

A Study of the Works *From My Little Island: Folk Song* by Robert Aldridge, *Nagoya Marimbas* by Steve Reich, *Ti Mon Bo* by Tito Puente, *Trio Per Uno* by Nebojsa Zivkovic, *Wind in the Bamboo Grove* by Keiko Abe, *Eight Pieces for Four Timpani: VIII. March* by Elliott Carter, *Douze Études: No. 9* by Jacques Delécluse, *Prelude to a Dream* by Bryce Craig, Birifor Funeral Repertoire, *Log Cabin Blues* by George Hamilton Green

by

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B.M., University of Wisconsin – Eau Claire, 2015

A THESIS

submitted in partial fulfillment of the requirements for the degree

MASTER OF MUSIC

School of Music, Theater, and Dance
College of Arts and Sciences

KANSAS STATE UNIVERSITY
Manhattan, Kansas

2017

Approved by:

Major Professor
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Abstract

This document is an analysis of the all of the pieces prepared for my master's recital which was given on March 12, 2017 in Kirmser Hall on the campus of Kansas State University. I have analyzed these piece from both a theoretical and historical point of view. When programming a recital, especially a recital for a collegiate percussion student, it is important to have a diverse representation of percussion music to demonstrate a broad knowledge of music and technical ability.

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Acknowledgements

I would like to thank Dr. Kurt Gartner for all of his guidance during my studies with him. He has opened many doors for me, and I am forever grateful for everything he has done.

Chapter 1 - *From My Little Island: Folk Song*

From My Little Island was written for marimba by Robert Aldridge in 1988 and was commissioned by Leigh Howard Stevens. The piece was composed for Nancy Zeltsman, and she also gave the premiere performance in May of 1990. Aldridge later revised the piece in 2002 with “minor improvements” worked out with Zeltsman’s input.¹ This piece is a theme and variation in “perpetual motion” with the theme stated in the first movement, and nine variations distributed across the other six movements. Although this piece is very simple harmonically, I believe there is a stylistic aspect to this piece that is worth discussion. The composer uses simple musical examples to emphasize the folkloric dimension of this piece, while also making it enjoyable for a classical player to perform. This piece is pretty simple to understand, but it has some technical and interpretive challenges throughout.

Nancy Zeltsman currently teaches marimba and is the chair of the percussion department at the Boston Conservatory.² In addition to teaching at the Conservatory, Zeltsman also teaches at Berklee in Boston. She is a very active performer, presenting recitals and marimba master classes across the U.S. and internationally and “she has premiered over 125 solo and chamber marimba works including compositions by Paul Simon, Michael Tilson Thomas, Gunther

¹Aldridge, Robert L. *From My Little Island*. 1988. Edition Peters, New York, 2002. Musical Score. Edited by Nancy Zeltsman

² "Nancy Zeltsman." Home | Nancy Zeltsman. Accessed December 13, 2016. <http://www.nancyzeltsman.com/>.

Schuller, and Robert Aldridge.³ She also serves as Artistic Director for the for the Zeltsman Marimba Festival, a two-week summer marimba seminar.⁴

When I began preparing this piece, I considered the meaning of the composer's indication of the pieces as a folk song. According to Oxford Music Online, "the label folk music usually means that most, if not all, of the following attributes, are true: it is acoustic music performed by a solo act or a small ensemble, often written by the performer(s), rendered in very simple arrangements, and dealing with social or personal issues to which most laypersons can easily relate."⁵ We can find some of those characteristics to be true of this piece.

The work is performed by a soloist. Although not written by the performer, it is arranged fairly simply. It is not clear if this piece deals with a social or personal issue, but we can attempt to build an argument one way or the other. If we look at the compositional style of this piece, we will find our answer.

The simplicity of this piece is very apparent. It's in E-flat major, and there aren't any rhythms besides eighth-notes until we get to the coda. The stickings (the order of which mallet plays when) are similar to the plucking of a guitar, a common folk instrument. When playing four mallets, each mallet is assigned a number, similar to a pianist's fingers. In our left hand, the outer mallet is 1 and the inner mallet is 2, and in our right hand, the inner mallet is three, and the outer mallet is 4 (see the diagram below). The repeated stickings found throughout this piece are

³ "Nancy Zeltsman." Home | Nancy Zeltsman. Accessed December 13, 2016.

<http://www.nancyzeltsman.com/>.

⁴ Ibid.

⁵ Norm Cohen. "Folk music." *Grove Music Online. Oxford Music Online*. Oxford University Press, accessed December 14, 2016,

<http://www.oxfordmusiconline.com/subscriber/article/grove/music/A2241135>.

very reminiscent of a guitar being plucked. Below is an example of such a sticking pattern in this piece

Figure 1 Example of sticking in *Folk Song*, mm. 7-8

Another aspect of this piece that could be considered simple is the harmony. In this work, the composer rarely uses more than five chords in sequence. This movement never leaves the key of E-flat major, even for the second theme and the coda. Most of the cadences that we find throughout this piece are either imperfect authentic cadences, perfect authentic cadences, or the occasional half cadence.

This movement is set in a pretty simple AABA form with and similar introduction and ending, but with a chorale in the coda. Aldridge's phrasing helps to establish the form of the piece. For example, measure 6 begins the first theme of this movement which is set as a parallel period that concludes by rehearsal marking FF. It is made up of two, four-measure phrases that each end in an imperfect authentic cadence. As expected, its antecedent ends with a weaker cadence like a half cadence or an imperfect authentic cadence. The consequent phrase of a parallel period is usually the stronger of the two phrases, generally ending in a perfect authentic cadence. In this example, however, both phrases end in imperfect authentic cadences. I do believe that the second phrase feels stronger because of the new material that follows it. When I perform this piece, I try to make it obvious that it is a stronger cadence as well.

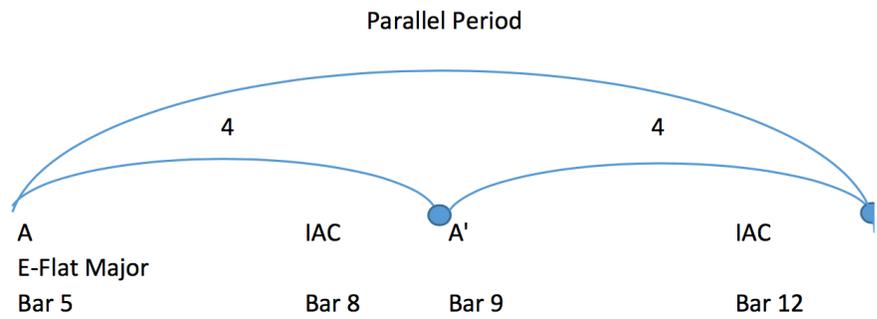


Figure 2 Phrase diagram of mm. 5-12

Figure 3 Mm. 5-12, parallel period

The second theme begins at rehearsal JJ. The composer has notated phrase markings and also uses double-bar lines to help outline the period. I do interpret this piece slightly different than the composer has initially marked it. In the example below, we can see the second theme and how it is a three-phrase period over twelve measures. The melodic line begins on the eighth-note before JJ and is only found on every fourth eighth-note. This is an excellent example of a three-phrase-period. The first two phrases are the antecedents and the last phrase in the consequent because of the cadence that they have. The first two end with weaker imperfect authentic cadences and the last phrase ends with a perfect authentic cadence.

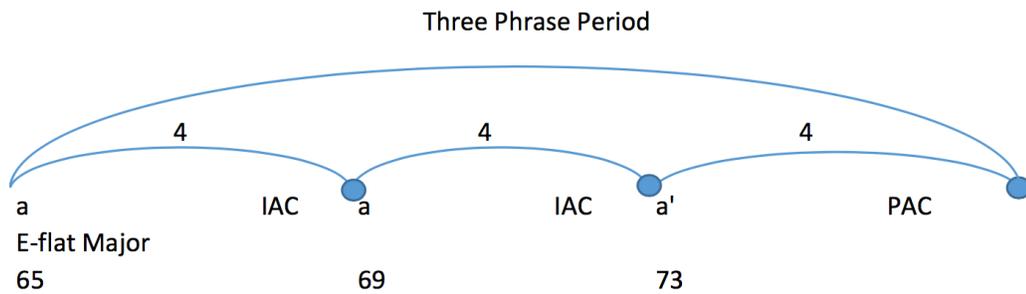


Figure 4 Phrase diagram of mm. 65-7

Figure 5 Mm. 65-76, three-phrase-period

While this piece includes many aspects of structural simplicity, it also presents some distinct technical challenges. For example, while the stickings are fairly simple as discussed earlier, there are times in this piece where a large range of the instrument is being used. This brings up accuracy and touch issues that would not be a problem if the range was a little more condensed. As you can see in figure 5, the range of the last phrase is just over three octaves and over one octave within each hand independently. The later motion that is required to get from

note to note now effects the vertical stroke. Covering that distance while striking the tone-bar with musical intent rather than just trying to hit the right notes is very difficult.

Another difficult part of this piece is the intervallic distance that we find between mallets in a single hand. Occasionally we find intervals that exceed one octave in a single hand. As discussed above, large intervallic leaps create technical and musical issues, but playing these notes in unison is much more challenging. In the coda, there are some intervals such as tenths that require a lot of attention to perform correctly. It is rare to find an interval larger than an octave in one hand. These intervals require a large stretch, potentially causing tension and inaccuracy. As shown in Figure 6, there are a few examples of ninths and tenths in the right hand.

The image displays a musical score for two instruments: Marimba and Maracas (Mar.). The score is written in 4/4 time and consists of two systems of staves. The Marimba part is in the upper system, and the Maracas part is in the lower system. The Marimba part is marked with dynamics *p*, *mp*, *mf*, and *f*, with a *dim. poco a poco* instruction. The Maracas part is marked with *p*. The score shows large intervals in the right hand of both instruments, particularly in the final measures. A measure number '5' is indicated at the beginning of the Maracas part.

