

PRIMARY COMPOSITIONAL CHARACTERISTICS IN THE INSTRUMENTAL MUSIC
OF PAUL LANSKY AS DEMONSTRATED IN *HOP* (1993)

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This dissertation provides insight into the compositional characteristics of Paul Lansky's instrumental works as demonstrated in *Hop* (1993). As well, this document intends to make *Hop* more approachable to performers through a structural, harmonic, and rhythmic analysis.

This dissertation presents a brief overview of Lansky's biographical information, discusses background information about *Marimolin* (the ensemble that premiered the piece), and provides an analysis of *Hop*. *Hop* is analyzed with regard to form, harmony, and rhythm. The analysis was conducted through a tonal approach, and harmonies are identified with a lead sheet analysis. Personal interviews with Paul Lansky and marimbist Nancy Zeltsman provided significant insight into Lansky's influences, musical characteristics, as well as other elements pertaining to *Hop*.

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CHAPTER 1

INTRODUCTION

The acoustic compositions of Paul Lansky have attained a distinguished status over the past two decades in the realm of percussion ensemble literature, including music for violin and solo marimba. Lansky's brilliant concepts of instrumental orchestration include such beautiful combinations as tuned pipes and glockenspiel in his percussion quartet *Threads* (2005), which create an almost kaleidoscopic effect of tonalities. His 2001 composition, *Three Moves for Marimba*, demonstrates an aggressive style of writing for the instrument. Lastly, his composition *Hop* (1993), the focus of this dissertation, which is scored for marimba and violin, demonstrates his playful side of harmonic interaction.

Hop was Lansky's first opportunity to work with a percussionist in the preparation for the premiere of one of his acoustic compositions. World-renown marimbist Nancy Zeltsman provided Lansky with insightful suggestions concerning the technical and musical possibilities of her instrument. Zeltsman's ensemble Marimolin was helpful in guiding Lansky as he composed for the marimba and violin combination.¹ Nancy Zeltsman currently serves as chair of the percussion department at Boston Conservatory and is on faculty at the Berklee College of Music. She has been featured on eight, compact-disc recordings and has premiered works written for her by such notable composers as Gunther Schuller, Steven Mackey, as well as Michael Tilson Thomas, Music Director of the San Francisco Symphony.²

Currently, there are only four dissertations and/or scholarly writings that address the acoustic works of Lansky. This document intends to provide a new body of information about Lansky's compositional approach to acoustic music. Specifically, the document presents a

¹ Paul Lansky, interview by author, Princeton, NJ, August 1, 2010.

² Nancy Zeltsman, "Biography," Nancy Zeltsman, <http://www.nancyzeltsman.com/bio.htm> (accessed September 7, 2010).

structural, harmonic, and rhythmic analysis of *Hop* (1993), which will serve as a conduit for the discussion of Lansky's compositional characteristics in his acoustic works.

This dissertation draws and expand upon information contained in the dissertations of Denise Ondishko (*Six Fantasies on a Poem by Thomas Campion: Synthesis and Evolution of Paul Lansky's Music Compositions [with]; Rush*), Brandon Derfler (*Single-Voice Transformations: A Model for Parsimonious Voice Leading*), and Madelyn Byrne (*Speech-Based Computer Music Compositions: Selected Works by Charles Dodge and Paul Lansky*).

While serialism may seem a natural path to follow for analysis, as Lansky's strong familiarity with the processes involved from his work with George Perle, Lansky stated that the harmonies in *Hop*

fit with[in] the standard harmonic analysis. I compose by ear. There was no set used and I can see why I chose certain notes, but I can't tell you what they are doing there. It (referring to the first half of the piece) certainly centers around 'G.' The tonal analysis is the closest thing imagined that you could do with the piece.³

In the following pages, *Hop* has been analyzed with regard to form, harmony, and rhythm. Books by Nor Eddine Bahha and Robert Rawlings (*Jazzology*), Kostka/Payne (*Tonal Harmony*), Mark Levine (*The Jazz Theory Book*), and Nicolas Slonimsky (*Thesaurus of Scales and Melodic Patterns*) serve as the basis for the harmonic analysis. The analysis was conducted through a tonal approach and harmonies are identified with a "lead sheet" analysis⁴ as recommended by the composer.⁵

Lastly, interviews with Paul Lansky and marimbist Nancy Zeltsman provided significant insight into Lansky's influences, musical characteristics, as well as other elements pertaining to *Hop*. Transcripts of all interviews are provided in the appendices of the document.

³ Lansky, interview. See Appendix C.

⁴ Stefan Kostka and Dorothy Payne, *Tonal Harmony* (New York: McGraw-Hill, 2004), 484.

⁵ Lansky, interview. See Appendix C.

CHAPTER 2

PAUL LANSKY

Paul Lansky is the William Shubal Conant Professor of Music at Princeton University, where he teaches computer music, composition, and twentieth-century theory and analysis. A student of George Perle, Milton Babbitt, and Edward Cone,⁶ Lansky is best known for his computer music compositions involving non-real time processing of real-world sounds, which Lansky refers to as an “aural camera.”⁷ Lansky has received numerous awards, commissions, and grants for his compositions.

As a student at Princeton, Lansky began to experiment with diverging approaches to twelve-tone composition. These approaches, along with the inspiration of Princeton faculty member Milton Babbitt, led to an obsession with serialism. The influence of serialism and twelve-tone composition had long-lasting results on Lansky. One of the most positive outcomes was the significant collaboration with composer and theorist, George Perle. The duo, Lansky and Perle, worked together from 1969-1973, and allowed Lansky to assist Perle in a unique application of “twelve-tone tonality.”⁸ This process uses some of the fundamental concepts of the twelve-note system pioneered by Schoenberg, such as set and inversion, but employed basic kinds of hierarchical distinction found in tonal practice, such as the concept of a “key” as a primary point of reference. His system of “12-note tonality” is in simplest terms an attempt to create useful distinctions and differentiations in a twelve-tone context by defining functional

⁶ Paul Lansky, “Biography” Princeton Music Web Site. Received March 8, 2010, from http://www.princeton.edu/music/people/display_person.xml?netid=Paul&display=Faculty

⁷ Ibid.

⁸ Elliott Antokoletz, “Paul Lansky,” *Grove Music Online*. Received March 10, 2010, from http://libproxy.library.unt.edu:4493/subscriber/article/grove/music/42944?q=Paul+Lansky&search=quick&pos=1&_start=1#firsthit.

This system strives to create a hierarchy among intervals, as well as among larger collections of notes or “chords.” The main correlation of this system to the twelve-tone system is the use of an ordered linear progression, identical to a twelve-tone set. Gilbert Chase, *America's Music: From the Pilgrims to the Present* (Champaign: University of Illinois Press, 1992), 587.

characteristics of pitch-class collections.⁹ Ultimately, Lansky's artistic development led him away from experimenting with twelve-tone composition and abstract pitch-class relations, and into computer music composition.¹⁰

Lansky has been able to use computers to process "real world" sounds (speech, street noises, etc.). His first work using this process was *Six Fantasies on a Poem by Thomas Campion* (1978–9), a set of computer explorations on the sounds of speech and poetry. Lansky refers to this process of sampling real-world sounds as using an aural camera. However, in the next decade, some of his computer compositions began to employ a tonal-like syntax. Tonal relationships in these works serve as a foundation for sonic exploration in these compositions, rather than as an assertion of tonality as a structural principle.¹¹

Armed with his aural camera, Lansky "tries to make the ordinary seem extraordinary, the unmusical musical. Lansky tries to find implicit music in the world noise around us, stating that like photographs, "recordings of real-world sounds ... create a nostalgic ache in that they almost capture events which are, in reality, gone forever." The best example of such compositions with the "aural camera" perhaps is Lansky's 1990 composition *Table's Clear*, which, as per his own testimony, was created one evening after dinner in October, 1990, when his two sons, Jonah and Caleb (ages 14 and 9 at the time) took their kitchen apart, recording the sounds of everything they could find that would make noise, including themselves. Lansky ran the tape machine while his wife, Hannah, ran for cover. Lansky then transferred all the sounds to his computer, spent a few months working, and came up with the piece.¹²

While computer music works dominate Lansky's oeuvre, it is important to note

⁹ Paul Lansky, "George Perle," *Grove Music Online*.

¹⁰ Elliott Antokoletz, "Paul Lansky," *Grove Music Online*.

¹¹ *Grove Music Online* (2007-2010), s.v. "Paul Lansky."

¹² Taken from liner notes of Paul Lansky, *Homebrew*, Bridge Recordings, 1993, compact disc. [B000003GIT]

Lansky's continual return to instrumental music. The pieces he wrote for instruments have an identity of their own, different from his voice as a computer-music composer, even if the majority of them also employ electroacoustic media. One facet that makes these sporadic acoustic works significant is their nontraditional instrumentation as in, for example, *Serenade* (1978) for violin, viola, piano; *Values of Time* (1987) for string and woodwind quartet and computer-synthesized tape; and *Hop* (1993) for violin and marimba.

Since 1993, instrumental music composition has gradually become the focus for Lansky's compositional output. In a New York Times article published in 2010 Lansky states that he has said all he can with computer-music composition. At sixty-four years old, he is interested in composing only for live musicians. For Lansky, it feels like the "beginning of a [new] career."¹³ This turn involved a sharp change of compositional approaches for a composer who had established his identity through computer-music compositions, many of which were the result of his own music composition program, CMIX.¹⁴ While this shift to acoustic music composition is arriving late in life, Lansky is enjoying composing for live musicians, as well as hearing the enthusiastic response of an audience reacting to a performance of his work (s).¹⁵ Lansky's choice to focus on purely acoustic-music composition had its genesis from commissions by several performers in the 1990s, such as Nancy Zeltsman, marimbist, and David Starobin, guitarist.¹⁶ This shift has continued in the twenty-first century with several, significant premieres and commissions (Table 1).

