The Eccentric Compositional Style of Mark Applebaum: An Analysis of his Acoustic Percussion Works

Richard Shane Reeves
University of South Carolina

Follow this and additional works at: https://scholarcommons.sc.edu/etd
Part of the Music Performance Commons

Recommended Citation

This Open Access Dissertation is brought to you for free and open access by Scholar Commons. It has been accepted for inclusion in Theses and Dissertations by an authorized administrator of Scholar Commons. For more information, please contact dillarda@mailbox.sc.edu.
THE ECCENTRIC COMPOSITIONAL STYLE OF MARK APPLEBAUM: AN ANALYSIS OF HIS ACOUSTIC PERCUSSION WORKS

by

Richard Shane Reeves

Bachelor of Science
University of Alabama at Birmingham, 2003

Master of Music
University of Florida, 2008

Submitted in Partial Fulfillment of the Requirements for the Degree of Doctor of Musical Arts in

Music Performance

School of Music

University of South Carolina

2017

Accepted by:

David S. Herring, Major Professor

Michael Harley, Committee Member

Daniel Jenkins, Committee Member

Greg Stuart, Committee Member

Cheryl L. Addy, Vice Provost and Dean of the Graduate School
ABSTRACT

Mark Applebaum is an American composer and Professor of Composition at Stanford University who has made significant contributions to contemporary music. His music has been performed all over the world and his popularity as a composer continues to increase. The experimental nature of his music and his continual innovation and creativity makes his music worthy of study. However, there has been no scholarly research done on his music. Because of this void, a study of his music is needed and would be valuable to both performers and scholars alike.

The oeuvre of Mark Applebaum is vast and includes music written in traditional mediums as well as those that are unorthodox. The author has chosen to limit the focus of this document to nine acoustic percussion works. Using these selected works, this document will provide an analysis of certain compositional traits that illustrate the composer’s eccentric compositional style. Applebaum has written many other pieces for chamber ensembles and, large ensembles, as well as electro-acoustic compositions that contain similar compositional traits, as well as exceptional percussion writing. While in general these works are beyond the scope of this document, some will be referenced briefly if they are pertinent to the concepts being discussed.

As of the date of completion of this paper, there is no existing research on these works and it is intended that the document may be used in further research of the music of Mark Applebaum. In addition, given that this document focuses on Mark Applebaum’s
acoustic percussion works, it is the writer’s hope that it will be a valuable source of information in the percussion community.

The document is divided into five chapters. Chapter one contains a biography of Mark Applebaum as well as an introduction to his music. Chapter two focuses on specific compositional ideas that illustrate Mark Applebaum’s unorthodox method of composition. This involves an analysis of four major percussion works, each of which were constructed using compositional ideas that involve a complex process of generating musical material. Chapter three focuses on ways that rhythm and meter are used with examples taken from several works. Chapter four focuses on the use of indeterminacy and improvisation. Finally, chapter five will take a detailed look at the visual and theatrical elements found in much of Mark Applebaum’s music.
TABLE OF CONTENTS

Abstract ........................................................................................................................................ iii

List of Figures ............................................................................................................................ vi

List of Musical Examples ........................................................................................................ vii

Foreword .................................................................................................................................... 1

CHAPTER 1. BIOGRAPHY OF MARK APPLEBAUM ........................................................... 2

CHAPTER 2. INNOVATIVE COMPOSITIONAL PROCESSES .............................................. 7

CHAPTER 3. TREATMENT OF RHYTHM AND METER ................................................... 45

CHAPTER 4. INDETERMINACY AND IMPROVISATION ............................................... 56

CHAPTER 5. VISUAL AND THEATRICAL ELEMENTS ....................................................... 67

BIBLIOGRAPHY .................................................................................................................... 87

APPENDIX A: RECITAL PROGRAMS .................................................................................. 89
LIST OF FIGURES

Figure 2.1 Comparison of all four kaleidoscopes ..............................................................10
Figure 2.2 After kaleidoscopes 2-4 have been cut into pieces ...........................................10
Figure 2.3 Strips put in position .........................................................................................11
Figure 2.4 Final configuration ...........................................................................................11
Figure 2.5 P.D. Eastman, *Go, Dog. Go!*, pp. 6-7 ...............................................................13
Figure 2.6 Numbers assigned to the dogs ..........................................................................15
Figure 2.7 *Straitjacket*, palindrome number sequence .......................................................31
Figure 2.8 Censorship number sequence .........................................................................31
Figure 2.9 Second view of censorship sequence compared with the first .........................32
Figure 2.10 Both halves of the palindrome after censorship .............................................34
Figure 2.11 Second half of palindrome inverted ...............................................................34
Figure 2.12 Final configuration of measures .....................................................................35
Figure 3.1 *Go, Dog. Go!* improvisation designations ........................................................51
Figure 3.2 *Gone, Dog. Gone!* instrument setup ..............................................................52
Figure 3.3 *Gone, Dog. Gone!* instrument notation key ......................................................53
Figure 3.4 *Gone, Dog. Gone!* cycle chart .......................................................................54
Figure 4.1 Legend for *Theme in Search of Variations* .....................................................65
Figure 5.1 Final form of composite drawing .......................................................................78
Figure 5.2 *Composition Machine #1* instrumentation and legend .....................................80
Figure 5.3 *Composition Machine #1* inking rules ..........................................................82
LIST OF MUSICAL EXAMPLES

1. *Go, Dog. Go!*, mm. 1-17 (coda)..................................................................................15
2. *Go, Dog. Go!*, m. 6, m. 10 and m. 15 (rhythmic figure A)..........................................18
3. *Go, Dog. Go!*, m. 6, m. 10, m. 15 (rhythmic figure B)..................................................18
4. *Go, Dog. Go!*, mm. 3 and 10 (dogs with one wheel)...................................................19
5. *Go, Dog. Go!*, mm. 5 and 9 (rhythmic figures A and B marked).................................19
6. *Go, Dog. Go!*, mm. 8, 11, and 16 (black dog)..............................................................21
7. *Go, Dog. Go!*, mm. 14 and 16....................................................................................22
8. *Go, Dog. Go!*, mm. 1-17, (white and spotted dogs with triplet).................................23
9. *Go, Dog. Go!*, mm. 2, 4, 5, 13, and 14 (dogs with red or yellow collars).................24
10. *Go, Dog. Go!*, mm. 1, 6, and 7 (dogs with green collars)..........................................25
11. *Go, Dog. Go!*, mm. 9, 12, and 15 (dogs with white collars).......................................26
12. *Go, Dog. Go!*, mm. 5 and 9, (dogs subjected to the “not in a hurry” modification)...27
13. *Straitjacket*, mvt. 1, (reconstruction of first 4 mm. of original material) .....................36
14. *30: The First Decade*, mm. 89-113 ..........................................................................39
15. *30*, mm. 81-88..........................................................................................................41
16. *30: The Third Decade*, episode VII .........................................................................42
17. *Catfish*, mm. 33-35 ..................................................................................................47
18. *Catfish*, mm. 64-66 ..................................................................................................47
19. *Catfish*, mm. 71-74 ..................................................................................................47
20. *Go, Dog. Go!*, mm. 1-63 ..........................................................................................49
21. Gone, Dog. Gone!, page one ........................................................................................55
22. Entre Funérailles II, page one .....................................................................................60
23. Catfish, mm. 45-54 ......................................................................................................61
24. 30: The Second Decade, mm. 256-263 .....................................................................63
25. Theme in Search of Variations, mm. 23-29 .................................................................65
26. The Metaphysics of Notation, excerpt ......................................................................68
27. Straitjacket, mvt. II, mm.1-3 ......................................................................................70
28. Straitjacket, mvt II, mm 1-4 ......................................................................................72
29. Gone, Dog. Gone!, mm. 1-6 ......................................................................................74
30. 30: The First and Second Decades, mm. 318-323 ......................................................76
31. Straitjacket, mvt. IV, Taquinoid, mm. 1-5 .................................................................77
32. Composition Machine #1, section 2, mm. 8-15 .........................................................82
FOREWORD

This document is part of the dissertation requirement for the Doctor of Musical Arts degree in Performance. The major portion of the degree consists of four public recitals. Copies of the recital programs are bound at the end of this paper, and recordings of the recitals are on file in the University of South Carolina Music Library.
CHAPTER 1

BIOGRAPHY OF MARK APPLEBAUM

Mark Stephen Applebaum was born on Friday, October 13, 1967 in Chicago, Illinois to Robert and Rosalie Applebaum. He began studying piano at the age of seven due in part to the influence of his father who was also a pianist and composer. In high school, Applebaum continued to play piano as well as perform with a rock band. It was also in his high school days that he began composing music, most notably musicals for his theater program. After graduating high school in 1985, Applebaum attended Carleton College where he studied composition with Philip Rhodes and completed a senior thesis involving a trip to Mexico City to interview Conlon Nancarrow. He graduated in 1989 receiving his baccalaureate, magna cum laude. He received both his Masters in 1992 and his Ph.D. in 1996 in composition from the University of California at San Diego where he studied with Brian Ferneyhough, Joji Yuasa, Rand Steiger, and Roger Reynolds. In the fall of 1996, Applebaum taught at Carleton College where he served as Dayton-Hudson Visiting Artist. Shortly afterwards he began his first tenure track position at

---

2 Ibid.
3 Ibid.
Mississippi State University in 1997. In 2000, he left to accept a position at Stanford University, where he currently serves as Associate Professor of Composition and Theory as well as founder and director of the Stanford Improvisation Collective.

In addition to his work at Stanford, Applebaum has given lectures and masterclasses at many renowned institutions including Harvard, Princeton, Columbia, Oberlin, Duke, the University of Chicago, Northwestern University, the Eastman School of Music, the New England Conservatory of Music, Hong Kong University, the JML/Irino Foundation in Tokyo, the Bruckner Conservatory in Linz, Austria, and the Janáček Academy of Music and Performing Arts in the Czech Republic.

Applebaum’s works have been performed throughout the United States, Europe, Africa, and Asia with notable performances at the Darmstadt summer sessions, ICMC in Beijing and Singapore, the TRANSIT Festival in Belgium, Stockholm New Music, the American Composers Orchestra’s OrchestraTech, the Unyazi Festival in Johannesburg, South Africa, Sonorities in Belfast, Sonic Circuits in Hong Kong, SIGGRAPH in Los Angeles, the Essl Museum in Vienna, and the Kennedy Center. He was a 2002 visiting artist at Electronic Music Midwest, featured composer at the 2004 University of Michigan Electronica Microfestival, and a featured composer at the 61st Festival of Contemporary Music at Louisiana State University.

Over the course of his career, Applebaum has received many commissions, including those from Betty Freeman, the Merce Cunningham Dance Company, the

---

7 Bash.
8 Ibid.
9 Ibid.
Fromm Foundation, the Paul Dresher Ensemble, the Vienna Modern Festival, Antwerp’s Champ D’Action, Festival ADEvantgarde in Munich, Zeitgeist, MANUFACTURE (Tokyo), the St. Lawrence String Quartet, the Jerome Foundation, and the American Composers Forum. In 1997, Applebaum received the American Music Center’s Stephen Albert Award and an artist residency fellowship at the Villa Montalvo artist colony in Northern California.¹⁰

In addition to being a composer, Applebaum is also an accomplished jazz pianist. He has performed concerts all over the world, including a solo recital in Ouagadougou, Burkina Faso which was sponsored by the American Embassy. He received the jazz prize of the Southern California Jazz Society in 1994, and in 1999 the Mark Applebaum Trio performed in the first Mississippi arts event broadcast live over the World Wide Web. Currently, he performs with his father, Bob Applebaum, in the Applebaum Jazz Piano Duo. They made their Tunisian debut at the Municipal Theater in Tunis and have recently performed a concert in Singapore. The Apple Doesn’t Fall Far from the Tree, their first studio recording, is available on Innova Records.¹¹

Applebaum has also been interested in the invention of new instruments, most of which he constructs himself. Part of this inspiration comes from Conlon Nancarrow and Harry Partch, composers who also found it necessary to invent unusual instruments to realize their musical visions.¹² He has designed and built many electro-acoustic instruments out of junk, hardware, and found objects for use as both compositional and improvisational tools. One such instrument is the Mouseketier, a musical Frankenstein consisting of small objects such as threaded rods, nails, combs, doorstops, springs, 

¹⁰ Ibid.
¹¹ Ibid.
¹² Applebaum, “State of the Art.”
squeaky wheels, ratchets, a toilet tank flotation bulb, and other unlikely objects which are struck, plucked, scratched, and bowed.\textsuperscript{13} It can also be connected to an interface of live electronics which enables the instrument to produce an even wider array of sounds.

