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SILENCE IN THE MUSIC OF JOHN CAGE, TORU TAKEMITSU
AND SALVATORE SCIARRINO

by

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ABSTRACT OF THE DISSERTATION

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In Western common practice music, the concept of silence is considered a background against which sound is perceived. For some twentieth-century composers, however, silence becomes an important element in their music, as a new and inventive way of conceiving of sound. The purpose of this study is to investigate what makes twentieth-century composers, in particular John Cage, Toru Takemitsu, and Salvatore Sciarrino, interested in silence, and what influences this has on their musical philosophies. I also discuss what kinds of musical devices and effects they use to emphasize silence in their music and how silence may be conveyed through sound.

I begin in Chapter 1 with a review of research that discusses musical silence generally, as well its employment by specific composers. I provide a historical review of the concept of silence and important figures whose music was influenced by silence. Following this, I delineate the terminology of ‘silence’ in this dissertation. I then discuss Cage’s use of silence. Cage’s concept of silence developed through his interest in non-conventional sound, the events he experienced, philosophies and books he studied, including Zen, and people he met beginning in the late 1930s. These helped Cage acknowledge that there is no absolute silence in the world; for him, sound and silence are on a single continuum.

In Chapter 2, I introduce Takemitsu's musical background, which comprises both Western experimental music and the influence of the Japanese spatial concept *ma*, I then explore types of silence Takemitsu employs, including long pauses, decay, and single-note utterances. Follow this, I use these concepts to analyze the structure of silence in *Garden Rain*. Takemitsu treats and designs silence as sound in *Garden Rain* and the aesthetics and function of *ma* are applied to his use of silence.

Chapter 3 explores Sciarrino's use of extremely soft sound which lies at the border between silence and sound, against Darmstadt composers' aesthetics. It is conveyed by musical silence through extended techniques rather than conventional techniques, extreme dynamics, and extreme range. Through an analysis of *Infinito Nero*, based on the mystical utterance of Saint Maria Maddalena de'Pazzi, we see how Sciarrino describes the silence of Maria and the surrounding ambient sound by using non-conventional techniques. Finally, I compare the use of silence by Cage, Takemitsu, and Sciarrino.

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Introduction

In Western common practice music, the concept of silence is considered a background against which sound is perceived. For some twentieth-century composers, however, silence becomes an important element in their music, as a new and inventive way of conceiving of sound. I believe silence in music can be very powerful. Indeed, it can sometimes be even more powerful than sound as a device to deliver and maximize a composer's intention. The effective use of silence can reinforce the audience's expectation and create tension. In addition, as musical elements, musical silence itself can be considered a unique sonority and offers the chance to listen to a new acoustic realm, which can be developed or broadened by contemporary (and future) composers. Because of the new possibilities and potentialities afforded by the use of musical silence, contemporary composers have shown (and continue to show) interest in the use of silence as sound. Although silence has played an important role in many composers' music, it has been especially noteworthy in the music of John Cage, Toru Takemitsu, and Salvatore Sciarrino, and is therefore deserving of closer attention. They developed the use of silence effectively in their own unique ways, evincing their individual musical aesthetics and philosophies. Furthermore, the use of musical silence in their music can help us think more about what we listen to, where the border between musical sound and silence is located, and how music relates to noise. In this thesis, I will investigate what makes these twentieth-century composers interested in silence, and what influences this has on their musical philosophies. I also discuss what kinds of musical devices and effects they use to emphasize silence in their music and how silence may be conveyed through sound.

The *Oxford American Dictionary* defines silence as "complete absence of sound,"¹ quiet is defined "with little or no sound or motion."² According to these definitions, silence falls under

¹ Erin McKean, *The New Oxford American Dictionary* (New York: Oxford University Press, 2005), 1579.

² *Ibid.*, 1389.

the category of quiet. However, in this thesis, I'll use the term silence more broadly. Since my focus is on silence in the twentieth century, in particular, the use of silence by Cage, Takemitsu, and Sciarrino, a look at definition of the term from more recent music dictionaries is warranted. In her dissertation, Juliana Hodkinson, "Presenting Absence," refers to Wilhelm Seidel's claim in *Die Musik in Geschichte und Gegenwart* (The music in history and present), that in German musical terminology, *stille* (silence) had become a *modewort* (buzz word³) in discussions of late twentieth-century scored music.

In recent decades music has discovered silence as an object of composition and musical action. In this context, the word 'silence' has advanced to become a '*Modewort*' [buzz word], and has entered the terminology of contemporary music. Here, it signifies more than negative soundfulness. It stands for a new musical character of presence, above all for a new musical temporal *Befindlichkeit* [sensitivities]. The musical actuality of silence also meets with an interest within reception aesthetics for voids, and in moments that through their emptiness or extreme poverty of events, challenge the listener to an exceptional degree.⁴

Seidel's definition, which considers the use of silence in contemporary music, "as a new musical character of presence," encouraged me to think of a new aspect of silence in the twentieth century that cannot be found in the past. In this conception, silence is no longer only the absence of sound, a negative concept. In this thesis, I explore two perspectives of silence: one from emptiness (absence of sound, rest and pause), the other from quiet or minimal sound (quiet dynamic and minimal gesture).

³ Author's translation

⁴ Erst die Musik der letzten Jahrzehnte hat die Stille als Gegenstand der Komposition und der musikalischen Aktion entdeckt. In diesem Zusammenhang erst avancierte das Wort Stille zum Modewort und ging in die Terminologie der gegenwertigen Musik ein. Es bezeichnet hier mehr als negative Lautlichkeit. Es steht für einen neuen musikalischen Daseins Charakter, vor allem für eine neue musikalische temporale Befindlichkeit. Wilhelm Seidel, *Die Musik in Geschichte und Gegenwart* (2. Ausgabe) 1998), 1760 (Quoted in Juliana Hodkinson, "Presenting Absence: Constitutive Silences in Music and Sound Art Since the 1950s," (PhD Diss., University of Copenhagen, 2007), 26-7. 102, trans. Hodkinson).

Research in Silence

It was not until the mid-twentieth century that musical researchers gained interest in musical silence. In *Musical Form and Musical Structure* (1968), Edward T. Cone compares the frames of paintings to those of music, and discusses internal and external environments of music:

For most music then, internal environment is meaningless concept. In spite of this fact, or perhaps because of it, music stands in great need of a frame to separate it from its external environment – to mark off musical time from the ordinary time before and after it. Without such a frame, the chaotic, undifferentiated flow of ordinary time will encroach on each extreme of the composition. It will prevent us at the beginning from being aware of the measure of temporal control exerted by the music, and at the end from appreciating the full discharge of its energy. At this point you have undoubtedly guessed what the frame is. It is silence.⁵

Cone claims that the silence frames music, and that silence presents at the beginning and ending of music.

Zofia Lissa, in her essay, “Aesthetic Functions of Silence and Rests in Music” (1964) discusses the concept of silence in performance practice such as silence before the performance, between movements, and after the performance before the applause. She defines the terms, rest, pause, and silence: but the distinction of rest and pause sometimes is not clear in the article.

The *rest* is called upon to perform other tasks than those assigned to silence. The basic difference between a rest and silence can be explained as follows: the former operates within the work and is a component part of it...Not infrequently the *pause* is a rhythmic supplement of the sound structure. Its musical role and functions it performs are manifold and, strange as it may sound, it is capable of changing its power of expression. A pause can be expressed by a notation sign or without it, as a work can be dismembered by rests or by phrasing...*Silence* is a medium which provides an element of contrast in the architectonic design of a musical work, including larger, smaller, the part of musical punctuation marks which are based on musical logic, or on the structural principles of the sound fabric.⁶

⁵ Edward T. Cone, *Musical Form and Musical Performance* (New York: Norton, 1968), 16.

⁶ Zofia Lissa “Aesthetics Functions of Silence and Rests in Music,” trans. E.Tarska *Journal of Aesthetics and Art Criticism* 22 (1964): 447.

She also discusses how composers in different eras and styles employed silence and what roles or functions silence fulfilled from the music of J.S. Bach to twentieth century composers like Webern as well as those of electronic music and music concrete. She claims that the “function of rests [and silence] are changing as new musical style[s] develop.”⁷

Another early touchstone of research on silence is Thomas Clifton’s “The Poetics of Musical Silence,” (1976) in which he first offers the metaphor that silences are like the spaces between trees in a forest. These spaces contribute to the perceived character of the forest and enable us to speak coherently of dense growth or sparse vegetation; silence is not nothingness. Clifton categorizes three types of silences: temporal, registral, and silence in motion, and any silence can be perceived as any combination or overlapping of these. He categorizes three functions of the registral space: highlighting the arrival of another part, or a different activity in the same part; emphasizing long-span connections; creating gaps or absences in the registral space. The third type of silence is called “silences in motion,” which can be experienced as being pulsed or unpulsed.

In the late twentieth century, researchers reexamined these earlier approaches to silence. Some authors incorporated modern composers’ and philosophers’ different perspectives of silence into their research. Richard C. Littlefield, in his article “The Silence of the Frames” (1996) reread Cone’s frame theory through the views of Immanuel Kant and Jacques Derrida.⁸ For Kant, the frame is ornamental, and for Cone silence as musical frame is only at the beginning and ending, as mentioned above. However, for Derrida, the frame “responds to and signifies a lack within the work itself. This lack makes frame necessary, not just ornamental and contingent, as Kant

⁷ Ibid., 444.

⁸ Richard Littlefield says “Jacques Derrida questions Kant’s evaluation of the picture frame as mere ornamentation to the art-work proper. Fastening on details that escape Kant’s notice, Derrida ascribes some interesting functions to the frames.” See Richard Littlefield, “The Silence of the Frames,” *A Journal of Society for Music Theory*. 1996. <http://www.mtosmt.org/issues/mto.96.2.1/mto.96.2.1.littlefield.html>

would have it.”⁹ Littlefield also proposes silence as a border can be located internally, and that, if emphasized and heard as interruption or continuity, this silence is equally important as sound or even more important than sound. Such a view breaks the hierarchical opposition of two concepts, sound and silence, which is in the same line as Derrida’s method of ‘deconstruction.’¹⁰ According to Littlefield, silence exists also in the vertical (registral) dimension, not only in the horizontal (temporal) dimension such as in the beginning and ending. Moreover, even the silence at beginning and ending is symbolically important and not a mere ornament. In contrast to earlier composers and philosophers who think silence is a termination, David Metzger, in “Modern Silence,” (2006) says that for late modernist composers, silence is a departure and has been used as a profound aesthetic statement. He claims silence in modernism has been represented as artistic material in modernism in two ways: “as a compositional state and as an expressive scene.”¹¹ A state here means “a sonic and/or conceptual ideal to which a work aspires. Silence is one such ideal, as are purity, complexity, and the fragmentary.”¹² Late modernists were interested in such a state because of “unique sonic and textural properties called upon by different conditions”¹³ as well as growing disinterest in twelve tone or systematic compositional procedure. The article shows how

⁹ Littlefield, “The Silence of the Frames”. Derrida, in *Truth in Painting* says, frame creates another element of construction to either support or confuse its construction. See Jacques Derrida, “Parergon,” in *The Truth in Painting*, trans. Geoff Bennington and Ian McLeod (Chicago: University of Chicago Press, 1987), 15-148.

¹⁰ Dermont Moran, in *Introduction to Phenomenology* says Derrida’s deconstruction is “like Lévi-Strauss’s structuralism, proceeds by identifying opposing structures at work in the text: the oppositions of preface and text, of signifier and signified, of sensible and intelligible, male and female, body and soul, etc. But structuralism tends to keep these opposing terms separate, whereas deconstruction shows how they complicate each other. Indeed, a recurrent tactic of Derrida’s writing, derived from the structuralist approach, is to set up typical oppositions that operate as the two extreme poles of our thinking in a particular area, and to show that our assumption that these poles must be kept apart is groundless and that eventually the two poles ‘contaminate’ each other (‘contamination’ being a favorite Derridian term). Derrida’s mission is to demonstrate the contaminations rather than purities at work in meaning.” Dermont Moran, *Introduction to Phenomenology* (New York: Routledge, 2000), 472.

¹¹ David Metzger, “Modern Silence,” *The Journal of Musicology: A Quarterly Review of music History, Criticism, Analysis, and Performance Practice* 23, no. 3 (Summer 2006): 333.

¹² Ibid.

¹³ Ibid.

Webern, Nono, and Sciarrino achieve this state to evoke silence, and how they accomplish expressive scene through silence.

Other recent research has discussed the use of silence of by specific composers, including Handel, Beethoven, and Messiaen. Ellen Harris discusses Handel's use of silence in "Silence as Sound." (2005) Two traditions influenced the use of musical silence by Handel: madrigalism which depicts silence with word-painting, and Corelli who hugely influenced German composers at that time. Harris mentions Corelli employs three different kinds of silence as a bridge between sounds, suspending, and marking off formal and harmonic boundaries in his instrumental music. Harris claims Handel developed both traditions in his own way. In Handel's early years, his use of silence followed the tradition in vocal music which describes words relating to silence with pauses, but his more mature music instead uses longer interrupted silence and intensifies rhetorical silence. As Barry Cooper points out, Beethoven also acknowledged the importance of silence. In his article "Beethoven's uses of silence," (2011) Barry Cooper claims that Beethoven uses silence to emphasize and intensify many different emotions. Also, in his music, silence is used as a turning point in the flow of emotion, a dramatic interruption, and for depicting narration in many other unusual and idiosyncratic ways. Nicky Losseff and Jenny Doctor collected a variety of essays about silence, titled *Silence, Music, Silent Music* (2007). Among them, Matthew Hill and Jan Christians discuss how Messiaen expresses his catholic dogma through silence (or evoking silence) on his music. Hill claims that in *Regard dur Silence* (one of a suite of 20 pieces for Messiaen's solo piano, *Vingt regards sur l'Enfant-Jésus*) Messiaen explores a connection between silence and faith, and paradoxically suggests listeners contemplate silence through sound. "The inaudible mysteries surrounding the Christchild-the silences-revealed something to Messiaen in contemplation, and that revelation took place in sound."¹⁴ Christiaens claims that Messiaen's qui-

¹⁴ Nicky Losseff and Jenny Doctor, ed. Introduction to *Silence, Music, Silent Music* (Aldershot: Ashgate, 2007), 6.

et beginning and end, the organ's static harmonics, and the slow tempo in *Le Banquet Céleste* makes the audience contemplate silence and eternity.

Historical Review in Silence

How have twentieth century composers used silence differently than those of earlier centuries? It is necessary to look at brief history of the evolution of silence before focusing on three twentieth century composers' silence. As mentioned above, the change of the roles and functions of silence correlates with stylistic changes in Western classical music.

