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The purpose of this study was to create an annotated bibliography of works for solo marimba and electronics published from 1978-2012. Thirty-four compositions were included in the annotated bibliography. For inclusion in this study, works met criteria established as follows: published and commercially available prior to January 1, 2013; supplied with both the score and accompaniment material; written for an individual performer; original composition for marimba; and marimba was the only keyboard percussion instrument. The incidental use of auxiliary percussion instruments did not disqualify a work for inclusion.

The information identified in each entry of the annotated bibliography includes title, composer, publisher, range of marimba needed, duration of the work, number of movements, the type of accompaniment, and composer or publisher's notes. Entries in the bibliography were organized alphabetically by composer last name. Each entry contains overviews of the accompaniment and performance techniques, including four-mallet stroke types and difficulty, as well as a musical overview, which covers such topics as specific challenges within the work or mallet selection.

The annotations are neither meant to evaluate the musical merits of the works nor make observations or draw conclusions regarding the development of the identified compositions. The information provided in this document is

intended to serve as a practical and useful resource for performers and bring broader awareness to the included works.

The first chapter includes discussion of the study's limitations and the process for identifying and selecting works included works. The scope of academic research relevant to works for solo marimba and electronics is examined in Chapter Two. The third chapter includes discussion of the annotation formats used in bibliographies of marimba literature that serve as the basis for the annotations contained in this document, as well as defining the terminology contained in these annotations. Chapter Four is the annotated bibliography of published works for solo marimba and electronics. The fifth chapter is a summary of the study followed by conclusions and suggestions for further research. Three appendices index the included works by title, date, and duration.

AN ANNOTATED BIBLIOGRAPHY OF WORKS FOR SOLO MARIMBA
AND ELECTRONICS PUBLISHED FROM 1978-2012

by

Michael Joseph Ptacin

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Approved by

Committee Chair

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DEDICATION

In memory of my middle school band director, William Randall “Randy” Ingold, who passed away on March 28, 2012, without whom I may never have started playing the bells.

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CHAPTER I

INTRODUCTION

The term “electro-acoustic music” refers to “music in which electronic technology . . . is used to access, generate, explore and configure sound materials, and in which loudspeakers are the prime medium of transmission.”¹ Electro-acoustic compositions utilize a live performer on an acoustic instrument in conjunction with an electronic element. The electronic element of this music may take various forms: tape, live electronic processing, and performance interfaces (MIDI controllers). Winner of the electro-acoustic prize at the 1978 Bourges International Electroacoustic Music Festival, Ivan Patachich’s “Metamorfosi I: per marimbafono e nastro” was thought to have been the first work for marimba and electronics.² Since 1978, the total number of new works for solo marimba and electronics has increased within each decade, from about twenty performed in

¹ Simon Emmerson and Denis Smalley, “Electro-acoustic music,” in *Grove Music Online, Oxford Music Online*, Oxford University Press <http://www.oxfordmusiconline.com/subscriber/article/grove/music/08695> (accessed March 20, 2013).

² Melinda Berlász, “Patachich, Iván,” in *Grove Music Online, Oxford Music Online*, Oxford University Press <http://www.oxfordmusiconline.com/subscriber/article/grove/music/21064> (accessed January 10, 2013).

the United States in the 1980s to at least twice that in the 2000s.³

In 2011, Yi-Chai Chen identified ninety works, both published and non-published compositions, for solo marimba and electronics performed in the United States between 1978 and 2010.⁴ Almost two-thirds of the works Chen identified are not published. Also, Chen conducted a survey of marimba repertoire covered in selected university percussion programs. In her survey, Chen noted twelve works for marimba and electronics appeared in the repertoire lists of surveyed programs. None of the works were composed more recently than 2002.⁵ The results of Chen's survey indicated a general lack of promotion and advancement of these compositions in academia.

Purpose of the Study

The purpose of this study was to develop an annotated bibliography of works for solo marimba and electronics published from 1978-2012. The musical merits of the works were not evaluated; rather, pertinent information regarding the electronic accompaniment and technical challenges for the performer were explored. The information included in the annotations emphasizes objective material: title, composer, publisher, range of marimba needed, and composer's or

³ Yi-Chia Chen, "A Catalog of Solo Works for Marimba with Electronics and an Examination and Performance Guide of *Flux* for Marimba and Electronic Tape by Mei-Fang Lin," (DMA diss., Arizona State University, 2011, in ProQuest Dissertations and Theses, <https://libproxy.uncg.edu/login?url=http://search.proquest.com/docview/911991162?accountid=14604>) (accessed January 1, 2013), 10, 13-15.

⁴ Chen, 9-21.

⁵ *Ibid.*, 19.

publisher's notes. Also, the annotation entry contains an overview of performance techniques, including four-mallet stroke types and difficulty, as well as a musical overview covering specific challenges within each work and mallet selection, one of the only subjective entries in the annotations.

Selection and Identification of Literature

The following criteria were established as guidelines for selecting the works included in this study:

1. The work must be published and commercially available prior to January 1, 2013.
2. The publisher must provide both the score and accompaniment material.
3. The work must be for an individual performer.
4. Only works originally written for marimba are considered.
5. Marimba must be the only keyboard percussion instrument used in the work.
6. The incidental use of auxiliary percussion instruments is acceptable.

Thirty-four works met the established criteria for inclusion.

The initial identification of possible works to include in the study was conducted through Steve Weiss Music's online catalog. Steve Weiss Music is the largest distributor of percussion products, including sheet music, in the United States.⁶ Their website contained the sheet music category "mallet instrument

⁶ Andrea Byrd, "Retailer Profile: Steve Weiss Music," *Drum Business Magazine*, May-June 2012, 18.

with recording” listing four-four results.⁷ Of these results, eighteen works matched the established criteria of this study.

In her dissertation, Yi-Chia Chen included a catalog of solo works for marimba and electronics performed in the United States between 1978 and 2010.⁸ A search was conducted on every composition identified in Chen’s dissertation, excluding those already identified in Steve Weiss Music’s catalog, to determine each work’s publication status. This search utilized the WorldCat library catalog, the databases of the Percussive Arts Society⁹, composer websites, and general Internet search engines. Also, composers were contacted to inquire about the publication status of works that could not be identified through the previously mentioned sources. The results of this search yielded eleven works for inclusion in this study.

Five works neither contained in Chen’s dissertation nor Steve Weiss Music’s catalog were identified through searches of databases maintained by the Percussive Arts Society, WorldCat, the online catalogs of percussion music publishers, personal websites of composers and performers, and general searches

⁷ Steve Weiss Music, “Sheet Music: Mallet Instruments with Recording,” <http://www.steveweissmusic.com/category/mallet-cd> (accessed January 1, 2013).

⁸ Chen, 9-21.

⁹ Mutsuko Fujii and Senzoku Marimba Research Group, “Fujii Database of Japanese Marimba Works,” 2006, http://www.pas.org/Libraries/PASIC_Archives/FujiiMarimbaDB.sflb.ashx (accessed December 1, 2012); Percussive Arts Society, “Siwe Guide to Solo and Ensemble Percussion Literature,” <http://www.pas.org/Learn/compresearch.aspx> (accessed December 1, 2012).

on the Internet. These searches were conducted utilizing keywords, including: marimba; tape; electronics; and computer. Table 1 contains a list of the works included in this study and the source for each.

Table 1. Identification of works by source found

Title	Source
Celestial Dances	Steve Weiss Music
The Alabados Song	Steve Weiss Music
Hangar 84	Steve Weiss Music
Pixelation	Steve Weiss Music
Halcyon Deconstruction	Steve Weiss Music
Fertility Rites	Steve Weiss Music
In the Fire of Conflict	Steve Weiss Music
diastemas [2005-I]	Steve Weiss Music
Rimbasily	Steve Weiss Music
WarHammer	Steve Weiss Music
Polytempus II	Steve Weiss Music
Liquid Bars	Steve Weiss Music
Nature's Course	Steve Weiss Music
Precipice	Steve Weiss Music
Crystal Butterfly	Steve Weiss Music
For Marimba & Tape	Steve Weiss Music
Fabian Theory	Steve Weiss Music
Marimba Music	Steve Weiss Music
Metamorfosi I	Chen dissertation
Ball the Jack	Chen dissertation
Modi-fications	Chen dissertation
C:M	Chen dissertation
Marimbascap	Chen dissertation
Angels	Chen dissertation
Work-out for Marimba and KAT	Chen dissertation
Morphism IV	Chen dissertation
Pentaphase	Chen dissertation
Tempo Distortion #4	Chen dissertation
Night Chill	Chen dissertation
Length of Variable Echo ¹⁰	HoneyRock Publications website
One Study One Summary	Promethean Editions website
Individual Lemming	Edition Svitzer website
Mirrors of Emptiness	Edition Svitzer website
Variations on the Housatonic	Edition Svitzer website

¹⁰ The accompaniment must be purchased directly from the publisher.

The acquisition of published scores along with any additional materials needed for the performance of each work, such as tape or CD, was required for completing the annotations. Materials were available for purchase online from several sources: Steve Weiss Music, publisher websites, sheet music distributors, and various national music centers.

Limitations of the Study

A complete annotation of all music for marimba and electronics was beyond the scope of this study. Unpublished manuscripts and self-distributed works were not included for annotation. Of the ninety compositions identified in Chen's dissertation, fifteen works were not published and seventeen were self-distributed by the composer. Not all composers responded to requests regarding the publication of their music; as such, the status of seventeen works remains unknown. Personal data of composers were not included; likewise, the guide is not intended to focus on cultural trends, have a nationalistic basis, or function as a biographical reference. Also, the annotations do not contain observations or draw conclusions regarding the development of the literature over time.

Not all published works identified in Chen's dissertation met the criteria for this study. The score and accompaniment for Guy Reibel's "Miroirs for Marimba and Tape" and Martin Matalon's "Traces IV for Marimba and Live Electronics" may be rented but not purchased. The scores for Pierre Bartholomée's "Passacaille pour Marimba et Live Electronics," Lars Indrek Hansson's "Serendipity for Marimba and Tape," and Tristram Cary's "Black,

White & Rose: Music for Marimba with Gongs, Woodblocks and Prerecorded Tape” are available for purchase but do not include the accompaniment.¹¹ Martin Wesley-Smith’s “White Knight and Beaver” was conceived for flexible instrumentation and was not an original composition for marimba. Two additional works not found in Chen’s dissertation were excluded from this study: Andrian Pertout’s “An honourable silence” and John Casken’s “Soul Catcher.” Both of these works are available, but they are not original compositions for marimba.

Examination of published scores identified two mistakenly categorized works in Chen’s study: Emma Lou Diemer’s “Ice Rhythm” and Ken Ueno’s “Theater in Music.” “Ice Rhythm” was written for marimba or MalletKAT. The score of “Theater in Music” indicates no electronic component. Correspondence with the composer revealed the premiere performer prerecorded the third movement, which was subsequently played back through a sound system while the performer pantomimed the performance. The program for that performance included the altered title, “Theater in Music for Marimba and Electronics,” instead of the actual title. Jérôme Blais’ “Plugged 1.1,” written for amplified marimba, is not included in this study. Amplification may reveal hidden sounds within a marimba while it is played and alter a listener’s perception of the resonance and articulation of its sound. Amplification, however, may be used in

¹¹ The availability of the accompaniment varies for these works. The tape for “Serendipity” may be obtained through the composer. Tristram Cary passed away on April 24, 2008, and, according to the Australian Music Centre, the tape’s availability remains unknown at this time. The electronics for “Passacaille” may be requested from the Centre Henri Pousseur in Liege, Belgium.

various performance situations and on works not composed with the intention of amplification. Due to the inconsistency in the application of amplification and the effects created by its use on works whether intending these effects or not, amplification is not being considered an electronic effect in this document.