Applebaum jokingly says that because he is the only person who plays this instrument, he is simultaneously the world’s greatest and worst Mouseketier player.\textsuperscript{14} Nonetheless, he enjoys playing the role of inventor in addition to the more traditional roles of performer, interpreter, composer, and teacher.\textsuperscript{15} Applebaum frequently performs live concerts using his homemade instruments and has recorded a full length album entitled,\textit{Mousetrap Music}, which consists of improvisations on these instruments.\textsuperscript{16}

Applebaum’s eccentric personality, as well as his interest in exploring new ideas and methods, gives his music a unique (and oftentimes bizarre) quality. Some of his ideas are rather absurd, such as his Concerto for Florist and Orchestra, in which an orchestra accompanies a florist creating a large bouquet of flowers. Others stem from random observances outside of the world of music. For example,\textit{ Tiön}, a soundless work written for three simultaneous conductors conducting invisible ensembles, was inspired by Applebaum witnessing an argument in sign language between two deaf people.\textsuperscript{17} This observation caused Applebaum to realize that loudness is very much an emotional and psychological phenomenon and not just an aural one.\textsuperscript{18} Along similar lines, many of Applebaum’s compositions explore the areas of visual arts. Most notably, his interest in the visual aspects of performing music has led him to the creation of a complex sign

\textsuperscript{13} Ibid.
\textsuperscript{15} Ibid.
\textsuperscript{16} http://www.markapplebaum.com/bio.html
\textsuperscript{18} Ibid.
language system complete with a unique notational system. This system is made up of hundreds of gestures that are choreographed to music and notated in the score using a series of pictographs created by the composer, himself. These gestures will be discussed in detail in this document. Mark Applebaum is always searching for new ideas and methods in the creation of his music. Many of his works cause one to question the very definition of what music is. Applebaum’s response is that it is the wrong question. The question should not be “is it music?”, but rather, “is it interesting”? Furthermore, Applebaum states that if a metric is needed by which to evaluate his music, it would be that his works should always cause the listener to ask two questions—“What the hell was that?” and “Can I hear more?”

---

19 TEDxStanford.
CHAPTER 2

INNOVATIVE COMPOSITIONAL PROCESSES

This chapter will demonstrate some of the innovative compositional processes that Mark Applebaum has used in specific works. Four pieces will be discussed, each of which make use of a compositional technique that has been crafted specifically for each work. The mechanics of each technique as well as the ideas that inspired them will be discussed in detail.

2.1 NARCISSUS: STRATA/PANACEA

Narcissus: Strata/Panacea is a piece for solo marimba premiered in 1994 by Tatiana Kóleva at the Darmstadt summer courses in Germany.\textsuperscript{21} This work makes use of a compositional technique that involves cutting fragments of previously composed sheet music and then redistributing these fragments in such a way that they form stacked layers. The result is that certain sections of music are obscured whenever a fragment is placed on top of it. The music written on the fragment cancels out and replaces the music that it obscures. Once the layers are put in place, the score is rewritten and this new score becomes the final draft of the work. This process will be discussed in detail after some brief background information about the work.

Narcissus: Strata/Panacea is part of a larger collection of works referred to by Applebaum as the Janus Cycle. This collection of works was composed between 1992

and 1996 and includes orchestral, choral, chamber, and solo compositions. There are a total of eleven works in the Janus cycle, with Narcissus being the sixth one. Each of these eleven works is in a binary form made up of two contrasting sections that Applebaum calls kaleidoscope and monolith. The kaleidoscope has a dense and complex texture made up of short rapidly juxtaposed materials. This contrasts heavily with the monolith, which is very sparse and simplistic. In Narcissus, the two sections of the kaleidoscope and monolith are subtitled; Strata and Panacea, respectively. It is this kaleidoscope section or Strata, which makes use of the previously mentioned cutting and layering technique and will be the focus of the remainder of this section.

The kaleidoscope section of every work in the Janus cycle is constructed using a complex algorithm that is a total of six minutes in duration. This algorithm consists of a configuration of formal designations, durational values, and transformation procedures rather than specific musical material. As a result, it may be used many times but still produce distinct works. Each piece in the Janus cycle has unique musical material which is then subjected to the algorithm. Narcissus: Strata/Panacea is special among the works of the Janus cycle in that it uses the algorithm in a different way. Instead of having the composition constructed as one six-minute kaleidoscope according to the pattern of the algorithm, Applebaum created the kaleidoscope of this work out of fragments of four different kaleidoscopes. In other words, Applebaum composed four separate kaleidoscopes for this work instead of one as he did for the other pieces in the Janus cycle.

---

22 Ibid.
23 Private telephone conversation with composer, July 14, 2013. The writer was shown the algorithm but the composer requested to not have it revealed in the document.
24 Ibid.
However, due to a detailed process involving layering of the fragments, the total duration of this new kaleidoscope still comes out to be the normal length of six minutes.

The compositional process begins with the creation of each of the four original kaleidoscopes. These kaleidoscopes are four separate musical works that are composed independently but all make use of the same algorithm. The first kaleidoscope is six minutes in duration, which is the standard duration for all kaleidoscopes in the Janus cycle. The second kaleidoscope is half the duration as the first, or three minutes. The same algorithm is used to construct the piece but the durations have been shortened by half (i.e., a three second section is now 1.5 seconds in length). The third kaleidoscope is half the length of the second kaleidoscope, totaling one and a half minutes with the durations of the algorithm shortened by half again. Likewise, the fourth kaleidoscope is shortened to half the length of the third kaleidoscope and clocks in at forty five seconds in duration with the algorithm adjusted accordingly. The scores for each kaleidoscope are written as one long, horizontal line of music rather than the traditional method of having multiple lines on a single page. After all four kaleidoscopes have been completed, the four scores are laid out and positioned according to size, as shown in Figure 2.1. The kaleidoscopes are in order from top to bottom and are color-coordinated (Red = Kaleidoscope 1, Blue = 2, Green = 3, Purple = 4).

After the scores are placed in order of size, the second, third, and fourth kaleidoscopes are cut into a certain number of strips that correspond to the number of its order. The second one is cut into two halves, the third one is cut into three thirds and the fourth one is cut into four fourths. Figure 2.2 shows the pieces after they have been cut into strips.
Figure 2.1: Comparison of all four kaleidoscopes.

Figure 2.2: After Kaleidoscopes 2-4 have been cut into pieces.
Next, the two strips of kaleidoscope two are laid on top of kaleidoscope one. Similarly, the three strips of kaleidoscope three are laid on top of the two strips of kaleidoscope two; one strip on one half and two strips on the other. Finally, the four strips of kaleidoscope four are laid on top of the three strips of kaleidoscope three; two strips on one piece and the other two each placed on one strip of kaleidoscope three. Figure 2.3 and Figure 2.4 shows what this looks like.

**Figure 2.3:** Strips put in position.

**Figure 2.4:** Final configuration.
Once these strips are put in place, then the entire piece is rewritten as one score which now becomes the final form of the work. The total duration of this new kaleidoscope is still the same as that of the other works in the Janus cycle which is six minutes. However, there are now interruptions throughout in which one piece interrupts the other and in turn is interrupted by another. As a result of this layering and interruption, the first, second, and third kaleidoscopes have measures that are written but never heard because they have become replaced by the interruption of a different one. The only kaleidoscope that is heard in its entirety is the fourth one, albeit in four non-consecutive segments. The subtitle *Strata* is a fitting description for the kaleidoscope section of *Narcissus* because of the various layers that are built on top of each other at different points. The composer said that the idea for this type of layering structure came from interruptions one experiences in channel surfing on a television.\(^\text{25}\) In this case, the four kaleidoscopes represent four different television channels that are changed back and forth.

2.2 GO, DOG. GO! CODA SECTION: TRANSLATING IMAGES TO MUSIC

Another innovative compositional idea used by Mark Applebaum is found in the percussion duet *Go, Dog. Go!*, specifically in the work’s coda (The main body of the work is constructed in a different manner and will be discussed later in the document). Applebaum created musical material for this coda based off a double spread page in the 1961 children’s book *Go, Dog. Go!* by P.D. Eastman. The title of this work is also taken from the title of the book. Applebaum’s motivation for using this picture as a starting point was his desire to take something seemingly trivial and construct something complex with it.\(^\text{26}\) The picture is shown in Figure 2.5.

\(^{25}\) Ibid.
\(^{26}\) Personal Interview.
Each player has a setup of six instruments consisting of a high and low wood, high and low metal, and high and low skin instrument. All six instruments are chosen by the performers with no stipulations other than each pair must have two distinct sounds and all instruments between both players have similar sustain rates when struck. Both players read from the same score and play in unison throughout the entire coda.

There are seventeen dogs that appear on these two pages and there are seventeen measures in the coda, each one corresponding to a single dog. As stated in the program notes of the piece, musical materials were created according to distinct visual features of the dogs. The main features mentioned are the color of the dog (white, black or spotted), method of movement (on foot, unicycle, bicycle, buggy or roller skates), and the color of

---

the collar that the dog is wearing. Additionally, special characteristics of certain dogs result in modifications to the principal musical materials. These include dogs with the tongue hanging out, having extremely effeminate mannerisms, and having the appearance of not being in a hurry. These three characteristics are given in the program notes, but it is implied that these are only examples and that there may be other noticeable characteristics that result in additional modifications.

Example 1 shows the seventeen measures of the coda. (Measure numbers were not included in the original manuscript, so they have been added in order to facilitate ease of analysis). Vocalizations are sounded with the syllables Go, Dog, and Go repeated in several cycles at the rate of one syllable per measure. Each syllable occurs on the downbeat, with one final syllable sounding after the conclusion of the last measure.

Applebaum does not state which measure corresponds to each dog, nor does he reveal the exact order in which they occur. However, a careful analysis reveals that the images are translated into music in the order shown in Figure 2.6. Numbers have been added to the original pages indicating the order of the dogs. The number given for each dog indicates the number of the measure that corresponds to it (i.e. dog number one = measure one, dog number two = measure two, etc).

When placed in this order, all of the dogs that are on foot have a reverse grace note figure on the downbeat of their respective measures. This figure is made up of a sixteenth note followed by two grace notes. There are a total of ten dogs moving on foot: dogs 1, 2, 4, 7, 8, 11, 13, 14, 16 and 17. The instrumentation for the grace note figure is low skin, low metal, and high wood and is the same for all dogs except for dogs two and eight. Dogs two and eight have a different instrumentation because they are the only two

---


Figure 2.6: Numbers assigned to the dogs.
dogs on foot that are pushing another dog and are thus subjected to this modification. Dog two is pushing another dog on a device with one wheel, while dog eight is pushing another dog in a buggy. The rhythmic character of the grace note figure is retained but the instrumentation has been changed to low wood, low skin, and high metal (cf. mm. 1 and 2).

Two of the dogs on foot have other distinct features. The first is dog number eleven, which is doing a handstand. This dog is grouped into the category of dogs on foot even though he is technically being transported by another dog on a unicycle. It appears that the modification for a dog doing a handstand is to have the grace note figure played twice, as shown in measure eleven. The second is dog number seventeen, which is cut off in the picture with only the hind leg revealed. It is impossible to know anything about this dog except that it is moving on foot. Neither its color nor the color of its collar can be determined. Therefore, it receives only the musical marker that all dogs on foot receive, which is the three-note grace figure on the downbeat of the measure. Applebaum chooses to finish the measure for this special dog on the hi-hat which is the only measure of the coda in which it is used. The sounding of the hi-hat, followed by the sudden silencing of it by the foot, can be interpreted as a musical depiction of the page abruptly cutting off the image of the dog.

Applebaum states that the number of wheels signify thematic duration.29 Therefore dogs with more wheels will have longer measures than those with fewer. Dog five, who is on roller skates, has the largest number of wheels (eight wheels total). Being that it is the only dog that is moving on roller skates, it is logical to assume that the corresponding measure for this dog will be the longest measure in the coda, which is

29 Ibid.
measure five (the 42/16 measure). This places the roller skate dog as dog five in the order of occurrence. The dog with the second largest amount of wheels is dog nine, who is riding in a buggy which has four wheels. Since this is the only dog that has a vehicle with four wheels, the corresponding measure will be the second longest measure in the coda which is measure nine (the 11/8 measure). Knowing that the roller skate dog is number five and the buggy dog is number nine helps to determine the order of the rest of them.

