## SELECTED WORKS FOR SOLO FRAME DRUMS BY B. MICHAEL WILLIAMS

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In 1993, American percussionist and composer B. Michael Williams published *Four Solos for Frame Drums*. This collection is considered the first work written exclusively for solo frame drum in Western notation. Williams primarily modeled his solos around traditional rhythms and techniques from Middle Eastern musical traditions as well as Glen Velez's virtuosic style of playing frame drums. He also drew influence from the music of South India and Sub-Saharan Africa. Williams intentionally combines the aforementioned elements as a means to expose his students and audience members to the music and drumming of these regions.

The purpose of this paper is to provide a detailed analysis of select compositions for solo frame drum by B. Michael Williams in order to assist future performers in making well-informed interpretive decisions. The analysis will highlight the compositional style, structural components, technical demands and important performance considerations of four pieces by Williams:

Quatrinity, Etude in Arabic Rhythms, Another New Riq and Rhythmic Journey no. 1: (From Conakry to Harare).

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## CHAPTER 1

#### INTRODUCTION

In the 1930s and 1940s, composers Edgard Varese, Henry Cowell, Lou Harrison and John Cage integrated non-Western percussion instruments from Africa, China, Japan and Southeast Asia into their music.<sup>1</sup> These composers typically utilized non-Western percussion for the instrument's sonic qualities rather than for the traditional rhythms and/or techniques used by the culture from which the instruments originated.<sup>2</sup> These early experiments, in what has come to be known as global or world music, set the stage for many later Western composers to explore and utilize percussion instruments from other cultures.<sup>3</sup>

The 1970s witnessed a dramatic shift in the way Western composers approached writing for non-Western percussion instruments. Composers continued to exploit the timbral possibilities of percussion but also began employing traditional musical material/concepts from the non-Western cultures they were studying. This "shift" was led by composer Steve Reich. Reich visited Ghana to study African music in 1970 and completed his masterpiece, *Drumming* the following year. The rhythmic content within *Drumming* contains patterns similar to those found in the drumming of the *Ewe* people of Ghana. According to Steven Schick, "the use of drums in tightly cycling periodic patterns in *Drumming* is a quality found in African music; just as the heavily nested contrapuntal structures where several simple parts combine to create a complex whole is a characteristic of Indonesian Gamelan." Due to Reich's influence, composers have

<sup>&</sup>lt;sup>1</sup> Pieces include Varese's *Ionization*, Cowell's *Ostinato Pianissimo*, Harrison's *Fugue for Percussion* and Cage's *Three Constructions*. They used non-Western percussion instruments such as *amglocken* (tuned cowbells), *nipple gongs, oxen bells, temple bells* and various types of drums and gongs from Asia.

<sup>&</sup>lt;sup>2</sup> One exception is Amadeo Roldan, who included traditional Afro-Cuban instruments, techniques and rhythms in his *Ritmicas 5 and 6*.

<sup>&</sup>lt;sup>3</sup> Composers such as Alan Hovhaness and Carlos Chavez.

<sup>&</sup>lt;sup>4</sup> Schick, Steven. *The Percussionist's Art: Same Bed, Different Dreams.* (Rochester: University of Rochester 2006). 240.

increasingly incorporated traditional performance practices of non-Western percussion instruments in their compositions.

American percussionist Glen Velez<sup>5</sup> achieved worldwide recognition in the late 1970s for his virtuosic treatment of frame drums. Velez studied traditional drumming styles from Egypt, Persia, India, Italy, Brazil, Morocco and Ireland and unified the various individual techniques into a composite vocabulary for frame drums. Due to his influence, interest in Middle Eastern frame drumming traditions skyrocketed around the globe. Western composers of symphonic, wind ensemble and chamber ensemble genres began to incorporate frame drums into their compositions, yet no works written exclusively for solo frame drum were published before 1990. Western Composers who have included frame drums in their compositions include: N. Scott Robinson, *Mirage* (1994), *Shaken, Not Stirred* (1995), *Handful* (2000) and *Global Positions* (2004), John Bergamo, *Frembe* (1997), Susan Botti, *Cosmosis* (2005) and Nathan Daughtrey, *Limerick Dreams* (2006).

In 1993, American percussionist and composer B. Michael Williams published *Four Solos for Frame Drums*. This collection is considered the first work written exclusively for solo frame drum in Western notation. Williams primarily modeled his solos around traditional rhythms and techniques from Middle Eastern musical traditions<sup>6</sup> as well as Velez's virtuosic style of playing frame drums. He also drew influence from the music of South India and Sub-Saharan Africa<sup>7</sup>. Williams intentionally combines the aforementioned elements as a means to expose his students and audience members to the music and drumming of this region. Upon

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<sup>&</sup>lt;sup>5</sup> Glen Velez will be discussed further in chapter 2.

<sup>&</sup>lt;sup>6</sup> Williams uses rhythms commonly found in the music of Morocco, Egypt, Iran, Iraq, Syria and Israel.

<sup>&</sup>lt;sup>7</sup> Influences from Sub-Saharan Africa include the music found within the *Ewe* people of Ghana and *djembe* drumming ensembles from Mali, the Ivory Coast and Guinea.

completion of *Four Solos for Frame Drums*, Williams continued to compose solos for this burgeoning idiom.

The purpose of this paper is to provide a detailed analysis of select compositions for solo frame drum by B. Michael Williams in order to assist future performers in making well-informed interpretive decisions. The analysis will highlight the compositional style, structural components, technical demands and important performance considerations of four pieces by Williams:

Quatrinity, Etude in Arabic Rhythms, Another New Riq and Rhythmic Journey no. 1: (From Conakry to Harare).

This paper will include a brief synopsis of the history of Middle Eastern frame drums as well as an overview of their integration into Western music. Descriptions and illustrations of three frame drums Williams utilizes in his pieces (the *tar*, *bendir* and *riq*) and their standard holding positions and techniques, will be included to facilitate a basic understanding of how to play each drum. This paper also contains an analysis of the aforementioned works including a description of the form of each solo, an examination of prominent rhythmic motives or *ostinati*, their origins and interpretation, as well as an explanation of the technical demands within each solo. Interviews and coaching sessions with B. Michael Williams concerning his inspirations for writing these solos and specific performance considerations he believes are essential for a successful rendition will also be included.

State Of Research Pertaining To Middle Eastern Frame Drumming

There are numerous articles and books that explore the history of Middle Eastern frame drumming traditions. Some of the foremost authors in research of the frame drum include:

Veronica Doubleday, James Standifer, Carol Meyers and Amnon Shiloah. In 1999, frame drum virtuoso Layne Redmond published *When the Drummers Were Women, A Spiritual History of* 

*Rhythm.*<sup>8</sup> Her research thoroughly traces the development of frame drumming traditions throughout the Middle East and Mediterranean, particularly those of female drummers.

Percussionist and ethnomusicologist N. Scott Robinson has created a website devoted to frame drum traditions that exist worldwide. The site includes brief overviews of the histories of frame drumming in the Middle East, Mediterranean, India, Asia, Africa and North America. He also includes pictures and descriptions of roughly fifty frame drums, a catalog of notable frame drummers throughout the world and a discography and videography of related music.

To date, few articles or method books exist that illustrate the numerous techniques involved in playing frame drums in Western notational systems. None exist that address the fusion of cultural playing styles<sup>9</sup> that are common in modern frame drum performance. Furthermore, the majority of college percussion pedagogy courses do not adequately cover Middle Eastern frame drumming in their curricula. Many Western percussionists are not familiar with the basic strokes and sounds one can produce from frame drums or with the musical traditions associated with them.

The most comprehensive methodology available in Western notation is Mary Ellen Donald's, *Arabic Tambourine*. Her book includes detailed descriptions and photographs of the various strokes and techniques one will encounter when playing a *riq*, *tar* and a large tambourine, the *mazhar* (Middle East). It also includes appendices of representative Arabic rhythms, a glossary of relevant terms and a discography of illustrative recordings. A thorough investigation of Donald's research is necessary to facilitate an understanding of B. Michael

<sup>&</sup>lt;sup>8</sup> Redmond, Layne. When the Drummers Were Women, A Spiritual History of Rhythm. (New York: Three Rivers Press, 1997).

<sup>&</sup>lt;sup>9</sup> These styles include techniques taken from the *tar, bendir* and *riq* from the Middle East, *kanjira* from South India and *bodhran* from Great Britain.

<sup>&</sup>lt;sup>10</sup> Donald, Mary Ellen. *Arabic Tambourine*. (San Francisco: Mary Ellen Books, 1985).

Williams' compositions. Additional resources include the instructional videos of John Bergamo<sup>11</sup> and Glen Velez published by Interworld Music Associates. Important foundational elements contained in these videos include basic technical concerns of various frame drums and improvised solos which reflect Bergamo's and Velez's fusion of global frame drumming styles.

<sup>&</sup>lt;sup>11</sup> See chapter 2 for a biography of John Bergamo.

#### CHAPTER 2

#### A BRIEF HISTORY OF FRAME DRUMS FOUND IN MIDDLE EASTERN MUSIC

A frame drum can be defined as "a type of membranophone which is made by stretching a skin over a hollow body of any shape or size". Traditionally, the depth of the shell of the drum is smaller than the diameter of the head that is stretched across it. Drum diameters can range from six to more than twenty inches. The shape of a frame drum is typically round although square or hexagonal drums are found in several cultures throughout the world.

According to Layne Redmond, "Frame Drums of ancient trans-Mediterranean cultures were primarily wheel-shaped drums whose diameter was much wider than the depth of its shell. Its round, vessel-like hoop was shaped like a grain sieve, and both probably share the same origin." The shells of frame drums are constructed out of various woods, metals or clay.

Drumheads are made of animal skins from cows, goats, fish, lizards, deer or from synthetic material such as plastic. <sup>14</sup> Some of the most commonly-used drums are the *tar*, *bendir*, *riq* (also referred to as *deff* or *daff*), *darbuka*, and *tabal*. <sup>15</sup>

Frame drums are found in the Middle Eastern and North African nations of Egypt, Israel, Morocco, Tunisia, Iran, Iraq, Syria and Turkey to name a few. Drumming traditions and techniques in these countries have typically been passed aurally from generation to generation. As early as the 19<sup>th</sup> century, archaeologists discovered terracotta figurines, hieroglyphics, paintings and other artifacts depicting men and women playing various sized and shaped frame drums, some estimated to be from between 3000 and 2000 B.C. The earliest representations

<sup>&</sup>lt;sup>12</sup> Meyers, Carol L. "Of Drums and Damsels: Women's Performance in Ancient Israel." *The Biblical Archaeologist*, vol. 54, no. 1 (Mar. 1991), 18.

