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Abstract

This dissertation is about a collection of musical repertoires—broadly speaking, American experimentalism—and the practice of music analysis. In many ways, the two do not go hand in hand: music analysis has long found itself confounded by experimental traditions, in some cases writing them off altogether. I argue that this tension is no coincidence but a matter of design. Composers of experimental music were paradigmatically concerned with the breaking and recasting of cultural norms and practices—of performance, listening, composition, and the medium of music. It thus comes as no surprise that the discipline of music analysis found itself breaking against these repertoires. I contend, however, that these sites of breaking should not be abandoned but encountered as a productive field of conflict with the potential to recast both experimentalism and music analysis.

The analytical approach I develop draws from disciplinary perspectives of music theory, art history, and literary criticism, and takes up three main themes: technology, culture, and analysis. Technological innovations in the twentieth century changed the way composers thought about and created musical sound; within the dissertation, I argue that experimental composers also used their musical works *as* technologies for the redefinition of important musical concepts, and for the breaking and recasting of cultural norms and practices. Listening closely to their works and cultural interventions leads to a reflexive analytical perspective in which music theory can rethink its disciplinary methods.

In Chapter 1, theories of form and conceptual art intersect in a music-analytical vignette of John Cage's *0'00''* (1962). In Chapter 2, I argue that, through his indeterminate musical works, Cage composed a listening subjectivity for his audiences. Chapter 3 centers on the use of mechanical repetition to develop alternative listening practices in Pierre Schaeffer's *musique concrète* and Steve Reich's early minimal music. In Chapter 4, I suggest that Reich's *It's Gonna Rain* (1965) replaces the anthropomorphism of classical music with technomorphism through abnegations of agency and

voice. Finally, I consider how the music of Julius Eastman and Maryanne Amacher can productively challenge experimental music's predominant ways of listening and music theory's ways of conducting analysis.

Introduction

Silver Streetcar for the Orchestra and the Analysis of Conceptual Music

“please tell me that this is a real piece”¹

Alvin Lucier’s composition for solo triangle, *Silver Streetcar for the Orchestra* (1988), is remarkably simple. The composer explains the piece in his own words, in the liner notes for a recording by percussionist Brian Johnson:

In *Silver Streetcar*, the player dampens the triangle with the thumb and forefinger of one hand while tapping the instrument with the other. The performance consists of moving the geographical locations of these two activities and changing the pressure of the fingers on the triangle as well as the speed and loudness of the tapping. During the course of the performance, the acoustic characteristics of the folded metal bar are revealed.²

Among the unlikeliest of solo instruments, the triangle is a familiar member of the percussion battery, and yet *Silver Streetcar* can come as something of a revelation. The triangle usually rings from behind the orchestra, providing sonic punctuation to climactic moments rather than a full-fledged

¹ YouTube user xylojet’s comment on “Silver Streetcar for the Orchestra’ by Alvin Lucier,” uploaded and performed by Brad Meyer on May 5, 2011: <https://www.youtube.com/watch?v=wxkaZK-VqdI>, accessed May 12, 2016.

² From liner notes for Alvin Lucier, *Ever Present*, Mode 178, 2007.

musical voice. But in Lucier's work, the instrument and its many tones take center stage. The triangle's fast attack, its complex timbres, and its slow decay together weave an elaborate sonic mesh which ricochets off walls, floors, and ceilings. A multitude of frequencies swell up and out of the humble triangle, its often-unnoticed tones suddenly rising to the foreground, combining with rings and resonances in vibrant sonority. Each strike of the beater renews the triangle's ringing, re-spinning the web of sound as the instrument turns and swings.

In the context of Lucier's work, the triangle slips free of its archetypal, instrumental role; freed from the restraints of melody and meter, the elegantly bent metal bar is finally allowed to say its piece through a minimal formal design. *Silver Streetcar for the Orchestra* is, in this sense, a rediscovery of something hidden in plain sight: the sheer sound of the triangle. Its bare repetition allows for reflective appreciation of the simple instrument in all its beauty, but the piece is also an undeniable bit of musical novelty. YouTube user xylojet (quoted above) asks the World Wide Web for a certification of Lucier's work, perhaps in the hope that someone with more knowledge or better judgment will answer in the affirmative—someone who can confer the status of a “real piece” upon this strange performance. In this dissertation, I pursue some of the underlying questions, doubts, and interests which inform xylojet's plea for musical legitimacy. What, for example, motivated their comment? Was it that *Silver Streetcar* seemed a little too simple, too cute, or too fun to be real music? Or could it be that xylojet suspected a sort of internet practical joke—that the percussionist, tongue in cheek, recorded himself hitting a triangle for a few minutes and gave it a title in order to poke fun at those wacky composers of experimental music and at anyone foolish enough to buy it?

If *Silver Streetcar* is indeed a real piece of “music,” it's a very unusual sort of piece. It doesn't have any of the ordinary markers of sounds organized for *musical* purposes: no tune, no text, no

chords, no apparent meter (although it does repeat, ad nauseum, one basic rhythmic pattern). Over the five-minute performance that Brad Meyer offers in his video, the piece offers very little in the way of drama or formal design of the sort that one might expect from a piece of music. Instead, the repeated beating of the triangle plays into one of two routes the listener can take: either the static, monotonous sounds gradually become charming, enchanting, and meditative; or *Silver Streetcar* falls flat, and the constant ringing grates on one's patience—not just boring, but annoying in an almost torturous way. In either case, the substance of Lucier's composition doesn't lie in themes or motives, in melodies or rhythms, or in intricate formal design; rather, the appeal (or lack thereof) lies in the sheer sound of the triangle.

The irony of *Silver Streetcar*—and a number of other works of conceptual music—is that an apparently simple compositional design nonetheless allows Lucier, his performer, and the sounds of the triangle to spark a number of rich and challenging questions that lie behind xylojet's comment. Is this music? If not, then what is it, exactly? If it *is* a real piece, then what does that mean for music? Can anything be music? What *can't* be music? Who decides these things? These are not the kind of questions that music theorists ordinarily pursue, at least in part because the questions behind this YouTube comment are not readily answerable by any of music theory's ordinary methods. And yet, the big questions that *Silver Streetcar* raises are the same kind of questions that motivate the composition, the performance, and the scholarly study of experimental music.

This dissertation is, on the one hand, about a collection of musical repertoires—American experimentalism in the expanded sense—and, on the other, it is about a network of theoretical questions that involve music analysis. In many ways, the two do not go hand in hand; music analysis has long found itself confounded by experimental traditions, in some cases writing them off

altogether. In the chapters that follow I argue that this trouble is no coincidence, but a matter of design. Composers of experimental music were paradigmatically concerned with the breaking and recasting of cultural norms and practices—of performance, of listening, of composition, and of the medium of music itself. It should come as no surprise that the discipline of music analysis has found itself breaking against these repertoires. I contend, however, that these sites of breaking should not be abandoned, but encountered as a productive field of conflict with the potential to recast both experimentalism and music analysis.

At the most general level, music analysis involves a critical reading of a musical work and its sounds, a detailed description of how the work is organized, and an empathetic interpretation of the work in its cultural contexts. At this general level, Alvin Lucier's *Silver Streetcar for the Orchestra* makes an intriguing object for music analysis: the sound of the triangle in a minimal formal design immediately elicits questions about the status of the art object, cultural authority, and music's conceptual underpinnings. The problem for the music analyst, however, is one of method. The novelty and intrigue of *Silver Streetcar* do not come across in standard musical notation, where so much of music theory's analytical work takes place; nor does the work evoke its conceptual conundrums in spectrographic form with the triangle's sonic intricacy laid out visually. For the analysis of such works of experimental music, what is needed is an adaptable methodological approach that draws upon sound and form in combination with music's cultural contexts in order to illuminate the ways in which music manages to raise these big questions.

The analytical approach I develop in this dissertation takes up three themes that will help to bring the curious repertoires of experimental music into productive conflict with the methods of music theory: technology, culture, and analysis. Taken individually, each one extends far beyond the

scope of this project. Their particular convergences in the composition and performance of American experimental music, however, can help to link music theory's disciplinary emphasis on sound and form with what is most salient about musical works such as *Silver Streetcar* in their cultural contexts. In what follows, I will briefly apply each of these themes (technology, culture, and analysis) to Lucier's work and discuss the meanings of these terms within the scope of this project. It is my hope that establishing these terms early on will help to anchor points in the dissertation where I consider the relationships between twentieth-century American experimental music and its *technologies*, the effects and the expressions of these relationships in modern musical *culture*, and a related network of theoretical questions that involve practices of music *analysis*. More specifically, I explore some of the ways in which emergent sound technologies functioned as conceptual and material catalysts within experimental music's communities of practice: the new sounds made possible by machines opened up new possibilities for musical composition. In turn, composers of experimental music began to use their experimental works as technologies for cultural interventions into fundamental musical concepts such as sound, listening, performance, and composition. Analysis of these works of experimentalism may present methodological problems, but this conflict can produce another form of analysis in which contemporary music theory is afforded the opportunity to rethink its own disciplinary practices and methods.

Technology

Throughout this dissertation, “technology” will take on various meanings.³ In one sense, musical instruments are musical technologies, and in this sense, *Silver Streetcar for the Orchestra*, the triangle is a simple yet powerful one. The performer’s systematic exploration of this unlikely solo instrument and its sonic affordances suggest to the audience that the resultant sounds might be deemed worthy of the kind of attention paid to most musical performances. What the instrument has to offer, however, comes up considerably short of what many listeners might expect from a musical performance. To enjoy the piece, one must adopt a way of listening to music in which the sheer sound of the triangle can sustain attention and appreciation. *Silver Streetcar for the Orchestra* as a musical work thus becomes a technology for the analysis of listening practices, of the sound of the triangle, and of what constitutes a “real piece” of music. Lucier’s work is relatively simple in design, but complex in its conceptual implications. In musical experimentalism more broadly, the technologies involved were often considerably more complicated.

Technologies of another kind mediate nearly all twenty-first-century musical experience. In densely populated urban areas of the United States, loudspeakers and personal listening devices of all shapes and sizes are everywhere. Where loudspeakers might spread their sound across a diffuse and often indifferent public, personal listening devices are generally used to play curated sounds directly

³ For a discussion of some of these meanings—technology, technique, and “technicization”—see Jonathan De Souza, *Music at Hand: Instruments, Bodies, and Cognition* (New York: Oxford University Press, 2017), 2.

into individual pairs of attentive ear drums. Whether it passes through giant outdoor PA systems or tiny wireless headphones, the vast majority of the musical sounds transmitted by these technologies were made in a recording studio where they were mastered by an audio professional. Before they emit from whatever type of speaker, these recordings are most often digitally processed by massively complex compression algorithms.⁴ The relatively low cost of highly capable hardware and software enables more people to produce and distribute their own music; the eminent portability of personal electronic devices and the ever-increasing reach of cellular networks mean that music is always close at hand. The sonic ubiquity produced by technology has had profound effects on and within cultures of music listening and music making. Sound recording, cinema, radio, television, commercial record labels, and, more recently, online platforms such as Napster, iTunes, Spotify, and SoundCloud have all reshaped how people listen to music, how many people listen to the *same* music, and what kinds of music are produced and performed in the first place.⁵ But these modern technologies that mediate so much of present-day musical experience are not the first to do so.

For centuries, various technology has influenced the ways that people listen to, think about, and create musical sound. Historical examples abound in the tradition of Western art music, which is constituted at least as much by its instruments, its rituals, its performance spaces, and its systems of written notation as it is constituted by its sounds. Long before the machines and electronics of the

⁴ Jonathan Sterne, *MP3: The Meaning of a Format* (Durham: Duke University Press, 2012).

⁵ Anahid Kassabian, *Ubiquitous Listening: Affect, Attention, and Distributed Subjectivity* (Berkeley: University of California Press, 2013); Mark Katz, *Capturing Sound: How Technology Has Changed Music* (Berkeley: University of California Press, 2010); and, for a slightly older account of the effects of recording technologies and industries on music, see Michael Chanan, *Repeated Takes: A Short History of Recording and its Effects on Music* (New York: Verso, 1995).

twentieth and twenty-first centuries, what we now call classical music maintained reciprocal relationships with its various technologies, techniques, tools, or *techne*.⁶ The technologies of Western art music shaped and reshaped how people listened, determined how many people could listen to and share the same music, and in general provided the material basis for the production of musical sound. (Consider, for example, the importance of the pianoforte to musical theory and practice.) And yet, from the perspective of a music historian, the imprint of technology in past eras can look, feel, and *sound* altogether different than the imprint of technology on music today.

One could locate this difference in a changed perspective on sound brought about by urbanization, industrialization, and the omnipresence of new and noisy machines. Italian Futurist painter and composer Luigi Russolo described with joy the many sounds and noises to be heard on a walk through the twentieth-century city:

The gurgling of water, air, and gas inside metallic pipes, the rumblings and rattlings of engines breathing with obvious animal spirits, the rising and falling of pistons, the stridency of mechanical saws, the loud jumping of trolleys on their rails, the snapping of whips, the whipping of flags . . . department stores' sliding doors, the hubbub of the crowds, the different roars of railroad stations, iron foundries, textile mills, printing houses, power plants, and subways.⁷

Though they were meant for non-musical purposes, these technologies nonetheless made their way into the modern soundscape. And it was from this ever-evolving, technologically inflected modern

⁶ De Souza, *Music at Hand*, 23.

