

RECONSIDERING THE MODEL LISTENER:
AN EXPLORATION IN THE CRITICAL ANALYSIS OF ELECTROACOUSTIC MUSIC

By

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A DISSERTATION PRESENTED TO THE GRADUATE SCHOOL
OF THE UNIVERSITY OF FLORIDA IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY

UNIVERSITY OF FLORIDA

2013

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To my family

ACKNOWLEDGMENTS

I am thankful for the assistance, guidance, and mentorship given by my chair, James Paul Sain throughout this process. Additionally, I am thankful for the contributions of the many teachers who have contributed to my musical and scholarly growth over the past years: Jon Appleton, Charles Dodge, Paul Koonce, Chris Mercer, Peter Otto, Larry Polansky, Miller Puckette, and Paul Richards. Special thanks go to Steven Takasugi for his willingness to help me understand early on what being a composer is all about; I would have likely followed a very different career path were it not for his mentorship a decade ago. Additional thanks to Silvio dos Santos and Margaret Butler for their assistance as my work branched into broader musicological concerns, and to my friends in Gainesville for helping me to remain sane over the past few years. And finally to Sarah, for her support and love.

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May 2013

Chair: James Paul Sain
Major: Music

Composers, technicians, and performers have spent the last century exploring different ways in which electronics can assist in creating entirely new sound worlds for musical exploration. By the very nature of the field, this exploration has required knowledge not only of traditional musical practices but also topics such as computer science, electrical engineering, mathematics, and acoustics. Accordingly, much of the literature published on topics relating to electroacoustic music is technical in nature, including both scientific research and technical discussions of techniques for the generation or manipulation of electronic sound. There has been a parallel interest in developing “theories” of electroacoustic music: a body of work typically concerned with the arrangement of sonic elements from the perspective of a composer creating a work or of a theorist analyzing a work. Combining these theoretical writings with the technical writings described above, it seems as if the majority of the scholarship within the field of electroacoustic music is concerned with the discussion of technical, theoretical, and aesthetic issues that are relevant to the *creation* of the work. Comparatively little has been written about the resulting pieces of electroacoustic music as *aesthetic objects* –

works of art separated from their modes of production and underlying structures, and understood “on their own terms.”

I propose in this dissertation a model for a discourse of electroacoustic music that de-emphasizes compositional procedure and the pre-compositional intentions of the composer and explores the “intentions of the work” as experienced between the work and the critical listener. Models for the criticism and analysis of electroacoustic music are explored, drawing primarily upon methodologies from the fields of literary and critical theory – specifically semiotics and hermeneutics. These models will be applied to specific works of electroacoustic music as a way of initiating critical discussion of such works as *aesthetic objects*, recognizing the importance of the listening experience as separated from the methods utilized to create the work.

CHAPTER 1 INTRODUCTION

“Electro-acoustic music seems driven by composers more interested in logical construction than by intuition.” – Jon Appleton¹

The promise of utilizing electronic devices in the creation of music has always been to allow any possible sound, actual or imagined, to be used as musical material. From early electronic instruments such as the Telharmonium and Respighi’s use of recorded birdsong in *Pines of Rome* to the hyper-sophisticated acousmatic music and interactive laptop performance of today, composers, technicians, and performers have spent the last century exploring different ways in which electronics can assist in creating entirely new sound worlds for musical exploration. By the very nature of the field, this exploration has required knowledge not only of traditional musical practices but also topics such as computer science, electrical engineering, mathematics, and acoustics. Accordingly, much of the literature published in books, articles, and conference proceedings on topics relating to electroacoustic music is technical in nature, including both “pure” scientific research and technical discussions of techniques for the generation or manipulation of electronic sound.

Aside from the strictly technical literature, there has been a parallel interest in developing “theories” of electroacoustic music: a body of work typically concerned with the arrangement of sonic elements from the perspective of a composer creating a work or of a theorist analyzing a pre-existing work. Discussions of algorithmic composition, spectromorphology, systems of relating “live” and “fixed” elements, and such fall into this category. Combining these theoretical writings with the technical writings described above, it seems as if the majority of the scholarship within the field of electroacoustic

¹ Jon Appleton, “Musical Storytelling,” *Contemporary Music Review* 15, Part 1 (1996): 67.

music is concerned with the discussion of technical, theoretical, and aesthetic issues that are relevant to the *creation* of the work. This bias is also reflected in many composer-authored program notes written for CD inserts or concert programs, oftentimes focusing exclusively on the technical or compositional procedures utilized during the composition of the work.² Such writing oftentimes disregards or misrepresents the nature of the listening experience either due to an unintentional oversight, intentional obfuscation, or as a result of an assumption that a listener will be able to perceive these compositional procedures and find them meaningful to their experience.³ Comparatively little has been written about the resulting pieces of electroacoustic music as *aesthetic objects* – works of art separated from their modes of production and underlying structures, and understood “on their own terms.” To borrow from the Jon Appleton quote found above, the scholarship of electroacoustic music seems driven by writers more interested in logical construction than in listening.

As one of the few writers to address this issue, Leigh Landy has issued a call for greater triangulation (the use of feedback and evaluation) as a way to combat “what is called an ‘island mentality’ demonstrated by many individuals working in all areas of the sonic arts,” implying that such scholarship demonstrates “a bias towards formalism and therefore much less of one towards the contextual, aesthetic, reception, etc.”⁴ Landy has partially answered this call through his involvement in the Intention/Reception Project that will be briefly outlined in Chapter 2. Rather than continuing with Landy’s

² It should be acknowledged that although composer-authored program notes do contribute toward the bias I am describing, it is also difficult for the creator of a work to assume the position of the Kantian disinterested observer; hence the need for critical interpretation by other individuals.

³ This is a corollary to the problem of discussing serial or twelve-tone music simply as the by-product of a tone row or matrix, thereby disregarding the ability (or inability) of the listener to perceive these underlying structures apart from other, more surface-level musical features.

⁴ Leigh Landy, “Reviewing the musicology of electroacoustic music: a plea for greater triangulation,” *Organised Sound* 4, no. 1 (1999): 61.

proposed system of triangulation between composer, work, and audience, I propose in this dissertation a model for a discourse of electroacoustic music that de-emphasizes compositional procedure and the pre-textual (pre-compositional) intentions of the composer and explores the “intentions of the work” as experienced between the work and the critical listener. Models for the criticism and analysis of electroacoustic music will be explored, drawing primarily upon methodologies from the fields of music analysis and literary and critical theory, the latter reinforcing the author’s desire to draw parallels between fixed-media electroacoustic works and works of literature. These models will be applied to specific works of electroacoustic music as a way of initiating critical discussion of such works as *aesthetic objects*, recognizing the importance of the listening experience as separated from the methods utilized to create the work. The two sides of this dichotomy in the existing literature will be henceforth referred to as a *composer-centered* approach (a discourse of elements that entered into the creation of a work) and a *listener-centered* approach (a discourse of the perceptual experience of the work).

The end goal of this project is not to construct any sort of broad “theory” that can apply to a broad range of electroacoustic compositions, nor to analyze for the sake of analysis, nor to dismiss any previous literature as being in any way misguided. Rather, the goal is to demonstrate that a certain body of electroacoustic compositions has not been discussed in a manner that seems to be most appropriate, and to make a first attempt toward a meaningful discourse of these compositions. Although some sort of *analysis* will be included in later chapters of this dissertation, more of an emphasis will be placed on the act of *criticism*, informed by careful listening. This listener-centered

approach to the discourse of electroacoustic music is being proposed to counteract a perceived lack of critical engagement within the field, and is one step in this author's larger agenda of bringing electroacoustic music studies in line with larger trends within the field of musicology – particularly recent trends in the area of music criticism. For the purposes of this dissertation, Lawrence Kramer's definition of musical criticism will be used: "the public record of our sustained, thoughtful involvement with some of the music we find moving, enlightening, provoking, oppressive, ambivalent, and more. Talking about music... is a means of investing that music with the very cultural values we also want to comprehend through it."⁶

Terms and limitations. Although the terms *electronic music* and *computer music* are often used to describe the sort of works discussed in this dissertation, I will simply use the term *electroacoustic music* to refer to the wide variety of contemporary art music that utilizes electronic elements.⁷ This includes such sub-genres as musique concrète, acousmatic music, computer music⁸, sound art, electronic improvisation, and mixed-media pieces. Additionally, the discussion will be limited to pieces falling into the category of electroacoustic "fixed media" compositions: works designed for CD/DVD/computer playback in the home or for diffusion from a playback source in concert performance; not installations or works with any live performance component. Although the body of works involving live electronics or live instruments plus electronic elements would provide a far greater number of possibilities for critical discussion, the

⁶ Lawrence Kramer, "Music Criticism and the Postmodernist Turn: In Contrary Motion with Gary Tomlinson," in *Critical Musicology and the Responsibility of Response: Selected Essays* (Burlington: Ashgate Publishing Company, 2006), 48.

⁷ Though this is a commonly used term, some inconsistencies exist with regards to the question of spelling; whether *electroacoustic* or *electro-acoustic* is more appropriate. This author has adopted the usage of the former spelling, although the latter will surface in several quoted passages.

⁸ Which may or may not be a meaningful sub-genre in an era when the computer has assumed roles previously held by the tape machine, synthesizer, signal processor, mixer, etc.

ensuing discussion would necessarily broaden the scope of this project exponentially and therefore impractically.⁹

One further limitation of this project will be the selection of compositions that use recognizable (or referential) sonic materials, most often in the form of recorded “real-world” sound, with the exception of pieces that include recognizable linguistic content. While the author recognizes that critical discussion of *all* types of fixed-media electroacoustic music would be extremely beneficial and certainly welcomed, this final limitation has been levied due to the desire to explore ideas of semiotics and interpretation – critical methods that are much more readily applicable to pieces with referential content. The pieces discussed throughout this dissertation may be most appropriately categorized as *acousmatic music*, although a precise definition of that term has not been agreed upon within the literature. In *The Oxford Handbook of Computer Music*, Roger Dean uses the term *acousmatic* to refer to “pre-fixed digital sound structures ready for acoustic diffusion through loudspeakers without performers energizing conventional musical instruments to make sounds.”¹⁰ As this definition is overly broad, Jonty Harrison’s description of the term acousmatic will be more appropriate: “Acousmatic music... admits any sound as potential compositional material, frequently refers to acoustic phenomena and situations from everyday life, and, most fundamentally of all, relies on perceptual realities rather than conceptual speculation to unlock the potential for musical discourse and musical structure from the

⁹ An analysis of the rhetoric surrounding the fetishism of the “live” in electroacoustic music, laptop ensembles in particular, could (and should be) a dissertation on its own.

¹⁰ Roger T. Dean, “Introduction: The Many Futures of Computer Music,” in *The Oxford Handbook of Computer Music*, ed. Roger T. Dean (New York: Oxford University Press, 2009), 3.

inherent properties of the sound objects themselves – and the arbiter of this process is the ear”¹¹

Throughout this dissertation, I will reference “the listener” frequently. Although “the listener” could simply be understood as any individual who experiences a piece of music through the act of listening, the particular nature of the most commonly-found relationship between work and listener has been somewhat obscured in today’s field of electroacoustic music. Contemporary music has never found an enormous audience among the general public, and electroacoustic music remains an obscure oddity even to many of those entrenched in other areas of modern music-making. Most electroacoustic music concerts (at least in the United States) take place within the context of college and university music programs or dedicated new music (oftentimes electroacoustic-only) festivals and conferences, the attendance at said events being comprised primarily of composers and performers within the field. The specialist nature of the current audience for electroacoustic music bears mention in relation to Umberto Eco’s concept of the *Model Reader*. With reference to communicative texts, Eco writes that

“[the] author has to rely upon a series of codes that assign given contents to the expressions he uses. To make his text communicative, the author has to assume that the ensemble of codes he relies upon is the same as that shared by his possible reader. The author has thus to foresee a model of the possible reader (hereafter Model Reader) supposedly able to deal interpretatively with the expressions in the same way as the author deals generatively with them.”¹²

¹¹ Gordon Monro, “An acousmatic experience: Thoughts, reflections, and comments on the 1999 Australasian Computer Music Association conference Imaginary Space,” <http://cec.concordia.ca/econtact/ACMA/AcousmaticExperience.htm> (accessed April 11, 2013)

¹² Umberto Eco, *The Role of the Reader: Explorations in the Semiotics of Texts* (Bloomington: Indiana University Press, 1979), 7.

Given the makeup of the current audience for electroacoustic music, it is conceivable that many composers have constructed a Model Reader (Listener) of their music who happens to be a knowledgeable specialist within the field. This may explain the focus within the literature on the creation of the work rather than the reception of the work mentioned above and explored further within the next chapter. For this dissertation, however, I envision a *Model Listener* who is not a specialist, and who may have very little understanding of exactly *how* a piece of electroacoustic music is composed. This Model Listener is intelligent and thoughtful, imaginative, ready to listen carefully and critically, and willing to interpret an electroacoustic composition without explicit knowledge of its mode of creation. Subsequent references to “the listener” within this text should be understood to refer to this Model Listener. By exploring how such a Model Listener may be able to fruitfully interpret a work of electroacoustic music, this author hopes to initiate further consideration of the non-specialist audience not only within the literature but also with regards to concert programming and marketing.

CHAPTER 2 LITERATURE REVIEW AND EXPLANATION OF TERMS AND GOALS

“There are two key issues that are often worrisome about theoretical and, in particular, critical texts concerning electro-acoustic music. They tend to be written for very knowledgeable specialists, and they tend to be more focused on sonic construction or a composer’s theoretical concepts than, say, the listening experience.” – Leigh Landy¹³

Missing Information in the “Overviews”

Chapter 1 of this dissertation and Leigh Landy’s quote above have hinted at a significant gap in the literature of electroacoustic music. This gap can be most simply described as a lack of serious critical discussion of individual electroacoustic compositions from a listener’s perspective. In other words, the features that are most salient in a listener’s experience with certain pieces of electroacoustic music are rarely discussed, with authors choosing to spend the majority of their time focusing on technology or compositional procedure. This tendency can be easily illustrated in two books published in the last few years that claim to offer overviews of the field: *The Cambridge Companion to Electronic Music*¹⁴ and *The Oxford Handbook of Computer Music*¹⁵. These two volumes were chosen for the high-profile nature of their contributing authors, their well-known publishing companies (and thus wide availability through booksellers and university libraries), and the fact that the chapters selected for inclusion in both volumes largely display the same focus. Relative to this dissertation, it will be shown that these “overviews” neglect to address key issues that may be relevant to the listening experience, focusing instead on issues that are of more relevance to composers.

¹³ Leigh Landy, “Review of *Electroacoustic Music: Analytical Perspectives*,” *Notes* 60.1 (September 2003): 162.

¹⁴ Nick Collins and Julio d’Escriván, eds., *The Cambridge Companion to Electronic Music* (New York: Cambridge University Press, 2007).

¹⁵ Dean, ed., *The Oxford Handbook of Computer Music*.