<sup>&</sup>lt;sup>13</sup> Redmond, Layne. Redmond, Layne. "A Short History of the Frame Drum." *Percussive Notes*, vol. 1, no. 4 (October 1996), 69.

<sup>&</sup>lt;sup>14</sup> Robinson, N. Scott. http://www.nscottrobinson.com (website accessed 18 June 2008).

<sup>&</sup>lt;sup>15</sup> The *darbuka* and *tabal* are frame drums found throughout the Middle East.

appear from Sumer and later from Mesopotamia. Redmond states, "The frame drum is by far the most prominent drum in the ancient civilizations of Mesopotamia, Egypt, Greece and Rome. For at least 3,500 years, c. 3000 B.C. to 500 A.D., it was the primary percussive instrument." <sup>16</sup>

Frame drums, in association with dancing, were principally used for temple rituals, victory and battle songs, family and tribal rituals, entertainment at royal banquets and ecstatic trance cults.<sup>17</sup> It has been widely documented that more women than men traditionally played frame drums in folk and ceremonial events.<sup>18</sup> Numerous terracotta figurines, recovered from Palestine, Egypt, Syria and Cyprus, depict women playing frame drums and reveal a distinct women's performance tradition.<sup>19</sup> In fact, "at least ninety-five percent of the performers depicted from all the ancient cultures were women, and most of these women were priestesses of various goddesses and gods.<sup>20</sup> Other Middle Eastern scholars have also noted associations between frame drums and women. Shiloah refers to the *doira*, *tar*, *bendir*, and *daff* (*riq*) as the region's most characteristically feminine instruments.<sup>21</sup>

However, there are exceptions. For instance, in the music of *Tuareg* (Libya) men usually accompany singing with frame drums such as the *bendir* and *danga*.<sup>22</sup> Whether played by men or women, frame drums have been historically associated with the lower and middle classes. This is

<sup>&</sup>lt;sup>16</sup> Redmond, Layne. "A Short History of the Frame Drum." *Percussive Notes*, vol. 1, no. 4 (October 1996), 69.

<sup>&</sup>lt;sup>17</sup> Doubleday, Veronica. "The Frame Drum in the Middle East: Women, Musical Instruments and Power." *Ethnomusicology*, vol. 43, no. 1 (Winter, 1999), 110

<sup>&</sup>lt;sup>18</sup> Examples include Layne Redmond, Carol Meyers and Veronica Doubleday

Meyers, Carol L. "Of Drums and Damsels: Women's Performance in Ancient Israel." *The Biblical Archaeologist*, vol. 54, no. 1 (Mar. 1991), 20.

<sup>&</sup>lt;sup>20</sup> Redmond. 69.

<sup>&</sup>lt;sup>21</sup> Shiloah, Amnon. "Arab Music II: Folk Music." *Grove Music Online*. (website accessed 11 July 2008), <a href="http://www.grovemusic.com">http://www.grovemusic.com</a>

<sup>&</sup>lt;sup>22</sup> Standifer, James A. "The Tuareg: Their Music and Dances." *The Black Perspective in Music*, vol. 16, no. 1 (Spring 1988), 48.

due to the absence of adornment (ornate clothing, decoration or jewelry) in representations of musicians playing frame drums in terracotta figurines and other artifacts.<sup>23</sup>

## Introduction of Frame Drums into Western Music

For hundreds of years, composers of Western art music have been influenced by the music of other cultures and included elements of these cultures in their own compositions. One such element was the addition of non-Western percussion instruments. For example, Beethoven included a Turkish march in the fourth movement of his Ninth Symphony, influenced by Turkish Janissary bands touring through Austria during the 1820s. This is an early instance in which non-Western percussion such as the bass drum, triangle, and cymbals were integrated into an orchestral work.<sup>24</sup> The inclusion of more "exotic" percussion (such as amglocken, oxen bells and various types of drums and gongs) began to appear in Western art music late in the late 19<sup>th</sup> century. In the 20<sup>th</sup> century, American composers Henry Cowell, Lou Harrison, and John Cage dramatically increased the diversity and prominence of non-Western percussion.

Lou Harrison described Cowell's compositional language as transethnicism, defined as "the employment or evocation of musical styles and techniques from cultures other than the composer's own". <sup>25</sup> Cowell's childhood in San Francisco exposed him to a rich diversity of Chinese, Japanese and Indian music. 26 He later went on to teach a course in world music at the New School in New York City. In his compositions, Cowell referenced the music of many cultures from countries such as Iran, India, Indonesia, Japan, and Ireland.<sup>27</sup> He became a pioneer in his utilization of non-Western percussion, writing for such instruments as thunder sticks,

<sup>&</sup>lt;sup>23</sup> Meyers, 19.

<sup>&</sup>lt;sup>24</sup> Blades, James. *Percussion Instruments and Their History*. (London: Faber & Faber, Ltd. 1970), 266-267. Haydn and Mozart also included *Janissary* percussion instruments in several of their compositions.

<sup>&</sup>lt;sup>25</sup> Harrison, Lou. "The World of Music." *Music Primer*. (New York: C.F. Peters 1971), 45.

<sup>&</sup>lt;sup>26</sup> Nicholls, David. "Transethnicism and the American Experimental Tradition." *The Music Quarterly*, vol. 80, no. 4, (Winter 1996), 571.

27 Ibid, 570.

temple gongs (Southeast Asia), *tabla* (India), and *koto* (Japan) as evidenced in *Ostinato Pianissimo* (1934) and *Pulse* (1936).

Lou Harrison also made important contributions to the repertoire that incorporated non-Western percussion. He was particularly influenced by the music of Southeast Asia and included instruments from those countries in his many of his compositions. For example, his *Fugue for Percussion* (1941) is scored for unusual instruments such as temple gongs (Southeast Asia), oxen bells (Southeast Asia), steel pipes of specific pitches (used to mimic the sound of the *sarong* from Javanese gamelan), and *amglocken* (tuned cowbells). In the 1970s, Harrison's continued interest in Indonesian gamelan inspired him to construct an American gamelan with Bill Colvig for which he composed over fifty pieces.

John Cage is widely considered the most significant composer in terms of his usage of non-Western Percussion. For example, the majority of his percussion music of the mid 1930s to early 1940s draws heavily on sounds derived from diverse world cultures. Michael Williams states, "what Cage was interested in were sounds [of non-Western percussion instruments] themselves. Through his association with colleagues such as Cowell and Harrsion, who were quite familiar with the music of non-Western cultures, Cage became acquainted with the sounds associated with such cultures, and he freely employed those sounds in his own music." For example, Cage's *Three Constructions* (1939 – 1941) incorporate the following instruments: *quijadas, teponaxtle*<sup>29</sup>, brake drums, tuned steel pipes, congas or low-pitched African drums, Chinese toms, *amglocken*, temple gongs, seedpod rattles, oxen bells, thunder sheets, various gongs, and conch shells. All of the aforementioned instruments are taken directly from non-

<sup>&</sup>lt;sup>28</sup> Williams, B. Michael. *The Early Music of John Cage 1935 – 1943*. Ph.D. dissertation, Michigan State University (1990), 206.

Note: A *quijada* is the Spanish term for a jawbone of an ass or vibraslap. *Teponaxtle* is a large wooden box similar to a slit or log drum.

Western cultures or are intended to make use of the sounds he heard from Southeast Asian music. In 1989, Cage composed one of the first pieces for solo frame drum dedicated to Glen Velez entitled *Composed Improvisation for One-sided Drum with or without Jangles*.

Traditionally, frame drums were not used for solo playing. In 1980, Middle Eastern scholar Amnon Shiloah documented a new solo style of playing frame drums that had infiltrated several Middle Eastern cultures. Shiloah states, "It seems the new type of virtuoso frame drummer constitutes one of the significant changes from Western impact... the virtuoso instrumentalist playing independently or in large ensembles is becoming more and more fashionable" This style of playing was pioneered by American percussionists, Glen Velez and John Bergamo.

Glen Velez is a four-time Grammy award winning percussionist. As previously stated, he merged traditional frame drumming styles from around the world into one composite vocabulary. He was particularly innovative in the way he combined techniques of instruments such as the *bodhran* (Ireland), *bendir* (Morocco), *riq* (Egypt), *tamburello* (Southern Italy), *pandeiro* (Brazil) or *kanjira* (Southern India) and incorporated them into his solo playing. N. Scott Robinson observes, "He was successful in this approach because similarities in frame drum construction allowed for the transposition of different frame drumming techniques upon several unrelated instruments." Velez was responsible for an international renaissance in frame drumming due to his numerous recordings and live performances. Velez has also been very influential as an educator having taught such notable frame drummers as Layne Redmond and N. Scott Robinson. He frequently gives educational clinics on frame drums throughout North America, Europe and

<sup>&</sup>lt;sup>30</sup> Shiloah, Amnon. "The Status of Traditional Art Music in Muslim Nations." *Asian Music*, vol. 12, no. 1, Symposium of Art Musics in Muslim Nations, (1980), 50.

<sup>&</sup>lt;sup>31</sup> Robinson, N. Scott. http://www.nscottrobinson.com (website accessed 18 June 2008).

Asia and has released two instructional videos, *The Fantastic World of Frame Drums* and *Drumbeats* published by Interworld Music Associates.

Since 1970, John Bergamo has been the coordinator of percussion studies at the California Institute of the Arts. Bergamo received the most recognition due to his unorthodox style of playing frame drums he developed by applying techniques from the *tabla* (North India), *kanjira* (*South India*), *thavil* (*South India*), *conga* (Cuba) and *dumbek* (*Pakistan/Afghanistan*) to frame drums. He is also responsible for founding two groundbreaking percussion ensembles, Repercussion Unit in 1976 and Hands On'Semble in 1997. Like Velez, Bergamo has been highly influential as an educator, conducting clinics and master classes throughout the world as well as releasing several videos including: *The Art of Frame Drumming, Finding Your Way with Hand Drums* and *Hand Drumming with John Bergamo* published by Interworld Music Associates. He has taught several acclaimed frame drummers such as Randy Gloss, Andrew Grueschow and Austin Wrinkle. In addition, he is a prolific composer having written several works that have become staples in percussion literature including *Style Studies, Piru Bole* and *Four Pieces for Solo Timpani*.

### **CHAPTER 3**

#### B. MICHAEL WILLIAMS

B. Michael Williams is Professor of Percussion at Winthrop University in Rock Hill, South Carolina. Courses Williams teaches at Winthrop include Percussion Literature, Percussion Ensemble, Percussion Methods, Introduction to African Drumming, African Music in the Classroom, traditional Western percussion and world percussion. He is an active composer and has published numerous works for frame drums, *djembe* and marimba ensemble.