Organization of the Document

The scope of academic research relevant to works for solo marimba and electronics is examined in Chapter Two. The third chapter includes discussion of the annotation formats used in bibliographies of marimba literature that serve as the basis for the annotations contained in this document, as well as defining the terminology contained in these annotations. Chapter Four is the annotated bibliography of published works for solo marimba and electronics. The fifth chapter is a summary of the study followed by conclusions and suggestions for further research. Three appendices to the bibliography index the works by title, date, and duration.

CHAPTER II

SURVEY OF RELATED RESEARCH

A search was conducted to identify academic research into music for marimba and electronics. The results of the search revealed no study had been undertaken with the specific intention of analyzing works for marimba and electronics. A search for title-keyword “marimba” in the ProQuest Dissertations & Theses (PQDT) database yielded seventy-nine results on January 1, 2013. Abstracts were searched for references to music for marimba and electronics to identify previous academic research within the genre. Five of the seventy-nine results related to marimba and electronics:

1. Timothy A. Place, “Dark Forest for Marimba and Interactive Electronics” (MA thesis, University of Missouri – Kansas City, 2001).
2. Sarah E. Smith, “The Development of the Marimba as a Solo Instrument and the Evolution of the Solo Literature for the Marimba” (DMA diss., The Ohio State University, 1995).
3. Yi-Chia Chen, “A Catalog of Solo Works for Marimba with Electronics and an Examination and Performance Guide of *Flux* for Marimba and Electronic Tape by Mei-Fang Lin” (DMA diss., Arizona State University, 2011).
4. Christina F. Wilkes, “A Performer’s Guide to the Marimba Music of Daniel McCarthy” (DMA diss., University of Arizona, 1996).
5. Jeffrey J. Donkersgoed, “An Annotated Bibliography of Solo Marimba Music by Canadian Composers, 1981-2006” (MA thesis, University of Victoria, 2007).

Place's theses, the score to his composition "Dark Forest," did not contain research about music for marimba and electronics.¹² The content of Smith's dissertation included only the identification of "Puzzle for Marimba and Tape" by Gerard Geay in a list of works composed for and/or dedicated to Keiko Abe.¹³ The remaining three studies from Chen, Wilkes, and Donkersgoed involved more in-depth research on music for marimba and electronics compared to the scope of Place and Smith's texts, but Chen's dissertation was the only one specific to marimba and electronics.

The majority of Chen's dissertation detailed the commission, performance, and analysis of a new work for marimba and electronics. Also, Chen cataloged solo works for marimba and electronics performed in the United States between 1978 and 2010. Her catalog included the year of premiere performance or publication (as known), title, composer, and the type of electronics. Of the ninety works identified by Chen as performed between 1978 and 2010, twenty-three were published including the necessary electronic accompaniment.¹⁴

¹² Timothy A. Place, "Dark Forest for Marimba and Interactive Electronics," (Masters thesis, University of Missouri – Kansas City, 2001, in ProQuest Dissertations and Theses, <https://libproxy.uncg.edu/login?url=http://search.proquest.com.libproxy.uncg.edu/docview/251042762?accountid=14604>) (accessed January 1, 2013).

¹³ Sarah E. Smith, "The Development of the Marimba as a Solo Instrument and the Evolution of the Solo Literature for the Marimba," (DMA diss., The Ohio State University, 1995, in ProQuest Dissertations and Theses, <https://libproxy.uncg.edu/login?url=http://search.proquest.com.libproxy.uncg.edu/docview/304230339?accountid=14604>) (accessed January 1, 2013), 71.

¹⁴ Chen, 10-15.

Specifically focused upon the marimba music of Daniel McCarthy, Christina Wilkes' dissertation provided an in-depth analysis of four works by McCarthy.¹⁵ McCarthy's "Rimbasy," a composition for marimba and tape, was detailed in Wilkes' dissertation. Her insightful analysis focused on the technical aspects of performing the work, and she relayed information regarding how the performer and the tape interact.

Jeffrey Donkersgoed's dissertation, an annotated bibliography of solo marimba music by Canadian composers, included nine works for marimba and electronics, six of which were published.¹⁶ Donkersgoed's annotations included program notes from the composer, if available. His method for analyzing the technical difficulties of a work were based on criteria established in John Rausch's dissertation "Four-mallet Technique and its use in Selected Examples of Training and Performance Literature for Solo Marimba."

Similar to the database of PQDT, a search of Répertoire International de Littérature Musicale (RILM) Music Abstracts was conducted on January 1, 2013.

¹⁵ Christina F. Wilkes, "A Performer's Guide to the Marimba Music of Daniel McCarthy," (DMA diss., University of Arizona, 1996, in ProQuest Dissertations and Theses, <https://libproxy.uncg.edu/login?url=http://search.proquest.com/docview/304305284?accountid=14604>) (accessed January 1, 2013), 27-58.

¹⁶ Jeffrey J. Donkersgoed, "An Annotated Bibliography of Solo Marimba Music by Canadian Composers, 1981-2006," (MA thesis, University of Victoria, 2007, in ProQuest Dissertations and Theses, <https://libproxy.uncg.edu/login?url=http://search.proquest.com/docview/304806265?accountid=14604>) (accessed January 1, 2013), 43-51.

Search of the RILM database returned only one result, Robert Esler's symposium paper on the preparation and realization of Philippe Boesman's "Daydreams" for marimba and electronics.¹⁷

Summary

Prior to this study, academic analysis of works for marimba and electronics was limited to discussions of marimba and percussion music in a wholly different context. Studies from Jeffrey Donkersgoed and Christina Wilkes contained an oblique discussion of works for marimba and electronics. Donkersgoed's annotated bibliography of Canadian marimba music contained a section on music for marimba and electronics from Canadian composers. Wilkes' dissertation on Daniel McCarthy's marimba music contained an in-depth analysis of his composition "Rimbasly." Yi-Chia Chen's dissertation contained a listing of works for marimba and electronics performed in the United States through 2010. The works in Chen's study were identified by title, composer, date, and type of electronics. Chen presented no other information regarding the ninety compositions she identified.

¹⁷ Robert Esler, "Re-realizing Philippe Boesmans' *Daydreams*: A performative approach to live electro-acoustic music," (paper presented at the annual meeting of the International Computer Music Association, Miami, FL, 2004).

CHAPTER III

DEVELOPMENT OF THE ANNOTATION ENTRY

Two annotated guides of marimba literature were influential in developing the annotation format and categories for this study:

1. M. Christine Conklin, "An Annotated Catalog of Published Marimba Concertos in the United States from 1940-2000" (DMA diss., University of Oklahoma, 2004).
2. Jeffrey J. Donkersgoed, "An Annotated Bibliography of Solo Marimba Music by Canadian Composers, 1981-2006" (MA thesis, University of Victoria, 2007).

M. Christine Conklin's dissertation contains premiere information, range of instrument required, anecdotes and background, and technical and musical challenges.¹⁸ The details on technical and musical challenges, such as identifying the required four-mallet stroke types as set forth in Leigh Howard Stevens' *Method of Movement*, would be particularly useful for a performer.¹⁹ The prose-style format makes it difficult to quickly discern information within each entry; the research, however, represents a valuable and important contribution to the study of marimba literature.

¹⁸ M. Christine Conklin, "An Annotated Catalog of Published Marimba Concertos in the United States from 1940-2000," (DMA diss., University of Oklahoma, 2004, in ProQuest Dissertations and Theses, <https://libproxy.uncg.edu/login?url=http://search.proquest.com/libproxy.uncg.edu/docview/305139852?accountid=14604>) (accessed December 18, 2012)

¹⁹ Leigh Howard Stevens, "Method of Movement for Marimba: with 590 Exercises," (New York, Marimba Productions, 1979), 24-37.

Jeffrey Donkersgoed's annotation format delineates information into clear, easily identifiable components allowing access to essential information.

Donkersgoed stated the purpose of his study was to "increase the research on and performance of Canadian marimba music both nationally and internationally since many of the annotated works are virtually unknown."²⁰

Donkersgoed utilized John Rausch's method of rating technical difficulties within a work.²¹ Rausch's method provided Donkersgoed a uniform approach to analyzing technical components of the works in terms of lateral movement and movement between the upper and lower manuals of the marimba.

Donkersgoed's annotations do not contain information identifying the stroke types required to perform a work or addressing specific performance issues.

The annotations for this study were based upon the strengths of Conklin's and Donkersgoed's formatting. As in Donkersgoed's bibliography, each entry in this study was categorized into identifiable components with a specific, predetermined position within the annotation to facilitate access. Within the organized layout of the annotation, prose-style entries, in the manner of Conklin's bibliography, were included to detail technical and musical challenges of each work.

²⁰ Donkersgoed, 1.

²¹ Ibid., 14.

The Annotation Entry

Each entry includes information gathered from the score, the website of the publisher, composer, or Percussive Arts Society, recordings or WorldCat, as necessary to document the fields established for the bibliography. The annotations follow the format established in Figure 1.

<p>Composer</p> <p>Title (Date)</p> <p><u>PUBLISHER:</u></p> <p><u>RECORDINGS:</u></p> <p><u>RANGE:</u></p> <p><u>DURATION:</u></p> <p><u>MOVEMENTS:</u></p> <p><u>TYPE OF ACCOMPANIMENT:</u></p> <p><u>ACCOMPANIMENT OVERVIEW:</u></p> <p><u>TECHNIQUE OVERVIEW:</u></p> <p><u>MUSICAL OVERVIEW:</u></p> <p><u>COMPOSER'S/PUBLISHER'S NOTE:</u></p>
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Figure 1. Bibliography entry annotation format

The following explanations of specific annotation fields are provided to indicate the type of information or method for determining information included within a field:

The **date** is the date of composition, if known. If the actual composition date is not known, the copyright date included in the score was used.

The performer, album title, and record label were identified for commercially available **recordings**.

The **range** of marimba necessary to perform the work was identified. Considering C⁴ as middle-C, range was labeled as: 4.0 octave (C³-C⁷); 4.3 octave (A²-C⁷); 4.5 octave (F²-C⁷); 4.6 octave (E²-C⁷); or 5.0 octave (C²-C⁷).

The **duration** of the work taken from an indication in the score or available from the composer's or publisher's website, or an approximation based on available recordings.

The **type of accompaniment**, whether fixed electronics, electronic effects, live electronics, or controller, was indicated. Each of these types is defined as follows:

Fixed = A set accompaniment which may be played back and is always the same, called a "tape part" in reference to the magnetic tapes used by composers.

Electronic effects = Application of simple effects, such as delay and looping, to a live sound.

Live electronics = Altering a live sound through the application of effects, such as transposition, manipulation of the sound envelope. Live electronics also refer to sounds created at the moment of performance.

Controller = Utilizes a MIDI mallet controller or MalletKAT.

The text of **accompaniment overview** described sounds and/or effects used, flexibility of the electronics in relation to the performer, special equipment needed for performance, and identification of specific challenges.

The text of **technique overview** identified four-mallet stroke types contained in the work, difficulty of the playing mechanics, and specific challenges. The following abbreviations were used:

SI = single independent. A stroke made by a single mallet in a hand. May refer to either the inside or outside mallet in a hand.

SIA = single independent alternating. Single-independent strokes played between a player's hands (hand-to-hand).

DV = double vertical. Both mallets within a hand strike at the same time utilizing a single wrist motion.