⁷ Luigi Russolo, translated by Robert Filliou, *The Art of Noise (Futurist Manifesto, 1913)* (New York: Something Else Press, 1967), 7.

soundscape that Russolo drew his musical material. Most composers, however, did not derive their musical sounds from industrial ones. The sounds of new machines were readily audible in cities across Europe in the 1910s, but the futurist adoption of technological sound as musical sound necessitated a paradigmatic conceptual shift as much as it did a material one. Indeed, it was precisely this sort of conceptual shift that Russolo called for in *The Art of Noises*. While Russolo's insistence on the musical viability of technological and mechanical sound was and remains on the idiosyncratic side of modernist rhetoric, he was far from alone in developing an imaginative if quirky vision for the theory and practice of modern musical composition.

Around the turn of the twentieth century, a number of composers spun disparate strands of what is now called musical modernism. From Stravinsky's octatonicism to Schoenberg's twelve-tone method, the technical and material expressions of modernism varied, and some proved more polarizing than others. But despite their differences, the disparate strands of musical modernism invariably drove toward changes in how people listened to, thought about, and created music. Some composers destabilized tonal pitch centers while others destabilized rhythmic and metric regularity; some derived their melodic material from folk traditions while others sought to generate their music using formulas or chance operations. Musical modernism was not a unified movement; rather, its many strands were based upon many different ways of thinking about and creating music, with the result that each was liable to sound quite different than the next.⁸ But while there is no one common

⁸ See, for example, the many distinct strands of experimentalism which Ben Piekut traces in *Experimentalism Otherwise* (Berkeley: University of California Press, 2011).

material or conceptual component to all of modern music, its constitutive works exhibit clear and inextricable links between material and conceptual qualities.

As modernist composers sought to find their own ways of composing music—not just variants or deformations of established styles, but radically new technical approaches to compositional process—many of them sought out external sources of inspiration to help guide their compositional innovation. For some, this inspiration came from non-Western musical traditions and instruments; for others, their new directions in music were derived from innovations in other fields of artistic creativity. For these composers—and for many others—the centuries-long reciprocal relationship between music and technologies new and old proved a bountiful source. Industrial self-powered machines and their sounds breathed new life into this relationship as they found their way into the ears of these composers with modernist inclinations. It should come as no surprise that modern technologies functioned as their historical precedents had for hundreds of years: as conceptual and material catalysts for new ideas about musical sound and organization. The difference, however, between musical technologies of centuries past and the technologies of the twentieth century was that *sound and noise* were now in bounds—both conceptually and materially—for modernist composers seeking to break with their respective tradition(s).

It is a point worth repeating: the imprint of technology on modern experimental music does not lack for historical precedent. Experimentalism is not as easily untangled from its Western art music lineages as some of its more polemical participants might like. As will become clear throughout this dissertation, the roles of composer, performer, and audience; the sonic affordances of traditional musical instruments; and forms of musical organization inherited from classical predecessors all proved essential to experimental music's paradigmatic material and conceptual shifts. I will argue,

though, that in effecting these paradigmatic shifts, composers of experimental music began to use their musical works *as* technologies to specific ends.⁹

In writing manifestos, statements, essays, or other proclamations about their music-compositional techniques, composers of modernist music most often attempted to explain how the music came to be written and, perhaps more importantly, to specify how it should be listened to. While the music they wrote was not necessarily didactic in and of itself, there is an element of instruction—if not out and out education—that accompanies much experimental music. As new sounds and new ways of organizing them arose through musical experimentation, the communities of the musical avant-garde formed new definitions for all kinds of things related to music: sound, noise, form, silence, instruments, process, and even music itself. In composing their music in accordance with a number of these new definitions, composers used their musical works as technologies to define and redefine musical concepts.

It is not a new idea to cast music as a technology. In 1999, Tia DeNora theorized music as a “technology of the self”;¹⁰ more recently, Eric Drott (2018) showed how music can function as a technology of surveillance by way of its distribution through cloud-based streaming services.¹¹ After all, music affords myriad uses, and as a technology it is capable of producing any number of social

⁹ For robust discussions of human–technology interaction and the ways it can inform creativity see Georgina Born, “On Musical Mediation: Ontology, Technology, and Creativity,” *Twentieth-Century Music* 2, no. 1 (March 2005): 7–36; and Jennifer Iverson, “Invisible Collaborations: The Dawn and Evolution of *elektronische Musik*,” *Music Theory Spectrum* 39, no. 2 (Fall 2017): 200–222.

¹⁰ Tia DeNora, “Music as a Technology of the Self,” *Poetics* 27, no. 2 (1999): 31–56.

¹¹ Eric Drott, “Music as a Technology of Surveillance,” *Journal of the Society for American Music* 12, no. 3 (2018): 233–67.

and cultural effects. Conceiving of music as its own form of technology nonetheless raises a number of questions: If music is a technology, then who is using this technology? What's the nature of the interface? Does conceptualizing music as a technology prompt a rethinking of this interface? I attempt to answer these questions—at least in part—by joining the notion of music as a technology with philosopher and art historian Peter Osborne's theory of conceptual art. For Osborne, conceptual art is "art about the cultural act of definition, paradigmatically—but by no means exclusively—about the definition of art."¹² For a painting to be about its subjects and for an opera to be about its characters is a straightforward enough notion, but how exactly can an artwork be about the definition of art? For Osborne, this act of definition necessarily involves negation. Works of conceptual art—and here I would include conceptual music—tend to negate in whole or in part the very thing that they would seek to redefine. In the course of this dissertation, then, I will argue that John Cage attempted to redefine musical sound via the negation of musical sound; that Steve Reich attempted to redefine the musical performer via the negation of the performer; that Julius Eastman attempted to redefine the relationships between race, sexuality, and the composition of musical minimalism by negating the meanings of hate speech; and that Maryanne Amacher attempted to redefine the temporal and spatial bounds of music by negating those bounds altogether. Accordingly, the music of these composers did more than simply give listeners something to listen to; much of their work was *about* definition and redefinition—about a breaking and recasting. As I will argue

¹² Peter Osborne, *Conceptual Art* (London: Phaidon, 2002), 14.

further in the coming chapters, each of these composers used their musical works as technologies of cultural definition.

Culture

Anthropologist Clifford Geertz defined culture as “a system of inherited conceptions expressed in symbolic forms by means of which men communicate, perpetuate, and develop their knowledge about and attitudes toward life.”¹³ In *Silver Streetcar for the Orchestra*, it is precisely these sorts of inherited conceptions of music that come into contact with the work’s simple formal design, and that allow it to function as a powerful analytical technology in the shape of a musical composition.

Lucier’s piece, written in 1988, is a relatively recent contribution to American experimental music. In the middle of the twentieth century in the United States, composers of experimental music sought alternatives to a received European intellectualism whose cultural authority had waned since the end of the Second World War. Inherited from this European intellectualism were a number of musical conventions, along with conceptions of what constituted proper musical sound and organization. In upending many of these conceptions and conventions in their musical works—in part through the

¹³ Clifford Geertz, *The Interpretation of Cultures: Selected Essays by Clifford Geertz* (New York: Basic Books, 1973), 89.

conceptual and material catalyst provided by technology—American composers made cultural interventions into the norms and practices of classical music.

These interventions were particularly evident in the communities of practice that surrounded experimentalism in New York City in the 1950s and 60s. As Morton Feldman recalls, “for a few weeks, nobody knew what art was—that’s what made it so special.”¹⁴ And within this culture of experimentation and redefinition, there was a prevalent mindset that, really, art could look like *anything*, music could sound like *anything*, and the works of these composers and artists could mean and do just about *anything*. Within this environment of absolute open-endedness, conceptual art—in Osborne’s words, “art about the definition of art”—thrived as never before. Composers and artists knew this, and—themselves inspired by their technologies—they began to use their works as technologies of cultural definition.

Anahid Kassabian notes that everyday enculturated listening habits have the power to forge “distributed subjectivities.”¹⁵ While such distributed subjectivity is not lived identically by each individual constituent subject, the collective formation of norms and practices on the part of a community gives shape to recognizable and reiterated patterns of thought and expression. In twenty-first-century America, encounters with music playing in coffee shops, retail stores, on television and radio, and so on constitute what Kassabian calls “ubiquitous listening”—a constant, repetitive reinforcement of identity through musical listening practices. In this framework, it is clear how works

¹⁴ Morton Feldman, “Give My Regards to Eighth Street,” in *Give My Regards to Eighth Street: Selected Writings of Morton Feldman*, edited by B.H. Friedman (Cambridge: Exact Change, 2000), 101.

¹⁵ Kassabian, *Ubiquitous Listening*, xxv–xxvi.

of music can teach their listeners how to listen to them, how to *think* or how to *feel* about the music. This normalization is all the more powerful in public—whether that public is a collection of retail shoppers or a gathering of experimental music aficionados. With each performance, recording, review, and conversation around works of experimental music—with every *association* between musical sound and subject—experimental music furthers its effects as a technology of cultural definition, giving shape to a distributed subjectivity carried by listeners, performers, composers, and so on. As I argue in the first chapter on formalism and conceptualism, composers’ analytical work via their music is thus facilitated and actualized in its social performance. Indeed, the repetitive and reiterative sort of listening, performing, and composing culture around experimental music helps to entrench the reconceptualized musical concepts at the heart of this music.

Analysis

By this point, I have conducted one form of musical analysis on Alvin Lucier’s *Silver Streetcar for the Orchestra*. Although the specific sounds of the piece have not come to bear on my interpretation of the work in nearly the same way as musical notation comes to bear on interpretation in traditional music analysis, the linkage of sound and form to the cultural contexts of American experimentalism nonetheless allows for an interpretation of the piece’s conceptual import. My further claim, that this musical work and others like it can function as analytical technologies in and of themselves, requires a bit more exploration of what analysis can mean and what it can accomplish.

Depending on the context, “analysis” can refer to a number of different things. In a laboratory, analysis might be the electrolytic process that separates and reveals the elements of a chemical compound; in a psychiatrist’s office, analysis might be conducted through therapeutic conversation meant to help process thoughts and feelings. In humanities research, analysis may refer to the meticulous technical description and thoughtful interpretation of some complex object. The objects of scholarly analysis are most often products of someone else’s creativity: a literary text, a work of painting or sculpture, a photograph, a film, a piece of music, and so on. While these modes of analysis may differ with respect to their medium and their methodology, they nonetheless share the common goal of breaking things down.

The sort of breaking down that happens in the course of analysis is not an entirely destructive process—at least, it’s not usually intended this way. Rather, analysis is done in order to construct a new way of knowing, feeling, or understanding. It is true that, in the chemical laboratory, the breakdown of a compound into its constituent elements might cause a permanent and irreversible change in physical state. The material disintegration that results from such analytical procedures, however, provides information about the material world that could not otherwise be ascertained. Likewise, in talking therapy, one is meant to release tightly wound stresses and anxieties in ways that one would not or could not do elsewhere. In breaking down and succumbing to overwhelming thoughts and feelings, one does not resolve the cause of grief or stress itself; rather, the aim of psychoanalytic talking therapy is to uncover hidden causes of unwanted effects, to gain perspective, to learn to think differently, to feel better so that one can recompose oneself and return to daily life. Both of these forms of analysis result in new knowledge or insight—changes that result from breaking things down and making new sense of them—and analysis in the humanities is no different.

Formal, critical, and discourse analysis all make way for reconceptualizing the objects that are broken down.

Indeed, the metaphorical “breaking down” of analysis is supported by the etymology of “analysis.” From the Greek *analysis*—or, to break it down into its pair of roots, *ana* and *luen*—“analysis” might well be re-translated as a “loosening up.” With the above two paragraphs in mind, I would argue that most usages of “analysis” could be drawn back to this sense of *loosening things up*. Whether the object of analysis—the object of this loosening up—is material or conceptual, whether it is a thing or an idea, this loosening up produces a new sense of the thing or the idea. And no matter the form of analysis, there is some method, some tool, some technology needed to carry it out. The chemist has a laboratory full of equipment at her disposal, the therapist is carefully trained to take care of his patients and himself, and the music analyst has a field of methodologies, musical notation, and sound imaging technologies with which she can represent the sounds of music. Disparate though they may be, these are relatively straight-ahead examples of analysis. Conceiving of analysis more broadly, however, can open things up to methods, concepts, and objects of analysis that might not otherwise come to light.

In this dissertation, I will argue that composers of conceptual music used their works to produce new senses of inherited musical concepts. In other words, they used their musical compositions as analytical technologies in experimentation with the fundamental tenets of musical

culture, its norms and practices.¹⁶ In performance, this music breaks down musical objects, concepts, definitions, forms, and, from the disciplinary perspective of this dissertation project, this music can break down received methods of music analysis. Through this analysis by experimental music, it becomes possible for these loosened up bits to come back into a new form, a new shape, with a new definition—to break and recast with new meaning.

It bears mention that composers of conceptual music were hardly the first to use music analytically. Take, for example Beethoven's Op. 120 "Diabelli Variations" which, over the course of thirty-three variations, provided not only a forensic analysis of Diabelli's modest theme but situated this theme relative to other compositions (including Wolfgang Amadeus Mozart's *Don Giovanni*). The classical convention of the variation set demonstrated by Beethoven's composition was, within a quite different context, taken up by John Cage with his own *Variations* series (1958–67). But whereas Beethoven's work analyzed a musical object, Cage's analyzed musical concepts: sound, noise, space, performance, form, and so on are all teased apart, broken down, and (occasionally) reassembled. Both sets of variations are analytical, but in different registers.