Among the most thorough histories of musical silence in the twentieth century is Juliana Hodkinson's dissertation, "Presenting Absence: Constitutive Silences in Music and Sound Art since the 1950s." This dissertation delineates terms and notational signs indicating rests and pauses in Western scored music¹⁵ and classifies the historical development of silence from the Ancient Greeks to the twentieth century. It helped me to draw the whole picture of how silence has evolved alongside changes in musical style. Hodkinson describes in terms of the development process of silence "a continuous emancipation of the empty musical moment within the framework of music."¹⁶ According to her, not until the middle age, the role of silence was not offered. In Augustine of Hippo's theoretical writings *De musica*, Augustine expresses silence as a "space of time (not just an empty beat)" and introduces the mode of *silentia voluntaria* (voluntary silence), which describes pauses that are not indicated through meter.¹⁷

Silence is also frequently employed in 'word painting.' Especially common in Renaissance and Baroque music, word painting is the compositional technique, developed in the late sixteenth century Italian madrigal, of using musical cues that reflect or mimic the sung text. For example, in "Silence as Sound: Handel's Sublime Pauses," Ellen T. Harris notes that in Carlo

¹⁵ Hodkinson, "Presenting Absence," 26-7.

¹⁶ Ibid., 28.

¹⁷ Ibid. 27-8.

Gesualdo's *Sospirava il mio cor*, from his *Third Book of Madrigals* (1595), "the verb 'sigh' is broken with a rest (a musical sigh), the noun 'sigh' is followed with a short rest throughout the system, and the verb 'expire' is followed with a longer rest."¹⁸

According to Harris, musicologists have generally argued that the "expressive potential of silence was only developed in the classical era."¹⁹ Following Enrico Careri's assertion about the 'expressive potential of silence' that Harris writes that "Haydn, Mozart and Beethoven are the first to capitalize on the expressive potential of silence, the first to interrupt the sonorous flow where according to the rules one should not, creating delay, surprise, bewilderment."²⁰ Among them, Haydn employed silence in order to elicit surprise and to convey wit. Clifton, in "The Poetics of Musical Silence," lists as an example of temporal silence the ending of Haydn's *String Quartet in E-flat, Op. 33, no.2, fourth movement*. Clifton writes that "with the return of the presto tempo, surprise and anticipation combine with a growing exasperation with, and eventually a humorous acceptance of, the quartet's seeming inability to recognize its own ending."²¹ Indeed, a three-measure pause in mm. 166-169, which is unexpectedly longer than other previous pauses, makes listeners anticipate a loud continuation. However, against this expectation, it proceeds to the pianissimo ending (Ex.1).

¹⁸ Ellen T. Harris, "Handel's Sublime Pauses," *The Journal of Musicology* 22, no. 4 (Fall 2005): 525-7.

¹⁹ *Ibid.*, 522.

²⁰ "Haydn, Mozart e Beethoven sono stati i primi a capire le potenzialità espressive del silenzio, i primi a interrompere il flusso sonoro dove di regola non si dovrebbe, creando attesa, sorpresa, smarrimento" (Enrico Careri, "Sull'interpretazione musicale del silenzio," in *"Et facciam dolci canti": Studi in onore di Agostino Ziino in occasione del suo 65° compleanno*, 2 (Lucca: Libreria Musicale Italiana, 2003), 1080-1. (Quoted in Harris, "Handel's Sublime Pauses," 522, trans. Ellen T. Harris).

²¹ Thomas Clifton, "The Poetics of Musical Silence," *The Musical Quarterly* 62, no. 2 (April 1976): 31.

146

151 **Presto**

157

164

p *f* *p* *pp*

G.P. G.P. G.P.

Example 1. Haydn, *String Quartet in E-flat* op. 33, no.2, IV, mm.146-172

Barry Cooper argues that silence had been used in earlier music (which probably means earlier than Beethoven) in three ways: structural, dramatic and pictorial. Beethoven used all these types of silence, and as mentioned above, Cooper claims Beethoven employs silence in many conventional ways as well as his original ways. According to Cooper, Beethoven frequently places rests opening measures of the pieces to convey drama. Figure 1, from Cooper's article, lists examples of Beethoven's uses of rests in early part of music. Ex. 2 shows Beethoven's use of early rests in *Piano Sonata* op.10 no.3, IV.

Opus/movement	Work	Time	Beat no.
2/3.I	Piano Sonata in C	4/4	7-8
5/1. I	Cello Sonata in F	3/4	4-5(quarvers)
10/3. IV	Piano Sonata in D	4/4	2-4,6-8
22.I	Piano Sonata in Bb	4/4	3,7
30/2.I	Violin Sonata in C minor	4/4	6-8,14-16
57/1.I	Piano Sonata in F minor	12/8	14-15

Figure 1. Selection of Beethoven movements with prominent early rests²²



Example 2. Beethoven, Piano Sonata op.10 no.3, IV, mm.1-3

In the Romantic period, silence played more significant musical roles such as to emphasize delay, climax, dissonance and its resolution, tension or relieving tension, suspense, and expectancy. According to Elizabeth Margulis, Liszt used ‘liminalizing’²³ silence — “leading up to the silence, the music works itself into a climactic frenzy beyond which no intensification seems possible. The ensuing silence suggests a tumult so extreme that it has transcended the boundaries of possible sound.”²⁴ See Example 3.

²² Barry Cooper, “Beethoven’s uses of Silence,” *The Musical Times* 152, no.1914 (Spring 2011): 36, excerpt of figure 1.

²³ Elizabeth Hellmuth Margulis discusses: “[T]o liminalize means to make it seem as if the threshold of expressability had been reached. When silence follows a point of high emotional intensity, it often has this effect. Liminalizing silences seem to brim with significance, suggesting that the speaker has pushed the boundaries of expressability.” See Elizabeth Hellmuth Margulis, “Moved by Nothing: Listening to Musical Silence,” *Journal of Music Theory* 51, no. 2 (Fall 2007): 269.

²⁴ *Ibid.*, 269.

Example 3. Liszt, *Mephisto Waltz* no. 1, mm.184-207

At the start of the twentieth century, according to Hodkinson, the use of silence in music was influenced by poetry. For instance, Rainer Maria Rilke and Stefan George's poetry straddles the borders of language, offering "series of symbols that remained vague, complex and open in relation to meaning."²⁵ Hodkinson argues Schoenberg explored a muted expression partly through the musical setting of literary texts situated "between language and rationality" (such as George's poetry) and partly through the novel speaking singing style *Sprechgesang*.²⁶ *Sprechgesang* is employed for many other uses in Schoenberg's music, as for example in his opera *Moses and Aaron*.

²⁵ Hodkinson, "Presenting Absence," 35.

²⁶ Ibid., 21, 35.

According to Dennis Kurzon in his Book *Discourse of Silence*, Moses' *Sprechgesang* is used for describing the silence of the shepherd.²⁷

The exploration of silence by twentieth century composers influenced not only by poetry but also by a desire to find new sounds. Metzger argues in "Modern Silence" that turning to silence was inescapable for modernist composers. He points out that Webern's silence is between (or at the border of) sound and silence. He also mentions that Webern's silence is "a state that often exists in multiplicity, made up of distinct, individual forms of the state."²⁸ He says in Webern's case, there are four qualities which are required to support the realm, "stillness, soft dynamics, brevity, and fragmentation."²⁹ Stillness is defined here as the "blank background" uncovered through repeated or sustained figures with *ppp*. According to Metzger, Webern uses *ppp* as a starting point and explores markings below *ppp*, which is "barely audible (indicates *kaum hörbar* in Webern's pieces)," a border between music and silence, and fades into nothingness. Brevity and fragmentation serve to intensify the "presence of silence."³⁰ It arises and disappears quickly and this makes us more aware of silence. Lissa describes Webern's sound figures are 'wrapped' in silence by means of numerous rests separating the figures and silence generated by not only fewer figures and thinner textures but also larger space between layers, listing "distance separating the registers, the absence of a melodic outline, and the detached palette of tone-color" as contributors to this effect.³¹ Webern's use of silence is one which was not seen before the twentieth century. He employed silence to evoke ambience, something that may have been influenced by the literature of early twentieth century poets and the music of Schoenberg. Although silence and low-volume dynamic markings like *p* and *pp* can also be found in earlier repertoires, the emphasis on the space between silence and sound is unique.

²⁷ Dennis Kurzon, *Discourse of Silence* (Amsterdam: J. Benjamins, 1998), 105-112.

²⁸ Metzger, "Modern Silence," 339.

²⁹ Ibid., 339.

³⁰ Ibid.

³¹ Lissa, "Aesthetics Functions of Silence and Rests in Music," 450.

Composers such as Messiaen, Ives, Bartok, and Crumb also explored silence in their music in some way. Messiaen's silence is related to his faith and contemplation as mentioned above, whereas Ives and Bartok both employed silence as a manifestation of night. John Cage considered silence to be a fundamental musical element, and expanded and developed the idea of silence through many events and experiences, as well as exploring how silence could be used in his music. I will talk more about Cage's use of silence in the first chapter.

Throughout this brief history, we have seen that the role of silence has expanded over time from a dramatic effect to means of evoking mood and ambience. The use of silence has continued to evolve in the twenty-first century,³² but will not be discussed here for reasons of scope. The meaning, range, and role of silence have changed depending on era, style, or composers' intentions.

³² See Hodkinson, "Part IV. New-Millennium digital silences," in "Presenting Absence," 142-81.

Chapter 1. John Cage's Silence

"Silence has served as Cage's emblem." (Douglass Kahn)³³

"The history of modern music in the second half of this century has been drastically and deeply marked by one name: John Cage. Much more than his music, his ideas have been so influential that it would not be exaggerated to think of most present avantgarde / experimental / contemporary music scenes as being Cagean to a bigger or lesser extent. Although this is more clear and intense in the United States and Canada, it also happens in the rest of the Western world." (Francisco Lopez)³⁴

When people refer to 'silence' in Western classical music, John Cage undoubtedly comes to mind. As shown by Lopez's quote above, Cage's idea of silence is so influential that it is necessary to discuss Cage's techniques and philosophies prior to tackling other two composers's uses of silence. Takemitsu met Cage, and was deeply influenced by Cage's thoughts on music and silence, but there are nonetheless differences between the silence of Takemitsu and Cage. It is not possible to determine how much Sciarrino's thoughts on silence were directly influenced by those of Cage, but I will make comparisons between the Sciarrino's and Cage's thoughts on and use of silence. Through this, we will see how these late twentieth century composers developed silence in their own ways after Cage.

Particularly between the late 1930s and 1952, there were many events Cage experienced that influenced the formation of Cage's thoughts on silence. Cage interpreted these experiences in his own way whether the events are directly or indirectly related with thoughts on silence or not. Although my discussion will center around Cage's experiences up until 1952, the year *4'33''* was composed, this should not be taken to mean that the final result of his journey of thinking about silence is *4'33''*. However, through examining *4'33''* we may see how his thoughts on silence had

³³ Douglass Kahn, *Noise, Water, Meat: A History of Sound in the Arts* (Cambridge: The MIT Press, 1999), 557.

³⁴ Francisco Lopez, "Cagean philosophy: a devious version of the classical procedural paradigm," 1996. <http://www.franciscolopez.net/cage.html>

changed. Many parts of the following discussion and researchers' views are from Cage's own words, gathered from writings, interviews, and lectures.

1.1 Interest in Unconventional Sound with Rhythm and Noise

Cage studied with Arnold Schoenberg in 1934-35, who emphasized the importance of harmony. Yet Cage would come to see rhythm as more important than harmony, which he would find "artificial and unrealistic."³⁵ Indeed, Schoenberg's emphasis on harmony, paradoxically motivated Cage to focus on rhythm more than other musical elements. Paul Van Emmerik, in "An Imaginary Grid: Rhythmic Structure in Cage's Music from circa 1950" traces how Schoenberg's influence is related to Cage's interest in rhythm developing into the concept Cage called "rhythmic structure."³⁶ Emmerik says Cage's use of the term 'structure' is from Schoenberg's influence, an assertion supported by another theorist Reinhard Kapp's supposition that "Cage became acquainted with the foundation of Schoenberg's future *Structural Functions of Harmony* during his studies with him."³⁷ Although Schoenberg's term 'structure' here is related with harmony and pitch, Cage says in *Compositional Process* that "this rhythmic structure was as hospitable to non-musical sounds, noises, as it was to those of the conventional scales and instruments."³⁸ Emmerik goes on to note how Cage uses rhythmic structure to construct a musical form.

To Cage, composing a rhythmic structure meant as a rule creating a musical form based on numerical relationships between the durations of sections and of groups of measures of a composition in such a way that the durations of both levels were governed by a single series of proportions. Section lengths were counted in periods, marked in the score by double barlines or rehearsal numbers or letters, and groups of measures were counted in measures.³⁹

³⁵ Ibid.

³⁶ John Cage, "Composition as Process," in *Silence: Lectures and Writings* (Middletown: Wesleyan University Press, 1961), 19.

³⁷ Reinhard Kapp, "Cage, John," in *Metzler Komponisten-Lexikon: 340 werkgeschichtliche Portrats*, ed. Horst Weber (Stuttgart: Metzler, 1992), 123.

³⁸ Cage, "Composition as Process," in *Silence*, 19.

³⁹ Paul Van Emmerik, "An Imaginary Grid: Rhythmic Structure in Cage's Music up to circa 1950" in *John Cage: Music, Philosophy, and Intention, 1933-1950*, ed. David W. Patterson (New York and London: Routledge, 2002), 218.

Cage used rhythm to broaden the range of structure from pitch to non-musical sounds. He applied this strategy when composing his *First Construction* as well as other percussion pieces in this era.⁴⁰

Cage wrote a number of pieces for collaboration with dancers; the measurements of phrases in these pieces contributed to the development of his notion of rhythmic structure. William Brooks, in “Pragmatic Silence” says working with dancers relating to them through rhythm forms a precedent for his use of silence. According to Brooks, for example, Cage’s *Experience No.2* (1948) for solo voice accompanying Merce Cunningham’s dance, contains abnormally long silences. Brooks states that “the empty moments in the music invite the contemplation of this possibility...”.⁴¹ He also says this attempt to use long silences can be considered a precursor of *Silent Prayer*. This piece was never composed, only described through Cage’s lecture, “A composer’s confessions” at Vassar College in 1948:

I have... several new desires ([which] may seem absurd, but I am serious about them): first, to compose a piece of uninterrupted silence and sell it to Muzak Co. It will be 3 or 4 1/2 minutes long-those being the standard lengths of 'canned' music- and its title will be *Silent Prayer*. It will open with a single idea which I will attempt to make as seductive as the color and shape and fragrance of a flower. The ending will approach imperceptibility.
42

Cage mentions duration and silence in his lecture at Black Mountain College, stating “[One] of the four characteristics of the material of music, duration, that is, time length, is the most fundamental. Silence cannot be heard in terms of pitch or harmony: it is heard in terms of

⁴⁰ See Emmerik, “An Imaginary Grid,” 218-235.