DL = double lateral. Both mallets within a hand strike successively utilizing a single wrist motion.

The information in **musical overview** delineated the role of performer and electronics. Also, specific challenges such as balance between the two parts or mallet selection were identified.

Composer's/Publisher's note contained program notes or performance notes identified by the composer or publisher. This entry was included only if it provided helpful information not contained in the previous sections.

The composer, title, and publisher fields were completed from the score. The date field was completed from the score, publisher's or composer's website, or the Percussive Arts Society's databases. The indicated duration was based on the composer's or publisher's website or a commercially available recording. The

range of instrument needed was identified from score analysis. The type of electronics were indicated based on materials included with the score. An overview was prepared based on score analysis and listening to the electronics or utilizing the electronic processes to gain an understanding of their function and relationship to the marimba writing. Finally, required performance techniques were identified and areas of technical and musical challenges discerned. At any point where a particular mallet position required identification, such as discussion of mallet selection, the numbers 1-4 correspond with mallets from left to right as shown in Figure 2.

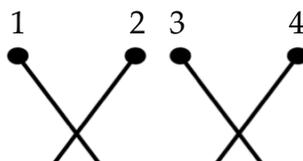


Figure 2. Mallet position identification

CHAPTER IV
THE ANNOTATED BIBLIOGRAPHY

The following annotated bibliography contains thirty-five entries. The works are listed alphabetically by composer last name. Three appendices to the bibliography index the works by title, date, and duration.

Charles Argersinger

Celestial Dances (1993)

PUBLISHER: Music for Percussion

RECORDINGS: None

RANGE: 4.3 octaves

DURATION: 5:40

MOVEMENTS: Single movement

TYPE OF ACCOMPANIMENT: Fixed

ACCOMPANIMENT OVERVIEW: Synthesized sounds. The tape contains rhythmic sounds written within the time signatures, but it also departs from the constraints of the time signatures within certain sections. The sounds may provide a groove for the marimba in one moment and then suddenly be free of any association with the beat. Some free sections occur congruently with the marimba, others occur while the marimba must stay in time. The accompaniment is supplied on an audiocassette. The audiocassette is comprised of two tracks,

one containing a click for the performer and the other with the accompaniment. The performer must use headphones for the click track.

TECHNIQUE OVERVIEW: SI, SIA, DV, and DL. The use of DL strokes are limited. Hand-to-hand single-line writing and double-vertical strokes dominate the technical requirements. There are no large leaps and the hands remain close together. Two brief roll sections are included in the work. The performer is also required to bend pitches on the marimba and bow a high D crotale.

MUSICAL OVERVIEW: The composition utilizes contrasting approaches to musical concepts throughout. Some sections of the work are highly structured while others contain minimal rhythmic and harmonic language. Rhythmic passages vary between standard subdivisions and tuplet or syncopated figures that obscure the beat. Several passages involve a melodic line quickly trading between the two parts. The performer must be rhythmically accurate. The sound of the marimba and tape should be equally balanced; the marimba occasionally rises out of the texture.

Paul Bissell

Hangar 84 (1998)

PUBLISHER: Go Fish Music

RECORDINGS: Janis Potter's album *Marimba Tracks* (Jump Recordings)

RANGE: 5.0 octaves

DURATION: 10:00

MOVEMENTS: Single movement

TYPE OF ACCOMPANIMENT: Fixed

ACCOMPANIMENT OVERVIEW: Synthesized sounds. Although the accompaniment is fixed, the composition is designed to allow some flexibility in interpretation. Bissell indicates moments where the performer may play out of time or repeat figures and, conversely, where strict time is needed.

TECHNIQUE OVERVIEW: SI, SIA, DV, and DL. The writing relies on several repetitive stickings. Some intricate, but quite idiomatic, four-mallet stickings make the single-line writing very straightforward. An octave interval within one hand is prominent. The writing is accessible, containing no large leaps or sudden shifts and the hands remain close together.

MUSICAL OVERVIEW: The marimba and tape seem to work best as a compliment to one another. There are few moments when one takes the attention from the other. The writing makes use of the entire range of the instrument and extreme dynamic range. Four matched medium-hard mallets (or exchange one medium mallet in the 1 position) are suggested.

Paul Bissell

The Alabados Song (2001)

PUBLISHER: Go Fish Music

RECORDINGS: None

RANGE: 5.0 octaves

DURATION: 10:15

MOVEMENTS: Single movement

TYPE OF ACCOMPANIMENT: Fixed

ACCOMPANIMENT OVERVIEW: Synthesized and sampled sounds. The opening chorale section of the work is free and Bissell indicates timings to keep the performer moving along with the tape. Occasional cues through this section must align with the tape. The remainder of the work requires synchronicity with the tape.

TECHNIQUE OVERVIEW: SI, SIA, DV, and DL. The writing utilizes repetitive stickings. Some single-line writing is present, but the technique is focused predominately on hand-to-hand. Although requiring independent striking motions between hands simultaneously, the writing remains accessible. Octave-interval within one hand is prominent. Some small-interval one-handed rolls required. Isolated moments

MUSICAL OVERVIEW: The marimba acts as a soloist accompanied by the tape for most of the work. The tape part also contains a pre-recorded voice at several moments during which the marimba assumes a secondary role. The melodic material is always presented clearly. The scoring makes use of a strong sense of tonality and harmony. The nature of the writing keeps the hands apart in different ranges of the instrument and, as such, a graduated set of mallets might be best employed: medium-soft in 1, medium in 2 and 3, and medium-hard in 4.

COMPOSER'S NOTE: The following text by Paul Bissell was taken from the score:

The title of this composition, *The Alabados Song*, stems from a fading tradition of Hispanic/Catholic communities in the southwest United

States. As families and entire villages moved in the early 1900s from Mexico and other South American countries into the United States, they created communities in America not serviced by a formal church or clergy due to their geographical isolation. For religious events these groups had to improvise their own ceremonies, including the ceremony of last rites for the dying. The group's elder males would gather at bedside and recite from the Book of the Alabados, an ancient text with Spanish origins once used to deliver news to remote villages. The book's prose was an odd mix of Catholic imagery, violent war stories and political gossip. The town elders would improvise melodies in a chanting manner over the bedside of the dying, using the book's text in place of a formal last rites ceremony.

The composition utilizes this idea of a backdrop for a fictitious musical story. The piece does not follow the literary action verbatim, but uses this story as a catalyst for the composition itself. There are two narrators in this version, the old woman, and the voice of the spirit of death. The narrative that the composition follows is: "Spirits enter a rural village to take the matriarch of a family away. They call her to get her to go willingly, but her thoughts of the present state are strong and she has too much fight left in her. She won't go as they ask. The spirits entice her with dance and reminders that her other loved ones have already gone into the beyond. She follows the spirits en route to heaven only to hear the voices of the chanting elders over her body. The wily old woman accommodates the spirits, playing and dancing with them, but as the spirits try to lead her away forever, she suddenly pulls herself back to reality. The spirits remind the woman that it is her time to die and slowly pull her towards them. In the end, tired and resigned from their calling, she leaves with the spirits for the other world."²²

Stephen Bull

Ball the Jack (1988)

PUBLISHER: Australian Music Centre

RECORDINGS: None

RANGE: 4.0 octaves

DURATION: 7:00

²² Paul Bissell, "The Alabados Song" (Corpus Christi, TX: Go Fish Music, 2001).

MOVEMENTS: Single movement

TYPE OF ACCOMPANIMENT: Fixed

ACCOMPANIMENT OVERVIEW: Drum machine and recorded bass guitar are the only sounds in the accompaniment. The background track is repetitive and layered, and it is dynamically static.

TECHNIQUE OVERVIEW: The DV is prominent in the writing. There is minimal use of SI and SIA strokes. The writing is simple and focuses on hand-to-hand motions.

MUSICAL OVERVIEW: The work is written in the style of an instrumental popular song reflective of the 1980s. The tape is always secondary to the performer. The work employs mixed meter, utilizing $\frac{3}{8}$ $\frac{5}{8}$ $\frac{7}{8}$ and $\frac{3}{4}$ mostly. In the middle of the work, twenty bars are identified as improvisation upon a C ascending melodic minor scale without the seventh. There are no dynamic markings. The writing spans less than three octaves of the marimba. A matched set of four medium-hard or hard mallets is recommended.

Donald J. Chamberlin

Pixelation (1995)

PUBLISHER: JOMAR Press

RECORDINGS: James Moyer's album *Something Old, Something New* (Motera Nebula Records).

RANGE: 4.6 octaves

DURATION: 9:30

MOVEMENTS: Single movement

TYPE OF ACCOMPANIMENT: Fixed

ACCOMPANIMENT OVERVIEW: Synthesized sounds. It is difficult, at times, to hear bass lines that are often responsible for providing the performer the beat. Transition points are generally overlapped, one fades out as another is faded in, again making the beat difficult to sense. Performing this work requires synchronicity after the opening statement, which lasts a little longer than the first minute of the work.

TECHNIQUE OVERVIEW: SI, SIA, and DV. DL strokes may occur depending on individual player's approach to certain figures. The performer must make fast interval changes within four-note chordal writing. Although there are no large leaps and the hands remain close together, performance requires adapting to difficult sticking situations.

MUSICAL OVERVIEW: The harmonic movement is rapid throughout the work. There are no key signatures and an abundance of accidentals due to the shifting harmonies. The work relies on certain rhythmic motives to hold the composition together. Apart from the opening statement, the writing feels constantly speeding forward due to the active writing. The melodic and harmonic languages have a jazz-influence to them.

The tape supports the performer throughout the work. The composer recommends the following mallet selection: medium-hard mallets for the first section, hard mallets for the second section, and something between those two choices for the third. An additional recommendation would be to consider a

mallet with the same hardness to the first movement but that is slightly heavier to cut through the texture.

Nathan Daughtrey

Halcyon Deconstruction (2012)

PUBLISHER: C. Alan Publications

RECORDINGS: None

RANGE: 5.0 octaves

DURATION: 10:15

MOVEMENTS: Single movement

TYPE OF ACCOMPANIMENT: Fixed

ACCOMPANIMENT OVERVIEW: Contemporary software synthesized sounds.

The sounds are mostly imitative of actual percussion instruments reflecting the origin of this work for marimba and percussion quartet. Some portions of the tape sounds are also influenced by electronica / dance music. The opening section and cadenza allow the performer latitude in execution, with small cues to provide landmarks through time.

TECHNIQUE OVERVIEW: SI, SIA, DV, and DL. Frequent and extended use of an octave-interval within one hand. Stickings are idiomatic and often present themselves logically. The closing section following the cadenza is the most difficult portion of the writing and calls for careful execution of four-mallet sticking choices though remaining idiomatic.

MUSICAL OVERVIEW: The marimba is usually the more important voice, and the tape part supports and contributes well to the marimba. Though the tape is usually very clear, the beat can get lost in the section following the cadenza. A subwoofer is recommended for the usage of low frequencies. The performer must get used to the length of time in the free opening and cadenza. Mallet suggestions are indicated in the score and comprise of sets of four medium-soft and four medium-hard mallets. Using the indicated medium-soft mallets after the cadenza can lead to an inarticulate and muddy sound towards the end of the work. It is therefore suggested to switch to medium or medium-hard mallets in the two measures of rest following the cadenza.

