

Listening to Luciano Berio's *Sequenza III*: A Multi-Perspective Examination of the Singer's
Embodied Experience

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Abstract

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The musical performer's embodied experience is an aspect of the performing process that has yet to be adequately considered in music scholarship. The embodied experience is relegated to the realm of the inaccessible and subjective, rather than being considered a valuable source of information for both the music analyst and performer. This thesis contends that the performing body can provide deep insights into musical meaning and can act as a resource for developing musical understanding. The sensations and experiences of the performer's body during the process of creating music can lead to the recognition of important moments and fundamental meanings within a musical work.

Engaging with scholarly literature from a variety of disciplines, this thesis will explore the classical singer's embodied experience from the three primary perspectives of phenomenology, ecological perceptual theory and body communication theory. Each perspective is explored in and through a comparative listening analysis of Luciano Berio's work for solo voice *Sequenza III per voce femminile* (1966) in order to illuminate specific aspects of the singer's embodied experience. This embodied approach to musical analysis considers the singer's body as a contributor to not only the production of sound but also to the creation of musical meaning, and can thus offer rich insights into that which is discovered through traditional analysis.

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Introduction

Since the beginning of the 20th century, human and science-based researchers have been studying the body with renewed interest. This philosophical, sociological, anthropological and neurocognitive research on the body can be broadly called embodiment research and examines the way in which the body impacts our understanding and experience of the world.

However, relatively few music performance researchers have engaged with embodiment research and it is an important consideration since the body plays a critical role in how we develop and produce musical meaning. The body can be understood from different perspectives (e.g. sociological, biological, philosophical and cultural) and this thesis will explore, from these different perspectives, the embodied experience of the musical performer. A key objective of this thesis is to take these multiple perspectives on the body and examine them in the context of the musical performing body. This research will be focused on the experience and perspective of the classical singer. The analytical framework for this research will be based in phenomenology, ecological perceptual theory and body communication theory. The case study for this methodology will be Luciano Berio's solo vocal work, *Sequenza III per voce femminile* (1966). In undertaking this research I will provide the reader with an understanding of how these multiple perspectives on embodiment can be applied in a music performance domain and subsequently influence the development of musical meaning.

Thesis Chapter Outline

This thesis will begin with a review of the pertinent literature related to embodiment theory and embodied musical performance. Aspects of the presented literature will be discussed in further detail in subsequent chapters and will contribute to different aspects of the analytical methodologies used in Chapters 2-4. The literature review in Chapter 1 is meant to provide the reader with an understanding of the multidisciplinary aspects of embodiment research, by demonstrating how this research has developed and grown within a variety of disciplines. Following Chapter 1, this thesis provides three levels of analysis of *Sequenza III*, each with a different perspective on how embodied experience contributes to musical meaning.

Chapter 2 of this thesis is based in a phenomenology, both from a philosophical perspective and a musical perspective. Engaging with the work of Edmund Husserl and Maurice Merleau-Ponty this chapter will provide background on certain aspects of phenomenology and then develop a first level of analysis of *Sequenza III*. This level of analysis is termed a phenomenological analytic model.

Chapter 3 provides an overview of ecological perceptual theory and discusses how aspects of this theory can be useful for an analysis of musical meaning. In this chapter a second level of analysis is presented, which I have labeled a comparative subject-position analysis.

The final chapter of this thesis, Chapter 4, contains a discussion of Mark Johnson's conception of embodied meaning and a bodily communication analysis based on work by Jane Davidson, Paul Ekman and Wallace Friesen.

Prior to the multiple analyses presented within this thesis, I would like to outline a description of the piece, since the reader may not be familiar with the work. I will also discuss a selection of the scholarly work that has been completed on *Sequenza III*, including readings by David Osmond-Smith, Istvan Anhalt, Joke Dame and Janet K. Halfyard, which demonstrate the variety of lenses through which this music has been considered.

Sequenza III

Sequenza III is not a work for the faint of heart.¹ In addition to moments of classical *bel canto* singing style the score also indicates that the singer must perform vocal gestures and make vocal sounds that a classical singer might not be accustomed to making. The uniqueness of *Sequenza III* has caused the development of many conflicting readings and interpretations of the piece, and it is not clear whether Berio meant it to be anything more than an exploration of phonetic sounds. We do know that the piece was composed for (and, as Istvan Anhalt suggests, co-created with (1984, p. 40)) Berio's wife Cathy Berberian, however, aside from displaying Berberian's incredible vocal and expressive abilities, a distinct meaning of the work is not apparent. Nevertheless, regardless of the composer's intentions, *Sequenza III* has remained a seminal composition in contemporary vocal repertoire (Halfyard, 2007, p. 104).

Description of the Piece

The work is based on a modular poem by Markus Kutter, who, when Berio queried Kutter to "give me a few words for a woman to sing," conceded by providing the following text:

¹ It is the third in a series of 14 *Sequenze*, each composed by Berio for a different solo instrument. For a full discussion of the entire series see Halfyard, *Berio's Sequenzas: Essays on Performance, Composition and Analysis*, 2007.

give me	a few words	for a woman
to sing	a truth	allowing us
to build a house	without worrying	before night comes

The poem is essentially unrecognizable in the score since Berio only occasionally inputs a complete, intelligible word and instead primarily employs the phonemes of the text using the International Phonetic Alphabet (IPA). The result is a mixture of disjointed sounds, abstracted from their semantic meanings, which are arranged in such a way to direct the listener's attention to the acoustic properties of the words.² Occasionally throughout the piece the listener is able to discern short fragmented phrases of text, but what is truly memorable about the piece is the sheer variety of non-textual sounds and utterances (i.e. extended vocal techniques such as gasping, coughing and laughing) that occur.

As the reader will have by now inferred, the score for this work is also untraditional. It is proportional, each measure amounting to approximately 10 seconds, and somewhat graphic in the notation of the vocal sounds. The singer must approximate the length of each vocal gesture (including the spaces between the gestures, which indicate silence) in order to time the piece correctly. The measures move fluidly between one, three and five lines on the staff depending on the type of vocalization required, either spoken, or sung. There are no specific time signatures, pitches or rests; the singer's task is to decipher the images on the score based on the legend Berio provides as a forward to the piece. The vocal range can be adapted to the singer with all of the pitch ranges being relative but not exact. There are a few select physical gestures that are indicated in the score (such as snapping of the fingers

² Eric Clarke (2005) refers to this as "a disruption of the normal relationship of source specification" (p. 33) that demonstrates how the presentation and perception of sounds can encourage the listener to detect structural information that they may not have garnered previously. This can also be seen in the experiments of Dibben (2001) who observed that listeners often grouped semantic meaning of musical sounds on the type of specification they identified (e.g. source, function or genre) (p. 172-173).

and rubbing or tapping a hand over one's mouth to distort the sound), but any and all other physical movements have been explicitly left to the discretion of the singer.

These other vocal sounds such as coughing, tongue clicking, snapping, gasping, whining, and laughing, while common in everyday auditory experience, are rarely heard emanating from the mouths of singers in a classical concert hall. These utterances are interspersed with the phonemes, sometimes with rapid succession, and exist throughout the vocal range of the singer. The singer is asked to explore every possibility of her sound production capabilities and thus is not restricted to only the sounds common to *bel canto* singing. Berio did this consciously, noting how “in traditional vocal music the voice is seen as a vulnerable instrument which is put away in its case after the performance, and which has nothing to do with the voice the singer uses in daily communication” (Dame, 1998, p. 240). *Sequenza III* is therefore an exploratory piece for the voice, allowing the singer to display a wider range of vocal utterances that “tell[s] the “story” of the relationship between the soloist and her own voice” (Dame, 1998, p. 241).

The piece is also expressively challenging for both singer and audience as Berio includes 44 different expressive directions (ranging from ‘tense,’ ‘bewildered,’ ‘tender’ and ‘wistful’) with no apparent continuity or order. The blisteringly fast change of mood and demeanor of the singer is one of the most engaging and simultaneously unsettling features of the piece, forcing the listener to experience upwards of nine minutes of unpredictable sounds.

The freedom prescribed to the singer and the overall eccentric nature of the piece allows for many contrasting interpretations of the piece. Within this thesis, it is not my intention to provide an additional interpretative reading but rather to use *Sequenza III* as a

case study in which to explore the importance of a singer's embodied experience. However, I will provide a brief overview of some of the contrasting interpretations of the piece, a topic that the reader may pursue further if desired.

Readings of *Sequenza III*

David Osmond-Smith

David Osmond-Smith is generally considered the primary scholar on Luciano Berio. His take on *Sequenza III* is that Berio has exploited Kutter's text and used it as "a quarry for phonetic materials, out of which from time to time a coherent phrase is allowed to emerge" (Osmond-Smith, 1991, p. 65). This interpretation seems calculated and passive, as well as starkly contrasting to other, highly emotional readings of the piece as exemplified by Istvan Anhalt and Joke Dame. Osmond-Smith goes on to discuss the continuity and contrast between vowel sounds in *Sequenza III*, noting how Berio in some sections has positioned the vowels in a circular motion, moving through the matrix of IPA vowels. This "display of oral acrobatics" permeates the piece and is seen by Osmond-Smith as a way of observing Berberian's vocal abilities with "a fascinated detachment" (Osmond-Smith, 1991, p. 65 and 66).

Istvan Anhalt

This disconnected and unemotional reading of *Sequenza III* is not a view shared by other scholars. Istvan Anhalt focuses his discussion of the piece on the mindset of the protagonist, wondering why she chooses to express herself in such an unintelligible way. Anhalt considers the woman to be under a state of duress as he asks, "what are the sources of her anxiety? Whom is she fighting? From whom is she fleeing?" (Anhalt, 1984, p. 25). He then goes on to make a diagnosis of the woman's apparent disorder, claiming that the piece

reveals “a woman [with] a syndrome of psychic ailments that contains elements of schizophrenia . . . we are seeing a complex sample of the turbulent inner life of a person either very psychotic or having a severe nightmare” (Anhalt, 1984, p. 27). Anhalt’s analysis of this woman’s mental state involves classifying the vocal utterances throughout the piece into five separate categories of oral expression³ and subsequently dividing each category into seven labels.⁴ Anhalt then compares these classifications to discern both small and large-scale orders of the vocal utterances, attempting to better understand the seemingly incoherent structure of the piece. His grand inference is essentially that there are two psychic states within the woman, each competing for dominance, and by observing that “the singing mode becomes victorious” at the conclusion of the piece, “the character portrayed seems to have found a state of precarious inner stability” (Anhalt, 1984, p. 38 and 40).

Joke Dame

Anhalt’s analysis offers much in the way of comprehending of the vocal utterances and developing an intelligible understanding of the structure of the work. However, as was suggested earlier, in her feminist reading of *Sequenza III* Joke Dame rejects Anhalt’s declaration of the fragile mental state of the protagonist. Dame questions Anhalt’s assumptions, turning his questions upon him and demanding, “what are you so frightened of? What are you fighting? From whom are you fleeing?” (Dame, 1998, p. 237). Dame believes that Anhalt introduces the female protagonist in his analysis so that he may make

³ These five classifications of oral expression are: class one: rapid, well-articulated, periodic utterances; class two: pauses; class three: vocal tics, and other interjections; class four: sustained singing; class five: timbre modifications (e.g. trills, tremolos) (Anhalt, 1984, p. 31-33).

⁴ These seven labels are 1) subtypes of the oral expression (i.e. often the expressive directions prescribed by Berio within the score); 2) range, register and directionality; 3) intensity; 4) duration; 5) affective labels (indicated in the score); 6) text-use; and 7) psycholinguistic connotations (Anhalt, 1984, p. 27 and 31).

claims regarding the woman's mental state without having to claim that Cathy Berberian, the primary interpreter of the piece, is herself psychotic. By separating the listener from the drama of the piece, by "pathologising the protagonist," Dame believes that Anhalt effectively regulates the piece and causes "the disturbing and frightening aspects of *Sequenza III* [to be] exorcised. The sting has been removed from the work and substituted by with moral" (Dame, 1998, p. 237). In Dame's view, a discussion of what the piece *means* is less important than deciphering which elements within the piece *carry* meaning. Dame's exploration of *Sequenza III* continues as she outlines the conception of Julia Kristeva's famed literary theory of phenotext and genotext, a theory in which Kristeva describes how every literary text, which is bound by conventions and code, can be regarded as a phenotext. It is what we hear, what we understand based on our adherence to those codes—essentially the material construction of a work. However, underlying every phenotext, and presenting itself simultaneously, is a work's genotext. The genotext does not reveal a signifying process as clearly as the phenotext, because its signifying potential is limitless. Dame takes Roland Barthes conception of these terms as he applied them to vocal music (switching the descriptors to phenosong and genosong) in order to explain how they function together in *Sequenza III*. Barthes considers the genosong in a vocal performance to include the erotic and seductive aspects of singing; the place of friction and the corporeality of the singer where "the melody really works at the language— not at what it says, but the voluptuousness of its sound-signifiers, of its letters" (Barthes, 1977, p. 182). Dame's use of Barthes conception of genosong fits well with the focus of this thesis in that it too is centered upon the physical body of the performer. Beyond simply physicality however, the genotext/genosong also contains aspects of that which is repressed, such as desire,

pleasure and lust. Through her discussion of genosong Dame explores the potential for eroticism and *jouissance* within *Sequenza III*. Her discussion also touches on why *Sequenza III* is an appropriate musical work for this thesis, since so many of the vocal gestures are connected to the singer's physicality and "the pleasure of the physical act as an aspect of sound production" (Dame, 1998, p. 239). Dame presents the genosong in three primary areas of *Sequenza III*. Firstly, as the "chosen sound material" for the piece, secondly, as the subject or content of the piece (since the piece is "concerned with the physicality of sound production" (Dame, 1998, p. 241)), and finally as a gateway for the performer's expression, offering "an outlet for what is usually repressed" (Dame, 1998, p. 241). *Sequenza III* defies conventional limits pushing both performer and audience to experience a deeper level of genosong, at the level of structure, subject and expression.

Janet K. Halfyard

Musicologist and singer Janet K. Halfyard offers yet another perspective from which to explore *Sequenza III*. While I have not come across any personal reflection on her own experience of the piece, I find it interesting to note that as singer specializing in contemporary music she would have an experience of the piece from a performance standpoint. I have no doubt that this area of her musical life would inform, either explicitly or incidentally, her musicological endeavors with the piece. Her dual perspective also means that she is well aware (arguably more so than other scholars) on the connection and influence of Berberian to this, and other, works of Berio. In short, Berberian's influence on this work cannot be overstated. The piece was written for her voice and her mannerisms and she is quoted as saying that she and Berio "almost composed together" (Soria, 1970, p. 5). Berberian is considered to be the ultimate interpreter of this piece and the yardstick

against which all other performances are measured. As Halfyard notes, “it would probably be impossible for anyone familiar with the extended vocal repertoire to perform *Sequenza III* without an awareness of Berberian looking over her shoulder” (2007, pp. 108-109).

Halfyard has done two main analyses of the piece, both of which connect the musical elements to other disciplines. In “Provoking Acts: The Theatre of Berio's *Sequenzas*” (2007), she considers how the piece can be considered a piece of theatre, outside of the musical components, and in “Before Night Comes: Narrative and Gesture in Berio's *Sequenza III* (1966)” (2002), she connects the vocal gestures to a theory of dance gestures by Robert Laban.⁵

In a connection to theatre, Halfyard examines *Sequenza III* (as well as *Sequenza V* for trombone) from the perspective of action, narrative, character and virtuosity. In her discussion she considers one element of the text to be of integral importance, the phrase “before night comes” near the final conclusion of the piece. For Halfyard, this text puts a “time limit” on the actions of the singer and therefore can be responsible for the feelings of franticness and panic and tension that pervade the piece. Halfyard also notes that within the theme of theatrical action the standard recital format for a singer is not adhered to—the performer appears oblivious to any performance or recital conventions as well as oblivious to the audience—which creates the feeling for the audience that they are watching something real. In line with Anhalt's thinking, Halfyard offers the possibility that “perhaps the singer has gone mad” (2007, p. 110).

Halfyard's essay in which she connects the piece to a Laban's theory of effort in his movement analysis gestures is another example of how researchers are drawn to the innate

⁵ For more information on Laban's theory of effort and movement analysis, see (Laban & F.C., 1947) and (Davies, 2006).

physicality that pervades *Sequenza III*. The vocal gestures move, change, twist and bend at such a rapid rate that it seems almost as if they do emulate a physical body engaged in dance. By categorizing each type of vocal gesture in accordance with one of Laban's terms (thrust, dab, slash, flick, press, wring, glide and float) Halfyard is able to discern the exact physical contours of motion displayed by the piece. In fact, the physicality of the vocal gestures and their connection to actual physical body movements becomes the primary focus of the analysis, since each of Laban's terms also takes into account the gesture's "force or weight (firm or gentle); its relationship with space, whether its trajectory is predictable and direct or unpredictable and flexible; and its relationship with time, whether its duration is brief or prolonged, resulting in gestures that are either sudden or sustained" (Halfyard, 2002). Halfyard presents an interdisciplinary perspective from which to look at Berio's music, one that knowingly explores the piece for its vocal and corporeal physicality.

In this thesis I will be using three recordings of *Sequenza III* as a basis for my analysis. These include a 1969 recording by Cathy Berberian, a 1988 recording by Luisa Castellani and a 1995 recording by Christine Schadeberg. Each recording presents a different interpretation of the piece, as the following comparative analyses of each version will illuminate. These analyses will also demonstrate how the embodied experience of each singer contributed to the uniqueness of each recording.

Sequenza III has been, and will more likely remain, a challenging work for both performers and scholars. It represents a revolutionary and exciting approach to vocal music, one that requires an appreciation of the physical body of the performer. Despite the variance in interpretive stances on the piece, it will remain a thrilling adventure for performer and listener in whatever mode it is experienced.

Chapter 1: Embodiment Research

This first chapter will briefly trace the theoretical development of the concept of embodiment by broadly considering two viewpoints of the body: a phenomenological perspective as presented by Maurice Merleau-Ponty, which views experience and perception as key components for understanding the world, and a sociological view as developed Michel Foucault, which argues that the body is steeped in cultural and social relations, or “socially constructed and socially experienced” (Turner, 1984, p. 54). The research of this chapter will be positioned on the theoretical contrast between phenomenology’s focus on the importance of experience mediated through the individual body and sociology’s view of the body as an object that is conceived through connections to the external environment.⁶

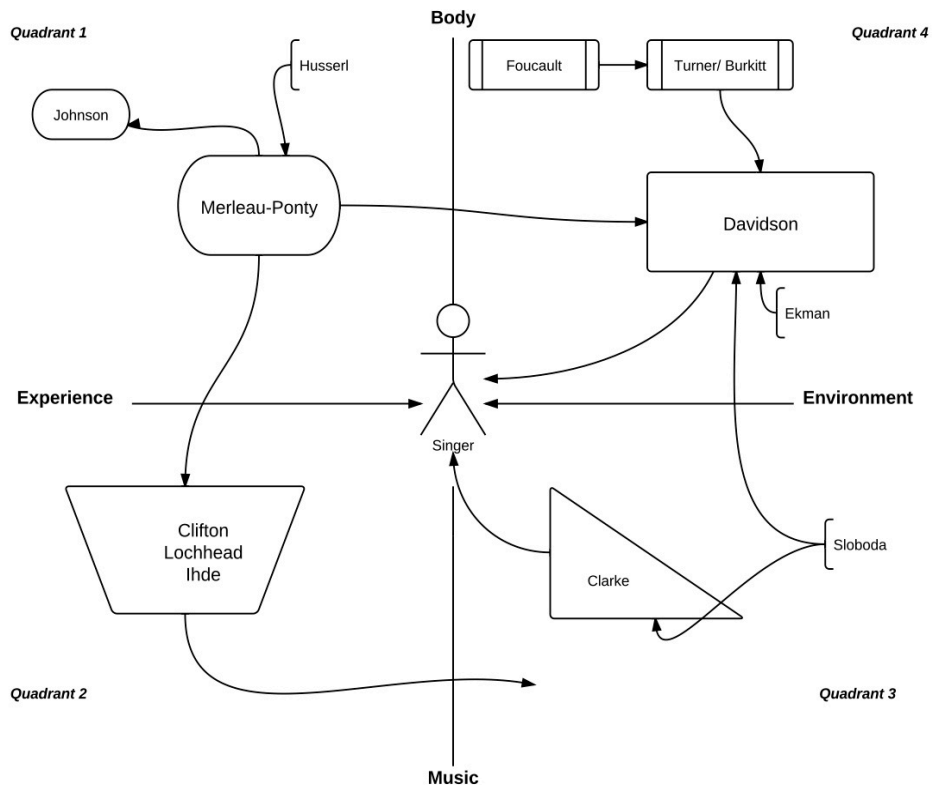
I am providing the reader with these two perspectives in order to demonstrate how different disciplines approach and understand the body. Using multiple theoretical perspectives can provide a level of understanding that is deeper than using one single theory. It is not the intent of this thesis to argue that one perspective is better than the other and, given the limits of the scope of this research, I will only be exploring the phenomenological perspective for the analysis of musical performance. The sociological consideration of the body, to be discussed in Chapter 1, will serve to establish that the body is an object that cannot be removed from its social, cultural and historical background and that there are forces at play upon the body which extend beyond individual experience.

⁶ I will be outlining these theories of the body as oppositions, following a similar line of thinking as outlined by Judith Lochhead and George Fisher (Lochhead & Fisher, 2002). While I recognize that there is some overlap between the philosophies of Merleau-Ponty and Foucault, when we consider the body in a broad, overarching sense they appear to represent opposing notions and therefore will be discussed in this manner. However, points of intersection between the two notions will be explored in subsequent chapters.

While this specific perspective is not the primary focus of the analytical sections of this thesis, I feel it important to include Foucault (and a few sociologists who were strongly impacted by him) in the larger theoretical conception of this study, in order to recognize the important influence his thought has had on embodiment theory.

Merleau-Ponty and Foucault thus represent two different viewpoints of the body. In order to move these broad conceptions of the body into the musical realm, and in order to explore fully the music performer's embodied experience, I have added other critical concepts to this discussion. These include a music perspective, as exemplified by Judith Lochhead, Don Ihde and Thomas Clifton, an ecological perspective exemplified by Eric Clarke, and a bodily communication perspective, exemplified by Jane Davidson. I have organized key concepts from this literature into four quadrants of knowledge, as seen in Figure 1. The literature review that follows will explore these quadrants of knowledge and outline the scholarly contributions to embodiment theory that have influenced my research. The labels of the four axes indicate the main theoretical considerations of this thesis: experience, the body, environment and music. The scholars presented here will not necessarily be presented in chronological order but rather in accordance with the primary themes of the thesis and the paths of influence between scholars (these are connected with arrows showing the direction of the influence). By presenting the literature in this way I will demonstrate how these diverging theoretical perspectives on embodiment can in fact be integrated to form a holistic conception of the embodied self, allowing the body to become imbued with meaning.

Figure 1



Beginning in Quadrant 1 with an overview of phenomenology and a description of Merleau-Ponty’s specific phenomenological perspective, this chapter will explore how phenomenology has been integrated within musical analysis, using the work of Thomas Clifton, Judith Lochhead and Don Ihde (Quadrant 2). Included in this discussion will also be Mark Johnson’s philosophical conception of embodied experience and his multi-perspective approach to the body. All of these scholars are connected by the shared outlook that embodied personal experience is the point of departure from which we create and develop meaning for ourselves.

Prior to reaching Quadrant 4, which considers the Foucauldian viewpoint of the body, we will explore, in Quadrants 3 and 4, an intersection of the two broad notions of the body represented by Merleau-Ponty and Foucault. This is research that considers both the

embodied experience of the body and the body's constitution by external social and cultural forces. This intersection is seen in Jane Davidson's work and her analyses of the physical gestures and body movements of musical performers. Davidson's research considers the performing body to be constructed simultaneously through both embodied experience and social frameworks/cultural experience. Another site of intersection for these two conceptions of the body is found in Eric Clarke's discussion of music and ecological theory. While Clarke's work is not concerned with providing a "theory of the body," within his discussion of music and ecological theory he reflects on both the contribution of the lived experience of the perceiver and the contextualization or environment of the perceived object (i.e. music). He therefore manages to reconcile the involvement of both participants in the act of experience and does not discount the importance of either side of the equation.

In Quadrant 4 I will discuss the perspective of the socially constituted body. In this section I will discuss the work of Foucault, Bryan Turner and Ian Burkitt. These scholars argue that the body is influenced, constituted and maintained by larger systems of social and cultural forces. In other words, the notion of the body as a social object is a contextual and referential understanding of the body: an object situated in an external framework that "is static and sculpted by systems of social power" (Lochhead & Fisher, 2002, p. 40).

The following literature review will move through the quadrants as illustrated in Figure 1 discussing the perspectives and theories of each scholar listed on that map.

Literature Review

Quadrant 1: Body- Experience

In the Body-Experience quadrant (Quadrant 1), we begin with those scholars whose work is based in personal experiences and sensations of the body. While the

phenomenological perspective of this thesis is grounded primarily in the theories of Merleau-Ponty, it is necessary to also discuss briefly the work of Edmund Husserl (1859-1938). Husserl is generally considered to be the “father of phenomenology” and his branch of the philosophy is focused on discovering the essences of experience and consciousness.⁷

Edmund Husserl

Husserl’s phenomenological philosophy underwent a number of shifts and adaptations through his lifetime. His work can be divided into three primary stages of thinking, beginning with a ‘pre-transcendental or epistemological phenomenology’, followed by a ‘fully transcendental phenomenology’ and concluding with what is sometimes termed a ‘genetic philosophy’ (Macann, 1993, p. 1). However, while it is an interesting journey to trace the development of Husserl’s ideas through these periods it is chiefly the rigors of his phenomenological approach and his influence on Merleau-Ponty that retain primary importance for this thesis.

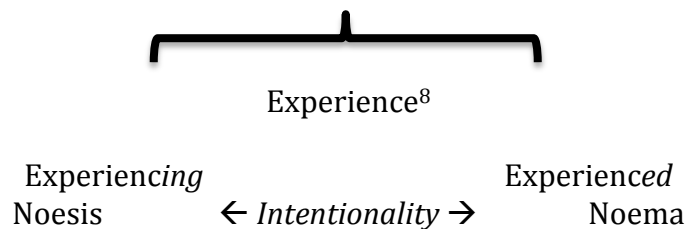
Husserl’s phenomenology is, fundamentally, a study of ‘essences’ (Langer, 1989, p. xiii). This may refer to the essences of an object or the essences of an experience. While the definition of what constitutes an essence has not been universally agreed upon I consider an essence to be an attribute of an object or experience without which said object or experience would not be recognizable. For example, if a chair does not provide the possibility of sitting one could conceivably refuse to consider it a proper chair. Therefore, offering the possibility of sitting may be, within one individual’s experience, the ‘essence’ of a chair. Phenomenology asserts that understanding the essences of an object or experience

⁷ The term ‘phenomenology’ can be traced back to the German mathematician and philosopher J. H. Lambert, and certain phenomenological techniques can be seen in Franz Brentano’s work as well. It has also been argued that Hegel and Kant displayed at times a kind of phenomenological viewpoint (Priest, 2001, p. 58). However, contemporary phenomenology is generally attributed to Husserl.

is the key to knowledge and it attempts to extract the essences of objects and experiences by providing rich descriptions of lived experiences. Phenomenologists believe that paying close attention to lived experiences and describing them in great detail is the first step in obtaining and developing knowledge about the world. As such, phenomenology maintains a clear distinction from other philosophies such as empiricism and rationalism that either do not take into account all aspects of the lived experience or instead use previously conceived tenets as a means of explaining aspects of the world.

Husserl’s perspective also purports the necessity of consciousness in developing an understanding of the world. In this line of thinking, the world would not exist for us without our consciousness and cannot exist prior to our consciousness of it. For Husserl, there are two poles of an experience, as seen in Figure 2: the intended object that is being experienced (*noema*) and the intending object that does the experiencing (*noesis*). The connection between these poles is Husserl’s idea of *intentionality*, which insists that our consciousness is always a consciousness of something, that is, it is always directed towards something and is not simply an awareness of itself (Bowman, p. 258). In this sense, Husserlian phenomenology seeks to explore the intentionality of experience between these poles in any of the possible forms that experience may take, for example perceiving, dreaming, thinking, remembering, etc.

Figure 2



⁸ This figure is a composite of images from Lochhead, 1986, p. 52-53 and Ihde, 2012, Ch. 2.

In his later writings (*Experience and Judgment* and *Ideas II*) Husserl begins to discuss his notions of embodiment, a theme that would later form the basis of Merleau-Ponty's conception of phenomenology. Husserl realized that his experience in the world was embodied and sensual since the world is felt and experienced with the senses. As David Bell notes, this shift is a long way from the original focus on object perception and "the philosophical vision which predominates in *Ideas* and Husserl's other middle period works" (Bell, 1990, p. 215). Husserl's later focus shifts towards the notion of kinesthesia, which he describes as "the pure ego [having] been transformed into a physical, sentient organism" (Bell, 1990, p. 215). Therefore, for Husserl, the body can be viewed multiple ways; one facet of the body may be seen from an external perspective (i.e. as an object) and the other facet is the corporeal sensation that contributes to consciousness and perception of the world (Crossley, 2012, p. 132).

Maurice Merleau-Ponty

Despite Husserl's extensive writings and theories on the subject, the philosophy of phenomenology still retains a broad and somewhat unclear definition. This causes the phenomenological approach to appear very different in the hands of different phenomenologists. In 1945, approximately forty years after Husserl began his work in the study of consciousness and experiential essences, Merleau-Ponty (1908- 1961) published his main writings on phenomenology in *Phenomenology of Perception*. In this work Merleau-Ponty asserted his perspective on phenomenology and, while many aspects of Husserl's work influenced him, his work is distinguished by discussing at length the centrality and importance of the body to the apprehension and understanding of human experience.

For Merleau-Ponty, it is through our perception of the world and our existence in the world that we have the ability to know or understand any aspect of that world. Merleau-Ponty encourages a return to the true experience of perception; he suggests that in our description of perception we often invoke notions (such as sensations or judgments) that are not actually apparent to us in the experience of perception. The scientist, for example, describes his or her experience of perceiving an object “as one might describe the fauna of a distant land— without noticing that he himself also perceives, that he is the perceiving subject and that perception as he lives it denies everything that he says about perception in general” (Merleau-Ponty, 2012, p. 214). Consequently, the task of the phenomenologist is to describe the lived experience of perception exactly as it is presented to them, without adding in assumptions or suppositions.

For Merleau-Ponty, this act of perception is always mediated through the body and consequently there is no ontological separation between body and mind. Therefore, without the body there can be no experience, no consciousness and no understanding of essences because it is *with* and, more importantly, *through* the body that we come to know the world around us. The ‘body’, for Merleau-Ponty, is not a non-corporeal entity but rather the embodied agent that is connected to the world prior to any consciousness of the world. It is through an embodied, corporeal experience that we are able to perceive the world and develop any sort of rational understanding of what we perceive. Rational thought or understanding cannot exist first without perception, thus making our lived experience in the world a primary and necessary component of knowledge. Since our bodies are the vantage point from which we *have* these lived experiences we must acknowledge that we are always situated in and as such constrained by our bodies.

One of the constraints discussed by Merleau-Ponty is that it is not possible to observe one's own body as an object because it is through the body that objects present themselves in experience. We would require a second body from which to visually observe our own body and in that way the very make-up of our physical selves prevents us from being able to objectify our bodies. In Merleau-Ponty's words, "[w]hat prevents [the body] from ever being an object or from ever being "completely constituted" is that my body is that by which there are objects" (2012, p. 94).⁹ However, while Merleau-Ponty maintains that it is not possible to observe the body as an object in the same way that one may observe an external object such as a lamp or a chair, he contends that it *is* possible to understand and experience the spatiality of one's own body. Spatiality of the body can also be described as body schema or *un schéma corporel* (2012, p. 101) and is defined as the way by which we are always aware of our bodies in their spatial and positional existence.¹⁰ My body schema makes it possible for me to move through the world, sidestepping and ducking under obstacles without making contact. It is a general awareness of the body in space, an awareness of the limbs in relation to each other and an awareness of the body in relation to objects (Merleau-Ponty, 2012, p. 102). In a way, this is also how musicians relate to their instruments on an embodied level. As an illustration of the body schema, Merleau-Ponty describes how an organist is able to quickly *orient* him- or her-self at an unfamiliar

⁹ This is another point of agreement between Husserl and Merleau-Ponty. In this statement Merleau-Ponty cites Husserl's *Nachlass* ("unpublished works" which have since been published). It is believed that Merleau-Ponty was referencing the following line by Husserl: "The same Body which serves me as a means for all my perception obstructs me in the perception of it itself and is a remarkably imperfectly constituted thing" (Husserl, 2002).

¹⁰ There is some confusion within the literature on embodiment on the distinction between 'body image' and 'body schema.' Gallagher (2005) traces this confusion through historical literature on the subject. Gallagher notes that Merleau-Ponty consistently used *schéma corporel* to describe the movement of a body within a space. However, in some translations of his writings, this has been changed to 'body image.' For more on this distinction between terms see Gallagher, 2005, p. 17- 39.

instrument. This orientation is not measured in a precise fashion but rather develops out of our intentionality toward the external world.

Here we see Merleau-Ponty's expansion of Husserl's conception of intentionality. For Merleau-Ponty, intentionality includes the physical body intending itself towards an object with the intention of incorporating it into the world. Intentionality towards objects in Merleau-Ponty's view is not simply how one thinks about the objects but also includes the way objects exist depending on their intended use of them (Crossley, 2012, p. 133). David Morris explains this by stating that "body movement itself is meaningfully "about" things, [it] is intentional" (2008, p. 116). Therefore, the organist who sits at a new organ and must familiarize him- or her-self with new pedal positions, does not "learn positions in objective space for each stop and each pedal, nor [do they] entrust such positions to "memory"" (Merleau-Ponty, 2012, p. 146). Instead, because the body is a "mediator of the world," it is as if "the stops, the pedals, and the keyboards are only presented to [the organist] as powers of such and such an emotion or musical value, and their position as those places through which this value appears in the world" (Merleau-Ponty, 2012, pp. 146-147). In this example, the body of the organist intends itself towards the instrument and becomes the link between the musical score (or "the musical essence of the piece such as it is indicated in the score") and the resonating sound within the organ (Merleau-Ponty, 2012, p. 147). It is the body's corporeal existence that allows for this passage of information to move from page to sound.