Analysis does not fix things; in fact, it does something quite the opposite. The aim of academic analysis is to learn something new about an object or subject. With this in mind, analyzing challenging works from an experimental musical tradition is not to be abandoned as futile but rather embraced as an opportunity for learning (about) another kind of analysis altogether—a purposeful

¹⁶ This is a sort of inversion of Kofi Agawu's argument that music analysis can be construed as performance and composition, in "How We Got Out of Analysis, and How to Get Back in Again," *Music Analysis* 23, no. 2/3 (July–October, 2004): 267–286.

breaking and recasting of music analysis itself as a disciplinary practice. In short, analysis *of* works of conceptual music can lead to analysis *by* works of conceptual music.

Chapter Outlines

In each of the following chapters, I analyze works of experimental music from an interdisciplinary analytical standpoint that can shed light on the music at hand and, in turn, on the disciplinary practice of music analysis. From the refreshed perspectives these interdisciplinary analytical methods afford, I argue for a recasting of certain established musical genres, styles, or modes of composition as branches of a musical conceptualism that concerns the negation and redefinition of various facets of musical sound and organization.

To begin my first chapter, I examine the relative importance of forms and formal analysis to the discipline of music theory as compared to other disciplines in the humanities, especially art history. I then draw upon a number of social and intellectual connections that obtained between artists and composers during the twentieth century to outline a conceptualism that spanned art and music, using Peter Osborne's theory of conceptual art to provide a perspective on how experimental music partakes in a larger conceptualism across creative media. Osborne's perspective joins Caroline Levine's to inform a music-analytical vignette around John Cage's 1962 piece for solo performer, *0'00"*.

In my second chapter, I chart a course through Cage's compositional output in some historical and biographical depth. More specifically, I trace his development of compositional process

and refinement of musical works with regard to indeterminacy and chance, drawing upon the analytical perspective and the expanded notion of form taken up in my first chapter. I draw upon Levine's expanded notion of form to argue that, although Cage did not compose the sounds of the radically indeterminate *4'33"* (1952) and *0'00"*, he nonetheless accessed and manipulated the material and temporal forms that surround music, drawing them into his work and, through them, composing a listening subjectivity that would comprehend sound, noise, silence, and music as one and the same. I adopt Anahid Kassabian's notion of distributed subjectivity in order to illuminate the ways in which the listening, performing, and composing cultures of American experimental music took up Cage's musical ideas and helped to proliferate the listening subjectivity he composed for his audiences.¹⁷

My third chapter centers on the ways in which sound recording technologies—and the degrees and kinds of repetition they afforded—acted as conceptual and material catalysts for the very different-sounding genres of *musique concrète* and musical minimalism. I revisit the painting and sculpture of 1960s American minimalism as a body of work in which consistent aesthetic qualities analogous to those of musical minimalism gave rise to a robust conceptualism and the “dematerialization” of the art object. This body of work and its critical literature helps to establish the terms in which repetition can be seen as a viable technical means by which both minimalism and *musique concrète* become technologies for cultural intervention into fundamental musical concepts. The role of repetition in these genres of experimental music—and the importance of Pierre Schaeffer

¹⁷ Kassabian, *Ubiquitous Listening*.

to work that spans music theory and sound studies¹⁸—provide further theoretical links between *musique concrète*, minimalism, and the cultural interventions of musical conceptualism.

In my fourth chapter, I offer an overview of an American musical minimalism that is defined as much by its characteristic aesthetic qualities—familiar harmonies, pulsing rhythms, and high degrees of repetition¹⁹—as it is defined by its constitutive composers’ use of various technologies to experiment upon sound and the medium of music. While not all minimalist composers shared the same musical ideals, many rhetorically framed their use of technologies—and technologically derived compositional techniques—as a primary means by which they could achieve an objectivity with regard to their experimentation with musical sound. I consider the fraught relationship between the aspirational objectivity of Steve Reich’s minimalism, the many forms of voice he attempted to erase, and the perceived forms of agency behind these forms of voice. In particular, *It’s Gonna Rain* (1965) and *Come Out* (1966) serve as examples of an electronic experimental music in which voice and technology interact under Reich’s stated objective ideals and depart from traditional musical hermeneutics. I offer extensions to Seth Monahan’s meta-analytical model of agent-classes in music-theoretical discourse in order to consider the relationship between the non-expressive objectivity of Reich’s musical minimalism and the many forms of voice and agency that underwrite traditional musical interpretation and analysis.²⁰ Finally, I move beyond Reich’s tape works of the 1960s to

¹⁸ This is most evident in Brian Kane’s work on acousmatic sound and listening, especially in *Sound Unseen* (New York: Oxford University Press, 2014).

¹⁹ Robert Fink, *Repeating Ourselves: American Minimal Music as Cultural Practice* (Berkeley: University of California Press, 2005).

²⁰ Seth Monahan, “Action and Agency Revisited,” *Journal of Music Theory* 57, no. 2 (Fall 2013): 321–71.

Julius Eastman's musical compositions and their controversial titles, which challenged the objective bent of American minimalism. Eastman's critical encounter with minimalism's predominant aurality at his 1980 concert at Northwestern University allows his music to act as a technology for rethinking the analysis of musical minimalism, and of music-theoretical representations of voice and agency.

Chapter 1: Forming a Conceptual Music

Throughout this chapter and throughout this dissertation, I mention many works of music that may seem to defy formal analysis. This might be for any number of reasons: their sounds might be too complex or too unruly, the works may be too disorganized or inconsistent, or the music may seem to lack sound altogether. In conducting their cultural interventions into classical music's norms and practices, composers of experimental music breached technical barriers, opened up uncharted sonic territory, and overturned conventions of composition and performance. While the results of their musical experiments sounded quite different, their shared interest in cultural intervention tended to place similar strain on formal analytical method. In this chapter, I argue that experimental music's apparent strain against formalism should not be taken as a fatal disconnect between the two, but rather as a side effect of the fundamental connection between formal composition and conceptual intervention.

To begin, I examine the importance of forms and formal analysis to the discipline of music theory as compared to other disciplines in the humanities, especially art history. With disciplinary discrepancies established, in the second part of this chapter I draw upon a number of social and intellectual connections that obtained between artists and composers during the twentieth century in order to outline a conceptualism that spans the media of art and music. The number and the nature of these connections suggests that interdisciplinary analytical methods developed for analysis of conceptual art may prove viable for the analysis of conceptual music, a repertory largely neglected by

the discipline of music analysis, which has leaned heavily on notational methodologies. Chief among the cross-disciplinary perspectives I discuss is Peter Osborne's theory of conceptual art, in which the negation of fundamental forms and concepts effects their redefinition.¹ Finally, I apply these lessons learned from conceptualism in the visual arts—together with Caroline Levine's expanded notion of form—to consider a music-analytical vignette around on John Cage's *0'00''* (1962), a work composed of indeterminate sounds that nevertheless derives its analytical function from conventional musical forms. The context for Cagean indeterminacy is taken up more fully in the following chapter; for the moment, what is most important for my argument is that such works of conceptual music necessitate a thorough reconsideration of the practice of musical analysis.

Intra- and Extra-Musical Forms

Music analysis is an essentially formalist practice. My usage of "formalist," however, is neither a derogatory reduction nor a brash generalization. Music analysis is, after all, almost never entirely about the myopic identification and quantification of the purely musical structures to which the epithet of "formalism" has conventionally referred. Any thoughtful analytical treatment of music will inevitably involve the things that exist beyond the notes, not least because those things contribute in important ways to music's meaning. History and biography, social, political, and cultural contexts

¹ Peter Osborne, *Conceptual Art* (London: Phaidon, 2002).

and inter-texts, conditions of performance, the music's immediate physical environment, and listeners' prior knowledge and experiences always inform interpretation and hermeneutics, criticism and reception, and—most importantly for this chapter—these things always shape analytical discourse to some degree. Perhaps most succinctly, Eric Clarke's ecological approach to the perception of musical meaning, in which the conscious and sub-conscious kinds of attention paid to extra-musical things always factor into experience of intra-musical things, articulates this relationship.² Music's surroundings and contexts are always processed, even if in the background, and their various affordances invariably affect the ways that people perceive sound as music.³ It is this implication of the extra-musical in the “intra-musical”—and *vice versa*—that leads music scholars to be variously tempted by, anxious about, or allergic to the phrase “the music itself.”⁴ But even with

² Eric Clarke, *Ways of Listening: An Ecological Approach to Musical Meaning* (New York: Oxford University Press, 2005).

³ Clarke draws upon the notion of affordances laid out most clearly by James Gibson in *The Ecological Approach to Visual Perception* (Ann Arbor: University of Michigan Press, 1979).

⁴ Gabriel Solis, “Thoughts on an Interdiscipline: Music Theory, Analysis, and Social Theory in Ethnomusicology,” *Ethnomusicology* 56, no. 3 (Fall 2012): 533 and 544–47, which focus in particular on the issue of musical sound as an object of study and analysis; Jocelyn Neal, “Popular Music Analysis in American Music Theory,” *Zeitschrift der Gesellschaft für Musiktheorie* 2, no. 2–3 (2005), <https://www.gmth.de/zeitschrift/artikel/524.aspx>, is an account of the rise of analysis of (American) popular music within American music theory; and, most recently, a panel on the Society for Music Theory's 2017 conference, entitled “What Does Music Theory Want?”—chaired by Naomi Waltham-Smith and with Seth Brodsky serving as respondent—centered on issues of subjectivity, (psycho)analysis, methodology, hermeneutics, and the like. Steven Rings followed later in the conference with his own plenary talk, wherein he called for music theorists to embrace the intellectual advantages of their niche corner of academia, wherein enchantment with musical objects can produce its own insights. The talk is now published as Steven Rings, “Music's Stubborn Enchantments (And Music Theory's),” *Music Theory Online* 24, no. 1 (March 2018), <http://mtosmt.org/issues/mto.18.24.1/mto.18.24.1.rings.html>.

the extra-musical in full view, music theory and analysis seemingly cannot but adhere to Eduard Hanslick's maxim that the "artist is inscrutable, the artwork is decidedly not."⁵

There are many works of experimental music that might clash with this formalist maxim and which, by extension, might clash with an essentially formalist music analysis. Without recognizable musical forms to work with, it may seem that formal analysis has no chance of gaining traction with works full of noise, silence, and other novel approaches to musical sound and organization. And indeed, music theory and analysis have historically veered away from musics that do not satisfy its formal expectations. In what follows, I propose that Hanslick's maxim may yet hold up—albeit through a creative interpretation—in spite of any apparent difficulties that may present themselves in the contexts of conceptual music. More specifically, I argue that an efficacious analytical approach to conceptual music might be found through the renewed and expanded notion of form developed by literary theorist Caroline Levine. She suggests that forms should not be confined to particular media, and that forms should not be limited to specifications of shape, size, or scale. She uses her liberated concept of form to explore the translation and transmutation of various forms across the media of literature, television, film, culture, and politics, shedding light on their broader organization and on the interconnections between each. Levine's contention is that this renewed notion of form can engender meaningful connections between the analysis of textual objects, historiography, and cultural

⁵ Eduard Hanslick, *On the Musically Beautiful: A Contribution Towards the Revision of the Aesthetics of Music*, trans. Geoffrey Payzant (Indianapolis: Hackett, 1986), 33; I much prefer this older translation over the newer "The artist is inscrutable, the artwork scrutable," which appears in Eduard Hanslick, *Eduard Hanslick's On the Musically Beautiful: A New Translation*, edited and translated by Lee Rothfarb and Christoph Landerer (New York: Oxford University Press, 2018), 47.

criticism. A music analysis with formalism as its theoretical foundation stands to gain valuable methodological perspective through such an expanded notion of form, especially if and when this discipline seeks to reach beyond the bounds of its familiar repertoires. This chapter and this dissertation thus look toward a music analysis that listens not only to music but across scholarly disciplines, and that embraces the many forms which surround and support the noises and the silence of conceptual music.

It could be argued that one of the pretexts for music-analytical work is confidence that a study of the forms of music can expand knowledge about music's social import. Although attention to the extra-musical at various levels complements and completes music analysis, music analysis is concerned, in the first instance, with the intra-musical: with what is going on *in the music*, and what it might mean. Thus my seemingly brazen declaration that music analysis is an essentially formalist practice. For the purposes of this chapter (and for the whole of this dissertation), forms and "formalism" do not denote an analytical practice that is somehow disproportionately or inappropriately concerned with forms of musical sound; rather, the expanded notion of form that I take up throughout advances my proposition that music-analytical practice is always to some degree concerned with musical forms, even if/when the musical work at hand might appear to be formless. For now, however, I want to point out how traditional notions of form have given rise to a distinctive disciplinary proclivity in music theory and analysis that is, from an interdisciplinary perspective, quite strange.