COMPOSER'S NOTE: The following text by Nathan Daughtrey was taken from his website:

The phrase "Halcyon Days" refers to a period of peace and tranquility. It can also harken back to an earlier time that is remembered as idyllic, whether accurately or not. I researched the mythological origins of this phrase to gather more inspiration for the piece. According to Ovid's *Metamorphoses*, Alcyone was the daughter of Aeolus, King of the Winds, and the wife of Ceyx. Alcyone and Ceyx were very much in love and were never willingly apart. Ceyx decided he must make a long journey across the sea to consult the oracle of Apollo at Delphi. Knowing the danger of such a journey, Alcyone was overwhelmed with grief and terror and begged him not to go. Ceyx left anyway and died tragically in a shipwreck. The gods came to Alcyone in a dream and told her of her husband's death. Stricken with grief, she jumped into the sea, but the Gods took pity on her and before she could be overcome by the waves, she was transformed into a kingfisher (also called a halcyon). Ceyx was changed into a bird as well and their love was blessed for all time. In their honor, Zeus forbade the winds to blow for seven days prior to and seven days following the Winter Solstice so Alcyone & Ceyx could safely brood over their nests near the waters. Their tragic love story has given us the very word that means calm, contentment and happiness.

The music follows the arc of the story fairly closely and divides into six major sections. The melodic/harmonic material is derived from 4 chords/pitch sets that have only 4 pitches in common.²³

Udo Diegelmann

Pentaphase (1997)

PUBLISHER: Hubert Hoche Musikverlag

RECORDINGS: None

RANGE: 4.3 octaves

DURATION: 10:30

MOVEMENTS: Single movement in three sections

TYPE OF ACCOMPANIMENT: Fixed

ACCOMPANIMENT OVERVIEW: Synthesized marimba sounds. The performer or an additional person at a specified point within the work must trigger the tape. The performer must have a volume pedal to control the output of the tape. The first section contains marimba sounds that have been played at extremely tempos (the quarter note is at 800 beats per minute at times). The second section contains a repetitive and grounded pattern.

TECHNIQUE OVERVIEW: SI, SIA, DV, and DL. Writing utilizes repetitive and idiomatic stickings. The writing style is divided into two sections: linear passages and double vertical strokes in one hand with single-independent strokes in the

²³ Nathan Daughtrey, "Halcyon Deconstruction," <http://www.nathandaughtrey.com/halcyon-deconstruction> (accessed January 22, 2013).

other. There are no sudden interval changes or large leaps, and the hands remain close together.

MUSICAL OVERVIEW: The tape part is secondary to the marimba in the first section. In the second “Phase” section, the tape and marimba should be at the same level so as to highlight the phase effect, similar to Steve Reich’s phase music. The tape does not contribute melodically to the composition; rather, it is either functions as an accompaniment or as an ostinato.

Christos Hatzis

Fertility Rites (1997)

PUBLISHER: Promethean Editions Limited

RECORDINGS: Beverly Johnston's album *Garden of Delights* (Independent)

RANGE: 5.0 octaves

DURATION: 13:40

MOVEMENTS: Three untitled movements

TYPE OF ACCOMPANIMENT: Fixed

ACCOMPANIMENT OVERVIEW: Synthesized sounds and sampled sounds (marimba and Inuit throat singers) that have been electronically processed. Each movement of the work utilizes different sound choices with distinct expressive characteristics. The tonal language is tightly integrated with the marimba writing. The tape contains contemporary sounds using modern processing techniques. The work requires synchronicity throughout.

TECHNIQUE OVERVIEW: SI, SIA, DV, and DL. This is a demanding composition requiring strong technical abilities. Though the first two movements are moderately easy, the third movement far outweighs the demands called for to that point. The performer must be comfortable with intricate, single-line writing in addition to sections involving large jumps, space between hands, and independent writing. A strong grasp of various polyrhythms is also needed. The performer must have a strong kinesthetic sense of the marimba.

MUSICAL OVERVIEW: The tape and the marimba take on the leading role at different points and in some moments join together as a single voice. The first and third movements are easy to follow; however, the beginning of the second movement can be difficult to synchronize. Balance between the tape and marimba must be carefully monitored to effectively convey moments that utilize the tape to mimic live effect processing. The difference between soft and loud sound levels is extreme. A performer would benefit from applying a limiter or dynamic-range compression to the tape so the high levels are not as overwhelming when the softs are set as desired. A subwoofer is recommended for the usage of low frequencies. The music covers a broad pallet of style and emotion. The composer identifies the second movement as being “French-sounding” and the third as “tango-like.”²⁴

²⁴ Christos Hatzis, “Fertility Rites,” <http://homes.chass.utoronto.ca/~chatzis/Fertility.htm> (accessed January 24, 2013).

COMPOSER'S NOTE: The following text by Christos Hatzis was taken from his website:

The title of the work derives from the [Inuit] throat songs themselves. In one of our interviews in Iqaluit Keith and I learned that throat songs were originally a fertility ritual, a shamanistic mating call which the women performed while the men were out hunting. The *katajjaq* (vocal games) in this piece are used to evoke this primordial practice. . . . Sometimes what is being felt and what is being said are diametrically opposed, as in the first movement where the gentle, non-possessive music for the marimba and the dark, longing calls on the tape contradict each other. But by the end both inner and outer worlds merge into uninhibited abandon and celebration of sexuality and life.²⁵

Christos Hatzis

In the Fire of Conflict (2008)

PUBLISHER: Promethean Editions Limited

RECORDINGS: None

RANGE: 5.0 octaves

DURATION: 10:15

MOVEMENTS: I. Rescue Me

II. I Call Your Name

TYPE OF ACCOMPANIMENT: Fixed

ACCOMPANIMENT OVERVIEW: Synthesized and sampled sounds including performance of a rapper. The tape contains contemporary sounds using modern processing techniques. The work requires synchronicity throughout. Surround sound tracks are included in addition to stereo tracks.

²⁵ Hatzis, "Fertility Rites."

TECHNIQUE OVERVIEW: SI, SIA, DV, and DL. The interval within the mallets of a hand ranges between a second and sixth. The writing does not require fast interval changes. The hands remain close together for most of the work. The writing does not require great independence between the hands. There are no large leaps.

MUSICAL OVERVIEW: While the marimba is active throughout the work, the rapper's performance on the tape is to be treated as the soloist. The work opens on crotales with an extended rhythmic passage. The marimba constantly weaves around the rapper, the melody often influenced by the spoken text. Both movements are rhythmically active, span the entire range of the instrument, and require fortissimo and louder playing in the upper register of the marimba. A matched set of medium or medium-hard mallets, preferably heavy, are recommended.

COMPOSER'S NOTE: The following text by Christos Hatzis was taken from his website:

I was becoming very concerned with the rise of gun violence in recent years in Toronto, my home city, but also with the constant rise of violence around the world in either organized conflicts, such as war, or spontaneous eruptions, exacerbated no doubt by food shortages, global warming and demographic explosion particularly in areas where daily survival is most difficult, and by the diminishing hope among the majority of people alive today that our current way of life can continue in its present form indefinitely.

Although my own spiritual focus has always been on the incoming Aquarian eon, expected to be an eon of peace and spiritual enlightenment, I am also aware of the fact that we are still in the closing years of the Piscean age, the age of *enantiodromia* or conflict according to Carl Jung; that things will get worse before they get better...much worse; that there

will come a time soon when our faith in God will be the only life vest that will protect us from drowning spiritually in the vast sea of hopelessness that surrounds us already. This is the story I wanted to tell through this work, but I wanted to say it not from the vantage point of spiritual certainty, but from the impenetrable darkness of someone struggling to stay afloat amidst this sea of hopelessness.²⁶

Vic Hoyland

Work-out for Marimba and KAT (1988)

PUBLISHER: Universal Edition

RECORDINGS: None

RANGE: 4.3 octaves

DURATION: 8:00

MOVEMENTS: Single movement

TYPE OF ACCOMPANIMENT: Controller

ACCOMPANIMENT OVERVIEW: The MalletKAT is used to trigger short and long sound samples. A sustain and volume pedal are required for the MalletKAT. The sounds are not identified by name; as such, the performer has freedom to select the actual sound sample used. Examination of the score, however, reveals a close relationship between the marimba and controller—the musical line weaves between the two and often overlaps—that may make the selection of a similar sound a desirable choice.

²⁶ Christos Hatzis, "In the Fire of Conflict," <http://homes.chass.utoronto.ca/~chatzis/IntheFireofConflict.htm> (accessed January 24, 2013).

TECHNIQUE OVERVIEW: SI, SIA, DV, and DL. DL strokes occur rarely and only as a part of four-mallet, single-line sticking. Single-independent alternating strokes comprise the majority of strokes within the single-line style of writing. Block chords punctuate the rapid, single-line gestures. The performer must adapt to kinesthetic differences changing between the marimba and MalletKAT.

MUSICAL OVERVIEW: The marimba and MalletKAT are equally important. Writing for the instruments focuses on the creation of single line. Four matched medium-hard mallets (or exchange one medium mallet in the 1 position) are suggested to achieve the articulation necessary in the rapid passages.

Steve Kornicki

Tempo Distortion 4 (2007)

PUBLISHER: Media Press, Inc.

RECORDINGS: None

RANGE: 4.3 octaves

DURATION: 5:50

MOVEMENTS: Single movement

TYPE OF ACCOMPANIMENT: Fixed

ACCOMPANIMENT OVERVIEW: Sampled marimba sounds that have been digitally processed. The tape and performer should be synchronized throughout.

TECHNIQUE OVERVIEW: May be performed with two mallets. The writing consists of alternating hand-to-hand and doubling (repeating a stroke with the

same mallet). There are no fast changes and stickings are repetitive. Intervals between the two hands range from a second through a ninth.

MUSICAL OVERVIEW: The marimba part is a set of thirteen repeating patterns, the patterns slow down toward the middle of the work and then speed back up to the end. Each pattern progresses from mp to ff to mp. The tape and marimba parts are made to overlap, the two sounds become a blur of tempo and texture. Two hard or medium-hard mallets may be used and would blend well with the sampled marimba sounds on the tape.

Gary Kulesha

Angels (1983)

PUBLISHER: Counterpoint Music Library Services

RECORDINGS: Beverly Johnson's album *Impact* (Centrediscs)

RANGE: 4.5 octaves

DURATION: 11:00

MOVEMENTS: I. Fallen Angels

II. Heavenly Angels

TYPE OF ACCOMPANIMENT: Fixed

ACCOMPANIMENT OVERVIEW: Synthesized and sampled sounds in addition to the recorded speech of multiple people. The synthesized sounds are intended to mimic sampled, live sounds. Each section of the work utilizes different sound choices with distinct expressive characteristics. The work allows flexibility in performance.

TECHNIQUE OVERVIEW: SI, SIA, DV, and DL. Four-mallet block chords and single-line writing dominate the composition. The hands are kept close together and there are very few leaps. There are rapid, single-line passages. A rolled section within the marimba solo in the first movement requires the performer to execute rhythmic material underneath a roll. The difficulty in that particular passage is the smooth rejoining of the left hand to the roll sustained in the right.

MUSICAL OVERVIEW: The tape and the marimba take on the leading role at different points and in some moments join together as a single voice. The composer indicates for very specific mallet choices throughout the work. For the composition to retain the intended effect, the mallet indications should be followed precisely. The tape is in two sections; the second section is triggered following a marimba solo. The solo section allows the performer freedom in interpretation. During the tape sections, the marimba and tape are loosely synchronized.

Alcides Lanza

diastemas [2005-I] (2005)

PUBLISHER: Shelan

RECORDINGS: Catherine Meunier's album *Night Chill* (Centrediscs)

RANGE: 4.3 octaves

DURATION: 9:15

MOVEMENTS: Single movement

TYPE OF ACCOMPANIMENT: Fixed

ACCOMPANIMENT OVERVIEW: Sampled percussion sounds that have been digitally processed. The tape and performer should relatively synchronize, no specifically unison moments occur. The tape consists of gestural sounds on marimba, crotales, temple blocks, drums, and bells.