There are five more dogs that are using a wheeled device; three on bicycles or scooters, and two on a one-wheeled device. It is a little more difficult to pinpoint the musical translation of each of these dogs, since the duration of their respective measures are similar in length and there is more than one of each. The three dogs using bicycles are dogs six, ten, and fifteen. The measures for all three of these dogs have similar musical material, although each one is distinct, possibly due to other unknown modifications. They begin with a 32\textsuperscript{nd}-16\textsuperscript{th}-32\textsuperscript{nd} note figure followed by an eighth note reverse flam (rhythmic motive A) as shown in example 2. Measures ten and fifteen have this figure on the downbeat, whereas measure six has the pattern displaced by starting with a sixteenth note rest. The figure still totals one full beat because the reverse flam has been changed to a sixteenth note. This displacement is most likely a modification of some sort, possibly because dog six is on what looks to be a self-propelled bike rather than a scooter (dog 10) or standard bicycle (dog 15). The next full beat for measures six and fifteen have an identical pattern except for the choice of skin instrument. This rhythmic motive (rhythmic motive B) consists of a sixteenth rest, a sixteenth note, and a broken sixteenth note, as shown in example 3.
Example 2. Mark Applebaum, *Go, Dog. Go!*, m. 6, m. 10 and m. 15 (rhythmic motive A).

Example 3. Mark Applebaum, *Go, Dog. Go!*, m. 6, m. 10, m. 15 (rhythmic motive B)

Rhythmic motive B is identical in instrumentation in both measure six and measure ten. However, measure ten has an extra eighth note rest placed just before it. This eighth rest as well as the sixteenth rest at the beginning of rhythmic motive B has been renotated as a dotted eighth rest. The remainder of material in these measures is derived from other features of the dogs not related to wheels. In summary, although there are slight differences between these measures, the musical material is similar enough to suggest that they are indeed linked to the three two-wheeled dogs.

There are two dogs that utilize a single wheel, dogs three and twelve. These two measures contain fragments of the material found in the measures of the two wheeled dogs. Measure three has the 32\textsuperscript{nd}-16\textsuperscript{th}-32\textsuperscript{nd} note figure (first half of rhythmic motive A) followed by the broken 16\textsuperscript{th} note triplet (second half of rhythmic motive B). Measure twelve has the 16\textsuperscript{th} note broken triplet (second half of rhythmic motive B). Example 4 shows measures three and twelve with fragments marked.
As mentioned, these fragments are pieces from rhythmic motives A and B which are all found in the measures of the two-wheeled dogs. Looking back at measures five and nine (roller skates and buggy dog respectively), the second half of rhythmic motive B and a complete rhythmic motive A can be found somewhere in the measure. However, they are not in the same order and there is other material interspersed between these fragments. Example 5 shows these two measures with rhythmic motive A and fragments from rhythmic motive B marked.

Example 4. Mark Applebaum, *Go, Dog. Go!*, mm. 3 and 10 (dogs with one wheel).

Example 5. Mark Applebaum, *Go, Dog. Go!*, mm. 5 and 9 (rhythmic motives A and B marked).

Rhythmic motives A and B are not found in the measures of the dogs on foot, which makes them an identifiable musical marker for dogs with wheels. It seems that the principal material for all dogs with wheels was made up of a series of fragments that were mixed and matched according to the number of wheels utilized. The roller skate dog
would have more fragments than all other dogs and the buggy dog would have more fragments than all the others minus the roller skate dog. This would explain why the roller skate dog has fragments that no other dog has, such as the quintuplet. Likewise, the eighth note triplet after rhythmic motive A occurs only with the roller skate and buggy dogs but not with the bicycle or unicycle dogs. It is difficult to recreate the original material because both the roller skate dog and the buggy dog also appear to have been subjected to further modifications. Both have their eyes closed and appear relaxed so they are most likely the dogs subjected to the “not in a hurry” modification that is mentioned in the program notes. However, there is enough information known to recognize general similarities of musical material for all dogs using wheeled devices.

Another major feature that dictates musical material and was mentioned by Applebaum in the program notes is the color of the dogs’ fur. There are a total of three black dogs, all of which are on foot, and as a result their measures include the grace note figure associated with those on foot. Since special characteristics of certain dogs denote modifications of the original materials, it is likely that dog eleven (which is doing a handstand) and dog sixteen (who seems to be the “extremely effeminate” dog mentioned in the program notes) have material in their respective measures modified from the original. Because of this, dog eight is most likely closer to the principal material. Dog eight is pushing another dog, so it has the altered grace note figure instrumentation mentioned previously. A comparison of the three measures for these dogs demonstrates similarities in musical material as shown in example 6. The principal material appears to have been made up of a sixteenth note figure with flams on the third and sixth notes that alternates between the low and high instruments of a single instrument class. Measure
eleven is the only measure that has the “on foot” grace note figure played twice in the measure. This is most likely a modification connected to this dog being the only one doing a handstand. Since it is played twice, the actual beginning of the original pattern begins on the second grace note figure and is cut short slightly. Ignoring the rests, the original pattern can still be seen but there are only four notes before the measure is cut off. Dog sixteen, as mentioned before, is most likely the dog mentioned in the program notes as “extremely effeminate”. Thus the modification is that the principal material has been rearranged to fit into a five over seven rhythmic grouping. There seems to be a similar modification to that of another dog mentioned in the program notes, dog fourteen, who is the only dog with his tongue out. In this measure there is a five over six grouping covering the entire measure. Therefore it is clear that these two modifications are related to transforming an entire measure into a grouping of five. Both measures are shown in example 7.


As far as the choice of instrumentation, dogs eleven and sixteen have their respective notes on the low and high skin instruments (other than the on foot grace note figure) while dog eight has his on the low and high wooden instruments. Most likely,
dogs eight and eleven have the same instrumentation because they are both wearing bows as opposed to collars while dog eight has no bow but rather a sweater. The other difference between the three black dog measures is rests that have been inserted between notes. These rests may have something to do with the color of the bows or sweater but because two of the three dogs have modifications; it is difficult to know for certain without knowing the principal material before it was modified.


With the exception of two dogs that may have been subjected to modifications, the measures of all solid white and spotted dogs contain a sixteenth note triplet voiced on a single instrument. None of the three black dogs (dogs 8, 11 and 16) or the yellow dog (dog 3) have this triplet. Of all of the dogs that have this triplet, dog two is the only one that has it voiced on the high wood. This dog has the triplet voiced on the high metal most likely so that the triplet matches the voicing of the grace note that precedes it. For all dogs that have the triplet and are on foot, the triplet and final grace note are played on the same instrument. Example 8 shows this triplet marked along with green arrows that indicate the grace note that precedes each triplet.
Dogs four and fourteen are both spotted but do not have the triplet (indicated by black box in fig. 2.14) which is most likely due to a modification in which the triplet is removed. Dog four is the only dog that has a large barrel on his collar and this could be a modification in which the triplet is removed. Dog fourteen has no discernible feature that would signal modification except for the tongue sticking out which seems to be linked to the quintuplet as mentioned previously.


The color of the collar of each dog is another feature that is realized musically.

Each of the dogs that have a red or yellow collar (four and one respectively) has a trill between both the high and low instruments of the same instrument category. Dog fourteen, the only dog with a yellow collar, has the trill between the two skin instruments.
All of the dogs with red collars except for dog two have the trill placed on the two wood instruments. Dogs that have a 16th note triplet before or after the trill have the 16th note triplet matching the instrumentation of the trill. Dogs five and thirteen have the triplet on high wood with the trill on high and low wood. Likewise, dog two has the triplet on high metal with the trill placed on the high and low metal. As for the sixteenth rest placement, in measure two, this is probably another modification for some unknown reason. Example 9 shows the measures of all dogs with red or yellow collars with the trills marked.

Dogs that have a green collar (dogs 1, 6, and 7) have a sixteenth note triplet at the end of the measure voiced as low skin, low metal, and low wood as shown in example 10. Dogs one and six have a roll on the high skin which precedes the sixteenth note triplet but dog seven has an eighth rest instead. It is possible that the roll has been removed due to a modification but it is difficult to be certain. All three of these dogs are spotted but dogs one and six have a single large black spot on their bodies whereas dog seven has a bunch of small black spots on his body. This could possibly be connected with a modification in which the roll is removed.

Example 10. Mark Applebaum, *Go, Dog. Go!*, mm. 1, 6, and 7 (dogs with green collars).

The other collar colors, blue and white, are somewhat more difficult to decipher. The only dog with a blue collar (notwithstanding dog 16 who is wearing a blue bow and dog nine wearing a blue sweater) is dog ten, which is riding a bicycle. However, there is no new material added after the sixteenth note triplet. Furthermore, all of the material in this dog’s measure is also in the measures of the other two bike dogs with the exception of the eighth note rest. The eighth note rest may be associated with the blue collar, but since this is the only dog with a blue collar it is impossible to confirm this guess.
Three dogs have white collars (dogs 9, 12, and 15). The measures for these three dogs are shown in example 11. All three of these dogs are either spotted or on foot, so they have the 16th note triplet on the high wood. Dogs nine and fifteen have a roll on the low wood either before or after the triplet, but this roll is absent in dog twelve due to a modification. Dog twelve has many small black spots just like dog seven, who also has the associated roll removed from its measure. As mentioned previously concerning green collar dogs, this may indicate that dogs having multiple small black spots have been subjected to a modification in which rolls are removed. Example 11 shows the measures for the three dogs with white collars.

Example 11. Mark Applebaum, *Go, Dog. Go!*; mm. 9, 12, and 15 (dogs with white collars).

Dog nine has the roll placed before the triplet whereas dog fifteen has the roll after the triplet. This is because dog nine has most likely been subjected to the “not in a hurry” modification which appears to be a retrograde of the roll/trill and triplet. Dog five also is subjected to this modification and thus has its trill placed in front of the triplet. As mentioned previously, these are the only two dogs that have their eyes closed and appear to not be in a hurry. Example 12 shows a comparison of dogs five and nine with the
retrograde figures marked. All other dogs with this triplet roll/trill figure have the triplet played before the roll or trill which is probably how the original material was written. The original material for white collar dogs appears to be a roll that occurs after the 16th note triplet followed by a rhythmic figure consisting of the values of a sixteenth note and an eighth (see ex. 11). Dog twelve has a sixteenth rest followed by an eighth note and dog fifteen has a sixteenth note followed by an eighth note. Dog twelve has the roll removed so the triplet is followed immediately by the rhythmic figure. The choice of rests or notes was probably determined by an unknown modification. Furthermore, dog nine does not have this figure, which could also be the result of another unknown modification.

Example 12. Mark Applebaum, Go, Dog. Go!, mm. 5 and 9, (dogs subjected to the “not in a hurry” modification).

2.3 Straitjacket, Movement I, palindrome form and sequential metamorphosis censorship

Another distinctive compositional technique is found in the first movement of Straitjacket, a piece for percussion soloist and percussion quartet. This work consists of four independent movements, each having a different instrumentation and compositional method. Thus, they can be perceived as four separate works. The composer states in the program notes that he privately subtitled the piece as “four restraint systems for solo
percussion and percussion quartet”. The four movements were modeled on four types of linguistic constraints found in the writings of the French literary collective known as Oulipo. Although there are many others, the specific constraints employed by Applebaum are the palindrome, the isopangram, the lipogram, and the taquinoid. In this chapter, the focus will be on the palindrome, which is the first movement of Straitjacket.

A palindrome in literature is a word, sentence, or phrase that reads the same forward as well as backward. Words such as civic, kayak, and racecar are all examples of single word palindromes. Whole sentences can be worded to form a palindrome such as “Never odd or even” and “Was it a cat I saw?” Applebaum uses the palindrome as the overarching form of the movement. However, the genius does not lie in Applebaum’s use of a palindrome, a form that has been used by many composers before him, but in the way that he modifies the material after composing it. Applebaum does this by way of an invented compositional technique that transforms the palindrome into something new. This process will be discussed momentarily.