¹³ Daniel Wakin, "A Computer-Music Man Unplugs," *The New York Times*, August 3, 2008. Received March 10, 2010: 1.

¹⁴ Denise Ondishko, "Six Fantasies on a Poem by Thomas Campion: Synthesis and Evolution of Paul Lansky's Music Compositions [with]; Rush," (Ph.D., The University of Rochester, 1990), 1.

¹⁵ Wakin, 2.

¹⁶ Wakin, 1.

Table 1. Paul Lansky's significant twenty-first century acoustic premiers and commissions

Composition Date	Title	Instrumentation	Premiering Ensemble/Commissioner
TBD	<i>Untitled</i>	Solo Vibraphone	Dr. Andrew Bliss
2008	<i>Idle Fancies</i>	Marimba with Small Percussion Set	Consortium
2008	<i>Comix Trips</i>	fl, ob, cl, bsn, perc, piano, vla, bass	Relache
2008	<i>With the Grain</i>	Guitar and Orchestra	David Starobin
2008	<i>Line and Shadow</i>	Small Orchestra	Riverside Symphonia
2007/2008	<i>Practical Preludes</i>	Guitar	Unavailable
2007	<i>Travel Diary</i>	Two Percussionists	Meehan/Perkins Duo
2006/2007	<i>Shapeshifters</i>	Two Pianos and Orchestra	Alabama Symphony
2006	<i>Pieces of Advice</i>	Horn and Piano	Bill Purvis and Mihae Lee
2006	<i>Songs of Parting</i>	Baritone, Perc, Guitar	Crazy Jane
2006/2007	<i>Sharp Songs</i>	SATB	Hobart and Smith Colleges
2005	<i>It All Adds Up</i>	Two Pianos	Quattro Mani, Lisa Moore
2005	<i>Threads</i>	Percussion Quartet	SO Percussion
2005	<i>Minor Alterations</i>	cl. gt, vln, bsn, drumset	Clogs
2005	<i>Ancient Echoes</i>	perc, vln, vck, vlar, piano, digital delay	Eighth Blackbird
2004	<i>Etudes and Parodies</i>	Horn, Vln, Piano	Princeton University
2004	<i>Ricecare Plus</i>	String Quartet	Brentano Quartet
2004	<i>A is For...</i>	clar, cl. Guit, vibes, vcl, piano, speaker	Bang on a Can Allstars
2003/2007	<i>Folk Tropes</i>	SATB	Synergy Singers
2002/2006	<i>Follow Me</i>	Electric Guitar Quartet	Unavailable

CHAPTER 3
HOP

Motivation for Composition

Hop was written for the violin and marimba duo, Marimolin, in the summer of 1993.¹⁷ It was presented as a gift to the duo as a result of the friendship between Lansky and marimbist Nancy Zeltsman. At the time, Zeltsman was married to Lansky's friend and colleague Steven Mackey.¹⁸ As stated previously, this was the first opportunity for Lansky to enjoy the benefits of receiving input from the performer who would premiere one of his compositions. The preparation for the premiere of *Hop* provided Lansky a welcomed opportunity to refine his idiomatic writing for the marimba through guidance from Zeltsman.¹⁹

Hop was Lansky's first entirely acoustic composition written for live performers in over fifteen years. Thus, *Hop* holds an important status in Lansky's oeuvre, as it is said to have inspired Lansky's subsequent preference for composing music for live performers instead of electronic music, something he had not envisioned since his *Serenade* (1978), for violin, viola, and piano. Since the completion of *Hop*, Lansky has composed twenty-eight acoustic compositions, nineteen computer/electronic music compositions, and three electroacoustic compositions.²⁰ The transition from no acoustic compositions for live performers in fifteen years, to the prevalence of composing for this idiom after the premiere of *Hop*, demonstrates that this piece played a prominent role in the shift in media for Lansky's subsequent compositions.

Hop was premiered by Marimolin duo at the Marimolin Huddersfield Festival in Huddersfield, England on November 25, 1993. The duo was founded in October 1985, in

¹⁷ Paul Lansky, "Hop," (Newton Centre: GunMar Music, 1994), program notes.

¹⁸ Nancy Zeltsman, interview by author, recording, July 29, 2010.

¹⁹ Ibid.

²⁰ Paul Lansky, "Compositions," Princeton Music Web Site, <http://www.music.princeton.edu/~paul/compositions.html> (accessed September 5, 2010).

Boston, MA, and performed together until 1996. It was composed of violinist Sharan Leventhal, and marimbist Nancy Zeltsman, who ambitiously pursued the commissioning of repertoire for their unique combination of instruments.²¹ In the eleven years during which they worked together (1985-1996), Marimolin premiered seventy-nine compositions, received grants and donations for over \$68,000 to commission new works for their instrumentation, and sponsored a composition contest that collectively gathered nearly 200 entries from around the world.²² The impact of the repertoire inspired by Marimolin is substantial, particularly in the percussion community.

Structure

In this section, I present a sample study of a portion of *Hop*. I first discuss the structure of the piece in general and propose a formal outline. Then I analyze the first two sections of the piece focusing on their principal characteristics: intervallic, rhythmic, and articulatory for the first section, and rhythmic and harmonic for the second one.

Hop does not follow a traditional structural format. It does not adhere to a structure typically associated with music found in the Baroque and Classical eras (e.g. sonata form, binary form, theme and variations, etc.). There are three main groups of sections (designated 1, 2, 3 in Table 2). The element of separation from Group 1 to 2 is the recurrence of the “A” section material in measure 63, now performed with fingertips by the marimbist. The change in tempo, rhythmic emphasis, and Lansky’s use of an authentic cadence separates Group 2 from 3.

In contrast to the traditional formatting of delineating sections according to harmony and thematic significance, my discussion of segments of *Hop* identifies phrases with similar interval

²¹ Lansky, “Hop,” program notes.

²² Nancy Zeltsman, “Biography,” Nancy Zeltsman, <http://www.nancyzeltsman.com/bio.htm> (accessed September 7, 2010).

and rhythmic qualities. For the purpose of this discussion, I will use traditional lettering to designate the various sections. The formal outline for *Hop* is as follows (Table 2).

Table 2. The formal structural outline of *Hop* (1993)

Group	Measure	Section
1	1-15	A
	15-30	B
	31-40	C (repeated)
	41-51	D
	52-62	E
2	63-84	A
	85-92	F
	93-97	A
	98-100	F
	101	D
	102-103	F
	104-105	D
	106-107	F
	108-111	D
3	112-133	G
	134-147	H
	148-158	G
	159-End	A

Analysis

The first group²³ of *Hop* includes sections A, B, C, D, and E, and introduces Lansky's unique approach to rhythm, rhythmic syncopation, and his use of jazz-influenced harmonies. Section A of *Hop* appears four times throughout the composition. The prevalence of this idea

²³ See Table 2 on p. 12.

acts as a unifying device for the piece. The A section is identifiable through two elements: (1) intervals with corresponding rhythm and (2) articulation. As well, they always start in unison.

Two intervallic figures are key to the identification of the A section: (1) ascending minor third, and (2) descending major seventh. Two sixteenth notes with a subsequent eighth-note rest appearing with the ascending minor third identify the first intervallic figure (Ex. 2a). Two eighth notes with a descending major seventh identify the second figure. Lansky is consistent with the duration of the eighth notes for the second figure (eighth-note), but inconsistent with the interval's rhythmic placement. By altering the rhythmic context for a similar motivic passage, Lansky allows the piece to breathe, dance, or even “hop” with more character. Example 2b shows the direct progression to the descending major seventh. Example 2c demonstrates an offbeat displacement of the eighths that creates a feeling of syncopation.

Example 2a. Paul Lansky, *Hop*. Meas. 1

Violin

Ascending
Minor Third

p pizz.

Marimba

p

Example 2b. Paul Lansky, *Hop*. Meas. 63

The musical score for Example 2b shows two staves: Violin and Marimba. The Violin staff is in treble clef and contains a short melodic phrase with a staccato articulation. Above the staff, two intervals are labeled: 'Ascending Minor Third' and 'Descending Major Seventh'. The dynamics are marked 'pp' and the instruction 'pizz.' is present. The Marimba staff is in bass clef and contains a similar short melodic phrase, also marked 'pp' and 'play with fingers'.

Example 2c. Paul Lansky, *Hop*. Mm. 3-4

The musical score for Example 2c shows two staves: Violin and Marimba. The Violin staff is in treble clef and contains a short melodic phrase with a staccato articulation. Above the staff, three annotations are present: 'Desc. M7', 'Asc. m3', and 'Syncopation'. The dynamics are marked '3' and '4'. The Marimba staff is in bass clef and contains a similar short melodic phrase, also marked '4'.

Short, staccato articulations are the strongest identifying element of the A section. The use of pizzicato in the violin, and the implementation of dead strokes and striking the marimba with fingers create the articulation identity for the A section. Pizzicato, for the violinist, is accomplished by playing the string with fingers instead of the bow. For the marimbist, dead strokes are an extended technique in which the performer is asked to leave the head of a mallet on the marimba bar after striking. Traditionally, a performer strikes the marimba bar with a mallet and quickly leaves the playing surface to produce a resonant tone. The use of a dead stroke is opposite in that it produces a short, dry sound. The combination of intervals, rhythm, and articulation, identifies the A sections of *Hop*.

