COMPOSITIONS INSPIRED BY SHOTOKAN KARATE KATAS

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ABSTRACT

This compositional thesis consists of six works inspired by the katas or forms of the Shotokan karate style. A kata is a fixed sequence of karate movements with an embedded natural rhythm. The "Origins of Shotokan" section reviews the history of martial arts in Asia and introduces some of the underlying inspirational elements such as techniques based on animal predatory movements and the kata's unique names.

The "Kata Common Elements" section expands on the meaning and structure of a kata. The traditional documentation of the natural rhythm ignores the move to move time interval. This thesis introduces the use of Western music notation to capture the timing relationships and to explain the kata's natural rhythm. Four composition sections use a melodic line that is influenced by the physical movement of the karate technique. Picture examples are used to clarify the linkage to the melody. The later sections describe the history of the six inspirational katas. The compositional decisions associated with each is described with respect to their origin, kata's name, natural rhythm, orchestration and melodic lines. The musical score accompanies the respective descriptions.

DEDICATION

To my good friend, Glen … a constant reminder that life is short … live it every day.

ACKNOWLEDGEMENTS

I would like to thank my advisors Al Henderson and Matt Vander Woude for their guidance through the thesis process. My early life mentors, Ella Donaldson, Joe Herdman and Gary Tomlin, sparked my musical interests in my youth. I returned to my musical passion for the past 15 years and would like to acknowledge my mentors, Roddy Elias, Steve Koven and Mark Eisenman.

My gratitude goes out to Saeki Sensei who inspired my karate-do for the past 34 years. My parents are much appreciated for instilling the spirit to follow my dreams. Special thanks to my wife and best friend for her support through my endeavours.

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INTRODUCTION

Before discussion of the thesis compositions and concepts, I wish to present a sense of my history to put my efforts into context. I have been a student of Shotokan karate for over three decades and a Sensei (i.e. instructor) for the past decade. This study occurred through affiliation with the Japan Karate Association (i.e. JKA) who are "the keepers of karate's highest tradition" (JKA 2017,1).

A kata is a fixed sequence of karate moves with a "natural rhythm"[1]. From the twenty-five sanctioned JKA katas, six are chosen as the inspirations for these compositions. The sequence is counted by a karate instructor to lead their students in the correct timing with proper vocal inflections to support the type of movement such as fast, slow, powerful, or strong. I learned the counting method[2] aurally through my instructor's guidance. Some additional education occurred by using traditional documentation but these lacked a "move to move" time interval definition.

The presentation of Shotokan martial arts with music is prevalent on media such as Youtube. The posted videos are listed in the VIDEOGRAPHY section and use unoriginal music with rhythms that are not synchronized to the movements.

Other martial arts, such as Chinese Wushu, support music with their forms. The example of Wushu (Merkic, 2011) presented on Youtube uses appropriately timed music. The performance resembles rhythmic gymnastics which tends toward a free style form where the movement is adjusted to align with the rhythm. The traditional Chinese Lion Dance, rooted in the Wushu style of martial arts, is musically accompanied. A literature search reveals many scholarly papers on Wushu and music but written in a Chinese logogram format.

[1] The natural rhythm is defined by aural tradition of Shotokan karate.
[2] The counting method sets the natural rhythm followed by the karate practitioner.

Boxercise is a type of exercise to music but should not be confused with martial arts. Traditional JKA Shotokan excludes music from the performance of kata.

The six compositions presented here are inspired by Shotokan karate katas in many ways. The orchestration is often chosen to reflect the animal origins of a given kata. In some examples, the ambience created sets the scene of fishing by a flowing stream or hunting in an African backdrop to the animals heritage. Some sections use a melodic line that reflects the physical movement of the kata with the natural rhythm that facilitates accompaniment to the kata's execution.

The Kanku Dai composition takes a unique approach in a popular anthem style with vocals, guitar, bass and drums. This composition's intent is to recognize Ginchin Funakoshi, the father of modern karate, who preferred this kata.

This thesis describes the creation of six compositions scores inspired by Shotokan kata movements, as well as, narratives based on the animal origins of the kata's associated fighting styles. In addition, a unique method of using Western music notation is created to define a kata's natural rhythm.

MUSICAL INSPIRATION

Historical Aspects

Creative inspiration and the aesthetics of music are expressed through out recorded history. Music's meaning, and the role in human existence is an ongoing dialogue. Reaching back to the Hellenic period, the word music meant 'the business of the Muses' who were the goddesses of poetic inspiration which included all language and dance. One of Plato's theories stated that music "imitates the sounds of nature and the passing show of temporary feelings." Lucretius in the 1st century B.C. stated that music

> "affords relaxation, distraction in distress, and an outlet for excess energy. No further explanation of musical delight is possible or necessary, and the pretensions of highfalutin theories are merely absurd. (Shapshott 1980, 123)"

The Medieval[3] age dwelled on music as a mathematical science. Toward the end of the period, the beauty and pleasure of polyphony, and counterpoint were recognized as fundamental and a reflection of the known universe. In the late 15th century of the Renaissance[4], the philosophy of music shifted from a mathematical category towards a humanist recognition as a sonorous art form. Zarlino expands and states,

> "the ear is judge. But the ear finds a fundamental contrast between feeling tone … he appeals to experience to testify to a correlation of harmonies with feeling within a single harmonic scheme. (124)"

The Baroque[5] era, returned to one of Plato's scientific theories on analyzing passion and the ways to arouse these feelings. The argument leveraged Descartes' essay from 1649 A.D. to propose that emotions resulted from a combination of psychological factors that follow a strict cause and effect. The emotions include admiration, love, hatred, desire, joy and sorrow (Descarte

[3] 800 to 1400 A.D.
[4] 1400 to 1600 A.D.
[5] 1600 to 1750 A.D.

1649, 94). Mattheson in 1739, expanded on these emotional impacts by defining detailed specifications of the musical techniques, as well as, the association to dance or movement. An example of these emotional rules suggested that large intervals reflects the expansion of the soul or joy and small intervals suggest the contraction or sorrow (Mattheson 1981). Further analysis found the correlation vague and limited that resulted in this 'theory of affections' becoming obsolete. Music's status deteriorated to the lowest art form in this era. Others looked to it as a style of imitation and a language of the heart.

The Enlightment period brought new hope. Diderot disputed the status and claimed music as the highest art form since music is

> "perceived directly and not mediated through interpretations of content, so that music gives imagination more freedom … not exercises in imitation that call for rationalized skill but sources of 'pleasures of the imagination' open to the free play for creative genius."

This position is supported by the philosopher, Kant, who agreed that music is not part of reason but frees the creative mind.

Convergence occurred on the overtone series and equal-tempered systems of sound in the nineteenth century. Tonal compositions looked to tension and release in a dynamic process to express ideas and attract listener's interest. However, atonality lead to the discourse of a new chaotic musical direction.

As described, there is an ongoing evolution of perspective on the aesthetics and value of music. Sparshott states, "aesthetics traffics in interpretation, not information" (Sparshott 1980, 132). For the composer, there is an ongoing need for clarity of procedures to deliver the objective of absolute originality and 'serious' work. The challenge is amplified by the diversity of genres from atonal to classical and popular styles. The quote of "beauty is in the eye of the beholder"

(Hungerford 1878) is this author's preference with the contradictory styles providing a target rich environment for creation.

Inspiration Methods

The compositions of this thesis are inspired by Shotokan karate katas. In some sections, the melodic line follows the shape of the physical kata movement and the beat follows the natural rhythm of the kata. This is described in more detail in the section called Kata Movements and Melody on page 15.

Many of the martial arts were development by Buddhist or Taoist monks who observed the movements of animals and created techniques through the emulation of their motions. Each kata is created from subsets of these martial arts styles and therefore are related to the associated subset of animal movements. The inspiration types for these instrumental compositions include narratives about the animals, atmospheres about their habitats or ambience reflecting the kata's stylistic family[6]. Other influences include the natural rhythm that may suggest a genre[7] or a time signature[8]. Although the Japanese musical culture is rich in expression, this thesis explores other sources of inspiration.

Western music uses emotion and atmosphere as common themes throughout its many eras. In the Baroque period, the Doctrine of Affections is an example that attempted various musical structures to imply a feeling or environment. C.P.E. Bach[9] is known for dramatic expressions that were viewed as true and natural feelings with dynamics of mood.

Debussy's *La Mer* is an example of a tone poem that creates the atmosphere of the sea. The wind and sounds of the waves are projected in various states from calm to violent activity. A

[6] The Shorin family is musically and physically light, similarly the Shorei family is heavy.
[7] Nijushiho and Unsu suggested a second drum line and Latin clave rhythm, respectively.
[8] Bassai Dai's natural rhythm suggested a 5/4 time.
[9] 1714-1788 A.D.

repetitive sequence or ostinato by the string section is used to represent the sounds of the water movement. Frederick Delius in *Summer Night at the River* uses a surging repetitive motif to infer the rivers flow. A similar ostinato technique is used in the Empi Suite on page 48 and 58 to create a flowing stream ambience.

Word painting is a compositional technique that takes a literal approach to the melodic line shape and ambience. For example, lyric about climbing a mountain uses an ascending scale or arpeggios. A section about tragedy is reflected through a dark musical atmosphere. The compositions of this thesis use a similar approach with the melodic line following the physical kata movement and the atmospheres reflecting the light or heavy family[10] of katas.

The Program Music approach is popular in the Romantic period of the 19th century which specialized in rendering of narratives through instrumental music. This style continues in the story telling of today's film industry. The Crane Theme and Leopard Theme in the Empi Suite are members of the narrative approach and tell stories of a hunt.

Composer through the ages looked to the animal kingdom for inspiration. Messiean frequently wrote about birds with works such as *Birds of Japan, Exotic Birds* and *Catalog of Birds*[11]. The avant-garde approach creates motifs suggesting bird calls of many types. Similarly, Ellington's *Sunset and the Mockingbird* uses a distinctive melodic pattern to reflect birdsong. The crane motifs used in the kata compositions are more aligned with word painting since the physical flight of the crane is captured rather than it song.

[10] Shorin or Shorei family
[11] Oiseaux du Japon, Oiseaux Exotiques, and Catalogue d'Oiseaux, respectively

ORIGINS OF SHOTOKAN

There is a long history of martial arts in Asia. Bodhidharma, a monk of the warrior class in India, travelled to China as a Buddhist missionary in 525 A.D.[12] During his extended lectures, students struggled with focus and fatigue. Bodhidharma stated,

> "Although the teachings of the Buddhist Law are meant to nourish you spiritually, in actuality the spirit and the flesh are one. They are not intended to be separated … I see you exhausted in mind and body… From tomorrow, you will rise early and train in the method" (Funakoshi 1988, 20).

He shared a set of exercises called "eighteen hands of the Lo Han" which were developed from watching the movements of animals. These training techniques were the origin of the Shaolin style of Kenpo (21). Several decades later two other martial arts experts, Sang-Jen and Li added 152 other skills, dragon, snake, tiger, crane, monkey and leopard techniques, to create a set of 170 (Frost 1998, 7). Eight distinct systems[13] of weaponless combat were developed by the Honan Shaolin monks.

In 1372 A.D., Chinese martial arts influence came to Okinawa through Chinese expeditions. During this era, King Sato of Okinawa welcomed communication with China's Emperor. A settlement in China's capital of Okinawa people started during the Ming Dynasty (1368-1644 A.D.) which promoted trade, travel, and the sharing of martial arts knowledge. In 1392 A.D., a Chinese community was established in Okinawa which likely contained martial arts experts among them (Frost 1998, 9).

In 1429 A.D., King Hashi Sho unified three Okinawa territories. Trade with Indo-China was promoted and cultural exchange including combat education occurred. During this king's

[12] Confirmed by the records at the Northern Shaolin Monastery in Honan province, China.
[13] The first two were developed during the Sung Dynasty (1127-1279 A.D.), the next four during the Ming Dynasty (1244-1911 A.D.) and the last two during the Ching reign (1644-1911A.D.) (7) (Funakoshi 1988, 20).

reign (1422-1439), common people were banned from carrying weapons which resulted in the advancement of secret weaponless martial arts.

In 1609 A.D., the Satsuma clan from a neighbouring island conquered Okinawa. This began the second weapons ban for the common people but also included the upper class. During the rule of the Satsumas, martial arts were known as Te[14] or Okinawa-te. Inconspicuous farm implements became weapons and training flourished. There was an ongoing sharing of knowledge with China through the many military and political delegation expeditions. All fighting technique and historical knowledge was passed by word of mouth with a self-imposed ban on written records to maintain secrecy from the ruling Satsuma.

The secrecy continued until late in the 19th century. The excellent physical development of martial arts practitioners was noticed during military medical exams around the turn of the century in Okinawa. Consequently, the Prefectural Commissioner of Education asked Funakoshi's mentor, Master Itosu, for a demonstration to a meeting of school principals. This resulted in karate's inclusion in the public-school curriculum in 1901 (Funakoshi 1988, 25) and the military's officer candidate program.

Ginchin Funakoshi is considered the father of modern karate. His life work was instrumental in bringing karate into the school systems, introduction to the Japanese mainland and promotion of karate throughout the world.

In 1922, Japan's Ministry of Education sponsored the first Athletic Exhibition. Funakoshi was invited for the first karate demonstration in Japan and subsequently established his dojo (i.e. gym) there. The Shotokan term is Funakoshi's poetry pen name combined with kan or hall which was used to name the dojo and later expanded to name the karate style. This translates as "the hall

[14] The three cities of southern Okinawa, Shuri, Naha, and Tomari became the centers of Te development with three fighting styles called Shuri-te, Naha-te and Tomari-te.

of the waving pines[15]". In addition, he taught at various universities throughout Japan, was a founding member of the Japan Karate Association (i.e. JKA) and authored many karate books as the veil of secrecy was lifted in the early twentieth century. Funakoshi was fundamental in introducing Okinawan martial arts to mainland Japan. Through his efforts, Shotokan expanded and became the most recognized karate style.

In 1949, the JKA was formed. Funakoshi, at age 80, became the emeritus chief instructor with Masatoshi Nakayama designated as the chief instructor (Braglia p170). The JKA is now active in over 100 countries globally with the mandate of preserving the soul and spirit of karate-do[16].

KATA COMMON ELEMENTS

Purpose and Description

Kata is a pattern of movements consisting of blocks, punches, strikes and kicks in a fixed order or sequence. The training process enables the karateka to strengthen the goal of "tempering and disciplining oneself" (Funakoshi 1973, 9). Practice is both a spiritual and physical activity (Nakayama 1987, 12) that builds the mind, body and spirit.

Shotokan katas are divided into two groupings. The first, Shorin-ryu, is characterized by light quick movements with the purpose of developing fast reflexes and agility (Nakayama 1987, 12). The second, Shorei-ryu, uses strong and powerful actions that improve physical conditioning through repetition. A set of six katas are chosen from these two categories as shown in Table 1, for inspiration in this thesis. Light timbres are captured in the Shorin-ryu style of compositions and heavy timbres in the Shorei-ryu.

[15] Shotokan name was chosen by his students
[16] This translates as "the way of the empty hand".