Art historian Seth Kim-Cohen points out that the practice of music analysis has typically betrayed an obsession with medium specificity, noting that the terms "extra-musical," "intra-musical," or even "para-musical" content have had no analog in the lexicons of academic study of

visual arts or cinema.⁶ One might trace this separability back to the moment during the nineteenth century when, as Lydia Goehr has observed, the extra-musical became separated from the musical in European music-critical discourse. This separation was articulated via an ascendent formalist aesthetics, most prominently championed by Hanslick.⁷ To be sure, the distinction between that which is internal to the music and that which is external is a useful one, especially for the European musical repertoires with which the academic discipline of music theory has traditionally occupied itself. But in compulsively quantifying the standardized sounds of the musical score, theory and analysis have privileged the intra-musical objects of notation for so long and to such an extent that the prefix becomes unnecessary. “Captured in and as a numerical sign system,” as Kim-Cohen puts it, the notes and rhythms internal to the musical score are not *intra*-musical; they are simply “musical.”⁸ The array of medium-specific, notated musical objects generated by and through Western musical notation has borne itself out in a robust formalist methodology of music analysis, which is, as a matter of course, ideally set up to re-inscribe the internal musical logics and organizational schemes of the Western classical music from which it was derived. The ramifications of this formalist lineage are myriad, and include a tendency toward obsessive focus on the notated musical objects of Western civilization (or other musical objects which nonetheless resemble them closely enough to be compared). This focus on isolated musical objects has prompted scholars such as Georgina Born to

⁶ Seth Kim-Cohen, *In the Blink of an Ear: Toward a Non-Cochlear Sonic Art* (New York: Continuum, 2009), 40; “para-musical” refers to Eric Drott’s discussion of markers of musical genre in Eric Drott, “The End(s) of Genre,” *Journal of Music Theory* 57, no. 1 (2013): 4.

⁷ Lydia Goehr, *The Imaginary Museum of Musical Works: An Essay in the Philosophy of Music* (New York: Oxford University Press, 1992), 155.

⁸ Kim-Cohen, *In the Blink of an Ear*, 96.

call for a more self-consciously *relational* study of music, and to thereby expand the boundaries of musicological inquiry.⁹

Many scholarly disciplines in the humanities and social sciences—if not most of these disciplines—employ largely qualitative, discursive analytical approaches. Meanwhile, for many students (and some teachers) of music theory, “analysis” connotes only the fastidious identifying and labeling of harmonies, phrase types, and repetitive binary and ternary organizational schemes. The field of music theory and its practice of formalist analysis have hummed along quite nicely on this tacit cordoning-off of (intra)musical content. But this version of music analysis falters in the face of musics that cannot be effectively captured in its “numerical sign systems,” whose interior and exterior cannot be so easily wrested apart, or which do not employ familiar musical objects such as harmonies and phrase types whatsoever. To the extent that compatibility with Western notational systems has been a prerequisite for the effectiveness of musical analysis, the disciplinary practice of music analysis has not fared especially well in its rare, hesitant ventures outside of its canonical confines. From European and American modernist mutations of classical music to traditions across the globe which do not conform to Western musical conventions, there exists a whole host of musics that may be rendered difficult or impossible to analyze on music theory’s traditional terms. The issue of meta-analytical anxiety is, however, nothing new to the discipline of music theory.

⁹ Georgina Born, “For a Relational Musicology: Music and Interdisciplinarity, Beyond the Practice Turn,” *Journal of the Royal Musical Association* 135, no. 2 (2010): 223–24.

Robert P. Morgan's "The Concept of Unity and Musical Analysis" and Kevin Korsyn's subsequent defense on behalf of Kofi Agawu, Daniel Chua, Joseph Dubiel, Jonathan Kramer, and himself both take up the intellectual integrity of academic musical analysis, the practice's sustained efficacy, and the deconstruction of idealized definitions of music and its theories.¹⁰ Although this exchange opened up a broader view of musical analysis, it was nonetheless anchored in a musical repertory that supports the kinds of "unitarian" analytical ideals Morgan himself values. Haydn, Mozart, Beethoven, and Brahms (Morgan's chosen examples) lend themselves easily to the sort of music-analytical arguments through which Morgan claims to find a unitary subject, through which Korsyn claims to find a non-self-identical subject-object dialectic, and through which Hanslick claimed to find his ideal of a purely formal, purely musical beauty. That is, the objects of their analyses are made up of highly stylized and standardized musical forms: functional tonal harmonies and chord progressions, regular phrases and melodies, and motivically coherent binary and ternary organizational schemes. The fine discrepancies between these forms and their slight variance from one composer to the next—and often between compositions by the same composer—are brilliantly illuminated by the large toolbox of meticulously tuned methods of formalist musical analysis. This music and its stylistic subtleties can withstand the immense analytical pressure that the field of music theory has placed upon them precisely because the methods by which theorists apply this analytical pressure were designed around this musical repertory in the first place. What's more, the depth and

¹⁰ Kevin Korsyn, "The Death of Musical Analysis? The Concept of Unity Revisited," *Music Analysis* 23, no. 2/3 (July/October 2004): 337–351; Robert P. Morgan, "The Concept of Unity and Musical Analysis," *Music Analysis* 22, no. 1/2 (2003): 7–50.

nuance of this formal analysis is such that writers such as Morgan and Korsyn have been able to bring the critical reflections of Descartes, Kant, Bakhtin, and Foucault (all from outside of music) into productive dialogue with excerpts from Beethoven's piano sonatas and Brahms's string quartets.

A composer such as John Cage, though, set about creating a musical repertory that challenges received ideas about musical sound and organization. Within this repertory—a body of work central to the notion of conceptual music—random chance and silence appear instead of subjectivity and expression, and sound and noise abound in place of the phrases, chords, and melodies central to Hanslickian musical beauty. Cage's interlocutors are not Kant, Descartes, or Beethoven; rather, he invoked the thinking of Daisetz Suzuki, Marcel Duchamp, and Henry David Thoreau. It is no wonder that much of Cage's music has confounded the established methods and perspectives of music analysis. Indeterminacy, improvisation, chance, sound, noise, and silence render Cage's music difficult or seemingly impossible to analyze because they displace the objects most legible to the disciplinary practice of music analysis. This displacement has long found Cage at the center of cross-disciplinary debates around the relationship of music to sound—and, more recently, around the culturally specific ways of listening which underpin ontologies of music, sound, and analysis.¹¹ The implications of a music theory (or a sound studies) that does not acknowledge the necessity of auditory culture are intellectually and politically perilous, and the field of music theory would do well

¹¹ Marie Thompson, "Whiteness and the Ontological Turn in Sound Studies," *Parallax* 23, no. 3 (2017): 273; and, for a response on behalf of "sonic realism" and object-oriented ontologies, see Christoph Cox, "Sonic Realism and Auditory Culture: A Reply to Marie Thompson and Annie Goh," *Parallax* 24, no. 2 (2018): 234–42.

to heed Brian Kane's critique of the so-called "ontological turn" within sound studies.¹² If there is collective anxiety in confronting these issues, it may well stem from a perceived conflict between the essential formalism of music analytical practice and the uncertainty of what music analysis might be like without it. And yet, if persistent attention to the forms of music must come into any kind of conflict with a critical perspective that demarcates Eurological methods and ontologies, my argument is that this conflict could and should be a productive one. Music analysis need not break or steel itself against cultural criticism; rather, its formalism can adapt and expand to encompass a more self-aware, ecological view of its culturally embedded musical objects.

John Cage's compositional output is a body of work well suited to analysis in this expanded formalism. While his indeterminate and aleatoric compositions may seem to defy music-analytical methods, much of Cage's music will in fact yield to an analyst who does not reject the noise, but rather addresses it on its own terms. Two examples are offered in recent music-theoretical scholarship. First, in a 2014 essay David W. Bernstein considered how the amplification and electronics of *Cartridge Music* (1960) prefigured more highly indeterminate, theatrical, and improvisational work that mirrored social, political, and cultural ideals.¹³ Second, in a 2009 analysis of *Two*² (1989) Rob Haskins identified the potential for a shared musical experience of the work's aleatoric yet discernibly networked pitch relationships and harmonic content within the indefinite

¹² Brian Kane offers a critique of the "ontological turn" and a warning with regard to its consequences in "Sound Studies Without Auditory Culture: A Critique of the Ontological Turn," *Sound Studies* 1, no. 1 (2015): 2–21.

¹³ David W. Bernstein, "John Cage's *Cartridge Music* (1960): 'A Galaxy Reconfigured,'" *Contemporary Music Review* 33, no. 5–6 (2014): 556–69.

possible paths through the time-bracketed score for the work.¹⁴ In both works, sonic elements remain partially determined: namely, amplification and pitches from the piano. Other of Cage's compositions provide no sonic anchor for musical analysis whatsoever. In music that appears to lack musical sound, the analyst must find a method of analyzing the silence not as empty negation, but as an opportunity for finding other points of contact with the work. It is no coincidence that the most fastidious analysis of Cage's most infamous, silent composition, *4'33"* (1952), comes not from a musicologist, but from art historian Liz Kotz.

In keeping with the title of her book *Words to be Looked At*, Kotz's analysis focuses largely on the multiple text scores for *4'33"*.¹⁵ To be sure, Kotz's work is about music, but because *4'33"* offers only silence in lieu of the musical objects and relationships that Bernstein and Haskins analyze, Kotz must instead look to the text—to the “extra-musical”—for a way into the Cage's composition.

By prying open the regulatory relation between sign and realization, Cagean indeterminacy repositioned writing as a kind of productive mechanism, thereby giving notation a functional and aesthetic autonomy—an autonomy that opens the door for the scores, instructions, or snippets of language to themselves *be* the work, while individual realizations occur as “instances,” “samples,” or “examples” of it.¹⁶

While even *Cartridge Music* and *Two*² can provide some sound for music analysis, *4'33"* appears to negate any semblance of musical sound. The work thus draws Kotz away from the silence and toward

¹⁴ Rob Haskins, “On John Cage's Late Music, Analysis, and the Model of Renga in *Two*,” *American Music* 27, no. 3 (Fall 2009): 327–55.

¹⁵ Liz Kotz, *Words to be Looked At: Language in 1960s Art* (Cambridge: MIT Press, 2010), 13–57.

¹⁶ Kotz, *Words to be Looked At*, 48.

an ontological paradigm in which the language and the score *are* the work. Indeed, works such as *4'33"* and *0'00"* (which will be the focus of analysis at the end of this chapter) may defy the kind of formalist analytical engagement with musical sound that the field of music theory is built upon. It is through this very defiance, however, that works of music can perform a kind of analysis that interrogates sound, music, and practices of music analysis. In an expanded Levinian formalism, this sort of reciprocal analysis by musical works has the potential to probe boundaries between the intra- and the extra-musical, and to open up the domains of music and music analysis. This redefinition by reciprocal analysis does not come about through the sheer negation of musical sound, nor through the wholesale rejection of formalist musical analysis. These are not merely words to be looked at; rather, the text score—along with performance of the work—can be taken as instructions for listening. Rather, it is as Kotz, Clarke, and Levine suggest: in the case of works like *4'33"* and *0'00"*, the potential for music analysis rests in the forms that surround the music, sonic or otherwise.

Art & Music

Conceptualism in the visual arts is supported by a robust literature of criticism, theory, history, and analysis. The methods and intellectual approaches of writers on conceptualism are fit to grapple with the sorts of challenges latent in music such as Cage's, and their writing has set invaluable precedents for this dissertation project. In particular, the work of art historian and philosopher Peter Osborne provides perspective on some of the ways in which experimental music can be understood and

analyzed as a form of conceptualism.¹⁷ As a music analyst, I insist on listening to this music's sounds and on analyzing text scores with the qualities and the challenges of musical sound in mind. While the visual and the sonic may present themselves as disparate media, historians of conceptual art can provide useful means of negotiation their differences and pushing productively at their similarities.

Music's ephemerality, its reliance upon performance, and its confounding dependence upon the "work concept" are in some ways inherent to its medium; in other ways, though, there is space for a conceptual music to test its limits and to offer new roads to defining and redefining the bounds of musical composition.¹⁸ Chief among those who have explored this terrain is Kim-Cohen, who ushers his readers "toward a non-cochlear sonic art"—a curious field of work that can accommodate music by Cage, Reich, Schaeffer, and others, alongside Muddy Waters, Francisco López, and Bob Dylan.¹⁹ One of the central aims of this chapter is to raise a rhetorical question in response to Kim-Cohen's project: why not call it "conceptual music" instead of "sonic art?" I raise this question not out of concern for terminological specificity, but because the project of definition is at the heart of conceptualism in both art and music. In the light cast by experimental art and music, what might otherwise amount to a minor terminological discrepancy can, in fact, turn out to be the crux of the argument.

The ulterior motivation for identifying a "conceptual music" rather than a "sonic art" has to do with the potential for a disciplinary rehabilitation of music analysis. As a member of the field, I

¹⁷ Osborne, *Conceptual Art*.

¹⁸ Goehr, *Imaginary Museum*.

¹⁹ Kim-Cohen, *In the Blink of an Ear*.

maintain that music's obsessions over the intra-musical do not preclude the medium of music from expressing anything like conceptualism; rather, music theory's obsessions are symptomatic of the discipline's preoccupation with canonical musical repertoires that are fixated upon their own internal logics. The "qualitative, discursive form of musical analysis" demanded by works such as *O'OO'* marks a significant departure from the sort of quantitative analysis built around the intra-musical logics of classical repertoires. A conceptual music has the potential to expand the domain of music, and to engage its terms and concepts in a fundamental breaking and recasting.