The B section is more active in terms of both rhythm and harmony than its preceding section. In addition, it is more physically challenging to execute for the marimbist. The rhythmic content for the entire composition is solely comprised of duple, rhythmic subdivisions: quarter notes, eighth notes, and sixteenth notes (with various permutations). In the B section, we begin to witness the emergence of Lansky’s “playful study of the qualities of rhythm.”²⁴ He uses varying sixteenth-note syncopations in the marimba part to give the piece a “dance-like” appearance, as exemplified in the first three measures of this section (Ex. 3).

Example 3. Paul Lansky, *Hop*. Meas. 15-17

The image shows a musical score for two instruments: Violin and Marimba. The Violin part is written on a single staff in treble clef. It features a steady pulse of quarter notes, with some syncopation. The Marimba part is written on two staves (treble and bass clefs). It features a complex rhythmic pattern of sixteenth notes and eighth notes, with various syncopations. The measures are numbered 15, 16, and 17. The key signature has one flat (B-flat).

The persistent quarter notes in the violin part provide a steady pulse that allows the listener to hear and understand the “dancing” syncopations of the marimba part underneath. The use of jazz-influenced harmonies further underlines the dance feeling.

The addition of a lowered seventh tone to a chord, or rather a “seventh chord,” is a strong indicator of a jazz-influenced harmony. A seventh chord is the fundamental element of jazz harmony and is used as a basis in most jazz compositions. In comparison, classical music traditionally relies on triads.²⁵ For example, if we are in the key of F major and build a seventh

²⁴ Lansky, “Hop,” program notes.

²⁵ Nor Eddine Bahha and Robert Rawlins, *Jazzology: The Encyclopedia of Jazz Theory for All Musicians* (Milwaukee: Hal Leonard, 2005), 11.

chord on the on the fifth scale degree (C), we would obtain a C⁷ harmony or dominant seventh chord, C-E-G-B flat.²⁶ This chord, which is commonly employed in classical music as well, is used as a basis for jazz harmony, in which all triads are typically required to carry a seventh.²⁷ This harmony also is a compositional characteristic for *Hop*.

Another example of a traditional harmonic procedure that appears in jazz music as well is the use of chord suspensions and extensions. An extension occurs when a note is added to a chord to increase the “richness and dissonance with altering the function of the harmony.”²⁸ An example appears on the downbeat of measure 17 (see Ex. 3a). Here, Lansky presents the amalgamation of tones for a C^{9Sus4} chord, which consists of the following tones: C-E-F (suspended fourth)-G-B flat-D (ninth). The inclusion of the ninth is a common addition to seventh chords containing a suspension.²⁹

Example 3a. Paul Lansky, *Hop*. Meas. 15-17

The image shows a musical score for two instruments: Violin and Marimba. The score is divided into three measures, labeled 15, 16, and 17. Above the Violin staff, chord symbols are written for each measure: G, Eb, D7, C⁹Sus⁴, F[#]7, C⁹Sus⁴, A^b9, G^{Sus}4, and C⁶Sus⁴. The Violin part consists of eighth and quarter notes. The Marimba part consists of eighth and quarter notes, with some rests. The key signature has one flat (Bb).

²⁶ Ibid.

²⁷ Ibid.

²⁸ Bahha, *Jazzology*, 12.

²⁹ Bahha, *Jazzology*, 13.

A harmonic analysis of Example 3a discloses a prevalence of jazz harmonies (seventh chords, suspensions, extended harmonies). Please note the omission of mode identification (major, minor) for each of the labeled harmonies; I have done so because of the constant, modal dichotomy presented by Lansky. Throughout the remainder of *Hop*, these simultaneous presentations of major/minor harmonies or “split-third chords”³⁰ shifts are prevalent. Split-third chords represent a chord with a major and minor quality built on the same root,³¹ as demonstrated in mm. 15-16 (Ex. 3a) with the D⁷ harmony. Here we hear the tones that comprise a dominant-seventh chord in the key of D (D-F sharp-A-C) combined with the F-natural, thus presenting a combination of a D^{Maj7} with D^{m7}.³² This chord occurs again in measure 16, beat 4, where the A on the beat and the enharmonic B-flat (A-sharp) on the second sixteenth spells a F-sharp^{Maj7} harmony and a F-sharp^{m7} harmony. The influence of the split-third chord pervades the remainder of the composition. Often, the “transformed” notes³³ appear in extreme registers and, thus, create a more colorful harmony. Furthermore, the presentation of notes in extreme registers heightens the difficulty of the piece for the both performers, especially for the marimbist.

The subsequent section, C (along with B and following E sections), occurs only once on the score, but is twice repeated. The C section can be seen as a development of previous ideas. The most notable development is the switch to a shorter unit of basic rhythmic action. Here, both parts (violin and marimba) move into a “double-time” feel. The surface rhythm in the violin part doubles, and the marimba encounters its first linear, thirty-second notes.

In the “B” section, the violin was noted for its steady, pulsating, quarter-note emphasis,

³⁰ Kostka and Payne, *Tonal Harmony*, 485.

³¹ Ibid.

³² Maj=Major, m=minor. For further reference, please refer to Mark Levine, *The Jazz Theory Book* (Petaluma: Sher Music Co., 1995), ix.

³³ The term “transformed” delineates the altered identity of the third. For example, if the major third is initially presented, the minor third or “transformed” note subsequently follows.

while the “C” section has a double time/eighth-note emphasis (Ex. 4).

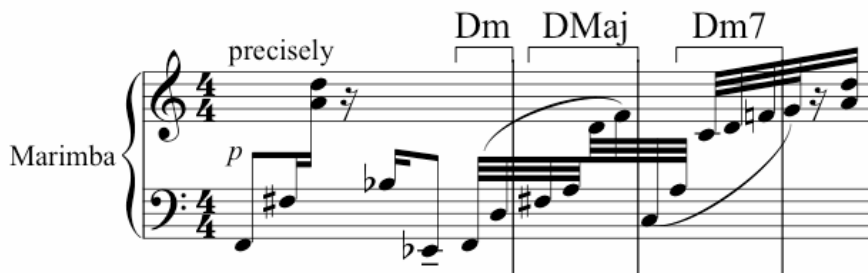
Example 4. Paul Lansky, *Hop*. Meas. 31



The purpose of the violin part remains as it did in the preceding section: to serve as a pulse for the syncopated marimba part.

As noted, the syncopations provide *Hop* with its “dancing” character. In this C section, Lansky has increased the difficulty of the syncopation by adding fast, linear thirty-second note passages to the marimba part (Ex. 4a).

Example 4a. Paul Lansky, *Hop*. Meas. 31

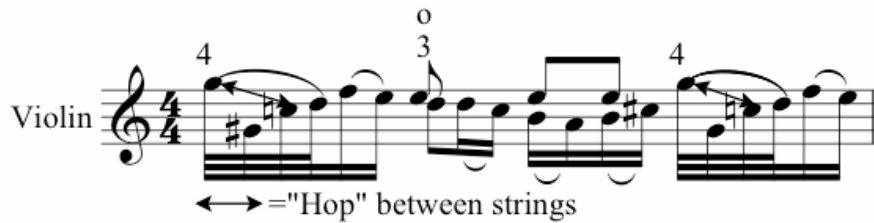


To ease in learning these fast passages, the marimbist must have a strong understanding of the harmonies presented. Beginning on beat 3, the marimbist alternates between the parallel minor and major forms of D. The progression moves from $D^m - D^{Maj} - D^{m7}$, with a final release on the note G. This modal dichotomy maintains as one of Lansky’s primary compositional characteristics throughout *Hop*.

The last point of interest in the C section is that the violinist is now required to hop. In

contrast to the marimbist whose hop was shifting his/her's physical stance, the violinist is required to quickly hop between strings with fourth finger. This is shown in example 5.

Example 5. Paul Lansky, *Hop*. Meas. 37



Like the prevalent dichotomy of modes, the hop is another primary compositional characteristic of *Hop*. This continues in the “D” section as well, where both instrumentalists must hop to perform large interval leaps.

The “D” section has an impulsive change of character from its surrounding “C” and “E” sections. After the tapering of the end of the “C” phrase to a soft *piano* dynamic, we suddenly encounter a syncopated, *forte*, accented dyad in the low range of the marimba that begins an unsettling flow of events for the listener. To perform in the lower register (C^2-C^3)³⁴ of the marimba at a loud dynamic (*forte*) produces a harsh tone.³⁵ If you supplement this with the syncopated vertical sonorities, there is a stark contrast to the more flowing, linear sections of the preceding and subsequent sections.

The most unsettling facet of the “D” section perhaps is the back of the parts. The correlation of fast, thirty-second notes in the violin part with syncopated dyads in opposing registers of the marimba place significant timing demands upon the performers which, in turn,

³⁴ Notated according to the Acoustical Society of America.

³⁵ Naturally, the marimbist can manipulate the sound of the instrument in this circumstance. However, Lansky is clear about the dynamic shift and further emphasizes this alteration in mood with the addition of accents.

supports the uneasiness felt in the “D” section. To create further restlessness, Lansky requires both performers to physically hop between registers, adding another level of disquietude to the “D” section (Ex. 6).

Example 6. Paul Lansky, *Hop*. Meas. 46

This unsettling “D” section quickly vanishes away with the soft, unison writing that begins the following phrase at measure 52.

The “E” section is one of the most unique and refreshing sections of the piece. After the aggressive “D” section, Lansky allows the piece to relax by maintaining consistent sixteenth-note based rhythms in both parts (violin and marimba), as well as shifting the dynamic from *ff* to *p* between sections “D” to “E.” Lansky allows the “E” section to organically increase its intensity before coming to an end and bringing back the previous “A” material. By employing augmentation (whereas a musical statement increases in length by uniformly longer or shorter values at every presentation³⁶), Lansky is able to slowly increase the intensity of the “E” section.