Table 1: Kata Type Classification

Kata	Shorin-ryu (light and quick)	Shorei-ryu (strength and power)
Bassai Dai		✓
Kanku Dai	✓	
Empi	✓	
Jion		✓
Nijushiho		✓
Unsu	✓	✓

Katas are organized to develop a karateka's[17] skills in a systematic process[18]. Each kata begins with a bow. From this point to the finishing bow, the karateka is in a heightened state of alertness called ki (Schlatt 1996, 150). The first movement of any kata is a block and follows Funakoshi's principle that "there is no first strike in Karate" (Braglia 2015, 552). Karate is intended as a defensive martial art

There are many fundamental characteristics of all katas. An exact sequence of moves is required for all forms. Each follows a performance line called the embusen which follows a specific shape. For example, the Jion kata line as seen from a bird's-eye view creates the shape of a capital H. The kata begins and ends at the same location.

To create the proper focus, the karateka must understand the meaning of each movement with respect to its application or bunkai (Schlatt 1996, 16). For example, moves 18 and 19 of Bassai Dai consist of a grasping block followed by a double pull of the opponent's arm and a

[17] Karate practitioner
[18] The first four katas from

Table *1* are used as part of the test requirements of a first-degree black belt (i.e. Shodan) exam (Powel 2016, 1). They are often used for screening in the first round of a black belt level tournament. The last two katas are much more difficult and directed towards the more advanced black belt levels.

downward side thrust kick laterally to the opponent's knee (Nakayama 1979, 64). The practitioner must be mindful of the target of each move[19].

Proper breathing is essential to focus the karateka's energy and create the correct kamae (i.e. focus) on completion of a move. All selected katas use two kiai focal points which are also emphasized in the compositions through a climax using dynamic expression and increased register. Finally, the appropriate rhythm is required to deliver the correct amount of power and speed (i.e. fast or slow), as well as, the proper expansion and contraction of muscles (Nakayama 1979, 13).

Kata Rhythm Charts

Kata rhythm is a fundamental and critical element of a katas performance. Nakayama Sensei states,

> "We have been taught since early times that the three most important elements in kata performance are the application of strength at the correct time, the control of speed in techniques and from technique to technique, and the smooth transition of the body from one technique to the next. These requirements cannot be fulfilled without rhythm. The kata performance of a person advanced in karate is powerful, rhythmical and consequently beautiful." (Nakayama 1966, 17)

With respect to any kata's rhythm, Nakayama Sensei states,

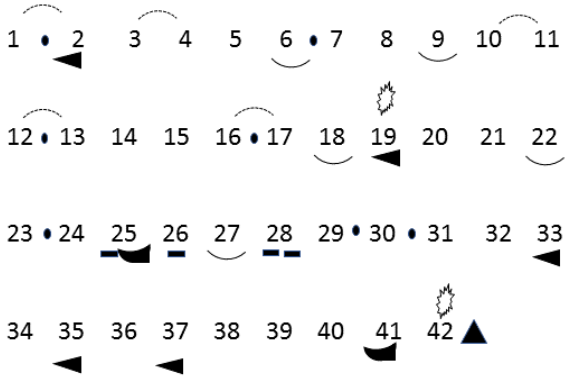
> "the rhythm evident in the movements of athletes is more complicated than and cannot be expressed in terms of, musical rhythm … Rhythm is especially necessary in the performance of formal exercise, kata" (Nakayama 1966, 17).

Western music notation is a potential method to define this important natural kata rhythm. Figure 1 is an example of traditional documentation to capture the characteristics for Bassai Dai's movements (Nakayama 1979, 14) but lacks a definition of time interval between the numbered movements. Similar traditional rhythm charts are available for each of the selected katas as

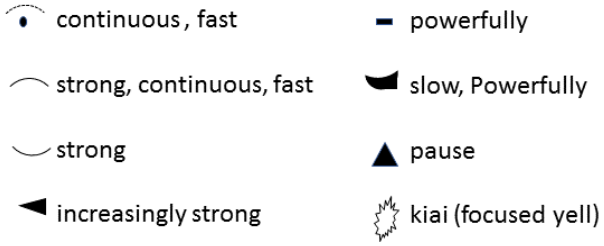
[19] Examples of targets are face level (i.e. jodan), pressure point, solar plexus (i.e. chudan) attack or groin strike (i.e. gedan)

follows, Bassai Dai and Kanku Dai (Nakayama 1979, 14), Empi (Nakayama 1981a, 14), Jion (Nakayama 1981b, 14), Nijushiho and Unsu (Nakayama 1987, 14). A karate instructor leads his student by counting each movement aloud. The count emphasizes the kata's natural rhythm with vocal inflections to encourage the movement's performance characteristics that are identified in Figure 1's Key for Movement Characteristics. The JKA expects global consistency of the natural rhythms within the bounds of feasibility associated with aural transmission.

Figure 1: Bassai Dai Rhythm Chart

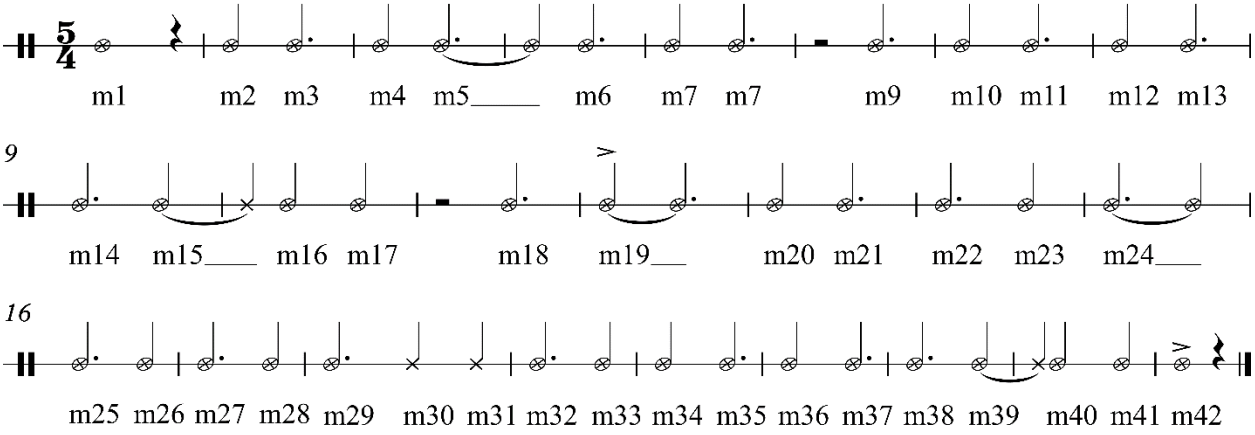


Key for Movement Characteristics



The time interval from one numbered move to the next is not equal as suggested by Figure 1 but is varied. The author created the kata, Bassai Dai's natural rhythm chart in Figure 2, using Western music notation that defines the time interval between each of the forty-two moves.

Figure 2: Bassai Dai Natural Rhythm Chart



Also created are original Western rhythm charts for the other three compositions which use kata natural rhythms is this thesis. These are identified in column two of Table 2. Column four indicates the instrument which follows the natural rhythm of the kata in the composition listed in column one. Column three indicates the section of the composition where the melody reflects the physical movement of the kata. This relationship is described in the section called "Kata Movements and Melody".

Table 2: Compositions using the Kata's Rhythm and Physical Movements Melodic Motifs

Composition	Rhythm Chart Figure Number	Sections Using Rhythm Chart and Melody related to Physical Movements	Instrument Following the Natural Rhythm
Bassai Dai	Figure 2	Section B	organ
Kanku Dai	n/a	n/a	n/a
Empi Exposition	n/a	n/a	n/a
Empi Development	n/a	n/a	n/a
Empi Recapitulation	Figure 12	Section A	piano (treble clef only)
Jion Prelude	n/a	n/a	n/a
Jion Overture	Figure 20	Section B	timpani
Nijushiho	n/a	n/a	n/a
Unsu	Figure 24	Section B	Double bass

A time signature was chosen for each of the selected katas. In some cases, it assists with creating the musical ambience themes shown in column three of Table 3.

Table 3: Overview of Composition's Time Signatures and Musical Ambience

Composition	Time Signature	Musical Ambience
Bassai Dai	5/4	heavy groove for penetrating the fortress
Kanku Dai	4/4	pop anthem for Funakoshi's favourite
Empi Exposition	6/8	birds flying and water flowing
Empi Development	6/8	big cat hunting in the African environment
Empi Recapitulation	6/8	Bird swooping, water flowing
Jion Prelude	4/4	Zen Meditation
Jion Overture	4/4	Buddhist Temple with oriental pentatonics
Nijushiho	4/4	Playful monkeys, second drum line rhythm
Unsu	4/4	Dancing clouds with Latin quality

The note values selected create the natural kata rhythms within the composition. The instant the note is struck represents the moment of focus[20] in the movement. The time interval until the next note is struck is divided between the time the current moment is held and the physical movement leading to the next focal point.

The tempo of each composition is chosen to align with the target musical ambience listed in column 3, of Table 3. The tempo may be too fast or slow to act as background music for the kata's execution. The relative interval between beats of the natural rhythm are chosen so that scaling of the tempo would enable accompaniment with kata execution. Some rhythmic liberties are taken to support the musicality such as adding rests to enable the music to breath. These rest periods are frequently chosen where the kata could also pause before proceeding to the next move such as after a climatic focal point called kiai. The compositions are inspired by Shotokan katas. However, decisions on strict adherence to the kata natural rhythm or melodic shaping play a secondary role to creating inspirational music.

[20] called kamai.

Kata Movements and Melody

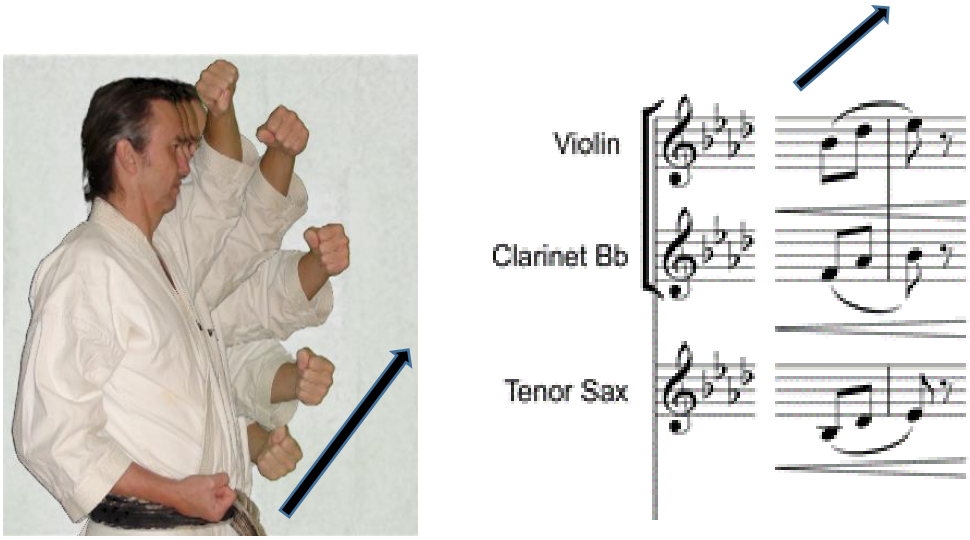
As shown in column two, four of the compositions use melodic lines that relate to the physical movement of the respective katas. The melodic motif shapes are chosen to reflect the physical shape or direction of the motion. Table 4 provides examples of the relationship between the physical movement and melodic line.

Table 4: Karate Movements versus Melodic Motif Examples

Movement examples	Japanese Movement Name	Melodic line description
rising face block	age-uke (Schlatt 1996, 98)	rising melodic line or arpeggio
downward block	gedan barai (102)	falling melodic line or arpeggio
knife hand block	shoto-uke (125)	falling then rising melodic line
front kick	Mae-geri (92)	rising melodic line or arpeggio
punch	zuki (66)	horizontal melodic line
two of block, kick, or punch simultaneously	uke (98), keri (87), tsuki (60)	dual melodic lines, similar or contrary motion dependent on moves direction.

The following figures are a set of typical kata moves with an example of an associated melodic line.

Figure 3: Rising Face Block and Rising Melody



The rising face block is executed by the author using time lapse photography. As an example, this motion occurs in the Unsu kata as movement forty-seven. The representative musical

excerpt is from the *Unsu* or *Hands in the Clouds* score at bars B30. Movement numbers are highlighted in the score using the nomenclature of "mxy" where m stands for the movement and xy the number of the movement. In this case, m47 is the forty-seventh movement of the Unsu kata. The violin, clarinet and sax follow a three-note rising melody. The pitch range of a perfect fourth reflects the vertical distance of the physical movement.

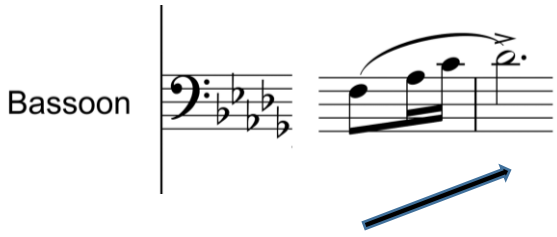
Figure 4: Downward Block and Descending melody

The downward block demonstrated in Figure 4 occurs in the Jion kata at movement twenty-two. The musical excerpt is from the *Jion* or *Mercy and Benevolence* score at bar B9 and labelled m22. The clarinet follows a four-note descending melody with a minor sixth from first to last note. This pitch range reflects the longer vertical distance of the movement.

Figure 5: Knife Hand Block and Descending/Ascending Melody

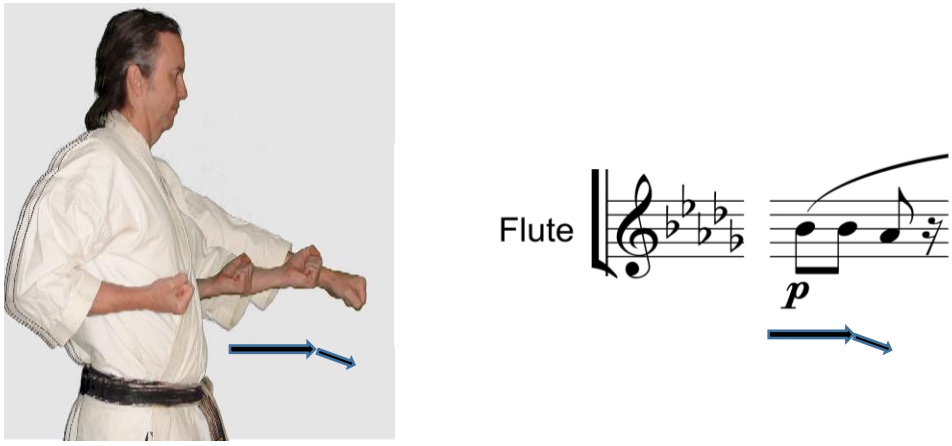
The knife hand block (i.e. shoto) is shown in Figure 5. As an example, this motion occurs in the Empi kata at movement twenty-one. The musical excerpt is from the *Empi Recapitulation* score, Figure 18, at bar A14 and labeled m21. The clarinet follows a descending melody followed by a four-note ascent. The final pitch is the same as the beginning since the physical movement is horizontal. The melody shape reflects the shape of the bent arm movement which is highlighted by the arrows.

Figure 6: Front Kick and Ascending Melody



A front kick (i.e. mae geri) is shown in Figure 6. As an example, this leg motion occurs in the Jion kata at movement 3. The musical excerpt is from the *Jion Overture* score in bar B3 and labelled m3. The bassoon follows a four-note ascending melody. The interval from the first to last note is a minor sixth which reflects the physical moments range of vertical height. The stance and upper body position differ in the Jion kata from the position in Figure 6. However, the kicking motion is accurate to show the relationship to the melody.