Williams is a pioneer in his compositional output for world percussion. His *Four Solos* for Frame Drums (1993) are the first published works for solo frame drum written in Western notation. In 2001, he published "Learning Mbira: A Beginning..." which is considered the first method book for mbira. He has received critical acclaim in Percussive Notes for his Four Solos for Frame Drums, Bodhran Dance, Recital Suite for Djembe and Learning Mbira: A Beginning..." His compositions are performed on solo recitals and used in percussion curricula around the United States, Europe, Puerto Rico, Taiwan, and Japan. In a poll taken by the Percussive Arts Society (2004), Williams was listed as one of the top ten composers to be performed on university percussion recitals. 33

His passion for African music led him to study with several notable African percussionists including Mohamed da Costa, Papa Ladji Camara, Djimo Kouyate, Abdoul Doumbia and Sidi Mohamed "Joh" Camara. He also studied *mbira* with Chartwell Dutiro and Erica Azim.

<sup>&</sup>lt;sup>32</sup> Four Solos for Frame Drums, reviewed by Lisa Rogers, Percussive Notes (February 1997). Bodhran Dance, reviewed by Terry O'Mahoney, Percussive Notes (December 2001). Recital Suite for Djembe, reviewed by Lisa Rogers, Percussive Notes (December 2001).

<sup>&</sup>quot;Learning Mbira: A Beginning...," reviewed by John Beck, *Percussive Notes* (June 2002).

Rogers, Lisa. "Choices Researching Percussion Ensemble Literature." *Percussive Notes*, vol. 1, no. 6 (December 2004), 67.

Bastian, Darren. "Solo Percussion Literature Programming." Percussive Notes, vol. 2, no. 6 (December 2005), 53.

Williams' interest in world music began in part as result of a jazz history class he took under Paul Berliner at Northwestern University in 1977.

Berliner introduced the class to *mbira* music from Zimbabwe. Though it would be 15 years before I was re-introduced to this instrument, the experience sparked my interest in African and other types of world music. As a percussionist and university professor, I began studying African music (including drumming, singing, xylophone traditions, as well as *mbira* performance) because I wanted to learn more about the origins of my Western percussion instruments. It is my belief that part of a well-rounded percussionist's responsibility is to have a working knowledge about musical instruments from a variety of cultural traditions.<sup>34</sup>

Williams describes his introduction to frame drums as an epiphany of sorts.

I first heard a frame drum at the 1982 Percussive Arts Society International Convention in Dallas, TX. It wasn't just the amazing variety of sounds Glen Velez got out of a single drum that riveted the audience in that memorable performance. I have never heard any musical instrument played more expressively. Glen's performance that day raised the bar for me in terms of musical expression. To this day it remains one of the most memorable and inspiring performances I have ever witnessed.

In order to further explore the sounds and playing techniques of frame drums, he began experimenting with the drums themselves and initiated some pre-compositional ideas.

It wasn't long before Remo came out with a line of frame drums and percussionists started buying them up like hotcakes. My students and I got *tars*, *bodhrans* and *riqs* and then wondered what to do with them! I began to keep a little notebook in which I notated grooves as I improvised on the drums.

My first composition for a frame drum was actually a transcription of an improvised performance. I had been invited to perform the prelude to a world communion church service. Instead of the usual organ prelude, I played an improvisation on a tar in a style I considered appropriate to the spirit of the occasion. Following the service, I remember one very large man who approached me with what I thought was an angry look on his face. I feared he was offended by my having played a drum in a church service. As he shook my hand, he moved closer and embraced me saying, "That was the most reverent thing I've ever heard!" Later on, I wrote down what I had played and called the piece *Quatrinity*. It was the first of what would become *Four Solos for Frame Drums*, to my knowledge the first published collection of solos for the instrument. The only work I know of that preceded it was John Cage's *Composed Improvisation for Frame Drum*, written for Glen Velez in 1988.

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<sup>&</sup>lt;sup>34</sup> Williams, B. Michael. Interview with the author 17 June 2008.

Nearly all my frame drum works were written for my students to play on their degree recitals. Way back in the '80s, when I was so enthralled with this amazing "new" medium of musical expression, I began writing pieces for the simple reason that my students and I didn't have any pieces to play on these extraordinarily versatile instruments. I have since encouraged my students to transcribe rhythms, keep their own notebooks of grooves and compose their own pieces. My best advice is, "If I can do it, you can do it!"

In addition to his compositions, Williams continued to expand the boundaries of world music when he recorded the compact disc *BataMbira* (Bembe Records)<sup>36</sup> with world renowned percussionist, Michael Spiro. This recording combined traditional *mbira* music from Zimbabwe with traditional *Bata* drumming from Cuba.

<sup>&</sup>lt;sup>35</sup> Williams, B. Michael. "Frame Drums: A Beginning..." (website accessed 24 April 2009),

<sup>&</sup>lt; http://www.bmichaelwilliams.com/news/?p=4>

<sup>&</sup>lt;sup>36</sup> BataMbira. Recorded in 2005. In 2006, BataMbira was nominated for a "Just Plain Folks" award for best African album.

#### CHAPTER 4

## THE TAR, BENDIR AND RIQ

Before analyzing Quatrinity, Etude in Arabic Rhythms, Another New Riq and Rhythmic Journey no. 1: (From Conakry to Harare), it is important for the reader to understand the basics of the three frame drums used by Williams in these compositions. The tar is a medium to large hand drum that originated from Morocco and Tunisia. Its diameter can range from fourteen to twenty inches with a shell depth from three to five inches. Also of the same origins, the bendir is similar to the tar with a slightly smaller diameter of ten to sixteen inches and a shell depth of three to five inches. It differs from the tar in the addition of snares stretched across the inside of the skin which produce a buzzing sound when struck. The shells of both drums are commonly fashioned out of wood but can sometimes be constructed of metal, plastic, stone or clay.

Both the *tar* and *bendir* are traditionally held in the left hand with the head of the drum facing away from the person. Typically, the drum is held at chest height about four to six inches away from the player's body at a slight angle. This type of grip is commonly referred to as the *Oriental* grip.<sup>37</sup> Both the left and right hands are used to produce different strokes, each with their own unique timbre.

<sup>&</sup>lt;sup>37</sup> Robinson, N. Scott. http://www.nscottrobinson.com (website accessed 18 June 2008).

<sup>&</sup>quot;A consistent feature of the depictions of frame drums throughout their history has been the use of two main grips for holding the instrument. From the iconographical evidence, the most common was what can be called the Oriental grip. The player is always shown with the left hand holding the instrument at the bottom with the skin facing away from him/her and the fingers of both hands playing. This grip allows the player to produce numerous sounds from the skin."



Figure 1. *Tar* held with Oriental grip.

The *riq* is a small tambourine between eight and ten inches in diameter, with five double pairs of large jingles set into a wooden or metal frame. It is found throughout North Africa and the Middle East and is predominately used in Arabic classical music as well as music that accompanies belly-dancing. Two different hand positions can be used when playing *riq*; traditional (*cabaret*/Oriental grip) and *classical* style. When playing the *riq* in the classical style, a performer holds the instrument between the thumbs and index fingers (which serve to muffle the head) of both hands. The drum itself is at a slight angle towards the floor (see figure 3).



Figure 2. Riq held with Oriental grip (cabaret style).



Figure 3. Riq held in the classical (soft position) style.

# General Types of Strokes

There are three basic strokes used when playing *tar*, *bendir* and *riq*. The names of these strokes, derived onomatopoeically, are *dom*, *tak*, and *slap*. It is necessary for a performer to understand these strokes in order to successfully perform Williams' pieces. Mary Ellen Donald's

*Arabic Tambourine* should be used as a supplement, as it contains thorough descriptions of each stroke as well as numerous exercises to facilitate better understanding of each.

The *dom* is a low, resonant sound, played with fleshy part of the index (*riq*) or ring finger (*tar, bendir*), just off center of the drum. In order to execute a *dom*, the performer must use a quick wrist rotation, similar to turning a door knob.



Figure 4. *Dom* stroke on *tar* or *bendir*, using ring and/or middle fingers.



Figure 5. Dom stroke on riq, using index finger.

The next stroke, referred to as a *tak*, produces a high pitched sound and is played near the edge or rim of the drum with the fingertips of the middle or ring fingers. There is also a stroke referred to as a muffled *tak*. The muffled *tak* is played similar to the regular *tak* but fingers come to rest on the head after the stroke, muffling the resonance.



Figure 6. Tak.

The final basic stroke is called a slap and is generally played by the entire hand in the center of the drum. This produces the characteristic "pop," which is a bright, staccato sound.



Figure 7. Slap.

The *flam* is a variation of the slap. However, the performer uses the thumbnail to produce a grace note before the remaining fingers hit the drumhead.



Figure 8. Flam.

# Additional Sound Effects

There are additional sound effects that can be used when playing frame drums. A brushing sound is created when the player, using his or her fingernails or finger pads, lightly scrapes the head of the drum back and forth, usually adhering to a specific rhythm (see figure 9). Also, a player can use a moistened fingertip to 'rub' the drumhead across the entire diameter of the drum. The resulting friction between the head and finger produces a drone-like, resonant sound.



Figure 9. Scrape.

Several unique techniques are used when playing the *riq*. The first, referred to as a *shake*, is when a player shakes the tambourine back and forth in the left hand with a specific rhythm or is shaken as fast as possible (creating a roll). When shaken with a particular rhythm, the motion is similar to waving goodbye with the palm facing the player's body. When executing a roll, the motion is comparable to shaking a paint can. The next is when a player plays specific rhythms

and rhythmic flourishes on the jingles of the *riq*. This technique is predominately used when playing the *riq* using the Oriental grip but can also be utilized when playing in classical style (see figure 10).



Figure 10. Playing on the jingles of the riq.

## CHAPTER 5

## **QUATRINITY**

## Notation Key for Solos for Frame Drums

In order to organize the tones of the frame drum in Western notation, Williams developed an easily-understood system of notation for the different sounds/strokes of each drum. This system is used in each of the four compositions analyzed in this paper (see figure 11).

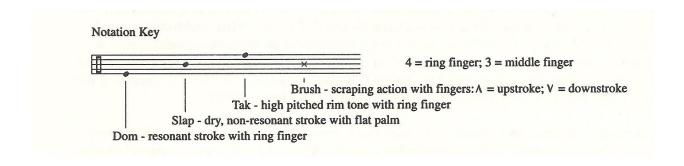


Figure 11. Notation key for frame drums, used by permission, Honeyrock Publishing.