It is well to note that twentieth-century music and art cultures have often blended into one another, their boundaries fuzzy and porous as composers and artists sought to expand their own media and cross into others.²⁰ The complex relationships between art and music—and between artists and composers—are evident both in their works and in their words. Among the most well documented figures in modern art and music, Sol LeWitt (1928–2007), Robert Rauschenberg (1925–2008), Marcel Duchamp (1887–1968), Steve Reich (b. 1936), and John Cage (1912–1992) shared friendships, collaborative working relationships, and conduits of intellectual exchange. The inter-associations between these historical actors have proven influential within their own continuing communities of practice, and in the secondary literature of the scholarly fields who study them. Their works are thus cultural interventions on multiple levels: in practice, their technical innovations

²⁰ Branden Joseph's art-historical work on John Cage constitutes the most extensive case, including but not limited to: Branden W. Joseph, *Beyond the Dream Syndicate: Tony Conrad and the Arts after Cage* (New York: Zone Books, 2008); Branden W. Joseph, *Random Order: Robert Rauschenberg and the Neo-Avant-Garde* (Cambridge: The MIT Press, 2003).

generated new objects to see, new sounds to hear, and new ways of being artists and composers; in theory, their formal innovations engendered new ways of thinking about—and analyzing—art and music.

In the following section, I draw some discursive connections between these figures as a means of tracing one intellectual lineage of conceptualism among countless others. This lineage is, of necessity, only a part of the story—indeed, to leave out important figures Andy Warhol, Jackson Pollock, Henry Flynt, or Yoko Ono, and to leave a gap between Duchamp’s 1910s and Rauschenberg’s 1950s is to tell a disjointed tale. The connections between artists and composers I discuss here should thus be taken as a retelling of one narrow path through their works, rather than anything close to a comprehensive historical narrative.²¹ Nonetheless, the intellectual exchanges between these figures will help to clarify how technology enabled a conceptualism that sought to redefine the fundamental concepts of both art and music.

²¹ On the diversity of experimentalism and its network of contradictions and conceptual conundrums, see Benjamin Piekut, *Experimentalism Otherwise* (Berkeley: University of California Press, 2011); and, for a more recent exploration of experimentalism understood as a proliferation of approaches to sound, see Jennie Gottschalk, *Experimental Music Since 1970* (New York: Bloomsbury, 2016).

Conceptualists

Although there are plenty of what we now call “conceptual” artists that preceded and succeeded Sol LeWitt, he is credited with the earliest, most prominent use of the term. In his 1967 essay “Paragraphs on Conceptual Art,” he proposed a wresting of the perceptual from the conceptual in both the creation and reception of artworks.²² For LeWitt, the perceptual elements of a work were the aesthetic: those sensed, those seen. The conceptual elements, on the other hand, were what he called the “mentally interesting.” For LeWitt a work of conceptual art was one that foregrounded this conceptual side, while “art that is meant for the sensation of the eye primarily would be called perceptual.”²³ As a means of emphasizing the conceptual in a work of art, LeWitt suggested the negation of an artist's own taste. Indeed, LeWitt saw the avoidance of an artist's subjectivity as essential to producing properly conceptual art. It was his view that the more direct contact he had with his work, the more his own tastes might skew the aesthetic of the work and thus turn it toward the perceptual. And so he sought a technical means of developing artworks that would separate the creative act from the ultimate shaping of the work's materials.

To produce his series of more than 1,200 wall drawings (1968–2008), LeWitt devised deliberately limited sets of instructions for assistants to follow. Execution of these instructions would

²² Sol LeWitt, “Paragraphs on Conceptual Art,” in *Artforum* 5, vol. 10 (Summer 1967): 79–84.

²³ LeWitt, “Paragraphs,” 81.

result in the final artworks, drawn directly onto walls in exhibition spaces and often destroyed later.

For example, the full text for his *Wall Drawing #85* (1971):

A wall is divided into four horizontal parts. In the top row are four equal divisions, each with lines in a different direction. In the second row, six double combinations; in the third row, four triple combinations; in the bottom row, all four combinations superimposed.

Of course, LeWitt had a good sense of what his *Wall Drawing #85* would look like once completed, but many of the drawings' finer details were determined by others. His ambiguous instructions and his use of assistants' labor thus served as degrees of separation between the artist and the drawing—between the idea that constituted the conceptual artwork and its singular material product. It should also be noted that the material form of any given *Wall Drawing* at any given point in time is, indeed, singular. The instructions act a bit like a musical score: once public, a performance or realization could unofficially take place anywhere, anytime. There are, however, important differences between the two. While musical compositions still under copyright command fees for performance, it is possible that multiple performances of the same work may happen simultaneously. In the case of the *Wall Drawings*, each drawing consists of instructions, but is also associated with a unique certificate of ownership that bestows the legal right to produce and display the drawing.

LeWitt's professed abdication of direct control over the final material form of his art echoed just a year later in New York minimalist composer Steve Reich's 1968 essay "Music as a Gradual Process," which he published in a catalogue for the 1969 exhibit *Anti-Illusion: Procedures/Materials* at

the Whitney Museum of American Art in New York.²⁴ LeWitt and Reich became friends in the 1960s, and their exchange of ideas and mutual appreciation for each other's work shows in Reich's essay, in which he touched on concerns remarkably similar to those voiced in LeWitt's essay, and in remarkably similar terms. In particular, the following two statements stand out as a pair:

When an artist uses a conceptual form of art, it means that all of the planning and decisions are made beforehand and the execution is a perfunctory affair. The idea becomes a machine that makes the art. (LeWitt, 1967)²⁵

Though I may have the pleasure of discovering musical processes and composing the musical material to run through them, once the process is set up and loaded it runs by itself. (Reich, 1968)²⁶

While Reich diverged from LeWitt in some important ways, the shared mechanical metaphor is glaring. Their "machine that runs by itself" is set up as the opposite to a more traditionally expressive creativity. Not only this, but LeWitt and Reich both saw their devices as unburdening them from producing their art and music directly. Reich went on to explain how process-based musical composition allows listeners' attention to shift from the personal to the impersonal:

While performing and listening to gradual musical processes one can participate in a particular liberating and impersonal kind of ritual. Focusing in on the musical process

²⁴ Steve Reich, "Music as a Gradual Process" [1968] in *Writings on Music: 1965–2000* (New York: Oxford University Press, 2004), 34–36; see also Cindy Nemser's account of the exhibition, which she titled "The Art of Frustration": <http://www.art-agenda.com/reviews/anti-illusion-proceduresmaterials/>, accessed December 10, 2018.

²⁵ LeWitt, "Paragraphs," 82.

²⁶ Reich, "Music as a Gradual Process," 34.

makes possible that shift of attention away from he and she and you and me outwards towards it.²⁷

The appearance of LeWitt's art and the sound of Reich's music are often compared as similarly bare, simple, and repetitive, and the two are invariably grouped together under the heading of Minimalism.²⁸ But if this "perceptual," surface level of their work is similar, it is in their respective, ideologically constructed relationships between the conceptual and the perceptual that the two diverge. As suggested by the above quotes, Reich's process music does not shy away from aesthetics and perception; his overt musical processes are all about listener perception. Despite this emphasis of perception—or perhaps *because* of it—Reich quietly establishes in his 1968 essay a pivotal terminological difference between himself and LeWitt: the word "conceptual" is conspicuously absent from "Music as a Gradual Process."

Reich's priority at the time was that his musical processes be audible and discernible—that he, unlike Cage, was privy to nothing the listener couldn't hear.²⁹ In his early phase music, which included *Violin Phase* and *Piano Phase* (both 1967), the generative machine was the rhythmic process he created. This machine was fully divulged and demonstrated to his audiences in performance.³⁰ The

²⁷ Reich, "Music as a Gradual Process," 36.

²⁸ Jonathan W. Bernard, "The Minimalist Aesthetic in the Plastic Arts and in Music," *Perspectives of New Music* 31, no. 1 (Winter 1993), 86–132.

²⁹ Reich mentions that it was fellow composer James Tenney who first pointed this out to him in Reich, "Music as a Gradual Process," 35.

³⁰ Joseph Auner makes the case that the actual, physical machines that yielded Reich's metaphorical process machines should be present on stage, as part of the visual aesthetic of performances of works such as *Violin Phase* in "Reich on Tape: The Performance of *Violin Phase*," *Twentieth-Century Music* 14, no. 1 (2017): 77–92.

phasing process proved flexible and adaptable, and he went on to compose works for traditional musical instruments. For LeWitt, on the other hand, the *idea* was the machine: a set of instructions capable of producing many artworks, though yielding just one at a time. Because the instructions for the *Wall Drawings* are readily available as parts of their titles, LeWitt's machines were made visible to his viewers just as Reich's were made audible to his audiences. But, unlike Reich, LeWitt embraced the indeterminacy of allowing others to carry out the realization of each drawing as a means of staying away from the "perceptual." In "Music as a Gradual Process," Reich firmly rejects indeterminacy and improvisation, stating that they and his musical processes are mutually exclusive. Thus Reich, in one fell swoop, distanced himself from Cage *and* LeWitt, emphasized his focus on audibility and perceptibility, and, by omission, diverged from LeWitt's project of "conceptual art." It is telling that, despite the clear creative kinship between the two, Reich also does not credit LeWitt in his essay. In fact, aside from a brief mention of James Tenney, Reich's sole counterpart in "Music as a Gradual Process" is fellow New York-based composer and champion of indeterminacy, John Cage. There are plenty of explanations as to why Reich was (and remains) selective about whom he claims as his influences. Regardless of personal or competitive motivation, Cage appeared as a composer to whom Reich wished to establish himself as both an equal and an opposite.

If Reich's 1968 essay echoed LeWitt's of the previous year, it also recalled in both topic and title Cage's essay from ten years prior.³¹ In 1958, Cage wrote "Composition as Process" as a companion to his own formidable solo piano work *Music of Changes* (1951), in response to an

³¹ John Cage, "Composition as Process," *Silence* (Middletown: Wesleyan University Press, 1961), 18–56.

invitation from Wolfgang Steinecke to lecture and perform at the Darmstadt International Summer Courses for New Music. Cage took the opportunity to outline his indeterminate and chance-based compositional methods, but also to specify their desired effects on the sounding music—the most important being that Cage’s own preferences would be removed from his work, thereby avoiding expression and allowing outside forces to shape his music. Regarding the relationship of process to final material form, Cage wrote:

Structure is no longer a part of the composition means. The view taken is . . . of an activity characterized by process and essentially purposeless.³²

Pieces like *Music of Changes* were composed using a system of chance operations that determined pitch and rhythmic values at random. The pre-compositional material for such works is a set of questions and constraints that were often answered by the flip of a coin or the roll of a die. The compositional process proper began with a fixed number of questions that could yield a vast number of possible outcomes. Once all of these questions had been answered, however, only one fixed score existed for *Music of Changes*, just as with any traditionally composed piece of music. In determining completely the range of possible outcomes, Cage had general power over the sounding music. But, like LeWitt would 17 years later, in *Music of Changes* Cage relinquished control over musical specifics, thus eliminating to some extent his tastes and subjectivity along with his ability to shape finer details of the musical surface.

³² Cage, “Composition as Process,” 22.

LeWitt's *Wall Drawings* and Cage's *Music of Changes* are similar in that each entailed a process that results in a fixed material form. Along with his stated disavowal of structure via chance, however, Cage also attempted to remove himself from his music by incorporating *indeterminacy* in his compositional process. Works such as *4'33"* and *0'00"* involve performances that yield an indefinite number of unique sonic realizations. Chance operations do not determine the sonic content for these pieces; rather, the realization of each is left up to its performer and/or to the coincidental noise in the performance space. With regard to self-removal through compositional process, Cage saw the implementation of indeterminacy as having a similar effect to his use of chance operations. Placing varying amounts of responsibility for the sounds of his music in the hands of performers, rather than in random chance alone, Cage was able to relinquish an amount of control over his music and therefore to distance himself from its material form. Although my analysis of this music comes later, it is important to note here that the further surrender of control on the part of the composer has implications for the music analyst. It is possible to analyze the sonic form of an individual performance of *0'00"*: spectrographs, for example, can serve as valuable representations of captured audio. Because the sounds of these radically indeterminate works are bound to change, however, the sounds of any one performance of the work cannot account for the work's indefinite sonic possibilities. It is in this sense that a piece like *0'00"* appears to be *formless*. If analysis of the work's sounds does not constitute an analysis of the work, then it certainly seems that the music theorist's tools will find no use. Still, further comparison between conceptual art and music will help to establish ways of analyzing such challenging works.

Although the constraints on the producers of the *Wall Drawings* are considerably narrower than the constraints on the performer of *0'00"*, the difference between these works of art and music

can be construed as a difference in the degree of indeterminacy involved in their realization. That said, there are also important differences between the two with regard to the intended effects of indeterminacy in the reception of these works. LeWitt, for his part, sought to deemphasize the perceptual in order to emphasize the conceptual or the idea. Cage, by contrast, maintained that his attempted self-erasure was meant to allow listeners to appreciate the qualities of the sounds themselves. Whereas LeWitt's focus was on the conceptual affordances of process, Cage insisted that his compositional emphasis was on the perceptual affordances of sound. Their stated intentions were also reflected in ancillary elements of their works: Cage's instructions to his performers exist in the form of a score that was not available to his audiences during a concert performance; LeWitt's instructions make up the title for each drawing. In the *Wall Drawings* and in *0'00''*, LeWitt's generative idea and process are foregrounded; Cage's is concealed.