Figure 7: Punch and Horizontal Melody



The punch or zuki (Schlatt 1996, 66) begins with the fist position beside the body with the forearm parallel to the ground. As an example, this punching motion occurs in the Jion kata at movement thirty-nine. The musical excerpt in Figure 7 is from the *Jion Overture* score at bar B20 and labelled m39. The flute follows a two-note repeating pattern followed by a perfect second descent which reflects the horizontal movement of the punch.

Figure 8: Simultaneous Blocks and Contrary Motion Melodies

This excerpt is a musical representation of moves thirty-one, thirty-two, and thirty-three from the *Empi Recapitulation* score at bar A21 and labeled m31, m32, and m33. The contrary motion melodic lines of the violin and clarinet represent the contrary blocking arm motions of the kata. In m31, the left open palm is pushing vertically downward while the right open palm is pressing vertically upward[21]. In m32, the hand roles reverse and again reverse for m32. Similarly, the melody uses contrary motion which builds in register and dynamics to the kiai climax at m36.

[21] The Japanese expression for the upward motion is teisho chudan oshi-age-uke (Nakahama 1981, 128) that means palm heel, stomach level, pressing, rising block. The downward motion is teisho gedan osae-uke that means palm heel, groin level, pushing block.

COMPOSITIONS

Bassai Dai – Penetrating the Fortress

Origins

The martial arts mimic the movement of many creatures including the tiger, crane, leopard, snake, dragon, monkey, mantis, bear and many others. The two katas wherefrom Bassai Dai is derived arrived in Shimabuku, Okinawa over four centuries ago. These forms came primarily from the fighting styles of the lion and leopard with more recent contributions from the crane and snake methods. The two original forms were modernized, combined and rename to Bassai Dai which translates to "penetrating the fortress" (Funakoshi 1973, 36).

The lion is considered the king of beasts. It hunts in packs with no natural preditors other than mankind. It is considered a symbol of courage, pride and self-assurance. The fighting style is known for strength, power and blocking ability. In China, the lion is revered. The lion dance is derived from the martial arts and is part of their cultural celebration for each New Year.

The leopard is the smallest of the big cats. Its characteristics are agility, stealth and camouflage. As a predator, they are known for their cunning, hit and run strategy. The fighting style is known for explosiveness using elbow strikes, knee strikes and low kicks.

The crane is a large water fowl with long legs and beak. It is known for its patient fishing techniques with its quick long peak to pierce the prey. The fighting style is similarly known for its patient attacks using accurate strikes to vital pressure points. The cranes beak corresponds to various hand and fingertip positions for precise attacks. The style is noted for large circular movements.

The snake is considered one of the most dangerous animals. It combines camouflage with a rapid striking ability. The fighting style is known for calm demeanor and hypnotic movements

and uses precise strikes to vital points of the opponent. A common technique is an open hand jab[22] to vulnerable targets like eyes, throat, groin or inside of legs or arms. The movements are soft sinuous and flowing. The leg attacks include roundhouse kicks, sweeps, jumps, slipping circular steps and zig-zag steps. Some practitioners are known to hiss.

The kata shares the characteristics from these four creatures described above. Once a karate practitioner masters the basics, Bassai Dai is an appropriate next step[23]. Nakayama, the leader of the Japan Karate Association for many decades, describes this kata:

> "learn to use opposites: composure and agility, strength and change, fast and slow techniques, light and heavy applications of strength … it must be full of vitality, but if it does not have imposing dignity, its special characteristics will not come out". (Braglia 2015, 254)

Funakoshi, the founder of Shotokan, comments on the determined state of mind required:

> "this form contains repeated arm deflections and blocks, movements that bear the feeling of moving from a position of disadvantage to strength, a situation that implies a willingness … that is required to penetrate within the fortress of the enemy" (Braglia 2015, 251).

Composition Description

The composition is structured as an ABA form in 5/4 time as shown in Figure 9. The piece uses Dorian modes (Levine 1995, 36). The instrumentation is chosen to reflect the four creature types as shown in

Table 5. The lion, which hunts in packs, is represented by the close voicings of the organ chords (Sussman 2012, 91). The shaker and bongos provide an African environment suitable for the big cats. The synthesized brass with its threatening timbre is chosen for the leopard.

[22] called nukite
[23] It is commonly used as part of the examination to achieve the first level (i.e. shodan) of black belt (Powel 2016, 1).

Table 5: Bassai Dai Orchestration

Fighting Style	Instrument
lion	organ
snake	sitar/piano
crane	flute
leopard	synth brass

The A section's repetitive piano part reflects the hypnotic movement of the snake and a sense of vitality. This section begins in Fm7 dorian and resolves at bar A7, A15 and A23 to Eb. The snake (i.e. sitar) and crane (i.e. pan flute) work harmoniously in bars A9 through A24 and uses call and response in A21 through A23. This can be compared to the complimentary kata movements of the karateka[24] when executing the snake and crane movement components. The Eb7 in A23 is used as a tritone substitute (Sussman 2012, 85) to move to D7 in A24 which acts as V7 dominant chord to modulate at the Interlude Gm Dorian.

Interlude one introduces section B with a majestic and dignified form. The bass line grows in complexity throughout this section to add tension. The section begins by changing the rhythm instrumentation from bongos and piano to drums and organ. This creates a more imposing feeling consistent with the title "Penetrating the Fortress". The shape of the melody in this section reflects the movements of the kata as described in the earlier "Kata Movements and Melody" section.

The organ's rhythm reflects the rhythm of the kata as shown in Figure 2. The kata consists of 42 positions or moves. The moves are numbered (Nakayama 1979, 16) as m1 to m42, as shown in Figure 2 and Figure 9. The organ four note chords reflect the lions hunting in packs. The leopard's agile aggressive character is highlighted in the synth solo melody. Bars B1 to B12 build to a climax at B12 where the kata also peaks with a kiai (i.e. yell on attack) on move 19 (i.e. m19).

[24] karate practitioner

To build tension, section B modulates from Gm to Am dorian at bar B13. Bars B19 to B24 build in volume to reflect kata's increasing tension to the kiai on move 42 (i.e. m42) in bar B24.

C section modulates back to F minor Dorian mode and opens with a four bar rhythm section intro. The C section is a restatement of A but bars C23 goes to V7 of Fm6 and resolves to Fm6 in C24 to finish the composition.

Figure 9: Bassai Dai Score


A5
Pan Flute
Sitar
Keys
Shk.
Bongos
mp
Eb
mp
2
4
A9
Pan Flute
Sitar
Keys
Shk.
Bongos
Fm7
mp
2
4
A13
Pan Flute
Sitar
Keys
Shk.
Bongos
Eb
2
4


A17
Pan Flute
Sitar
Keys
Shk.
Bongos
mf
Fm7
mf
2
4
A21
Pan Flute
Sitar
Keys
Shk.
Bongos
f
2
Eb7
D7
4
Interlude I
Pan Flute
Sitar
Keys
Electric Bass
Shk.
Bongos
Gm7
mf
switch to organ voice
Synth brass voice
mf
behind the beat
mf
4


B
Gm
organ voice
Keys
m1(kata movement #s)
m2
m3
m4
m5
m6
mp
Synth brass voice
mp
Electric Bass
Drum set
mp
B5
Keys
m7
m8
m9
m10
m11
m12
m13
p
Electric Bass
Drum set
B9
Keys
m14
m15
m16
m17
m18
m19
f
Electric Bass
f
Drum set


B13 Am
Keys
Electric Bass
Drum set
m20
m21
m22
m23
m24
m25
m26
mp
mf
B17
m27
m28
m29
m30
m31
m32
m33
m34
m35
f
mp
B21
m36
m37
m38
m39
m40
m41
m42
ff


Interlude II
Pan Flute
Sitar
Keys
Electric Bass
Shk.
Bongos
switch to electric piano voice
C
Fm7
electric piano voice
C5
Eb


C9
Pan Flute
Sitar
Fm7
Keys
2
Electric Bass
Shk.
4
Bongos
C13
Pan Flute
Sitar
Eb
Keys
2
Electric Bass
Shk.
4
Bongos
C17
Pan Flute
mf
Sitar
Fm7
mf
Keys
2
Electric Bass
Shk.
4
Bongos


C21
Pan Flute
Sitar
Keys
2
Electric Bass
Shk.
Bongos
C23
rit.
f
f
C7
Fm6

Kanku Dai – Looking at the Sky

Origins

The origins of this kata trace back to the Taoist monasteries in the Emei Mountain area of China[25]. The kata movements began as part of the dragon fighting style which was kept as a secret by the Taoist schools for centuries. The style emphasize breathing, a proper degree of muscle tension, control of emotion and proper mental attitude or spirit (Braglia 2015, 474). For the practitioner, the emphasizes is on inner growth rather than combat. The fighting style is characterized by dives to the ground, quick counters, fast changes of direction, and hypnotic movements, as well as, a strong spirit.

This kata was brought to Okinawa in 1756 by Ku Shanku (Funakoshi 1973, 36) who was head of the security delegation that were sent to crown the new king. His expertise came through study of martial arts at a Shaolin monastery and later learned the dragon style at a Taoist monastery. Kushanku preferred to end his military career and continue in martial arts studies but was circumvented by the Qing Court who ordered his return to active duty under the threat of the penalty of death. His punishment for initially ignoring the requests to return was an extended assignment to Okinawa. Historians speculate that his revenge was to teach the secret martial arts techniques to some of the natives who became the local masters. This kata was originally named Ku Shanku which means honourable marshal.

Funakoshi, through his modernization process, renamed the kata, “Kanku Dai”. The direct translation is “to look at the sky” (Funakoshi 1973, 36). Funakoshi, also a Zen practitioner, provided further explanation of the kata’s origin with the statement of "observe the emptiness external to us, to fully understand our own essence" (Braglia 2015, 274). The ideograms or

[25] In modern times, this is a sacred region of Buddhism.

symbols to write Kanku Dai are also used by Buddhist doctrine to describe the mental state of emptiness that leads to a higher state of being. The similar Japanese martial arts term is mushin which directly translates to "no mind" or "mind without mind" (Frederic 2006). In the absence distracting thought such as anger or fear the person acts or reacts without hesitation. This is a powerful mental state used in combat.

Kanku Dai was a favourite kata of Funakoshi. Nakayama notes that "It is the kata that Ginchin Funakoshi most liked to see performed." This kata was used at many demonstrations for dignitaries. The kata was performed in Tokyo in 1922 for a demonstration sponsored by the ministry of physical education, as an early step in the process of bringing karate education from Okinawa to mainland Japan. It belongs to the Shorin-ryu family of Shotokan katas (Braglia 2015, 268) which are characterized by light, quick movements.

The kata demonstrates methods to neutralize attacks from four directions. Whereas Bassai Dai defends a region, Kanku Dai is complimentary to expand the region with spiral and circular movements (Braglia 2015, 275). It consists of evasive techniques, fluid blocks, double punches, disruptive kicks, claw-like techniques and sweeping motions.

The kata was named for its first movement where the karateka (ie. practitioner) with hands touching in front, raises them over head and creates a sweeping motion to left and right while looking to the sky. This move[26] historically is from the Taoist school and "means to collect external energy to harmonize the relevant flow with the internal energy by raising one's consciousness" (Braglia 2015, 280).

[26] This is thought to provide the "function of properly aligning locomotive apparatus while the mind is calmed with a deep breath." This apparatus is the four coupled systems which are skeletal-articular and muscular-fascial.

Composition Description

The lyrics reflect the Zen ideas of the kata. Unlike many of the other compositions in this thesis, it does not attempt to use the inherent rhythm or physical movements for inspiration. Since this was Funakoshi's favourite kata, a pop anthem song style is used.

Through the lyrics, the concept of inner peace through martial arts is expressed. The first verse expresses the magnitude of looking at the sky and imaging one's insignificance in the bigger picture. The second verse conveys the clearness of mind and listening to the world around us. The third discloses the positive sense of well-being that comes through martial arts training with the chorus expressing that this must be the true meaning of Kanku Dai. The verse and chorus follow the same structure with the second and fourth lines rhyming.

Figure 10 Kanku Dai: Lyrics

I'm gazing to the heavens,
Looking at the sky
In the stillness of the moment
Time is passing by

Searching for mushin
The emptiness to seek
The mysteries of eastern ways
Will the skies speak

Chorus:
Searching, Seeking
Looking at the sky
Breathing, Feeling
Could this be Kanku Dai

The inner consciousness
Moving without fear
finding inner peace
The energy is here