The palindrome of Straitjacket is scored for five players on drum sets that play in unison for the duration of the entire movement. The members of the quartet play matching kits consisting of kick drum, snare, and hi-hat. The soloist plays two separate kits (both consisting of kick drum, snare and hi-hat) that can have two separate timbres if the soloist so chooses. Both drum sets of the soloist are positioned on the center of the stage facing away from each other; one towards stage right and the other towards stage left. The ideal setup is to have a single shared throne positioned between the two drum kits. The soloist performs the first half of the piece, which is also the first half of the

---

30 Applebaum. Program Notes.
31 Ibid.
palindrome, on one of the drum sets. When the first half of the palindrome is completed, the soloist spins around on the same throne and performs the retrograde of the palindrome on the second drum set which is facing the opposite direction. As a result, the two halves of the palindrome are reinforced visually by the position of the soloist.

The compositional process of this piece involved two phases: the initial composition of primary material, and the manipulation of that material. During the first phase, the primary material, which consists of 88 measures, was composed. These 88 measures are generated according to a pattern in which each measure is a transformation of the previous measure. The first measure is made up of what could be interpreted as a standard rock drum set groove. This measure is transformed slightly and repeated in measure two. Then the second measure is transformed and this becomes measure three. Similarly, this process of transformation continues until 88 measures have been completed. The type of transformation of each measure varies throughout the piece. The completion of these 88 measures marks the end of the first phase of the compositional process.

For the second phase, this 88 measure composition is now subjected to a process that involves the removal of certain measures found in the primary material. When a measure is removed, the next measure that remains takes its place. For example, if measure three is removed and measure four is not, measure four becomes the third measure in the final draft. Applebaum refers to this entire process as sequential metamorphosis censorship. The terms, sequential metamorphosis, refers to how each sequential measure of the primary material is a transformation of the previous measure. The term, censorship, refers to certain measures being removed or censored after the

32 Ibid.
original 88 measures have been composed. The measures are not removed randomly but rather follow a clear pattern based off of a specific number sequence. Applebaum describes the entire process in his program notes about the piece:

“The scheme is mind-numbingly elaborate, but the gist is that the musical narrative gradually increases and decreases the degree to which adjacent musical materials are transformed. For example, the second measure is a clear modification of the first measure; however, the third measure is a bit more distant from the second, as if an intermediary transformative step were missing; and so on. The conceptual gap widens and narrows, producing moments of logical consequence as well as profoundly incongruous ones.

But when this sequence folds back on itself, only some of the prior measures are sounded. New measures appear instead (algorithmically selected among those unsounded, intermediary bits that conceptually bridged the earlier gaps). At the same time there exist other composed intermediary bits that are never sounded on either side of the mirror. Perhaps it is clearer to imagine that my task is to first compose a number series and its retrograde: 12345 – 54321. But then the palindrome is distilled: 125 – 541. As such, certain bits (1, 5) are heard in both directions; certain bits (2) are heard only forward; certain bits (4) are heard only in reverse; and certain bits (3) exist conceptually, but are never sounded. Consequently, discursive gaps of varying size abound, from the most gently evolving discourse to the most fractured and surreal.”

Figure 2.7 shows a number sequence that represents all 88 measures. The shaded areas are the measures that remain after the censorship process (the measures in the final draft). The unshaded numbers are the measures that have been removed. These shaded measures that remain make up the first half of the final work or the forward progression of the palindrome. The backward progression of the palindrome will go through the same process but will have slightly different results.

In the final form of the work, measure one and two are played followed immediately by measure four, which has now become measure three in the final draft. As figure 2.7 illustrates, the rate of censorship follows a linear pattern of 1, 2, 3, 4, and 5 before going in reverse 4, 3, 2, and 1. The first two measures are played, then one

---

33 Ibid.
measure is censored; the next measure played, two measures censored; the next measure played, three measures censored, etc. After the completion of this sequence, it repeats, but only going up to 4 before reversing, then up to 3, then 2; etc. Figure 2.8 shows the complete censorship number sequence.

---

Figure 2.7: Straitjacket, palindrome number sequence. \(^{34}\)

---

Figure 2.8: Censorship number sequence.

---

It should be noted here that each row of the number sequence above forms its own palindrome, each one shorter than the previous one. Thus the overall work is made of two halves of a palindrome as well as the various rows of the censorship number sequence. The natural consequence of such a censorship pattern is that the rate of transformation of the principal material gradually widens and narrows. As a result, this produces moments in the piece where adjacent measures are similar, and other moments where they are so different that they seem almost unrelated. Figure 2.9 shows another view of the number sequence that emphasizes the rate of censorship. The original figure is shown beside it for reference.

Figure 2.9: Second view of censorship sequence compared with the first.\(^{35}\)

\(^{35}\) Ibid.
This diagram shows that there are five cycles of expansion and contraction, each forming the shape of a diamond. The least amount of sequential change occurs at the top point of each diamond as it moves diagonally to the right and downward. This direction of movement gradually increases the amount of change between consecutive measures. The greatest point of difference in each diamond occurs when the diagonal changes to a left, downward direction. From here, the rate of change begins drastic and gradually lessens in the amount of change occurring. Furthermore, with each diamond, the farthest point of change decreases each time, with the last diamond producing almost no change.

Once censorship has been applied, the original 88 measures are reduced to the 33 that are articulated in the final work. These 33 measures constitute the first half of the palindrome. The second half of the palindrome makes use of the same process of censorship but naturally begins on measure 88 and proceeds backwards. As a result, the specific measures that are removed will not be exactly the same as those removed in the first half. Figure 2.10 shows the two halves of the palindrome with an arrow indicating the direction in which it proceeds.

The first half of the palindrome concludes with measure 88, which is then repeated as the first measure of the second half. Figure 2.11 shows the second half inverted in order to show how different measures from the original material are removed.

The natural consequence in following this censorship technique is that some measures will sound only in the front half of the palindrome while others will only sound in the back half. Additionally, some measures will end up sounding in both halves while some that were originally part of the initial composition, will never sound. Figure 2.12 demonstrates all of these categories.
**Figure 2.10:** Both halves of the palindrome after censorship.  

**Figure 2.11:** Second half of palindrome inverted.  

---  

\(^{36}\) Ibid.
An analysis of these charts enables a reconstruction of sections of the original material before censorship was applied. For example, the first eight measures of the piece can be reconstructed and the details of transformation more clearly analyzed. The measures that are censored in the first half are played in the second half. Example 13 shows the first four measures as they would have appeared before censorship was applied. Here, it can be seen more clearly how each measure was a transformation of the previous measure. Unfortunately, the original 88-measure composition can never be reconstructed in full due to the fact that some measures did not sound in either half. Measure one contains eight beats. Measure two transforms this measure by rearranging the beats into a different order. The new order proceeds from outside to inside, beginning with beat eight.
and followed by beats one, seven, two, six, three, five and four. Measure three uses a slightly different transformation pattern. Beginning on beat one of measure two, it skips every other beat so it is made up of beats one, three, five and seven of measure two. The nature of this transformation type automatically changes it into a 4/4 measure. Measure four removes all notes in the hi-hat and snare except for the one ghost note on the fourth partial of beat three. In addition, the bass drum note on beat two is removed and beat four is a repeat of beat one. The modifications do not necessarily follow a specific pattern and, as mentioned previously, a full reconstruction is not possible due to a great portion of the original material never having been used in the final draft.

30 AND FORMAL SYNCHRONICITY

30, for percussion ensemble of 12 players, is a monumental work that is actually made up of three independent pieces, each of which is ten minutes in duration. The interesting concept behind this work is that its three smaller pieces were written so that they could be performed individually as self-contained works, consecutively as a trilogy, or played simultaneously. The performer’s choice will, of course, alter the total duration. If any of the three works are performed individually or in any combination simultaneously, then the total duration will be ten minutes. If two of the three are performed consecutively, the duration will be 20 minutes. Finally, if all three pieces are played consecutively, the total duration becomes 30 minutes. In addition to the work’s harmonious synchronicity between the three pieces, each piece has a distinctive feature specific to itself.

The title refers to the 30th anniversary of Mark Applebaum’s marriage. Each of the three pieces corresponds to one decade of the 30 year period. The title of the work varies according to the performance option chosen. The first piece played alone is entitled 30: The First Decade, the second piece, 30: The Second Decade, and the third, 30: The Third Decade. In addition, any two of these may be performed simultaneously and this choice should be reflected in the title: for example, 30: The First and Second Decades. If all three pieces are performed, whether consecutively or simultaneously, the title can be either 30: The First, Second, and Third Decades, or simply 30.39

30: The First Decade, for percussion soloist, uses two identical setups, one for the right hand and one for the left hand. The instrumentation for each set consists of a high and low cowbell, a high and low woodblock, and a high and low glass bottle. The pitches

and timbres of the set on the left must be an exact match to those on the right. The performer places music stands between the two percussion setups. The music is notated using two staves of three lines each. One stave is for the right hand set and the other stave for the left. The three lines represent the three pairs of cowbells, blocks and bottles.

The soloist uses two pairs of rubber mallets, one hard pair and one soft pair that all have two stage fiberglass shafts. The hard mallets are designated in the notation with a black circle above the corresponding notes while the soft mallets are designated in the notation with a white circle. The two-step fiberglass shafts are necessary because during certain sections of the piece, the performer must produce multiple bounce strokes by striking the glass bottles with the mallet shaft. This type of bounce is virtually impossible with a wooden handle mallet. In addition, other sections require that the performer use the butt end of the mallets to trill between two bottles, something which would be difficult using thick shafts or drum sticks.

In this work, Applebaum makes use of a striking spatial effect. Both percussion setups are amplified with a separate microphone unique to each setup. It is than played through a PA system with one microphone panned 100 percent to the right side of the sound system and the other microphone panned 100 percent to the left side. This produces a spatial effect in which identical sounds seem to move from one side of the hall to the other, making identically pitched instruments a necessity for this work. The piece is written with this spatial effect in mind, and the composer stresses its importance in the program notes. Example 14 illustrates this idea. To emphasize the spatial nature of the piece, note heads have been marked in red for the left side and blue for the right side. Beginning in measure 93, there is a trill written for the high and low cowbell which is

---

40 Ibid.
played with the mallets inside the bells. Here, both bells are played on the right percussion table and thus will be heard by the audience on the right side of the performance hall. Likewise, in measure 102, a similar figure is played on both cowbells on the left table and thus heard only on the left side. The pattern from measure 97 to measure 100 makes use of the high wood block on both the right and left tables. However, since they have the same pitch, an aural illusion is created in which the same sound jumps left to right in the concert hall. Beginning in measure 105, an extended version of this same pattern is played only on the high woodblock of the right table.


30: The Second Decade is written for percussion quartet. All four players have nearly identical setups that consist of a suspended cymbal, log drum, snare drum, two hand drums (bongos or congas), 2 concert toms, and bass drum. All instruments have
different tunings and dimensions, with player one having the highest pitched instruments and player 4 having the lowest pitched instruments. Players 1 and 3 have a pair of bongos and players 2 and 4 have a pair of congas. The instrumentation for the quartet uses instruments not found in the solo part, which is one way that both pieces are given a distinct character when they are performed individually. At the same time, this creates contrast with the solo part and quartet when two or three of the pieces are performed simultaneously.

In addition to playing instruments, all four players must perform various vocalizations as well as hand gestures. There are three vocalizations employed in the piece: “sh” as in the word hush, “s” as in silence, and “ch” as in cheese. All of these whispered sounds are notated using the International Phonetic Alphabet. Example 15 shows an excerpt of this piece using a full score that includes all three works together. In this example, the vocalizations have been marked with a square. The capital S is the symbol for the “sh” sound and the dotted lines indicate that it is held. This vocal sound pairs well with the two cowbell rolls in the solo part that are panned first to the left and then to the right. In some places, these vocalizations are mandatory, but during the hand gesture section there are vocalizations that are optional. Applebaum wanted to include something audible for audio recordings of the work since the hand gestures would not be seen. The hand gestures make up a substantial portion of the piece and will be discussed in detail in chapter five of this document.

---

41 Ibid.
42 Ibid.
30: The Third Decade is written for percussion septet. This work is quite different in form, style, and instrumentation than the other two works. It is made up of ten consecutive episodes that each consists of a single line passage for each player and notated spatially. Each episode lasts approximately one minute and is measured in real time. All players have a stopwatch that is synchronized with one another. At the beginning of the piece, the conductor gives a cue to start the watches which run for the remainder of the piece. Each episode is repeated a specific number of times before moving on to the next. However, each of the seven players move to the next episode at different times as notated in the score. For example, player one moves from episode one to episode two at 0:40 while player two moves at 0:45. Example 16 shows an example of
a complete episode. The players are labeled one through seven on the left side of the score along with their entrance time written above and the time that they move on to the next episode written below. In addition, there are two number values notated inside hexagonal boxes. The first box indicates the number of seconds that should elapse for the first repetition of the episode. The second hexagonal box indicates the duration of the second repetition of the episode. As the players continue repeating each episode, they alternate between these two values until it is time to move to the next episode. In example 16, player one takes eleven seconds to complete the first repetition and 19 seconds to repeat the second.