In contrast to Husserl's viewpoint, Merleau-Ponty's phenomenology does not place as strong an emphasis on discovering 'essences,' but rather is concerned with the information that appears when the body opens itself to the world through the act of

perception. For Merleau-Ponty, phenomenology's task is to explore the primordial link between the world and human beings. The body is the link to the world that not only makes perception possible, but is also the fundamental way by which we experience the world. Non-phenomenological philosophies that are concerned with reflective analysis from the outset do not consider the full extent of one's experience, "substitut[ing] a reconstruction for a description" (Merleau-Ponty, 2012, p. xxiii). Merleau-Ponty posits that we cannot know the world until we live through it and therefore there is no explicit truth residing outside our perception of the world: "[t]ruth does not merely 'dwell' in the 'inner man'; or rather, there is no 'inner man,' man is in and toward the world, and it is in the world that he knows himself" (Merleau-Ponty, 2012, p. xxiv). In Figure 1, Merleau-Ponty represents a middle ground between the axes of "experience" and "body" since his work places heavy emphasis on both as requirements for knowledge.

I believe that using phenomenology as an analytic method can assist in an articulation and understanding of the embodied musical experience. Phenomenology is only concerned with aspects of an experience that are directly presented to a subject, that is, things that can be observed during an experience. As such, rather than beginning with 'hidden' aspects of an experience that reside on a conceptual level, phenomenology provides a starting point for exploring the components of an experience at a real and immediate level before deepening one's knowledge. In this way I find it to be a very reasonable and accessible method that may act as a starting point for further exploration of experiences, concepts and ideas, a concept that I will elaborate on in Chapter 2.

Mark Johnson

Another scholar whose work on embodied experience has made an important contribution to our understanding of the body and lived experience is Mark Johnson. Johnson's writings describing the influence of the body on the mind offer a critical notion that grounds the phenomenological view of embodied experience. For this reason he is listed in Figure 1 as an offshoot to the work of Merleau-Ponty. Johnson's earlier work, as exemplified in his book *The Body in the Mind: The Bodily Basis of Meaning, Imagination, and Reason* (1987), demonstrates the ways in which bodily experience is constitutive of our understanding of meaning and rationality in the world. The physical patterns and motor processes of our bodies create what Johnson terms 'image schemas,' which are comprised of cognitive structures or patterns that account for our experience. These cognitive structures originate in the body at a physical or somatic level and are then transferred into the intellectual realm through a process Johnson describes as "metaphorical projection." Johnson's work demonstrates how our body acts as a resource and contributor to our understanding of the world while simultaneously acting as a type of constraint on that understanding. We are both aided and limited in our conceptualization and rationality by the capabilities of our bodies.

While Johnson never disputes his theories in *The Body in the Mind*, he does admit to a slight shift in focus in his later works. In *The Meaning of the Body: Aesthetics of a Human Understanding* (2007), Johnson notes that while he believed his previous discussion of the structure of rational and conceptual experience had addressed the root of meaning in human experience, he later recognized that he had not truly delved beyond the surface of how we create meaning in our lives. Johnson's more recent developments of this topic have

been primarily concerned with the contribution of the mind and body in the creation, development and sustainment of meaning in our lives. In the opening pages of *The Meaning of the Body*, it is possible to notice similarities between Johnson's thinking and Merleau-Ponty's approach, as both maintain that our embodied processes shape our experiences and our acquisition of meaning. For Johnson, "meaning grows from our visceral connection to life and the bodily conditions of life" and "what and how anything is meaningful to us is shaped by our specific form of incarnation" (2007, p. ix). He later explains the importance and necessity of views such as phenomenology, which provide us with insight into our emotions.¹¹ Johnson believes emotions to be a required aspect of cognition without which we would not be able to understand the world. Johnson strives to demonstrate that what we perceive as meaningful aspects of our lives arise from our embodiment, that is, our "bodily perceptions, movements, emotions and feelings" (2007, p. ix). It is therefore through our bodies that we not only understand structures and rational conceptions of the world (as was discussed in *the Body in the Mind*), but also all things that Johnson considers to be "aesthetics" or the aspects of existence that give our lives meaning such as images, sensorimotor schemas, feelings, qualities and emotions. Johnson argues against prevalent philosophical thought that presents a duality between mind and body, but rather prefers to understand meaning in the world as a result of our embodied nature. Through the proposition of an "embodied theory of meaning" to contrast what he describes as the current "conceptual-propositional theory of meaning" Johnson seeks a naturalistic method of understanding the "big, messy, multidimensional concept" that is meaning, a method that

¹¹ Johnson notes how phenomenology has not had adequate recognition as a philosophy, stating that it "has not had the salutary influence on our conception of human understanding that it deserves" (2007, p. x).

embraces our embodied nature and allows us to probe into the notions of quality, emotion, and feeling to begin to explore those things that create meaning for us (2007, p. ix).

Johnson's work thus offers important considerations to the theoretical framework of the discussion in this thesis. Much like Merleau-Ponty, there exists in Johnson's work a true appreciation for the import of the human body and the beginnings of a vocabulary that situate our embodiment firmly in the center of discourse on meaning, musical or otherwise. One of Johnson's most salient explanations is his conception of the body as comprised of "multiple nonreductive levels" in which he discusses five complementary levels of bodily understanding which are all necessary for a holistic formation of the body. (2007, p. 275). This multifaceted perspective is echoed in this thesis, which aims to explore the body as deeply pertinent to our lives and imbued with meaning. In Chapter 4 of this thesis Johnson's work will once again be relevant as we explore the multiple levels on which meaning and mind are embodied with the performing process.

Quadrant 2: Experience-Music

Ihde, Lochhead and Clifton

Continuing through the theoretical trajectory of Figure 1, we move into the quadrant bound by the axes of "experience" and "music" (Quadrant 2), which continues the discussion of embodied experience by including the notion of musical experience. Research combining phenomenology and music has not been extensive, but there have been a few key musical investigations that have engaged with the philosophy such as Thomas Clifton's efforts with a self-proclaimed "applied phenomenology" in his book *Music as Heard* (1983), Don Ihde's work on phenomenology and sound (2007) and Judith Lochhead's application of

phenomenology as a method of musical analysis (1986).¹² In his book *Philosophical Perspectives on Music* (1998), Wayne Bowman notes that phenomenological outlooks on music have tended to sway deeply into the realm of subjectivity (a main area of contention surrounding phenomenology in general), which, according to Bowman, “seems to impute subtly to music an objectivity at odds with phenomenological tenets” (p. 301). If musical study is viewed as an objective phenomenon then a discrepancy with phenomenology’s purporting of individual experience could exist.

Thomas Clifton’s phenomenological study of music in *Music as Heard: A Study in Applied Phenomenology* (1983) attempts to describe music as a listener experiences it, rather than describe it in symbolic or metaphorical terms. Clifton’s primary aim is therefore to remove the theoretical presuppositions that are usually in place when describing music and rather describe the actual experience of music. He asks the reader: “[d]o we really hear *col legno* as something simply attached to the primary substance of pitch? If a French horn prolongs an open E, and then quickly mutes it, is it the same E? Logically, yes; but in terms of musical behavior, I think not” (p. 6). In Clifton’s view, music requires a “reciprocity” or engagement on the part of the listener in order to become music. Once “reciprocity” between listener and music is reached, the experience of the music from that perspective is where we can decipher what the music truly expresses.

Clifton attempts to retain a strictly phenomenological approach in his discussion of the musical experience. He believes it is the gateway to musical understanding. However, this view is not universal. In one review of Clifton’s book, Lewis Rowell claims outright that

¹² There are also a number of seminal works detailing discussions of music and phenomenology by Alfred Schütz (1976), Lawrence Ferrara (1984) and David Greene (1982, 1984). However due to the limits of scope of this research these writings will not be prominently considered.

the phenomenological viewpoint is “ultimately, wrong” and that “at worst it can encourage an indulgent and narcissistic preoccupation with one’s own reaction and idiosyncrasies” (1986, p. 119). This may be an area of dissent between two opinions that will never be resolved; phenomenologists do not seem at all troubled by the notion of subjectivity since they maintain that meaningful experience is rooted in individual experience. As Clifton explains, a phenomenological description of music is:

objective in the sense that [it] attempts to describe the musical objects adequately, and subjective in the sense that [it] issue[s] from a subject to whom an object has some meaning. But subjectivity in this sense does not necessarily mean mere opinion: it means reciprocity. It is reciprocity that is too often forgotten or suppressed in music research (1983, p. ix).

For Clifton, reciprocity refers to the relationship between music and a receiver of music, a relationship that Clifton believes implicates the meaning that is assembled from the musical experience. The phenomenologist is not concerned with how individual parts of a musical object make up the whole, but is more interested in how the piece presents those elements as meaningful in an experience of them. Phenomenology can therefore be a helpful tool for the music performer or music analyst who wishes to discuss the wholeness of the musical experience rather than examining separate components. Additionally, since phenomenology is concerned with the presentation of a complete experience it holds much potential for music research since there are aspects of music that are sometimes only understood within the creation of musical sound.

Ihde and Lochhead present analyses that feature a phenomenological engagement with sound. Lochhead’s phenomenological work has primarily been focused on the temporal aspects of musical listening (1982, 1986) and Ihde has written both on auditory

aspects of phenomenology (2007) as well as on a generalized 'phenomenological approach' (2012). In *Experimental Phenomenology*, Ihde sets out illustrations with polymorphic capabilities in order to demonstrate the phenomenological procedure of within a visual field. By enlisting certain phenomenological tools, Ihde demonstrates the possibilities of interpretation that exist when certain predetermined ideas are suspended and limits are not placed on the interpretation of a visual field. While this thesis will not be employing phenomenology as a method of visual analysis, I will borrow Ihde's procedure for approaching experiences in a phenomenological manner.

Lochhead's work on phenomenology has mainly been applied to the temporal features of music. Time and temporality are especially important aspects of the phenomenological philosophy since all experiences are situated within a temporal flow that influences understanding of the world. Lochhead's approach to describing the temporal features of contemporary music (1986) will act as the basis for the phenomenological analytic model in this thesis and will be expanded on to include other elements within the music as well. Ihde and Lochhead both provide important models for this thesis because of the unique ways in which they adapt the phenomenological philosophy for their individual projects.

The phenomenological analytic model that will be outlined in Chapter 2 was developed through a synthesis of the phenomenological perspectives of Clifton, Ihde and Lochhead.

Quadrant 3: Music-Environment

Eric Clarke

In Quadrant 3, an ecological perspective is added to the discussion of embodied experience. I believe this to be an important component when interpreting a singer's embodied experience since certain contextual settings of music contribute to its perceived values. In this regard, I rely upon Eric Clarke's formulation of ecological theory and music perception (2005), which is situated in the third quadrant of Figure 1 and bound by the axes of music and environment. Clarke's aim in this research is to explore the relationship between the listener and his or her musical environment by expanding James Gibson's ecological perceptual theory into the musical realm (Gibson, 1966 & 1979). Clarke compares "musical materials" to "perceptual capacities" to discuss listener interactions with surrounding auditory environments (2005, p. 5).

Ecological theory maintains a number of similarities with phenomenology. Most notably, there is a focus on information that is acquired via perception rather than information acquired through suppositions or assumptions. Ecological theory and phenomenology each posit that "every kind of knowledge rests upon or involves a perceptual relationship with the environment" (Clarke, 2005, p. 43). However, there are still some explicit differences between phenomenology and ecological theory. One point of variance that Clarke mentions is that his musical adaptation of ecological theory is only concerned with perceptual meaning brought about by active engagement with an auditory environment (i.e. listening). Phenomenology's viewpoint of perception (including musical perception) is maintained across all types of possible experiences including remembering, imagining, dreaming, and so forth. While Clarke does not dispute that there is meaning that

can be understood within these other types of musical engagement, they are simply not a focus within his study of ecological theory (2005, p. 8). Further points of comparison between phenomenology and ecological perceptual theory will be discussed in Chapter 3.

Clarke's contribution to this thesis research is evident primarily in my adaptation of his concept of the subject-position in music; that is, how the musical material orients the position of the perceiving subject and influences a listening experience. Clarke notes how the term subject-position has been used widely in film studies to denote how components in the film elicit a certain response from the audience. While it is understood that each viewer's experience is shaped by his or her own personal background and opinions (i.e. my individual history will impact how I perceive the film I am watching), the materials that constitute the object also play a role in delimiting the responses and reactions of the receiver. In the context of film, the cinematic elements and construction of those elements influence the way in which the viewer responds and thus limit the potentially infinite number of "individual and unpredictable meanings" that each person may expunge from an aesthetic object or experience (Clarke, 2005, p. 93). As Clarke explains, while perception is always partly individual, "an important component is also built into the material properties of the object of perception, and is therefore a shaping force (at least potentially) on *every* perceiver" (p. 125). Substituting music for film as the aesthetic object, "[subject-position] can be defined as the way in which music solicits, demands even, a certain closely circumscribed response from the listener by means of its formal operations" (Clarke, 2005, p. 125). As it is understood here, subject-position differs from the notion of subjective experience because it is concerned with the *relationship* between the characteristics of the

aesthetic object and the reaction of the perceiving subject to these characteristics rather than only being concerned with the personal response of the perceiving subject.

To illustrate his musical and ecological adaptation of the concept of subject position, Clarke examines three musical works and describes the relationship between musical materials and listener subject-position.¹³

Clarke argues that this relationship emerges from an ecology that includes social convention and physical principles, both of which impact the resultant subject-position of the listener. For Clarke, musical materials can be better understood through an analysis that allows for an examination of the relationship between musical characteristics and social meaning by focusing on the specification of the perceptual experience of the listener. The analysis also adheres to one of the main principles of ecological theory which “explicitly recognizes the mutualism of perceivers and their environments” and helps us to understand how the connection between musical materials and listener perceptions shapes an aesthetic outlook. Clarke’s subject-position analysis is primarily focused on the social and cultural conventions that influence musical perception. For example, he notes how a falsetto voice in “Magdalena” implies a sense of absurdity or caricature, reminiscent of a convention in opera and pantomime. While the emphasis in my analysis differs slightly from Clarke’s culturally situated focus, I do acknowledge the significance of cultural conventions. An embodied musical performance is not immune to influence from such conventions, since an embodied experience does not occur outside of cultural understanding.

¹³ Clarke examines the songs “Magdalena” by Frank Zappa and The Mothers of Invention, “Taut” by P.J. Harvey and Johns Parish, Stravinsky’s ballet “Apollon Musagete”, and movements from two Haydn String Quartets, Bb Major Op. 33, no.2 and C Major, Op. 54, no.2

Taking up Clarke's concept of subject-position for my study of the singer's embodied experience, I will consider the ways in which the musical materials contribute to a development and understanding of performance. I believe this approach is especially pertinent for the consideration of the singer's embodied experience because the instrument resides within the body of the performer and consequently the performer's body must move and react in certain physical ways in order to produce the sound. I will explore further the specific elements of subject-position and the ecological perceptual analytic approach in Chapter 3.

Other writings on embodiment: neuroscience, music cognition, psychology and anthropology

I would now like to briefly review a portion of the work that has been done in non-philosophical disciplines that has contributed to the field of embodiment research. While this research will not be explicitly considered in the analytical sections of this thesis, the work that has been completed in this area adds a level of scientific credibility to theoretical and philosophical models of the body. I also believe it is important to summarize this research for the reader in order to demonstrate the variety of disciplines that have explored human embodiment. Much of the research that I will outline in this section is related to music cognition, which is why these scholars have been placed in Quadrant 3 (Music-Environment). Although there is some research here that does not discuss music, it all contributes to an understanding of (music) perception.

Antonio Damasio works with data from neurological science to explore the connection between consciousness, the body and emotions (Damasio, 1994, 1999, and

2003).¹⁴ In *The Feeling of What Happens* (1999), Damasio discusses the connection between consciousness, the body and emotion and distinguishes between three stages in the creation of a feeling. The first stage is a change in bodily state,¹⁵ which subsequently creates a mental image in the brain, arising from the neural pathways that constitute these changes (this creates the feeling) and finally, with the addition of consciousness, we are able to feel our feelings and experience an emotional state. Consciousness is therefore necessary in order to feel or express emotions.¹⁶ Damasio also presents information on the body's contribution to emotional states describing that the shared essence of emotion, feeling and consciousness is the body.¹⁷

Phenomenologist Maxine Sheets-Johnstone's work on corporeality and consciousness focuses on the importance of movement as a paradigm for understanding higher order concepts. For Sheets-Johnstone, "[movement] is the I that moves before the I that moves forms movement. It is the foundation of our conceptual life, that is, the foundation of an ever growing store of corporeal concepts such as 'inside', 'heavy', 'light', 'open', 'close', concepts having to do with conceptual relationships, and so on" (2011, p. xxiii). This notion is reminiscent of Mark Johnson's research on image schemata and

¹⁴ Other writings on neuroscience and embodiment include Gibbs, 2006; Gallagher, 2005, 2008; and Tucker, 2007.

¹⁵ "A myriad changes in the body's chemical profile; by changes in the state of viscera; and by changes in the degree of contraction of varied striated muscles of the face, throat, trunk and limbs" (Damasio, *The Feeling of What Happens: Body and Emotion in the Making of Consciousness*, 1999, p. 282).

¹⁶ This reasoning can also be seen in a state of unconsciousness when the body proper is asleep. As Damasio explains "[d]eep sleep is not accompanied by emotional expressions, but in dream sleep, during which consciousness returns in its odd way, emotional expression are easily detectable in humans and in animals" (1999, p. 100).

¹⁷ There are of course disputes over this kind of claim, which argue that the only bodily connection to emotion is the transfer of neurological information from the body to the brain through the spinal cord. Damasio notes however, that even patients with damaged spinal cords are capable of feeling emotion, and as such there are many more components of the body which contribute to emotional states, such as the "cranial nerves at brain-stem level (which can act on the face and viscera) and other brain stem nuclei (which can act directly on the brain . . .)" (1999, p. 289)

metaphorical projections. Our animated, primal movement is what has made it possible for us to grasp large concepts such as self, self-awareness, perception, language, and general knowledge of the world.

This connection between movement and meaning as exemplified by Sheets-Johnstone is accompanied by similar research in the musical domain. A substantial amount of research has been undertaken on the relationship between human movement and musical motion. It is not possible to provide a full overview of the research here, but some of the most pertinent include Steve Larson's exhaustive discussion of musical forces and melodic expectation (1997, 2002, Larson & McAdams 2004, Larson and VanHandel 2005, Larson and Robert 2012), Friberg and Sundberg's discovery of the connection between musical timing and human locomotion (1999), Arnie Cox and his mimetic hypothesis (1999), Dahl and Friberg's research on visual communication of musical performers (2007), Andrew Mead's discussion of "kinesthetic empathy" as a measure for developing an understanding of music (1999), and Shove and Repp's discussion of musical motion (1995). This type of research provides further support for the connection between human embodiment and musical understanding.

Music cognition research has also helped to make clear the links between music, emotion and embodiment. Leaders in the field such as John Sloboda, Patrick Juslin, Alf Gabrielsson and Eric Clarke have undertaken research covering a wide range of topics, including human response to aural sensations in music (Clarke 1989; Clarke & Krumhansl, 1990), the acquisition of musical expertise (Sloboda, 1996), emotional expression in music (Sloboda 1991; Gabrielsson & Lindström, 2001; Juslin, 2003; Gabrielsson & Juslin, 2003) and perception of musical elements (Sloboda, 1983).

Sloboda's work has been especially pivotal in illuminating the cognitive processes behind musical meaning. In "Does music mean anything?" (1998) and *Music and Emotion: Theory and Research* (Sloboda & Juslin 2001),¹⁸ Sloboda presents research on our emotional response to music, demonstrating the physical response of the body to music that is found to be meaningful. The wealth of knowledge that Sloboda has presented within the field of music cognition has therefore appeared to have "set the stage" for this current research; he has published extensively how the acquisition of musical skills including visual perception (1976), hand-eye coordination (1974) and the importance of positive musical influences in early years of music learning (Howe & Sloboda, 1991). It was in part due to research such as Sloboda's that the field of music cognition grew to better understand the ways in which musical knowledge and skill was apprehended, thus paving the way for current research on musical meaning and emotional response to music.

Quadrant 4: Body-Environment

Jane W. Davidson

It is from the world of music perception and ecological perceptual theory that we reach Quadrant 4 and the work of Jane Davidson. Davidson's research on the bodily communication and expressive possibilities of the performing body has strong implications for the perspective of this thesis. Primarily from a visual standpoint, Davidson has examined the body movements of pianists and instrumentalists (1993, 1994, 2002, 2007, Davidson & Correia 2001), singers (2001, Davidson & Liao 2007) and pop stars (2001, 2005, 2006, Davidson & Kurosawa, 2005) to develop an empirically grounded theory of bodily

¹⁸ This book, edited by Sloboda and Patrik Juslin, contains thirty-three chapters written by different authors in fields ranging from neurobiology, to sociology, to musicology, to psychology, all detailing the reasons and contexts for emotional response to music.

communication. Her work situates itself across a number of disciplines, including psychology, music, sociology and cognition. However, I would like to offer another perspective from which to examine Davidson's work by enlisting the two contrasting theories of the body outlined at the beginning of this chapter. While Davidson's research makes no explicit mention of phenomenology, Merleau-Ponty, or Foucault, it appears that her work still maintains an integral base in these phenomenological and sociological ideas. While Davidson's work is grounded in psychological methodology and appears at times to be extremely quantitative in its approach, I would identify in her approach a connection to these philosophical ideas.¹⁹

Davidson's early work on the role and communication of the musician's body was pioneering in its efforts to situate the physical body of the performer as one of the main contributing elements to musical communication. Davidson maintains a strong sense of respect for the corporeality of the musical performer both as a communicative vessel and a constitutor of musical meaning *for* the performer (by way of the somatic experience). Therefore, I see Davidson's work as being informed by both a phenomenological and Foucauldian understanding of the body. From a Foucauldian perspective (which will be described in more detail momentarily), Davidson considers the body to bear meaning for social and cultural interpretation, implications which may or may not reflect a performer's conscious choice but which have been learned through training or expected cultural

¹⁹ This connection between philosophy and empirical data is not too far fetched; we have seen it previously in Mark Johnson's work, which is undoubtedly philosophical in nature and enlists evidence from recent developments in cognitive science to support his theories of embodied meaning (See Johnson 2007 part II, chapters 6-9).

norms.²⁰ Davidson likens this social realm to the music rehearsal process (Davidson & Correia, 2001, p. 70) as well as the social etiquette and social display codes of the musical performer (Davidson 2001, 2006). Simultaneously, Davidson considers that the physical experience of performing can contribute to the creation of musical meaning (Davidson & Correia, 2001), a position reminiscent of Merleau-Ponty's phenomenological stance that the body is how we come to create and understand the world. It is therefore apparent that while Davidson's research is clearly delineated within a certain research sphere, her work would not have been possible without this dual notion of understanding what the body means and how embodied meaning contributes to our lives in a profound way.

We can also see some strands of connection between the notion of subject position in Clarke's ecological perceptual theory and Davidson's conception of the performing body. Davidson and Correia (2001), address this by detailing the performer's process of creating a musical narrative through the engagement of his body. They conclude that "[e]xploring through the body a lived movement narrative helped [the performer] to secure an interpretation of the work building upon musical phrases" (2001, p. 72). Although Davidson and Correia develop this interpretation from the physical movements of the performer, it is very evident that the music is the impetus for the movement, as the performer "builds upon musical phrases." The authors note that the performer's initial step prior to engaging body movement is to play through the movements multiple times. We can therefore assume that there has been an opportunity for the musical elements within the piece to orient the performer in a certain way. Here we can make the connection to Clarke's subject-position in

²⁰ See Davidson "The Role of the Body" (2001) in which she discusses gestures which the performer learns over time and act as self-soothing or self-stimulating and also Davidson "She's the one" (2006) for a discussion of the social role of popular music performers resulting in specific body movements and gestures.

that the performer apprehends the music, which in turn influences his body movements and results in a creative interpretation. Both the music and the performer's innate embodiment contribute to the creation and development of musical meaning.

Michel Foucault

The focus of this thesis is primarily upon the perception of the individual performing body and its contribution to musical creation and meaning. However, this is not the only way in which the body and embodiment are understood. A large section of embodiment research has considered the body as a representation of social, political and cultural ideas. This work is generally credited to Michel Foucault and his development of a "sociology of the body." I have situated his theories in Quadrant 4 (the Body-Environment Quadrant) and linked it as an influencing factor on Davidson's work. While I am not suggesting that Davidson explicitly considered Foucault's theories in her research, it is my belief that there are strong similarities between both Foucault's and Davidson's considerations of how the body is affected by external relations.

Foucault considers the body as a site on which social, cultural, political and power dynamics are executed. Primarily within a discussion and examination of the medical and disciplinary fields, Foucault argues that control and manipulation of people by power and political relations can be found acting upon the body as a means of control. These power relations control the human body and act as a disciplinary measure as "they have an immediate hold upon [the body]; they invest it, mark it, train it, torture it, force it to carry our tasks, to perform ceremonies, [and] to emit signs" (1995, p. 25). While Foucault never specifically offers a clear 'theory of the body' and has been criticized for the ambiguity in which he discusses the body (Turner, 1984, p. 48) his work is nevertheless important in

that it offers a perspective on the implication of external forces on the body. That is, his theories act as a reminder that communicative possibilities of the body are not always decided upon by the individual, but may also be influenced by relations of power. The body acts as an object on which this power is exercised (“rather than possessed”) in order to create “both a productive body and a subjected body” (Foucault, 1995, p. 26). Foucault’s notions of the body as a socially constituted object has strongly influenced many subsequent thinkers and his work has been expanded to include many notions of the body such as those discussed by Turner and Burkitt.

Ian Burkitt

Ian Burkitt (1999) considers the body as being a “thinking body” and a necessary component to being a person. Humans are not reducible to their bodies but they would also not exist without their bodies and as such one’s physical self is a required element for thinking and being in the world. For Burkitt, thought is an embodied, social activity that allows humans to reconfigure and reconstruct their surrounding world. Bodies in this sense are active (Burkitt describes productive, communicative, powerful and thinking bodies as components of this activity) and have the power of enacting changes within relations and the physical world (1999, p. 7-8). In this way we can see similarities between Burkitt’s idea of the body and Clarke’s ecological theory, as both theories situate humans within a larger context to which they are deeply and intrinsically connected. The concern of ecological theory with the nature of relationships between subjects, objects and their environment is mirrored in Burkitt’s account of human bodies as constituted by and constitutive of their external reality. This conception of the body is also connected to the ideas of Foucault, in that Burkitt sees the body as being held within relations of power. However, while Burkitt

describes the body as being both infused with power and subjected to control and regulation by external relations of power, he makes a point of disagreeing with Foucault on the primary nature of those power relations. While Foucault considers institutionalized power as the normative constructs that enact control upon the body, Burkitt believes that smaller scale, “everyday relations of power” must also be considered as having a large impact on the regulation of the body (1999, p. 4). It is as much in our daily communications and interactions with others that the body comes to be controlled and regulated as well as becoming split from the mind or disembodied. Any theory of body, therefore, which wishes to consider relocating the mind and body as one embodied notion, must not discount the impact and prevalence of these seemingly simple interactions.²¹

Burkitt also considers phenomenology and the work of Merleau-Ponty in his construction of the thinking body, but makes substantial critiques to the scope of the philosophy. One of Burkitt’s main critiques is that Merleau-Ponty does not consider the implications of material artifacts (i.e. external objects) on the human experience of embodiment.²² For Burkitt, artifacts are one of the primary ways in which the body is able to gain capabilities and powers within its relations, in which it “grows, communicates, learns and works” (1999, p. 147). Artifacts reform and reconstitute our embodied experience, therefore changing our experience of being-in-the-world and profoundly impacting our existence.

Consideration of the impact of artifacts on our embodied experience holds interesting implications for this thesis. Symbolic systems such as language or music can also

²¹ In Burkitt, 2004 this idea of coexistence between large and small-scale social practices that influence power relations is explored more thoroughly.

²² Burkitt paraphrases (Ilyenkov, 1977)) description of the term: “a created object in which human activity is embodied because it has been fashioned for some use within human practices” (Burkitt, 1999, p. 35).

be considered artifacts and, following Burkitt's line of thinking, it is therefore pertinent to consider how engagement with the "artifact" of music might transform one's embodied experience. For Burkitt, engagement with artifacts (or for our purposes here, music) mediates the relation between bodies, persons and objects and their socio-ecological contexts and allows us to create our individual identities (1999, p. 147- 152). Therefore, by developing a better understanding of our bodies as they engage with these artifacts (i.e. music), we are able to better understand how we are embodied, *thinking* beings (or "bodies of thought," to use Burkitt's term) whose existence is always in relation to "other people and objects in the world" (1999, p. 152).

Bryan Turner

Bryan Turner's book *The Body and Society: Explorations in Social Theory* (1984) is credited with bringing the notion of a "sociology of the body" to the foreground in the social sciences. Turner examines the concept of 'the body' from a variety of angles and argues that any comprehensive sociological thought or theory must take into account the way humans are embodied beings, or otherwise risk being incomplete. From Turner's perspective, so many of our daily tasks center on and are affected by our corporeality, thus making our embodiment a necessary component to consider when we wish to study, understand or learn about any facet of human nature or existence. Human agency is inseparable from our embodiment since both cultural and natural limits of our bodies limit our agency. Although Turner does not specifically relate this notion of embodiment to our participation in musical events, I would argue that any discussion of music (whether from the perspective of composition, performance, consumption, analysis or research) must also consider (either centrally as I have done in this thesis or peripherally) the impact of human embodiment on

its subject matter. Turner aims to take common concerns and questions pertaining to social order, regulation and constraint, as well as the relationship between individual and society, and integrate the body into these debates within the sociological field. Within his writings Turner places much emphasis on what I will call the gendered body, discussing how patriarchal control over women's bodies acts a method of social control. He also considers the diseased body, examining how the concept of disease allows insight into the notion that our bodies exist in both nature and culture. As Turner elucidates, the terms "disease" and "illness" denote entirely different aspects of being sick, where the former refers to "neutral biological criteria" and the latter is social and refers to "undesirable deviation from the norm" (1984, p. 208). While these terms are generally used interchangeably, if we accept the difference in definition presented by Turner and recognize that both terms are applicable to humans, it is possible to see one example of how the body straddles the line between nature and culture, existing in both domains simultaneously. This is also where we can see the influence of Foucault on Turner's work. As Turner explains, Foucault considers forms of knowledge and terminology as relations of power that affect the body as a cultural object. In this particular example, the differentiation made by the medical community within the verbal discourse of disease and illness "involves judgment as to what is desirable and undesirable" and as such allows the body to be classified in ways that are beyond the individual's control. While any actual analysis of how this relates to musical perception will not be the primary objective of this thesis, it is important for the reader to be aware of this view of the body. Our perception and understanding of music may appear to be completely individual and of our own free will and yet if we recognize that music is perceived through our bodies and if we agree with Foucault's notion of the body we must also consider how

external power relations shape our knowledge and our use of discourse and as such shape our musical perception.

While Turner's work does not contribute directly to the methodology to be outlined in this thesis it does provide an important grounding to the theoretical backdrop on which this research will develop. Firstly, it provides a perspective that acts as a foil to the phenomenological outlook, since it retains the perspective that the body is inextricable from its social positioning. For Turner, the phenomenological model "brackets out too much" when it removes the body from its "historical and sociological content" and as such cannot provide a complete answer to the question "what is the body?" (1984, p. 54). Additionally, Turner's belief that the body must be woven back into current theory and methodology is in line with the contention of this thesis; that a consideration of the body can lead to richer insights within many disciplines. Within music research, much like sociology, the body has been almost an afterthought— a necessary element in production of the subject matter, perhaps— but as something secondary to the object of study: music. If the body has been considered it is from a biological perspective rather than any embodied experiential contributions.²³ However, with this thesis I will demonstrate a theory and analytical model that takes into account the inherent embodiment of the musical performer and the salience of this notion to the study of music in general. While I have chosen to use Berio's piece *Sequenza III* as the case study for this research I also hope for this model to be transferable and that the reader will take the model outlined in this thesis as a method of analysis for music or performances of their choice. At the very least, I hope that the reader will take the

²³ One example of this preoccupation with the body as only a biological entity can be seen in the multitude of resources for musicians on facilitating more control over the body. For examples see Tubiana & Amadio, 2000; Norris, 1993; Horvath, 2002; and Green & Gallwey, 1987. This only serves to emphasize the idea of body as machine, an object to be controlled by the mind.

information presented here as a way of beginning to consider the multitude of ways in which human beings constitute an embodied existence and consider the ways in which our embodiment contributes to the development of our understanding of music and musical performance.

Chapter 2: Music, Phenomenology and the Body

This chapter will begin with a detailed overview of the philosophy of phenomenology, focusing on the work of phenomenologists Edmund Husserl and Maurice Merleau-Ponty.²⁴ While phenomenology was briefly discussed in the literature review presented in Chapter 1, the following discussion will provide more detail regarding the philosophy and also consider the musical applications of phenomenology, as developed through the work of Judith Lochhead, Thomas Clifton and Don Ihde. This chapter will conclude with a phenomenological analysis of the piece *Sequenza III*, in which the 'essential moments' of the analyst's listening experience will be discovered. The information covered in this chapter encompasses the scholarly work positioned in Quadrants 1 and 2 of the theoretical map.

