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INDETERMINACY AS SOCIAL PRACTICE IN CONTEMPORARY ART MUSIC

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To my parents,

For their love, support, and humor. And for encouraging me, above all else, to be whatever it is that I am.

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ABSTRACT

This work examines the social practice element of contemporary indeterminate music. Through historical and critical research, and analysis of some contemporary indeterminate works, I provide a view of indeterminacy as a subversive experimental music practice that challenges both the forms of alienation present in Western art-music culture and the concepts and power structures that have contributed to them. I compare and contrast indeterminacy with other terms and concepts related to “open works,” specifically aleatory, chance, and improvisation. A discussion of various philosophical viewpoints regarding the concept of the musical “work” and the role of the composer reveal ways in which indeterminacy challenges those enculturated notions which underlie various modernist alienations. Critical analyses of several indeterminate works by composers Christian Wolff, Mario Lavista, Tod Machover, John Zorn, and Carolyn Chen demonstrate some social practice strategies of countering or responding to alienation employed by contemporary composers.

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INTRODUCTION

There are many misconceptions regarding what indeterminate music is. There are also many misconceptions about indeterminate music's aesthetic, social, and political contexts within contemporary Western art music. Additionally, the distinctions between indeterminate music and other related types of open works are often ambiguously or poorly defined. Part of the reason for this is that the concept of the open work and the various musical practices that it denotes have been and remain a continuous process of thought, conversation, and musical experimentation. Musicological and historical accounts, particularly those of the twentieth century, are convoluted due to the fact that the concepts and terminologies are relatively recent, and many scholars and authors were in the challenging position of writing on the topic as it was unfolding. Consequently, certain events, definitions, and contextual or ideological issues—the reasons why composers began to explore the open work concept, the relationship of improvisation to indeterminacy, and the meanings of the terms indeterminacy, aleatory,¹ and chance—were not consistently agreed upon. Recent scholarship has sought to untangle the

¹ The terms “aleatory,” “aleatory music,” “aleatoric music,” and “aleatoricism,” are all based on Pierre Boulez’s lecture “Aléa,” presented in Darmstadt in 1957. Because the terminology is a etymological distortion, various authors have used each of these forms and they are considered synonymous. In this study, I will use the term “aleatory” when referring to a concept and “aleatoric music” when discussing music in the form of works. Some specific historical clarification regarding the origin and definition of this terminology will be addressed in Chapter 1. For more on the origin, use, and other issues regarding this terminology, see Rebecca Y. Kim, “In No Uncertain Musical Terms: The cultural politics of John Cage's indeterminacy,” (Phd Diss., Columbia University, 2008), 34-74.

complex history and terminological issues of open works, but contemporary indeterminate music has received little scholarly attention.²

This study will examine contemporary indeterminate practices by expounding the historical paths from which they have emerged and the characteristics that position them as a grouping of subversive experimentalism. The primary characteristic under investigation will be the element of social interaction, which plays a fundamental role in the process of creating the musical work, from composition through performance. Rebecca Kim, author of some of the most recent scholarship in indeterminacy, notes that this social element of indeterminacy binds together what was “broadly conceived as a set of techniques, ethics, and aesthetic guidelines to ‘open’ the work to the variabilities of musical production,” by presenting “a revised paradigm to the traditional creative process by accenting the importance of the ‘human variable’ in performance.”³ The present study will demonstrate that social interaction, or the “human variable,” in indeterminacy is able to exist in any part of the musical process (not solely in performance). Regardless of how the “human variable” is applied, its application seeks to reevaluate the roles of the composer, performer, and audience (or public). It is from this position that I argue that contemporary indeterminate music is an essentially social practice characterized by ideals aimed toward challenging or subverting beliefs and practices within modernist Western art music that have contributed to various forms of social alienation.

Studies in indeterminate music most often focus on the mid-twentieth century (1950s-1970s) and are centered around composer-philosopher John Cage and his

² In this study, I will use the phrase “contemporary indeterminate music” when referring to indeterminate works by living composers.

³ Rebecca Y. Kim, “In No Uncertain Musical Terms: The Cultural Politics of John Cage's Indeterminacy,” (PhD diss., Columbia University, 2008), 2.

contemporaries.⁴ However, indeterminacy has undergone a great deal of change since, in both concept and in practice. In fact, Cage himself did not maintain the same ideological and aesthetic attitudes or compositional practices throughout his own career. It is best, then, to understand indeterminacy not as a fixed concept, but as an ongoing discourse in experimental music.

An historical background will be necessary to understand the influences that have contributed to the unique practices of living composers. Although the figure of John Cage will play a prominent role throughout the study, the main purpose of this discussion will not be to provide an historical account of Cage's philosophy, but to understand how his ideas prompted new experimental music trends. Additionally, it will be useful to compare differences between Cage's early ideas about indeterminacy and discrepancies that we see in contemporary indeterminacy. For example, throughout much of his exploration of indeterminacy, Cage sought to restrict many aspects of improvisation (such as the performer making decisions based on taste or experience) within his open works, while some other contemporary composers choose to highlight such aspects. Such comparisons help us to understand the multitude of ways in which composers have sought to utilize indeterminacy and not to assume that indeterminacy, as a broad concept, is defined by Cage's early ideas. Although new studies on Cage and the early years of indeterminate music have been significant in clarifying many important historical factors, studies such

⁴ Kim suggests that John Cage's 1958 lecture, "Composition as Process: Indeterminacy," presented at the Internationale Ferienkurse für Neue Musik in Darmstadt, Germany, was the beginning of the explicit use of the term in reference to a particular musical concept. Additionally, Kim suggests that Cage appropriated the term from Christian Wolff's "New and Electronic Music" (1957-58). See Kim, "In No Uncertain Musical Terms," 1-2, 55.

as this, which focus on contemporary music, may prevent a false sense that indeterminacy was prominent only in the middle of the twentieth century.

Indeterminacy is often mistaken to be synonymous with aleatory, chance, or improvisation. Such assumptions not only propagate historical inaccuracies, but neglect significant social and musical nuances amongst the concepts and practices that these terms signify. For example, although they may share many musical characteristics and some common ideals, indeterminacy and aleatory inhabit unique cultural and political positions within the U.S. American and European post-WWII avant-garde scenes. Understanding the complexities and nuances of these terms will position indeterminacy as a political strategy embraced mostly by U.S. American experimental composers in order to differentiate their practice from their European counterparts.

Apropos to the clarification of the terminology of open works is a discussion of the distinction between “indeterminate music” and “indeterminacies in music,” as it is sometimes argued that all music is indeterminate music. In spite of the fact that any musical performance scenario, score, or set of instructions demonstrates some level of indeterminacy or performer agency, an “indeterminate work” is distinguished by the explicit intention to leave some elements indeterminate; it is not a side-effect of the limitations of notation, but is a fundamental structuring parameter of the work. Additionally, “indeterminate music,” as opposed to music that contains some level of indeterminacy, is marked by an ideal that is situated in social practice and interpersonal connectivity. It affords agency in some part of the musical process to a person or people other than the specified author or composer(s) with a collaborative or connective aim. It is also important to understand indeterminacy as a spectrum regarding the degree to

which certain parameters may be unfixed or unspecified, and not to misunderstand it as an either/or function. Additionally, indeterminacy does not necessarily operate in the same way from one work to another.

There are a multitude of possible manifestations of indeterminate works. Certain common assumptions or misconceptions—for example, that an indeterminate work must involve a score in which some decisions are left to the performer—can result in an incomplete or limited understanding of the concept of indeterminacy and the vast repertoire of works that utilize it. The works examined in this study will present some alternative scenarios. For example, in his piece *A Toronto Symphony* (2013) Tod Machover utilized social media applications to allow the general public to participate in the compositional process by generating and sharing electronic musical material. In another scenario the composer may participate in the performance of his or her own indeterminate work, as Mario Lavista did in the 2013 performance of *Música para un árbol*.

Contemporary indeterminate music aims to subvert many aspects of the construct of Western art music, including the typically hierarchized roles of the composer, performer, and audience, as well as the meaning of a “musical work.” In his dissertation, “Power and Indeterminacy: The Noisy Networks of Foucault, Cage, Burroughs, and Delany,” Donald Leonard Anderson claims that indeterminacy is an act of resistance and a critique of power structures that functions by existing within the very structure that it is meant to critique.⁵ In indeterminate music, this is achieved by creating “musical works”

⁵ Donald Leonard Anderson, “Power and Indeterminacy: The Noisy Networks of Foucault, Cage, Burroughs, and Delany” (PhD diss., University of Washington, 2011), 5-6.

which call into question features that are often used to define musical works (such as the presence of the score or specificity of notation) and, ultimately, the validity of the concept of the work itself. The two most notable ways that indeterminate music calls into question Western art music by remaining inside of it addressed in this study are the presence of a score that challenges conventional notions of what a score is and does, and the claim of authorship by a composer, challenging the same notions. Additionally, traditional roles are challenged by redistributing power and control over various aspects of the work, as well as introducing the concept of amateur performance (i.e. performances by untrained musicians or non-musicians). This questioning of power structures extends beyond the musical setting to the political and social realm, as power structures within art music have historically mirrored power structures within society at large (e.g. the hierarchical structure of the Classical orchestra).

Contemporary indeterminate music is a social practice which aims to play an active role within the social and political context in which it exists. This desire is a response to an atmosphere of alienation in the art music setting. Such alienation pervades as a result of the structures of power and hierarchy discussed above, as well as aesthetic ideologies, institutions, and ideas regarding musical autonomy that became particularly prevalent over the course of the nineteenth and twentieth centuries. Alienation, in the context of this study, describes a disconnectedness, estrangement, or isolation between categories of entities. The three forms of alienation under investigation are: (1) the alienation of music from context as a result of ideas regarding the autonomy of music, (2) the alienation of people from music as a result of musical complexity, and (3) the alienation among people as a result of elitism, ambivalence, and social hierarchy.

This study will first trace the history of indeterminacy from Cage's 1958 Darmstadt lecture to the present day. This historical account by no means aims to be comprehensive in terms of addressing all pertinent composers, scholars, aesthetic movements, or notational or performance trends. Instead, this account traces some of the most prominent influences and trends from Cage's early investigations into indeterminacy through various changes in ideology and practice that have led to characteristics of contemporary indeterminate music. Through this account, indeterminacy will also be related to and distinguished from aleatory, chance, and improvisation. I will then delve into the philosophy of musical works and the open work in particular to address the ways in which indeterminate music challenges existing ideas and assumptions about authorship and the meaning of the work. Finally, works and ideas by living composers will be explored and analyzed as a means of understanding contemporary indeterminacy as a practical social response to the aforementioned forms of alienation.

The methodologies that will be used toward achieving the aim of this study can be categorized into three main types: research in critical and historical scholarly sources, examination of primary source accounts by participants in the targeted repertoire, and critical and analysis of musical works by living North American composers (Canada, U.S., and Mexico).^{6,7}

⁶ The category of "musical works" in this study also includes intermedia performances or installations which incorporate sound or pieces which may not necessarily produce sound, but call the nature of music or sound into question, effectively drawing one's focus to absence of sound or to the idea of sound.

⁷ In the present study, the term "American" is used to refer to the North American region on which this study is focused. Regarding instances in which the United States of America is referenced, the term "U.S. American" is used.

The examination of historical and critical source material serves to provide the background to distinguish indeterminacy from related terms and artistic approaches as previously mentioned. Recent scholarship on indeterminacy serves to clarify some of the more convoluted aspects of the history of the topic and to shed light on social and political factors that have affected the discourse on indeterminacy. Recent critical narratives, such as Kim's, also allow us to better understand the status of art music which experimental composers aim to subvert.

The analysis of works in this study will be conducted with a focus on uncovering compositional techniques that speak to the critical discourse of the topic and provide evidence toward or against the study's hypothesis. While I do not provide a complete formal analysis of any of these works in the music theoretical sense, my aim is to investigate the role of indeterminacy in the work; how indeterminacy functions within various stages of the musical process; how the human agents of this process participate in the indeterminate or specified parameters; what might be the consequences of the work in terms of interpersonal connectivity, and how the formal characteristics or performed realizations of the work relate to statements made by the composer/performer/audience about the work. Some of the questions that guide these analyses include: which aspects of the work are indeterminate and which are specified? Where does indeterminacy occur in the musical process? Is there a clearly identifiable composer or author, or does the work aim to challenge the idea of authorship? And how is indeterminacy used in this work as a response to alienation or an act of resistance?

In order to maintain a clear approach to this topic there are certain related issues that, while relevant, will not be discussed at length. Indeterminacy as it is related

specifically to technology is a popular subject of current discourse. There are many complex ways in which electronic music and computer programming have intersected with concepts of chance and indeterminacy, and characteristics of indeterminacy as a social practice are maintained in works that utilize electronics. The many variables of hardware and programming add a level of complexity and open up new discourses which are not within the scope of this study to address. Technology will be mentioned in the discussion of Machover's work with social media. However, the premise of utilizing social media in *A Toronto Symphony* is aimed toward social practice and collaboration more than with generating indeterminate results electronically.

Primary source materials for this study consist largely of accounts by composers, performers, and other participants in the form of essays, blogs, and other information available online (such as descriptions of their work or artist statements), transcribed or recorded interviews, and musical materials which include scores or performance instructions (both formal and informal, published or unpublished). Secondary source information will be derived primarily from academic and scholarly sources, which will serve to provide historical context and critical examinations of the relevant topics, and journalistic sources which discuss particular musical works.

Among the scholarly resources that will be consulted in order to provide historical background of the terminology expounded in this study—indeterminacy, aleatoricism, chance procedures, improvisation—is Rebecca Kim's dissertation, "In No Uncertain Musical Terms: The Cultural Politics of John Cage's Indeterminacy" (2008). This source positions indeterminacy as a U.S. American experimental tradition distinct from the European aleatory and intersecting but not equivalent to chance and improvisation.

Additional sources detail this historical account and position Cage's correspondence with Pierre Boulez and presentation at the 1958 Darmstadt lecture as a starting point for indeterminacy. These sources include Michael Nyman's *Experimental Music: Cage and Beyond* (1999), and Jennie Gottschalk's *Experimental Music Since 1970* (2016). Gottschalk's very recent publication positions indeterminacy as a U.S. American tradition which falls in line with particular ideologies that she associates with U.S. American experimentalism.

Sources on the philosophy of music and the philosophy of art are relevant to exploring ideas about the meaning of the "musical work" and authorship, which are at the core of the discussion of indeterminacy. A point of departure is Umberto Eco's essay, "The Poetics of the Open Work" (1959) which was written not long after the Darmstadt lectures of Cage and Boulez. In this text, Eco addresses the issues of authorship and the idea of a "quality" communicated by the author that defines an aleatoric or indeterminate composition as a musical "work." Walter Benjamin's 1936 essay, "The Work of Art in the Age of Mechanical Reproduction," raises the issue of an essence or "aura" of an artistic work. Although this writing was produced before the terms indeterminacy and aleatory came into the musical discourse and it does not address music specifically, Benjamin's ideas about authenticity in regard to film and photography raise some concepts that are applicable to the discussion of open musical works.

More recent scholarship in music philosophy that directly addresses the issue of the "work" and the role of the composer comes from Peter Kivy, who takes a platonic

approach to understanding the compositional process and the definition of a work.⁸ In addition to providing his own approach, Kivy introduces differing viewpoints from many other philosophers. Kivy's discussions are seminal to this study in that they provide an historical background for how certain ideas about the "work" and the composer have been formed as well as multiple recent ways of understanding those concepts. It is a central argument of this study that composers of indeterminate music call into question the validity of certain power structures that underlie those conceptions. By reviewing Kivy's philosophical theories of those concepts, we are better able to understand how indeterminate music responds to them subversively.

In *The Imaginary Museum of Musical Works: An Essay in the Philosophy of Music* (1992), philosopher Lydia Goehr takes into account not only our conceptions of musical works in terms of the work and the performance, but also critically evaluates the desire to consider works within those categories. This angle assists in evaluating the underlying cultural constructs that support the ideas of the "work" and the author. Nicholas Cook takes a different kind of critical stance in *Beyond the Score: Music as Performance* (2013), where he examines the effect of platonic ideas about the work/performance dichotomy on the hierarchy of the constituents involved in the music composition and performance process. His critique is particularly relevant for an examination of how these aspects are put into question by indeterminate music.

An important step toward understanding indeterminacy as a response to alienation is to uncover the characteristics and sources of that alienation. Milton Babbitt's 1958

⁸ The writings by Peter Kivy consulted and discussed in this study are *Introduction to a Philosophy of Music* (2002), *The Fine Art of Repetition: Essays in the Philosophy of Music* (1993), and *Sounding Off: Eleven Essays in the Philosophy of Music* (2012).

essay “Who Cares if You Listen” (originally titled “The Composer as Specialist”) is one of the most frequently discussed sources in discourses about alienation of agents in the musical process in contemporary art music. Although he is not the first to express ideas regarding the conception of composition as research or the desire to academize art music, his essay reveals a mentality shared amongst many other modernist composers of the twentieth century. In her essay “Terminal Prestige: The Case of Avant-Garde Music Composition” (1989), Susan McClary examines Babbitt’s text and explores how ideas about musical autonomy and complexity played an important role in creating various forms of alienation. Regarding the autonomy of music, Janet Wolff discusses the ideologies that led to the commonly accepted belief that music is autonomous from politics and culture.⁹ Wolff proposes adopting a form of musicological study in which music is not separate from its social and political context, as is done with the literary and visual arts. What she is arguing for in the field of musicology is in many ways similar to what composers of indeterminate music are arguing for compositionally—that is, music as an active component of society. Wolff is writing on the topic as an introduction to a collection of essays about performance and reception; thus, she is advocating for the examination of political and social context within the other studies presented. Although the present study has an alternative aim, Wolff’s synthesis of the historical context of ideas about musical autonomy assist in understanding how those ideas have been perpetuated in composition as well as musicology and how composers (in addition to

⁹ See Janet Wolff, “The Ideology of Autonomous Art” in *Music and Society: The Politics of Composition, Performance, and Reception*, ed. Richard Leppert and Susan McClary (Cambridge: Cambridge University Press, 1987), 1-12.

musicologists) may be placing a greater emphasis on the context in which works are created and performed.