Example 16. Mark Applebaum, 30: The Third Decade, episode VII.

The instrumentation is quite large for this work and makes use of both traditional instruments as well as found objects. Each of the seven players has one specific
instrument (or small group of instruments) for each episode. In general, most of the instruments in a given episode are similar in character or tone color. For example, episodes one and ten contain a pitched sound tapestry made up of vibraphone, almglocken, glockenspiel, chimes, crotales, handbells and grand piano. Non-traditional instruments are present in several episodes. In episode five, all players use a roll of duct tape as an instrument and in episode nine; all players perform on clickable ballpoint pens. Episode seven (example 16) features traditional instruments such as bamboo wind chimes and clave, along with a typewriter, bubble wrap that is popped, twigs that are snapped, and stones that are poured onto a ceramic jug. The effect of this piece is a soft, calm and tranquil soundscape that slowly and gradually changes timbre in a similar way to how a multi-colored light slowly moves from blue to green to purple.

All three works that make up 30 have distinct characteristics and make use of different instruments and timbres. The solo piece is unique in that it is written to emphasize the panning spatial effect of the two identical percussion setups. Also, the instrumentation of the solo part consists of bottles, woodblocks, and cowbells — instruments not found in either the quartet or the septet. As a result, the soloist adds a distinct layer to the ensemble when all three pieces are performed together. The quartet contrasts with the solo part in that it uses drums, cymbals and log drums and is written without the spatial aspect found in the solo part. It also contains hand gestures that are not present in the solo or septet parts. The septet contains many different timbres including pitched instruments and unusual instruments which are not found in the solo or quartet parts. Furthermore, the placement of the notated rhythms is indeterminate and there is no
discernible meter. Therefore, it lacks the strong rhythmic elements found in the other pieces.

When all three pieces performed simultaneously, each of the individual works takes on a new identity when heard in context with the others. For example, when the quartet performs alone, the last section of the piece will have no sound at all because all four players are performing hand gestures. However, when performed with the soloist, these gestures are now choreographed with the sounds played by the soloist. If the quartet performs with the septet but not the soloist, rather than having someone play the exact rhythms of their gestures, they will be accompanied by a lush soundscape.
CHAPTER 3
TREATMENT OF RHYTHM AND METER

In this chapter, several works that contain notable uses of rhythm and meter will be discussed. This will include a brief discussion of Applebaum’s use of metric modulations using his percussion trio *Catfish* as an example. In addition, there will be a detailed analysis of two of Applebaum’s works that make use of a fascinating mechanism to generate rhythmic material that, to this writer’s knowledge, no other composer has used. This process and the purpose behind it will be discussed in detail.

3.1 METRIC MODULATIONS OF *CATFISH*

*Catfish* is a work written for percussion trio with each player performing on three instruments that are made of the same material. Player one uses three metal instruments, player two, wood and player three, skin. Each of the three instruments in each family is specified to be high, middle, and low in sound. In addition, the instruments must be three of a kind, or three different instruments entirely. For example, two cowbells and a metal plate would be forbidden but three cowbells (assuming they are high, middle, and low) or a cowbell, a metal plate and a cymbal would be permissible. While staying within these parameters, the players choose their specific instruments for performance. The piece was originally written to be the overture to what Applebaum refers to as a “secular oratorio”

---

about the local southern culture of people living in Starkville, Mississippi. However, this idea was abandoned and the overture was reworked into a stand-alone musical work.

In many of his works, Applebaum uses complex metric modulations. In *Catfish*, he uses several, some of which produce tempo calculations with decimal points. Example 17 shows that player two (wood) is playing quintuplets in measure 33. Although not shown in this example, the tempo in measure 33 is 45 bpm. The quintuplet becomes the sixteenth note of the next bar which, if performed perfectly, results in a tempo of 56.25 bpm. Another example of this type of modulation is shown in example 18. In measures 64 and 65 the tempo is 60 bpm. By the end of measure 65 all three players are playing unison quintuplets which are converted into septuplets in the following bar. This naturally produces a new tempo of 42.9 bpm. One final example involves several rapid metric modulations successively. Example 19 shows a series of measures, each of which has a new tempo. Measure 71 is at a tempo of 57.2 bpm which is a modulation of the measure that proceeds it (m. 70, not shown) and has a tempo of 42.9 bpm. The sixteenth note of the previous measure becomes the eighth note triplet in measure 71. Over the next few measures, this pattern of the sixteenth note becoming the eighth note triplet partial continues. This results in a tempo of 76.3 bpm in measure 72, 101.7 in measure 73 and finally arriving at 135.6 in measure 74.

---

44 Ibid.
Example 17. Mark Applebaum, *Catfish*, mm. 33-35.

Example 18. Mark Applebaum, *Catfish*, mm. 64-66.


3.2 *GO, DOG. GO!* RHYTHMIC MATERIAL

Mark Applebaum uses the element of rhythm in a unique way in his percussion duo *Go, Dog. Go!* The work is made up of six cycles, each of which consists of a unison
passage followed by a section in which one of the players improvises while the other player plays an ostinato figure. The coda occurs immediately after the sixth cycle.

In chapter one, an analysis of the coda section of this work was provided which showed how the genesis of that section was derived from pages found in C.P. Eastman’s book *Go, Dog. Go!* The main body of the work, however, is made up of materials that come from a completely different source.

The unison passages in this work are derived from rhythms found in well-known pop songs, and these passages are set at the exact tempi found in the original recordings. Their rhythms are taken from the most identifiable component of each song whether it be the rhythm of the vocal melody, drum beat, or something else. Because these rhythms are played on nonpitched percussion instruments, the audience most likely will not perceive the source material, nor is that the purpose of using such rhythms. Instead, the composer chose this material as a means to an end. His goal is to facilitate the linking together of the two players as they move from tempo to tempo in perfect unison. The rhythms are linked to songs that play in the minds of the two players during a live performance enabling them to stay together without the aid of a conductor, metronome, or click track. From the point of view of the audience, the perceived effect is that the two players consistently and suddenly jump from tempo to tempo, performing seemingly impossible metric modulations while playing in unison. Each of the phrases is short, lasting only one to four measures. The title and composer of each song as well as the original tempo marking is written above the measure.

---

45 Applebaum. Program Notes.
46 Applebaum. “State of the Art.”
Example 20 shows the first page of the work. The piece begins with a one measure phrase taken from Stevie Wonder’s *Too High*. The tempo of the original recording is at 100 beats per minute. The second and third measures make up a two bar phrase taken from James Brown’s *Papa’s Got a Brand New Bag* which is set at 124 beats per minute. Thus, there is an immediate tempo change of 24 beats between the first and second measure with no transition or accelerando. Measure four makes an even more drastic tempo leap from 124 to 82 beats per minute. Applebaum has written an arrow on the barline at the beginning of each new tempo change as an additional aid to indicate whether the tempo speeds up or slows down. As this excerpt reveals, most of these abrupt tempo changes would be virtually impossible were they not connected to some preexisting source.

For *Go, Dog. Go!*’s improvisation sections, Applebaum uses passages from well-known Western art music as source material for rhythms. While one performer improvises, the other performer plays an ostinato derived from a musical work in the Western musical tradition. This ostinato uses only one instrument family for each improvisatory episode. In addition, the performers never play the same instrument family at the same time. This change of instrumentation as well as the shift from playing in unison to playing solo with accompaniment occurs abruptly with no transition. The last four measures of example 20 show the first improvisation section with the ostinato being a rhythm taken from the second movement of Bruckner’s *Symphony No. 9*. Here the ostinato is performed on the high and low metal instruments along with the hi-hat. The soloist improvises on the wooden instruments and continues as long as the soloist likes. Thus, the ostinato is repeated until the soloist indicates that the improvisation is over. The soloist signals the end of the improvisation by playing the ostinato in unison with the accompanist for one complete repetition.47 After that, both players immediately proceed to the next unison passage or if they are on the last cycle, the coda. Figure 3.1 shows the soloist, accompanist, the instrument families of each as well as the original source of each ostinato found in the improvisation episodes.

To help the performers to achieve successful synchronization with one another, the composer has prepared a rehearsal track that contains the entire chain of song segments strung together using the original recordings of each. This track is used for rehearsals only and is not to be used in performance. Applebaum composed this work as an experiment in cognition. He was fascinated by performers changing tempo while

---

47 Applebaum. Program Notes.
<table>
<thead>
<tr>
<th>Cycle</th>
<th>Soloist</th>
<th>Accompanist</th>
<th>Ostinato Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Player 1 Wood</td>
<td>Player 2 Metal</td>
<td>Bruckner: <em>Symphony No. 9</em>, Mvt. II</td>
</tr>
<tr>
<td>II</td>
<td>Player 2 Metal</td>
<td>Player 1 Skin</td>
<td>Stravinsky: <em>Rite of Spring</em>, “Danse des Adolescents”</td>
</tr>
<tr>
<td>III</td>
<td>Player 1 Skin</td>
<td>Player 2 Wood</td>
<td>Holst: <em>The Planets</em>, “Mars”</td>
</tr>
<tr>
<td>IV</td>
<td>Player 2 Wood</td>
<td>Player 1 Metal</td>
<td>Varèse: <em>Ionization</em></td>
</tr>
<tr>
<td>V</td>
<td>Player 1 Metal</td>
<td>Player 2 Skin</td>
<td>Bartok: <em>Music for Strings, Percussion, and Celesta</em>, Mvt. II</td>
</tr>
<tr>
<td>VI</td>
<td>Player 2 Skin</td>
<td>Player 1 Wood</td>
<td>Stravinsky: <em>The Rite of Spring</em>, “Danse Sacrale”</td>
</tr>
</tbody>
</table>

Figure 3.1: *Go, Dog. Go!*, Improvisation designations.

playing together in unison. In preparing and performing this piece, the performers have to know the original songs as found on specific recordings in order to move together with one another. Including the tempo changes of the improvisation sections as well as the coda, there are a total of 102 tempo changes in the piece.

3.3 GONE, DOG. GONE!

*Gone, Dog. Gone!*, also for percussion duo, is a companion piece to *Go, Dog. Go!*. The main body of the piece is also derived from rhythms from popular music songs but they are used in a slightly different way than its predecessor. There is also an interlude that is similar to the coda of *Go, Dog. Go!* in that it is based on the characteristics of dogs from another page in the same book. Although there are many similarities between the two works, there are a few key differences in the way that the rhythms are constructed and performed. However, before discussing these differences, it is necessary to give a description of the instrument setup as well as the form of the piece because both of these factors contribute to the nature of its performance.
Unlike its companion piece, *Gone, Dog. Gone!* has a single instrument setup that is shared by both players. The setup consists of nine instruments that are selected by the performers and can be of any material (not limited to wood, metal, or skin as in *Go, Dog. Go!* but can also include glass, plastic, or other materials) and can be real instruments, invented instruments or found objects. The two players stand on opposite sides of the table facing each other. Figure 3.2 shows the setup for the piece. From the point of view of each player, there are three rows of instruments that are arranged as follows: three instruments in the first row, two in the middle row, and three in the row farthest from the player. The notation is written using three staves, one for each of the three rows as shown in Figure 3.3. The nature of the shared setup naturally produces a timbral inversion between the two players. For example, player one’s instrument one is player two’s instrument eight. Therefore, although they read from the same notation, their respective parts will have an inverted timbre. Figure 3.2 emphasizes this concept by notating player one’s instrument numbers in black and player two’s numbers in red.