Philosophy of Phenomenology

Edmund Husserl (1859-1938)

As it was briefly defined in Chapter 1, phenomenology is a philosophical movement from the early twentieth century that is generally credited to Edmund Husserl. Husserl attempted to develop a vocabulary and process from which to understand consciousness. Developed in part as a reaction to rationalism's focus on the mind and cerebral thinking, Husserl's phenomenology is a descriptive philosophy that attempts to convey the lived experience. Husserl's work deals primarily with developing a method for extracting the essences of experiences and objects. In this way Husserl's phenomenology denounces both

²⁴ While Merleau-Ponty's philosophy rarely makes explicit musical references, his theories on perceptual experience and our bodily engagement with the world have much to contribute to this analysis. He does mention music briefly in *The Phenomenology of Perception* (2012, p. 146-147) and *The World of Perception* (2004, p. 99).

the intellectualism of rationalism as well as empiricism's strict focus on sensory input. It therefore strives to create a method of looking at the world that is based on elements that appear to consciousness within experience. Phenomenology is said to act as a "first philosophy" (Bowman, p. 254) that "returns to the things themselves" (Merleau-Ponty, 2012, p. xxi) since it provides comprehensive descriptions of experiences. These descriptions are to remain explicitly faithful to all that appears to the observer during an experience and therefore do not include assumptions or preconceptions. Phenomenology maintains that experience of the world precedes knowledge of the world, and it is therefore through lived experience that we can come to know the world (Merleau-Ponty, 2012, p. xxii). In this way, phenomenology is a descriptive "study of appearances" that attempts to describe how phenomena of objects and experiences are *in their presentations to us*, or as we experience them *in our being in the world* (Bowman, p. 257).

Along with this focus on how phenomena present themselves within lived experience, phenomenology also considers the collective unity between subject and object and rejects the notion of a gap between the experienced and the experiencer (Bowman, p. 255). Phenomenology values the ability of experience and credits this approach with allowing true essences of objects to present themselves to the observer. Experience and perception are, therefore, the necessary components to extracting essences from objects rather than consulting the empirical sciences in order to obtain knowledge of the surrounding world. For example, if a phenomenologist wished to understand light he or she would simply describe their experience of light, excluding referencing what they know of light outside of that experience, such as how light is produced and how it functions. By contrast, to ask a physicist to explain the properties of light waves does not adhere to a

phenomenological perspective because that description does not represent how we engage and understand light within our experience of it.

Maintaining a phenomenological perspective proves to be difficult as there is the common urge to rely on previous knowledge of what an object or experience 'is' in order to provide a description. Continuing with the above example of describing light— if I am attempting to describe in a phenomenological manner my experience of light and yet I already have procured knowledge on the nature and functions of light then I will be apt to *explain* my experience with my knowledge rather than devoutly *describing* the lived experience. To solve this problem we turn to the process of bracketing (also referred to as phenomenological reduction or *époche*). This technique, which is central to Husserl's philosophy, aids the phenomenologist in focusing their description on the essences of their experience. Bracketing is the process of suspending current beliefs or suppositions that may bias the observer in their phenomenological description. This approach circumvents the desire to preemptively label, categorize or validate components of the experience and inspires "openness and descriptive richness at precisely the point where other approaches impose restraints that narrow the range of investigation" which provides space for "total attention to the objects and processes of consciousness as they exist in and of themselves" (Bowman, p. 257). Bracketing has since become a central technique to many phenomenological approaches and is considered one of the necessary attributes for *doing* phenomenology since it allows the observer to truly perceive the world rather than "going behind" an object and constructing a world out of previous knowledge. At its core, phenomenology teaches us to shift our thinking in order to allow us to see objects as they

are truly presented in experience and thus allows us to “mov[e] beyond our habitual attitude towards a philosophical one” (Hezekiah, 2010, p. 7).

Maurice Merleau-Ponty (1908-1961)

What phenomenology seeks to uncover through this process of removing the “habitual attitude” is the aforementioned notion of “essences”: a concept at the core of Husserl’s phenomenological philosophy. Generally speaking, there is no definitive or agreed upon explanation of what constitutes an “essence” however it can be broadly understood as a component of an experience without which the experience or object would cease to be itself and would therefore be unrecognizable. As such, the essence of an experience or object is a fluid entity that may adapt and change between individuals and different experiences. The inconclusive definition of the term essence is only one example of the difficulties in developing a decisive understanding of the phenomenological approach. As much as phenomenology is defined as and understood to be ‘the study of essences,’ there is ultimately still much variance in phenomenological approaches. Maurice Merleau-Ponty begins the preface to his substantial work *The Phenomenology of Perception* (1945/2012) by posing the question “what is phenomenology?” and acknowledging the strangeness of the fact that the question has yet to be fully determined. Merleau-Ponty asked this question forty years after Husserl’s work on the topic, and nearly another forty years later, in his phenomenological account of musical analysis *Music as Heard* (1984), Thomas Clifton also subverts the question, coyly stating that “if [the question ‘what is phenomenology’] has not yet been answered by either Husserl himself or subsequent phenomenologists, then I myself respectfully decline to answer it” (p. vii).

While many scholars evasively refuse to define the philosophy in concrete terms, there is the general agreement that one understands phenomenology only by *doing* phenomenology and that the process of trying to see (or hear, as will be the focus in this thesis) in a phenomenological manner proves more fruitful than simply attempting to digest the phenomenological vocabulary. There is therefore an element of flexibility when adopting the phenomenological approach. Husserl's work was expanded upon by a number of other philosophers including Martin Heidegger, Jean-Paul Sartre and Merleau-Ponty, who all maintained integrity to the core philosophy of phenomenology but adapted or highlighted certain elements which they deemed of primary importance. Merleau-Ponty's work on phenomenology is of particular interest to this thesis as it maintains a strong focus on the contribution of the lived body to understanding the essences of experience. Moving away slightly from Husserl's focus on the element of consciousness, Merleau-Ponty's phenomenology maintains that it is through our bodily experience that we come to understand the world, as it is the body which "will reveal to us the perceiving subject as well as the perceived world" (2012, p. 74). Our body is always with us and is therefore inextricable from our lived experience. It is a lived object within the world. We view the world from the same perspective because it is always *from the body* that the world is experienced and perceived and this notion of perception is a central component of Merleau-Ponty's work.

For Merleau-Ponty, perception precedes rational thought and provides us with knowledge of the world and ourselves. It is therefore through our perception and the body that we are able to acquire knowledge of the world since "the world is not what [we] think, but what [we] live through" (2012, p. xxx). As such, Merleau-Ponty rejects the notion of an

absolute “truth” as frequently purported by the empirical sciences and maintains that ideas labeled as true are simply those that are generally agreed upon, truth being “another name for sedimentation” (1964, p. 96). As Bowman explains, for Merleau-Ponty, perception “is in no way subservient to reflective thought” and by adhering to the world of perception we “restore the world to its full humanness and deny that humans can ever relate to the world as detached, impartial spectators” (Bowman, 1998, p. 262). It is these “truths” which are merely agreed upon notions of knowledge that “obscure people’s lived, bodily sense of the world” (Bowman, 1998, p. 263). It is here that the technique of bracketing becomes indispensable— as a tool to rid us of our learned truths so we may perceive the world as it is presented to us in our experience of it.

Criticisms of Phenomenology

Phenomenology is not a method without its critics. Scholars question the approach due to the elusive and arguably subjective nature of its “descriptive analysis.” Eric Clarke describes phenomenology as “still a poorly developed field,” predominantly due to the difficulty in what it is trying to accomplish (2011, p. 197). The shortcomings of phenomenology as outlined by Clarke include, firstly, that by focusing only on conscious experience, phenomenology excludes other, major parts of our experience (i.e. unconscious or non-conscious). Secondly, that it is difficult to translate experiences into words, especially when describing convoluted concepts such as corporeality, temporality and multiplicity. According to Clarke, such attempts at description remain either bland, lacking a “vividness” or over-explain the experience by providing too many associations and connections to the writer’s personal lived experiences. Finally, Clarke explains his disbelief that any one person would be capable of providing a full, comprehensive description of an

experience; while partial accounts may be possible it seems unlikely that everything could be included. Clarke instead seems to support phenomenological accounts that do not claim to be exhaustive descriptions, but rather acknowledge “the mediated and necessary partial nature of an individual’s account of their own experience as given” (2011, p. 198).

There seems to be an especially strong refusal to marry phenomenology and music; while many scholarly attempts have been noted in this chapter, their work represents a small selection of music research. Thomas Clifton in particular has been equally lauded and condemned for his attempt to bring phenomenology into the foreground as a method of musical analysis. In his significant work, *Music as Heard*, which will be discussed in more detail shortly, Clifton attempts to demonstrate the descriptive nature of phenomenology in order to show how music is presented in experience. However, many feel that this method is not applicable to music. Many critics find the method too subjective, lacking in rigor, and irrelevant.

These concerns are understandable. As a method seeking to provide a universal, overarching description of a musical object it seems clear that phenomenology would not succeed. Despite the analyst’s best attempts at bracketing in order to remain somewhat impartial, it is also impossible (as Merleau-Ponty has discussed) to stand objectively outside oneself and remove oneself from a certain position of observation. As Bowman notes, while phenomenology attempts to posit itself as a method free from interpretation as “a description that is not itself situated, perspectival and partial,” this is an impossibility, since “all descriptions are themselves interpretations [and] there can be no view from nowhere” (1998, p. 282). These descriptions are therefore inevitably unique and as such not necessarily applicable beyond the individual. As Lawrence Ferrara explains, “ the full,

pure, or absolute suspension of one's tradition is impossible" and a phenomenological analysis will therefore reflect one's own personal "tradition" (Ferrara, 1991, p. 153).

However, as Bowman points out: "these concerns [about phenomenology] . . . do not wholly negate the method, nor do they alter its potential value for uncovering important musical truths obscured by habit and abstraction" (1998, p. 301). I find Bowman's notion here to be apt; despite phenomenology's potential flaws there is much in the method that is worth exploring. In spite of its criticisms, I believe there to be value in a phenomenological approach, especially when use in conjunction with musical analysis.

Merits of phenomenology as an analytic model

The phenomenological perspective holds interesting implications for music research because it can deepen our understanding of the musical experience. Merleau-Ponty's work is not generally concerned with application onto the musical realm (see footnote 1 in this chapter for exceptions) and yet his philosophy of embodied perception sets the stage for an intriguing approach to musical analysis. I have chosen to utilize a phenomenological approach in my analysis of *Sequenza III* for a number of reasons. Firstly, by remaining faithful to Merleau-Ponty's conception of phenomenology, it becomes a method that speaks directly to the body's involvement within the musical experience and embraces the influence of the corporeality of the body upon that experience. In a discussion of the embodied singing voice, especially with regards to *Sequenza III* (a physically and vocally acrobatic piece), I find it to be appropriate that the method recognizes and respects the influence of human corporeality upon conceptual understanding. Secondly, because contemporary pieces such as *Sequenza III* do not conform to conventions of Western art music (i.e. they do not exhibit traditional forms, gestures or harmonies) they are difficult to

describe using traditional analytic models. The freedom and flexibility available within the phenomenological approach means that it is more easily applicable to this type of music because the incoherent structure of the piece does not weaken the analytic method. Finally, phenomenology's focus and insistence on the importance of the integrated experience between subject and object allows the development of an analytical model that both respects and celebrates the variance and individuality within every performance of *Sequenza III*. This is a piece which can be understood, interpreted and performed in a myriad of ways and it is therefore of no use for the analyst to attempt to explain the piece in a fixed, absolute manner. Phenomenology encourages the analyst to describe, but not explain, their experience with objects and as such allows the objects (in this case, the musical work) to reveal the essences of how they exist in that experience. I appreciate how the method embraces the richness of the lived experience and makes no attempt at rationalizing experiences preemptively or insisting upon controlling subjectivity within an analysis.²⁵ Rather than impose upon *Sequenza III* preconceived notions of "what it means" or "how the music should constitute an experience," utilizing the phenomenological approach allows *Sequenza III*— the musical object itself— to partially dictate the outcome of the analysis. I feel this is one of the greatest strengths of phenomenology in that the approach does not limit or constrict the possibilities available within an analytic method. Furthermore, phenomenology offers an important aid to the research of this thesis, which is attempting to access a process of the musical experience that is generally understood to be private and unreachable. The embodied process of the performer, or the transfer of music

²⁵ Ferrara has also criticized the apparent obsession with objectivity in analysis, declaring that it causes the method to dominate the work and prevents the analyst from remaining "open' to all of the potential dimensions of meaning that might emerge in a work" (1984, p. 356).

from score through body and into sound, is a process that is in some ways hidden from the musical receiver. However, I believe that this process can be accessed and articulated and that by investigating this process it is possible to generate a deeper understanding of how and why we connect to music. In order to move from music as it is experienced by a receiver *into* the embodied process of a performer we must first begin with the aspects of the musical experience that are easily accessed. This is where phenomenology can act as a great asset, since it focuses solely on these components.

Phenomenology offers a method that begins at what we see and hear and witness in an experience (the accessible components) and then allows for further analysis once the absolute essences of an experience have been disseminated. Further on in this thesis we will enlist other methods that will allow us to move into those areas that are deemed inaccessible (i.e. exploring what creates and contributes to the essences of our experience), but phenomenology is the gateway without which this process could not begin.

Phenomenological approaches to music research

We will now begin to consider phenomenology in a musical domain, discussing the scholarly work that has been relegated to Quadrant 2 of the theoretical map.

Despite the elusive and occasionally controversial nature of phenomenological thought, it has been utilized with some consistency as a method of musical analysis.²⁶

Phenomenological musical approaches by Judith Lochhead (1986), Thomas Clifton (1984) and Don Ihde (2007, 2012) were combined to develop the analytical model in this thesis to be applied to *Sequenza III*. Ihde's understanding of the phenomenological process and his breakdown of the process of bracketing an experience (using what Ihde calls "hermeneutic

²⁶ A short list of other prominent works might include Mikel Dufrenne (1973), Alfred Schütz (1976), David Greene (1982, 1984), David Lewin (1986) and F.J. Smith (1967, 1973).

rules”) helped shape the analytical approach of the model. Ihde’s rules allow the analyst to maintain equality between the examined elements and “suspend or step back from [their] ordinary ways of looking, to set aside [their] usual assumptions regarding things” (2012, p. 17). Ihde’s breakdown of steps for proceeding with the process of bracketing provides a clear manner by which to suspend beliefs and assumptions, attending to the musical experience as it presents itself. Ihde’s hermeneutic rules as outlined in *Experimental Phenomenology* (2012) are as follows:

1. Attend to phenomena as and how they show themselves
2. Describe (don’t explain) phenomena
3. Horizontalize all phenomena initially
4. Seek out structural or invariant features of the phenomena

These four rules require additional explanation as to how they will enlighten and restrict the following analysis. As Ihde makes clear, the rules are, on the surface, extremely simple in theory and yet tend to present many challenges to the analyst who puts them into practice. The first, *attend to phenomena as and how they show themselves*, is a cornerstone of the phenomenological method. This is essentially what Husserl presents as bracketing and allows the analyst to perceive in a phenomenological manner. Bracketing involves resisting the temptation to use previous knowledge, understanding and suppositions to complete a description of an experience. Ihde notes that questions arise even at this first step as to making a distinction between what is real and what seems to appear but he maintains that this type of questioning must be suspended temporarily if we are to enter into the phenomenological mindset. There are a multitude of ways which we can experience phenomena and a multitude of methods by which we can experience them. If we begin the

phenomenological approach with an idea of is real or what we expect to be real then we are not practicing phenomenology.

Ihde's second hermeneutic rule of *describe (don't explain) phenomena* continues with this concept of bracketing and begins to decide which features may and may not be included within the analysis. Any explanation of the experience that attempts to go behind or provide reasons for phenomena is to be excluded from the description. Aspects of the phenomena that fall into a phenomenological description include only the features that appear or are presented within the experience. To return to the previously mentioned example of a phenomenological description of light: we may intellectually understand light as being comprised of certain properties of wavelengths, intensities and speeds but that is not how light is presented to us in our experience. As such, a true phenomenological description of that experience would not include any of the scientific data that "goes behind" and attempts to explain the lived experience of the phenomena.

In keeping with the first two rules, Ihde's third rule continues to enforce an inclusion of only those elements which are presented within the experience while excluding any other presumptions. The rule *horizontalize all phenomena* ensures that all elements of the experience are provided equal weighting within the description rather than being organized into a hierarchy based on suppositions of function or importance. Adherence to this rule prevents a bias on the part of the analyst from declaring one facet of the experience as prominent or more important than the others. For example, if, based on previous knowledge of a piece of music, I have decided that certain structural elements are of great importance to an understanding of the work I may hone in on those elements during my phenomenological analysis. However, while those structural elements may be

important they are not necessarily elements that are explicitly present in my experience of the piece. Therefore, by not giving all musical elements equal weighting it is possible I will skew the analysis in favor of elements that I deem important. This prevents a truly phenomenological reading of the music since I am not describing how the elements exist in their presentation to me.

The final rule presented by Ihde is to *seek out structural or invariant features of the phenomena*, the terminology of which is a replacement for Husserl's concept of essences. Husserl encouraged phenomenologists to simply describe their experiences with phenomena and to also, under the assumption that certain essential features would be presented to the observer within their experience, use the method to seek out the essential features of the objects they were encountering. As mentioned earlier in this chapter, the designation of which elements in a phenomena or an experience can be considered essences is not a completely decided matter within phenomenological thought. Essences are generally the elements of an object or an experience that are innate to it, without which the object or experience could not be considered the same, that is, the elements without which they would not be recognizable. Essences can also be considered elements that are commonly characteristic to a variety of objects or experiences. These definitions become even more elusive when we consider them in the musical domain and attempt to decide what musical elements constitute the musical essences of a work or a musical experience. It is possible that these essences would not even be *musical* elements such as form or harmony or rhythm; could not a listener's bodily response or a performer's imagined narrative be essential elements of the piece that, while they may be *evoked* by musical elements, have little correlation to the musical construction of the piece?

Rather than attempting to extract the essences from *Sequenza III*, within the following analysis I will discern the essential moments of my listening experience. I define essential moments as sections or attributes of the piece that appear innately connected to the way the piece presents itself in a listening experience, that is, without which I would cease to recognize the piece in its current form. I am aware of the broad and somewhat elusive nature of this conception, however I in no way wish to confine or delimit my phenomenological exploration of the essential moments of *Sequenza III* by invoking a fixed definition. Therefore, I will work with this broad definition to see which elements appear to me as essential moments of the piece during my phenomenological experience of the piece. I believe that this broad definition also allows appropriate room for the phenomenological attitude, as it is flexible enough to allow for different essential moments to arise within different experiences.

Outline of phenomenological analytic model

I will now outline the phenomenological analytic model that has been strongly influenced by two music scholars, Thomas Clifton and Judith Lochhead. I have adapted the work of Clifton and Lochhead in order to create a practical analytic model that we can think of as an exercise in musical phenomenology. Ihde's hermeneutic rules will assist the analyst in maintaining a phenomenological mindset through the following analysis.

I will be applying a phenomenological approach to *Sequenza III* within four musical elements in order to explore the essential moments of the piece. These elements were extracted from Thomas Clifton's work on the phenomenological music experience. In his book, *Music as Heard* (1983) Clifton outlines four musical elements that he believes are essential considerations when approaching music with a phenomenological attitude. These

four elements are time, space, movement (what Clifton refers to as “play” and what I will refer to as gesture) and feeling. Clifton derives these “essential” elements from a simple experiential analysis of a gavotte from Bach’s *English Suite no. 3 in G Minor* in which he explains that his initial description of the piece is compiled from these four musical strata. Clifton surmises that these elements are invariant features of all music, and are responsible for presenting musical essences to the listener.²⁷

Clifton’s work with these four elements will be instrumental to the following analysis and will provide the framework by which we will explore the essential moments of *Sequenza III*. However, even working within these four elements of a piece of music is not enough to construct a clear analytic model, since there is much to consider in each of these sections. In order further delimit the analysis these four elements will be broken down into subsections, modeled after Lochhead’s phenomenological analysis of the temporal features of contemporary music (1986). In her analysis, Lochhead maintains focus in her discussion of the music by distinguishing between temporal *objects*, *places* and *modes*, thereby presenting three distinct temporal phenomena on which to base her narrative. She then offers an explanation of six *temporal attributes* which each provide information regarding how a listener may experience temporal phenomena in a musical work. Lochhead’s subsequent narrative analysis of three contemporary pieces²⁸ is centered upon the three

²⁷ This is a claim that has been heavily criticized as to whether these elements are truly ‘essences’ or simply important features in some musical experiences (see Bowman, p. 280). I have chosen to follow Clifton’s lead in my analysis because I believe these elements to be important and potential conveyors of essences in *Sequenza III* and feel they will add clarity to the analysis. However I acknowledge that there may be differing opinions on the matter and do not deny that fact that there may be other musical elements which are ‘essential’.

²⁸ *Fourth String Quartet*, Seymour Shifrin (1973); *Music for Violin Solo*, Daria Semegen (1981); *Brass Quintet*, Elliot Carter (1976)

temporal phenomena of *objects, places* and *modes* and described using the six *temporal attributes* as a basis for her choice of language.

For the subsequent analysis of *Sequenza III*, I will be following a similar process to Lochhead, expanding her treatment of temporal phenomena to include the three additional musical elements of the piece as outlined by Clifton. Table 1 shows how Lochhead’s analytic model will be crosscut with the musical elements of time, space, gesture and feeling, as outlined by Clifton.

Table 1 - Phenomena and Musical Elements

Phenomena (Lochhead) → Musical elements (Clifton) ↓	OBJECTS	PLACES	MODES
TIME	Temporal objects	Temporal places	Temporal modes
SPACE	Spatial objects	Spatial places	Spatial modes
GESTURE	Gestural objects	Gestural places	Gestural modes
EMOTION	Emotive objects	Emotive places	Emotive modes

In Lochhead’s temporal phenomenological music analysis she distinguishes distinction between the phenomena of *objects, places* and *modes*. Lochhead considers *objects* to be “any structure that we apprehend as a successive whole” (1986, p. 60). These

objects may exhibit: i) clear boundaries that are continuous, overlapping or disconnected, ii) hazy boundaries that are overlapping, or iii) no boundaries in which the objects are successive and continuous. Lochhead describes *places* as “a locus of . . . awareness” (1986, p. 61) that may or may not be marked by a sudden change in the music (i.e. a change in pitch, dynamics, texture, etc.). Lochhead describes *modes* as existing when we are drawn to the mode of experience rather than an object, for example simultaneity, duration or succession.

Lochhead’s phenomena of *objects*, *places* and *modes* are cross cut with Clifton’s musical elements of temporality, spatiality, gestures, and feeling, as seen in Table 1. Lochhead’s temporal analysis is therefore expanded from only temporal *objects*, *places* and *modes* to also include: spatial *objects*, *places* and *modes*, gestural *objects*, *places* and *modes*, and emotive *objects*, *places* and *modes*. The purpose of this phenomenological analysis is to eventually fill in Table 1 with twelve essential musical moments (emblematic, significant moments in the piece) that will serve as point of further exploration in Chapters 3 and 4.

Lochhead’s attributes of phenomena as descriptors

Within the discussion of the three phenomena in each of these four musical elements, the language utilized for discussion will be based around certain attributes of the phenomena (see Table 2). This is another adaptation of Lochhead’s temporal phenomena analysis for which, prior to the analysis, she outlines six temporal attributes to be used in her discussion. I will be using Lochhead’s suggested attributes for the discussion of temporal phenomenon and expanding Clifton’s descriptive terms to compile lists of attributes for the other three categories of spatial, gestural and emotive. Ultimately, this analysis is a synthesis of two phenomenological models that are extremely contrasting in

their specifics but very similar in their objectives. Ihde's hermeneutic rules serve as a unifying device with regards to the overall analytical approach, since they encourage the analyst to adhere to a phenomenological approach. Since all three analytic approaches maintain adherence to an underlying philosophy of phenomenology, they share common traits that allow for methodological combination.

Clifton's analysis is not entirely systematic and I have at times supplemented his description of attributes with contribution from both Ihde and Lochhead. An example of this occurs in the breakdown of Emotive Attributes (see Table 2 and List 2). While Clifton heavily values the *feeling* or *emotive* aspect of phenomenological analysis he does not provide a breakdown of how to examine the emotive components of a piece of music. In Clifton's discussion he focuses on the feeling of possession; the emotion that he describes as necessary for the construction of all other feelings. While there are many factors in creating the feeling of possession (according to Clifton it requires the presence of belief, caring, feeling and willingness) I did not feel that an exclusive discussion of possession would properly assess the emotive aspects in *Sequenza III*. Consequently, I have also enlisted Lochhead's method of describing emotive aspects of music to supplement Clifton's conception. Lochhead's phenomenological analysis is focused primarily on temporal aspects of musical works and yet there are times when she discusses emotive aspects as well. The emotive attributes list therefore is a combination of Clifton and Lochhead's models.

Lochhead's discussion of emotion is not a proclamation of what the feelings in the piece *mean* but rather a discussion of how her listening experience matches the description of an emotion in the score. In this way she primarily discusses *how* we hear or *how* we

experience the feeling. While Lochhead does describe certain musical features that are present when certain emotions are instructed in the score (e.g. the feeling of “lightly” is exemplified by “short, staccato elements and a *p* dynamic level” (p. 86)) there is a stronger focus on the manner in which we hear these musical elements. For example, does this new emotion disrupt what we have previously experienced? Has it grown out of something that we recently heard? Or perhaps it exists simultaneously with another emotion but is relegated to the background of our experience?

Difficulty of phenomenological terminology

A difficulty arises in a phenomenological analytic model such as this when the parameters start to be clearly defined. Analytical models can sometimes delimit the nature of an experience and there is a concern that by focusing on certain phenomena and musical elements (e.g. a spatial place or a temporal mode) that this procedure might become non-phenomenological. Despite this, I feel that such a clear analytic model is necessary in order to maintain coherency and accessibility within the analysis. However, it is also important to note that musical elements exist simultaneously within the piece of music and as such at times may not be inextricable from each other. In fact, in some ways these elements are so interconnected in the formation of the music, as well as in the way we experience them, (how is it possible to understanding musical movement without consideration of musical time or space?) that it may seem imprudent to examine each musical element separately.

While it may not be possible to keep each element neatly contained within its own discussion, maintaining some boundaries assists in adding a sense of coherency to the descriptions. Additionally, it is difficult for the analyst to pick up all the elements of an experience simultaneously and this breakdown offers a chance to truly explore what the

piece is presenting in an experience without the fear of missing or overlooking key elements. By attempting to maintain separation in the discussion but not enforcing it if the experience dictates otherwise, this analysis strives to balance coherency, clarity and cohesiveness.

Analytic Procedure for Phenomenological Analytic Model

This analysis will begin with a presentation of Table 2. This chart details the attributes of the phenomena, that is, the descriptions that will be used to classify certain components within the music as objects, places or modes. These descriptions are extracted from Lochhead, Clifton and Ihde and pertain specifically to phenomenological listening. Explanation of the terminology in Table 2 will follow for the reader who may be unfamiliar with descriptive phenomenological vocabulary.

Immediately preceding the analysis, a short description of the vocal gestures according to the staves on the score is seen in List 1 (each staff equals 4 measures and 40 seconds). These were extracted through an impartial and neutral score study of the piece and contain an objective breakdown of the most prominent vocal gestures on each staff. This list is intended to act as reference for the reader who does not possess a copy of the score of *Sequenza III* in order to better understand the musical content of the phenomenological analyses that are to follow.

The phenomenological analysis that follows will be compiled of narrative prose detailing a general experience of listening to the piece. There are four detailed narratives, each corresponding to one of Clifton's musical elements of time, space, gesture and feeling. Time codes are provided based on the location of the components within the score to act as "bar numbers" and within each section the narrative is separated between the phenomena

of *objects, places* and *modes*, where applicable. The sections noted with time codes are not divided into the 40-second sections seen in the neutral description of gestures in List 1 but are rather grouped by the way in which elements were presented to the analyst within the phenomenological listening.

Final caveat

These narratives will be guided by the categories and terminology outlined above but will always remain faithful to the phenomenological approach by describing the listening experience explicitly. This method of phenomenological listening requires the analyst to in a sense “re-learn” how to hear, so that, as Ihde describes it, “the learning does not *construct* what is to be seen [or heard], it *constitutes* it in terms of meaning (2007, p. 63). The analytical framework outlined here is a means of focusing the analyst’s attention and clarifying the model for the reader. This type of loosely directed phenomenological listening activity is seen in Lochhead and Clifton’s work but also in Lawrence Ferrara (1984) and David Greene (1982, 1984). One of the difficulties in phenomenology is the immediate paradox in reconciling the philosophy of the approach with the practicalities of process. Phenomenology posits that an experience should be entered into without presuppositions or expectations (i.e. not looking for anything) while musical analysis normally attempts to investigate a specific musical attribute. Ihde describes this paradox as the “dialectic of interpretation.” If we define what is being looked for prior to analysis then we are not truly entering into the experience without bias. Perhaps the only response to this dilemma is to assure the reader that while certain attributes of the music are being investigated, the approach being used to investigate them is attempting to remain rigorously phenomenological. That is to say that that Ihde’s rules for phenomenological bracketing

(outlined above) are in place to ensure that the analysis leans heavily on the side of observation rather than explanation, even if not every facet of the experience is considered at once. The organization of musical elements that I have outlined does not necessarily diminish the phenomenological approach but simply delimits what is considered in each discussion of the experience in an attempt not to overwhelm either the analyst or reader.

From these narratives detailing the phenomenological experience of listening, certain sections of the piece that clearly exemplify certain essential moments will be extracted and placed into Table 1-b. These essential moments will then serve as sections for further analysis in Chapters 3 and 4.

Table 2 – Phenomena Attributes

Temporal ²⁹	Order and Sequence	Mensural Properties	Change and Continuity	Temporal Orientation	Gestural functions	Protentional/ Retentional	Manifest/ Latent
	Dynamic and irreversible succession or static and reversible succession	Measured in relation to a background unit (time) or in relation to other objects (temporality).	May be seen in conjunction with the three types of temporal phenomena: objects, places and modes.	Associated with a sense of before and after	Gestures that indicate a beginning or an ending function	Presentations that either look forward to future or back to past.	Presentations that either appear explicitly in experience or appear implicitly in background
Spatial ³⁰	Musical Line	Varieties of Thickness	Depth	Faceting			
	Thickness or Thinness	Undifferentiated surface; Surface with low, middle or high relief	Distance; Penetration; Multidimensional linear forms (Emerging elements or Spatial overlap)	A change in perspective that shifts understanding of space and reorients view			
Gestural ³¹	Heuristic character	Ritualistic character	Auditory Shape				
	Manner in which the gestures are presented	Manner in which gestures situate themselves (do they strain against or comply with temporal or spatial boundaries?)	The auditory shape of the gesture (how experienced without a visual presentation of shape)				
Emotive ³²	Possession	Associated musical elements	Presentation				
	The listener's "engagement" with music; instinctive connections to musical moments.	Dynamics, articulations, lengths, etc.	How we hear emotions that are indicated in the score as directions to the performer.				

²⁹ These titles and descriptions of temporal attributes from Lochhead (1986).

³⁰ These titles and descriptions for spatial attributes from Clifton (1983).

³¹ The titles and descriptions for gestural attributes are from Clifton (1983) and Ihde (2007).

³² The titles and descriptions for emotive attributes from Clifton (1983) and Lochhead (1986).

Attributes of the Musical Elements of Time, Space, Gesture and Emotion

The following detailed explanation outlines the terms found in Table 2. These terms are an elaboration on the descriptive language that can be used when discussing the four musical elements found in Clifton's phenomenological studies (time, space, gesture and emotion). It may be apparent to the reader that these concepts are very sophisticated and can lead to very complex insights when applied to an object of study. The specificity of these terms help to focus the discussion and ground the discussion in language that pertains to the phenomenological philosophy. These terms will be used in the following narrative analysis to add structure and coherence to the phenomenological approach.

Temporal Attributes

The seven terms outlined in the first row of Table 2 are the terms that will be used to describe temporal phenomena. These terms and the following paraphrased descriptions are from Lochhead (1983).

- *Order and Sequence*³³ refers to the succession with which we hear temporal elements and whether it seems possible to reverse the sequence of events.
- *Mensural Properties* is a term used to classify components that are either in time, such as when a musical component is heard against an absolute temporal background or as part of temporality, in which the musical components are heard in relation to each other and not against a temporal background.
- In a musical experience we may also be drawn to features of *Change or Continuity* in which successive musical components may be heard as a continuum or as a moment of abrupt variation.
- *Temporal orientation* refers to how the listener is situated within the "now" based on a sense of before or after; we may hear musical components or moments of silence as positioning us towards a certain sense of temporality.
- *Gestural functions* refer to musical components that indicate a beginning or ending function and allow the listener to hear the start or the finish of a temporal object, place or mode.
- *Protentional and Retentional Involvements* describe musical components that push the listener to hear the music in the future or in the past, respectively. A *Protentional Involvement* may have a sense of anticipation, continuation or

³³ Lochhead originally terms this attribute "Order Properties" but I have revised the term for purposes of clarity.

pausing before the next musical event. A *Retentional Involvement* attends to a past musical presentation or helps define what we have just heard in the past.

- *Manifest and Latent aspects of temporal phenomena* describe the way that musical presentations either appear directly to us in experience (i.e. temporal objects) or appear implicitly (i.e. absolute background).

Spatial Attributes

The four terms outlined in the second row of Table 2 are the terms that will be used to describe spatial phenomena. These four terms were taken from Clifton (1983).

- The first refers to the thickness or thinness of the *musical line*. This may or may not have to do with the number or range of instruments playing at one particular moment (and for our purposes here *Sequenza III* only has one vocal line throughout the piece) but refers to how the texture of any musical line is experienced.
- *The Varieties of Surface* as described by Clifton refers to the complexity of musical lines interacting with the surface texture of the music.
 - These are separated into four possibilities:
 - Undifferentiated surface: “absence of movement . . . absence of any contrast in dynamics . . . absence of timbral complexity” (Clifton, 1983, p. 155);
 - Surface with low relief: “where a line formed by the contours of the surface, the line will be perceived as adhering to the surface rather than detaching itself . . . competition between line and surface is held to a minimum” (Clifton, 1983, p. 156);
 - Surface with middle relief: “change of surface is effected by contour and timbre” (Clifton, 1983, p. 157);
 - Surface with high relief: “the presence of a more or less stable ground from which is projected a figure of doubtless individuality which, nevertheless, is still fastened to its ground” (Clifton, 1983, p. 172).
- Clifton also refers to the experience of *Depth* in music that also contains a number of constituent parts, including distance, or how near or far we hear elements as being presented to us.³⁴ This is sometimes difficult to describe because there is no distinguishing musical factor for a certain amount of distance (i.e. soft musical components may not appear to be in the distance).
 - Penetration as an aspect of depth refers to how we hear musical components coming through and merging with existing components.
 - Penetration differs from terms such as “emerging” or “interruption,” neither of which joins with existing components to create the same feeling of continuity as a penetrating component.
 - Multidimensional Linear Forms contain two distinct parts:

³⁴ The descriptions for depth in this section are paraphrased from Clifton (1983, p. 178- 202).

