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ASYMMETRICAL RHYTHMS FOR MARIMBA

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By

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Norman, Oklahoma

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ASYMMETRICAL RHYTHMS FOR MARIMBA

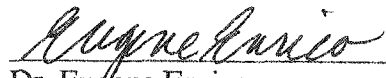
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CHAPTER ONE

APPLICATION OF ASYMMETRICAL RHYTHMS IN THE

MARIMBA REPERTOIRE

Ever since Igor Stravinsky and Bela Bartok used asymmetrical rhythms in *Petrushka*, *Le Sacre de Printemps*, *Concerto for Orchestra* and other works, more and more composers have utilized such rhythms. These rhythms give the music tension, diffraction and various accent possibilities. Bartok's use of asymmetrical rhythms became a strong influence for composers. In particular, his *Sonata for Two Pianos and Percussion* is considered a milestone in the development of multi-percussion and as such, James Blades believes the percussion writing in the *Sonata* "... has unquestionably been a source of inspiration to subsequent composers."<sup>1</sup> He also states:

It is possible that Bartok's enthusiasm for percussion was inspired by the employment of these instruments by his Central European predecessors... and also by the predominance of rhythm in folk music of the Balkans.<sup>2</sup>

Pierre Boulez, a composer whose name became synonymous with percussion, launched a new phase in the use of percussion instruments.<sup>3</sup> Particularly challenging and innovative was his scoring for keyboard percussion instruments. Boulez employed xylophone and vibraphone in *Le marteau sans maitre* and two five-octave xylorimbas,

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<sup>1</sup> James Blades, *Percussion Instruments and Their History*, (London: Faber and Faber Limited, 1984), 414.

<sup>2</sup> Ibid.

<sup>3</sup> Ibid., 435.

two vibraphones, glockenspiel, a series of large cowbells, two octaves of tubular bells and two octaves of bell plates in *Pli selon pli*.

The discovery of the vast potential of the marimba in recent decades fostered the creation of an unprecedented volume of literature written specifically for the instrument. Marimbists are constantly being challenged technically and musically by new compositions, which often include challenging asymmetrical rhythmic combinations.

The purpose of the study is to identify the different asymmetrical rhythms present in selected contemporary marimba compositions and serve as a performance practice method for marimbists. After careful consideration the following procedures were selected for use in this project.

a) Discuss each asymmetrical rhythm as it appears in a contemporary marimba composition and stress the importance of accenting the longer beat.

b) Analyze the configurations of the rhythm, i.e. the various grouping of short and long beats. For example, 5/8 may be articulated as 2+3 or 3+2.

c) Study and internalize the most commonly applied asymmetrical rhythms following the pedagogical suggestions of Bela Bartok. This will include clapping, drumming and chanting oral exercises.

d) Perform and practice the three levels of musically based etudes suitable for beginning, intermediate and advanced marimbists.

These four steps will provide a cohesive package for studying and understanding asymmetrical rhythms.

A considerable part of the interpretation of today's marimba repertoire depends

on the performer's sensitivity to the rhythmic structure of a particular work. Studying the rhythmic structure of a composition is just as important as understanding the form, melody and harmony.

A study in asymmetrical rhythms will fill a gap in the marimba and percussion pedagogy materials. It will facilitate the process of learning and enable a better understanding of the various accent possibilities embodied in these rhythms. Since asymmetrical rhythms are found in the standard marimba repertoire, marimbists should be familiar with them as a prerequisite when performing contemporary compositions.

Although many compositions for marimba make use of asymmetrical rhythms there is limited amount of available literature to develop performance of these techniques. There is a need for systematic discussion of the various existing natural<sup>4</sup> asymmetrical rhythms and need for a pedagogical text.

An awareness of asymmetrical rhythms will help marimbists to become sensitive to them and phrase the music in accordance with the natural accent embodied in them.

Excerpts from a series of postings in the Members Only Conference Center at the Percussive Arts society web site ([www.pas.org](http://www.pas.org)) indicate that asymmetrical rhythms are largely present even in the first five compositions marimbists encounter.<sup>5</sup>

In the initial stages young marimbists focus more on tone quality and proper technical execution. Once these goals are achieved in one piece they typically proceed to the next. It is important in this early stage for the young marimbists to also

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<sup>4</sup> Bartok, 43.

<sup>5</sup> PN, "First Five Marimba Pieces," *Percussive Notes*, August 2001, 8.

develop a clear concept for the natural pulsation of the various asymmetrical rhythms encountered.

In essence, asymmetrical rhythms are combinations of simple duple and triple meters, which when combined form different asymmetric combinations.<sup>6</sup> In order to project for the listener the feel of duple and triple meters, the performer has to interpret some of the notes as accented and leave others as unaccented. It is important to mention that "...the accented beat is the focal point, the nucleus of rhythm, around which the unaccented beats are grouped."<sup>7</sup>

For instance, if the rhythm of 5/8 is articulated as one short (duple) and one long (triple) meter the combination 2+3 beats requires accenting the triple meter. Accenting the longer beat stronger than the preceding duple, is essential for conveying the asymmetrical structure of the rhythm. Bartok comments on the importance of stressing the longer beat stating:

...this extension of the note value is no other than translation of a dynamic stress in terms of duration.<sup>8</sup>

Initially, this triple accent creates a feeling of rhythmic instability to performers, but can be overcome by practicing. According to Bartok the most common asymmetrical rhythms are natural ones.

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<sup>6</sup> Bela Bartok, *"The So-Called Bulgarian Rhythm"* in *Essays*, ed. Benjamin Suchoff (New York: St. Martin's Press, 1976), 40-49.

<sup>7</sup> Crosvenor Cooper and Leonard Meyer, *The Rhythmic Structure of Music*, (Chicago: University of Chicago Press, 1960), 6-7.

<sup>8</sup> Bartok, *Ibid.*, 48.