![Figure 3.2: Gone, Dog. Gone!, instrument setup.](image)

---

Applebaum also uses a form that is much different than the form of *Go, Dog. Go!*. There are six total pages that contain four musical lines; A, B, X, and Y. Lines A and B make use of the instrumental setup while lines X and Y are for visual gestures. Both lines A and B use transcribed popular music rhythms as source material. These rhythms are similar to those found in *Go, Dog. Go!* and some are even taken from the same songs. Both lines A and B are paired with lines X and Y. Line X uses the same rhythms as line A and line Y uses the same rhythms as line B, so lines X and Y are simply visual representations of line A and B. The six pages of music are repeated a total of six times, with each cycle having a different combination of the four musical lines. The cycle arrangement is shown in figure 3.4. The interlude, not listed in the table, is to be played once or twice somewhere between cycles but not before the first cycle or after the last cycle.\(^{49}\)

The most distinctive difference between the rhythmic material of this piece and the rhythmic material of its predecessor is found in the first cycle. In *Go, Dog. Go!*, Applebaum composed a single line that both players perform in unison (except for the

---

\(^{49}\) Ibid.
improvisation episodes). In *Gone, Dog. Gone!*, Applebaum has created two different musical lines that are, in cycle one, played simultaneously. Each song in line A is paired with another song in line B of a similar tempo. For example, line A begins with the Beatles *Day Tripper* which is paired with the Kinks *All Day and All of the Night* in line B. The result is that a new composite rhythm is created from both lines.

The second major difference between this piece and *Go, Dog. Go!* is the realization of the rhythms by means of visual gestures. As mentioned previously, lines X and Y make use of the same rhythms as lines A and B respectively, but articulate them visually rather than aurally. The visuals that are used are part of an invented hand gesture system that Applebaum created and has used in several of his works. This system will be discussed in detail in chapter five of this document. Cycles two through five have one player playing an instrumental line (A or B) while the other plays the gestural line (X or Y). During these middle cycles, lines A and B are sounded alone once by each player. However, due to the timbral inversion, when player one plays lines A and B it will sound different than when played by player two. Cycle six, the final cycle, uses lines X and Y performed simultaneously in absence of sound except the vocalizations.
Example 21 shows the first page of the score, which includes all four lines written together. Throughout all six cycles, players one and two never play the same line in unison (although the interlude is played in unison). Line X is connected to line A and line Y is connected to line B.


*Go, Dog. Go! and Gone, Dog. Gone!* illustrate Mark Applebaum’s ability to create an unusual process to coordinate tempo changes and use it to produce exceptional works. Drawing upon rhythms of well-known popular and classical music in order to facilitate instant tempo modulations between two players is a fascinating concept. It also demonstrates the quirky and at times highly original creative processes that underly Applebaum’s music.
CHAPTER 4
INDETERMINACY AND IMPROVISATION

For a composer such as Mark Applebaum, equally versed in jazz as well as contemporary art music, it is no surprise to find that indeterminacy and improvisation play an important role in much of his music. In one interview, Applebaum states that his favorite musician is Miles Davis and if he could pick a second, it would be John Cage. This statement reveals much about the musical personality of Mark Applebaum. It is no surprise that the improvisation associated with Miles Davis as well as the experimentalism and indeterminacy of John Cage informs much of his work.

Applebaum divides his work into three broad categories: non-vernacular music, trans-idiomatic improvisation/instrument building, and jazz. The first category refers to standard mediums of a traditional art music composer such as orchestral, chamber, solo and operatic works. The second category refers to the building of his sound sculpture instruments and the improvisations associated with them. The third category is self-explanatory. Applebaum states that some people have jokingly referred to the multiplicity of his musical endeavors as schizophrenic. However, in Applebaum’s view, they are actually interconnected and influence each other quite often. He states that “some influences are transformed in nature as they are exported to neighboring creative endeavors. The freedom that I associate with jazz manifests itself as performance indeterminacy in my non-vernacular composition, those moments in which players are

---

50 Hodgson. *Mississippi Writers and Musicians.*
51 Applebaum. “State of the Art.”
52 Ibid.
invited to adjust particular morphological details, often on the fly during performance." Applebaum uses the term *performance indeterminacy* to emphasize the connection between indeterminacy and jazz improvisation. However, chance procedures or what he refers to as *compositional indeterminacy* are not used very often in his works. Applebaum states that “Chance procedures are rarely employed in my compositional technique, but notations that engender performance responses of limited indeterminacy occur frequently throughout my work…For me, indeterminate notations can best express stochastic events, they make every performance notionally different, and they suggest that performers may listen and communicate as improvisers.” As these quotes reveal, Applebaum does not favor aleatoric methods of composition, but likes to combine elements of performance indeterminacy with other fixed parts in his music.

In *Entre Funérailles II*, indeterminacy is used as part of the formal structure of the work. This is a work for solo vibraphone and was premiered by Terry Longshore in Medford, Oregon in August, 2000. The title is in reference to two works by Applebaum’s teacher Brian Ferneyhough entitled, *Funérailles*. They are considered to be two versions of the same piece and are known as *Funérailles* No. 1 and No. 2. Both are scored for two violins, two violas, cello, double bass, and harp. Ferneyhough requires that both versions be performed on the same concert, but not consecutively. Therefore, it is imperative that another work or works are performed between the two versions. With this in mind, Applebaum composed a series of solo works that would function as interludes to the two versions of Ferneyhough’s original work. Hence, the title includes the word *entre* which

---

53 Ibid.
54 http://www.markapplebaum.com/acoustic.html
55 30, previously discussed for its unusual formal aspects, is another example of the use of formal indeterminacy on a large scale.
is the French word for “between.” The other works in this series are: *Entre Funérailles I*, for solo trumpet and *Entre Funérailles IV*, for solo flute (there is no number III). Although these works are written for this specific purpose, they may also be performed independently. Applebaum considers them to be both an homage and a “whimsical aesthetic intrusion.”

The piece is composed using a form that consists of 32 separate cells of various lengths. The score is spread out over two full pages and is shaped somewhat like a circle with lines connecting each of the cells. The performer chooses any cell as a starting point and proceeds either clockwise or counter-clockwise (also chosen by the performer) following the lines to the next cell until the starting point has been reached. At this point the piece concludes with each cell being played only once. Although the form is indeterminate, the musical material within each box is fixed. Example 22 shows the first page of the work. Between each cell, along the black line, there is a number inside a circle. These numbers indicate a pause between each cell the length of which is determined in seconds according to which number is present. For example, the number 1 corresponds to a one second pause between the previous and following cells. At various points in the score, the letter “A” appears in place of a number, an abbreviation for *attacca* that indicates there is no pause at this point.

Another work that contains elements of indeterminacy is the percussion trio *Catfish*. In this work, Applebaum gives indeterminate parts to one or two players, while the other player or players have a fixed part. Throughout his music, Applebaum indicates

57 Ibid.
59 Ibid.

measures containing any form of indeterminacy or improvisation by putting the measure in square brackets. In addition, indeterminate musical passages are notated using grace notes with smaller noteheads. Example 23 shows an excerpt that begins at measure 45. In measures 45 through 48, each bar has two of the three players playing a temporally indeterminate passage while the third player has a fixed measure (fixed measures are marked in green). Who plays the fixed bar and who plays the indeterminate bars will change each measure throughout this section. This leads into measure 49, where all three players have indeterminate material simultaneously (marked in red). A closer look at this measure reveals that it begins with a unison figure but not all players have the same amount of musical gestures. Player two has one less grouping than player one and player three has two less groupings than player one. However, the three players are prevented
from playing any of the gestures in unison because each their respective parts must fill up the entire time slot. This type of passage demonstrates how Applebaum uses indeterminacy within the context of a fixed structure. While the music in these measures are indeterminate in regards to temporal placement, the entire musical figure must be completed within the bracketed area without carrying over into the next measure.

Example 23. Mark Applebaum, *Catfish*, mm. 45-54.

In this same example, Mark Applebaum uses indeterminacy to achieve a sense of musical tension. Measures 49 through 53 alternate between all players performing in unison, and all players performing similar material at their own pace. From an aural perspective, the listener perceives a perceptible alternation between clutter and clarity, creating a sense of tension and release that is completed by the downbeat of measure 54. Measure 54 is the beginning of a new section of the piece in which all three parts are independent of each other. Taken as a whole, this example can be interpreted as a slow build using partial indeterminacy (mm. 45-48) that eventually reaches its climax of total...
indeterminacy involving all three players (m 49). This is followed by a group of measures that alternate between clutter and clarity before moving on to a new section consisting of independent parts and new material. This alternation between clutter and clarity in measures 49-54 functions in a similar way to a V, I, V, I, V, I progression in a classical work, with the indeterminate measures acting as a V (tension) and the unison measures acting as a I (release). Furthermore, the last indeterminate measure (m. 53) resolving to the downbeat of measure 54 functions in the same way as a cadence, marking the end of this section and the beginning of a new section.

The previous examples from Catfish show indeterminacy in the temporal placement of musical events within a given measure, while the actual rhythms, striking surfaces, and articulations are precisely notated. This type of indeterminacy is also found in 30: The Second Decade. In this piece, rather than limiting the temporal indeterminacy to a single measure, Applebaum extends the indeterminate periods to sections made up of multiple measures as shown in example 24. In this example, there are two groups surrounded by square brackets, each of which has three measures. The indeterminate events are played on log drums at a dynamic of pianissimo. After each bracketed section, there is a unison measure played on drums and cymbals at fortissimo. This passage creates tension and release in a similar way to that of the earlier example from Catfish. The contrast between indeterminate and fixed elements is further strengthened by the sudden shift between soft and loud as well as the change of timbres from the log drums to the battery percussion. The soloist assists as well by punctuating the beginning of each unison measure with a loud flam on the low woodblock.

In some of his works, Applebaum includes sections which are entirely improvised. One of these works, *Go, Dog. Go!*, was discussed in chapter 2. In this piece, there are six improvisatory episodes that occur immediately after a unison passage. Each of the two players performs three improvisations, while the other player plays an ostinato derived from a western art work. These improvisations only have two stipulations: (1) the players use only the specified instruments, i.e. wood, metal, or skin; and (2) the solos be of varying durations.\(^{60}\)

Another example of improvisation in Applebaum’s music is found in the percussion trio *Theme in Search of Variations*. The instrumentation for this piece is much more complex than *Catfish*. All three players have a setup consisting of multiple

---

\(^{60}\) Applebaum. Program notes.
percussion instruments organized by family type: metal, wood, skin and pitched instruments. All three players have several metal instruments including windchimes, a triangle, a suspended cymbal, and a tam-tam; several wooden instruments including woodblocks and log drums; and one or more skin instruments. Each player also has two pitched percussion instruments that are unique to each player. The types of implements used on all of the instruments are also specified in the score. The score is notated in such a way as to have a staff for each family of instruments i.e. metal, wood, and skin as well as a separate staff for each pitched percussion instrument. The piece is also written in full score only. Figure 4.1 shows the legend for the instrumentation of the piece.

Applebaum originally wrote the piece to be performed along with other pieces written by graduate students of his at Stanford University. The student pieces function as “variations” of Applebaum’s work and include a type of coda made up of segments extracted from each work. Despite the original function of his piece, Applebaum states that it is completely autonomous and does not need to be programmed with the variations.61

In Theme in Search of Variations, Applebaum weaves passages of improvisation among passages of fixed notation. Example 25 shows a layered improvisation between the three players that overlaps as it proceeds. The instruments that are used during the improvisation are clearly specified but everything else is freely improvised within the bracketed area. The improvisation begins at measure 23 and continues over the course of three bars. Each player improvises for two of those measures and plays a soft roll on the low drum for the third measure. Player one improvises on the second and third measures; player two on the first and third; and player three on the first and second.

Figure 4.1: Legend for Theme in Search of Variations.

Example 25. Mark Applebaum, Theme in Search of Variations, mm. 23-29.
As this chapter reveals, indeterminacy and improvisation are two important components in the musical personality of Mark Applebaum. Although Applebaum rarely uses chance procedures, temporal indeterminacy is used quite often as shown in *Catfish* and *30*. In addition, Applebaum frequently uses improvisation in sections of some of his works. *Go, Dog, Go!* uses improvisation episodes as a contrast to the rhythmic unison passages. *Theme in Search of Variations* demonstrates how Applebaum places bracketed improvisation sections within pieces that are otherwise fully composed.
CHAPTER 5
VISUAL AND THEATRICAL ELEMENTS

An examination of the compositional style of Mark Applebaum would not be complete without a discussion of the visual and theatrical elements found in much of his music. In many cases, these aspects take precedence over the aural aspect of the work. As a result, the very definition of music is called into question. However, as mentioned in chapter one, Applebaum is more concerned about whether his works are interesting rather than if they may or may not step outside the traditional boundaries of music.