# Structural Analysis

Quatrinity (1993) is a short work written for the North African tar or bendir. Williams states the title "refers to the 12/8 meter employed throughout the piece (4 groups of 3 or 3 groups of 4). The piece maintains a strong feeling of four throughout, though some phrases may be perceived in three or six (a common feature of sub-Saharan African music). Quatrinity is written in rondo form (ABACABA).<sup>38</sup> Each theme is written in four bar phrases once repeated. No

<sup>&</sup>lt;sup>38</sup> Williams, B. Michael. Four Solos for Frame Drums. Everett, PA, Honeyrock (1993).

tempo marking is specified, however the composer feels the dotted quarter-note should approximately equal 120-130 b.p.m.<sup>39</sup>

The piece begins with a two measure introduction (a fragment of the A theme) repeated four times, gradually fading in with each repetition. The complete A theme is stated in measures 3 through 6 (see figure 12). The accent pattern quickly establishes 12/8 as the time signature and the melodic content is derived from combinations of onomatopoeically named strokes: *doms* (bottom line), *taks* (top line) and slaps (middle line). Williams uses a "diddle" marking (a common symbol in rudimental drumming) in measures four and five to indicate a double stroke played by rapid alternation of the ring and middle fingers of both hands. This creates a drum roll effect and should be played with the rhythm of sixteenth-notes.



Figure 12. A theme from *Quatrinity*, mm. 3-6, Copyright 1993, used by permission, Honeyrock Publishing.

The B theme enters at measure 8 (rehearsal letter B). Williams contrasts the opening material through different combinations of *doms* and slaps and also unorthodox techniques/sound effects including brush strokes and one-handed rolls. A notable feature of the second theme is a

<sup>&</sup>lt;sup>39</sup> Williams, B. Michael. Interview with the author 20 July 2008.

shift in metrical perception to 6/4 instead of 12/8. This effect is created by placing the *dom* stroke on beat one followed by two slaps on beat three and beat five.



Figure 13. B theme from *Quatrinity*, rehearsal letter B, mm. 8-11, Copyright 1993, used by permission, Honeyrock Publishing.

The C theme contains the most complex rhythmic and technical passages. For example, in measure 18 (rehearsal letter D), the pattern created between the *dom* on beat one and subsequent slaps mimic the *gonkogui* (iron bells, usually with a low and high pitch) pattern commonly found in the music of the *Ewe* people of Ghana (see figure 14). It is a highly syncopated pattern and must be practiced on its own to achieve rhythmic integrity. This measure is repeated four times in alternation with passages including repeated "diddled" or "doubled" strokes reminiscent of rudimental snare drum solos. <sup>40</sup> Measure 21 demonstrates another instance where a temporary shift in metric perception occurs. The accents and four note groupings create the illusion that the meter modulates to 3/2.

 $<sup>^{40}</sup>$  In an interview with Williams, he stated that the more ornate passages were influenced by traditional rudimental solos such as *Three Camps*.



Figure 14. Gonkogui bell pattern.



Figure 15. C theme from *Quatrinity*, mm. 18-25, Copyright 1993, used by permission, Honeyrock Publishing.

After returning the B and A themes respectively, Williams concludes *Quatrinity* with the same material found in the introduction. Unlike the introduction, the repeated two measure gradually *ritards* and fades out.

# Performance Considerations

In beats seven through eleven of measure 8, Williams writes for a brush stroke indicated by note heads with an x. Following the notated rhythm, upstroke and down stroke markings designate which direction the forearm must move. To achieve the desired sound, the performer uses the fingertips/fingernails of the right hand similar to a scraping or scratching action.

The performer is required to execute a one-handed roll in measure 9 (specified with T and 3 in the score). This is accomplished by a rotary wrist motion, alternating the thumb with the middle, ring and little fingers (placed together). A similar technique is used when playing *kanjira* (a small frame drum from South India) or one-handed rolls played on marimba or vibraphone. "In this section (the recurring rondo theme), the drum must be repositioned to rest either on the upper chest or against the cheek to allow free use of the thumb to execute the *dom* in an independent measured roll (figure 16). At the end of this section, the drum is repositioned, until the thumb is anchored on the frame [back to the Oriental grip]:"<sup>41</sup>



Figure 16. Repositioned drum required for section B.

Greater finger dexterity is required to effectively execute the double stroke or roll passages throughout the solo at the suggested tempo. To increase finger speed and dexterity, the author recommends the performer practice standard rudimental five-stroke, seven-stroke and

<sup>&</sup>lt;sup>41</sup> Williams, B. Michael. Interview with the author 24 April 2009.

nine-stroke rolls, replacing the doubled strokes with the middle and ring fingers of both hands (see figure 17).<sup>42</sup>

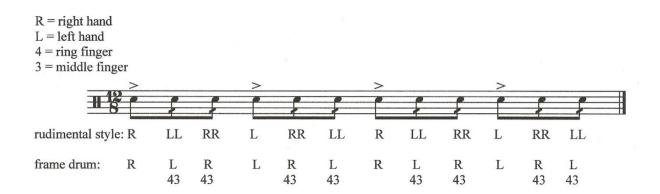


Figure 17. Five-stroke rolls with traditional sticking and with frame drum sticking.

<sup>42</sup> Roll rudiments can be found in the Percussive Arts Society's official list of the standard 40 rudiments. You can access this list at http://www.pas.org

#### CHAPTER 6

## ETUDE IN ARABIC RHYTHMS

# Structural Analysis

Etude in Arabic Rhythms is the third solo in Williams' collection of pieces for solo fame drum entitled, Four Solos for Frame Drums. It is the most complex of the four solos in its rhythmic and technical demands. Williams states:

Etude in Arabic Rhythms is a study of seven Arabic rhythms from a variety of musical traditions: Dwar Hindi, Malfuf, Saudi, Chiftetelli, Magsum, Nawwari, and Masmudi. Some of the rhythms are identical with regard to construction, varying only in the timbres achieved by striking the drum in different playing areas. This is an indication of the importance of timbre to the identity of these rhythmic motives. Drumming in the Arabic tradition is conceived almost melodically – the contrast of the low, ringing dom and the high-pitched tak creating a sense of rhythmic depth. The rhythms here are presented in symmetrical four-bar phrases, reinforcing this sense of a quasi-melodic style.43

The piece is divided into seven sections corresponding to the seven styles: "Dwar Hindi," "Malfuf," "Saudi," "Chiftetelli," "Magsum," "Nawwari" and "Masmudi" (arranged in that order). Each rhythm is presented in its entirety at the beginning of each section. Following the initial statement, Williams varies the rhythms by different timbral combinations of doms, slaps and taks and/or ornamented passages reminiscent of traditional rudimental snare drum solos. Changes in tempo coincide with a change of style. "Tempos are given more as an indication of general flow from slow to fast rather than as strict denominators. As such, they may be treated with flexibility." Williams utilizes ritards and accelerandos to transition between styles that have different tempos. Styles of similar rhythmic construction and tempo are placed adjacent to one another.

<sup>&</sup>lt;sup>43</sup> Williams, B. Michael. Etude in Arabic Rhythms (from Four Solos for Frame Drums). Everett, PA, Honeyrock (1993).

44 Ibid.

Etude in Arabic Rhythms begins with Dwar Hindi. Dwar Hindi is a rhythm commonly found within the Muwashshahat, a form of Arabic vocal music which is essentially non-improvised and contains a wide variety of rhythmic patterns. The literary and musical form of the Muwashshahat was cultivated in Moorish Spain and is highly regarded as a complex and sophisticated form of Arabic music. It typically has a secular text consisting of love poetry in classical Arabic. Sometimes colloquial and trannum expressions, namely the syllables ah, ya alli and aman, are used as well.<sup>45</sup>

Dwar Hindi

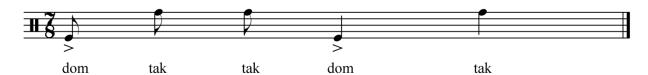


Figure 18. Dwar Hindi.

The following examples demonstrate how Williams varies Dwar Hindi. In the first example, sixteenth notes are added in between the main strokes, creating a sense of greater rhythmic intensity. In the last measure of this four bar phrase, notice the inclusion of diddles on the last two groups of sixteenth notes. This is a preview of virtuosic passages that will occur later in the solo (see figure 19).

<sup>45</sup> Donald, Mary Ellen. *Arabic Tambourine*. (San Francisco: Mary Ellen Books, 1985), 75.



Figure 19. First Variation of Dwar Hindi, *Etude in Arabic Rhythms*, mm. 5-8, Copyright 1993, used by permission, Honeyrock Publishing.

The second example is an exact replica of the traditional rhythm in its construction. However, Williams varies Dwar Hindi by the addition of slaps on beats three and six in measure 9 and snaps on beats three and six in measure 10. At the conclusion of the second variation, the meter changes to four-four. A rhythmic motive occurs that foreshadows the fifth rhythm in this etude, Chiftetelli (see figure 20) and serves as a unifying compositional feature throughout the work. It is presented by either direct repetition or in fragmented form, occurring six times throughout the solo in measures 12, 16, 38, 67, 69 and 108.



Figure 20. Second Variation of Dwar Hindi, *Etude in Arabic Rhythms*, mm. 9-12, Copyright 1993, used by permission, Honeyrock Publishing.

The next style is Malfuf, a rhythm usually played rather rapidly in order to intensify the 'spirit' or energy of the music it accompanies. 46 Malfuf is used in the first section of the wellknown drum solo referred to as hagala and is a popular accompaniment for dabkah dancing. In Levantine and Egyptian music, sections using malfuf often alternate with baladi, another type of Arabic rhythm. 47

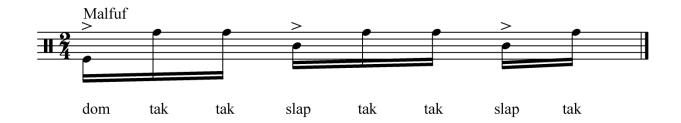


Figure 21. Malfuf.

The most intricate variation of Malfuf begins in measure 24. This variation combines moments of timbral variation as in measure 25 and an ornamental passage in measures 26-27. This passage is similar to passages found within the traditional rudimental solo, Three Camps.

<sup>&</sup>lt;sup>46</sup> Donald. 28 <sup>47</sup> Ibid.



Figure 22. Variation of Malfuf, *Etude in Arabic Rhythms*, mm. 24 – 27, Copyright 1993, used by permission, Honeyrock Publishing.