This point of distinction between LeWitt and Cage is also a site of Reich's explicit divergence from Cage. In "Music as a Gradual Process," Reich described the same impersonality and self-removal that LeWitt and Cage pursued, but claimed that it could emerge in his own music from the "psychoacoustic byproducts" of an entirely audible musical process.³³ For Reich, the processes involved in serialist and aleatoric music were unnecessarily complex and were virtually inaudible in the sounding music. Indeed, the formlessness of Cage's radical indeterminacy that appears as a roadblock to formal musical analysis presented challenges to his listeners as well. The audience at David Tudor's premiere performance of *4'33''* famously talked, laughed, and walked out before the

³³ Reich, "Music as a Gradual Process," 35.

four minutes and thirty-three seconds were up, an unpleasant surprise that bothered Cage. He explained in an interview with John Kobler years later:

They missed the point. There's no such thing as silence. What they thought was silence, because they didn't know how to listen, was full of accidental sounds.³⁴

Whereas Reich sought to write music that needed no additional instruction, audiences for Cage's "silent" and noisy music would need help if they were to understand and to hear things as he wanted them to hear—if they were to "know how to listen." In the following chapter, I will consider the motivations behind Cage's project of educating his listeners, and the means by which he attempted interventions into the listening culture of modern music. For now, it is enough to note the similarities and the differences between Reich's and Cage's thought, and to recognize the important role that writing played in advancing their cultural interventions.

"Composition as Process" was only one of the many essays, stories, and experimental text pieces that Cage published over the course of his career. Some were directly didactic, while others were full of jokes, anecdotes, and reflections on his idiosyncratic brand of Zen Buddhism. The first published collection of his writings, which included "Composition as Process," was aptly titled *Silence*.³⁵ Cage intended for his book to be thumbed through like a newspaper. It was a collection of essays to be read in any order, either in whole or in part. His penchant for quoting friends and

³⁴ Richard Kostelanetz, ed., *Conversing with Cage* (New York: Routledge, 2003), 70.

³⁵ John Cage, *Silence* (Middletown: Wesleyan University Press, 1961).

favorite literary influences comes to the fore throughout. Those cited include figures as disparate as Daisetz Suzuki, Henry David Thoreau, Erik Satie, and Buckminster Fuller, but of those mentioned over the course of *Silence*, among the most important to Cage's involvement in the visual arts was the American artist Robert Rauschenberg.

Although Cage did not meet Rauschenberg in person until 1951, the two had by then already encountered each other's work. Beginning in the late 1940s, both attended Black Mountain College, a school of experimental art in Asheville, North Carolina. There, Cage would have seen Rauschenberg's early monochrome works, and was certainly aware of his *White Paintings* (1951). Indeed, Cage claimed that it was Rauschenberg's example that pushed him to finally compose a silent piece of music:

His white paintings that I referred to earlier: When I saw those, I said, "Oh yes, I must; otherwise I'm lagging, otherwise music is lagging."³⁶

As a peer to Cage in the world of the visual arts, Rauschenberg provided inspiration and motivation. That said, the composer was also driven by an artist of a previous generation: Cage's hero-turned-chess partner, Marcel Duchamp.

It is with good reason that Peter Osborne says, "Duchamp haunts conceptual art with the specter of redundancy: the idea that he might have done it all before."³⁷ Although the term

³⁶ Kostelanetz, *Conversing with Cage*, 67.

³⁷ Osborne, *Conceptual Art*, 27.

“conceptual” only came to be attached to practices like Duchamp’s in the late 1960s, the way Duchamp spoke about materiality and interpretation echoes clearly in the language of LeWitt’s essay. In an interview with Katharine Kuh in 1960, Duchamp laid out a very brief history of recent art and its conceptual underpinnings, in part as an explanation for his series of Readymades (1913–1921). From his vantage point, the visual arts had gone through a transition since the middle of the nineteenth century, when the painter was liberated from having to produce works for a certain purpose to being able to make art with some autonomy.

Earlier, paint was always a means to an end, whether the end was religious political, social, decorative, or romantic. Now it’s become an end in itself.³⁸

Duchamp saw nineteenth-century impressionism as the beginnings of a turn toward the “retinal” or, in LeWitt’s terms, the “perceptual.” Although this nineteenth-century moment in painting coincides with the separation of the intra-musical from the extra-musical in Hanslickian formalism, the movements of painting and musical composition seemed, for the most part, to head in rather different directions. Beyond impressionism, other stylistic trends and movements moved further in the direction of perceptual emphasis: for Duchamp, the abstract expressionism of the 1940s existed at the apex of “retinal” art. As he saw it, the emphasis of paint and brushstroke went more or less unopposed until the surrealists and Dadaists of the early twentieth century, whose work he nevertheless quickly dismissed as insufficient. To satisfy the lack that Duchamp perceived in

³⁸ Katharine Kuh, *The Artist’s Voice: Talks with Seventeen Artists* (Evanston: Harper & Row, 1962), 7.

contemporary painting, one would need to somehow isolate this retinal component and minimize it in order to produce a new, properly “non-retinal” art. Duchamp’s own solution to this problem was his series of “Readymades,” ordinary, mass-produced found objects to which he gave titles and that he placed alongside works of art in galleries and exhibition spaces. These things were meant to be physically unremarkable and utterly replaceable, so as to minimize their retinal/perceptual appeal, the values that traditional art possesses. In selecting and displaying his found sculptures, Duchamp’s art objects took on an entirely different function than their previous, decidedly more pragmatic utility: the Readymades became technologies for the re-definition of the art object.

The Readymades are a series of objects selected and named by Duchamp from 1913 to 1923.³⁹ Often cited as the first examples of conceptual art, they include a comb, a shovel, a bottle rack, and, most infamously, a urinal.⁴⁰ For Duchamp, the point was not to choose objects that could carry a clear purpose or meaning, but to select his next Readymade without taste or judgment. He explained to Katharine Kuh the conflict of tricking himself into choosing objects neutrally:

My intention was always *to get away from myself* [emphasis added], though I knew perfectly well that I was using myself. Call it a little game between “I” and “me.”⁴¹

³⁹ The exact dates and the inclusion of some works with the “Readymades” aren’t always agreed upon. Some objects were either assembled by Duchamp or altered significantly, such that they no longer appear as they did when they were found.

⁴⁰ These are, respectively: *Comb* (1916), *In Advance of the Broken Arm* (1915), *Bottle Rack* (1914), and *Fountain* (1917).

⁴¹ Kuh, *The Artist’s Voice*, 92.

For Duchamp, an important rule in this game was to consciously limit the number of Readymades he would select per year in an attempt to prevent traces of his own preferences showing up in the series as a whole. With this deliberately detached process in mind, it is easy to imagine that just about anything might have ended up as one of Duchamp's Readymades, that the shovel and comb may just as easily have been a rake and a toothbrush. Indeed, the point of the Readymades was that "an ordinary object [may be] elevated to the dignity of a work of art by the mere choice of an artist."⁴² Even the few objects Duchamp did settle on may themselves be replaced: *In Advance of the Broken Arm* (1915) (the object for which was a snow shovel) is now on its fourth version: another shovel was chosen in August 1964 and is now housed in the permanent collection of New York's Museum of Modern Art. The eminent substitutability (and replaceability) of the Readymades makes clear that the perceptual qualities of each ordinary thing are essential to neither the work nor the series. It is only through a non-retinal, conceptual emphasis that the Readymades become meaningful.

Duchamp's playful attempts to get away from himself echo in Cage's implementation of indeterminacy and chance, in LeWitt's machinic ideas, and in Reich's musical processes. Indeed, the cultural interventions effected by Duchamp continue to reverberate in the work of artists and composers decades and even a century later. Of the many differences between them—with respect technique, aesthetic, and musical philosophy—there is also a clear and pervasive commonality: the attempted negation of their own personality from their creative work. To be sure, that these artists

⁴² André Breton and Paul Éluard, ed., *Dictionnaire abrégé du surréalisme* (Paris: Galerie des Beaux-Arts, 1938), 23.

and composers idealized impersonality does not itself provide a constitutive definition of conceptualism across art and music. For Peter Osborne, however, negation is the primary mechanism by which conceptualism effects its cultural interventions.

Conceptual Art, Conceptual Music, and Negation

Art historian and philosopher Peter Osborne writes that conceptual art is “art about the cultural act of definition—paradigmatically, but by no means exclusively, the definition of ‘art.’”⁴³ For him, conceptual art’s questions are pointed: among this form of art’s foremost exigencies is the definition of art itself. His meta-definition puts a point on the confusion of conceptualism, but it also exerts pressure on the matter of interpretation. For a painting to be about its subjects and for an opera to be about its characters is a straightforward enough notion, but how exactly can an artwork be about the definition of art? For Osborne, this act of definition necessarily involves negation.

Osborne traces in the history of conceptual art six distinct “lineages of negation,” each originating in a particular truism about art that some works of conceptual art have nonetheless called into question. I reproduce these six lineages here in full, as they will come to bear on various aspects of this dissertation:

⁴³ Peter Osborne, *Conceptual Art*, 14.

1. *The negation of material objectivity* as the site of the identity of the artwork by the temporality of “intermedia” acts and events. This led to a type of conceptual art linked to the history of performance in music and dance.
2. *The negation of medium* by a generic conception of “objecthood,” made up of ideal systems of relations. This led to a form of conceptual art closely related to the history of minimalism.
3. *The negation of the intrinsic significance of visual form* by a semiotic or, more narrowly, linguistically based conceptual content. This produced a type of conceptual art connected to academic philosophy and the history of the Readymade.
4. *The negation of established modes of autonomy of the artwork* by various forms of cultural activism and social critique. This generated a range of forms of conceptual art associated with the legacy of the historical avant-gardes of the 1920s in the politics of the 1960s, and with Constructivism and Productivism in particular.
 - a) works that use as their primary means intervention into, and the refunctioning of, existing cultural forms of publicity (“media”) in order to transfigure, and thereby help to transform, the structures of everyday life;
 - b) works that are explicitly focused on political-ideological conflicts and promote awareness of particular alternative or subaltern ideological positions;
 - c) works that direct their attention to the relations of power at play within art institutions themselves.⁴⁴

Together, these strains illuminate the broad and diverse field of conceptual art, but they also serve as an important step toward disciplining a mode of artistic production that often intentionally defies order and understanding. The negation of “material objectivity” in the transitory performances of

⁴⁴ All of the above is excerpted from Osborne, *Conceptual Art*, 18–19. For more on the legacy of earlier avant-gardes in 1960s politics, Osborne directs his reader to John E. Bold, ed., *Russian Art and the Avant-Garde: Theory and Criticism* (London: Thames & Hudson 2002), parts III–IV.

music and dance allows works of conceptual art to elude the assumed and expected objective permanence of the plastic arts. The temporality and ephemerality of these performances—precisely because they do not conform to the traditional material objectivity of visual art—make such pieces legible as works of conceptualism that invite reconsideration of what a work of art is, and what it could be. For Osborne, then, the strategy that conceptual art generally employs is to negate what it is that the work of art seeks to redefine, and to offer in its place a newly defined instance of that which had been negated. In proposing this model of redefinition-by-negation along with these lineages, Osborne harnesses conceptualism's conundrums and provides inroads into theorizing what a work of conceptual art can accomplish, not just what it negates. This theoretical maneuver is crucial to establishing an analytical approach that does not throw its hands up at noise and silence—and that does not simply re-state the intentions of artists and composers such as LeWitt, Reich, Cage, Rauschenberg, and Duchamp. Osborne's work instead provides a framework for an analytical approach that historicizes works of conceptual music and makes them available for interdisciplinary critical analysis by discursive and qualitative methods.

In both their breadth and their specific stylistic affiliations, Osborne's lineages also provide fairly stable links between movements in the visual arts and the world of musical composition. Minimalism, for example, is a branch of conceptual visual art associated with the negation of medium. Minimalism in music, on the other hand, is a genre that is often reduced to simplistic technical description. As Jonathan Bernard notes in his comparative study of minimalist aesthetics in art and music, music critics generally either praise the music of Reich, Glass, Riley, and Young for

“its newness and ‘accessibility’ or have derided it for its supposed shallowness.”⁴⁵ Bernard’s was a step in the direction of applying the field of art theory and criticism to the field of music theory and analysis, a direction which I pick up in Chapter 3 of this dissertation. Genre is, however, only one way to think across conceptual art and conceptual music.

In order to delimit and define a conceptual art that engages sound, Seth Kim-Cohen borrows from the words of Marcel Duchamp to provide a pair of definitions: “A non-retinal visual art is liberated to ask questions that the eye alone cannot answer”; “a non-cochlear sonic art appeals to the exigencies out of earshot.”⁴⁶ The clear delineation is that conceptual art and its questions and exigencies are the domain of the mind in ways that other art is not. Of course, all art depends upon the mind, but Kim-Cohen means that there is a something-else to conceptual art of any medium, that it “emphasize[s] its concepts, *expressly* at the expense of other aesthetic aspects.”⁴⁷ To be sure, this something-else is never entirely independent of the materials that make up the work. But Kim-Cohen rhetorically locates the viewing and listening experience for ordinary art in unthinking sensory organs in order to emphasize conceptualism’s engagement of conscious attention, intersubjectivity, and intertextuality. This is, for the very most part, in keeping with LeWitt’s conceptual-perceptual dichotomy: the mentally interesting vs. art whose substance lies in visual perception. The key difference between LeWitt and Kim-Cohen, however, is that Kim-Cohen does not adhere to the hard and fast distinction between the conceptual/non-cochlear and the perceptual/cochlear.