- ‘Emerging elements’, which are components which seem to replace what they are emerging through (not join with, as with a penetrating component)
 - ‘Spatial overlap,’ which describes components existing simultaneously on different planes rather than components that emerge through one another. Components with spatial overlap co-exist and exhibit a ‘give and take’ nature that is not present in emerging elements or penetration.
- *Faceting* describes a musical event which forces a change in perspective that shifts our understanding of space and orients our view of the spatial elements differently.³⁵
 - One possible example of faceting could be the employment of a deceptive cadence at a surprising moment, which causes a sudden shift in the spatial positioning of the listener.

Gestural attributes

The three terms outlined in the third row of Table 2 are the terms that will be used to describe gestural phenomena. The terms “heuristic” and “ritualistic” are found in Clifton’s work (1983) and the concept of “auditory shape” is from Ihde (2007). All descriptions are paraphrased from these authors.

- *Heuristic* describes the manner in which the musical gestures are experienced; do they unfold in a way that allows the listener a sense of personal discovery in an almost interactive way? Or do they evoke a feeling of interchange and reciprocity between control and freedom?
- *Ritualistic* character describes how the gestures are situated within the spatial or temporal boundaries of the piece. The listener may notice that the music appears to adhere to or circumvent those boundaries.
- Ihde’s contribution to the gestural attributes is the description of the *Auditory Shape* of the gesture. It is important that the listener attempt to describe the heard shape of the gesture— how they are experienced in the auditory realm— without relegating the gesture to a conception of visual shape. While references to visual shapes may emerge, they must not be assumed (i.e. if a musical line is rising or falling, we may associate this with a visual conception of up and down, but the auditory experience may not equal this notion).

Emotive attributes

The three terms outlined in the fourth row in Table 2 are the terms that will be used to describe emotive phenomena. The term “possession” is adapted from Clifton (1983) and the terms “associated musical elements” and “presentation” are inspired by Lochhead (1986).

- The descriptions for the emotive attributes begin with Clifton’s notion of *possession* of a musical experience.

³⁵ The descriptions for faceting in this section are paraphrased from Clifton (1983, p. 202–204).

- For Clifton, the feeling of possession is a foundational feeling acquired prior to developing any other feelings about music and it is an imperative part of the musical experience since it “underlies and prepares for more recognizable feelings” (1983, p. 272). If we place the feelings we experience while engaging with music off to the side in order to see the music more objectively then we are thinking separately from the music and the result is a conception is “deduced and intrinsically incomplete” (1983, p. 295). What we feel about music is “a necessary constituent of the musical experience” (1983, p. 14) which deeply affects the way we comprehend other musical aspects such as time and space (1983, p. 272).
 - Clifton’s definition of possession is constituted by a number of parts including acts of *belief*, and a willingness to experience sounds as actual music; *freedom*, which provides the possibility for possession or non-possession; *caring*, which describes feeling coming from an attitude of concern for the [musical] object; and *willing*, which urges the feeling of possession to continue.
- In comparison with his other descriptions of musical elements (i.e. time, space and gesture) Clifton does not outline the application of the feeling of possession quite as clearly. I have therefore taken this notion to be synonymous with the notion of “engagement” with music. That is, the experience of a feeling that instinctively pulls us towards a musical element or moment. Despite the seemingly “important” and “emotionally weighted” musical events that music scholars are generally taught to observe (such as modulations, tempo changes, final cadences, etc.), within this emotive analysis I would like to explore the possibility that there are musical moments which might not be generally considered to be important, but that hold substantial emotional power for the listener. Whenever the listener develops a strong sense of engagement [possession] with the music, be it for a variety of reasons, that moment will be considered an important locus of feeling or emotion within the musical experience.
- In order to further clarify this notion of engagement with the music, two additional descriptions for emotive attributes have been included. These titles were inspired by a section of Lochhead’s analysis on *Brass Quintet* by Elliot Carter (1986, p. 79- 92) in which she discussed the temporal features of the piece by considering the emotive directions outlined in the score. Since the score of *Sequenza III* contains numerous emotive directions to the performer, a similar approach will be attempted within this analysis.
 - I have selected the terms *Associated Musical Elements* and *Presentation* to discuss this feature, which will outline the musical characteristics that accompany the emotive directions to the performer (e.g. dynamics, phrase lengths, articulations, etc.) as well as the how these emotions are heard in their presentation to the listener (i.e. does the experienced emotion concede to the direction in the score or does it

subvert it? Are we startled, soothed, or excited by the emotional presentation?) The objective of this analysis of emotive attributes is to explore the musical moments that retain personal engagement for the listener, to describe the musical characteristics that these moments exhibit, and to describe how we hear the directed emotions as they are presented to us.

List 1- Neutral description of the vocal gestures in *Sequenza III* (40' = 1 line of notation = 4 measures)

- **[00:00- 00:40]:** Low, intense muttering with a sudden cut off; short, high, closed mouth hum; quiet high hum with morphing vowels; tongue clicking sounds.
- **[00:40- 01:20]:** Quiet high hum with morphing vowels; very fast, tense, unintelligible muttering; high and low pitched vowels; constrained laughter; comprehensible word “woman”; wavering sound.
- **[01:20- 02:00]:** High, tight hum; quick falling notes; quick, short vowel sounds; repeated open mouthed laughter lowering in pitch; long exhale; comprehensible phrase “give me . . . few words.”
- **[02:00- 02:40]:** warbling sound; whimpering; long, sustained pitches with morphing vowels; cough; tongue click; snapping sound; comprehensible words “though we build for us be us.”
- **[02:40- 03:20]:** quick, intense muttering; wobbling, shaking sound with abrupt endings; light, breathy sound with abrupt shift to different vowel; long string of connected vowel sounds at different pitches; loud words “a few”; slow drop in pitches with morphing vowels.
- **[03:20- 04:00]:** low hum; slurred humming sound; sharp tongue click; very low vowel sound; soft hum; rising muttering gesture with abrupt high ending; words “for sing me to give me . . . to sing to be few words tonight” with tremolo in voice; strong/weak emphasis on words “to” and “night”.
- **[04:00- 04:40]:** alternating note hum; tongue trill; strong high note followed by low ending note; strings of detached vowels within a large range; strong, low laughing; fast inhale; high pitched and fast [la]; tongue click and cough; quick muttering; sung words “to few to me.”
- **[04:40- 05:20]:** quick muttering; sung words “a to sing”; breathy [a] following by an inhale; sharp high tongue trill; sharp, quick inhale; low guttural sound; closed mouth whine; tense muttering interspersed with violent gasps; unintelligible muttering from low to very high; long held note on the word “for.”
- **[05:20- 06:00]:** Breathly [a] vowel with pitch bend; tongue flub on lips; pause; words “to be”; descending whimpering sound followed by low pinched sound [ko]; humming and lip flubs; strong [a] low then high pitch; words “wing us”.
- **[06:00- 06:40]:** long, slow, sustained section; short, fast, detached, ascending words; fast exhale on [a]; loud, high words alternating on same two pitches “few words before to be us before a few words . . .etc.”
- **[06:40- 07:20]:** intense muttering over large range; fast series of inhales and exhales; relaxed exhale; tense muttering; ascending muttered [l] sound; high tongue trill; breathy muttering; sharp exhales in rhythmic pattern.
- **[07:20- 08:00]:** sharp exhales; a sung “to me” with the [i] vowel increasing in intensity before an abrupt stop; long sigh; tight hums interspersed with bursts of muttering; relaxed low tone; lip flub; “to sing”; tight, high hum.
- **[08:00- 08:40]:** low soft “to”; humming interjected with vowels that move from sung to warbled; sung “comes to sing, to sing” with some parts warbled and ending on very soft, low note.

Narratives of *Sequenza III*

The following four narratives each describe my experience of listening to Cathy Berberian's 1969 recording of *Sequenza III*. Each narrative is focused on one of Clifton's musical elements (time, space, gesture and emotion), and aspects of the music are further broken down into *objects*, *places* or *modes* (according to Lochhead's analysis) depending on how they are experienced. These narratives were conceived with a phenomenological mindset, while adhering to Ihde's four hermeneutic rules.

The goal of these detailed narratives is to describe the listening experience exactly as it presents itself in order to discern essential moments of the listening experience. In a traditional analysis these moments may be hidden by preconceived ideas regarding the piece. At the completion of all four narratives, twelve essential moments will be chosen to fill in Table 1 (the completed table is labeled Table 1-b).

1. Temporal Phenomenological Narrative Analysis of *Sequenza III*

Berberian [00:00- 00:20] ³⁶

At the beginning of this piece the voice begins with no concept of internal or external meter; the listener is afforded no opportunity to orient herself to the temporal progression of this piece and as such all attention is drawn to the temporal *changes and continuity* which occur.

- **Mode:** The timing of the opening section is unpredictable and jagged, it appears as more of a temporal mode rather than a temporal object because it is unclear where its definitive boundaries lie. Our attention is not drawn to specific moments but the overall sense of a lack of temporality.
- **Object:** A short, closed mouth hum at 00:15 appears to be a temporal object since it presents a drastic change from the previous and following temporal mode.

³⁶ All times are approximate and are taken from an estimation of where they should lie from a close reading of the score, not Berberian's actual performance. Any performance of this piece may have extreme variations from the timing of the notated score and as such would not be consistent with the analysis if the reader used a different recording to accompany the analysis. Despite this, I still strongly encourage the reader to familiarize him- or her-self with the original recording from which this analysis was derived (Cathy Berberian, *Berio: Sequenzas III & VII; Differences*, Phillips, 1969).

Berberian [00:20- 00:60]

- **Place:** When the first humming gesture arrives at 00:20 it seems to suspend time and presents temporal *mensural properties*- its measurement is not in relation to any background unit of time, but rather in relation to the previous gestures. The humming could be described as a temporal place; it does not present itself as an important musical moment but immediately forces the listener to confront their conception of time and temporality due to that feeling of suspension of time.
- **Objects:** The high, short hums that proceed and perforate that humming gesture (at 00:28, 00:31 and 00:34) occur quickly and provide that section with a feeling of *retention*, of remembering or “pulling back” in time. As the music progresses, the listener is still with those gestures, trying to hear them when they have already passed. The first experience of finality or ending for the listener comes around 01:10 with the word “woman”. This *gestural function* of the dropping interval provides the first feeling of an ending and the subsequent moments of silence produce the feeling that the whole first section of the piece (from 00:00- 01:10) could be experienced as one complete temporal object that finally concludes with a clear boundary. Within the clear boundary of silence following the word “woman” the listener experiences a strong feeling of *protention*, or anticipation as to the future.
- **Mode:** Throughout the first 60 seconds of the piece there is no feeling of ending or finality.

Berberian [00:70- 01:45]

- **Objects:** This period is made up of temporal objects that appear more obvious to the listener due to their clear and definitive boundaries. These boundaries are either presented as moments of silence or as a distinctive moment of *change* in the listener’s temporal awareness. By this point in the piece there seems to continuously be a strong feeling of *retention* when a gesture is reminiscent of one previously heard. For example the frequent sustained humming gestures all present a feeling of *temporal mensural properties*, and as they are heard more frequently also present the feeling of *retention* to the previous humming gestures.

Berberian [01:50- 02:30]

- **Objects:** Between 01:50 and 02:30 in the piece the temporal objects are presented as *latent aspects of temporal phenomena* in that their temporality is not brought to the foreground in the listener’s experience. The more manifest aspects in this period are the *changes* between gestures; however their changing does not appear to hold any time or temporal significance.

Berberian [02:30- 03:24]

- **Mode:** At 02:30 for the first time we are presented with a *mensural property of time* rather than temporality when a sound separate from the voice appears as a *latent aspect* of temporal phenomena. This sound appears as a structure into which the voice either does or does not fit. As the piece continues, the *order and sequence* appear as the most prominent temporal mode. The piece seems to move between a feeling of irreversible succession, with each new sound being presented as new and without a feeling of *retention* to the previous one (02:40- 02:48) before moving to present sounds rife with the feeling of *retention* and reversibility (02:49- 03:24).

This shifting between modes of temporal presentation is a prevalent feature of this piece. The vocal gestures are organized in such a way that the listener is constantly subjected to changes in temporal modes. At times the individual vocal gestures (or temporal objects) fade into the background of consciousness and what moves to the foreground is this reversing in temporal mode presentation.

Berberian [03:40- 05:30]

- **Objects:** As we approach the middle of the piece it is individual *manifest* temporal objects that appear directly in presentation to us. They generally begin and end with boundaries of silence. Within the silence following the temporal objects there is a strong feeling of *protention* to the next anticipated sound (see for example the pause at 03:47 after /u/ta/ta/). The temporal objects between 04:22 and 05:20, consisting of an entire stave of the score present the most *manifest* feeling of *mensural properties of time*; the pace and *sequencing* of the gestures appears rhythmic and consistent. During this time there is no pull between *protention* and *retention* but primarily a sense of being in present time or that the *temporal orientation* is in a sense balanced. The *change and continuity* of the temporal objects in this section is rapid but is connected by the consistent *mensural properties*.

Berberian [05:37- 05:50]

- **Object:** The short gesture at 05:37 (/co/) presents itself as a gesture with an ending function that maintains a strong sense of *retention* to the temporal object immediately preceding it. The temporal object immediately following appears to start anew with a gesture that has a beginning function.
- **Place:** This moment therefore appears as a temporal place in which an important moment of temporal awareness is presented to the listener.

Berberian [05:40- 07:30]

The piece continues in a similar fashion as in the first half; with an alternation between slight variations in temporal modes (such as 05:40— 06:09 and 06:15—06:48) followed by obviously delineated temporal objects (see 06:09—06:14 and 06:49— 07:24).

- **Modes:** During the moments when the temporal modes are the most apparent temporal phenomenon there appears a slow feeling of *continuity* and gradual *change*. The *order and sequence* appear static and reversible.
- **Objects:** This is quite opposite to the experience of the listener when presented with the quick succession of temporal objects. Here there is rapid change and the only feeling of continuity is the repeated turnover of the temporal objects. The *order and sequence* aspects of the temporal objects are dynamic and irreversible and there are clear boundaries between each subsequent one. The feeling of *retention* appears again during the presentation of the temporal objects, however it is not necessarily for the temporal object that has just been heard but rather for temporal objects heard earlier in the piece. This section (between 6'09"-06:14 and 06:49- 07:24) is as such heard from the point of view of a past listening. The *temporal orientation* of the listener is from a perspective of previous hearing the objects, rather than a current hearing.

Berberian [08:27- 08:40]

- **Objects:** The three similar temporal objects that conclude the piece present the listener with a confounding dilemma of temporal awareness. In a sense, the *sequence* of the two final notes does appear as a *gesture* that represents finality or ending. However, they simultaneously retain a feeling of *retention*, pulling the listener back to both the immediately preceding gesture and ones experienced earlier in the piece. As such the listener is left with a confused sense of *temporal orientation* with the temporality of the final temporal object pulling towards both the future and the past, and merging feelings of finality and continuity.

2. Spatial Phenomenological Narrative Analysis of Sequenza III

Berberian [00:00- 00:60]

- **Objects:** The opening muttering line of this piece presents a spatial object that has a thick *musical line* that is eventually interrupted by silence. The following spatial object appears similar but decreases somewhat in thickness. We hear this muttering gesture multiple times through the first few minutes of the piece and each time there is a light variation in the thickness of the spatial object. The high close mouthed sounds appearing for example at 00:15 and 00:31 (as well as later in the piece at 01:35) are presented as elements emerging out of spatial objects and allow the surface at these times to display middle relief. However, when similar spatial objects appear twice between 50' and 60' they display a level of high relief and seem further differentiated from the musical surface.

Berberian [01:00- 01:30]

- **Mode:** The elements that are presented within the listening experience between 01:10 and 01:27 exhibit a spatial mode rather than individual spatial objects. The elements all maintain similar dynamic levels but are presented with some movement/variation and provide a good example of a surface with middle relief. However it is not the individual spatial objects that draw our attention but rather the overall sense of movement and presentation (the mode), which provide a sense of space and structure.,

Berberian [02:00- 02:30]

- **Place:** An example of *faceting* occurs at 02:00 (/for/) when the voice produces a higher element on a new vowel and abruptly shifts our perception of our orientation in space. It becomes obvious here that we had positioned ourselves to listen to the piece from a certain point of view, but then must quickly shift that view as the piece changes. The spatial considerations of the piece are thus expanded by our change in perspective.
- **Objects:** The spatial object at 02:13 provides the presentation of penetration of space. The vowels appear to materialize from each previously heard vowel but also simultaneously merge and meld into that vowel.

Berberian [02:30- 02:40]

- **Place:** Between 02:30 and 02:40 is the only time in the piece when we are presented with two distinct lines, making this moment an important locus of spatial awareness (a spatial place). The snaps appear to exist in a different spatial plane from the voice and they appear to be behind and overlapped by the vocal sounds. The two elements exist simultaneously and each manifest itself directly to our experience when they are heard; that is, the snaps do not appear to 'come through' the voice as with a penetrating element.

Berberian [02:40- 04:20]

- **Mode:** As we move toward the middle of the piece (from 02:40- 04:20) we are constantly jostled between experiences of surfaces with low relief and surfaces with high relief. These *variations in surface relief* may appear quite suddenly (one example being the "ecstatic" gesture at 03:40) or perhaps as a gradual move between the two levels such as the leveling back to a surface with low relief between 03:05 and 03:20).

Berberian [04:20- 05:00]

- **Place:** The section between 04:20 and 05:00 is interesting in that it presents multidimensional linear forms and thus creates *depth* by presenting two contrasting poles.

The higher vocal gestures in contrast with the lower vocal gestures display a feeling of spatial overlap during this time as the elements run together and maintain a feeling of continuity even when they are not heard in the present. A strong feeling of *distance* is present during this time as the spatial boundaries of the piece are reached.

Berberian [05:00- 06:00]

- **Objects:** The gestures between 05:00 and 05:15 are presented as one long spatial object, which gives off the feeling of penetration; each gesture appears to grow out of the previous and merge into the overall line. A few seconds later at 05:29 we no longer feel the spatial object as an example of penetration but more as *faceting* since each new vowel appears to *shift our perception* and our viewpoint to another perspective. It also appears in this section and the few following measures (from 05:29 to 06:00) that we are not presented with any change in distance. Although there are many changes in dynamics and in perspective (*faceting*) the elements are all presented from the same distance of the listener.

Berberian [06:00- 06:49]

- **Mode:** Between 06:00 and 06:12 we are again presented with building levels of low to high relief of the *surface texture*. Beginning slowly with a surface of low relief the presentation continues until a sustained presentation of high relief occurs from 06:15 to 06:49. As the surface with high relief extends we also become aware of a sense of spatial overlap again with certain gestures being situated on differing planes. These planes appear to us in a vertical relationship with one being stacked upon the other and constituent elements being allocated in each given domain. Although we are aware that there is only one voice present during this piece we still cannot help notice these elements which appear to co-exist on different spatial planes.

Berberian [06:50- 07:30]

- **Mode:** Although the measures between 06:50 and 07:30 are heard as individual spatial object it is apparent that their presentation more obviously materializes as a spatial mode. Rather than experiencing the gestures as spatial objects the listener is privy to a constant change in their experience of distance as the spatial objects switch between an experience of closeness and farness through this section. The changes are not abrupt or concrete enough to warrant the description of *faceting*, but there is a distinctive and continuous movement in proximity between listener and sound.

Berberian [08:20- 08:40]

- **Objects:** The final line of the piece and especially near the very end (08:20 to 08:40) allows the listener to experience emerging elements. In the experience it seems the spatiality of the objects at the conclusion of the piece emerge from the preceding element but do not join with it; they replace it and thus provide the listener with a new sense of space with each heard sound.

Despite attempting to “bracket” my expectations and assumptions I found at the end of the piece I presumed that I would hear penetrating elements growing out of and joining with each other to develop a fluid ending.

3. Gestural Phenomenological Narrative Analysis of Sequenza III

Berberian [00:00- 00:50]

- **Mode:** The muttering gesture that opens the piece orients us to a *ritualistic structure* of the music that is constantly repeated. The gesture situates the listener within spatial boundaries.
- **Objects:** The high short hums that interrupt the muttering appear as rhetoric gestures that push the previously adhered to spatial boundaries. These gestural objects present the *auditory shape* of a wave with sharp spikes. At 00:35, with a tense muttering gesture we start to really feel a push against the spatial boundaries of the piece.
- **Place:** The humming gesture from 00:37- 00:50 is an important gestural place because the gesture appears to move towards and away from the listener on a horizontal plane for the first time in the piece.

Very frequently in the piece the gestures appear to be situated within a two dimensional vertical plane. It is therefore extremely obvious when the gestures begin to move in a more three dimensional way, moving towards or away from the listener on a horizontal plane.

Berberian [00:50- 01:45]

- **Mode:** The muttering at 00:50 develops a cyclical *auditory shape* as it repeats the previous *ritualistic character* of restrained boundaries interspersed with a short hum that pushes the spatial boundary. At 01:10 we are presented with the first sense of *heuristic character* in the piece as the gestures slowly unfold to the listener with a strong sense of discovery.
- **Objects:** At 00:60 the tense muttering and short laughter present *auditory shapes* like trajectories- moving away from the listener in one direction. The vocal gesture on “woman” (a drop to a low note) appears playful because it does not present a feeling of finality.
- **Place:** The pause after “woman” at 01:09 presents itself as an important gestural place because it retains a feeling of *protention*, which contributes to its *heuristic character*.

This brief pause at 01:09 is intriguing because it *seems* like it should present a feeling of finality or ending, or at least a moment of respite. In actual experience, we are pulled forward into the next gesture during this pause, wondering what the next sound will be and as such the moment thwarts our expectations.

Berberian [01:48- 02:40]

- **Objects:** At 02:00, when the voice opens up suddenly in a higher range, the listener experiences the *auditory shape* of a blossoming, opening bud. At 02:13 with the humming gesture, the gestural object here is heard as a *shape* that is continually restarting and falling back on itself.

It is interesting to compare the differing auditory shapes that present themselves when hearing similar vocal gestures such as humming or sustained vowels. Based on the singer’s intention and production of the sound the listening experience and the gestural imagery evoked can be vastly distinctive.

- The muttering vocal gesture followed by a click at 02:23 appears to push upwards slightly against the spatial boundary and then be forced back down to earth with the quick coughing gesture.
- **Place:** The snapping sound which accompanies the phrase “though we build for us be us” plays with the *ritualistic character* of the piece because it becomes unclear whether the snapping sound or the voice are the structural element.

- **Mode:** The many gestural objects between 01:50- 02:00 together present a gestural mode to the listener that is steeped in a *heuristic character* of slow personal discovery.

Berberian [02:40- 03:20]

- **Mode:** This section represents a *ritualistic character* in terms of intensity of gestures rather than gestural shape.

This is an interesting mode since all of the ritualistic character that has presented itself so far has been differentiated based on gestural shape (with regards to its situation in or pushing against boundaries). In this section, it is the vocal intensity and volume changes (rather than the auditory shapes), which present this ritualistic character of pushing and being restrained against boundaries.

- **Objects:** The gestural objects at 02:43 appear once again to move on a horizontal plane, pushing towards and away from the position of the listener. The objects in the following section (starting at 02:55) present a long *auditory shape* that moves in twisted lines on a three-dimensional plane, occasionally rounding back on itself but generally moving forward towards the next gesture.

Berberian [03:20- 04:20]

- **Objects:** The low [o] at 03:25 appears as an auditory shape that is a moving line writhing on a flat horizontal surface.
- **Place:** The long moment of silence at 03:38 presents itself as a contained gesture, boxed in on either side by vocal gestures. Even though the moment is brief, it appears expansive.

Berberian [04:20- 04:50]

- **Objects:** The three arpeggio gestures at 04:20 demonstrate themselves a ritualistic character in that they both conform to a certain sense of structure as well as attempt to subvert it by the amount of vocal range that they cover.
- **Place:** The “open laughter” presents an important gestural place that provides a heuristic feeling because it is the first time we have heard laughter of this sort within the piece.
- **Mode:** The various gestural objects between 04:30 and 04:50 are all vastly different in their individual auditory shapes, but together they present a type of gestural mode that is based on juxtapositions. The move from high to low locations of space, appear to switch between gestures of small auditory shapes to large and generally subvert the listener’s ability to “guess” what might happen next.

Berberian [04:50- 06:00]

This section continues with the same gestural themes that have permeated the beginning of this piece; stark juxtaposition being a strongly emergent theme. The vocal gestures that follow each other are highly oppositional in nature and auditory presentation.

- **Objects:** In this section gestures appear to present themselves less so as auditory shapes and more with regards to their constitution. Some, such as the lib flub at 05:25 are tightly bound and contained while others, such as the long sung vowels at 05:20 and again at 05:30 present themselves as loose and susceptible to being torn apart.

Berberian [06:00- 07:25]

- **Objects:** The high sustained phrase “few words before to be us before a few words . . .etc.” at 06:15 appears as a complete gestural object of one continuously repeated note interspersed

with sudden drops to lower notes. It also appears to change *auditory shape*, beginning as a vertical object and then moving into a horizontal plane and finally to a cyclical plane.

- **Mode:** The mode presents a series of vocal gestures that indicate a pushing and straining against spatial boundaries.

It is interesting to casually observe the differences in vocal production that occur when a vocal gesture is heard as “straining” against boundaries. It is normally also accompanied by a tension in the voice that is not heard during other gestures which are more comfortably situated within the boundaries of the piece. This is not simply because the “straining” gestures are higher, because this is not a consistent trait of these gestures. Rather, it is normally a combination of elements such as vocal intensity, vocal range, speed, contrast, movement and gestural shape which contribute to this feeling of pushing or straining against boundaries.³⁷

Berberian [07:25- 08:40]

- **Place:** The tight hum followed by a sigh at 07:25 is a significant moment of respite from the 1-½ minutes of frantic gestures to which the listener has been exposed. The gestures at this moment feel compact and restrained in their presentation, almost as if they were being weighted. The interjection of quick muttering gestures (at 07:35, 07:38 and 07:45) are reminiscent of the gestures that appeared to push boundaries and push the drama forward. However, the expression is quickly curtailed by subsequent humming gestures. This push and pull sensation within the relationship between the vocal gestures develops a *heuristic* feeling of exploration and discovery.

4. Emotive Phenomenological Narrative Analysis of Sequenza III

Berberian [00:00- 00:50]

- **Mode:** This section is generally apathetic and relaxed sounding, with no real variation in emotional intensity save for the Places outlined below.
- **Place:** The strong muttering gesture at 00:35 is the first real moment of emotional intensity. The phrase is marked “very tense” on the score and it appears both tense and also desperate.
- **Object:** The morphing vowel gesture from 00:37- 00:50 appears like a complete emotive object attached to a feeling of exploration or discovery.

Berberian [00:50- 01:10]

- **Objects:** The muttering from 00:50- 00:60 sounds insistent and frustrated, but not necessarily “tense” as it is directed in the score. The following muttering gesture at 00:60 (which rises in pitch) sounds frantic and wild.

This is an interesting shift in emotive states. Both vocal gestures can be described as “muttering” and according to the score they are to be performed as “tense” and “very tense”, respectively. However, tension is not necessarily the first emotion that is received by the listener, although there is a differentiation in the emotional quality- definitely a more *intense* feeling in the second gesture.

³⁷ These types of musical characteristics contributing to the listener’s experience will be discussed in greater detail in Chapter 3.

- **Place:** The low note on “man” at 00:68 sounds impassive and tired, which fits the description in the score. This is the first time we have heard this emotion of indifference in the piece.

Berberian [01:10- 01:48]

- **Mode:** The humming gesture at 01:10 presents itself as a sustained and restrained vocal gesture alongside a timid feeling. This emotive mode is continued through to 01:27 but is perforated with sudden drops in pitch that indicate a startling change in emotion- almost like a sudden burst of bravery.
- **Objects:** The muttering and laughing gestures that occur between 01:27- 01:43 all appear as separate emotive objects that increase and build frantic and tense feelings. These are objects with strong feelings of engagement for the listener as the intensity and possible eruption of emotion grows and grows.
- **Place:** The sigh gesture at 01:43 is an important emotive place because of the preceding frantic emotive objects. The sigh gesture presents a feeling of relaxation and release from the previous build up.

Berberian [01:48- 02:40]

- **Mode:** The vocal gestures here maintain a sense of calm and collectedness, even through large intervallic jumps. The emotive directions in the score do not appear to be strictly adhered to, but rather an overall sense of tranquil fluidity is maintained.
- **Objects:** The vocal gestures that intersperse this calm texture are presented as sudden shifts in emotional intensity. They are recognized by the increased speed of their presentation and the stark juxtaposition of their components (e.g. muttering, click, cough all in rapid succession).

Berberian [02:40- 03:40]

- **Place:** The feeling of fear comes through very strongly at 02:43 and is characterized by the tremolo in the voice, the higher pitch and the breathy tone. There is also a gradual increase in speed through this vocal gesture, which adds to the feeling of fear or panic.
- **Mode:** The emotive mode in this section is characterized by the strong shift in timings of the vocal gestures; when a gesture is performed quickly it presents a feeling of tension and when a gesture is relaxed and slower in its production the feeling associated with it is also relaxed.

This is an example of how strongly many of the musical elements are connected within their presentation. The emotive features in this section arise in part due to their temporal features.

Berberian [03:40- 04:20]

- **Place:** A moment that provokes strong feelings of engagement on the part of the listener is the soft “to sing to be, etc.” at 03:48. The low dynamic and calm production of sound creates a feeling of relaxation that draws the listener in.
- **Mode:** Unlike the previous section in which emotive attributes were characterized by their timings, this section is strongly characterized by changes in volume.

Berberian [04:20- 05:15]

- **Mode:** The emotive mode throughout this section is generally frantic, with very few of the subtleties of the emotive descriptions coming through. The emotions build on each other as the pace of the vocal gestures also increases and a sense of urgency and panic pervades the section.

It is interesting to note that the primary feelings of possession have occurred in the calmer emotive moments. It appears that the moments of high intensity and frantic emotions tend to isolate the listener and place them in the position of observer. The more serene moments allow the listener to engage with and truly possess the music.

Berberian [05:20- 06:15]

- **Objects:** The sustained singing in this section creates a strong feeling of being “stuck” or restrained.
- **Place:** The low [co] utterance at 05:38 is an important emotive place because it is one of the few times when a feeling of apathy is displayed. This feeling extends into the long pause immediately after.
- **Mode:** The emotive mode in this section is generally restrained, although there are some moments when the emotion appears to intensify, increasing the feelings of engagement within the listener (at 05:42, 05:50, 05:57). The gestural motion in this section presents itself as cyclical due to the rising and falling of emotional intensity/focus.

Berberian [06:15- 07:30]

This section is arguably the climax of the piece, by any traditional measure. It is loud, sustained, and exhibits the highest pitches of the entire piece. However, while it is obviously intended to be a point of high, sudden drama (the performance directions read “extremely intense/ frantic/ distant/ extremely intense/ increasingly desperate”) the actual presentation of emotions was not quite as extreme.

- **Mode:** The section of high, sustained singing from 06:15- 06:50 expresses the feelings of control and expansion. There is a sense of tension, undoubtedly, but it does not maintain any strong feeling of panic or anxiety.
- **Objects:** The rapid and fast paced objects that begin at 06:50 return to a rushed feeling of panic and fear. Their haphazard and quick presentation present feelings of intensity and distraction.
- **Place:** One moment of extremely intense emotional panic can be noted at 07:05.

Berberian [07:30- 08:40]

- **Place:** The sighing gesture at 07:30 provides a feeling of deep catharsis from the previous section.
- **Mode:** This section presents a feeling of slowing down or cooling off, interjected with moments of nervous tension (such as “give me a few words” at 07:34). The emotive mode seems almost playful and exploratory as the voice “noodles around” mid-range pitches. We also sense this sense of “playing” with some casual pitch bends (at 08:08 on [lo]) and vocal/hand tremolos (at 08:10 and 08:15).
- **Objects:** The final emotive objects that conclude the piece appear calm and almost complacent. The final hand tremolo provides one last moment of auditory interest before the voice fades away into a feeling of calm acceptance.

Essential moments of Sequenza III as chosen from phenomenological analysis

The foregoing analysis, presented in the style of phenomenological descriptive narratives, detailed multiple listening experiences of the piece *Sequenza III*. Each experience focused on a different musical element (time, space, gesture and emotion) and attempted to define the vocal gestures in the piece as *objects*, *places* or *modes*, depending on their presentation. The aim of the analysis was to complete Table 1 with twelve essential moments, each moment being representative of a type of phenomena within each musical element. There was no set procedure for choosing which sections of the analysis would be considered an essential moment. From the many “temporal objects” or “spatial places”, etc. that were described in the narrative analysis, I simply chose the moment that I felt most clearly represented that description. That is, I chose moments that unequivocally seemed to be experienced as “temporal modes” or “emotive objects”, etc.

These twelve essential moments of *Sequenza III* will be considered further in Chapter 3 from an ecological perceptual theory perspective and in Chapter 4 from a body communication theory perspective. By analyzing these phenomenological essential moments with other, non-phenomenological analytic models, I will demonstrate the importance of the singer’s embodied experience upon the creation of these essential moments.