The relationship between improvisation and indeterminacy is complex in many ways. Cage's changing stance toward improvisation throughout his career signals some of the complexities of indeterminacy as a practice that aims to subvert Western art music while still remaining inside of it. Sabine M. Feisst discusses Cage's shifting attitudes toward improvisation at different points in his career and how those attitudes manifested compositionally and in his ideas about indeterminacy.¹⁰ Kim addresses some of the possible reasons for Cage's initial ambivalence toward improvisation in reasons which are aesthetic as well as social.¹¹ Because differing attitudes toward the ideals of improvisation amongst certain composers played a role in shifting the goals and methods of indeterminacy, writings on improvisation by composers and improvisers are particularly useful. Some of these writings include Fredric Rzewski's "Little Bangs: A Nihilist Theory of Improvisation" (1999) and Vijay Iyer's "Improvisation: Terms and Conditions" (2009). Rzewski was very influential on composers such as Christian Wolff, who took Cage's model of indeterminacy and used it toward ideals from improvisation such as the value of the individual and the ability to affect change in the present moment. Both Rzewski and Iyer view improvisation as a direct reflection of and connection to life and society, a view that lends improvisational techniques additional weight within contemporary indeterminate practices, which are a response to ideas about musical autonomy and the alienation of music from society to which those ideas contribute.

¹⁰ See Sabine M. Feisst, "John Cage and Improvisation: An Unresolved Relationship," in *Musical Improvisation: Art, Education, and Society*, ed. Gabriel Solis and Bruno Nettl (Urbana and Chicago: University of Illinois Press, 2009), 38-51.

¹¹ See Kim, "In No Uncertain Musical Terms."

This study will closely examine particular works of the following contemporary composers: Christian Wolff (b. 1934), Mario Lavista (b. 1943), John Zorn (b. 1953), Tod Machover (b. 1953), and Carolyn Chen (b. 1983). All of these composers live and work in the United States with the exception of Mario Lavista, one of Mexico's most prominent living composers. Overall, the composers discussed in this study represent multiple generations, diverse backgrounds, and differing methods of utilizing indeterminacy. John Zorn is known for his work in jazz and improvisation while Tod Machover has found diverse ways of utilizing technology in composition, including using social media apps as a means of inviting the general public into the compositional process. The youngest composer of the group, Carolyn Chen, has a diverse body of work, elements of which can be likened to Wolff, Fluxus artists, and other earlier composers, but her body of work also demonstrates unique methods of connecting indeterminate composition to contemporary society. Chen's series of pieces titled "Music for People" incorporates amateur performance in public spaces, such as the supermarket, in order to create artworks that not only comment on everyday life, but invite the public to participate in the performance (or the performance to participate in public). Although this selection of composers in no way represents the full spectrum of indeterminate practices, their works exemplify many of the topics that are most relevant to this study. Although the present study only discusses the work of North American composers, indeterminacy, as a social practice, is present beyond the limits of that geographical zone. It is outside the scope of this study to delve into the social and cultural complexities of a transcontinental movement of experimental practices.

This study is divided into three central chapters. The focus of chapter 1, “Uncertain Paths,” is to: (1) provide an historic background that is necessary and pertinent to the study, to (2) establish a preliminary understanding of what indeterminacy is and what it is not, and (3) to elucidate the particular aesthetic path by which the composers highlighted in this study constructed the ideals that characterize indeterminate works. This chapter begins by presenting some of the problematic definitions or misconceptions of indeterminacy, including the argument that all music is indeterminate music. An historical account of the origins of indeterminacy centers around John Cage and his contemporaries, particularly Cage’s correspondence with Pierre Boulez in order to position indeterminacy relative to aleatory and chance music. Cage’s relationship to composer Christian Wolff is another significant point in the history of indeterminacy, as many of Wolff’s adaptations of Cage’s ideas reflect current indeterminate practices. The distinction between chance procedures and indeterminacy will also be explored in relation to compositional practices that gained popularity in the twentieth century, such as coin tossing (exemplified by Cage). These practices demonstrate the factor of probability and limited possible options, which differentiates chance music from indeterminacy. The complex issue of improvisation as it relates to indeterminacy will be explored in terms of Cage’s and other composers’ ideological responses to improvisation, the changing role of improvisation in indeterminate music, and how and why an “indeterminate work” might be distinguished from an “improvisational performance.” The latter issue raises ideas about authorship and the meaning of the “work” that will be continued in chapter 2.

Chapter 2, “Composing the Unknown: Contesting Notions of the Work and the Composer,” centers around Mario Lavista’s *Música para un árbol* (2011). This work

presents many challenges such as major discrepancies between the score and performance (in which Lavista participated), a high degree of agency afforded to the performers, and the informal collaborative environment in which the piece was rehearsed. These challenges raise questions regarding the identity of the work, Lavista's role as a composer/performer/facilitator, the significance of a musical score, and the work/performance dichotomy. Different aspects of these questions are addressed in literature by Umberto Eco, Walter Benjamin, Peter Kivy, and Lydia Goehr. The examination of this authorship through the lens of Lavista's piece provides insight into the ways in which Western art music culture conceives of the concepts of the work and the composer (i.e. author), and how and why those concepts are called into question by indeterminate practices.

Chapter 3, "Contemporary Indeterminacy in response to Alienation," will examine the three types of alienation mentioned earlier in this introduction, the factors that contributed to them, and ways in which contemporary indeterminate music is a response or an act of resistance to them. The discussion of the alienation of music from context as a result of ideas regarding the autonomy of music includes a look into how these ideas were formed and why some composers seek to challenge them. An analysis of works by Carolyn Chen, such as "The Character for Ant Contains the Character for Justice" (2006) demonstrates how the integration of social issues within the meaning and structure of a musical work is achieved or strengthened by factors of indeterminacy. The alienation of people from music is described in large part as a result of an aesthetic trend shared by many modern composers, in which music was valued for displaying a high degree of formal complexity. Some indeterminate works by Christian Wolff and Carolyn

Chen respond to such complexity through the use of verbal instructions (i.e. prose scores) or simplistic notations describing unspecified or highly variable actions. The third form of alienation, between the constituents of the musical process (composer, performer, audience) are discussed in reference to issues of elitism, ambivalence, and social hierarchy. Works that change the hierarchized model of the constituents are examined including Machover's *A Toronto Symphony* and Chen's "Music for People." Finally, a look at John Zorn's *Game Pieces* illustrates the ways in which the aspects of art music, which many composers seek to subvert (such as the authority of the composer), may still be present in their works. For example, Zorn expresses his desire to afford agency to the performers, but limits the availability of his scores for "unauthorized" performers and acts as the conductor of his own sanctioned performances. This discussion shows how such seeming contradictions can be viewed as evidence that indeterminacy is not a fixed concept, but an ongoing subject of discourse and creative experimentation.

This study represents an effort to better understand contemporary art music practices as both a continuing dialogue of ideas as well as a reflection of the specific time in which they exist. The intrinsic social quality of indeterminate music in particular makes this a pertinent discussion for understanding how some composers are seeking to create works that, as Anderson posits, belong to a time and social construct while simultaneously calling that construct into question. Viewing contemporary indeterminate practices as a response to alienation positions these practices as a response to both historic and current trends. It is my hope that this study will encourage a continuing discourse between musicology and current compositional practices of indeterminacy.

CHAPTER 1

Uncertain Paths

Introduction

Indeterminacy, a term that, in its most general sense, has been defined as “‘not precisely fixed,’ ‘not settled,’ ‘not fixed beforehand: not known in advance,’ ‘not leading to a definite or end result,’” may appear at first to be applicable to any such “open” qualities within music.¹ Specifically within the discourse of so-called “open works,” indeterminacy is often used synonymously, interchangeably, or alongside the terms “aleatory” and “chance.”² More specifically, many encyclopedic definitions of indeterminacy and aleatory equate the two terms as strategies that incorporate the element of chance. Rebecca Kim notes that “while both aleatory and indeterminacy may have addressed the phenomenon of chance, each encapsulated a disparate set of attitudes and cultural interests,” and that, while they may appear synonymous in their use of open elements and even share some structural compositional methodologies, “their connotations differ.”³

Chance, though it appears as an element of both indeterminacy and aleatory, must not be mistaken as the defining feature of either. Although it may have been the discussions between John Cage and Pierre Boulez regarding experimentation with unfixed or undetermined elements (which they referred to as elements of chance) that

¹ Definitions of indeterminacy from Jennie Gottschalk, *Experimental Music Since 1970* (New York and London: Bloomsbury, 2016), 9.

² The term “open work” will be discussed at length in chapter 2.

³ Kim makes note of some definitions of indeterminacy and aleatory that fail to properly distinguish between the two terms. For those definitions see Kim, “In No Uncertain Musical Terms,” 36, 38-40.

initially united the two practices, the two composers publically expressed their ideological differences and disagreements through their two Darmstadt lectures: Boulez's 1957 "Aléa" and Cage's 1958 "Composition as Process: Indeterminacy." It is precisely an ideology and an attitude that Cage himself has cited as the distinction between indeterminacy and chance, with chance representing that which is undefined and indeterminacy signifying an attitude of openness, curiosity, and awareness.⁴ Cage raises the other terminological misidentification that is often made regarding chance, that although the element of chance is present in indeterminate music, not all music in which the chance element is present ought to be considered indeterminate.

Improvisation poses yet another issue in the history and meaning of these terms as its role within and relative to indeterminacy has always been in flux. Because of this, authors such as David Cope draw conclusions about the relationship of improvisation to indeterminacy based on what they have observed as characteristics related to improvisation. In *New Directions in Music* (7th ed.), Cope begins his chapter on indeterminacy with a lengthy section under the heading "improvisation."⁵ Within this section, Cope makes mention of jazz improvisation, prominent improvisation groups of the 1960s (including the New Music Ensemble, Sonic Arts Group, and Musica Elettronica Viva), as well as graphic score notation and specific examples of open works (including William Duckworth's *Walden Variations* and Luciano Berio's *Circles*).⁶ In his discussion of Duckworth's *Walden Variations*, Cope refers to the notation style as "improvisational graphic notation;" and in his description of Berio's *Circles*, refers to

⁴ Ibid, 39.

⁵ David Cope, "Indeterminacy," in *New Directions in Music*, 7th ed. (Long Grove, IL: Waveland Press, 2001).

⁶ Cope, 77-82.

notational segments that are contained within “improvisation boxes.”⁷ Although one may argue that performers use improvisational techniques in the actualization of open elements within the scores, his decision to describe open works through the lens of improvisation, as well as his choice to begin his section on indeterminacy with a discussion of improvisation, may lead to incorrect assumptions about indeterminate music as a subset of improvisation, an improvisation technique, or as having been derived from improvisation. The history of indeterminacy reveals a complex relationship of ideals and strategies between improvisation and indeterminacy wherein many composers utilize tenets of improvisation to challenge the notion of composed “works” and to heighten the influence of the “human element.”

Based on these many misconceptions or misrepresentations of the aforementioned terms and concepts (indeterminacy, aleatory, chance, improvisation), it is beneficial to clarify these terms and to determine what characterizes each of them as unique, though deeply interconnected, concepts. Now, with several decades of musical development and discourse on the topic, we are in a position to examine those practices retrospectively and to form clearer concepts around this terminology. Doing so will grant us a much more nuanced way of describing and understanding the repertoire of contemporary open works. In this chapter, the aforementioned terms will be clarified in respect to their historical origins and formal and social/contextual characteristics. The historical path of indeterminacy as it developed as a unique practice of experimentation provides evidence for the assertion that contemporary indeterminacy is characterized by socially connective ideals.

⁷ Ibid., 79.

In order to treat indeterminate music as a specific practice within contemporary music, we must first distinguish “indeterminate music” from “indeterminacies in music.” First, I will address the matter of varying degrees of indeterminacy and explicit versus incidental unspecified features in a musical work. Following that, I will trace the historical origins of indeterminacy and aleatory from the starting point of mid-twentieth century post-war avant-garde ideals in both the United States and Europe, centered around the figures of John Cage and Pierre Boulez. I will also address the role of chance procedures within the subject of open works and how chance music is distinct from indeterminate music. This historical background will help to illuminate similarities and differences between the geographically situated musical traditions of open works and how those traditions developed into two distinguishable practices in today’s music. Next, I will consider the special relationship of improvisation to indeterminate music. As an integral component of indeterminacy and a singular practice in its own right, it is necessary to speculate about what distinguishes an improvisation from an indeterminate “work,” while also considering the intersections between the two. In examining the historical context of these concepts, certain ethical dilemmas and ideological contradictions faced by Cage and his contemporaries will arise, as well as discrepancies between early versus current indeterminate music. A discussion devoted to addressing these inconsistencies will bring them to light and will help to clarify that, while most of the discourse on indeterminacy is centered around Cage and his mid-twentieth century contemporaries, indeterminacy is part of an ongoing and changing musical discourse.

Explicitly Undefined: Is All Music Indeterminate Music?

It is often argued in discussions of indeterminacy that all music is indeterminate. Paul Griffiths begins his entry on aleatory in *Grove Music Online* by noting this concept, writing, “the term ‘aleatory’ . . . applies to all music: it is impossible for a composer to prescribe every aspect in the realization of a composition; even the sound result of a tape playback will depend on the equipment used and the acoustic conditions.”⁸ It is certainly true that any music that is written and performed by humans allows for errors and subjectivities; and all systems of music notation are limited in their abilities to specify details. However, indeterminacy is not a desired element of all music or an intentionally significant structural aspect of every work. Additionally, whether intentional or not, the degree to which various factors within a work may be indeterminate exists along a spectrum. Indeterminacy is not an either/or function, but a matter of degree, regulated by both intentional and incidental circumstances. Notations, performance practices and performance instructions also inform us that factors of indeterminacy are not necessarily intended to be handled the same way (i.e. realized in performance) from one musical work or genre to another. Ultimately, the difference between a work that contains some indefinite features and an “indeterminate work” is the explicitness and function of what is left undefined. In contemporary American art music, indeterminacy is not a consequence of the limitations of notational systems and human abilities to control all aspects of a musical performance, but a particular set of ideals and compositional techniques that aim

⁸ Paul Griffiths, “Aleatory,” *Grove Music Online*, Oxford Music Online, accessed May 6, 2016, <http://www.oxfordmusiconline.com/subscriber/article/grove/music/00509>. Griffiths uses the term “aleatory” synonymously with indeterminacy in this context, an issue that will be addressed later in this chapter.

to open various aspects of a work by incorporating human subjectivity and social interaction.⁹

A significant error in the argument that all music is indeterminate music, and the sometimes stated counterargument that no music is indeterminate (which is, in essence, the same argument), is the false binary that this creates. Indeterminacies in music exist along a vast spectrum of features created by a multitude of possible factors from open forms and graphic notations to the basic unpredictability of the universe. Although the degree to which a musical work is indeterminate is an important element of that work, we ultimately want to consider not just *whether* a work is indeterminate, but *how* and *why* indeterminate features function within it.

It may seem obvious that when we talk about indeterminate music we are not discussing the slight probability that the ceiling of the concert hall might cave in during the performance and affect the outcome, but if we consider classifying indeterminate music as a repertoire based on whether *any* unfixed elements exist, then the possibility of such a scenario would be a worthy consideration. The next logical step may then be to consider indeterminacy as presenting certain types of indeterminate features (notational as opposed to environmental, for example) or by exhibiting a minimum degree of indeterminacy. However, considering indeterminacy based on certain structural features leads to issues in regard to specific works (such as Cage's *4'33"*, where indeterminacy in written performance instructions as well as in the performance environment are defining

⁹ This definition is derived from Kim's statement, "Broadly conceived as a set of techniques, ethics, and aesthetic guidelines to 'open' the work to the variabilities of musical production, indeterminacy presented a revised paradigm to the traditional creative process by accenting the importance of the 'human variable' in performance." See Kim, 2.

features of the piece), and the latter solution begs the question of how we might measure degrees of indeterminacy and where to draw the ‘official’ line. A more appropriate method for distinguishing between indeterminacies in music and ‘indeterminate music’ is to examine individual works on the bases of performance practice or instructions and the value of indeterminacy to the musical and/or extramusical functioning of the work or genre; or, in other words, whether indeterminate features are purposeful and explicit in order to serve an aesthetic or ideological aim—an intentional giving up of a certain amount of control—or whether they are a side-effect of notation or human limitations of control.

Composer Brian Eno has expressed his disagreement with the polarization of “musical ideas into opposing camps,” whether in terms of indeterminate/determinate or classical/contemporary.¹⁰ Nonetheless, in his essay “Generating and Organizing Variety in the Arts,” Eno presents two “organizational structures” that organize musical structural characteristics into groups in connection with aesthetic and ideological aims. It may appear at first that categorizing music into two “organizational structures” may represent another equally problematic binary system, but Eno proposes that classical and contemporary music are, instead, each “a group of hybrids tending toward one of the two structures.” The first structure is characterized as a rigid structure “moving sequentially through an environment assumed to be passive (static) toward a resolution already defined and specified.”¹¹ This structure responds to the natural indeterminacy of the

¹⁰ Brian Eno, “Generating and Organizing Variety in the Arts,” in *Audio Culture: Readings in Modern Music*, ed. Christoph Cox and Daniel Warner (New York: Continuum International Publishing Group Inc., 2004), 232.

¹¹ Ibid.

environment (what Eno refers to as “variety”) by attempting to offset it.¹² The second structure is one that, although exhibiting some restriction or limitation, ultimately aims to be adaptable to the variety of the environment. Eno posits that the performance instructions of these two structures differ in order to achieve their respective aims. Instructions for the first organizational structure must strive to be as fixed as possible in opposition to variety. For the second structure, a plan that is highly specific and oriented toward a particular outcome is not useful in achieving the aim of adaptation; therefore, Eno argues that this structure uses heuristic instructions, which he defines as, “a set of instructions for searching out an unknown goal by exploration, which continuously or repeatedly evaluates progress according to some known criterion.”¹³ It is easy to see how one might view works exhibiting varying degrees of indeterminacy as tending more toward one of these two organizational extremes. This also helps us to understand that while factors of indeterminacy may exist within a work, the goal of the performance may be to “neutralize or disregard” variety, rather than adapt to it.¹⁴

Let us assume that we accept the above premise that, despite the presence of indeterminate features in all music (i.e. variety in the environment), a musical work tends toward the aim of either restraining or embracing such indeterminacy. We are then led to the question of how a performer is to discern which of those aims a particular work is tending toward. In Western art music, it is through notated scores that instructions are most typically conveyed. Notation, however, is limited in its capacity to specify detail

¹² Eno appropriates the term “variety” from cybernetics: “The *variety* of a system is the total range of its outputs, its total range of behavior. All organic systems are probabilistic: they exhibit variety, and an organism’s flexibility (its adaptability) is a function of the amount of variety that it can generate.” *Ibid.*, 227.