TECHNIQUE OVERVIEW: SI, SIA, DV, and DL. Both hands extensively use the interval of a major ninth through the entire range of the marimba. The performer is allowed adequate time to comfortably execute large leaps. At times, there is a large space between the hands. The technical demands of playing are outweighed by the demands of reading the notation.

MUSICAL OVERVIEW: The work requires incidental percussion: temple blocks, three wood blocks, a log drum, and bamboo wind chimes. Elements of graphic notation combine with standard staff notation. The notation is also a mixture of proportional and time notation, with markers indicating 15-second intervals. The score contains a page of symbols and text as instructions. The work as a whole does not have a tonal center. Each repeated cell contains harmonic material that binds it as a unit, but from one to the next may be drastically different. Though the music is quite specifically notated, the freedom of interpretation due to the proportional system gives a sense of improvisation. A set of two-tone mallets is best suited to achieve not only the vast dynamic range but their core can be activated to provide clarity on the percussion instruments. The core sound in the louder dynamics will also help push the marimba above the texture of the tape.

COMPOSER'S NOTE: The following text by Alcides Lanza was taken from the score:

Diastema [Gr. Interval, from 'diasté': to stand apart]. In Biology, it refers to the modified protoplasm at the equator of a cell, which exists previous to the mitotic division of the cell. Musicological studies in Iberoamerica make references to certain medieval music styles as "música diastemática". This music style, able to notate the intervallic distances with more precision, came after the notation with 'neumas'. Established around the Vth C. [fifth century], neumatic notation was able to specify the exact number of notes in a melody, but was rather imprecise in terms of pitch and intervals, as well as rhythm.²⁷

Christien Ledroit

Night Chill (2004)

PUBLISHER: Canadian Music Centre

RECORDINGS: Catherine Meunier's album *Night Chill* (Centrediscs)

RANGE: 5.0 octaves

DURATION: 11:00

MOVEMENTS: Single movement

TYPE OF ACCOMPANIMENT: Fixed

ACCOMPANIMENT OVERVIEW: Synthesized sounds and sampled sounds with effects processing. The sounds explore various textures and timbres, a similar approach to the marimba writing. The tape contains contemporary sounds using modern processing techniques. The tape functions in several ways and may expand on the sound of the marimba, imitate or antagonize the marimba, or provide a backdrop for the marimba.

TECHNIQUE OVERVIEW: SI, SIA, DV, and DL. There is mostly a single-line style approach to the marimba part coupled with four-mallet block chords,

²⁷ Alcides Lanza, "diastemas [2005-I]" (Montreal, Quebec: Shelan, 2005).

which keeps the hands close together. Two brief passages require the performer to have a large spread between the hands and execute two independent lines.

MUSICAL OVERVIEW: The tape and marimba are equally important. The parts interact quite freely with each other. Timings are included in the score to provide a general alignment to the parts, but the work does not require the two to maintain a perfect alignment. Even within active rhythmic sections, the performer is free to keep a general synchronicity with the tape, following along to harmonic changes. The performer is free to repeat, improvise, and delete material as they follow the tape.

David Little

Modi-fications (1990)

PUBLISHER: Donemus Publishing

RECORDINGS: None

RANGE: 4.6 octaves

DURATION: 14:45

MOVEMENTS: Single movement

TYPE OF ACCOMPANIMENT: Fixed

ACCOMPANIMENT OVERVIEW: Synthesized sounds and sampled percussion and marimba sound with effects applied. The tape begins with random beeps of pitches and long periods of silence before an ostinato pattern develops around fifty seconds into the work. This pattern continues for almost two more minutes. From the end of the opening improvised section through the end of the work, the

tape and performer are rhythmically and texturally intertwined. The tape contains contemporary sounds using modern processing techniques. The tape interacts with the marimba, often sounding like live effects.

TECHNIQUE OVERVIEW: SI, SIA, DV, and DL. The performer must execute basic polyrhythms between hands. Occasionally the polyrhythms occur within two mallets of the same hand. The work requires large leaps and large space between hands. DV strokes range from seconds through octaves in both hands.

MUSICAL OVERVIEW: The first two and half minutes of the work is improvised, beginning with three pitches in the middle octave of the marimba and gradually expanding to include twenty-two pitches spanning the range of the instrument. After complete randomness from the marimba and tape, a sudden descending passage requires the marimba and tape to synchronize. The difficulty lies in catching the tempo, as there is no beat in the tape to aid the performer. The following section combines marimba rolls with sweeping, sustained tones in the tape. From the rolled section to the end, the tape provides a beat for the performer; however, the beat can be difficult to discern at times. The sound of the marimba and tape should blend into one instrument. A subwoofer is recommended. The score indicates and calls for soft mallets, hard mallets, and two-tone mallets. These suggestions should be followed.

Daniel McCarthy

Rimbasy (1989)

PUBLISHER: C. Alan Publications

RECORDINGS: Michael Burritt's album *Shadowchasers* (Truemedial Jazzworks)

RANGE: 4.6 octaves

DURATION: 9:15

MOVEMENTS: Single movement

TYPE OF ACCOMPANIMENT: Fixed

ACCOMPANIMENT OVERVIEW: Synthesized sounds. Sustained tones in the tape often support fast, sweeping single-line phrases in the marimba. The majority of the accompaniment is rhythmically active and interplays with the marimba requiring precise synchronization.

TECHNIQUE OVERVIEW: SI, SIA, DV, and DL. Compositional techniques include small interval one-handed rolls and intricate single-line writing. The writing is difficult at times yet remains idiomatic. Sticking suggestions throughout the score are generally sensible and provide a solid framework. The performer must be comfortable with complete independence between the hands.

MUSICAL OVERVIEW: The work is harmonically diverse, stemming from jazz-influenced harmonies, and rhythmically exciting. Some moments are free and improvisatory while others feel pulled straight out of rock music. The first, third, and the latter half of the second section contain rapidly moving lines covering the entire range of the instrument, a matching set of hard mallets is preferred. A brief chorale benefits from a switch to soft mallets in the middle section. The marimba often pushes to the foreground of the texture.

Daniel McCarthy

WarHammer (1999)

PUBLISHER: C. Alan Publications

RECORDINGS: Nathan Daughtrey's album *Spiral Passages* (C. Alan Publications)

RANGE: 5.0 octaves

DURATION: 8:00

MOVEMENTS: Single movement

TYPE OF ACCOMPANIMENT: Fixed

ACCOMPANIMENT OVERVIEW: Synthesized sounds. The majority of the accompaniment is rhythmically active and interplays with the marimba requiring precise synchronization.

TECHNIQUE OVERVIEW: SI, SIA, DV, and DL. Extensive use of intricate four-mallet stickings. The writing is difficult at times yet remains idiomatic. One-handed rolls are required.

MUSICAL OVERVIEW: The marimba and tape part are meant to seem as one. The work is harmonically diverse, stemming from jazz-influenced harmonies. Overall it has greater forward momentum than McCarthy's *Rimbasly* from the driving-rhythm infused melody. Recurring motives help unify the work. A matched set of mallets works best for the four-mallet stickings covering the entire range of the instrument. Though the writing is rhythmically intense and often pushes into fortissimo, the extensive use of the lower register should put the preference into a heavy mallet capable of articulation and full tone with less velocity to minimize the risk of damaging the bars.

Thomas McKenney

C:M (2006)

PUBLISHER: C. Alan Publications

RECORDINGS: None

RANGE: 4.5 octaves

DURATION: 6:30

MOVEMENTS: Single movement

TYPE OF ACCOMPANIMENT: Fixed

ACCOMPANIMENT OVERVIEW: Synthesized sounds, specifically frequency modulation. The tape is not interactive as much as it embellishes the marimba and, at times, supplies an underlying beat.

TECHNIQUE OVERVIEW: SI, SIA, DV, and DL. DL strokes occur rarely and only as a part of four-mallet, single-line sticking. Single-independent alternating strokes comprise the majority of strokes. The writing utilizes patterns and repetitious sticking choices and is very idiomatic. A ninth is required in the right hand, but the interval is in the upper two octaves and easily playable. Some passages include octaves. A majority of the writing is for sixths or less.

MUSICAL OVERVIEW: The tape functions as a backdrop for the marimba, providing a continuo background for rhythmically slower marimba writing, interjecting in rests, or adding emphasis to notes in the marimba. The tape can be difficult to follow especially realigning after periods of silence. Sections of the tape containing sounds with contrasting timbres occasionally make discerning the beat difficult. The music is based on two complimentary hexachords and

relies on harmonic sound instead of a melody. Sections reappear as motivic devices. A matching set of medium-hard mallets is recommended.

Dary John Mizelle

Polytempus II (1979)

PUBLISHER: Mizelle Music

RECORDINGS: On the album *New Percussion Music*, work performed by Charles Wood (Lumina Records) [Vinyl recording. No longer in print.]

RANGE: 4.0 octaves

DURATION: 8:45

MOVEMENTS: Single movement

TYPE OF ACCOMPANIMENT: Fixed

ACCOMPANIMENT OVERVIEW: Synthesized sounds, specifically FM and additive synthesis. Two separate tracks are provided, one with clicks and one without. These tracks must be aligned and played at the same time. The click track must be sent to headphones for the performer. Each line of the tape has a different timbre and separate tuning system that is meant to differentiate it from another. Each line is also at a different tempo than the others and changes often. The accompaniment is completely notated in the score.

TECHNIQUE OVERVIEW: SI, SIA, DV, and DL. Intricate four-mallet stickings are required. Demands fast changes in intervals and positioning. Complete independence of hands is required. The writing includes extensive use of

polyrhythms. There are large jumps and occasionally a large space between the hands.

MUSICAL OVERVIEW: The marimba is extremely active throughout the work, full of rapidly sweeping lines up and down the instrument. The marimba must remain in perfect synchronicity with the click track; however, the marimba part does not temporally align with the sounds on the tape. Two brief sections of the work may be performed *rubato* but within the time the tape allows. In addition to the individual tempos of each element (hence the composition's title) occurring simultaneously, the writing is polytonal and comprised of six different tuning systems. Due to the extreme rhythmic demands, and considering the writing makes predominate use of the upper three octaves, a matched set of medium-hard mallets is recommended.

João Pedro Oliveira

Liquid Bars (Lâminas Líquidas) (2008)

PUBLISHER: Keyboard Percussion Publications

RECORDINGS: None

RANGE: 4.3 octaves

DURATION: 11:45

MOVEMENTS: Single movement

TYPE OF ACCOMPANIMENT: Fixed

ACCOMPANIMENT OVERVIEW: Synthesized and sampled sounds. The writing requires moments of synchronization within a relatively free

environment. The tape is not a timekeeper or present simply as a background to the marimba, rather it functions as a collaborator in the music. The tape contains contemporary sounds using modern processing techniques.

TECHNIQUE OVERVIEW: SI, SIA, DV, and DL. Rapid, four-mallet, single-line stickings are required, including passages with large intervallic leaps. Although the work is technically difficult, the rhythmic difficulties and timekeeping present larger challenges to the performer than the techniques involved. The performer must have a strong kinesthetic sense of the marimba.