Williams uses an accelerando to transition from Malfuf into next style, Magsum. Magsum is one of the most popular rhythms played in Egyptian folk and urban music. It is identical in its rhythmic construction of another popular rhythm, Baladi (which means "of the country" or "of the people"). The tempo designates whether it is referred to as Baladi or Magsum; when played slowly with a heavy feeling, it is called Baladi and when played at a moderate or fast tempo with a lighter feeling it is referred to as Magsum<sup>48</sup>

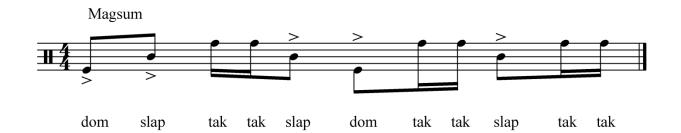


Figure 23. Magsum.

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<sup>&</sup>lt;sup>48</sup> Donald. 20

The first variation of Magsum begins in measure 39. Additional *taks* are added to create a passage of constant sixteenth-notes, though the combination of accents, *doms* and slaps remain identical to the traditional rhythm. This variation concludes with four groups of seven-stroke rolls (see figure 24). Contrast is provided in the second variation (ms. 43-46) by two elements: a rapid thirty-second note flourish, executed with the ring, middle and index finger respectively and through the displacement of the original accent pattern. The accents now occur on beats one, the "and" of one, the "a" of three and beat four (figure 24).



Figure 24. Variation 1 and 2 of Magsum, *Etude in Arabic Rhythms*, mm. 39-46, Copyright 1993, used by permission, Honeyrock Publishing.

The fourth rhythm employed in *Etude in Arabic Rhythms* is Saudi. Saudi is the foremost rhythm used to accompany Saudi-Arabian music. Saudi is often performed by several percussionists who simultaneously play different rhythmic patterns in contrast to

the main rhythm, creating a polyrhythmic effect. A popular combination of drums used to create this polyrhythmic style is clay drum, tar, bongos and tambourine. It is performed at a moderate tempo without much embellishment. <sup>49</sup> There are four, four-measure phrases that consist predominately of the traditional Saudi rhythm. Brief, ornamented or timbrally altered one or two measure interjections occur at the conclusion of each phrase.

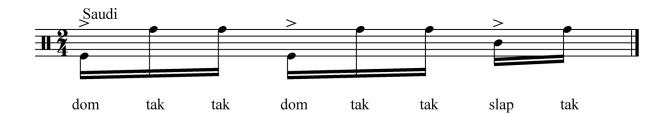


Figure 25. Saudi.

The last measure in the Saudi section (m. 62) accelerandos into the next section featuring the Chiftetelli rhythm found throughout the Middle East and Mediterranean. Chiftetelli is frequently used to back up a melodic improvisation called *tagsim*. It is also a popular accompaniment to the slow, sensuous section of a belly dance and can serve as a transition between two faster rhythms. In its slow version, the length of Chiftetelli is eight beats; in its faster version it is four beats. Williams incorporates the fast version in *Etude for Arabic* Rhythms. 50

This is the shortest section of the etude lasting a total of eight measures or two fourmeasure phrases. The second phrase (measures 67-70) contains a significant variation of the

<sup>&</sup>lt;sup>49</sup> Donald. 29

<sup>&</sup>lt;sup>50</sup> Ibid. 42

Chiftetelli rhythm. It begins with the rhythmic motive first introduced in measure 12 (see figure 20), which is an ornamented version of Chiftetelli. The second measure of the variation essentially follows the accent pattern of the traditional rhythm however, the rhythmic content is altered. The first beat is repeated two times followed by slaps on beats four and the "and" of four (see figure 27). It is followed by the restatement of the rhythmic motive in measure 67. The accent pattern of the concluding measure alludes to the accent pattern found in the next style, Nawwari (Middle East). This accent pattern serves as a transition between the two styles. The arrangement of *doms* and slaps is a reversal of those found in Nawwari.



Figure 26. Chiftetelli.

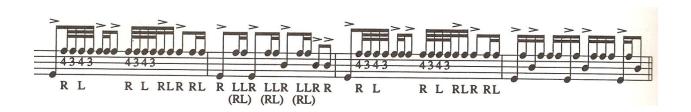


Figure 27. Variation of Chiftetelli, *Etude in Arabic Rhythms*, mm. 67-70, Copyright 1993, used by permission, Honeyrock Publishing.

Nawwari is a rhythm associated with Syrian or Lebanese *tabl* (large drum) players and is sometimes used to accompany the *dabakah*, a line folk dance popular in the Levant.<sup>51</sup>

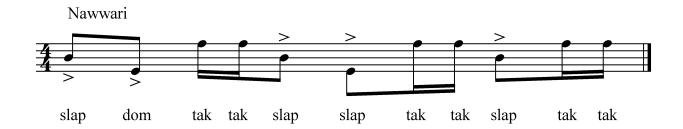


Figure 28. Nawwari.

The variation beginning in measure 79 is of particular interest from both a musical and technical perspective. The first four measures (mm. 79-82) are a rhythmic variation of the traditional Nawwari pattern. Greater syncopation occurs due the delay of the entrance of the first note to the "e" of beat one (as opposed to directly on beat one in the original pattern) and the addition of a slap on the "a" of beat four. Further timbral interest is increased by the addition of right and left hand snaps in the repeat of this four-measure variation (mm. 83-86). The snaps also amplify the intensity of the syncopation within this variation. Further discussion of this variation and the difficulties of its technical execution will be discussed in the next section, entitled Performance Considerations (chapter 4).

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<sup>51</sup> Donald. 86

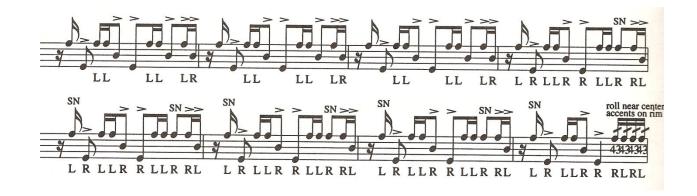


Figure 29. Variation of Nawwari, *Etude in Arabic Rhythms*, mm. 79-86, Copyright 1993, used by permission, Honeyrock Publishing.

The Nawwari section concludes with a four-measure passage that serves as a transition into an optional open improvisation rather than as a variation of the Nawwari rhythm. It is similar to other moments in this etude that employ virtuosic quasi-rudimental passages. "The optional open improvisation may be quite free and cadenza-like, or it may continue to adhere to the established four-bar phrase structure, interweaving the various rhythms in an improvisatory manner."

Masmudi is the final rhythm utilized by Williams in Etude for Arabic Rhythms (figure 30). It is closely related to the Baladi/Maqsum rhythms. "In fact, many Middle-Eastern musicians refer to Baladi as Masmudi Sarir (small Masmudi) Masmudi Kabir (big Masmudi). If you remove the *taks* from both rhythms, you will notice that the *doms* in Masmudi are spaced in relationship to each other exactly as they are in Baladi. The amount of time between *doms* in Masmudi is twice as long as that between the *doms* in Baladi because the entire rhythm is twice as long."

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<sup>52</sup> Donald. 32

Masmudi functions to create more excitement within music written in the Maqsum style. Consequently, the majority of popular or folkloric songs are not played entirely in the Masmudi rhythm. It is regularly used in the entrance music for a belly dancer, either played with percussion alone or accompanied by a simple, repetitive melody. Masmudi is usually played at a rapid tempo, with excitement generated by ornate, virtuosic passages inserted between the accented *dom* strokes.<sup>53</sup>

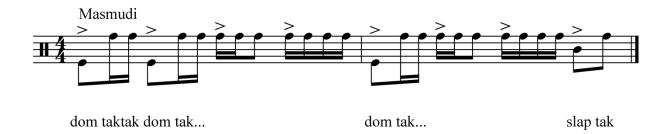


Figure 30. Masmudi.

Following the initial statement of Masmudi, Williams introduces subtle alterations to the traditional rhythm by the inclusion of "diddles" and a more syncopated accent pattern (see figure 31, mm. 96-97). With each four-measure phrase, ornamentation and rhythmic complexity are increased. Interestingly, each ornamentation or variation is constructed from fragments of passages taken from a previous section in the piece. For example, the content in measures 99-100 is a combination of material found in measures 42 and 88 (figure 32). Another example occurs in measures 107-108. These two measures combine fragments of measure 79 and the recurring rhythmic motive found throughout the solo (figure 33).

<sup>53</sup> Ibid.



Figure 31. *Etude in Arabic Rhythms*, mm. 96 -97, Copyright 1993, used by permission, Honeyrock Publishing.



Figure 32. *Etude in Arabic Rhythms*, mm. 99-100, Copyright 1993, used by permission, Honeyrock Publishing.



Figure 33. *Etude in Arabic Rhythms*, mm. 107-108, Copyright 1993, used by permission, Honeyrock Publishing.

# Performance Considerations

From a technical perspective, *Etude in Arabic Rhythms* is the most difficult solo within *Four Solos for Frame Drums*. There are numerous passages throughout the solo that require the performer to play fast, alternating double strokes between the ring and middle fingers of both hands (see figures 8 and 15). As with *Quatrinity*, the author recommends the performer should be proficient with 5, 6, 7 and 9 strokes rolls to effectively execute these virtuosic moments within the solo (see stickings below).

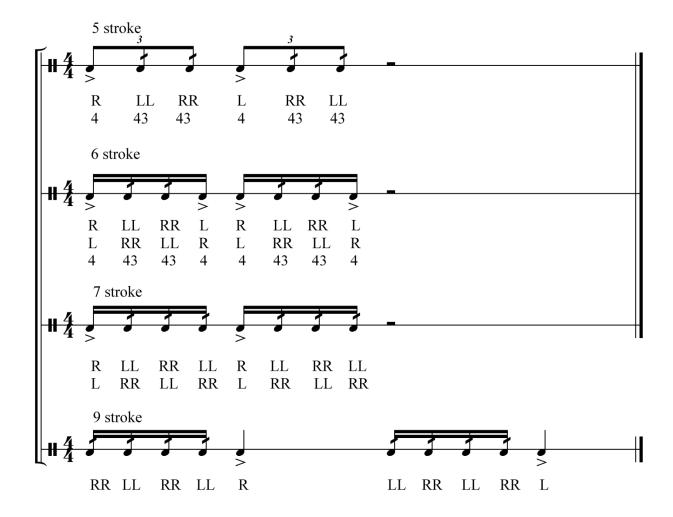


Figure 34. 5, 6, 7 and 9 stroke rolls.

There are also passages that employ intricate combinations of *doms*, *taks*, slaps and snaps. The author recommends the performer should first study *Quatrinity* to develop a good foundation of sounds before attempting this solo. In particular, passages containing snaps (especially snaps with the left hand) require isolation and reduction of tempo to achieve consistency in sound production (see figure 29). To execute snaps in the right hand, the performer does a traditional "snap" between the thumb and middle or ring fingers, making sure the tip of the middle/ring finger strikes the edge of the drum. To execute left hand snaps, the author recommends placing the pinky finger over the ring finger. The performer should use a good deal of velocity when forcing the pinky finger off the ring finger and onto to the drumhead, once again making sure to strike the edge of the drum. This will produce a characteristic "snap" sound. It is also acceptable to place the middle finger over the index finger, utilizing the same motion described above.