¹³ *Ibid.*, 232.

¹⁴ *Ibid.*

and determine outcomes. By examining particular features of notation or categorizing notational systems within repertoires, we are able to make more informed assumptions regarding tendencies to resist or embrace unpredictability.

The concept of notation as a set of instructions which are absolute or represent the essence of what a musical work “is” is arguably a modern notion. Prior to the eighteenth century, notation served mainly as a memory aid for performance and within particular performance practices, composers were able to make some assumptions about how performers would interpret what was written. For example, the absence of dynamic or expressive markings in a work from the Baroque period would not have been interpreted as an invitation from the composer for the performer to express their personal creativity. In “Composition as Process: Indeterminacy,” Cage presents Johann Sebastian Bach’s *The Art of Fugue* as an example of indeterminate music due to the lack of instruction for characteristics of timbre and amplitude.¹⁵ However, it is more likely that a composer such as Bach would have made the assumption that the performer, educated within that musical idiom, could make some expressive or dynamic decisions based on performance practices within that idiom. Therefore, I argue that Bach’s *Art of Fugue* contains indeterminacies within the score, but presents a different aesthetic than contemporary indeterminate music.

In *What’s the Matter with Today’s Experimental Music?* Leigh Landy discusses composer-theorist Erhard Karkoschka’s classification system for contemporary notation.¹⁶ Karkoschka presents four groups or types of notation. Landy defines the first

¹⁵ John Cage, “Composition as Process: Indeterminacy,” in *Silence: Lectures and Writings by John Cage*, 3rd ed. (Middletown, CT: Wesleyan University Press, 2011), 35.

¹⁶ Leigh Landy, *What’s the Matter with Today’s Experimental Music: Organized Sound Too Rarely Heard* (Philadelphia: Harwood Academic Publishers, 1991), 61.

group, *Präzise Notation*, as “precise, sometimes called result notation which includes traditionally notated scores as well as post-scriptive precise notations used by ethnomusicologists and some electronic composers.” The second group of notation, *Rahmennotation*, is defined as “‘framework’ or reaction notation,” which is similar to traditional notation, “but one or more elements have been freed.”¹⁷ Landy uses Morton Feldman’s use of stemless notes as an example of *Rahmennotation*. Karkoschka calls the third notational group *Hindweisende Notation*, which is somewhere between *Rahmennotation* and the last group, *Musikalische Graphik*, which contains “abstract graphic or action notation.”¹⁸ Prose scores are also categorized as *Hindweisende Notation*.¹⁹ We can position these categorizations in respect to the two polar extremes or organizational strategies presented by Eno, with the first notational type corresponding to the extreme of organization and resistance to variety and the fourth notation type corresponding to the extreme in favor of adaptability to variety, with the second and third falling somewhere in between.

Landy also discusses works that use “open form” (often referred to as “mobile form” or “variable form”), wherein the notation of musical material appears as *Präzise Notation*, but the ordering and/or repetition of formal sections is left to the discretion of the performer.²⁰ Open form was a popular strategy amongst Boulez and other composers of aleatoric music, but was also popular amongst American composers such as Earle Brown. Landy notes that Boulez and Brown had different inspirations for the use of open

¹⁷ Ibid.

¹⁸ Ibid., 61-62.

¹⁹ Landy notes that non-musical performance aspects are not included in these notation types, but are worthy of mention as aspects of notation. Ibid., 62.

²⁰ Ibid.

form: Boulez claimed to be influenced by the literature of Stéphane Mallarmé and James Joyce, while Brown was influenced by the mobiles of artist Alexander Calder.²¹ The significance of the differences in influence will become more apparent later on in this chapter. What is important to recognize about open form notations at this point is that the forms that inspired the notation demonstrate the aims of the performance outcome. For just as Calder's mobile sculptures are designed to embrace variety in the environment with their moving parts, Brown creates movable musical "parts" in his use of "mobile form."

In "The Poetics of the Open Work," Umberto Eco illustrates how composers wanting to leave possibilities of interpretation open to the performer explicitly state so in scores of so-called open works. He uses the example of Henri Pousseur's *Scambi*, an electronic music composition which utilizes an open form in which thirty-two segments of music can be ordered in a variety of different ways. Pousseur writes of the piece, "*Scambi* is not so much a musical composition as a *field of possibilities*, an explicit invitation to exercise choice."²² Although there are degrees of musical indeterminacy far greater than Pousseur's open form *Scambi*, the explicit nature of the features of indeterminacy distinguish it from works in which the notation merely leaves out or is unable to account for certain details.

The examination of notation style, genre- or period-specific performance practices, and historical knowledge grants us some understanding of what drives a composer to leave aspects of a work open. Understanding whether indeterminacies in a

²¹ Ibid.

²² Henri Pousseur quoted in Umberto Eco, "The Poetics of the Open Work," in *Audio Culture: Readings in Modern Music*, ed. Christoph Cox and Daniel Warner (New York: Continuum International Publishing Group Inc., 2004), 168.

work exist as a side-effect of notational limitations or as an explicit invitation to adapt to indeterminacies by exercising choice is invaluable to the performer. The roles of indeterminacy in these two structures (suppressing or adapting) also represent a variety of aesthetic, philosophical, and social ideologies. Ultimately, it is these types of ideologies that distinguish “indeterminate music” from “indeterminacies in music.”

Exploring the Unknown: Cage, Boulez, and the Post-War Avant-Garde

Many of the methods that composers began to explore in the mid-twentieth century were influenced by post-World War II attitudes. Pre-existing modernist tendencies to break with past models were exacerbated by the post-war political climate. Composers in Europe and the United States began reexamining Western art music traditions and forms. Composers, both in Europe and in the U.S., were particularly interested in challenging the notion of predictability in music and sought to thwart listeners’ expectations in various ways. Some turned to serialism as a structured form that was nonetheless thought to be sonically unpredictable, as it departed from traditional and familiar formal structures, thus leaving listeners without a basis on which to predict what would happen next. Pierre Boulez, for example, experimented with open forms in which the performer determined the order of given musical segments. The open form introduced a new parameter of unpredictability: unpredictability of the outcome from the point of view of the composer. It was this aspect of forgoing agency amongst any or all constituents within the musical process with which John Cage also experimented. There are two concepts in respect to unpredictability that Cage devoted himself to investigating:

experimentation, understood as “an act the outcome of which is unknown,”²³ and *chance*, the element of the unknown itself.

Post-war explorations of chance and experimentation took place most notably in the dialogue and correspondence between composers John Cage and Pierre Boulez. It is through this dialogue that we are able to see how two aesthetic paths emerged, interacted, and eventually diverged into what we now consider the practices of aleatory and indeterminacy. Most importantly, we are made aware of the ways in which indeterminacy traces a path of US experimentation that aims to embrace the element of chance to the fullest extent. In Kim’s words, “indeterminacy represents an important phase of Euro-American engagement wherein the foregoing values of the reigning European tradition were momentarily suspended in favor of an experimental approach that has subsequently been deemed traditionally but debatably American.”²⁴

Cage and Boulez began their correspondence in 1949, based on a mutual interest in investigating elements of unpredictability.²⁵ Of particular interest to Cage was giving up control or agency on the part of the composer. Cage related this idea to certain tenets of Zen Buddhism, specifically the concept of elimination of the ego. Cage utilized chance elements to create results unpredictable to the composer. Although Boulez did this as well with his use of open forms, it was Cage’s intention to use this unpredictability as a means of inhibiting the ego of the composer as well as the performer; to prevent their personal tastes, biases, and habits, from influencing the outcome of the work and performance. Although true elimination of the ego is a philosophical concept impossible

²³ John Cage, “Experimental Music: Doctrine,” in *Silence: Lectures and Writings by John Cage*, 3rd ed. (Middletown, CT: Wesleyan University Press, 2011), 13.

²⁴ Kim, 28.

²⁵ *Ibid.*, 32.

to achieve in reality, Cage began to experiment with higher degrees of chance in his compositions toward that ideal.

One of Cage's best known applications of chance toward the aim of suppressing the ego is his 1951 prepared piano work *Music of Changes*, composed using the *I Ching* as a generative method. The *I Ching*, or "Book of Changes," is a classical Chinese text in which the results of the flipping of coins corresponds to one of 64 possible hexagrams that the user can interpret as they wish. The hexagrams might be used to provide advice, answer a question, or inspire some idea in the interpreter. It was Christian Wolff, a contemporary and friend of Cage, who gave him his first copy of the *I Ching*, which Cage then adapted into a structure for generating musical material. Cage created 64 musical fragments, each corresponding to hexagrams of the *I Ching*, and through many repetitions of the flipping of coins, ordered the fragments in the series in which they appeared, into a fully realized score. This "chance procedure" limited Cage's agency in the compositional process. However, because the result was a fully realized work presented in detailed traditional notation, Cage did not forfeit his agency into the hands of the performer either, a strategy intended to truly "let chance decide" and avoid human preferences or biases.

Cage described his use of the *I Ching* and other experiments to Boulez through their correspondence. It started to become apparent, however, that they were beginning to work in different directions and form conflicting ideologies in regard to chance. The disagreement regarding the extent and application of chance resulted in two lectures at the Darmstadt Internationale Ferienkurse für Neue Music, which may be considered the defining dividing impetus between aleatory and indeterminacy: Boulez's 1957 lecture, "Aléa," and Cage's 1958 lecture, "Composition as Process: Indeterminacy." The crux of

the disagreement between the two composers hinged upon “the twofold question of how the variable of chance was to be applied to musical experiment, and whether this experiment constituted a legitimate discovery to be justified as musical composition.”²⁶ This disagreement, presented publically at a prominent meeting place of the post-war avant-garde, depicted not only aesthetic and procedural differences, but cultural differences as well, most notably an attachment to European musical traditions in Europe and a desire to establish an “American” sensibility as distinct from European art music in the U.S. Boulez’s presentation was an open critique of Cage’s use of chance procedures, presented at a time in their correspondence when their disagreements had become profound.²⁷

In “Composition as Process: Indeterminacy,” written as a response to Boulez’s essay presented the previous year, Cage presents several works that he labeled as indeterminate in respect to aspects of composition or performance: J.S. Bach’s *Art of Fugue*, Karlheinz Stockhausen’s *Klavierstück XI* (1956), Earle Brown’s *4 Systems* (1954) and *Indices* (1954), Morton Feldman’s *Intersection 3* (1953), Christian Wolff’s *Duo for Pianists II* (1958) and his own work, *Music of Changes* (1951). It is worth noting that his inclusion of Bach and Stockhausen indicate that Cage was not yet distinguishing indeterminacy as geographically oriented in the United States as opposed to Europe, nor

²⁶ Ibid., 33.

²⁷ Kim references a letter from Boulez to Cage that illustrates the degree of his frustration regarding Cage’s use of chance where Boulez writes, “I do not admit—and I believe I never will admit—chance as a component of a completed work. I am widening the possibilities of strict or free music (constrained or not). But as for chance, the thought of it is unbearable!” Kim further notes that, in his critique, Boulez attempted to distance his work from Cage’s by “attributing the adoption of chance to everything from a ‘weakness in compositional technique,’ to Eastern ‘intoxication,’ creative ‘impotence,’ unholy ‘obsession,’ ‘madness,’ and even to altered states of ‘narcotic’ consciousness.” Ibid, 44-46.

was he distinguishing organizational systems as Brian Eno proposed in the last section of this chapter. Those developments became clearer through the discourse of indeterminacy, and it was in the 1958 Darmstadt lecture that Cage first publically presented the term in reference to indeterminate features in musical works.

In contrast to Boulez's 1957 lecture, Cage's approach was methodical in its technical and objective descriptions of indeterminate features.²⁸ This focus on structure was indicative of one of the primary ideological issues that was underlying the composers' disagreement: where Boulez was concerned about the possible ill consequences of chance on the agency and prowess of the artist, Cage was concerned about the consequences of chance on musical form.²⁹ Removing creative control from the composer and affording creative control to the performer was a more challenging concept for European than for US avant-garde composers. European composers preferred experimentation with chance as an exercise in the compositional process while maintaining the ability to make alterations and decisions regarding the final product of the work. Many US composers were, in contrast, moving more toward the *experimental* ideology presented by Cage, of accepting the outcome as yet unknown.³⁰ Composer Alvin Lucier illustrates this point in his description of Cage's dedication to the outcome of chance procedures and indeterminate works:

²⁸ Kim, 65.

²⁹ Ibid., 52.

³⁰ Kim further notes the inclusion of chance procedures within multiple points of the composition process. She writes, "Boulez implemented chance only insofar as its effects were tested and contained in the confines of pre-compositional experiment. For Cage, chance did not preclude composition proper but remained a constant variable from pre-composition to performance and reception." Kim, "In No Uncertain Musical Terms," 33-34.

Cage would never throw out something he didn't like on the basis of taste. Other composers have worked this way. They've used chance procedures to make material that they would otherwise not make; then they choose what they like and make that piece the way they would make it anyway. That's a half-baked way of working, don't you think? Cage doesn't use chance procedures to get interesting material that he may or may not choose to like or dislike; he simply accepts it all. Once he sets up his chance procedures, he follows them to the nth degree.³¹

Indeterminacy gets personal preference out of the compositional process.

In contrast, European composers placed value on the composer's control over the structural integrity of a work. Boulez is quoted by Hamilton in proclaiming his departure from continuing to further explore Cage's ideas in chance composition, stating, "The only thing, forgive me, which I am not happy about, is the method of absolute chance (by tossing the coins). On the contrary, I believe that chance must be extremely controlled . . . I am a little afraid of what is called 'automatic writing,' for most of the time it is chiefly a lack of control . . ."³² Morton Feldman remarked on the increasing desire among European composers to maintain a controlled musical framework in aleatoric music, "This is true of Boulez. This is true of Stockhausen. You can see this in the way they have approached American 'chance' music. They began by finding rationalizations for how they could incorporate chance and still keep their precious integrity."³³ Our

³¹ Alvin Lucier quoted in Jennie Gottschalk, *Experimental Music Since 1970* (New York and London: Bloomsbury, 2016), 17-18.

³² Pierre Boulez quoted in Andy Hamilton, "The Music of Chance: Musical Dice Men from John Cage to John Zorn," in *Undercurrents: The Hidden Wiring of Modern Music*, ed. Rob Young (London: Continuum, 2002), 212.

³³ Morton Feldman quoted in David Cope, "Indeterminacy," 84.

understanding of aleatory, as distinct from indeterminacy, is in relation to this differing set of ideals in regard to the use of the element of chance, specifically how and why it is used. Whereas indeterminacy seeks to challenge the role of the composer by removing or reallocating control and, thus, challenging the concept of the musical work as well, aleatoric music does not seek to challenge the authority of the composer and work, but to utilize chance as a means of creating some unpredictability in performance. This is further evidenced by certain structural preferences. The use of variable form notation—in which the performer selects the order of conventionally notated musical fragments—is common in aleatoric music. Indeterminate music has taken many diverse structural forms employing varying degrees of chance in notation as well as composition and performance, examples of which will be discussed in greater detail in chapter 3.

At this point it is necessary to clarify that, although chance and indeterminacy have been used synonymously in some instances, the two terms have been distinguished in important ways since Cage's inauguration of indeterminacy in 1958. As noted in the introduction to this study, Cage began to expound the differences between the terms not long after writing "Composition as Process: Indeterminacy," and expressed in 1961 that indeterminacy was distinguishable from chance as an attitude of curiosity and embracing the unknown.³⁴ This attitude is reflected in Lucier's observation of Cage's intent to preserve the integrity of the unknown above all else. We might clarify chance, then, as the factor of the unknown itself. In this sense, chance is able to exist in both aleatory (in which composer agency is still largely maintained) and indeterminacy.

³⁴ Kim., 39.

We might then describe “chance operations” or “chance procedures,” as methods devised by the composer in order to produce an outcome based on probability. In *Music of Changes*, for example, Cage designed the system of probability for his chance procedure (each coin toss resulting in one of 64 possible hexagrams) and assigned specific musical meanings to the outcomes. The design of musical outcomes that were correlated with the hexagrams was necessary in order to create a fully realized score. The distinguishing feature of chance procedures is the control on the part of the composer and the absence of human agency other than the composer. Although Cage could not determine which of the 64 possible hexagrams his coin tosses would result in or in what order, he designed the probability of the outcome.³⁵ This reflects Cage’s intention in *Music of Changes*, which was to remove agency from both the composer and the performer. As we will see later on in this chapter, the discourse of indeterminacy moves toward sharing agency with humans other than the composer. Additionally, many composers utilize indeterminacy as a means of embracing or highlighting personal tastes, experiences, and subjectivities of other constituents involved in the musical process, as opposed to limiting their influences on the outcome of the work. For now, it will be helpful to understand that chance operations and indeterminacy both incorporate the element of chance, or something which is undetermined and unknown ahead of time.³⁶ Another way to understand the difference between chance procedures and indeterminacy,

³⁵ Cage has implemented various controlled chance procedures in composition in several works. He has used star maps printed onto transparency film in various works as a means of determining pitch, locations of sounds in the performance space, and which performers are audible at various times. These works include *Etudes Australes* (1974-75), *Atlas Eclipticalis* (1961), and *Variations IV* (1963).

³⁶ “Ahead of time” could refer to “before composition” or “before performance” depending on how chance is utilized within the musical process.

is that chance procedures are generative and non-collaborative, whereas indeterminacy relies on human collaboration, resulting in something that is not a product of probability but human agency.

The reader might also be wondering at this point what is meant by “experimentalism” or “experimental music”? As Gottschalk points out, “experimental music is challenging to pin down because it is not a school or a trend or even an aesthetic.” She offers that “it is, instead, a position—of openness, of inquiry, of uncertainty, of discovery,” in which “explorations are oriented toward that which is unknown, whether it is remote, complex, opaque, or falsely familiar.”³⁷ This resonates with Cage and Alvin Lucier’s emphasis on the attitude of embracing the unknown. Benjamin Piekut offers an understanding of experimentalism as a “grouping,” rather than a “group,” meaning that experimentalism is not a category defined by a set of musical features, but as something that is performed and enacted.³⁸ His view is particularly helpful in understanding that experimentalism, including indeterminacy, is an ongoing discourse. It is something that is being defined and redefined as it is in process.

Improvisation and New Approaches to Indeterminacy

An essential component in the process of indeterminacy, following Cage’s 1958 lecture up to the present day, is the role and influence of improvisation. Many have noted the resemblance of features of indeterminate music to presences of improvisation that have occurred in other repertoires in the history of Western art music, including cadenzas

³⁷ Gottschalk, 1.