5.1 MUSICAL NOTATION AS A FORM OF ART

For a composer that is interested in visual aspects of musical performance, it is no surprise that musical notation is thought to be in itself a piece of visual art. Although some of Applebaum’s works are written in a traditional manner, many of his pieces are written using graphic notation. Because of the unorthodox manner in which he uses notation, Applebaum almost always writes his works by hand rather than using a notation software program. He says that his imagination is restricted by such programs. As a result, the orthography of his works has a certain personalized touch. Furthermore, he believes that the score can be a piece of visual art in addition to being a symbolic

---

62 The concept of a musical manuscript also being viewed as a work of art is not a new concept and has historical precedence dating back to the 14th century. In addition, many 20th century composers such as George Crumb have created beautiful manuscripts that are written using circles, spirals, and other shapes. Likewise, graphic notation has been employed by many composers of the 20th and 21st centuries. However, Mark Applebaum takes this visual aesthetic to more extremes where it becomes, at times, more important than the aural aspect. In some works, the aural aspect is removed altogether.

63 http://www.markapplebaum.com/acoustic.html
representation for generating sounds. One of the most extreme examples of this can be found in his work *The Metaphysics of Notation*. The score is a 72-foot-long sheet cut into twelve segments that are each 6 feet wide and 10 inches tall. Additionally, there are two hanging mobiles that contain smaller segments of notation. The notation is made up of various pictographs, shapes, and figures that can be interpreted with any type of instrument or voice. The twelve panels were placed in the Cantor Arts Center Museum at Stanford University. Every Friday over the course of a year, the museum allowed musicians to interpret the work musically. Consequently, the piece functions equally as a work of visual art as well as a musical score (interestingly, Applebaum states that there is no sound in his head during the compositional stage of these graphic scores).

Example 26 shows an image of one of the panels. This excerpt contains nothing that resembles traditional notation. The performer is given no instructions and can therefore create his or her own system for interpreting the symbols. In addition, the piece can be read horizontally, vertically, from left to right or from right to left.

---

**Example 26.** Mark Applebaum, *The Metaphysics of Notation*, excerpt.

---

64 Personal telephone interview.
65 CCA Fresno State. 2013.
In addition to visual elements, much of Mark Applebaum’s music contains theatrical elements. Mark has always been attracted to visual arts and theatre. In high school he participated in theater and even composed musicals for the theater program. During this time, Mark began shifting from interpreting music to composing music. Thus theatre was a major part of his early compositions. Applebaum states that he was influenced by Harry Partch’s view of the visual aspect of performance. In several of Applebaum’s works, the motions and theatrics that the performer undergoes as the piece is performed becomes more important than the sounds produced. Therefore, to simply listen to an audio recording of one of these works will not realize Applebaum’s full artistic vision.

One of the most fascinating accomplishments of Mark Applebaum and an excellent example of his interest in visual and theatrical elements is his invention of a complex system of hand gestures utilized in a number of pieces. Applebaum refers to the gestures as “a kind of alien, pre-verbal, and rhythmicized sign language.” They are performed in a sharp, rhythmic manner with the body remaining motionless and the face fixed in a blank stare. There is no comedic element to the performance and the performers should execute the gestures with confidence and precision. The desired effect from the point of view of the audience is that they are witnessing a bizarre, foreign ritual being acted out on stage. As will be shown, these gestures are taken from mundane, everyday motions that people do without thinking about or focusing on them. Applebaum

---

67 Personal telephone interview.
68 Hodgson.
69 Applebaum. “State of the Art.”
70 Applebaum. “Program Notes to Straitjacket.”
71 ibid.
states that he has a fascination with the absurd, which is caused by a “tedious, obsessive attention to ridiculous things.” Or, in other words, how bizarre the actions of our mundane routine of activity seem when they are examined out of context.

In order to render this hand gesture system into musical notation, Applebaum created a square pictograph for each gesture along with a name that corresponds to what is written on the pictograph. For example, a gesture that uses a closed fist with the knuckles facing up is given the name “Rock”, as in the game of rock, paper, scissors. Therefore, a picture of a rock becomes the symbol for this gesture. Most of the gestures are similar to this example in that they correspond to common movements experienced in ordinary life. This type of association with a common motion immediately gives the performer a clear description of how to execute the gesture. To attach the gestures to specific rhythms, Applebaum placed the square pictographs on an extended notational stem with the actual rhythms notated above. Example 27 shows the first two measures from the second movement of Straitjacket.

Example 27. Mark Applebaum, Straitjacket, mvt. II, mm.1-3.

---

73 Ibid.
74 Applebaum. “Program Notes to Straitjacket.”
In this example, it can be seen how the gestures are notated as well as the rapid succession from one gesture to the next. The gestures are written using three staves: the top stave is for the right hand, the bottom for the left hand, and the middle stave is for gestures that involve both hands simultaneously. The rhythms are notated at the top with pictograph symbols placed on the extended stems that reach to the bottom staff. Included with the score is an index of all gestures that are listed by name and are in chronological order. Some of the gestures are short while others are sustained. For example, the “shaky hands” gesture in measure one is held out for two beats and is thus notated as a tremolo. Similarly, other gestures that are sustained are sometimes notated with a dotted line. The index contains detailed instructions for each gesture that clarify the manner in which it is to be executed.

It must be noted that the pictographs and their corresponding descriptions are used only for the sake of the performer’s ability to synthesize and reproduce the movements as they read the notation. The composer’s interest however, is not in the real world aspect of the movements but rather the physical motion of the gesture itself. In other words, the desired effect is not for the audience to associate the gestures with any kind of real world movements but rather that they experience a type of abstract theatrical performance.

This hand gesture system has been used in several different works, each of which have slight variations in the way that the gestures are used. Applebaum created a master database of gestures that he choose from when composing. None of the works make use of all gestures, although some gestures appear in multiple works.

---

75 Applebaum. “Program Notes to Gone, Dog. Gone!”.
76 Personal interview.
Applebaum’s first use of this system is in the second movement of the aforementioned *Straitjacket*. In this piece, the soloist sits in a chair on the center of the stage with a pair of percussionists on each side. The four percussionists play various percussion instruments while the soloist performs silent, choreographed gestures. In this way, the quartet functions in the same manner as so-called “foley” sound artists who duplicate ambient sounds during the post production of movie sound recording. Conversely, the soloist functions as the visual element of the piece.\(^7\) The title of the movement, *Isopangram*, refers in literature to a sentence in which each letter of the alphabet is used only once. Similarly, in this movement there are a total of 118 gestures performed by the soloist, each of which is heard only once. Example 28 shows the first four measures of the piece.


After *Straitjacket*, the next piece that uses these gestures is a work for electronic tape and solo performer entitled *Aphasia*. The piece is actually written for a “singer” to

---

\(^7\) Applebaum. “Program Notes to *Straitjacket*.“
perform although there are no sounds made by the vocalist. The gestures are similar to those found in *Straitjacket* and are executed in the same manner, but the accompaniment is an electronic recording rather than live performers. The source of the electronic sounds is actually vocal samples from the voice of baritone soloist Nicholas Isherwood, which are then electronically manipulated.78 The piece came from an idea that Applebaum had for a mute singer with hand motions. Applebaum’s intention was for the piece to be a metaphor for what he refers to as “expressive paralysis”, something that he experiences when he begins to compose a new work.79

This same hand gesture system is also used in the percussion duo, *Gone, Dog. Gone!* but with further variation. As mentioned in chapter three, the main body of the work is constructed using rhythms of rock and pop music. Two lines of music are created (A and B) and paired with another line consisting of hand gestures (X and Y) which are written using the same rhythms found in their musical counterpart. Throughout much of the piece, the performers alternate cycles in which one player performs on the instrumental setup while the other performs the gestures. For example, player one plays line A while player two performs line X. This is similar to the foley approach as found in *Straitjacket*, but with only one accompanist rather than four. There is also another interesting feature found in *Gone, Dog. Gone!* During the last cycle of the piece, both players perform two different gesture lines simultaneously (lines X and Y). Here, there is no sound except for the vocal articulation of the words *Gone, Dog*, and *Gone* on the downbeats of each measure. Example 29 shows the first six measures of the piece.

---

78 Brown, “*Aphasia: A Stanford music professor's work, with hand gestures and odd sounds, about obsessive attention to ridiculous things.*”
79 Ibid.
It can be seen in Example 29 that the lines for the gestures are connected to one of the musical lines. Line A and X are paired and line B and Y are paired. Both lines X and Y make use of the same types of gestures and proceed in the same order. For example, both begin with the “superman” gesture followed by “smear blackout”, “stature of liberty”, and “eye poke”. However, because of the difference in the rhythms of the two musical lines, the gestures are not executed in identical fashion. There are two simultaneous rituals that make use of the same gestures but with differing manifestations.

Mark Applebaum uses the hand gesture system again in the work 30: The Second Decade for percussion quartet. As mentioned in chapter two, this work can be performed alone or simultaneously, with a soloist and/or a septet. The last 25% of the piece is completely made up of gestures and optional vocalizations. All four players execute gestures simultaneously, but each of the four players has a unique part. Rather than create an index for each player, Applebaum created a master index of all gestures and listed them in alphabetical order. The notation is also slightly different from previous works. Instead of having three lines representing right, left, and both hands, a single line is used with right hand pictographs placed above the line, left hand pictographs placed below the line, and two handed pictographs placed directly on the line.

If this piece is performed alone, this section of the piece will contain no sounds and will be transformed into a completely visual performance (unless the optional vocalizations are utilized). If the work is performed with the soloist, the gestures are given an additional significance in that they mimic the sounds created by the soloist. This manner of gesture usage is the exact reverse of the way that they are used in Straitjacket. Here, the soloist acts as the foley artist that creates sounds while the quartet now...
functions as the visual element using silent hand gestures. Example 30 shows a passage that illustrates the interaction of the soloist and quartet.

Example 30. Mark Applebaum, 30: The First and Second Decades, mm. 318-323.

5.2 DRAWING PICTURES

The fourth movement of Straitjacket, entitled “Taquinoid”, takes the visual aesthetic into the realm of literal drawing. In this movement, no musical instruments are played at all. Instead, five large easels with blank paper attached to them are brought onstage and positioned facing the audience. The soloist and the four accompanists sit with their backs to the audience and draw pictures on easels using black magic markers. Each of the marker strokes are performed in unison among the five players with the
soloist giving a cue before each set of strokes. The only aural element is the sound of the marker strokes as they first hit and then slide across the paper. Contact microphones are placed on the easels to amplify the sound of the markers. All of the strokes of the markers are done in a rhythmic manner which is notated in the score. Even though the rhythms of the marker strokes are in unison, the five players each produce a different picture. The effect is that the audience watches and hears the players drawing in unison, but the resulting images that appear on each paper are unique to each player. Furthermore, by the end of the piece, the audience comes to realize that all five pictures are separate pieces of a larger picture. All five pictures connect horizontally as if they were at one time a single page that is now cut into five equal parts. Example 31 shows the first five measures of the score.

Each measure is represented by one visual panel. All five players have their own line of pictures which they follow. The rhythms of the marker strokes are notated under each picture using a single line. Some boxes contain one motion while others contain up to five motions. The order of motions is numbered in both the picture, and the rhythmic notation under the picture. Dots shown in the pictures are made with a single stabbing gesture which produces a staccato sound. Rapid scribbling or filling in shapes are notated as tremolandi.  

Figure 5.1 shows the final form of the pictures.

Figure 5.1: Final form of composite drawing.

5.3 COMPOSITION MACHINE # 1

*Composition Machine # 1* is another important example of Mark Applebaum’s interest in the visual and theatrical aspects of performance. In this work, the audience watches the performer create a musical score and then interpret that score. This work makes use of three stations. Stations one and three each contain two different instrumental setups, one small and one elaborate (the performer chooses the station for each setup). At both of these stations there are music stands placed facing the audience in

---

80 Applebaum. “Program Notes to Straitjacket.”
order that they be able to see the score. The performer has his or her back to the audience. A large scroll, rolled up and tied with a rubber band, is placed on the music stand at station 1. Station 2 contains an amplified table with a long sheet of paper covering the entire surface. Behind the table are two tables or trays containing found objects that are specified in the score. The performer faces the audience in between the two trays with the table in front of him. The section of the piece that is performed at station 2 is memorized so no music stands are necessary.