Table 1-b

Phenomena (Lochhead) → Musical elements (Clifton) ↓	OBJECTS	PLACES	MODES
TIME	[04:22- 05:20]	[00:20-00:27] (humming)	[05:40- 06:09]
SPACE	[05:00- 05:15]	[02:30- 02:40]	6'50"- 7'30"
GESTURE	[00:60- 01:10]	[03:38] (pause)	[04:20-04:50]
EMOTION	[01:48- 02:40]	[03:48- 04:00]	[07:30- 08:20]

Chapter 3: Ecological Perceptual Theory

Having now established a selection of twelve essential moments of *Sequenza III*, based on a phenomenological analysis of my listening experience, the analytic emphasis will now shift slightly to include a recent theory by Eric Clarke (2005) that is based on an ecological approach to music perception. Clarke's approach is heavily indebted to James Gibson's ecological perceptual theory (1979), which explores the symbiotic relationship of an organism to an environment and the ways by which an organism perceives that environment. In his book, *Ways of Listening: An Ecological Approach to the Perception of Musical Meaning*, Clarke transfers this ecological theory to the domain of music by situating Gibson's theoretical ideas within a musical analysis. This chapter is primarily concerned with Clarke's discussion of music and the ecological notion of subject-position. This concept, which will be explained in greater detail further on in this chapter, provides a basis for understanding the way that musical characteristics influence the perspective of the listener.

Clarke's ecological approach to music provides another perspective by which to consider the implications of musical embodiment. Following the previous discussion of phenomenology, where the technique of bracketing assists in uncovering essential moments but also promotes a narrow focus, an ecological approach allows for these essential moments to be examined within their contextual position. This adds an additional layer to the understanding of the music beyond the phenomenological listening experience. Discussing the same essential moments that were discovered in the previous chapter, the aim of this chapter is to widen the perceptive focus from the phenomenological viewpoint to explore other implications of musical perception. A theory that is concerned with the perception of music within a given environment will allow us to resituate the essential

moments of *Sequenza III* within a context and explore the implications of that environment on musical perception.

This chapter will compare the phenomenological essential moments of *Sequenza III* between recordings of three different singers, which were recorded over a span of three decades. These recordings include performances by Cathy Berberian (1969), Luisa Castellani (1988) and Christine Schadeberg (1995). Even a cursory listening comparison of these recordings reveals noticeable differences in the musical interpretation and vocal production. The musical characteristics to be heard in these recordings are an influencing factor in how the listener interprets Berio's work. This is what Clarke refers to as subject-position in music: the way by which musical characteristics orient the listener towards a certain opinion or interpretation of the music. The following comparative subject-position analysis will compare all the vocal gestures within four chosen essential moments of *Sequenza III* in order to discern what type of overall mood or emotion is evoked by each singer's interpretative choices. The resultant mood or emotion will as such indicate the subject-position for each essential moment within each recording.

Clarke does not explicitly link the musical subject-position with the embodied experience of the musical performer, however I believe there is a direct correlation between these two concepts. I will use Clarke's ecological approach to explore how the individual embodied performances change the listener's perception of the same piece of music. This contention is supported by the theories of metaphorical projection and kinesthetic empathy, which I will discuss later in this chapter. While these aspects of subject-position are not the focus of Clarke's own analysis, I believe that metaphorical projection and kinesthetic empathy add further layers to an understanding of embodied

performance and musical experience. Additionally, looking ahead to Chapter 4, the impact of the performing body will again become a crucial component as we continue to examine embodied musical performance from the perspective of Jane Davidson's work on body communication in musical performance (Davidson 1993, 1994, 2001, 2002, 2005, 2006, 2007, Davidson & Correia 2001, Davidson & Kurosawa 2005) and Ekman and Friesen's categories of non-verbal behavior (1969).

Comparison of Ecological Perceptual Theory and Phenomenology

There are substantial philosophical and methodological differences between ecological perceptual theory and phenomenology. However, moving from phenomenology to ecological perceptual theory still retains a natural progression of ideas due to some common theoretical assumptions.

Ecological perceptual theory and phenomenology each maintain an appreciation for the closeness of the relationship between perception and meaning, recognizing that meaning emerges from the perception of experiences. Ecological perceptual theory considers perception to be a reciprocal relationship between environment and perceiver (Clarke, 2005, p. 17). This lies in stark contrast to attitudes of perception that consider the perceiving subject to impose internal ideas of structure and organization onto an environment in a unidirectional transfer of information.³⁸ Instead, ecological perceptual theory is a method of conceiving a subject's perceptual experience by considering how the perceiving subject "picks up" structured information from a pre-existing environment.

One of the crucial differences between ecological perceptual theory and phenomenology is how each approach believes different components of perception

³⁸ Clarke refers to this as an "information-processing" viewpoint, and discusses its theoretical limitations when considering the connection to musical perception (2005, p. 11-16).

constitute an apprehension of meaning. Ecological perceptual theory maintains that, in the case of auditory perception, meaning is created when a sound is both perceived and understood. The meaning of the sound will subsequently move the perceiver towards action. For example, if I hear a screeching sound behind me (perception of auditory stimuli) I may identify the sound as squealing car tires (understanding of auditory stimuli) and quickly move my body out of the way to avoid being hit by the car (resultant action). Additionally, if the properties of a perceptual experience are not immediately understood, the subject will continue to “hunt” for information, “attuning” to his or her environment until understanding and meaning are acquired. An example could consist of sniffing the air repeatedly to identify a faint smell or hearing a noise and turning to look at the source of a sound in order to identify it. Therefore, recognition of a sound is equated to the combination of perceptual meaning and a corresponding action, whereas “to hear a sound and *not* recognize what it is, is to fail to understand its meanings and thus to act appropriately” (Clarke, 2005, p. 7). Another example might be if I was sitting in my living room and heard the shattering of glass emerge from the kitchen. To hear such a sound and identify it as shattering glass means I understand the meaning of the perceived sound and also what possible actions will follow (i.e. cleaning up the glass, moving people out of the kitchen while I do so, etc.). Identification of the sound is possible chiefly due to perceptual learning, a factor in ecological perceptual theory that will be discussed in more detail shortly. Additionally, situational context influences recognition of the sound; if the perceiver remembers having recently left a glass on the edge of the counter, they will intuit that the glass was the object that emitted such a sound. Perception is therefore closely connected to interaction with the environment.

Phenomenology posits a notion that is somewhat different, especially considering the notion of bracketing which is so prevalent in the phenomenological method. Bracketing attempts to prevent the subject from making external connections and “hunting” for knowledge with which to clarify an experience so that the experience may be presented as it is in that moment. An understanding of stimuli is not necessarily the goal of phenomenology; instead it is of primary importance to consider the completeness of the experience in its presentation to a perceiver. Ecological perceptual theory allows for much more input from the perceiving subject, acknowledging that previous knowledge of the subject and his or her perceptual capabilities influence perceptual experiences. Thus, ecological perceptual theory situates the perceiving subject much more concretely within their environment, and, rather than only focusing on that which presents itself in immediate experience (as phenomenology attempts to do), aims to consider all of the ways in which a subject interacts and engages with an environment to develop a perceptual experience.

In a musical application, Clarke describes this objective as attempting to uncover how “listeners interact with the general auditory, and more specifically musical, environment: to discuss listening to music as the continuous awareness of meaning, by considering the musical materials in relation to perceptual capacities” (Clarke, 2005, p. 5). This will become an important consideration in this thesis with the continued discussion of *Sequenza III*. In contrast to the aim of the previous chapter, which attempted to maintain a bracketed view during the analysis in keeping with the phenomenological method, when approaching the piece from the perspective of ecological perceptual theory all of the analyst’s knowledge of the piece is potentially applicable. As such, factors such as the

compositional history of the piece, the manner of its reception, the individuality of the performer, the analyst's training and cultural or social conventions all become a part of the environment in which the piece is perceived. All of this knowledge influences the perceptual capacities of the listener and therefore contributes in a reciprocal way to the environment.

While the method and ultimate goal of phenomenology and ecological perceptual theory may differ, they share a common similarity in that each approach maintains a focus on individuality of experience. In phenomenology, the perceiving subject is considered to be included with the experienced object (*noema*) within the experience (*noesis*). Ecological perceptual theory also includes the subject as a contributing component to the experience as the subject is "engaged with the meaning of the events in their environment" (Clarke, 2005, p. 7).

Ecological perceptual theory considers this engagement to be an active process on the part of the perceiver although it is not necessarily a conscious process. Therefore, for the perceiver to obtain meaning from his or her environment (either visual, auditory, olfactory, etc.) it is necessary for the perceiver to "resonate with" or "be in tune with" the environment. As Gibson states, "a system 'hunts' until it achieves clarity" and if attunement with an environment is not reached, the perceiver will work and shift and orient him- or her-self until proper attunement is reached (1966, p. 271). I do not wish to imply by this distinction that phenomenology is a form of passive perception and ecological perceptual theory an active one; perception by a subject at any level and by any method is active, and phenomenology's technique of bracketing requires an extremely active engagement on the

part of the perceiver. One approach is not more or less active than the other but they each differ in *how* they approach perception and what they hope to obtain through the process.

It is also important to note that while ecological perceptual theory assumes the perceiver will continually orient themselves to their environment in order to optimize their perceptual capacities, there still remains a distinction, much like in phenomenology, between *perceived* information and *coded* information. The former is “what is directly specified by environmental information” (Clarke, 2005, pp. 17-18) and the latter refers to indirect forms of knowing, or “knowledge *about* the environment” (Gibson, 1966, p. 91). It is necessary to recognize this slight distinction between contextualization or subject involvement and non-perceptual forms of knowledge. Eliciting meaning from an environment through consideration of previously constructed information is not equivalent to perceptually acquired information.

There are a few salient concepts within ecological perceptual theory that must be understood prior to delving into the analytical section of this chapter.³⁹ I will briefly cover three factors that will add plausibility to the existence of ecological perceptual theory as well as discussing the notions of affordance and invariance. In the following section I will also cover in detail the concept of subject-position, which is a component of ecological perceptual theory that will form the basis for the next level of analysis of *Sequenza III*.

³⁹ My discussion will not be exhaustive and for a more detailed discussion of ecological perceptual theory I would point the reader towards Clarke’s numerous writings on the subject (1987, 2005, 2011) as well as Heft (2001) and Gibson (1966, 1979).

Ecological Perceptual Theory

Perception and Action, Adaptation and Perceptual Learning

Clarke notes that one potential criticism of ecological perceptual theory is that it appears to be “magical” and without real substance of process. To combat this criticism he describes three factors which add credibility to the theory by explaining how the relationship between environment and perceiver functions. These include *perception and action*, *adaptation* and *perceptual learning*.

The notion of *perception and action* has been discussed earlier in this chapter with the example of a subject repeatedly sniffing the air to identify a certain smell. It implies that perception and tuning into to one’s environment is an active process and any actions “lead to, enhance, and direct perception, and are in turn the result of, and response to, perception” (Clarke, 2005, p. 19). The second concept in these three factors is *adaptation*, a mutual process of evolution by subject and environment. Clarke cites examples evolutionary adaptations to environments, such as the giraffe’s long neck and human development of music-making objects (ranging from the human body to drilled bones to iPods).⁴⁰ A musical example of adaptation can be seen in the evolution of music in culture. Over generations, a species adapts to a certain kind of tonality and sound that is both created and influenced by interactions with and perceptions of an environment. Adaptation both enhances perception in a current environment as well as affords future opportunities.

⁴⁰ One theory explaining the evolved long necks of giraffe’s (otherwise referred to as “morphological adaptation to an environment”) is the competition for food. Giraffe’s are easily able to reach over the thorny lower branches of the trees in their environment to reach the fruit at the top and since very few other animals can reach the fruit due to the thorns on the lower branches it allows giraffes to remain competitive in the fight for survival. However, there has been some contestation to this theory (Simmons & Scheepers, 1996); some researchers maintain that the evolutionary change is due to sexual selection, with long necks in males appearing more dominant in the fight for a mate. This is not a universally accepted theory (see Mitchell, Van Stittert & Skinner, 2009) but for our purposes here the exact reason is not of great importance since they can all be considered evolutionary adaptations to an environment and as such fit into ecological perceptual theory.

The final explanation for ecological perceptual theory is *perceptual learning*. While adaptation of a species occurs over many generations, perceptual learning occurs throughout one's lifetime through repeated exposure to an object or act. It describes the way in which we continuously learn and develop our perceptual capabilities. The process of ear training at a music conservatory illustrates this point: while the students may at first perceive chords as one entity, through repeated exposure they are able to distinguish individual notes or intervals. This skill is obtained through the process of perceptual learning.

These three notions detailing the process of perception prevent ecological perceptual theory from appearing to be abstract or "magical." They demonstrate the active nature of perceptual activity and show the perceiver's involvement in the act of perception and the way by which an organism attunes to its environment.

Affordance and Invariance

Affordance and *Invariance* are two terms used by Gibson that further describe the workings of ecological perceptual theory. Gibson coined affordance from the verb "to afford" and uses it to denote the range of possibilities that a perceiving subject believes an object can offer. The possible affordances of an object are based on its perceived properties and these may include action possibilities. For example, if we perceive an object such as a chair we understand what it can and cannot afford us; while it may have the potential to afford us the action of sitting, we also know it will not afford us food or water or stimulating conversation. This example may sound puerile, and yet it precisely demonstrates how perception of affordances can lead to a resultant action. Through our perception of objects we come to learn what they can and cannot afford us, as well as similar or different

possibilities of affordance between them. For example, a park bench may also afford sitting, but if it is bolted to the ground it does not afford the possibility of lifting, whereas a kitchen chair might afford both lifting and sitting. Based on these perceived affordances, possible actions related to the object can be discerned by the subject.

Moving this example into the musical realm we can consider the sound of tuning instruments in a concert hall, which is a sound that affords us the action of settling in our seats and preparing for the music to come. The sound of a popular song in a more informal setting may afford the opportunity to sing along or dance to the music; an action that the tuning of an orchestra does not afford.

These musical examples also illustrate another salient point of ecological perceptual theory: that nature and culture are inseparable. In fact, cultural norms and ideas are so ingrained and prevalent in our perception that they are frequently considered part of the natural environment. Many possible affordances develop out of our social and cultural conditioning; as with the example of how the tuning of an orchestra does not afford the possibility of the audience dancing or singing or playing along. An outdoor concert at a music festival carries extremely different possibilities of affordance for its listeners (depending on the style of music); talking, yelling, clapping, singing along, moving around and dancing all become possible affordances which are restrained or elicited by the social and cultural expectations of an object.

The way by which it is possible to collectively recognize affordances of objects (i.e. how any reader would agree with my previous statement that a chair can afford sitting but not conversation) is by their invariant properties. Clarke cites verbal speech as an example of this concept; while speech may vary drastically in its physical and aural presentation (i.e.

through variations in pitch, timbre, volume, accent, speed, emphasis, cadence) we are still able to recognize it and understand its message. Canadian English speakers may perceive a British speaker as having an accent, but it does not generally prevent an understanding of the language. The same example may be transferred to music. If the sound of a bassoon is heard close at hand and then far away it will still be recognized as the same sound, although, based on the perceivers musical knowledge the sound may be identified at varying levels of specificity (i.e. as a bassoon, a wind instrument, a musical note, or a pitched sound). Such specificity of perception depends upon perceptual learning, as outlined above. Regardless, the sounds in these examples must be comprised of certain invariant properties that will allow for consistent recognition even though aspects of perception have been skewed. On a broader scale, this is how it is possible to recognize transposed musical phrases as repeated motives, even though they may be played by different instruments, in different pitch classes and in different keys. In connection with the example of the chair that I utilized in the explanation of affordance, invariance refers to how we are able to make the correlation that both a kitchen chair and a park bench afford the same action of sitting; they contain similar invariant properties and are as such grouped together by such.

Invariance is a principle similar to one of the definitions of a phenomenological essence that was discussed in Chapter 2. An essence of an object or experience being, in part, something that without which we would not be able to recognize the object or experience any longer. If a kitchen chair suddenly lost the possibility of affording the possibility of sitting down would it still be recognizable to us? Would it still be considered a chair?

Invariant properties are learned patterns, conventions and codes that not only allow for identification of objects but also indicate the affordance of an object. Affordance and invariance therefore work in conjunction during any act of perception, and assist the perceiving subject in understanding their environment. These two concepts strongly implicate the interpretive choices made by the performer, since all music is understood through its invariant properties and these properties indicate the possible affordances (i.e. interpretative choices) that exist for the performer. As such, the comparative subject-position analysis in this chapter is intrinsically connected to the invariant properties of *Sequenza III* and by the interpretative choices that the work affords for the performer.

Subject- position in music

The component of Clarke's work on ecological theory that holds the most relevance to this thesis is his discussion of the subject-position in music. Clarke's format and conception of the analysis in this discussion will be highly evident as we continue the examination of *Sequenza III*. Subject-position is an important consideration when discussing music because it essentially recognizes how musical elements are able to orient the listener in a certain way and confine the possibilities of the listener's experience.⁴¹ Originally a term used in conjunction with film studies, subject-position describes the way the construction of a film influences and, in a sense, dictates the viewer's response.⁴² While it is generally assumed that there are an infinite number of possible responses to an artistic

⁴¹ It is important to make a distinction between this approach and a semiotic approach. Rather than a semiotic approach that relies on codes and symbols to create an interpretation of signs and symbols, the approach I am discussing here retains a more experiential and embodied approach that does not delimit but rather broadens the analytic possibilities. There is no specified 'codification' in the ecological approach, but rather a focus on 'specification'; the wide range of possibilities that a musical characteristic may evoke.

⁴² Clarke cites Johnston (1985) who defines subject-position as "the way in which a film solicits, demands even, a certain closely circumscribed response from a reader by means of its own formal operations" (p. 245).

presentation, depending on the individual viewer's personal history, knowledge, viewpoint, etc., the notion of subject-position acknowledges that the art itself (i.e. the film, music, painting, etc.) limits the infinite possibilities of these reactions based on its inherent characteristics. Continuing with the example of film, if we consider the formal operations of the film (such as camera angle, shot composition, music, etc.) and assume that the viewers watching the film understand the shared cultural context under which these elements exist, then it follows that the reactions of the viewers will all fall within a certain range. There are therefore certain elements within every aesthetic experience where the material aspects of the formal operations of the art form (whether it be music, art or film) act as a "shaping force" on every perceiver, regardless of the personal and individual perspective that each perceiver brings to the experience (Clarke, 2005, p. 125).

Clarke uses the example of the musical soundtrack in Jane Campion's well-known 1993 film *The Piano* to demonstrate how different uses of music elicit different viewpoints for the audience. For the main character (Ada), her own personal piano playing is seen as liberating and freeing, while the other composed music in the film's soundtrack is more indicative of her troubled relationship with another character. Clarke points out how the film achieves this through the "circling and flying movements of the camera" during shots of Ada playing her own music, a choice which influences the listener into feeling that "the music that she is playing (her music) [is] liberating and liberated" (2005, p. 93). Through the elements of the film (in this case, the cinematography) the viewer comes to understand that music as evoking a specific idea, one that is different from the idea specified by the other music in the film (where the cinematography is presumably more static). The mutual relationship between subject and environment is a primary component of ecological

perceptual theory and subject-position exemplifies this principle. With regards to music perception, the relationship between the available perceptual information (i.e. music) and the listener's perceptual capabilities is what creates meaning in the music and "defines an aesthetic attitude" (Clarke E. , 2005, p. 91).

This same type of evocation also exists in the medium of music. I personally consider the notion of subject-position to be better thought of as an active verb (that is, subject-*positioning*), which describes the way the music is acting *upon* the listener and thus influences the listener's perception. This means that the music itself has a certain amount of control how it is perceived. Clarke notes how this aspect of subject-position helps maintain a balance between essentialism's notion of one intrinsic meaning (i.e. that song X equals Y unequivocally) and an infinite number of possible meanings (i.e., there are as many different meanings as there are listeners). There is a certain range of meanings that are dependent on the individuality of the listener but this range is also curtailed by essential elements of the object. This balance of possible meanings is due in part to the central tenet of ecological theory discussed earlier: invariance. The invariant properties of an object or experience (that is, the learned patterns and configurations) contribute to how a perceiver reacts to and interacts with them, thereby dictating the subject-position. An object's affordances may also be part of its invariance and as such influence the subject-position; if a chair must always afford the possibility of sitting to be considered a chair, then that quality would be an invariant characteristic. While a chair might not orient a perceiver quite as drastically or distinctly as a film or a piece of music, the chair's invariant properties will still inform the perceiver as to how they should relate to the object.

Additionally, I think it is important to note that there are essentially two levels of subject-position: one level between the musical characteristics and the performer [music → performer] and another level between the performer's interpretation of the music and the listener [performed music → listener]. Clarke's analysis (and the adaptation of his analysis, which follows) does not implicitly discuss this first level of subject-position, however it is an important aspect to consider since it affects the second level of subject-position.

Level 1 [music → performer]: As the performer reads the music on the score and rehearses the music in preparation for performance, he or she begins to develop a relationship with the music. As the performer rehearses and familiarizes him- or her-self with the music, certain musical ideas and interpretations are conceived. These musical ideas are influenced by the invariant properties of the piece and what the performer feels the properties afford to him or her. This is the first level of subject-position at work—certain characteristics (i.e. invariant properties) of the music influence the performer's interpretation of the music and orient the performer in a certain way. This consequently affects the performance of the music, which leads to the second level of subject-position.

Level 2 [performed music → listener]: At this level, there are two simultaneously existing threads of subject-position orienting the listener: the innate musical characteristics and the performer's interpretation of the music. In a sense, the subject-position that orients the listener is a more complex version of the subject-position that initially oriented the performer. At the first level, it is the music in its bare, yet-to-be-interpreted form that creates a certain feeling in the performer. Once the performer's interpretation has been added, the subject-position that affects the listener is more convoluted because it contains two levels of orientation: the musical characteristics and the performer's interpretation.

Similar to Clarke's analysis, this thesis will only be concerned with the second layer of subject-position (that of [performed music → listener]), however I contend that an additionally important aspect of the subject-position at this level (one that Clarke does not explicitly discuss) is the performer's embodied experience of the music. The somatic experience of the performer affects the interpretation and as such makes a considerable contribution to the subject-position of the music for the listener. This will become evident in the following comparative analysis, since all three singers are performing the same musical characteristics with completely unique interpretive renderings. Theoretical evidence will be presented to display how it is specifically the embodied experiences of the performers that are contributing to each interpretation.

In his research, Clarke outlines this approach in a comparison of the words and music in two popular music songs (*Magdalena* by Frank Zappa and The Mothers of Invention and *Taut* by P.J. Harvey and John Parish). Clarke first presents a breakdown of the musical and textual materials within each song and then, in bullet point format, presents an admittedly non-exhaustive series of points to demonstrate which of the previous materials appear to orient the listener to a certain subject-position. These include elements of vocal and instrumental production, text emphasis, recording choices, instrumentation, rhythmic variations, etc. Essentially any component of the music that seems to persuade the listener to hear or understand the music in a certain way is included in Clarke's breakdown. In his analysis, Clarke explicitly describes certain musical components (such as the vocal timbre or the instrumental texture) and explains how the sounds evoke specific images or feelings for him. The compilation of these images and feelings is what leads him to specify an overall subject position for each piece.

For example, in analyzing the song *Taut*, Clarke describes the way the drum kit specifies a certain feeling: “[t]he unpredictability, irregularity and discontinuity of the kit playing specifies a type of control — a kind of manipulated unpredictability, but one which the listener is *subject to* rather than a part of” (2005, p.112). For Clarke, musical characteristics such as this, along with a variety of other components, all continually specify the same narrow set of conditions for the subject-position of *Taut*: one of “a serious confrontation with power, desire, and manipulation” (2005, p. 111). The music consistently evokes feelings of control, violence and aggression. There is little irony or ambiguity in the feeling this song is attempting to project— neither the music nor the lyrics would allow a listener to interpret the song much differently than Clarke does.

In contrast, Clarke’s analysis of *Magdalena* observes that the music specifies a much more ambiguous subject-position that would allow more interpretative choices on the part of the listener. The music in the song at times does not line up as clearly with the text; sometimes lyrics about gruesome and serious subjects are sung with falsetto voice in a parody style. In this song Clarke also notes how the changes in the “voice” of the narrator (first to third person) contribute to the shifting subject-position (2005, p. 113). It is not clear to the listener whether they should engage with the seriousness of the subject matter in the text or the parodic musical style. In this example, the music confuses rather than supports the subject-position.

Clarke thus attributes the connection between the musical materials and the subject-position to both social conventions (such as the inherent meaning behind a falsetto voice) and physical principles (such as the sound of the singer’s voice). Since both of the songs which Clarke discusses present the same subject matter, but through different musical

materials, he is able to present a clear contrast of how the characteristics of the music can orient the listener differently even when exploring the same type of subject matter.

Theoretical Basis for a Comparative Subject-Position Analysis

For the purposes of this study, I will be adapting Clarke's method to present a comparative subject-position analysis of three singers performing *Sequenza III*. Because a full analysis of three complete performances is beyond the scope of this thesis I will restrict my analysis to specific moments in all three performances. These passages have been selected from the phenomenological essential moments, extracted from the phenomenological reading of Cathy Berberian's performance, discussed in Chapter 2. Given that even a presentation of all twelve essential moments for each singer would be longer and more in depth than necessary, I will limit my discussion to four essential moments. Discussing the same essential moments for each of the singer's individual performances will create continuity in the analysis and allow the reader to reflect on how different performances of the same musical materials orient the listener. Especially within such a physically demanding piece, which displays only the human voice, I hypothesize that many of the characteristics that contribute to the subject-position are due to the physical body and embodied experience of each singer. The way each singer physically connects to the vocal gestures in the piece and communicates them through her physical instrument cannot help but influence how the listener hears the music. This hypothesis is supported by the notions of metaphorical projection and kinesthetic empathy, which provide rationale for how a listener would instinctively connect to the somatic experience of the singer and be influenced by the physicality heard in the singer's voice. Before entering the analysis, I will briefly outline these two theories.

Metaphorical Projection

In a discussion of metaphor as it relates to music it is necessary to consider metaphor in a broader sense than only as a linguistic device. In this instance it is pertinent to evoke the idea of a conceptual metaphor, which can essentially be thought of as a representative of something else, or as “understanding and experiencing one kind of thing in terms of another” (Lakoff & Johnson, 2005, p. 104). Lakoff and Johnson contend that our conceptual system, or how we understand, organize and perceive our world, is primarily based on this notion of metaphor. Their claim is based almost exclusively on linguistic evidence, and they cite a number of examples detailing how, in our everyday lives, concepts are turned into conceptual metaphors, which then structure and influence how we exist in the world.

One example is the concept of “argument”, which is then connected to the conceptual metaphor “argument is war.” With this association, Lakoff and Johnson are not insinuating that the actions of war are comparable to the actions of an argument but rather demonstrate, through common sayings such as, “your claims are indefensible” or “he attacked every weak point in my argument,” that our understanding of the structure and actions of an argument hinges on its comparison to the structure and actions of war. In this example it is possible to see how, through conceptual metaphors which are deeply ingrained in our discourse and our everyday understanding, a concept and its subsequent actions (an argument) is understood by way of another concept and its subsequent actions (war).

The partnership between music and conceptual metaphor, that is, understanding one concept by way of another, has long been lauded as one of the primary ways in which

we are able to understand the abstractness of musical sound. In Roger Scruton's estimation, an understanding of music would not be possible without metaphor:

It seems that in our most basic apprehension of music there lies a complex system of metaphor, which is the true description of no material fact. And the metaphor cannot be eliminated from the description of music, because it is integral to the intentional object of musical experience. Take this metaphor away and you cease to describe the experience of music (1983, p. 85).

For Scruton, metaphor in a musical context is the method by which *sound* is perceived as *music*, made up of pitches, harmonies, melodies and rhythms. For example, the common description of music as moving through space is possible because we understand the sounds we are hearing as existing in a realm where they become objects with gestural and spatial properties. This is accomplished through what Scruton describes as "metaphorical transference." The *music* that a listener perceives is actually a compilation of *sounds* that are then projected into an "intentional world" through metaphor. Within this "intentional world," sounds are then "transfigured into movements, harmonies, rhythms—metaphorical gestures in a metaphorical space" (Scruton, 1983, p. 100). In other words, they become *music*.

This idea of conceptual metaphor is relevant to this thesis in that it provides a theoretical explanation for how an embodied performance can allow the performer to develop musical meaning. Taking Scruton's notion that music is understood as music because of the process of metaphorical transference, as well as Lakoff and Johnson's theories on the prevalence with which we use conceptual metaphors to structure our understanding, it follows that when a performer gains an embodied understanding of the music through their somatic experience, this understanding is transferred into musical

meaning through metaphorical processes. That is, metaphorical transference is accessible to us because we have experienced these conceptual ideas within our bodies. Scruton and Lakoff and Johnson both insinuate that our somatic experience is the primary basis for the formation of these conceptual metaphors.

Lakoff and Johnson explain how these conceptual systems that consist of metaphors have their basis in “our constant spatial experience, that is, our interaction with the physical environment” (2003, pp. 56-57). In Johnson’s later writings, which will be discussed in further detail in Chapter 4, he goes on to further substantiate these claims of attributing the connection of metaphorical projections (or understanding through metaphor) as grounded in our somatic, bodily experience. In his discussion of how sound is transferred into music with certain “physical” properties, Scruton describes how “it is this sense of ourselves as agents—rather than any purely geometrical idea of space— which underlies our experience of musical movement, and prompts us to describe music in spatial terms” (1983, p. 86). In essence, metaphor is the link between the differing modes by which we understand music. Following the conjecture of this thesis that the performer’s body is a locus of deep musical understanding, the two modes to be considered here would be the physical self and the abstract description of music. In Scruton’s estimation, understanding of space and movement in one mode (the physical world) is metaphorically transferred into understanding of musical attributes in another mode (the abstract).

Conceptual metaphor purports that we understand one type of experience through our understanding of a different type of experience. We live through our bodies and develop an innate understanding of our somatic experience which we then project into a more abstract, conceptual domain. While this thesis is concerned with this projection from

the point of view of the performer, it is also through the metaphorical projections of their corporeal experience that an audience connects with music they are hearing. Referencing Johnson's work, Davidson and Correia (2001) describe this phenomenon as the existence of "shared stocks of bodily knowledge" (p. 77), which are developed through "very basic physical structures which reveal concepts such as balance, scale, force and cycles" (p. 78). Given that performers and audience members alike share these "stocks of bodily knowledge," it is possible for the audience to metaphorically project their own inner experiences upon the musical interpretation of the performer and subsequently develop a connection to the performed music.

If metaphorical projection helps us to shift understanding between spheres and as such comprehend abstract musical characteristics, how is it that these characteristics then come to be imbued with meaning? One possible explanation that again considers our embodied nature as a contributing factor is the notion of kinesthetic empathy.

Kinesthetic Empathy

Kinesthetic empathy is a concept that has long been recognized within the world of dance as a means of describing the connection between a dancer's movements and the audience's interpretation of emotion (Foster 2007, 2011).⁴³ Kinesthetic empathy is the notion that an audience feels or relates to the movements of performers in a visceral way, thereby developing a deep connection to the embodied experience they are viewing. In a discussion of kinesthetic empathy in relation to music, Andrew Mead succinctly explains

⁴³ This connection is based on elements of posture, force, speed and muscular tension within the dancer's body, which the audience is able to understand via their own previous motor experiences. As Foster explains: "[v]iewers' bodies, even in their seated stillness, nonetheless feel what the dancing body is feeling—the tensions or expansiveness, the floating or driving momentums that composer the dancer's motion. Then, because such muscular sensations are inextricably linked to emotions, the viewer also feels the choreographer's desires and intentions" (2007, p. 249).

that “while most theoretical discourse tends to deal with music as sounds, those sounds are as a result of human action, and therefore can be usefully construed in terms of those actions” (1999, p. 4). Mead employs a number of musical examples to explain this connection between auditory stimuli and kinesthesia. Firstly, how a musical dynamic refers to not only the volume of a sound, but also to the amount of bodily effort behind the sound. A listener is aware of the physical energy and tension behind a *forte* sound, even if the sound is far away and as such not actually loud in volume. Secondly, while musical directions such as *staccato*, *legato* and *tenuto* provide information about the desired sound, they also describe the physical approach of the player; the way they “address [the] instrument” (Mead, 1999, p. 4).

Finally, Mead cites how our description of pitch as “low” and “high” is a culturally conditioned metaphor that emanates from the experience of producing vocal sounds. Mead equates the contraction of the vocal folds when singing a higher pitch as requiring a similar muscular tension as when lifting the arms or a heavy object. Therefore, increased muscular tension is connected to “higher” pitches and the lengthening of the vocal folds, which occurs in “lower” singing, is equated to the opposite. Through these examples Mead demonstrates the connection that exists between sound and our embodied experience. It is these connections and this shared understanding which allow audiences to viscerally connect with a performer.

It is not my position (nor, I believe, is it Mead’s) that musical sounds be cast aside for an exclusive focus on bodily movements and experience. However, the point remains that an essential component of music’s innate character is its connection to our embodied physicality. Mead describes kinesthetic empathy as the way in which listeners identify with

the embodied sound produced by performers (Mead, 1999, p. 10). This occurs because of our shared knowledge of how sound is made (especially with regards to the voice, since it is an instrument that we have all experienced) and a visceral understanding of the effort required to produce certain types of sounds (essential the previously mentioned “shared stocks of bodily knowledge” referred to by Davidson & Correia). This is why high tessitura singing in any voice type is usually a thrilling experience for the audience; operatic arias climax on high, unsustainable pitches because the physical energy required to sing in an “unnatural” area of the voice allows the listeners to share in the increased energy and excitement of the phrase.

Scruton also discusses a similar idea related to musical meaning, which he describes with the German word *Einfühlung*. This term translates to “feeling into” and can broadly be understood as empathy. It describes how it is possible to feel and experience an emotion from a first-person perspective even when we are not technically being subject to that emotion. When we see another person in pain and read their facial expressions or body language reflective of their feelings, it is possible that we will begin to experience this feeling ourselves as well, no longer as an observing third party but rather from a personal perspective. For Scruton, this type of empathy is connected to the idea of metaphor in music, since empathy develops for the music listener after the music has been understood through the creation of an “intentional world” through metaphorical transfer. Once the “inert sounds [of music] are transfigured into movements, harmonies, rhythms— metaphorical gestures in a metaphorical space” the listener then “into these metaphorical gestures [breathes] a metaphorical soul” (1983, p. 100).