⁴¹ William Brooks, “Pragmatic Silence,” in *Silence, Music, Silent Music*, 109.

⁴² John Cage, *John Cage, Writier: Previously Uncollected Pieces*. ed. Richard Kostelanetz (New York: Limelight, 1993), 40.

time length.”⁴³ Therefore, Cage’s thoughts on silence can be linked with his interest in rhythm and creating structures by foregrounding duration.

According to James Pritchett, 1937-1942 are the years in which Cage was most interested in noise. He began to write music for prepared piano and percussion, thinking these sounds reflected the “industrial culture around him.”⁴⁴ Cage writes: “Wherever we are, what we hear is mostly noise. When we ignore it, it disturbs us. When we listen to it, we find it fascinating.”⁴⁵ However, Cage’s views of or interest in noise are different from the use of noise by futurists or other avant-garde composers at the time. Kahn, for instance, compares Russolo’s view of noise in music to those of Cage:

Luigi Russolo initiated the strategy whereby extramusical sounds and worldliness were incorporated rhetorically or in fact into music in order to reinvigorate it. Cage exhausted this strategy by extending the process of incorporation to a point to every audible, potentially audible and mythically audible sounds, where consequently there existed no more sounds to incorporate music, and he formalized the performance of music to where it could be dependent upon listening alone. He not only filled music up, he left no sonorous (or potentially sonar) place outside music, and left no more means to materially regenerate music.⁴⁶

Also, according to Kahn, Cage criticized the fact that avant-garde composers accepted noise in the same way that “sound (musical sound) was not meant [to] carry extraneous meanings.”⁴⁷ This critique is based on his motto of anti “self-expression”, which finds reflection with certain tenets of Eastern philosophy (which will be discussed in more detail below). In 1942, Cage moved from Chicago to New York, where he was not able to work with percussionists anymore as he did in Chicago. He was able to work with dancers and prepared piano instead, leading him towards the use of silence.

⁴³ John Cage, “Defense of Satie,” in *John Cage* (New York: Praeger, 1970), 81.

⁴⁴ James Pritchett “What Silence taught John Cage: The Story of 4’33’” 2009.
<http://rosewhitemusic.com/piano/writings/silence-taught-john-cage/>

⁴⁵ John Cage, “The future of music: Credo,” in *Silence*, 3.

⁴⁶ Kahn, *Noise, Water, Meat*, 558.

⁴⁷ *Ibid.*, 558-9.

Thus, Cage's interest in noise and rhythmic structure is a path to silence and anticipates Cage's later experimentation with silence, especially in *4'33"*. In terms of how Cage's thoughts on noise and rhythm led him to silence Kahn says:

Materially, silence shared duration with musical sound and would not contradict the extramusical sounds that Cage had already incorporated in his music. In this respect, silence took over where percussion, or rather the auspices of silence in Cage's thought in the latter 1940s can be found within his ideas of percussion/noise in the mid-1930s.⁴⁸

1.2 Zen and Other Influenced Philosophies

It is well known that Eastern philosophies including Zen Buddhism influenced Cage's silence by 1952. In addition to Zen, others philosophies, books, and people he met such as Sri Ramakrishna also influenced Cage's turn to silence in late 1940s. When Cage encountered difficulty in his personal life and became concerned about the function of art in the society, he confessed that learning and practicing Zen helped him.⁴⁹ Cage told Peter Gena that he learned Zen through Aldous Huxley's *The Perennial Philosophy*:

Just at that time, when I knew that I needed help, and needed it in terms of my mind, Daisetz Suzuki⁵⁰ came from Japan to teach the philosophy of Zen Buddhism. And I had already studied book called *The Perennial Philosophy* of Aldous Huxley, ...which brought together by teachers in various religious, culture, and times. And I had chosen from that anthology Zen Buddhism as the flavor that tasted best to me.⁵¹

⁴⁸ Ibid., 558.

⁴⁹ Cage first learn Zen late 30s, but had more interest in late 40s. See Richard Kostelanetz, *Conversing with Cage* (New York : Routledge, 2003), 13,44.

⁵⁰ One of the best-known interpreters of Zen Buddhism, D. T. Suzuki, has presented Zen to the West as an experience that is essentially free of history and metaphysics, superseding all categories and transcending all paradoxes. (Dumoulin, xix). Suzuki is willing to relate Zen to Western thinking and religion, he wrote books. "He[Suzuki] felt Zen would assuage the restlessness and relieve the spiritual void of modern life" After the WWII he taught at Columbia late 40s-1957. See David Revill, *The Roaring Silence: John Cage; A Life* (New York: Arcade, 1992), 107-8.

⁵¹ Personal communication from Peter Gena, from this transcript of a recording class (Quoted in Gann, *No such Thing as Silence*, 137-8).

Cage attended Suzuki's class at Columbia University around three years from between '46 and '47, which facilitated his engagement with Zen.

How did Zen affect Cage's thought on music? Gann says that Cage originally thought that sound and silence are opposite concepts, but the composer's study of Zen Buddhism led him to dissolve a tendency to think in dualities. This allowed Cage to begin to consider sound and silence as part of the same continuum. Cage did not follow all the practices and lesson from Zen religiously and reflected Zen on his music in his own way. He used Zen "to find a means of writing music as strict with respect to my ego as sitting cross-legged."⁵² However, it is evident that Cage learned no-mindness, repelling egoism, and non duality from Zen, and this changed the way he wrote music, as well as his views on silence. This Zen discipline later influenced his experimentation with indeterminacy and aleatory.

South Asian sources were also important for Cage's views on music. Cage actually had interest in South Asian philosophy prior to his interest in Zen. Gita Sarabhai, who helped Cage to learn Indian music and its aesthetics, introduced him to books including Anada K. Coomaraswamy's *The Transformations of Nature in Art* and *The Gospel of Sri Ramakrishna*, which piqued Cage's interest in Eastern thought.⁵³ These books suggested to him that, "the function of art is not [to] communicate one's personal ideas or feeling, but rather to imitate nature in her manner of operations."⁵⁴ Likewise, the fact Eastern evinced not "a spirit of control" but "a spirit of acceptance"⁵⁵ influenced his aleatoric music.

In addition to his exposure to Eastern philosophies during that period, Cage read Carls Jung's *The Integration of the Personality* and reread Aldous Huxley's *The Perennial Philosophy* (which he first read at 15). For Cage, Eastern philosophy and related texts, his friendship with

⁵² John Cage, "Tokyo Lecture and Three Mesostics," *Perspectives of New Music* 26, no. 1 (Winter 1988): 7.

⁵³ Kostelanetz, *Conversing with Cage*, 17.

⁵⁴ *Ibid.*, 44.

⁵⁵ *Ibid.*, 17.

Suzuki and Sarabhai mentioned above, and Christian mysticism, to which he exposed when he was young, all have the same context. According to a conversation of Cage and Peter Gena, Cage says Eastern thought was his primary motivation to write *4'33''*.⁵⁶ In 1948, when he first thought of the idea, he confessed that he was “just then in the flush of my early contact with oriental philosophy. It was out of that that my interest in silence naturally developed. I mean it’s almost transparent.”⁵⁷ In a 1984 interview, Cage recalled:

I wanted to be quite in a non quiet situation. So I discovered first through reading the gospel of Sri Ramakrishna, and through the study of the philosophy of Zen Buddhism—and also an important book for me was *The Perennial Philosophy* by Aldous Huxley, which is an anthology of remark of people in different periods of history and from different cultures—that they are all saying the same thing, namely, a quiet mind is a mind that is free of its likes and dislikes. You can become narrow-minded, literally, by only liking certain things, and disliking others. But you can become open-minded, literally, by giving up your likes and dislikes and becoming interested in things.⁵⁸

To summarize, an encounter with several individuals and books led Cage to be more open minded and dissolve dualism. This non-dualism goes against the concept of division so common in Western thought. For Cage, this view is drawn from Huxely, Aquinas, Christian mysticism, and Zen Buddhism, all of which strengthened his idea regarding silence. Through his non-dualistic view, Cage considers silence and sound, noise and music, as one. Non-dualism and the notion of writing music without ego were applied to the fundamental concept of *4'33''* and proceeded to influence Cage’s aleatoric music. I’ll further discuss how non-hierarchical conceptions of noise/music, sound/silence, and no-intension relate to *4'33''* in the next section.

1.3 *White Painting* and Anechoic Chamber Experience, and *4'33''*

There are two events that happened in the year prior to 1952, when Cage composed *4'33''*; the first involved Robert Rauschenberg’s *White Painting*, the second an experience with

⁵⁶ Kahn, *Noise, Water, Meat*, 561.

⁵⁷ Stephen Montague, “John Cage at Seventy: An Interview,” *American Music* 3, no. 2 (Summer 1985): 213.

⁵⁸ Kostelanetz, *Conversing with Cage*, 247.

an anechoic chamber. Cage met Rauschenberg in Vassar College in the summer of 1951, and saw Rauschenberg's *White Painting* in the exhibition at Black Mountain College. It is a blank, white painting across three panels with minimal brush or roller marks. While the intention of Rauschenberg's *White Painting* is related to Christian mysticism (where white is symbolic of the divine), Cage interpreted the painting in his own way, with whiteness simply representing an absence. Rauschenberg wrote of the painting:

They are large white (1 white as 1 God) canvases organized and selected with the experience of time and presented with the innocence of a virgin. Dealing with the suspense, excitement, and body of an organic silence, the restriction and freedom of absence, the plastic fullness of nothing, the point a circle begins and ends. They are a natural response to the current pressures of the faithless and a promoter of intuitional optimism.⁵⁹

This assured Cage of what he was doing. Along with other events and factors, the *White Painting* motivated he is thinking about absence and laid the foundation for his composing *4'33''*. Cage acknowledged this when he wrote, "To Whom It May Concern: The white paintings came first; my silence piece came later."⁶⁰

Cage's experience with an anechoic chamber at Harvard in the same year (1951), likewise gave Cage further inspiration to compose silent piece.

It was after I got to Boston that I went into the anechoic chamber at Harvard University. Anybody who knows me knows this story. I am constantly telling it. Anyway, in that silent room, I heard two sounds, one high and one low. Afterward I asked the engineer in charge why, if the room was so silent, I had heard two sounds. He said, "Describe them." I did. He said, "The high one was your nervous system in operation. The low one was your blood in circulation."⁶¹

⁵⁹ Robert Rauschenberg. A facsimile of the handwritten letter, postmarked October 18, 1951, is reproduced in Hopps, *The Early 1950s*, 230 (Quoted in Gann, *No such Thing as Silence*, 157).

⁶⁰ John Cage, "On Robert Rauschenberg. Artist, and His Work," in *Silence*, 98.

⁶¹ John Cage, *A Year from Monday: New Lectures and Writings* (Middletown: Wesleyan University Press, 1967), 134.

From the experience, he learned there is no absolute silence in the world. In a lecture entitled “Experimental Music” Cage said,

There is no such thing as an empty space or an empty time. There is always something to see, something to hear. In fact, try as we may to make a silence, we cannot. ...Until I die there will be sounds. And they will continue following my death. One need not fear about the future of music.

But this fearlessness only follows if, at the parting of the ways, where it is realized that sounds occur whether intended or not, one turns in the direction of those he does not intend. This turning is psychological and seems at first to be a giving up of everything that belongs to humanity—for a musician, the giving up of music. This psychological turning leads to the world of nature, where, gradually or suddenly, one sees that humanity and nature, not separate, are in this world together; that nothing was lost when everything was given away. In fact, everything is gained.⁶²

Cage’s realization that there is no absolute silence in the world and that sounds exist everywhere thus forced him to turn to the world of nature. This led Cage to accept that nature cannot be separated from humanity. This sound from nature all around us coincides with the white (blank) musical transcript found in his infamous composition *4’33’’*.

4’33’’

4’33’’ consists of three movements without a performer’s sound. In 1952 Cage’s friend, pianist David Tudor, premiered the piece at Maverick Concert Hall. During *4’33’’* the audience listened to noise from themselves in the concert hall, perhaps even from outside the hall. This was Cage’s intention, shifting audiences’ attention from the performer’s sound to ambient noise. After the premiere of *4’33’’* there were many reviews, comments, and critiques. Even today, audience try to look for meaning in *4’33’’*. Pritchett writes that Cage’s *4’33’’* tends to be idolized in spite of the composer’s deemphasizing of that piece. Nonetheless, Pritchett asserts that silence is at the core of John Cage’s life and work, and concludes that *4’33’’* shifts our consciousness to the si-

⁶² Cage, “Experimental Music,” in *Silence*, 8.

lence, even if shortly.⁶³ Cage wrote: “People may leave my concerts thinking they have heard ‘noise,’ but will then hear unsuspected beauty in their everyday life. This music has a therapeutic value for city dwellers.”⁶⁴ *4’33’’* indeed leads us to a transformation of listening. Cage challenges our assumption that only sound from a performance in a concert hall (or recording) is music and that all other sound is noise. By doing so, the traditional hierarchy between sound and silence, music and noise, is rendered meaningless. For Cage, “[s]ilence is all of the sound we don’t intend. There is no such thing as absolute silence. Therefore silence may very well include sound and more and more in the twentieth century does. The sound of jet planes, of sirens, et cetera.”⁶⁵

However, many questions can be raised about *4’33’’*. Is *4’33’’* indeed a silent piece?⁶⁶ Does it reflect his philosophy fully? In contrast to learning of Zen which emphasizes lack of intention, *4’33’’* involves Cage’s control and a frame he made artificially, such as a traditional three- movement form, performance place, and specific duration. Cage also tries to control what people listen to with his frame. In spite of these questions and arguments, the value of *4’33’’* cannot be ignored because it shows Cage’s journey of exploring silence, as reflected his philosophy. Kahn says “*4’33’’* was not a gesture for Cage, but something he sincerely took to heart and one of the key moments in the development of his mature philosophy and practice.”⁶⁷

Silent Prayer (1948) was the very first plan to write silence with a musical frame, which Cage announced in a lecture at Vassar College, as previously mentioned. This piece is considered as a precursor of *4’33’’*⁶⁸ because he mentioned in a lecture that it will be “3 or 4 and 1/2

⁶³ Pritchett, <http://rosewhitemusic.com/piano/writings/silence-taught-john-cage/>

⁶⁴ John Cage, “Percussionist,” *Time* (22 February 1943): 70 (Quoted in David Wayne Patterson, “Appraising the Catchwords, c. 1942-1959: John Cage’s Asian-derived Rhetoric and the Historical Reference of Black Mountain College” (PhD Diss., Columbia University, 1996), 108-9).

