**SUNKEN MONADNOCK:** A COMPOSITION FOR FLUTE, CLARINET, BASSOON, VIOLIN, VIOLONCELLO, ELECTRIC GUITAR, PIANO, PERCUSSION, THREE FEMALE VOCALISTS, AND COMPUTER

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Dissertation Prepared for the Degree of

DOCTOR OF PHILOSOPHY

UNIVERSITY OF NORTH TEXAS

December 2013

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Harris, Joshua Kimball. “Sunken Monadnock”: A composition for flute, clarinet, bassoon, violin, violoncello, electric guitar, piano, percussion, three female vocalists, and computer. Doctor of Philosophy (Composition), December 2013, 99 pp., 3 examples, 17 figures, bibliography, 92 titles.

*Sunken Monadnock* is a scripted combination of three modular musical surfaces. The word “surface” is borrowed from Morton Feldman, who compared the aural surface of music to the canvases of the action painters of the American Abstract Expressionists, and contrasted it with the work’s subject, or organizational structure. Composers’ transition toward a focus on surface through indeterminate compositional techniques, according to Feldman, parallels the development of modernist abstract art.

“Sunken Monadnock: Composing with Visual Metaphors” is a companion critical essay that takes the surface/subject metaphor as a starting point for analyzing *Sunken Monadnock*. Other visual metaphors that inspired *Sunken Monadnock*, and are discussed in the essay, include Shakir Hassan Al Said’s mystical semiotics, Jasper Johns’s crosshatch prints, and Wassily Kandinsky’s theory of abstraction. The circle and spiral, especially, play influential roles in *Sunken Monadnock* as reflected by musical applications of repetition, rotation, compression/rarefaction, and endlessness. The void in the circle’s center also comes into play.

The nature of the work’s formal counterpoint requires an innovative approach to the score, which consists of five sections, each of which reflects a different approach to the aural surface (i.e., to the traversal of time). The two outer sections are traditionally scored, but the three sections in the middle—labeled “Surfaces”—are played simultaneously by three subsets of the ensemble. The piece is approximately 22 minutes long.
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by

Joshua Kimball Harris
ACKNOWLEDGEMENTS

I am especially grateful to Joseph Klein for his generosity and guidance on this dissertation. He allowed me the freedom to proceed along a conceptual path as “all-over” as a Jackson Pollock drip painting. I must also mention a few people who put me on that path: Scott Meister, who first suggested I write a piece about a sculpture; Steven Johnson, who taught music history with pictures; and David Sargent, who showed me how to think about counterpoint. But none of this would have been possible without the patient support of my life-partner, Megan. Thanks, finally, to my teachers and colleagues at the University of North Texas who have given me considerable feedback, advice, support, affirmation, and encouragement on many projects, culminating in this dissertation.
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PART I

SUNKEN MONADNOCK: COMPOSING WITH VISUAL METAPHORS
Chapter 1
Introduction

Aesthetic Foundation of *Sunken Monadnock*

In November 1993 *Omni* magazine published a short glossary of various terms apparently intended to keep its readers current with trends in science and science fiction. Among these terms were several that also influenced art and music in the 1980s and 1990s, including “the butterfly effect,” “chaos,” “Gödel’s incompleteness theorem,” and “Mandelbrot set.” The author of these short, concise definitions, Anna Copeland, gave the following under the entry “Postmodernism”:

A reaction to intellectual traditions that attempt to explain the world using universal concepts such as Freudian models of the personality, Marxist theories of economics, or the cause-and-effect explanations used by historians. Postmodernism views life in the late twentieth century as a series of disconnected events, a smorgasbord of narratives or discourses that compete for attention.¹

This provides a good place to begin this essay on *Sunken Monadnock*. *Omni* magazine itself was committed to an unguarded look at a wide variety of topics, both fact and fiction, both scholarly and commercial, both high and low—in other words, very postmodern. This essay will explore the very diverse influences on *Sunken Monadnock*, ranging from visual art to mysticism to popular culture. The piece could be seen as “a series of disconnect events, a smorgasbord of narratives,” as it certainly resists any universal concept or model.

Before continuing I should be clear that defining postmodernism is inherently problematic. As such it stands in contrast with the great Western tradition of classifying and compartmentalizing: it resists singularity. While I am not particularly interested in labels, especially historical labels, and though I certainly see elements of postmodernist style in my

work (e.g., fragmentation, juxtaposition of materials, and ephemerality), my approach to composition is also very systematic and algorithmic—in other words, modernist. Inasmuch as postmodernism accepts even modernism into its tent, however, I am comfortable seeing my music as postmodern. Further, I do not resort to the term “postmodernism” as a catch-all that makes any artistic decision immediately valid no matter how incongruent or internally contrasting; indeed, a series of disconnected events or smorgasbord of narratives is not necessarily good art. Rather, I am using Copeland’s definition above as a jumping-off point.

Let me, then, adapt her definition specifically for the project at hand. I might say that *Sunken Monadnock* is a reflection of life in the early twenty-first century as a series of non-linear, ambivalent events, a smorgasbord of narratives and discourses that pack our attention. I reject the idea that musical events resulting from indeterminate means and processes, which are very common in *Sunken Monadnock*, are disconnected—though they may perhaps be linearly disjointed. They are not, in any case, unrelated from one another. Thus, events are ambivalent at least: they have multiple potentially valid relationships. I also reject the idea that multiple narratives and discourses necessarily compete for our attention, as if our attention could ever be held by only one thing at a time. Thus, (post)modern life fills our attention with a smorgasbord of narratives and discourses.

Here lies a paradox in my compositional aesthetic, and it is something that seems especially anti-postmodern: All those narratives pack into a unified field of information—a monolith. One of the first things that new photographers learn is that the camera records the entire field of vision without prejudice, an image that often stands at odds with what the photographer saw when composing the photograph. The difference between what the camera sees and what the eye sees is the eye’s connection to a brain that constantly filters out the clutter,
makes sense of the entire visual field, and focuses on the object of intention. It is from this *Gestalt* position that I saturate the subject and surface of my music, trusting listeners confronted with monolithic sound to filter, focus, and make sense of the disparate information.

Visual Arts Metaphors

Subject and surface, like the photography example above, are more metaphors from the visual arts. These terms come to music via Morton Feldman, who famously associated with many of the painters in downtown Manhattan’s New York School from the 1950s until the 1980s, and who wrote extensively about his use of visual metaphors in his compositions. Subject has two primary meanings in the visual arts—the viewer of the artwork\(^2\) and also the thing represented in the image, or what the image is about. In abstract art the subject becomes more ambiguous, often moving from a representational subject to a focus on the abstract structure and design, or to more painterly considerations like technique and action. It is this focus on structure and design that Feldman means when he talks about the subject in music. From the action painters of the New York School, Feldman developed the “radical insight that process itself could serve as subject matter.”\(^3\)

In painting, surface refers to the plane on which the paint is applied. It might be thought of as the imaginary boundaries of the artwork, or more specifically the boundaries of the artwork’s form, or even as synonymous with the work’s form. With the advent of abstract

\(^2\) Subject-as-viewer (when the relationship between the the viewer and the work is discussed using the subject/object binary) becomes especially relevant to music, which complicates the binary by placing performer/interpreters between the two poles. While this has presented problems for the visual art world (for example in performance art or the action painters with whom Feldman associated), the intermediary of the performer in the subject/object binary is a problem that musicians are, perhaps, more comfortable with. I do not address this issue further here except to say that the indeterminacy of *Sunken Monadnock* requires the performers to share a creative role with the composer further breaking down the binary.

\(^3\) Beal, 231.
painting and modernism the emphasis began to shift from the painting’s subject to its surface. Kandinsky theorized the surface of the painting as a plane, which he viewed as the culmination of abstraction, containing all the component points and lines of the image. He thought the four sides of the image had a “particular resonance.” Later the abstract expressionists expanded on the primacy of the surface, drawing attention to the materials (paint and canvas) and the action of painting. Feldman noted that in Guston’s work, especially, “mixing paint directly on the canvas was material evidence of the labor of the artist.” As for music, Feldman used the term surface to refer specifically to the free, non-metrical treatment of time. I return to that idea in Chapter 2, “Patterns and Systems.”

* * * * *

The historical connections between art and music have ebbed and flowed through the generations. Opera’s merger of the visual, dramatic, verbal, and musical culminated with Wagner’s Gesamtkunstwerk in the late 19th century. This merger followed—and extended—a long debate between program music, which incorporated narrative, and absolute music, which existed in its own isolated sphere. In the twentieth century, Adorno identified the growing isolation of absolute music as a potential problem, but he also criticized Stravinsky for his “pseudomorphism” of painting, arguing that Stravinsky’s musical work attempted to paint a picture of something specific and concrete, thus confusing music with the visual arts.

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4 Gortais, 1245.
5 Beal. 231.
6 Adorno, 21-2: “The work, then, by virtue of its absolute spiritualization, becomes something that exists blindly, in stark conflict with the ineluctable determination of every artwork as spirit.... There is validity in the suspicion...that the concept of great music—now passed to that of radical music—itself belongs to a moment in time, that humanity in the age of omnipresent radios and gramophones has actually forgotten the experience of music.”
7 DeNora, 18, 74.
Other writers have sought more connection between the artist and composer. Daniel Albright said, “To study one artistic medium in isolation from others is to study an inadequacy,” and Walter Pater famously said, “All art constantly aspires towards the condition of music.” Pater continues, “For while in all other kinds of art it is possible to distinguish the matter from the form, and the understanding can always make this distinction, yet it is the constant effort of art to obliterate it.” Thus, in some way the lines between form and content inherently blur in music, and visual artists are continually seeking this blurring in their own work. Abstract modernist painters found a way to merge content and form by reducing or eliminating representation in order to focus on the materials of the artwork, or as Feldman might say, by subordinating the subject to the surface.

The Pater quotation above has ironically and unfortunately become closely associated with Clement Greenberg’s medium-specific formalism, which “saw each art as progressing by reigning itself down to the purest use of its own intrinsic materials…. Indeed we may see abstract painting, for example, as a reduction to the materials specific to painting (i.e. the canvas, paint, and brushes). This reduction, however, also makes it easier to see direct parallels in form and process between visual arts and music. James Leggio suggests, “In studying the relations between, for example, music and painting, we must often allow the two arts, though tantalizingly near each other, to remain at arm’s length, so to speak.” We must focus on parallel functioning when the two arts run alongside one another but do not come together literally.