Metaphorical Projection and Kinesthetic Empathy in an Embodied Musical Performance

I believe that these two notions of metaphorical projection and kinesthetic empathy provide a platform for understanding how the body of the performer contributes to the apparent subject-position of the music. This is an element of subject-position which Clarke does not explicitly address, but that I believe warrants an exploration. Scruton's discussion of metaphorical transference, along with Lakoff and Johnson's similar investigation into conceptual metaphor, and Mead's notion of kinesthetic empathy, all point to the idea that human embodiment (i.e. the performer's somatic experience) is one of the primary ways in which an understanding of abstract concepts (musical meaning) is developed. I believe that the embodied nature of the voice means that this is an especially pertinent idea for vocal music. It is not simply the notes or the melody or the rhythmic pulse which orients the listener to a certain mood or feeling. The embodied nature of the sound as created by the singer (i.e. the contribution of the singer's body or physical self) influences how we hear the music. The same note sung by two different voice types may denote completely different meanings based on where the note sits in each singer's range. In one singer a note may sound strained and specify a feeling of tense excitement, while in the other it may sound relaxed and nonchalant. These are not necessarily interpretative choices on the part of the singer; they are clear contributions from the body and are due to the way the voice exists in the body. Aspects of singing such as the tightness of the throat, the movement of the jaw, the expansion of the lungs, or the size of the mouth all influence the way a listener perceives and interprets the music. Additionally, an audience is able to empathize with the singer's

embodiment because of their own metaphorical projection that they are layering on the music based on their previous embodied experience.

I would argue that the body can also be “heard” in instrumental music as well, but there is no doubt that it is especially apparent in vocal music, since it is inconceivable to consider the music as separate from the singer’s body. The voice exists because it comes through the body. As such, the singer’s body is one of the contributing factors, along with certain characteristics of the music itself, to subject-position. The comparative subject-position analysis to follow will illustrate this point clearly, since all three singers were working from the same musical score.

There are many differences within the three recordings studied in this thesis, and there are, of course, a variety of factors that contribute to these differences. These include cultural understandings of the piece, vocal training, personal narratives of the piece, personal experience and most importantly, I would argue, the singer’s embodied experience. The differences in musical interpretation come from the unique embodied experiences of each singer, both during and prior to singing the piece. Their embodied experiences encompass contributing factors such as cultural and social ideas, understanding of previous music, their physical (and vocal) limits and possibilities, etc. As we will see in the following chapter with Mark Johnson’s notion of the multiple facets of the human body, all of the possible factors that contribute to musical interpretation can be traced back to multiple conceptions of the body and the way in which we ascertain information about our world and ourselves through our bodies. As such, the following comparative subject-position analysis will discern the subject-position of each rendition through a discussion of both the

musical characteristics as well as the physical characteristics of the body as heard in the sound.

One obvious problem with this type of analysis, which Clarke addresses and which we have also seen during the discussion of phenomenology in Chapter 2 is the inherent subjectivity that the analyst brings to the act of analysis. How can the analyst be sure that what they are hearing would orient another listener in the same way? The short answer, of course, is that they cannot. There are multiple interpretations that may be gleaned from a single musical phrase. Clarke notes that there are two possible solutions to this problem. The first approach is to either present an infinite number of possible interpretations based on all possible perceptions of the music, or undertake additional ethnographic research to decipher what people actually infer from the music (such as Tia DeNora's approach in *Music in Everyday Life* (2000)). The second approach, which is how most analyses are done, is just to "make an assumption based on shared or common sensitivities of a generalized audience to which the analysis is presented" (Clarke, 2005, p. 208). This thesis will be following the second approach, also with a reiteration of my disclaimer from Chapter 2: through this analysis I aim to present an *approach*, not necessarily a final answer on the meaning of *Sequenza III*. Through this analysis, which again presents how I, as a listener, am oriented by the music, I hope to demonstrate how the musical materials and the performing body work in conjunction to create a subject-position for the listener.

It should be noted that the assumed hypothesis for this analysis is that each performance will be different and more specifically will evoke different moods and emotions on the part of the listener. This is not to dispute the notion of invariant principles that was previously outlined in connection to the ecological approach. Despite the impact of

different performances it can still be assumed that the music of *Sequenza III* has invariant principles in the way performers approach the vocal gestures and the way in which a listener hears and interprets the gestures. As Clarke notes, differing descriptions of music can act as a “starting point for an exploration of the invariants that specify each of these [interpretations]” (2005, p. 198).

Aim of the Comparative Subject-Position Analysis

As was discussed at the beginning of this chapter, continuing the analysis of *Sequenza III* with a foray into ecological perceptual theory is an attempt to broaden the scope of potential understanding of the music by contextualizing it within a comparative framework. While I do not think it would be prudent to refer to the previous phenomenological analysis as a 'decontextualized' approach, since the philosophy does not remove the object of study from the context of perception, it is clear that ecological perceptual theory maintains a stronger focus on the environmental circumstances of the piece. It also allows for the chance to explore not only what is being perceived but also the questions of why and how this perception is occurring. However, I do not wish to imply to the reader that the following analysis will be a fully social or cultural reading of *Sequenza III*. It is not the objective of this thesis, nor is it within the scope of the research presented here to undertake such an extensive analysis of three contrasting performances. I will make no attempt to theorize on the social or cultural background of the performers or make claims as to why they chose to perform the piece in a certain way. I wish to make a distinction much like Clarke cautions in his own analysis: that I will be focused on the meaning produced by the vocal *sounds* of the piece and not by surmising any social context of the performer (Clarke, 2005, p. 51). What I hope will ultimately emerge out of this analysis (the procedure for which will be explained shortly) is to consider the impact of the differing bodies and embodied experiences of each performer upon the listener's perception of the piece. It may seem to the reader that the research presented here has moved decidedly away from the opening focus on embodiment. I argue, however, that it is important to consider theories of perception, such as ecological perceptual theory, in order to situate the

performing body (and the listening body) within an environment. The way we are able to “hear” the performing body within music is because it exists and is being communicated within the same performing and listening environments as the music. The following section will describe the aspect of ecological perceptual theory that explores this notion in further detail and will be adapted for the subsequent analysis.

Analytical Procedure

‘Essential Moments’ of *Sequenza III* from phenomenological analysis

Table 3

Phenomena (Lochhead) → Musical elements (Clifton) ↓	OBJECTS	PLACES	MODES
TIME	[04:22- 05:20]	[00:20-00:27] (humming)	[05:40- 06:09]
SPACE	[05:00- 05:15]	[02:30- 02:40]	[06:50- 07:30]
GESTURE	[01:00- 01:10]	[03:38] (pause)	[04:20-04:50]
EMOTION	[01:48- 02:40]	[03:48- 04:00]	[07:30- 08:20]

The essential moments to be used for this subject-position comparative analysis are from the above chart and include the four moments in bolded text: in the category of temporal objects, the passage from 04:22- 05:20; in the category of spatial modes, from 06:50- 07:30; in the category of gestural modes, from 04:20- 04:50; and in the category of emotive places from 03:48- 04:00. The three recordings that will be considered here feature sopranos Cathy Berberian (1969), Luisa Castellani (1988) and Christine Schadeberg (1995). These recordings present three different singers all recording the piece during three different time periods.

The analysis for each of the four essential moments for each singer is provided in bullet point format, with each bullet representing one vocal gesture. For the sake of clear analytic reference, each gesture is assigned a descriptive term (such as “laughter”), which are indicated in square brackets at the beginning of each point. The written analysis provides a descriptive account of each gesture and the kind of emotion or mood that the gesture evokes.

The subject-position of each singer is discussed individually, followed by a comparative analysis of each bullet point. A general comparative discussion concludes each section of analysis.

- **[Pause]** There is a pregnant pause in between the laughing gestures, which breaks up the motion of the line and creates a feeling of suspense.
- **[Sung gestures]** The sung 'tense' gestures at 04:37 and 04:42 specify a strong feeling of anxiety and fear. The intermittent muttering in between the gestures as such comes across like a secret message for the listener, which has to be delivered quickly and quietly for fear of being caught.
- **[Tongue trill gestures]** There is an alternating of vocally clear gestures and moments of intense breathiness from 04:45- 04:52. This specifies a constant alteration between tension and relaxation in the vocal folds, as well as in the listener's perception.
- **[Whining]** An increasing sound of constriction in the singer's throat from 04:53 to 05:00 creates the feeling of building nervousness and tension. The voice sounds tight as if it is difficult to produce sound.
- **[Gasps 2]** The measured gasps at 05:03 are reminiscent of an attempt to calm oneself when dealing with feelings of panic.
- **[Muttering]** The frantic switching between vocal ranges (i.e. low and high) as well as the unintelligible phonemes specifies a feeling of lack of control and stability.
- **[High Muttering]** The constant shifting of dynamic extremes specifies a feeling of privacy juxtaposed with a sense of public display.

Luisa Castellani

- **[Arpeggio gestures]** The detached staccato 'laughing gestures' that begin this section indicate a sense of playfulness due to their temporal flexibility. The singer's malleable timing of the notes emphasizes the rising and falling gesture of the pitches (i.e. slower rising of pitches, speeding up as the notes fall in the way that a vehicle speeds up slightly on a downhill).
- **[Laughter]** The slow delivery of the lower laughing gestures at 04:26 specifies a relaxed feeling of nonchalance.
- **[Gasps 1]** The gasping inhalations at 04:33 do not sound rushed or insistent but instead provide a feeling that the singer is languishing in the inhalation.
- **[Pause]** Only a brief pause to breathe- appears to have no communicative significance.

- **[Sung gestures]** The sudden increase in volume with the phrases “a few to me” and “a to sing” specify a feeling of ‘showing off’ or overt display. They are presented with emphasis and clarity of text and are very apparent to the listener since this is the first discernable text of this section.
- **[Tongue trill gestures]** The rapid shifts between vocal gestures beginning at 04:45 are unpredictable and jolting. There is no feeling of comfort or ease for the listener.
- **[Whining]** The breathy, whining and laughing vocal gestures at 04:50 present extreme modes of vocal production- from a light sound with an excess of air to a tight, pinched, nasal sound. This contrast specifies instability.
- **[Gasps 2]** The second set of gasps in this section is more intense with faster and sharper inhales. This alludes to the feeling of fear or anxiety.
- **[Muttering]** The extremely fast and articulated muttering are performed with such a strong sense of internal control that it becomes a private moment for the performer- as if all her focus and energy is directed to the vocal gesture and the listener is no longer involved.
- **[High Muttering]** The high muttering gestures specify a feeling of tightness and restriction and a strong sense of instability.

Christine Schadeberg

- **[Arpeggio gestures]** The arpeggio gestures are performed quietly and playfully, specifying a feeling of youthfulness and joy. This is especially apparent on the run down from the extreme high register on the last gesture at 04:26 as the voice flies down the range of the singer in a completely carefree manner.
- **[Laughter]** The laughing starts out as a staccato, guttural sound that appears as a caricature of actual laughter. It then quickly changes into a less intense laughter that specifies the feeling of confusion through its open [a] vowel and rise in pitch.
- **[Gasps 1]** The gasps in the following section are extremely long and drawn out, specifying the feeling of needing to regulate one’s breath after exercise or physical exertion of some kind. This is especially apparent with the intermittent words between gasps, which are breathy and labored.

- **[Pause]** The pause is present, but brief. There is a strong sense of anticipation for the next vocal gesture.
- **[Sung gestures]** The contrast between the sung and muttered gestures at 04:45 does not feel rushed or frantic. The sung gestures especially seem to specify a feeling of exploration and enjoyment- like someone singing privately for herself.
- **[Tongue trill gestures]** This trill is high pitched and fast and provides a feeling of excitement. It is not tight or intense enough to provoke feelings of fear.
- **[Whining]** The [a] gesture at 04:50 is a leisurely and languishing exhaling sigh, specifying a sense of calmness and relaxation. The whining gesture at 04:53 starts out specifying the sound of a petulant child complaining but then morphs into a playful sound by the end of the gesture. The result is that it almost appears the singer is making fun of the seriousness of the sound. The following laughter appears as a response directly related to the whining.
- **[Gasps 2]** The muttering and gasping gestures that follow at 05:00 specify the sounds of someone who is in desperate need of air. The irregularity of the gasps and the sound of the full body inhaling contribute to this.
- **[Muttering]** The quickness of the muttering and light vocal quality specifies the sound of someone poking fun at another person. The muttering removes the feeling of anxiety that the gasping portrayed, and reestablished the sense of playfulness from the beginning of this section.
- **[High Muttering]** The final two muttering gestures in this section ([be/lo] at 05:14) are sudden bursts of sound but specify a feeling of control. The second gesture is repeated as an echo and moves from a feeling of control into a feeling of both emotional tension and physical tension in order to regulate the dynamic level in that way.

Comparative Analysis of Temporal Objects: [04:22- 05:20]

- **[Arpeggio gestures]** All three singers perform this gesture in a similar manner: with a carefree and almost joyful sentiment. Berberian performed the gestures at the quickest tempo and with less rhythmic flexibility than Castellani and Schadeberg. All three singers move into a very high vocal register for this gesture.

- **[Laughter]** This laughing gesture varies from feelings of aggression (in Berberian's interpretation) to a more joyful sound (as in Schadeberg's and Castellani's versions). This is an important factor in setting the mood since laughter is culturally understood as being either joyful and humorous or menacing and hurtful.
- **[Gasps 1]** This series of gasps varies in mood between all three singers. Castellani appears to be enjoying her inhalations, almost as if she is relaxing and languishing in the opportunity to breathe. Berberian's gasps, in contrast, are more frantic and the reverb of her voice within that section makes it appear as if she is alone and panicked about her situation. Schadeberg's gasps also sound more desperate than Castellani's but not with a feeling of panic; they rather sound the most realistic, as if she is simply recovering her breath after a period of exertion.
- **[Pause]** In Berberian and Schadeberg's versions, this pause is somewhat prominent and creates a feeling of suspense and anticipation as the listener waits for what is to come. Castellani barely acknowledges the pause, stopping briefly only to take a breath before the next section.
- **[Sung Gestures]** All three versions present these sung sections differently. Berberian's interpretation is full of anxiety and fear as she sings the gestures with a tight vocal intensity. In complete contrast, Castellani and Schadeberg's renditions are much more lighthearted, specifying feelings of 'showing off' and 'exploration' respectively.
- **[Tongue trill gestures]** Continuing with the mood of her previous gesture, Schadeberg's tongue trills here are excited and carefree. Berberian still maintains a sense of tension but also allows some moments of relaxation to contrast that mood. Castellani's rendition is jolting and unpredictable.
- **[Whining]** Berberian's tight throat in this gesture adds to the feeling of nervous tension while Schadeberg's whining sounds playful and childlike. Castellani continues with a feeling of unstable unpredictability.
- **[Gasps 2]** The gasping gesture from all three singers specifies an intense need for air. Schadeberg's version sounds the most realistic and physical, while Berberian and Castellani's gasps come from a more emotional place as they sound anxious and fearful.

- **[Muttering]** With this section of low muttering there is again a lot of contrast between each singer. Berberian sounds unstable and as if she is not in control of the sound she is producing. In contrast, Castellani appears to have a strong sense of internal control as she executes the muttering very cleanly. Schadeberg does not portray this feeling of intensity that is apparent in the other two renditions; her muttering is playful and funny.
- **[High Muttering]** The feeling specified by each singer changes suddenly when the muttering gesture becomes higher and moves into a high section of each individual voice range. Schadeberg suddenly produces the sound with a strong sense of control and Castellani's version takes on an unstable quality because the voice is so high and tight compared to the previous gestures. Berberian again presents a level of contrast as she moves between dynamic extremes; it sounds as if she is presenting a public and private persona through this section.

Interpretive Discussion of Subject-Position and Temporal Objects: [04:22- 05:20]

This section of vocal gestures provides a lot of material for each singer to work with. Even a cursory listening demonstrates that each singer approaches the emotional tone and vocal production of these gestures in an extremely distinctive fashion. However, there are also some clear similarities between and among the performances; most notably in the characteristics that each singer used to specify certain emotional tones. These characteristics included: 1) the speed at which the gestures were sung and the spacing between subsequent gestures and 2) the vocal quality used by each singer. These two characteristics are primary contributing factors to the overall mood of the section and heavily contribute to the subject-position of the listener. Firstly, the speed or rate at which the gestures are presented is an element that strongly affects the interpretation but varies extensively between each singer. Berberian's interpretation is unquestionably the fastest as she blows through the vocal gestures rapidly and with very few pauses in between. Her gestures at times blur together and even with the score it is almost difficult to follow her

voice. Castellani's presentation is more methodical and clear in her presentation of each gesture. It is possible to hear the precise articulations that she performed but she as well does not take much, if any, time between the gestures. Schadeberg's version, in comparison to the two previous, appears as almost the antithesis. While at times she also presents the gestures at a blisteringly fast pace, she also takes frequently pauses between gestures to emphasize them. There are also moments where she stretches the gestures out, such as with many of the gasps indicated in the score at 04:32 and 05:00.

Secondly, the quality of the sound produced, while varied between singers, was one of the main ways in which subject-position is achieved. By vocal quality I am not referring to the way each vocal gesture was articulated or presented to the listener, but more to the overall quality of tone employed by each singer. Berberian tends to favor a breathy vocal quality that does not fully engage the resonating capabilities of her voice. There were very few moments within this section when she appears to be singing with her whole voice (i.e. with full *bel canto* technique and allowing her entire instrument to resonate). Castellani seems to favor this approach as well. While the listener is privy to more of her full, resonant sound than with Berberian's recording, there is the sense that Castellani presents the gestures with a manufactured or inauthentic vocal tone. She sings with a heavy emphasis on the nasal or guttural attributes of her voice in accordance with the apparent attributes of the gestures (e.g. whining gestures emphasized the nasality in her voice, while laughing gestures emphasized the throaty and guttural characteristics). Schadeberg is the only singer who appears to be maintaining a sense of consistency throughout the shifts in vocal gesture. While it is obvious that the gestures do not lend themselves explicitly to portraying

the tone of classical singing, Schadeberg still presents a thorough sense of her overall vocal quality; her tone was not as distorted through the gestures as with Berberian and Castellani.

In terms of subject position, these two factors of speed and vocal quality orient the listener in fairly specific ways. They combine to create an overall mood or emotive feeling through this section, which imparts to the listener how they “should” be feeling about the music and also how they are to react to the singer. Berberian’s rapid delivery of gestures combined with an overall tight and pinched vocal quality presents an overall feeling of anxiety and tension. Berberian’s interpretation is unexpected and full of contrast, with rapid changes in dynamics and articulation, thereby distancing the listener and displaying the unraveling of the protagonist. In some ways this is reminiscent of Anhalt’s interpretation of *Sequenza III* which was discussed in the introduction to this thesis; there is the sense that the singer is mad or at least mentally unstable, and the ominous feeling which resides through this section, the sharp moments of contrast and unpredictability work to support this reading.

In sharp contrast to Berberian is Schadeberg’s interpretation. Her performance of this section is slower and more controlled. She seems to be languishing in the moments of vocal display and enjoying the strangeness of the virtuosic gestures. Schadeberg presents a funny, almost comical version of this section; at times it appears as if she is poking fun at something, although the focus of her ridicule is unclear. It could be the listener or perhaps even herself. Her version also seems exploratory as she takes time to present the gestures, but then likewise childish, since at times she speeds up and presents supremely fast displays of virtuosity. Schadeberg’s version relaxes the listener and ensures them that, unlike Berberian, her mental faculties are fully intact; she is only having fun.

Castellani's interpretation, with regards to how it orients the listener, falls somewhere in between the previous recordings. Her vocal production is definitely "inauthentic" in that it favors the individuality and characteristics of each gesture rather than the fullness of her actual voice. Because of this, the emotional tone of each gesture is unique, and she moves between a funny, comic feeling (as we hear with Schadeberg) and a serious, tension-riddled mood (as exemplified by Berberian). As a result, Castellani's version is almost confusing for the listener; is the singer in trouble or is she just playing around? Is this a piece that the listener should take seriously and attribute a serious subject matter to or is it simply a crazy representation of sounds?⁴⁵ Castellani juxtaposes vocal gestures in a jolting manner, moving between slow displays of relaxed singing and rapid displays of virtuosity. The most striking aspect of her performance is the contrast of vocal production, from extreme nasality to breathiness to a sound imbued with throaty, chest resonance, Castellani present a wide range of vocal qualities, but without a true sense of what the piece means.

⁴⁵ The contradictory nature of the subject-position in Castellani's version draws a parallel to Clarke's analysis of the song *Magdalena* and the dual nature of the subject-position implied by that performance (2005, p. 113).

Spatial Mode: [06:50- 07:30]

The image shows a musical score for Cathy Berberian's 'Spatial Mode' (06:50-07:30). The score is written on a single staff with various annotations and phonetic transcriptions below it.

Annotations:

- anxious* (above the first measure)
- urgent* (above the first measure)
- very excited and frantic* (above the first measure)
- whimpering* (above the second measure)
- urgent* (above the third measure)
- whimpering* (above the fourth measure)
- whining* (above the fifth measure)
- serene* (above the sixth measure)
- tense* (above the seventh measure)
- tender* (above the eighth measure)

Phonetic Transcriptions:

[?] [be/co.]be([to/co/be.)(r) [l] (e) [lo]([a) (u) (o) (a) (u) (i) [?] [?] [b]([t]dka/be/lo/me.) [l] ——— (r) (tru/be/to/co/be.) (lo/me..)

..) (i) (be/lo/..) [?] [?] [me][me]

be [?] to to [l] [l]
/fa/ me me me

Cathy Berberian

- **[Muttering]** This muttering is unintelligible but extremely frantic and insistent in terms of its vocal quality. It specifies a feeling of urgency due to its speed and tightness of the vocal tract in its delivery.
- **[Tremolo/Gasp]** This tremolo does not follow the trajectory of pitches that is outlined on the score. Instead, the tremolo at first moves up making two attempts to raise its pitch. This alludes to a feeling of nervousness and franticness. The gasp is sudden, quiet and very fast which creates the feeling of surprise.
- **[Tremolo Slide]** This gesture goes by very quickly. It is quiet and short and only has a small range of pitches. It does not specify any strong emotion or mood.
- **[Muttering 2]** This round of muttering resumes the previously felt frantic energy. The voice sounds as if it is very much 'in the throat,' which adds to a low, intense feeling of urgency. The range is fairly narrow, but when the pitch does try to move higher the voice remains within the chest resonance area of the singer, which makes the sound strained and only adds to the urgent, frantic feeling.
- **[Tongue flap]** This gesture is performed very fast and moves into a very high (almost shrill) area of the singer's voice. It specifies the feeling of panic.

- **[Whimpering]** These gestures run together and are performed very quietly. There is no focus to the vocal sound, which serves to create a feeling of fear or apprehension.
- **[Whining]** The whining is fast and very breathy in vocal quality. It specifies a feeling of being rushed and panicked.
- **[Sung gesture]** This gesture is a sudden contrast in that it is calmer than the entire previous section; it is sung lightly and in the middle range of the singer. It presents a mood of being lifted out of the previous feeling, with a sense of detachment or calm observation.

Luisa Castellani

- **[Muttering]** The muttering is low and guttural, placed very much in the throat of the singer. The phonemes are so fast they are unintelligible. The second section of muttering is a tongue trill rather than phonemes.
- **[Tremolo/Gasp]** This gesture is performed quickly with a very frantic feeling. The tremolo is very tight and tense and the gasp is high pitched and sudden.
- **[Tremolo Slide]** This gesture is still fast and frantic, but the rising in pitch allows for more of a feeling of playfulness than the previous gesture. The final [i] at the end of the slide is 'tossed off' which specifies a casual feeling.
- **[Muttering 2]** This muttering is low and fast and specifies a feeling of mental instability due to the phonemes being completely unintelligible.
- **[Tongue flap]** This is a point of excitement in this section because the gesture is slightly slower and more accurate than the previously heard muttering, and the pitches move through a huge range, becoming more tense and excited as they move higher.
- **[Whimpering]** This whimpering is fast and detached, with each sound being very tight and pointed in its vocal quality. However, there is very little nasality in the sound, which makes the gesture seem casual and almost upbeat.
- **[Whining]** The whining, like the whimpering, is missing a nasal quality that would give it a forlorn feeling, and therefore it specifies a feeling of nonchalance and peppiness.

- **[Sung gesture]** This sung phrase is initially very held back in terms of vocal intensity– the sound is quiet and focused. There is one swell of sound in the middle of the gesture before it is again pulled back which specifies a real sense of secrecy or mischievousness.

Christine Schadeberg

- **[Muttering]** The muttering is breathy and quiet which gives off a feeling of breathless excitement. The phonemes are not strongly articulated so there is not feeling of intensity.
- **[Tremolo/Gasp]** This gesture is light and breathy in vocal quality, which makes it sound weak and uninspired. The gasp is high and quick and specifies a true feeling of surprise.
- **[Tremolo Slide]** The tremolo attempts twice to climb in pitch, which, combined with the shaking of the voice, contributes to a feeling of exertion and exhaustion.
- **[Muttering 2]** The muttering moves between low and high pitches and as such specifies a feeling of playfulness and exploration. The phonemes move from very closed to open as if the singer is enjoying experimenting with the sounds she can produce.
- **[Tongue flap]** This gesture appears to blend in with the preceding muttering- the increased use of the tongue in this moment is not aurally apparent to the listener.
- **[Whimpering]** The whimpering is performed in a detached and fairly high-pitched manner with a definite edge of nasality in the voice. The gesture varies in pitch but is mostly in the upper range and the pointedness of the gestures specifies a feeling of being hurt or indignant.
- **[Whining]** These short whining gestures are performed quietly and at a high pitch which relay the feeling of a childlike innocence.
- **[Sung gesture]** This gesture is a first glimpse of *bel canto* singing in this section; it is performed at a fairly high pitch and very quietly, with a light vocal quality. It specifies one of the first notions of maturity in this section– in stark contrast to the childish whining that is heard previously.

Comparative Analysis of Spatial Mode: [06:50- 07:30]

- **[Muttering]** This first onset of muttering sets the mood of this section. In Berberian’s version, this gesture is frantic and urgent and provokes feelings of intensity in the listener. In contrast, Schadeberg takes a more relaxed approach; the breathy quality in her voice evokes a feeling of excitement and

pleasure. Castellani's rendition is not quite as urgent as Berberian's but the speed and ferocity with which she displays the gestures present a manic sound and imply that she is operating outside of 'normal' awareness.

- **[Tremolo/Gasp]** In this gesture Berberian continues setting a tense/nervous mood, which is evident in the way she tries twice to complete the gesture. Castellani's performance is similar in that the tight vocal quality she presents creates a feeling of tension. Schadeberg's vocalizing at this moment is weaker and less focused than the other two, however the sharpness of her gasp does evoke the image of true surprise.
- **[Tremolo Slide]** Castellani continues with a sense of frantic energy in the speed at which she performs this gesture but relaxes her throat as she ascends to higher pitches enough to simultaneously create a feeling of playfulness. Schadeberg's rendition creates a feeling of exhaustion as she takes two attempts to complete the rising gesture. Interestingly, this gesture was not a moment of communicative or emotional importance in Berberian's version; it passes by almost unnoticed.
- **[Muttering 2]** Castellani performs this second round of muttering in a similar way to the opening of this section: incredibly fast, with low, guttural sounds that create a mood of intensity and instability. Berberian's rendition is similar, but with the addition of a strained sound as she moves her chest resonance into higher pitches. This effect is how Berberian creates a sense of urgency, in contrast to how Castellani uses speed to create the same mood. Schadeberg uses a high and low range for this section which allows her muttering to retain a feeling of playfulness and exploration that is not present in the previous two versions.
- **[Tongue flap]** Much like Berberian's rendition of the 'tremolo slide' gesture, in this moment Schadeberg does not seem to impart any emotive or communicative information. Castellani's version has a decidedly strong feeling of excitement as she clearly articulates each sound and moves through a wide range of pitches. In contrast, the high speed and high pitch at which Berberian performs this gesture creates a feeling of tightness in her vocal tract and a mood of tension and anxiety.
- **[Whimpering]** This is the first moment in Berberian's performance of this section when there is a feeling of calmness. She sings the whimpering gestures quietly and at a slower pace than some of the previous muttering gestures, which allows for a moment of respite from the previously frantic mood.

Castellani follows a similar route in that her whimpering sounds almost casual. It is sung at a high speed and in a detached manner, but does not have the nasal quality associated with true whimpering which allows it not to have an anxious or insistent quality. Schadeberg's version *is* nasal as well as being very high pitched. These qualities evoke images of being hurt, angry or indignant which are emotions more commonly associated with the sound of whimpering.

- **[Whining]** Schadeberg's whining here is again the most realistic- she evokes the perfect image of a child whining when they are upset. Berberian moves back into feelings of panic. Her whining is breathy and fast, which creates the sense that she is being rushed. Castellani's version does not evoke images or feelings of true whining as her singing is not nasal and in fact creates an upbeat feeling through the rhythm and easy variation in pitch.
- **[Sung gesture]** For this singing gesture, all three singers appear to create a new emotional effect from what they had previously set up within this section. Schadeberg sings it in true *bel canto* style, which creates a sense of maturity and competency when compared with the childish whining she had previously portrayed. Castellani, who has, up until this point, been quite pronounced with her vocal gestures, suddenly pulls back the volume and vocal intensity of her singing to create a feeling of privacy or secrecy. Lastly, Berberian's mood of tension and anxiety fades away as she sings this gesture in a calm, unwavering and almost emotionally detached manner. It is as if she is no longer involved with the drama of her narrative but is rather observing the action from an external perspective.

Interpretive Discussion of Subject-Position and Spatial Mode: [06:50- 07:30]

This section of vocal gestures is extremely indicative of how each singer is able to intuit the music as presented on the score and create a completely unique interpretation. It is fascinating to observe the differences in emotional communication that each singer displays through this passage. Additionally, this section also allows us to witness how all the singers tend to set up an emotional narrative or trajectory, but then abort or reject it in a few chosen gestures. I believe this demonstrates one of the most fascinating and

compelling aspects of this work; that it is impossible to assign one simple narrative or mood to the piece as many moments of vocalization present the complete opposite to moments that have come before.

During this passage, the most obvious example of this shift in presentation comes at the final gesture, which is the first time in this section that the opportunity to sing (in the classical sense) is presented. All of the vocal gestures that precede this moment of singing can be considered extended techniques of the voice and while they are not necessarily extended in an acrobatic sense, they are sounds (such as gasping, tremolos, whimpering, etc.) that are rarely heard in classical singing repertoire. Berberian's rendition of this section is fraught with tension and anxiety. Her vocal quality throughout this section alternates between a tight, shrill sound and a breathy sound, both of which indicate tension in the vocal tract. She performs the gestures at high pitches and at high speeds, rarely pausing between gestures. Additionally, one interesting effect is when she briefly performs a light belting sound, that is, she uses primarily chest resonance in a higher area of her voice where it would be more natural to blend in some upper resonances. Since this is a somewhat unnatural thing for the voice to do it creates a feeling of straining or tension in the sound. This only serves to contribute to the mood Berberian has set up, which is filled with tension and pressure. However, at the end of this section, when Berberian arrives at the sung gesture, the mood suddenly shifts. It is calmer and more rational as if Berberian is observing the action rather than living it. This sudden shift abruptly orients the audience in

a different way and it essentially makes the listener question the “truths” of the narrative and their assumptions.⁴⁶

Schadeberg presents a similar effect at the same moment in the piece. Previous to the singing section she had been portraying many of the vocals gestures in a childlike manner. For example, the whining was extremely nasal and high pitched— like the whining of a petulant child— while the whimpering sounded like a child who had been hurt or reprimanded. Even with the opening muttering gestures, Schadeberg alternates her pitches so rapidly that it evokes a feeling of childlike exploration and wonderment, as if she is a child exploring the capabilities of her voice. However, in the final moments, Schadeberg begins to ‘sing’ in the traditional sense of the word. She displays that final phrase with *bel canto* style and technique and showcases the maturity of her developed voice with a high level of breath control and a roundness of tone. This is an abrupt shift in imagery for the listener. Not only does Schadeberg display the possible juxtapositions of her vocal abilities but she also subverts the listener’s original opinion of the narrative of the music.

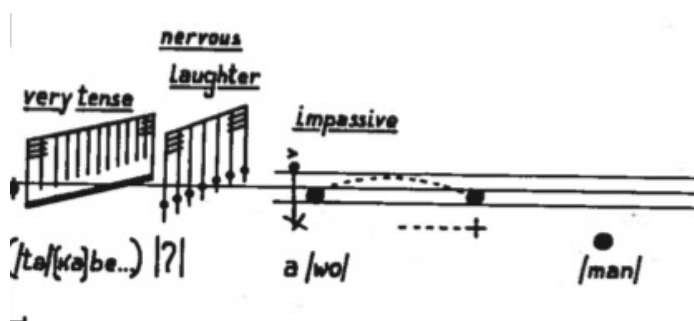
Castellani’s switch in narrative is not quite as drastic as Berberian’s and Schadeberg’s, but it is still present. In the final phrase, Castellani pulls her voice into a low, quiet dynamic while simultaneously pulling back the vocal intensity of her singing. This creates a feeling of secrecy, which is a sudden shift from the more overt and direct presentation of the vocal gestures earlier in the section.

Through this discussion of the shifts in emotional meaning (and essentially the subject position of each rendition) it is also apparent the differences in the choices of mood

⁴⁶ This sudden shift in emotive orientation is comparable to Clifton’s definition of *faceting* in application to the spatial elements of music (see Chapter 2). *Faceting* occurs when a musical event forces a change in perspective that shifts the listeners understanding of the music’s spatiality. This is essentially what is occurring in this section on an emotive level rather than a spatial level.

for each interpretation. Each singer plays with pitch, vocal focus and intensity, speed, nasality, breath, resonance, vowel shape and clarity of tone to evoke a certain emotional feeling. While each singer is undeniably singing the same gestures (sometimes even within similar pitch ranges or tempi) they are each able to create entirely different emotional narratives. This is not an example per se of how the music creates a certain subject position, but more how the presentation of the music creates and alters this position.