Lansky’s use of augmentation is very similar to the compositional process found in Frederic Rzewski’s *Les Moutons de Panurge* (1969). In this piece, Rzewski develops a melody by adding and subtracting notes one note at a time (e.g. 1, 1-2, 1-2-3, 1-2-3-4).³⁷ While Lansky’s

³⁶ *The New Harvard Dictionary of Music*, 1986 ed., s.v. “Augmentation and Diminution.”

³⁷ Cornelius Cardew, “A Note on Frederic Rzewski,” *The Musical Times*, Vol. 117, No. 1595 (Jan., 1976): 32.

cumulative procedure is somewhat less procedure that Rzewski's, process develops alongside the same lines (Ex. 7). For our purposes here, this example is confined to the violin part.

Example 7. Paul Lansky, *Hop*. Meas. 52-54



At measure 63, we begin the second group³⁸ of *Hop*, encompassing sections A, D, and F. Here, we see the recurring “A” material that acts a unifying agent for the composition. We revisit the loud, aggressive, syncopated “D” section, and encounter rapidly changing harmonies in the “F” section.

After a return to the “A” material in mm. 63-84, we arrive at the “F” section of the piece. Beginning in measure 63, Lansky fluidly transfers between sections, alternating in this progression: F-A-F-D-F-D-F-D, before moving to new material in Group 3 (See Table 2 on p. 12), measure 112.³⁹

The “F” section of *Hop*, mm. 85-92, is identified through alternating perfect fifths, with each chord progressing by semitone, whole tone, sesquitone, or ditone.⁴⁰ At the beginning of the “F” section, there are four alternating perfect fifths: A flat-E flat, A-E, D flat-A flat, and B-F

³⁸ See Table 2 p. 12.

³⁹ Ibid.

⁴⁰ A semitone=minor second, whole tone=major second, sesquitone=minor third, and ditone=major third. The labeling of these intervals is taken from Nicolas Slonimsky, “Thesaurus of Scales and Melodic Intervals,” (New York: Cole-Ross Company, 1947), ii.

sharp. In Example 8, these alternating perfect fifths are shown with their respective voice progressions.⁴¹

Example 8. Paul Lansky, *Hop*. Meas. 85

The musical score for Marimba, Example 8, shows a sequence of chords with the following voice progressions indicated by brackets and labels: Semitone (top voice), Sesquitone (Retrograde), Ditone (Retrograde), Sesquitone (Retrograde), Whole Tone, and Whole Tone. The bottom voice progressions are labeled as Ditone, Whole Tone, Whole Tone, Semitone, and Enharmonically Equivalent.

This is not the first instance of Lansky placing a progression of rapidly changing chords in one of his acoustic compositions. Derfler noted Lansky’s use of alternating pentachords in his Lansky’s *Modal Fantasy*, “Prelude” (1970) for solo piano. In this “Prelude,” the pentachords are “formed through the moment-to-moment alignment of five independent voices which move mostly by half or whole step.”⁴²

Following the “F” section, the recurring “A” section (mm. 93-97) intervenes before quickly returning to the “F” section. This appearance of the “F” section is now written in a linear (arpeggiated) format instead of the vertical (chordal) format of its first appearance (Ex. 8a).

Example 8a. Paul Lansky, *Hop*. Meas. 98

The musical score for Marimba, Example 8a, shows a sequence of chords with the following voice progressions indicated by brackets and labels: Semitone, Sesquitone (Retrograde), Ditone (Retrograde), Sesquitone (Retrograde), Semitone, and Whole Tone. The bottom voice progressions are labeled as Ditone, Whole Tone, Whole Tone, Whole Tone, and Whole Tone.

⁴¹ Please note the enharmonically equivalent ditones: A-D^b (C[#]) and E-A^b (G[#])

⁴² Brandon Derfler, “Single-Voice Transformations: A Model for Parsimonious Voice Leading” (Ph. D. diss., University of Washington, 2007), 241.

Following the second “F” section, there is an alternation of “D” and “F” sections that occurs three times. The “D” sections are characterized by louder, more aggressive, vertical statements and contrasted with softer, subtler, linear presentations of the “F” material. Lansky’s alternation of *subito* dynamics first appeared in the initial “A” section, where the marimba part has aggressive interjections occurring on one beat in measure 7, two beats in measure 10, and three beats in measure 14. Before proceeding to the subsequent “G” section, the final “D” section closes with a strong G^{7Sus6} chord, functioning as dominant to the “G” section which is firmly grounded in the tonal area of C.

The change in tempo, rhythmic emphasis, and Lansky’s use of an authentic cadence separates Group 2 to 3. Upon the arrival of Group 3 and the “G” section in measure 112, Lansky inserts several new ideas. First, the rhythm and syncopation of the marimba part is repetitive and very similar to the preceding sections. However, there is a tempo change from quarter note=70bpm to quarter note=75bpm, which gives a sultry “swing”/dance feel to this section. Lansky asks the marimbist to “swing (a bit awkwardly)” in his notes.⁴³ Secondly, the harmonic vocabulary is much simpler. Compared to the “B” section’s continuous transition of harmonies (as shown in Ex. 3a), the “G” section’s harmonic content (primarily represented in the marimba part) can be solely confined to the harmonic functions: Tonic (I)-Subdominant (IV)-Dominant (V). Lastly, the floating tones of the violin part outline the tones of the jazz-influenced “Blues Scale”⁴⁴ in the key of C, thus grounding the “G” sections in the key of C.

When one thinks of traditional dance music, one ultimately hears repetition of rhythm on which to base their dance routine. One example of such repeated rhythms used for dancing is the ballroom “Rumba.” Here, the dancers proceed in a repetitive quarter, eighth-eighth, quarter,

⁴³ Lansky, “Hop,” 11.

⁴⁴ Bahha, *Jazzology*, 30.

eighth-eighth rhythm, which is reflected in the music. While Lansky is in no way attempting to mimic a traditional dance form, he is employing a similar process by maintaining the rhythmic content and emphasis from measure to measure. Almost every measure has an identical rhythmic emphasis, supplied by the marimba player (Ex. 9).

Ex. 9. Paul Lansky, *Hop*. Rhythmic emphasis in “G” sections



An application of this rhythmic emphasis is shown in the first measure of the “G” section, measure 112 (Ex. 9a). Here, you notice the rhythmic emphasis displayed in Ex. 9, as well as the aforementioned harmonic functions: Tonic (I)-Subdominant (IV)-Dominant (V). This progression is demonstrated in every measure of both presentations of “G” section, mm. 112-132 and mm. 148-158, respectively.

Example 9a. Paul Lansky, *Hop*. Meas. 112

Lansky confines the vocabulary of the violinist to the tones of the C blues scale for both presentations of the “G” sections, helping to establish the C tonality. However, Lansky interestingly enough, begins this section (mm. 112-122) with a B-flat pentatonic scale, which

differs from the C-blues scale by one note, the bV of the C-blues scale (G-flat). Lansky then elides into the use of the C-blues scale for mm. 123-132. The jazz-influenced “Blues Scale” consists of the following tones: I-bIII-IV-bV-V-bVII-I, or C-E flat-F-G flat-G-B flat-C.⁴⁵ Lansky alters the traditional blues scale in the second “G” section by adding an additional tone borrowed from the “major bebop” scale, which contains a lowered sixth scale degree (A-flat).⁴⁶

To add to the sultry flavor of the “G” section, Lansky asks the violinist to play *flautando* in the first “G” section. *Flautando* literally means “flute-like,” and is “an instruction to bow a stringed instrument over the fingerboard.”⁴⁷ The result is a high, thin, floating sound that complements the lower, thicker, rhythmic marimba part.

The final section of *Hop*, which occurs between the two statements of the “G” sections in Group 3 is labeled “H.” In this section, the lines (violin and marimba) are both primarily based on the altered, C blues scale⁴⁸ with occasions of interpolation, infrapolation, and ultrapotation of chord tones occurring in the marimba part.⁴⁹ As well, Lansky emphasizes the C tonality by accenting a recurring motive that comprises all of the chord tones in a C^{m7} chord. From a performer’s vantage point, Lansky now asks both performers (violin and marimba) to hop between notes.

According to Nicolas Slonimsky in his *Thesaurus of Scales and Melodic Patterns*, there are three rules for the placement of notes occurring between chord tones: (1) interpolation: the insertion of one or several notes between chord tones, (2) infrapolation: the insertion of a note below a chord tone, and (3) ultrapotation: the insertion of note above the next principal tone. These three approaches may also be used in varying combinations, such as infra-interpolation,

⁴⁵ *The New Harvard Dictionary of Music*, 1986 ed., s.v. “Scale.”

⁴⁶ Bahha, *Jazzology*, 30.

⁴⁷ *The New Harvard Dictionary of Music*, 1986 ed., s.v. “Flautando.”

⁴⁸ Please refer to description of altered blues scale in the discussion on section “G.”

⁴⁹ Nicolas Slonimsky, *Thesaurus of Scales and Melodic Intervals*. (New York: Cole-Ross Company, 1947), ii.

infra-ultrappolation, or infra-inter-ultrappolation.⁵⁰ To show an example of Lansky’s adaptation of Slonimsky’s compositional approach, let us look at the marimba part in the beginning of the “H” section (Ex. 10). Remembering that the harmonic vocabulary is based on the altered, C-blues scale, the notes will be labeled as: C=chord tone, T=interpolation, F=infrapotation, and U=ultrapotation. Any combinations of these labels will be designated as such.