⁶⁵ Michael Zwerin, “A Lethal Measurement,” in *John Cage*, 16

⁶⁶ Kyle Gann says it is mischaracterized as Cage’s “Silent Sonata,” but he proposes “Unintended Noise Sonata”. Kyle Gann, *No such Thing as Silence* (New Haven: Yale University Press, 2010), 163.

⁶⁷ Kahn, *Noise, Water, Meat*, 561.

⁶⁸ Kahn proposes several more connections between *Silent Prayer* and *4’33’’*. See Kahn, *Noise, Water, Meat*, 571-2.

minutes” and “a piece of uninterrupted silence.” Of course, since it was never composed, we don’t know exactly what shape this piece would have taken. *4’33’’*, written four years later in 1952, reflects Cage’s learning between 1948 and 52 from various experiences and research of Asian philosophy. Through Zen, Cage found that silence and sound are non-separable, that there is no hierarchy between them. Cage looked for how he could compose natural sound or silence in a piece of music with no-mindness and no-intention which Zen emphasizes. Just as the *White Painting* requires us to “slow down, watch closely over time, and inspect their mute painted surfaces for subtle shifts in color, light, and texture,”⁶⁹ and the muted sounded in an anechoic chamber shifted Cage’s attention to the sound of his body, *4’33’’* shifts our attention to listening to the natural sounds around us. Gann speaking on the relationship between *4’33’’* and *Silent Prayer*, writes, “in order to reach *4’33’’*” from *Silent Prayer*, Cage needed to go through experiences that would lead from attempting to listen to nothing to redefining silence as being not nothing but something.”⁷⁰

1.4 Conclusion

Cage’s use of silence may be traced back to his interest in rhythm, percussion, and noise, rather than harmony and pitch. Through an exposure to Eastern philosophy, he challenged the Western dualism of silence and sound reached the conclusion that those two concepts are one and the same. Marcel Cobussen discusses Cage’s silence as a spatial concept:

Silence is a space having all the ambient sound.... In the last stage [of the development of this silence] ...silence becomes a perceivable presence (i.e., the sounds that surround us) and composing is about finding sounds that respect this silence. ‘When I write a piece, I try to write it in such a way that it won’t interrupt this other piece which is already going on’⁷¹ Cage writes his music on the sounds that always already surround it.”⁷²

⁶⁹ Sarah Roberts, “White Painting [three panel],” 2013. <https://www.sfmoma.org/artwork/98.308.A-C/essay/white-painting-three-panel/>

⁷⁰ Gann. *No such Thing as Silence*, 127.

⁷¹ Willam Duckworth, *Talking Music: Conversations With John Cage, Philip Glass, Laurie Anderson, And 5 Generations Of American Experimental Composers* (Da Capo Press, 1999), 15.

Cage's silence is not distinguished from sound but one existence, and there is no hierarchy between silence and sound. This Cage's thought is on the same line as a deconstructive strategy of Derrida which was discussed in the previous section. Cage struggled to find what form or structure could be reflected from the idea that sound and silence are one. Despite the controversy surrounding *4'33''*, the idea that, through a performer's silence, people can listen to silence as ambient sound was influential. Cage's silence broadens our range of listening, and asks us to reconsider what music, sound, silence, and noise are to us. According to Kahn "[t]he core of Cage's musical practice and philosophy was concentrated on sounds of the world and the interaction of art and life. There is a musical specificity to be had within Cage's compositions."⁷³ Cage's philosophy influenced Takemitsu's thoughts on music and silence; this influence will be discussed in the next chapter.

⁷² Cobussen, "Cage and Silence," http://www.deconstruction-in-music.com/proefschrift/300_john_cage/316_cage_and_silence/cage_and_silence.htm

⁷³ Kahn, *Noise, Water, Meat*, 557.

Chapter 2. Toru Takemitsu's Silence

Toru Takemitsu was born in Tokyo in 1930. He began working for the American Post Exchange (PX, a US Army base retail store) in Yokohama in 1946. While working there had the opportunity to access the recordings and scores of European and American composers such as Debussy, Messiaen, Webern, Copland, and Varese.

Takemitsu joined several composers' groups in Japan in the 1950s (modeled after European artists' groups⁷⁴); his music was performed through these groups. One such group was called *Shin Sakkyokuha Kyokai* (new composers' association) founded by Yasuji Kiyose in 1946 (Takemitsu joined in 1950). The aim of the organization was to keep aspects of Japanese character and aesthetics in modern music. His music was first publicly performed at their seventh concert in 1950. Takemitsu also participated in *Jikken Kōbō* (experimental workshop/laboratory), an artistic group including musicians, artists, and experimental performers seeking experimental artistic experiences instead of following Japanese traditions.

From the late 1940s to the early 1950s, much of Japan suffered from hunger and poverty due to the aftereffects of World War II. Until the mid-1950s, Takemitsu suffered from financial and health issues; such issues discouraged life as a composer. However, several unexpected events provided him with momentum as he gained confidence as a composer in the late 1950s. One notable composer to acknowledge his music was Igor Stravinsky. When Stravinsky visited Japan, he wanted to hear Japanese orchestral music, and listened to Takemitsu's *Requiem*. Stravinsky was impressed by Takemitsu's music, and commented on the "passionate intensity" of Takemitsu's *Requiem*.⁷⁵ Stravinsky mentioned Takemitsu's name after he came back to the US. Takemitsu's foreign travels began in 1964; during these travels, he met Cage again in San Fran-

⁷⁴ James Siddons states the European groups are "the Parnassians, Symbolists and Decadents in Decadents in French literature, or in music, the Ecole d'Arcueil, Les Six, and La Jeune France." James Siddons, *Toru Takemitsu: A Bio-Bibliography* (Westport: Greenwood Press, 2001), 4-5.

⁷⁵ Donald Richie, "Tokyo no Stravinsky", *Ongaku Geijutsu*, Sept. 1959; quoted by Akiyama Kuniharu, Toru Takemitsu, *Oto, chinmoku to hakari aeru hodon* (Tokyo: Shinchōsha, 1971), 218.

sisco (they had already met briefly in Tokyo) in 1964 and Messiaen in Paris in 1965. His reputation was building: and he received many commissions, attended symposia and festivals, and was awarded numerous prizes.

2. 1 Takemitsu's Silence from Japanese Thoughts

Japanese Thoughts on Music and *Ma*

The ways in which music is conceptualized in Japanese traditions are different from those of Western traditions. Noriko Ohtake, in her book *Creative Sources for the Music of Toru Takemitsu*, states nature, language, and music are all closely related in Japanese culture. For example, a *samisen* player imitates the droning of a cicada while a *shakuhachi* (a kind of Japanese flute) player imitates a bamboo stub.⁷⁶ Therefore, what a Western listener might term noise, a Japanese listener considers to be part of the music. This recalls Cage's attitude toward Western conceptions of noise. For traditional Japanese, according to Takemitsu, "the enunciated sound itself gains utmost freedom and life. Originating from an identified human being (a performer), the sound extracts an emancipation of self, and thus becomes a part of nature."⁷⁷ This notion of being part of nature is an important feature to understand traditional Japanese music. This stands in contrast, for instance, from Russolo or other futurists' thoughts on noise, which is inspired by industrial soundscapes and seeks new sounds to correspond with the flow of the industrial era. Noise for Japanese listeners is related with nature and is therefore conceptualized as part of music. Ohtake cites Japanese anthropologist Junzo Kawada's explanation that when he listened to Takemitsu's music, extramusical noises from nature such as the sounds of birds and wind did not disturb the

⁷⁶ Noriko Ohtake, *Creative Sources for the Music of Toru Takemitsu* (Aldershot: Ashgate, 1993), 52-5.

⁷⁷ Toru Takemitsu, *Confronting Silence* (Berkeley: Fallen Leaf Press, 1995), 54.

music.⁷⁸ Kawada described *Novemember Steps* as, “enhancing the sounds that belong to the ‘stream,’ the music finally became a part of the world.”⁷⁹ As Takemitsu’s desire is to be a part of nature, he makes sound “shaped by the sound around him” and tries to merge music and nature.⁸⁰ According to Takemitsu, people create music because they fear death (representable by silence) and music proves one’s existence. However, he thinks controlling nature and music by ‘piling up sounds’ makes music unnatural.⁸¹ He strives to achieve sounds that are among the “infinite number of sounds that are as intense as silence.”⁸²

In terms of *ma* and silence in Japanese music, Takemitsu says, “The most important thing in Japanese music is space, not sound. Strong tensions. Space: *ma*: I think *ma* is time-space with tensions. Always I have used few notes, many silences, from my first piece.”⁸³ Takemitsu’s thoughts on sound and silence are based on the Japanese tradition even though his music was greatly influenced by Western music. Understanding *ma* is helpful in taking Takemitsu’s thoughts on silence and how distinguish Takemitsu’s use of silence based on *ma* from those of other composers’.

What is *ma*? The Japanese-English dictionary *The New Nelson Japanese-English Character Dictionary* defines *ma* as

1. Space; room
2. An interval

⁷⁸ Toru Takemitsu and Junzo Kawada, *Oto, Kotoba, Ningen (Sound, Word, Man)* (Tokyo: Iwananmi Shoten, 1980), 72-3.

⁷⁹ Ibid., 75.

⁸⁰ Ohtake, *Creative Sources for the Music of Toru Takemitsu*, 53.

⁸¹ Ibid., 22.

⁸² Toru Takemitsu, *Oto, Chinmoku to Hakarieaeru hodon* (*Sound, Measuring with Silence*). (Tokyo: Shincho Sha, 1971), 36-7. (Quoted in Ohtake, *Creative Sources for the Music of Toru Takemitsu*, 22).

⁸³ Toru Takemitsu quoted in Fredric Lieberman, “Contemporary Japanese Composition: Its Relationship to Concepts of Traditional Oriental Musics” M.A. thesis University of Hawaii, 1965.140-1.

3. A pause; rest and space, room; interval; pause; rest (in music); time; a while; leisure; lurk; timing, harmony.⁸⁴

However, *ma* includes more philosophical meaning in Japanese culture. This spatial aspect of *ma* can be found in Japanese architecture, drama, painting, poetry, garden, and music. Roger Reynolds, in “A Jostled Silence,” explains the Japanese sense of *ma* is richer meaning and the thought about space can be found in Japanese architecture. The concept of ‘space’ in traditional Japanese thought is beyond physical extent, and unlike the Western concept of space, people feel space freely and flexibly in traditional Japanese architecture. *Ma* can also be heard in traditional Japanese music. For example, *honkyoku* (original or fundamental pieces) written for *shakuhachi*, in *Reibo* (Longing for the Bell, *Shoganken* Temple version) the performer has pauses to breathe both between phrases and after the dying away of sound.⁸⁵ The solo *shakuhach* features single stretched sound that is itself surrounded with silence. The pauses between phrases are longer than the time needed to breath, allowing the listener to focus on the silence and eternity.

According to Reynolds, *ma* is a bridge “existing between two things (objects, persons, points in time) that could potentially interact.”⁸⁶ According to Architect Arata Isozaki, the change of nature and the affection for movement were absorbed into the Japanese concept of indefinite architectural space. *Ma* is a void, a moment of waiting for this kind of change.⁸⁷ Isozaki also says that, in *Shinto* religion *ma* is the moment of waiting for *Kami* (spirits or phenomena worshipped in *Shinto*), therefore *ma* can be understood as the active action of waiting and preparing for a

⁸⁴ Haig, John H. *The New Nelson Japanese-English Character Dictionary* (Rutland : C.E. Tuttle Co., 1997), 1132.

⁸⁵ The *honkyoku* were those explicitly connected to Zen and the temple traditions. See Bonnie C Wade, *Music in Japan: Experiencing Music, Expressing Culture* (New York: Oxford University Press, 2005), 50, 54.

⁸⁶ Roger Reynolds and Toru Takemitsu “A Jostled Silence: Contemporary Japanese Musical Thought (Part One)” *Perspectives of New Music* 30, no. 1 (Winter 1992): 28

⁸⁷ Arta Isozaki, “Ma: Japanese Time-Space,” *The Japan Architect* 54 (1979): 78.

meaningful thing as *Kami* to descend into and fill spaces; Later it influenced space-time cognition. He says that, “space was perceived only in relation to time flow.”⁸⁸

Takemitsu compared the views of space and architecture in Western and Japanese cultures, and how they relate to nature and the perception of time. He claims that architecture in the West works against nature, whereas Japanese architecture absorbs nature.

Whereas in the West one gets the feeling that differing spaces exist at the same time, in Japan, in such places as the ancient capitals Nara and Kyoto, one senses the synchronic existence of differing flows to time. While one is made strongly aware of space in the West, one is more likely to be conscious of time in Japan.[...] In contrast to Western architecture, which occupies space in resistance to nature, Japanese architecture possesses a tendency to share space in common with nature.⁸⁹

Thus, *ma* is a different concept than the Western notion of negative space. *Ma* not only points to physical space but also points to philosophical or spiritual space and action relating with time (cognition) and nature.

***Ma* in Takemitsu's Music**

How does *ma* exist in music and how does Takemitsu reflect this concept of sound? As discussed earlier, *ma* is a spatial concept with a richer cultural meaning. Thus, in music, *ma* is more complex and abstract in meaning than just silence and space. Takemitsu, in another part of the same essay, writes:

The unique idea of *ma* – the unsounded part of this experience – has at the same time a deep, powerful, and rich resonance that can stand up to the sound. In short, this *ma* this powerful silence, is that which gives life to the sound and removes it from its position of primacy. So it is that sound, confronting the silence of *ma*, yields supremacy in the final expression.⁹⁰

⁸⁸ Ibid., 71

⁸⁹ Toru Takemitsu, “My Perception of Time in Traditional Japanese,” *Contemporary music Review* 1 (1987): 10.

⁹⁰ Toru Takemitsu, Tania Cronin, Hilary Tann. “Afterword,” in *Perspectives of New Music* 27, no. 2 (Summer 1989): 212.

In traditional Japanese thought, *ma* and sound are used as reciprocal means to of understanding and recognizing each other. Also, because *ma* is manifested in many aspects of Japanese life, musical performers and listeners play and listen to *ma*, not just sound.

Reynolds proposes that *ma* in music exists not only as a musical space such as a pause or rest, but also in physical space between performers. For example, Reynolds discusses the relationship between two groups of strings in Takemitsu's *Dorian Horizon*, where the displacement of physical space is not left to right but front and back for different two groups of strings. The displacement of two groups of strings is effective because it "emphasizes near and far and sometimes the passage of messages from the far through the near."⁹¹ Reynold says Takemitsu's use of *ma* in physical space creates another level of *ma*. This idea can also be applied to *November Steps*, where two Japanese instruments, the *biwa* and *shakuhachi*, and a Western orchestra perform mostly in alternation. *Ma* exists as a bridge where these two sounds world meet.