## CHAPTER 7

# ANOTHER NEW RIQ

Another New Riq was written in Greensboro, North Carolina at the Jembe Institute during the summer of 1998. At the time, I was immersed daily in West African music and rhythms such as Manjani and Dundunba. One afternoon, I went to a local drum shop and started playing around with one of the riqs they had in stock. To my delight, the one I was playing sounded and felt great. Ideas seemed to flow endlessly from my fingers. I decided to purchase the instrument and thought to myself, just what I need, "another new riq." Later that afternoon, I began experimenting and writing ideas down for this instrument. Another New Riq blossomed out of this experience. 54

# Structural Analysis

Williams describes *Another New Riq* as "essentially in ABA form with a 12/8 'feel' common to many West African rhythms. It also shows an African influence through repeated ostinati, polyrhythmic inflections and *djembe*-like improvisations in the B section. I incorporated both playing styles of the instrument (Oriental/cabaret and classical) to provide contrast between the A and B sections." <sup>55</sup>

The piece begins with a two-measure ostinato (played on the *zils*) repeated four times. This ostinato functions to introduce the 12/8 time signature and "groove" that remains for the duration of the piece. Melodic material enters in the third measure marking the beginning of the A section. Williams continually expands melodic material in two-measure increments through additional *doms*, slaps, *taks* and flourishes on the *zils*. The A section requires the performer to hold the *riq* with the Oriental grip (see figure 35). This allows the performer to play the *zils* (jingles) with fingers of both hands while supporting the instrument with the thumb of the left hand.

<sup>&</sup>lt;sup>54</sup> Williams, B. Michael. Interview with the author, 17 June 2008.

<sup>55</sup> Ibid

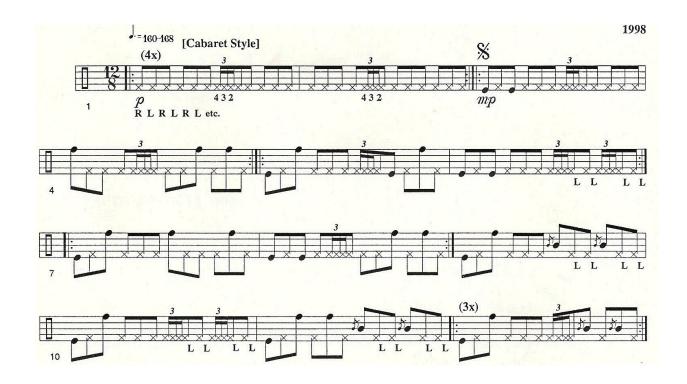


Figure 35. *Another New Riq*, mm. 1-10, Copyright 1999, used by permission, Honeyrock Publishing.

The climax of the A section arrives in measure 15. Williams creates this climax by two compositional devices: the incorporation of shakes (see figure 36) and the dynamic shift to *forte*. The shakes, indicated by diamond noteheads, create further melodic interest and rhythmic intensity. In measures 17 - 21 (a variation of measures 15 - 16), Williams exploits multiple shakes generating a timbral *crescendo* that concludes in measure 21.

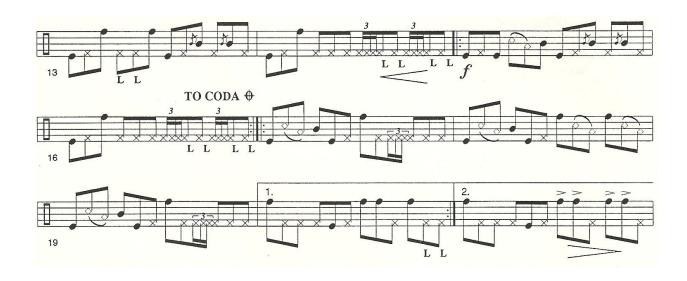


Figure 36. *Another New Riq*, mm. 13 – 21, Copyright 1999, used by permission, Honeyrock Publishing.

Beginning in measure 22, melodic material is greatly reduced from previous measures and is accompanied by a dynamic shift to *mezzo-piano*. With each subsequent two-measure phrase, *doms* and *taks* are eliminated as the focus shifts back to activity on the *zils*. This, in conjunction with the *diminuendo* beginning in measure 26, results in an effective transition into the B section which employs the classical or soft position technique.

The B section commences with a two-measure motive in measures 30-31 (figure 37). This motive serves as the basis for the entire section and is repeated by either direct repetition or variation. Variations consist of different tonal configurations as well as ornate passages inspired by *djembe*-like improvisations (figure 38).

<sup>&</sup>lt;sup>56</sup> The material is identical to measures two and three with two exceptions. The *dom* on the third beat of measure three is replaced with a *tak* on the third beat of measure 22 and the *tak* on the first beat of measure four is eliminated in measure 23.

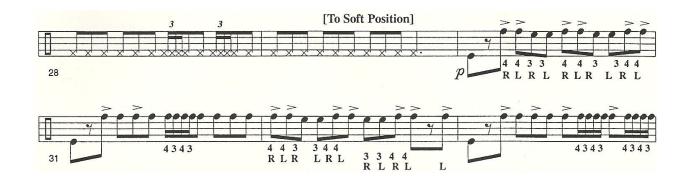


Figure 37. *Another New Riq*, mm. 28 – 33, Copyright 1999, used by permission, Honeyrock Publishing.

A dominant feature of the B section is Williams' manipulation of accents to create the illusion the meter is constantly changing. For example, in measures 38 – 39, the meter appears to shift from 12/8 to 3/2 (m. 38) followed by 3/4 and 6/8 (m. 39, see example 38). It is worthy to mention that the accent pattern in measures 37 and 38 is "taken from a solo line in *Manjani*" played by Mamady Keita on his recording titled *Nankama* [published by Fonti Musicali].<sup>57</sup>

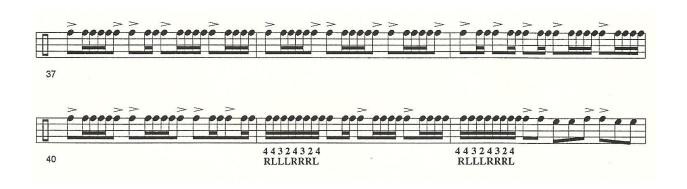


Figure 38. *djembe*-like improvisation, *Another New Riq*, mm. 37 – 42, Copyright 1999, used by permission, Honeyrock Publishing.

 $<sup>^{57}</sup>$  Williams, B. Michael. "Mamady Keita's 'Mendiani'." *Percussive Notes*, vol. 37, no. 4 (August 1999), 58. Specifically, Williams quotes measures 7-8 from the transcription.

After the conclusion of the B section (m. 57), the performer returns to the beginning of the A section (m. 3) then proceeds to the coda after playing measure 16. The first four measures of the coda are the timbrally diverse, combining material from measures 15, 19 and 18 respectively (figure 39). In measure 62, a new motive emerges that is reminiscent of measures 11 and 14 (figure 39). In opposition to the introduction, Williams gradually omits timbres from the melodic content of this motive resulting in the decrease of melodic and rhythmic intensity. The opening two measures return in measure 69, repeated three times, with each repeat slowing and getting softer. The tempo continues to *ritard* and flourishes on the *zils* are omitted in measure 69. *Etude in Arabic Rhythms* concludes in measure 70 with instructions for the performer to spin a single *zil* on the third beat.

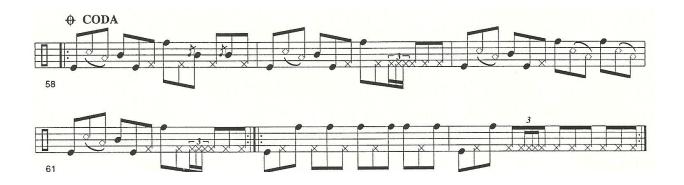


Figure 39. *Another New Riq*, mm. 58 – 63, Copyright 1999, used by permission, Honeyrock Publishing.

# Performance Considerations

Before attempting *Another New Riq*, a performer must first learn how to implement several techniques unique to playing *riq* including muffled *taks*, playing on the *zils* and playing the *riq* in the classical style or soft position (see chapter 4 for explanation). In particular, the

sixteenth-note triplet flourishes on the *zils* require a great deal of finger dexterity to provide rhythmic clarity. The following exercise is intended to assist the performer with executing the sixteenth-note triplet flourishes required by this composition. <sup>58</sup> The performer should start the exercise with the quarter-note equaling 75 b.p.m., gradually increasing the tempo by increments of 10 b.p.m as he or she becomes comfortable at the prescribed tempo.

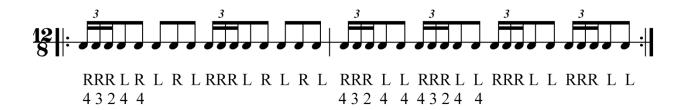


Figure 40. "Flourish" exercise.

Also, the execution of the shakes in measures 15 - 19 and again in 58 - 61 can present problems due to lack of muscle development and dexterity. The subsequent exercise is recommended to build muscle strength and coordination needed to control the shake at the designated rhythm. With this exercise, the author suggests the initial tempo of the quarter-note equaling 60 b.p.m., once again gradually increasing the tempo by increments of 10 b.p.m.

ia the rig in then m

<sup>&</sup>lt;sup>58</sup> The flourishes are generally played with the right hand if the performer is right handed. A left handed performer can hold the *rig* in their right hand, playing all of the strokes with the left hand.



dom shake dom

Figure 41. Shake exercise.

#### CHAPTER 8

# RHYTHMIC JOURNEY NO. 1(CONAKRY TO HARARE)

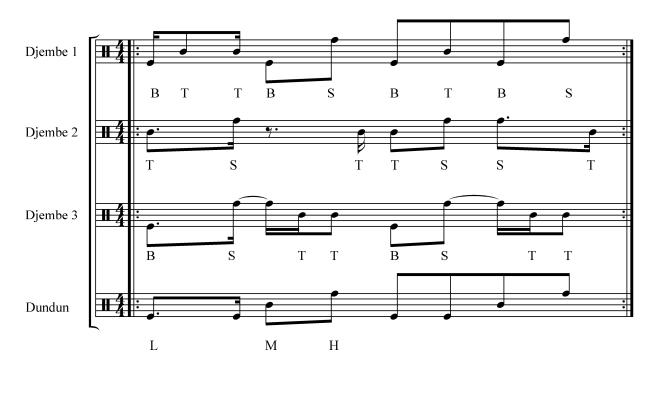
Completed in 2007, *Rhythmic Journey No. 1(Conakry to Harare)* is Williams' latest addition to the repertoire for solo frame drum. The variety of cultural influences within this solo results in a unique, multi-cultural experience for both the performer and listener.