Example 10. Paul Lansky, *Hop*. Meas. 134-135



Upon further inspection, one will find the notes that stray from the tones presented in Lansky’s altered, c-blues scale are the major seventh (B) and major ninth (D). As mentioned before, these two tones are standard vocabulary for jazz-influenced harmonies,⁵¹ and therefore fit naturally within this altered C-blues scale.

Lansky further emphasis this tonality by placing accents on a recurring motive throughout this section (Ex. 10a). This recurring motive (in brackets of Example 10a) is comprised of the chord tones for a C-minor seventh chord, which are (not surprisingly) the same chord tones for a C-blues scale.

⁵⁰ Ibid.

⁵¹ See p. 14.

Example 10a. Paul Lansky, *Hop*. Meas. 135



In the “H” section, Lansky calls for both performers to hop. The violinist, as before,⁵² must sporadically hop to the open G-string within a passage of running sixteenth notes (Ex. 10b). For the marimbist, the approach is similar in that it requires the marimbist to jump several registers to execute the hop (Ex. 10c).

Example 10b. Paul Lansky, *Hop*. Meas. 135-136



Example 10c. Paul Lansky, *Hop*. Meas. 136



The “H” section culminates with a G^{m7} chord before eliding into a C^7 chord with the arrival of the second “G” section in measure 148. After a brief recurrence of “G,” Lansky

⁵² See p. 15.

concludes the piece with a final “A” section. Lansky does a wonderful job of recapitulating the “A” section, closing the composition as it began - with an ascending minor third.

CHAPTER 4
CONCLUSION

Three primary compositional characteristics of Paul Lansky's acoustic works are demonstrated in *Hop*: modal dichotomy, unique approach to rhythm, and the use of tonal/functional harmonies.

His most identifying compositional facet demonstrated in *Hop* is the continuous alternation of major (Ionian) and minor (Aeolian) modes, as identified primarily through simultaneous appearances of major and minor thirds. These "split third" chords⁵³ pervade the composition and add a unique character to Lansky's playful use of rhythm.⁵⁴

Lansky's clever applications of rhythmic syncopations add a sultry feel to the composition and according to Lansky, allow it to "groove."⁵⁵ In addition, his rhythmic continuity assists with the delineation of phrases and sections. In *Hop*, Lansky uses similar rhythms to mark the recurring "A" sections, allows a passage to continuously expand one note at a time in the "E" sections, and inserts an quasi-ostinato rhythmic pattern to assist the dancing quality of the "G" sections.

The final identifying element is Lansky's overall functional use of harmonies. Lansky worked hard to find the right harmonies for the composition, as the "marimba has such a weird harmonic texture."⁵⁶ While *Hop* often fluctuates modes, as well as supplementing the harmonies with extensions and suspensions, the harmonic content is based on tonal concepts. The clear presentation of dominant-seventh chords, as well as the V-I cadences (such as the transition into the "G" section), serves as concrete examples of Lansky's affinity with tonal music. According

⁵³ See p. 14.

⁵⁴ Paul Lansky, "Hop," program notes.

⁵⁵ Lansky, interview. See p. 36.

⁵⁶ Ibid.

to Lansky: “In *Hop*, there are a lot of cadences and keys, so you have to treat the marimba with kid gloves. Otherwise, the harmonies would make no sense at all.”⁵⁷ Lansky states that his

“compositions and processes are to throw things down on the page, start the filter and try to see what makes sense, to build an internal logic. And, if I don’t build an internal logic, then I start over. I always feel that I have been successful in a piece when something does not make sense. Then it is good, a context that provides a meaning for the ways things are supposed to behave. It is internal logic in the language.”⁵⁸

It is my hope that this document will serve as a portal into the compositional characteristics of the acoustic works of Paul Lansky. In addition, it is the author’s hope that this publication will serve as an impetus for further research into Lansky’s acoustic writing.

⁵⁷ Ibid.

⁵⁸ Ibid.

APPENDIX A

1993 PERFORMANCE NOTES FOR *HOP*⁵⁹

⁵⁹ Paul Lansky, *Hop*, (Newton Centre: GunMar Music, 1994), Program Notes.

ABOUT THE MUSIC

Hop, written for Marimolin in the summer of 1993, is a kind of dance music without a cause. That is, it knows that it would like to dance, but it can't quite seem to get the idea. More seriously, it is a playful study of the qualities of rhythm and line of which this combination of instruments is uniquely (and wonderfully) capable.

ABOUT THE COMPOSER

Paul Lansky studied at the High School of Music and Art, Queens College and Princeton University, where he is now Professor of Music and Chairman of the Music Department. His works consist largely of pieces for computer and instruments, alone and together, many of which are recorded. Both New Albion and Bridge Records have recently released all-Lansky CD's.

Lansky was a member of the Dorian Wind Quintet (horn). He has been visiting composer at the California Institute of the Arts, the Aspen Music Festival, Rensselaer Polytechnic Institute, and the New South Wales Conservatorium of Music in Sydney, Australia. He has received fellowships, awards and commissions from the National Endowment for the Arts, the Koussevitzky Foundation, the Fromm Foundation, the American Academy/Institute of Arts and Letters, and the Guggenheim Foundation.

His music has been used extensively by dance troupes, including the well known Bill T. Jones/Arnie Zane Company, the Sharir Dance Company, Danceworks, and others. In 1991, Lansky toured the (former) Soviet Union with Sarah Caldwell as part of her *Making Music Together* festival.

ABOUT MARIMOLIN

The marimba/violin duo "Marimolin" was founded in 1985 Boston, MA by marimbist Nancy Zeltsman and violinist Sharan Leventhal. The team has been extremely successful establishing a repertoire for their unusual combination with over seventy pieces composed specifically for them within their first nine years together. One means to this end has been Marimolin's Annual Composition Contest, established in 1987. For further details about the contest, schedules of upcoming performances or more information about the duo, please contact them c/o Margun Music, Inc.

Publication N° : MP4041

Duration : 7:00 min.

Note: A 5-octave low-C marimba is required.

APPENDIX B

HOP ERRATA

Measure Number	Beat(s)	Errata
56	1	Last F ⁴ sixteenth note should be written as a thirty-second note.
60	3,4	Should progressively alternate G natural - G sharp ² in bass clef part.
115	4	B ³ should be B-flat ³ . This correlates to the identical passage in measure 126.

60

⁶⁰ Paul Lansky, interview by author, Princeton, NJ, August 1, 2010.

APPENDIX C

TRANSCRIPT OF INTERVIEW WITH PAUL LANSKY

Willie: I always like finding out about everybody's inspiration. What was your first intuitive process to start composing? I looked at your composition list and a flute solo was the first composition, premiered by John Heiss.

Lansky: The first thing that I thought about with this piece (*Hop*) was some way to make the violin and the marimba gel. I had heard them play and they gave a recital in Merkin. I thought that a lot of the pieces worked really well but they weren't doing things the way that I wanted them to do. Viñao has a great piece for marimba and violin tape. Please remember that. They played some other pieces: Robert Aldridge and other people, they were all good pieces. But, coming out of computer music, I was really interested in the spectral aspect of the two instruments. I think the first thing that I actually came up with in the piece is the opening where the marimba plays with their fingers (in a minor third interval) so you get a timbre that is just sort of a blend. Marimba and violin are in a way are sort of oil and water. Marimba, especially the five-octave marimba, has got this sixth harmonic that really sticks out if you hit it dead center, especially with the low notes. That was another issue that I had-I wanted to try to find the language that would accommodate the out-of-tune quality of the marimba with the violin.

Willie: I have never even thought about that aspect (the "out of tune" quality of the marimba).

Lansky: I have written now half dozen pieces with marimba, and I find that really tonal pieces work very well. A tonal piece works very well, but my language is in the middle. In *Hop*, there are a lot of cadences and keys, so you have to treat the marimba with kid gloves. Otherwise, the harmonies would make no sense at all.

Willie: Talking about the colors of the instruments really pulling those off well. I talk about that in the penultimate section in the piece, which you ended up doing later with *Three Moves*. I have played *Three Moves*, which was great so I can automatically apply that to this last section. I love

⁶¹ Paul Lansky, interview by author, Princeton, NJ, August 1, 2010.

this last section, because there is clarity with the tessitura: the *flautando* in the violin and the low register in the marimba. It is such a great color.

...

Willie: As much as possible, I am trying to do an analysis - Besides the love of the piece and that I will be performing it soon, a lot of performers are afraid of Hop because it is fairly difficult. When I went through and started analyzing it, especially in the section that was used in *Hop 2*, there are a lot of cadences (dominant/sub dominant) functions that are repetitive.

Lansky: If you are not thinking that way, you feel there is a lot of ink there. But, if you can feel that harmonic function, I think it helps.

Willie: Yes, particularly there is a I-IV-V harmonic progression that proceeds C- (E flat)-F-G and then uses C- (E flat)-A flat-B flat as a kind of substitution. Once I discovered this, learning the piece was easier.

...

Willie: Concerning the analysis, there are “windows” where the material kind of looks forward and backward. For example, there are a lot of alternations where the “A” section comes back. Concerning the “windows” concepts looking back and forth-is there any reason, or is this just organic?