It can be argued, however, that Takemitsu's use of silence and space is not only influenced by traditional Japanese music and thought. As discussed above, Takemitsu's music was heavily influenced by Western music. Distinguishing between the influence of Japan and West is not a simple task. Webern and Messiaen, both influences on Takemitsu's music, used many silences in their own music and share many common techniques: for example, Webern wrote few notes and many silences, and Messiaen used long pauses and decay to evoke a sense of eternity. In "Toru Takemitsu and the Unity of Opposites" Timothy Koozin says, "Takemitsu's music achieves poetic elegance through an aesthetic balance of contraries-of Eastern idea and Western technique, of structural integrity and pure unencumbered sonority, of sound and silence equally

⁹¹ Reynolds and Takemitsu, "A Jostled silence," 28

imbued with expressive meaning.”⁹² Although Takemitsu’s music was influenced by that of Messiaen and Webern, his sound is distinguished from them. Koozin concludes that Takemitsu’s silence is a synthesized Western and Japanese idiom, and it is impossible to distinguish exactly those two influences on his music. It is in this overlap between East and West where Takemitsu’s music and silence reside. This overlap is as a bridge between two worlds. Through concrete musical analysis in the next section, I will compare Takemitsu’s dealing with silence to those of Messiaen and Webern. This comparison of Japanese and Western influence will help us to understand Takemitsu’s music better.

We have seen that *ma* is important and meaningful silence, a crucial concept and aesthetic in the discussion of Takemitsu’s use of silence. Through *ma* we can see how traditional Japanese thought about nature, sound, and noise differs from Western thought. In the next section, I will see what types of musical gestures evoke silence and how *ma* and its aesthetic are delivered through his music.

2.2 Types of Silence in Takemitsu’s Music

Takemitsu composed few notes and many silences in his music. In his works, Takemitsu’s silences are not merely rests between notes in a temporal one-dimension, but instead evoke a richer, meaningful space corresponding to his philosophy.

In this section, I will see how different types of silence functions and can be applied his philosophy. Lastly, I examine how Takemitsu designs silence structurally on different layers and in scales.

Long Pause

⁹² Timothy Koozin, “Toru Takemitsu and the Unity of Opposites” *College Music Symposium* 30, no. 1 (Spring 1990): 44

There are countless silent musical moments in Takemitsu's music. Because Takemitsu offered profound meaning for silence in his philosophy, I will look at what types of silence he used and what function this silence has relating with his philosophy and the character of *ma* as discussed above. Since I cannot deal with all silence in his music here, I have chosen several musical examples which have distinctive silent moments.

I will first look at a long pause in one of Takemitsu's piano pieces, *Piano Distance* (1961). The remarkable musical characteristics of Takemitsu's piece include a natural musical flow inspired by natural phenomena and many quiet moments surrounded by pools of silence. However, this does not mean that his music is always soft, stationary, or without tension. In *Piano Distance*, as the title suggests, many musical elements evoke distance (or space) including sudden big dynamic changes, huge registral gaps, and contrasting musical motion with balanced alternation between rapid embellishments and long sustained notes, single notes and thick textural chords. These different types of distances create greater tension. There are many pauses in his piano music generally, but in m. 50, after a larger registral gap, there is a long fermata accompanied by text that reads 'be silent.' (Ex.4) For those unfamiliar with the piece, it might first be understood as an ending until the piece resumes. Why did he put this long silence here and what is the function of it? From mm. 39 to 45 is the longest phrase in the piece which consists of twenty-four successive eighth-note chords with a series of crescendos (after one large crescendo from *pp* to *ff*, there are three small crescendos). This gesture marks a climax pushing to higher tension. It reaches a very high note (E7) in the right hand with a *fff* marking, and a lower note (C#1) in the left hand at m.44, and then proceeds to B3 with a soft dynamic (*p*) and stops after two measures. This two-measures pause extends the previous tension because of its placement right after an intense, lengthy crescendo, so one might expect that this moment could be a longer silence than two measures. However, unlike this expectation there is a quiet one measure phrase after the two-measures pause, which is in turn followed by a long silent moment in m.50. The previous tension

of the two-measure pause is released by this soft phrase and this released tension is continued during the long silence. This flow from m.44 offers the contrast power of silence, as it is the same power of silence at the end of the piece of music. This long silence makes the audience get used to in silence, so that in m.51, the sudden *sf* chord attack has a very powerful effect, which is reinforced by the previous long and powerful silence. This sudden chord would be surprising for an audience member who considered the silence in m.50 as the ending or who focused on that long silent moment. This chord thus helps the audience regain their tension and focus again. The powerful role of the silence followed by sudden loud sharp and brief chord sound is an example which can be applied to that Takemitsu mentioned *ma*, as “strong tension(s)” which gives “at the same time a deep, powerful, and rich resonance that can stand up to the sound.”

The musical score for Example 4, Takemitsu, Long pause in *Piano Distance*, mm.41-54, is presented in two systems. The first system (mm. 41-45) features a piano piece with various dynamics (ff, p, mf, p, mf, f) and tempo markings (accel., quiet, p, original tempo). The second system (mm. 46-54) shows a piano piece with dynamics (ppp, p, mp, p, sf, sustain, fff, pp) and tempo markings (softly, suddenly, original tempo). The score includes a long pause in m. 51 marked 'Be silent'.

Example 4. Takemitsu, Long pause in *Piano Distance*, mm.41-54

Pause with Decay

Another type of pause we see is a pause with a decay. There are many pauses with decay especially in Takemitsu's piano music, as in the above example of *Piano Distance* and the second

movement of *Uninterrupted Rests* (1962) with sustain pedal (with an expressive marking that reads “Quietly and with a cruel reverberation”). Takemitsu’s piano music, compared to other composers’ piano pieces, is not always fully notated. He generally writes only few phrase markings (some pieces have no phrase markings) but extended beams beyond the measure indicate phrasing (Ex.5 second movement in *Uninterrupted Rest*, 2nd and 3rd system). More importantly, for a full measure of silence with a sustained note decay, there are no rests (see above example 4 and 5). In many cases in Takemitsu’s music, the shape of musical motions emerges and then disappears into the silence or ambient moment. It is related to Takemitsu’s notion of “stream of sound.” Takemitsu’s thoughts on sound are laid bare in his discussion of “stream of sound” in his essay in *Confronting Silence*: “One day in 1948 while riding a crowded subway I came up with the idea of mixing random noise with composed music. More precisely, it was then that I became aware that composing is giving meaning to that stream of sounds that penetrates the world we live in.”⁹³ In his book, *The Music of Toru Takemitsu*, Peter Burt says the “stream of sound” concept is represented by “beginning from the ambience and fading into nothingness.”⁹⁴ Between these musical movements, there are some pauses with sustain notes and pedal in Takemitsu’s piano music. However, the sound disappears and is followed by absence of sound at some point. It is up to the performer’s decision to decide how long the performer will allow these silences to linger. This brings up a notational question: Why does he not use rests? Is it because he really does not want to have an absence of sound at that moment?

⁹³ Takemitsu, *Confronting Silence*, 79.

⁹⁴ Peter Burt, *The Music of Toru Takemitsu* (New York: Cambridge University Press, 2001), 237-8.



Example 5. Takemitsu, *Uninterrupted Rest*, II, second and third system

Takemitsu's use of and thoughts on rests are different from those of Western composers. As a composer who writes with an Eastern influence using the Western notation system, Takemitsu criticizes the limitation of the Western system's representation of silence (rest):

Within our Western musical notation the silences (rests) tend to be placed with statistical considerations. But that method ignores the basic utterance of music. It really has nothing to do with music. Just as one cannot plan his life, neither can he plan music.[...]

Western music has been carefully classified within a narrow system of sounds, and its presentation has been systematically notated. Rests within a score tend to be placed with mathematical compromises. Here the sound has lost its strength within the limitation of functionalism. Our task is to revive the basic power of sound. This can be done only by a new recognition of what sound really is. I do not know if *gagaku*⁹⁵ satisfies that requirement, but I do know that in this stream of sounds that is *gagaku*, a richness of sound undivided by rigid classifications can be recognized.⁹⁶

In Takemitsu's piano music, while a note decays with the sustain pedal, there is no notation of notes (see above examples). There is physical sound which should disappear at some point, but Takemitsu did not distinguish between decay and the absence of sound with rest. This

⁹⁵ *Gagaku* is Japanese court music.

⁹⁶ Takemitsu, *Confronting Silence*, 5, 7.

notation gives performers a dual meaning of sound and silence, allowing them coexist at that moment. It reflects Takemitsu's philosophy that "to make the void of silence live is to make live the infinity of sounds. Sounds and silence are equal... I [Takemitsu] would like to achieve a sound as intense as silence."⁹⁷ This also might be a resolution for what he criticizes Western notation in terms of rests and their restrictions.

For silences with decay and/or long reverberation between each musical gesture, the role of the pedal is very important in attaining an ethereal effect that evokes a sense of eternity. In the case of *For Away*, three pedals (damper, soft, and sostenuto) are required, and there are detailed pedal markings through the score, in spite of the indication 'freely' for pedal in some bars. The soft pedal is used in the beginning of the piece and until around three quarters of the way through the piece. This use of soft pedal maximizes soft and quiet moments, and allows for dynamic changes within a lowered level of sound.

Koozin states that Takemitsu's use of silence with decay achieves a realization of a sense of eternity that cannot be perceived without a musical frame.⁹⁸ According to him, this gesture also can be found in Japanese art. Koozin states that:

In the temporal imagery of traditional Japanese arts, moment-to-moment events are superimposed against a static background; being and becoming are recognized as contraries which mutually define each other. Through the decaying reverberation of the piano's tone, Takemitsu creates a metaphor for the fluidity and impermanence of the physical world. Musical gestures in Takemitsu's music which begin with an initial accent and enlisting the surrounding silence, so that ultimately the static sonorous background becomes linked to a background of objectified silence.⁹⁹

The musical gesture, approaching nothingness as it decays, can make audiences feel a sense of eternity and timelessness "linked to a background of objectified silence." Messiaen also used these kinds of gestures to evoke eternity. Although Messiaen's technique is derived from his

⁹⁷ Quoted in the liner notes, "Toru Takemitsu: Miniatur II." Japanese Deutsche Gramophone, MG 2411.

⁹⁸ Koozin, "Toru Takemitsu and the Unity of Opposites," 41.

⁹⁹ Ibid.

awareness of time relating with his Christian faith, Messiaen influence is combined with a traditional Japanese sense of eternity in nature and music on Takemitsu's music. Because of the quiet sounds, slow gestures, and shared pitch elements (especially the use of the octatonic collection),¹⁰⁰ the sound of both composers is often similar. However, Takemitsu's music has more flexible and frequent spaces than that of Messiaen. Likewise, Takemitsu's music is not fully notated as mentioned, a feature which lets performers make their own decision or take their time to breath. As discussed above, Messiaen's concept of space is philosophically different from that of Takemitsu's in profound level: Messiaen's quiet moments and silence are for meditating on God, a manifestation of his Christian faith.

The Emphasis of Isolated Utterances

"Music is either sound or silence. As long as I live I shall choose sound as something to confront a silence. That sound should be a single, strong sound." (Toru Takemitsu)¹⁰¹

In traditional Japanese music, a single utterance can mean a lot; this is associated with *ma*. *Ma* surrounds a single stroke of the Japanese instruments *biwa* or *shamisen*. As Takemitsu writes in his essay, "One Sound," "just one sound can be complete in itself, for its complexity lies in the formulation of *ma*, an unquantifiable metaphysical space (duration) of dynamically tensed absence of sound."¹⁰² A single utterance in traditional Japanese music is strong and completes, as Takemitsu writes. Takemitsu also conceived of the concept of a single utterance in a more philosophical way. He believed that this single sound is related to Buddhism. He says, "with one sound one becomes the Buddha... suggesting that the universe is explored in a single sound... So, with some exaggeration, I might say God dwells in a single sound."¹⁰³ This is also related to the term

¹⁰⁰ See Koozin, "Toru Takemitsu and the Unity of Opposites."

¹⁰¹ Takemitsu, *Confronting Silence*, 5.

¹⁰² Toru Takemitsu, "One Sound," *Contemporary Music Review* 8, Part 2 (1993): 3.

¹⁰³ Takemitsu, *Confronting Silence*, 65-6.

sawari (touch) which is associated with *biwa* (or other string instruments) and refers its natural noise and timbre.¹⁰⁴ And as Ohtake writes, *sawari* allows the sound (noise) absorbing nature and finally promotes *ma*. Thus, this single sound is not just simple or minimum sound. It is a way to feel nature and even Buddha. Takemitsu also says about *ma* and *sawari*:

While words like *ma* or *sawari* have actual technical meanings, at the same time they [Japanese performers] convey a metaphysical aesthetic. I [Takemitsu] think that as a people who developed the concept of *Ichion Jôbustu* the Japanese found more meaning in listening to the innate quality of sound rather than in using sound as a means of expression. To them natural sound or noise was not a resource for personal expression but a reflection of the world.¹⁰⁵

Takemitsu goes on to state that “Japanese music considers the quality of sound rather than melody.”¹⁰⁶ However, this consideration of “quality of sound” exists not only in Japanese music, but in certain Western music as well, especially in Webern’s music. Koozin says both the influence of Webern, who also emphasized single sounds in isolation, as well as the influence of traditional Japanese aesthetics, should not be ignored. He refers to Chou Wen-Chung’s following discussion in “Asian Concepts and Twentieth Century Composers,” of Webern’s influence and its parallel with Asian music:

Webern’s concern with clarifying motivically generated structures with highly variegated textures meticulously defined in regard to articulation, timbre, register, duration, etc., reminds one of certain types of Asian music in which the shifting melodic structure would seem either static or erratic were it not similarly defined. The music for *ch’in* (a Chinese zither), for example, is impossible to understand if one recognizes only that it is in a sort of variation form and is based on a single mode, usually pentatonic. The meaning of the music derives from the great variety in articulation, the almost continuous change in timbre, the pitch inflections, and the diverse types of vibratos employed. Nor can Webern, particularly in his pre-serial works (e. g., *Six Bagatelles*, Opus 9, and *Three Little Pieces* for cello and piano, Opus 11), be understood purely in terms of pitch relationship. In

¹⁰⁴ Takemitsu states *biwa*’s structure and *sawari* that “on the *biwa* the *sawari* is part of the neck of the instrument where four or five strings are stretched over a grooved ivory plate. When a string is stretched between these grooves and plucked, it strikes the grooves and makes a noise. The concave area of this ivory plate is called the ‘valley of the *sawari*,’ the convex are the ‘mountain of the *sawari*,’ and the entire plate simply *sawari*. When a string is stretched between these grooves and plucked, it strikes the grooves and makes a noisy ‘bin’.” Takemitsu, *Confronting Silence*, 65.