The Cambridge Companion to Electronic Music contains several chapters written “from the viewpoint of researchers at the forefront of the sonic explorations empowered by electronic technology.”¹⁶ These chapters were assembled by the editors in an effort to provide an overview of the field of electronic music, and are broadly segmented into the categories of history, practice, and foundations.¹⁷ It is an interesting commentary on the field to note that the majority of these “researchers” are themselves creative artists.

Any book that seeks to provide an overview of a given subject has a responsibility to relate certain facts regarding “the way things are” in a clear and cohesive manner for the benefit of individuals without pre-existing background knowledge. Andrew Hugill’s chapter on *The Origins of Electronic Music* and Ge Wang’s chapter on *A History of Programming and Music* are two such chapters that relate and characterize historical events and trends in a purely positivistic fashion, devoid of criticism or interpretation. Chapters such as these do well in their purpose of disseminating established facts about technology and history. Relative to this dissertation, the problem with this text as an “overview” is twofold: the overabundance of essays that seek to simply describe historical or technological facts, and the failure of certain authors to delve into areas such as aesthetics, criticism, and reception when dealing with appropriate topics.

A composer-centered bias can be found in chapters such as Karlheinz Essl’s *Algorithmic Composition*. Here, Essl describes several approaches that composers have used throughout history to incorporate algorithms as a way of generating musical

¹⁶ Collins and d’Escriván, eds., *The Cambridge Companion to Electronic Music*, rear cover.

¹⁷ Though the editors use these terms in their introduction, it is curious that the actual section headings are “Electronic Music in Context,” “Electronic Music in Practice,” and “Analysis and Synthesis” respectively.

material. The emphasis here is on compositional technique; the only method Essl gives the listener to appreciate the resulting music is by appreciating the process by which the music was generated. This chapter is certainly useful for suggesting algorithmic methods to composers, and can provide frameworks by which such a piece of music may be analyzed. However, Essl neglects to treat the resulting music as an aesthetic object that may be appreciated on any number of levels by a hypothetical listener.¹⁸

This focus is also present in Natasha Barrett's chapter on *Trends in Electroacoustic Music*. Barrett's goal here was to characterize several aesthetic trends within the field such as microsound, soundscape, the application of acousmatic theories, and noise music. Similarly to Essl, Hugill, and Wang, Barrett provides historical overviews of these various trends along with certain technical and theoretical ideas that contribute to their generation. In characterizing these trends, Barrett stays within the composer-centered paradigm of treating a piece of music as a product of its component parts.

The goal of *The Oxford Handbook of Computer Music* is similar to that of *The Cambridge Companion* - to provide a "state-of-the-art cross section of the most field-defining topics and debates in computer music today."¹⁹ At just over twice the length of *The Cambridge Companion*, the scope is somewhat broader. Many of the methodological shortcomings found in *The Cambridge Companion* are also found here, as certain articles serve only to describe historical facts or technical procedures. Once again, almost all discussion of a piece of electroacoustic music is completely tied up in

¹⁸ For example, my own work *Mutations I* utilized an extremely strict algorithm for the selection and ordering of pitched material. When listening to the work, this algorithmic material is by far the least interesting component of the piece, serving only to populate the structures defined by compositional choices regarding phrasing, dynamics, and orchestration.

¹⁹ Dean, ed., *The Oxford Handbook of Computer Music*, dust jacket.

explanations of how the piece is generated - which techniques or ideologies went into the creation of the piece, not taking into account the listening experience.

Of interest here is a wider focus that includes a section entitled “Cultural and Educational Issues” and a few notes on cognition and perception. Leigh Landy contributed a chapter to this volume, but his subject matter is somewhat different than his listener-centered work mentioned in Chapter 1 and later in this chapter. Landy’s chapter is entitled *Sound-Based Music 4 All*, and in it Landy discusses various ways in which sound-based music²⁰ can be given a broader awareness outside of the current (rather small) community. By educating listeners not only in the techniques behind the creation of music but also in ways to experience and appreciate this form of music, Landy has demonstrated his willingness to value the listener as intelligent and aesthetically-minded.²¹

Although it may seem as if I am condemning these individual authors for focusing on technical and theoretical issues, that is certainly not the case. Information such as these authors convey is admittedly necessary in a book with these goals. As complete volumes, however, there is a noticeable lack of any discussion of music as an aesthetic object that is experienced in real time by a real human listener. This bias on the part of the editors draws into question the intended audience for such books. Composers may be able to use the technical and stylistic information to assist in the creation of new works, and the historical information can provide a framework within which a composer

²⁰ “Sound-based music” is Landy’s term for musics that are not “note-based,” including not only electroacoustic music but also sound design for film and video games. Leigh Landy, *Understanding the Art of Sound Organization* (Cambridge, MA: MIT Press, 2007), 17.

²¹ This chapter stands in contrast to certain statements in Margaret Schedel’s contribution to *The Cambridge Companion*, where she espouses an overly optimistic view that the availability of affordable technology and free software will automatically result in a greater awareness and appreciation of electroacoustic music - ignoring virtually any factor that would ground her utopian musings in reality.

may situate their work. However, composers are not offered any information to assist in composing pieces that are themselves anything beyond an application of compositional techniques. Similarly, a (non-composing) listener, scholar, or critic may be able to use these volumes to provide historical and stylistic backgrounds within which to frame pieces of music, but is offered nothing in the way of information that may assist them in appreciating the unfolding of a piece over time or even (on the broadest scale) as anything other than the output of a particular theoretical model.

Music Criticism

If a critical approach to the discourse of electroacoustic music is to be advocated, a brief overview of music criticism is in order. Music criticism has traditionally encompassed areas such as descriptive journalism and value judgment, but has recently taken on a much broader definition and somewhat of a narrower audience. Music critics of previous generations reached their audiences through newspapers and magazines, informing their readers about a composition or performance by “using appropriate metaphors, images and adjectives, with only occasional reference to analytical detail.”²² As musical landscapes shifted throughout the twentieth century and new works found less of an audience among the general public, coverage of contemporary music in the mass media has largely disappeared.

Notable exceptions to this trend in the United States include Alex Ross’s work for *The New Yorker* and Tom Johnson and Kyle Gann’s writing for *The Village Voice*. In comparing Ross, Johnson, and Gann’s output to that of earlier music critics, several differences in tone and methodology are apparent. For example, the nineteenth-century

²² Edward Rothstein, “Criticism, §III: Since 1945,” in *Grove Music Online*. *Oxford Music Online*, <http://www.oxfordmusiconline.com.lp.hscl.ufl.edu/subscriber/article/grove/music/40589> (accessed October 19, 2010).

music critic William Ayrton published a fairly negative review of Beethoven's Ninth Symphony in 1825, citing the work's beauty and the composer's genius but also criticizing the work's excessive length and the inclusion of a chorus in the final movement. The performance's total duration of one hour and five minutes was found to be a "fearful period indeed, which puts the muscles and lungs of the band, and the patience of the audience, to a severe trial." Ayrton was unable to hear a satisfactory connection between the choral movement and the rest of the work, stating that the "want of intelligible design is too apparent." The review concludes by recommending that the work be put into a "produceable form" by omitting the repetitions and excising the chorus altogether.²³

While late twentieth-century critics such as Gann, Johnson, and Ross also describe the works at hand and characterize features that they are somewhat displeased with, Ayrton's negative comments are far more judgmental. This may be simply due to the fact that Ayrton was more irritable and opinionated than these modern-day critics, but is more likely a function of his place within Western cultural history. Coming straight off the heels of the "twilight years" of the Enlightenment, critics in the early nineteenth century may have been influenced by Kantian notions of "beauty" in works of art. Such aesthetic critiques hinge upon a society's reliance on rules of logic and science, as divorced from mystical or spiritual answers to problems. Thus, critiques of art can be objectively held to a "correct" system of standards. If *nature* features elements that are symmetrical and logically connected, and we have determined that *nature* embodies "beauty," then we can objectively proclaim that works of art with

²³ William Ayrton, "Beethoven's Ninth Symphony," in *The Attentive Listener*, ed. Harry Haskell (London: Faber and Faber, 1995), 83-85.

disjointed sections or “illogical” features are thus excluded from the category of the “beautiful” – good and acceptable art. Accordingly, the Ninth Symphony’s excessive length and confusing choral section have pushed the balance in the direction of “unacceptable.”

In the twentieth and twenty-first centuries, such systems for logically deducing what art is acceptable or unacceptable based upon universal standards does not (or perhaps *can not*) exist. Due to space limitations and practical concerns, it is unfeasible to attempt to tackle the question of whether *postmodern thought* truly does exist on a broad scale in contemporary society; however, it is safe to state that *pluralism*, or the valuing of several different viewpoints, is an integral component of our contemporary cultural landscape. Accordingly, these modern critics stop short of issuing broad-scale value judgments of musical works, presumably because they realize such an effort would require much more in the way of aesthetic speculation than their editors have allowed them space for. Ross’s comments in a 2007 *New Yorker* article on Philip Glass’s music regarding the predictable nature of the composer’s works are more amusing than venomous²⁴, and sets the stage well for his article-closing optimism regarding the composer’s current compositional direction.

Apart from their desire not to objectively cast value judgment on musical works, critics such as Ross, Johnson, and Gann may be motivated by other societal concerns. In their positions as regular contributors to periodicals with a large non-specialist

²⁴ Ross writes, “More often than not, you start off with a disappointed sense of déjà vu: a rapid onset of churning arpeggios and chugging minor-key progressions dashes any hope that the composer may have struck off in a startling new direction. At times, it seems as though he had launched Microsoft Arpeggio on a computer and gone off to have tea with, say, Richard Gere. But marvelous things can happen when the composer’s attention is fully engaged.” Alex Ross, “The Endless Scroll; New works by Philip Glass,” *The New Yorker*, November 5, 2007, 98.

readership, they may have assumed the mantle of “champion” or “advocate” of new music. In particular, Tom Johnson’s contributions to *The Village Voice* are overwhelmingly positive in nature.²⁵ Rather than publicly attacking music that he did not care for, Johnson seems to have used his visible position to advance the public’s awareness of music that he felt had some cultural or musical value. Alex Ross has taken this task even further, using his articles in *The New Yorker* to educate the public on a variety of issues surrounding contemporary music in addition to providing concert reviews.

As the nature of music criticism in general media outlets has changed, so has the relationship between *criticism* and *musicology* within the academy. In the early 1980’s, the musicologist Joseph Kerman argued that a preoccupation with analysis, historiography, and “quasi-scientific scholarly research in music” had “produced signally little of intellectual interest,” because it completely ignored the question of artistic value; he urged others to adopt a wider stance of criticism in their work.²⁶ Ensuing music scholarship did undergo a change, focusing on the sociology of music, its political meanings and its cultural contexts.²⁷ The scholarship resulting from this change of focus is sometimes referred to as the New Musicology or Critical Musicology. In addressing the nature of these endeavors, Lawrence Kramer wrote of three ways in which they may be considered “critical”:

“It involves critical interpretation, which presupposes acts of historically informed interpretation as a basic disciplinary activity; philosophical critique, which engages a concern with the character of knowledge in

²⁵ Tom Johnson, *The Voice of New Music* (Editions 75, 1991).

²⁶ Joseph Kerman, “How We Got into Analysis, and How to Get out,” *Critical Inquiry* 7, no. 2 (Winter 1980): 319, see also Joseph Kerman, *Contemplating Music: Challenges to Musicology* (Cambridge, MA: Harvard University Press, 1985).

²⁷ Rothstein, “Criticism, §III: Since 1945,” in *Grove Music Online*.

general and of musical knowledge in particular; and critical reflection, which entails disciplined self-awareness in the musical thinker.”²⁸

Although the role of criticism in today’s musical landscape is multi-faceted and still undergoing changes, it is apparent that the definition of criticism has moved away from journalistic reporting and value judgment and more into the domain of the critical reflection and interpretation as practiced by musicologists. The goal of this project is to initiate a critical discourse of electroacoustic music that has the ability to straddle these two areas. While critical interpretation, critique, and reflection are very much needed within the *academic* scholarship of electroacoustic music, this discourse will also illuminate features of electroacoustic pieces that seem to be most apparent to the uninitiated listener: narrative, referentiality, and the like; thus implying potential applications within the field of music journalism.

The Problem of Evaluation

As outlined above, much historical music criticism has focused on the evaluation or assessment of music, and the words “value” and “aesthetic judgment” occur frequently in writings wherein Joseph Kerman called for a return to “criticism” within the academic study of music. The philosopher Malcolm Budd has written on the difficulties of ascribing value to a work of art, initially pointing out that an artwork can “possess as many kinds of value as there are points of view from which it can be evaluated.”²⁹ Budd claims that the primary metric of value judgment of interest to the artist (and presumably for the critic) is that of “artistic value”, or “the value of a work of art *as a work of art.*” In his book *Values of Art*, Budd proposes that the artistic value of a work of art is

²⁸ Lawrence Kramer, *Interpreting Music* (Berkeley: University of California Press, 2011), 65.

²⁹ Malcolm Budd, *Values of Art: Pictures, Poetry, and Music* (New York: Penguin Books USA, 1995), 1.

determined by or is a function of “*the intrinsic value of the experience the work offers.*”³⁰

Such a method of ascribing value to a work of art is thus closely tied in with an individual’s personal experience with the work.

Malcolm Budd’s discussions of determining the value of a work of art are quite relevant in their wide-reaching scope. The simple notion that a work can be differently evaluated along a number of measures can go a long way in undermining any value judgment that claims to be universal. However, Budd’s ultimate claim that a piece’s *artistic value* lies in the intrinsic value of the experience the work offers can be problematic. This methodology places the value of the work unnecessarily on a psychological plane. In this model, the value is found in *our* experience of the work, not within the work itself. Thus, it is difficult to extend such a philosophy to determining the quality of a work and not simply the quality of experiencing the work.

With this project’s broad critical goal of discussing and interpreting works of electroacoustic music and approaching them from various angles, the notion of objective musical value will not hold a central place in the discussion. It should be acknowledged that pieces of music certainly can differ in their “quality,” and most participants in contemporary music culture can probably recall experiencing an unequivocally *bad* piece. Were the principles outlined in this project to be applied in the service of journalistic criticism, the critic would have a responsibility to discuss all works presented for review – be they “good” or “bad.” However, the goal of this project is not to single out “bad” pieces and utilize critical methodologies to reinforce the critic’s viewpoints regarding their “badness.” Rather, the works discussed here will be chosen

³⁰ Jerrold Levinson, “Evaluating Music,” in *Musical Worlds: New Directions in the Philosophy of Music*, ed. Philip Alperson (University Park, PA: The Pennsylvania State University Press, 1998), 94.

based on this critic's viewpoint that they hold some qualities worthy of discussion, and that they deserve critical attention due to being (in Kramer's words) moving, enlightening, provoking, oppressive, or ambivalent.