³⁸ Benjamin Piekut, “Introduction,” in *Experimentalism Otherwise: The New York Avant-Garde and its Limits* (Berkeley: University of California Press, 2011), 6-7.

and other “open” features of performance.³⁹ As was uncovered in the previous section, however, indeterminacy emerged out of a particular time and dialogue of aesthetic, ethical, and cultural ideas, and is not a mere continuation of or commentary on historical improvisation practices. Others have noted that indeterminate elements in a work are often realized in performance using improvisation. However, not all composers of indeterminate music have considered the decisions that the performer makes in an open work to be improvisation, and some composers have been adamantly opposed to such an idea. Beginning in the 1960s, however, as Cage’s ideas about indeterminacy became more widely-known, other American experimental composers saw an opportunity to combine Cage’s indeterminate methods with ideals of improvisation.⁴⁰ As some composers began to incorporate certain ideals from what they called “free improvisation”⁴¹ (spontaneity, actively engaging in the present moment, collaboration, and connection with the social and political environment) into indeterminacy practices, the social element of indeterminacy became not just a technicality, but the ethical aim toward which indeterminacy has been used.

³⁹ Cope, “Indeterminacy,” in *New Directions in Music*, 7th ed., 77.

⁴⁰ This may have also been the result, in some cases, of misunderstandings regarding Cage’s ideology and aim in his indeterminate practices, just as some scholars have misinterpreted indeterminacy as an improvisational practice.

⁴¹ Bruno Nettl provides a broad definition of improvisation as “the creation of a musical work, or the final form of a musical work, as it is being performed.” In Western art music, specifically, improvisation has played different roles historically and in particular musical idioms. See Bruno Nettl, “Improvisation,” in *Grove Music Online, Oxford Music Online* (Oxford University Press), accessed April 23, 2017. <http://www.oxfordmusiconline.com.libproxy.unm.edu/subscriber/article/grove/music/13738pg2#S13738.2.6>. The term “free improvisation” applies to a concept or practice of improvisation which is free from a particular musical idiom. According to Jennie Gottschalk, for many musicians, the ideology of “free improvisation” included not using any formal organizational system. For more information on free improvisation practices and ideologies see Jennie Gottschalk, *Experimental Music Since 1970* (New York and London: Bloomsbury, 2016), 188-209.

Cage's attitude toward improvisation did not remain entirely constant throughout his career, as he began to embrace some elements of improvisation in his later works. However, as Sabine Feisst notes, "throughout most of his career, Cage displayed ambiguity and adversity toward improvisation and warned performers against improvisatory performances of his own scores, challenging his society's well-worn concepts of free music making and improvisation."⁴² Considering Cage's objective to reduce the influence of the ego, one might equate this warning against improvisation toward performers as a warning against the influence of the ego. Feisst explains:

Cage expected from all of his performers a similar attitude and presupposed discipline and compositional decisions within the framework he designed. Performers were expected to work out all or part of the score ahead of the performance from materials and directions Cage provided. Performers have to strive for impersonality and nonintention and engage in situations with unknown outcome. . . . This explains further why Cage distanced himself from improvisation. He did not want to encourage common habits, subjective and ultimately predictable acts, among improvising performers.⁴³

Kim describes Cage's purposeful distancing from improvisation as originating from "a distrust of the imagination."⁴⁴ It is possible, however, that the division Cage maintained between improvisation and indeterminacy also stems from nineteenth-century

⁴² Sabine M. Feisst, "John Cage and Improvisation: An Unresolved Relationship," in *Musical Improvisation: Art, Education, and Society*, ed. Gabriel Solis and Bruno Nettl (Urbana and Chicago: University of Illinois Press, 2009), 38.

⁴³ *Ibid.*, 42-43.

⁴⁴ Kim., 209.

ideas about musical autonomy and the separation of music from social and political context. Additionally, this division may have been, at least to an extent, a means of situating indeterminacy within practices of Western art music and avoiding connotations with popular musics, particularly jazz. Gottschalk references Anthony Braxton's statement that, "Both aleatory and indeterminism are words which have been coined. . . to bypass the word improvisation and as such the influence of non-white sensibility."⁴⁵ Kim notes that this analysis of Cage's attitude toward improvisation, as represented by his (and Boulez's) choice of terminology, has become more prominent following his death in 1992. She cites several additional authors who address Cage's attitude toward improvisation in respect to jazz, including Georgina Born and David Corbett, who see Cage's negation of popular idioms as a means to gain legitimacy within the modernist culture of Western art music.⁴⁶ Moreover, George E. Lewis regard Cage's resistance to jazz improvisation "as a means of maintaining cultural difference and power against a racial Other."⁴⁷

Cage began to express a change in his attitude regarding improvisation in the 1970s when he became interested in politics and the writings of Henry David Thoreau,

⁴⁵ Anthony Braxton quoted in Gottschalk, 188.

⁴⁶ See Kim, 213.

⁴⁷ Ibid., 214. Although it is outside of the scope of the present study to explore the racialized aspect of indeterminacy practices and policies (as well as experimental music in the Americas, more generally), it is a topic worth exploring in order to better understand the issue outlined here. See Georgina Born and David Hesmondhalgh, eds., *Western Music and Its Others: Difference, Representation, and Appropriation in Music* (Berkeley: University of California Press, 2000); George E. Lewis, "Improvised Music after 1950: Afrological and Eurological Perspectives," *Black Music Research Journal* 16, no. 1 (1996): 91-122; Thomas Burkhalter, Kay Dickinson, and Benjamin J. Harbert, *The Arab Avant-Garde: Music Politics, Modernity* (Middletown, CT: Wesleyan University Press, 2013); and Ana R. Alonso-Minutti, Eduardo Herrera, and Alejandro L. Madrid, *Experimentalisms in Practice: Music Perspectives from Latin America* (New York: Oxford University Press, forthcoming).

and created some works in which he explicitly called for sections of improvisation.⁴⁸ Nonetheless, he maintained his attitude toward the performance practice of his indeterminate works, that the performer does not improvise the open elements, but decisively plans them ahead of time. Feisst concludes that Cage's continued rejection of improvisation within indeterminacy was indeed a rejection of the improvisational connotations of "intuition, self-expression, memory and taste-based utterances, discursiveness, predictability, and repetition."⁴⁹ I add to Feisst's conclusion that Cage's rejection of improvisation, particularly in the way that indeterminacy was received, was also a way of remaining within the realm of art music by maintaining cultural hegemony within indeterminacy.

Despite Cage's rejection of improvisational connotations, other composers who were influenced by Cage's work with chance and indeterminacy saw the opportunity to incorporate those connotations into it. Christian Wolff, a friend of Cage's and a follower of his indeterminate practices, understood what Cage was working to achieve, but decided to use indeterminate composition toward a different aim. Wolff states:

[Cage] made a composition which was then performed the way it was written, it was fixed. . . . But what I became interested in introducing wasn't even chance so much anymore, but the element of what we called indeterminacy—not at the point of composition but at the point of performance—so my scores might be made

⁴⁸ Feisst, "John Cage and Improvisation," 44.

⁴⁹ *Ibid.*, 49

without using any chance procedures at all, but they were made in such a way that when performers used them, unpredictable events would take place.⁵⁰

Author Andy Hamilton writes that Wolff's use of indeterminacy in performance evolved from a desire for unpredictability in performance to a desire for collaboration. This attitude of spontaneity and championing the expression and influence of the performer may be, in part, a result of Wolff's collaborative relationship with Frederic Rzewski, a pioneer of the "free improvisation" movement. Many of Rzewski's ideas about improvisation were focused on collaboration and group interaction. Michael Nyman posits that Rzewski's convictions mirror some of Cage's regarding the social dynamic of art by involving the performer in the creative process, as Cage had done in a limited way through his indeterminate works. But Rzewski took the collaborative and social nature of performance much further by inviting more creative freedom from the performer and by involving the audience in the performance process as well.⁵¹

Hamilton compares the collaborative nature of Wolff's indeterminacy to the Cage's use of chance procedures, he writes, "Cage's use of chance indeterminism didn't allow any autonomy to performers. Wolff, in contrast, collaborates with the performer in what he calls, 'working actively with contingencies.'"⁵² Hamilton describes this concept as a group realization of indeterminate material, similar to a dynamic of group improvisation, stating, "Whereas in Cage's music, each player works through the musical

⁵⁰ Andy Hamilton, "The Music of Chance: Musical Dice Men from John Cage to John Zorn," in *Undercurrents: The Hidden Wiring of Modern Music*, ed. Rob Young (London: Continuum, 2002), 215.

⁵¹ Michael Nyman, *Experimental Music: Cage and Beyond*, 2nd ed. (Cambridge: Cambridge University Press, 1999), 130.

⁵² Hamilton, 215.

events prescribed in the score regardless of what other players are doing, Wolff focuses on the unpredictable possibilities that arise from each performer attending to what others are doing.”⁵³

Wolff’s collaborative ideals lead to higher degrees of indeterminacy in many of his works. Works such as *Play* use descriptive texts (i.e. prose notation) rather than notational symbols to assign the performer various tasks that are extremely open in how they may be interpreted. Additionally, *Play* is meant to be performed by multiple performers with instructions such as “as soon as you cannot hear yourself or another player stop directly,” and “sometimes play independently, sometimes by coordinating: with other players,” demonstrating the collaborative nature of the realization of Wolff’s works.

An interest in improvisational techniques was also shared by some of Wolff’s contemporaries in the mid-twentieth century. Composers like La Monte Young and other Fluxus artists experimented with the limits of indeterminate practices and their relationship to other improvisational practices and concepts of theater and performance art. Throughout the remainder of the twentieth century, the social component of indeterminacy as distinct from chance procedures, the necessity of another human’s completion of the given material, became something of value to many composers who sought to explore collaboration, improvisation, and individuality in composition.

An important distinction remained between the works of Wolff, Young, and other composers and what were considered “improvisations.” For although less precise notations and more highly collaborative performance scenarios were being introduced,

⁵³ Ibid.

the concepts of the musical “work” and the author/composer were maintained.⁵⁴ It is this designation of a performance as an authored work which allowed composers to distinguish their work from “pure improvisation,” while using improvisation to challenge existing hierarchical compositional and performance structures.

This new socially oriented conception of indeterminacy came to be represented more and more often in works through the twentieth and into the twenty-first century. The change in the dialogue of indeterminacy could be viewed as concurrent with the increasing prominence of musical trends associated with postmodernism. Donald Leonard Anderson considers Cage’s experimentation in indeterminacy to be a shift from modernism to postmodernism.⁵⁵ In a similar vein, Richard Taruskin notes a change in the reception of Cage’s indeterminate work by audiences, performers, and composers. He further considers the shift in the reception of indeterminacy to be the turning point between the modern and postmodern.⁵⁶ However, that view risks creating a new false binary between the modern and postmodern; an “old” versus a “new” indeterminacy.

Conclusion

Indeterminacy is perhaps best understood similarly to the way that Piekut conceives of experimentalism: as a grouping, rather than a group, as something which is not preexisting and defined, but which is performed. The discussion presented in this

⁵⁴ These concepts are discussed in depth in Chapter 2.

⁵⁵ See Donald Leonard Anderson, “Power and Indeterminacy: The Noisy Networks of Foucault, Cage, Burroughs, and Delany” (PhD Diss., University of Washington, 2011), 15.

⁵⁶ See Richard Taruskin, “No Ear for Music: The Scary Purity of Cage,” *New Republic* 28, no. 11 (1993): 8.

chapter did not provide a closed definition of indeterminacy—to do so would be to characterize it as a fixed concept—but to explicate the path of indeterminacy as it intersects with and diverges from other concepts related to open works: chance, aleatory, and improvisation.

The argument of whether or not all music is indeterminate is one worth consideration as it affects our understanding of compositional and performance practices, past and present, as well as the ethical, philosophical, and aesthetic ideals that helped form them. Brian Eno's ideas about organizational systems of variety in music provide a method for examining performance practices and notation systems in order to gain insight into whether a particular work might be structured to suppress or adapt to variety. Although all music exhibits some degree of indeterminate elements, indeterminacy is marked by an explicit structural aim to embrace and adapt to variety.

In addition to the explicitly utilizing open features as a structuring element, indeterminacy is situated within a particular social, political, and historical context. An investigation of the correspondence between John Cage and Pierre Boulez and their 1957 and 1958 Darmstadt lectures sheds light on the issues regarding the use of chance that allow us to position indeterminacy and aleatory as divergent paths in musical thought and practice.

Following the path of Cage's early conception of indeterminacy as it inspired the work of composers such as Wolff and Rzewski shows how the perceived contradictions between Cage's ideas toward improvisation in indeterminacy and others' uses of indeterminacy are better described as a dialogue in experimental music driven by the influence of multiple ideas. Whereas Cage sought to suppress some of the connotations of

improvisation presented by the social element of indeterminacy, others sought to embrace them.

From its beginnings as an experiment with chance to more recent applications as a socially connective compositional practice, indeterminacy has been a method of challenging alienating power structures that were pre-existing in Western art music culture. By limiting the control over the outcome of a work, indeterminacy challenges the creative supremacy of the composer and, by creating the possibility of different outcomes of a work, indeterminacy challenges the notion of the work itself.

CHAPTER 2

Composing the Unknown: Contesting Notions of “Work” and “Composer”

Introduction

In 2011, Mario Lavista (b. 1943), along with a small ensemble, performed his newly composed piece, *Música para un árbol* (Music for a Tree), at the opening of an exhibition by his wife, Mexican visual artist Sandra Pani (b.1964) entitled *De ser árbol* (Of Being a Tree).¹ Pani’s exhibition presented thirty-six charcoal figures reminiscent of both tree and human forms drawn on long strips of paper and suspended from the ceiling. The ensemble—Verónica Murúa, soprano; Horacio Franco, recorder; Bozena Slawinska, cello; Mario Lavista, Thai gong; and five performers of crystal wine glasses—performed in the exhibition space as patrons walked freely amongst Pani’s drawings.

The score for *Música para un árbol* presents what could be labeled an “open form,” or a variable structure. Each of the main instrumental parts (voice, recorder, and cello) is comprised of segments of musical material that appear in standard pitch and rhythmic notation. These small segments are organized into five “phrases” or larger sections. Each part also provides a set of pitches for wine glasses, which are to be performed continuously for example, see the first “phrase” of the recorder part, shown in figure 2.1. The open form notation and the indication at the top of the score “*Elegir cualquier orden y repetir cada fragmento a voluntad*” (Select any order and repeat each fragment at will) indicate that, within a larger formal section, each performer is to play

¹ *De ser árbol* was first exhibited at the University of Guanajuato as part of the 2011 International Cervantino Festival. The following year it was exhibited at the Ibero-American University in Mexico City, and in the Museum of Graphic Arts in Oaxaca.

the musical fragments in the order and repetition of his or her choosing. To this respect, Luisa Vilar Payá suggests that the open form concept relates the performance experience to the experience of the spectators at the exhibition. She writes, “The aleatory² aspect of the music can be understood as the representation of an imaginary spontaneous walk among Pani’s works and amidst their interstices: a personalized approach that emphasizes the unique and unrepeatability of each spectator.”³ As the spectators meander through Pani’s hanging drawings, Lavista affords the performers freedom to pursue their own path through the music, but unified by a shared environment.

² Although in this sentence Vilar Payá chooses the term “aleatory” and not “indeterminacy,” throughout her text it is clear that she uses both terms interchangeably. This exemplifies that the predilection of one term over another (either “aleatory” or “indeterminacy”) might not be accentuated in non-English narratives.

³ Luisa Vilar Payá, liner notes to *Mario Lavista. Música para un árbol: En torno a la obra de Sandra Pani*, Verónica Murúa, Horacio Franco, Bozena Slawinska, Mario Lavista, Ensemble Cepromusic, dir. José Luis Castillo, trans. Gregory Dechant (Tempus Classico, CD, 2016).

Fl. dulce

Música para una exposición

Mario Lavista
2011

Elegir cualquier orden y repetir cada fragmento a voluntad.

1a Frase

Lento (♩ = ca.)

Figure 2.1 Mario Lavista, *Música para un árbol*, first “phrase” for recorder. Used by permission of Mario Lavista.⁴

The score itself is not particularly unusual in terms of the notational style, which is reminiscent of many open form works. What is remarkable is that the recording of the performance of *Música para un árbol*, released in 2016, presents a musical work significantly different than the one that the score denotes. One of the most apparent discrepancies between the score and the performance is in the addition of the Thai gong, which Lavista himself performs. Discrepancies in the form and musical material are

⁴ Mario Lavista, *Música para un árbol*, unpublished score, 2011. I would like to thank Ana Alonso-Minutti for granting me access to view her copy of the score.

rather profound. The formal structure of “phrases,” or major sections, appears to have been followed loosely or not at all by some of the performers.⁵ Additionally, the specific pitch and rhythmic content provided in Lavista’s score are followed to a similar extent as the form. Although it is possible to draw associations between some of the motivic fragments that Lavista provides and what the majority of the performers are playing, the motives are very rarely heard being played as written. The vocal part provides text with pitch and rhythmic figures, however, in performance, Murúa *speaks* rather than sings the text, often in a whispered tone that forgoes the given pitch material. Some similarities exist between what Slawinska performs and what is written in the cello part. However, it seems likely that the written material was used as a point of inspiration from which Slawinska improvised new material. Franco remains within the pitch collection provided by Lavista, but performs unpitched sounds and extended techniques which are not indicated in the score in addition to his own articulations and rhythmic figures.

Despite the differences between the piece that is written and the piece that is performed, there remain many unifying similarities between the two representations. The text that Murúa performs (though not always arranged as the score presents it) comes directly from the text that Lavista provides. The text consists of fragments from *Systema Naturae*, by Carl Linnaeus (1707-1778): *Creationis telluris est Gloria Dei ex opere Naturae per Hominem solum* (“The end of the creation of the earth is the glory of God, as seen from the works of Nature by Man alone”).⁶ The performers also maintain the pitch collection that is given in the score, which highlights the intervals of a perfect

⁵ Bozena Slawinska utilizes the given formal structure by following the phrases of the cello part while choosing her own sequence.

⁶ Translation by Gregory Dechant in Vilar Payá liner notes to *Mario Lavista. Música para un árbol: En torno a la obra de Sandra Pani*.

fourth and perfect fifth, creating a unifying “open” sound characteristic of perfect intervals. This intervallic unification is maintained in the performance of the crystal glasses which is as written.