...they have not been laboriously thought up by composers, but have come into being in village music making, by the most natural development. ...these rhythmic types caused great difficulties to trained musicians (though not to peasants).<sup>9</sup>

Another challenge is that the metrical unit in many compositions with asymmetrical rhythms is not the quarter note but a quite fast eighth or sixteenth note. To be able to perform fluently in fast tempi marimbists should spend time studying and internalizing the various asymmetrical rhythms from the very beginning of their musical careers. Bartok suggests:

It would be advisable to take such rhythmic problems from the very beginning of musical study. At first, when the pupil's technical ability is still elementary, perhaps only in clapping, drumming and conducting. Then later on should come the playing, and above all singing of simpler works in these rhythms.<sup>10</sup>

Numerous beginning level compositions mentioned in the *First Five Marimba Pieces* make extensive use of asymmetrical rhythms.<sup>11</sup> Among them are works by Keiko Abe, Richard Gipson, Paul Smadbeck, Gordon Stout and Toshimitsu Tanaka.

*Monograph IV* by Richard Gipson is a work that presents a number of different technical and musical challenges for the young marimbist, while also exploring asymmetrical rhythms. The introduction and the main motif are written in 7/8 and articulated 2+2+3 (Example No.1). The middle section of the piece (letters D through G) is almost entirely written in 5/8 rhythm and grouped 2+3 (Example No.2).

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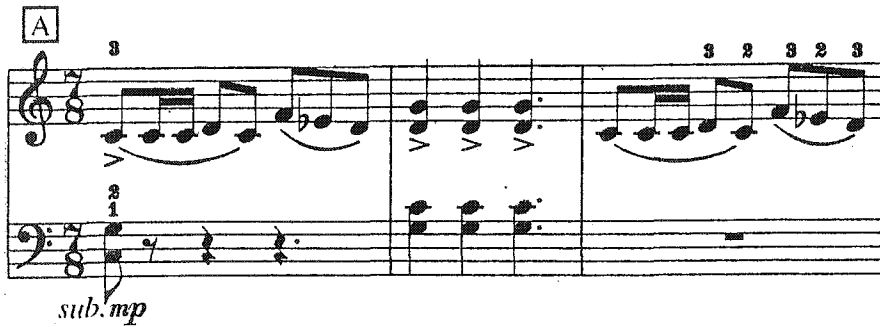
<sup>9</sup> Bartok, Ibid., 43.

<sup>10</sup>Bartok, Ibid., 48.

<sup>11</sup>First Five Marimba Pieces, 8.

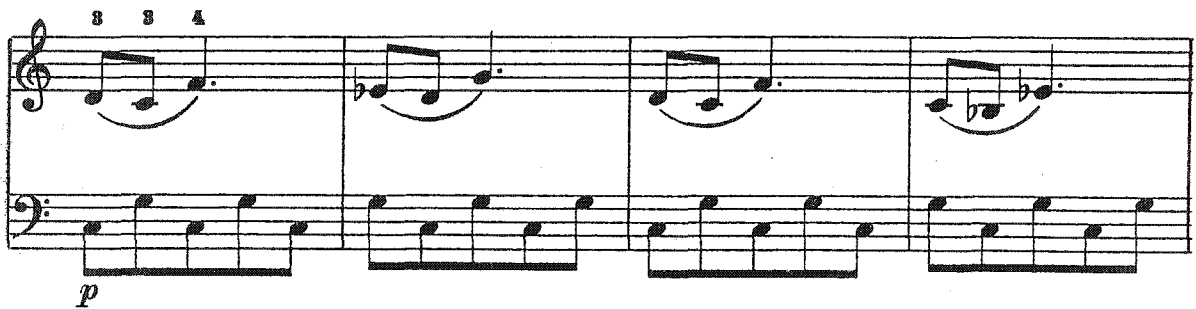
### Example No.1

*Monograph IV* by Richard Gipson (measures 14-16).



### Example No.2

*Monograph IV* by Richard Gipson (four measures after D).



Quite often students fail to interpret the feel of the rhythm correctly due to very little or no previous experience with asymmetrical rhythms. Instead of accenting the longer (triple) beat the majority of marimbists accent the downbeat of each measure in the 7/8 (2+2+3), negating the asymmetrical feel.

The interpretation of the middle section (Example No.2) requires that marimbists convey the 5/8 (2+3) feel clearly indicated in the right hand melody. Once again students tend to place the accent on the down beat stronger than the elongated second pulse of the

In *Etude No.1* by Paul Smadbeck there is no indication of a time signature for the first thirty-five measures. The quantity of the sixteenth notes is not the same in each measure and they are not grouped symmetrically (see Example No.3). The tempo marking is *Prestissimo* posing yet another challenge for the beginning marimbist, who has to consistently perform the two-measure phrasing while beginning to play on the nodes and gradually move to the center of the bars.

*Etude No. 1* by Paul Smadbeck (measures 9-10).



Another composition by Smadbeck written in irregular pulsation is *Rhythm Song*. The main challenge seems to be phrasing in 7/4. In most cases marimbists place the downbeat at the down beat of each measure. A different interpretation and flow of the piece

could be achieved if the rhythm is articulated as (2+2+3). This will require accenting the triple beat, which conveys to the listener that the composition is written in irregular rhythm.

The following asymmetrical rhythms are found in *Two Movements for Marimba* by Toshimitsu Tanaka. They are: 5/8 grouped (2+3) and (3+2), 7/8 grouped (3+2+2) and (2+2+3). Following Bartok's performance suggestions, the marimbist should accent the B-flat in the first measure and the G in the second (Example No. 4)

#### Example No.4

*Two Movements for Marimba* by Toshimitsu Tanaka (measures 57-58).



In Keiko Abe's *Variations on a Japanese Children's Song* the rhythm of 3/16+3/32 (Example No.5) appears consistently in the final section of the piece.

#### Example No.5

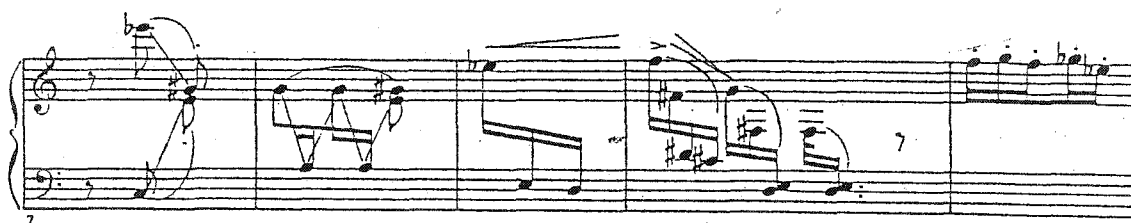
*Variations on Japanese Children's Songs* by Keiko Abe (fifteen measures before the end).



