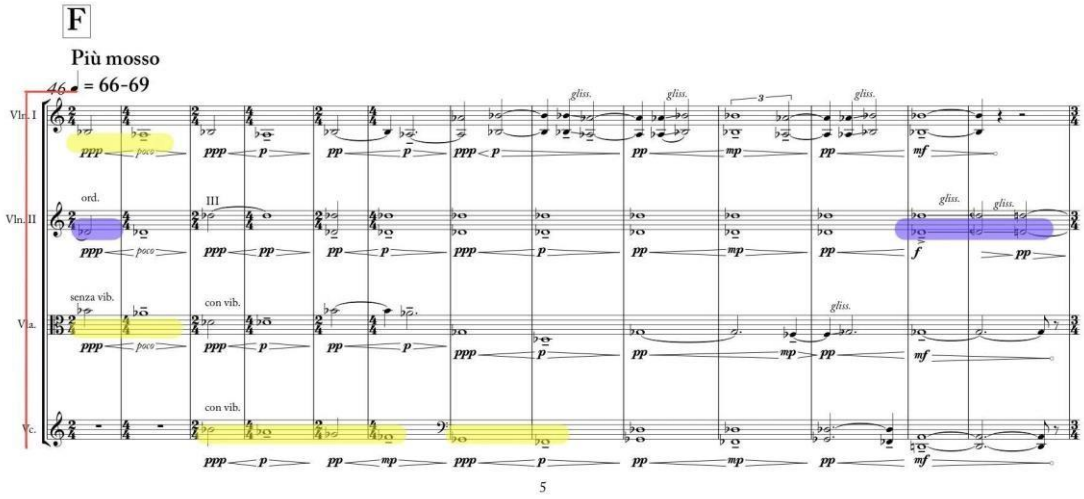



Figure 7.10 Measures 46-58 of Pasibutbut

Part B is characterized by its chorale-like sounds and contrasting flow, in which the more sustained values (whole notes, quarter notes, triplet quarter-notes etc.) inhabit the rhythmic realm. Although the rhythmic pacing of the notes has slowed down, the appearance of the descending motif is much more frequent and the length of that has extended from its typical two or three-note groupings into a six-note grouping, as seen in the cello line from measure 52. In the next figure, one hears two pairs of a three-note descending motif only within the span of nine measures (from measures 59-68) while Violin II continues to rise into an E♮.

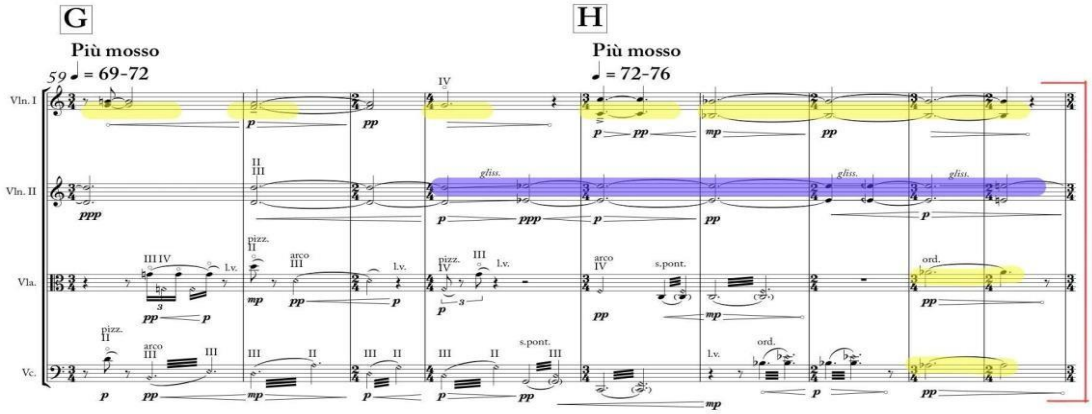



Figure 7.11 Measures 59-67 of Pasibutbut

## Part C

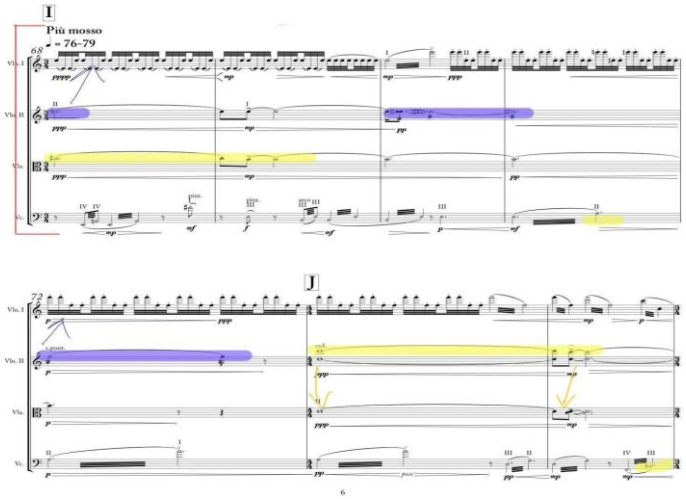



Figure 7.12 Measures 68-74 of Pasibutbut

As we begin the final section of this piece, the bass note is no longer only relegated to Violin II and the rhythmic flow, also often heard and played in Violin II, is now represented in Violin I as well. The descending motifs continue to appear throughout this section with the first note beginning in the Viola on a C♯. The second descending