MUSICAL OVERVIEW: The tape and marimba should sound as one instrument. The tape often mimics live effects processing of the marimba. Although the work has an improvisatory feel and does incorporate proportional notion, time cues and length of durations must be followed when notated to effectively communicate the musical intentions. The articulations, rapid lines, and dynamic range of the marimba writing is best combined with the tape by using a matched set of hard mallets. The marimba notation is standard, with a few special figures explained in the preface to the score. Sounds on the tape may trigger events in the marimba, or the marimba may trigger events in the tape. Confidence in performance is key to successfully portraying the latter.

Sumi Otoemon-ayahiro

Length of Variable Echo (2002)

PUBLISHER: HoneyRock Publications

RECORDINGS: Nanae Mimura's album *Marimba Spiritual* (Sony Music Japan)

RANGE: 5.0 octaves

DURATION: 8:45

MOVEMENTS: Single movement

TYPE OF ACCOMPANIMENT: Fixed

ACCOMPANIMENT OVERVIEW: Synthesized and sampled sounds under effect processing. The operation of the accompaniment requires a second person. Activation of the soundscape program opens a web browser window. Within the browser window, several buttons are presented. The operator must follow along with the score and activate each button at the indicated point to change to soundscape. The soundscape is continuous and provides a noise background for the marimba.

TECHNIQUE OVERVIEW: SI, SIA, DV, and DL. Complete independence of the hands is required. Large space between the hands and one-handed rolls are included. Intervals in one hand vary from seconds to octaves and change often. The composition utilizes a rhythmically active writing style. The key signatures and mallet positions increase the technical challenge of performing the work. Bowing the bars is required for the first section.

MUSICAL OVERVIEW: The soundscape is always secondary to the marimba. The composition is divided into seven sections. Most of the sections are based upon a continuous triplet rhythm introduced in the second section. The composition changes key areas frequently but each section is deeply rooted in particular harmonies. The writing takes advantage of the resonant space of the

marimba. Within rhythmic activity, repetition of notes creates a written out resonance.

COMPOSER'S NOTE: The following text by Sumi Otoemon-ayahiro was taken from the score:

It was on a night of a lunar eclipse in Japan when I was asked to commission a piece by Ms. [Nanae] Mimura. As we were talking on the phone, I looked up at the moon, which was the source of inspiration for colors of various sounds, a structure and ideas for soundscape [sic]. The key structure of the entire piece is governed by the "moon." To perform this piece, the player is to recreate the image of a lunar eclipse by [sic] sounds.²⁸

Iván Patachich

Metamorphosi I (1978)

PUBLISHER: Editio Musica

RECORDINGS: On the album *Contemporary Hungarian Percussion Music*, work performed by Gábor Kósa (Hungaroton) [Re-released on CD from original vinyl album].

RANGE: 4.3 octaves

DURATION: 8:30

MOVEMENTS: Single movement

TYPE OF ACCOMPANIMENT: Fixed

ACCOMPANIMENT OVERVIEW: The performer creates the tape part. Part 1 of the score is recorded and altered according to very specific and detailed

²⁸ Sumi Otoemon-ayahiro, "Length of Variable Echo" (Everett, PA: HoneyRock, 2002).

instructions contained in the score. The resulting recording of the altered sound is played back while the performer plays Part 2. The hardware originally required to produce the tape part included: Moog 3/C synthesizer; Sound/M ringmodulator; Studer A/80 8-band tape recorder; STM/210 tape recorder; PKP/13 stereo mixer; WSW mixer; Studer J/37 1-inch 4-band quadrophonic tape recorder; and EMR/140 Rev. disc. Knowledge of these devices coupled with the directions might allow a performer to create a tape part with modern computer software.

TECHNIQUE OVERVIEW: SI, SIA, and DV. Stroke types are static for long durations of time. No rapid changes in technique are required. The writing contains occasional double stops, but centers around block chords and single-line writing. The writing is idiomatic and techniques easily accessible.

MUSICAL OVERVIEW: The marimba writing makes use of the low and middle register of the marimba. A set of matched medium or medium-hard mallets could be used. Most of Part 2 requires only two mallets, and pauses allow time to switch between four and two mallets should the performer choose to do so. The live part and the tape part are tightly integrated. Highly rhythmic and synchronized sections are interspersed with freer moments. The work is comprised of five sections, each with a different method of altering the sound in the pre-recorded part. Only the third section requires the two parts to be strictly aligned rhythmically. Although the original realization of the composition lasted 8' 43", the work can be made shorter or longer depending on the musical decisions of the performer.

John Psathas**One Study One Summary (2008)**

PUBLISHER: Promethean Editions Limited

RECORDINGS: Pedro Carneiro's album *Ukiyo* (Rattle Records)

RANGE: 5.0 octaves

DURATION: 12:30

MOVEMENTS: I. Etude

II. Summary

TYPE OF ACCOMPANIMENT: Fixed

ACCOMPANIMENT OVERVIEW: Synthesized sounds and sampled percussion sounds. The tape sounds have a heavy electronica / dance music influence, especially in the first movement. The second movement has a more subdued quality in the first half before entering a breakbeat section. The tape is as active as the marimba writing and helps to accent the important aspects of the marimba line, as well as interacting with the marimba. Two versions of the accompaniment exist: one with the junk percussion sampled into the track and a second without the percussion if it is performed live with the marimba.

TECHNIQUE OVERVIEW: SI, SIA, DV, and DL. This composition presents many technical difficulties including fast interval changes, difficult four-mallet stickings, and large leaps. The constant stream of notes requires the performer to address complicated sticking patterns and issues with body positioning and mallet placement. The melodic line out of a dense, moving texture. When

performed with the junk percussion, the work becomes even more difficult as maneuvering to reach the percussion instruments in front of the marimba.

MUSICAL OVERVIEW: The writing for marimba is in the manner of a *moto perpetuo*, the melodic line being incorporated into a continuous stream of notes. Both movements are heavily influenced by electronic dance music and contain sounds and rhythmic characteristics of several of its subgenres. The marimba and tape should have a tightly integrated sound. A subwoofer is recommended to adequately reproduce the extensive low-frequency sounds in the tape. The first movement contains very fast rhythmic elements across the range of the instrument and requires clarity from a set of hard mallets. A softer mallet may be used in the bass; however, the mallet 1 position must be involved in complicated stickings necessitating only a slight difference between it and the other mallets. Although the second movement is rhythmically active, a blur of harmony is desired and the score calls for a set of super-soft and soft mallets.

Stephen Rush

Nature's Course (1995)

PUBLISHER: C. Alan Publications

RECORDINGS: On the album *Murders in the Rue Morgue: The Music of Stephen Rush*, work performed by Nick Petrella (MMC Recordings)

RANGE: 4.6 octaves

DURATION: 11:15

MOVEMENTS: I. Winds

II. Breezes

III. Furies

TYPE OF ACCOMPANIMENT: Fixed

ACCOMPANIMENT OVERVIEW: Synthesized sounds. Each movement has a distinct sonic identity. The first movement explores sustained sounds and has a haunting quality. Movement two has less direct elements of wind sounds and the tape takes on a darker tone. This movement combines sustained tones and rhythmic activity. The third movement is also free of wind sounds and has an underlying drum groove.

TECHNIQUE OVERVIEW: SI, SIA, DV, and DL. One-handed rolls required.

Very few double-vertical strokes and the interval changes occur at slow rates.

Most of the composition focuses on single-line writing. Stickings are idiomatic.

MUSICAL OVERVIEW: The marimba and tape are in unison for the second and third movements. The first movement allows freedom from precise timing. In all movements the two components generally act as one. Low frequencies would benefit from a subwoofer in performance. Each movement is stylistically different from the others and draws heavily on the movement's title. "Winds" employs short, ascending figures. The movement is very free and the marimba and tape rarely play in unison. The range focuses on the low and middle of the marimba. A matching set of medium-soft mallets is recommended; however, if those mallets were too inarticulate in the few louder, upper register moments, medium mallets would suffice.

“Breezes” is metered and full of flowing, moving lines and rolls. This movement focuses on the middle range of the marimba. Though the writing is much more animated than the first, the style requires smooth phrasing and movement between notes. Medium mallets are recommended.

“Furies” indicates a heavy rock groove. The first half of the movement is in $\frac{10}{8}$ and the second half in $\frac{6}{8}$. This movement is rhythmically more active than the first two. The performer must scream loudly at one point. A matched set of hard mallets would be appropriate. Due to some of the low-register playing in this movement, a depth of sound from a softer mallet in position 1 is a desirable alternative to a fully matched set. The writing easily allows for the 1 mallet to only be utilized on the lower notes.

COMPOSER’S NOTE: The following text by Stephen Rush was taken from the score:

Instead of addressing the noisy aspects of Nature (birds, rain, thunder, etc.) it began to deal with the process of Nature. Both the random chaos and the eternal order of things began to reveal themselves in this work, and the process of composition as well as the syntax of the work began to be affected by Nature. Being a somewhat public believer in Taoist and Zen principles, I let things go there way with me, letting “nature take it’s [sic] course.” I quit fighting the temptation to correct myself: for instance, to avoid dissonance in the second movement, or to avoid the connotative drive of the third movement. I also found the presence of Wind as a sound resource entering the electronic portion of the work. Wind has been long on my mind, if you will. The “Tao” can be translated as wind, as well as some translations of the name of the Holy Spirit in the Bible. Further, the Wind is the most wistful of Nature’s properties, having no aspects of human engineering or control whatsoever (one could not say this about

Fire, Earth or even Rain). Hence the titles of the movements evolved entirely around names for Wind.²⁹

Allan Schindler

Precipice (2011)

PUBLISHER: Keyboard Percussion Publications

RECORDINGS: Nathaniel Bartlett's album *Precipice* (Albany Records)

RANGE: 5.0 octaves

DURATION: 18:00

MOVEMENTS: Single movement

TYPE OF ACCOMPANIMENT: Fixed

ACCOMPANIMENT OVERVIEW: Synthesized sounds and sampled sounds with effects processing. The sounds explore various textures and timbres, a similar approach to the marimba writing. The tape contains contemporary sounds using modern processing techniques. The tape functions in several ways and may expand on the sound of the marimba, imitate or antagonize the marimba, or provide a backdrop for the marimba.

Playback is available for a stereo system. The preferred playback, however, is a four-channel system with subwoofer. The accompaniment is divided into six sections. The performer must trigger each cue at specific moments indicated in the score. The software for controlling the sound cues is included with the score. A foot pedal is required for initiating the files.

²⁹ Stephen Rush, "Nature's Course" (Greensboro, NC: C. Alan Publications, 1995).

TECHNIQUE OVERVIEW: SI, SIA, DV, and DL. There are quick, large leaps, and the performer must be comfortable with large space between the hands. The work requires one-handed rolls in both hands at various large and small intervals. A glossary explains the notation of other performance effects, such as dampening, dead strokes, playing with the shaft of the mallet, and playing on specific parts of the bar.

MUSICAL OVERVIEW: The tape and marimba are equally important. The writing for the marimba is largely gestural. The performer is required to make musical lines out of short melodic fragments and incorporates silent space. Musical time through the work is indicated in length of time and not standard time signatures. Extended roll sections call for specific types and speeds of rolls to create various textures. Overall, the work explores the textures possible on a marimba. Part of exploring those textures is mallet selection and, as such, every performer must choose what expresses their interpretation of the notation.

Grigory Smirnov

Mirrors of Emptiness (2008)

PUBLISHER: Edition Svitzer

RECORDINGS: Jia Jia Qiao's album *The Alchemist* (Edition Svitzer)

RANGE: 5.0 octaves

DURATION: 15:00

MOVEMENTS: Single movement

TYPE OF ACCOMPANIMENT: Electronic effects

ACCOMPANIMENT OVERVIEW: The effects require a delay pedal or computer software capable of this effect. The output of the delay device must be able to send consecutive iterations of the delay to opposite channels (i.e. The delay sound should “bounce” from right to left). A microphone(s) must be positioned to capture the sound of the marimba.