Another composer whose works have become standards in the keyboard marimba literature is Gordon Stout. In the entire collection of his fourteen *Etudes for Marimba*, Stout rarely gives any indication of a time signature (Example No.6) despite the frequent alternations of duple and triple groupings of notes in a single measure.

#### Example No.6

*Etude No.7 (Slides)* by Gordon Stout (measures 7-11).



Previous experience and understanding of asymmetrical rhythms are necessary in order to successfully interpret the *Etudes*. An analysis of the rhythms employed by Stout shows the application of 5/16 grouped (2+3) or (3+2), 7/16 (2+2+3) or (3+2+2), 8/16 (3+2+3), 11/16 (2+2+3+2+2) and even 13/16 (2+3+3+3+2).

Encountering asymmetrical rhythms could be as challenging to the advanced marimba player as well. In some compositions such as *Etude No.1* by Smadbeck and *Etudes for Marimba* by Stout there is no indication of a time signature. In other occasions providing a time signature serves as an indication of the quantity of notes in one measure but gives no indication of note groupings. It is important in such cases to mentally regroup the various long and short groupings and make them work in a familiar asymmetric time signature. A good example is the second movement of *Merlin* by Andrew Thomas (Example No.7).

### Example No.7

*Merlin* by Andrew Thomas (measures 107-108).



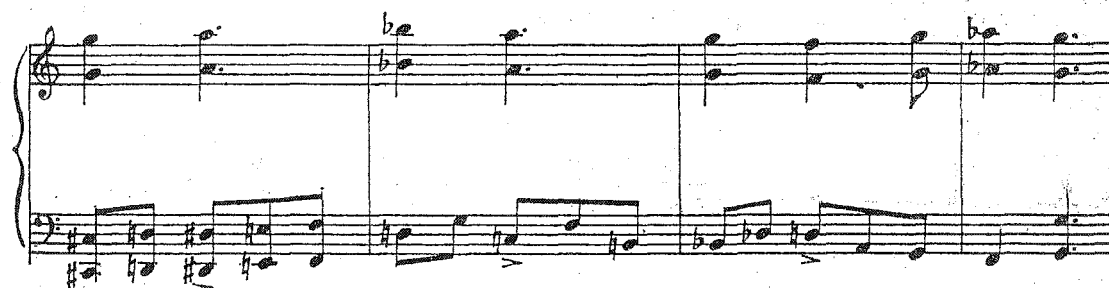
The beginning time signature 6/8 could not be more misleading in terms of phrasing for the marimbist expecting to phrase the rhythm in the usual articulation of (2+2+2) or (3+3). The common grouping of (3+3) transforms as early as in the second measure where the groupings of sixteenth notes clearly reveal the composer's intention to break away from the conventional articulation of 6/8. Instead, the articulation in the second measure suggests asymmetrical subdivision of 7/16 (2+2+3) + 5/16 (3+2) and 5/16 (3+2) + 7/16 (3+2+2) in the third. If already familiar with asymmetrical rhythms, marimbists can easily adjust mentally and reshape the 12 sixteenths asymmetrally. The unusual articulation of 6/8 remains throughout the second movement and marimbists could greatly benefit by combining the short and long beats into common asymmetrical rhythms such as 5/16 and 7/16 even across the bar line. If unfamiliar with such rhythms, performers will have to arduously count each short and long beat which will result in disruption of the musical flow and more difficult memorization.

Among the marimba compositions making use of asymmetrical rhythms is *Thirteen Variations on Tudora* by Dobri Paliev (Example No.8). Each variation is

written in a different rhythm (Example No.9) and could also serve as a pedagogical tool for teaching the applied  $5/8$  (2+3),  $9/8$  (2+2+2+3) and  $11/8$  (2+2+3+2+2) rhythms. The variations are short and allow for a full concentration on a particular rhythm.

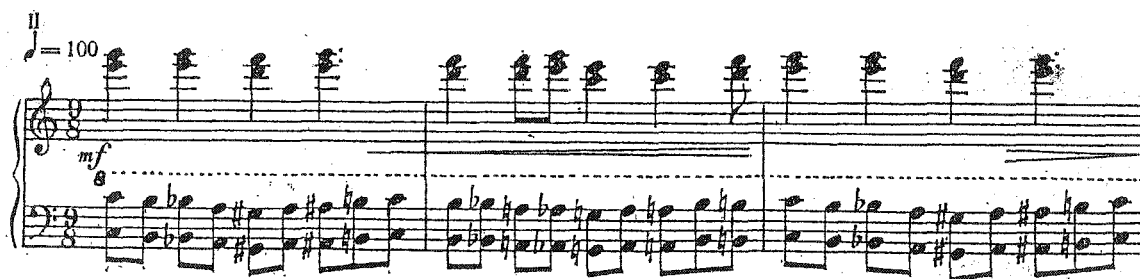
#### Example No.8

*Thirteen Variations on Tudora* by Dobri Paliev (variation V, measures 10-13).



#### Example No.9

(variation II, measures 1-3).



An interesting use of asymmetrical rhythms is seen in *Concert Piece for Marimba* by Tsenko Minkin (Example No.10). In the final section of the composition marimbists are required to play in  $11/16$  (2+2+3+2+2),  $13/16$  (2+2+2+3+2+2) even  $15/16$  (2+2+2+2+3+2+2).

### Example No.10

*Concert Piece for Solo Marimba* by Tsenko Minkin (six measures before the end).



Marimbists continue to encounter asymmetrical rhythms in new compositions as well. In recent reviews of a selected keyboard percussion ensemble music, three of the five selected for review compositions make use of asymmetrical rhythms.<sup>12</sup>

In a composition scored for marimba quartet titled *Inconsistent Jim*, the composer Scott Johnson has written sections that alternate between 7/8 and 4/4 and in *Danceries - 2* by Didie Benetti the contrasting themes are in 6/8 and 7/8. The entire first movement of *Marimba Quartet* by Daniel Levitan is written in 7/8 with occasional measures either in 7/16 or 4/4.

The former analysis indicates that it would be advisable for marimbists to spend time studying the most commonly used asymmetrical rhythms in the contemporary repertoire such as 5/8 (5/16), 7/8 (7/16), 9/8 (9/16) and 11/8 (11/16). An awareness of the structure of these rhythms will enable marimbists to better understand and perform existing and new marimba compositions.