⁴⁵ Bernard, “The Minimalist Aesthetic,” 87.

⁴⁶ Kim-Cohen, *In the Blink of an Ear*, xxi.

⁴⁷ Kim-Cohen, *In the Blink of an Ear*, 52.

Work on percepts and concepts since LeWitt's essay has problematized the simple opposition of the two. Most recently, Andy Clark has shown that the perceptual cannot be characterized as entirely pre-fact while the conceptual is post-fact, largely because the perceptual is already shaped considerably by conceptual knowledge.⁴⁸ That is, the supposedly unthinking, pure input that the perceptual represents for LeWitt does not exist for the predictive mind that anticipates and calculates. While it was an effective and strategically convenient rhetorical move for LeWitt, such a clean dichotomy is now outdated. These cognitive entanglements aside, the difference between LeWitt's proclamations and the critical perspective represented by Kim-Cohen can also be understood in terms of negative and positive. LeWitt's creative method seems a negative one which deemphasizes the perceptual in order to shift focus to the conceptual idea and eliminates "caprice, taste, and other whimsies" so the artist may "explore his idea thoroughly."⁴⁹ It is in this negative light that the term minimalism seems particularly apt. Kim-Cohen, on the other hand, operates from a critical position that focuses on both the particulars of the works at hand—their negative strategies included—and upon the larger cultural picture, in which these artists and works made interventions into the contemporary discourses of avant-garde art and music. This contemporary critical position answers the polemical negativity of artists and composers seeking to distinguish themselves from their traditions and makes legible the sorts of effects that these works of conceptual art and music create.

⁴⁸ Andy Clark, *Surfing Uncertainty: Prediction, Action, and the Embodied Mind* (New York: Oxford University Press, 2016).

⁴⁹ LeWitt, "Paragraphs."

For Kim-Cohen, one particular effect—or perhaps a failed effect—of conceptualism upon the medium of music is the distinction between the “extra-musical” and the “intra-musical” that I discussed earlier in this chapter. Citing the prevailing perspective of music studies, in which the “extra-musical” is an operative concept, he points out that “music has always functioned according to Greenbergian precepts.”⁵⁰ Art critic Clement Greenberg was notoriously disinterested in matters outside of or apparently separate from the artwork, and Kim-Cohen sees music’s obsessions with medium-specificity as falling into line with this thinking. After all, the closed systems of musical notation all but demand that matter outside of what the score calls for should be considered “extra-musical.” Defined thus, music is permanently insulated, unable to reach outside its bounds, unable to define itself. Delimitation and definition are, however, the crux of Osbornian conceptualism. If music finds itself fenced in by its “Greenbergian precepts” and medium-specificity, then there might just be a viable escape route to be found in conceptualism’s mechanism of redefinition via negation.

The first item in Osborne’s list of lineages is explicitly associated with a history of performance in music and dance: a negation of material objectivity via temporality. And, indeed, the inherent ephemerality of music’s passing in time poses a problem to an ontology of individual musical works—or of artworks that exist temporally as music and dance do. Lydia Goehr’s historicist approach conjures an “imaginary museum” of the Western art music canon, wherein musical works exist at once apart from their texts—their notated scores—and, at the same time, seem to exist apart from their fleeting sonic realization. Hers is an account of the challenges that temporal media pose to

⁵⁰ Kim-Cohen, *In the Blink of an Ear*, 39.

the canonical constructs of visual art's tradition of fixed objects.⁵¹ Without material fixity, musical objects fail to withstand the pressure of permanence placed upon them by structures of thought derived from visual art's order of physical objects. As a result, music's canon appears to stand on shaky ontological ground. Its museum—its hall of great works—does not need to be somehow reimagined such that it might be able to accommodate the real and tangible objects of music. Put another way, this idealized fusion of text and sound imagined in the “work concept” remains a figment of classical music's imagination.

It was in the negation of material objectivity that artists and composers active during the 1960s and 70s—along with movements such as Fluxus—engaged in various creative ventures that are often gathered under the rubric of “performance art,” and that can appear to pull the medium of visual art toward the medium of music and *vice versa*. Indeed, a number of Fluxus artists made explicit motions toward this sort of fusion of media—and, in so doing, they also made forays into fusing work and concept, sound and text. While some works diverged entirely from the classical tradition, many shared the recognizable historical topics of classical concert music: instruments, scores, and iconic ensembles like the orchestra are central to more than a few works in the Fluxus Performance Workbook.⁵² For example, George Brecht's *Concerto for Orchestra, Fluxversion 3* (1962):

The orchestra is divided into two teams, winds and strings, sitting in opposing rows. Wind instruments must be prepared so as to be able to shoot out peas. This can be accomplished by inserting a long, narrow tube into wind instruments. String

⁵¹ Goehr, *Imaginary Museum*.

⁵² Ken Friedman, Owen Smith, and Lauren Sawchyn, ed., *The Fluxus Performance Workbook*, accessed May 24, 2016, <http://www.deluxxe.com/beat/fluxusworkbook.pdf>.

instruments are strung with rubber bands which are used to shoot paper missiles. Performers must hit a performer on the opposite team with a missile. A performer hit three times must leave the stage. Missiles are exchanged until all performers on one side are gone. Conductor acts as referee.⁵³

Concertos are normally written by composers, but Brecht was no composer, was he? If he was not, then what exactly is his *Concerto for Orchestra, Fluxversion 3*? To begin to answer this question is to re-inscribe Osborne's central point, that conceptual art is often about the definition of art itself. Indeed, in order to categorize Brecht's orchestral pea and missile fight as either art or music, one must first clearly define both media. There is plenty to suggest, at least at first, that Brecht's piece is music—to begin with, he has titled it *Concerto for Orchestra*. (In an imagined performance, one assumes that this orchestra would be arranged and seated on stage as they would be for a performance of any standard work from the Western canon, and that this would not be the only piece on their concert program.) Nevertheless, there aren't any pitches or rhythms, no melody nor harmony. Indeed, the emphasis in Brecht's concerto doesn't seem to be so much on the *sounds* of the performance, but rather on the sheer spectacle of an orchestra—a group of people normally so carefully coordinated—engaged in a wild, childish battle.

Brecht's concerto brings music's own struggle with material—if not materiality—to the fore. It is one result of music's standardization and reproducibility via notation that traditionally “musical” sound may be defined by excluding ordinary sound and noise. Brecht's *Concerto* features an ensemble

⁵³ *The Fluxus Performance Workbook*, 26

that might appear to be fully prepared for a performance of common practice period symphonic literature, but that in fact stages a performance in which discrete pitches or rhythms are conspicuously lacking. Its negation of these standard musical sounds allows the concerto to be *about* the differentiation of sound, noise, and music. While Brecht's work exists primarily in text—rarely if ever performed—and Cage's works are performed frequently, each centers on the negation and cultural definition of musical sound. This negation draws upon resources offered by both text and sound, a bifurcation between musical materials that appears sharper in these experimental works. Both text and sound thus complement one another even as they diverge, a relationship more apparent in the work of Cage and Brecht, but which shapes the composition, performance, and the formal analysis of classical music as well. Indeed, it is an expanded notion of formalism, one that recognizes musical works as ecologically situated, and that allows for a musical analysis of works such as the *Concerto for Orchestra*, *4'33"*, or *0'00"*.

Toward a New Formal Analysis

Forms and “formalist” analysis have seen something of a rehabilitation in literary theorist Caroline Levine's recent work, in which she renders myriad multi- and inter-media objects and concepts comparable and analyzable through a much-expanded notion of form. Her re-imagining of such apparently simple concepts as whole, rhythm, hierarchy, and network provides a critical landscape in which she is able to subject hugely disparate things to similar analytical scrutiny, placing them in dialogue with one another and forging conceptual relationships rife with meaning. Even from this

broadened viewpoint, however, indeterminate things like Cage's musical compositions may nevertheless appear formless:

There are many events and experiences that do not count as forms—and we could certainly pay close attention to these: fissures and interstices, vagueness and indeterminacy, boundary-crossing and dissolution.⁵⁴

In his musical compositions and writings, Cage re-conceptualized “silence” as an inevitable presence and sonic abundance rather than an utter absence or lack of sound—that is, as a rich sonic landscape rather than an empty fissure. Nevertheless, this new, noisy silence's unpredictability and irregularity, its unrepeatability and its restless aleatory mean that its contents simply do not sit still long enough to take form. Coupled with sound's inherent ephemerality, indeterminate musical compositions resist the kind of analysis that both music theory and Levine's theory of forms employ. And yet, the advantage of Levine's expanded notion of forms is that they are translatable across different media: musical forms need not exist solely in musical sound. There are forms to be found in *4'33"* and *0'00"*, but they are legible only within a Clarke-inspired, ecological view of these indeterminate compositions as musical works.

Cage made sure that there would be plenty of familiarly musical things in the background, contexts, and surroundings of performances of *4'33"* or *0'00"*: a stage, an audience, instruments, or, as in Kotz's analysis, text scores. By composing these musical works and persistently programming

⁵⁴ Caroline Levine, *Forms: Whole, Rhythm, Hierarchy, Network* (Princeton: Princeton University Press, 2015), 9.

them on concerts, Cage secured his music's place alongside other, more conventional music in the various traditions and practices of musical production and performance. Without these trappings of classical music, Cagean sound, noise, and silence might never have been considered "music" at all—he might have been called an artist, his work "performance art." His dogged insistence on maintaining his role as "composer," creating "scores," and performing musical "compositions" might seem like a matter of superficial labels, semantic triviality. Nonetheless, no matter what his work sounded like, these names and titles allowed him and his music access to the systems and constructs that surround, support, and define musical practice.

Without such musical markers as the piano, virtuoso pianist David Tudor, and the Maverick Concert Hall in upstate New York, the sounds that attended the 1952 premiere performance of *4'33"* might have gone entirely unnoticed. Much to Cage's chagrin, it seems these sounds did, in fact, go unnoticed by most present. As noted earlier, Cage believed that his audience simply "didn't know how to listen."⁵⁵ For the generous analyst, *4'33"* serves as a case study in how a silent piece of music can suggest that musical sound may be found in the ever-present silence that surrounds them. Staged before an uninitiated audience, however, *4'33"* also serves as a case study in how a silent piece of music can fail altogether, suggesting nothing but an apparent end to the concert. Throughout the rest of his life and career, Cage would try to avoid such failures, and to teach his listeners and readers "how to listen." Many of his interviews, essays, and text works are dedicated to communicating clearly his musical philosophy and his understanding of sound and silence. But he also continued to

⁵⁵ Kostelanetz, *Conversing with Cage*, 70.

refine his compositional process—not necessarily by re-claiming some degree of control over the sounds of his music, but by more carefully considering and crafting the role of the forms that surround his musical compositions and their performances.

What Cage learned from the premiere of *4'33"* would affect how he went about composing other works of radically indeterminate music such as *0'00"*. There are many differences between the two related works—some stark, others subtle. Where *4'33"* offers silence, *0'00"* offers heavily amplified sound; where *0'00"* offers its performer moderate freedom in the making of sounds, *4'33"* requires the performer to make no sound whatsoever. The premiere performance of *4'33"* at the Maverick Concert Hall has been well documented, described, and analyzed elsewhere; *0'00"*, on the other hand, has not been nearly so celebrated. To conclude this chapter, and to make clear the compositional refinement from one work to the next, I offer an analytical vignette of a concert performance of *0'00"*.⁵⁶

0'00"

For the third piece on a concert program, a table stands in the middle of the stage. On this table are a bartender's standard cocktail-mixing tools: shakers, spoons, strainers, bottles, highball glasses, and a

⁵⁶ "Rob Haskins and Friends: A Concert to Celebrate the Centenary of John Cage (1912–2012)," Friday, August 31, 2012 (Johnson Theatre, University of New Hampshire).

bucket of ice. A single performer wearing a half apron enters to applause. He stands in front of the table for a moment of preparation, then picks up his utensils and begins to make a drink. The hall fills with sound. Contact microphones attached to the tabletop pick up each swirl and stir, and the hall's sound system dutifully sends every detail to the audience. The crack of an ice cube in room-temperature rum, the plop of a dash of bitters, and the fizzing of club soda poured from bottle to glass all project outward from the stage in high fidelity.

The many-thousands-of-dollars sound system in the hall is normally reserved for the amplification of even more expensive musical instruments. The stage usually supports accomplished musicians, actors, and dancers. The audience that fills the seats expects great performances of great composers, playwrights, and choreographers. But this sacred space and its attendant resources, including staff, equipment, and facilities, are all in service to the sonic byproducts of bartending—at least for this performance of John Cage's *0'00''* (the text score for which is reproduced in Figure 1). These sounds are treated as fine art, literally and figuratively allowed to occupy center stage.

0'00"

SOLO TO BE PERFORMED IN ANY WAY BY ANYONE

FOR YOKO ONO AND TOSHI ICHTYANAGI

TOKYO, OCT. 24, 1962

John Cage

IN A SITUATION PROVIDED WITH MAXIMUM AMPLIFICATION (NO FEEDBACK), PERFORM
A DISCIPLINED ACTION.

WITH ANY INTERRUPTIONS.

FULFILLING IN WHOLE OR PART AN OBLIGATION TO OTHERS.

NO TWO PERFORMANCES TO BE OF THE SAME ACTION, NOR MAY THAT ACTION BE

THE PERFORMANCE OF A "MUSICAL" COMPOSITION.