Although the performance, in many aspects, does not reflect what is written in the score, the piece is described in all written accounts as a work by Mario Lavista. However, from its inception, Lavista conceived of the piece as having a degree of flexibility and a strong collaborative element. This was apparent to the performers throughout the rehearsal and performance process. To this regard, Ana R. Alonso-Minutti notes that “both Horacio Franco, flautist, and Verónica Murúa, soprano, expressed that, while rehearsing the piece in Lavista’s studio, it was clear that the score was not prescriptive, but merely to be taken as a suggestion, and that the composer himself was welcoming sonic departures from the fragments he wrote.”⁷ There are perhaps as many points from which one could argue that this performance ought to be considered a “group improvisation” as opposed to a composition. The presence of the aforementioned consistencies between the score and performance and Lavista’s presence throughout the musical process (in composition, rehearsal, and performance) allow for the possibility that some of the composing may have taken place “off book,” in a sense. Perhaps the resulting work heard in performance was a collaborative revision of the original material. A YouTube video showing Franco in a rehearsal of the piece at Lavista’s home also demonstrates the casual, collaborative nature of the process.⁸

⁷ Ana R. Alonso-Minutti, “Escuchando la pintura, pintando la música: intertextualidad musical y pictórica en la obra de Mario Lavista” (Listening to Painting, Painting Music: Musical and Pictorial Intertextuality in Mario Lavista’s Music), *Pauta: Cuadernos de teoría y crítica musical* 139-140 (2016): 101.

⁸ Sandra Pani, “De der árbol – Sandra Pani,” YouTube video, 0:45, November 7, 2011, <https://www.youtube.com/watch?v=TpT1kyDbCqE>.

All of these issues lead us to wonder about the nature of the “work” and authorship in *Música para un árbol* and in indeterminate works in general. If the music of the performance is the result, not just of Lavista’s own creation, but of the informal collaborative rehearsal environment that took place between the musicians in Lavista’s home, can we really say that he is the sole “composer”? Additionally, if the score and the performance represent two very different sonic scenarios, which one is the “real” *Música para un árbol*? Is it the score or the performance that constitutes the “work”? In this chapter, I argue that indeterminacy uses the elements of chance (i.e. the unknown or undefined) and social practice (i.e. collaboration) to draw our attention to these questions in order to undermine the power structures that underlie existing Western art music assumptions about the “work” and the composer.

We may feel intuitively (though subjectively) decisive about whether and how we consider something to be a musical work.⁹ But on what criteria are we basing this intuitive knowledge? In his 1959 essay, “The Poetics of the Open Work,” Umberto Eco considers these criteria to be a product of enculturation, writing, “when we speak of a work of art, our Western aesthetic tradition forces us to take “work” in the sense of a personal production which may very well vary in the ways it can be received but which always maintains a coherent identity of its own and which displays the personal imprint that makes it a specific, vital, and significant act of communication.”¹⁰ In the first section

⁹ The discussion of what constitutes a “work of art” consists of two main dilemmas: the meaning of a “work” and the meaning of “art.” In this study, the contestation of what constitutes “art” will be set aside. My focus will be to discuss how we form a notion of a musical work as it is contested within the context of an open work.

¹⁰ Umberto Eco, “The Poetics of the Open Work,” in *Audio Culture: Readings in Modern Music*, ed. Christoph Cox and Daniel Warner (New York: Continuum International Publishing Group Inc., 2004. Originally published 1959), 173.

of this chapter, we consider aesthetic and philosophical points of view on the nature of the work by authors such as Eco and Walter Benjamin, and more recent scholarship from Peter Kivy, Lydia Goehr, and Nicholas Cook. These perspectives shed light on the enculturated concept of the work so that we can understand the ways that indeterminacy contests that concept. The next point of discussion addresses another enculturated concept, which is the composer as the creator of the work. While Eco argues for the creative influence of the composer within open works, Kivy argues that composition is not an act of creation at all, but of discovery. These discussions shed light on Lavista's role as the composer of *Música para un árbol* and how his work, and other indeterminate works, challenge the validity of the work concept.

The “Work”: Aura, Object, and Performance

The concept of the “work” appears at first to be intuitive, as it is something that we reference frequently, not only in music scholarship but in casual discussions of music as well. When we make reference to a musical work in conversation, we are rarely met with confusion about what we mean. It is not until we raise the question of what a musical work actually *is*, that we find the concept to be rather slippery. Many scholars have questioned (and continue to question) what comprises a musical work, in what form it exists, and how it functions within Western constructs of musical culture. In examining some of the points of view in the discourse of what a musical work *is*, we uncover the many ways that indeterminate music challenges the work concept.

One of the features of art music that we often discuss in reference to a musical work is the notated score. However, the score was not always a centerpiece of Western musical practice. The use of notation as a record of musical information in Western art

music tradition began in the Medieval ages. Prior to and during this time, a great deal of music was either improvised or retained in memory. As was noted in chapter 1, notation prior to the eighteenth century was used primarily as a memory aid so that certain aspects of a performance may be repeated, but was not regarded as a representation of all aspects of the performance, as improvisation often retained a role in the performance practice. Kivy notes that, despite the fact that we might consider early medieval notation to be rather “non-specific” in comparison to later notation styles (particularly of the nineteenth and twentieth centuries), that what this notational system was recording brought to light a concept that had not yet been a subject of discourse within music, the concept of the “work.” Kivy notes that in early medieval performances “it began to make sense to say that ‘something’ was being repeated, from one performance to the next; and, however vaguely that something was determined by the notation, that was the ‘work,’ whether or not there was a word for it, and whether or not memory played a prominent role in the proceedings.”¹¹

By the nineteenth century, the score gained a position of prominence in conveying musical information, which was closely tied to ideas regarding the artistic supremacy of the composer as the “creator” of the “work.” Regardless of the degree to which performers attempted to strictly follow the instructions of the score, however, there remained room for certain differences from one performance to another, whether due to the impossibility of determining every factor of the performance outcome in notation, or through more purposeful expressive interpretation by performers. Nonetheless, there

¹¹ Peter Kivy, *Introduction to a Philosophy of Music* (Oxford and New York: Clarendon Press, 2002), 204.

seemed to be a consensus among scholars, musicians, and audiences that the “work” remained intact. Another way to understand this idea would be to consider the situation of a performer playing a wrong note (according to the given score). It is unlikely, in this scenario, that listeners would consider the performance to be of a different work. In the realm of indeterminate music, the issue of different performances of the same work becomes especially profound, as two performances of the same work may display very few sonic similarities. In this way, indeterminacy challenges an aspect at the core of our discussion of the musical “work”: the relationship between the score and the performance.

In his 2013 book *Beyond the Score: Music as Performance*, Nicholas Cook discusses an attitude that became increasingly prevalent around the turn of the nineteenth and twentieth centuries. This attitude placed the score as superior to the performer in respect to conveying or perhaps “containing” the essence of the work. Cook notes that Heinrich Schenker, a prominent turn-of-the-century musician and critic once wrote that “a composition does not require a performance in order to exist. . . . The reading of the score is sufficient.”¹² Cook also quotes Arnold Schoenberg in stating that the performer was “totally unnecessary except as his interpretation makes the music understandable to an audience unfortunate enough not to be able to read it in print.”¹³ This emphasis on the score as the keeper of the essence of the work not only negates some of the necessity of performance to the existence and experience of music, but also magnifies the importance

¹² Heinrich Schenker quoted in Nicholas Cook, *Beyond the Score: Music as Performance* (New York: Oxford University Press, 2013), 8.

¹³ Arnold Schoenberg quoted in Cook, *Beyond the Score: Music as Performance*, 8.

of the score in terms of conveying musical information from the composer to the performer (or reader of the score).

Eco considers the score/performance relationship in the context of open works, but appears to favor the position of the authority of the score as well. He writes that, although performances of open works “will never be quite the same on two different occasions. . . they will never be gratuitously different.” He credits this sense of retained unification in performances to information that is provided by the composer, stating that performances of open works “are to be seen as the actualization of a series of consequences whose premises are firmly rooted in the original data provided by the composer.”¹⁴

American philosopher Nelson Goodman proposes a theory that differs from Eco’s in that the score is not superior to the performance. Instead, Goodman defines the musical work as follows: “the compliants of a score are performances and the compliance class is a work.”¹⁵ What Goodman means in the first half of this statement, that “the compliants of a score are performances,” is that performances comply, or adhere, to instructions provided in the score; i.e. the performance is some kind of representation of information conveyed through the score. This reflects Eco’s statement about the data transmitted by the composer via the score. The second half of the statement, that “the compliance class is a work,” describes a scenario in which all performances of a particular work represent a “class,” of compliants (i.e. performances that adhere to the instructions of a score). The work, in effect, is equivalent to the class of all performances of that particular work. One of the issues in Goodman’s theory that Kivy points out is the scenario in which a musical

¹⁴ Eco, 172-3.

¹⁵ Kivy, *Introduction to a Philosophy of Music*, 206-7.

work might never have a single performance. As Schenker and Schoenberg proposed, it is possible that a musical work might still exist if only in the form of a written score. Additionally, Kivy notes that some qualities may exist in a performance but not in a score and vice versa; for example, just because a work has never received an expressive performance does not mean that it is not an expressive work.¹⁶

Kivy proposes that the primary flaw in theories such as Goodman's that try to define the work concept based on only the relationship between the score and performance is that the score and performance are both physical objects and the "work" is not.¹⁷ It may seem unclear at first how a performance exists as a physical object in comparison to a score. Kivy explains that a performance may be classified as an object in that it exists in space and that, in effect, "there is nothing mysterious about its *existence*."¹⁸ In contrast to the score and performance, Kivy proposes that the "work" is not a physical object, but something more abstract and mysterious. He writes, "The score is a physical object; the performance is a physical object: a complex sound event in compliance with the score. So, if we could say what the work is by merely talking about score and performance, there would be no mystery."¹⁹

In *The Work of Art in the Age of Mechanical Reproduction* (1936), Walter Benjamin attributes the mysterious identifiable quality of the "work" to something he calls the "aura." In this text Benjamin's primary subject is works of visual art and the

¹⁶ Ibid.

¹⁷ Although one may argue against Kivy's suggestion that a performance is an "object," for the purpose of this study, it is equally useful to consider that a performance exists in a physical realm or as a physical manifestation. Thus, a performance does not carry the same "mysterious" quality as the work concept, as it is not a concept but a physical reality.

¹⁸ Ibid., 206.

¹⁹ Ibid.

affect of mechanical reproduction on the idea of authenticity and the original.

Nonetheless, the idea of authenticity is directly applicable to the work concept. As Benjamin states, “the authenticity of a thing is the essence of all that is transmissible from its beginning, ranging from its substantive duration to its testimony to the history which it has experienced.”²⁰ We can see the parallels between what Benjamin describes as “authenticity” and features that Eco and others have identified about the transmissible quality of the work, either from score to performance or from one performance to another. Although Benjamin’s idea of the “aura” intersects with Kivy’s idea that the work exists in the abstract and not as a physical object, his concept identifies what the work is in reference to what it *does* (transmits an essence), but it does not provide any basis for our understanding of what the work actually *is*.

Using the method of Platonism (otherwise known as “realism”), Kivy considers the work concept to be a similar concept to the concept of numbers in that, although it is not a physical object, it is “real” in the sense that exists and is identifiable. Thus, the “work,” much like “number” is not a *thing* in and of itself, but a *type of thing*. In this analogy, “work” and “number” are what Kivy refers to as “types” and a specific performance or a specific number are referred to as “tokens.” One of the attractive qualities of the “type/token” theory is that it applies well to the work/performance dichotomy. If we recall, one of the main issues with identifying the “work” (and one of the main problems with theories like Goodman’s) was the possible range of discrepancies between score and performance or between performances. Kivy explains that in the “type/token” theory “the tokens of the type differ from one another within given limits,

²⁰ Benjamin, *The Work of Art in the Age of Mechanical Reproduction*, 14.

even while being recognizable as tokens of that type.”²¹ For just as individual numbers differ but remain within the number “type,” individual performances may differ, but provided they comply with the directions given by the score (with a limited number of mistakes, discrepancies, or departures) may still be considered “types.”

What Kivy does not address is the possibility of a performance which willfully departs from the score in *permissible* ways, as in the case of *Música para un árbol*. Assuming that Lavista permitted the decisions that the performers made to perform something other than what was written, can the 2011 performance at Pani’s exhibition still be considered a “token” of the score’s “type”? Or is the “type” in this case something other than the score? Kivy does not provide any additional information that can be used toward addressing those questions, and I have found no other sources in music philosophy that address such a question directly. This dilemma does bring to light, however, the ways in which an indeterminate piece like *Música para un árbol* can challenge various aspects of our conception of the “work.”

Philosopher Lydia Goehr considers the “work” to be a regulative concept. By viewing the “work” through the lens of the regulative concept we are able to better understand the ways that indeterminate music challenges the notion of the “work.” She explains that a regulative concept is connected to social ideals and “function[s] in a practice if participants act in a learned way.” Thus, it is a regulated means of maintaining a cultural notion of a concept. She adds that a regulative concept is supported by its connection to subsidiary concepts in that each one regulates the other. In order to clarify this theory and put it into context, she writes:

²¹ Ibid., 213.

The concept of a musical work, for example, emerged in line with the development of numerous other concepts, some of which are subsidiary—performance-of-a-week, score, and composer—some of which are oppositional—improvisation and transcription. It also emerged alongside the rise of ideals of accurate notation and perfect compliance. In this process, the work-concept achieved the most central position.²²

Considering the work concept in this way reinforces Goehr's earlier idea about enculturation and ties in many of the related themes discussed in other theories (the score, the composer) as subsidiary concepts that maintain the enculturated conception of the work. If we then examine some of the attributes of indeterminacy that were discussed in chapter 1, we can identify some elements such as improvisation, non-specific notation systems, and independence of the performer, which may be oppositional to the regulatory concept. If indeterminate music consisted only of oppositional concepts, we might agree that indeterminate works are not actually "works." However, indeterminate works maintain many of the subsidiary concepts mentioned by Goehr and the other authors, namely performances, a score, and a composer. By maintaining both subsidiary and oppositional concepts, composers of indeterminate music are able to undermine the regulative nature of the work concept causing us to call into question the central position that the "work" maintains in Western musical culture.

²² Lydia Goehr, *The Imaginary Museum of Musical Works: An Essay in the Philosophy of Music* (Oxford: Clarendon Press; New York: Oxford Univ. Press, 1992), 103.

The Composer: Creation and Discovery

As was mentioned in the previous section, much of the enculturated idea of what a “work” is rests on other enculturated ideas about the creative supremacy of the composer of the work. In this section, we will explore the subsidiary concept of the composer and how different understandings of the compositional process might support different views of the work concept. In turn, these new understandings provide some interesting viewpoints for examining ways in which indeterminate music subverts the regulative (i.e. enculturated) nature of the “work.”

In his 1993 publication *The Fine Art of Repetition: Essays in the Philosophy of Music*, Kivy addresses the “firmly entrenched” notion of the composer/artist as a “godlike creator,” and counters it with the proposition that music is not created by the composer, but is instead, *discovered*.²³ Kivy offers two counterarguments to this notion. The first, is that the idea of the artist as a “godlike creator” is not so “firmly entrenched.” The second is that if a work is, in fact, a “type” (as described in the previous section of this chapter) and not a physical object, then it must already exist and cannot be created.

Kivy’s first counterargument to the claim that the composer is the creator of the work (as stated by philosopher Jerrold Levinson) is based on the history of the conception of the role of the composer. He suggests that the idea of the composer as a formidable

²³ The idea of the “firmly entrenched” belief that the composer is a “godlike creator” comes from philosopher Jerrold Levinson. Kivy quotes Levinson stating, “The main reason for holding on to [the idea that music is created] is that it is one of the most firmly entrenched of our beliefs concerning art. The whole tradition of art assumes art is creative in the strict sense, that it is a godlike activity in which the artist brings into being what did not exist beforehand—much as a demiurge forms a world out of incoherent matter.” See Peter Kivy, *The Fine Art of Repetition: Essays in the Philosophy of Music* (Cambridge and New York: Cambridge University Press, 1993), 41.

creative being is not formed by a long history within Western culture, but is in fact, a fairly recent development. He notes that this idea “does not really come into its own until the end of the eighteenth century, partly through the influence of the romantic movement.”²⁴ This subsidiary concept of the artist as a creative genius was a Romantic notion that, as Kivy claims stands in the way of understanding the work concept through his “type/token” theory. For his second counterargument, he offers that if the “work” is a “type” such as a number is a type, then it cannot be created or destroyed, but is already in existence. He further illustrates this point with the example of a musical work, such as Beethoven’s Fifth Symphony, explaining that, although one might destroy a copy of the score of the Fifth Symphony or even Beethoven’s original score, that the work itself is not really destroyed.²⁵ This then begs the question of how a composer is able to create something that cannot be destroyed. He concludes, “It did not come to be; it cannot cease to be. And, not being a physical object but a spaceless, timeless entity, it is clear that it cannot causally interact with our world of space and time.”²⁶ He proposes that the alternative to the creation of the “work” is the *discovery* of the work through the compositional process.

Kivy brings back the example of Beethoven to illustrate his concept of composition as discovery. He notes that, as is evidenced in his many sketchbooks, Beethoven struggled with musical materials (motives, themes, modulations), trying many different options until “discovering” the right one. In these sketchbooks, Kivy writes, “Beethoven has left behind, in other words, the gradual steps he took in discovering what

²⁴ Ibid.

²⁵ Kivy, *Introduction to a Philosophy of Music*, 214.

²⁶ Ibid., 211.

he was after.” One may still object to this idea of discovery, arguing that what Beethoven was doing was indeed creating, however he rejected many of his creations along the way.²⁷ Kivy’s response to this objection is that the “type/token” theory still hold up if one considers creation to be part of the compositional process, so long as one accepts that discovery is part of the process as well.

One issue that arises with the assumption that composition is an act of discovery rather than creation is the idea of composition as a vehicle for the “personal expression” of the artist, that musical “works” bear the artist’s “unmistakable mark.” Kivy suggests that it is still possible for the artist to leave his or her own expressive “imprint” on a work that is primarily a discovery. He gives the example of Isaac Newton’s *Principia mathematica* (1687) in which he disclosed his discoveries of the laws of motion. Kivy posits that, although the laws of motion were “types” not created by Newton, his *Principia mathematica* bears his own personal mark. In a similar vein, he suggests, Beethoven’s Fifth Symphony is a “work” discovered by Beethoven, but bearing his own personal mark.²⁸

If we consider the idea of discovery and the personal mark of the composer in the context of indeterminacy, we are presented with some interesting relationships between indeterminate practices and the conception of the artist. The scenario of discovery as opposed to invention appears especially obvious when we consider John Cage’s experimentation with chance procedures. Whether or not one accepts the premise that composition is an act of discovery, one might easily understand Cage’s creative process under that light. Additionally, Cage and many other composers have viewed

²⁷ Ibid., 214-5.