Analysis

Any significant discussion of a particular work of music will necessarily involve at least a small measure of descriptive musical *analysis*, and this project is no exception. Several attempts have been made in recent years to extend the discourse of musical analysis as practiced by "music theorists" and "musicologists" into the realm of electroacoustic music; as extended essays on particular compositions these analyses are perhaps the closest thing within the literature to what I am proposing. Rather than dealing with issues of technology or composition, notions of value, quality, interpretation, or relation to external structures, such analyses primarily seek to discover and describe ways in which the constituent parts of a piece of music combine to create the whole. Techniques for analyzing instrumental music in this fashion include motivic, harmonic, and formal analysis, Schenkerian reductive analysis, semiotic approaches, and more. Nicholas Cook has tried to answer the question "what does musical analysis tell us?" by steering the end result away from any scientific or aesthetic goals and simply using musical analysis to inform an understanding of the "large-scale connections appropriate to the particular musical context," and the ability to "weigh alternatives, to judge how it would have been if the composer had done this instead of that."³¹ In short, the goal of traditional musical analysis is to uncover and explore "how a piece of music works," or perhaps how it does *not* work.

³¹ Nicholas Cook, *A Guide to Musical Analysis* (New York: W.W. Norton, 1987), 232.

Attempts to mount analyses of electroacoustic music have explored a variety of methodologies. In an analysis of Paul Lansky's *As If* (for string trio and synthesized tape), Mary Simoni applies traditional methods of pitch and rhythm-based musical analysis to the instrumental parts in combination with some (limited) discussion of the tape part via spectrographic display.³² Mara Helmuth's analysis of Barry Truax's *Riverrun* utilizes sonograms in conjunction with some limited notation of pitched elements on a five-line staff to illustrate spectral motion throughout the piece.³³ In an analysis of Joji Yuasa's *The Sea Darkens* (from *A Study in White*), Kristian Twombly also relied on sonograms to provide a visual display of the piece, noting this tool's ability to allow an analyst to "examine the acoustical properties of a variety of sonic materials not readily accessible through traditional methods of analysis."³⁴

Others have adopted linguistic approaches to the analysis of electroacoustic music, such as Simon Emmerson's framework for discussing a piece's usage of either a mimetic or an aural discourse.³⁵ In Emmerson's theory, those pieces that feature an aural discourse obtain their structure through the interaction of elements in a purely sonic (or traditionally musical) fashion with little to no reference to the extramusical. The mimetic discourse refers to works whose elements interact based upon mimesis, or their imitation of extramusical elements. As Emmerson acknowledges, many pieces obtain their discursive language through a combination of these two approaches.

³² Mary Simoni, "Paul Lansky's *As If*," in *Analytical Methods of Electroacoustic Music*, ed. Mary Simoni (New York: Routledge, 2006), 55-88.

³³ Mara Helmuth, "Barry Truax's *Riverrun*," in *Analytical Methods of Electroacoustic Music*, 187-238.

³⁴ Kristian Twombly, "Oppositional Dialectics in Joji Yuasa's *The Sea Darkens*," in *Electroacoustic Music: Analytical Perspectives*, ed. Thomas Licata (Westport, CT: Greenwood Press, 2002), 217-235.

³⁵ Simon Emmerson, "The Relation of Language to Materials," in *The Language of Electroacoustic Music*, ed. Simon Emmerson (New York: Harwood Academic Publishers, 1986), 17-39.

In contrast to the analyses detailed above, which seek to describe features of a composition by analyzing the *completed* product, other scholars have written analyses of electroacoustic music that take advantage of having access to software code, tables of mathematical figures, or other information that went into the creation of the piece. Several chapters in the book *Electroacoustic Music: Analytical Perspectives* fall into this category. James Dashow's analysis of his composition *Sequence Symbols* begins with a description of his original ideas for the piece, continues with a discussion of the software instruments and signal processors he created in the Music 360 language in order to realize the piece, and concludes with a lengthy discussion of the pitched elements of the piece, utilizing standard musical notation.³⁶ Agostino Di Scipio's analysis of Jean-Claude Risset's *Contours*, though also including sonograms of the completed work, is largely concerned with a discussion of the Music V code that Risset wrote in order to realize the piece, citing Risset's views that the Music V data is "the computer 'score' for sound", and that by studying the Music V listings, "one is able to analyze the scores, not only the notes, but also the sounds."³⁷

Analytical approaches such as these can be very useful in identifying and elucidating what a work "does" on an internal level. Commonalities between sections of a piece can be explored, underlying structures can be exposed, and timbral, motivic, and semiotic trajectories can be traced across the length of a work. While these methods are critical in discussing issues internal to a piece, they fail to explicitly address the relationship between the work and the audience, and oftentimes are not illuminating

³⁶ James Dashow, "Looking into *Sequence Symbols*," in *Electroacoustic Music: Analytical Perspectives*, 185-216.

³⁷ Agostino Di Scipio, "A Story of Emergence and Dissolution: Analytical Sketches of Jean-Claude Risset's *Contours*," in *Electroacoustic Music: Analytical Perspectives*, 153.

of the aspects of a piece that may be most salient to the listener. In particular, Twombly's analysis of Yuasa's *The Sea Darkens* (from *A Study in White*) focuses heavily on describing in a dry mathematical fashion the elements of the piece that Twombly "discovered" through the use of sonograms, waiting until the end of the analysis to address the interplay between "pure sound" and text, and only acknowledging "the listener" in the final paragraph. Granted, many such analyses do describe features of a piece that a listener is clearly aware of. However, pure analysis as most often practiced in the literature is insufficient on its own to address areas of inquiry such as perception, aesthetics, phenomenology, or interpretation. In characterizing a similar problem concerning the preoccupation with organicism within systems of analysis as practiced in the mid 20th century, Joseph Kerman wrote:

"These new analyses are, as always, conducted at different levels of sophistication and insight. Even the best of them leave the reader uneasy. They come up with fascinating data and with undoubtedly relevant data; yet one always has a sinking feeling that something vital has been overlooked. For however heavily we may weigh the criterion of organicism in dealing with the masterpieces of German instrumental music, we know that it is less important for other music that we value. This music may really not be 'organic' in any useful sense of the word, or its organicism may be a more or less automatic and trivial characteristic. Its aesthetic value must depend on other criteria. Cannot a criticism be developed that will explain, validate, or just plain illuminate these other musical traditions?"³⁸

In a review of the book *Electroacoustic Music: Analytical Perspectives*, Leigh Landy summarizes the shortcomings of the analyses contained within by noting that "[t]he ear... is not of fundamental importance."³⁹

³⁸ Kerman, "How we Got into Analysis," : 320.

³⁹ Landy, "Review of *Electroacoustic Music: Analytical Perspectives*," : 162.

Recent Steps in New Directions

Lest the situation be completely misrepresented, some time should be spent in the discussion of the writings of those whose critical or analytical approaches to electroacoustic music have begun to make headway toward the goal of this project.

Intention/Reception

The Intention/Reception Project mentioned in Chapter 1 is one recent attempt to bring the issue of listener perception into the discussion of electroacoustic pieces.⁴⁰ This is an ongoing project organized in the UK by a group of individuals centered around the composer Leigh Landy. Through controlled scientific experiments, data was gathered regarding the ability of listeners from a variety of differing backgrounds to appreciate or understand a piece of music having been given differing amounts of foreknowledge regarding the piece, including a title and program notes. The goal of these experiments was to characterize the connections between a composer's intention for a piece of music and the manner in which the piece was received by the listener.

The Intention/Reception Project and similar undertakings are crucial in illuminating our understanding of how a piece of electroacoustic music is perceived by people from different musical backgrounds. Indeed, one measure of a piece's "value" (or at least success) might be constructed along the lines of whether the composer's intentions were fully understood by the listeners. However, this is but one measure of a piece among several; after all, a piece of music can be of extreme personal value to an individual regardless of whether they fully understand or even care to understand the composer's original intentions. Literary theorists associated with the "New Criticism" have discussed the idea of the author's pre-textual intention, suggesting that this cannot

⁴⁰ Landy, *Understanding the Art of Sound Organization*, 38-65.

furnish the touchstone of interpretation, and may even be irrelevant or misleading as guides to a text's meaning or meanings.⁴¹ In other words, the intentions of the composer need not necessarily enter into a discussion of the work as an aesthetic object if we choose instead to focus on the intentions of the work itself. This idea will be explored further in Chapter 3.

Listening

The elements of electroacoustic pieces that I wish to discuss in this dissertation (particularly the perception and interpretation of referential sounds) will be most successfully illuminated through careful listening rather than the usage of sonograms, the study of software code, etc. Katharine Norman has published extensively on the topic of listening to electroacoustic music, referring to her "listening journal" style of writing as an "unashamedly personal response" to the works she has chosen.⁴² Rather than attempting to "analyze" or "criticize" electroacoustic pieces, Norman is primarily interested in documenting in a personal literary fashion her own perceptions experienced during the process of listening. In her own words, "we have a need for a new kind of literature to explain works of art for sound, one that listens differently to what is going on and allows for subjective interpretation as a valued tool."⁴³ One critique that I have toward Norman's work is that she will sometimes offer her real-time thoughts transcribed during her listening experience as the entirety of her commentary on the piece, without taking the opportunity for critical reflection after the fact.

⁴¹ Stefan Collini, "Introduction: Interpretation terminable and interminable," in *Interpretation and Overinterpretation*, ed. Stefan Collini (Cambridge: Cambridge University Press, 1992), 6-10.

⁴² Katharine Norman, *Sounding Art: Eight Literary Excursions through Electronic Music* (Aldershot: Ashgate Publishing Limited, 2004), xi.

⁴³ Katharine Norman, "Stepping Outside for a Moment: Narrative Space in Two Works for Sound Alone," in *Music, Electronic Media and Culture*, ed. Simon Emmerson (Aldershot: Ashgate, 2000), 217.

One of Norman's particularly effective "listenings" (as they are not analyses per se) is that of Brad Garton's *Southside Silence*.⁴⁴ In Garton's program notes, he conveys to the listener that the piece is meant to explore a certain sense of place and a certain "detached melancholy state of mind," stemming from a childhood experience of his own. Norman's excursion through the piece begins with her comments on Garton's program notes, continues with her own history with the piece, progresses through a detailed "listening journal" of the entire piece, and finishes with a paragraph of concluding thoughts. As Norman writes, "*Southside Silence* is an unpretentious personal memoir that also invites several journeys of remembering from the listener." It seems it would be somewhat inappropriate, though entirely possible, to attempt a spectrographic analysis of such a piece or to take a look at Garton's software code or DAW session: such lines of thought would be irrelevant. The piece itself is "about" elements of the human experience, represented through sound, and as such Norman's approach honors the "intentions of the work."

Other writers worth mentioning with regards to the study of *listening* to electroacoustic music include Salomé Voegelin, Denis Smalley, and Suk-Jun Kim. Voegelin's writing is primarily concerned with exploring philosophical ideas attached to the listening of sound art, mingling fanciful speculations with personal subjective experience and a healthy dose of Adorno and Heidegger; never staying too long on the discussion of any one particular piece of music.⁴⁵ Listening-centric writings by

⁴⁴ Katharine Norman, "Conkers (listening out for organised experience)," *Organised Sound* 15, no. 2 (2010): 119-120.

⁴⁵ Salomé Voegelin, *Listening to Noise and Silence: Towards a Philosophy of Sound Art* (New York: Continuum, 2010).

Smalley⁴⁶ and Kim⁴⁷ are primarily concerned with exploring notions of *how* we listen to electronic music, proposing detailed theoretical frameworks by which we may catalogue sounds in a composition and their associated perceptions: “listening strategies” in Smalley’s words.

Goals for this Project

Throughout this project, I wish to adopt Lawrence Kramer’s broad definition of music criticism as a “thoughtful involvement” with music. While discussions of intention/reception and value judgment might potentially play a role in such discussions, they will not be focused upon in depth for reasons outlined above. Rather, I am proposing a model for the discourse of electroacoustic music that combines two main components both informed by careful listening: analysis and critical interpretation. This combination will be referred to as “critical analysis.”

In beginning a critical discussion of works of electroacoustic music, it will be imperative to include some discussion of the elements contained within the piece as appropriate – the sonic materials, form, motives, extra-musical signifiers, software tools, etc. This is the *analysis* portion of the proposed critical model. Various analytical tools appropriate to the piece in question will be utilized in order to describe and characterize the elements of said piece. If analysis is defined as an elucidation of *what* is contained within a piece, perhaps critical interpretation may be defined as a discussion of what *may* be contained within a piece, or perhaps *why* certain elements are included by the composer or perceived by the listener in a particular way. This consideration of the

⁴⁶ Denis Smalley, “The Listening Imagination: Listening in the Electroacoustic Era,” *Contemporary Music Review* 13:2 (1996): 77-107.

⁴⁷ Suk-Jun Kim, “Imaginal Listening: a quaternary framework for listening to electroacoustic music and phenomena of sound-images,” *Organised Sound* vol. 15, no. 1 (2010): 43-53.

personal listening experience within a critical analysis serves to extend the analysis of electroacoustic music away from a simple description of the materials found within a piece and toward a discussion of features that are clearly important factors in appreciating a large number of electroacoustic compositions.

Umberto Eco has already been referenced in Chapter 1 of this dissertation, and his name will re-appear several times in subsequent chapters. Equally known as an author of fiction and as a literary theorist, Eco has served as a model for me in my project of developing a discourse whereby the music that I am involved in creating may be meaningfully discussed. Clearly, the existence of creator/critics in the realm of written text has a close parallel with that of the composer/theorists inhabiting the musical world; the latter of which is hardly uncommon. As Chapter 3 of this dissertation will elaborate, I am particularly interested in addressing theories of semiotics and interpretation with relation to acousmatic music – many of my ideas for the application of these theories originated while reading Eco’s varied critical texts. Of most interest to me is Eco’s ability to discuss potential interpretations of his *own* work, demonstrating his belief that the author may hold limits over the possible interpretations of *his* text. This idea will be discussed further in Chapter 6.

CHAPTER 3 MUSICAL MEANING AND INTERPRETATION

“[B]ind listening does not exist: Sounds are magnetized by the world as much as they magnetize it, and we are caught up in their systems of relay and resonance.” – Joe Milutis⁴⁸

As explained earlier, this project seeks to extend a listener-centered approach to the discourse of electroacoustic music by emphasizing the combination of musical analysis with the act of critical interpretation as informed by careful listening. The *critical interpretation* portion of this project serves to reinforce the author’s belief in a similarity between the referentiality and thus the perception of certain (primarily acousmatic) electroacoustic compositions and works of literature. On a superficial level, a fixed-media electroacoustic piece is more similar than an instrumental piece to a work of literature simply because it exists in a static form that can be duplicated, repeated, and referred to explicitly without the detriment of changes that accompany performance interpretation. On a deeper level, an electroacoustic piece has the potential ability to provoke discussion on issues such as musical meaning, reference, and narrative in an explicit manner much more similar to literature than to instrumental music, due to the possibility of reference-laden sonic material. The areas of literary and critical theory have undergone many advances during the past century, with musicologists only recently taking advantage of the efforts made by said theorists: electroacoustic studies trailing even further behind. In this chapter, I will discuss pre-existing theories of musical meaning, reference, and textual interpretation, noting along the way a few key efforts that have been made to apply such scholarship to the area of music. This will form the backdrop for the critical analyses in the ensuing chapters.

⁴⁸ Joe Milutis, “The Biography of the Sample: Notes on the Hidden Contexts of Acousmatic Art,” *Leonardo Music Journal* 18 (2008): 74.