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8 Albright, ix.
9 Leggio, xvii.
10 Ibid.
11 Ibid., xviii.
Leggio includes the following possible parallel functions between music and visual art: 

*harmony* and *rhythm* in painting; tone *color* in music; parallel formal analyses; biographical overlapping, or inspirations, between painters and composers; shared criticisms (race, class, gender, etc.); and cultural overlapping (e.g., primitivism, urban life).\(^{12}\) We see nearly all of these parallels in the compositions of Feldman, who referred to his compositions as *time canvasses.* The parallels between much of Feldman’s work and color field painting, for example, include elimination of symbolism, simplification of gesture, avoidance of marked contrast or exaggerated differences, and a dramatic expansion of scale.\(^{13}\)

I must state, however, before painting too black and white a picture, that Feldman himself was clear that visual art and music were quite separate things—parallel, but separate. When asked later in his career to discuss his music in terms of visual art he curtly responded, “No, it’s music!”\(^{14}\) In fact, his “only argument” with Cage was that the latter claimed that “Everything is music.” To illustrate the interconnectedness, and yet the distance, between music and everything else he gave a Zen riddle: “Does a dog have the Buddha nature? Answer either way and you lose your own Buddha nature.”\(^{15}\) Thus, Feldman felt that we should situate ourselves somewhere between the visual and the aural—taking cues from both when appropriate.

The use of visual metaphors in discussing music has been very revealing to me as a composer. Stravinsky, if he really was attempting to *paint a picture* with music, failed to recognize the absurdity of such a proposition (or assumed the metaphorical nature of such a proposition went without saying). In this essay I refer to the work of painters like Jasper Johns

\(^{12}\) Ibid., xix.

\(^{13}\) Beal, 230.

\(^{14}\) Ibid., 234.

\(^{15}\) Feldman, *Eighth Street*, 30-1.
and Shakir Hassan Al Said because their work either illuminates an analytical point or because their work has in some way influenced *Sunken Monadnock*. I also discuss how I attempt a balance between the surface and the subject of my work through the use of both indeterminate and overdetermined processes.

Overview of the Critical Essay

Chapter 2, “Patterns and Systems,” discusses the various systems at work in *Sunken Monadnock*. I explore the recent history of systematic, algorithmic, and process musics to show where the current work fits. Steven Johnson’s essay on Feldman’s *Why Patterns?* has influenced me to think very carefully about how music can be influenced by visual art, and I use Feldman’s approach to parallel functions as a starting point from which to show how I employ various circular processes, including isorhythm and serialism.

One of the interesting aspects of Johns’s process works is that the process is not entirely visible. Parts of the process, even very obvious parts, are missing from the art work itself. In Chapter 3, “The Void,” I explore the history and significance of the void in a variety of traditions, including that of mystical Islam through a brief study of the work of the Iraqi painter Shakir Hassan Al Said, a Sufi practitioner. I also explore several compositional techniques including kinds of grounding and the use of negative space that reflect the void in music. Finally, I examine the parallel between Johns’s hidden processes and my own process that illuminates emerging signification in *Sunken Monadnock*.

Chapter 4, “Formal Counterpoint” briefly traces the use of counterpoint in the Western musical tradition, and then proceeds to confront the problem of non-linearity in music, a time-based art form. This problem is the rationale for the general emphasis on counterpoint, especially
formal counterpoint, in *Sunken Monadnock*. By formal counterpoint I mean relationships and interactions between temporally discrete sections of music that will be cut, superimposed, merged, and permuted in a variety of ways. Each of three formal surfaces (a term from Feldman) focuses on a single, distinct systematic approach to composition and, to various degrees, on groupings of instruments. I chose these groupings to achieve a relatively homogenous tone color in each section (although there is obviously variety in the degrees of homogeneity in tone color—the singers being more so, for example, than the winds and strings). At times, the ensemble is reconfigured as various instruments leave one grouping and join another.

Overview of *Sunken Monadnock*

Before summarizing these three surfaces, I would like to explain the overall form in both idealistic and practical terms, as composition seems primarily to be a negotiation of the tension between these two extremes. Like most of my works, the composing of *Sunken Monadnock* has moved along a continuum from idealistic fantasy toward practical reality over time. My original conception of this work was one of three stand-alone pieces being played at the same time. Indeed, I continue to think of it in those terms. The reality, however, is that the three surfaces are not, at this point, fully fleshed out, independently performable works. One of the surfaces, “The Ventriloquist,” has been performed separately from *Sunken Monadnock*, but in a very different state than that in which it exists here. I would like to follow that pattern with the other surfaces in the future, using them as modules to adapt and combine into new metaworks. In a sense, *Sunken Monadnock* is the first in such a series of metaworks.

This particular work exists by fusing the three surfaces together in specific ways at specific times. Temporally, the work consists of three sections in sequence, A, B, and C (see
Figure 1). The A section (called Frame I in the score) begins with the ensemble metrically and conceptually unified, but ends with a fragmentation of the group into the three subgroups, each of which continues to one of the three surfaces. The B section makes up the longest, most substantial, part of the work and finds the three subgroups each acting independently, following different kinds of scores, thinking about time differently, and listening primarily to its own subgroup. The C section (Frame II) brings the three subgroups back together (at least briefly) into the same meter and measure alignment before the ending.

Figure 1, Formal Design of Sunken Monadnock
Summary of the Three Surfaces

Surface I, “Stone Mountain” (flute, clarinet, bassoon, violin, cello, electric guitar), pp. 9-11. I based all of the parts in this group on seven pairs of *taleae* and *colores*. The *taleae* are also permuted by various processes and migrate among the six instruments.

Surface II, “The Ventriloquist” (piano, percussion), pp. 12-13. This surface focuses on phasing tempo curves. These tempo curves are generated by an algorithm I wrote for the computer application Max, which triggers percussion samples during performance to ensure precision of closely related tempos. These tempo curves are not heard constantly throughout this section, but fade in and out. The content of the on-stage instrumental parts will mimic these phasing tempo streams, and also complement them with other gestures. Not all of the curves will be heard all the time, but they will fade in and out.

Surface III, “Vladimir’s Song” (singers), pp. 14-19. In this surface I focused on teleological motion, gradually developing speech phonemes devoid of linguistic meaning toward clearly discernible, meaningful language. The motion is imperceptibly slow and follows a complex system with multiple layers of change happening constantly. Again, not all of this process is heard in the final work, but the text will finally be heard at the end of the composition, as the song sung by Vladimir at the beginning of Act 2 of *Waiting for Godot* by Samuel Beckett. This song epitomizes the themes of circularity, stasis, and deferred hope that pervade the play—a verbal analogy for the kind of music explored in this *Sunken Monadnock*:

A dog came in the kitchen  
And stole a crust of bread.  
Then cook up with a ladle  
And beat him till he was dead.
Then all the dogs came running
And dug the dog a tomb
And wrote upon the tombstone
For the eyes of dogs to come:

A dog came in the kitchen, etc.\textsuperscript{16}

Chapter 2

Patterns and Systems

Traditional Patterns

Music analysis could be defined as the discernment of the patterns that distinguish works, styles, and genres from one another. The informed listener can hear Dufay’s signature fauxbourdon or Josquin’s paired, imitative entrances. The routines of baroque and classical music established a canonical set of harmonic progressions and formal traditions. In the twentieth century Schenkerian analysis suggested that every piece from the recent (i.e. last few centuries) collection of Western music could be reduced to a three- or five-note descent to the tonic pitch—quite an obstinate pattern indeed.

Systems are modernist and postmodernist composers’ self-conscious response to patterns uncovered through analysis. The output of a feedback loop, integral serialism grew out of the development of tools to analyze the atonal and dodecaphonic works of the Second Viennese School. Composers employing integral serialism planned every parameter of the music according to repeating series of numbers. They even manipulated and permuted the series according to abstractions of the series, thus creating layer upon layer of systematic music. Despite these overdetermined\(^\text{17}\) plans, listeners are often unaware of the processes working to build rigorously complex structures of uniformity and balance.

\(^{17}\) I am borrowing this term from the field of psychoanalysis where it means having multiple determining factors. No connotation of judgment is implied.
Minimalism took a more direct approach to the systemization of music. Steve Reich and others wanted the process to be transparent and audible, perhaps like one of those telephones from the 1990s encased in clear plastic through which the user can see green circuit boards and LEDs flashing. In Reich’s phasing pieces, for example, the process often involves little more than two unison parts, one of which gradually speeds up or slows down—causing a phasing effect—until they come back into unison, at which point the piece ends. The listener is often aware of the process as soon as it begins, and can usually guess the arc of the piece from the beginning.

The Aural Plane

Integral serialism and minimalism stand at opposite ends of a spectrum of approaches to structure, or what Feldman referred to as the musical work’s subject. In his essay “Between Categories” Feldman situates his approach to composition in the tradition of the French post-impressionist painter Paul Cézanne, who rejected perspective in his works. Feldman sensed something visceral and direct in this discarding of the tradition of illusion, writing that in the work of Cézanne, and later the American abstract expressionists, “rather than taking us into a world of memory, we are pushed into something more immediate in its insistence on the picture plane. The search for the surface has become the obsessive theme of the painting.”18 Feldman asserts that “all attempts at utilizing an organizational principle, either in painting or music, have

18 Feldman, Eighth Street, 84.
19 Ibid.
an aspect of hallucination.”19 Perspective in painting required precision in organization that Feldman associated with the systems of the integral serialists, Boulez in particular.

Thus, Feldman wanted to subordinate the subject of the music to its surface. But what, exactly, is the surface of a piece of music? What is the aural plane? According to Feldman it has to do with the passage of time. Time is the musical analog of the painter’s canvas. This may seem obvious, but Feldman asserts that composers have not been interested in time, but rather in timings.20 His thinly veiled criticism of metrical organization will not surprise anyone who has studied his scores. Timings appear to be arbitrary, the senseless time signatures only highlighting his ambivalence. Beat-oriented approaches to time bored Feldman, who said, “I am not a clockmaker. I am interested in getting to Time in its unstructured existence. That is, I am interested in how this wild beast lives in the jungle—not in the zoo.”21

The Score

Feldman’s approach to time has strongly influenced my own approach to time in Sunken Monadnock. I use the term “surface” to distinguish between three separate sections, or what may be thought of as being like movements—except that these sections do not occur sequentially but simultaneously. The score design required extensive planning because the three surfaces were conceived in such radically different ways from one another that the practical requirement to produce a single score for the work seemed incongruent with my compositional approach. I finally decided that the best way to produce a score was to make it as chronological as possible

20 Ibid., 87.
21 Ibid.
while still maintaining score independence among the three surfaces. The result is a score comprised of five sections—two frames and three surfaces.