Lansky: The way I work is to try to tell a story. For example, there are some composers like David Lang, that will start a texture going and just live with that texture or awhile and all of a sudden something will change. They just did the *So-Called Laws of Nature* concert. Students played it and the first movement with the slats, every once in awhile you get those low slats. This is not my way of working, I like to tell and create a story. I try not to allow the ideas to get tired, constantly thinking about refreshing something or changing something. I like to think

about different modes of continuity such as gradual or sudden changes and everything in between those. You see that a lot, there are passages where all of a sudden everything stops and something else happens. Then there are passages that evolve into something. I did not really think about whether it was A, B, ABC. I just thought ideas had gotten tired; now it is time to do something new. One thing about the pieces that there are different modes of behavior happening with tapping of the keys, percussive stuff, groovy stuff, and the aggressive things with the double stops with the violins. Just sort of giving those free play is something I thought a lot about. Never worked for a full scheme. I write something, and then listen to it, decide whether this section is just not right, and I will cut it out. Composition process, especially, with the computer, is put together in a stretch and then I try to eliminate as much as I can. Elimination is sort of like what a film editor does to keep the continuity of the film. His form is like cinema; keep the action moving, not to let something get tired. This is not what everyone does.

Willie: This makes sense, as there is a dialogue between the sections. One of the things that I have discussed with one of my professors is dealing with harmonic function - discussion to do with PC set analysis. Especially, the next to last section there is a tempo change that is very bluesy, has a harmonic context and almost a modal dichotomy with the split third always there, really wanting to analyze the piece with a jazz emphasis. There are ninths in the last section, as well as a lot of color tones and I do not think they fit with the pitch class set analysis.

Lansky: They fit with the standard harmonic analysis. I compose by ear. There was no set used and I can see why I chose certain notes, but I can't tell you what they are doing there (picked up score to explain). It certainly centers around "G." The tonal analysis is the closest thing imagined that you could do with the piece.

Willie: (showing where the harmonies fits) Again, wanted to provide some vocabulary to help people learn *Hop*. The first half is “G” centered; the second half is “C.”

Lansky: This is accurate - the last section thought as harmonically based.

Willie: Talking with Nancy about it - this section grooves, it is sultry (“G” section). Half of the people cannot play it, they read the ink. It has some soul into it.

Lansky: In Stoyanov’s new recording it does swing (meaning the Stoyanov “swings” the rhythms, as if in a jazz style), I am not sure I agree with it, but it works.

...

Willie: I went through the piece thinking of the word *Hop*. Obviously, for both instruments in this, is that it does hop around physically. Another thing of the hop is the harmony, and the balance, like a *Billy’s Bounce* or a jazz tune. Amazing is the rhythm of how much color with only duple-based rhythms throughout the entire piece. No triplets, all eighths or sixteenth notes, how much it hops without using any swing rhythms, always jumping syncopations.

Lansky: Underlying duple fill to the piece, triplets would have sounded artificial. I do use triplets a lot of the time, but never thought of using them here.

Willie: What came first with *Hop*? The music or the title?

Lansky: The music. Writing for marimba is hard. I played piano and the early writing in this piece was done from a keyboard. Groove section in the end had a lot more vertical harmony. Worked hard finding the right language for the harmonic, this was the biggest problem I had. [The] marimba has such a weird harmonic texture.

Willie: The writing in here is very unique, very autonomous. Even on *Slide* it is the same thing. The approach is unique, as it is more about the music that is there rather than the technical application.

Lansky: *Slide* was interesting, *Slide* is a much more chromatic language than this. I realize that I have to outline the harmonic language a little more carefully. I put in all phrase marks. So, the idea was basically play the phrase marks. Phrase marks outline the harmonic language. [This] worked a lot better as a result of doing that.

Willie: Reading the Brandon Derfler's dissertation: "*Single Voice Transformations: A Model for Parsimonious Voice Leading*", University of Washington 2007. Mr. Derfler spoke about your parsimonious voice leading used in *Modal Fantasy*. One section (measure 85), one of the things I was trying to look for some characteristics through all of your acoustic work. Trying to decipher a pattern.

Lansky: The harmonic language is in terms of Circle of Fifths. Circle of Fifths to me is a metric for distance, things are close to each other in Circle of Fifths or they are far apart in the Circle of Fifths. This is a general way of talking about scales. C scale is really far from the F sharp scale and really close to G scale. So, the Circle of Fifths just contains these, every seven notes is a major scale. I don't think about it consciously, but a lot of the stuff that happens in the harmonic language here has to do with close jumps and far jumps in the Circle of Fifths. If you look at this passage here with a G scale, I look at this passage here you go over the flat side, then sharp side, than natural side...My way of thinking is not that you don't make big jumps, but the Circle of Fifths provides a metric for measuring how close things are to each other. So, in a lot of this piece, if you use the Circle of Fifths as a filter, you could probably find a lot of relations in the piece that have to do with close jumps or far jumps, or big leaps or small leaps step wise. And, here, this goes from A flat fifth to the A natural fifth, this was a big jump. Going from D flat to the D would harmonically be C flat, so this could be G flat land there. G flat today would be natural relative. For example, if you looked at measure 90, it starts on the right side of the scales

then in the middle of the measure flips over to the color from flat side back to the right side flips over to the flat side. The idea is the violin has large leaps. A flat, B flat, goes back to the “hop” idea. D flat, D natural, G flat, G natural comes with the opening of course A natural, B, C sharp, big leaps of sevens. Sevenths are the genetic code for the piece.

...

Lansky: For the opening measure, I sort of think of the first three notes D & B as being on the C side and then shifting a half step, C sharp, and D flat. Started with C sharp just to make it look more logical coming from D, it really does shift over. Retroactively think of the B as a C flat. B pivots between C flat and B natural and A flat. Measure 2 slips a half step down from C sharp to C. C goes down to B flat. Measure 3, the D and E flat being sequenced by the C and D flat, sequenced by F and G flat sequenced by G and A flat, still descending seventh. In atonal music, the seventh is emblematic, kind of dissonant, but it does not sound so dissonant in this piece.

Willie: It seems that the register shift helps assist the “hiding” of the dissonance. By shifting the sevenths to an alternative register, it makes the tone more colorful, like say, perhaps, Schoenberg.

Lansky: Yes, composers like Schoenberg had good ideas in a sense. My compositions and processes are to throw things down on the page, start the filter and try to see what makes sense, to build an internal logic. And, if I don't build an internal logic, then I start over. I always feel that I have been successful in a piece when something does not make sense. Then it is good, a context that provides a meaning for the ways things are supposed to behave. It is internal logic in the language.

Willie: With the New York article, “*Computer Man Unplugs*”, this (*Hop*) was perhaps one of the pieces that was a turning point. Nancy Zeltsman said you called it getting you back into “protein music.”

Lansky: In 1993, there was another ten years, to do electronic music but this is certainly influential. Until this point, I think it is literally true. I was in my late forties when I wrote this piece and had never written a piece for instruments where I got to work with the performers on the piece as I was writing it. I had written music for string quartets, chamber, pianos, songs, and never had the experience of writing something and having a player criticize it, really life changing experience. He likes the computer as he can write it and then play it. Frustration with working with instrumentalist pieces (*sic*). After spending year writing, they play it, and it would not be the piece they wanted. I loved the computer, and got what I wanted out of the piece and out of the instrument. This is the first piece I had written where I would take to the performer to change (*sic*). Now when I write for performers, I routinely try to get them involved in the composition before it is right. Some performers like to do it and some don't. E-mail makes it all possible. You can take a photograph of any image on the screen, command shift 4, then you get a little cursor, drag around and get a picture of what is on the screen. Apple Shift 4 to take the photograph.

APPENDIX D

TRANSCRIPT OF INTERVIEW WITH NANCY ZELTSMAN

⁶²**Willie:** Thank you for meeting with me this morning really excited to talk to you. It has been an honor to follow you for awhile. During my Masters Degree, you were kind enough to send me a transcript of the Beethoven *Bagatelle*, marimba solo, which I had the opportunity to perform later that year. (Since then, Nancy has published the Beethoven *Bagatelle No. 4, op. 126* in her book.)

...

Willie: Please tell me about *Marimolin*, as I have read quite a few articles. As a teacher, I am trying to motivate my students and trying to tell them how to get a group like that started. I was wondering what was the genesis of Marimolin, was there something before *Combo Platter*?

Zeltsman: *Combo Platter* had been written for me and I played it with other people originally. So I had played it with different violinists. The composer, Bob Eldridge, suggested that we bring in violinist, Sharan Leventhal. Literally, it was our first rehearsal of *Combo Platter*, where we played for an hour and took a break. On this very first break, one of us just impulsively said “I love playing with, you, do you want to do a duo?” Lets take stock of this... “What do we play, violin and marimba, how is that going to work?” [We] did not give a lot of thought, impulse how incredible the music, we were just this is really easy to play music with this person, violin and marimba, awesome combination, very excited impulse which remains. (She is asked that question a lot by her students how can you form a group and you can do it from a pragmatic point of view, what colors do you like, what instruments do you like, or whose a musician or colleague or friend you like or admire, see what music, this is how chamber music grows. A group started with bass clarinet, flutes, cello, makes no sense, all instruments duplicated the same range.)

⁶² Nancy Zeltsman, interview by author, recording, July 29, 2010.

Willie: Fortunately, my wife is a violinist with the Nashville Symphony and she has a chamber group. She is open to playing Mark Mellits and some other new music things that have odd instrumentation. The things that I really like with what you have done is when getting my notes together that you really focused a lot of your comments on stuff that I do not enjoy about percussion-that the majority of the articles tend to be focused on stickings and the technical pursuit. I really liked how you were able to correlate the articulations of the violin and focusing on your sound and I really think that makes a huge difference with what we are doing as percussionists. I think that starts with chamber music and I wanted to get some background on that.