The performance begins at stage right, where the performer unrolls the large scroll wrapped with a rubber band and places it on the music stand. The scroll contains pictographic notation which the audience can see. The performer then plays the notation on the instrumental setup according to a personal but predetermined interpretation system. The audience is unaware that his scroll has been created beforehand by the performer. After the entire page has been played, the performer wads up the scroll into a ball while moving towards station two. Once he is there, he drops the ball on the amplified table covered in paper. This second section is divided into two parts, “2a”, and “2b.” For section 2a of the piece, the performer takes various found objects and places them one by one on the table in rhythmic fashion. Section 2a is the only section with notation in the original score and is memorized by the performer. The objects used are specified in the score and are grouped in notation according to their shape: one line for square objects, one line for circular objects, one line for triangular shaped objects and one line for miscellaneous objects. Figure 5.2 shows the instrumentation and the staff legend.

---

82 Ibid.
83 Ibid.
Section 2 Instrumentation:

- metal beer caps (12-15, divided into 2 groups)
- 3 allen wrenches
- 2-3 feet of heavy chain
- one tree branch
- one meter of aluminum foil
- the crumpled score ball (from section 1)
- plastic cup
- tin can
- metal pie pan
- stainless steel mixing bowl
- plastic cassette case
- plastic CD jewel box
- hardcover book.

Figure 5.2: Composition Machine #1, instrumentation and legend.

At the conclusion of section 2a, section 2b begins. This involves tracing the objects that have now been placed on the paper. The performer traces the outline of each object with the marker one by one and places the object back on the tray. The composer indicates that the performer may choose the order of tracing and removal so long as the process is thought out beforehand. This is done so that the performer always appears to the audience as following a predetermined plan rather than choosing on the spot. Once the tracing process is completed, the performer takes this newly-created paper (which is now a new pictographic scroll) to station three where it is performed on different instruments but according to the same interpretation system as was utilized in section one.
At the conclusion of section three, the player rolls up the scroll and places it on the music stand of station one, conceptually preparing for another performance. This second scroll, that the audience witnesses being made, is actually a duplicate of the first scroll that was wadded up. The performer creates the first scroll during a rehearsal of section 2 prior to the performance.\textsuperscript{84} In other words, the performance of section two produces the score for the other two sections.

Two or more performances may be linked together. In this case, multiple players are used and the first player hands the new score to the second player as he exits the stage. The second player then begins the piece using the new score and the cycle may continue as many times as desired.\textsuperscript{85}

An elaborate set of preparation and performance notes are given by the composer in the score. As mentioned before, section 2a is the only one of the three sections that contains notation written by the composer. This notation is for the section in which the performer places objects on the table and traces them. Example 32 shows an example of the notation for this section. A note with a square around the notehead represents the first appearance of an object. A note with a dotted line indicates that the object is to be dragged across the table creating an audible legato slide. Tremolo markings indicate that the object is to be rubbed rapidly back and forth on the table. Each object is labeled near the notehead.

The score also includes a set of inking rules for tracing which are divided into four categories: Basic shapes, embellishments, connecting lines, and alphanumerical values. Figure 5.3 shows an illustration of these inking rules and how they relate to each object.

\textsuperscript{84} Ibid.
\textsuperscript{85} Ibid.
Example 32. Mark Applebaum, *Composition Machine #1*, section 2, mm. 8-15.

**Figure 5.3**: Composition Machine #1, Inking Rules.

The basic shapes category corresponds to the shapes of the objects, which are organized in the score using four systems as shown previously. Each object is given a specific drawing instruction, either the tracing of the object, or shapes drawn near the object. For example, X’s are drawn near the beer bottle caps and L’s are drawn near the allen wrenches. Some shapes contain instructions for shading. The embellishments involve drawing diamond shapes around several of the bottle cap X’s as well as arrows drawn from a circle pointing at the square of the CD case that previously was traced. The
connecting lines involve solid or dotted straight lines being drawn to connect objects. The final inking rule involves alphanumeric values. A letter that corresponds to the current day of the week is written in the square of the cd case rectangle. Saturday equals the letter A, Sunday the letter B, etc. In addition, the number representing the current day of the month is written in one of the circles. The number of the bottle caps on the left side of the table is written inside one of the two triangles. The number of bottle caps that are on the right side of the table are written inside the cassette tape rectangle.

The idea behind Composition Machine # 1 has its genesis in two previous works that have already been mentioned in this document: The Metaphysics of Notation and the Taquinoid movement of Straitjacket. The Metaphysics of Notation was created using graphic notation but with no instruction as to how to interpret the various symbols. In this case, the score was fixed but both the instrumentation and the method of interpretation is left to the performer. Taquinoid, as mentioned earlier, has the performers create a drawing that could potentially be performed but never is. It is limited to creation only. Composition Machine # 1 includes both of these aspects and applies them in a loop: the performer draws his or her own score and then interprets it. Traditional scores include a written score as well as an interpretation method, whether specified explicitly or through cultural implication. In this work however, the performer is simply instructed how to draw a score and then must go on to formulate their own interpretation system of that score.  

---

86 Applebaum. “Program Notes to Composition Machine #1.”  
87 Ibid.
5.4 CONCLUSION

This document has explored several major aspects of Mark Applebaum’s compositional style. Innovative compositional processes that are used in specific works were discussed in detail in chapter 2. Some of these techniques and concepts seem unique to the composer, including the idea of sequential metamorphosis censorship used in the first movement of Straitjacket, and the score layering process used in Narcissus: Strata/Panacea. Both of these works give insight into the complexities of Applebaum’s conceptual mechanisms. Chapter 2 also included a detailed analysis of the coda section of Go, Dog. Go!, in which Applebaum translated images of dogs into musical representations. The final piece featured in chapter 2 was 30, a piece that is notable because it was written as three separate works and can be played individually, consecutively, simultaneously, or in any other combination. The instrumentation of this work was also discussed, highlighting the fact that Applebaum uses instruments unique to each piece in order to give each one a distinct tone color palette. In addition, each of the three smaller pieces has a special characteristic that simultaneously showcases contrast when performed individually, and contributes to a rich, complex tapestry when played simultaneously. These distinctive features are: the spatial panning effect in The First Decade, the use of Applebaum’s hand gesture system in The Second Decade, and a nonmetric, free time form employed in The Third Decade.

Chapter 3 contained a detailed discussion of Applebaum’s use of popular music rhythms as source material for the main section of Go, Dog. Go!, in which he used as an innovative mechanism to allow multiple players to change tempo while playing in unison. Additionally, he used ostinatos found in seminal works of Western art music in the
improvisatory sections of this piece. This use of rhythmic material produced a work with a total of 102 abrupt tempo changes, performed simultaneously by two players. The companion piece, Gone, Dog. Gone!, expanded on this concept of popular music rhythms by exploring simultaneous, interlocking lines as well as performing these same lines using visual gestures.

Chapter 4 discussed the important role of indeterminacy and improvisation in much of Applebaum’s music. As noted, this is due in part to Applebaum’s interest in the music of experimental composers such as John Cage as well as his background in jazz piano. Surprisingly, Applebaum rarely uses chance procedures or what he refers to as compositional indeterminacy in his works. However, he employs temporal indeterminacy frequently, demonstrated in examples taken from Catfish, 30: The Second Decade and 30: The Third Decade. In works such as Entre Funérailles II, Applebaum employs indeterminacy in the form. In some works, such as Theme in Search of Variations, Applebaum inserted bracketed passages to indicate improvisation within a given duration. Other works, such as Go, Dog. Go!, feature longer improvisational episodes in which the duration is determined by the performer.

Mark Applebaum’s use of visual and theatrical elements is another integral part of his compositional personality and was the subject of chapter 5. His view of musical notation as visual art causes him to use great care when writing his scores which are almost always done by hand. As a result, his scores have a personal touch and are often visually pleasing. This view has also led to the creation of more and more elaborate graphic notation in some of his works. Applebaum’s interest in art manifests itself in the fourth movement of Straitjacket, in which the players draw pictures on easels. With the
exception of the rhythms of the marker strokes, here Applebaum completely abandons traditional musical elements and focuses on visual perception.

Also noted in chapter 5 was Applebaum’s interest in mundane tasks which eventually led to the formation of his signature hand gesture system. The frequent use of this system shows that it is an important component of the composer’s music, as it has been used in many works and will most likely be featured in future pieces. This same obsession for the mundane also contributed to the creation of works such as Composition Machine #1 in which the audience witnesses a performer draw a musical score and interpret it. In the middle section of the work, the “performance” of engraving a score becomes the central focus. All of these works reveal that Mark Applebaum views the visual aspect of his music as equal to, or in some cases, greater than the aural aspect. Some pieces even question the very definition of what music is, a question that does not concern Applebaum at all. Instead, his concern only lies in whether the piece is interesting and whether it inspires the listener to want to hear more of his music.

The scope of this document was limited to Applebaum’s acoustic percussion works. However, he has written other pieces that feature many of the same ideas, as well as works that incorporate other imaginative concepts and compositional procedures. The musical oeuvre of Mark Applebaum is rich, diverse, and full of imagination and creativity. It is the hope of the writer that this document will bring further attention to the idiosyncratic and inexhaustively creative music of Mark Applebaum.


APPENDIX A: RECITAL PROGRAMS

presents

RICHARD SHANE REEVES, percussion

in

Doctoral Recital

Wednesday, October 26, 2011 • 6:00 PM • Recital Hall

Spider Walk (1993) Marta Praszynska
(b. 1943)

Intermezzo in A Major, Op. 118, No. 2 Johannes Brahms
(1833-1897)
Arr. by Shane Reeves

Bem • Vindo (1989) Ney Rosauro
(b. 1952)

Dances of Earth and Fire (1990) Peter Klatzow
(b. 1945)

Prelude No. 3 (From West African Rhythms) (1995) Christopher Deane
(b. 1957)

Libertango (1974) Astor Piazzolla
(1921-1992)
Arr. by Eric Sammut

Mr. Reeves is a student of Scott Herring.
This recital is given in partial fulfillment of the requirements for
the Doctor of Musical Arts degree in Performance.
RICHARD SHANE REEVES, percussion

in

Graduate Recital

Thursday, March 22, 2012
6:00 PM • Recital Hall

Catfish (1997)  Mark Applebaum  (b. 1967)

Kelly Grill, percussion
Ben Tomlinson, percussion

Pas de Deux (1999)  Matthias Schmitt  (b. 1958)

Denise Rudell, harp
Allison Schweickert, vibraphone


Aimee Fincher, piano


Briana Leaman, oboe


Aimee Fincher, piano
Korinne Smith, flute


Kelly Grill, percussion
Allison Schweickert, percussion
Ben Tomlinson, percussion

Mr. Reeves is a student of Dr. Scott Herring. This recital is given in partial fulfillment of the requirements for the Doctor of Arts degree in Performance.
RICHARD SHANE REEVES, percussion

in

Doctoral Recital

Monday, January 14, 2013
6:00 PM • Recital Hall

Recital Suite for Djembe (1997)  B. Michael Williams
   I. Allegro - in the style of Djole  (b. 1954)

   (b. 1956)

Recital Suite for Djembe (1997)  B. Michael Williams
   II. Moderato - in the style of Yankadi

Six Poems (1990)  Robert Stright
   I. brought forth in purple  (b. 1960)
   II. a freshening lustre mellow
   III. abstruser musings
   IV. a dancing shape
   V. inaudible as dreams
   VI. echo seeking of itself

Recital Suite for Djembe (1997)  B. Michael Williams
   III. Vivace - in the style of Lenjengo

Quasi Una Sonata (2001)  Nehoja Jovan Zivkovic
   I.  (b. 1962)
   II.
   III.

Alan Rudell, piano

Mr. Reeves is a student of Dr. Scott Herring.
This recital is presented in partial fulfillment of the requirements for the
Doctor of Musical Arts degree in Performance.
RICHARD SHANE REEVES, percussion
in DOCTORAL RECITAL

Brett Landry, percussion

Monday, August 26, 2013  
6:00 PM • Recital Hall

30: The First Decade (2013)  
Mark Applebaum  
(b. 1967)

Of Wind and Water (1992)  
Dave Hollinden  
(b. 1958)

Mark Applebaum

Brett Landry, percussion

Entre Funérailles II (1999)  
Mark Applebaum

Gone, Dog. Gone! (2012)  
Mark Applebaum

Brett Landry, percussion

Mr. Reeves is a student of Scott Herring.  
This recital is presented in partial fulfillment of the requirements for  
the Doctor of Musical Arts degree in Performance.