The outer frames (p. 1-8, 20-5) are quite traditional in their metrical parsing of time and are suitable for a conductor if the ensemble desires. The middle section, however, is governed by a timer that is visible to the whole ensemble, and contains the concurrent three surfaces (Surface I on pp. 9-11, Surface II on pp. 12-13, and Surface III on pp. 14-19).

This score format raises some questions as to the purpose of a score, which are typically two-fold: to give a conductor information to do his or her job, and to provide a visual representation for the scholar or performer who wishes to study the score. In the case of Sunken Monadnock, no conductor is required in this middle section since time is governed by a timer; therefore there is no need for the score to represent all the concurrent sound material in chronological order. Despite the fact that a traditional score includes all simultaneously sounding events in vertical alignment, there are some precedents for a more independent, indeterminate score. John Cage’s Number Pieces, for example, consist of parts but no scores, as the latter would be inaccurate anyway since the combinations of parts (i.e. the verticalities or simultaneities) are indeterminate. The same is true of Sunken Monadnock where the surfaces’ interactions with one another are indeterminate.

The surfaces are so named because they each deal with time in different ways, but always in its unstructured passing. The winds and strings in Surface I, “Stone Mountain,” are given clock times at the beginning of phrases. The phrases have no specified duration, but each note is accompanied by a small number above it that indicates the number of “counts” that note should get at a very fast tempo. The counting is not a pulse, per se, but rather a device designed to give
notes proportional durations in relation to one other—that is, designed to construct rhythms. The piano and percussion in Surface II, “The Ventriloquist,” are given short fragments, usually of indeterminate length, to be played during a particular window of time. These fragments are meant to complement and supplement the audio playback that makes up the most substantial part of this surface. The sopranos’ score for Surface III, “Vladimir’s Song,” is notated proportionally to space on the page with each system lasting approximately fifteen seconds long. As can be seen, each surface takes a different approach to non-metrical temporal design.

Surface I, “Stone Mountain”: Analysis of the isorhythms

Surface I, “Stone Mountain,” is based on isorhythms: in this case, I am abstracting from any historical sense of that term the ideas of separate, prescribed series governing pitch (i.e. *colores*) and rhythm (i.e. *taleae*). In this case there are seven pitch series and seven duration series. These *colores* and *taleae* are linked in my precompositional materials to a specific harmonic series, but in their application in the piece, they are often treated separately. Before continuing I will explain how these *colores* and *taleae* are derived.

Figure 2 shows the *colores* and *taleae* I used throughout Surface I. I began with the harmonic series of seven pitches centered about C on the circle of fifths. Figure 3 shows the process by which I chose the ordering for each harmonic series. In deriving the *colores* in this manner, I sometimes omitted repeated pitches. This is why the various *colores* have different numbers of pitches included. Using the C harmonic series as a mirror point, the process for deriving the F harmonic series is a reversal of that of the G harmonic series. The same is true for B-flat/D and E-flat/A. This resulted in retrograde invariance at $T_4$ between B-flat and D, and at
T₆ between E-flat and A. The *taleae* are durations derived from the numbers I wrote above the harmonic series staves, from left to right, or in other words, the ordinal numbers of the pitch series written in harmonic series order.

**Figure 2, Isorhythmic Source Material in *Sunken Monadnock*, Surface I, “Stone Mountain”**

<table>
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<tr>
<th>colores</th>
<th>taleae</th>
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<tr>
<td>A</td>
<td>15 13 11 9 7 5 3 1 2 4 6 8 10 12 14</td>
</tr>
<tr>
<td>D</td>
<td>1 8 9 2 3 10 11 4 5 12 13 6 7 14 15</td>
</tr>
<tr>
<td>G</td>
<td>1 13 12 9 8 5 4 2 3 6 7 10 11 14 15</td>
</tr>
<tr>
<td>C</td>
<td>1 4 5 8 9 12 13 15 14 11 10 7 6 3 2</td>
</tr>
<tr>
<td>F</td>
<td>1 15 14 11 10 7 6 3 2 4 5 8 9 12 13</td>
</tr>
<tr>
<td>B[sub]b[/sub]</td>
<td>15 8 7 14 13 6 5 12 11 4 3 10 9 2 1</td>
</tr>
<tr>
<td>E[sub]b[/sub]</td>
<td>1 3 5 7 9 11 13 15 14 12 10 8 6 4 2</td>
</tr>
</tbody>
</table>
Figure 3, Derivation of Isorhythmic Source Material from Seven Harmonic Series

Why Counting?

This process of deriving isorhythmic source material was somewhat arbitrary (especially in the case of the durations), but it ensured a variety of pitch and duration orderings. The durations are especially rich in their diversity, each series containing a different ordering of the durations 1 through 15. I knew from the beginning that I wanted to avoid any sense of metrical organization of time, and I began experimenting with various approaches to complex meters and
rhythmic notation. My primary motivation in this approach was Feldman’s trio for piano, flute, and glockenspiel, *Why Patterns?* The score to this 1978 piece is full of changing meters and complex rhythms including various kinds of polyrhythms. The aural result, however, is free of any rhythmically rigid complexity. In fact, the listener does not perceive any durational proportions or metric organization at all.

The reason for this is two-fold. First, the titular patterns in the piece constantly change by small degrees. This constant changing disrupts metrical patterns and any sense of a regular pulse. In my experience performing the piano part to *Why Patterns?* (and verified by my discussions with other Feldman performers), I found myself counting the smallest common subdivision value through all the meter changes. In the case of the piano part of *Why Patterns?*, that value is the sixteenth note, and that is what I counted consistently regardless of the written time signature. The second reason the listener does not perceive any metric organization in *Why Patterns?* is that none of the three instruments corresponds with the others until the final few pages (a short passage that amounts to an incongruous coda). Unlike most musical scores, the one for *Why Patterns?* does not indicate any vertical alignment between instruments, and so does not reflect the aural result of performance accurately at any given moment. It is effectively three parts printed on one page—one step farther than Cage had gone with his Number Pieces, but no more helpful.

As I was contemplating the performance practice of *Why Patterns?* and trying to devise a rhythmic framework that would deal with my fifteen discrete durations—and one that would be flexible enough to deal with any manipulation of those durations—I was reminded of a piece I

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22 Feldman, *Why Patterns?*
had seen performed a few years ago, *The Annunciation* by Michael Hicks (2006). In this work, Hicks simply places numbers above note heads that indicate each note’s duration (see Example 1, Excerpt from *The Annunciation* by Michael Hicks). The performer is instructed to count to each number at 210 to 240 counts per minute. As I played this piece I realized that I was doing nearly the same thing I did when playing *Why Patterns?*, counting a very fast common value. The advantage of Hicks’s model, however, is that the performer does not need to do any calculating or translating symbolic notation into numbers for counting.\(^\text{23}\) Thus, an entire intermediary layer is removed.

![Example 1, Excerpt from *The Annunciation* by Michael Hicks](image)

\*Numbers above chords, single notes, or rests represent beats to be held (1 = 210 - 240)

This model of rhythmic notation seemed to solve the problems of my fifteen discrete durations because any integer is easily notated and easily read. I no longer needed to devise time signatures and notations to accommodate such a fine gradation of durational proportions. It

\(^{23}\) For example, in preparing my score of *Why Patterns?* for performance, I noted the value for each note in terms of sixteenth notes. In the case of a dotted half note tied to an eighth note, for example, I would have written a small “14” above the note and counted to fourteen at the appropriate speed.
seemed to me a simplification of and a practical improvement upon Feldman’s notation. In the Appendix, the *taleae* and *colores* are labeled with color matching those of Figure 1. The *colores* are indicated by the background color, and the *taleae* beginnings are indicated with colored text above the staff. The operations on each *talea* are also given (for example, “D*2” means the durations come from the D *talea*, each multiplied by 2, and “D+3” means each duration has 3 added to it). One problem with traditional rhythmic notation is that it largely limits operations to doubling and halving, whereas I wanted more flexibility, as in Feldman’s words, to see how Time lives in the jungle.

Tempo Curves: Analysis of Surface II, “The Ventriloquist”

The treatment of time in Surface II, “The Ventriloquist,” is somewhat at odds with the temporal freedom of the first surface. In fact, it is so precise that it must be performed by a computer. The centerpiece of the second surface is the live algorithmic generation and playback of six independent pulse streams, or what I think of as tempo curves, because each is constantly changing along a curve function (see Figure 4). The six tempo curves are grouped into three pairs, each of which gradually accelerate and decelerate between the same two speeds: curves 1 and 2 move between 60 and 90 beats per minute (BPM), curves 3 and 4 between 80 and 120 BPM, and curves 5 and 6 between 90 and 150 BPM. Each pair accelerates and decelerates slightly out of phase from one another: curves 1 and 2 in a 2:3 ratio, curves 3 and 4 in a 5:7 ratio, and curves 5 and 6 in an 11:13 ratio. Curve 1 is the only one that does not reach its fastest point.

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24 An email I received from Hicks on December 15, 2012, confirmed that his counting notation had been a solution to the same problems—that is, it allowed a high degree of temporal resolution for the most subtle manipulation of a *talea*, and it accomplished the counting that he did anyway when playing Feldman.
at the halfway point, where the tempi of the four different streams exist in a (2:3:4:5) relationship. At any other given moment, there are six pulse streams producing a kaleidoscope-like effect of constantly changing patterns.

I used the curve~ object in the computer application Max 5 to generate the six tempo curves. This object allowed me to send a list of three-part messages, each containing the target tempo, the time it should take to get there, and the shape of the curve. I put all the messages for each tempo curve into a coll object and programmed it to send the next message when the previous message’s target tempo had been reached.
Each pulse triggers a sound file at random from a group of similar files. I recorded samples of nine different instruments playing the same five short motives. Each motive was recorded four times by a percussionist attempting to play identically each time. The subtle variations in human performance were essential to help offset the mechanized process of Surface II, “The Ventriloquist.” The result is over 170 samples divided into approximately 35 groups, each mapped to one of the six tempo curves.