¹⁰⁵ Ibid., 56.

¹⁰⁶ Ibid., 65.

short, Webern's concern with all the definable physical characteristics of individual tones is conceptually and aesthetically in sympathy with important categories of Asian music.
¹⁰⁷

Let us see the difference how Webern used it from those of Takemitsu at the end of this section.

This single emphasized note gesture can be found in writings for *biwa* and *shakuhachi* in *November Steps*. Takemitsu wrote few pieces for traditional instruments, and only several pieces are written for Japanese traditional instruments and Western instruments together.¹⁰⁸ As mentioned briefly in the previous discussion about *November Steps*, the parts for *biwa* and *shakuhachi* alternate with the parts for Western orchestra, and this alternation shows a contrast between two different sound worlds, such as its techniques, textures, musical languages, et cetera. It shows how Takemitsu tried to “integrate” rather than “blend” two different sound worlds.¹⁰⁹ There are some parts of both sound world played together: for example, when the *biwa* and *shakuhachi* first play, the orchestra provides a soft accompaniment. In this piece, the *biwa* and *shakuhachi* writing embody traditional Japanese gestures, including those improvised with graphic notation part in the cadenza. The thick sonic texture of the Western orchestra contrasts to the gesture of *biwa* and *shakuhachi* which is surrounded by thick silence. Especially while the Japanese instruments are playing, there are silent moments between notes that are not indicated in the score. In terms of *sawari* the *shakuhachi*'s noise is meant to involve strong breath: there are indications in performance notes, “make an accent with strong breath” and “*Muraiki* playing (with such breath).” The *biwa*'s noise should involve a strong stroke, rubbing or crossing strings. These sounds are also contrasted with the orchestra's pure and refined sound. Although there are some noises from ex-

¹⁰⁷ Chou Wen-Chung, “Asian Concepts and Twentieth Century Composers,” *Musical Quarterly* 57, no. 2 (April 1971): 214.

¹⁰⁸ Music for Western and Japanese instruments together are *November Steps* (1967) for *biwa*, *shakuhachi*, and orchestra, *Distance* (1972) for oboe and *shō* ad libitum, *Autumn* for (1973) *biwa*, *shakuhachi* and orchestra, and *An Autumn Ode* (1992) for orchestra with *shō*. These are composed for concert music. Music for Television and film are excluded.

¹⁰⁹ Takemitsu, “Contemporary Music in Japan,” 210.

The musical score is for the 'Ending of Rain Spell' by Toru Takemitsu. It features a piano with right-hand (r.h.) and left-hand (l.h.) staves. The right-hand part begins with a 'piano r.h.' instruction and a 'l.v.' (lento vivace) marking. The left-hand part is marked 'piano l.h.' and includes a 'harp' effect. The tempo is indicated as '(Very slow)'. The score includes various dynamic markings: *p* (piano), *mp* (mezzo-piano), *p* (piano), *mf* (mezzo-forte), and *p* (piano). Specific notes are labeled with solfège names: 'Fa' and 'Sol' in the left hand, and 'La' in the right hand. The right-hand part also includes a 'vib.' (vibrato) marking. The score is marked with a large 'N' in a box at the beginning.

Example 7. Takemitsu, Ending of *Rain Spell*

Let's return to the difference between Webern's silences and his emphasis on single notes. As mentioned earlier, Metzger claims that there are four types of ways in which Webern employs silence: stillness, extremely soft dynamics, brevity, and fragmentation. Both stillness and extremely soft dynamics are common between Webern and Takemitsu, but the latter two, brevity, and fragmentation, are different from Takemitsu's silence. In terms of length and silence, Takemitsu's use of silence is almost opposite to Webern's. The lengths of Takemitsu's compositions are generally longer than those of Webern's, and sustained notes linger until the sound dies or disappears as seen in previous examples. Despite their shared use of emphasized and isolated notes, their approaches to this technique differ: Unlike Webern, who uses fragmented phrases "surrounded by silence," Takemitsu's musical phrase is generally stretched rather than fragmented. Also, isolated single notes or phrases are surrounded and balanced with longer phrases. In some cases, there are long pauses or moments between phrases or even in the middle of phrases, but the resulting effect is not that of fragment or cut.

Webern and Takemitsu's use of silence, though subtly different, share many similarities. We surveyed some differences and made comparisons between how silence appears and what aesthetics operate behind between Takemitsu and Messiaen, and Takemitsu and Webern. Takemitsu's aesthetics of silence overlapped with Western and Japanese philosophy. Consequently,

Takemitsu's use of silence is formed by synthesizing and incorporating both Japanese and Western successors.

2.3 Analysis of Silence in *Garden Rain*

In this section, I'll look at silence in Takemitsu's *Garden Rain* (1974) for ten brass instruments. In this example, we will see how different lengths and functions of silence locate at different levels of musical structure. As the title suggests, this music was inspired by the idea of gardens, particularly, in poem which was written by Susan Morrison.¹¹⁰ Japanese gardens are world famous for their unique style, spatialization, and harmony with nature based on Japanese aesthetics. Takemitsu writes: "I love gardens. They do not reject people. There one can walk freely pause to view the entire garden, or gaze at a single tree. Plants, rocks, and sand show changes, constant changes."¹¹¹ He wrote several compositions about gardens, including *Arc* for piano and orchestra (1963-6), *In an Autumn Garden* (1973,79), and *Fantasma/Cantos* (1991). *Garden Rain* begins with soft and "stationary" long notes.¹¹² According to Burt, it is influenced by *sho* (a Japanese traditional wind instruments consisting of 17 narrow bamboo pipes), its chord, because of the "pitch-material of *Garden Rain* in terms of subsets formed by 'partitioning' of the traditional repertory of *sho* chords" and the pauses necessary inhaling and exhaling between musical movements or phrases.¹¹³ The *sho*, unlike most Western instruments, produces multiple sounds at once and sounds similar to chord played by multiple brass instruments. Takemitsu mentions the *sho* in his essay *Confronting Silence*:

¹¹⁰ Takemitsu found this poem in *Miracles*, an anthology of poetry. See Takemitsu, *Confronting Silence*, 117. The poem is "Hours are leaves of life/ and I am their gardens.../Each hour falls down slow" ed. Richard Lewis, *Miracles: Poems by Children of the English-speaking World* (New York: Simon and Schuster, 1966), 121.

¹¹¹ Takemitsu, *Confronting Silence*, 95.

¹¹² The score says "Nearly Stationary (John Cage)," Toru Takemitsu, *Garden Rain*, Paris: Éditions Salabert, 1974, 1.

¹¹³ Burt, *The Music of Toru Takemitsu*, 167.

Sound on the *sho* is produced by inhaling and exhaling. The resultant sound, continuous and without attack, does not generate external beats, but awakens an internal latent rhythm. Delicately swaying clusters of sound reject the concept of everyday time. I now recall Pierre Reverdy saying, “Only silence is eternal.”

Creating sound by inhaling and exhaling results in an unbroken continuity.[...] Indeed, inhaling and exhaling are the history of life.¹¹⁴

Pauses in *Garden Rain* between musical phrases recall the *sho*’s exhaling and inhaling and evokes *ma* in the first section, A. The gesture in section A seems to embody Takemitsu’s description “continuous and without attack,” or, as the score says, “without accent.” A chart, Figure 2 depicting the structure of *Garden Rain*, adapted from Dana Wilson (I added silence part).¹¹⁵ Section A is a “stationary” long and homophonic part, while section B consists of poly rhythms in the higher bass and melody in the lower bass. Echoic trumpet melodies appear as a canon passage in section C. The last section, the coda, starts with trumpet melodies similar to section C in page 11, with little varied motion, and returns to a “stationary” part (as in section A).

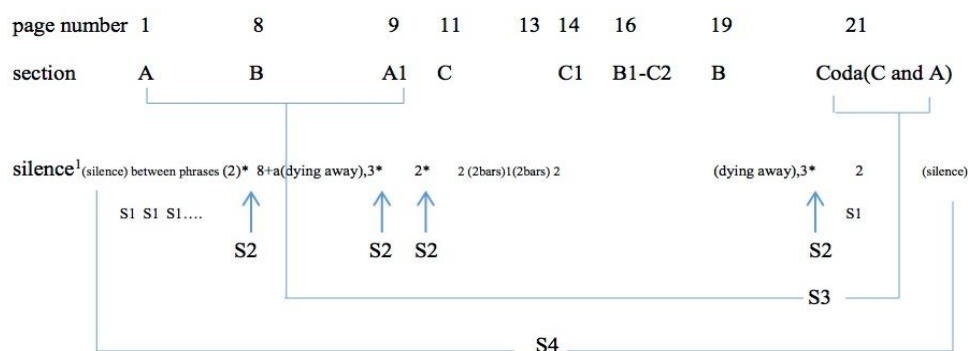


Figure 2. Form and silence in *Garden Rain*

In section A, the breath between musical phrases is more than enough time to breath; other composers might have notated only a breath mark in this case (Ex. 8). However, Takemitsu uses a

¹¹⁴ Takemitsu, *Confronting Silence*, 7.

¹¹⁵ Dana Wilson, “The role of texture in selected works of Toru Takemitsu” (PhD Diss., University of Rochester, 1982), 209.

measure with a rest and numbers of relative seconds.¹¹⁶ Each silent moment has different numbers of time units, 1.5, 2, 2, 3, 4, and the numbers generally increase. Like the units of silence increase, the numbers for time of sound (including dying away) also increase, 16,12,14,13,18.5, 22, respectively, even if there are slight exceptions. This shows how Takemitsu deals with the moment of silence as sound. Each musical phrase in the stationary section consists of three gestures: emergence from nothingness with a soft dynamic, a lengthy period of “dying away,” and then silence (see Ex.8). The shape of these three different gestures mimics the natural phenomenon of sound, and can be applied to Takemitsu’s concept of “stream of sound” as an emergence from ambience and disappearance to ambience (or *ma*, as Burt pointed out).

The musical score for the beginning of *Garden Rain* is divided into two measures. Above the staff, the sequence of gestures is labeled: (Silence), Emergence, Dying away, Silence, Emergence, Dying away. Above these labels are numbers in boxes: 6, 10, 1.5, 4, 8. The first measure is labeled '1st Group' and contains the following instruments and gestures: Tp.2, Hrn (Bouché) with a 'pppp' dynamic and a 'dying away (d.a.)' gesture; Tp.1 with a 'dying away (d.a.)' gesture; Tbn. with a 'dying away (d.a.)' gesture; and Hr. n. with a 'dying away (d.a.)' gesture. The second measure contains the following instruments and gestures: Tp.1 with a 'dying away (d.a.)' gesture; Tp.2 with a 'dying away (d.a.)' gesture; Hr. n. with a 'dying away (d.a.)' gesture; and Tbn. with a 'dying away (d.a.)' gesture.

Example 8. Takemitsu, Beginning of *Garden Rain*

Unlike section A, section C (starting from page 14) has almost no silence except for a few short pauses at pages 13 and 14. Spanning sections C1-B, in pages 14-21, there is the longest phrase which leads to the climax in the piece. Before this longest phrase, short phrases and short pauses alternate as seen in example 9. These short breaks create tension. Thus, this short silence

¹¹⁶ The score says about numbers: “Numbers indicate time (tempo) and each number is played relatively. This piece is desirable to play as slow as possible. For example, in 6, it must be played longer than six second.” Takemitsu, *Garden Rain*, 1.

is functionally different from the relatively longer pause in section A.

Example 9. Takemitsu, Pauses in *Garden Rain*, pp.13-4

I have adapted the idea of silence at different levels from Jonathan Lee Chenette's Master's thesis "The Concept of *Ma* and the Music of Takemitsu," Chenette proposes that sound and silence at different levels in the piece: each muted trumpet echoing sound that was initiated with the preceding statement (section C at pp.11 and 21 as seen in Ex.10 and 11), silence between sections that connect sustained chord sections, A+B+A1 and the coda (what I call S3), and another silence from ambience at the very beginning and ending which establish a higher level of silence (which I call S4).¹¹⁷ Silence exists not only between phrases (what I call S1) in section A, but also between sections (see above figure 2) and other places. There are pauses before sections B (p.8), A1 (p.9), C (p.11), and the coda (p.21), respectively; I call these S2 (see *). Also, the silence before coda in page 21, the same types of silence as in section A: longer dying-away gesture followed by a fermata and pause, recalls the stationary section A. Finally, the first stationary section comes, but it is after the trumpets' echoing canon (section C, p.21). This silence, which arrives

¹¹⁷Jonathan Lee Chenette. "The Concept of *ma* and the Music of Takemitsu." (M.A. Diss., Grinnell College, 1985), 15-6.

after the dying-away of sound, locates at a higher level (beyond several sections) and links the first (stationary) parts including sections A, B, A1 (until p.9) and the coda (from p.21), which I call S3. Wilson points out the similar function of the sound which links the sections as the silence does. According to Wilson, “the rapid trumpet passages (all four trumpets playing a total of only two or three pitches in different rhythmic patterns) offer a textural link between the stasis of section A and the great activity of B and C.”¹¹⁸ These trumpet passages appear similarly as pages 11 and 21 (Ex.10 and 11). Thus silence, which is after a long dying-away, and sound which is the trumpet’s echoing melodies, both serve to tighten the whole structure. We can see how Takemitsu carefully designed both sound and silence making them both structurally important.

The image displays a musical score for two groups of instruments, labeled '1st Group' and '2nd Group', spanning pages 10 and 11. The score is written for trumpet (trp.), trombone (trbn.), and horn (hrn.) parts. On page 10, the 1st Group has a 'dying away' section marked with a wedge and 'mf (f)', followed by a 'very soft, dolce' section. The 2nd Group also has a 'dying away' section marked with a wedge and 'mf'. On page 11, the 1st Group has a 'Breathe' section marked 'pp' and a '72-85' section. The 2nd Group has a 'very soft, d.a.' section and a '72-85' section marked 'pp'. The score includes various musical notations such as notes, rests, and dynamic markings.

Example 10. Takemitsu, Trumpet passage in p.11 which links A and section B, C in *Garden Rain*, pp. 10-11

¹¹⁸ Wilson, “The Role of Texture in Selected Works of Toru Takemitsu,” 216.

p.20
[8]

1st Group

trp. *mf* *p* dying away

trbn. *f* *p* dying away

trbn. *p* *molto (f)* *mf* *ppp*

2nd Group

trp. *f* *p*

trbn. *f* *mf* dying away

trbn. *mf* *pp* dying away

d.a.