²⁸ Ibid., 219.

indeterminacy as a means of altering the fixed conception of the work as the artist's personal expression. They either attempted to eliminate the personal expression of all constituents involved (as Cage sought to do), or invited the personal expression of constituents other than the composer to shape the outcome of the work. We are able to then form some conclusions about ways in which some composers of indeterminate music aim to challenge the Romantic notion of the composer as the sole "godlike" creator of the work, and in effect, challenge the notion of the "work" as the result of the composer's creation.

Conclusion

Let us now return to Mario Lavista's *Música para un árbol*. Through our discussion of ideas from Peter Kivy and other authors, we have surveyed various ways in which philosophers and critics have evaluated the work concept and the role of the composer. We might now be able to apply some of these ideas to the issues of the score versus performance dichotomy, single versus multiple authorship in a semi-improvisational scenario, and a score that is incongruous with the performance of the same "work." Although we might not be able to definitively come to a consensus on what a "work" *is* and what a composer *does*, we can revisit various aspects of *Música para un árbol* to form conclusions about ways in which this and other indeterminate works challenge some commonly held "work"/composer conceptions.

Lavista's compositional process in *Música para un árbol* presents an alternative to the single composer/creator scenario. One might consider Lavista's role to have been more like that of a facilitator, guiding the process of discovery for the ensemble.

Lavista's process of arriving at the "work" through collaboration in rehearsal and performance may be contradictory to conceptions of the work as a creation by a sole artist. However, this process does not seem to contradict Kivy's idea about composition as an act of discovery. If we consider that Lavista might have retained some sort of "veto power" throughout the collaborative process, then his decisions regarding which elements of the original score to maintain in performance and the extent to which performers would be allowed to improvise certain parameters, we might draw the parallel of the act of musical discovery between Beethoven's sketchbooks and Lavista's rehearsals. The significant differences between those two acts of discovery were that Beethoven's was a solitary creative process that occurred on paper, whereas *Música para un árbol* was a collaborative creative process that occurred through musical and social interaction departing from the written document.

This change in process results in a change in the role of the score. Even Kivy's "type/token" theory relies on adherence to the score in order to qualify a performance as a "token." We may be able to reconcile these ideas, however, if we consider how the score for *Música para un árbol* functioned in different parts of the musical process. In the early stages of the process, we might consider the score to be something like Beethoven's early sketches of a musical idea. The rehearsal process could then be likened to a process of revision in which Lavista and his ensemble sought to discover the "work." Although Lavista did not publish the score as a fixed reflection of the "work," the retention of pitch material, text, and some motivic ideas from the score in performance indicate that the score, though not followed exactly, served, instead, as a basis for improvisation.

Ultimately, this change in the role of the score in the musical process calls into question the validity of the supremacy of the score in defining the “work.”

Finally, Lavista’s collaborative and improvisational “work” further questions Levinson’s concept of the work reflecting the “mark of the artist.” By inviting the ensemble to participate in the elaboration of the “work” from its written conception (evidenced by the score), *Música para un árbol* came to represent the mark of the performers as well, or perhaps, the “mark of the collective.” The attitude of creating a “collective sound” is present in theories of improvisation. Vilar Payá notes that the indeterminate elements in *Música para un árbol* “recall Lavista’s own music of the 1970s.”²⁹ Alonso-Minutti also references Lavista’s interests in indeterminacy at that time, but further notes his experience as a performer and founder of the improvisation collective Quanta in 1970.³⁰ She further notes that, “while in other compositions Lavista limits himself to be the authorial creative voice behind the fully notated scores, in *Música para un árbol* he exposes a different configuration of an alternative modernism. In this newly formed cosmopolitan version, the ‘work’ does not belong to him alone, but emerges through collective ownership.”³¹ These ideals reflect a desire to create a communal product, or a sound that reflects the creative influence of the ensemble, in the performance of the work.

One might wonder why, in works where the ensemble participates in the act of “discovery” and the performance resembles a group improvisation, composers might

²⁹ Vilar Payá.

³⁰ Ana R. Alonso-Minutti, “Permuting Cage.” *Brújula: revista interdisciplinaria sobre estudios latinoamericanos* 6 (2008): 118.

³¹ Alonso-Minutti, “Escuchando la pintura, pintando la música: intertextualidad musical y pictórica en la obra de Mario Lavista,” 102.

choose to claim authorship for a “work” and not just label it a “collective improvisation,” as Lavista did with *Kailash* (2012), which he labeled as an “obra colectiva” (collective work), written for another art exhibition.³² I argue that to reject the titles of “work” and “composer” entirely would not be as effective in calling into question the validity of those concepts as it would be to retain them in this altered context. For the terms “work” and “composer” have many social and political implications as well, implications which are rooted in power dynamics present in Western musical culture. Many such power dynamics, including the authority of the score and the hierarchy of the composer/performer/audience have contributed to various forms of social alienation that are present within contemporary Western art music. Composers of indeterminate music are not aiming to forsake the “work” and composer concepts altogether, but to call into question the power dynamics that inform them and inquire as how they might be otherwise.

³² Ibid.

CHAPTER 3

Contemporary Indeterminacy in Response to Alienation

Introduction

During the first half of the twentieth century the autonomy of the musical work took on a great deal of importance as composers began to place the value of it upon its structural and sonic characteristics and to divorce the work (at least in theory) from its social and political contexts. Composers who championed the many ideals which may be described as tenets of modernism—including formalism, complexity, notational specificity, and atonality, to name a few—met with challenges within the social contexts in which they were composing. Much of the music of the modernists was not only challenging or “difficult” for performers to translate and for audiences to understand, but was oftentimes intentionally so. This difficulty was, for many, a source of prestige and a symbol of musical progress. Despite the prestige modernist composers achieved amongst their contemporaries, this “difficult” music that so challenged the tastes and desires of performers and audiences led composers to wonder whether and where they may be able to find support to continue their work within these ideals. Composers like Milton Babbitt, for instance, advocated for musical complexity as a form of research in order to receive support from the academy. His advocacy for composition as a form of scientific research, which separated music from any extramusical context, resulted in a climate of alienation in the U.S. contemporary music scenes.

This chapter explores how various forms of alienation within contemporary Western art music arose, their musical and social consequences, and how many

contemporary composers utilize methods of indeterminate composition in response. By implementing indeterminacy through a variety of compositional, notational, and performance strategies, composers have aimed to reestablish connections between the agents of the musical process (composer, performer, audience), the music itself with the social and political context in which it exists, and the formal aspects of music with the “human.”

The composers whose works are presented here, Christian Wolff (b. 1934), John Zorn (b. 1953), Tod Machover (b. 1953), and Carolyn Chen (b.1983), in no way represent the totality of indeterminate strategies used toward this aim. This small collection of living North American composers does, however, demonstrate a variety of modes of application of indeterminacy toward clearly socially connective aims across a relatively broad time span. Additionally, the generational span of these composers, from Wolff (a consolidated composer) to Chen (a composer in the early stages of her career) highlights the course of the dialogue of indeterminacy throughout several decades and among multiple generations. Despite some of the differences that may be found in indeterminate works by these composers, it is still apparent that many factors and influences remain. For example, there are obvious parallels between some early indeterminate works by Christian Wolff and some very recent indeterminate works by Carolyn Chen. Despite changes in technology or in the ongoing dialogue of indeterminacy, the response to modernist ideals and factors of alienation remains a common thread.

The term alienation in this context is to be understood in a rather general sense apart from more specific meanings that are applied in psychological, sociological, or other contexts. A general understanding of alienation is a disconnection, particularly of a

person or people, from a thing or situation of which they used to or ought to be connected. It is a condition characterized by estrangement, isolation, distance, or division. Alienation in modern and contemporary music takes many forms, but is characterized by this division and estrangement between the music itself and those involved in musical activity and the musical environment.¹

I have categorized the forms of alienation present in contemporary art music into three broad categories: (1) alienation of music from any extramusical context or content, (2) alienation of people from music and, (3) alienation among the people involved in the musical process and the environment. All three of these categories are deeply interrelated and do not represent actual divisions of types of music or musical thought. The factors of musical autonomy, formalism, academisation, and complexity underlie each of these categories. For the sake of clarity, however, each of these categories will be discussed one at a time with the following questions in mind: How did this category of alienation arise? What have been its formal and social consequences on contemporary art music? And how have contemporary composers utilized methods of indeterminacy in response to it?

¹ The musical environment refers to the broad setting and context in which music exists including spaces in which it is created and performed; the geographical, political, and social environment in which it exists; as well as a point in time, whether it be current or historical.

Alienation of Music from Context:

Embracing Extramusical Factors in Response to Musical Autonomy

The alienation of music and sound from social, cultural, or extramusical contexts can be directly linked to twentieth-century modernist ideals regarding musical autonomy and the formalist methods used toward attaining them. The separation of music from its social contexts developed into a value system where to exude extramusical meaning or to examine music with such a meaning in mind could diminish the value of a piece of music or an analysis of music upon its reception. Cage's ideas about the liberation of sound, on the other hand, reject the formalist complexity of modernist music, but retained (if not magnified) the emphasis of musical and sonic autonomy and the rejection of meaning or representation.

Composers have advocated for musical autonomy long before the twentieth century. In the nineteenth century, music was considered to be an autonomous activity, a position that coincided with the rise of the composer as a freelance artist. Ironically, however, the alienation of audiences from contemporary music as a result of music's detachment from social and extramusical context and other factors led composers in the twentieth century to seek something similar to patronage from universities, as will be discussed in greater detail later on. Additionally, twentieth-century modernism sought autonomy from characteristics believed to be associated with Romanticism, including emotion and femininity. The nineteenth-century trend of the composer as a freelance artist and the related notion of the autonomy of art was preceded by earlier notions, such

as the late Renaissance distinction of the artist from the “craftsperson.”² The particularly high regard for the artist becomes particularly pronounced in the twentieth century, when the composer gains a prominent hierarchical position within the musical process and composers of art music aim to further distinguish themselves from those involved in popular or “folk” musics.³

Perhaps a more concrete manifestation of the desire for autonomy can be found in the formalist tendencies of modernist composers.⁴ The rejection of social context or musical subtext within absolute music was sought through focus on the form and structure of music in composition, performance, and reception. Emphasis on organization, complexity, specificity, and music’s sonic qualities was conveyed through highly determinate notations and structures which composers deemed less likely to signify emotional, social, or programmatic material. Atonality and dodecaphony as well as the abandonment of Classic or Romantic forms were used toward this aim.

The alienation of contemporary art music from context is thus in the form of autonomy from social and cultural circumstances and extramusical meaning or function. However, to detach music from the social and cultural realm risks rendering the music culturally and socially irrelevant. If the elite value of music is its detachment from the society in which it exists, how is the music to continue to exist without the support of that

² Janet Wolff, “The Ideology of Autonomous Art,” in *Music and Society: The Politics of Composition, Performance, and Reception*, ed. Richard Leppert and Susan McClary (Cambridge: Cambridge University Press, 1987), 2.

³ This issue will be discussed in greater detail later on in this chapter.

⁴ In this context formalism is meant as a broad term for “absolute music” with an intentional emphasis on form and structure, associated with modernist tendencies in general, not isolated to a particular geographical or political context such as the formalism associated with Socialist Realism in the Soviet Union in the mid-twentieth century.

society? In the modernist attitude, maintaining the integrity of the autonomous music remained paramount at the risk of audience support, or, as McClary writes, “Better to go down with the ship than to admit to meaning.”⁵ She refers to this consequence as “terminal prestige,” explaining that, “By retreating from the public ear, avant-garde music has in some important sense silenced itself.”⁶

Some contemporary indeterminate music has decidedly forgone not only the emphasis on formalism, but has ceased to desire autonomy as well.⁷ As I argued in chapter 1, indeterminacy became a means for forging social connections and providing an openness for meaning and interpretation. Some of the characteristics of the move away from an aesthetic of autonomy are the exchanging of formalism and complexity for simplicity and openness in form and notation, the incorporation of aesthetic principles of improvisation, abandoning control of the sound product and placing value on other parameters of the performance, and the integration of other artistic media or disciplines into composition and performance.

Where modernist formalism favored specificity in notation in order to achieve a highly determinate result, less specific methods of notational instruction were used successfully in achieving indeterminate results. One method that composers such as Christian Wolff and La Monte Young began to use around the early 1960s was to provide written instructions in place of traditional music notation. Such written instructions varied

⁵ Susan McClary, “Terminal Prestige: The Case of Avant Garde Music Composition,” *Cultural Critique* 12 (1989): 66.

⁶ Ibid.

⁷ McClary points out that, “The idea of aesthetic autonomy, constructed in specific historical and social circumstances, and reinforced by the critical and ideological practices of certain academic disciplines, is beginning to disintegrate.” See McClary, “Terminal Prestige,” 8.

in their degree of specificity and determinacy as well. Additionally, some of Young's instructions were more concrete and specific, "Draw a straight line and follow it," others were more abstract, such as his *Piano Piece for David Tudor* no. 3, which provides the text, "Most of them / were very old grasshoppers."⁸ Young's form of providing instructions through brief, indeterminate passages of text—a type of score called an "event score," a term coined by George Brecht—was also shared by some of his contemporaries in the Fluxus collective.

As a large group of artists reacting "against the new orthodoxies of modernist art"⁹ working in many different artistic and performance media, Fluxus artists not only worked in multiple forms as a collective but aimed, "to work between the art forms, to combine them, to blend them, or (best yet) to formulate new modes that obviated the distinctions between them."¹⁰ In 1965, Fluxus artist Dick Higgins referred to this integration of art forms such that they are not isolated by distinct practices as "intermedia," a term still commonly used to describe similar works and practices.¹¹

The highly indeterminate works of Fluxus and others often relied on improvisation as a tool for the completion of indeterminate parameter. However, improvisation became more than a tool for realizing open works, as for many, improvisation served as a means of reintegrating music into the social and political

⁸ Examples of text provided by Peter Frank. See, Peter Frank, "Fluxus Music," in *Breaking the Sound Barrier: A Critical Anthology of the New Music*, ed. Gregory Battcock (New York: Dutton, 1981), 17.

⁹ Peter Frank, "Fluxus Music," in *Breaking the Sound Barrier: A Critical Anthology of the New Music*, ed. Gregory Battcock (New York: Dutton, 1981), 14.

¹⁰ Ibid.

¹¹ See, David Bithell, "Intermedia Art," In *Grove Music Online*, Oxford Music Online, accessed January 30, 2017, http://www.oxfordmusiconline.com.libproxy.unm.edu/subscriber/article/grove/music/A2241749?q=intermedia&search=quick&pos=1&_start=1#firsthit.

sphere. For Frederic Rzewski improvisation provided an environment where political ideals could be acted out; he writes, “An improvised piece of music is held to be ‘free.’ A written piece is assumed to be ‘structured’. . . In the 1960s, in radical circles of the ‘free music’ movement, *freedom* was an ethical and political, as well as aesthetic concept . . . in this case, to free the world from the tyranny of outdated traditional forms.”¹² This intentional turn from an aesthetic of autonomy toward an aesthetic of improvisation (whether on its own or as a factor of indeterminate music) points to a desire amongst composers to not only “break free” from traditional forms, but from formalism altogether.

A great example of a move away from formalism using indeterminacy is the work of Carolyn Chen (b. 1983). Chen has produced numerous intermedia and indeterminate works, some of which reflect the aesthetic ideals and methods implemented in response to the alienation of autonomy and formalism mentioned above. In *The Character for Ant Contains the Character for Justice* (2007), Chen provides instructions in text form, combining text of a more abstract, poetic nature and text which provides more explicit instructions for performance, shown in figure 3.1.

¹² Frederic Rzewski, “Little Bangs: A Nihilist Theory of Improvisation,” in *Audio Culture: Readings in Modern Music*, ed. Christoph Cox and Daniel Warner (New York: Continuum International Publishing Group Inc., 2004), 268.

The character for ant contains the character for justice

My dad says ants are communist and just. My mother says communists are not always just. The justice in ant may have more to do with sound than anything else. Still, the character is contained (蟻).

Parts: people, containers, things that can be contained (these may overlap).

Play: One by one, containers are placed adjacently to form a line through a space. The line does not have to be straight, but will make its way across the space. On each pass something that can be contained may be placed or exchanged.

Carolyn Chen, 7/1/07

Figure 3.1. Carolyn Chen, *The Character for Ant Contains the Character for Justice* (2007).¹³

One of the most immediately noticeable characteristics of this score is the absence of instruction regarding the production of sound. In fact, it is not sound itself, but the *idea* of sound that is the focal point of the piece. The opening text states, “The justice in ant may have more to do with sound than anything else. Still the character is contained.” This line indicates that the character, which is equated with or represented by sound, is internalized, is contained. Chen uses the absence of intentional sound making to draw our attention toward the withheld sound that we imagine being passed between them.

The Character for Ant not only incorporates the political and social factors evident in the first section of text (communism, justice, character that is contained), but its performance is structured upon a social activity (moving an object from person to person) as the main structuring characteristic of the performance. Chen’s inclusion of

¹³ Carolyn Chen, *The Character for Ant Contains the Character for Justice*, score (2007), accessed March 19, 2017, <https://dl.dropboxusercontent.com/u/33657432/The%20character%20for%20ant%20contains%20the%20character%20for%20justice.pdf>.

“people,” in the parts (or material) needed makes us aware that the performers are not merely interpreting the work but are, in fact, a primary component of this work. Though many scores will indicate the number of performers needed, “people” are rarely listed as parts or materials and are typically described by the term “performers.” Chen uses this terminology to draw focus to the human aspect of the performers, not as professional interpreters of the work, but as people. This terminology may also reflect the political content of the piece in reference to communism. By eliminating the role of the performer, we eliminate associations of status or hierarchy associated with performance and, as with the ants, view the performers as a collection of parts of a whole, the character of whom remains contained. The performance of Chen’s work then becomes an embodiment of the political and social factors it represents.

Another one of Chen’s works that uses social dynamics as a primary structuring characteristic is *Pears* (2007), for two performers. The score consists of boxes, which represent the performance space, and dots, which represent the two performers. Lines of poetic text appear beneath the boxes and are used to inspire the sound and movement in each of the sections (see figure 3.2).