At this point there are two approaches to the final mix of this surface. Initially I planned to use prerecorded fixed media, but I had trouble choosing a perfect mix. Actually, I had trouble with the idea that there were so many varieties and so many perfect mixes with over 100 tracks. I believe this problem gets to the appeal of indeterminacy for many composers including Morton Feldman and John Cage. Feldman once said of Cage that he “created a camera for others to take the picture,” and in the case of Surface II, I felt it best to create the machine that would surprise me and other listeners each time. I used Max 5 to create a mixing algorithm for live performance that chooses which sample group to use and when to fade each tempo curve in and out.

The computer playback component is central to the philosophy of Surface II, “The Ventriloquist,” but there is also an onstage component performed by the piano and percussionists. The bookends of their parts are a notated version of the temporal phasing that is characterized by the computer part (see Example 2, Excerpt from Surface II, “The Ventriloquist,” rehearsal B1, p. 12). The first percussionist plays various non-resonant, or muted, metals (one at a time), the second percussionist play various woods (one at a time), and the pianist plays either muted clusters in the low range of the piano or cluster harmonics in the middle range. All three

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25 Feldman, Eighth Street, 28.
parts gradually phase between 60 and 90 BPM, though obviously without the precision of the computer part.

The onstage instrumentalists then move on to play a variety of short fragments and motives, rather sparsely, while the computer takes over and continues the phasing. All three players read from the same part—a twist on the indeterminate model of Cage’s Number Pieces. Feldman’s music is noted for its near repetition, its not quite ostinatos, often achieve by a rhythmic displacement of some sort. In *Sunken Monadnock*, I have reduced this notion of subtle variation by allowing the variations inherent in human performance to suffice. In *Surface II*, while all players are reading from the same part, they never play the same thing because of the indeterminacy embedded in the single part (rehearsals B2, B3, B5, p. 12-13). There are also moments like this in *Surface I*, “Stone Mountain,” where two instruments have the same pitches.
and same durations (e.g. alto flute and clarinet at 4:40, p. 9), but never play the same thing the same way at the same time.

I will return to this idea of near repetition in the conclusion, but in Surfaces I and II, I relied on human variation to ensure continual variations. These two sections of *Sunken Monadnock* present a problem, however, for the surface metaphor I have suggested I am employing in this work. If I were to faithfully employ such a metaphor, these organizing principles I have been discussing would be mere hallucinating. I will discuss the tension between surface composition and highly deterministic processes (which might be more a rhetorical tension than one of substance) later in this essay, but first I will venture farther into the exploration of organizational principles in discussing the void and Surface III, “Vladimir’s Song.”
Chapter 3

The Void

Philosophers since Plato have pondered the issues of negation and nothingness, and whether nothing even exists. Martin Heidegger begins his *Introduction to Metaphysics* by asking “Why are there beings at all instead of nothing?” He goes on to argue that humans are incapable of experiencing nothing—though I am convinced that we notice quickly when an expected something is missing. In this chapter I look at some of the implications of negation in art and music. Generally, negation can be thought of as a kind of grounding, or a technique that directs the viewer’s attention toward or away from parts of an artwork. Negative space, or empty space, is the most direct kind of negation in the visual arts. In music “negative space” can be translated rather literally as silence—the negation of sound.

A more nuanced take on negation, however, requires not a literal absence, but the suggestion of a thing’s opposite, a flipped meaning—an inversion. A photograph’s negative image, for example, is a close approximation of the photograph—one that is always recognizable as the “same” image. One can nearly imagine the original image by looking at its negative. In the same way a person can understand the meaning of phrases like “not happy,” “not big,” and “not cold” without needing additional words. The suggestive power of negation can be very strong. If an artist can say “not happy,” he or she does not need to say “sad.” The void—that is, the absence of all things—represents the ultimate negation, and artists have used the void in various ways to lead the viewer or listener, first, to the absence of stuff in order to understand the

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26 Heidegger, 1.
meaning of the art work. I begin by looking at the void in the work of the Iraqi painter Shakir Hassan Al Said.

Shakir Hassan Al Said

Al Said (1925-2004) was critical in the development of modernist painting in postcolonial Iraq. In 1951 he cofounded the Baghdad Modern Art Group, and in 1971 he founded the One-Dimension Group. The latter sought to connect modernism with pre-colonial, authentically Iraqi aesthetic roots, especially the common usage of Arabic letters in Islamic art. Because of the tradition of aniconism in Islamic art many artists primarily used geometrics abstractions and Arabic letters to convey meaning. The letters, especially, hold great religious significance and often adorn the interiors of mosques throughout the world. Abstract, or non-representational, styles have a much longer tradition in Arab cultures and are not as bewildering or elemental as Western abstraction. As a Sufi, or Islamic mystic, Al Said’s paintings comfortably convey meaning despite their non-representational style.

Seyyed Hossain Nasr wrote, “[T]he Sufi influence was strong in the domain of the arts,”27 and it certainly seems to have influenced Al Said’s work.28 Annemarie Schimmel, wrote, “The goal of the mystic is to return to the experience of the Day of Alastu, when only God existed,” before he created mankind.29 This is an extreme vision of tawhid, the Islamic notion of unity, in which there is literally only one thing—God, and nothing else. Sufis work toward this end through several means of self-annihilation, including asceticism, meditation, and various

27 Nasr, 13.
28 Harris.
29 Schimmel, 24.
modes of repetitive movement or the chanting of scripture. Al Said’s work seeks to represent the annihilation of the self in order to portray God, replacing the flawed with the perfect. But since the perfect cannot be realized, it must only be suggested through its marked absence.

Decolage, or anti-collage, in Al Said’s work is one method of creating negation. He frequently cut, slashed, or removed the canvas to reveal the wood or wall behind it. Examples are two untitled works, one (Figure 5) in which jagged lines lead to ruptures of the canvas itself, and another (Figure 6) that features two gaping holes in the canvas. This annihilation of the canvas points to the annihilation of the self.

Figure 5, Title unknown by Shakir Hassan Al Said, 1975
Another Sufi method of self-annihilation is ritualized meditation and contemplation, often involving repetitive chanting or moving. For most Muslims the act of the dhikr—or recitation of the names of God—is usually personal, but the various communal rituals prescribed by sufis allow its participants to meditate deeply so that they may alter their consciousness. Some groups have an especially rhythmic method of recitation in order to reach an ecstatic state. They form a circle and recite the shahada\(^\text{30}\) slowly and methodically, sometimes on the inhalation and

\(^{30}\) The shahada is an expression of faith and the first of the five pillars of Islam: “There is no god but God, and Muhammed is God’s prophet.”
sometimes on the exhalation. Gradually, they increase the tempo while gradually eliminating syllables and words until the shahada is merely signified by the last letter of Allah (ha), resulting in a frenetic group sigh.\footnote{Shimmel, 176.}

Schimmel points out that the most common formulation of the dhikr includes ninety-nine names, but that the “Greatest Name is hidden.”\footnote{Ibid., 177.} Indeed, the most powerful invocation is the one that is never invoked. This is perfectly aligned with the cosmology of the void in Islamic art. Nasr said, “…[T]he void, or that which is empty of things becomes a trace and an echo of God in the created order, for through its very negation of ‘things’ it points to that which is above and beyond all things. The void, therefore, is the symbol of both the transcendence of God and His presence in all things.”\footnote{Ibid., 186.}

Al Said called his paintings contemplations, and they certainly exhibit the qualities of Sufi contemplation—repetition, action, rhythm, tempo change, and elimination. Gradual elimination, as has been shown, is especially important. Anything that distracts from unity must be removed until only the essence of a thing remains—a word, a letter, a thought, or the wooden frame behind the canvas. The void is also clear in Al Said’s work.

\footnote{Shimmel, 176.}
\footnote{Ibid., 177.}
\footnote{Ibid., 186.}
His *Wall Strip 4* (Figure 7), for example, is characterized by active rhythms, perhaps those of a whirling dervish, but the focal point of the work is the portal to a dark recess in the upper center of the canvas—the void. A dark abyss consumes the center of an untitled work from 1992 (Figure 8). Darkness, however, is not the only way to point to the void. In a sense, the holes in the canvas described above are voids where even light may sometimes come through. In an untitled work from 1999 (Figure 9), Al Said creates a particularly striking image of the void by cutting a large hole out of the canvas.
Figure 8, *Untitled* by Shakir Hassan Al Said, 1992

Figure 9, *Untitled* by Shakir Hassan Al Said, 1999
Jasper Johns

Whereas Al Said makes the void the violent focal point of much of his work, Jasper Johns approaches negation more subtly. In his crosshatch paintings from the 1970s and 1980s, rather than removing work from the canvas, he suggests an elaboration of the work that extends unseen beyond the canvas. Michael Crichton and Steven Johnson have pointed out the tension between subject and surface in these works. In comparing Johns’s work with Feldman’s, Johnson wrote the following about The Scent (1973-4) in terms that are applicable to several series of crosshatch paintings, including Usuyuki (1977-8):

The work, consisting of three separate but joined panels, holds an irony that…also exists in Feldman’s late music. The painting shows a surface that is simultaneously simple and complex, simultaneously improvisational and carefully ordered. Minimal in content, it presents just a few easily apprehended elements, which extend through the space by a perceptible but flexible pattern of repetition…. The surface appears to be as ‘all-over’ in character as are any of Pollock’s drip paintings. But Johns used the simplicity of these marks to direct attention away from surface content toward the process of perception, or, as Johns has phrased it, ‘the changing focus of the eye.’ Patient viewers, scrutinizing the picture more closely, will experience a dawning revelation of structure: what at first seemed haphazard turns out to involve systematic, regulated structure.34

34 Johnson, New York Schools, 219-20.
Crichton pointed out the pattern in *The Scent* (Figure 10): “This is a large painting in three panels.... At first it appears to be only a random array of secondary colors.... Then one notices that it is not really random, since no cross-hatched area abuts another area of the same color.”\(^{35}\) Additionally, each panel is repeated, in part, on the adjacent panes: “...if the three vertical elements of the first canvas were labeled A B C, the second canvas would be C D E, and the third E F A.”\(^{36}\) Crichton’s book, written in 1977, predicted that Johns would continue complicating these cross hatch patterns, and Johnson follows up with an analysis of *Usuyuki* (1978-9) thereby fulfilling this prediction. I have provided an analysis below of a subsequent painting from the same *Usuyuki* series using Johnson’s analysis as a model (see Figure 11).