Rhythmic Journey No. 1(Conakry to Harare) for solo tar, written for Michael Scarboro, is one of several works I've composed for students to perform on recitals. The piece begins with rhythmic motives inspired by West African djembe drumming, 'travelling' through adapted versions of the dance rhythms Makru (section A) and Wolosodon (section C), with a brief polymetric excursion through the traditional rudimental snare solo Three Camps (section B) to Zimbabwean mbira rhythms for the tunes Chigwaya (section D) and Kuzanga (section F). Hence the subtitle, Conakry to Harare takes the performance from the capital of Guinea to the capital of Zimbabwe. The occasional pulses in the foot provide the listener with a helpful hint to perceiving the inherent polyrhythmic feel of these rich African patterns.<sup>59</sup>

# Structural Analysis

The solo begins with an adaptation of the dance rhythm Makru. The opening section is a composite rhythm fashioned out of the three *djembe* parts and *dundun* (a large cylindrical, double-headed drum) part traditionally played in a rendition of Makru (figure 42). Williams replaces the *djembe* and *dundun* strokes/timbres with corresponding strokes on the *tar*. For instance, the *bass tone* is replaced with a *dom*, the *tone* with a slap and the slap with a *tak*.

<sup>&</sup>lt;sup>59</sup> Williams, B. Michael. *Rhythmic Journey No. 1(Conakry to Harare)*.



 $\begin{array}{ll} B = BASS & L = LOW \ DUNDUN \\ T = TONE & M = MIDDLE \ DUNDUN \\ S = SLAP & H = HIGH \ DUNDUN \end{array}$ 

Figure 42. traditional *djembe* and *dundun* parts for Makru.<sup>60</sup>

Williams adheres to the rhythmic skeleton of Makru throughout the opening section.

Deviation from the traditional rhythm is accomplished by the inclusion of embellished (rudimental) passages and timbral alteration. The embellished passage that begins in measure six is typical of Williams' other solos in its rudimental nature. The "diddled" strokes along with accent pattern foreshadow the B section which quotes *Three Camps* (figure 43).

<sup>60</sup> Billmeier, Uschi. *Mamady Keita: A Life for the Djembe*. (Arun-Verlag 1999), 145.

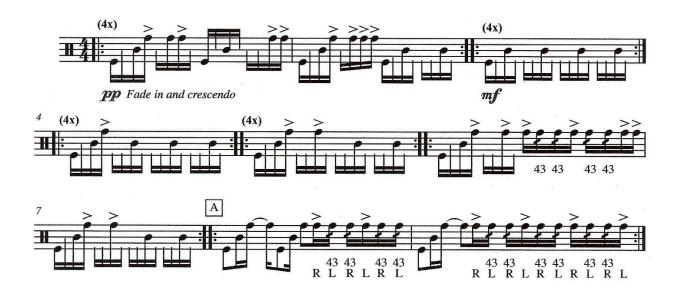


Figure 43. *Rhythmic Journey No. 1*, mm. 1-9, Copyright 2008, B. Michael Williams, reprinted with permission.

The B section of this solo (beginning in m. 17) is a direct quote from the traditional rudimental solo, *Three Camps*. Specifically, Williams incorporates the second and third "camp" as well as the concluding phrase. As previously stated, Williams refers to a "brief polymetric excursion" of *Three Camps*. The "polymetric excursion" is produced by two devices. First, the time signature changes to 3/4 (*Three Camps* is originally written in the time signature in 4/4 or 12/8). Sixteenth-notes (instead of triplets) form the base rhythm with accents on beats one, the "a" of one, the "and" of two and the "a" of three creating a 4:3 polymeter. Quarter-notes played with the foot<sup>61</sup> remind the listener the meter is in 3/4 instead of 12/8, reinforcing the 4:3 polymeter (figure 44).

<sup>&</sup>lt;sup>61</sup> Williams states that a pedal bass drum, woodblock, cowbell or ankle bells can be used for the foot sound.

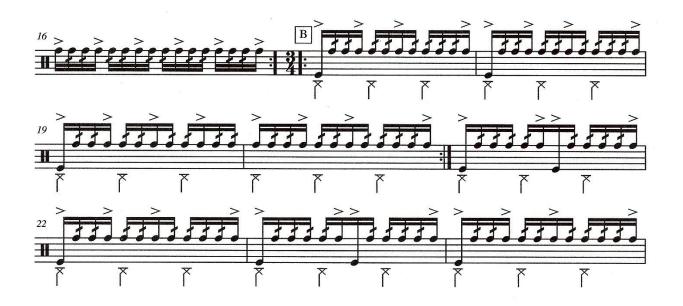


Figure 44. *Rhythmic Journey No. 1*, mm. 16 – 24, Copyright 2008, B. Michael Williams, reprinted with permission.

The rhythm from Wolosodon serves as the foundation for the C section, which employs four-measuring phrasing as in previous sections of this work. The last measure of the phrase (m. 32) is a typical "call" pattern played by a lead *djembe* player to signal that the ensemble should begin, end or transition into another section of the piece they are playing. With each repetition, slight variations of the Wolosodon rhythm are achieved through additional slaps and *taks*.



Figure 45. *Rhythmic Journey No. 1*, mm. 29 – 32, Copyright 2008, B. Michael Williams, reprinted with permission.

The rhythm on beats three and four as well as the *ritard* in the second ending (m. 41) function to transition into D section. This section is constructed upon the rhythm associated with the *mbira* tune Chigwaya (figure 46). Chigwaya is traditionally danced in three (9/8) with a 5 + 4 phrasing that spans two measures. Williams imitates this phrasing by placing the rhythmic material in alternating measures of 5/8 and 2/4. After the initial statement, three variations occur that include basic tonal configuration of *doms*, *taks* and slaps of the Chigwaya rhythm. However, each repetition is marked by an increase in rhythmic activity and ornamentation (see figure 47).



Figure 46. transcription of Chigwaya. 62

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<sup>&</sup>lt;sup>62</sup> Transcription by B. Michael Williams.

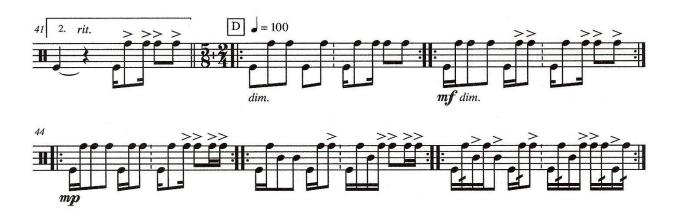


Figure 47. *Rhythmic Journey No. 1*, mm. 41 – 46, Copyright 2008, B. Michael Williams, reprinted with permission.

Letter E provides an opportunity for the performer to *ad lib* in the style of Chigwaya. Williams recommends the performer should "improvise on the two-bar phrase, inserting accents, slaps and rolled embellishments at will, but consistently maintaining the groove." Following the improvised section, the meter shifts to 9/8 and the foot begins to play dotted quarter-notes "revealing the 'actual' feel of the dance pulse and shifting the metric perception from 5 +4 to 3 + 3." <sup>64</sup>

<sup>&</sup>lt;sup>63</sup> Williams. 2

<sup>&</sup>lt;sup>64</sup> Interview with the Author, 2 May 2009.

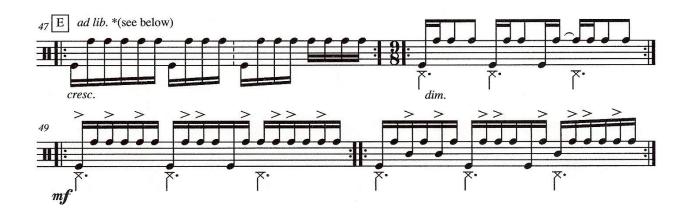


Figure 48. *Rhythmic Journey No. 1*, mm. 47 – 50, Copyright 2008, B. Michael Williams, reprinted with permission.

The final section (letter F) is based upon the *mbira* tune Kuzanga. "*Kuzanga* is unique in that its phrase lengths consist of nine beats per section, rather than the more standard twelve beats. In learning the rhythm of *Kuzanga*, it may be helpful to think of the nine beats [played in the hands] as grouped in a 5 + 2 + 2 configuration. This configuration is supported (as well as contrasted) by a strong triple beat grouping [in the foot] (3 + 3 + 3)."



Figure 49. Kuzanga – standard version. 66

<sup>65</sup> Williams, B. Michael. *Learning Mbira...A Beginning*. Honeyrock, Everett, PA, 2001. 62

<sup>66</sup> Ibid.

The hands play constant sixteenth-notes that mimic the interlock created between the right and left hand parts when playing *mbira*. Accents are utilized to mark the main bass-line and dance pulse of the Kuzanga rhythm (figure 50, m. 52). In measure 53, dynamic and rhythmic intensity are increased with a shuffle-like ostinato (repeated a total of three times) that "imitates the rhythm played by the *hosho*, a rattle used to accompany traditional *mbira* music." Normally the *hosho* rhythm is in 9/8: dotted eighth-note followed by a sixteenth-note then eighth-note, repeated two times.

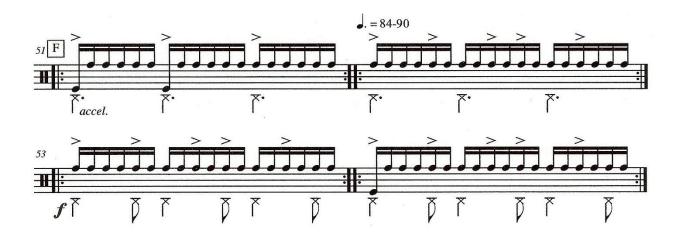


Figure 50. *Rhythmic Journey No. 1*, mm. 51 – 54, Copyright 2008, B. Michael Williams, reprinted with permission.

The climax of this section occurs in measures 55 - 56. The accent pattern remains consistent with the Kuzanga melody but the foot pulse returns to dotted quarter-notes. Williams integrates embellished, roll-like patterns that increase in complexity in measure 56 (figure 51).

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<sup>&</sup>lt;sup>67</sup> Interview with the Author, 2 May 2009.

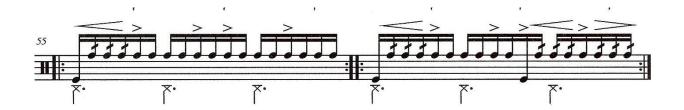


Figure 51. *Rhythmic Journey No. 1*, mm. 55 – 56, Copyright 2008, B. Michael Williams, reprinted with permission.