Figure 6 Chorale at the end of *Folk Song*, mm. 108-116 use of large intervals in right hand

While folk music is a relatively simple style of music, it often comes with a very substantial or important message. Folk musicians like Bob Dylan, Paul Simon, and their contemporaries wrote songs about change and stood up for what they believed in. As noted

earlier, this piece is a theme and variation in “perpetual motion” as the composer called it. Being the last movement of this piece, and the last variation of the theme, I think titling it “Folk Song” makes a lot of sense. We get to look back at how the theme evolved and changed and saw the final product. Below you will see an example of the first theme from the first movement. It starts at rehearsal marking A and can be found in the left hand (the bass voice). It has a very syncopated nature as it weaves in and out of mixed meters and it is complemented by notes from the right hand. It also has a very simple contour. there are hardly any leaps of more than a third, and its motion is mostly stepwise.



Figure 7 The theme in the first movement, mm. 13-19 found in the left hand

The next example is the last variation of the piece stated in the 7th movement “Folk Song.” The motion is mostly stepwise; however, it is not as syncopated. Note that the melodic line is now in the right hand and found on the up-beats. That is still a form of syncopation. The variation begins at rehearsal marking FF. It is clearly a different melody, but it is very similar to the original theme.



Figure 8 Last variation of the theme, found in the right hand, mm. 13-24

While the marimba is not a typical folkloric instrument (at least not in the North American culture), we can see the nature of this piece and how its style and simplicity resonates richly with traditions of folk music. The rhythmic and harmonic simplicity make way for the technical challenges that the player can take on. And the setting of the original theme into many different variations can symbolize change that a society can understand.

Chapter 2 - Nagoya Marimbas

Nagoya Marimbas, written by Steve Reich, has become a standard piece of the percussionist's chamber music repertoire. Having only two parts, and requiring each player to only use two mallets, this piece seems very simple to understand. Studied more closely, we discover why Reich believes that this piece requires strong performers. This piece has characteristics typical of Reich, but it also has some other aspects to it including Japanese modes.. Also, through pitch class set analysis, it is possible to distinguish a form from this piece, based on the relationship between the different patterns.

Steve Reich, born on October 3rd, 1936 in New York, is a compositional pioneer, and a master of the repetitive music that emerged from New York in the 1960s.⁶ This repetitive music, known as Minimalism, is the setting for many of Reich's pieces for percussion ensemble such as *Drumming* (1971), *Clapping Music* (1972), and *Music for Pieces of Wood* (1973). *Nagoya Marimbas* was written much later, about thirty years later. A reflection on this piece by the Steve Reich provides some insight to its technicalities:

Nagoya Marimbas is somewhat similar to my pieces from the 1960s and '70s in that there are repeating patterns played on both marimbas, one or more beats out of phase, creating a series of two-part unison canons. However, these patterns are more melodically developed and change frequently, and each is usually repeated no more than three times, similar to my more recent work. The piece is also considerably more difficult to play than my earlier ones and requires two virtuosic performers.⁷

⁶ Paul Griffiths. "Reich, Steve." *Grove Music Online*. *Oxford Music Online*. Oxford University Press, accessed February 27, 2017, <http://www.oxfordmusiconline.com/subscriber/article/grove/music/23091>.

⁷ "Nagoya Marimbas." *Nagoya Marimbas*. Accessed February 27, 2017. <http://www.laphil.com/philpedia/music/nagoya-marimbas-steve-reich>.

Nagoya Marimbas was written in honor of the opening of Shirakawa Hall in Nagaoya City, Japan. The piece was commissioned by Sekar Sakura from the Nagoya College of Music. The first performance of this piece as December 21st, 1994 at the Shirakawa Hall and it was performed by Sekar Sakura, Yukie Kurihara, and Maki Kurihara.⁸

They very first pattern we see in this piece is based on a five-note pentatonic motive. This mode is used in the music of many different cultures around the world, including groups in West Africa, Native Americans, and groups in East Asia such as China and Japan.⁹ Because of the universal nature of this mode, Reich may be appropriating this mode to evoke the expected Japanese sound. The melody that Reich comes up with is mostly based on leaps, rather than step-wise motion. This causes the listener to hear the melody less in relation to the mode than as a theme. Once the second voice is added in phase, it makes the mode even less obvious.



Figure 9 The Pentatonic Scale and the first pattern of *Nagoya Marimbas*

As mentioned above, this piece requires virtuosic performers. While the focus of piece is on the composite rhythm created by the two voices, each player needs to be independently strong with their part for the final product to be accurate. Similar to another piece by Reich, *Piano Phase* (1967), *Nagoya Marimbas* requires a lot of attention to time and pulses. However, *Nagoya*

⁸ Reich, Steve. *Nagoya Marimba*. Milwaukee, WI: Boosey & Hawkes, 1994.

⁹ Jeremy Day-O'Connell. "Pentatonic." *Grove Music Online*. *Oxford Music Online*. Oxford University Press, accessed February 27, 2017, <http://www.oxfordmusiconline.com/subscriber/article/grove/music/21263>.

Marimbas has a pattern that is much more syncopated which creates a hocket between the two parts. The rhythms of the two voices create the following composite rhythms.

The figure displays three musical staves in 2/4 time. The top staff, labeled 'Marimba 1', begins on the first beat with a quarter note, followed by an eighth note, a quarter note, and a quarter note. The second staff, labeled 'Marimba 2', begins on the second beat with a quarter note, followed by an eighth note, a quarter note, and a quarter note. The bottom staff, labeled 'Composite (Marimba 1 Unison Marimba 2)', shows the combined rhythm where the notes from both marimbas are aligned vertically. The first measure contains the notes from Marimba 1, and the second measure contains the notes from Marimba 2. A vertical bar line separates the two measures.

Figure 10 Individual rhythms and composite rhythm of first pattern

This pattern permeates the entire piece. The first marimba begins by playing the whole pattern outright, while the second marimba slowly adds in a few notes at a time until both are playing the whole pattern. By the time the second marimba is finished constructing this pattern, both marimbas are playing the exact same thing. However, the second marimba is three eighth-notes behind the first player. The first marimba states the pattern starting on beat one, and the second marimba begins the pattern begins on the end of two of the same measure. When two voices are playing at different intervals of time, or play the same thing beginning at different points of time, known as phasing.¹⁰ These phases happen at different intervals through this piece as well. The smallest interval we see is only one eighth-note apart, while the largest interval is three quarter-notes apart. There are some patterns where the rhythmic interval isn't a multiple of

¹⁰ Whittall, Arnold. "phasing." *The Oxford Companion to Music*. *Oxford Music Online*. Oxford University Press, accessed February 27, 2017, <http://www.oxfordmusiconline.com/subscriber/article/opr/t114/e5139>.

eighth-notes, but is a multiple of sixteenth-notes. Here are some examples of different phasing intervals:

The image displays three musical staves, each representing a different phasing interval in a marimba piece. Each staff consists of two parts, both labeled 'Marimba'. The top staff shows a phasing interval of three eighth notes, with the second part starting three eighth notes after the first. The middle staff shows a phasing interval of three sixteenth notes, with the second part starting three sixteenth notes after the first. The bottom staff shows a phasing interval of three quarter notes, with the second part starting three quarter notes after the first. Each staff begins with a 'Start' marker above the first staff line.

Figure 11 Top: m. 15, interval of three eighth-notes. Middle: m. 19, interval of three sixteenth-notes. Bottom: m. 33, interval of three quarter-notes

These variations in the interval of the phasing create tension and contribute to development through the piece. In the first two examples in the Figure 11, the pattern is the same in the first part, while the second parts change the rhythmic interval.

Pitch-class set analysis reveals the harmonic relationships of the piece's patterns. I used the first marimba part to determine the new patterns to analyze. Anytime the first marimba's pattern changed, I considered it to be a new pitch-class set. Throughout the whole piece, thirty-five sets were identified. Of these thirty-five sets, twelve are unique, meaning many were repeated multiple times throughout the piece. Some are only presented one time; some are presented up to eleven times. The table below shows the unique sets, their prime form, and the frequency of these sets throughout the piece. These sets are organized by their frequency of use.

Table 1 Frequency of Pitch-Class Sets

Set Number	Prime Form	Frequency
3-9	027	1
4-16	0157	1
4-23	0257	1
6-z25	013568	1
7-35	013568t	1
5-20	01568	2
5-23	02357	2
6-33	023579	2
5-35	02479	4
6-z29	023679	5
5-29	01368	6
6-32	024579	11

Pitch-class set analysis can show the relationship among these sets. To determine this, a Nexus-Set must be identified. The Nexus-Set is the set that is the most important. The Nexus-set is the set that is the most important, like the A theme in sonata-allegro form, because we find relationships of all the other themes to the A theme. I labeled the Nexus Set as 5-35, because it is the very first set in this piece. Every set has a complement set as well. The complement set is made of all of the notes that are not found in the original set. In this case, our Nexus Set's complement set is 7-35. Figure 12 below shows the Nexus Set in with its complement. The complement is shown both in Prime form (bottom line) and in relation to the the Nexus-Set.



Figure 12 Left: The Nexus Set (5-35). Right: The Complement (7-35).

Once the Nexus Set was established, the next task was to search for relationships between all of the unique sets and the Nexus-set and its complement. From strongest to weakest, the relationships that I found were the following: a set was a subset or a superset of both the Nexus

Set and its complement (KH), a set was a subset or a superset of or a superset of the Nexus Set or its complement, a set of the same cardinality (equal number of pitch-classes) have all but one pitch-class in common with the Nexus Set or its complement (R!), and a set has no intervals in common with the Nexus Set based on its interval Vector (R0). These relationships are based on Allen Forte's Pitch-Class Set analysis guide, which is included in the appendices. This table below shows the relation ships.