\(^{35}\) Crichton, 62.

\(^{36}\) Ibid.
Like *Scent*, *Uyuzuki* is divided into three columns that change in relation to one another in each of three panes. In the latter, the left column becomes the right column in the pane to the right, and the middle and right columns shift to the left, creating a sense of rotation (See Figure 12). Additionally, the columns seem to slide downward, revealing new material that seems to enter from the top in the center and right panes. Figure 12 shows the apparent movement of the basic elements from the left pane to the right pane. There are, in total, fifteen different rectangular elements in *Uyuzuki*, though only nine ever appear in one pane. This leaves parts of the process clearly outside the frame of the canvas, which constitutes the plane, or visible portion, of the process. In other words, the process expands beyond the artwork; we only see parts of the complete process.
In the composition of *Sunken Monadnock* I was intrigued by the notion that the process must not necessarily exist in its complete form within the art work itself. Perhaps I was overly biased by the aesthetics of process-oriented composers like Reich for whom the process *is* the work, but I found it liberating to use one process to generate unified material, and then another process to filter and shape the material to fit within the context of the work. We have already seen this filtering process applied in Surface II, “The Ventriloquist” (in fact, I used the filtering process there to create multiple versions suitable for different contexts). Now I will describe the process at work in Surface III, “Vladimir’s Song” and how much of it actually appears on my time canvas.

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37 Johnson, *New York Schools*, 223.
Revelatory Process: Surface III, “Vladimir’s Song”

I was struck by the circularity of Beckett’s text, and I wanted to work against some common ideas about repetition. Usually repetition either enhances meaning or erodes it. I wanted to overlay a linear process on the text that would allow for text to become intelligible only at the very end. This is a way of enhancing meaning, but it moves the original meaning of the text (i.e. the meaning of the text at the beginning) to a pre-linguistic starting point. I found this to be inherently musical since music arguably has an intrinsic pre-linguistic meaning. This linear process develops linguistic meaning, moving gradually from vowels to non-verbal phonemes, to syllables, to word fragments, to non-syntactical words, finally to intelligible text. In order to move Beckett’s text from a state of intelligibility to one consisting of a primordial soup of vowels, however, I needed to first reverse this progression. I started by breaking down the English text into fifty-six syllables:

æ dʊɡ kɛm ɪ kɪt tʃən
ænd stɔl ə pɪs əv bɹɛd
ðɛn kʊk əp wiθ ə le dæl
ænd bit him əŋ tɪl hi wæz dæd

ðɛn dl ə dæɡz kɛm ræŋ niŋ
ænd dæɡ ɔ dæɡ ə tʊm
ænd rot ə pæn ɔ dæ tʊm stɔn
fɔr ɔ dæ ədʒ ɔz əv dæɡz tu kæm

I then did the same with the French text in order to supply variety in the texture. I had to make a few minor changes to make it the same fifty-six syllables:
With each text divided into fifty-six syllables, and each one labeled 1-56, I could use numbers to effect an even distribution of changes over several iterations of the texts. I used a random sequence generator to create the order of syllables for the first iteration of text—a different initial sequence for each of three soprano parts. The first two sopranos sing toward the English text and the third soprano sings toward the French text. Figure 13 shows the basic distributions for each soprano part.
In these charts each column represents one sequence of syllables. The column on the left of each contains the first, random, sequence (top to bottom) and the column on the right contains the syllables in Beckett’s original sequence (i.e. 1-56). The changes found in each iteration of the text are shown; otherwise, the empty squares mean nothing has changed at that position in that sequence, and the last number given in that row is still in effect.

The pattern of changes is mirrored between the two English parts above (Figures 13a and 13b). In the first (Figure 13a), two or more “correct” syllables enter the sequence on each
iteration, beginning at the middle first, then expanding outward. In the second, the “correct”
syllables enter the sequence at the beginning and ending first, continuing toward the middle. I
opted not to move directly from center to ends, and vice versa, via linear functions because I felt
that with twenty-six iterations the process would become obvious to the listener, and also
because intelligible text patterns would become apparent too early, with no room for change. In
other words, if the first soprano began to make sense with a string of intelligible words by the
third or fourth iteration, that string would simply get longer each time via a simple additive
process. By reiterating and overlapping the pattern four times nothing becomes intelligible as
language until the final few iterations. There are persistent gaps of intelligibility in the middle of
each iteration until then. The French text distribution in the third soprano part (Figure 13c)
combines the two patterns described above.

After replacing the numbers in the charts with the syllables of Beckett’s text, I was left
with a massive amount of mostly nonsensical syllables. As an example, see Figure 14, which
shows every iteration of the French text from the random sequence to the original sequence,
representing one third of the full text of Surface III. The top row of the chart in Figure 14
contains pre-compositional information on how to implement these syllables in the score (please
refer to the legend in Figure 14). The label “0” means, for example, to strip the syllable of any
consonants. The label “b3.2” means to add only the ending syllable after three rows, then after
two rows, throughout that column. The label “b-f” means to add both beginning and ending
consonants. Each part has a different set of instructions, and so evolves slightly differently.
Figure 14, Surface III, “Vladimir’s Song,” Complete Soprano 3 Text
It was very important to me that these vocal parts evolve very slowly and gradually. One way I was able to extend convincingly the process was the implementation of compound syllables (i.e. where the syllable begins with a consonant in one voice and ends with a consonant in another voice). I accomplished this by having initial consonants throughout a passage in one part while another part has only terminal consonants. Because of the indeterminate rhythms of proportional notation, compound syllables sometimes occur, allowing for a smoother transition from pure vowels to syllables with consonants.

I knew early on in composing Surface III, “Vladimir’s Song,” that I would not use all of the material generated by these processes. After sketching out the first few systems and doing some quick arithmetic, it became clear that the full process would take nearly an hour to complete, much longer than the time frame I had for Sunken Monadnock. Allowing for the possibility of the complete process to appear in another work, I removed more than half of the iterations (i.e., more than half of the columns in Figures 13 and 14). I felt that even with over half of the material removed, the process would still be effective—indeed, such trimming was even required for the process to be more effectively perceived by the listener. After rehearsing with the performers, I decided to cut even more material from this surface.

In the end, there is not much of the original process remaining in Surface III of Sunken Monadnock. And yet over the course of fourteen or fifteen minutes there is a perceptible evolution of vocal material beginning with vowels, transitioning to non-linguistic syllables, then to non-syntactical words, and finally revealing Beckett’s text at the very end. There are times when the singers re-enter following a rest, where the effect is that the process has continued
unfolding during their silence. This is a musical metaphor of the hidden process in Jasper Johns’s crosshatch paintings that evokes the sense of “something out-there” that cannot be seen or heard; it points to the void.
Chapter 4

Formal Counterpoint

The overarching compositional idea governing Sunken Monadnock is the notion that counterpoint happens on higher levels than traditionally understood by composers. This is merely an extension of the conceptual evolution of counterpoint over the past century. Each of the surfaces in Sunken Monadnock has an independent form that could serve a stand-alone piece of music. In their basic forms, they are monolithic, simple modules suitable for a variety of musical settings. The setting of these modules against one another in counterpoint, however, conveys a different level of meaning to each section. To understand how setting (i.e. context) changes meaning it is useful to explore the traditional musical purpose of counterpoint, albeit with a unique interpretation.

The term counterpoint derives from the late medieval term punctus contra punctum (point against point), which was then shortened to contrapunctus and used chiefly to describe the patterns and evolving rules of composing polyphony. Alfred Mann, in the preface to his translation of Johann Joseph Fux’s Gradus ad Parnassum describes an important conceptual leap in composers’ attitudes toward polyphony: “Soon after the term contrapunctus appeared, its applications seems to have been extended beyond the strict original meaning, and in a Treatise of Counterpoint (1412), the Italian theorist Prosdocimus de Beldemandis pointed out that the contrapuntist had actually become concerned with the problem of cantus contra cantum—the problem of judging one complete melody against another rather than note against note.”38

This conceptual leap is important because it set a precedent for thinking of music in terms of dynamic, independent layers. In Bach fugues, for example, we can easily see melodies—and

38 Mann, introduction to The Study of Counterpoint, viii.
even label them subject, countersubject, answer, etc.—set against other melodies. The rules of 18th century fugue composition, in fact, are especially concerned with the order and position of these melodies.

Composers of the modern era applied this idea of dynamic layers to other elements of musical composition. Ruth Crawford Seeger, for example, in her *String Quartet* (1931), uses dynamics hairpins to create a contrapuntal texture within long, static harmonies. Krzysztof Penderecki, in his *Threnody for the Victims of Hiroshima* (1960), constructs a fugue, not with melodies, but with entire orchestral passages identified by their texture since they have almost no pitch content. In some works by Charles Ives and Karlheinz Stockhausen we see a multiplicity of simultaneous, discrete musical forms. Earle Brown’s open form (mobile) pieces such as *Available Forms I* and *II* (1961, 2) consist of modular sections that can be played in any order or combination.

The composer William Kleinsasser presented a lecture at the University of North Texas in 2012, in which he took the notion of counterpoint a bit farther. He talked about pieces being in counterpoint with the memory of other pieces. For him it was kind of a mode of influence. In other words, when he composes he sees his current project as having a contrapuntal relationship with earlier pieces that he has written. This is an abstract notion related to, for example, Luciano Berio’s Chemins series, in which the composer adapted his own earlier works from the Sequenza series. I suppose Berio composed Chemins in counterpoint, at least, with his own memory of the Sequenzas.

When I heard Kleinsasser’s lecture I felt like he hit on something I had been thinking about myself: counterpoint between pieces (or between formal sections, i.e., formal counterpoint). In my concept, however, the pieces literally exist and are heard simultaneously. In

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a sense it is akin to hearing a fugue answer and countersubject played simultaneously. Both are fully formed, legitimate melodies, but it is in the counterpoint between them that the real musical interest lies. If the melodies move to other places--different keys, registers, tonal functions, etc.--that is, if the composer re-contextualizes the melodies, then the space between also changes. In other words, if counterpoint focuses on the space between and through various contrapuntal techniques, the composer can manipulate that space.