Sixteenth-notes are eliminated in measure 57 resulting in an eighth-note outline of the Kuzanga rhythm. The grace notes in measure 58 and 59 allude to the return of *hosho* pattern. With each subsequent measure, rhythmic activity and timbral variation are reduced, leaving only the skeletal *hosho* pattern. This, along with a *diminuendo al niente* and *ritard*, draw the piece to its close (figure 52).

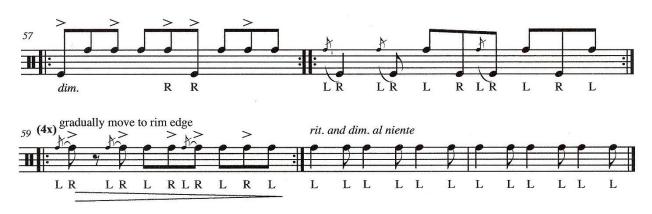


Figure 52. *Rhythmic Journey No. 1*, mm. 57 – 61, Copyright 2008, B. Michael Williams, reprinted with permission.

# Performance Considerations

Many of the technical concerns relevant to *Quatrinity, Etude in Arabic Rhythms* and *Another New Riq* apply to *Rhythmic Journey No. 1*, such as consistency of sounds/timbres, smooth transitions from section to section and execution of embellished passages. However, there are a few considerations that warrant further discussion. First, additional technical stamina and finger dexterity is required to play the *Three Camps* section at letter B. Before attempting this solo, the performer should first master the execution of 5, 7 and 9 stroke rolls (see figure 34, chapter 6). The performer should then practice the traditional version of *Three Camps*, starting at a slow tempo and gradually increasing speed until the required tempo is achieved.

The coordination between polymetric patterns in the hands verses the foot (found in measures 17 - 28 and 48 - 56) also poses a potential problem to the performer. The following diagrams illustrate where the rhythm of the foot "lines up" within the rhythmic pattern of the hands. This approach greatly reduces the complexity of simultaneously playing two opposing meters.

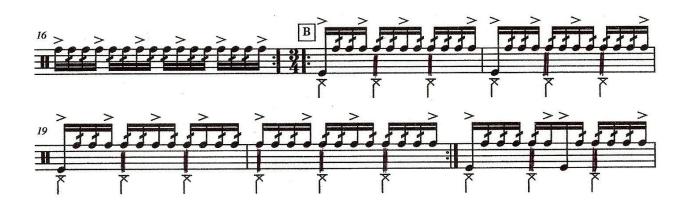


Figure 53. *Rhythmic Journey No. 1*, mm. 19 – 20, Copyright 2008, B. Michael Williams, reprinted with permission.

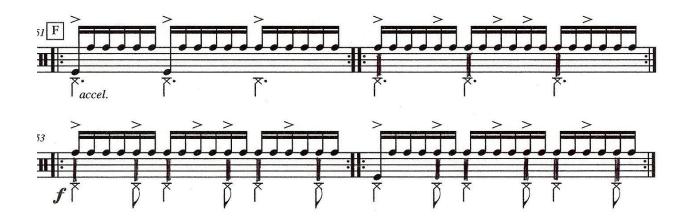


Figure 54. *Rhythmic Journey No. 1*, mm. 53 - 56, Copyright 2008, B. Michael Williams, reprinted with permission.

#### **CHAPTER 9**

#### CONCLUSION

Williams' compositions for solo frame drums are landmark works in the development of a new compositional genre. His contributions to this idiom have inspired other percussionists and/or composers to compose for these instruments and have served as models for subsequent works. The pieces are well-constructed and feature the solo frame drum within a musical context. They make fantastic additions to any recital program, clinic or solo performance.

His works are also valuable pedagogical resources for anyone interested in learning the fundamentals of Middle Eastern frame drumming. From the author's own experience as a percussion educator, the study of these solos can dramatically accelerate a student's grasp of the conceptual idea of Middle Eastern drumming. <sup>68</sup> These concepts include the understanding and command of polymeters, improvisation governed by predetermined ostinati or rhythmic cycles and an expanded knowledge of the rhythmic vocabulary prevalent throughout the Middle East, North Africa and Mediterranean. Additionally, Williams ingeniously interweaves rhythms found in Sub-Saharan Africa (Ghana, Mali, Guinea, The Ivory Coast and Zimbabwe) and traditional rudimental drumming from the United States, further exposing the performer to a wide array of musical influences and styles.

Upon completion of learning the four solos discussed in this paper, the performer will attain a technical command over the various strokes/timbres and standard holding positions commonly associated with the *tar*, *bendir* and *riq*. Furthermore, greater finger dexterity is required to execute embellished passages found within all four compositions, which in turn

<sup>&</sup>lt;sup>68</sup> When used as a supplement to more traditional methods of study such as listening and transcribing traditional music from recordings and/or videos or studying with a frame drum specialist. However, there is limited access in the United States to experienced frame drummers who have backgrounds in Middle Eastern frame drumming. Some of the more notable include: Glen Velez, John Bergamo, Randy Gloss, Layne Redmond, and N. Scott Robinson.

contributes to a percussionist's overall technical facility with traditional Western percussion instruments such as snare drum, drum set and timpani.

With the advancement of frame drumming in communities, universities and concert halls, Williams' compositions for solo frame drum will become standard performance and pedagogical literature for percussionists in the future.

# APPENDIX COMPOSITIONS BY B. MICHAEL WILLIAMS

Title	Year Published	Instrumentation
Cyclic Invention on 8/9/92, from Four Solos for Frame Drums	1993, Honeyrock Publishing	Solo for tar or bendir
Quatrinity, from Four Solos for Frame Drums	1993, Honeyrock Publishing	Solo for tar or bodhran
Variations on a South Indian Theme, from Four Solos for Frame Drums	1993, Honeyrock Publishing	Solo for kanjira
Etude in Arabic Rhythms, from Four Solos for Frame Drums	1993, Honeyrock Publishing	Solo for tar or riq
Three Shona Songs for Marimba Ensemble	1995, Honeyrock Publishing	Arrangement for marimba quartet
Recital Suite for Djembe	1997, Honeyrock Publishing	Solo for djembe
Bodhran Dance	1999, Honeyrock Publishing	Solo for bodhran
Another New Riq	1999, Honeyrock Publishing	Solo for riq
Tiriba Kan	2005, Honeyrock Publishing	Solo for djembe
Asturias – Leyenda, Preludio	2006, Honeyrock Publishing	Transcription for solo vibraphone
Kirina Dreams	2008, BataMbira Productions	Solo for djembe
Rhythmic Journey No. 1: From Conakry to Harare	2008, B. Michael Williams	Solo for tar
Merck's Tattoo	2008, , B. Michael Williams	Solo for riq

#### **BIBLIOGRAPHY**

- Bastian, Darren. "Solo Percussion Literature Programming." *Percussive Notes*, vol. 43, no. 6 (December 2005), 53.
- Beck, John. "Review of "Learning Mbira: A Beginning..." Percussive Notes, vol. 40, no. 3 (June 2002).
- Bergamo, John. (website accessed 7 July 2008). http://www.talmala-bergamo.com
- Billmeier, Uschi. Mamady Keita: A Life for the Djembe. (Arun-Verlag 1999).
- Blades, James. *Percussion Instruments and Their History*. (Westport, Connecticut: Bold Strummer, LTD., rev. 1992), 151-160, 184-186.
- Donald, Mary Ellen. Arabic Tambourine. (San Francisco: Mary Ellen Books, 1985).
- Doubleday, Veronica. "The Frame Drum in the Middle East: Women, Musical Instruments and Power." *Ethnomusicology*, vol. 43, no. 1 (Winter, 1999), 110.
- Harrison, Lou. "The World of Music." Music Primer. (New York: C.F. Peters 1971), 45.
- Meyers, Carol L. "Of Drums and Damsels: Women's Performance in Ancient Israel." *Biblical Archaeologist*, vol. 54, no. 1 (Mar. 1991), 18.
- Nicholls, David. "Transethnicism and the American Experimental Tradition." *The Music Quarterly*, vol. 80, no. 4, (Winter 1996), 571.
- O'Mahoney, Terry. Review of *Bodhran Dance. Percussive Notes*, vol. 39, no. 6, (December 2001).
- Peters, Gordon. Treatise on Percussion. (Wilmette, Illinois: Kemper-Peters Pub. 1975), 9-15.
- Redmond, Layne. "A Short History of the Frame Drum." *Percussive Notes*, vol. 34, no. 5 (October 1996), 69.
- Redmond, Layne. When the Drummers Were Women, A Spiritual History of Rhythm. (New York: Three Rivers Press, 1997).
- Robinson, N. Scott. http://www.nscottrobinson.com (website accessed 18 June 2008).
- Rogers, Lisa. "Review of *Four Solos for Frame Drums*". *Percussive Notes*, vol. 35, no. 1 (February 1997).

- Rogers, Lisa. "Review of *Recital Suite for Djembe*." *Percussive Notes*, vol. 39, no. 6 (December 2001).
- Rogers, Lisa. "Choices Researching Percussion Ensemble Literature." *Percussive Notes*, vol. 42, no. 6 (December 2004), 67.
- Schick, Steven. *The Percussionist's Art: Same Bed, Different Dreams.* (Rochester: University of Rochester 2006). 240.
- Shiloah, Amnon. "Arab Music II: Folk Music." *Grove Music Online*. (website accessed 11 July 2008), <a href="http://www.grovemusic.com">http://www.grovemusic.com</a>>
- Shiloah, Amnon. "The Status of Traditional Art Music in Muslim Nations." *Asian Music*, vol. 12, no. 1, Symposium of Art Musics in Muslim Nations, (1980), 50.
- Standifer, James A. "The Tuareg: Their Music and Dances." *The Black Perspective in Music*, vol. 16, no. 1 (Spring 1988), 48.
- Velez, Glen. (website accessed 7 July 2008), < http://www.glenvelez.com>
- Williams, B. Michael. Interviews with the author, Rock Hill, SC, June 17, 2008, July 20, 2008 and October 12, 2008.
- Williams, B. Michael. Four Solos for Frame Drums. (Everett, PA, Honeyrock 1993).
- Williams, B. Michael. Another New Rig. (Everett, PA, Honeyrock 1998).
- Williams, B. Michael. *Rhythmic Journey no. 1: From Conakry to Harare*. (Rock Hill, SC, B. Michael Williams 2008).
- Williams, B. Michael. "Mamady Keita's 'Mendiani'." *Percussive Notes*, vol. 37, no. 4 (August 1999), 58.
- Williams, B. Michael. *The Early Music of John Cage* 1935 1943. Ph.D. Dissertation, Michigan State University (1990), 206.