Table 2 Relationships of different sets to the Nexus Set and its Complement

Set Number	Prime Form	Interval Vector	Frequency	Relation to Nexus Set
5-35	02479	032140	4	Nexus Set
6-33	023579	143241	2	KH
3-9	027	10020	1	KH
4-23	0257	21030	1	KH
6-32	024579	143250	11	KH
4-16	0157	110121	1	K
5-23	02357	132130	2	K
5-20	01568	211231	2	K
6-z25	013568	233241	1	K
5-29	01368	122131	6	RP
6-z29	023679	224232	5	R0
7-35	013568t	254361	1	Complement

When looking at the frequency of these Pitch-Class Sets, and also the strength of their relationship to the Nexus Set, it is possible to outline a form of this piece based on when these sets occur. Based on the strength of the KH relationship, and the frequency that set 6-32 is presented, this piece begins to fit into a sonata-like form. We begin the piece with the Nexus-set, the A theme. At measure fifty-seven, we see a string of eight patterns that are set 6-32. Similar to a Tonic/Dominant relationship, this is our B Theme, finally at measure seventy-six we are back to the Nexus-set.

Steve Reich is a master of the Minimalist genre. He finds ways to develop repetitive melodic lines and rhythms into a larger work of music. Through phasing found in the rhythmic

intervals, and relationships between the patterns found through pitch-class set analysis, it is possible to identify a form of this piece that work.

Chapter 3 - *Ti Mon Bo*

Composer, timbalero, and band leader Tito Puente contributed greatly to the popularization of Cuban and North American jazz music. Through listening and studying transcriptions of Tito Puente's solo, I have identified some important characteristics of Tito Puente's improvisation in his first recording performance of *Ti Mon Bo*.

Ernesto Antonio "Tito" Puente was born in New York City on April 20th, 1923.¹¹ He was best known for his virtuosic playing on the timbales and the vibraphone. Although Tito Puente spent most of his life performing and popularizing Cuban dance music, he was not of Cuban descent. His parents, Ernesto and Ercilia Puente came to the United States in the early 1920s from Puerto Rico.¹² Because he and his father shared the same name, Tito's parents referred to him as Ernestito, and that was shortened down to Tito.¹³

Growing up, Tito performed with many local groups, including Los Happy Boys, and in his teenage years, he performed with Noro Morales and Frank "Machito" Grillo.¹⁴ He eventually went on to form and lead a band called The Picadilly Boys, which later became known as the Tito Puente Orchestra.¹⁵ This orchestra became a training ground for other Afro-Cuban musicians such as Mongo Santamaria, Willie Bobo, Ray Barretto, and Johnny Pacheco.⁷

¹¹ Lise Waxer. "Puente, Tito." *Grove Music Online. Oxford Music Online*. Oxford University Press, accessed March 10,

2017, <http://www.oxfordmusiconline.com/subscriber/article/grove/music/49880>.

¹² Puente, Tito, and Jim Payne. *Drumming with the mambo king*. Milwaukee, WI: Hudson Music, 2000.

¹³ *Ibid.*

¹⁴ *Ibid.*

¹⁵ *Ibid.*



Figure 16 Upbeat quarter-note-triplets, mm. 2-3

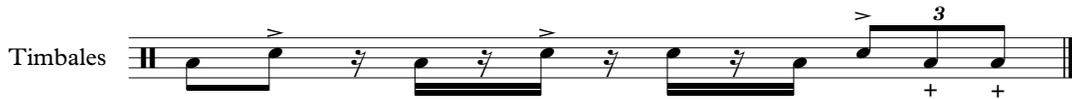


Figure 17 Upbeat sixteenth-notes, m. 35

Another technique Tito Puente explores is known as a hemiola. A Hemiola is a term that refers to the ratio of 3:2.¹⁶ This term can also refer more generally to the implication of a different time signature than notated. A general example of a hemiola would be consecutive dotted-eighth-notes in 4/4 time. It would be easy for the listener to perceive the dotted-eighth-notes as the new pulse, and it would cycle against the quarter-note every three measures.



Figure 18 Example of a basic 4:3 hemiola

Tito Puente's use of hemiolas are a little more complicated. He uses groups of notes, rather than just single notes to outline the polyrhythms. This first example is similar to the example above. The notes on the high drum outline a 4:3 hemiola, but Puente accents every other

¹⁶ "Hemiola." *The Oxford Companion to Music*. *Oxford Music Online*. Oxford University Press, accessed March 13, 2017, <http://www.oxfordmusiconline.com/subscriber/article/opr/t114/e3212>.

hit on that drum, which makes it feel like it is twice as slow. He also fills in the space with more syncopated sixteenth-notes.

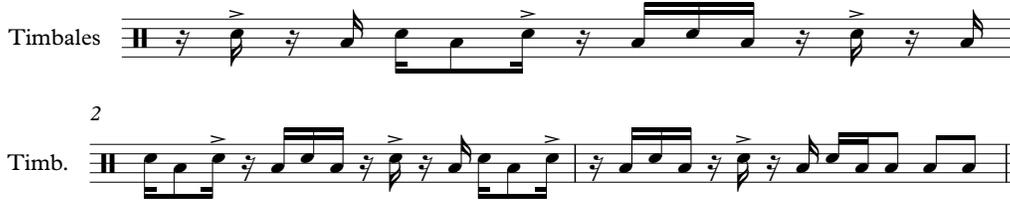


Figure 19 Example of a hemiola, mm. 38-40

Another example of a hemiola in this solo is at starting at measure 49. Puente sets up a typical 4:3 hemiola, but he fills in the dotted-eighth-notes with two sixteenth-notes on the low drum. He starts by doing it for only one cycle, but then he plays it out longer for the last time.

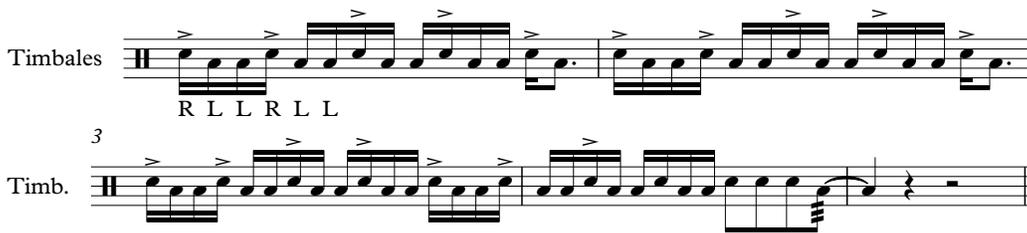


Figure 20 4:3 Hemiola, mm. 49-52

The techniques that Tito Puente presents in his solo from *Ti Mon Bo* are not limited to a particular Cuban rhythm or style. All of these figures can be played in other styles such as son-montunos, mambos, and more. These ideas are expanded upon and based around the clave to make things even more interesting. When I play these tunes, or when ever I solo on timbales, it is not my attempt to try and play a transcribed Puente solo verbatim, but to try and play some of the figures and techniques emulate his style.

Chapter 4 - *Trio Per Uno*

Trio Per Uno (“trio for one”) was written in 1995, and revised in 1999, by Nebojša Živković. The piece contains three movements: I (Meccanico), II (Contemplativo), and III (Molto energico). The first and the third movements are very similar in instrumentation with the use of drums; the first movement bongos and a shared bass drum while the third movement uses toms and snare drums. The second movement is different because of its use of keyboard instruments like vibraphones and crotales. The composer describes the first movement of this piece as being “perfection of wildness in an archaic ritual cult.”¹⁷ In *Trio Per Uno*, there are many techniques required of all three players to convey one thematic line. This piece is built on the concept of “rhythmic counterpoint.” Generally referring to harmony, counterpoint is “the combination of simultaneously sounding musical lines.”¹⁸ Rhythmically, Živković uses multiple voices to create composite lines, to develop motives, and to build tension in specific parts of this first movement.

Trio Per Uno was recorded by the Nebojša Živković, Ben Toth, and Fernando Meza on Živković’s album *Nebojsa Jovan Zivkovic: The Castle of the Mad King*.¹⁹ This piece was premiered on October, 21st, 2009 at the Schleswig-Holstein Musik Festival in Hasselburg,

¹⁷ Živković, Nebojša. *Trio Per Uno*. Nierstein, Germany. Ed. Musica Europea, 1995/1999.

¹⁸ Klaus-Jürgen Sachs and Carl Dahlhaus. "Counterpoint." *Grove Music Online*. Oxford Music Online. Oxford University Press, accessed March 16, 2017, <http://www.oxfordmusiconline.com/subscriber/article/grove/music/06690>.

¹⁹ Živković, Nebojša Jovan, writer. *ZIVKOVIC: Castle of the Mad King (The)*. Naxos Digital Services US Inc., 2000, CD.

Germany.²⁰ The first movement of this piece can be described as energetic, mechanical, or aggressive because of its rhythmic drive and loud dynamics.

Because this piece is a multi-percussion piece, the composer has provided a chart that explains his notation. This chart will be useful when observing the examples in this paper.

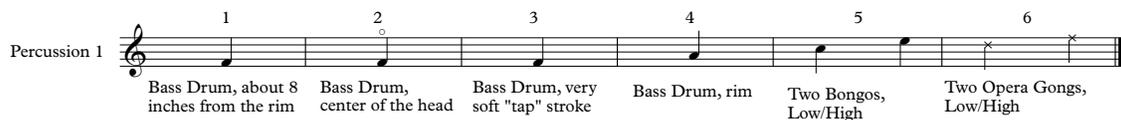


Figure 21 Notation chart

The term “rhythmic counterpoint” connotes the manner in which rhythms in separate voices interact or fit together to create composite ensemble themes. This compositional technique is prevalent in the first movement. The first example is in measures 11-12, and it is first the trading of the thirty-second-notes from player to player in measure eleven, then the trading and the buildup of the accents in measure twelve.