Zeltsman: When I look back on the *Marimolin* years, one of the main gifts that I received from that collaboration was exactly from what you said, playing with another instrument that inspired you. In my case, we were having composers write for us all the time who would often write very intricate articulations for the violin and nothing for me, just notes. When we would rehearse and I would see the score, I'd see doing pizzicatos and different articulations and phrases, and I could emulate that...that is the core of my playing. I was in a room with a violinist for eleven years; I was basically not around other percussionists. How many percussionists are ever not around other percussionists? Then, when I emerged, I realized I seem to be more obsessed with articulation than the average percussionist because that is what I had to feed on. So I would often when we would meet with composers I would say that I would like to add those articulations to particular phrase and mark my part. They would say, "can you do that?" and I would say "sure." Then, they would say, "sure, put that in!" A lot of scores were edited and added in that way. One of the real inspiring things about *Marimolin* and life changing for me.

Willie: I think it elevates what we are doing as marimbists and percussionists alike, that we are talking about larger musical concepts rather than sticking selections. One of the reasons I wanted to do this piece (*Hop*) was to try and do something different. Talking about articulations and all those nuances. The nuance, type of strokes, balancing with the violin, was all that part of the original composition? Or did you help with Lansky's choices in those?

Zeltsman: I think with him, it was half and half, he had written in a fair amount of that. Why the music is so appealing, it is that it has got this soulful, "gosply," bluesy quality by major and minor thirds appearing in close succession a lot but also with the kinds of grooves he sets up. I think there is a clear implication, that there needs to be a lot of nuance of the sort of ghosted notes that make things sound groovier. If you go to the part of Hop that became the beginning of *Hop*², the *Three Moves* that came about because I loved that one part so much, you have to start it here. (Sings selection) How I am singing now, is very instructive on how to play it. There is not something that is possible to sing. It is more that I ghosted certain notes (singing). It is clear from melodic contours of Paul's melody lines, which sort of carried the piece along, what you reach for, what gets swallowed and hidden, is key to the whole groove of it. I don't play it at a very even dynamic. If you listen to my recording of it, you will hear that.

...

Zeltsman: Interpretation - Whenever I try to teach nuance, half the people think I am making it up; I am actually doing what the composer wrote. The style implies that is what the composer wants. Do you know what I mean from playing it yourself?

Willie: Yes, one of the teachers at North Texas, Christopher Deane, I have been talking with him about, it. This whole section for the violin part going over the top just outlines the C Blues scale and it is a very functional, like I-IV-V jazz harmony. Although there are a lot of non-harmonic

tones, basically it is the same as Nashville progression⁶³, if you will harmonically, which adds to that sultry flavor. Those articulations, where it lies from the physical standpoint automatically adds those syncopations.

Zeltsman: Yes, this is true. (Nancy plays “G” section of *Hop*.)

[I] Did not play the equal dynamic, not groovy at all (Nancy plays more). A lot of the inner notes are really pretty flowered. So, I’m sure you know what is cool about this piece that it really has a style of its own. You can tell some of the notes where he wants to go realistically.

Willie: Was this part of the context, or did you commission Lansky on this piece?

Zeltsman: *Hop* was not a commission, *Hop* was a gift. When I was married (to Steven Mackey) and living in Princeton, Paul was in our social circle. Paul is a good friend, [although I] do not see him very much now. This was when Paul was mainly a computer composer for most of his life. (A couple of articles she read where Lansky credits her for getting him into writing protein music, for human bodies rather than silicone.) *Hop* was a turning point for him, because he would occasionally hear what I was doing. He knew what I was doing for *Marimolin*, so *Hop* was fun writing for him. After that, we commissioned a piece from him called *Six Years Ago Monday*, which is for violin, marimba, and tape. I think that we got a grant for that right when *Marimolin* was breaking up. In order to fulfill the grant, I asked Gordon Stout if he would do the premieres as we had been bound by the grant to do. So Gordon and a violinist from Ithaca played these three pieces at PASIC. They did a whole concert at PASIC one year that was actually the result of the last commission of *Marimolin* instead of us doing it. One of those was a piece from Paul, which never really caught on. It is okay, not as good as *Hop*. I played it with someone else at some point. Paul knows that, he told me that he liked writing what he wants to

⁶³ The “Nashville System” is traditionally based on the following four-measure harmonic progression: I-I-IV-V.

write; it is not just for the money. There is a certain pressure sometimes I think that composers feel as much as they would like to get paid, certain composers depending on their life situation, if they have a teaching job, do not rely on it for their income, just sometimes like to write what they write. For Paul, his echelon of notoriety that is very unusual, he is very generous that way.

Willie: We (Lansky and I) will be meeting with him on August 1. The research I have done on him as far as the acoustic music, has taken off in the last decade. There is now a Hop 3 with *Idle Fancies*.

...

You were talking about performing a section of *Hop* as a solo. Did you go ahead and start playing that section (“G” sections of *Hop*) as a soloist before it was written out?

Zeltsman: No, I think until he deemed it a marimba solo, I would not have extracted it. There are not a lot of bars before the violin starts doing something that does not seem like background materials.

...

Willie: Is there a list of all the compositions that came through from the commissioning of *Marimolin*?

Zeltsman: On my website, go to www.NancyZeltman.com, there is a PDF entitled “Works Premiered,” which lists every piece *Marimolin* played, which is about eighty pieces.

APPENDIX E

CHRONOLOGICAL LIST OF PAUL LANSKY'S COMPOSITION AND RECORDINGS

Paul Lansky: Compositions

Also see my [discography](#)

[my home page](#)

Idle Fancies (2008) six preludes for marimba with small percussion set. Consortium commission, pub Carl Fischer

Comix Trips (2008) for chamber ensemble (fl,ob,cl,bsn,perc,piano,vla,bass), commissioned by Relache, pub. Carl Fischer

Concert Aria for Robots and Violin Obbligato (2008), commissioned by Ensemble Robot

With the Grain (2008), concerto for guitar and orchestra, commissioned by the Fromm Foundation for David Starobin , pub. Carl Fischer

Line and Shadow (2008), for small orchestra, commissioned by the Riverside Symphonia, pub. [Carl Fischer](#)

Practical Preludes for Guitar (2007=8), pub. [Carl Fischer](#)

Travel Diary (2007) for two percussionists, commissioned by the Meehan Perkins Duo, pub. [Carl Fischer](#)

Shapeshifters (2006-07) for two pianos and orchestra, commissioned by the Alabama symphony for Quattro Mani and the Alabama Symphony pub. [Carl Fischer](#)

Pieces of Advice (2006) five movements for Horn and Piano, commissioned by Bill Purvis and Mihae Lee, pub. [Carl Fischer](#)

Songs of Parting (2006), Baritone, Percussion, Guitar, written for Crazy Jane, pub. [Carl Fischer](#)

Chatter of Pins (2006), electronic, text, pub.grimtim music, recording [Bridge Records](#)

Sharp Songs (2006/2007), SATB, commissioned by Hobart and Smith Colleges, pub. [Carl Fischer](#)

Composition Project for Seniors (2006), electronic, GrimTim Music, recording [Bridge Records](#)

A Guy Walks Into A Modal Bar (2006), electronic-interactive, for 5 laptops, *GrimTim Music*, 1st performance, 4/4/06, Princeton University

It All Adds Up (2005), suite in six movements for two pianos, written for Quattro Mani, pub. [Carl Fischer](#), 1st performance Quattro Mani, Weil Hall, 2/19/06

It All Adds Up (2005), suite in six movements for solo piano, pub. [Carl Fischer](#) 1st perf. Lisa Moore, Greenwich House, 11/6/06

Threads (2005) , for percussion quartet, written for So Percussion, pub. [Carl Fischer](#) , 1st perf, So Percussion, Princeton University, 4/8/06

Minor Alterations (2005), for el. gt, vln, bsn, drumset, written for Clogs, pub. [Carl Fischer](#) , 1st perf, Clogs, Princeton University, 4/11/06

⁶⁴ Paul Lansky, "Compositions," Princeton Music Web Site. Received July 22, 2010, from

The Joy of F Sharp Minor (2005) , electronic, *GrimTim Music* , recording [Bridge Records](#)

Ancient Echoes (2005), for perc, vln, vcl, clar, piano, digital delay, written for 8th BlackBird, pub. [Carl Fischer](#) 1st perf. 8th BlackBird, Univ of Richmond, 11/05

Etudes and Parodies, for French Horn, Violin and Piano, 2004, *Editions New Rochelle*, first perf. Wm. Purvis, M Lee, C Macomber, Princeton Univ, 9/28/04, Recording: [Bridge Records](#)

Ricercare Plus, for string quartet, (2 additional mvts for Ricerare, 2000), 2004, first performance, Brentano Otte, Princeton University, 9/28/04, recording: [Bridge Records](#) , pub: [Carl Fischer](#)

The Dust Bunny, animated cartoon, with Grady Klein and Ted Coffey 2004 , available [here](#)

A is For..., arrangement for clar, el guit,vibs,vcl, piano, speaker, GrimTim Music, 2004, written for Bang on a Can Allstars, first performance, North Adams Mass, 7/24/04, pub. [Carl Fischer](#)

Folk Tropes, SATB, poems by Jonathan Greene, 2003/2007, first perf. Synergy Singers, Princeton Univ. 4/13/2004 ,pub. [Carl Fischer](#)

Music for the Same Sea, theatrical production, Paul Binnerts dir, first perf. mar 24,2004, Berlind Theater, Princeton NJ

Post-Pastoral, Handel Remix, for Canteloupe Records CA21020, 2003, GrimTim Music. Recording: [Canteloupe Records](#)

In the Moment, 8-channels, choreography (and performance by Mark Haim), GrimTim Music 2002.

Follow Me, for electric guitar quartet (2002, rev. 2006), pub. [Carl Fischer](#).