Planning the Surface Overlap

In his *Treatise on Fugue*, the eighteenth century German music theorist W. F. Marpurg gave the following advice to composers of fugues: “The melodic line of the theme should be so arranged that it will admit a number of changes in its accompaniment.”

Indeed, a cursory survey of the fugue subjects of Marpurg’s primary model, J. S. Bach, reveals a great deal of compositional potential packed into frequently small thematic packages. An asymmetrical rhythmic motive or a well-placed dissonance can provide the composer with ample material upon which to build a variety of permutations and structures, supported by a variety of accompanimental contexts. The same issues concern the composer of formal counterpoint who is recontextualizing more complete musical ideas.

In an early sketch of the overall formal design of *Sunken Monadnock* (Figure 15), I was already concerned with the interactive potential of three independent forms. This is admittedly a step back from Cagean indeterminacy, but I wanted to convey a broad idea about shape in this piece. Since all of the surfaces exhibit various degrees of rhythmic-temporal indeterminacy, there was always a tension between letting each surface be independent and shaping the space between them. It is this tension that sets this style of counterpoint apart from that of, say, Cage’s Number

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40 Mann, *The Study of Fugue*, 163.
Pieces or even Brown’s *Available Forms*. This is the same tension that exists in Bach’s melody-against-melody counterpoint. Cage is not explicitly concerned with the shape of the space between—he leaves it undetermined. I, on the other hand, am almost exclusively concerned with that shape, to the exclusion of concern with small scale details of rhythm and pitch. *Sunken Monadnock*, though highly indeterminate, is concerned with the counterpoint—or the space—between the three surfaces.

**Figure 15, Early Sketch of the Formal Design of Sunken Monadnock**

This tension between local indeterminacy and global shape is also clear in Feldman’s work. Despite his claims to privilege the surface over the subject in his work, Feldman is
obviously concerned with systems and patterns, especially in his later work. Johnson points out that Feldman was not as committed to “purposelessness” as many think, despite his own polemical writing claiming such. In the 1970s his music shifted styles to more systematic approaches based on his fascination with the patterns found in Oriental rugs and Jasper Johns pattern paintings. Of course the reality has always been that composers of all stripes must give some degree of attention to the structure and inner workings of their music, their politics and aesthetics notwithstanding. It can never really be surface or subject, but some combination of the two.

Phenomenology of the Space Between and Other Metaphors

“Let us note, at the very least, that a void exists between musical acoustics and music properly speaking, that it is necessary to fill this void with a science describing sounds, joined to an art of hearing them, and that this hybrid discipline clearly grounds our musical efforts.” —Pierre Schaeffer

Phenomenology seeks to be this hybrid discipline to fill the void between the science of description (musical acoustics, for example) and the art of hearing (music properly speaking) by bracketing reality, or factual knowledge, and favoring experience as evidence. Schaeffer’s void is the almost ungraspable space between the objective known and the perceived.

The ungraspability of the void, or the space-between binary poles (e.g., science/art, subject/object, fact/fiction, surface/subject), implies some element of counterpoint. In this sense, counterpoint is a reflection of the void, or negative space more generally--it establishes context and meaning. It is the ungraspability of counterpoint that makes it so compelling and interesting.


42 Kane, 16.
Some would argue that counterpoint is completely graspable. Indeed, it can be described in great
detail. Schenkerian graphs, which seek to show large-scale counterpoint, are one example of this
description. Species counterpoint, too, captures the essence of a contrapuntal style in order to
教 students how to emulate that style. These examples, however, are more akin to the
descriptive science that Schaeffer mentions above. What is less clear is the listener’s perception
of counterpoint. It is, apropos of the void, nebulous.

This is where metaphors become helpful. Metaphors work like the intersection of many
lines defining an otherwise indeterminate point. A famous phenomenological example describes
a coffee cup (or any three-dimensional object). In order to fully understand the dimensions and
appearance of the cup we must look at it from all sides.\textsuperscript{43} We cannot, however, see all the sides at
once; at any given moment most of the cup is hidden from view. With each subsequent view of
the cup, our understanding of the cup increases, and we approach a complete understanding of
the essence of the cup. This is the kind of experiential understanding that we gain from listening
to a musical element—be it a note, melody, or larger form—from various perspectives, or in
various contexts. In the course of a fugue, for example, we may hear the subject fifteen or more
times—above the texture, below or in the middle of the texture, in the tonic key, in the dominant
key, etc.—and each time we hear it enhances our understanding not only of what it is, but what
its essence is. We gain an understanding of a melody’s essence in the same way that we come to
understand the coffee cup’s essence—through our multiple experiences with it. Though each
modular surface of Sunken Monadnock can be understood independently, their combination with
other modular surfaces creates new contexts that expand our understanding of the essence of
each surface

\textsuperscript{43} Luft and Overgaard, 10.
For composers to fully appreciate the potential of counterpoint (and its essence), it is helpful to see it from as many different perspectives as possible. Other fields in the humanities use the metaphor of musical counterpoint to better understand interactions and engagements among their research materials, but composers often seem to confine their use of counterpoint to the pitch realm. For example, in 2009 Gay Breyley wrote an article called “Music as a Model for Postmodernist Textual Analysis,” in which he argues that modes of musical analysis complement other models of textual criticism. Anne Holmes was already doing that in her article from 2005, “Counterpoint in Mallarmé’s ‘L’Après-midi d’un Faune,’” where she explores rhythmic and rhyming counterpoint in the text, but also the metaphorical counterpoint between memory and desire. This validates and enhances our understanding of counterpoint as tension between two fully formed, independent elements.

Mallarmé seems, of course, an ideal writer for musical comparisons and metaphors since his relationship with composers and music is well known. Samuel Beckett is another writer whose text is known for possessing a certain musicality (he was also a strong influence on Feldman, which I discuss in Chapter 5). Paul Lawley explores the overt musicality of the playwright’s Play in his article “Beckett’s Dramatic Counterpoint: A Reading of Play.” The following excerpt demonstrates Lawley’s use of musical metaphor in his textual analysis: “Play, with its ‘toneless’ voices, the ‘rapid tempo throughout’, the ‘trio’ which opens the ‘action’ (in a note Beckett even ‘scores’ this section) and its final da capo instruction, should seem at times

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44 I mean counterpoint here in the musical sense of combination, not in the argumentative sense.

45 Breyley, 144.

46 Holmes, 30-1: “[Bertrand] Marchal’s ‘contrepoint continu’ of ‘souvenir’ and ‘désir’...suggests equal weight given to each component, and is therefore not identical with the situation which we have been considering of a main subject undercut by a dissonant voice.”
less a dramatic text than a musical score. The musical characteristics of the *Play*’s structure have the effect of pushing the language to the borders of abstraction.”47

The structure of *Play* that Lawley refers to is quite unique among plays. It might better be described, in fact, as three separate monologues. Each of the three characters stands rigidly facing the audience for the duration of the short work. Taken alone, each part tells the story of the plot from that character’s point of view. Beckett then breaks these monologues into fragments and weaves a tapestry with those fragments. *Play* is cubist in the way it simultaneously portrays three different perspectives. It is like seeing all the faces of the phenomenological coffee cup at once. It is a distorted compression of *real* time. In the same way that surface-oriented painters distort reality, Beckett distorts the temporal surface.

This is very closely related to the counterpoint in *Sunken Monadnock*, which compresses three “monologues,” if you will, into the same temporal space. More like Beckett’s scripted form than, say, Feldman in the formally indeterminate *Why Patterns?*, I have carefully considered the ebb and flow of each surface and tried to make room in the final score for particular moments to be heard through the texture. This can be seen generally in Figure 15. In Surface 1, “Stone Mountain,” I reduced the texture to a single pitch at around 6:00 in order to make space on the aural canvas for the entrance of Surface III, “Vladimir’s Song.” From around 14:00 to 17:00 both Surface I and Surface III build tension, though in different ways, to effect a large scale gesture of growth. Surface II, “The Ventriloquist” and Surface III both have extended passages of rest at different moments in order both to thin the overall texture and to create a sense of orchestrational expectation for those surfaces to return.

47 Lawley.
In conclusion, I offer a wonderful visual analog to this discussion of formal counterpoint in *Sunken Monadnock*: Wassily Kandinsky’s 1934 painting *Surfaces Meetings* (Figure 16). Though I cannot claim to have been influenced in the current work by this particular painting, it clearly manifests the formal ideas that did influence me. The multiple overlapping planes, or surfaces, can be seen as formally complete, or closed. And yet, there are points of connections between them. For example, the diamond or kite shaped figure in the lower center could be seen as part of the white surface or the darker surface overlapping the white. There are also larger formal considerations such as the large overlapping curvilinear forms just left of center. The points of connection between all these forms draw the eye. The viewer questions not the individual quadrilaterals, but rather the interaction and the space between them.

*Figure 16, Surfaces Meeting by Wassily Kandinsky, 1934*
Circles and Waves

The title *Sunken Monadnock* is a paradoxical expression that evokes an image of ambiguous grounding. It derives from juxtaposing two separate geographical inspirations: the town of Butler, Tennessee, which was unceremoniously inundated by the Tennessee Valley Authority in 1948 to create Watauga Lake; and Pilot Mountain, a monadnock rising starkly above the Piedmont region of North Carolina. Both are nearby places in which I have lived and both have fascinated me, each by itself and as a pair of opposing formations. Each seems to be an inversion of the other, but neither is subordinate to the other. They simultaneously attract and repel each other, generating a sense of spinning—like whirling dervishes—and centrifugal force that propels my imagination in the work at hand.