Musical Meaning

The question of whether music can truly *mean* anything has been debated for centuries – the complex nuances of said debate being complicated by a multitude of compositional strategies and the many ways in which any object or utterance can be said to *mean* something else. Philosophers and musicologists such as Roger Scruton, Lawrence Kramer, Stephen Davies, Leonard Meyer, Peter Kivy, Jerrold Levinson, and many others have written extensively upon this topic, exploring the many different ways that a piece of music might mean (or not mean) something (or nothing) to anyone (or no one). In his book *The Aesthetics of Music*, Roger Scruton takes care to separate the issue of musical meaning into the behaviors of *representation* and *expression*, expressing reservations whether music is truly capable of either behavior.⁴⁹ In *Musical Meaning and Expression*, Stephen Davies rejects notions of music's ability to describe, depict, or symbolize, choosing to focus on the ability of music to awaken emotions in the listener.⁵⁰

In reviewing much of the literature regarding the philosophy of music (musical meaning, representation, and expression in particular) it has become apparent that most of these theories are grounded in older methods of musical thought. One would certainly be surprised to find any mention of electroacoustic music within this literature, but what is more disconcerting is the overabundance of musical examples from the nineteenth century, with nary a thought on the authors' part regarding the possibility of turning their attention toward any post-1945 repertoire. With regards to Stephen Davies, when the object of one's study is Beethoven, Schubert, Chopin, and Wagner,

⁴⁹ Roger Scruton, *The Aesthetics of Music* (New York: Oxford University Press, 1997).

⁵⁰ Stephen Davies, *Musical Meaning and Expression* (Ithaca, NY: Cornell University Press, 1994).

one will undoubtedly find *emotion*. While the existing literature on this subject has proven to be invaluable as background information, the conclusions of those working primarily with examples of tonal instrumental music cannot be extended without significant qualifiers to the body of work represented in this current project.

Reference (Semiotics)

Semiotics can be understood simply as the theory of how something (the sign) can stand for (or *mean*) something else (the signified). Thus, all theories of musical meaning and musical or textual interpretation return to semiotics at their core, even if it is not referenced explicitly. Much of the semiotic scholarship is based upon (or serves in reaction to) early theories by Ferdinand de Saussure and Charles Peirce – the theories of the latter will be discussed further in Chapter 4. In the introduction to his book *A Theory of Semiotics*, Umberto Eco wrote that his aim was

“to explore the theoretical possibility and the social function of a unified approach to every phenomenon of signification and/or communication. Such an approach should take the form of a *general semiotic theory*, able to explain every case of sign-function in terms of underlying systems of elements mutually correlated by one or more codes.”⁵¹

Many other semiotic theories are similarly grandiose in their scale, seeking to construct elaborate theoretical models concerned with cataloguing how *anything* may stand for *anything else*. Raymond Monelle characterizes such efforts by noting that they tend to “concentrate on pattern rather than content, to seek out structure rather than to interpret meanings.”⁵² While much of Eco’s later work is based upon his earlier semiotic theories, his efforts in textual interpretation will be more relevant to this project.

⁵¹ Umberto Eco, *A Theory of Semiotics* (Bloomington: Indiana University Press, 1976), 3.

⁵² Raymond Monelle, *Linguistics and Semiotics in Music* (Philadelphia: Harwood Academic Publishers, 1992), 5.

Several efforts have already been made to apply semiotic theory to the analysis of instrumental music, and occasionally to the analysis of electroacoustic music. Many “semiotic” analyses of instrumental music adopt the theoretical models whereby linguists parse out the written word into meaningful segments, thus concentrating primarily on musical form and intra-musical connections – resonating with Monelle’s comment above.⁵³ Kofi Agawu⁵⁴ and Eero Tarasti⁵⁵ have written extremely in-depth and well-researched books wherein they tackle various elements of semiotic musical analysis, considering both intra- and extra-musical signification; a thoughtful discussion of those authors’ contributions to this field could not be done justice within this brief overview.

As mentioned at the beginning of this chapter, one difference between the study of reference in acousmatic music and instrumental music is the possibility for an acousmatic piece to include sonic material that is much more explicitly referential to extra-musical elements than could ever be possible in an instrumental piece. Whereas Messiaen attempted to represent birdsong in compositions such as *Rèveil des Oiseaux* or Villa-Lobos evoked the sound of locomotives in *Bachianas Brasileiras No. 2*, an acousmatic composer has the ability to compose with recorded representations of *actual* birds and locomotives. To be fair, many listeners of Messiaen and Villa-Lobos are able to accurately draw the intended semiotic connection between the musical signs and the real-world objects meant to be signified. However, the level of musical narrative

⁵³ See for example the analyses by Jean-Jacques Nattiez and Elisabeth Morin described in the *Semiotic Analysis* section in Cook, *A Guide to Musical Analysis*, 151-182.

⁵⁴ See Kofi Agawu, *Playing with Signs: A Semiotic Interpretation of Classic Music* (Princeton: Princeton University Press, 1991), and Kofi Agawu, *Music as Discourse: Semiotic Adventures in Romantic Music* (Oxford: Oxford University Press, 2009).

⁵⁵ See Eero Tarasti, *A Theory of Musical Semiotics* (Bloomington: Indiana University Press, 1994).

possible with the limited abilities of acoustic instruments to evoke real-world objects or situations simply cannot compare to the greater possibilities present when using recorded sound.

Interpretation (Hermeneutics)

Alongside literature that seeks to describe *how* the sign may stand for the signified exists a body of work concerned with *interpreting* the very nature of the sign or the signified – such scholarship frequently questioning the original author’s intentions for the written word. One major issue that divides the hermeneutic literature is the question of whether texts should be considered “open” or “closed” – whether the reader is to create their own text through (possibly unlimited) interpretation or whether the author or the text itself hold the keys to the “correct” interpretation. Umberto Eco has published several books and essays concerned with the interpretation of texts, and although his earlier work hinted at an affinity toward the idea of the “open work”⁵⁶, he has more recently written at length against the notion of unlimited semiosis, thereby placing certain boundaries upon the act of interpretation. In the introduction to *The Limits of Interpretation*, Eco writes

“Even the most radical deconstructionists accept the idea that there are interpretations which are blatantly unacceptable. This means that the interpreted text imposes some constraints upon its interpreters. The limits of interpretation coincide with the rights of the text (which does not mean with the rights of its author)... If there is something to be interpreted, the interpretation must speak of something which must be found somewhere, and in some way respected.”⁵⁷

The distinction that Eco makes here between the interpretative limits imposed by the text itself versus limits imposed by the author bears mention with relation to my

⁵⁶ See Umberto Eco, “The Poetics of the Open Work,” in *The Role of the Reader*, 47-66.

⁵⁷ Umberto Eco, *The Limits of Interpretation* (Bloomington: Indiana University Press, 1990), 6-7.

goals within this dissertation to alternately consider and ignore the composer's pre-compositional intentions for the work or their guidance as offered through program notes. In his well-known essay *The Death of the Author*, Roland Barthes made the case for the removal of the Author as a figure whose intentions *must* be respected during the act of interpretation, noting that to "give a text an Author is to impose a limit on that text, to furnish it with a final signified, to close the writing"; noting at the end that "the birth of the reader must be at the cost of the death of the Author."⁵⁸ While as an imaginative interpreter/reader/listener I relish the opportunity to construct my own interpretations divorced from any respect for the original Author, I also side with Eco in his idea that certain interpretations may in fact be blatantly unacceptable. This idea will re-surface in Chapter 6, as I address Eco's thoughts on the Empirical Author with relation to the interpretation of my own work.

In my discussions of works by Mark Wingate, James Mobberley, and myself in later chapters, the reader will note that I place my critical analyses in reaction to the composers' program notes: neglecting to do so in my discussions of pieces by Jonty Harrison and Paul Koonce. Even when citing the program notes for the piece, my views are oftentimes in opposition to the composer's stated goals. This may demonstrate a sliding scale between respecting the intentions of the work and the intentions of the composer within my analysis – while I believe the intentions of the composer are most often helpful in understanding a piece, my own personal interpretations are oftentimes quite different. This raises the question of whether a "responsible" critic must acknowledge the composer's intentions in a critique of the work.

⁵⁸ Roland Barthes, "The Death of the Author," in *Image-Music-Text* (New York: Hill and Wang, 1977), 142-148.

As an example of potential “problems” raised by this dilemma, see Tom Johnson’s 1972 review in *The Village Voice* of a concert containing two new works by Charles Dodge: *Speech Songs* and *The Earth’s Magnetic Field*.⁵⁹ The experience of the latter work offered in this review stems purely from an aural standpoint; Johnson describes the timbre of the electronic sounds, the pitch content of the piece, and the work’s “compelling personality.” The review concludes by noting that “one has the feeling that that the piece is not simply a result of something the composer wanted to do, but that it worked itself out.” As was well publicized upon the work’s initial LP release and within the subsequent literature, *The Earth’s Magnetic Field* was actually a highly determinate work based upon numerical data derived from fluctuations in the earth’s magnetism caused by the sun’s radiation over the course of the year 1961.⁶⁰ Perhaps this information was not advertised during this particular event, or perhaps Johnson simply didn’t read the program notes. However, it seems as if a post-concert fact-finding conversation with the composer may have illuminated this very simple fact and thus resulted in a very different review. On the other hand, too many discussions of *The Earth’s Magnetic Field* concentrate entirely on the technical aspects of the work – how the scientific data was re-purposed into musical information, what sorts of synthesis techniques were utilized, etc. In that respect, it is actually refreshing to read the account of a listener such as Tom Johnson who was evaluating the work based solely upon the musicality of the end product. My personal stance as a critic will be to at the very least research what information is available regarding the composer’s

⁵⁹ Johnson, *The Voice of New Music*, 34.

⁶⁰ Richard Taruskin, *The Oxford History of Western Music, Vol. 5: Music in the Late Twentieth Century* (New York: Oxford University Press, 2010), 497.

intentions for the work – choosing later to acknowledge or disregard such information within my analysis.

Applications of These Ideas to Electroacoustic Music

The idea that referential materials in acousmatic music may bear some sort of interpretation on the part of the listener is in no way new – it simply has not been widely applied to in-depth analytical discussions of particular pieces. In characterizing the philosophy of acousmatic music, François Bayle has noted that:

“In acousmatic music, one may recognize the sound sources, but one also notices that they are out of their usual context. In the acousmatic approach, the listener is expected to reconstruct an explanation for a series of sound events, even if this explanation is provisional. Like reading a detective story, one invents a scenario to find the chain of causality that explains the situation.”⁶¹

In Joanna Demers’s recent book *Listening Through the Noise: The Aesthetics of Experimental Electronic Music*, she devotes her first chapter to the topic of “Listening to Signs in Post-Schaefferian Electroacoustic Music.”⁶² This chapter serves as a concise overview of the scholarship surrounding *listening*, particularly Pierre Schaeffer’s idea of *reduced listening*, which will be discussed further in Chapter 4. Unfortunately, Demers limits her discussion to the topic of listening to *signs*, rather than speculating about the *signified*. Other than a paragraph on Jean-Jacques Nattiez, the topic of semiotics is not discussed in any depth.

The Next Step(s)

With this brief overview in mind of what it might mean to *interpret* a work, *what* may be interpreted, and *how* elements of a piece of music might be understood to stand

⁶¹ Sandra Desantos, “Acousmatic Morphology: An Interview with Francois Bayle,” trans. Curtis Roads *Computer Music Journal* 21, no. 3 (Autumn 1997): 17.

⁶² Joanna Demers, *Listening Through The Noise: The Aesthetics of Experimental Electronic Music* (New York: Oxford University Press, 2010).

in reference to other objects, actions, or ideas, let us turn our attention toward a practical exploration of these ideas in relation to specific pieces of electroacoustic music. The following three chapters will include in-depth critical analyses of several different pieces, with each chapter utilizing a slightly different methodology. The repertoire has been intentionally chosen in order to demonstrate how the discourse of different pieces of fixed-media electroacoustic music may need to be individualized in order to take into account both the “intentions of the work” and a personal, subjective, listening experience. More specifically, these three chapters serve to illuminate elements in the selected compositions that this author has found to be moving, enlightening, provoking, oppressive, or ambivalent.

Chapter 4 will further discuss the issue of semiotic reference, and will apply a Peircian model of semiotics in order to illuminate how certain elements in two selected compositions by Mark Wingate and Jonty Harrison traverse different modes of referentiality. This is perhaps the most “theoretical” component of this project, suggesting that the perception and organization of referential elements in acousmatic compositions may be illuminated through a specific and semi-rigorous theoretical framework if so desired. Chapter 5 will discuss the author’s experience with James Mobberley’s composition *VOX METALLICA*, noting that an intertextual (and slightly antagonistic) reading of this piece might be fruitful. In Chapter 6, the author will turn his attention toward two of his own compositions, alternately being able to provide background information regarding the creation of the piece and adopting the imaginary persona of an individual who might be hearing the piece without such knowledge. This will demonstrate the “intentional fallacy”, specifically highlighting that this composer’s

original intentions for a work oftentimes are in no way illuminating of a fruitful listening experience.

CHAPTER 4 SEMIOTIC REFERENCES IN TWO WORKS BY MARK WINGATE AND JONTY HARRISON

In this chapter, I explore possible intersections between semiotic theory and the perception and analysis of contemporary electroacoustic music. Although several attempts have been made to construct theories of musical semiotics, the literature deals almost exclusively with instrumental music – largely that of the western tonal canon. Particularly within the acousmatic sub-genre of electroacoustic music, the notions of sign, meaning, and referentiality fulfill unique functions and create different cognitive connections than their counterparts in the instrumental realm. After outlining certain core concepts in the acousmatic and semiotic fields, I will demonstrate their possible intersections through the analysis of two electroacoustic works.

A Brief Synopsis of The Acousmatic

The two works selected for study in this chapter both fit squarely into the *acousmatic* tradition as defined in Chapter 1 – both are works for a fixed medium composed using recordings of acoustic sound sources. While some acousmatic works rely on the montage technique of assembling unprocessed recordings into a cohesive piece, many composers utilize signal processing techniques to extend the timbral characteristics of these acoustic recordings. The perceptual result of these timbral manipulations is oftentimes that of listening to slightly extended or warped versions of real-world objects, and at other times any sense of referentiality is obscured through extreme manipulations that render the original sound source unrecognizable.

The acousmatic tradition has its roots in the early *musique concrète* work of Pierre Schaeffer in the 1950's. Schaeffer would construct his musical compositions onto magnetic tape using exclusively recordings of real-world acoustic phenomena.