Chen explains the social factors that inspired the composition and inform the performance of *Pears*:

The way people inhabit a space—the distance between them, the nature of their movement, their shifting position in relation to each other and to other elements in the space—implies a social and emotional relationship. The piece was inspired by the thought of a friendship between two people that continues whether they are close together or separated by distance. Here, moments of a physical relationship

are scripted, and some kind of conversational dynamic is suggested by the text. The rest must come from the performers.¹⁴

In both of Chen's works above, social, political, and emotional factors are not only welcomed through context or subtext, but are utilized as structuring characteristics. By leaving the musical formal characteristics indeterminate, Chen allows the social dynamics amongst the performers to determine the outcome of the performance. Within Chen's own description of *Pears*, it is apparent that this particular use of indeterminacy is used toward connective ideals. The music is no longer alienated from its social and political context, but is itself a performance of a social and political context. Additionally, Chen's scores, with their simplistic graphic or text-based notation and indeterminate characteristics, are not limited to performance by professional musicians. Chen and others use such simplicity as a means to not only reconnect contemporary music to its context, but to people (professional or amateur) as well. The inclusion of non-professional musicians is a trend that will recur in later examples in this chapter. This idea is perhaps one of the more profound examples of ways in which composers respond to alienation by opening participation in music to the general public beyond the audience role and by bringing the practice of art music into the public sphere.

¹⁴ Carolyn Chen, *Pears*, score (2007), accessed March 19, 2017, <https://walkingmango.files.wordpress.com/2014/08/pears.pdf>.

Alienation of People from Music: Simplicity in Response to Complexity

In his 1958 essay, “The Composer as Specialist,” Milton Babbitt characterizes modern art music by its desirable attributes of “‘difficulty,’ ‘unintelligibility,’ and isolation.”¹⁶ Difficulty, unintelligibility, and isolation play different roles amongst performers and listeners and are due to a number of possible musical factors. As discussed in the previous section, the emphasis on formal musical structures and specificity in notation places a great deal of power in the score. For performers, this meant a performance practice in which maintaining the integrity of the music as presented in the score was paramount. This became especially challenging as composers aimed to write highly complex music and performers faced greater difficulty in achieving the specified result. Additionally the three characteristics noted by Babbitt led to a mutual ambivalence between composers and audiences.

For listeners, the isolation from contemporary music came as a result of complexity. The modernist ideal of breaking with past musical traditions, in particular with functional tonality, meant that audiences were faced with trying to find a new way in which to understand the sounds that they were hearing. Many composers speculated about the cause of the misunderstanding of new music on the part of the audience. In his essay, “Contemporary Music and the Public,” co-authored with Foucault, Pierre Boulez asks, “Is there really only lack of attention, indifference on the part of the listener toward contemporary music? Might not the complaints so often articulated be due to laziness, to

¹⁶ Milton Babbitt, “The Composer as Specialist,” in *The Collected Essays of Milton Babbitt*, ed. Stephen Peles, Stephen Dembski, Andrew Mead, and Joseph Nathan Strauss (Princeton: Princeton University Press, 2011), 2.

inertia, to the pleasant sensation of remaining in known territory?”¹⁷ Whatever the fault of the audience in the misunderstanding and indifference toward contemporary music, it was clear that composers were not willing to compromise their quest for new compositional forms and higher degrees of complexity. Many composers have come to consider the label of “difficult” an honorable one. Arnold Schoenberg considered comprehensibility and positive reception of his music by audiences to be a sign of failure (of a new work) or diminished artistic worth (of older works). In his essay, “How One Becomes Lonely,” he writes, “My works were played everywhere and acclaimed in such a manner that I started to doubt the value of my music. . . how could it happen that now, all of a sudden, everybody could follow my ideas and like them? Either the music or the audience was worthless.”¹⁸

Many composers have positioned composition as a research field within the academy as a means of supporting their compositional endeavors without having to rely on audience approval. The academisation of art music emphasized the field of music theory and analysis, which underwent a great deal of change and gained more significance in the twentieth century. Methods of analysis based on mathematical models reinforced modernist formalism, autonomy, and complexity of form. As Georgina Born writes, theoreticism has also been a key component in legitimizing modernist music.¹⁹ McClary notes that the emphasis on form, autonomy, and complexity in methods of analysis, particularly in academic music education, perpetuates the notion that such

¹⁷ Ibid., 10.

¹⁸ Arnold Schoenberg, “How One Becomes Lonely,” in *Style and Idea*, ed. Leonard Stein (London: Faber and Faber, 1975; originally published 1937), 30-53.

¹⁹ See Georgina Born, *Rationalizing Culture: IRCAM, Boulez, and the Institutionalization of the Musical Avant-Garde* (Berkeley and Los Angeles: University of California Press, 1995), 42.

parameters constitute musical legitimacy, that “Any music worth bothering with (i.e., that is sufficiently prestigious to warrant attention) *was already difficult music*.”²⁰

Although modernist music composition may have found some success as a field of academic study, a significant alienation of the audience resulted from the perceived “Who Cares if You Listen?” attitude. In her essay, “Terminal Prestige: The Case of Avant-Garde Music Composition,” McClary discusses the prestige of complexity and “difficulty” as a significant factor of the alienation of both audiences (the general public) and performers from modernist music.²¹ McClary describes this prestige as “terminal” due to the consequences of the alienation of audiences in particular from contemporary art music.²² As a reaction, many composers have sought to revive contemporary music from this terminal state, through the use of simplicity and indeterminacy and through fostering an environment of participation for performers and the public.

In response to the alienation created by complexity and unintelligibility, some composers sought to de-specialize contemporary art music through simplification and engagement with audiences and amateur performers. Certain methods of indeterminacy (such as those presented in Chen’s *The Character for Ant is the Character for Justice* and *Pears*) eliminate structural and notational complexity and introduce the essential component of social practice. This simplification not only aimed to reconnect audiences with contemporary music, but performers as well. Born writes, “Against often the

²⁰ McClary, “Terminal Prestige,” 70.

²¹ In her discussions of Roger Sessions’ essay “How a ‘Difficult’ Composer Gets That Way,” Susan McClary writes that, “While Sessions professes not to care whether the assessment of ‘difficult’ is intended as praise or reproach, the title and tone of his essay make it quite clear that he wears ‘difficult’ as a badge of honor.” See McClary, “Terminal Prestige,” 58.

²² *Ibid.*, 66.

unperformed and unperformable complex scores and text-centered composition of the serialists, experimentalists wrote simplistic scores that broke away from traditional music notation: often just a short written description or graphic diagram, aimed at live performance, that was intended to give the performer maximum interpretive play.”²³ While Chen’s two examples included here present twenty-first century models of this notation, works from Christian Wolff’s 1971 “Prose Collection” including *Play*, *Stones*, and *Sticks*, utilize similar methods to achieve similar aims.

The instructions for *Play* (shown in figure 3.3), while simplistic, are somewhat specific in detailing parameters of coordination, timing and sequence.²⁴ With its lack of music notational symbols and high degrees of complexity in how to interpret the text instructions, *Play* is suitable for performance by performers with any level of musical education, including amateurs. Michael Nyman explains that, “An inclination to play with sounds would suffice perfectly to lead someone to perform it, while a little ingenuity, discipline, concentration and calm can only improve execution,”²⁵ and that “*Play* was written for players who have not necessarily had the benefit of (or been corrupted by) a musical education.”²⁶ Another significant aspect of play is the collaborative relationship between the performers as a structuring element of the piece, similar to the social activity of passing objects in Chen’s *The Character for Ant Contains the Character for Justice*. In Wolff’s piece, however, the performers base their individual decisions on what is happening in the group. This is exemplified in instructions such as

²³ Born, 57.

²⁴ Michael Nyman, *Experimental Music: Cage and Beyond*. 2nd ed. (Cambridge: Cambridge University Press, 1999), 114.

²⁵ Ibid.

²⁶ Ibid., 115.

“as soon as you cannot hear yourself or another play stop directly,” “Sometimes play independently, sometimes by coordinating,” and “sometimes overlap events.”²⁷ This dynamic where the individual performer bases his or her decisions upon what is happening in the group reflects Wolff’s ideals about the social and communal aspect of performance that are derived from free improvisation.

Play

Play, make sounds, in short bursts, clear in outline for the most part; quiet; two or three times move towards as loud as possible, but as soon as you cannot hear yourself or another player stop directly. Allow various spaces between playing (2, 5 seconds, indefinite); sometimes overlap events. One, two, three, four or five times play a long sound or complex or sequence of sounds. Sometimes play independently, sometimes by coordinating; with other players (when they start or stop or while they play or when they move) or a player should play (start or, with long sounds, start and stop or just stop) at a signal (or within 2 or 5 seconds of a signal) over which he has no control (does not know when it will come). At some point or throughout use electricity.

Figure 3.3. Christian Wolff, *Play* (1971)²⁸

In *Stones* and *Sticks*, Wolff uses materials to inform the musical output of the work in that the timbral element of the piece comes from the inherent sounds of the materials used. Additionally, what the performer is able to do is limited by the physical qualities of the materials. Other instructions are somewhat specific despite their

²⁷ Christian Wolff, *Play*, in “Prose Collection” (Lebanon, NH: Frog Peak Music, 1971),

7.

²⁸ Ibid.

simplicity. For example, in *Stones* (shown in figure 3.4), he instructs performers to make sounds “for the most part discreetly; sometimes in rapid sequences.”²⁹ In *Sticks* (Shown in figure 3.5), he provides instructions for “sustained as well as short” sounds and how the form of the piece may be dictated by the physical changes of the sticks, “You may end when your sticks or one of them are broken small enough that a handful of the pieces in your hands cupped over each other are not, if shaken and unamplified, audible beyond your immediate vicinity.”³⁰ These simple yet concise instructions lend the two pieces an adequate amount of structure while still keeping the actions simple and attainable. This is important for a couple of reasons. First, supplying structure lends a cohesive quality to the piece, characterized by discreet versus successive sounds, for example. Secondly, the structure provides an amateur performer enough information so that he or she feels confident in deciding what to do and is not faced with too much “free improvisation,” which can be daunting for anyone not experienced with performing, but it is simple enough that they are able to perform the notated actions.

²⁹ Christian Wolff, *Stones*, in “Prose Collection” (Lebanon, NH: Frog Peak Music, 1971), 9.

³⁰ Christian Wolff, *Sticks*, in “Prose Collection” (Lebanon, NH: Frog Peak Music, 1971), 10.

Stones

Make sounds with stones, draw sounds out of stones, using a number of sizes and kinds (and colors); for the most part discretely; sometimes in rapid sequences. For the most part striking stones with stones, but also stones on other surfaces (inside the open head of a drum, for instance) or other than struck (bowed, for instance, or amplified). Do not break anything.

Figure 3.4. Christian Wolff, *Stones* (1971)³¹

Sticks

Make sounds with sticks of various kinds, one stick alone, several together, on other instruments, sustained as well as short. Don't mutilate trees or shrubbery; don't break anything other than the sticks; avoid outright fires unless they serve a practical purpose.

You can begin when you have not heard a sound from a stick for a while; two or three can begin together. You may end when your sticks or one of them are broken small enough that a handful of the pieces in your hands cupped over each other are not, if shaken and unamplified, audible beyond your immediate vicinity. Or hum continuously on a low note; having started proceed with other sounds simultaneously (but not necessarily continuously); when you can hum no longer, continue with other sounds, then stop. With several players either only one should do this or two or two pairs together (on different notes) and any number individually.

You can also do without sticks but play the sounds and feelings you imagine a performance with sticks would have.

Figure 3.5. Christian Wolff, *Sticks* (1971)³²

³¹ Ibid.

³² Ibid.

Chen's collection of pieces, "Music for People," projects a similar attitude toward opening composition to varying levels of performers as well, including the absence of traditional instruments. As in *Play, Stones* and *Sticks* the exchange of traditional instruments for the voice or everyday objects eliminates the element of acquired musical skill or learned performance practice of playing traditional instruments. Chen takes the involvement of the everyday a step further by composing pieces that are to be performed in spaces traversed or inhabited by the general public. Some examples are pieces that she composed for *For People in a Supermarket* (2004-10), a collaborative work amongst several composers who created indeterminate performance works to be performed within the supermarket space. This collective work, which includes five pieces by Chen, takes music far outside of the university and the hands of the skilled specialist into the supermarket where it may be performed by anyone regardless of their musical background.

One of Chen's contributions to *For Music in a Supermarket*, "Aisle Music," asks for two performers, one of whom sits inside of a shopping cart singing the names of products as the other performer pushes the cart through the aisles. The person who pushes the shopping cart provides dynamic and tempo cues to the vocalizing person based on the speed and manner in which they push the cart. These parameters are detailed enough for anyone to understand and interpret the work, while remaining simple enough to accommodate for those with little or no formal musical training. The parameters of indeterminacy regarding the performance space take into account the social sphere in which the work is meant to be performed as well. In this case, Chen recognizes that it is

beyond her will of specificity to determine the location of products on the shelves which are to be intoned or the speed at which the cart is potentially able to move. By utilizing indeterminate features in the formal structure of the work, Chen incorporates the unpredictability of the social space into the work.

Wolff's "Prose Collection" works as well as Carolyn Chen's "Music for People" demonstrate how indeterminate composition responds to complexity and alienation of the performer. There is a high degree of freedom for the performers to exercise their own ingenuity or complexity as desired. Perhaps one of the most striking differences between these works and highly complex modernist works is the consideration of amateur performers. Where some modernist composers found prestige in difficulty and isolation; composers of indeterminate music found inclusion and social connectivity in simplicity and indeterminacy.

Alienation Among People:

Challenging the Role of the Composer in Response to Elitism and Hierarchy

The works by Wolff and Chen mentioned above reacted to alienation between performer or audiences and "difficult music" by providing agency through simplicity in the performance process. When alienation arises between the constituents of the musical process themselves (the composer, performer, and audience), some composers also respond by using indeterminacy as a social practice within the compositional process.

In his 2013 work *A Toronto Symphony*, Tod Machover (b. 1953) collaborated with the Toronto Symphony and the city of Toronto itself. Machover, a composer and

designer of electronic musical media at MIT, designed a social media app with which citizens of Toronto were able to record and submit sounds of their city to Machover to be used in the performance of the piece. He worked with members of the TSO to convert the audio samples contributed by the public into notated music that the symphony performed live.³³ Through another user-friendly app, citizens were then able to interact with the sections of instrumental version of the work online by moving the mouse around the screen to manipulate sounds.³⁴

What is remarkable about Machover's *Toronto Symphony* is the way in which he utilized social media technology to invite the audience (the city of Toronto) and the performers (the Toronto Symphony) into the act of composition. This inclusion in the generative process may be examined as a response through indeterminate social practice to alienation that has occurred between constituents of the musical process by emphasizing a sole composer as the supreme creative entity.

Nineteenth-century Romanticism and the idea of the "genius composer" greatly contributed to the hierarchy amongst composer, performer and audience, where the composer reigned supreme. Due to the aforementioned factors of complexity and specificity, the composer's intentions as conveyed through the score were of the utmost importance. Performers then assumed the role of interpreter and audiences, as mentioned previously, were in some cases considered all but obsolete. Moreover, the nineteenth-century context of such a hierarchy is related to the concept of artistic genius—that the "work" is a creation by a unique, exceptional artistic personality. The concept of genius

³³ Sue Carter Flinn, "Tod Machover Crowd-Sourced a Symphony for Toronto – Now Other Cities Want One Too," *Toronto Life*, March 7, 2013.

<http://torontolife.com/city/tod-machover-toronto-symphony/>.

³⁴ Ibid.

and subsequent hierarchy continue through the twentieth century when the transcendence of established rules contributes to the alienation of twentieth century audiences from the music of some modern composers who sought to break from identifiable forms. This focus on the artist, or author, of the work as the primary creative and deciding entity further plays into the loss of creative agency amongst the performer and the isolation of art music from audiences.

Although Machover's *Toronto Symphony* is a reaction against this hierarchy in many ways due to its social practice in compositional indeterminacy, Machover still maintains primary control over the work that is being produced. Ultimately, it is Machover who is able to decide which of the audio contributions are to be interpreted, in what ways they might be interpreted (by what instruments) and how they will become part of the formal structure of the work. As was mentioned in the conclusion to chapter 2, by maintaining the claim of sole authorship within a work, composers can more clearly lead us to reevaluate the role of the composer. In *A Toronto Symphony*, Machover is not trying to do away with the composer, but to suggest that a composer might serve a different type of role, in this case as a mediator who collects and organizes creative input from the general public.

John Zorn (b.1953), who is known for his work in jazz and improvisation, reevaluates the role of the composer as well in his "Game Pieces" (1984-2002). In these pieces Zorn provides an ensemble of professional performers with graphically notated instructions on ways in which they can react to the actions of other performers. Zorn, who acts as the conductor, initiates certain performers' actions and reactions through the use of hand signals. One of Zorn's primary aims in "The Game Pieces" was to allow the

creativity and expression of the performers to shape the outcome of the work. In discussing the value of individual creativity and interpretation in “The Game Pieces,” Zorn writes:

[Y]ou *want* to leave things open to performers in any music, or you end up with something that’s just so dictatorial. Music that’s overmarked is often more than daunting to the performer. It becomes impossible. You don’t want a machine to be playing this stuff. It’s got to be *human*. You want to give the option for the musicians on the stage to be able to express their creativity in some kind of way, whether it’s in fingering or phrasing or dynamics or whatever. I feel very strongly that there is an interaction between what’s on the page and the musician that’s playing it, and that there should be a level of creativity involved.³⁵

Zorn notes that he wanted the performers not only to express their individuality through improvisatory techniques and degrees of indeterminacy, but to form a social bond amongst the music and each other, he writes, “The answer for me was to deal with *form*, not with *content*, with *relationships* not with *sound*. Instructions in these early game pieces do not have musicians on the stage relating to *sound*. They have musicians on the stage relating to *each other*.”³⁶ These ideals fall in line with those shared amongst many other composers of indeterminate music in this chapter. One might draw particular relationships to Wolff and Rzewski, who incorporated the concept of a performance that is based on social interaction from free improvisation.

³⁵ John Zorn, “The Game Pieces,” in *Audio Culture: Readings in Modern Music*, ed. Christoph Cox and Daniel Warner (New York: Continuum International Publishing Group Inc., 2004), 198.

³⁶ *Ibid.*, 199.