If there is a common thread running through all the disparate parts and techniques in Sunken Monadnock it is circularity, and it is worth exploring how much of the aesthetic foundation of this work as well as the compositional techniques used are related to circularity. I have already addressed several of these issues previously: the pitch and rhythm series inherent in isorhythms reflect the repetitive quality of circles; the organization of the columns in Johns’s crosshatch painting strongly suggest rotation; Beckett’s text in Surface III, “Vladimir’s Song,” epitomizes the endlessness of the circle with the word “etc.” at the end; even the holes in Al Said’s canvases evoke the void in the center of a circle.
In *Sunken Monandnock*, various techniques of repetition are means to explore small variations. As the previous passage discussing the difficulty in finding the perfect mix of Surface II, "The Ventriloquist," illustrates, I prefer to eschew perfection in favor of allowing for a plurality of perspectives. I prefer to subject my musical ideas to extensive varied repetition in order to fully understand each idea’s essence.

The essence of circularity is stasis; musical events repeat because repetition is necessary to keep any temporal event continually present. The large-scale build up from the end of the bassoon solo (ca. 13:30) to the beginning of Frame 2 (p. 20) is supported primarily by circular processes in Surface I, “Stone Mountain.” The first circular process here is the use of Shepard tones, an auditory illusion that seems to prolong indefinitely an event in motion by overlapping the same linear gesture in such a way that it is perceived to be one infinite linear gesture—the aural equivalent of a barber’s pole. At 13:30 in Surface I, I begin an abstraction of a Shepard tone (see Example 17, Surface I, “Stone Mountain,” 13:30, “Shepard Tones”). Here the contours of the *colores* are arranged so that each is either predominately ascending or descending. I then set them in overlapping pairs, the bassoon and electric guitar ascending on D, the cello and bass clarinet descending from A, and the flute and violin descending from B-flat. The aural effect, though not illusory in any immediate sense like a Shepard tone, is gradually circular and static. Each instrument’s entrance might be experienced as a continuation rather than a beginning.

The culmination of this intensification finds the isorhythms stripped of the circular nuance they once held. This is perfectly natural, of course: reducing the circularity of the passage—that is, its static element—must increase the forward momentum. Subtractive processes gradually reduce the dense isorhythmic texture to a single, pulsing B-flat (see Example 3); the
first subtractive process is seen in the Appendix at ca. 16:00. The durations are reduced with each cycle of the *talea* until each note is a single count. The *color* is also reduced gradually, first to B-flat, F, and other pitches adjacent to those, then to B-flat and F only, and finally to B-flat by the beginning of Frame 2 (p. 20).

Isorhythms are essentially two musical elements repeating at different rates. The coincidence of the *color* and *talea* mark an even slower, imperceptible rhythm of repetition. The rhythmic phasing in Surface II, “The Ventriloquist,” matches this kind of circularity. We might think of this moving in and out of phase more abstractly as the compression and rarefaction seen in sound waves as they move through the air. As the pulse streams in Surface II approach unity, the listener senses a kind of centrifugal force that makes the ensuing out-of-phase passage seem inevitable. This kind of overt pushing and pulling of time is similar to the distortion of time created by Beckett’s *Play*, which sets aside real time to indulge “dramatic counterpoint.”

Example 18, Surface I, “Stone Mountain,” ca. 17:15, “Loops”
Critique

Much of this essay, including this current discussion of various kinds of circularity, has dealt with visual metaphors. I might say, for example, and few would argue, that the repeated figures in Surface II, “The Ventriloquist,” B5 (p. 13), are plainly “loops.” But in music, loops do not really exist. Wagner’s Gurnemanz might have sung of the Grail Kingdom in Parsifal, “Here Time becomes Space,”48 but in actuality, time can only ever seem like space. For all of my attempts to create circularity, I was still operating within a linear model. George Crumb often invokes the spiral, both directly and indirectly, which seems to be a more precise metaphor for the temporal domain than the simple circle. *Makrokosmos* contains a movement called “Spiral Galaxy” whose score has spiral-shaped staves, and *Vox Balaenae* contains several interlocking (helix-shaped) spiral figures. For Crumb, it seems to connote the slow revolving of evolution and cosmic motion. His colleague George Rochberg also wrote about the slow coursing of musical history in spiral-like terms: “The enlargement of mental perspective teaches us that consciousness, whose core is the central nervous system, is radial, not linear.”49

The spiral then, with its combination of circle and line, is perhaps the better analogy for *Sunken Monadnock*. Surface III, “Vladimir’s Song,” for example, is strictly linear and overtly teleological. That one surface shapes and propels time in *Sunken Monadnock* while the other two swirl around it.

The spiral, of course, is still a visual metaphor, and the problem with the visual is that it does not necessarily concern itself with time, while music necessarily does. This is where

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48 Wagner, 65.

49 Rochberg, 236.
Beckett steps in and provides a more nuanced solution. In my aforementioned loops in Surface II, “The Ventriloquist,” B5 (p. 13), we have an example of minimalist technique—motives transparently repeated wholly and perfectly. Beckett, and Feldman, use minimal processes, but they never resort to minimalism. According to Amy Beal, “[Feldman’s] formal patterns are rarely repeated exactly for long, and his structures are more cloudy than clear. Rather, Feldman’s aesthetic was closer to Samuel Beckett’s methods of repetition and variation of simple fragments; or, as Feldman put it, what interested him about Beckett was the writer’s ability to get ‘deeper and deeper saturated into the thought’ by repeating that same thought again and again in different ways.”

Play, for example, contains a da capo repeat of the entire play. Waiting for Godot, too, is highly repetitive. Each day in the play finds the characters doing the same things, having the same conversations, and continuing to have the same—unfulfilled—expectations. Both plays require repetition as the dialog and plots are highly fragmented. In Play, the non-linear storytelling style makes it difficult to understand the narrative without a second hearing. Waiting for Godot is longer, but the themes are presented in brief fragments, so that the audience needs to hear many of these similar fragments in order to form an experiential understanding of those themes. In this way, understanding Waiting for Godot is a phenomenological journey that matches the familiar experiences of the human condition.

Ramona Cormier and Janis L. Pallister, in fact, assert the play is an allegory on the condition of human life. They write, “The pivotal theme of En attendant Godot is death, man’s ultimate limitation,” and human beings’ attempts to avoid death are “absurd.” They confirm

50 Beal, 239.

51 Cormier and Palister, 80.
that Beckett is ultimately nihilistic, and reject analyses of the play as a Christian morality play. They see Beckett as portraying a “disintegrating Christian morality...in the process of being replaced by an egocentric one.”⁵² But in their claim of a “mixed morality,” they inadvertently acknowledge a binary that may be in complete inversionsal balance. In other words, the tension between Christian hope and nihilistic despair might be seen as different sides of the same coin, with neither being subordinate to the other. One is simply an inversion of the other, and as such, they both point to the same thing: the essence of human life.

Frederick Busi refers to this tension in theological terms: “Beckett has charged his clowns to remain in perpetual conflict in order to emphasize the basic strain of agnosticism which frustrates them and their beholders in the audience.”⁵³ Busi also notes that Vladimir’s misquotation early in the play (“Hope deferred maketh the something sick, who said that?”⁵⁴) is from Proverbs 13:12: “Hope deferred maketh the heart sick: when the desire cometh, it is a tree of life.”⁵⁵ Thus, Beckett seems to have no intention of making a definitive statement on the happiness or sadness of, the goodness or badness of, the morality of life. Rather, he attempts to portray to essence of being human, warts and all. And understanding an essence requires sufficient repetition and variation.

This gets to the heart of the matter. It is how we arrived at the essence of the coffee cup. It is the counterpoint of a Bach fugue. It is the natural repetition of our daily lives full of glitches, mistakes, fixes, redoes—variations. With Sunken Monadnock I have attempted to get “deeper and deeper saturated into the thought” by repeating things in different ways. I have used a modified,

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⁵² Ibid., 89.
⁵³ Busi, 89.
⁵⁴ Beckett, Godot, 8.
⁵⁵ Busi, 89.
broken circularity because static music is an appealing, but ultimately flawed concept. *Sunken Monadnock* is not circular, but not really linear either. It is focused on the surface but with significant attention given to the subject. It utilizes contrapuntal aesthetics, serialism, and algorithms, but it is essentially indeterminate. It resists all these binaries, floating somewhere in between, beautifully flawed.
Appendix, Complete Isorhythmic Analysis of Surface I, “Stone Mountain”

accidentals only affect note immediately following; microtonal accidentals may optionally be omitted by entire ensemble

\[ \frac{\text{duration}}{\text{note}} = \text{ca. 180-190} \]

62
Bb (if >10, -3; if <10, -2 each time through the talea):

- Bb:
  - dim. poco a poco
  - mp
  - p
  - pp
  - ppp

Certain sections are indicated with specific dynamics and articulations, such as "accel." and "fades out, take cl, fade back in." The score also includes time indications like 16:30, 17:00, and 17:45.
Books and Journals


______. “‘Rothko Chapel’ and Rothko’s Chapel.” *Perspectives of New Music* 32, No. 2: 6-53.


Musical Works


*New Sounds in Electronic Music*. Odyssey, 32 16 0160, 1967, LP. Includes *Come Out* by Steve Reich


PART II

SUNKEN MONADNOCK
Sunken Monadnock

Joshua Harris
for mixed chamber ensemble
Instrumentation

3 sopranos
flute, doubling on alto flute and piccolo
clarinet in b-flat, doubling on bass clarinet
bassoon
violin
violoncello
electric guitar
percussion 1 (marimba, splash cymbal, various muted metals)
percussion 2 (xylophone, splash cymbal, various woods)
piano

Program Note

Sunken Monadnock is a mostly indeterminate combination of parts of three distinct processes, or surfaces. The three begin together and converge again briefly before the ending, but with very few exceptions, other convergences and correspondences are products of chance. Each of the three surfaces deals generally with stasis and circularity, and they may exist separately as stand-alone pieces, but exist here specifically modified for this piece.

Surface I, Stone Mountain (flute, clarinet, bassoon, violin, cello, and sometimes electric guitar; isorhythms)

Stone Mountain is a small granite dome in Alleghany County, North Carolina, that as a child I would hike with my family. Though the beginning of the trail was a steep 600-foot ascent, we were rewarded with open views as we passed above the tree line onto the bald, gray rock fields. The mountain goats traverse the steepest rock faces with ease, but people are not always so lucky: On the descent down the other side a sign reminded us that people had fallen to their deaths after venturing off the trail and wading in the slippery stream at the top of the waterfall.