These short recordings used as Schaeffer's musical material were intended to be perceived as "sound objects" – accumulations of timbre, pitch, and rhythm, devoid of any referentiality to the real-world phenomena that would result in such a sound. In listening to such works, Schaeffer advocated a perceptual strategy known as *reduced listening* – the "perceptive reality of sound as such, as distinguished from the modes of its production and transmission."⁶³

As can be imagined, it is difficult to train one's ear to focus solely on the timbral characteristics of a recognizable sound without factoring into one's perception the original mode of production. Let us use for example the recording of a crying baby used by Paul Koonce in the piece *Hothouse*. (1992) (*Excerpt – 2:30 - 4:05*) Although the timbral manipulations used to integrate this recording into the surrounding musical texture speak to the composer's intent to focus on the pitch contour of the sound object rather than its reference to a real-world child, it is extremely difficult even for the experienced acousmatic listener to listen to this moment of the work and not perceive on some level the concept of a human child. Schaeffer's *reduced listening* model would have us believe that we can perceive this musical moment based exclusively on the acoustic characteristics of the sound, and to be fair, this is precisely how Koonce has engineered this section of the piece. On a strictly musical level, the sound object is treated as another piece in a large puzzle of sonorities related solely on their acoustic characteristics. When analyzing the form of the piece, the referential value of this sound object to a live infant never factors into any sort of narrative. However, the unavoidable reality that the listener will register at least on the subconscious level the

⁶³ Pierre Schaeffer, "Acousmatics," in *Audio Culture: Readings in Modern Music*, ed. Christoph Cox and Daniel Warner (New York: The Continuum International Publishing Group, 2006), 77.

referential concept of “baby” leads towards the conclusion that such sound objects do in fact serve as cognitive reference points even if treated in a purely sonic manner in the surrounding musical context.

Semiotics

This idea that sound objects in an acousmatic piece can intentionally or unintentionally serve in a referential capacity turns our discussion towards semiotics – the study of signs, references, and meaning. If the appearance of a particular sound object brings to mind a specific object or concept, it is apparent that the sound object is functioning as a *sign* with some amount of intrinsic meaning. Charles Peirce defines the concept of *sign* in broad strokes as “something that stands for something else to someone in some way.”⁶⁴ With this broad applicability for the concept of the sign and the signified, it seems clear that our semiotic discussion of acousmatic music can potentially be drawn further from the realm of simple one-to-one correlation between a recording and a physical object into other concerns both intra- and extra-musical.

Simon Atkinson has already made a compelling case for the adoption of a Peircian semiotic model for acousmatic analysis, albeit stopping short of proposing the specifics of such a system or demonstrating these ideas through analysis.⁶⁵ Atkinson argues that an invaluable project would be to develop a taxonomy (and thus theoretical framework) of how sound can “stand for something,” i.e., function as a sign in semiotic terms. He continues by arguing that “such terminology should not reinforce distinctions

⁶⁴ Thomas Turino, “Signs of Imagination, Identity, and Experience: A Peircian Semiotic Theory for Music,” *Ethnomusicology* Vol. 43, No. 2 (Spring-Summer, 1999): 222.

⁶⁵ Simon Atkinson, “Interpretation and Musical Signification in Acousmatic Listening,” *Organised Sound* Vol. 12, No. 2 (2007): 113-122.

between the intra- and extra-musical”⁶⁶ To respond to Atkinson’s claims, I feel as if the existing tripartite framework of Peircian semiotics will serve as at least an initial starting point for the application of semiotic approaches to acousmatic analysis. However, considering the almost fundamental nature of acousmatic music to include both intra- and extra-musical referentiality, I feel as if any analytic system devoid of this parameter would fall short of fully expressing both the composer’s intent and the listener’s perception of a piece.

Peircian semiotics divides the act of meaning into three parts – the sign (that which means), the object (what the sign means), and the interpretant (the effect created by bringing together the sign and the object in the mind of the perceiver.) All three of these components can be understood according to phenomenological categories that Peirce called First (possibility, abstraction), Second, (actuality, referentiality, action), and Third (mediation, organization, rules). The nine intersections between sign, object, and interpretant, and First, Second, and Third have all been given specific names and descriptions, as seen in Figure 4-1, courtesy of S. Alexander Reed.

As previously mentioned, the understanding of semiotic signs in acousmatic music requires that particular attention be paid to the scale of intramusical versus extramusical semiosis. A sound object that serves solely as an intramusical sign would act only as a reference to other moments within the piece of music – a repeated phrase, an anticipated rhythmic pattern, etc. The purely extramusical sign would only reference concepts or objects outside of the musical framework – i.e. an airplane or the concept of joy. As referenced in Chapter 2 of this document, Simon Emmerson has described a categorical framework for the analysis of electroacoustic works that includes the idea of

⁶⁶ Simon Atkinson, “Interpretation and Musical Signification in Acousmatic Listening,” 113.

a piece utilizing either a mimetic or an aural musical discourse. Those pieces that feature an aural discourse obtain their structure through the interaction of elements in a purely sonic (or traditionally musical) fashion with little to no reference to the extramusical. The mimetic discourse refers to works whose elements interact based upon mimesis, or their imitation of extramusical elements. As Emerson acknowledges, many pieces obtain their discursive language through a combination of these two approaches. Similarly, many sound objects within an acousmatic work function somewhere on the continuum between purely intramusical and purely extramusical referentiality.

In understanding and categorizing the types of semiotic signs utilized in an acousmatic piece, it is important to consider the specificity of a particular recorded sound in light of its usage in the surrounding musical context. For example, Paul Koonce's crying baby sample is a recording of a specific baby making a specific vocalization at a specific moment in time. If the piece was entitled *A Portrait of my Child on December 2, 1992*, and the recording was surrounded with other infant-appropriate sounds, it would stand to reason that the composer's intent was to use this recording to signify a very specific real-world object. In this case, the recorded sound would function in Peircian terms as a *dicent-indexical-sinsign*. It is a dicent because the behavior of the object (the live infant) has a direct relation to the very nature of the sign (the recorded sound). It is indexical because of the co-occurrence of the infant's cry with the creation of the sign, and a sinsign due to the fact that we are dealing with a specific reference to a specific infant.

In reality, Koonce's usage of the baby sample functions much more as an element within an aural discourse rather than a mimetic one, with a large degree of intramusical referentiality. The section immediately preceding this musical moment features piano, clarinet, and rooster samples, among other elements. Through a series of timbral manipulations, the clarinet and rooster samples converge upon a common sonic territory and emerge unified as the sound of the baby's cry. Presented in its pure unaltered form alongside various environmental and industrial sounds for a moment, the baby sound quickly begins its own timbral modulation and effectively disappears into the distance. During our brief encounter with this sound object, the concept of a human infant is never reinforced in any meaningful way via the surrounding musical materials, much less with any reference to a specific baby at a specific moment in time. The listener's subconscious connection of this sound to that of a human infant notwithstanding, it seems clear from the musical context that this sound was meant to function in a discourse with other musical elements in a primarily aural rather than mimetic fashion. As such, a more accurate Peircian semiotic assessment would be that of a *rhematic-iconic-legisign*. It is rhematic because the sound object references the possibility of a baby without maintaining a connection to any particular realization of this possibility. It is iconic because the sign bears resemblance to a possible "baby" object without coinciding with any such occurrence, and a legisign because the sound object is most similar to that of a general type rather than any specific occurrence or abstract quality. Even more importantly, the meaning of this sound object can be analyzed as almost completely intramusical in its reference only to the surrounding sound objects through an aural discourse.

This sliding scale between using sounds to signify specific concepts or objects versus their use as *sound objects* in the purest sense tends to be a common compositional technique among acousmatic practitioners, and may prove to be a useful metric by which such pieces may be analyzed. I will now turn to brief analyses of two electroacoustic works that utilize various positions along this metric.

Analyses

Mark Wingate – *Pufferfish* (1996)

Pufferfish serves as an excellent starting point in our application of semiotic analysis to acousmatic music, due to its very clear referentiality and transformation of sound material. Wingate's program notes for this piece read as follows:

Pufferfish can change their appearance by expanding or contracting their bodies at will by swallowing air or water. Known and respected for its dangerous toxicity, the pufferfish must be expertly prepared by a master sushi chef or the result can be a highly unpleasant or even fatal meal. On the other hand, if prepared properly it rewards the anxious diner with a delicious culinary experience accompanied by an over all feeling of well-being or euphoria.⁶⁷

Considering the traditional practice of utilizing program notes to describe elements of the composition at hand, it is indeed telling that Wingate's sole topic for discussion is the variety of fish about which this piece is apparently concerned. Wingate's sonic palette in this piece includes unprocessed real-world recordings, slightly processed versions of these recordings, instrumental timbres, and a few abstract sounds of indeterminate origin. Following is a basic outline of the piece's main sections, with brief descriptions of the materials present within, presented in chronological fashion.

⁶⁷ Mark Wingate, *Liner notes, Pufferfish*, Compact Disc. empreintes DIGITALes, 1996

Introduction (0:00 – 0:15)

Water samples, both processed and unprocessed

A section (0:15 – 1:27)

Unprocessed sounds:

Door

Footsteps (panned right to left)

Faucet, water, scrubbing, drain

Faucet, water, scrubbing

Flute

Faucet, water

Water sound continues on a gradual crescendo

Flute and faucet sounds repeat, gradually becoming more processed

B section (1:27 – 2:48)

Water sounds

More flute sounds

Abstract scratchy sounds

Return of the water samples from the introduction

Vocal samples enter, cuing a gradual rise in pitch and increase in amplitude and density

Water samples become more rhythmic

Coda (2:48 – 3:04)

Unprocessed sounds:

Door

Dripping faucet

Footsteps (panned left to right)

In light of Wingate's program notes and the abundance of recognizable sound objects, it seems clear that this piece contains some narrative elements surrounding the dangerous pufferfish. The brief introduction serves as a way to introduce to the listener the predominant form of musical discourse utilized within later sections of the piece – recognizable sounds presented both in their pure form and in a digitally-extended form. In this section, the unprocessed sounds are certainly recognizable as a semiotic sign for "water", either as a legisign (general type of water), or a sinsign (an actual occurrence of specific water). The differentiation between these two becomes more clear as the piece

progresses. As Wingate processes the water sounds, they become more abstract – leading the nature of the sign more towards the qualisign territory. In other words, the manipulation of the water samples changes their nature as signs from more specific to more abstract.

The A section of the piece utilizes unprocessed real-world sounds in such a way that a narrative interpretation is clearly intended. While it would be possible to analyze this section on a purely aural level as a sequence of non-referential sound objects, their particular assembly leads more towards a mimetic discourse. The first gesture involves a door opening and closing, a series of footsteps leading from right to left, the sound of a faucet being turned on, water, scrubbing, and the sound of water going down a drain. The faucet, water, scrubbing, and drain sequence is repeated again. The narrative quality of these gestures leads the listener to imagine a particular individual going through a series of actions – possibly a master sushi chef entering a kitchen and beginning the preparation of a pufferfish. As with the more specific interpretation of Koonce's baby gesture, an appropriate Peircean identification of these sound objects would be that of *dicent-indexical-sinsign*. In all categories, this assessment bears the quality of secondness – signs acting as references to objects in a very specific fashion.

As the A section continues, a flute gesture is introduced. The flute phrase initially serves as an intramusical sign, signifying the fact that Wingate is pulling the listener away from a purely narrative realm into a more abstract one. While the water sound is looped in its pure form, the faucet sound begins to gradually change shape. First presented in clear on-off gestures, the faucet sounds become more fragmented and layered in ways that a real-world faucet could not possibly emulate. To return to

Emmerson, their discursive usage moves from the mimetic into the aural. In Peircean terminology, the nature of the sign changes from the specificity of a sinsign into the abstraction of a qualisign – maintaining the qualities of “faucet” without serving as a specific faucet in Wingate’s narrative. Similarly, the nature of the signified object changes from the specificity of an index into the resemblance of an icon. In both cases, the movement along the Peircean grid is from secondness into firstness – from actuality into abstraction. As the A section continues with further modifications of the faucet sound, the flute sound is also fragmented and altered in a similar fashion.

The entrance into the B section is marked by a large burst, and if the narrative qualities hold in the perception of the listener, a transportation into a different space. While water sounds are still present, they are no longer that of a kitchen sink but those of a larger body of water – a tank or perhaps the ocean. The particular flute gesture utilized in this section of the piece serves as a legisign in its reference to certain traditional Japanese musical styles. As the B section continues, the sound world becomes increasingly abstract and removed from that of real-world object referentiality. The musical elements gradually shift their mode of signification from the extramusical into the intramusical. While initially presented as unprocessed sound objects, the water sounds are modified towards the end of the B section in a manner very similar to that of the introductory section. Concurrent with this gradual build in water intensity is the appearance and buildup of voice samples and a pulsating sound – possibly derived from a water sample. This trajectory towards increasing amplitude and a higher pitch level serves as qualisign – an abstract reference to an iconic object. The specific nature

of this iconic object is not made clear in the piece, and may be interpreted by the listener in a number of ways as an increase in emotional intensity.

Upon reaching the coda, Wingate resumes the exclusive use of unprocessed real-world sounds – a door, dripping, and footsteps. This serves as an intramusical reference to the beginning of the A section where the same sounds were utilized. It also has the effect of returning the listener's interpretations from the abstract firstness of the B section to the secondness of the A section. The reappearance of these sound objects resumes the narrative that was begun in the A section. As such, the sounds each bear specific intramusical referentiality to their earlier counterparts.

With the exception of the brief introduction and coda, *Pufferfish* follows a general trajectory from Peircean secondness towards firstness. Sounds are initially presented in a highly referential fashion, signifying specific objects in a specific narrative. Through the course of the piece, these sounds are manipulated and augmented by non-referential sounds, leading the listener into a more abstract sound world. The introduction clearly acts as a precursor to the abstractness of the B section, and the coda acts as an echo of the narrative qualities of the A section.

The clear bookending accomplished by the recurrence of certain sounds in the coda leads towards a curious reassessment of the narrative qualities of the piece – particularly the B section. Were the coda omitted, the listener's perceptions of the piece's structure might be simply that of secondness to firstness – actuality to abstraction. However, the closing material's reference to the A section begets a retroactive reassessment of the overarching narrative of the piece. It seems fairly safe to assume that the A section involves the sonic representation of an individual entering

a room, turning on a faucet, and scrubbing something (possibly a pufferfish) in a sink. The coda features the sound of this individual apparently leaving the room, as signified by the reversal of the spatial trajectory of the footsteps. It is difficult to analyze the elements of the B section in a similarly concrete fashion, as the signs and their corresponding objects are much more abstract. If one is to assume that the narrative deals with the preparation of a pufferfish by a master sushi chef, perhaps the tank/ocean and Japanese flute sounds are meant as signifiers for the pufferfish's natural habitat. As the sounds in the B section become more abstract and increase in intensity, perhaps they are meant as signifiers for the death of the pufferfish at the hands of the chef. Similarly possible would be their interpretation as signifiers for the unfortunate death of an unwitting diner at the hands of an unskilled chef. Given Wingate's program notes, it would also seem possible that this build serves as an abstract representation of a satisfied diner's "feeling of well-being or euphoria" upon successful intake of a well-prepared meal.

Jonty Harrison – *Unsound Objects* (1995)

Similar to Wingate, Harrison's sonic palette for this piece includes both unprocessed recordings and abstract electronic sounds. However, the middle ground between these two extremes is more pronounced than in *Pufferfish*, and it is difficult (and likely unnecessary) to construct any overarching narrative to the piece. The electronically processed elements of the piece seem to be extremely abstracted versions of the unprocessed sound objects, as they frequently feature corresponding moments in rhythmic or frequency content. A common processing technique utilized in this piece is that of adding resonance or extended harmonic content to sounds that originally began as more noise-based.