Despite Zorn's attitude toward affording creativity to the performer, he still maintains some control by limiting performances of the work to those where he selects the performers that he himself conducts. To this end, the scores for "The Game Pieces" are not made easily available for non-sanctioned performances. Zorn's decision not to publish the game pieces and his preference to maintain control over the performers in the ensembles he conducts in performance show some of the remains of the hierarchized composer as the predominant entity in the musical process. Zorn states that he doesn't take issue with unauthorized, or what he calls, "outlaw" performances of "The Game Pieces," as long as, he says, "they realize the difference between amateur/outlaw versions (without my presence) and the more 'authorized' versions I organize myself."³⁷ Zorn clarifies his reason for this preference:

Many people have wondered why I have deliberately chosen not to publish (or even write down) the rules to these pieces, preferring to explain them myself in rehearsal as part of an oral tradition. The reasons are many. There is a lot more to these pieces than just the rules. For one thing, the choosing of players has always been a crucial part of the performance process and the art of choosing a band and being a good band leader is not something you can impart on paper in a written preface to the score. Although these pieces were written in the abstract and can be done essentially by anyone, they were not written in a vacuum. They were originally created to harness the personal languages of . . . players that I worked with closely and often.³⁸

³⁷ Ibid., 197.

³⁸ Ibid.

Zorn's insistence on selecting performers based on his prior knowledge of their skills and tendencies in performance and improvisation (something that Cage, Feldman, and Brown had done as well) demonstrates the complex politics of indeterminacy. Thus, one might view Zorn's "Game Pieces" as a unique situation amongst individual works by composers who are creating within the realm of their own desires and impulses, remaining subject to past influences, and responding to music and aesthetic ideas past and present. Zorn's attitudes present in the game pieces represent an individual stance or scenario within an ongoing conversation. Nonetheless, Zorn, Chen, Wolff, Machover, and other composers understand the essential social component of indeterminacy, and utilize those methods with intention toward connective aims.

Conclusion

The cases discussed in this chapter demonstrate ways in which composers are responding to various forms of alienation through indeterminacy. The climate of alienation in art music stems most noticeably from nineteenth-century ideas about the "work" and the composer, discussed in chapter 2, that resulted in an emphasis on formalism, complexity, and a hierarchized social structure. Additionally, ideas about music as an autonomous art further contributed to the sense of alienation of art music from the social and political environment. Through simplistic notations and high degrees of indeterminacy, composers challenge the prestige or complexity and formalism. By incorporating elements of improvisation, composers challenge the authority of the score. And by reallocating some creative agency to performers or the general public, composers

of contemporary indeterminate music cause us to reevaluate the role of the composer and the meaning of the single-author “work.”

CONCLUSION

The research presented in this study provides a glimpse of the ways in which contemporary composers use indeterminacy to challenge the power structures that contribute to conceptions of the “work” and the composer and which have ultimately led to an atmosphere of alienation in Western art music. Although the collection of works presented here is by no means inclusive of every indeterminate musical technique, nor is the group of composers discussed comprehensive, this overview does provide three important contributions: (1) a synthesis of relevant issues that direct the view of indeterminate music as distinct from but related to other open work concepts (2) an understanding of the concepts that drive particular power structures present in contemporary Western art music and the forms of alienation to which they contribute and (3) an exploration of diverse methods of indeterminacy used by contemporary composers as a response to alienation, either by challenging those power structures or attempting to counter alienation.

In chapter 1, the historical examination of the post-WWII Euro-American dialogue, particularly between composers John Cage and Pierre Boulez, helped to clarify how indeterminacy became a path for North American experimentalism. Discursively, this path is distinct from aleatory, incorporating but not synonymous with improvisation, and relying upon the element of chance. However, one of the most significant yet rarely discussed features of indeterminacy is the component of social practice. This component is not only essential for creating a performance in a structure that favors variety and

adaptability, but is also the component that is used by many contemporary composers as a means of subverting the constructs that contribute to alienation.

In chapter 2, philosophical viewpoints from Peter Kivy, Lydia Goehr, and others expounded the concepts of the “work” and the composer. Although there may not be any consensus among philosophers regarding what a “work” *is* or what a composer *does*, what is perhaps most important to this study is understanding how and why various theories about those questions have been formed and the implications they have had on Western musical culture. Through the lens of Mario Lavista’s 2011 performance of *Música para un árbol*, we are able to see how the concepts of “work” and “composer” are enculturated. We also see how, by reevaluating the role of the score and composer within a piece, a composer might challenge the validity of those concepts and lead us to wonder whether we might conceive of them differently.

Chapter 3 further elucidated the atmosphere of alienation in contemporary music by tracing it to some trends and ideals stemming from nineteenth-century thought. These ideas included formalism, complexity, and hierarchy within the musical social structure. Contemporary works by composers Christian Wolff, Carolyn Chen, Tod Machover, and John Zorn provided examples of ways in which composers have used indeterminacy in response to those forms of alienation. One of the most significant unifying aspects of all of the discussed works is the use of the “human” or social factor of indeterminacy.

The cases presented here represent only a small sample of the use of indeterminacy by contemporary composers. By better understanding what indeterminacy is and how it functions as a social practice, the door is open for future research to explore this path of contemporary music. Some specific areas that could benefit from further

development, but that were not within the scope of this study, are the intersections of indeterminacy with other disciplines (artistic and otherwise), and the relationship between indeterminacy and technology.

The findings presented in this study shed light on indeterminacy as an important component of experimental music. It is not a set of specific compositional techniques or a musical “movement,” but a practice that is still in process. It is my hope that the findings of this study will contribute to the ongoing dialogue of this contemporary social practice.

REFERENCES

- Adorno, Theodor W. *Philosophy of New Music*. Translated and edited by Robert Hullot-Kentor. Minneapolis: University of Minnesota Press, 2006.
- Alonso-Minutti, Ana R. "Permuting Cage." *Brújula: revista interdisciplinaria sobre estudios latinoamericanos* 6 (2008): 114-123.
- , "Escuchando la pintura, pintando la música: intertextualidad musical y pictórica en la obra de Mario Lavista." *Pauta: Cuadernos de teoría y crítica musical* 139-140 (2016): 85-105.
- Alonso-Minutti, Ana R., Eduardo Herrera, and Alejandro L. Madrid. *Experimentalisms in Practice: Music Perspectives from Latin America*. New York: Oxford University Press, forthcoming.
- Anderson, Donald Leonard. "Power and Indeterminacy: The Noisy Networks of Foucault, Cage, Burroughs, and Delany." PhD diss., University of Washington, 2011. ProQuest (3501497).
- Auner, Joseph. *Music in the Twentieth and Twenty-First Centuries: Western Music in Context*. New York: W.W. Norton & Company, 2013.
- Babbitt, Milton. "The Composer as Specialist." 1958. In *The Collected Essays of Milton Babbitt*. Edited by Stephen Peles, Stephen Dembski, Andrew Mead, and Joseph Nathan Strauss. Princeton: Princeton University Press, 2011.
- Barthes, Roland. *Image, Music, Text*. Edited by Steven Heath. New York: Hill and Wang, 1977.
- Battcock, Gregory, ed. *Breaking the Sound Barrier: A Critical Anthology of the New Music*. New York: Dutton, 1981.
- Benitez, Joaquim. "Avant-Garde or Experimental? Classifying Contemporary Music." *International Review of the Aesthetics and Sociology of Music* 9, no. 1 (1978): 53-77.
- Benjamin, Walter. *The Work of Art in the Age of Mechanical Reproduction*. 1936. New York: Prism Key Press, 2012.
- Bithell, David. "Intermedia Art." In *Grove Music Online. Oxford Music Online*. Oxford University Press. Accessed January 30, 2017.
http://www.oxfordmusiconline.com.libproxy.unm.edu/subscriber/article/grove/music/A2241749?q=intermedia&search=quick&pos=1&_start=1#firsthit.

- Born, Georgina. "Prehistory: Musical Postmodernism as the Negation of Musical Modernism." In *Rationalizing Culture: IRCAM, Boulez, and the Institutionalization of the Musical Avant-Garde*, 40-65. Berkeley and Los Angeles: University of California Press, 1995.
- Born, Georgina and David Hesmondhalgh, eds. *Western Music and Its Others: Difference, Representation, and Appropriation in Music*. Berkeley: University of California Press, 2000.
- Boulez, Pierre. "Aléa." *Perspectives of New Music* 3, no. 1 (1964): 42-53.
- Bressanin, Anna. "Tod Machover: Composer's Social Media Symphony for Toronto." BBC News. March 12, 2013. <http://www.bbc.com/news/magazine-21719783>.
- Brown, Earle. "Transformations and Developments of a Radical Aesthetic." In *Audio Culture: Readings in Modern Music*, edited by Christoph Cox and Daniel Warner, 189-195. New York: Continuum International Publishing Group Inc., 2004.
- Burkhalter, Thomas, Kay Dickinson, and Benjamin J. Harbert. *The Arab Avant-Garde: Music, Politics, Modernity*. Middletown, CT: Wesleyan University Press, 2013.
- Cage, John. *Silence: Lectures and Writings by John Cage*. Middletown, CT: Wesleyan University Press, 1973.
- . *Music of Changes*. New York: Henmar Press, 1961.
- Carney, James D. "What Is a Work of Art?" *The Journal of Aesthetic Education* 16, no. 3 (1982): 85-92.
- Chen, Carolyn. "Carolyn Chen." Accessed September 18, 2016. <https://walkingmango.wordpress.com/work/music-for-people/>.
- . *The Character for Ant Contains the Character for Justice*. Score. 2007. Accessed March 19, 2017. <https://dl.dropboxusercontent.com/u/33657432/The%20character%20for%20ant%20contains%20the%20character%20for%20justice.pdf>.
- . *Pears*. Score. 2007. Accessed March 19, 2007. <https://walkingmango.files.wordpress.com/2014/08/pears.pdf>.
- Cook, Nicholas. *Beyond the Score: Music as Performance*. New York: Oxford University Press, 2013.
- Cope, David. "Indeterminacy." In *New Directions in Music*, 7th ed., 77-101. Long Grove, IL: Waveland Press, 2001.

- Cox, Christoph and Daniel Warner, eds. *Audio Culture: Readings in Modern Music*. New York: The Continuum International Publishing Group Inc., 2006.
- Cox, Christoph. "Visual Sounds: On Graphic Scores." In *Audio Culture: Readings in Modern Music*, edited by Christoph Cox and Daniel Warner, 176-186. New York: Continuum International Publishing Group Inc., 2004.
- Eco, Umberto. "The Poetics of the Open Work." 1959. In *Audio Culture: Readings in Modern Music*, edited by Christoph Cox and Daniel Warner, 167-175. New York: Continuum International Publishing Group Inc., 2004.
- Eno, Brian. "Generating and Organizing Variety in the Arts." In *Audio Culture: Readings in Modern Music*, edited by Christoph Cox and Daniel Warner, 226-233. New York: Continuum International Publishing Group Inc., 2004.
- Feisst, Sabine M. "John Cage and Improvisation: An Unresolved Relationship." In *Musical Improvisation: Art, Education, and Society*, edited by Gabriel Solis and Bruno Nettl, 38-51. Urbana and Chicago: University of Illinois Press, 2009.
- "Losing Control: Indeterminacy and Improvisation in Music Since 1950." *New Music Box*, March 1, 2002. Accessed March 19, 2017.
<http://www.newmusicbox.org/articles/Losing-Control-Indeterminacy-and-Improvisation-in-Music-Since-1950/7/>.
- Flinn, Sue Carter. "Tod Machover Crowd-Sourced a Symphony for Toronto – Now Other Cities Want One Too." *Toronto Life*. March 7, 2013.
<http://torontolife.com/city/tod-machover-toronto-symphony/>.
- Foucault, Michel and Pierre Boulez. "Contemporary Music and the Public." Translated by John Rahn. *Perspectives of New Music* 23 (1985): 6-12.
- Frank, Peter. "Fluxus Music." In *Breaking the Sound Barrier: A Critical Anthology of the New Music*. Edited by Gregory Battcock, 13-19. New York: Dutton, 1981.
- Goehr, Lydia. *The Imaginary Museum of Musical Works: An Essay in the Philosophy of Music*. Oxford: Clarendon Press; New York: Oxford Univ. Press, 1992.
- Gottschalk, Jennie. *Experimental Music Since 1970*. New York and London: Bloomsbury, 2016.
- Griffiths, Paul. *Modern Music: The Avant Garde Since 1945*. New York: George Braziller Inc., 1981.
- *Modern Music and After*. 3rd ed. New York: Oxford University Press, 2010.

- ."Aleatory." *Grove Music Online. Oxford Music Online.* Oxford University Press, accessed May 6, 2016. <http://www.oxfordmusiconline.com/subscriber/article/grove/music/00509>.
- Hamilton, Andy. "The Music of Chance: Musical Dice Men from John Cage to John Zorn." In *Undercurrents: The Hidden Wiring of Modern Music*, edited by Rob Young, 209-221. London: Continuum, 2002.
- Higgins, Charlotte. "Tod Machover: How to Crowdfund a Symphony." *The Guardian*. March 2013. <https://www.theguardian.com/music/2013/mar/19/tod-machover-how-to-crowdfund-symphony>.
- Iyer, Vijay. "Improvisation: Terms and Conditions." In *Arcana IV: Musicians on Music*, edited by John Zorn, 171-175. New York: Hips Road, 2009.
- Kim, Rebecca Y. "In No Uncertain Musical Terms: The Cultural Politics of John Cage's Indeterminacy." PhD diss., Columbia University, 2008. ProQuest (3333375).
- Kivy, Peter. *Introduction to a Philosophy of Music*. Oxford and New York: Clarendon Press, 2002.
- Kivy, Peter. *The Fine Art of Repetition: Essays in the Philosophy of Music*. Cambridge and New York: Cambridge University Press, 1993.
- ." *Sounding Off: Eleven Essays in the Philosophy of Music*. Oxford: Oxford University Press, 2012.
- Landy, Leigh. *What's the Matter with Today's Experimental Music: Organized Sound Too Rarely Heard*. Philadelphia: Harwood Academic Publishers, 1991.
- Lavista, Mario. "Música para un árbol." Unpublished score. 2011.
- ." *Música para un árbol: En torno a la obra de Sandra Pani*. Verónica Murúa, Horacio Franco, Bozena Slawinska, Mario Lavista, Ensemble Cepromusic, José Luis Castillo, dir. Tempus Classico. CD. 2017. Compact disc.
- Leppert, Richard and Susan McClary, eds. *Music and Society: The Politics of Composition, Performance, and Reception*. Cambridge: Cambridge University Press, 1987.
- Lewis, George E. "Improvised Music after 1950: Afrological and Eurological Perspectives." *Black Music Research Journal* 16, no. 1 (1996): 91-122.
- McClary, Susan. "Terminal Prestige: The Case of Avant Garde Music Composition." *Cultural Critique* 12 (1989): 57-82.

- Nettl, Bruno. "Improvisation." In *Grove Music Online. Oxford Music Online*. Oxford University Press. Accessed April 23, 2017.
<http://www.oxfordmusiconline.com.libproxy.unm.edu/subscriber/article/grove/music/13738pg2#S13738.2.6>.
- Nicholls, David. "Avant-garde and Experimental Music." In *Cambridge History of American Music*, edited by David Nicholls, 517-534. Cambridge: Cambridge University Press, 1998.
- . *American Experimental Music, 1890-1940*. Cambridge: Cambridge University Press, 1990.
- Nyman, Michael. *Experimental Music: Cage and Beyond*. 2nd ed. Cambridge: Cambridge University Press, 1999.
- Pani, Sandra. "De der árbol – Sandra Pani." YouTube video. 0:45. November 7, 2011.
<https://www.youtube.com/watch?v=TpT1kyDbCqE>.
- Payá, Luisa Vilar. Liner notes to *Música para un árbol: En torno a la obra de Sandra Pani*. Translated by Gregory Dechant. Verónica Murúa, Horacio Franco, Bozena Slawinska, Mario Lavista, Ensemble Cepromusic, José Luis Castillo, dir. Tempus Classico. CD. 2017.
- Piekut, Benjamin. *Experimentalism Otherwise: The New York Avant-Garde and its Limits*. Berkeley: University of California Press, 2011.
- . *Tomorrow is the Question: New Directions in Experimental Music Studies*. Ann Arbor: The University of Michigan Press: 2014.
- . "Introduction: New Questions for Experimental Music," in *Tomorrow is the Question: New Directions in Experimental Music Studies*, edited by Benjamin Piekut, 1-14. Ann Arbor: University of Michigan Press, 2014.
- . "Indeterminacy, Free Improvisation, and the Mixed Avant-Garde." *Journal of the American Musicological Society* 67, no. 3 (2014): 769-824.
- Rockwell, John. *All American Music: Composition in the Late Twentieth Century*. Cambridge, MA: Da Capo Press, 1983.
- Rzewski, Fredric. "Little Bangs: A Nihilist Theory of Improvisation." In *Audio Culture: Readings in Modern Music*, edited by Christoph Cox and Daniel Warner, 266-271. New York: Continuum International Publishing Group Inc., 2004.
- Saunders, James, ed. *The Ashgate Research Companion to Experimental Music*. Burlington, VT: Ashgate Publishing Company, 2009.

- Sessions, Roger. "How a Difficult Composer Gets That Way." In *Roger Sessions on Music: Collected Essays*. Edited by Edward T. Cone. Princeton: Princeton University Press, 1979.
- Schoenberg, Arnold. "How One Becomes Lonely." In *Style and Idea*, ed. Leonard Stein, 30-53. London: Faber and Faber, 1975. Originally published 1937.
- Sun, Cecilia. "Experimental Music." In *Grove Music Online. Oxford Music Online*. Oxford University Press. Accessed February 24, 2016.
<http://www.oxfordmusiconline.com/subscriber/article/grove/music/A2224296>.
- Taruskin, Richard. *The Oxford History of Western Music*. Vol. 5: "Music in the Late Twentieth Century." New York: Oxford University Press, 2009.
- , "No Ear for Music: The Scary Purity of John Cage." *New Republic* 28, no. 11 (1993): 26-35.
- Wolff, Janet. "The Ideology of Autonomous Art." In *Music and Society: The Politics of Composition, Performance, and Reception*, edited by Richard Leppert and Susan McClary, 1-12. Cambridge: Cambridge University Press, 1987.
- Zorn, John. "The Game Pieces." In *Audio Culture: Readings in Modern Music*, edited by Christoph Cox and Daniel Warner, 196-200. New York: Continuum International Publishing Group Inc., 2004