Surface II, The Ventriloquist (piano, marimba, xylophone, woods, metals, and sometimes electric guitar; phasing tempi)

Albert Brooks famously deconstructed the traditional ventriloquist act by making no attempt not to move his lips. He continually undermined his ventriloquism skills by clearly showing the dummy to be an inanimate object: dropping it to lie limp on the ground, or giving the dummy a drink of water while he sings.

Surface III, Vladimir’s Song (3 sopranos; revelatory process)

The text begins as vowels, then evolves into phoneme, syllables, and words before appearing in their original order. In a sense, the variations here precede the theme, which is finally revealed at the end.

The text is from Waiting for Godot by Samuel Beckett, Act 2.

A dog came in the kitchen
And stole a piece of bread
And cook up with a ladle
And beat him until he was dead.

Then all the dogs came running
And dug the dog a tomb
And wrote upon the tombstone
For the ages of dogs to come:

A dog came in the kitchen
etc.

Joshua Harris
Denton, Texas
June 2013
Performance Notes

Frames I and II (rehearsal marks A and C respectively) are metrically unified. A conductor may be used in these sections if desired. Regardless of whether a conductor is used, a single timer, visible to the entire ensemble, should be used to facilitate cues in the Surfaces (rehearsal marks B). The timer should be started at the beginning of the piece, and all clocktimes in the score indicate the time since the beginning of the piece. Microtonal accidentals are optional and indicate slight tonal inflections.

The three Surfaces each have their own score and unique system for dealing with time. **Surface I**, **Stone Mountain** (winds and strings), pp. 9-11, employs very fast counting by each performer. Small numbers above each notehead indicate durations based on around 180-190 counts per minute. Each performer will likely count at a slightly different speed but should attempt to stay near 180-190. At the end of this Surface (p. 11, 2nd system), the counted pulse accelerates to around 240. At rehearsal mark C each performer should be playing eighth notes at a tempo of quarter note = 120, but out of phase. The repeated bar at C is to allow the performers to gradually synchronize.

Segments begin at the clocktime indicated in boxes above the staff; endings are indeterminate except in cases where the endings of long notes or repeated patterns are shown. Dashed vertical lines indicate approximate times while solid vertical lines indicate exact times.

**Surface II, The Ventriloquist** (piano and percussion), pp. 12-13, is comprised of several segments with beginnings and endings given in clocktime with dashed vertical lines (i.e. approximate times). Single line staves with treble clefs represent the pitch space of the instrument (piano, marimba, or xylophone), with the line being the middle of the range, and the upper and lower borders of the box being the highest and lowest registers, respectively. If both treble and bass clefs appear at the left side of the staff, the performer may choose the pitch classes from either staff.

**Surface III, Vladimir’s Song** (sopranos), pp. 14-19, is notated proportionally with each system representing fifteen seconds; clocktimes are indicated at the beginning and ending of each system with dashed vertical lines marking off fifteen second increments. Lines extending from each notehead indicate the duration of each note.

All the text in Surface III uses the International Phonetic Alphabet. Internal and terminative consonants are printed on the page where they should sound. If a terminative consonant appears before the end of a note’s extension line, then the performer should close to that consonant and continue to sustain the note. All the text is based on Vladimir’s song from the second act of *Waiting for Godot* by Samuel Beckett, although in Surface III it has been broken into syllables and phonemes. Gradually these vowels evolve into phonemes, then into syllables, then into words, before finally appearing in Beckett’s original order at the end of Frame II. In Surface III, the performer should always gradually transition between phonemes, putting the emphasis on gradually changing formants with constantly changing overtones.

**Formal plan:**

<table>
<thead>
<tr>
<th>0:00</th>
<th>3:20</th>
<th>6:00</th>
<th>7:30</th>
<th>16:00</th>
<th>18:00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frame I</td>
<td>Surface I</td>
<td>Surface II</td>
<td>Surface III</td>
<td>Frame II</td>
<td></td>
</tr>
</tbody>
</table>
Sunken Monadnock

Frame 1
Steady \( \approx \frac{4}{120} \)

percussion 1

percussion 2

piano

perc. 1

perc. 2

pro.

perc. 1

perc. 2

pro.

perc. 1

perc. 2

pro.

perc. 1

perc. 2

pro.

perc. 1

perc. 2

pro.

perc. 1

perc. 2

pro.
molto rit.

Frame I

tacet until 6:00; continue to Surface III, p. 14

tacet until 7:30; continue to Surface II, p. 12

hold as long as possible, then tacet until 3:20

continued to Surface I, p. 9

82
Surface I, Stone Mountain
(winds and strings)

accidentals only affect note immediately following;
microtonal accidentals may optionally be omitted by entire ensemble

\( \frac{3}{4} \) = ca. 180-190

\( \text{a.fl.} \)

\( \text{cl.} \)

\( \text{bsn.} \)

\( \text{vln.} \)

\( \text{vc.} \)

\( \text{picc.} \)

\( \text{b.cl.} \)

\( \text{bsn.} \)

\( \text{vln.} \)

\( \text{vc.} \)

\( \text{e.gtr.} \)
Surface II, The Ventriloquist
(percussion and piano)

B1

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:30</td>
<td>Non-resonant metals (muted cymbal, muted cowbell, etc.)</td>
</tr>
<tr>
<td>8:45</td>
<td>Match perc. 1, then gradually move between 60 and 90</td>
</tr>
<tr>
<td>9:00</td>
<td>Match perc. 2, then gradually move between 60 and 90</td>
</tr>
</tbody>
</table>

*) Percussionists change instruments occasionally. Fade out and back in when changing.

pno.

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:40</td>
<td>Mute strings with palm</td>
</tr>
<tr>
<td>9:00</td>
<td>Play any clear harmonic</td>
</tr>
</tbody>
</table>

*) Pianist changes between clusters and harmonics occasionally. Fade out and back in when changing.

Choose 3 events. Tempo ad lib. unless noted.

B2

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:45</td>
<td>Surface II, The Ventriloquist (percussion and piano)</td>
</tr>
<tr>
<td>9:15</td>
<td>Match perc. 2, then gradually move between 60 and 90</td>
</tr>
</tbody>
</table>

)* Pianist changes between clusters and harmonics occasionally. Fade out and back in when changing.
Choose 4 events. Tempo ad lib. unless noted. **mf - ff**

---

**B3**

10:15 - 10:35

---

**B4**

11:45 - 12:05

---

**B5**

13:00 - 13:20

---

**B6**

15:00 - 15:20

---

*Tacet until ca. 18:00 (rehearsal C) continue to p. 20*
Surface III, Vladimir’s Song
(sopranos)

*Gradually change vowels. Allow more open vowels to naturally be louder. Accidentals only affect note immediately following.*
13:45

Un chien vint dans l'office
Et prit une andouillette.

Les autres chiens ce voyant
Vite vite l'ensevelirent.
Au pied d'une croix en bois blanc,
Où le passant pouvait lire:

14:00

pitches approximate, exaggerate consonants

Un chien vint dans l'office
Et prit une andouillette.

14:15

Les autres chiens ce voyant
Vite vite l'ensevelirent.
Au pied d'une croix en bois blanc,
Où le passant pouvait lire:

14:30

Un chien vint dans l'office
Et prit une andouillette.

92
14:45
\[
\begin{array}{c}
\text{distort} \quad \text{ff} \\
\text{mf} \quad \text{f}
\end{array}
\]
À l'écoute de la louve,
Le chef le mit en miettes.

15:00
\[
\begin{array}{c}
\text{P} \quad \text{f} \\
\text{mf} \quad \text{P}
\end{array}
\]
Les autres chiens ce voyant
Vite vite l'ensevelirent

15:15
\[
\begin{array}{c}
\text{mf} \quad \text{P} \\
\text{mf} \quad \text{P}
\end{array}
\]
Au pied d'une croix en bois blanc
Où le passant pouvait lire:

15:30
\[
\begin{array}{c}
\text{mf} \quad \text{f} \\
\text{f} \quad \text{f} \quad \text{f}
\end{array}
\]
Un chien vint dans l'office
Et prit une andouillette.

15:45
\[
\begin{array}{c}
\text{whisper} \quad \text{cresc.} \\
\text{mf} \quad \text{mf}
\end{array}
\]
À l'écoute de la louve,
Le chef le mit en miettes.
He was dead then all the dogs came running. The dog dug the dog's tombstone up. The age

He was dead then all the dogs came running. The dog dug the dog's tombstone up. The age

He was dead then all the dogs came running. The dog dug the dog's tombstone up. The age

He was dead then all the dogs came running. The dog dug the dog's tombstone up. The age
Wrote ago on the tomb came for piece ago stone of him and wrote up dog the tomb-stone up the ages lay dogs to come a dog came in the kit.

lay dogs to come dog came in the kit then stole a piece of bread then cook.

Run dog came in kit then stole a piece of bread then lay an and beat him he till dog was in.

beat ff

beat ff

beat ff

beat ff

Wrote mf age on the tomb came for piece mf age stole a piece of bread with a lay an.
Briskly, \[=150\]

die and beat him un–til he was dead. Then all the dogs came run–ring and dug the dog a tomb and wrote age on the tomb.

all up dogs beat run–ring and came the dog a come and wrote up on the tomb–stone up the a–ges of dogs to come.

dog was and in all up dogs beat run–ring and came the dog a come and wrote up on the tomb–stone up the a–

fl.

cl.

bsn.

vln.

vc.

e.gtr.

perc. 1

cresc. poco a poco to end

perc. 2

pno.

cresc. poco a poco to end

poco accel.

Cresc. poco a poco
dog came in the kitchen And stole a piece of bread And cook up with a ladle And beat him un-till he was dead Then

dog came in the kitchen And stole a piece of bread And cook up with a ladle And beat him un-till he was dead Then

dog came in the kitchen And stole a piece of bread And cook up with a ladle And beat him un-till he was dead Then

fl.
cl.
bn.
vln.
vc.
e. gtr.
perc. 1
perc. 2
pno.

pno.
Frame II

C9 Furiously, \( \text{\textsuperscript{\textcircled{f}}220} \)

```
all the dogs came running And dug the dog a tomb And wrote upon the tombstone For the eyes of dogs to come:
```

```
A dog came in the kitchen And stole a crust of bread Then cook up with a ladle And beat him till he was dead.
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```
Then all the dogs came running And dug the dog a tomb And wrote upon the tombstone For the eyes of dogs to come: repeat
```

Frame II

10°-15° fade out slowly