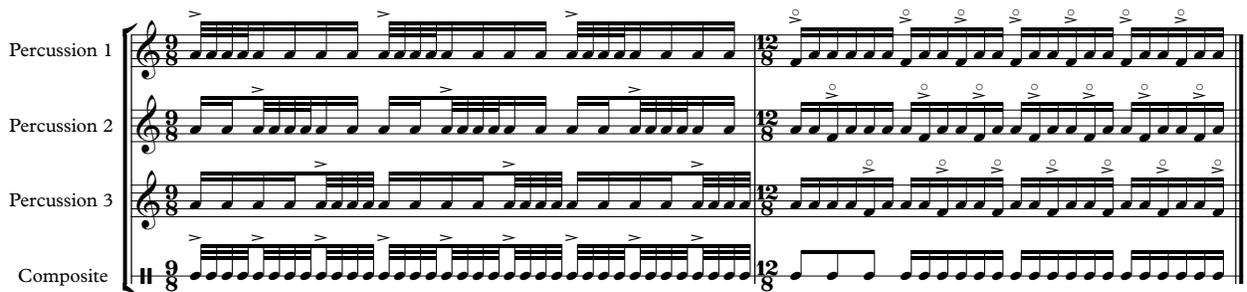


Figure 22 Rhythmic Counterpoint in mm. 11-12

²⁰ "Program Notes." Work comments in English by the composer - Nebojša Jovan Živković | Composer · Percussionist · Concert Artist. Accessed March 16, 2017. <http://www.zivkovic.de/p-notes.htm>.

The top three lines of the above example are the individual players, while the bottom line is the composite rhythm, or what the composer is trying to convey. The first measure, which is played on the rims of the shared bass drum, comprise thirty-second-notes being passed from player to player. When players move to the head of the bass drum in measure twelve, the eighth note is passed, but then each player is offset by one sixteenth-note, causing the sixteenth-note to now be the composite rhythm. The use of a shared bass drum lying flat in the center of the trio, emphasizes the idea of it being a trio “for one” as the composer mentions it. If were played on three different instruments, there would also be issues with timbre, because it would be rather difficult the get three different drums to match exactly.

In a similar example, all three players move between the center and edge of the bass drum (still on the head). Živković writes accent patterns to be played in the center of the head, which, when played together, create an interesting composite rhythm.

Figure 23 Rhythmic Counterpoint, mm. 25-26

The composite rhythm that is produced from the three individual voices, although much simpler than what any of the three players is playing, is much more interesting. There is a development over the short, two measure phrase that seems to drive into the what comes next.

The third example of rhythmic counterpoint is a little more complex than the last two. To contrast with the second example above, each player plays the same line in unison. Similar to

what Steve Reich's compositional technique, Živoković offsets each player by a sixteenth-note, one at a time, to slowly create the composite rhythm.

Figure 24 Rhythmic Counterpoint, mm. 30-33

The composite line in this example is written using a three-line staff because I felt that would better show the development of the of the composite rhythm. This is a good example of development in this piece. The dynamic that this passage is written at is *piano* and it does not crescendo at all. The only way the composer builds tension leading into the next phrase is the composite rhythm. By displacing one player at a time by one eighth-note, he turns a simple dotted-quarter-note rhythm into a dense sixteenth-note transition.

There are times in this piece where Živković uses unison passages to contrast the the rhythmic counterpoint. For example, the very begging of this piece is straight sixteenth-notes on the rim of the bass drum in unison. He also has some more complex ideas that he had in union. Here in measures 37-45, we see some very complex rhythms, that are all played in unison.

Another challenging part about this is that the way the drums are set up, this passage is easiest played with alternating stickings starting with the left hand. A technical deficiency in most players, percussionists are generally accustomed to playing passages with a right hand lead.

The image shows a musical score for Percussion 1 and Percussion 2, measures 37-45. The score is in 4/4 time and features complex rhythmic patterns with sixteenth and thirty-second notes. Percussion 1 starts at measure 37 with a mezzo-forte (mf) dynamic. Percussion 2 starts at measure 40 with a forte (f) dynamic. The passage concludes at measure 45 with a fortissimo (fff) dynamic. The score includes various articulations such as accents, slurs, and dynamic markings.

Figure 25 Unison Passage, mm. 37-45

This piece has a lot to offer in terms of compositional technique, and demand of the player. With intricate passages played in unison contrasting with contrapuntal rhythms creating interesting composite rhythms, this piece has become a standard in the repertoire of the chamber percussionists, as with many of Nebojša Živković's works.

Chapter 5 - *Wind in the Bamboo Grove*

As performers, our job is to interpret what the composer writes. Through analysis, we can identify some aspects that can shape our own ideas and also help us see more clearly what the composer was thinking. In Keiko Abe's piece *Wind in the Bamboo Grove*, there are things such as form, rhythm, and specific musical techniques that the player should take into account when developing his or her interpretation.

Keiko Abe was born in the Yoyogi area of Tokyo, Japan in April of 1937.²¹ Abe was first introduced to the marimba in the early 1950s when Lawrence Lacour brought four marimbas to Japan on a Missionary trip.²² Inducted into the Percussive Arts Society in 1993, Keiko Abe is most well known as a soloist, composer, and designer of the modern day marimba. Beginning in the 1970s, Abe began working with the engineers at Yamaha to help develop the marimba to meet her needs as a player and expand the range for her compositions.²³ By 1987, Abe and Yamaha had come out with their final product, the YM-6000, the first five octave marimba ever.¹



Figure 26 YM-6000 Marimba (photo courtesy of Yamaha.com)

²¹ Kite, Rebecca. *Keiko Abe: A Virtuositic Life*. Leesburg, VA: GB Percussion, 2007.

²² Vogel Weiss, Lauren. "Keiko Abe." *Percussive Notes* 32 (June 1994).

²³ Kite, Rebecca. *Keiko Abe: A Virtuositic Life*. Leesburg, VA: GB Percussion, 2007.

Wind in the Bamboo Grove, written in 1984, is a reflection of Abe's connection to nature.

The program notes for this piece have a quote from Keiko Abe herself that reads as follows:

In the early morning haze as I stood in the middle of a bamboo grove, I became enwrapped in a rich medley of sound. Listening to the bamboo leaves rustling against each other in the occasional whip of the breeze, I seemed to hear the song of the wind... I sensed the dynamic and powerful nature of life forces. I took out of my pocket a marble and threw it into the grove. The blue marble disappeared into the morning haze, leaving behind its beautiful echoes as it rebounded from stalk to stalk²⁴

-Keiko Abe

This piece is a very common recital and one of Abe's most popular works. It contains many musical elements that are very idiomatic to the instrument, although this should be expected, because Keiko Abe is one of the best marimba players in history. In this piece, Abe explores new techniques as well, including playing with the shafts of the mallets on the edge of the tone-bars.

The form Abe uses for this piece is a slightly modified sonata-allegro form. This piece contains a slow introduction, a fast exposition, a slow cadenza (in place of a development), and a fast recapitulation with a coda at the end. Figure 27 below shows us a more detailed form of the piece, and general characteristics of each section.

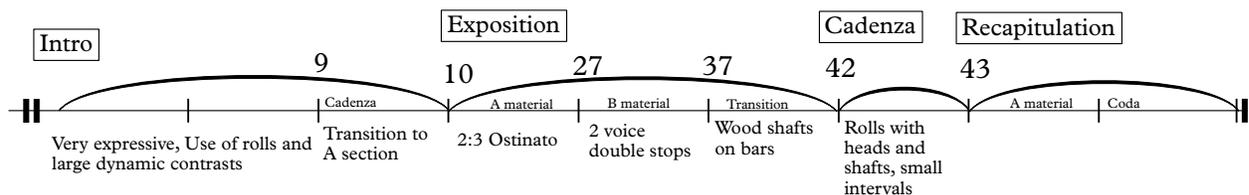


Figure 27 Form Diagram for Wind in the Bamboo Grove

²⁴ Reids, Alexandra. Program notes, *Wind in the Bamboo Grove*. Student recital. Newark, DE: University of Delaware.

The form of a piece is like a road map; it shows the performer where they are going, but it is up to them to figure out how to get there. Knowing the form will help a performer develop their own interpretation of the piece, and understand how the sections come together to create the large piece.

The different sections of this piece have some very unique styles to them. The A material in the exposition, probably the most recognizable musical idea from this piece, is a very energetic, aggressive ostinato. This fast paced material is in the lowest octave of the marimba





Figure 29 Example of 2 versus 3, mm. 8-9

Another recurring theme is the speeding up of notes. This almost paints the picture of the winds picking up and blowing leaves around. She used this technique throughout the cadenzas and transitions. In my interpretation, I tried to bring this back in the more rhythmic sections by using *rubato*.

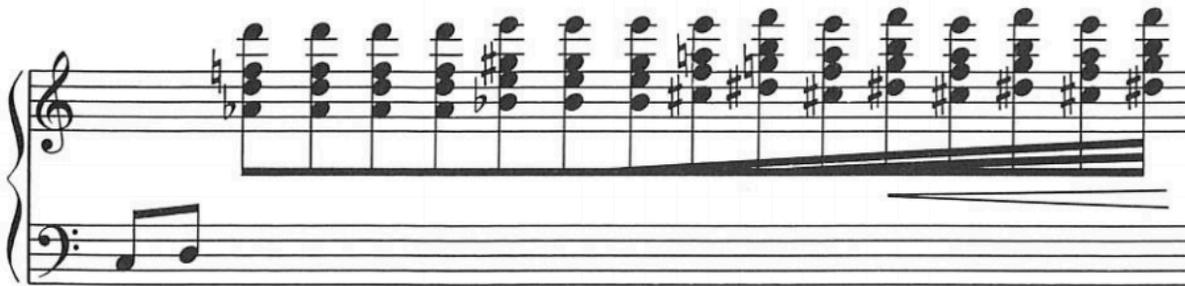


Figure 30 Accelerating notes, end of introduction

A place in the A material that I think is most appropriate to add some *rubato* to mimic this wind blowing idea is when the ostinato stops and a short melody is interjected. This *rubato* could not only add musical style to the interpretation, but it can also help facilitate getting in and out of the ostinato smoothly.