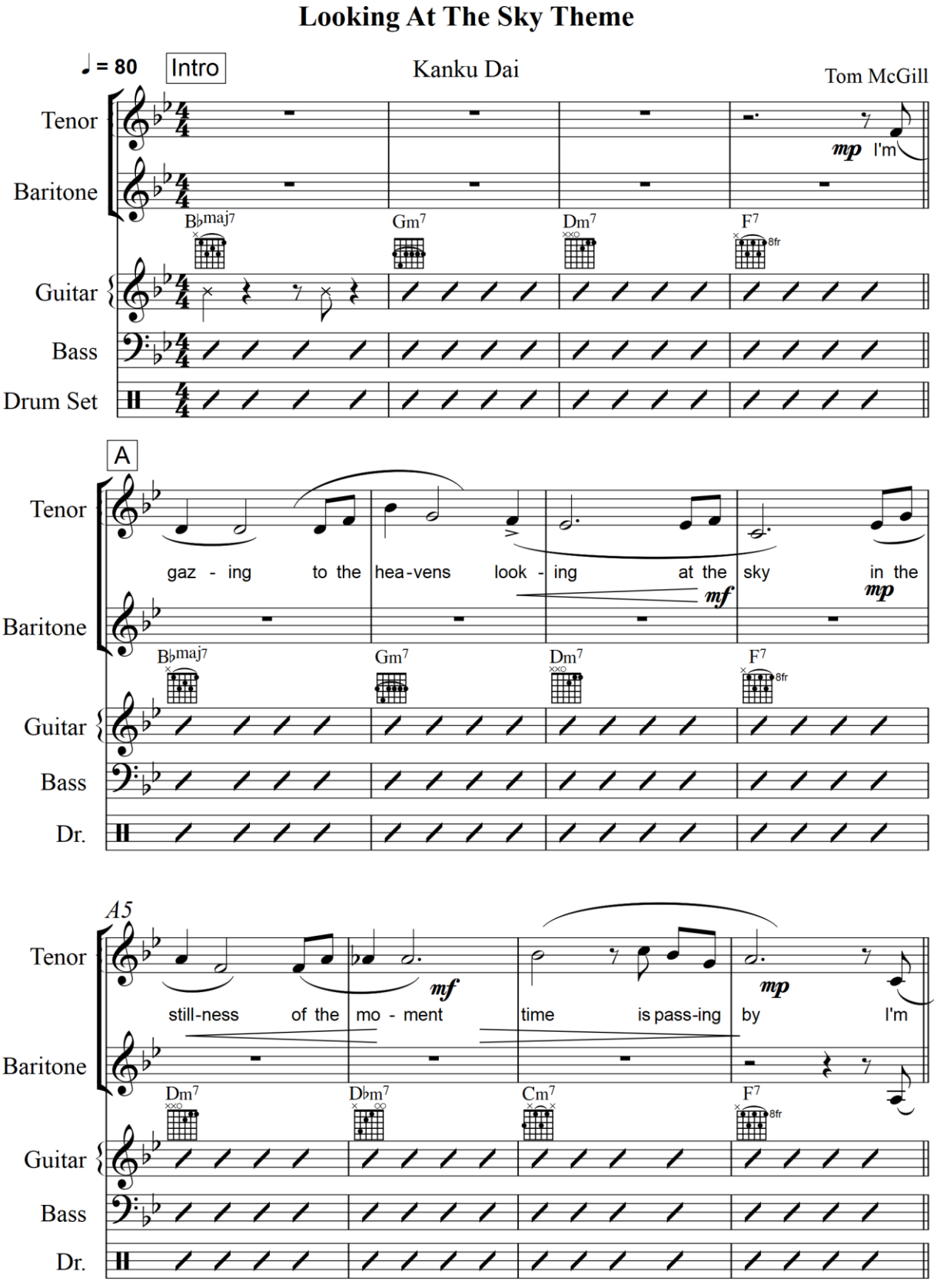
repeat Chorus

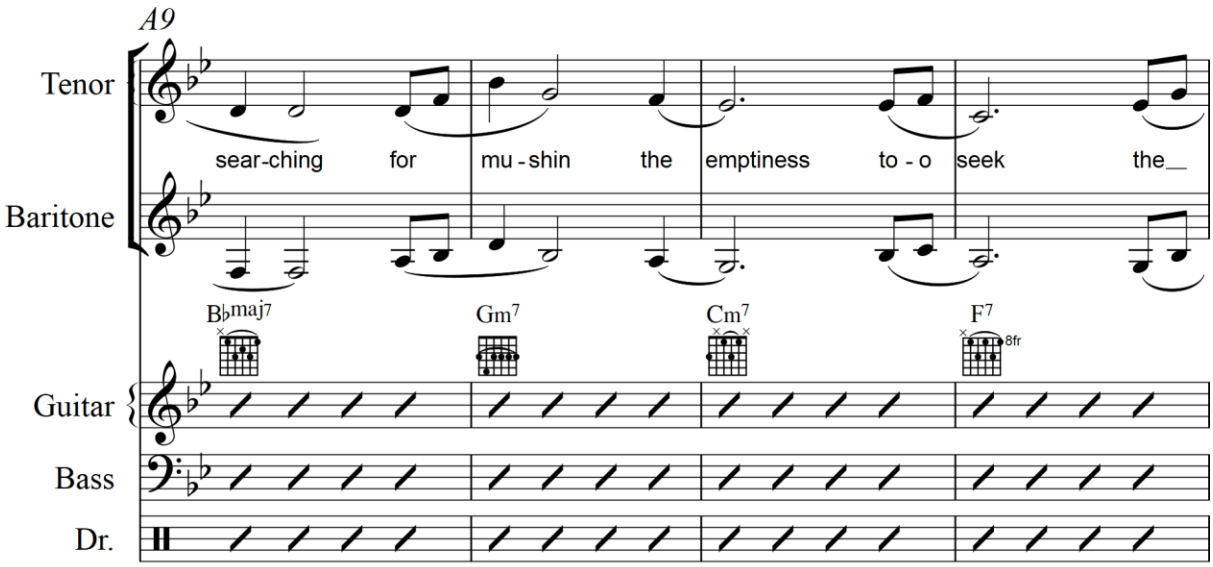
The composition is structured in an AABAB form. The instrumentation is selected in a folk-rock pop tune format with vocals, backing vocals, acoustic guitar, bass and drums. The recording was done by the author through Abelton Live 9 which is a digital audio workstation to enable sharing the lyrics through vocals. For consistency with the pop style, the guitar chord charts are included.

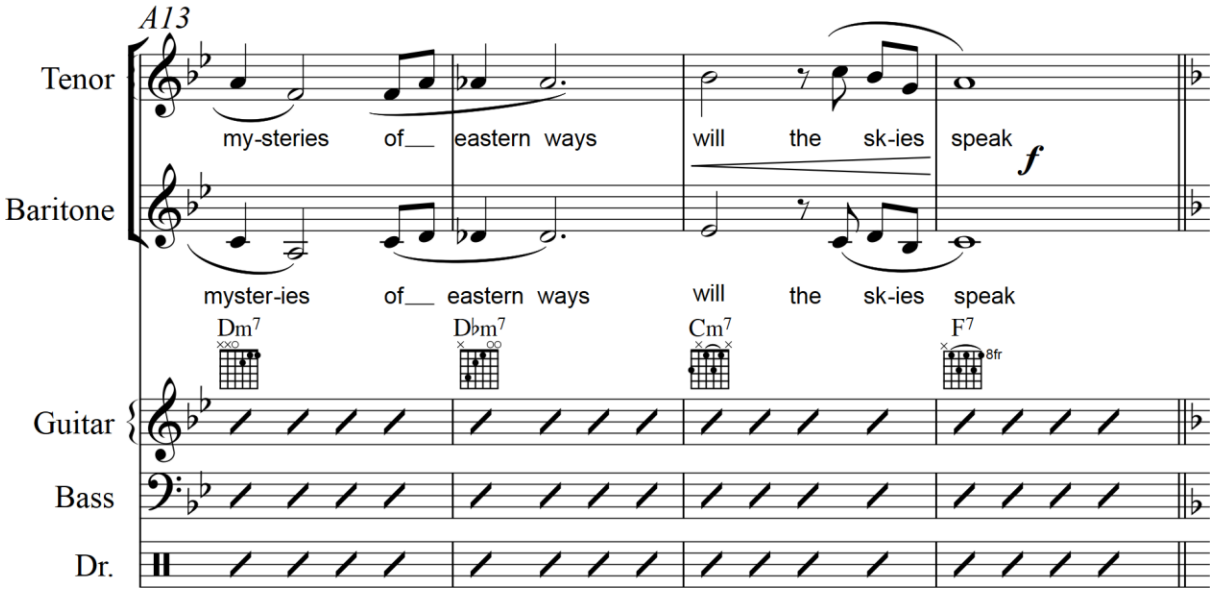
The A section is in the key of Bb and begins with a common chord sequence of I maj7, vi m7, ii m7, and V7. In bar A5 to A9, the sequence changes to iii m7, flat iii m7, ii m7, V7 which uses the flat iii m7 as a tritone's minor substitute.

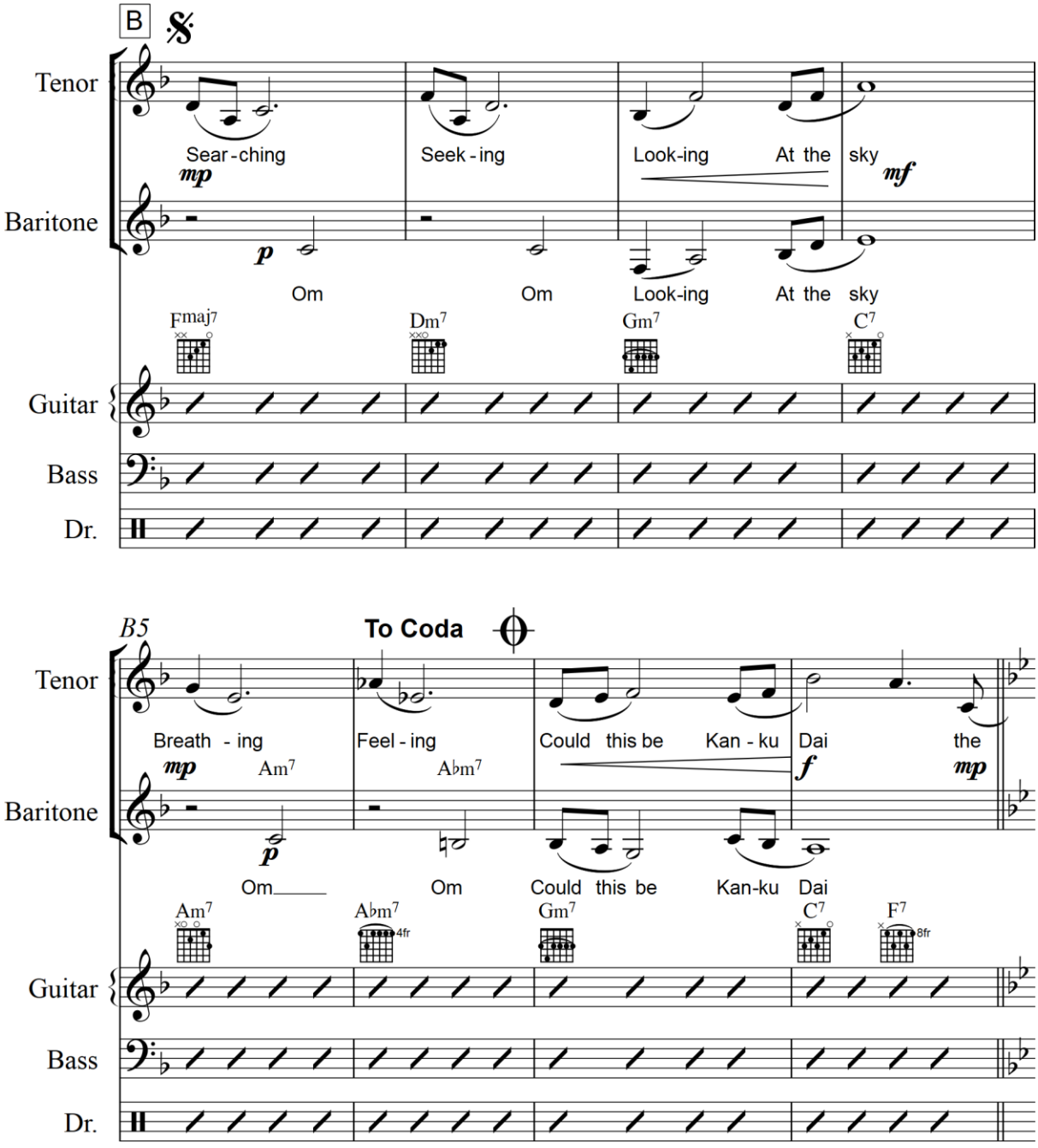
The B section modulates to Fmaj7 using F dominant 7 as a pivot chord (Sussman 2012, 174) in bar A16. Bars B1 to B4 use the same Imaj7, vim7, iim7, V7 but in the new key. Bars B5 to B8 use iii m7, flat iii m7, ii m7, V7 and also in the key of F. The V7 (i.e. C7) acts as an extended dominant (Mullholland 2013, 49) to I7 (i.e. F7) which acts a V7 for the C section's modulation back to Bb major. The chord structure of section C is similar to A.

Figure 11: Kanku Dai: Looking at the Sky Score




A9
Tenor
Baritone
Guitar
Bass
Dr.
sear-ching for mu - shin the emptiness to - o seek the_
B♭maj7
Gm7
Cm7
F7
8fr


A13
Tenor
Baritone
Guitar
Bass
Dr.
my-steries of_ eastern ways will the sk-ies speak
f
myster-ies of_ eastern ways will the sk-ies speak
Dm7
D♭m7
Cm7
F7
8fr


B
Tenor
Baritone
Guitar
Bass
Dr.
Sear - ching
Seek - ing
Look-ing
At the
sky
mp
mf
p
Om
Om
Look-ing
At the
sky
Fmaj7
Dm7
Gm7
C7
B5
To Coda
Breath - ing
Feel - ing
Could this be
Kan - ku
Dai
the
mp
Am7
Abm7
f
mp
Om
Om
Could this be
Kan-ku
Dai
Am7
Abm7
4fr
Gm7
C7
F7
8fr


C
Tenor
Baritone
Guitar
Bass
Dr.
in - ner con-scious-ness mov- ing with-out fear and
mp
Om Om Om no fear
B♭maj7
Gm7
Cm7
F7
8fr
C5
find - ing in-ner peace energy is here
f
find - ing in-ner peace energy is here
Dm7
D♭m7
Cm7
C7


C9
D.S. al Coda
Tenor
Baritone
Guitar
Bass
Dr.
p
Om
Om
Om
Om
Om
Om
Om
Om
Fmaj7
Dm7
Gm7
C7
rit.
Fmaj7
Could this be
Kan - ku
Dai
ff
Could this be
Kan - ku
Dai
Gm7
C7
Fmaj7

Empi – Flying Swallow

Origins

The original Chinese name for Empi was Guan Yin-Yang Bao that translates to the soft crane and hard leopard fighting styles. The crane fighting style originated between the 2nd and 6th centuries in Taoist monasteries of southern China. In the 16th century, this form was merged into the Shaolin styles (Braglia 2015, 327). The leopard style was also part of Shaolin Buddhist monastery's techniques and originated between the 13th and16th century (327).

The kata migrated to Okinawa in 1838 through the teachings of a Chinese ambassador called Wang Shiu who came to Okinawa as a member of the delegation to crown the king[27]. The kata was renamed to Wanshu to honour this ambassador. The kata was passed over time through a chain of teacher[28] to student relationships and eventually absorbed into Shuri-te as part of the Shorin-ryu style[29].

Funakoshi stated:

> "The Shorin-ryu (i.e. Shorin school) movement characteristics are very light and quick with rapid motions to the front and back, which may be likened to the swift flight of the falcon …One cannot help but be greatly impressed in seeing a slightly built man with motions as quick as those of a bird in flight performing the Shorin-ryu kata with techniques of a blinding swiftness, which are the elegant result of intensive training" (Funakoshi 1973, 8).

Crane Fighting Style

The style originated in the Taoist monasteries and later merged into the Shaolin Buddhist methods. The characteristics are less aggressive including fluid, light, precise and graceful movements. The practitioner does not attack first but rather patiently waits for the aggressor and

[27] King Sho Iku
[28] initially taught to Kisihin Teruya, a karate instructor in Tomari.
[29] one of the two fundamental styles of Shotokan karate

uses precise counter measures to the vital points in retaliation. The techniques are suited to a fast, lean person with long limbs who performs large circular movements enabling fast accurate strikes (Braglia 2015, 369). These factors are all reminiscent of the cranes fishing techniques of patience and balance, as well as attacks using its long piercing beak. The style uses various hand and finger positions for creating the beak like impact of a pointed attack.

Leopard Fighting Style

The Leopard style originates in the Shaolin Monasteries of China. As an animal, it is the smallest of the big cats and known for its agility with the strength to carry twice its own weight. Unlike the lion, it hunts alone and often stalks its prey by slowly crawling before a short swift run to close the distance and attack its prey. The leopard embodies aggression and independence with the cunning characteristics of stealth and ambush (Braglia 2015, 332). It is adaptable to many African habitats. The leopard will commonly rest in trees to avoid its predators.

The leopard fighting style[30] is known for its explosive hit and run methods. Rather than counter attack, this method promotes an escape, reposition and re-attack process.