The fluid form of the piece does not lend itself easily towards broad divisions into component sections. Rather, Harrison moves smoothly from one sonic world into another, using the more abstract sound elements to bridge the timbral gaps between disparate real-world sounds. An extremely reduced version of a structural “road map” follows:

0:00

Water sounds with processed counterparts
Short and long gestures

1:30

Water sounds become more metallic

2:00

Flowing water sounds, corresponding long electronic sounds

3:00

Crunching and crackling sounds with electronic counterparts
Footsteps
Long electronic sounds from previous section continue

4:00

Bubbling water sounds return
Long electronic sounds lead into sounds of a rainstorm with thunder

5:30

Crackling sounds similar to the footsteps
Extended usage of the sound of unlocking and opening a door
Long electronic sounds continue

7:00

Unprocessed sounds similar to fire or static, accompanied by corresponding electronic sounds
Bouncing marbles

8:30

Return of the electronic resonator sounds
More marbles

9:40

Keys, opening a door, returning to the rainstorm
Similar electronic sounds remain

10:30

Footsteps return

Indeterminate sound gestures – perhaps the sound of passing cars

Indeterminacy leads into the sound of waves

12:00

Wave sounds are soon accompanied by the sound of sea gulls and people on the beach

12:45

Quick resonated electronic gesture concludes the piece

If any sense of narrative structure is intended in *Unsound Objects*, it is certainly more obscured than the narrative found in *Pufferfish*. Considering the selection of sounds that probably had a human agent behind their origin (footsteps, opening door), a broad reference could be imagined to an individual traveling from some watery place (perhaps a river), into a rainstorm, into a house, back out into the rainstorm, and finally to the beach. If this narrative serves as an overarching framework for the piece, it is obscured by the moment to moment excursions into electronic abstraction, compounded by the presence of unprocessed sound objects that have no apparent connection to the narrative. The listener's tendency to seek out a narrative structure from these sound objects notwithstanding, it seems as if Harrison is more concerned with the momentary dialogue between concrete and abstract sound worlds.

During several moments of the piece, a sound will be presented both in its pure unprocessed form and as an electronically-extended abstract sound. In most cases, the processed sound is so far removed from the original real-world recording that it is difficult to determine with any degree of accuracy where it may have originated. It is only through their simultaneous or immediately successive presentation that such correspondences become clear. An example of this technique takes place between

8:00 and 9:00 with the marble sounds. When presented in their unaltered form, the marble sounds can be perceived as extramusical signs, possibly behaving as *rhetic-indexical sinsigns*. This degree of specificity is caused by the clear recording quality and usage of reverberation that reinforces the perception of a particular marble bouncing in a particular acoustic space. Whether the reverberation was present in the original recording or added later during the compositional process, the perception is that of the marble bouncing in a medium-sized space with hard surfaces, perhaps the structure that the imaginary protagonist entered in order to escape the rainstorm. Between 8:30 and 8:40, a resonated electronic sound is present that mimics the rhythmic characteristics of the bouncing marble. Were this sound to be utilized in another section of the piece, its connection to the marble might be obscured or completely missed. However, its close proximity to the unprocessed marble sound leads towards its perceptual interpretation as an intramusical sign. The removal of the particular qualities of “marbleness” obscures this sound’s referentiality to a real-world marble, and instead only references other similar sonic elements within the piece – the adjacent unprocessed marble sounds. The entire semiotic relationship of this processed marble to its unprocessed counterparts could be interpreted as a *rhetic-iconic-qualisign*. Through this process of electronic abstraction, Harrison has transformed the marble sound object’s referentiality from the extramusical to the intramusical, and from Peircean secondness into firstness.

Although the typical transformational scheme in this piece (as with many others in the genre) is to move from specificity into abstraction – secondness into firstness – there are a few moments within *Unsound Objects* where Harrison utilizes the inverse

behavior – firstness into secondness. One example of this phenomenon takes place with the door/latch sounds between 5:25 and 6:55. The initial appearance of this sound seems to imply the opening of a specific door in some narrative sense, but its fragmentation and repetition soon leads its nature as a sign from secondness (or even thirdness) towards firstness. When initially presented, this door sound is treated purely as an abstract sound object, devoid of reference to a specific function. It isn't until the final un-latching sound at 6:25 or even the door's closing sound at 6:55 (accompanied by a silencing of other sonic textures) that we begin to perceive these sonic elements as bearing meaning towards an extramusical object.

A similar transformation takes place towards the end of the piece with the thunder and ocean sounds. The listener is presented with a series of rain and thunder sounds leading up to around 11:00. At 11:15, Harrison re-introduces the thunder sound in a slightly-processed form. Rather than conveying specificity towards an element in a particular rainstorm, the thunder sound is filtered and panned from one speaker to the other repeatedly. While maintaining certain qualities of “thunderness”, the semiotic relationship is moving from secondness into firstness – from a specific reference to thunder to a general sense of a thunder-like sound. This panned thunder sound continues for a while until it is gradually cross-faded into the sound of ocean waves. Although the thunder and the ocean sounds are very distinct timbrally, Harrison has exploited both their similarity in rhythmic gesturality and broadband noise content to effectively transform thunder into ocean waves through an abstracted middle ground. This can be characterized as a movement from one specific referentiality into another, mediated by an excursion into abstraction – secondness into firstness into secondness.

Concluding Thoughts on This Topic

In these brief analyses of pieces by Wingate and Harrison, I have demonstrated how Peircean semiotic terminology can be used to illustrate the various modes of referentiality present within the works. The specific dimension of actuality to abstraction utilized by both composers can be effectively discussed in terms of Peircean secondness to firstness. Although a specific theory of semiotic functionalities within electroacoustic music has yet to be developed, it is my hope that this foray into speculative applications of broad Peircean concepts to acousmatic referentiality will serve as an initial step towards the eventual development of a more codified theory. It is clear that this sort of analysis can be an insightful method into gaining further understanding of the specific meanings and thus the perception of various elements within an acousmatic musical structure. Further developments may include the distillation of the 9-point Peircean framework into one more suited towards acousmatic referentiality, in addition to the inclusion of the intra- vs. extra-musical and aural vs. mimetic discursive dimensions.

A Basic Framework of Peircean Semiotics
diagram and descriptions by S. Alexander Reed

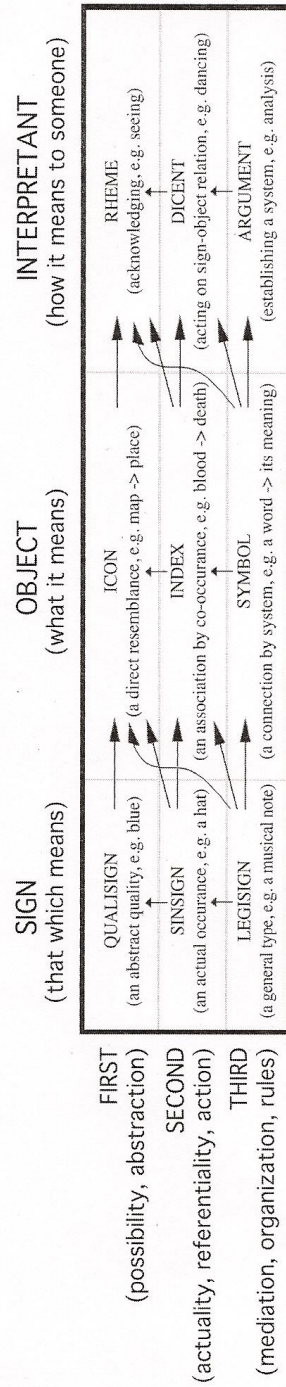


Figure 4-1. A basic framework of Peircean semiotics

CHAPTER 5
INTERTEXTUALITY AND CREATIVE MISREADINGS:
JAMES MOBBERLEY'S VOX METALLICA

James Mobberley's program notes to his 2006 piece *VOX METALLICA* read as follows:

"VOX METALLICA, for fixed 2-channel digital media, uses a collection of recordings of non-singing sounds from several different sources, plus recordings of guitars, bass guitar, drum set, and organ as sound sources. Context being a critical part of our memory and pattern-recognition processes, Vox Metallica plays with familiar and non-familiar juxtapositions of elements from "classical" electro-acoustic and popular music. After all, it's both a short walk, and a very long walk, from uptown to downtown..."^{68 69}

Although many literary theorists would suggest that the intentions of the author/composer (or at least the guidance of the composer as suggested via program notes) need not factor into one's interpretive experience of the work, Mobberley's notes do provide an appropriate backdrop upon which we can undertake an initial, relatively straightforward discussion of the piece. After doing so, I will proceed with a slightly more oppositional reading of the piece, demonstrating that things may not be as clear-cut as Mobberley has implied. The ensuing two-part discussion will mirror my own experience as a listener of *Vox Metallica*. I was first introduced to this piece at the 2006 Society for Electro-Acoustic Music in the United States (SEAMUS) National Conference at the University of Oregon. Prior to hearing the piece in concert, Jon Appleton (my professor at Dartmouth at the time) introduced me to James Mobberley. During our brief discussion, Mobberley characterized *Vox Metallica* as something like "a little rock music," noting that he enjoyed having some fun with pieces that he submitted to

⁶⁸ Ellipses found in original. James Mobberley, "Liner Notes, VOX METALLICA," *Music from SEAMUS* vol 16 (Compact Disc, 2007).

⁶⁹ As Mobberley has been inconsistent with the capitalization of the composition's title in his own program notes, I will henceforth use the less abrasive form of *Vox Metallica*.

conferences like SEAMUS. At the time of my inaugural “listening” of the piece in concert later that day, I recall hearing the piece precisely as I felt Mobberley intended it to be heard, and enjoying it immensely. However, in listening to the piece several more times privately, in concert, and in the classroom as an example for my students over the past seven years, my interpretation of certain elements of the piece have undergone a change.

Background

In his program notes, Mobberley has primed the listener’s ears with the expectation that the sounds utilized in this piece belong to (or are reminiscent of) two different musical styles: “classical” electroacoustic music and popular music – an expectation that is confirmed easily within the first ninety seconds of the piece. He has also suggested that *context* may play a role in the understanding of individual sound objects, perhaps with the idea that a stereotypical sound belonging to one recognizable musical style may take on other meanings when removed from the original context. “Familiar and non-familiar juxtapositions” of these elements are anticipated, though it must be acknowledged that most listeners will be more likely to fall into the “non-familiar” category. Finally, Mobberley makes a cryptic statement regarding “uptown” and “downtown”: one that requires a small amount of explanation prior to our discussion of the piece.

To those individuals knowledgeable of late twentieth-century American music, the terms *uptown* and *downtown* most often refer to the aesthetic differences found in different regions of the New York City “new music” scene starting in the 1960’s. In characterizing the uptown/downtown dichotomy as viewed in 1979, Kyle Gann wrote:

“The Uptowners, such as Milton Babbitt and Jacob Druckman, wrote complicated music in European genres, heavily dominated at that time by Arnold Schoenberg’s 12-tone thinking and its derivatives. Downtown music was simpler and less pretentious, drawing on the nature- and accident-accepting philosophy of John Cage. Conceptualism and minimalism were, then, the two primary Downtown movements; artrock and free improvisation would soon join them.”⁷⁰

In using the terms *uptown* and *downtown* to characterize the interplay between the “classical” electroacoustic style and popular style found in Vox Metallica, Mobberley is seemingly aligning the “popular” style (to be discovered upon listening as *rock*-influenced) with the downtown music scene: most likely artrock and free improvisation. This author has difficulty with this particular parallel, as will be demonstrated later in this chapter. Regardless, Mobberley’s observation on the geographical and aesthetic distance between these two musical worlds is intriguing, suggesting that his desire is to close the conceptual gap through the juxtaposition of style.

Mobberley’s program notes and this author’s listening experience both lead toward an *intertextual* exploration of the piece. Intertextuality can be understood as the manner in which a reader (or listener) brings their knowledge of other texts into their interpretation of any single text, acknowledging that any text is defined through its relation to other texts. More than simply noting explicit references across texts, an intertextual criticism recognizes that the totality of one’s understanding of any one text is necessarily filtered through one’s understanding of all other texts, in effect “tracing echoes and reflections of other texts.”⁷¹ Music theorist Michael Klein has published an insightful book entitled *Intertextuality in Western Art Music*, where in the first chapter he attempts to draw intertextual connections between works by Bach, Chopin, and

⁷⁰ Kyle Gann, *Music Downtown: Writings from the Village Voice* (Berkeley and Los Angeles: University of California Press, 2006), xii.

⁷¹ David Beard and Kenneth Gloag, *Musicology: The Key Concepts* (New York: Routledge, 2005), 95.

Lutosławski. Rather than tracing chronological influence and difference in some Bloomian fashion, Klein illustrates his *own* intertextual experience with these pieces of music, noting how elements of one piece illuminate his interpretation of another in a completely ahistorical fashion.⁷²

Richard Rorty hinted at the pervasiveness of intertextual interpretation when he wrote that “[r]eading texts is a matter of reading them in the light of other texts, people, obsessions, bits of information, or what have you, and then seeing what happens. What happens may be something too weird and idiosyncratic to bother with... [o]r it may be exciting and convincing”. Rorty proceeds to warn interpretive readers that these intertextual relations “may be so exciting and convincing that one has the illusion that one now sees what a certain text is *really* about. But what excites and convinces is a function of the needs and purposes of those who are being excited and convinced.”⁷³

I suggest that the intertextual references to other musical styles and aesthetic movements in *Vox Metallica*, both in the music and in the program notes, prove to be problematic when subjected to different possibilities of intertextual criticism. Thus the two approaches will proceed as follows: I will first perform a critical (and somewhat dry) analysis of the piece as I believe Mobberley *most likely* intended and how I originally heard the piece, and will then continue with a more oppositional and perhaps fanciful analysis of the piece taking into account the intertextual connections that *I* bring to the listening experience. Throughout this discussion both the reader and this author should

⁷² Michael Klein, *Intertextuality in Western Art Music* (Bloomington: University of Indiana Press, 2005).

⁷³ This quote forms part of Rorty’s larger discussion regarding the possible difference between *using* a text and *interpreting* a text, pointing out that he prefers to view both actions as different people using texts for different purposes. Indeed, my own public interpretive or analytical acts may be viewed simply as the *use* of a composition for my own purposes. This interesting possibility should always be considered, but will not be dealt with explicitly in this project. Richard Rorty, “The Pragmatist’s Progress,” in *Interpretation and Overinterpretation*, ed. Stefan Collini (Cambridge: Cambridge University Press, 1992), 105-106.

keep in mind Rorty's warning regarding the danger of assuming that any one intertextual connection is in any way illuminating of what a work is *really* about, supposing that such a definitive discovery of a work's "true" nature can ever be possible. I cannot presume that my intertextual interpretation of Mobberley's piece serves to unravel Mobberley's intentions or even the perceptual experience of *any* other listener. In the end this may simply serve as my own "interpretive journal", similar to Katharine Norman's listening journals – a public record of my own experience with the piece without the positivistic goals of analysis.