The image shows a musical score for two marimba parts. The top part is labeled 'Marimba' and the bottom part is labeled 'Mar.'. Both parts are in 12/8 time. The Marimba part starts with a piano (*p*) dynamic and a mezzo-forte (*mf*) dynamic. The Mar. part starts with a mezzo-piano (*mp*) dynamic and a mezzo-forte (*mf*) dynamic. The score shows a rhythmic pattern of eighth notes in the left hand and chords in the right hand.

Figure 31 Example of where *rubato* can be added, mm. 20-23

The B material in the exposition is a stark contrast to the A material. We see a change in the rhythm, from sixteenth-notes to eighth-notes. While the left hand plays a similar ostinato to the A material, the right hand is now rhythmically in unison with the left hand, creating a contrapuntal sound and texture.

The image shows a musical score for two marimba parts. The top part is labeled 'Marimba' and the bottom part is labeled 'Mar.'. Both parts are in 4/4 time. The Marimba part starts with a piano (*p*) dynamic. The Mar. part starts with a piano (*p*) dynamic. The score shows a rhythmic pattern of eighth notes in the left hand and chords in the right hand.

Figure 32 B Material, mm. 27-32

Abe utilizes some techniques that are very specific to a marimba. Most specifically she instructs the performer to use the shafts of the mallets on the edge of the tone-bars. This create a very distinct sound from anything else within this piece. It also helps illustrate bamboo chutes clicking against one another in the wind. While this technique could damage the tone-bars if the

performer plays with too much weight or force, it is very effective when done correctly. The notes indicated with the “X” on the stems are to be played on the edge of the tone-bar.

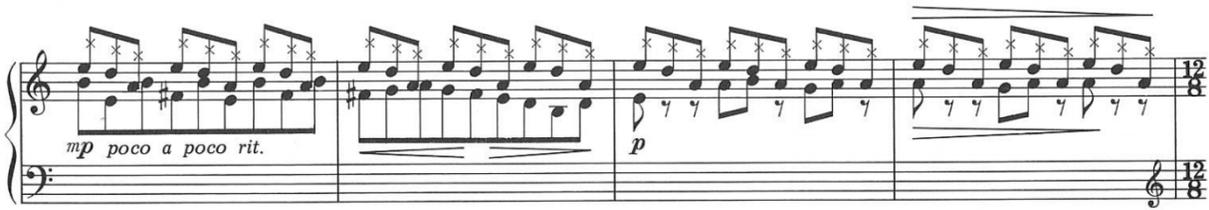


Figure 33 Mallets on the edge of tone-bar, transition to cadenza, mm. 37-40

Within the cadenza, Keiko Abe has the performer switch back and forth from playing on the edges with the shafts, and the traditional way with the heads on the mallets on the tone-bars. The Cadenza is almost entirely rolled throughout, making it a very contemplative moment. With the shafts on the tone-bar and the performer rolling, it creates even more of a natural wind-blown bamboo sound. A couple ways a performer could interpret these rolls differently to create their own sound is by varying the speed of the rolls (how many times the tone-bar is rearticulated in a beat) or the balance of the four voices.



Figure 34 Roll with normal technique versus Shafts on the edges of the tone-bar, m. 42

Keiko Abe’s use of form and innovative compositional techniques, both with texture and timbre, really give this piece a sound of its own. There is a lot of room for interpretation of the performer both in regards to form and musical style. There is no wonder why this piece is a common recital piece because it is so malleable to interpretation.

Chapter 6 - *Eight Pieces for Four Timpani VII. March*

Elliott Carter's *Eight Pieces for Four Timpani* is just as much a study of time as it is a study of timpani, especially in the final movement, *March*. The pieces are filled with metric modulations that you would be hard pressed to find in any other music. In addition to the metric modulations, there are also polyrhythms within the eighth movement. While weaving in and out of time is an important aspect of this piece, Carter also uses some different tools and techniques to help get the colors he wants out of the drums.

Born in New York in 1908, Elliott Carter was an American composer who was well respected by his contemporaries.²⁵ His grandfather started a business importing lace and because of this business, Elliott Carter spent a lot of his young life in Europe.²⁶ At the age of fourteen, Carter began to study at the Horace Mann School where he developed an interest in modern music.²⁷ He studied counterpoint with Nadia Boulanger at the École Normale de Musique in Paris from 1932 until 1935.²⁸ Carter has taught at many outstanding schools such as the Peabody Conservatory, Columbia University, and Julliard, and he has won many awards including two Pulitzer Prizes.²⁹

Eight pieces for Four Timpani, in its original form, only contained six movements. The first six movements, *Saeta*, *Moto Perpetuo*, *Recitative*, *Improvisation*, *Canaries*, and *March*,

²⁵ David Schiff and Mark D. Porcaro. "Carter, Elliott." *Grove Music Online*. Oxford Music Online. Oxford University Press, accessed March 17, 2017, <http://www.oxfordmusiconline.com/subscriber/article/grove/music/A2257467>.

²⁶ Ibid.

²⁷ Ibid.

²⁸ Ibid.

²⁹ Ibid.

were released in 1950, while the other two, *Adagio*, and *Canto*, were added in 1966.³⁰ In the performance notes of this collection, Elliott Carter states that not more than four of these pieces should be performed as a suite in public at a time.³¹ Each of these pieces is dedicated to a timpanist. The final piece of this collection, *March*, is dedicate to Saul Goodman, who was the timpanist for the New York Philharmonic from 1926 until 1972.³² These Pieces are often asked for on auditions for orchestras and graduate schools as well as common pieces to play on recitals.

March is the final piece of this collection, and often the most played. This piece has many music elements that are typical of Elliott Carter’s writing such as metric modulations, polyrhythms, and specific techniques to get certain colors and timbres. The piece begins with the player using the head of his or her right mallet, and the wooden butt of the left mallet. Carter establishes an ostinato in the left hand which I believe sheds on how this piece got its name.

The image shows a musical score for the beginning of the piece 'The March'. It is written for a timpani player. The tempo is marked as quarter note = 105. The score is in 4/4 time. The right hand part is labeled 'R.H.-HEAD' and the left hand part is labeled 'L.H.-BUTT'. The left hand part features a triplet of eighth notes marked with a forte (f) dynamic. The right hand part features a series of eighth notes and quarter notes.

Figure 35 A Material (The March ostinato), mm. 1-2

³⁰ Williams, Jan. "Elliott Carter’s “Eight Pieces for Timpani” —The 1966 Revisions." *Percussive Notes*, December 2000.

³¹ Carter, Elliott. *Eight Pieces for Four Timpani*. New York. Associated Music Publishers, Inc. 1995.

³² "About PAS." Saul Goodman. Accessed March 17, 2017. <http://www.pas.org/About/the-society/halloffame/GoodmanSaul.aspx>.

The form of this piece is rather simple: ABA. The second A section has some differences from the first A section, but I chose to keep the label of A instead of A' because the thematic material is the same. The A sections are both made from up of a left hand ostinato and a right hand melody. The B section is definitely more developmental and this is where we hear most of the metric modulations.

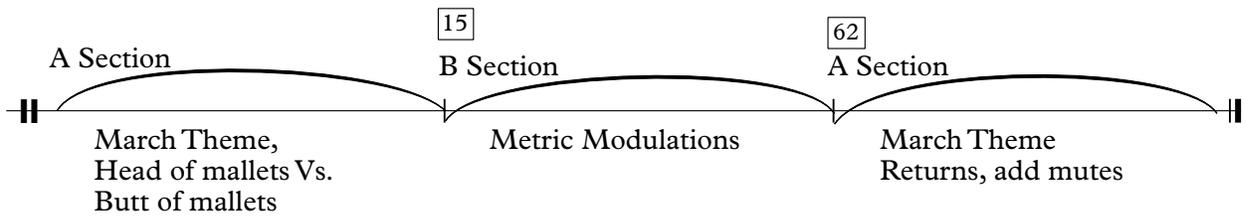


Figure 36 Form diagram of VII. March

Throughout the A section we see the marching ostinato with the polyrhythm of the right hand melodic material. Occasionally we find a pause in the march where Carter briefly follows the polyrhythm. I like to compare this to tonicization in harmonic analysis. Here we see Carter briefly touch on what could be a new pulse, but it makes its way back to the home tempo, instead of completely modulating.

The image shows two staves of musical notation. The top staff is labeled '[HEAD]' and '[BUTT]' and contains a bass clef with a melody. It starts with a dynamic marking of *mf*. A dashed box highlights a section of the melody, and a dynamic marking of *f* is placed above it. Below the staff, the text '(L.H.-mf sempre)' is written. The bottom staff is also labeled '[HEAD]' and '[BUTT]' and contains a bass clef with a melody. It starts with a dynamic marking of *mf*. A note with a fermata is shown above the staff, with the text '(♩=♩)' next to it.

Figure 37 "Metric Tonicization" mm. 3-4 of this example

The B section brings up all the metric modulations, and it even begins with one. What was formerly the dotted eighth-note is now the quarter note, bringing the tempo to 140 beats per minute. Throughout this section the performer is required to switch the orientation of mallets multiple times, sometimes to both mallet heads, sometimes to both mallet butts, or sometimes to one of each.