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<sup>12</sup>PN, Selected Reviews of Solo and Ensemble Percussion Literature, August 2003, 75.

## CHAPTER TWO

### PRACTICAL EXERCISES FOR THE MOST COMMONLY APPLIED ASYMMETRICAL RHYTHMS IN THE MARIMBA REPERTOIRE

The exercises contained in the present chapter were developed following the pedagogical suggestions of Bela Bartok for introducing asymmetrical rhythms to beginning musicians. They will help marimbists to feel and internalize the most commonly used asymmetrical rhythms before encountering them in the marimba literature. Marimbists can also benefit by practicing them after encountering a particular rhythm in a composition.

The analysis of the asymmetrical rhythms applied in the marimba literature in the first chapter revealed that the most frequently employed rhythms are 5//8 articulated (2+3) or (3+2), 7/8 grouped (2+2+3) or (3+2+2), 9/8 as (2+2+2+3) and 11/8 articulated (2+2+3+2+2) in slow and moderately fast tempi and 5/16, 7/16, 9/16, 11/16 in fast tempi articulated in the same way. The present chapter provides practical exercises for the initial introduction and practicing of each of the previously discussed rhythms. The following exercises were developed following Bartok's suggestions and will enable the student to develop an understanding of the articulation of each rhythm. Most importantly they provide an opportunity to practice the pulsation of short and long beats in each rhythm.

The exercises are divided in three groups:

- 1) **clapping exercises** representing the basic subdivision of short and long beats in

a particular rhythm. A slow and a moderately fast exercise illustrates how the rhythm transforms its pulsation depending on the tempo. These exercises will introduce and mentally establish the basic feel of each rhythm.

2) **drumming exercises** offering sticking patterns to further internalizing each rhythm. Three possible stickings are suggested for each separate rhythm. This will provide a way to practice common sticking permutations encountered in the marimba literature.

3) **oral exercises** that offer syllables with no literal meaning comprise the third group of exercises. Two different groups of syllables are used: M-TA, M-TA-TA as suggested by Bartok and TI-RI, TI-RI-RI, suggested by folklorist Raina Katzarova and also recommended for practicing by Bartok.<sup>13</sup>

These exercises give an opportunity for initially practicing the feel of each rhythm without an instrument or even outside the practice room. It is advisable that all exercises be practiced periodically until the counting is completely eliminated and each rhythm has been strongly established in the performers mind.

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<sup>13</sup>Bartok, *Essays*, 48.

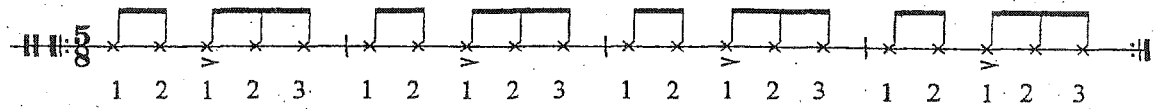
# 5/8 (2+3)

## CLAPPING EXERCISES

♩=60

EX.1

CLAPPING

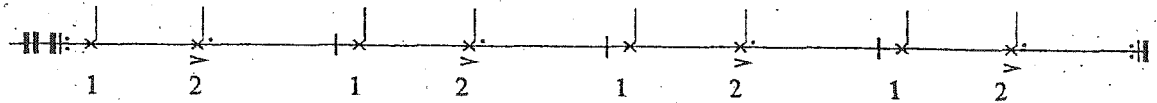


COUNTING

EX.2

♩=120

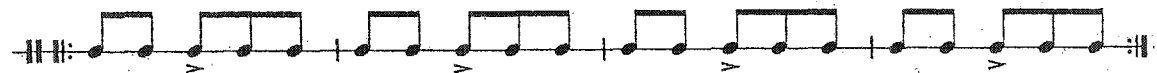
CLAPPING



COUNTING

## DRUMMING EXERCISES

EX.1



L R L R R L R L R R L R L R R L R L R R  
 R L R L L R L R L L R L R L L R L R L L  
 R L R L R L R L R L R L R L R L R L

# EX.2

♩=120

L L R L L R L L R L L R  
 R R L R R L R R L R R L R  
 R L R L R L R L R L R L

## ORAL EXERCISES

### EX.1

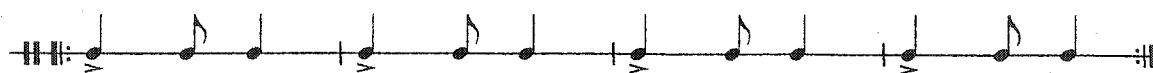
M TA M TA TA M TA M TA TA M TA M TA TA M TA M TA TA

### EX.2

TI RI TI RI RI TI RI TI RI RI TI RI TI RI RI TI RI TI RI RI



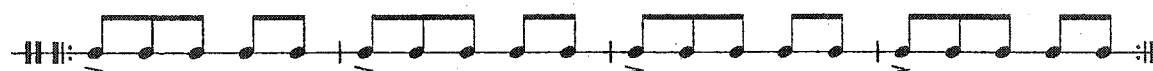
# EX.2



|   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|
| R | L | R | R | L | R | R | L | R | R | L | R |
| L | R | L | L | R | L | L | R | L | L | R | L |
| R | L | R | L | R | L | R | L | R | L | R | L |

## ORAL EXERCISES

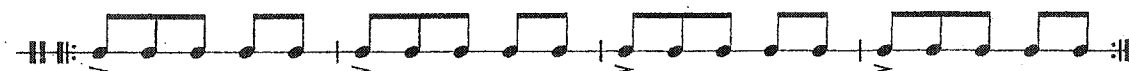
### EX.1



M · TA TA M TA M TA TA M TA M TA TA M TA M TA TA M TA

### EX.2

TI RI RI TI RI TI RI RI TI RI TI RI RI TI RI TI RI RI TI RI



# 7/8 (2+2+3)

## CLAPPING EXERCISES

♩=60  
CLAPPING

EX.1

1 2 1 2 1 2 3 1 2 1 2 1 2 3 1 2 1 2 1 2 3 1 2 1 2 1 2 3

COUNTING

♩=120  
CLAPPING

EX.2

1 2 1 2 1 2 3 1 2 1 2 1 2 3 1 2 1 2 1 2 3 1 2 1 2 1 2 3

COUNTING

## DRUMMING EXERCISES

EX. 1

RLRLRL L RLRLRL L RLRLRL L RLRLRL L

LRRLRL RL RLRLRL RL RLRLRL RL RLRLRL RL

RLRLRL RL RLRLRL RL RLRLRL RL RLRLRL RL

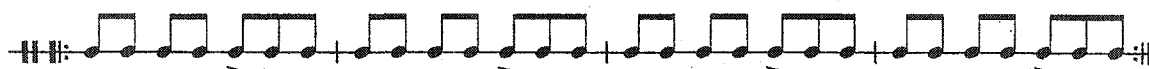
# EX.2



|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| R | L | R | R | L | R | L | L | R | L | R | R | L | R | L | L |
| L | R | L | R | L | R | L | R | L | R | L | R | L | R | L | R |
| R | L | R | L | R | L | R | L | R | L | R | L | R | L | R | L |