Alphabet Book: ABC,Countdown, Alphanumeric Song, Interesting Numbers, Pattern's Patterns, A is for..., Say That Again, As Things Were, Um, Folk Song, GrimTim Music, 2001 ,[Bridge Records](#) 9126

Labyrinth, 8-channel tape, 2-channel tape, *GrimTim Music*, 2000

Ride,computer, 8-channel tape*GrimTim Music*, 2000 , recording [Bridge Records](#)

Odd Moments,flute, clar, vln, vcl, piano , written for Da Capo Players, pub. [Carl Fischer](#), 1999

Idle Chatter Junior, computer processed speech, *GrimTim Music*, 1999 , recording [Bridge Records](#)

Three Moves for Marimba, *G. Schirmer*, 1998, recording, Nancy Zeltsman, **See Ya Thursday, Equilibrium** 29. (score most easily purchased from [Steve Weiss Music](#))

Heavy Set,Computer processed piano,strings, *GrimTim Music*, 1998, recording: [Bridge Records](#)

Semi-Suite,for classical guitar, *Editions New Rochelle* , 1998, recording: [Bridge Records](#)

Now That You Mention It,Computer processed piano,strings, *GrimTim Music*, 1997, recording: *Conversation Pieces*, Bridge Records 9083, 1998

Shadows,Computer processed piano,voices,strings, *GrimTim Music*, 1997, recording: *Conversation Pieces*, [Bridge Records](#) 9083, 1998

For the Moment, Computer processed piano, *GrimTim Music*, 1997, recording: *Conversation Pieces*, [Bridge Records](#) 9083, 1998

Honorable Mention, Computer processed piano, *GrimTim Music*, 1997

Andalusia, Computer processed piano and voice, *GrimTim Music*, 1997, recording: *Conversation Pieces*, [Bridge Records](#) 9083, 1998

Crooked Courante, Solo guitar, *GrimTim Music*, 1997, recording: David Starobin, *Newdance*, Bridge Records 9084, 1998

Chords, Computer generated tape, *GrimTim Music*, 1997, recording: *Conversation Pieces*, [Bridge Records](#) 9083, 1998

Dancetracks: Dark Remix, Steve Mackey, Guitar, tape, *GrimTim Music*, 1997, Recording: [Bridge Records](#)

Same Scene, Nine Years Later, computer-processed speech, *GrimTim Music*, 1997, recording: *Conversation Pieces*, [Bridge Records](#) 9083, 1998

Looking Back, for tape, for the 60th Anniversary of the High School of Music and Art. 1996, *GrimTim Music*, recording: [Bridge Records](#)

Things She Carried, A computer opera. Text by Paul Lansky, Hannah Mackay, music by Paul Lansky, reader Hannah Mackay, 1995-96, *GrimTim Music*, CD [Bridge Records 9076](#)

Six Years Ago, Monday, for Marimba, Violin, Tape (1996), pub [Carl Fischer](#).

Dancetracks, for an Improvising Guitarist (computer synthesized tape, electric guitar) 1994, *GrimTim Music*, First performance, Tim Brady, London, Feb 18, 1995.. Recording: Steve Mackey, [Bridge Records](#)

Still Time, (computer synthesized tape) (1994). *GrimTim Music*, recording: *CRI CD 683*. ([New World Records](#))

Hop, Marimba and Violin, (1993) publisher: [Schirmers](#), (via Steve Weiss Music) recording: *BMG/Catalyst 62667-2*, First performance, Marimolin Ensemble Huddersfield Festival, Huddersfield, England, Nov. 25.

Memory Pages, (computer synthesized tape), Readers Paul Lansky, Hannah Mackay. *GrimTim Music*. 1993, , recording: [Bridge Records, 9050CD](#).

AshGrove, (computer folk song setting) (1993), *GrimTim Music*. recording: [Bridge Records](#)

Word Color, (computer synthesized tape, Hannah Mackay, reader), (1992) *GrimTim Music*, recording: [Bridge Records, 9050CD](#)

Three Champion Choruses, (SATB), (1992), *GrimTim Music*, First performance, Nemo Festival, Kantilena Koret, John Frandsen, dir., Nemo Festival, Aarhus, Denmark, Aug1, 1992.

Listening-In, (computer-synthesized-tape) (1991) 7 folk song settings, (1992) *GrimTim Music*, recording: [Bridge Records](#)

Now and Then (computer-synthesized tape) Hannah MacKay reader, (1991) *GrimTim Music*, recording: [Bridge CD 9035](#) (1992)

Table's Clear (computer-synthesized tape) (1990) *GrimTim Music*, recording: [Bridge CD 9035](#) (1992)

The Sound of Two Hands (computer-synthesized tape)(1990) *GrimTim Music*, excerpt published in *Computer Music Journal*, Vol 16, No. 1, Spring 1992, recording: [Bridge CD 9035](#) (1992)

NightTraffic (computer-synthesized tape) (1990) Publisher: *GrimTim Music*, recording: [Bridge CD 9035](#) (1992)

QuakerBridge (computer synthesized tape) (1990). Publisher: *GrimTim Music*, recording: [Bridge CD 9035](#) (1992)

Late August (computer synthesized tape) (1989). Recording: [New Albion Records 030CD](#). Publisher *GrimTim Music*.

Not So Heavy Metal (with Steve Mackey) (computer processed performance) (1989), Recording : [New Albion Records 030CD](#). Publisher: *GrimTim Music*.

Talkshow (real-time performance system) (1989) First performance: Paul Lansky, Neil Rolnick, RPI, March 23, 1989. Publisher: *GrimTim Music*.

The Lesson (computer synthesized tape) (1989). Publisher *GrimTim Music*.,recording: [Bridge Records, 9050CD](#)

Smalltalk (computer synthesized tape) (1988) Recording: [New Albion Records 030CD](#) . Publisher *GrimTim Music*.

Notjustmoreidlechatter (computer synthesized tape), recorded on *Tellus, the Audio Cassette Magazine*, #22, *False Phonemes* (1988) recordings: [Neuma CD](#), [Bridge Records, 9050CD](#). Publisher: *GrimTim Music*,

Stroll (tape, piano, flute, cello, marimba) (1988) Publisher: Semar Editore, Rome. First Performance, Flederman Ensemble, Sydney Australia, June 24, 1988. Recording: [Centaur Records](#)

just_more_idle_chatter (computer synthesized tape) (1987) recording: [Centaur CD CRC 2076](#). Publisher *GrimTim Music*, [Bridge Records, 9050CD](#)

Values of Time (tape, string quartet and wind quartet) 1987. First performace: Aspen Music Festival, 1987. Publisher: Semar Editore, Rome.

Wasting (with Brad Garton and Andrew Milburn) (computer-synthesized tape) (1985), recording : [Centaur CD CRC 2076](#). Publisher *GrimTim Music*

Idle Chatter (computer synthesized tape) (1985) recording : [Wergo Compact Disc 2010-50](#), [Bridge Records, 9050CD](#).. Publisher *GrimTim Music*.

Guy's Harp (computer synthesized tape) (1984). Recording [New Albion Records 030CD](#). Publisher: *GrimTim Music*.

As it grew dark (computer synthesized tape) (1983) recording [Wergo 2031-2](#). Publisher *GrimTim Music*.

As If (String trio and Computer synthesized tape) (1981-82)First Performance: Speculum Musicae, Macmillan theater, 1983recording: [Centaur CRC 2110](#)

Folk-Images (computer-synthesized tape) (1980-81). Publisher *GrimTim Music*.recording: [Bridge Records](#)

Six Fantasies on a Poem by Thomas Campion (computer-synthesized tape) (1978-79)recording: *CRI SD-456 (1982)*; also excerpted on sound sheet, *Computer Music Journal*, Vol. 4/4. Publisher: *GrimTim Music*. *CRI CD 683* (1994).. recording: [New World Records](#)

Serenade (violin, viola, piano) (1978) first performance: Henry Martin, ICSM concert

Dance Suite (piano) (1977) publisher: *Boelke-Bomart, Inc., Hillsdale, NY, (1978)* 16 pp. first performance: Robert Miller, Columbia University

Crossworks (piano, flute, clarinet, violin, cello)publisher: *Boelke-Bomart, Inc., Hillsdale, NY (1978)* 27pp.recording: Boston Music Viva, *Nonesuch H-71351* (1978)first performance: Da Capo Players, Carnegie Recital Hall

Fanfare (two French Horns) publisher: *Perspectives of New Music*, vol. 14/2, (1976) p.235

Artifice (on Ferdinand's Reflection) (Computer-synthesized tape) (1975-76). Publisher: *GrimTim Music*.

mild und leise (computer-synthesized tape) (1973)recording: *Columbia-Odyssey Y34149* (1976). Publisher: *GrimTim Music*.

Affine Study (piano) (1972)

String Quartet #2 (1971, rev. 1977) publisher: *Boelke-Bomart, Inc. Hillsdale, NY (1978)* 21 pp.recording: Pro-Arte String Quartet, recording: *CRI, SD-402* (1979) first performance: Pro Arte String Quartet, Univ. of Wisconsin at Madison

Modal Fantasy (piano) (1970) publisher: *Columbia University Press, NY, (1975)* 20 pp. recording: Robert Miller, *CRI SD-342* (1975) First performance by Robert Miller, Columbia University

Piano Piece in Three Parts (1968), Publisher: *Boelke-Bomart, Inc., Hillsdale, NY (1978)* 12 pp. First performance: Robert Miller, Princeton Univ.

String Quartet #1 (1967) First performance: Composer's Quartet, Princeton 1967

Verse and Refrain for solo Flute (1966). First performance: Princeton, 1966, John Heiss

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