Figure 38 Frequent mallet changes

The final A section is the same style as the first A section with some slight changes. The player needs to have mutes ready, and easily accessible to put on the drums. The drums get muted one at a time, to create dry, articulate sound. Because the player must mute the drums so quickly, he or she needs to come up with an efficient process. Below is a diagram of how I had my mutes set up. I used two additional music stands, one between the 32" drum and the 29" drum, and the other between the 26" drum and the 23" drum.

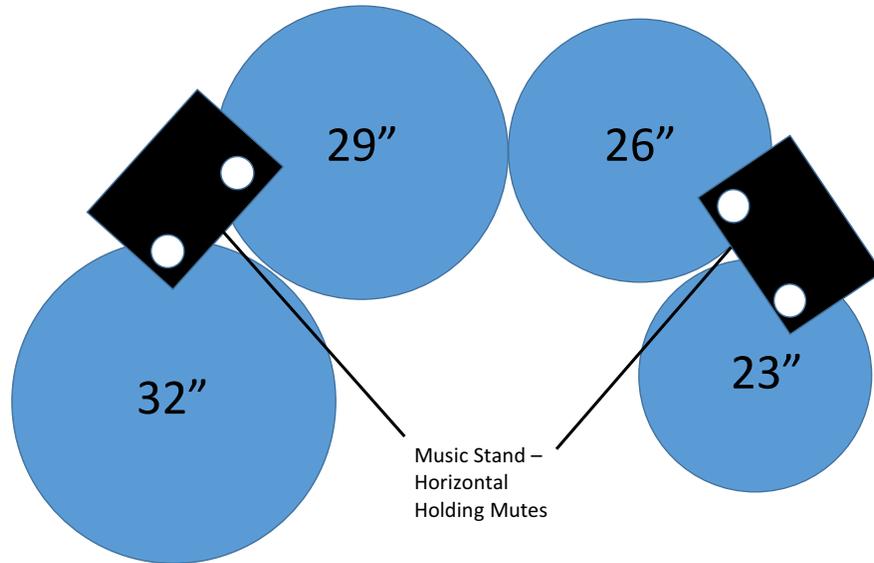


Figure 39 Setup suggestion for VII. March

Getting these mutes on is a challenge. When Carter notates to mute the drums, he frees one hand by having the left hand play while the right hand places mutes, or vice versa.



Figure 40 Muting example

By the end of this piece, all four drums are muted, and the performer is playing with the butts of both mallets. The piece ends with a long diminuendo, simulating a marching band continuing down the street.



Figure 41 Final diminuendo of the piece (The departure of the marching band)

From a performer's standpoint, this piece has a lot of technical considerations, such as choosing mallets that are going to work for switching the orientation, and setting up the mutes to work properly, to how to navigate and practice the metric modulations. It is amazing how Elliott Carter can create these musical ideas almost seventy years ago, and they are still technically challenging today.

Chapter 7 - *Douze Études No. 9*

Jacques Delécluse's *Douze Études*, completed in 1964, are considered a standard in today's snare drum repertoire. It is nearly impossible for a student to study percussion at a university or a conservatory and not play one of these iconic etudes. But why are these etudes so important to the study of our instrument? Why are these etudes so frequently asked for on auditions for professional orchestras and graduate schools? These etudes have a level of detail that is unparalleled by other works for snare drum. In Delécluse's ninth etude for snare drum, we see many musical and technical challenges that set these etudes apart. Using extreme and sudden contrasting dynamics, syncopation in duple and triple subdivision, and special techniques like grace notes, Delécluse has created a new standard for modern snare drumming.

French composer and percussionist, Jacques Delécluse was born in 1933 in Béthune, France. Delécluse comes from a very musical family. His father, Ulysses Delécluse, was a famous clarinet player and teacher in France.³³ Jacques started playing the piano when he was younger, and he attended the Paris Conservatory where he studied both piano and percussion.³⁴ During his time at the conservatory, Delécluse won first prize in both piano and percussion; he

³³ "About PAS." Jacques Delecluse. Accessed March 17, 2017. <http://www.pas.org/About/the-society/halloffame/DelecluseJacques.aspx>.

³⁴ Ibid.

was the first student to ever achieve this honor with two instruments.³⁵ Delécluse also performed with the Paris Opera Orchestra, and he taught at the Paris Conservatory.³⁶

In an interview with Rob Knopper, a percussionist with the Metropolitan Opera, Delécluse says the purpose of these compositions are for the student, that they are supposed to give students pleasure.³⁷ Delécluse composed far more than the twelve etudes we have today. He did not want to publish the same thing twice, especially if one was going to be lower quality.³⁸

Today, these twelve etudes are very commonly asked for on auditions for orchestra, universities, and youth orchestras.³⁹ In fact, a majority of professional orchestra auditions around the world request a Delécluse etude, and out of all of them, etude number nine is by far the most requested.⁴⁰

³⁵ "Day 12: my interview with jacques delécluse." ROB KNOPPER. Accessed March 17, 2017. <http://www.robknopper.com/blog/2014/10/26/day-12-my-interview-with-jacques-delcluse-and-the-albums-release-day-is-here>.

³⁶ "About PAS." Jacques Delecluse. Accessed March 17, 2017. <http://www.pas.org/About/the-society/halloffame/DelecluseJacques.aspx>.

³⁷ "Day 12: my interview with jacques delécluse." ROB KNOPPER. Accessed March 17, 2017. <http://www.robknopper.com/blog/2014/10/26/day-12-my-interview-with-jacques-delcluse-and-the-albums-release-day-is-here>.

³⁸ Ibid.

³⁹ Ibid.

⁴⁰ "How often are delécluse études asked for in auditions?" ROB KNOPPER. Accessed March 17, 2017. <http://www.robknopper.com/blog/2014/11/16/how-often-are-delcluse-tudes-asked-for-in-auditions>.

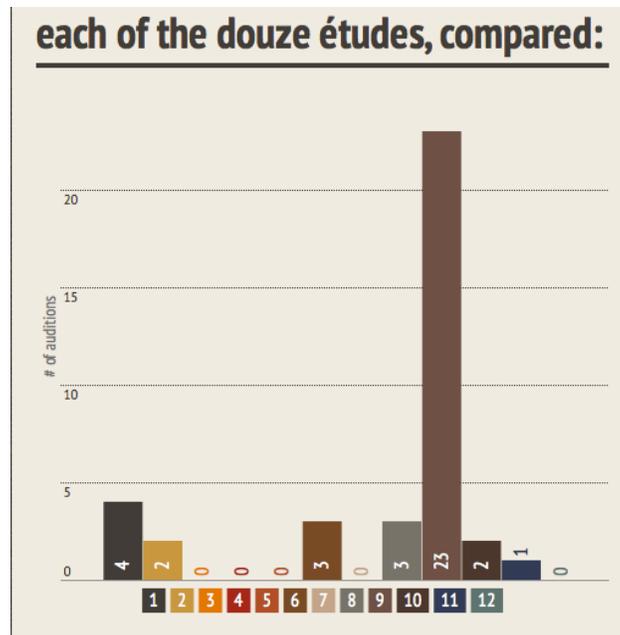


Figure 42 Frequency of Delécluse études on US orchestral auditions⁴¹

Throughout the ninth etude of *Douze Études*, we see many technical and musical difficulties that require the touch of a skilled percussionist. An example of this is the use of a wide dynamic range. This etude explores the extremes of the dynamic ranges and it also has sudden changes between loud and soft gestures. This musical element demands some technique to be performed properly. Any time there is a *subito* (immediate) change in dynamics, it requires either a controlled rebound, or to prep from a lower stick height to a higher stick height. Going from low to high is not a very difficult technique, but going from high to low requires a lot of control. We see this happen a few times throughout this etude.

⁴¹ "How often are delécluse études asked for in auditions?" ROB KNOPPER. Accessed March 17, 2017. <http://www.robknopper.com/blog/2014/11/16/how-often-are-delcluse-tudes-asked-for-in-auditions>.



Figure 43 *Subito* dynamic change from loud to soft, mm. 6-7

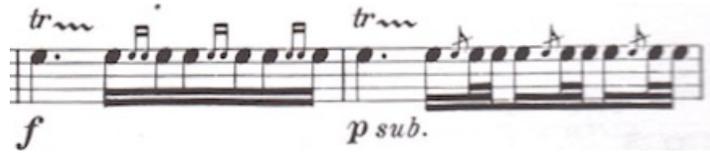


Figure 44 *Subito* dynamic change from loud to soft, mm. 15-16



Figure 45 *Subito* dynamic change from loud to soft, mm. 25-26

Another difficult aspect of this etude is the syncopation. It is written in the compound meter of six-eight, and it has many different syncopated passages throughout. On top of the syncopated rhythms, Delécluse also add other colorful techniques like grace notes and rolls to the mix.

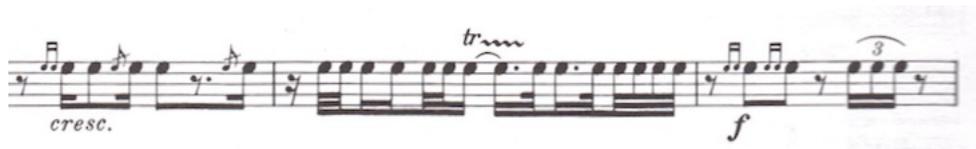


Figure 46 Use of syncopation, mm. 18-20

We also see syncopation with different subdivisions. Generally, the syncopation is within a duple subdivision, but we also find syncopation in triplet subdivisions.



Figure 47 Use of syncopation with a triplet subdivision, m. 33



Figure 48 Use of syncopation with a triplet subdivisions, m. 26

The last musical element that sets these etudes apart is Delécluse's use of special techniques such as grace notes. He establishes the prominence of the grace notes, or the drags, in the opening theme of this etude, and we see the continued use of this rudiment throughout the whole etude, being set among more complex rhythms and syncopations.