Kata Theme

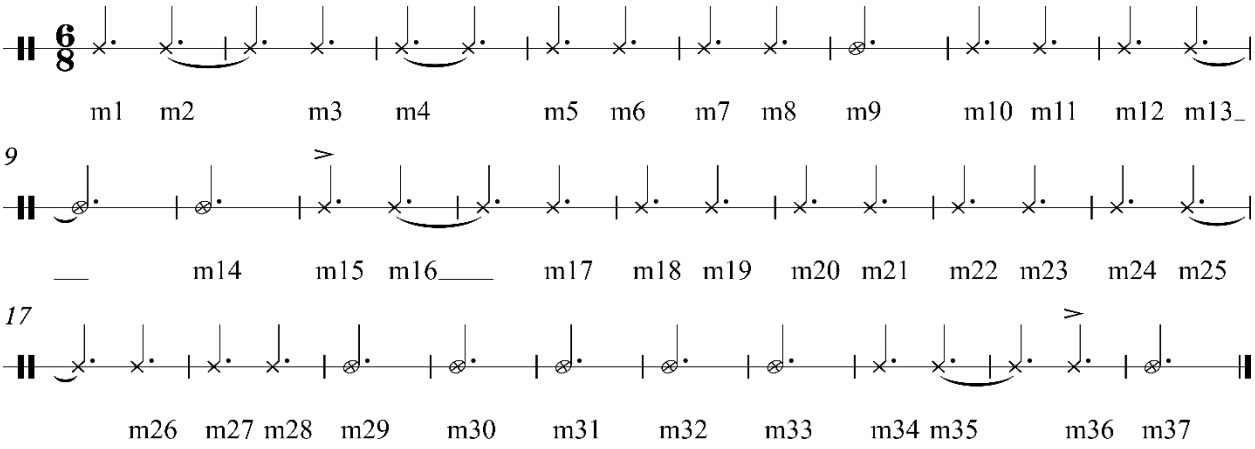
The Empi kata demonstrates the Shorin-ryu roots of Shotokan karate with light, quick movements. The translated name means flight of the swallow. Nakayama, past leader of the Japan Karate Association (i.e. JKA), stated that:

> "the meaning of the name Empi or Flying Swallow is found in the upper level rising strike and in jumping and striking while grasping the opponent and pulling him in, which are suggestive of the high and low flight of the swallow" (Nakayama 1981a, 138).

[30] Common techniques use the fore-knuckle fist strike to the softer parts of the body including eyes, throat and ribs.

These moves or positions are m6 to m9 of the kata and repeated in moves m10 to m13 and finally in m26 to m29 (104). These moves are rhythmical documented in Figure 12 and section A of the score in Figure 18.

Figure 12: Empi Rhythm Chart



Empi Suite: Composition Overview

The Empi Suite follows a Sonata form of three movements: Crane theme (exposition), Leopard theme (development) and Kata theme (recapitulation). The Crane theme begins at a slow adagio pace. The listener should envision a summer's day, a stream flowing and glistening sun reflecting off the water. A crane stands on a rock, patiently waiting and ready to pierce any unsuspecting prey which may swim past. The Leopard Theme uses a hunting theme with the leopard pursues its quarry in an African environment. The Kata Theme begins with a melody and rhythm that follows the kata's sequence and finishes with a recapitulation of the Crane theme.

Crane Theme Description

The listener should envision a crane balancing on a rock awaiting a passing fish while the creek flows by and the sun shimmers off the water. The orchestration uses the ostinato piano background as the flowing stream, the flute as the swimming fish, the clarinet as the swooping crane and the violas as the breeze, as outlined in the table below.

Table 6: Empi Crane Theme Orchestration

Role	Instrument
crane	clarinet
fish/prey	flute
ambience/emphasis	violin
flowing stream	piano

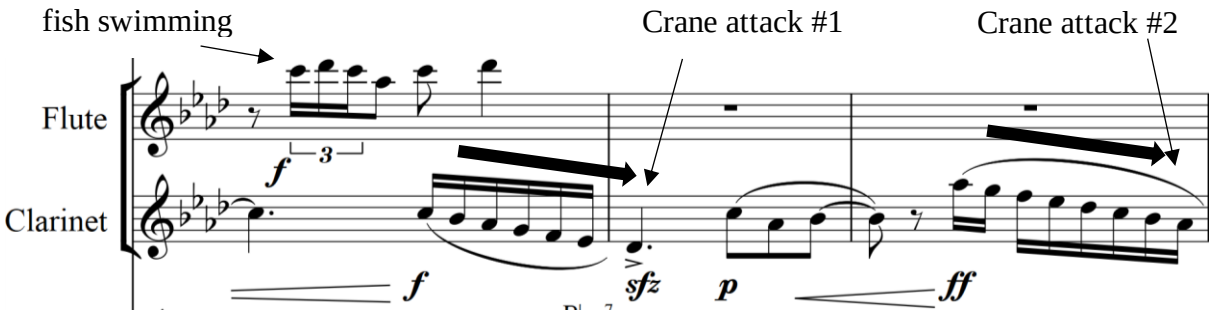
The music movement is in an ABAB binary form in the key of C major throughout the A section. The introduction creates a calming mood through the first four bars suggesting a merry breeze blowing through some leaves leading to the response of another set of leaves rustling in bars 5 to 8. The A section moves the focus to a flowing stream that is implied through the piano's ostinato. The developing flute motifs are a school of fish swimming which leads to a fish jumping in bar A8 that is represented by the rapid ascending and descending melody line. The section modulates creating a dark timbre using a deceptive cadence (Mullholland 2013, 19) from G7 to Cm (i.e. V7 of Cm). The Cm (i.e. iii m7 of Ab major) creates the sense of moving by the shift from a major to a minor key and a more ominous feeling for the B section's crane fishing events. This section later resolves to Ab major.

From bars B1 through B8, the crane (i.e. clarinet) is swooping while descending lower and lower over the stream to land as shown by the progressively lower register of the melodic motif, as shown in Figure 13. In bars B9 to B11, it stands motionless on a rock and patiently waits for a fish to enter its strike zone as shown by the static melody.

Figure 13: Crane Swoops in to Land on a Rock

The long descending scales of bars B12 and B14 reflect two descending, swift, beak strikes of the crane to the unsuspecting fish, as shown in Figure 14.

Figure 14: Clarinet/Crane Descending Beak Attacks



The stream's cycle of life continues as bar B16 moves to bar A1 and repeats the AB section that reflects the ongoing process in the food chain.

Leopard Theme Composition Description

The overall theme represents a leopard who waits and then attacks its prey in an African environment. The shakers and bongos create the background ambience. The flute plays the role of the prey such as a rabbit hopping around. The leopard is reflected by the violin using forceful bowing techniques. The violas create a background suspenseful atmosphere as outlined in Table 7.

Table 7: Empi Leopard Theme Orchestration

Role	Instrument
leopard	violin
crane	clarinet
prey	flute
atmosphere	violas
African ambience	bongos/shakers

This development movement is also structured in an ABAB binary form. The first section follows a simple harmonic structure that uses an F minor (Aeolian) scale throughout. In bars 1 to 4, the rhythm section creates the background ambience of an African environment. The first half

of section A opens with the rabbit minding its own business and hopping here and there to consume the plant life as shown by the flute's melody with large interval jumps. The leopard recognizes its prey in the second half and begins to crawl forward at bar A9 with the erratic rhythms.

In section B, the leopard crawls more quickly through bars B1 to B4 and bounds forward to pounce on its prey three times in bar B8. The flutter tongue flute reflects the heart rate of the rabbit. In B7, it becomes paralyzed with fear. The triton interval, flutter tongue and unique flute timbre is used to capture this ominous ambience, as well as the timpani and bass rhythmic interworking.

Figure 15: Leopard Pounces on Prey

The leopard retires to a tree in B9 and B10 where it rests with tail twitching through the remainder of section B. The AB parts of the development section repeats. The cycle of life continues as bar B16 returns to bar A1 that reflect the ongoing process of the food chain.

Kata Theme Composition Description (Recapitulation)

This movement is structure as AABC form. Where A's melody is based on the movements of the kata as described in the section called "Kata Movements and Melody", the B section is a recapitulation of the Crane theme and returns to the slow adagio tempo.

The introduction opens with piano ostinato which reintroduces the ambience of a flowing stream. The A section begins in F major, modulates to Bb major at A9 and returns to F major at bar A17. This section is twenty-six bars in length to align with the kata rhythm's thirty-seven

moves (ie m1 to m37) as shown in Figure 12. At moves m15 and m36, the kata reaches two climaxes. These are emphasized using crescendos to accents and forte expression markings in bars A11 and A25.

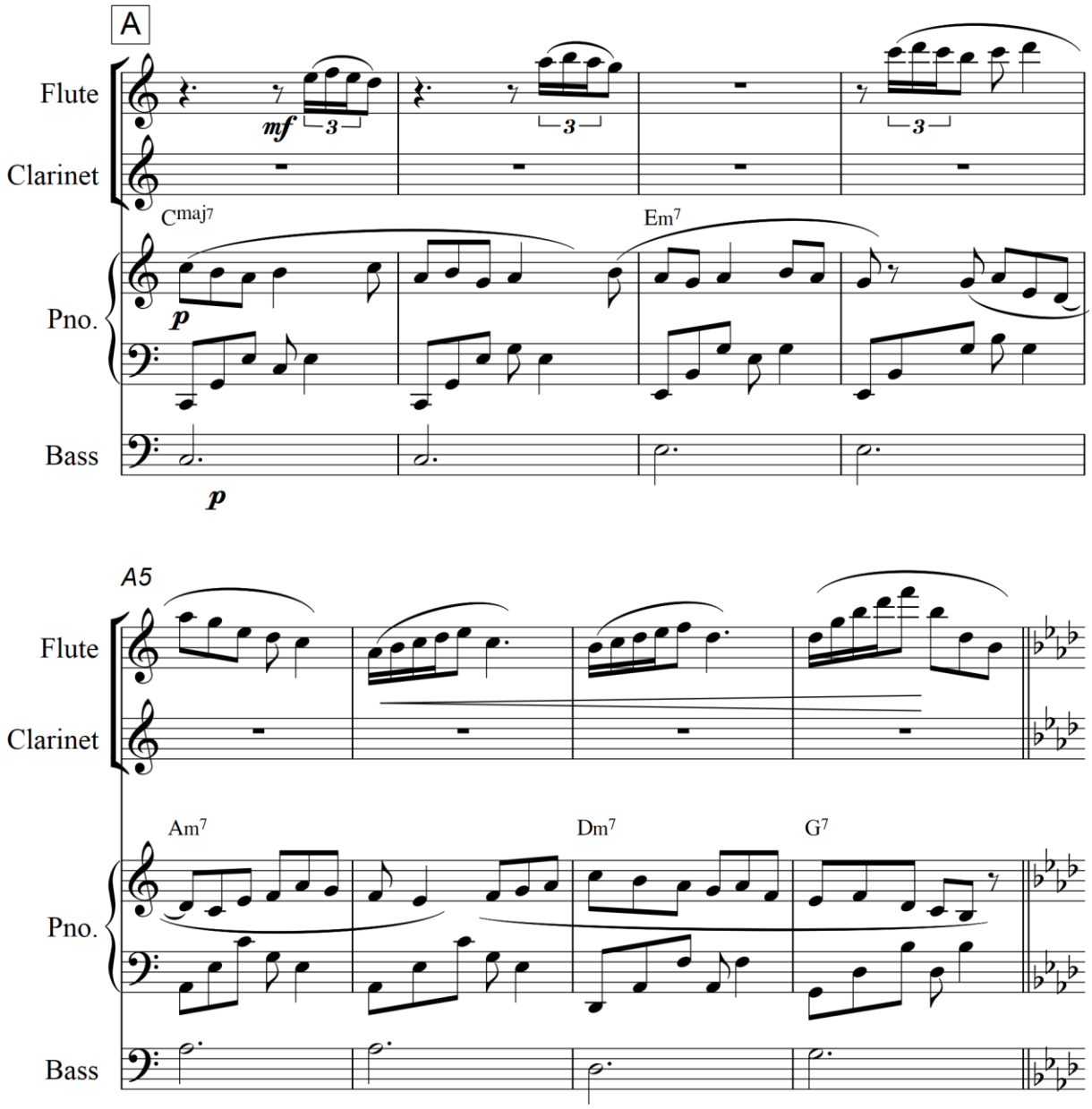
The kata techniques are a mixture of the crane and leopard methods working together. The violin as the leopard and the clarinet as the crane, also harmonize or contrapuntally interwork to create the flying swallow effect, as well as, melodically representing the movements of the kata. The instruments roles are outlined in Table 8.

Table 8: Empi Kata Theme Orchestration

Role	Instrument
leopard	violin
crane	clarinet
flowing stream	piano
African ambience	bongos/shakers/timbali

The B and C sections are the recapitulation of the Crane theme that was described above.

Figure 16: Empi Suite: Crane Theme Score


A
Flute
Clarinet
Pno.
Bass
mf
3
Cmaj7
Em7
p
p

A5
Flute
Clarinet
Pno.
Bass
Am7
Dm7
G7


B
Violin
Flute
Clarinet
Cm7
mf
Fm7
Pno.
Bass
B5
Violin
pp
Flute
Clarinet
B♭m7
E♭7
Pno.
Bass


B9
Violin
Flute
Clarinet
Pno.
Bass
A♭
Fm7
B12
B♭m7


B15
1.
2.
Violin
Flute
Clarinet
Pno.
Bass
sfz
p
ff
sfz
ff
E♭7
A♭7
G7
E♭7
A♭maj7
f
p
f

Figure 17: Empi Suite: Leopard Theme Score


A5
Flute
Violas
Bass
Shk.
Bongos
Timbali
A9
Flute
mf
Violin
mp
Violas
Bass
Timpani
Shk.
Bongos
Timbali


A13
Flute
Violin
Violas
Bass
pizz.
Shk.
Bongos
Timbali
B
mp
mf
Flute
Violin
Violas
Bass
Timpani
mf
Shk.
Bongos
Timbali


B5
heart beat of prey
leopard pounces
Flute
Violin
Violas
Bass
Timpani
Shk.
Bongos
Timbali
f
fff
f
4
ff
B9
Flute
Violin
Violas
Bass
Timpani
Shk.
Bongos
Timbali
mp


B13
1.
2.
Flute
Violin
Violas
Bass
Timpani
Shk.
Bongos
Timbali
rit.
arco
arco

Figure 18: Empi Suite: Kata Theme Score


A
Violin 1 Solo
Clarinet Bb
mp
Fmaj7
Am7
Piano
m1(kata_move_#s)m2
m3
m4
m5
m6
pp
pp
Bass
Shaker
Bongos
Timbali
A5
Violin 1 Solo
Clarinet Bb
Dm7
Gm7
Cm7
F7
Piano
m7
m8
m9
m10
m11
m12
m13
Bass
mf
Shaker
behind the beat
mp
Bongos
Timbali


A9
Violin 1 Solo
Clarinet Bb
Piano
Bass
Shaker
Bongos
Timbali
B♭maj7
Dm7
m14
m15
m16
m17
mp
p
f
mf
A13
Gm7
Cm7
C7
m18
m19
m20
m21
m22
m23
m24
m25


A17
Violin 1 Solo
Clarinet Bb
mp
Piano
Fmaj7
Am7
mp
m26
m27
m28
p
m29
m30
Bass
arco
staccato
Shaker
Bongos
Timbali
A21
Violin 1 Solo
Clarinet Bb
Piano
Dm7
Gm7
m31
m32
m33
m34
m35
Bass
Shaker
Bongos
Timbali


A25
1.
2.
Violin 1 Solo
Clarinet Bb
Piano
Bass
Shaker
Bongos
Timbali
ff
mp
f
C7
Dm7
G7
m36
m37
m36
Interlude
Cmaj7
Em7
Am7
Dm7
G7
p


B
Flute 1
Clarinet Bb
Piano
Bass
mf
p
p
p
Cmaj7
Em7


B5
Flute 1
Clarinet Bb
Piano
Bass
Am7
Dm7
G7


C
Violin 1 Solo
Flute 1
Clarinet Bb
Cm7
mf
Fm7
Piano
Bass


C5
Violin 1 Solo
pp
Flute 1
Clarinet Bb
B♭m7
E♭7
Piano
Bass


C9
Violin 1 Solo
Flute 1
Clarinet Bb
Piano
Bass
A♭
Fm7
p
f
mf
3


C13
Violin 1 Solo
Flute 1
Clarinet Bb
Piano
Bass
rit.
sfz
p
ff
B♭m7
E♭7
A♭maj7

Jion – Mercy and Benevolence

Origins

The Jion kata is likely a synthesis of two similar katas called Jiin and Jitte by Funakoshi's teacher[31]. These source katas were derived from the Monk fighting style[32] (Braglia 2015, 295). The Jiin and Jitte katas were brought to Okinawa by a Chinese Taoist monk called Lau Leung in the mid-nineteenth century due to a ship wreck. The people of Okinawa warmly received this monk. In return, he shared many martial arts forms with them (295). Funakoshi documented the kata's details[33] in one of his books from the early 1920s (287).