Gestural Object: [01:00- 01:10]



Cathy Berberian

- **[Muttering]** This muttering is inconsistent and performed extremely quickly. It is unintelligible and sounds panicked in its delivery. It is performed with an element of *sprechstimme* or 'speech-like singing', which only adds to the urgent nature.
- **[Laughter]** The laughter is fast and frantic in nature. Berberian employs an aspirated [a] vowel and the gesture moves from a low, guttural sound to a high pitch very quickly.
- **[Appoggiatura]** This quick grace note is tossed off very quickly and is sung in a very high register. It is still pointed and very articulate in its presentation and evokes a feeling of lightness or ease.
- **["/wo/man/"]** The first half of the word is sung lightly and in an upper register, specifying a feeling of purity and delicacy. Berberian closes to the /m/ consonant for a period but the purity of sound remains. The /man/ syllable drops into a low register for the voice but is sung very evenly. It specifies a sense of security and strength.

Luisa Castellani

- **[Muttering]** This muttering goes on for a longer period than Berberian's version and sounds much less frantic, although the phonemes are still performed quickly. It is pitched in the lower range of the singer, almost as if it should be speech and has very little variation in pitch through its duration. There is a throaty voice quality that almost implies a humorous feeling because it is so unlike 'proper' classical singing.
- **[Laughter]** This laughter is performed gruffly with a very open vowel (almost as a 'huh') and sloppy articulation.
- **[Appoggiatura]** This gesture goes by almost unnoticed without any strong articulation or attention.
- **["/wo/man/"]** The /wo/ is sung with a very closed /u/ vowel and quickly closes to the /m/ consonant which implies a feeling of privacy or secrecy. It is sung in the mid-range of the singer. The /man/ is low in pitch, but not uncomfortably so for the singer and is sung easily with an air of apathy. It is not held for a very long duration, which does not imply it is an important element.

Christine Schadeberg

- **[Muttering]** This muttering is extremely faint and is performed very quickly. It promotes a feeling of instability as it jumps around between registers– moving from low to high but without a connection of pitches in between.
- **[Laughter]** This laughter is performed quickly and with an extremely nasal voice quality. It specifies laughter *at* something or someone– it has an edge of aggressiveness and maliciousness to it.
- **[Appoggiatura]** This grace note is performed in an extremely high register (almost as a squeak) and is separated from the following phoneme /wo/ by this extreme register choice. There is also a very slight pause after the appoggiatura and as such it is very emphasized. It does not specify much emotional information on its own, but coupled with the following word it evokes an image of whining and exasperation.
- **["/wo/man/"]** The first syllable is sung strongly with a pressed sound that also has a hint of nasality to it. This specifies a feeling of irritation or obnoxiousness, which is only further emphasized by the preceding appoggiatura– the height of the grace note allows the singing to land heavily on the /wo/

phoneme to accentuate this element. The /man/ phoneme recedes slightly in its aggressive nature as it backs off in volume and in vocal pressure. However, the final /n/ consonant is nasalized and held briefly which again implies a feeling of irritation or annoyance.

Comparative Analysis of Gestural Object: [01:00- 01:10]

- **[Muttering]** All three singers perform this muttering extremely quickly and the phonemes are generally unintelligible within all three renditions. However, they all add other vocal elements, which help to evoke a mood. Berberian almost speaks the gesture, which creates a feeling of insistence and panic, while Schadeberg achieves a similar feeling of instability by abruptly varying the pitch. Castellani uses a strange, throaty vocal quality during this gesture, which creates a humorous edge due to the almost frog-like sound she creates through an expansive opening in the back of her throat.
- **[Laughter]** Each singer achieves a different type of laughter here: Berberian's is rushed and frantic and she covers a huge range of pitches in a very short amount of time, Castellani's laughter is sloppy, gruff and unarticulated and Schadeberg sounds as if she is laughing at someone through her aggressive, nasal tone.
- **[Appoggiatura]** Castellani does not appear to place much emphasis on this gesture; in her rendition it passes by quickly without notice. However, Schadeberg heavily emphasizes the grace note by singing it in an extremely high register that is disconnected from the following gesture. In her version it is used as an obvious set-up for the word "woman" which is to follow. Berberian's version is lighter and sung with more ease than Schadeberg's version. For Berberian this note is present, but tossed off in a relaxed way which specifies a feeling of casualness.
- **["/wo/man/"]** Berberian performs this gesture in a light, delicate manner, singing it softly and easily in her mid-upper range. In contrast, Schadeberg's singing here is nasal and accompanied by a large amount of vocal pressure, which specifies the feeling of irritation or obnoxiousness. Castellani's rendition falls somewhere in the middle: she sings this gesture with only minimal effort and vocal energy. It falls in the middle to low end of her range and specifies a feeling of apathy or indifference.

Interpretive Discussion of Subject-Position and Gestural Object: [01:00- 01:10]

This 10-second section is an important moment in *Sequenza III* since it contains the first intelligible word heard in the piece: [/wo/-/man/]. Even though Berio notated the word in a fragmented manner, due to its backdrop against a full minute of fast, indecipherable phonemes and sounds, it sticks out for the listener as the first bit of material that can be truly understood. As many other analyses of this piece have commented, it is also significant that this first understandable word is the word “woman,” since it adds a certain degree of contextualization to the piece. It is unclear whether the word refers to the singer or someone else, but this is the first clue as to a potential subject matter or narrative within the piece.

The emotional setup for this word within each of the different interpretations is an interesting development that happens within the very small time frame of ten seconds. This section exemplifies how much emotional communicative information can be encoded within small and short vocal gestures. For example, Berberian begins the section in a frantic and rushed manner, exemplified by the speed at which she performs the gestures as well as the huge variation in pitch that she presents. The *sprechstimme* she employs in the muttering gesture indicates that she is so panicked she has lost the ability to sing with control and is instead relegated to rushed speaking.⁴⁷ This set-up of a frantic mood then allows for a strong contrast with the way Berberian sings the word “woman”: lightly and easily and without straining. Even when she drops into her lower register for the syllable /man/, it is not sung with force or pressure and the tone remains very even. The listener

⁴⁷ *Sprechstimme* or *Sprechgesang* refers to music that is presented in a half-sung, half-spoken manner, i.e. “speak-singing.”

then wonders why that specific word has brought on a sense of calm for Berberian. Why has such a reference seemingly removed her from her panicked state?

In Castellani's version she establishes a very different emotional tone than Berberian. Her vocal quality in the muttering gesture is at times comical because it is so far removed from the vocal quality associated with classical singing. The emotion she sets out from the onset of this section is one that is casual, relaxed and without the frantic fear displayed in Berberian's version. However, this casual feeling morphs into sloppy, unarticulated laughter and eventually into a feeling of apathy when she reaches the final word. "Woman" is sung without any vocal intensity, in an easily accessible area of Castellani's voice and is not held for any substantial duration of time. This section therefore appears to process from a highly emotional mood at the beginning of this section to a lower, apathetic and uninterested emotional mood at the end. It is an interesting progression, which again begs the question: what are Castellani's feelings when she referencing this "woman" if her vocal output at this moment lack a previously heard intensity?

Schadeberg's interpretation of this section offers a third perspective on the vocal gestures and a third method of questioning the meaning of the word "woman." Her version is, in a sense, more literal and more upfront in its emotional meaning. For example, during the laughing gesture her voice is nasal and aggressive which evokes the image of her actually laughing at another person. The muttering gesture that opens the section is also aggressive and nasal and species a feeling of instability due to the way it moves abruptly between low and high pitches. This overall mood of upfront aggression continues through the end of the section as the word "woman" is sung with a high amount of vocal pressure and nasality, which specifies a feeling of irritation or annoyance.

- **[[na] [ait]]** The following word of “[na][ait]” is presented forcefully at the onset and then again seems to drift away, lowering in intensity. There is also an obvious manipulation of vowels on the word, as the [a] sound moves into an extremely spread [i] sound.
- **[Appoggiatura]** This gesture is quick but pronounced. It specifies a feeling of sneakiness or mischief.
- **[Mood]** The repeated notes at the beginning of this section present a feeling of building emotional intensity, like an increased frantic nervousness.

Luisa Castellani

- **["to sing to"]** The first few words are sung very slowly in comparison to the other singers. They are elongated and sung at a very low dynamic level, presenting a feeling of secrecy.
 - The nasality in the ‘ng’ sound in the word “[sing]” is overemphasized which specifies a kind of subtle irregularity since it is a nasal sound is rarely heard in ‘proper’ singing technique.
- **[Tremolo]** The dental tremolo on “[to]” is very evident, and acts as a surprise for the listener. It specifies a kind of reversion back into a personal sphere.
- **[to [u]] & [[na] [ait]]** The “to [u] [na] [ait]” are heavily punctuated and also sung in a very nasal manner. Their dynamic level is suddenly very high compared to the opening of the section. They represent a feeling of brashness in contrast to the calm opening.
- **[Appoggiatura]** The appoggiatura gesture on “[words]” is heavily pronounced and specifies a feeling of secrecy due to its low pitch and breathy tone.
- **[Mood]** The first few words are also sung without vibrato or much vocal weight, which specifies a feeling of calmness and purity.

Christine Schadeberg

- **["to sing to"]** The opening of this section is performed at a midrange dynamic, with a thin vocal tone. It appears consistent and unobtrusive.
- **[Tremolo]** The dental tremolo indicated in the score is difficult to discern. It is not overtly displayed.
- The phoneme [be] is short and abruptly cut off, specifying the sense that it was almost an offensive sentiment that was quickly curtailed by the singer.

- **[to [u]] & [[na] [ait]]** There are small ‘swells’ of sound on the words “to [u]” and “[na][ait]” when specify a feeling of movement or impetus towards something. Almost a sense of yearning.
- **[Appoggiatura]** The appoggiatura on “words” is unremarkable- it appears just as it would in traditional bel canto singing; present but without a heavy emphasis.
- **[Mood]** It is almost as if the singer is remembering or recounting something from another time, as if she is not fully present in this moment.
 - The dynamic level remains even through this short section, and the medium dynamic combined with the light vocal quality presents a feeling of impassivity.

Comparative Analysis of Emotive Place: [03:48- 04:00]

- **["to sing to"]** Berberian performs this section in a rhythmic, orderly way that is heavily contrasted by Castellani’s quiet and slow rendition, which gives off a sense of secrecy. Schadeberg is even simpler in her unobtrusive interpretation; she sounds consistent and passive.
- **[Tremolo]** Castellani performs the only clearly obvious tremolo, as both Berberian and Schadeberg appear to almost bypass this vocal effect.
- **[to [u]] & [[na] [ait]]** These words provide interesting contrast between all three singers. Berberian appears to shrink back in dynamics and vocal focus, almost as if she is embarrassed, Castellani’s words are nasal and heavily punctuated and very present and Schadeberg’s version strongly emphasizes the vocal swells in the line which creates a feeling of yearning or longing.
- **[Appoggiatura]** This appoggiatura is unremarkable in Schadeberg’s version as it passes by almost without being noticed. This is unlike Castellani’s rendition, in which she emphasizes the gesture to make it an important moment in the vocal line. Berberian’s appoggiatura is very fast, but does have a sense of character to it as it sounds very mischievous.
- **[Mood]** Berberian’s mood is intense, and the intensity only seems to build in this line. Castellani, although she emphasizes many of the unique vocal gestures in this line, maintains a calm feeling or purity rather than the intense or anxious mood in Berberian’s version. As for Schadeberg, this line is fairly passive and calm but also specifies a feeling of yearning or reminiscing for the past due to the way she leans on certain aspects of the line.

Interpretive Discussion of Subject-Position and Emotive Place: [03:48- 04:00]

Even within this short fragment of music it becomes apparent how each singer presents the vocal gestures and how the variance in presentation affects the mood. Berberian's recording presents an intensely emotionally rendition of this line, singing the words at a quick and rhythmic pace that comes to an abrupt halt at "to [u] [na] [ait]." She also plays with the amount of vocal emphasis on each note, sometimes affording equal weight and then suddenly heavily emphasizing the onset of a word. This increasing of tempo and the increasing vocal emphasis creates a feeling of building intensity and tension that borders on the edge of panic. In comparison, Schadeberg sings this line in a much less intense manner; one could describe her singing as quite pretty in this section. It is a non-obtrusive rendition in which she does not appear to dig into or show off the odd quirks of the vocal line (e.g. the dental tremolo written over the second [to] is barely audible). However, the lightness of her vocal tone and ease at which she produces the gestures does create a sense of yearning. This is not done in an aggressive or confrontational way, but rather with a sense of yearning that is passive and accepting. This line reminds the listener that the singer is a trained performer, as her small diminuendos on "to [u] [na] [ait]" appear almost artistic.

In Castellani's version, she emphasizes the contrast in the vocal gestures. This allows the mood of this line to alternate between a sense of secrecy and overt brashness. She emphasizes the individual components of each word such as the nasality in the words "sing" and "night" and the tremolo on [to]. She presents a wide dynamic range that makes sudden shifts between loud and soft. In Castellani's interpretation the listener becomes acutely aware of the specific characteristics of each word and there is less of a sense of continuity

within the phrase compared to what is heard in the two other renditions. Thus, Castellani's version takes the listener out of time; each gesture is heard in its individuality but not in connection to the rest of the piece.⁴⁸ The focus of this line becomes an exploration of Castellani's individual voice as a singer rather than the mental or emotional state of the character. This focus on contrast as a contributor to subject-position frequently appears in Clarke's reading of *Magdalena*, which, much like my description of Castellani's performance, appears to present a subject-position that is almost removed from the music. In *Magdalena*, Clarke notes how the constantly changing music styles and vocal effects produce an ambiguous subject-position that appears to the listener as ironic, unclear and uncomfortable in its elusiveness. In Castellani's recording of *Sequenza III*, this fluctuating subject-position shifts the listener's attention from any potential narrative of the piece to a focus on her actual voice.

Conclusion

These four comparative listening analyses demonstrate the wide variance that is possible in the presentation of *Sequenza III*. Differences in each singer's vocal tone, articulation of vocal gestures, speed and timing of vocal gestures, inflection, and engagement of vocal resonances all evoke different emotional associations for the listener. Such changes in vocal production and vocal quality can influence a section of the piece so that it appears funny or comical in one rendition and serious or tense in another. These are striking differences, especially since the singers are performing the same type of vocal utterances, from the same score, and at times within comparable vocal ranges.

⁴⁸ Here again there is a connection to the phenomenological terminology utilized in Chapter 2. Lochhead's description of 'temporality' as a mensural properties in application to the temporal features of the music is similar: 'temporality' refers to when gestures are heard in relation to each other rather than as against a temporal background. 'Temporality' would thus describe Castellani's vocal gestures in the section.

Within this variance, Clarke's notion of subject-position emerges quite clearly. In Clarke's discussion he considers two songs that each present similar subject matter but contain musical characteristics that orient the listener differently. In the preceding analysis, I compared versions of the same song (which then, theoretically, should have the exact same subject matter) and noticed how the difference in the *presentations* of musical characteristics orients the listener and influences their emotional perception of the music. This is a slight variation of the way in which Clarke presents the notion of subject-position but I believe it still demonstrates the same principles.

Furthermore, I believe that a comparison of the same songs (and as such a comparison of the same musical characteristics) showcases my stance that the reason for this variation in subject-position of the music is the corporeality of the performer. Undoubtedly, a performer may consider how they wish to present material, but it is my fervent belief that this interpretation arises primarily out of the performer's bodily experience, whether by conscious or unconscious contribution. The potentiality of the vocal mechanism, the limits of the body and the voice and the performer's previous experience with their own personal embodiment are factors which arise through the body and contribute to the facilitation of a musical interpretation or musical performance. Singers can only sing a piece within the confines of their bodies and can only explore the multitude of expressive possibilities through and with their bodies. In this way every musical performance is an embodied performance and every musical interpretation has been created, shaped and influenced by the performer's embodiment.

Additionally, as was discussed earlier with the concepts of kinesthetic empathy and metaphorical transfer, the embodied connection between listener and performer is another

factor in the development of music's subject-position. Both phenomenology and ecological perceptual theory contend that any study of experience (including a musical experience) must encompass both perceiving subject and perceived object. There is no ontological separation between these aspects of an experience. Similarly, for our purposes here, we can consider the performer, the musical text and the listener as components that all exist together, entrenched within the musical experience. When we specifically discuss the experience from one point of view we are simply looking at one facet of the same experience. Elisabeth Le Guin even took this notion a step further in her book *Boccherini's Body* (2006) when she included the *composer's* embodied experience as a component of musical meaning. With this mindset it is possible to understand how the embodiment of a listener would inform and influence the subject-position of a piece of music. Firstly, since all human beings are capable of producing sound, we are all at some level (regardless of our level of classical voice training) able to empathize with the corporeality of the singer that we are hearing. Our body instinctively does this at a level below our conscious experience. As Mead explains: "how we perceive [musical] sounds, and how we make those [musical] sounds, cannot help but carry part of the message" (1999, p. 15).

Secondly, as was apparent with the notion of conceptual metaphor, a listener's previous embodied experience will influence how they apprehend music in general. It is possible to hear music as an active entity because we associate with it certain embodied qualities. We recognize these qualities because we too have experienced them in our embodied existence. The nature of speed, forces, opposition, verticality and intensity are all concepts that have an embodied genesis that is then expanded into conceptual or abstract realms such as the comprehension of music. Johnson and Larson (2003) explore this

concept specifically in the ways in which we hear motion in music. Using a popular Beatles song as a case study for describing how we hear and experience physical motion in music, they conclude that our emotional response to music is directly tied to our understanding of music, which is in turn directly tied to our embodiment. For Johnson and Larson, musical understanding and musical experience occur simultaneously and are “fundamentally shaped by conceptual metaphors that are grounded in bodily experience” (2003, p. 78). Both performer and listener engage in this method of understanding and use metaphorical projections to link their previous bodily experience to the sounds they are creating or hearing. This allows for an embodied understanding of the music that subsequently leads to the development of individual musical meaning.

I am in no way suggesting that embodied experience is the only contributing factor to musical meaning. There are undoubtedly social, cultural, gendered etiquettes as well as training, personality and environmental influences that affect both the performer and listener. The interconnectedness of these factors makes it extremely difficult to discern the exact implications of embodied experience on either the performer or the listener. However, I have attempted in this chapter to begin to untangle possible contributions of the body to musical performance by first recognizing the high level of variance in three different interpretations of *Sequenza III*. However, there is no way to say with certainty that those variations were only and exclusively due to the performer’s embodied experience. The following analysis in Chapter 4 will again examine these same essential moments within the work and attempt to excavate, in a more precise fashion, the specific contributions of each individual performing body to the subsequent interpretation. This process will attempt to decipher how certain physical communicative elements are heard in an auditory realm.

Through this analysis it will be clearly apparent how we hear the body in the voice and the ways in which the body contributes to a musical performance.

Chapter 4: Body Communication Theory

This chapter will discuss potential links between the phenomenological essential moments of *Sequenza III* (as discussed in Chapter 2) and the impact of the musical presentation of those essences (as discussed in Chapter 3). That is, this chapter will fill in the gap between these two moments of the musical process by exploring the connection between the musical materials and the reception of those materials by a listener. The conduit between the musical materials and their reception is the embodied experience of the singer. In this chapter, a final analysis of *Sequenza III* will be presented, with the aim of firmly establishing the connection between a singer's embodied musical experience and a musical interpretation grasped by the musical receiver.

This chapter is based on the theoretical perspective of Mark Johnson. Johnson contends that knowledge of the world and the human experience develops out of our embodied nature. Johnson credits the body and our experience of embodiment as the way we are able to grasp higher order rational concepts as well as find meaning in our aesthetic experiences. For Johnson, "meaning is not just what is consciously entertained in acts of feeling and thought; instead, meaning reaches deep down into our corporeal encounter with our environment" (2006, p. 25). In relation to this thesis, this quote describes the "corporeal encounter" or embodied experience of the musical performer, an encounter that creates deep feelings of musical meaning for both performer and listener. Here I quote Johnson at length, who insists:

Music is meaningful in specific ways that some language cannot be, but it shares in the general embodiment of meaning that underlies *all* forms of symbolic expressions, including gesture, body language, ritual, spoken words, visual communication, etc.

Thinking about how music moves us is not going to explain everything we need to know about language, but it is an excellent place to begin to understand how all meaning emerges in the flesh, blood and bone of our embodied experience (2007, p. 260).

Johnson contends that our embodiment is central, not only to the creation and communication of music and musical meaning, but also to how we experience meaning in our daily, non-musical lives. Johnson's work, therefore, provides a theoretical basis for the embodied communication analysis that is to follow in this chapter, which connects body language, the performer's embodied experience and musical sound.

The methodology for this analysis will engage with the work of Jane Davidson, whose pioneering efforts in the field of music cognition have also emphasized the importance of the performing body in the acquisition of musical meaning for the performer and receiver. I am using Davidson's analytical approach as the basis for the final comparative analysis of the three recordings of *Sequenza III*. Davidson's research frequently includes reference to Ekman and Friesen's (1969) work on the communicative aspects of non-verbal communication, and this connection will be adapted to the analytic methodology in this chapter, moving the categories of nonverbal behavior into the auditory domain. This will be done with the integration of Fernando Poyatos' paralinguistic vocabulary (1993), which will be connected to the descriptions used by Ekman and Friesen to denote the categorization of physical movements. By doing so, the communicative meanings of the body on a visual and auditory level are equated as a way of "hearing" the result of one's embodied experience within the voice.

This will situate the discussion within Quadrant 4 of Figure 1, the theoretical map outlined in Chapter 1 (with the axes Body-Environment). Ultimately, the following

discussion and analysis seeks to discern how the performing body influences the surrounding environment through the embodied experience of the musical performer.

Embodiment as a Basis for (Musical) Meaning

In *The Body in the Mind* (1987), Johnson discusses how all meaning arises out of understanding at an embodied level. He supports this claim through an extensive discussion of the terms *image schemata* and *metaphorical projections*. Image schemata are patterns of our corporeal, embodied experience which “[give] coherence and structure to our experience” (1987, p. xiv). These structures are then “projected by metaphor onto abstract domains” (1987, p. xv).

This is an extension of the work that Lakoff and Johnson presented on how conceptual metaphor develops abstract understanding. In this later work, rather than focusing exclusively on linguistic examples to explain this metaphorical transfer, Johnson delves into the world of embodied physical movement to illustrate his theory. Essentially, through examining the ways we are physical beings in the world and within our bodies, Johnson is able to link that somatic, visceral understanding to more abstract, conceptual understandings.

For example, one schema that Johnson cites is that of the experience of containment, or being “in” or “out” of something. We understand, based on our experience in the world, that we are in our bodies, and that our bodies can be in clothing and in a room. Bodies, clothes and rooms can all be considered containers that enclose objects. Likewise, we understand that when we exit a room (i.e. a container) we are no longer in the room but out of it. From an understanding of this in–out schema it is possible to grasp the implications of this concept; that containers offer protection, that containers restrain that which they

envelope, that the container produces a fixed location, that whatever is in a container is also in the larger container that holds both objects (i.e. multiple objects in a room are all within the same container), etc. (Johnson, 1987, p. 22). While these kinds of deductions may seem obvious, that is only because we instinctively draw such conclusions without much thought— they are natural progressions of understanding. However, following Johnson’s breakdowns of these schemata it is possible to become aware of the origins of these assumptions, which are based in our physical and somatic experience of the world. For Johnson, these schemata, these “recurrent pattern, shape and regularity in, or of, these ongoing ordering activities” are necessary for meaningful experience because they “emerge as meaningful structures for us chiefly at the level of our bodily movements through space, our manipulation of objects, and our perceptual interactions” (1987, p. 29).

Pulling this into the musical domain, I would argue that the physical, somatic experience of the performer being within a body as he or she creates musical sounds provides a conceptual understanding of the music. Musical interpretations are founded on this embodied experience and transferred to the receiver through the act of performance. Therefore, there is an innate connection between how our bodies understand music at an embodied level, and how we then understand music on an intellectual level.⁴⁹

This connection has been highly undervalued by perspectives that, as Johnson argues, “mistakenly assume that embodied, imaginative understanding does not have the universal, public character necessary to yield objective meaning” (1987, p. 173). What I

⁴⁹ Steve Larson describes this connection in a slightly different way, citing the aspects of ‘force’ that we experience in our lives as directly related to the musical forces we used to describe and understand music. Larson’s three main descriptions of musical force include “musical gravity,” “musical inertia” and “musical magnetism.” This metaphorical understanding musical forces is described as being “central to, explanatory for, and constitutive both our discourse about music and our experience of music” (Larson & VanHandel, *Measuring Musical Forces*, 2005, p. 119).

take Johnson to mean here is that the individuality of our embodied experiences has prevented embodiment studies from being considered credible material for an investigation of understanding and meaning. The correlation between embodiment and intellectual understanding appears too simple and too personal to have value.⁵⁰ However, while it would be incorrect to argue that embodied experience is universal, Johnson makes a case for a similarity in the *way* we create meaning: “[t]hese embodied and imaginative structures of meaning [image schemata and their metaphorical projections] have been shown to be shared, public and “objective,” in an appropriate sense of objectivity” (1992, p. 174). Although developing from a different perspective, ecological perceptual theory also purports a shared sense of meaning throughout different experiences, exemplified by the concept of invariants within an environment. The concept of kinesthetic empathy that was discussed in Chapter 3 makes yet another case for a shared understanding of embodied experiences.

Directing the discussion back to *Sequenza III*, I do not believe that every performer or every listener would apprehend the same understanding of the piece and subsequently glean the same meanings of the piece. The aim of this thesis is not to export a universalization of a musical experience but rather to illustrate how embodiment is an integral component of musical understanding and that the universal nature of embodiment allows for a thread of similarity throughout all musical experiences. I believe Johnson’s work also demonstrates the inextricability of our embodiment from any aspect of the

⁵⁰ I believe another difficulty with this topic is that our embodied experiences occur so naturally and so organically that we are unaware how such experiences contribute to our apprehension of meaning. Our embodiment is, in a sense, hidden from us. Shaun Gallagher notes the distinction between conscious and marginal awareness of the body, and how it is usually the latter that predominates: “[m]ost of the time . . . our attention is directed away from the body and towards the environment or project we are taking on” (1995, p. 229).

human experience, a viewpoint which is clear when he states that “any adequate account of meaning and rationality must give a central place to embodied and imaginative structures of understanding by which we grasp our world” (1987, p. xiii). It is my belief, therefore, that within any discussion of musical understanding or musical meaning it is imperative to consider the significance of the impact of our embodied nature.

Mark Johnson’s 5-Prong Conception of the Body

The second aspect of Johnson’s work that I would like to touch upon here is what I have termed a “five-pronged” viewpoint of the body as he outlines in *The Meaning of the Body* (2007). As has been mentioned previously, it is not possible to grasp the significance of human embodiment with only a one-dimensional perspective on the body, i.e. a perspective that considers the body to be merely a physical object. Johnson’s description of the body is the most holistic and all encompassing definition that I have come across and I find it to be the most comprehensive description that touches upon all possible facets of the body.⁵¹ Johnson’s conception of the body includes:

1. ***The body as biological organism:*** This is essentially the body as it is considered in mainstream culture— a physical entity that is capable of physiological processes, movements and the transformation of its environment. The biological body is what allows for feeling and emotion and perception, in part due to a functioning brain and central nervous system.
2. ***The ecological body:*** This facet of the body refers to the important connection between organism and environment and is concerned with how these two units influence and shape each other. The flow between organism and environment is incredibly important in defining our perception of our worlds. Johnson notes how it is important here not to separate the body and environment into two separate objects as is commonly done with mind and body but rather to consider both as “one continuous process” neither of which has a pre-existing structure or identity (Johnson, 2007, p. 276).

⁵¹ In this thesis, I have only really explored two of the five possible facets as described by Johnson, the phenomenological body and the ecological body. While the other three facets are undoubtedly important, they were beyond consideration for the scope of this thesis.

3. ***The phenomenological body***: This facet describes what it is like to live in and experience our bodies from an embodied perspective; the way it feels to breathe and move and exist within the world. This component of our bodies is concerned with consciousness or our sense of “being-in-the-world” (Heidegger, 1962).
4. ***The social body***: The body that is created and affected by our intersubjective communicative relations (Williams & Bendelow, 1998). While Johnson does not mention Foucault’s notion of the body, I would situate Foucault’s ideas here as someone who considers the social relations of the world to construct and control bodies. This facet of the body would also encompass Burkitt’s (1999) notion that small-scale social relations between individuals also contribute to a certain understanding of the body.
5. ***The cultural body***: There are certain cultural understandings that shape both personal and external perspectives on our bodies. According to Johnson, these include “cultural dimensions include gender, race, class (socioeconomic status), aesthetic values, and various modes of bodily posture and movement.⁵² These aspects of our lives come to inform our bodily states and understanding. As Clarke notes, culture eventually becomes a point of inseparable intersection with nature and thus both components heavily influence our perception of our bodies (2005, p. 39-41).

I outline these facets here not to provoke intense consideration of each conceptualization of the body, but rather to make the reader aware of the multi-faceted perspective of the body that has started to emerge in contemporary thought. Other than Johnson’s outline, I have yet to encounter any literature that attempts to discuss all five facets simultaneously, however research has been undertaken on each individual component.⁵³ Nevertheless, even as the body and studies of embodiment have gained prominence within philosophical literature it is still not a topic that is widely understood.

⁵² Although her work was not discussed in this thesis, Judith Butler’s ideas of gender being performative would fit within this facet of bodily understanding. Butler maintains that one’s gender is not a reflection of an innate inner essence but rather is “performed” by each individual in conjunction with cultural normative practices. From this perspective gender is something that is within control of the individual and is decided upon by movements and stylization of the body. For more information see *Gender Trouble* (New York: Routledge, 1999) and “Performative Acts and Gender Constitution: An Essay in phenomenology and feminist theory” in *The Feminism and Visual Culture Reader*, 2nd edition. (Ed. Amelia Jones). (New York: Routledge, 2010): 482- 492.

⁵³ For research on the biological body see Gray (2008); for the ecological body see Lee (1993); for the phenomenological body see Sheets-Johnstone (2011), Gallagher (1995, 2005); for the social body see Foucault (1995, 2003), Turner (1984, 2000, 2012) and Noland (2009); for the cultural body see Williams & Bendelow (1998), Crossley (2001) and Thomas & Ahmed (2004).

If we consider these facets of the body in terms of musical implications it is possible to understand how the embodiment of a performer contributes to their musical interpretations since it includes physiological, environmental, phenomenological, cultural and social aspects of the performer's life. Although it may not occur at a conscious level, all elements of a musical interpretation can be attributed to a performer's previous and current lived embodied experience. Examining such embodied experiences as a paradigm of study of the musical performance process is therefore an essential component for developing a deeper understanding of how we connect and relate to music and the musical experience.

Body Communication Theory

With the theoretical basis for this chapter in place, the discussion will now move into the analytical section. This third and final analysis of *Sequenza III* seeks to explore how the somatic experience of the performer can be inferred from an auditory standpoint. Combining work by Jane Davidson, Paul Ekman and Wallace Friesen and Fernando Poyatos, the body communication analysis to follow will discern how the physical movements of the body directly influence the voice of the singer.

Jane Davidson

Jane Davidson is a multidisciplinary music researcher and performer who has examined the importance of the bodies and lived experiences of musical performers. Of particular interest to this thesis is her groundbreaking work studying the body movements of performers and visual communication aspects of performance. Davidson's work in this area has helped develop an appreciation for the physical movements of performers and a theory of how such movements convey communicative material to an audience. In one

study of a pianist (Davidson, 1994), Davidson pinpoints the areas of the performer's body that hold the primary communicative elements and deduces how such information is conveyed to an audience. Additionally, in a study of a group of solo pianists (Davidson, 1993), Davidson demonstrates the importance of gesture and movement in performance by showing that the performer's emotional intent was most easily perceived by the observer through the visual medium, even in comparison to the auditory or an audio-visual combination. The pianists were asked to play the same piece three separate times with three different emotional intents and the study participants viewed each of these performances with the visual only, the audio only and visual/audio combination. The participants gleaned the most expressive information from watching the performance with only the visual stimulus.

Paul Ekman and Wallace Friesen

I will adapt Davidson's work in order for it to be used within the auditory domain. Since all of Davidson's research within this area has been conducted with visual stimuli, there are some difficulties when transferring her exact methodology into an aural analysis. Davidson has frequently classified the body movements of performers using categories of non-verbal behavior by Paul Ekman and Wallace V. Friesen (Davidson 2001, 2005, 2006). Based on eight years of research, including two cross-cultural studies, Ekman and Friesen compiled revolutionary research paper dissecting non-verbal behaviors (1969). Their research categorizes the myriad of body movements displayed by humans and discusses the origins, usage and coding (classifying) of all of these types of movements. This research helps us to better understand the usage of certain movements, and whether they support or subvert aspects of verbal communication.

For this final portion of my analysis I will be enlisting Davidson's conception of the performer's body as a communicative vessel and her usage of Ekman and Friesen's terminology as a system of classification while restricting the discussion to the auditory realm. Continuing with the musical essences and the comparative analysis as exhibited in Chapter 3, I will perform a final listening analysis of each recorded performance of *Sequenza III* in order to decipher how we hear communicative potential in the voice. That is, Ekman and Friesen's categories of non-verbal behavior will become the method for classifying similar attributes in the voice of each singer, attributes which I believe are a direct result of the somatic experience of each singer. The objective of this portion of the analysis is to examine how the performer's body directly contributes to vocal communication.

I will be using the following categories from Ekman and Friesen's coding of non-verbal behavior: *adaptive*, *regulatory*, *emblematic*, and *illustrative*. Their fifth category (affect display) generally refers to facial expression and as such does not fit within this analysis. However, in lieu of that category I will be enlisting Davidson's description of *display* gestures (Davidson, 2001), which she describes as overt gestures employed for the purpose of "showing off" to the audience. In an adaptation of these terms for the aural realm, I will therefore be asking how, in the vocal expression of each singer, the voice is heard as being emblematic, adaptive, displaying, illustrative and/or regulatory.