Figure 49 Use of drags in the opening theme, mm. 1-2

As this etude develops, Delécluse add these drags to more complex rhythms, and he also contrasts them to single grace notes, or flams. Going back and forth between these two rudiments requires control from the performer.



Figure 50 contrasting drags and flams, m 15-16



Figure 51 Contrasting drags and flams, mm. 47-48



Figure 52 Contrasting flams and drag on syncopated rhythms, mm. 18-20

Douze Études by Jacques Delécluse opened a new door of possibilities for the modern snare drummer. His innovative use of techniques paired side-by-side with musical aspects which were not commonly found in snare drum repertoire at the time created a new standard for which not only snare drummers but works for snare drum are now held. It is obvious why these etudes are commonly asked for on auditions.

Chapter 8 - *Prelude to a Dream*

Prelude to a Dream by Bryce Craig was written in 2016 for his newborn nephew, Callen.⁴² Scored for vibraphone and B-flat Clarinet, Craig thought it would be appropriate to write a lullaby for a newborn baby, but as he began composing, he wondered what a lullaby would sound like as heard while dreaming. To depict this, Craig's use of frequent changing of time signatures, abrupt tonal shifts, and electronic effects are a few examples of how he can achieve this goal.

Bryce Craig is a composer and percussionist currently living in Greensboro, North Carolina. He is a freelance composer, but he also works as a Music Editor and Audio Specialist at C. Alan Publications.⁴³ Craig received his Bachelor of Music Degree from Kansas State University and his Master of Music degree from Central Michigan where he studied with composer David Gillingham.

To illustrate how one might hear a lullaby in a dream-like state, Craig uses many musical and technical elements to his advantage. The first element that we find is the frequent shifting of time signatures to weaken the sense of strong beats and weak beats. If the piece were to be written entirely in four-four time, we would sense the strong presence of the down beats throughout the whole piece. This technique is most evident in the beginning section of this piece. In addition to the frequent changes in the time signature, the vibraphone player plays a pattern that emphasizes the third partial of the triplet, causing even more doubt in the perception of the downbeat.

⁴² Craig, Bryce. *Prelude to a Dream*. Greensboro, North Carolina: C. Alan Publications, 2016.

⁴³ Ibid.

The musical score consists of two staves. The top staff is for Bells, using soft plastic mallets, and the bottom staff is for Vibraphone, using soft yarn mallets. The music is written in treble clef and features frequent time signature changes: 3/4, 4/4, 5/4, 3/4, and 4/4. The vibraphone part consists of triplet eighth notes. The score includes dynamic markings of *pp* and *Ped. ad lib.*. A section labeled 'A' is marked at the beginning of measure 7.

Figure 53 Frequent time signature changes and emphasis of the upbeat, mm. 1-10

With the emphasis of the upbeat being played on the bells rather than the vibes, the listener might perceive the bells playing the downbeat, creating even more of a dream-like dysphoria.

These time signature changes happening again, however now both parts are present. The clarinet part has some melodic lines that emphasize the upbeats, and the vibraphone part has some chords that are pulsed to the dotted-quarter notes. Together, these create a sense of freedom from time, much like the sense of freedom within dreams. Another aspect of this example is in measures 46 and 47, during which the clarinet and the vibraphone play the same motive, but the vibraphone enters three eighth-notes later, creating an echo-like response.

The image displays two systems of musical notation. The first system, starting at measure 43, features a Bb Clarinet (Bb Cl.) and Vibraphone/Blues (Vibes/Bls.) parts. The Bb Cl. part begins with a rest, followed by a melodic line in 4/4 time with dynamics *pp* and *mp*. The Vibes/Bls. part starts with a *mf* dynamic, followed by a hemiola rhythm in 3/4 time with *pp* dynamics, and then returns to 4/4 time with *mp* dynamics. The second system, starting at measure 46, continues the Bb Cl. part with dynamics *pp*, *mp*, *p*, and *cresc.* across various time signatures (4/4, 9/8, 4/4). The Vibes/Bls. part starts with *pp* dynamics in 9/8 time and *mp* dynamics in 4/4 time.

Figure 54 Frequent time signature changes, emphasis of the upbeat in the clarinet, and hemiola rhythms in the vibraphone, mm. 43-48

Another aspect of this piece is the frequent and abrupt tonal shifts. These changes help outline the form of the piece. The piece has a very plagal nature to it in terms of the form. While we have multiple sections of this piece, we can really look at it in two larger sections, the first section being centered around C, and the second section being centered around F. I think another way to look at these two sections is the first being the lullaby, and the second being the dream. In the first section, it is very straight forward with the vibraphone accompanying the melody in the clarinet. The second is where things get a little more interesting with in the interplay between the two players, and the additions of some electronic effects.

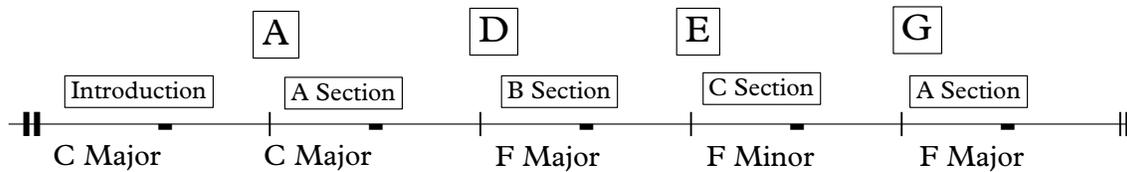


Figure 55 Form and Key Diagram

The last aspect of this piece is the use of the electronic effects. There are two that are being used in this work; one is rather traditional and one is a little more obscure. First, the composer calls for the vibraphone player to turn on the motor, which creates a tremolo effect. This is a common effect for the vibraphone to use, so common in fact, that it is a part of the instrument. The composer adds this in a very creative way; while the player is sustaining a note, he will slowly add in the motor creating a very elegant effect.

Figure 56 Addition of the motor to the vibraphone

The second effect that the composer uses is a digital delay for the clarinet. The composer specifies in the program notes of the score that the delay should be set to roughly seventy beats per minute, or 857 milliseconds. This creates an echo effect for the clarinet. And it interacts nicely with both the rhythms played by the clarinet and the tremolo from the vibraphone. Both effects are activated at letter D in the piece, and I think this is what separates the first section (the lullaby) from the second section (the dream).

Prelude to a Dream by Bryce Craig is a nice integration of wind and percussion instruments, and acoustic and electric effects. While the repertoire continues to grow for percussion, it is interesting to watch not only what instrumentation is being used, but also what new techniques are being explored. Through the frequent changing of meters, the abrupt change of tonal centers, and the use of electronic effects, this piece illustrates a beautiful dreamlike lullaby and it is piece that requires both musical sensitivity, and a technical approach to perform.

Chapter 9 - Birifor Funeral Repertoire

The gyil is an African xylophone commonly found in West Africa. While this instrument is common in both the Dagara and Birifor cultures, the repertoire is very different.⁴⁴ Within Ghana, there are five distinct style of gyil performance; Nandom (Dagara), Kaliba (Birifor), Jirapa, Sissala, and Lawra.⁴⁵ I will be focusing on the music of the Birifor culture, specifically the Birifor funeral repertoire, and discuss both background information and performance practice for this music.

There is a myth that is associated with the gyil and its music. It explains both the origins and the power of the gyil music.

There was once a great hunter, deep in the forest, searching for game, who heard an incredible sound coming from the trees. Upon investigation, the hunter witnessed a ceremony of the mythical *kontomble* utilizing a pair of *gyile* (plural). The *kontomble* are described as dwarfs, living in specific trees in the forest and thought to have magical powers, or even be descendants of the first humans. Infatuated by the sound of the music, the great hunter, having magical powers of his own, captured one of the *kontomble*. The hunter then bargained the life of the *kontomble* for the instruction of the gyil. The hunter learned the construction of the instrument, the repertoire of the *kontomble*, and brought the knowledge back to his people. To this day, the *kontomble* are still attracted to the sound of the gyil but also harbor animosity toward humans.⁴⁶

The music of the Birifor funeral is still influenced by the myth. In fact many of the songs in the repertoire reference the *kontomble* in their text. The Birifor funeral transcriptions are divided into two parts; *Daarfo*, representing the Birifor's heritage as hunters and performed on a

⁴⁴ Vercelli, Michael. "Performance Practice of the Dagara-Birifor Gyil Tradition Through the Analysis of the Bewaa and Daarkpen Repertoire" DMA Diss. University of Arizona, 2006, ProQuest Dissertations Publishing (3237587).

⁴⁵ Ibid.

⁴⁶ Ibid.

solo gyil, and *Daarkpen*, featuring songs symbolic of mourning and performed by an ensemble encouraging the participants to dance.⁴⁷ I will be discussing *Daarkpen* section of the funeral.

In the *Daarkpen* section of the funeral, the lead gyil player directly address the participants using culturally recognizable phrases spoken on the instrument.⁴⁸ The lead gyil player can control the mood of the funeral by selecting music that that may help communicate sorrow, grief, or many other emotions one might feel while dealing with the loss of a loved one. Best analyzed as a song cycle, each section of the *Daarkpen* is based around short melodic songs which represent proverbs in the Birifor language.⁴⁹ While there are many songs in the *Daarkpen*, we performed three of them: *Kpil Kpala*, *Nifa de na o beir*, and *Ganda yina*. The table below shows the translation of the texts.

Table 3 *Daarkpen* texts

Text	Translation
<i>Kpil Kpala</i> : “ <i>Kontomble a way, lam pulo</i> <i>Kontomble a way, gyil-saa ney</i> ”	Insults the <i>kontomble</i> ’s appearance by comparing the size of their testicles to the <i>gyil-saa</i> , or largest gourd resonator on the gyil
“ <i>Nifa de na o beir</i> ”	A bad person has died and taken his child with him. (The child will also die if there is no one to care for it)

⁴⁷ Ibid.