Funakoshi believed the kata relates to the Jion Temple located in the city of Xian in the province of Shanxi, China. The temple was built in 648 A.D. in honour of the mother of the third emperor of the Tang Dynasty (289) who is remembered as virtuous, serene and sacred. The temple[34] was named Jion which translates to mercy and benevolence.

The kata consists of 47 movements that follow an ebusen of the capital I letter. The movements are heavy and powerful consistent with Shorei-ryu school. The initial hand position of the kata encapsulates the right fist with the left palm reminiscent of Buddhist greeting and points to the origin of this kata.

Nakayama states that

> "in this kata a perfect harmony like the Buddha's, and in its calm movements, a strong spirit. It is appropriate to master rotational movements, and shifting directions. There are no particular difficult movements … it is most valuable for mastering fast and slow tempos and the fundamentals of simultaneous arm and leg movements executed while changing directions" (Nakayama 1981b, 120).

[31] Anko Itosu (1831-1915)
[32] called Luohan quan and based on a document found in the Shaolin monastery of Henan from the time period of the Qing Imperial dynasty , (1644-1911)
[33] The Jion ideograms used by Funakoshi mean "a heart free from bondage". These symbols also advocates grace, kindness and benevolence.
[34] There are now many Jion temples throughout China and Japan.

The kata

> "focuses on control over the adversary or on obtaining the ability to disarm an attacker physically and psychologically … not meant for violent people. The approach is a continuous advancement "to block opponent's actions in the bud, removing space needed to continue the attack" (Braglia 2015, 292).

The kata is derived from the fighting styles of the bear, monk, and crane. The latter is described in the Empi chapter.

Bear Fighting Style

The Bear is the largest land carnivore and weighs up to seven-hundred kilograms (304). Due to its power, size, claws and ferocity, it is dangerous to humans. The bear style[35] uses dense, heavy movements with the stances that are solid or rooted to the earth. The brute force, aggressive approach moves in a linear path with simple techniques. The attack uses great strength without the use of vital or pressure points. A bear stands on their hind legs, uses rapid blows with its claws and crushing weight to bring its opponent into submission. Similarly, the kata uses heavy, simple techniques in a linear path.

Monk Fighting Style

The monk techniques are from the soldiers of the Shaolin order. The Shaolin were inspired by the Taoist philosophy[36] of rejecting violence to create a method that was purely defensive. The monk fighting style is characterized by a stable rooted stance and a serene mental

[35] Historically, fighting styles mimic the behavior and intrinsic qualities of fauna and natural elements. The later are grouped by the Taoist followers into sky, lake, fire, lightning, wind, water, mountains and earth (307) categories. These elements are also considered in their various states including solid, semi-solid, liquid and gas.

[36] "According to the most ancient Eastern philosophies, religious people live in a blessed balance between the forces of heaven and earth and their full realization is bound to the awareness of their condition and to the quality of the adherence to the path dictate by universal laws … Those who embrace … Buddha prefer to isolate themselves to seek the truth within themselves." (Braglia 2015, 316)

state. The monks were expected to be merciful to their opponents but never back away. Their powerful movements are delivered smoothly, decisively with focus and unified energy. (Braglia 2015, 317)

Jion Suite Composition Description

Zen Prelude Description

The origins of the Jion kata point back to the Shaolin Buddhist monasteries. Zen meditation is a fundamental technique in their enlightenment training. The purpose of the prelude is to emulate the Zen mediation process where a person is in a comfortable static position and recites a mantra to enter the Zen state. In this state, the mind becomes idle and the heart and breathing rates decrease dramatically. There is a feeling of lightness and floating[37].

The prelude's relationship of human functions to instrument type is shown in Table 9.

Table 9: Jion Suite- Zen Prelude Orchestration

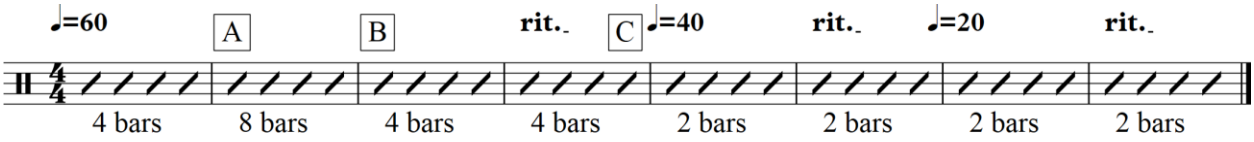
Human Function	Instrument
breathing	double bass
heart beat	timpani
mantra	synth (voice)
ambience	synth (pad8/fx1)
mind activity	bassoon
other mind activity	flute

The composition follows an AABC form in the key of F major. The tempo begins at sixty beats per minute for section A and slows midway through B. By section C, the rate drops to forty beats per minute and gradually slows to twenty beats per minute, as shown in

Figure *19*. The tempo reduction relates to the Zen meditation process of slowing breathing and heart rate, as well as, the stoppage of the mind's thoughts.

[37] The author was a practitioner of meditation for a number of years.

Figure 19: Zen Prelude Tempo Overview



The double bass emulates the steady zen breathing by alternating between notes F and A with a two measure repeating cycle. The timpani emulate an even but slowing heartbeat. In section A, the mind is quite busy with thoughts, as characterized by the flute and bassoon melodies. The ah-hum mantra starts in A using the synth voice and begins to have the effect of quieting the mind in the B section. The quieting process is demonstrated by the absence of the bassoon and an increase in melodic rests with phrase subsets of the A melody, as well as, a register reduction.

In section C, the mind is quiet which is represented by the lack of a flute melody. The heart (i.e. timpani) and breathing (i.e. double bass) slows to a Zen meditation rate but increases in volume since this is all that the Zen practitioner hears. The tubular bells reflect the sounds of the Jion temple.

Overture Composition Description

The overture's structure is an AABA form. The A section is in an Em dorian mode (Levine 1995, 36). The interlude chromatically progresses to Bbm dorian for the B section. The minor pentatonic scale (195) is used for each. This scale is commonly used in oriental traditional music and creates an Asian temple ambience.

The orchestration reflects the historical style roots of the Jion kata and uses the flute for the monk style, clarinet for the crane and bassoon for the bear as shown in Table 10.

Table 10: Jion Overture Orchestration

Fighting Style	Instrument
Buddist monk	flute
white crane	clarinet
bear	Bassoon

Section B follows the kata's unique natural rhythm defined in Figure 20. The forty-seven moves are numbered from m1 to m47 in both the rhythm chart and the score which is followed by the timpani. The bass acts as a drone with bow phrasing to assist with the breathing of the melody. Drones are commonly used in traditional oriental compositions and assists with creating an Asian temple ambience.

The section B melody follows the physical movement as described in the section called "Kata Movements and Melody". The right hand's movements are reflected by the flutes melodic line. The left hand's movements are shown by the clarinet's melody. The feet motions of stomping or kicking follow the line of the bassoon. The synthesizer provides an underlying contrapuntal melody to the lead roles of the flute, clarinet and bassoon.

The kata focus moves of m17 and m47 are supported by kiai sounds in the kata. These also are climatic moments in the composition through the expression markings and increased register.

Figure 20: Jion Overture Rhythm Chart

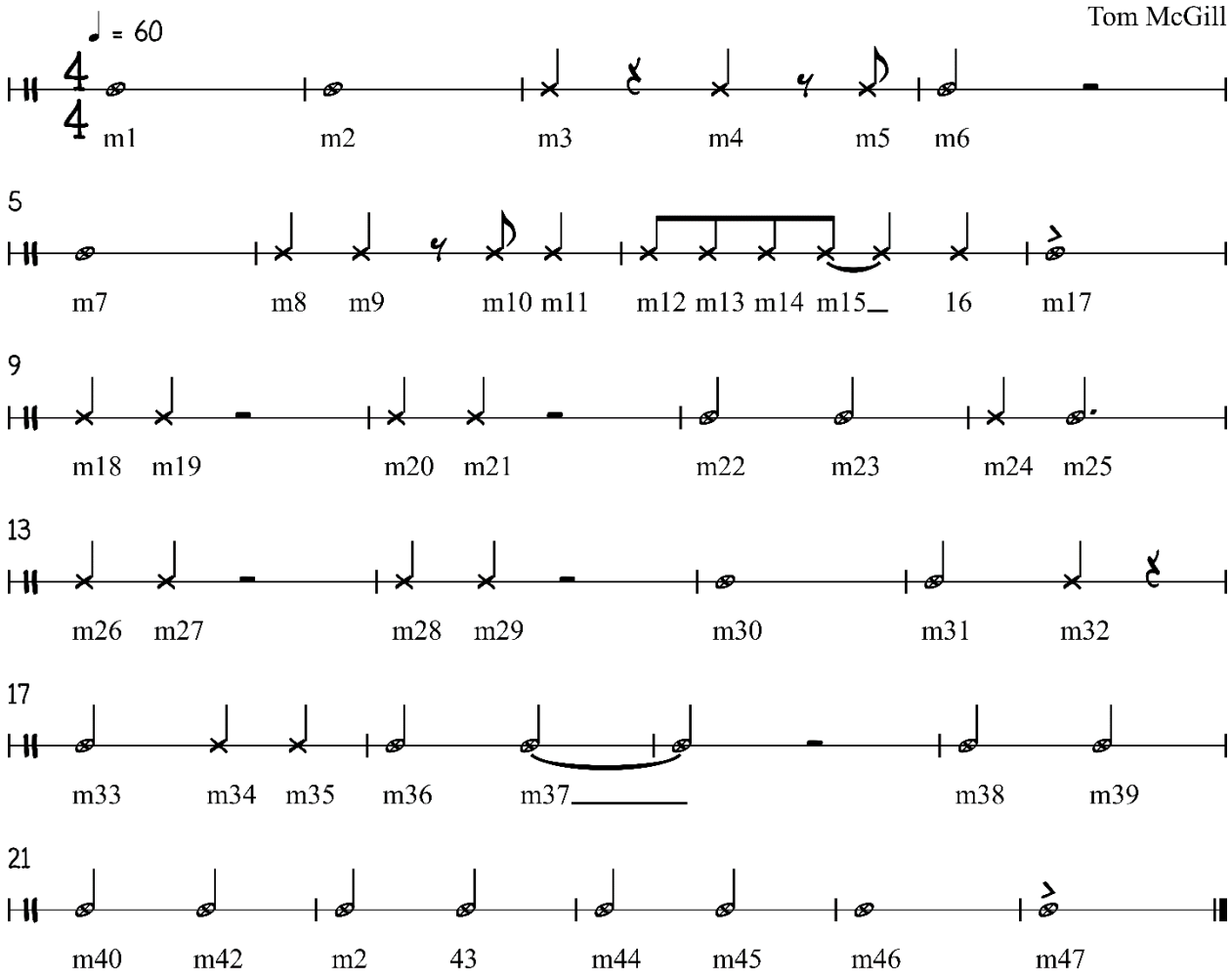
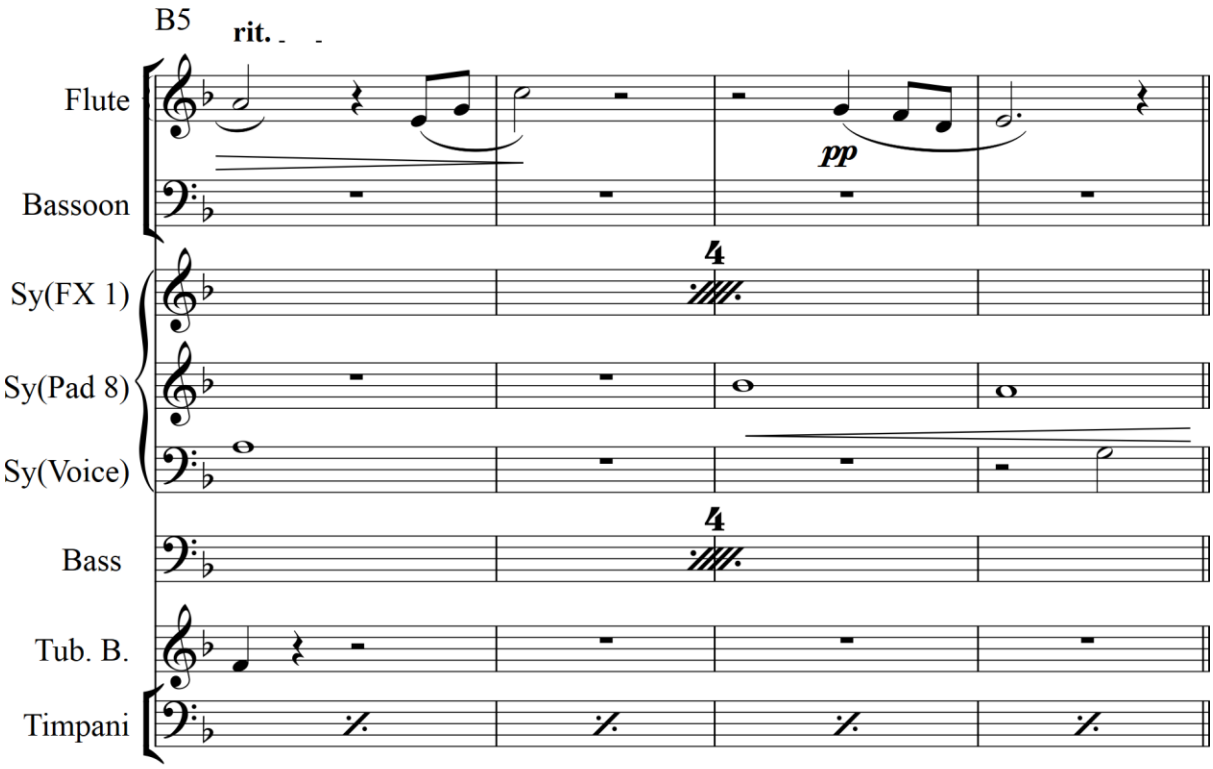
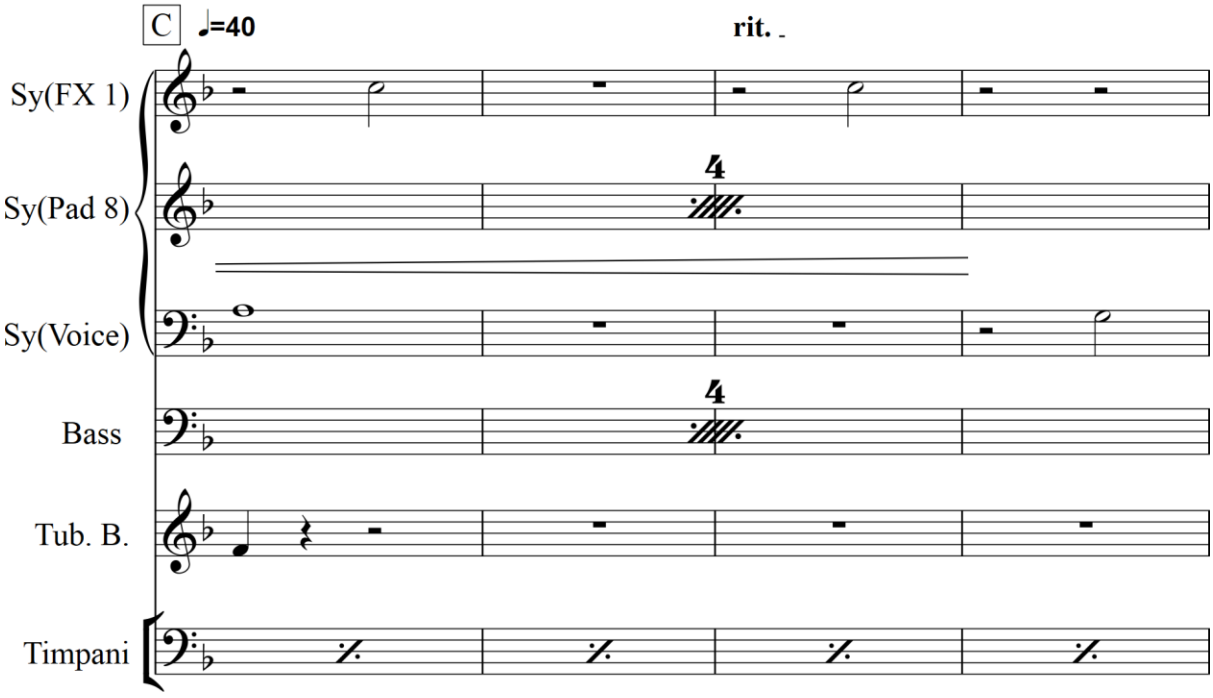