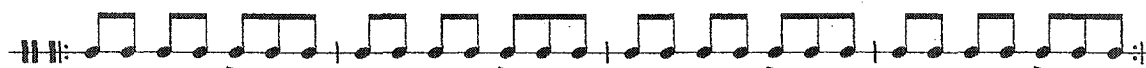
## ORAL EXERCISES

### EX.1



M-TA M-TA M-TA-TAM-TA M-TA M-TA-TA M-TA M-TAM-TA-TA M-TA M-TA M-TA-TA

### EX.2



TI-RI TI-RI TI-RI-RI TI-RI TI-RI TI-RI-RI TI-RI TI-RI TI-RI-RI TI-RI TI-RI TI-RI-RI

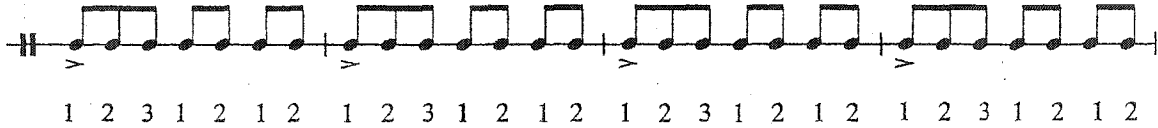
# 7/8 (3+2+2)

## CLAPPING EXERCISES

♩=60

EX. 1

CLAPPING

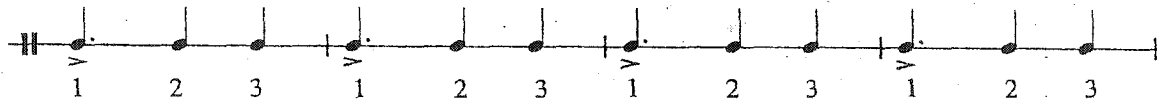


COUNTING

EX. 2

♩=120

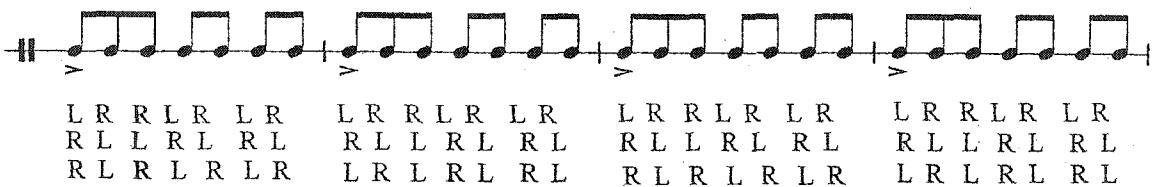
CLAPPING



COUNTING

## DRUMMING EXERCISES

EX. 1



EX. 2

L R L R L R L R L R L R L R L R L R L R L R L R L R L R

# ORAL EXERCISES

EX. 1

M-TA-TA M-TA M-TA M-TA-TA M-TA M-TA M-TA-TA M-TA M-TA M-TA-TA M-TA M-TA

EX. 2

TI-RI-RI TI-RI TI-RI TI-RI TI-RI-RI TI-RI TI-RI TI-RI-RI TI-RI TI-RI TI-RI-RI TI-RI TI-RI

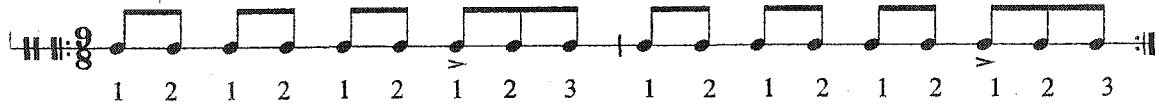
# 9/8 (2+2+2+3)

## CLAPPING EXERCISES

$\text{♩} = 60$

EX. 1

CLAPPING

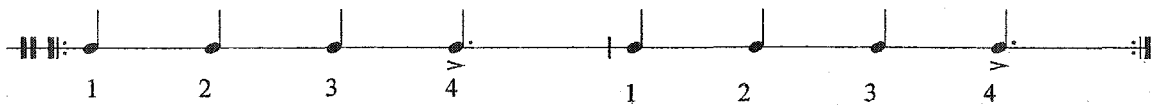


COUNTING

$\text{♩} = 120$

EX. 2

CLAPPING



COUNTING

## DRUMMING EXERCISES

EX. 1



|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L | R | L | R | L | R | L | R | R | L | R | L | R | L | R | R |
| R | L | R | L | R | L | R | L | L | R | L | R | L | R | L | L |
| R | L | R | L | R | L | R | L | R | L | R | L | R | L | R | L |

EX. 2

L R L R R L R L R R  
 R L R L L R L R L L  
 R L R L R L R L R L

# ORAL EXERCISES

EX. 1

M - TA M - TA M - TA M - TA - TA M - TA M - TA M - TA M - TA - TA

EX. 2

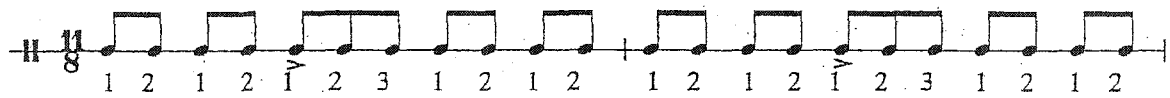
TI - RI TI - RI TI - RI TI - RI - RI TI - RI TI - RI TI - RI TI - RI - RI