Initial Discussion

As is anticipated from Mobberley's program notes, *Vox Metallica* not only includes sounds that are most often identified with "electroacoustic" or "rock" music, but also finds its form by contrasting and combining these sounds and their accompanying characteristic stylistic gestures.⁷⁴ The "non-singing sounds" referenced in the program notes are in fact non-singing *vocal* sounds, including pops, clicks, groans, screams, and unintelligible speech-like vocalizations. These vocal sounds comprise the entirety of the EA sounds found in the piece. The guitars, bass guitar, drum set, and organ sound sources make up the set of Rock sounds, and they seem to have all been performed (prior to digital manipulation) in a "standard" rock fashion without the use of extended techniques.

The compositional treatment of sounds from these two sets is initially consistent with either EA or Rock style. At the beginning of the piece, EA sounds are introduced with a rhythmically sparse dispersal and an absence of clear pulse. Digital sound

⁷⁴ To aid in the following discussion, subsequent references to characteristic sounds or sound treatments from "electroacoustic music" will be referred to as EA, while the "rock music" materials and treatments will be referred to as Rock.

manipulation is evident through the presence of artificial reverberation, pitch shifting, and time stretching. Between 0:49 and 0:56, a very characteristic EA gesture is presented as a series of short sounds begins with a burst, slows down, and then reverses trajectory to speed back up – a phrase rhythmically reminiscent of early tape manipulation, albeit without pitch change. Rock sounds are also treated in a stylistically consistent fashion at the outset, as the first Rock “moment” occurs at 1:13 with a pick-scraped descending distorted electric guitar gesture. Additional Rock material includes distorted electric guitar power chords, pyrotechnic guitar solo material, and the section beginning at 4:42 with a very strong constant pulse and drum sounds.

Throughout the course of the piece, the EA and Rock sounds are not limited to compositional treatments belonging to the stylistic world from which they originated. EA sounds are oftentimes treated in a Rock fashion, and vice versa. Table 5-1 details the usage of both varieties of sound source and both varieties of musical style. An X in either of the “sounds” columns indicates the presence of either EA or Rock source material, with a small x being used to indicate that a sound may be present but is not the focus. When a section contains *only* treatment from one of these styles, this will be indicated with a large X in the appropriate column. The presence of an X in both style columns indicates a stylistic mixture, with the larger X denoting the most prevalent style.

The piece has no clear repetitions of material and thus eludes motivic analysis or a formal analysis that utilizes markers such as A, B, C, A', etc. Sonic material, musical style, and their various permutations are the building blocks of this piece. In reviewing Table 5-1, a very basic form is apparent within the two style columns: until the end of the piece, Mobberley simply alternates between sections with an overall EA style or an

overall Rock style. While the sounds present within these sections do not follow any sort of pattern, the alternation of style proves to be a very effective way to convey a sense of progress throughout the piece. Overall, the trajectory of the piece sees both EA and Rock sounds presented initially in “expected” ways, with material progressively getting treated more radically, leading up to the final minutes of the piece where all sounds and styles combine together – Rock style winning out at the end.

After this brief and dry discussion of the elements within the piece viewed as “most likely” intended by the composer, I will now proceed with a number of additional observations based upon my intertextual experience with the piece.

Further Interpretation

Although I initially experienced *Vox Metallica* as an honest and well-executed combination of electroacoustic and rock music, I have since come to question these assumptions. What makes the piece interesting is certainly this combination of sounds and styles intersecting in unique ways, but it seems now that neither the EA nor the Rock material could sufficiently stand on its own. The opening EA section seems extremely clichéd in its austere presentation of tiny pitch-shifted and reverberated sounds – it almost feels like *Dripsody, Part II*.⁷⁵ Likewise, the “Rock” material is poorly recorded and cheap-sounding. This is not *real* electroacoustic or *real* rock music – this is a combination of tired gestures executed poorly. *Vox Metallica* is a parody or a caricature. It is a series of simulacra.

If the meaning of Mobberley’s title was not apparent prior to an initial listening, it becomes quite clear in the opening two minutes of the piece. *Vox* symbolizes the EA “non-singing” vocal sounds, while *Metallica* symbolizes the Rock sounds. Individuals

⁷⁵ A reference to Hugh Le Caine’s 1955 tape piece entitled *Dripsody*.

who have not been living under rocks since the mid 1980's will realize that the latter is meant to reference the American heavy metal band Metallica.⁷⁶ Any listener experienced with Metallica's catalogue will be able to note that the Rock sounds and materials present in Mobberley's piece are not exactly evocative of the band's sound or style. The distorted electric guitar material in *Vox Metallica* sounds as if it was recorded through a cheap amp simulator, the drum sounds seem to be straight out of a \$150 drum machine, and one would be hard-pressed to locate an organ within the instrumentation of any Metallica album. Rather, the Rock sounds and materials seem to be more often reminiscent of 1970s hard rock bands. The section beginning at 4:42 is perhaps most representative of the 1970s influence, from the slide-guitar riff at the opening to the Hammond B3-esque stabs and glissandi culminating around 5:30. A nod to Pink Floyd takes place in the area between 7:00 and 7:45, as the repeating synthesizer arpeggio recalls the extremely similar gesture found in *On The Run* from the band's 1973 album *Dark Side of the Moon*. However, even these 1970s-style gestures are lacking the timbral specificity of their forebears. Whereas the EMS synthesizer used to sequence Pink Floyd's arpeggio is timbrally rich and the performance includes changes in filter settings, Mobberley's rendition is flat and static. The Hammond B3-like material sounds as if it was performed by calling up a preset organ patch on a digital keyboard and recorded through a DI box – no tube amplifier distortion or whirling Leslie speaker in evidence. Keith Emerson would be embarrassed.

If these "stereotypical" Rock elements in *Vox Metallica* serve to stand as signs for *real* rock music but fail to achieve realness, they are thus *simulacra* – representations or

⁷⁶ Considering Metallica's well-known copyright infringement lawsuit against the file-sharing service Napster in 2000, it would be interesting to discover whether the title of this composition ever crossed the desk of their lawyers.

copies of the original that fail to achieve “sameness” with the original. They are falsely-constructed realities designed to resemble their source so closely that we buy into the illusion of their *realness*. “Hyperreality” is the term used by many philosophers to describe the inability to discern the copy from the original, and although the accompanying rhetoric delves unnecessarily into the very nature of living in the world (consumerist society in particular), one specific example proves relevant to Mobberley’s piece: Disneyland.

Jean Baudrillard and Umberto Eco have both written about the various representations of the *real* world present in the constructed Worlds of Disneyland; Frontierland, Tomorrowland, Main Street USA, Adventureland, etc. Writing of the Main Street USA section of the park, Eco notes how this street is “presented as at once absolutely realistic and absolutely fantastic... belonging to a fantastic past that we can grasp with our imagination.”⁷⁷ In discussing how the robotic animals on the Jungle Cruise ride perform for spectators on cue, Eco compares this to the experience of taking a *real* river cruise,

“where the captain of the paddle-wheel steamer says it is possible to see alligators on the banks of the river, and then you don’t see any, you risk feeling homesick for Disneyland, where the wild animals don’t have to be coaxed. Disneyland tells us that technology can give us more reality than nature can.”⁷⁸

Baudrillard’s take on Disneyland is even more nihilist, arguing that the simulacra of Disneyland serve to obscure the fact that even the *real* world represented in the simulacrum is itself fake.⁷⁹ Leaving the more extreme viewpoints behind, the

⁷⁷ Umberto Eco, *Travels in Hyperreality* (New York: Harcourt Brace Jovanovich, 1986), 43.

⁷⁸ Eco, *Travels in Hyperreality*, 44.

⁷⁹ Jean Baudrillard, *Simulacra and Simulation*, trans. Sheila Faria Glaser (Ann Arbor: The University of Michigan Press, 1994), 12-13.

constructed realities of Disneyland form an interesting parallel to the simulated Rock material in *Vox Metallica*. As Eco wrote, the Main Street represented in Disneyland is clearly meant to evoke “Everytown USA”, albeit one from a “fantastic past.” No American Main Street ever looked exactly the way we see when we enter the gates of Disneyland; polished windows, clean gutters, smiling faces, barbershop quartets, Mom, and apple pie. This is an ideal reality engineered to evoke as many of our own recollections of similar realities as possible, in order that we may buy into the fantasy.

Recall Mobberley’s reference to uptown and downtown music in the program notes; one might initially interpret (as I did) the uptown reference to signify “classic” electroacoustic music, and the downtown reference to signify rock music. However, this is not in keeping with the usage of the terms as demonstrated in the Kyle Gann quote earlier. “Downtown” does not signify any element of popular music, but rather the sorts of *New Music* happening in downtown NYC venues – artrock, free improvisation, conceptualism, minimalism, and more. Mobberley’s juxtaposition of different musical styles is reminiscent of one well-known participant in the Downtown scene: John Zorn. Zorn’s music “draws upon elements and techniques from a number of musical genres and traditions such as rock and popular music from all over the world, jazz..., classical music..., improvised music, and film music.”⁸⁰ One would be hard-pressed to uncover a category that Zorn does *not* draw upon in his music.

One potential problem with such “collages” of musical style (indeed, treating style as material) is the danger of only representing certain elements of a style and its accompanying culture while discarding the rest. A major criticism of Third Stream

⁸⁰ John Brackett, “Zorn, John,” *Grove Music Online. Oxford Music Online*. Oxford University Press, <http://www.oxfordmusiconline.com.lp.hscl.ufl.edu/subscriber/article/grove/music/A2225901> (accessed February 5, 2013).

compositions in the 1950s and 60s was that in combining *classical* with *jazz*, one is left with some mutant child halfway in between that does not truly respect the heritage of either parent. The elements that certain Downtown composers draw from either EA or Rock music may in fact be judged the same as the elements chosen to represent the frontier, the jungle, the future, or Main Street at Disneyland. The waitress dressed up in “authentic” frontier garb who brings over a patron’s burger in a simulated Western saloon at Disneyland is no more of a true representation of the *real* American frontier than the presence of distorted power chords on an electric guitar is a true representation of *real* rock music. Both are simulacra.

Following this interpretation of *Vox Metallica* to its conclusion, Mobberley has constructed a masterful parody of “downtown music”, and indeed any polystylistic New Music. While on the surface the composition may appear to simply combine EA/Rock sounds with EA/Rock treatments in multiple permutations, upon closer reflection it is neither EA nor Rock – it was never meant to be. When EA and Rock elements collide within the piece, the effect is that of costumed performers from different simulated worlds crossing paths – the aforementioned frontier waitress sitting down on her lunch break with an astronaut. All of the above are simply false representations meant to appropriate style without substance.

Concluding Thoughts

The two different views of *Vox Metallica* detailed in this chapter illustrate the interpretive possibilities available when considering *only* the materials internal to a piece and its program notes versus considering potential interpretations informed by intertextual connections. Perhaps this reading of the piece has “uncovered” some hidden agenda on the composers part, or perhaps I am guilty of (as Richard Rorty might

claim) using this text for my own purposes. Or perhaps Mobberley simply wanted to write “a little rock music.”

Table 5-1. EA and rock sound/style analysis of Vox Metallica

Time	EA sounds	Rock sounds	EA style	Rock style
0:00	X		X	
1:13	X	X		X
1:18	X		X	
1:39	X	X		X
2:02	X	x	X	
2:11		X		X
2:24	X	X	X	
4:42	x	X		X
5:29	x	X	X	x
6:14	X	x	X	
6:56	X	X	X	X
7:47	X	X		X

A single X in a sound or style column indicates the presence of a single style or sound. The presence of an X in both sound or style columns indicates a mixture, with the larger X indicating the predominant feature.

CHAPTER 6
THE COMPOSER AS SELF-CRITIC: TWO WORKS BY TRAVIS GARRISON

“[T]he response of the author must not be used in order to validate the interpretations of his text, but to show the discrepancies between the author’s intention and the intention of the text.” – Umberto Eco, *Between Author and Text*⁸¹

In this chapter, I turn my attention toward two of my own works: *Crosstalk* (2010) and *selectric.metal* (2011). The goal in pursuing this topic is not to simply describe my own compositional procedures or my intentions for the work and then proceed to outline how others may discover this information through listening or analysis, but rather to illuminate through a very personal experience how such discussions may be extremely misleading and/or irrelevant to the listener’s appreciation of the work. Lest it not be clear to the casual listener, composers quite frequently discover The Work during the process of its own composition; “masterpieces” (with scare quotes indeed) are oftentimes simply the final iteration of an exploratory process undertaken with completely different goals in mind. The compositional “method” that I have witnessed myself undertaking during the composition of several recent pieces is quite reflective of this sort of exploration. Thus, I cannot afford my pre-compositional intentions any more weight towards establishing a *correct* interpretation of a composition than I can the moment-to-moment or reflective interpretations of the listener. Most of all, my own post-compositional listening and marketing of each piece is colored not only by the compositional process and my original intentions, but also the need to construct program notes and informal comments offered to potential listeners: the latter being filtered through my desire to project a particular interpretation of the piece rather than

⁸¹ Umberto Eco, “Between Author and Text,” in *Interpretation and Overinterpretation*, ed. Stefan Collini (Cambridge: Cambridge University Press, 1992), 73.

letting the material speak for itself. With these seemingly antithetical viewpoints in mind, the ensuing discussion has the potential to become complete nonsense that cannot be considered useful toward any purpose. Thus, I will clarify that my goal in pursuing both my own pre- and post-compositional listenings of these pieces alongside speculative and informed “non-composer” listenings will be to further illustrate the validity of personal interpretive analyses in light of the composer’s demonstrated lack of concrete authority.

Umberto Eco can serve as a model (once again) for my work in this chapter, for as a writer he not only straddles the worlds of literary theory and fiction but also is willing to apply his theories of textual interpretation to his own works of fiction. In his third lecture/essay in the book *Interpretation and Overinterpretation*, Eco addresses several of the varied interpretations levied at his novels by both amateur and professional critics. One critical analysis of interest found significance in the letters with which the names of a computer and of certain characters begin: A, B, C, and D. Eco responded to this connection by first noting that during the writing process the computer named Abulafia was given another name; the alphabetical sequence was only completed late within the writing process when he changed its name. However, Eco does not deny that this sequence *is* present within the published version of the text and that a reader may find significance within. It is not within the purview of the author to refute possible interpretations based upon his own pre-textual intentions – the intentions of the text must be respected.⁸²

⁸² Granted, it is one thing to point out the ABCD alphabetical sequence and quite another to attach certain modes of significance to it. Potentially unfounded and fanciful interpretations can always be argued against.

I have chosen to discuss *Crosstalk* and *selectric.metal* in this chapter for two primary reasons: the first being that they are both within the limits of the object of study for this dissertation – acousmatic pieces with referential sound materials. The second reason is that I feel these two pieces are among the most successful of my recent compositional output, and they represent a direction that I hope to explore further in subsequent compositions. Both pieces have been recognized on numerous occasions through presentations at national conferences and festivals including the SEAMUS national conference, the Electronic Music Midwest Festival, the New York City Electroacoustic Music Festival, and the Society for Composers, Inc. (SCI) national conference, in addition to several regional and graduate student festivals. Additionally, both pieces have been published in the University of Florida SCI Student Chapter CD series. *selectric.metal* was awarded Honorable Mention (third place) in the SCI/ASCAP 2012 Student Commission Competition, and is also serving as the musical composition portion of my dissertation requirements, meant as a companion to this written document.