TECHNIQUE OVERVIEW: SI, SIA, and DV. Intervals are slow to change and there are no large leaps. Single-independent linear passages and hand-to-hand double-vertical strokes are the most common technical elements. The indicated tempo may change technically easy passages into challenging ones, especially during series of double-vertical strokes.

MUSICAL OVERVIEW: The delay sound must support and not overpower the marimba. Tempo control is extremely important in this work as effectiveness of the effects relies on the marimba synchronizing with the delay. The work centers on the A above the treble staff, utilizing this pitch to begin and end the work. Most of the writing takes place on the natural manual of the marimba. There are several sections differentiated by the rhythmic patterns and the texture they create. The rhythmic gesture opening the work recurs at several moments though expanded and embellished. Mallets that produce a clear tone in the upper register but suitable for the lower are needed. The chosen mallets must be articulate at soft dynamics but not brittle or harsh above fortissimo.

Christopher Swist**Variations on the Housatonic (2007)**

PUBLISHER: Edition Svitzer

RECORDINGS: None

RANGE: 5.0 octaves

DURATION: 14:00

MOVEMENTS: Single movement

TYPE OF ACCOMPANIMENT: Fixed

ACCOMPANIMENT OVERVIEW: The tape contains sampled sounds that have been heavily processed. The sounds utilized are recorded nature sounds. The processing of the sounds makes them largely indistinguishable as nature sounds. The tape is in two parts to be triggered at different moments in the work. Because the tape must be triggered during the performance, the player must have another person to play back the sounds or may utilize a controller device (such as a foot pedal) to trigger the sound.

TECHNIQUE OVERVIEW: SI, SIA, DV, and DL. The theme and first variation require six-mallet technique. The six-mallet writing requires independent movement of the mallets in the hand and the ability to change intervals easily though in small degrees. The four-mallet writing is conventional and involves mostly hand-to-hand writing. There are no large leaps and the hands remain at close to moderate distances from each other.

MUSICAL OVERVIEW: A theme and seven variations, with the theme occurring at the end of the work. The marimba is solo for the first variation. The first tape

cue is triggered and takes place during variations 2-4. Marimba is solo for variations 5 and 6. The tape performs the seventh variation alone before the marimba performs the theme. The first tape cue serves as a soundscape for the marimba, and the marimba should be heard over the tape. Each variation has a texture and feel, which clearly defines one variation from the next.

COMPOSER'S NOTE:

Having spent 10 years now living in New England it is only natural that at some point I would construct a "New England" piece. With references to the Housatonic River, Charles Ives and recorded samples from Connecticut, this variation set embodies much that is regional. The theme of this set is a partial quotation of the texture in the piano accompaniment to the Charles Ives song "The Housatonic at Stockbridge." In more deference to Ives, the seven variations are heard first with the theme being reserved for the end of the piece. This was a common technique in the music of Ives called cumulative form.

Attila Szilvási

Individual Lemming (2010)

PUBLISHER: Promethean Editions Limited

RECORDINGS: None

RANGE: 4.3 octaves

DURATION: 8:00

MOVEMENTS: Single movement

TYPE OF ACCOMPANIMENT: Fixed

ACCOMPANIMENT OVERVIEW: Synthesized sounds. The tape contains contemporary sounds using modern processing techniques. The sounds are influenced by non-dance style electronica. The tape fills space and supports the

marimba through its use of low frequency and bass sounds. Some moments may be difficult to align with the tape; however, a split track recording with a click in one channel and the tape in the other is provided for performance if needed.

TECHNIQUE OVERVIEW: SI, SIA, DV, and DL. The writing mostly relies upon single-line writing style and hand-to-hand figures. The writing is very idiomatic and presents few sticking challenges. Intervals are mostly a fifth or smaller with no fast changes. Suggested stickings in the score are logical. There are a few large leaps and moderate space between the hands.

MUSICAL OVERVIEW: The marimba plays a more important role than the tape. The tape presents background material for the marimba playing a melody line. Accompaniment also serves as a timekeeper for most of the work. Occasionally the tape part is in unison with the marimba. Performance requires the marimba to be in synch with the tape. There is no specific key signature, the work progresses through many tonal centers. The harmony is traditional and the rhythmic elements are straightforward. Much of the work focuses on playing within an established groove.

COMPOSER'S NOTE: The following text by Attila Szilvási was taken from the score:

The Norwegian Lemming is a rodent mammal, native in North Scandinavia. This small gopher-like creature has the peculiar habit of gathering in groups and looking for new territory every 3 or 4 years when they overpopulate a certain place and there is a lack of food. During this migration they face several natural obstacles, some of them die and sometimes they throw themselves into the sea without sense in large numbers. That gave rise to the legend of lemmings committing mass suicide.

However one of my generation's first associations about the Lemmings is one of the most popular computer games of the 90's, the Lemmings. In this game, different from the original example, some lemmings helped the group to achieve their goals. But still this didn't make them look different from the others. At that time during the game I used to think about whether they really all the same inward? [sic] There might exist among them an Individual Lemming...³⁰

Ben Wahlund

Crystal Butterfly (2002)

PUBLISHER: HoneyRock Publications

RECORDINGS: None

RANGE: 4.3 octaves

DURATION: 6:45

MOVEMENTS: Single movement

TYPE OF ACCOMPANIMENT: Fixed

ACCOMPANIMENT OVERVIEW: Synthesized sounds, sampled marimba, and pre-recorded speech. The tape provides a backing rhythm section and mostly avoids melodic and harmonic material.

TECHNIQUE OVERVIEW: SI, SIA, DV, and DL. The work predominately focuses on DV strokes. DL strokes are seldom used. Within phrases, intervals remain fairly static. The hands work together and seldom require complete independence.

MUSICAL OVERVIEW: The marimba and tape remain synchronized throughout. The tape is secondary to the marimba and provides a very clear

³⁰ Attila Szilvási, "Individual Lemming" (Copenhagen: Edition Svitzer, 2010).

accompaniment that is easy to follow. The music is influenced by popular music styles and contains traditional and accessible harmonies. Rhythmically interesting while remaining in the scope of less advanced players. Most players would prefer a matched set of medium-hard mallets to provide clarity to the rhythms at the required tempo. The sound quality of the 1 mallet position, however, benefits from being a slightly softer mallet than the others.

COMPOSER'S NOTE: The following text by Ben Wahlund was taken from the score:

In the spring of 2001, my brother visited me and we went on a walk in the woods. Being the avid photographer that he is, Tom was stopping for pictures with every step. He paused, slowly motioned toward a leaf on which the most radiant silver-blue butterfly had perched, and quickly snapped a shot. The butterfly gracefully and effortlessly flew away, glistening with every turn in the light-filled sky. I was mesmerized for the rest of our visit at what a beautiful moment he had been able to capture in what seemed like one effortless action and I recognized that in many ways his study of photography ran parallel to my study of music. So I set out to capture in sound what it was that Tom saw in that butterfly – that beauty of flight summed into one brilliant, joyful moment.³¹

Mark Waldrep

Morphism IV (1987)

PUBLISHER: Leisure Planet Music

RECORDINGS: None

RANGE: 4.3 octaves

DURATION: 11:00

MOVEMENTS: Two untitled movements

³¹ Ben Wahlund, "Crystal Butterfly" (Everett, PA: HoneyRock, 2002).

TYPE OF ACCOMPANIMENT: Fixed and controller

ACCOMPANIMENT OVERVIEW: The writing for MalletKAT controller does not indicate specific sounds for the performer to use. A sustain and volume pedal are required for the MalletKAT. A complex computer part may be performed in one of three ways, either 1) realtime computer sequencer controlling an array of MIDI sound modules, 2) a pre-recorded tape of the computer parts created by the performer, or 3) a realization supplied on a CD with the score. The composer calls for computer parts 1 and 3 to be percussive and of contrasting timbres and part 2 to be sustained sounds. The score, however, makes no indicating as to which part notes belong. The performer must use their judgment in creating their own realization of the computer portion and may gain some insight by listening to the composer's realization. The MalletKAT part may be performed on marimba according to the composer; however, the actual range of the MalletKAT part goes below the 5.0-octave range of a marimba.

TECHNIQUE OVERVIEW: SI, SIA, and DV. There writing is largely single-line and makes occasional use of double-vertical strokes, only twenty-three times in the lengthy span of music. The stickings are fast and complex, and the performer must adapt to kinesthetic differences changing between the marimba and MalletKAT. The work requires large and sudden leaps, and the performer must be comfortable with large space between the hands. If performing only on marimba, not all of the MalletKAT parts are easily adapted and the performer will have to make decisions in how to handle the sustained pitches.

MUSICAL OVERVIEW: The marimba and computer (or tape) are equally important. Four matched medium-hard mallets (or exchange one medium mallet in the 1 position) are suggested. The performer and the electronics must be strictly synchronized as several sections are performed in unison. The performer is allowed freedom in determining the exact tempo of the first movement, the range ♩ = 96-120 is indicated, if creating their own realization. The work is rhythmically dense and complicated. Though composition does not appear to rely on clear harmonic progressions and is not necessarily tonal, but long phrases are usually contain a pitch center.

Michael Waldrop

Marimbascap (2006)

PUBLISHER: drop6 media

RECORDINGS: None

RANGE: 5.0 octaves [includes *ossia* for smaller instruments]

DURATION: 11:15

MOVEMENTS: I. Parables

II. Delineations

TYPE OF ACCOMPANIMENT: Fixed

ACCOMPANIMENT OVERVIEW: Synthesized and sampled sounds. Both movements have similar sounds: synth drums and long-tone synth pads.

Playback requires outputting the accompaniment to two channels: left channel

with a click track for the performer and right channel with the tape part for speaker output. Headphones must be used for performance.

TECHNIQUE OVERVIEW: SI, SIA, and DV. Each movement focuses on a particular technique. The first movement focuses primarily on hand-to-hand double vertical strokes. The intervals are mostly fourths and fifths. The second movement incorporates the three stroke types in a more uniform manner and the opening focuses on octaves. The composition uses repetitive and idiomatic stickings, making it ideal as an etude-style work.

MUSICAL OVERVIEW: Both movements follow a similar structure: active opening that establishes a groove with drum accompaniment, a rolled middle section with long-tone synths, and a return to the opening material. The tape should be secondary to the marimba. The marimba and tape remain in sync throughout. Accessible work with a small set of technical requirements makes it ideal for a developing player. A matched set of medium-hard mallets will provide clarity to the sound of the first movement. That mallet selection makes a compromise between the clarity needed for the upper register while achieving a full sound from the middle and low register. The second movement uses the middle and low register of the instrument and a matched set of medium mallets are appropriate.

Martin Wesley-Smith

For marimba and tape (1983)

PUBLISHER: Australian Music Centre

RECORDINGS: Synergy Percussion's self-titled album, work performed by Rebecca Lagos (Vox Australias)

RANGE: 4.0 octaves

DURATION: 11:00

MOVEMENTS: Single movement

TYPE OF ACCOMPANIMENT: Fixed

ACCOMPANIMENT OVERVIEW: Synthesized sounds and sampled marimba produced on a Fairlight Computer Musical Instrument. The extremely active tape part is less a timekeeper and more another performer.

TECHNIQUE OVERVIEW: This work may be performed with two mallets.

Although the composition is for two mallets, the performer is faced with many sticking challenges. Many of the figures contain large leaps and are not idiomatic.