NO ATTENTION TO BE GIVEN THE SITUATION (ELECTRONIC, MUSICAL, THEATRICAL).

10-25-62

THE FIRST PERFORMANCE WAS THE WRITING OF THIS MANUSCRIPT (FIRST MARGINATION ONLY).

THIS IS 4'33" (NO.2) AND ALSO PT.3 OF A WORK OF WHICH ATLAS ECLIPTICALIS IS PT.1.

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Fig. 1: Text Score for John Cage's *0'00": Solo to be Performed in Any Way by Anyone* (New York:

Henmar Press, 1962).

The performer mixes a variety of cocktails over the course of about thirty minutes and is finished. He accepts his applause, bows, and walks off stage. The stage lights fade, the hall lights go up, and the stage crew hurries out to exchange the tools, table, and fresh cocktails for a new batch of instruments. From beginning to end, *0'00''* is like any other musical performance. Everyone and everything involved are in their right places, playing their customary roles; it's just that there are no "musical" instruments, no "musical" tones or rhythms. It is as though the bartender and his drinks have been cut out of ordinary, mundane life and pasted into the concert hall.

A scene like this one ought to raise a number of questions, especially for readers, listeners, or concert-goers who haven't heard or seen a performance like this before. One question—which echoes xylojet's response to Lucier's *Silver Streetcar*—might be: is *0'00''* really "music" at all? Without singing or playing, without beat or melody, these sounds of bartending may seem only to be mere sounds. In fact, the mixing of cocktails is only one of countless possible realizations of the radically indeterminate *0'00''* allowed by its text score.

In past performances by Cage and others, the sounds for the piece have come from an amplified typewriter, contact microphones attached to the composer's throat as he sipped coffee, or from the cleaning of violin strings.⁵⁷ Upon further reflection and study of the score, further questions may follow: If this is indeed "music," then what kind of music is it? Why would someone write this music? What does it mean? Does this music really *mean* anything at all? These questions are, not at

⁵⁷ William Fetterman, *John Cage's Theatre Pieces: Notations and Performances* (Amsterdam: Harwood Academic Publishers, 1996), 88; YouTube performance by EquineViolinist, uploaded May 30, 2012, and accessed Sept. 27, 2016: <https://www.youtube.com/watch?v=PdTsrABY3AE>.

all coincidentally, some of the foundational questions that drive the discipline of music theory—a discipline that employs close reading and rigorous technical analysis of works of music to develop answers to these questions. Whether one decides that it’s “music” or plain old sound, the charge for the music analyst remains the same: to analyze *0'00''* as a musical work. And so, an academic music theorist might have even more doubts to add to the questions I’ve posed above. One may reasonably doubt whether this indeterminate, noisy music is really *analyzable* at all, what such analysis might look like or mean, and whether it would constitute *music* analysis.

In addition to all of the above problems, questions, and puzzles that this music poses, its extreme indeterminacy may pose the biggest challenge of all. While an individual performance of *0'00''* consists of definite sounds, the musical composition that is *0'00''* does not specify the sounds that will constitute its performance. In fact, that the sounds of *0'00''* should change from one performance to the next is written into the fifth line of the work’s text score. Thus, to parse the (non)musical sounds that constitute any one performance of *0'00''* would not be an especially helpful exercise. To analyze the composition that is *0'00''*, one needs to do more than, say, examine via spectrogram the sounds of a bartender mixing drinks. To reiterate: these sounds were but one performance of *0'00''*—and, per mandate of the score, all other performances will sound quite different. What all performances of *0'00''* are likely to have in common, though, are many of the extra-musical forms of musical production and performance.

Many of these forms can be roughly determined from the instructions laid out in the written score for performance of the work. The possibility of “any interruptions” and the instruction that “no attention be given the situation” by the performer are both attempts on Cage’s part to prompt an unceremonious execution of whatever disciplined action the performer has chosen. Nevertheless,

0'00" is billed as a piece of "music" and, as such, its performers, concert programmers, and concertgoers will be ready to pay a certain kind of attention to whatever is about to happen. They are at a concert, after all, and so they will be ready to listen to music.

For a concert such as the one I've described, the performer has procured a score, chosen the disciplined action with care, practiced this action, and checked sound levels in the hall prior to the concert. The audience is, of course, expected to follow concert etiquette. There will be other works of music on the program, there will almost certainly be musical instruments around, there will be applause, and there will be a stage of some sort. The required amplification sets some practical, technological limits on when and where the piece can be performed—it needs to be somewhere with electricity for amplification, it should probably be sometime within local noise ordinances. This is to say that in every dimension—excluding its sounds—*0'00"* fits the description of a piece of "music." Its background, context, and surroundings should all be familiar to concert-going audiences, but the music has been switched out and replaced. To put it another way: the forms that make up and surround this concert experience are all familiar, though their sonic contents are not.

The forms that surround music are integral to Clarke's ecological perspective, from which he seeks to incorporate any and all factors in a listener's perception of music into scholarly consideration and analysis. Of course, listeners react not only to sounds, but also to information in their environments. Perception, as Clarke defines it, is "the awareness of, and continuous adaptation to, the environment"; for him, perceiving is a matter of "trying to understand, and adapt to, what is

going on.”⁵⁸ Perception of music involves basic orientation as to the source of sounds, as in Clarke’s introductory vignette, in which the contents of an audio CD are discovered. But listeners might also glean more nuanced meanings from what surrounds them, what surrounds the music, and what the music might jog in their memory. Clarke goes on to analyze Jimi Hendrix’s 1969 performance of “The Star-Spangled Banner” on electric guitar. He uses an example of an American listener who heard the bugle-style arpeggiation of “Taps” in Hendrix’s use of open-string harmonics on the guitar, while Clarke, who is British, did not. This tune, played at military funerals, provides different contextual meaning and brings new affective potential to Hendrix’s performance.⁵⁹

Surely an audience of *0’00”* is like any other from this perspective: its listeners perceive the piece’s surroundings as well as its sounds, and so they will “[try] to understand, and adapt to, what is going on.” Clarke’s interventions are useful in discussions of more conventional music, where analytical myopia makes it easy to forget that the musical work—with its privileged ontological status and claims of autonomy—is always surrounded and supported by other things. If music theory’s usual musical repertory benefits from Clarke’s ecological perspective, analysis of Cage’s indeterminacy, noise, and silence cannot do without it. But while Hendrix’s guitar rendition of the national anthem of the United States is obviously “musical,” an audience for *0’00”* must try to understand, and adapt to, what is going on in a different way—they must perceive this kind of “music” differently.

⁵⁸ Clarke, *Ways of Listening*, 6–7.

⁵⁹ Clarke, *Ways of Listening*, 57–58.

The incorporation of chance into his compositional process and an increasing reliance on performer choice and improvisation at times left Cage with little to “compose.” Instead of carefully crafting the sounds of his own music, Cage took to accessing, manipulating, and redefining what a “composer” was, what a “score” might consist of, and what constituted a “musical” composition. Among the perceived forms in a Clarke-inspired, music-analytical ecology are those of a familiar concert experience—the composer, the hall, the stage, the lights, the program, the audience, and the amplification through a sound system. These familiar forms become familiar through regular, repeated experience: with each new concert comes a new music-perceptual event, wherein the function of these extra-musical forms in musical meaning-making is reiterated and re-inscribed. For many people, concert attendance is a frequent pastime. Orchestras and opera companies, university performance programs, and touring ensembles all have concert seasons with more-or-less weekly offerings. Over time, one becomes accustomed to concert etiquette and develops an ever-more-refined sense of what to expect—of what and how to perceive in Clarke’s expanded, ecological sense.

The repetition of concert calendars, schedules, and regular attendance constitute what Levine calls a “rhythmic” form. Her meaning is not restricted to the local, entrainable rhythms of musical notes; rather, she means a sense of rhythm on a much larger scale. Levine forwards the notion that repetition over any lengths of time can help to structure experience, whether daily work schedules, weekly appointments, yearly seasons and anniversaries, or centennial celebrations.⁶⁰ These diverse, overlapping rhythms can be precise or approximate, and they can be frequent or infrequent. For the

⁶⁰ Levine, *Forms*, 49–50.

purposes of my analysis of *0'00"*, the concert setting I've described is one constitutive event of a larger rhythmic form that has instilled in audiences a number of habitual cultural practices and expectations. Familiarity with the ritual of applause, fading of lights, bowing, and audience silence during performance speaks to the breadth, depth, and sheer number of these rhythmic forms. And, as Cage was well aware, familiarity grants these forms great power and influence in the realm of musical perception, experience and meaning.

These forms were in play at the premiere performance of *4'33"*, and Cage meant for them to help make the point that there is no such things as silence—only music. As we now know, instead of finding music in silence, the uninitiated audience missed the point (or missed *Cage's* point): these forms seemed to direct them not to the coincidental sounds in the performance space, but to nowhere at all. To those in the audience who missed the point, nothing was happening, and so they talked and walked out. Here, then, is the most important difference between *4'33"* and *0'00"*: if *4'33"* makes the point that any sound could be music, *0'00"* provides an example of such sounds. Where the performer of *4'33"* seems to do nothing at all, the performer of *0'00"* does something. And, crucially, that something is *amplified*. A bartender entering the stage should capture an audience's attention in a way that Tudor's inactivity did not, but just in case his audience should miss the point again, Cage decided to pipe the sounds of *0'00"* through loudspeakers. Silence may easily go unnoticed; "maximum amplification" is impossible to ignore.

To place a bartender in a concert hall is to put an unexceptional activity in the center of an exceptional frame. To move the sounds of mixing drinks from regular life and the outer world into the confined performance space, onto the stage, and under the lights and gaze of the audience is to suggest that these sounds *are* music, that they *do* belong here. The pre-existing physical and temporal

forms that describe and surround a typical musical performance all work for and with Cage's piece: the concert hall, the ticket booth, the rows of seats, the stage, the printed score, the crew, and even the other musical works on the program are all props that the sounds of *0'00''* need in order to pose as music. Perhaps most importantly, the audience's pre-existing ideas of what music is or can be establish the conditions in which the sounds of bartending can be a negation of what they were expecting. Their expectations have been ingrained by large-scale, repetitive, rhythmic forms of regular concert attendance and ritualized listening practices that likely began as they were first learning and constructing their own concepts of art and music. The audience that does not recognize any pitches or rhythms but does hear sound—that asks itself “are these sounds music?” or “what kind of music is this?”—begins to question, to define and redefine not just the sounds at hand, but the medium of musical sound. It is through these extra-musical forms that Cage composed not only individual works of music, but attempted to re-compose and redefine the medium of music itself.

Cage composed through these rhythmic and extra-musical forms rather than through traditionally musical sound, in order to propose his own definition of music. This is not to suggest that Cage's emphasis was not on the sounds; for he insisted that the listener pay attention to the quality of the sounds themselves, that *this* was real music. But a listener's attention to sounds themselves is itself the result of a process—it is the activity of someone who, according to Cage, “know[s] how to listen.” That a listener might learn from his music “how to listen” would be, for Cage, the ideal outcome of the sonic, formal negation that constitutes so much of his music. It is through this formal negation that Cage's music opens up opportunities to elaborate and redefine what formalism and “formal analysis” might be.

Music such as Cage's poses ontological and methodological problems for the practice of music analysis, but consideration of the forms that pervade the ecological perception of music are one important way into discussing how this music engages its audiences in the definitional questions of conceptual music. Indeterminacy, noise, and silence, then, are not so unanalyzable or formless after all—in fact, they perform some meta-analytical work of their own. By challenging received notions of musical sound and organization, Cage's music makes sound and organization, along with forms, formalism, and music analysis available for elaboration, redefinition, and re-composition. In works such as *4'33"* and *0'00"*, Cage as composer does not cease composing simply because he doesn't write notes and rhythms. Rather, he accesses and manipulates the material, temporal, experiential forms that surround music as a cultural act and product, drawing them into his work and composing through them a listening subjectivity in which sound and noise become music. Perhaps this explains the recollection of Cage's friend and fellow composer Christian Wolff:

[Cage] never regarded a piece as finished until it was performed. It was all very well to put it down on paper, but it was pointless unless it got out there somehow to somebody.⁶¹

Without a performance, Cage's music was not yet music—because the sounds had not yet been heard, and because the music had not yet taken form.

⁶¹ Christian Wolff and David Patterson, "Cage and Beyond: An Annotated Interview with Christian Wolff," *Perspectives of New Music* 32, no. 2 (Summer 1994): 71.

John Cage's works of indeterminate music might thus be construed as technologies for the redefinition of musical sound by its conceptualist negation. These technologies could, however, fail in their intended effects, much to the composer's frustration. Cage persisted in his project of redefining musical sound by revising *4'33"* and composing sequels, including *0'00"*. As hinted at by Wolff with regard to Cage's insistence upon performance, the conundrums, the pitfalls, and the great potential of works of conceptual music is often most evident in the social setting of musical performance. Indeed, Cage deemed that, if they were to succeed, his musical technologies needed to sound before an audience amidst the many (extra-)musical forms that surround and support a live musical performance. In the following chapter, I advance my analytical argument around Cage's work by picking up the relationship between Levine's forms and Clarke's musical ecologies in analyses of both *4'33"* and *0'00"* as further refinements of a musical technology. Motivated by difficulties both personal and professional, Cage decided that his project of musical composition should expand to involve another kind of composition altogether. If the audiences that were so important to the success of his music did not already know how to listen, Cage decided that he would need to teach them himself.