# 11/8 (2+2+3+2+2) CLAPPING EXERCISES

$\text{♩} = 60$

EX. 1

CLAPPING

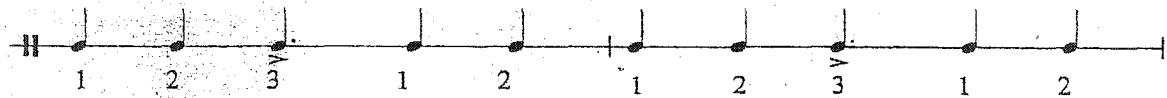


COUNTING

EX. 2

$\text{♩} = 120$

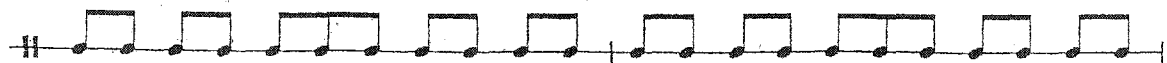
CLAPPING



COUNTING

## DRUMMING EXERCISES

EX. 1



|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| L R | L R | L R | R L | R L | L R | L R | L R | L R | L R | L R | R L | R L | R L | R L |
| R L | R L | R L | L R | L R | L R | L R | L R | L R | L R | L R | L R | L R | L R | L R |
| R L | R L | R L | R L | R L | R L | R L | R L | R L | R L | R L | R L | R L | R L | R L |

EX. 2

R L R R L R L R L L R L

L R L R L R L R L R L R

R L R L R L R L R L R L

# ORAL EXERCISES

EX. 1

M-TA M-TA M-TA-TA M-TA M-TA M-TA M-TA M-TA M-TA-TA M-TA M-TA

EX. 2

TI-RI TI-RI TI-RI RI TI-RI TI-RI TI-RI TI-RI TI-RI RI TI-RI TI-RI

## CHAPTER THREE

### ETUDES FOR MARIMBA IN ASYMMETRICAL RHYTHMS

# Etude 5/8 (2+3) BEGINNING

This beginning level two-mallet exercise has a four measure introduction that establishes the feel of 5/8 rhythm (articulated 2+3). The accent should be placed on the longer beat throughout the etude. Following the introduction is a simple melody, which repeats and is followed by a concluding four measures that restates the introduction. The exercise can serve as a preparation for the feel in the middle section of Richard Gipson's *Monograph IV* (D-E).

**Moderato**

LR LR LR LR LR LR LR LR LR LR sim.

5 *f* LR

9 *mf*

13 *f* RL

# Etude 5/8 (2+3) INTERMEDIATE

Similar in structure to the beginning level 2+3, this intermediate two-mallet etude is a bit more challenging in the use of accidentals, tempo changes and a Gershwin-like feel. Accenting the longer beat is required from the performer. This is a good way to exercise the feel of 5/8 (2+3) and prepare marimbists for more challenging works such as the marimba *Etudes* by Gordon Stout.

$\text{♩} = 120$   
Moderato

L R L R L R L R L R sim. A tempo

*f* poco rall. *mf*

6

12

16

# Etude 5/8 (2+3) ADVANCED

This advanced level etude requires fluent four mallet playing skills and helps to internalize the feel of 2+3 before encountering the pattern in more difficult compositions such as *Two Movements for Marimba* and *Merlin*. Written in the spirit of Kuhlau and Clementi sonatinas, it requires accuracy as well as accenting stronger the longer beat.

Moderato

R L R L R R L R R L R L

*mf*

6

10

14

19

# Etude 5/8 (3+2)

## BEGINNING

Placing the accent at the beginning of each measure will provide a proper feel in this two-mallet etude. A short two measure introduction is followed by the main melody. A crescendo in the last four measures reconfirms the feel of the 3+2 rhythm.

**Moderato**

R L R L R L R L R sim.

5 *mf*

8

11

*f*

# Etude 5/8 (3+2)

## INTERMEDIATE

The tenuto markings distinguish the 3+2 feel of the rhythm throughout this two-mallet etude. It should be performed with a hint of jazz and folk idioms. The performer should not prolong or shorten the dotted quarter rest in the last measure.

$\text{♩} = 120$

R L R L R L R L R L sim.

*f* *mf*

5

9

15

21

26

*f*

# Etude 5/8 (3+2)

## ADVANCED

This advanced level etude requires four mallet technique. After establishing the feel of the rhythm in the first four measures the performer takes a break and continues emphasizing the melody at the down beat of each measure. Following the *ritardando*, *stringendo* and *allargando* markings the etude leads to measure twenty seven where for a few measures it resembles an opera arioso with *ad libitum* marking. Immediately following are a few measures written in Beethoven-like trills in the spirit of his piano concertos. The *A tempo* reestablishes the initial feel and is followed by a short two measure mini codetta that leads the etude to an ending. Playing this etude will prepare marimbists to recognize the rhythm in works such as *Merlin*.

♩ 104

*f*

5

*mf* 1 2 3 2 sim.

11

17 *stringendo*

*rit.* *mp*

22 *allargando*

*f*

27 *ad lib.*

*tr.*

31 *A tempo*

*mf*

35 *marcato*

*subito ff* *mf*

# Etude 7/8 (3+2+2)

## BEGINNING

The tenuto markings in the melody help convey the 3+2+2 pulse of the rhythm in this two-mallet etude. The range is limited to a fifth, appropriate for the beginning marimbist. The same rhythm is found in compositions such as *Two Movements for Marimba* and *Merlin*.

Moderato

4

7

10

# Etude 7/8 (3+2+2)

## INTERMEDIATE

An avantgard jazz feel is predominant for this two-mallet etude. A short two measure introduction leads to a melody written in a question-answer mode, which ends unanswered. This etude will prepare marimbists for Gordon Stout's *Etudes*.

Lively

*f* *mf*

5 *L R L R L R L*

8 *R* *f*

# Etude 7/8 (3+2+2)

## ADVANCED

After the first six measures, which establishes the 3+2+2 feel, the pulse calms down to prepare the song-like character of this etude. Accents and tenuto markings have been inserted following the melodic line. After the repetition of the main motif in a lower register, a brief transition leads towards gradual disappearance (*decrescendo*) of the tune. Four-mallet technique is required for this etude, which establishes the (3+2+2) feel encountered in Andrew Thomas' *Merlin* and Toshimitsu Tanaka's *Two Movements for Marimba*.