motif begins together at measure 73 with both inner voices playing the pitches D and C. Once again, to match the bright timbres heard in the inner voices, Lin notates the last note of the descending motif, which is a B♭, as a natural harmonic in the cello line.

**Finale**

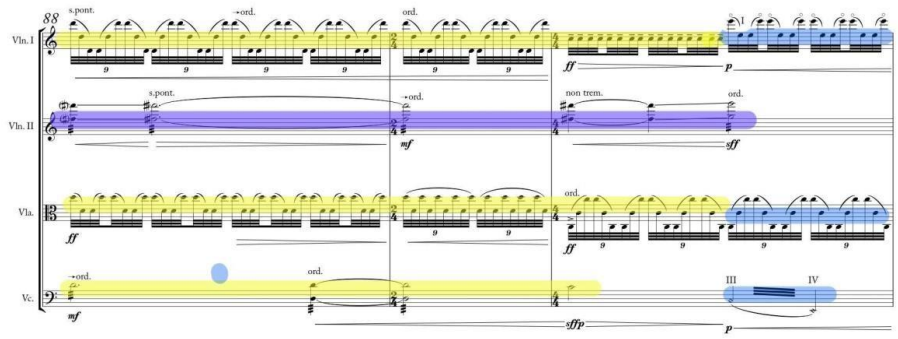



Figure 7.13 Measures 88-90 of Pasibutbut

As we reach the end of the piece, all four voices come together to build a triad on C as the bass note reaches its highest point, as seen in violin II, on the pitch G. Measures 92-93 pays an homage to a fleshed-out C-overtone series in all four voices as it transitions into the triumphant C Major chord in the final bar – the *Maslin*!

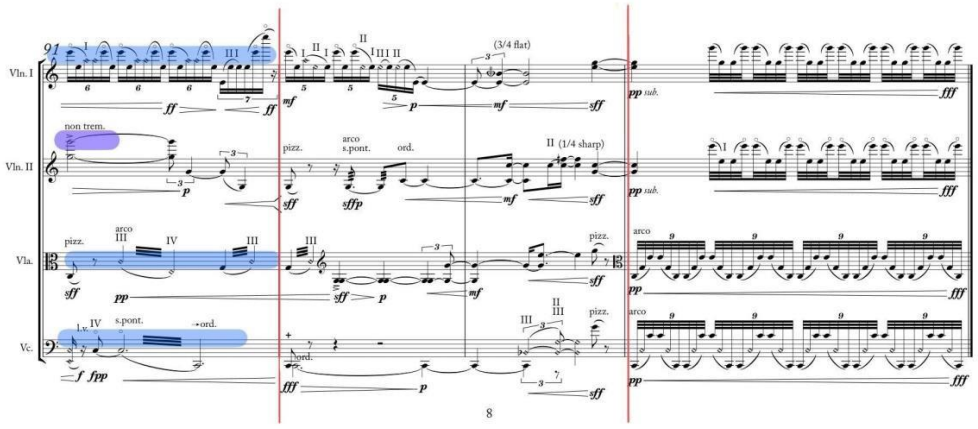



Figure 7.14 Final Three Measures of Pasibutbut

# Chapter 8: Conclusion

In all three pieces, we discover the aural soul of each tribe through a categorizing of intervals, rhythms, and sound structure by further understanding its function in keeping the culture alive. The guidance of the voice within these songs should be understood to further discover how one could pull a similar expressive voice on the violin. The violin has been compared to the voice and so that, in of itself, already forms a meaningful link between the vocal characteristics of the songs and inherent timbral characteristics of the violin.

To briefly elaborate on the relationship between the voice and the violin, a quick reminder of its history might be necessary. The *bel canto*, a branch of Italian opera is a style that is often described in violin-playing. Composers, such as Handel and Mozart, composed melodies in their music that had an affinity for the vocal voice and song. This idea naturally influenced articulation and phrasing within vocal expression and overflowed into instrumental music. Instruments desired to play "songfully" - there was a *bel canto* in the violin. Composers such as Paganini and Spohr were also heavily influenced by that operatic style of singing. Maiko Kawabata, award-winning musicologist and violinist, states that, "along with left hand techniques, violinists paid great attention to the role of the right hand in making the violin sing. They thought of the bow as providing the breath and strove to perfect smooth bowing techniques as avidly as

singers sought to master breath control."[16] Other well-known composers and violinists have also stated the importance of the voice and the violin. Charles Auguste De Beriot, who was a Belgian violinist and composer, mentioned that “the true mission of the violin is to imitate the accents of the human voice, a noble mission that has earned for the violin the glory of being called the king of instruments. Nathan Milstein used to say that "the violinist's dream is to imitate the human voice.”