MUSICAL OVERVIEW: Rhythmically complex and often changes meters including $\frac{5}{16}$ $\frac{7}{16}$ $\frac{3}{8}$ in addition to more common simple duple meters. The tape is treated as a soloist and has extended sequences playing without the marimba.

The score contains few cues; the performer must listen to a performance track provided with the tape part to learn how the tape and marimba interact.

Performance requires strict synchronicity. The meter changes and busy part make realigning to the tape extremely difficult if separation occurs. Hard mallets recommended and rubber or latex may be preferable.

Nigel Westlake**Fabian Theory (1987)**

PUBLISHER: Rimshot Music Australia

RECORDINGS: Synergy Percussion's self-titled album, work performed by Michael Askill (Vox Australias)

RANGE: 4.3 octaves

DURATION: 5:40

MOVEMENTS: Single movement

TYPE OF ACCOMPANIMENT: Electronic effects

ACCOMPANIMENT OVERVIEW: The effects require delay and loop pedals or computer software capable to these effects. A microphone(s) must be positioned to capture the sound of the marimba. The three toms used in the work should not be captured and included in the effects. Because of the specific requirements for the delay timing, all tempo indications must be strictly followed.

TECHNIQUE OVERVIEW: SI, SIA, and DV. The writing utilizes single-line stickings that are very idiomatic. The majority of writing alternates from hand-to-hand with either double verticals or single-independent figures. The score includes *ossia* for an extended section utilizing five mallets. The work does not contain large leaps and the hands remain close together.

MUSICAL OVERVIEW: The accents and playful, rhythmic writing in combination with the delay effect results in a bubbling and energetic sound. Tempo control is extremely important in this work as effectiveness of the effects relies on the marimba synchronizing with the delay. To aid in clarity of the

texture created by the marimba and the delayed sound, articulate mallets must be used throughout. These mallets are also important for playing three toms, which are also part of the setup. A matched set of hard mallets is desired. Rubber or latex mallets are preferable as they aid in clarity and produce a “bouncy” sound, which may be desired stylistically.

Maurice Wright

Marimba Music (1981)

PUBLISHER: HoneyRock

RECORDINGS: None

RANGE: 4.3 octaves

DURATION: 8:45

MOVEMENTS: Single movement

TYPE OF ACCOMPANIMENT: Fixed

ACCOMPANIMENT OVERVIEW: Synthesized and pre-recorded sounds. The work requires strict synchronization due to the rhythmic interplay between the tape and marimba. The accompaniment alternates between sections of sustained tones rhythmic activity.

TECHNIQUE OVERVIEW: SI, SIA, and DV. DL may occur depending on individual player’s approach to certain figures. Switching between stroke types occurs quickly. The single-line writing is largely idiomatic with four-mallet stickings. The distance between the hands varies between close and moderate.

There are few large leaps and sections requiring complete independence between the hands.

MUSICAL OVERVIEW: The work is both harmonically and rhythmically diverse. The marimba and tape both play similar textures. A strong sense of time is necessary as there are periods of silence on the tape. The sections of tape with long tones can be difficult to follow. Changes in pitch indicated in the score during these sections are difficult to hear as cues. The marimba writing makes use of the low and middle register of the marimba. A set of matched medium or medium-hard mallets could be used but may lose some depth of tone in the rolled sections, especially in the lower register. The music may best be served with graduated set of mallets: an articulate bass mallet in 1, medium or medium-hard in 2 and 3, and mallet 4 should be slightly harder than the inner mallets.

CHAPTER V
SUMMARY, CONCLUSIONS, AND SUGGESTIONS
FOR FURTHER RESEARCH

Summary

Prior to this study, no study was undertaken with the explicit purpose of analyzing works for marimba and electronics. Yi-Chia Chen's 2011 dissertation compiled a list of works for marimba and electronics, both published and unpublished, containing the basic bibliographic material of each work. The purpose of this study was to create an annotated bibliography of works for solo marimba and electronics published from 1978-2012. For inclusion in this study, works met criteria established as follows: published and commercially available prior to January 1, 2013; supplied with both the score and accompaniment material; written for an individual performer; original composition for marimba; and marimba was the only keyboard percussion instrument. The incidental use of auxiliary percussion instruments did not disqualify a work for inclusion. A total of thirty-four works met the criteria set forth.

The information identified in each entry of the annotated bibliography included title, composer, publisher, range of marimba needed, duration of the work, number of movements, the type of accompaniment, and composer or publisher's notes. Entries in the bibliography were organized alphabetically by composer last name. Each entry contained overviews of the accompaniment and performance techniques, including four-mallet stroke types and difficulty, as

well as a musical overview, which covered such topics as specific challenges within the work or mallet selection.

Conclusions

Although not detailed and discussed specifically in the annotations, advances in electronic composition technologies have shaped the sonic possibilities and the general quality of the electronic components of the works. The electronics of earlier compositions in the bibliography, such as Wesley-Smith's "For marimba and tape" and Mizelle's "Polytempus II," were limited by the ability of devices available at the time and sound noticeably different from contemporary works, such as Hatzis' "Fertility Rites" and Schindler's "Precipice."

Changes in technology have also changed how we interact with electronics. Composers now have the ability to use electronics to create and manipulate sound in the moment of performance, far beyond creating accompaniments by patching cables on a synthesizer, recording to magnetic tape, and spending hours cutting and splicing tapes. Fixed compositions, unburdened by hardware synthesizers and tape, have advanced over the years due to the availability of personal computer technology and sound processing software. Modern computer software provides composers an unlimited numbers of tracks and layers. Composers also have access to an immense resource of already available sounds and effects and the means to create any ones they desire. These observations are not meant to undermine the validity of compositions created by

older methods but rather to highlight the relative ease of electronic creation available to today's composers.

Four forms of electronics—fixed, electronic effects, live electronics, and controller—have been utilized in compositions for marimba and electronics, but it is worth noting that no compositions in this bibliography used live electronics. The reason none of the works for marimba and live electronics have been published is unknown; however, one possible explanation is the complexity of performing these works. Publishers may not see commercial viability in producing works that require a person to have the peripherals necessary for performance. Another possible explanation may align with a general trend towards non-publication of works. Sixteen works for solo marimba and electronics were published from 2001 through 2010, but at least twenty-seven works remained unpublished in that same period, sixteen of which utilized live electronics.³² The availability of these unpublished works varies.

The performance of these works remains minimal compared to the repertoire available to modern marimbists. Most of these compositions are unknown to the general percussion community. The ProQuest Dissertation & Theses database contains seventy-nine dissertations and theses regarding marimba, five of those documents relate to marimba and electronics. Yi-Chia Chen's dissertation is the only one of those documents focusing specifically on works for marimba and electronics. The general obscurity of these works is a

³² These figures may not account for all works composed for marimba and electronics from 2001-2010. Forty-three compositions were documented in Yi-Chia Chen's dissertation as being written during that decade.

disservice to marimbists. These works have several qualities that should attract more attention from performers:

1. Provide a solo performer the experience of a chamber-music setting
2. Electronics have the capacity to expand the sound options available to the marimba
3. Perform music written by contemporary composers

Some percussionists and marimbists who advocate the marimba and electronics medium identify some works on a list on a website; however, identification of a composition on a list does not provide an individual information to generate any interest in the composition. This annotated bibliography was conceived to provide an overview of works for solo marimba and electronics readily available through publication in the hopes of generating new interest in the literature.

Suggestions for Further Research

This document provides a starting point for future research into music for marimba and electronics. As additional works are published in the future, a researcher may compile annotations similar to those contained in this study. Such research could continue to increase the exposure of these works to a wider audience. A more detailed formal, harmonic, or rhythmic analysis of these works could identify compositional trends for marimba and electroacoustic compositions; additionally, those analyses could trace changes and developments within the technical capabilities of marimbists.

A formal, harmonic, or rhythmic analysis might also be used to develop a performance guide for an individual composition. Performance guides could involve interviews with composers, commissioners, and premiere performers. Research into these people may explore the relationship between composers for and performers of marimba music, or between a specific composer and performer. Interviews could also lead to the availability of greater biographical information on contemporary composers and performers, including those who have and continue to shape the world of marimba performance. Interviewing composers and discussing how they wrote for the instrument and the process of learning about the instrument might also inspire additional composers to write for marimba.

Annotated guides are a useful means of providing information about a genre of works in an organized and comprehensible format. Other areas similar to marimba and electronics that could be annotated include electronics with vibraphone, timpani, snare drum, or multiple-percussion. Annotated literature guides, of any research focus, for solo marimba, vibraphone, timpani, snare drum, and multiple-percussion would be a welcomed and beneficial addition to the field of percussion performers, students, and educators.

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APPENDIX A

WORKS INDEXED ALPHABETICALLY BY TITLE

WORKS INDEXED ALPHABETICALLY BY TITLE

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35	Angels
23	Ball the Jack
43	C:M
19	Celestial Dances
60	Crystal Butterfly
36	diastemas [2005-I]
66	Fabian Theory
29	Fertility Rites
64	For marimba and tape
26	Halcyon Deconstruction
20	Hangar 84
31	In the Fire of Conflict
58	Individual Lemming
46	Length of Variable Echo
45	Liquid Bars (Lâminas Líquidas)
67	Marimba Music
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28	Pentaphase
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44	Polytempus II
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WORKS INDEXED CHRONOLOGICALLY BY DATE

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67	Marimba Music	1981
35	Angels	1983
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66	Fabian Theory	1987
61	Morphism IV	1987
23	Ball the Jack	1988
33	Work-out	1988
40	Rimbasly	1989
39	Modi-fications	1990
19	Celestial Dances	1993
51	Nature's Course	1995
24	Pixelation	1995
29	Fertility Rites	1997
28	Pentaphase	1997
20	Hangar 84	1998
44	Warhammer	1999
21	The Alabados Song	2001
60	Crystal Butterfly	2002
46	Length of Variable Echo	2002
38	Night Chill	2004
36	diastemas [2005-I]	2005
43	C:M	2006
63	Marimbascap	2006
34	Tempo Distortion #4	2007
57	Variations on the Housatonic	2007
31	In the Fire of Conflict	2008
45	Liquid Bars (Lâminas Líquidas)	2008
56	Mirrors of Emptiness	2008
50	One Study One Summary	2008
58	Individual Lemming	2010
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APPENDIX C

WORKS INDEXED CHRONOLOGICALLY BY DURATION

WORKS INDEXED CHRONOLOGICALLY BY DURATION

PAGE	TITLE	DURATION
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34	Tempo Distortion #4	5:50
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60	Crystal Butterfly	6:45
23	Ball the Jack	7:00
42	Warhammer	8:00
58	Individual Lemming	8:00
46	Length of Variable Echo	8:45
67	Marimba Music	8:45
44	Polytempus II	8:45
40	Rimbasly	9:15
38	Night Chill	9:15
36	diastemas [2005-I]	9:15
24	Pixelation	9:30
33	Work-out	10:00
20	Hangar 84	10:00
21	The Alabados Song	10:15
31	In the Fire of Conflict	10:15
26	Halcyon Deconstruction	10:15
61	Morphism IV	11:00
28	Pentaphase	11:00
51	Nature's Course	11:15
63	Marimbascap	11:15
45	Liquid Bars (Lâminas Líquidas)	11:45
48	Metamorfosi I	12:00
35	Angels	12:00
64	For marimba and tape	12:00
50	One Study One Summary	12:30
29	Fertility Rites	13:40
57	Variations on the Housatonic	14:00
39	Modi-fications	14:45
55	Mirrors of Emptiness	15:00
54	Precipice	18:00