HARMON pull stem

p.21
Section (C+A)

1st Group

trp. 60-72 *pp* *pp* *p*

trp. *pp*

2nd Group

60-72 *pp* *pp* *ppp*

Example 11. Takemitsu, S3 (silence between sections) and trumpet passage which link sections in *Garden Rain*, pp. 20-21

These silences (S1-between phrases, S2-between sections, and S3-beyond several sections) evoke *ma*, as mentioned, and recall one of the characteristics of *ma*, a bridge between two worlds. The spaces, *ma*, existing between musical phrases and sections provide a cue to the audience and make them expect subsequent musical events in the form of phrases, sections, or changing moods or motions. Additionally, as Chenette proposes, silence is located both before and after music which I term S4, at the highest level.¹¹⁹

¹¹⁹ Chenette, "The Concept of *Ma* and the Music of Takemitsu," 16.

While this silence exists in any other music, S4 is related particularly with the similarity between smaller and greater musical shapes in *Garden Rain*. In a smaller musical shape as I pointed out in section A (see Figure 3), there are three gestures: emergence, dying away, and silence (or silence, emergence, and dying away, because silence overlaps with the next phrase). Since a portion of section A and A1, consist of three gestures and almost 2/3rds of the entire piece, this shape may be heard as a more primary gesture in this piece.¹²⁰

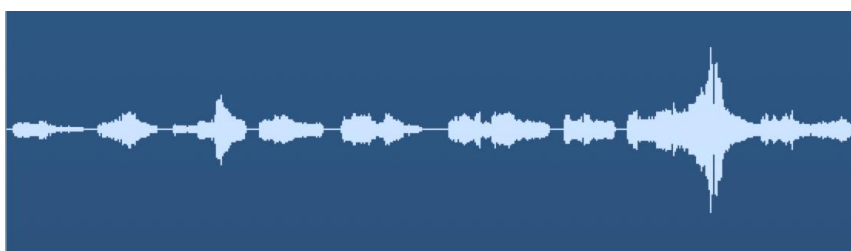


Figure 3. Three gestures of musical phrases in section A (-207'') in *Garden Rain* : (silence), emergence, dying away, and silence (two silences surrounding sound can be overlapped), pp.1-5

A greater sense of the piece may be pictured as a musical gesture that starts from ambience (silence), emergence, and proceeds through dying away, returning to silence. So roughly the motion is the same as the smaller gesture of each phrase in section A, as seen in Figure 3. As a greater level of silence, S4 surrounds the entire piece.

Therefore, in *Garden Rain*, each silence exists as a smaller distance between phrases and also as a larger distance between sections, even beyond several sections, and each functions differently depending on context. Also, it recalls the perspective of *ma*, which plays a role as a

¹²⁰ The length of sections A+A1+A=251", and those of whole music is 370", see Wilson, "The role of texture in selected works of Toru Takemitsu," 222, Figure 19.

bridge between different (musical) worlds, such as different phrases and sections. Takemitsu's use of silence shows how he designs silence just as carefully as sound.

2.4 Conclusion

Takemitsu's silence is rooted in the Japanese spatial aesthetic *ma*, contrasting with a void or negative absence in Western thinking. His use of silence synthesized Japanese philosophy with the techniques of Western composers. In this chapter, we surveyed various types of silence such as longer pauses, pauses with decay, single complete sounds, and we also looked at the function and structural design of silence. This silence in Takemitsu's music invites listeners to a special realm of silence associated with surrounding sound. These silences between sound help us realize the beauty of "stream of sound" and enjoy Cagean moments of emptiness.

Chapter 3. Salvatore Sciarrino's Silence

As a self-taught composer, Salvatore Sciarrino's (1947-) style cannot be easily determined and is therefore difficult to analyze. Although silence in his music has been much discussed, we can gain new insights by comparing it to the use of silence by Cage and Takemitsu. For Sciarrino, space is an important concept in his music, and his spatialization and silence are associated with each other. I will examine how his notion of space is correlated with silence and compare those attitudes to Takemitsu's, whose sense of space is based on the Japanese aesthetic and spatial conception *ma* and also relates to silence.

Sciarrino was born in 1947 in Palemo in southern Italy. In his youth, he was interested in painting, and later regarded this visual experience of painting as influential on his thoughts about spatialization in music. He was inspired by the paintings of Jackson Pollack, Lucio Fontana, and Alberto Burri, and tried to imitate their style. At the age of 12, he decided to study music, and briefly studied with Antonio Titone (1959) and later Turi Belfiore (1964). Despite this, Sciarrino is mostly considered a self-taught composer, as much of his learning came from his independent study of the music of Mozart, Mendelssohn, and Brahms. His first public performance was at Palermo's New Music Week in 1962, which he described as "a stream of continuous sounds, woven with breath, tiny noises, harmonies with small groups of events."¹²¹ Sciarrino has argued that his personal style is best represented by the music he composed after 1966.¹²²

After a few years studying at the University of Palemo, he moved in 1969 to Rome. There, he met a composer Franco Evangelisti and took a course in electronic music at the Accademia di S. Cecilia;¹²³ both events influenced Sciarrino's music and philosophies. Sciarrino

¹²¹ Klatenecker, Martin, "L'Exploration du Blanc," *Entretiens* 9, Paris, (1990): 107-8 (Quoted in Grazia Giacco, trans. Cedric Peter, Introduction to *La notion de "figure" chez Salvatore Sciarrino. Sonus: A Journal of Investigations into Global Musical Possibilities* 27, no. 2 (Spring 2007): 16).

¹²² Salvatore Sciarrino "Short Biography," Savaltoresciarrino.eu.
http://www.salvatoresciarrino.eu/Data/Biografia_breve_eng.html

¹²³ Franco Evangelisti is one of Sciarrino's Italian successors who linked between German Darmstadt and Italian contemporary music in 1960s.

quickly developed a personal style. He is an especially prolific composer: his music spans many genres from solo to theater and opera pieces. In addition, he has written the librettos of his operas. He has also written essays including an interdisciplinary book: *Le figure della musica, da Beethoven a oggi* (Ricordi 1998). He taught composition in Milan, Perugia, and Florence Conservatories from 1974 to 1996. He also taught courses about spatialization and composition masterclasses in Città di Castello from 1979 to 2000. He has continued to be based there since 1982.

3.1. Influences

Rejection of Darmstadt Aesthetics

Galvin Thomas, in his article, “The Poetics of Extremity” says Sciarrino’s “silence was the *tabula rasa* against which, during the 1960s and reacting against the then-prevalent Darmstadtan aesthetic and all received forms of musical method and rhetoric... .”¹²⁴ Sciarrino refers to the style of the Darmstadt school as the “Darmstadt aesthetic” and discusses a kind of “structuralism” typical of that aesthetic.¹²⁵ The Darmstadt (school) refers composers’ group who took part in the Darmstadt International Summer Courses for New Music from the 1950s to the early 1960s in Darmstadt, Germany which greatly influenced European composers. Unlike Sciarrino’s successors, who were deeply involved with Darmstadt style, Sciarrino rejected the Darmstadt aesthetic. Instead of that, his music evinces research of “timbre, ...form, and space construction.”¹²⁶ What about structuralism and serialism did Sciarrino reject, and what alternatives did he propose?

¹²⁴ Gavin Thomas, “The Poetics of Extremity. Gavin Thomas Introduces the Remarkable Music of Salvatore Sciarrino,” *The Musical Times* 134/1802 (April 1993): 193.

¹²⁵ See James Dennis Bunch “A Polyphony of The mind: Intertextuality in the Music of Salvatore Sciarrino” (PhD Diss, University of Illinois at Urbana-Champaign, 2016), 142. Bunch refers Christopher Fox says “It was Nono who proposed the name ‘Darmstadt School’ (with its conscious echo of ‘Second Viennese School’) to emphasize the collegiality of the most advanced composers associated with the course. “Christopher Fox, “Luigi Nono and the Darmstadt School: Form and Meaning in the Early Works (1950-1959),” *Contemporary Music Review* 18, no. 2 (1999), 111-2.

¹²⁶ Giacco, Introduction to *La notion de “figure” chez Salvatore Sciarrino* (Paris: L’Harmattan, 2001): 17.

Structuralism and serialism were discussed and developed by Darmstadt composers.

Helmut Lachenmann states that the key concept of Darmstadt thinking was that “parameters and [their] dissemination depended on serial, quantified procedural methods.”¹²⁷ Serialism developed from Schoenberg’s twelve-tone method into integral serialism, which incorporated other musical elements besides pitch such as rhythm, dynamic, and articulation. This integral serialism spread throughout in not only Europe but also the United States. Sciarrino criticized Darmstadt’s preoccupation with serialism, commenting: “After the Darmstadt years it seems that the musician has lost his psyche, impaled upon Modern spikes. He represses himself, both when he writes and while he listens and on the contrary privileges logical and formal aspects.”¹²⁸

James Dennis Bunch, in his Ph.D. dissertation “A Polyphony of the Mind: Intertextuality in the Music of Salvatore Sciarrino” discusses aspects of the structuralists aesthetic that Sciarrino rejects. According to him, Sciarrino regarded the serialists’ music and thoughts on music as “systematic, arithmetical, grammatical, disengaged, negative, and formalistic.”¹²⁹ Sciarrino criticizes the term “structure” and argues that this term became misused:

When I was young, structuralism was at the height of its existence. I was very annoyed with the improper use of the word “structure.” Because one used the word to speak of “aggregates,” of more or less abstract configurations. That’s what “structure” meant. For example, the titles [i.e., works] of Boulez wanted to say this, because he refuted, in that period, the concept of structural organism. [...] Instead of structure in the linguistic sense, it was neither functional nor objective but – as one can say – the results of manipulation. What they called structuralism was more preoccupied with operations than with results, while structure is rather the result of perception. If it is not the result of perception, then the word “structure” makes no sense.¹³⁰

¹²⁷ Helmut Lachenmann, “Composing in the Shadow of Darmstadt,” *Contemporary Music Review* 23, no. 3/4 (2004): 43.

¹²⁸ Salvatore Sciarrino, *Carte da Suono* (Palemo: Novecento, 2001), 51 (Quoted in James Dennis Bunch “A Polyphony of the Mind: Intertextuality in the Music of Salvatore Sciarrino” (PhD Diss, University of Illinois at Urbana-Champaign, 2016), 142).

¹²⁹ Bunch, “A Polyphony of the Mind,” 168.

¹³⁰ *Ibid.*, 146, 469-470.

Bunch also points out that Sciarrino criticizes structuralists and modernists' view of formalism. According to Bunch, Sciarrino's assertion is that the approach of music should be global and that composers should be concerned not just with musical form or pitch structure. Marco Angus describes his view of what he calls "globality" in Sciarrino's music:

While other composers limit themselves to the grammatical elements of discourse (separating the micro-structural aspect and declining any responsibility for actual form), he[Sciarrino] imagines a sonic world in its globality, including all the details; he imagines, that is, the sounds in their percipience.¹³¹

Compared to the arithmetical perspectives typical of the Darmstadt school, Sciarrino uses numbers as a perceivable device. In this sense, in Sciarrino's music, musical motives are repeated so that the audience can have enough time to perceive them and become familiar with them.

In Sciarrino's music there are many sonic gestures that mimic the sound of nature such as bird or dog's crying. Sciarrino discusses these sounds, claiming that he does not "there is a difference, for the listener, between the cry of a real cricket and its imitation by an instrument: it is not an imitation on another plane; they exist on the same plane, in the same temporal field."¹³² These sounds of nature are achieved through the use of extended techniques developed or invented by Sciarrino. According to Thomas, Sciarrino's way of using extended technique is different from those of other contemporary composers. Rather than providing 'effects,' they are used as fundamental musical subjects and are not developed. Thomas says these sonorities are reconsidered as compositional form and grammar."¹³³ On the musical imitation of nature, Sciarrino comments:

In the usual aesthetic of our time we speak of imitation as something negative... Thus the tendency towards abstraction is a reaction against a bourgeois art based on the representative... When this conflict of abstraction and imitation has lost its ideological force, the relationship of art to nature re-emerges... I think it is possible now (something I have often

¹³¹ Marco Angus, *Come Avvicinare il Silenzio: la musica di Salvatore Sciarrino* (Rome: RAI-ERI, 2007), 34 (Quoted in Bunch, "A Polyphony of the Mind," 153).

¹³² Sciarrino, "Entretien avec Salvatore Sciarrino," *Entretiens*, 138-9.

¹³³ Thomas, "The Poetics of Extremity," 194.

done) to develop a new relationship with nature... Music can imitate real sounds, but must do so in a way so that one hears the artifice; to reproduce exactly is useless...¹³⁴

Spatialization

Rather than Darmstadt's serialism, Sciarrino emphasizes spatiality in his music. Sciarrino speaks in terms of the sense of space in music:

We deal with the sense of space which is the basis for music, but I do not mean real space, but mental space; for before giving out the organizing rules of a composition, space organizes musical perception... Music has taken into itself, through a 1000 year path, the illusion of proximity and distance, that is to say the ambient space.¹³⁵

Sciarrino's concept of spatiality can be found in the final two chapters of his book, *Le figure della musica, da Beethoven a oggi*. Sciarrino states that musical spatiality is both horizontal (temporal), as well as vertical (dimensional).¹³⁶ Sciarrino's sense of space was also inspired by the visual arts. In his book, visual artists who influenced Sciarrino's sense of musical spatialization are discussed, particularly Italian artists who pioneered novel uses of space, Fontana and Burri. Just as these artists emphasized space and dimension through slits on the canvas or by making holes through the burning or breaking of materials, Sciarrino described in acknowledged "dynamically mediated spaces / dimensions inhabited by materials."¹³⁷

Bunch argues that the influence of visual art in terms of spatialization is related to Sciarrino's compositional process through diagram.¹³⁸ Bunch invokes Gianfranco Vinay's discussion of sonic objects, which are the fundamental element of Sciarrino's music, as opposed to motives,

¹³⁴ Sciarrino, "Entretien avec Salvatore Sciarrino," *Entretiens*, 136.

¹³⁵ Salvatore Sciarrino, *Le figure della musica, da Beethoven a oggi*, 60, 67 (Quoted in Giacco, *La notion de "figure" chez Salvatore Sciarrino*, 5).

¹³⁶ Sciarrino's book *Le figure della musica, da Beethoven a oggi* talks about not only music (of other composers) but painting and photos films which correlate each other and show intertextual relationship between them. In this book five *figures* as tools understanding his musical thoughts are discussed: Accumulation, Multiplication, little bang (which is not musical term though, marking strong moment through discontinuity), genetic formation, and windowed form. These five figures are also related with each other. See Sciarrino's *Le figure della musica, da Beethoven a oggi*.