Italian Baroque violinist and composer, Francesco Geminiani, mentioned in his treatise, *The Art of Playing on the Violin*, that the way to a successful performance was to "give the instrument a tone that shall in a manner rival the most perfect human voice". In fact, there is new research being carried out by the National Taiwan University to explore how the sounds of the Amati and Stradivarius violins mimic the resonances of the human voice. Inspired by Geminiani's writings, Hwan-Ching Tai, Yen-Ping Shen, Jer-Horng Lin and Dai-Ting Chung used speech analysis techniques to delve into the resonances of the violins. The study included two of the oldest instruments that are still in existence today: the 1570 Andrea Amati violin and the 1560 Gasparo da Salo violin. The sounds of 13 other Italian violins, six of those being Stradivari, were compared to the sounds of eight female and eight male singers singing English vowels. The formants, a feature of human voices that are heard when vowels are vocalized, were being looked at and the team discovered that the resonance of the Amati instruments resembled that of a male singing voice and the ones of the Stradivari more closely resembled a tenor and alto voice.[17] As

[16] Kawabata, Maiko. “Violinists ‘Singing’: Paganini, Operatic Voices, and Virtuosity.” Ad Parnassum 5, no. 9 (April 2007).
[17] Tai, Hwan-Ching, et al. “Acoustic Evolution of Old Italian Violins from Amati to Stradivari.” *Proceedings of the National Academy of Sciences*, vol. 115, no. 23, 2018, pp. 5926–5931., https://doi.org/10.1073/pnas.1800666115.

Hwan Ching Tai, one of the researchers, stated that “the early violin was not a solo instrument but an accompaniment to songs and dances. It is conceivable that Andrea Amati may have wanted to build a string instrument that could imitate human voices to blend into such music."

Another concept of violin-playing is the way in which we use physical gesture to evoke musical architecture, phrasing, pacing, atmosphere, and character. When these movements are not a part of 'proper technique', in which specific and necessary movements are required of the body to effectively play the instrument, scientists have defined these movements as ancillary or nontechnical motion. Performers tend to use more amounts of nontechnical motion near phrase endings and moments of rubato - this is something that is consistently found in studies across multiple instruments, including the piano, clarinet, and ensemble performance.

Without taking into consideration the individual variations, studies have shown that there are commonalities between the types of nontechnical motions that performers use while expressing musical phrases. There was a specific study in which all six violinists showed a side-to-side whole-body swaying to be one of the main nontechnical motions in their performance while performing an unaccompanied violin sonata by Heinrich Biber. They became much more frequent near cadential or phrase arrivals in the piece. In a string quartet, Donald Glowinski, neuropsychologist and lecturer who explores the potential of musical performance as a model for understanding emotions and group creativity, discovered that "head and upper body sway" are motions that are "apt to express the phrasing and breathing" of the music interpretation "without being submitted

to the constraints observed for other limbs such as the hands to produce the sound itself".[18]

The first two pieces being analyzed in this dissertation take the idea of movement and physical gesture into a completely different realm in which they do not necessarily only resemble a sense of phrasing and elucidate the structure of the piece, but also pay homage to the musical culture and importance of movement in Taiwanese Aboriginal music. As mentioned before, dance and music are often paired together while the songs are being sung during rituals and festivities in these tribes. To incorporate movements that play such a huge role in this specific musical culture into violinistic playing, brings to life yet another dimension of not only violin-playing, but also musical expression.

Embodying and melding innate musical characteristics of a unique culture originating in Taiwan through the usage of western instruments expands the possibilities of composition, performance, and the overall concept of sound. Although one might hear patterns and timbres that evoke similar characteristics to pieces that are not specifically influenced by these cultural sounds, the artistic intention differs. Not necessarily depicted as art music or complex music but viewed more intimately as pieces that can bring one closer to the essence of Taiwanese Aboriginal music. Each composer intelligently and intuitively uses those similarities to synthesize two worlds into a completely different one – one that provides substantial direction into the culture and its history while presenting refreshing perspectives on the role of the violin today.

[18] Hospelhorn, Emma & Radinsky, Joshua. (2016). A Method for Analyzing Gestural Communication in Musical Groups. Discourse Processes. 10.1080/0163853X.2015.1137183.

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