Fernando Poyatos

In order to move these delineations of non-verbal behavior categories into the aural realm I will also enlist definitions of vocal behavior from Fernando Poyatos' (1993) discussion of paralanguage, or nonverbal vocal communication. The exploration of

paralanguage is especially relevant to the analysis of *Sequenza III* as the piece does not contain many obvious communicative elements (i.e. it only displays a handful of words or phrases), but is rather based on many paralinguistic gestures.

The following discussion provides the original meaning of Ekman and Friesen's categories, followed by a description of how they will be adapted to fit within the aural realm using vocabulary from Poyatos. It is important for the reader to note that these adaptations of non-verbal gesture categories may not align with complete congruity to categories of verbal utterance owing to the visual nature of some connections. However, the essence of each non-verbal category has been captured in the transfer and with each category there are many salient features that connect each system of categorization.

Method for Auditory Analysis of Nonverbal Behaviors

Oral communication cannot help but be influenced by the way that each person experiences his or her own embodiment, since any and all oral communication (speaking, singing or other sounds) is created, constrained and delivered through and with the physical body. Therefore, any physical gestures that create our body communication in the visual realm (such as emblematic gestures or adaptive gestures) may also be "heard" within the voice and can act as signals or clues for the listener, providing insight into the performer's embodied experience. The performer's embodied experience is a part of performance creation that is deemed inaccessible since we cannot get inside of the performer's body or mind as he or she prepares a work for performance. However, I am arguing here that if we develop our understanding of the singer's embodied performance experience, we will be more tuned into the concerns related to that embodied expression, and consequently we will be able, as listeners, to gain some level of understanding of the

process of embodied performance. I believe that the performer's embodied experience can then be accessed by the musical receiver and can expand and deepen his or her musical understanding. I also feel that as a classical singer I have the background knowledge to offer a very educated speculation as to what each singer is experiencing in order to articulate to the reader some specifics on the performer's embodiment.

The sections of music in the following analysis were the twelve essential moments that were also utilized in Chapter 3 and the discussion of subject-position. Their original genesis is from Chapter 2, during the phenomenological analysis of the piece, when they were discerned as being essential moments of *Sequenza III*. I feel that maintaining continuity through the thesis with these moments that had been discussed as being essential to the intrinsic meaning of the music is a way of connecting the many disparate theoretical viewpoints that pervade this thesis. Additionally, by continually examining the same musical moments it is possible to understand the ways in which different theoretical lenses can alter the interpretation of the same musical characteristics.

Conversion of Body Communication Descriptors

i) Adaptive- Non-verbal

Adaptors are the most complex category of non-verbal behavior.⁵⁴ Adaptors are usually movements that are performed unconsciously and that have been learned over time as movements which help to satisfy our needs. These might have been movements learned in childhood that, at the time, served a specific purpose. However, as one grows into adulthood the movement becomes fragmented and disconnected from its original purpose.⁵⁵ The action is still soothing and comforting to perform into adulthood. These fragmentations, however, make adaptors especially difficult to identify and understand.

⁵⁴ In later writings, Ekman changed this term from "adaptors" to "body manipulators." However, for the sake of consistency I will be using the initial descriptive term.

⁵⁵ Ekman and Friesen (1969) differentiated between three distinct types of adaptors: self-adaptors, object-adaptors and alter-adaptors. These referred to adaptive gestures that were either performed on the self (such as touching the face), performed with or on an object (such as clicking a pen repeatedly) or gestures that stem from early attempts at interpersonal communication that connect us to our 'fight or flight' response

Adaptive- Auditory

This category of non-verbal behavior is the least adaptable to an auditory consideration. However, due to the fact that these movements are learned by repetition and ingrained into one's movement vocabulary by habit, I have aligned the category with Poyatos' description of *Primary Qualities* of the voice. These refer to the common, consistent and recognizable characteristics of one's voice; the "timbre, resonance, loudness, tempo, pitch (including pitch level, range, registers, and intervals), intonation range, syllabic duration, and rhythm" (1993, p. 175). While these qualities may be altered in the singing voice, there are always certain primary qualities that are evident in the voice of each individual singer. Therefore, adaptors will refer to these unique and consistent vocal traits, which are constitutive of each singer's natural voice. The notion of one's "natural voice" is slightly problematic, since what constitutes the natural voice is difficult to define and may also change over time. Undoubtedly, the speaking and singing voice change over time and are influenced by age, context and training. However, there resides in each voice a natural core and timbre that is developed from a specific physiology and cultural context. It is how we are able to identify certain speakers or singers upon hearing them; there is an inherent vocal quality that contributes to the individuality of every voice.⁵⁶ I believe it is important to acknowledge the natural voice as a starting point for analysis, as it acts as a baseline for comparing any manipulated, unnatural vocal effects.

With regard to *Sequenza III*, the term adaptive will denote aspects of the performances in which we are hearing the singer (Berberian, Castellani or Schadeberg) instead of a narrative portrayal of a character. Each singer has habitual vocal techniques that come into play as they present an emotional narrative or attempt to convey an emotional text. The singer's natural voice is affected by the training they acquire, that is, even a trained classical voice may be considered a "natural voice." The existence of the natural voice is therefore context and culturally dependent. An understanding of what comprises the natural voice for a particular singer is only acquired through frequent and consistent listening to the voice. Recognizing someone's natural voice is therefore a learned behavior. The term adaptive will be used to denote moments of singing when the inherent, undistorted, natural vocal qualities of each singer are heard. These natural qualities are usually present regardless of the music or character they are performing and these vocal traits are what will be considered the aural equivalent of adaptors.

ii) Regulatory- Non-verbal

These gestures are actions that regulate conversational flow, pace and exchange, but carry no expressive information in themselves. They are used to keep communication consistent, clear and on track. Davidson considers regulatory gestures to be an essential element of co-performer communication, such as a strong nod on a downbeat by performers in order to "line up" the metrical beat of a song.

(such as restless movement of the limbs). However, this level of detail is not necessary here and as such only the overarching definition of adaptors is needed to identify a similar function in the auditory realm of the singer.

⁵⁶ Poyatos describes five factors that contribute to the primary qualities of a voice: biological, physiological, psychological, sociocultural and occupational (1993, p. 176).

Regulatory- Auditory

Since *Sequenza III* only has one performer, regulatory gestures for vocal purposes will be adapted to refer to the components of singing which help create and control the act of producing sound, that is, the ‘mechanics of singing.’ These are the basic physical actions of the body required for sound production or how the body needs to respond to produce the vocal gestures in the score.

iii) Emblematic- Non-verbal

Emblematic gestures are impersonal, culturally shared gestures. They maintain a shared cultural meaning that requires no explanation within a cultural demographic. Unlike adaptive gestures, which are learned over time as a method of personal self-soothing, emblems are learned through continued exposure to culturally and socially accepted gestures. Possible examples of emblematic gestures might include a thumbs-up or a peace sign with the index and middle fingers. Emblems are usually consciously communicated and may or may not resemble the meaning of what they are depicting.

Emblematic- Auditory

In describing emblematic gestures for an aural realm, I will enlist Poyatos’ description of *differentiators*, which are “quasilexical messages” that “characterize and differentiate . . . physiological reactions (many of a reflex nature) as well as psychological states and emotional reactions” (Poyatos, 1993, p. 245). Differentiators include sounds such as laughing, crying, gasping, burping, screaming, whispering, etc.; gestures that are event based and, as Poyatos notes, are either due to physical or emotion origins. These sounds generally have shared cultural understandings of their connotations and thus are reminiscent of emblematic gestures that also share certain cultural meanings. For example, crying at a funeral is an emotional differentiator associated with the act of mourning; it is a communicative sound that does not include verbal language.

iv) Illustrative- Non-verbal

Illustrative gestures⁵⁷ are socially learned and maintain an external focus. They are concerned with character or narrative portrayal that aligns with the verbal message being expressed and as such, are directly tied to speech.

Illustrative- Auditory

In application to vocal gestures this category will represent vocal qualities that present a mood or a narrative; qualities that are engaged in order to express the drama of the singer’s narrative but are not necessarily intrinsic to vocal production or the singer’s natural voice. These are defined by Poyatos as *Vocal Qualifiers* and possible examples would

⁵⁷ Ekman and Friesen separated illustrators into six different categories based on terms by Efron (1941). This minute distinction is not necessary for our purposes here and as such has not been included.

include the presence of a 'breathy' tone or a 'harsh' voice quality. These qualifiers have a complex origin that is comprised of biological, physiological, emotional, but most of all sociocultural factors, since we perceive and evaluate sounds based on social norms and understandings (Poyatos 1993, p. 199).

v) Display- Non-verbal

Display gestures (from Davidson, 2001) are gestures performed solely for purposes of audience display or "showing off" and thus directly influencing audience but which are not connected to narrative. Examples might include a dramatic pause before starting to sing or a waving gesture to the crowd.

Display- Auditory

In terms of adapting this term to fit vocal gestures, it will refer to the dramatic elements of the music which push the extremes of musical and vocal components such as volume, speed, range and articulation. These musical elements can contain a degree of virtuosity when pushed to either extreme and as such the degree to which these extremes are 'displayed' to the listener will constitute this category.⁵⁸

⁵⁸ As was previously noted, Ekman and Friesen have a category titled 'affect displays' that refers almost exclusively to communication of facial gestures and expressions. This category was excluded from the discussion here due to a lack of visual information and replaced with the category 'display' from Davidson (2001). Davidson's description is not meant to be confused with that of Ekman and Friesen.

Table 4- Analysis

Essences	Berberian	Castellani	Schadeberg
Objects			
Time [04:22- 05:20]	Display/Emblematic	Display/ Emblematic	Illustrative /Emblematic
Space [05:00- 05:15]	Emblematic	Display	Illustrative
Gesture [01:00- 01:10]	Illustrative	Emblematic	Emblematic
Emotion [01:48- 02:40]	Adaptive	Adaptive/ Illustrative	Illustrative
Places			
Time [00:20-00:27]	Adaptive	Illustrative	Emblematic- pinched, tight sound= tension
Space [02:30- 02:40]	Illustrative	Display	Adaptive
Gesture [03:38]	X	X	Illustrative- b/c of gesture before pause
Emotion [03:48- 04:00]	Adaptive	Adaptive	Illustrative
Modes			
Time [05:40- 06:09]	Adaptive	Adaptive	Illustrative
Space [06:50- 07:30]	Emblematic	Illustrative	Display/ Illustrative
Gesture [04:20-04:50]	Display	Emblematic	Emblematic
Emotion [07:30- 08:20]	Illustrative	Display/ Illustrative	Adaptive/ Illustrative

Discussion of Body Communication Analysis

The above Table 4 was compiled through a dedicated listening to each of the twelve essential musical moments listed in the left-hand column.

The analytic results in the table were sometimes achieved effortlessly and sometimes required a greater effort to decide on the overall sense of each vocal gesture. Occasionally, it was not sufficient to choose only one of the descriptions of nonverbal behavior in order to describe the musical moment, in which case two terms were used.⁵⁹ In these cases, the presentation of the vocal gesture in terms of the five categories outlined above was either ambiguous or evenly split between two categories.

This analysis required the consideration of multiple aspects of the vocal presentation. For each section of the recording listed in the first column of the above table, I considered the following list of expressive devices: the vocal quality, the dynamics, the speed of the vocal gestures, the articulation, the vocal intensity, the pitch and the vocal range. These devices denote certain parameters of expression that communicate expressive and narrative information to the listener. I considered each parameter and then reflected on the weight granted to each parameter in a specific section. In each given passage, the most prominently exhibited parameter of expression dictated the subsequent body communication descriptor allotted to that section. Frequently, more than one parameter would contribute to the body communication descriptor. For example, *display* gestures were normally described as such because of an acute awareness of the speed, vocal range and dynamic range present in a section. Conversely, aspects of the vocal quality, such as

⁵⁹ See [04:22- 05:20] for all three singers, [01:48- 02:40] for Castellani, [06:50- 07:30] for Schadeberg and [07:30- 08:20] for Castellani and Schadeberg.

huskiness or nasality, frequently were associated with an *illustrative* description, since those parameters prominently exhibited emotional or narrative aspects of the music.

It is apparent that both the musical materials and each singer's presentation of the materials implicated the body communication descriptors used for this analysis. The reader may recall a connection to the second level of subject-position presented in Chapter 3; an orienting of the listening that includes both the characteristics of the music as well as the performer's embodied experience of the music. It is therefore not possible to consider this analysis as being constructed solely on the performer's embodied experience of the music, as there are always multiple factors at work in a musical performance. However, by attaching descriptors to depict how we "hear" the body in the voice, an explicit connection to the physicality of the singer can be made.

It is interesting to note that none of the twelve essential moments were labeled as *regulatory* gestures. This is not altogether surprising when we consider that Davidson termed regulatory gestures (in the visual sense) as those used primarily for co-performer communicative purposes.⁶⁰ Since *Sequenza III* has only one voice and no accompaniment, there is technically no need for the singer to regulate herself as one might in a musical dialogue.

The value of analyzing the vocal gestures at this moment-by-moment level is that it provides a basis for comparison between singers and the connections between their presentation of the music and their physicality. From these descriptions we can examine the overall narrative of each singer (by looking at the columns of the chart), specific

⁶⁰ Examples of regulatory gestures in the visual sense might include eye contact or nodding on a downbeat in order to ensure consistency of tempo.

moments in time for each singer (by looking at specific boxes) or compare the effect created by each singer within a certain gesture (by looking at the rows of the chart).

Cathy Berberian

Cathy Berberian's rendition of the piece appears to be fairly even across all categories of verbal communication, with only a slight emphasis on *adaptive* gestures (that is, on a presentation of the *primary qualities* of her voice). The *adaptive* gestures describe points within the music when Berberian's unique and personal vocal quality comes through to the listener and is not masked by any vocal effects (*illustrative* gestures) or overshadowed by huge displays of virtuosity (*display* gestures). To demonstrate how these terms came to be applied to certain moments I will choose two examples that I have identified as definitively connected to specific nonverbal categories.

To illustrate my analysis of *adaptive* gestures, we will consider the long humming gesture at 00:20-00:27. During this gesture, Berberian's voice is clearly produced with no extra effects or unnatural vocal qualities. The vibrato is produced evenly and the vocal quality remains consistent throughout the gesture. This level of consistency in the sound indicates that Berberian is not placing any special vocal effects on her voice (such as nasality, breathiness, huskiness, etc.) and is instead allowing the listener to experience the authentic primary qualities of her voice. Subsequently, this quality of sound is identified by the listener as "Cathy's voice" and becomes the reference point for comparing vocal effects during the remainder of the piece.

The few moments of *illustrative* gestures are clearly evident at 01:00- 01:10 during which Berberian's voice moves rapidly from a high pitched, compressed frantic sound, to a throaty, covered sound, to a low guttural sound, none of which convey the true timbre of

Berberian's unique instrument. These gestures appear to be telling the narrative, the story of the music; during these moments we lose the core of Berberian's voice and instead are confronted with the immediacy of an unnatural vocal sound. It is obvious that these *illustrative* moments are meant to convey specific information to the listener rather than to demonstrate the innate qualities of Berberian's voice. Many of these *illustrative* gestures were described as such in contrast to the *adaptive* gestures that denoted Berberian's natural voice. That is, when the vocal quality or vocal delivery abruptly changed from the previously heard *adaptive* gestures, it was clear that the sound was as such being altered for a desired effect.

This piece is frequently described as being 'virtuosic' and therefore it comes as no surprise that there are moments of *display* gestures in Berberian's interpretation. The *display* gestures were described as such because they are extremely obvious virtuosic presentations. These gestures (such as the laughing and arpeggiated gesture's between 04:20-04:50) contain sharply contrasting vocal gestures that involve a wide vocal range and extremely fast utterances. For example, from 04:37- 04:42 the singer moves through a series of tongue clicks, coughs, high legato singing and low muttering all within a matter of seconds. The heightened level of physicality required for the singer to create these sounds requires multiple rapid shifts in body states and as such may be described as virtuosic.

Occasionally, as with the juxtaposition of gasping, laughing and muttering gestures between 04:22- 05:20, I felt compelled to describe the gestures as both *display* and *emblematic* since the gestures were both virtuosic and appeared to denote certain shared cultural meanings (i.e. the coughing gesture appeared as the shared cultural emblem of clearing one's throat, and the gasping gestures indicated the notion of "gasping in fear"). In

these moments, the singer's body is intended towards displays of vocal virtuosity while also insinuating meaning behind certain emblematic sounds. At other times, there are moments of *display* (such as at 04:20-04:50), when the sound of the voice moving through rapidly changing musical gestures that the vocal quality of the singer is superfluous to the virtuosity of the gestures.

Luisa Castellani

In contrast to Berberian's version, Castellani appears to favor *illustrative* and *display* gestures in her interpretation of *Sequenza III*. This is apparent even on a superficial listening of her rendition; her vocal virtuosity is frequently on display, and she predominantly chooses to morph her voice into unnatural sounds (or what Poyatos would call vocal qualifiers) for expressive purposes. Even if the exact narrative might not be clear to the listener, it is obvious that Castellani is experiencing something monumental throughout this piece. Frequently employing vocal qualifiers such as nasal singing, throaty singing and breathy singing, Castellani manages to communicate a narrative that becomes the predominant focus of the piece. One example of these unnatural sounds would be the throaty, nasal sound she makes during the whining gesture at 04:55. This is an obvious moment of Castellani influencing her voice in order to produce a certain effect. It is then up to listener to interpret what that effect implies. In Castellani's version, the blatant distinctions in her vocal qualities are so prominent that the strange utterances she is making become almost perfunctory. This is in stark contrast to Berberian's version in which the vocal utterances appear to be the main focus of the work. We are also offered more frequent opportunities, as listeners, to hear the true quality of Berberian's voice while in Castellani's version such natural qualities are more difficult to discern.

The speed at which Castellani performs the muttering gestures (such as at 05:00-05:15) and the extensive use of her full vocal range are the most common contributors to the *display* gestures. The ability to articulate a vocal gesture with such speed and precision requires intense control over the articulatory mechanism, a skill that not all singers possess. Castellani's apparent ease with the speed of these gestures, as well as the wideness of the vocal range in this section (which moves from low to high very quickly), is what makes this section virtuosic and therefore categorized as a *display* gesture.

Christine Schadeberg

Schadeberg's version, based on a reading of these essential moments, is mostly *illustrative*. Her version seems very focused on communicating a narrative through the piece; vocal gestures are rarely sung without a very obvious kind of emotion implication behind them. It appears not as an exploration of vocal sounds, but rather an exploration of the experience of a character. Many of the musical moments were described as *illustrative* during this analysis due to the high level of contrast in the music. While the other singers also explored contrast in the vocal *quality* that they presented, Schadeberg's version maintains the highest level of *musical* contrast, that is, contrast in dynamics, speed, rhythmical placement, and pacing. This high level of contrast leads the listener to believe that there is a very prominent narrative storyline being presented within the music, which is contributing to these extremes in dynamics and speed.

Schadeberg also strays the furthest from the notated score in terms of the timing of her gestures; she frequently elongates the length of the gestures or the pauses between gestures much more than what is indicated. These pauses and moments of silence contribute especially to the overall feeling of an *illustrative* performance. Instead of always

presenting the listener with information (as we see in Berberian's version which is almost constant singing), Schadeberg presents moments of silence, which allow the listener to create a scenario of what occurs within those pauses. By providing the listener with time to reflect on the music they are hearing, Schadeberg invites the audience into her narrative and provides moments for the listener to speculate on the happenings that are creating or influencing the music. It is interesting to note that Schadeberg was the only singer of the three to whom I assigned a description for the pause at [03:38]. In the renditions of the other two singers, this pause seemed like an ordinary rest, without much meaning or significance. For Schadeberg however, this moment was ascribed the description *illustrative* as it appeared as a significant gesture which coloured the meaning of the preceding and proceeding vocalized gestures.

The Singer's Experience of Embodiment and the Influence on Subject-Position

I would now like to briefly compare all three performances and the main descriptions that were attached to them in order to theorize on what the embodied experience of each singer might have been. The purpose of this research was not to obtain ethnographic evidence of each individual singer's embodied experience. However, it is possible to theorize on the embodied experience of the singer based on the sound produced in performance. This conjecture is based on the assumption that all humans are fundamentally connected through the shared experience of embodiment and therefore it is possible to empathize with the embodied experience of another. The preceding body communication analysis allows us to pinpoint the ways in which it is conceivable to *hear* the body of the performer within the vocal sound of each singer. In this discussion I will also connect the body communication description from the analysis in this chapter to the

results of the subject-position analysis from Chapter 3. I hope this will demonstrate the connection between an embodied experience and a musical interpretation.

Berberian's rendition of *Sequenza III* was described as primarily *adaptive* in nature, Castellani's version was described equally by *illustrative* and *display* gestures, and Schadeberg's performance was undoubtedly *illustrative*. Even now we are aware of the individuality of each performance, individuality that I believe stems from the unique somatic experience of each singer as they create the music. For Berberian, the prevalence of *adaptive* vocal gestures, which present the distinct quality of the singer's voice, indicates that Berberian was maintaining a constant technical approach to many musical passages, simply allowing her instrument to function naturally. In order to create other vocal effects (such as breathiness, graininess, or a glottal or pinched sound) she would have had to alter her physicality in some way to affect the vocal sound. The quality of the vocal gesture indicates that she remained physically calm and neutral during this moment, and as such the gesture was described as *adaptive*. From this we can assume that Berberian's embodied experience for much of the piece would have been equivalent to that of a singer singing traditional *bel canto* repertoire; her torso would have remained long and open, her breath would have moved freely through her body, and she would have balanced the tension in her articulatory mechanisms in order to not interfere with the sound.

Berberian's somatic experience at these moments heavily influences the subject position. I described the section 03:48- 04:00 as adaptive, since it is possible to hear the core of Berberian's voice, unaffected by manipulation. However, the term adaptive (that is, the common, consistent and recognizable characteristics in a voice) is not meant to be equivalent to the notion of ordinary or emotionless. In Chapter 3, I described the subject-

position of this section as building with intensity. Berberian builds this intensity not by adding strange, “un-vocal” effects such as nasality, breathiness or glottal fry, but rather through a focusing of her vocal tone. Her vocal quality becomes clearer, more concentrated and slightly louder as the intensity of the line builds.

In contrast, Schadeberg’s experience would have been quite different. Her version includes many “unnatural” vocal effects in order to communicate the narrative of the music. This indicates to the listener that the singer’s body during this performance is not necessarily used to facilitate proper technique (i.e. an open, straight torso with deep breaths, etc.), but is rather focused on the emotional experience of the work’s character. An example of this can be heard at 00:20- 00:27 with a humming gesture that I would describe as *emblematic*. The sound is pinched, high and tight, which specifies the presence of a constricted vocal tract. I would surmise that this constriction is an example of the singer’s body intending itself towards not only the creation of a humming sound (which requires a certain amount of body constriction to begin with) but also intending towards the desired narrative. It is possible to imagine the protagonist in this piece undergoing an experience at this moment that creates a sense of nervousness or fear and thus contributes to this tense feeling.

Returning to the notion of subject-position that was discussed in Chapter 3, we can see how the tight sound in the voice orients the listener in a certain way, in this case towards assuming that this is a moment of fear or insecurity for the singer. The listener hears this because of a bodily experience (i.e. a restricted vocal tract) but also because the singer herself is simultaneously having a similar somatic experience. I believe that at this moment Schadeberg’s somatic experience is intrinsically connected to her character’s

narrative. From this I would also hypothesize that the overall somatic experience for Schadeberg rests on these moments of “unnatural” or tense singing as well as moments of more traditional sound production. This constant switching between somatic states for the singer (from tension to relaxation) would also inform her interpretation of the piece, and may explain some of the more intensely emotional sections of Schadeberg’s performance.

Castellani’s performance of the piece and subsequent embodied experience appears to fall in between the previous two versions. Her version was described as employing both *illustrative* and *display* gestures, meaning that it appeared to alternate being a narrative focus and virtuosic vocal displays. At different moments, the narrative story she appears to be portraying and the sheer virtuosity of the vocal sound each take prominence. Castellani seems to favor frequent manipulations of vocal quality, alternating nasal, breathy, tight, and guttural sounds as methods of communication. This manipulation (aside from the breathiness in the voice) appears to be done mainly with external components of the vocal mechanism (i.e. the throat, tongue and jaw) rather than with internal components of the mechanism such as control of the airflow. This leads to the assumption that Castellani’s somatic experience involves the maneuvering of these different mechanisms, perhaps producing a less grounded embodied experience of the piece. Rather than fully engaging with her natural voice, as is seen in Berberian’s version, Castellani maintains a focus on the articulatory components in order to create her performance.

The shift between illustrative and display gestures clearly affects the subject-position of Castellani’s performance. From 06:50- 07:30 she sings a wide range of vocal gestures, exploring all areas of her vocal range and employing multiple levels of intensity. The emotional states she evokes in this passage are numerous, which create, for the listener,

a sense of neurotic, frantic energy. In Chapter 3 I described the subject-position for this section of Castellani's recording as displaying sudden shifts; the intensity of the vocal gestures is prominent in the first half of this section and then suddenly shifts to a lower intensity, which specifies a feeling of secrecy. The dichotomy in Castellani's embodied experience in producing the vocal gestures directly influences the subject-position.

Conclusion

The foregoing analysis explored the connection between the physical body of the singer and her vocal sound. By describing attributes of each singer's voice in terms normally reserved for visual bodily communication, a direct link between the somatic, embodied experience of the singer and the music was provided. The methodology for this body communication analysis was based in the visual communication work of Jane Davidson, Paul Ekman and Wallace Friesen, with input from Poyatos' work on paralinguistic vocabulary. The theoretical basis for this analysis came from Mark Johnson's work on embodiment and the creation of meaning, and the notion that all meaning arises from the embodied way that we experience the world.

I believe that the specific results of the analysis are of less importance than the general acknowledgement that the corporeality of the singer has a great deal more to offer to musical meaning than has previously been thought. Paul Atkinson elucidates this idea when he states:

Each singer has his or her own idiolect of gesture. Each body provides a unique repertoire of physical competences and possibilities. Just as each singer brings a unique voice to the part, so she or he brings a unique body too. The body is simultaneously a set of resources and a set of constraints over

what expressive gestures and practical actions can be accomplished (2006, p. 104).

Singers produce vocal sounds that are directly correlated to their bodies and to their embodied experience of their bodies. This connection is one of the most significant and most influential aspects involved in creating musical meaning, however, it is a connection that has not received adequate acknowledgement in literature on music performance. The reasons for this oversight may be because the connection is viewed as being subjective, individual or unimportant. I believe a more likely answer to the lack of music embodiment research is that we have yet to truly recognize the prominent role that the body plays in our apprehension and creation of meaning. The body in many ways operates below the level of conscious understanding and tapping into such automatic processes can be challenging. Regardless, I contend that it is worth exploring how we experience our embodiment with regards to music performance as this can bring exciting and new insights into both traditional and contemporary music.

Conclusion

This thesis has examined the singer's embodied musical performance from a variety of perspectives. The breadth of research that has been conducted on the body was presented in Chapter 1 in order to demonstrate how the notion of embodiment stretches across multiple disciplines. It is important to acknowledge that the body is a multifaceted entity, as this adds a deeper level of understanding to the possible implications of embodiment research within different disciplines. Chapter 2 was situated on Husserl and Merleau-Ponty's philosophies of phenomenology and provided a phenomenological analytic process that articulated the lived experience of a listening analysis of *Sequenza III*. The objective of this analysis was to unearth the essential moments that are constituted in a listening experience of the piece, to provide "data" which could then be further examined in direct connection to the development of an embodied performance. Phenomenology is a method that prevents analysis from becoming cluttered with assumptions, predictions or expectations, and allows the material (in this case the music) to dictate the results. This data, the essential moments of the music, were then examined from an ecological perspective in Chapter 3, with a comparative subject-position analysis. This analysis compared recordings of *Sequenza III* by Cathy Berberian, Luisa Castellani and Christine Schadeberg. This approach allowed the reader to see the different interpretations that can occur between different performances of the same musical moments. The primary reason for such variance in performance was attributed to the different embodied experiences of each performer, which has been shown throughout this thesis to be a contributing factor to our experience of the world and our development of abstract concepts. It was therefore hypothesized that embodied experiences also provide a basis for the development of

musical meaning for the performer. This meaning is then communicated to an audience and apprehended through the audience's own embodied experience, a notion that is supported by the theories of metaphorical projection and kinesthetic empathy.

It was clear from this comparative subject-position analysis in Chapter 3 that contrasting performances of the same musical elements in a piece are able to orient the listener towards a unique emotion or mood. Clarke credits this to certain characteristics of the music that play a role in shaping the perception of the listener, a process described as the subject-position. The subject-position of music is influenced by the invariant properties (i.e. innate essential characteristics), as well the social and cultural conditioning of the receiver. I felt it necessary to continue with an exploration of Clarke's work by adding a third contributing factor to the formation of subject-position: the individual embodied experiences of the performer and listener.⁶¹ These individual embodied experiences are also what influence the potential essences and invariants within a musical work for both listeners and performers. Musical essences and musical invariants are not necessarily universally fixed attributes but are in fact distinctive; manipulated and affected by one's individuality corporeality. Here we see a connection to phenomenology and the notion that attention to individual experience is the method by which to discover the essences of an object, rather than any preconceived ideas of the essence of an object. This information is acquired through an embodied experience and then in turn affects the subject-position of a musical performance.

⁶¹ To return to the idea of affordances and invariance in connection to the example of the chair that was presented in Chapter 3, we might ask ourselves the question of *how* we come to learn that a chair affords us the possibility of sitting and as such this is an invariable of the object? I would argue that we come to acquire this knowledge through the somatic, embodied experience of sitting on a chair and having that experience engrained into our physical bodies. Following this, we are able to recognize the same affordances and invariants in other objects (such as stools or benches) even though they may not at all resemble the chair from a visual or aesthetical standpoint.

The body communication analysis that was presented in Chapter 4 continued with the essential moments of *Sequenza III* and investigated how the communicative properties of the physical movements of each singer could translate into the communicative properties of the voice. This analysis was based on work completed by Jane Davidson, Paul Ekman and Wallace Friesen and Fernando Poyatos. The aim of this section of analysis was to demonstrate the close connection between the body and the voice, and the communicative abilities of the body to inform the voice.

The theoretical support for this analysis came from Mark Johnson's conception of the importance of human embodiment and the notion of image schemata that create the possibility of higher order rational thinking. We pick up and absorb information about our external and internal worlds through our embodied experiences, a notion that also applies to the singer in creation of a musical interpretation. While musical interpretations may appear to be completely conscious and rationally conceived entities, I believe that the singer's embodied experience of the music contributes significantly to any musical understanding and subsequent interpretation. Therefore, how the singer communicates at the level of physical gesture implicates how they communicate vocally. Additionally, the body limits musical interpretation because the performer's physicality controls and influences any and all articulation of the music. The body of the performer is also the basis for connection to music for the performer. This connection allows for musical understanding, which then translates into a musical interpretation and thus influences the listener.

Davidson and Correia (2001) briefly explore this development of a musical interpretation in a discussion of how the body movements of a performer in practice

sessions allow the performer to create and build an interpretation of the music. By moving his body to the music as he played, the flautist subject in this study was able to create a personally meaningful narrative and musical interpretation. I believe that this demonstrates more than a simple connection to musical interpretation but also an ingrained and deeply meaningful method for emotionally connecting to music and communicating emotion in music. Rather than only using body movements to develop a certain musical “character” for the piece (as was discussed by Davidson and Correia), connecting to the physical movements and physical or somatic *experience* of music making allows the performer to feel and engage with the music on a level that is intrinsic to our understanding of the human experience.

Research on embodied musical performance presents certain challenges to the analyst. The primary difficulty is the lack of existing methodological frameworks on which to base an analysis. The three analyses in this thesis were each compiled from multiple sources, in order to ensure the examination of a specific aspect of embodied performance. There are very few existing methodologies that explicitly examine this subject. Additionally, this subject (or embodied musical performance) is subjective and is difficult to articulate. Humans are generally not directly aware of their embodiment and how it contributes to their apprehension of meaning, and, even if we were, describing an embodied experience proves to be extremely challenging. I think that future research on this topic would benefit from an ethnographic or auto-ethnographic methodology that attempts to provide the subjects with a vocabulary by which to describe their somatic experiences.

This research also presents the challenge of defining divisive, controversial vocabulary. In order to work with the kinds of analytic frameworks presented in this thesis,

and explore the factors that constitute an embodied musical performance, the analyst must engage with difficult terminology, including essences, embodiment, and the natural voice, which do not maintain universally acknowledged definitions. Therefore, in order to adequately describe the subject matter, such terms must be, to a certain extent, defined by the analyst and presented in such a way to be as clear and all-encompassing in their usage as possible.

The influence of the performer's body on the development and creation of musical meaning is an undervalued concept in current literature. Much of what creates a musical interpretation is attributed to rational choices made by the mind. We understand the world through our bodies and I believe that at a deep, potentially unconscious level we understand music in that same way. The individuality of the body shapes the music throughout the creative process and contributes to the differences between performances. Even electronic music, while most definitely further removed from human corporeality, had to come through the body of the composer at some point in the process, even if it was only at the creation of an algorithm. Live or recorded performances, even when we are not able to see the physical gestures of the performers, impart a great deal of information about the performer's somatic embodied experience through the musical sounds. The differences that were noted between the multiple analyses of *Sequenza III* in this thesis were implicated by the bodies of the performers as well as the embodied experience of the analyst doing the listening and the interpreting. This thesis has demonstrated the close connection that exists between musical meaning and embodied experience and has provided a variety of methods by which to explore this connection. The research undertaken here presents a new and

exciting perspective for examining music and musical performance, a perspective that does not separate the experience from the interpretation.

It is impossible for us to listen to music devoid of our bodies and divorced from our innate experience of our embodiment. We live our embodiment everyday within our non-musical lives and, by embracing the notion that we also live in within our musical lives and recognizing that perhaps our embodiment is one of the most direct paths into better understanding our connection to music, we can create richer and more meaningful musical experiences at any and all points along the spectrum of creation and consumption of music.

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