Crosstalk (2010)

The compositional process of *Crosstalk* began with a toy electric guitar, gained musical material from two Schoenberg compositions and a loose narrative along the way, and ended with a set of program notes that only partially represented two of those three elements. The only information available prior to concert, CD, or web listening is the following:

Crosstalk – noun.

1. Interference caused by two signals becoming partially superimposed on each other due to electromagnetic (inductive) or electrostatic (capacitive) coupling between the conductors carrying the signals.
2. Conversation that does not relate to the main topic being discussed.

These two definitions of the word crosstalk serve to illustrate two alternative views of the elements within the piece, suggesting a particular narrative that I oftentimes relate when talking about the piece with potential listeners. However, the compositional path by which the piece came to attain this program was somewhat circuitous.

Most of the sonic materials for *Crosstalk* originated in a lengthy improvisation session with a childrens' electric guitar. I originally purchased this guitar at a thrift store with the intent of ripping it apart to salvage components for other projects, but became intrigued by some of the noisier sounds I was able to coax out of the guitar when I connected it to an amplifier. The improvisation from which the ultimately usable material originated did originally include pitched melodic or rhythmic material, but this did not prove to be useful for the eventual composition. Of much more interest were the sounds I was able to create by running the signal through distortion processors and experimenting with sounds that I could create with the guitar without using the strings, such as slowly turning the crackly volume knob or banging on the side of the body. One very effective technique for sound generation was to hold the guitar up to various electrical devices in my home studio: my laptop, my flat screen monitor, the amplifier for my studio monitors, etc. This formed the basis for one definition of the word crosstalk – the intersection of different electrical signals.

Upon working with this “noisy” material for a period of several months, I found the narrow timbral palette to be somewhat limiting. In search of some harmonically-rich material, I settled upon a two-measure excerpt from the third movement of Schoenberg's String Quartet No. 1 in D Minor, Op. 7. (measures 75-76). Following a section of the piece that contains much activity and dynamic range, these two measures

form a quiet two-measure pianissimo interlude within the string quartet, after which Schoenberg returned to the previous material. I decided to capitalize on this feeling of stasis within the excerpted Schoenberg sample, and time-stretched the material to create versions that were eight and sixteen times the length of the original.

In proceeding to assemble these noisy guitar sounds alongside the static string quartet sounds, I was simultaneously pursuing two different ideas. The first idea was represented in the second definition of the word crosstalk given in the program notes – that of “conversation that does not relate to the main topic being discussed.” I was attempting to create a form for the piece where different trains of thought are continuously interrupted by radically different ideas – these variously interrupting ideas eventually combining in some unpredictable fashion. The “expanded” version of the program notes that I have offered in masterclasses and informal discussions is that the piece depicts the activity along the radio spectrum or various television channels. On one channel the listener can find Material A, but when abruptly switching to another channel they may discover Material B. Throughout the piece, however, elements from Material B begin to combine with Material A, picking up traces of Material C: found somewhere in the static between the two channels.

The second idea that I was attempting to explore within this piece is much more hidden, and has not been publicly discussed until the writing of this dissertation. While composing this piece, I had been tasked by one of my professors with completing an analysis of the song *Nacht* from Schoenberg’s *Pierrot Lunaire*. The pitched material in *Nacht* stems almost entirely from a three-note [0 1 4] pitch set, occurring with an initial pitch, an ascending minor third, and a descending major third. In addition to using this

melodic motive repeatedly throughout the song, Schoenberg also uses this pitch relationship to determine transposition levels of larger segments. I blatantly ripped off this idea in *Crosstalk* by not only including this three-note melodic motive within some of the sequences of short sounds, but also using these intervallic relationships to determine transposition levels of all other elements within the piece, including the Schoenberg string quartet material. In effect, I was applying Schoenberg to Schoenberg.

Having assembled a satisfactory composition out of my chosen source material by exploring these two ideas for the arrangement and modification of sounds, I was then tasked with the creation of concert program notes as cited above. Given the background information provided concerning the compositional process, it should seem clear that these program notes only hint at a few of the elements that went into the creation of the work, to say nothing of potential interpretations. Definition 1 clearly hints at the source material gathered by experimenting with electrical interference, although this will only be apparent to listeners who are already familiar with this sound. Definition 2 provides a cryptic reference to the rapid shifts within the piece between different sound worlds, without making explicit the idea of different television or radio stations. The Schoenberg material is never referenced. The listener is thus unprepared to fully understand my intentions for the piece via the program notes, and must rely upon the listening experience if such an understanding is to happen.

Having listened to the piece dozens of times in its completed form, I have increasingly heard one particular narrative present within the materials, and even though I understand how the sounds were created and organized I have begun to find

these facts irrelevant to my listening. During the compositional process, I was somewhat obsessed with Schoenberg's three-note motive, and applied it generously throughout the piece. I imagined that I would be able to achieve the same sort of unity found in *Nacht* with this recurring motive. As the piece took shape and additional layers of digital signal processing were applied, the traces of this initial motive began to fall into the background. While I can easily detect the locations where Schoenberg-inspired material surfaces within the piece, it is extremely unlikely that any other listener will notice this, much less find it relevant to their experience.

The narrative that I hear within the piece now is partially in line with the television or radio program outlined earlier, but I find that outline somewhat problematic upon repeated listening. These rapid shifts between different sound worlds at the beginning are truly effective at depicting this idea, but the program breaks down as the piece progresses. We hear early in the piece three different sound worlds: "noisy" sounds, strings, and "electronic-y" sounds. I tend to hear the string sounds and the electronic sounds as the two competing television programs being switched between, with the noisy sounds representing static or noise in between the channels. A few minutes into the piece, these distinctions begin to break down and the sound worlds mingle in ways that cannot be explained through this program. Perhaps characters from one television program begin to cross over into other programs, but they also inhabit the space in between the channels. There is no apparent logic to the channel-switching activities of the invisible holder of the remote control, as in the final three minutes of the piece we find ourselves fixed on whatever channel is playing the string quartet material, with only minor accents by other sounds.

selectric.metal (2011)

selectric.metal provides another example of a piece where my pre- and mid-compositional intentions are not exactly reflective of either my own post-compositional assessment or the interpretations of others. This piece was played on a public concert in an early form, and only took its final shape after substantial revisions. The work began as a simple exercise in using digital signal processing to gradually extend the timbre of a looping sample. Two main samples were used in the original version of the piece: an old-fashioned typewriter and an industrial sewing machine. To this I added a few short samples of a bouncing ping-pong ball and a camera. The basic form of the original piece featured the typewriter sample in the opening section, gradually becoming timbrally extended away from its original form. After an abrupt shift, the same process was repeated with the sewing machine sample. The signal processing for the sewing machine section included a process with some amount of feedback, and the original end of the piece consisted of an extended drone resulting from this feedback process. This first version of the piece was named *Untitled 2011*.

Though I felt *Untitled 2011* was ready for public consumption at the time, it became clear that the rudimentary form of the piece was too basic, and the material could not sustain interest. In beginning a revision of the piece, I began by taking a stereo mixdown of the original version, reversing the sound file, and placing it alongside the “forward” version of the same piece – in effect creating a palindrome. Mixing between these two versions of the piece provided some timbral variety, especially in earlier sections of the piece where the drone originally found only at the end was now featured. I applied several pitch-shifting processes to the drone sound in order to create

harmonies and a variety of glissandi, but the piece was still lacking some element of interest.

In the spirit of “remixing” the piece, I thought it might be interesting to add a drum track, so I located a set of drum loops and placed them end-to-end throughout the entire duration of the piece. Listening repeatedly to various sections of the piece, I decided to mix in the drums whenever I felt that the rest of the material was becoming tedious. These “drum breaks” are usually accompanied by some sort of filter sweep.

Having very little idea what to make of this piece, I created the following cryptic set of program notes:

Type. Bounce. Hit. Manufacture.
Drone. Mix. Bake. Serve.

To a potential listener, this implies *agency*. These are action words, possibly representing actions undertaken by the composer during the creation of the piece. A composition with these program notes might include the sounds created when one types, bounces, hits, manufactures, drones, mixes, bakes, and serves. This is only partially true, as I intended to use these program notes to represent the larger process of composing the piece: mix, bake, and serve being the final three steps in my recipe for this piece.

As a piece of electroacoustic music, I (and many other individuals) find *selectric.metal* quite satisfactory. As a work of creative sound art, the journey taken from one sound world to another is smartly executed, the sounds are attractive, and the pacing is engaging. The referentiality of the sounds is somewhat baffling, though. One must question the relationship between typewriter, sewing machine, and drumset, within the context of the electronically-generated chaos that now surrounds them. Are these

samples meant to be solely understood as “sound objects”: packages of spectrum and time to be understood solely as such? Or does the electroacoustic medium allow for the creation of a middleground between these three sound worlds, creating a narrative by which one sound transforms into another? More puzzling is the connection between the program notes and the piece of music. In describing a list of actions that are supposedly related to the piece, it seems as if I am implying to the listener that either these actions or the objects involved in said actions are somehow important to the perceptual experience of the piece.

In a masterclass with James Mobberley, he made it known that his impression of the non-drone sounds was “an exploration of rhythm.” The typewriter, the sewing machine, and the drumset each have their own looping rhythmic pattern, and he was able to hear connections between these patterns; noting that he thought I had somehow engineered these rhythms to be complementary in some fashion. In reality, the three main rhythmic loops within the piece arrived in my compositional toolbox fully-formed – apart from some minor editing and the obvious signal processing I made no effort to combine any of these separate rhythms. However, the typewriter section and the sewing machine section still maintain their overall processing trajectories from the early version of the piece, in addition to the elements added within the revision. The processes by which these two sounds become timbrally and rhythmically extended are virtually identical, and the resulting sonic spaces are quite similar. When I hear these sections, I can clearly discern a difference between the two – it may be easier for others to form this connection.

Upon submitting *selectric.metal* to a certain competition, I received the following notes from the juror, Nick Brooke:

I'll never type again!—I've never heard a typewriter sound so juicy. I appreciated the concise sound world, and also the ability to stop and start coherently (especially ca. 1:30)—it wasn't only a beautifully morphing, massed texture the whole time. The pitched material is quite beautiful, and parses the whole piece for me formally. The almost drumsetty material is cleverly brought in and out. I wondered a bit about the sudden retreat to quietness at 2:15—though I liked the formal idea of it, I wondered what immediate events motivated it. Around 5:06, very gorgeous.

These comments suggest that this listener appreciated the piece on the level of “absolute music”; apart from naming the typewriter sound, he did not make any effort to interpret the referential sounds in the piece, nor to account for any sort of extra-musical narrative. It is curious to note that the sounds he labeled as “almost drumsetty material” were indeed samples of an acoustic drumset subjected to subtle and drastic digital processing. Within the context of the absolute music framework where this listener placed the piece, the connection between this material and an actual drumset was likely irrelevant.

The comments offered by Mobberley and Brooke, combined with my own listening experience and other informal comments offered after performances, all point to a non-referential listening of the piece. While the sounds are indeed referential to real-world objects and situations, it is difficult to hear the assembly of the sounds as a narrative of any sort. It seems as if it is most appropriate to discuss *selectric.metal* in terms of Pierre Schaeffer's reduced listening – “actual” typewriters, sewing machines, ping pong balls, and cameras play no meaningful role in this piece. If this is indeed the case, why include such misleading program notes? Perhaps a more accurate set of program notes might be “*selectric.metal* is absolute music. I hope you enjoy it.”

Final Thoughts

This exploration of my own compositional process has served to demonstrate once again the importance of respecting the “intentions of the work” while conducting a critical analysis, recognizing that the composer’s goals are oftentimes misleading. While this point has been discussed at length within literary criticism circles, many musical analyses (particularly those of electroacoustic music) would do well to set aside any notion of “uncovering” what a composer intended to do within a work and instead focusing on the connection between the music and the listener.

CHAPTER 7 CONCLUSION

Within this dissertation, I demonstrated a significant gap within the scholarship of electroacoustic music; a lack of in-depth critical discussions of specific compositions that privilege the listening experience. In particular, I focused upon a parallel between the referentiality of acousmatic compositions and works of literature, extending ideas of semiotics and interpretation from their literary origins into the realm of electroacoustic music. I believe that this sort of discussion can be quite fruitful in the effort to further understand how electroacoustic compositions may be understood by listeners, particularly those who are not themselves composers. An emphasis on technology and compositional procedure does not illuminate the experience of *listening* to a work, and such an emphasis may even serve to turn potential listeners away from the field.

As noted earlier, the field would benefit from further discussion of specific pieces of music not only within the electroacoustic-centered academic scholarship, but potentially in wider-reaching outlets. Within the academic electroacoustic community, the “bias toward formalism” of which Leigh Landy spoke has certainly been evident as journal articles, books, and conference presentations move more toward discussions of characterizing broad trends, technologies and compositional procedure at the expense of any discussion of criticism or aesthetic speculation. The most significant books published within the last few years on electroacoustic music topics have been overviews, and even journals such as *Organised Sound*, which have featured more philosophically-leaning articles in the past, have begun to focus more on recent trends and technologies. Important books authored or edited by Simon Emmerson in the past twenty years have had unfortunately small publication numbers and are typically out of

print, and valuable volumes such as 1989's *On the Wires of Our Nerves: The Art of Electroacoustic Music*⁸³, containing important aesthetic considerations from multiple pioneers in the field, would likely find difficulty in today's publishing market. At the same time, trends within the broader field of musicology continue to advance.

I propose that the most fruitful way to advance the agenda I propose in this dissertation is twofold: to not only begin to include critical analyses of specific compositions within electroacoustic-centered scholarship, but to also begin to turn the attention of those who are not themselves practitioners of electroacoustic music toward the extended possibilities for musical discourse present in this style of music. While historians such as Richard Taruskin, Paul Griffiths, and Kyle Gann have done well to include discussions of electroacoustic music in their overviews of late twentieth-century music, most of the contemporary musicological scholarship concerns itself with non-electroacoustic music, even then shying away from anything found in the late twentieth century. Granted, it is impossible for all musicological endeavors to account for all types of music; one must oftentimes discuss instrumental music, opera, electroacoustic music, and other styles in different settings. However, some crossover between the scholarship of electroacoustic and non-electroacoustic music, when appropriate, could help to illuminate the ways in which electroacoustic music may help us to understand certain concepts in music, and may assist potential listeners in forming connections between the two formats.

⁸³ Robin Julian Heifetz, ed., *On the Wires of Our Nerves: The Art of Electroacoustic Music* (Cranbury, NJ: Associated University Presses, 1989).

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BIOGRAPHICAL SKETCH

Travis Garrison is a composer, audio engineer, and performer of electroacoustic music. A common thread throughout his work is a blurring of the boundaries between things organic and things electronic, between the actual and the imagined, and between the real and the hyperreal. Current research interests include computer-based improvisational systems and the aesthetics, history, and theory of electroacoustic music.

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