Figure 21: Jion Suite: Zen Meditation Theme (prelude) Score


A5
Flute
Bassoon
Sy(FX 1)
Sy(Pad 8)
Sy(Voice)
Bass
Tub. B.
Timpani
mf
mf
4
4
B
mp
4
4
4


B5
rit.
Flute
Bassoon
pp
Sy(FX 1)
Sy(Pad 8)
Sy(Voice)
Bass
Tub. B.
Timpani


C
♩=40
rit.
Sy(FX 1)
Sy(Pad 8)
Sy(Voice)
Bass
Tub. B.
Timpani

4

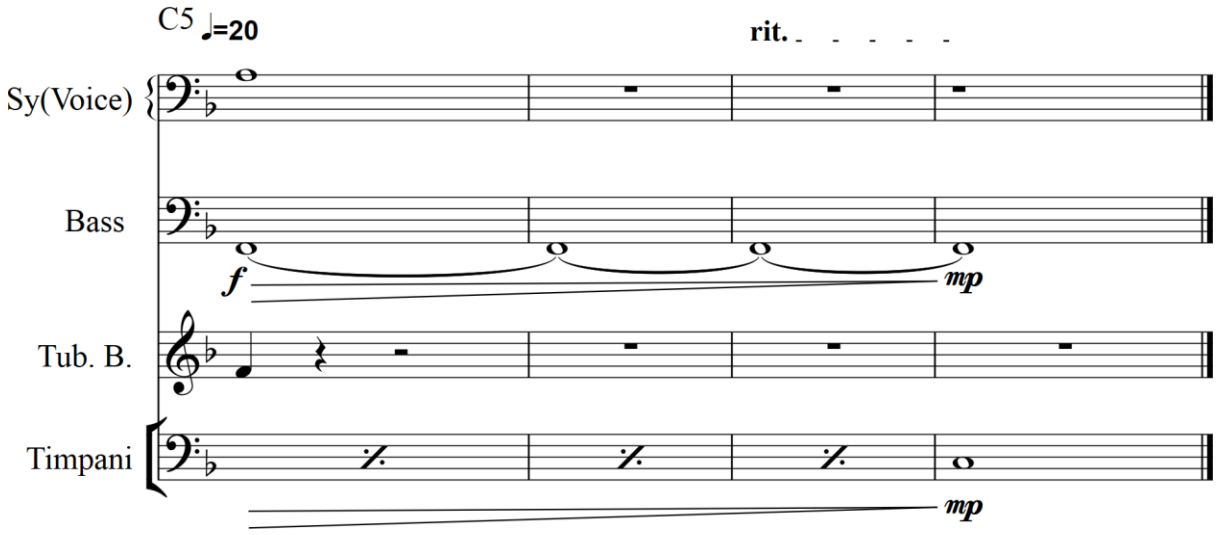


Figure 22: Jion Suite: Mercy and Benevolence (Overture) Score


A9
1.
Tub. B.
Flute
Clarinet
Bassoon
Sy(FX4)
Bass
Timpani
f
mf
mp


A13
2.
Tub. B.
Flute
Clarinet
Bassoon
Sy(FX4)
Bass
Timpani
f
mf
mp


Interlude
Tub. B.
Flute
Clarinet
Bassoon
Sy(FX4)
Bass
Timpani
p
f
Dm7
D♭m7
Cm7
Bm7
B
mp
B♭m7
mf
m1(kata movements #s)
m2
m3
m4
m5
m6


B5
Tub. B.
Flute
Clarinet
Bassoon
Sy(FX4)
Bass
Timpani
m7
m8
m9
m10
m11
m12
m13
m14
m15
m16
m17
B9
Tub. B.
Flute
Clarinet
Bassoon
Sy(FX4)
Bass
Timpani
m18
m19
m20
m21
m22
m23
m24
m25


B13
Tub. B.
Flute
Clarinet
Bassoon
Sy(FX4)
Bass
Timpani
mf
p
mf
p
mf
p
m26 m27
m28 m29
m30
m31 m32
B17
Tub. B.
Flute
Clarinet
Bassoon
Sy(FX4)
Bass
Timpani
f
f
f
f
f
f
m33
m34
m35
m36
m37


B19
Tub. B.
Flute
Clarinet
Bassoon
Sy(FX4)
Bass
Timpani
p
m38
m39
m40
m41
m42
m43


B23
Tub. B.
Flute
Clarinet
Bassoon
Sy(FX4)
Bass
Timpani
ff
f
m44
m45
m46
m47


C
Tub. B.
Flute
Clarinet
Bassoon
Sy(FX4)
Bass
Timpani
Eb m7
mp
mf


C5
Tub. B.
Flute
Clarinet
Bassoon
Sy(FX4)
Bass
Timpani
mp
mf


C9
rit.
Tub. B.
Flute
Clarinet
Bassoon
Sy(FX4)
Bass
Timpani
mf
ff
mp
mp
f
f
f
f
f
f

Nijushiho– Twenty-four Steps

Origins

This Nujushiho kata originated in the Taoist traditions of Wudang quan, the fighting style of the mountainous Wudang region of China. These techniques are considered part of the monkey martial arts methods. The Shaolin further developed the style in the ninth century and later blended it with the white crane approach. The style was documented in a 16th century novel (Braglia 2015, 405), as well as in the Okinawan Bubishi, an ancient book of martial arts in Okinawa. The Nijushiho[38] kata was brought to Okinawa[39] in 1843. The kata was passed from teacher to student until reaching Funakoshi who documented the movements in one of his books published in the early 1920s (Braglia 2015, 398).

The monkey is a well-known symbol of eastern cultures. In Buddhism, an Indian story is shared of a monkey called Hanuman[40] who saved the life of Lord Mana from the evil king Ravana (Braglia 2015, 403). Consequently, the monkey is considered a symbol of intelligence, shrewdness, and wisdom. Due to the monkey's similarity to humans, this creature's behavior was studied and developed into over 200 martial arts forms that are subdivided into 5 sub categories called standing monkey, stone monkey, tricky monkey, wooden monkey and sly or lost monkey (Braglia 2015, 404). This animal's characteristics are agility, unpredictability, cunning, and intelligence with aggressive behavior, fast reflexes and the ability to go in any direction with uncanny dodging reactions and leaps. The fighting style emulates these traits. It often starts from

[38] considered a part of Naha-te that is the martial arts development in the southern Okinawa town of Naha (Braglia 2015, 392)
[39] by the native, Kenri Nakaima who studied martial arts at the Beijing Military Academy and graduated in 1843
[40] The Hindu people believe Hanuman has 8 spiritual powers with the self-realization and spiritual elevation at the pinnacle.

a crouched posture which naturally protects the vital groin region. The arms often dangle and commonly use a windmill technique. The hands use a partially closed fist to punch, grab, tear, scratch and deliver heavy blow techniques. The style includes flips, rolling falls, somersaults and air rotations. The practitioner uses defense as a means of attack and may climb opponent to deliver an attack.

The kata consists of 33 movements with a enbusen of a seven-pointed star (Braglia 2015, 389). It is the most fluid of the JKA Shotokan forms and exhibits the power techniques of its Shorei-ryu roots. Nakayama states,

> "performance of this kata is correct only when the movements are smooth and flow unbrokenly one into the other. Until total integration of varying strengths and speeds are totally mastered, performance is apt to resemble a dance." (Braglia 2015, 400).

The techniques create space from the opponent to enable effective counter attacks.

Composition Description

This composition is intended to project the playful feeling of monkey business in observance of the kata's heritage in the monkey fighting style. A second drum line rhythm creates a jazzy rhythmic background that was inspired by Malcom Rebennack's works. The instrumentation roles are outlined in Table 11 . The monkey type reflects the five categories of the 200 movements within the fighting style.

Table 11: Nijushiho Orchestration

Monkey type	Instrument
Standing	Tuba
Stone	Baritone Saxophone
Tricky	Trombone
Lost/Sly	Trumpet
Wooden	Marimba

The structure is an ABCD form with twenty-four bars per section in recognition of Nijushiho's literal translation which is twenty-four to reflect the number of steps or stances in the kata. The chord progression follows a common sequence in a twenty-four bar form.

Section A features the marimba with rosewood resonators to take the role of the wooden monkey theme. This section is harmonically supported by all the other instruments with some mischievous glissandos from the trombone that represents tricky monkey and the trumpet that represents sly monkey.

Section B features the baritone saxophone representing stone monkey which also uses a plop technique to add humour to the monkey playful feel in bars B14 to B16. Wooden monkey (i.e. marimba) rejoins in B21 through B24 to build tension leading up to the next section. C features sly, tricky and stone monkeys playing in an open voicing harmony (Sussman 2012, 295) leading to a call and response (315) in bars C9, C10 and C11. C15 to C19 is again an open harmony leading to back and forth expression in C17 to C20 that could be interpreted as monkeys swinging in the trees. Section D expands on C by bring all instruments harmonically together and all monkeys in a call and response or playful tree swinging exchange.

This composition does not use the kata's natural rhythm nor a melodic line to show the kata's movements.

Figure 23: Nijushiho: Monkey Biz on 24 Score


A
Trumpet
Trombone
Bari. Sax
Marimba
Organ
Tuba
Drum Set
mf
F7
B♭7


A5
Trumpet
Trombone
Bari. Sax
Marimba
Organ
Tuba
Drum Set
mf
F7


A9
Trumpet
Trombone
Bari. Sax
Marimba
Organ
Tuba
Drum Set
mf
B♭7
A13
F7
E7
E♭7
D7
p


A17
Trumpet
Trombone
Bari. Sax
Marimba
Organ
Tuba
Drum Set
mf
Gm7
C7
A21
F7
D7
f


B
Trumpet
Trombone
Bari. Sax
Marimba
Organ
Tuba
Drum Set
mp
mf
mf
mf
mp
F7
B♭7
F7
B♭7
B5
Trumpet
Trombone
Bari. Sax
Marimba
Organ
Tuba
Drum Set
mf
mf
mf
F7
F7


B9
Trumpet
Trombone
Bari. Sax
Marimba
Organ
Tuba
Drum Set
mf
mf
f
B♭7
B♭7
B13
Trumpet
Trombone
Bari. Sax
Marimba
Organ
Tuba
Drum Set
mp
F7
E7
E♭7
D7
F7
E7
E♭7
D7


B17
Trumpet
Trombone
Bari. Sax
Marimba
Organ
Tuba
Drum Set
mf
mf
p
Gm7
C7
Gm7
C7


B21
Trumpet
Trombone
Bari. Sax
Marimba
Organ
Tuba
Drum Set
p
p
p
F7
D7
Gm7
C7
F7
D7
Gm7
C7


C
Trumpet
Trombone
Bari. Sax
Marimba
Organ
Tuba
Drum Set
f
F7
B♭7
C5


C9
Trumpet
Trombone
Bari. Sax
Marimba
Organ
Tuba
Drum Set
mf
mf
mf
B♭7
B♭7


C13
Trumpet
Trombone
Bari. Sax
Marimba
Organ
Tuba
Drum Set
mp
mp
mp
F7
E7
E♭7
D7
F7
E7
E♭7
D7


C17
Trumpet
Trombone
Bari. Sax
Marimba
Organ
Tuba
Drum Set
mf
Gm7
C7


C21
Trumpet
Trombone
Bari. Sax
Marimba
Organ
Tuba
Drum Set
mf
F7
D7
Gm7
C7


D
Trumpet
Trombone
Bari. Sax
Marimba
Organ
Tuba
Drum Set
f
p
F7
B♭7


D5
Trumpet
Trombone
Bari. Sax
Marimba
Organ
Tuba
Drum Set
f
F7

D9


Trumpet
Trombone
Bari. Sax
Marimba
B♭7
Organ
B♭7
Tuba
Drum Set

D13


Trumpet
mp
Trombone
Bari. Sax
mp
Marimba
F7
E7
E♭7
D7
Organ
F7
E7
E♭7
D7
Tuba
Drum Set


D17
Trumpet
Trombone
Bari. Sax
Marimba
Organ
Tuba
Drum Set
mp
mp
mp
Gm7
C7
Gm7
C7


D21
rit.
Trumpet
Trombone
Bari. Sax
Marimba
Organ
Tuba
Drum Set
f
f
f
F7
D7
Gm7
C7
F7
F7
D7
Gm7
C7
F7

Unsu – Cloud Hands

Origins

This kata was created entirely on the island of Okinawa with origins in the town of Naha[41]. The likely originator, Aragaki[42] (1840-1918), based the movements on the fighting styles of the white crane, dragon, and praying mantis, as well as, the style from Fuzhou, China that was created by the Shaolin Buddhist monks. Aragaki was fluent in Chinese language and was sent to Beijing as an interpreter for the Kingdom[43]. He made several trips and stayed for extended periods where he learned other fighting styles including monk style[44] and whooping crane style. Funakoshi[45] learned Unsu through Aragaki's instruction and published the movements in one of his books during the early 1920s (Braglia 2015, 411).