⁴⁸ Ibid.

⁴⁹ Ibid.

“Ganda yina”	The breadwinner is gone. What will you do tomorrow, how will you survive?
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The instrumentation that we used was a pair of gyile (plural) and one drum, a kuor (a gourd with skin, usually from a snake or a monitor lizard, stretched over it). The *Kpil Kpala* is the first in the series of ensemble songs within the *Daarkpen* repertoire. This song begins with a melody played by both gyl players, but soon, the lead player moves down to play the lower part. The lower part, first played by the lead player, is an ostinato that is a 2:3 hemiola.



Figure 57 *Kpil Kpala* Ostinato

When either the lead player or the support player is performing this ostinato, it is common to switch between this pattern, or improvise across the whole range of the board. The other player will play the perform the following melodic line.



Figure 58 *Kpil Kpala* Support

The second half of this song creates a different texture. The support player moves to a bell pattern on the edge of the lowest tone-bar on the gyl with the handle of his mallet, and plays the same melody as the lead player, only one sixteenth note later, creating a hocket.

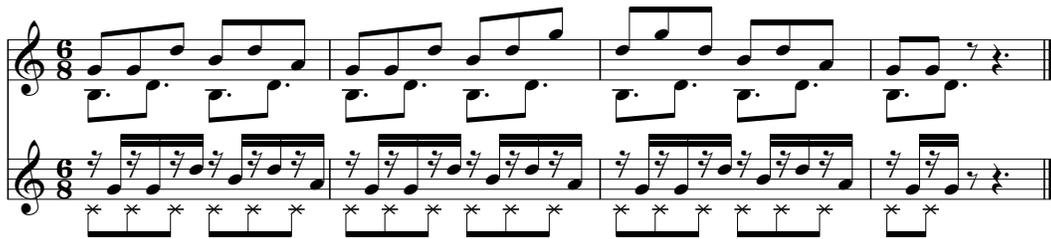


Figure 59 *Kpil Kpala* with bell and hocket

The next song, *Nifa de na o beir*, keeps this bell and hocket pattern continue, however the pulse switches from six-eight to three-four, changing the groupings of eighth-notes. Below is the main melody *Nifa de na o beir*.



Figure 60 *Nifa de na o beir*

Added on top of this melody is a second melody played by the lead player. The support player continues to hocket the *Nifa de na o beir* pattern.



Figure 61 *Nifa de na o beir* second melody

Finally, the third section of this song is the variations. These variations are played by the lead player while the support plays the hocket.. Each of these patterns is repeated until the lead player decides to move on to the next one.



Figure 62 *Nifa de na o beir* variations

The third and final song is *Ganda yina*. This song switches back to the six-eight pulse, and it begins with the lead player performing the main melody.



Figure 63 *Ganda yina*

Like the other songs, the lead player performs this melody with a second melody added on top. Because the *Ganda yina* melody has double stops in it, the lead player (and the hocket pattern for the support player) must play a variation. The left hand of the lead player, and the hocket pattern will perform the lower line of this melody, and the right hand of the lead player will play the upper line. Of the three songs, this one is the most technically demanding because of the coordination required between hands in the lead part.



Figure 64 two-handed lead pattern

Although this is just a brief overview of only a few selections of the Birifor funeral repertoire, it was a great introduction to this culture and their music for me personally. It is amazing how these relatively simple melodies can communicate so many different emotions. Studying this music is a great way to understand not only a part of this culture's music, but how the perceive and deal with situations that are universal, like death.

Chapter 10 - *Log Cabin Blues*

Over the years, George Hamilton Green contributed many works to the percussionist's repertoire, specifically ragtime or "novelty" music. Green spent much of his career performing vaudeville acts, but he lived in a time of transition for American music. In the early 1900s, Vaudeville and Ragtime was popular, but as the decades came and went, by the mid-1920s a new genre of music was becoming popular: jazz. Many of George Hamilton Green's compositions are commonly referred to as "ragtime" or "novelty music," but I believe Green was aware of the rise of jazz. *Log Cabin Blues* (1924), and many other compositions of his, seem to have characteristics of both ragtime and jazz, and can be considered a transitional piece between the two genres.

Recognized as one of the greatest musicians in the history of percussion, George Hamilton Green was a well-know composer, teacher, performer, and instrument designer. Green was born on May 23rd, 1893 to a rural, working-class, but musical family in Omaha, Nebraska.⁵⁰ Green's father, George Hamilton Green, Sr. was a bandleader and arranger who taught his sons, George Jr. and Joe, to enjoy music. G.H. Green was considered a child prodigy on the piano at the age of four.⁵¹ The Green brothers were first exposed to a xylophone around 1901, and by 1906, G.H. Green gave his first professional performance.

Log Cabin Blues was published in 1924 in a collection entitled *George Hamilton Green's Jazz Classics for the Xylophone: A Series of Modern Ragtime Solos with Piano Accompaniment*.⁵² Along with *Log Cabin Blues* were pieces such as *Triplets*, *The Whistler*, *Cross-Corners*,

⁵⁰ Lewis, Ryan C. "Much More Than Ragtime: The Musical Life of George Hamilton Green (1893–1970)." *Percussive Notes*, September 2010, 68-71.

⁵¹ *Ibid.*

⁵² *Ibid.*

Chromatic Fox-Trot, and *The Ragtime Robin*. This was an interesting time in American music because we started to see ragtime transit into jazz. Ragtime thrived in the early 1900s and this was probably the music that Green grew up listening to and playing. Now in the 1920s, we start to see jazz become the more popular genre thanks to artists like Jelly Roll Morton.

Ragtime is a style of popular music that lasted from the mid-1890s until around 1918.⁵³ Ragtime music is mostly identified by its large use of syncopation and it is typically thought of as piano music. Ragtime was very popular in the heartland of American: Missouri, St. Louis and Kansas City were hotbeds for ragtime music. With George Hamilton Green growing up right around the corner in Omaha, he was very close to the action.

Ragtime music was active in the African American community. Many of the most popular ragtime composers were African Americans such as Scott Joplin, Joseph Scott, and Jelly Roll Morton. Another style of music that was popular among African Americans was Jazz. Jazz developed from more than just ragtime, it is also heavily rooted in many genres such as spirituals, plantation songs, and the blues. *Log Cabin Blues* seems to share roots in both ragtime and jazz. What makes this piece “ragtime” is its use of syncopation. What makes this piece “jazz” is its openness to improvisation.

Throughout this piece, we hear many examples of Green’s use of syncopation. The first example of syncopation that we see is in the introduction of the piece. Through the first strain, which is the same melodic material as this introduction, we mostly see constant eighth notes, but in this introduction, we see some tied notes, and an occasional upbeat emphasis.

⁵³ Edward A. Berlin. "Ragtime." *Grove Music Online. Oxford Music Online*. Oxford University Press, accessed March 25, 2017, <http://www.oxfordmusiconline.com/subscriber/article/grove/music/A2252241>.



Figure 65 Syncopation in the introduction of *Log Cabin Blues*, mm. 1-4

Another time we see syncopation is in the second strain of this piece. Again, we see the emphasis of the upbeat. This pattern continues throughout the rest of this strain. We also see syncopation in the solo breaks of this strain.



Figure 66 Syncopation in the second strain



Figure 67 Syncopation in the second strain break

This piece gets its syncopated nature from its ragtime side. One innovation that jazz brought was improvisation. *Log Cabin Blues* has a few opportunities for improvisation. To start, I would like to point out that the score has chord changes notated above the staff, making it open to improvisation. There are many solo breaks throughout this piece, most notably in the second strain and the final strain. The final strain has a solo break in the middle of, which will be played twice because the whole strain is repeated. There are three options notated that are options to play in this break. In the score, it says the follows:

The Extra Breaks, Nos. 1 and 2, can used in the third and fourth measures of the last strain of this selection, which constitutes a “Solo Break” for Xylophone. In other words, the first time this strain is played, use the break that is written in the third and fourth measures, and

then when the strain is repeated, substitute either extra break No. 1 or No. 2. These extra breaks can only be used in the third and fourth measures of the last strain.⁵⁴

The image shows a musical score for three different break options. The top staff, labeled 'Solo Break', is in treble clef with a key signature of one flat (B-flat). It contains a melodic line with various note values and rests, ending with a triplet of eighth notes. The middle staff, labeled 'Extra Break 1', is in treble clef and provides a harmonic accompaniment with chords and some melodic fragments. The bottom staff, labeled 'Extra Break 2', is in treble clef and provides a different harmonic accompaniment, featuring several triplet markings under groups of notes. The entire score is contained within a single system of two measures.

Figure 68 Final strain break and extra breaks

If the performer wishes, these breaks could be substituted with improvisations. While this is a small opportunity for the performer to improvise, it is still an opportunity.

Because each strain of this piece is repeated, a lot of performers take liberties and improvise over the second time through a strain. Bob Becker, a member of the chamber group Nexus and a leading scholar of George Hamilton Green, has performed and recorded many of Green's rags with Nexus. On Nexus' CD *Ragtime Concert*, Bob Becker, playing the solo part, improvises over the second time through the second strain. Below is a transcription of his solo.⁵⁵

⁵⁴ Green, George Hamilton, and Randy Eyles. *Xylophone rags of George Hamilton Green*. Ft. Lauderdale, FL: Meredith Music Publications, 1984.

⁵⁵ *Ragtime concert*. Nexus, 1991, CD.



Figure 69 Bob Becker’s Improvisation over the second strain of *Log Cabin Blues*

George Hamilton Green was composing music in a very pivotal time in American history. Jazz was on its way into the popular scene, and ragtime was on its way out. As a ragtime composer, Green had to adapt. *Log Cabin Blues* is a good example of G.H. Green utilizing both styles, ragtime and jazz.

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