Moderato, Cantabile

4 2 3 2 3 1

4 2 3 4 2 3 4 sim.

5

9

13

17

21

*mp* *mf* *f* *mf*

25

29

33

37

poco.....a..... poco.....dim.....

41

repeat ad lib.

pp

## Etude 7/8 (2+2+3) BEGINNING

In an almost march-like melody the beginning marimbist has an opportunity to concentrate on accenting the longer beat in this 2+2+3 articulation. A short two measure phrase establishes the feel in the beginning and at the end of the etude. Two-mallet technique is required.

The musical score is written for a single melodic line in 7/8 time, with a key signature of one sharp (F#). The tempo and feel are indicated by the 2+2+3 articulation. The score consists of three staves of music, each with a measure number (1, 5, and 9) at the beginning. The first staff starts with a forte (*f*) dynamic and includes a mezzo-forte (*mf*) dynamic. The second staff starts with a mezzo-forte (*mf*) dynamic. The third staff starts with a forte (*f*) dynamic. The notation includes various note values (quarter, eighth, and sixteenth notes) and rests, with accents (>) placed over the longer beats. Above the first staff, the mallet sequence "R L R L R L R L R L L L" is written. Above the second staff, the mallet sequence "L" is written. Above the third staff, the mallet sequence "R L R L" is written.

## Etude 7/8 (2+2+3) INTERMEDIATE

In this two-mallet etude the marimbists perform the 7/8 in a more sophisticated manner encountering accidentals, rolls and a slight temp variation at the end. The main goal is to help with the further internalization of the rhythm.

$\text{♩} = 144$

R L R L R L R L

*f* *mf*

5

9

poco rit. *p*

# Etude 7/8 (2+2+3) ADVANCED

The beginning should be played with a misterioso mood leading to the establishment of the 2+2+3 feel encountered in pieces like *Merlin*. The main melody is introduced in measure 15 and subsequently repeated in different octaves with a few transitional phrases. A *ritardando* precedes the reappearance of first idea. Four-mallet technique is required.

Misterioso

2 3 2 3 2 3 2 sim.

*ppp* *poco cresc. e accelerando*

*mp*

9 (♩=172)

*mf* *f* sim.

14  $\text{♩} = 144$

*mf*

18 1.

*subito pp*

22 *A tempo*

*rit.* *mf*

26

3 3

30

*mf*

35

*pp* *mp*

39

*mf* *f*

43

*ff* accel. molto.....

47

repeat ad lib

# Etude 9/8 (2+2+2+3) BEGINNING

The descending melody, limited to the range of a fifth, gives an opportunity to practice the 9/8 2+2+2+3 rhythm. Accenting the longer beat is essential. The etude is written for two-mallets.



# Etude 9/8 (2+2+2+3) INTERMEDIATE

After establishing the feel of 2+2+2+3 in the first two measures, marimbists can concentrate on the arioso-like feel of this etude. A few stops, *ritardandos* and *A tempos* could be inserted at the discretion of the performer. Practicing this etude will help with the performance of Dobri Paliev's second variation of *Thirteen Variations on Tudora*, which is written in the same rhythm. Two-mallet technique is required.

$\text{♩} = 126$   
Lightly

*f* *mf*

5

7

9 1.

12 rit.

## Etude 9/8 (2+2+2+3) ADVANCED

Written in a twelve measure blues style, this four-mallet etude should be entertaining for both the performer and listener. Marimbists can create their own 12 measure improvisation(s) and insert it after measure fourteen. The same rhythm is found in *Thirteen Variations on Tudora* by Dobri Paliev and in *Variations on Japanese Children's Song* (represented as 3/16+3/32).

♩=132-152

The musical score is written for a four-mallet instrument in 9/8 time, featuring a 12-measure blues structure. The key signature has two flats (B-flat and E-flat). The score is divided into five systems, each with a grand staff (treble and bass clefs).  
- Measure 1: Treble clef has a whole rest; bass clef has a half-note chord (B-flat, E-flat).  
- Measure 2: Treble clef has a whole rest; bass clef has a half-note chord (B-flat, E-flat).  
- Measure 3: Treble clef has a whole rest; bass clef has a half-note chord (B-flat, E-flat).  
- Measure 4: Treble clef has a whole rest; bass clef has a half-note chord (B-flat, E-flat).  
- Measure 5: Treble clef has a half-note chord (B-flat, E-flat); bass clef has a half-note chord (B-flat, E-flat).  
- Measure 6: Treble clef has a half-note chord (B-flat, E-flat); bass clef has a half-note chord (B-flat, E-flat).  
- Measure 7: Treble clef has a half-note chord (B-flat, E-flat); bass clef has a half-note chord (B-flat, E-flat).  
- Measure 8: Treble clef has a half-note chord (B-flat, E-flat); bass clef has a half-note chord (B-flat, E-flat).  
- Measure 9: Treble clef has a half-note chord (B-flat, E-flat); bass clef has a half-note chord (B-flat, E-flat).  
- Measure 10: Treble clef has a half-note chord (B-flat, E-flat); bass clef has a half-note chord (B-flat, E-flat).  
- Measure 11: Treble clef has a half-note chord (B-flat, E-flat); bass clef has a half-note chord (B-flat, E-flat).  
- Measure 12: Treble clef has a half-note chord (B-flat, E-flat); bass clef has a half-note chord (B-flat, E-flat).  
Dynamics include *p* (piano) at measure 1 and *f* (forte) at measure 5. The notation includes various note values (half notes, quarter notes, eighth notes) and rests.

13

15

18 *p*

*f* *allargando*

# Etude 11/8 (2+2+3+2+2) BEGINNING

Marimbists should attempt this etude after becoming familiar with the previous two-mallet beginning etudes in the study. The simple melody requires accenting the longer beat, which is surrounded by two short beats.

$\text{♩} = 112$

L R L R L R L R L sim.

*mf*

3

5

7

9

11

# Etude 11/8 (2+2+3+2+2)

## INTERMEDIATE

The two introductory measures establish the jazz feel of this two-mallet etude. Accidentals and grace notes should be properly executed while creating the feel of an asymmetric *Take Five* by Brubeck. The rhythm is found in Stout's *Etudes*, Minkin's *Concert Piece for Marimba* and in Paliev's *Thirteen Variations on Tudora*.

Moderato

*f*

*mf*

*pp*

repeat ad lib.