The direct translation of Unsu is cloud hands. The meaning relates to the clearing of thoughts[46] to find a more authentic answer to the questions that life frequently asks (Braglia 2015, 411). Nakayama states,

> "Clouds undergo incessant transformations. So too, does this kata, which takes its name – Cloud Hands from this phenomenon …and requires lightness, quickness, timing, rhythm and strategic skills" (Braglia 2015, 412).

The form consists of 48 movements with an embusen of a straight line with 3 small diagonal segments (Braglia 2015, 412). The kata begins with outstretched arms reminiscent of the crane's wings followed by single finger attacks like the movement of the crane's beak. The sword

[41] as part of Naha-te style
[42] Instructor of Funakoshi
[43] Kingdom of Ryuku which was the previous name of Okinawa
[44] Luohan quan
[45] the father of modern karate
[46] similar to the kata called Meikyo

hand strikes, crescent kicks and lunge to the ground are derived from the dragon style. The chicken head wrist blocks come from praying mantis methods. The set of movements are derived from both the power movements of Shorei-ryu and the light, fast movements of Shorin-ryu styles.

Unsu emphasizes Sen no sen-shin which is "how to anticipate the intention of the antagonist … the study aims to learn how to counterattack on the intention of the antagonist, before the thought is manifested in the opponent" (Braglia 2015, 415). The practitioner must recognize the body language or intention of the opponent and respond accordingly.

Praying Mantis Fighting Style

The praying mantis is a very effective predator insect because of its voracity (Braglia 2015, 520). The fighting style was likely created prior to 220 A.D. in China[47]. The methods were documented in a manual called Mi-shou or "secret hand" (Braglia 2015, 520). After centuries of secrecy, it was published in 1794. The form is characterized by grappling with hooks to lock and trap the opponent's joints (Braglia 2015, 521). It is most effective in close combat and is dominated by hand and arm techniques that are supported by sweeps and unique leg movements (Braglia 2015, 522).

The crane style is described in the section on Empi called Crane Fighting Style. The Monk Fighting Style is described in the section on Jion called Monk Fighting Style on page 67.

Composition Description

The composition is structured as an ABA form in 4/4 time. The later part of the Unsu kata (Nakayama 1987, 16) uses a natural 2/3 clave rhythm (Mauleon-Santana 1999, 6) as shown by movements m13 through m35 in Figure 24. This inspired a latin ambience throughout using a

[47] county of Jimo in Shandong

montuno piano technique (Campos 2003, 12) supported by a Latin conga rhythm (Mauleon 1993, 44).

The instrumentation in Table 12: Unsu Orchestration is chosen to reflect the three fighting styles. The register reflects the creature's intellect from the lowly insect to the perceptive human.

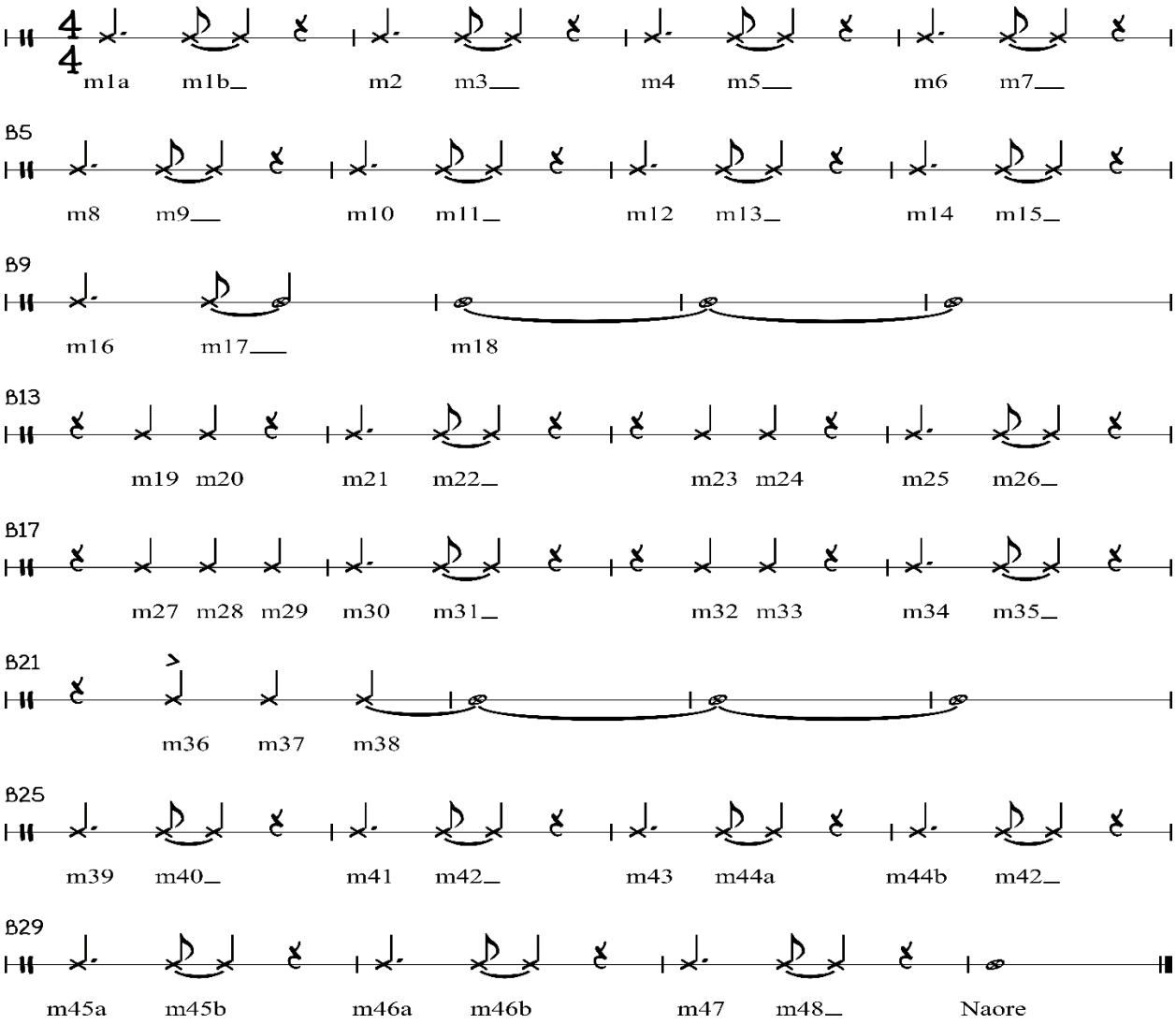
Table 12: Unsu Orchestration

Fighting Style	Instrument
Buddist Monk	flute
White Crane	clarinet
Praying Mantis	tenor sax

In section A, the sax/mantis solos for the first 4 bars and is followed by the clarinet/crane's harmonic supported which can be compared to the crane style complimenting the mantis style. This section is in the key of G major for an uplifting positive feeling in support of the Cloud Hands title. The tension builds through rising register and volume to bar A16 and releases into the next section.

Section B modulates uses a deceptive cadence (Mulholland 2013, 19) from G7 to Cm and resolves to Ab major at B10. The melody follows the physical movements of the kata as described in the previous section called "Kata Movements and Melody.

Figure 24: Unsu Rhythm Chart



The bass line uses the natural rhythm defined in Figure 24. The movement numbers are also shown in the score with each bass note.

Occasionally, the orchestration is chosen to reflect the fighting style origin of the kata move. For example, the m1 movement in bar B1 is the rising melodic line of the clarinet or spreading of the crane's wings. The falling line leading to beat 1 of bar B2 reflects the down stroke of the crane's wings in lift off.

Another example is movements, m2 and m4, where the saxophone/mantis is chosen for the low register to reflect the foot sweep motions that are characteristic of the praying mantis style. All 3 instruments or styles interwork in a call and response (Sussman 2012, 315) format and build in tension to bar B11. There is a natural slowing of motion at m18 in the kata. The melody similarly pauses for a musical breather.

The melodic harmony reflects two body parts moving together in similar motion and uses contrary melodic movement when body parts are moving apart. In bar B13 for example, the arms are moving in opposite directions for move m19 and m20 and contrary contrapuntal melodic lines reflect the physical movement. The bass line follows the natural two-three clave beat (Mauleon-Santana 1999, 6) from bars B13 to B24. The climatic peak occurs at m36 with a kiai which is accented. This is followed by a release of tension through bar B24 with longer note values to enable the melody to breath.

The B section completes with interplay between the three instruments. Movements m45 and m46 at B29, are examples of contrary arm movements with a similar contrary melodic line. This section builds in tension to the second kiai in the kata at m48 in bar B31.

Section C restates A but moves the melody from the tenor sax to the violin and finishes with close voicing (Sussman 2012, 90), three-part harmony of all lead instruments. The intent is to musically capture the interworking of the 3 contributing fight styles to the katas form.

Figure 25: Unsu - Cloud Hands Score


A5
Violin
Clarinet Bb
Tenor Sax
Piano
Congas
Dbl Bass
mp
mf
Bm7
Em7
Bm7
Em7
2
4
A9
Am7
D7
Am7
D7


A13
Violin
Clarinet Bb
Tenor Sax
Piano
Congas
Dbl Bass
f
Bm7 Em7 Am7 D7 Gmaj7 G7
4
Interlude
Cm7 Fm7
mf


B
Violin
Clarinet Bb
Tenor Sax
Piano
Congas
Dbl Bass
mf
mf
mp
Cm7
Fm7
Cm7
Fm7
(kata move #s)m1a
m1b
m2
m3_
m4
m5_
m6
m7_
mp
B5
Violin
Clarinet Bb
Tenor Sax
Piano
Congas
Dbl Bass
Bbm7
Eb7
Bbm7
Bm7
mf
mp
mp
Bbm7
Eb7
Bbm7
Eb7
m8
m9_
m10
m11
m12
m13
m14
m15


B9
Violin
Clarinet Bb
Tenor Sax
Piano
Congas
Dbl Bass
E♭7
A♭maj7
E♭7
A♭maj7
m16
m17
m18
B13
Violin
Clarinet Bb
Tenor Sax
Piano
Congas
Dbl Bass
Cm7
Fm7
Cm
Fm7
m19
m20
m21
m22
m23
m24
m25
m26


B17
Violin
Clarinet Bb
Tenor Sax
Piano
Congas
Dbl Bass
mf
mp
B♭m7
E♭7
Cm7
Fm7
2
m27 m28 m29 m30 m31 m32 m33 m34 m35
B21
f
A♭maj7
B♭7
m36 m37 m38


B25
Violin
Clarinet Bb
Tenor Sax
Piano
Congas
Dbl Bass
mp
f
mf
Cm7
Fm7
m39 m40 m41 m42 m43 m44a m44b m44c
B29
Bbm7
Eb7
Abmaj7
Ab7
m45a m45b m46a m46b m47 m48 naore


Interlude
Violin
Clarinet Bb
Tenor Sax
Piano
Congas
Dbl Bass
Gmaj7
D7
Am
D7
Gmaj7
D7
Am7
D7
mf
C
mp
mf
p
Am
D7
Am7
D7
Am7
D7
2
4


C5
Violin
Clarinet Bb
Tenor Sax
Piano
Congas
Dbl Bass
mp
mf
Bm7
Em7
Bm7
Em7
2
4
Bm7
Em7
Bm7
Em7


C9
Violin
Clarinet Bb
Tenor Sax
Piano
Congas
Dbl Bass
mp
mp
Am7
D7
2
2
4
Am7
D7
Am7
D7


C13
Violin
Clarinet Bb
Tenor Sax
Piano
Congas
Dbl Bass
mf
mp
Bm7
Em7
C15
rit.
f
Am7
D7
Gmaj7

CONCLUSIONS

This thesis describes the creation of six scores inspired by Shotokan kata movements, as well as, narratives based on the animal origins of the kata's associated fighting styles. In addition, a unique method of using Western music notation is created to define a kata's natural rhythm.

Martial arts origins trace back many centuries to Bodhidharma's Buddhist missionary excursion from India to China. Observation of animal movements by Buddhist and Taoist monks contributed a great deal to the development of martial arts. Martial arts migration was influenced by the cultural exchanges between China and Okinawa. Shotokan karate was brought to mainland Japan in the early twentieth century.

These origins inspired the orchestration, timbre and ambience of these six compositions. The mood of the pieces, follows the katas categories of the light, quick, Shorin style or the strong, powerful, Shorei style. Kata's natural rhythms are captured using Western music notation to define the move to move time interval. The traditional approach relies on aural transmission of the timing. Some natural rhythm sub-sections motivated the heavy five-four bassline of Bassai Dai's Penetrating the Fortress. The natural clave rhythm in a subsection of Unsu's Hands in the Clouds inspired a Latin feel for this arrangement. A deeper understanding of the six kata forms through the kata origin discussion, composition description, and scores was achieved.

The natural rhythms and melodic lines based on physical movements are used within four sections of the compositions. This enables musical accompaniment of the kata's execution. A video was created for the thesis defense of the kata, Bassai Dai that used the composition as accompaniment. The challenge was to maintain align of the movements to the rhythm. The tempo originally written at 140 beats per minute required reduction to 120 beats per minute. The subtle

quantization of the written versus aural quantization demanded significant focus in the execution to achieve alignment. The audio became the timing master that required slight adjustments in the movements to enable alignment on the video.

The opportunity for future compositional inspirations are possible given the many Shotokan katas still musically unexplored. Karate kata documentation could also benefit from a more accurate timing interval definition such as the proposal of this thesis.

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GLOSSARY

The following is a list of terms commonly used in the traditional Japanese karate style called Shotokan.

bunkai	kata application
chodan	Stomach level, solar plexus
embusen	the shape or performance line of movement.
Funakoshi, G.	Founder of Shotokan karate style and Japan Karate Association (JKA)
gedan	Low level, groin
go no sen-shin	Relates to the timing of a counter attack
JKA	Japan Karate Association
jodan	Face level
kamae	Focal point of a moment. All muscles momentarily tensed.
Karate-do	Empty hand way
karateka	Practitioner of karate
kata	Exact sequence of blocks, kicks, strikes and punches. A form.
kiai	Short yell when attacking to focus energy
Luohan quan	Monk fighting style
mantra	Buddhist word used in meditation to aid concentration
meikyo	Kata. Name translates to polishing the mirror.
mushin	Empty head. Mental state of readiness.
Naha-te	Hand of Naha. Fighting style of Okinawan town of Naha
Nakayama, N.	Chief Instructor of Japan Karate Association (JKA) from 1955 to 1987. Director of physical education at Takushoku University in Japan.
naore	recover
Ryukyu	A chain of Japanese islands from Kyushu to Taiwan. The largest is Okinawa. Ryukyu was an ancient name for Okinawa.
sen no sen-shin	Relates to the timing by attacking the attack with keen anticipation
Sensei	Karate instructor
shodan	1st degree black belt
shorei-ryu	Shorei school. Fighting style characterized by power movements
shorin-ryu	Shorin school. Fighting style characterized by light, quick movements
shoto	Knife hand
Shotokan	Style of karate promoted by Ginchin Funakoshi and the JKA
Shuri-te	Hand of Shuri. Fighting style of Okinawan town of Shuri