# Etude 11/8 (2+2+3+2+2)

## ADVANCED

Sharp dynamic contrasts and virtuosic four mallet playing is required in this etude. Discovering and projecting the turnarounds in the etude is needed from the performer. Proper accenting of the longer beat is the main requirement for conveying the 2+2+3+2+2 rhythm. The ending should be well built, anticipated and furious. The etude will help establish the feel of 11/8 (2+2+3+2+2) encountered in Stout's *Etudes*, Minkin's *Concert Piece for Marimba* and in Paliev's *Thirteen Variations on Tudora*.

The musical score is written for four mallets on a grand staff (treble and bass clefs). The tempo is marked as 160 bpm. The piece begins with a forte (*ff*) dynamic. The first system (measures 1-3) features a complex 11/8 time signature with a 2+2+3+2+2 rhythmic pattern. The second system (measures 4-6) continues this pattern. The third system (measures 7-9) shows a change in the bass line, with the treble line continuing the melodic pattern. The fourth system (measures 10-12) concludes with a mezzo-forte (*mf*) dynamic and a 'sim.' (simulacrum) marking, indicating a final, anticipated ending.

15

*subito pp*

17

*mf*

19

*f* *rit.*

21 *A tempo*

*ff* *mf*

24

26

*subito pp*

28

cres.....

30

cen.....

32

do.....

34

dim.....

36

**ff** più mosso

39

stringendo

41

43

45

## CHAPTER FOUR

### CONCLUSIONS

The exploration of the potential of the marimba as a solo instrument in recent decades fostered the creation of an unprecedented volume of works written specifically for the instrument. Modern composers constantly challenge marimbists technically and musically by exploring the possibilities of two, four and even six mallet technique. Often these new pieces present yet another challenge for the marimbist in the form of asymmetric rhythmic combinations. Such rhythms are found in various levels of marimba compositions in works by Keiko Abe, Richard Gipson, Toshimitsu Tanaka, Andrew Thomas, Gordon Stout, Paul Smadbeck, Dobri Paliev, Tsenko Minkin and other prominent marimba composers. These challenging rhythms are present even in the very first pieces marimbists typically play. For this reason it is important for marimbists to develop a feel for the most often used asymmetrical rhythms. Students often have to perform pieces containing asymmetrical rhythms and it is important to analyze short and long beats to determine which beats should be accented more than others.

According to Bela Bartok, the elongation of the note value is a translation of a dynamic stress.<sup>14</sup> This requires accenting the longer beat(s) in a given asymmetrical rhythm stronger than the duple meter(s). In order to achieve an awareness for the pulsation of strong and weak beats, Bartok suggests a series of exercises to be presented to students from the very beginning of their musical studies. Following his pedagogical

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<sup>14</sup>Bartok, *Ibid.*, 48.

suggestions the present study offers clapping, drumming and oral exercises for the most commonly applied asymmetrical rhythms in the marimba repertoire, such as 5/8 (articulated 2+3 and 3+2), 7/8 (articulated 2+2+3 and 3+2+2), 9/8 (articulated 2+2+2+3), and 11/8 (articulated 2+2+3+2+2). Practicing these exercises will assist marimbists in internalizing the natural flow of each rhythm.

After repeatedly practicing these exercises marimbists will be able to more fluently perform the beginning, intermediate and advanced asymmetric etudes. Students are also encouraged to select and perform the etudes in a given level as a suite.

To further research and discuss the nature of the asymmetrical rhythms students could benefit by listening to different genres of music containing such rhythms. Appropriate listening could include recordings of Bela Bartok's *Sonata for Two Pianos and Percussion*, *Concerto for Orchestra*, the third movement of *String Quartet No. 5* (Scherzo. Alla bulgarese) and from *Mikrokosmos Bulgarian Rhythm Nos. 1 and 2*. Also of benefit for the understanding of these rhythms would be listening to Igor Stravinsky's *Petrushka* and *Le Sacre de Printemps*, Dave Brubeck's *Blue Rondo A la Turk* and the albums *Tears of Joy* and *Bulgarian Bulge* by Don Ellis. Recordings of various folk cultures rich in asymmetrical rhythms such as *Le Mystere des Voix Bulgares* are further recommended.

It would be invaluable to compare the use of asymmetrical rhythms in different ethnic traditions. Such studies were done by Bartok who examined the presence of asymmetrical rhythms in various countries.<sup>15</sup> Further research on the topic exists by

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<sup>15</sup>Bartok, Ibid., 186.

folklorists Raina Katzarova-Koukodova, Kiril Djenev and Stoyan Djoudjeff. Their contributions revealed the close relationship between asymmetrical rhythms and folk dances. For example, they identified that in Bulgaria every asymmetrical rhythm has a corresponding dance. They also created and developed symbols to notate the different movements and steps. It is interesting to note a performance practice of asymmetrical rhythms by folk dances:

In some places the musicians change the rhythm in the middle of the dance to 7/8, 2/4 or 9/8 beat. The dancers greet every change with a shout, changing into the new rhythm and dancing with still greater abandon.<sup>16</sup>

Djoudjeff discusses the similarity of asymmetrical rhythms and poetic feet. He compares the structure of simple, compound and heterometric rows with ancient Greek poetic feet. For instance, the 11/8 rhythm, articulated (2+2+3+2+2), widely spread in Bulgarian and Macedonian music is compared with Gliconik Tripody.<sup>17</sup> Marimbists who would like to further analyze the existing asymmetrical rhythms could study them in a particular culture and compare them with existing materials on the subject. This will further advance understanding and knowledge of the various asymmetrical rhythms.

It is the author's hope that the present study will lead to further research of the asymmetrical rhythms. Of particular interest would be to discover if there are cultures that share common asymmetric rhythms. A further discussion on the subject will help for better understanding the nature of these rhythms.

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<sup>16</sup>Raina Katzarova-Kukudova and Kiril Djenev, *Bulgarian Folk Dances*, (Cambridge: Slavica Publishers, 1976), 32.

<sup>17</sup>Stoyan Djoudjeff, *Bulgarian Folk Music*, (Sofia: Nayka i Izkystvo, 1970), 84.

Most sincerely the author hopes that the present study will fill a gap in the marimba and percussion pedagogy materials, by serving as a source for studying and internalizing asymmetrical rhythms.

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