¹³⁷ Bunch, "A Polyphony of the Mind," 227.

¹³⁸ Sciarrino calls forms of graphic notation, "*diagrammi di flusso*," (diagrams of flow), *Ibid.*, 228.

themes, structures, or “sonic aggregates.”¹³⁹ Vinay refers to the compositional process, which has four stages (as evidenced by the composer’s diagrams): sketching of several figures (sonic objects); arrangement and disposition of figures; modification and revision and establishing the final form of the work; translating the diagram into musical notation.¹⁴⁰

Another way Sciarrino emphasizes spatialization in music is through dynamics. Bunch discusses how Sciarrino’s use of silence and extreme dynamics evoke spatialization:

The silences, near silences (“figurative silences,” as David Metzger calls them), and extremely subdued dynamic levels that predominate in Sciarrino’s works, place them at an extreme metaphorical distance from the listener. This subjective affect of distance is what creates a sense of cavernous, “sidereal,” space. It is grounded in a concrete poetic practice. The sudden, explosive gestures (such as the gun shots in *I fuochi oltre la ragione*, or *Un fruschio lungo trent’anni*), and the paroxysms of sound that follow sustained static fields (ex. *Lo spazio inverso*, *Morte di Borromini*, *Immagine d’arpocrate*) threaten, menace, approach us covering the immense metaphorical distances that set them in relief.¹⁴¹

In addition, in *I fuochi oltre la ragione*, for four percussionists, other explosive gestures (beside gun shots as Bunch described) are found, such as those by the metal tubes with a *ff* marking and repeated strokes on the bass drum among extremely quiet shaking or stroking of pine branch or water. These give us images of different musical dimensions or layer. Because of its distinctive use of dynamics and timbre, the audience can easily imagine the musical dimensions that Sciarrino intends to deliver. This musical layering by displacing contrasting dynamics and timbre corresponds to the visual artistic approaches of Burri and Fontana.

Brendan P. McConville, in his essay, “Reconnoitering the sonic Spectrum of Salvatore Sciarrino in *All’ aure in una Lontanaza*” states that Sciarrino is interested in the space between silence and sound. This description recalls Metzger’s “figurative silence,” as discussed above.

¹³⁹ Gianfranco, Vinay, “Vue sur l’ Atelier de Salvatore Sciarrino (à partir de *Quaderno di Strada* et *Da Gelo a Gelo*,” *Circuit: Musiques Contemporaines* 18, no. 1 (2008): 15 (Quoted in Bunch, “A Polyphony of the Mind,” 228).

¹⁴⁰ Bunch, “A Polyphony of the Mind,” 229.

¹⁴¹ *Ibid.*, 237.

McConville states the regions between sound and silence “help facilitate his [Sciarrino’s] passage between the polarities of silence. When concerning these polarities, sound may be intensified by dynamic, texture, or timbre.”¹⁴² In this chapter, I will discuss what musical elements can be conveyed by musical silence in Sciarrino’s music and what their functions are.

3.2. Musical Elements Describing Silence

How can Sciarrino reach silence through sound in his music? Sciarrino asks:

Is there a metaphysics of silence? I don’t know... Certainly silence, a ‘zero-sound’ (but one which also contains all sounds), present unsuspected theoretical problems. How does one decide the frontier, the point of passage? There is a sort of reversal in my music in that the sounds preserve traces of the silence from which they come and into which they return, a silence which itself is an infinite rumbling of microscopic sonorities.... For in absolute terms silence does not exist. Even in an empty room there are still heartbeats. As long as one is human there is no silence; and when there is perception, there is music.¹⁴³

In his discussion of absolute silences, Sciarrino mentions does the anechoic chamber (a point of inspiration for Cage as well, as discussed in Chapter 1). However, Sciarrino and Cage both deal with silence differently. As Metzger points out, Sciarrino employs silence to set an expressive scene that situates sounds in a specific role and place. The scene occurs at the border between sound and silence. Cage, on the other hand, erases all lines between sound and silence.¹⁴⁴ In the following section, I examine how Sciarrino’s concept of “zero-sound” is conveyed through his musical language and what types of musical elements evoke silence and quiet sound, “an infinite rumbling of microscopic sonorities.”

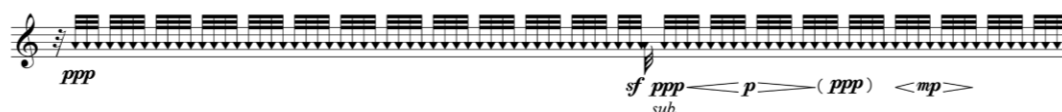
¹⁴² Brendan P. McConville, “Reconnoitering the sonic Spectrum of Salvatore in *All’aure in una Lontana-za*,” *Tempo: A quarterly Review of Modern Music* 65, Issue 255 (January 2011): 32

¹⁴³ Sciarrino, “Entrein avec Salvatore Sciarrino,” *Entretemps*, 139.

¹⁴⁴ Metzger, “Modern Silence,” 334-5.

Extended Techniques

Sciarrino invented many extended techniques-especially for approaching close to zero sound. There are extended techniques he invented or developed for many instruments, but those for the flute are more distinctive than other instruments. These were developed through a collaboration with Italian flautists Roberto Fabbriani and Giancarlo Graverini. In the article *Carte da Suono*, “the biggest challenge [Sciarrino] faces is to make instruments and music exceed their own limits.”¹⁴⁵ The extended techniques Sciarrino uses for flute and other winds are played by breath with or without pitch, harmonics, trills with harmonics, tongue click, and percussive key strokes. Many of them are achieved using a very quiet volume. These extended techniques invoke not only silence but also a variety of tone colors and timbre. For example, in *Come vengono prodotti gli incantesimi* for flute solo, the tongue attack (also called tongue ram) creates an almost inaudible volume (Ex.12).¹⁴⁶



Example 12. Sciarrino, Beginning of *Come vengono prodotti gli incantesimi*

Although the functions of extended techniques (especially those with very low volume) are dependent on the music and its context, Rebecca Leydon, in her article, “Narrativity, Descriptivity, and Secondary Parameters: Ecstasy Enacted in Salvatore Sciarrino’s *Infinito Nero*,” asserts that in contemporary music, narrativity is often conveyed through extended technique. Leydon states that since much contemporary music has a lack of form or function of harmony (including cadence), extended techniques are used as tools that offering narrativity. According to her, through extended techniques, listeners are “enveloped in a palpable sonic space populated by viscerally perceived subjectivities, listen may be more inclined to hear the unfolding of musical

¹⁴⁵ Sciarrino, *Carte da suono*, 139. trans. Megan Lanz (Quoted in Megan Lanz, “Silence: Exploring Salvatore Sciarrino’s style through *L’opera per flauto*,” (DMA Diss, University of Nevada, 2010), 20-1.

¹⁴⁶ In his performance note, tongue attack is “without blowing this technique also produces a sound a seventh below. It can be done either exhaling or inhaling.” Salvatore Sciarrino, *Come vengono prodotti gli incantesimi* in *L’opera per flauto*, Milano: Ricordi, 1990, 11.

events as narrative transformations.”¹⁴⁷ She refers another composer, Helmut Lachenmann who also used many extended technique as Sciarrino, explains Lachenmann’s piece *Air*, in terms of his using of extended technique against structuralism:

Air. Musik für grosses Orchester mit Schlagzeug-Solo—for which I made the claim that, without any concessions, it had broken away from serialism’s immobility, because the energies that were basic to instrumental sound, as the trace of its mechanical production, were consciously incorporated into the composition and played a crucial role in the work’s sonic and formal structure. This was my own way of breaking away from what I felt to be a falsely abstract and increasingly sterile structuralism;¹⁴⁸

Leydon shows how Sciarrino’s use of extended techniques evokes narrativity in *Infinito Nero*. *Infinito Nero* is a piece based on the mystical utterance of Saint Maria Maddalena de’Pazzi. It begins with the flute’s breath-like sound (representing the sounds of exhalation and inhalation). After joining with the clarinet’s *colpo de lingua* (tongue ram) sound, which Leydon calls “a drop-let of fluid” in m.2, the flute’s regular breath-like sound is delayed.¹⁴⁹ Leydon suggests that this represents Maria Maddalena’s holding her breath whilst listening to “water dripping in the stone passageways of the Florentine convent.” This water dripping sound reminds Maria Maddalena of “the image of Christ’s wounds.”¹⁵⁰ Following Maria Maddalena’s next breath, Leydon argues that the strings’ harmonics tremolo and clarinet’s tongue ram in m.6 “suggest a brief convulsion of Maria’s quiescent body.”¹⁵¹ (Ex.13) These “close to zero” sounds, made possible by extended techniques, support and reinforce narrativity in *Infinito Nero*. We will deal with other silences in *Infinito Nero* in Chapter 3.3.

¹⁴⁷ Rebecca Leydon, “Narrativity, Descriptivity, and Secondary Parameters: Ecstasy Enacted in Salvatore Sciarrino’s *Infinito Nero*” Klein, Michael Leslie and Reyland, Nicholas W. *Music and narrative since 1900* (Bloomington: Indiana University Press, 2013), 311.

¹⁴⁸ Lachenmann, “Composing in the Shadow of Darmstadt,” 46.

¹⁴⁹ *Ibid.*, 322.

¹⁵⁰ *Ibid.*

¹⁵¹ *Ibid.*

respira dentro la testata

fl. (espirando inspirando)

mf p

mp mf

mf p

mp mf

5

fl. p

vn. p

cl. p

b.d. M

ppppp

cl. (colpo di lingua)

pp

soffio flaut.

vla. p

vc. mp pp

Example 13. Sciarrino, *Infinito Nero*, mm.1-6

Hodkinson proposes that “timbral quieting contributes to a sense of heightened presence” in Sciarrino’s music. Here “timbral quieting” points to timbral effects which bring conventional Western musical notation to the border of silence in Sciarrino’s music. She considers Sciarrino’s piece *Lo spazio inverso* as an example of that, and the presence of a living body links the performer, the listener and the composer: for example, the use of various techniques for inhaling through a wind instrument recalls the regular bodily function of breathing. Sciarrino argues that this effect blurs the lines between various parties involved with the work. The audible breathing of the instrumentalist is similar to the breath of the listener and/or the composer. On the use of silence, Hodkinson says that this contributes to an inverted space for listening (like the title suggested). This is achieved in Sciarrino’s music through the aural experience that Sciarrino describes as “re-setting the listener’s perception to zero, close to no-sound.”¹⁵² She argues that spatial “inversion is a metaphor for the switching of silence and musical sound between background and foreground.”¹⁵³ In this sense, silence can be enhanced by the use of spatialization.

Hopkinson also refers that the use of extended technique recalls Cage’s aleatory. Because of its similarity to improvisation, some of Sciarrino’s extended techniques are still not familiar with many performers. Thomas compares Cage’s aleatory with Sciarrino’s extended technique, commenting that it “result[s] in sounds which, halfway between note and noise, are never entirely

¹⁵² Giacco, La notion de “figure” chez Salvatore Sciarrino. 24, 54 (Quoted in Hodkinson, “Presenting Absence,” 134).

¹⁵³ Hodkinson, “Presenting Absence,” 135.

predictable or reproducible.”¹⁵⁴ The quiet sound from performers is associated with other noise in the hall, so the final sound of the performance is always different.

Dynamics

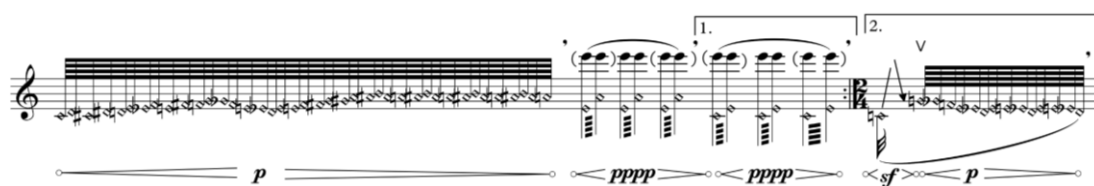
Although many extended techniques evoke close to zero sound support silence, lower dynamic levels are also important; furthermore, these two qualities mutually support one another. Sciarrino employs dynamics that crescendo from nothing to *pppp* (*crescendo dal nulla*, crescendo from nothing) and decrescendo back to silence (*diminuendo al nulla*, diminuendo to nothing). In order to more clearly illustrate this, Sciarrino adds a zero before the crescendo after the decrescendo. For example, in the beginning of *Lo spazio inverso*, the clarinet’s soft dyad breath,¹⁵⁵ the cello’s harmonics, and the violin con sordino all have very quiet volume level. The combination of these extended techniques with both quiet dynamics, and crescendo/decrescendo from silence to *ppp* and back to silence intensify the sense of quietness (Ex. 14).

Example 14. Sciarrino, Beginning of *Lo spazio inverso*, mm.1-8

¹⁵⁴ Thomas, “The Poetics of Extremity,” 193.

¹⁵⁵ Performance notes say “this soft dyad requires a great amount of breath and almost no pressure”, *Lo spazio inverso*, in *Sei quintetti* (Milano: Ricordi, 1996), 4.

A similar example is *All'aure in una lontananza* for flute solo, where many gestures are also played using extended technique with the dynamics (crescendo from silence decrescendo to silence) above mentioned. In addition, Sciarrino uses diamond notation, which tells the flautist to “cover the entire mouthpiece with the lips holding it between the teeth (without biting down), as far-inside the mouth as possible; the result will be a blowing sound of definite pitch.”¹⁵⁶ This effect, along with a very quiet dynamic marking and tremolo, creates a blowing sound like very soft whistling. The soft gesture repeats for a long time, so the audience becomes familiar with the quietness. However, at the end of first page, a *sforzando*, violent glissando appears, and this sudden attack is emphasized among long and quiet gestures. Sciarrino calls this kind of effect a “little bang,” which can be found often in his music (Ex 15).



Example 15. Sciarrino, Little bang in *All'aure in una lontananza*, p.4, seventh system

Sciarrino discusses the little bang as one of the five figures in his book, *Le figure della musica, da Beethoven a oggi*. According to Bunch the little bang shows “dramaturgical relationship between two sounds or sound states” and “marks beginnings, changes, and other marked moments in the flow of a composition (and from our perspective as listeners, causes them).”¹⁵⁷

Sciarrino says that the term “little bang” is derived from the physical phenomenon known as the “big bang”: “before the big bang there was nothing; nothingness is stasis par excellence. So

¹⁵⁶ Sciarrino, performance notes from *All'aure in una lontananza* in *L'opera per flauto* (Milan: BMG Ricordi Music Publishing, 1990), 3.

¹⁵⁷ Bunch, “A Polyphony of the mind,” 192.

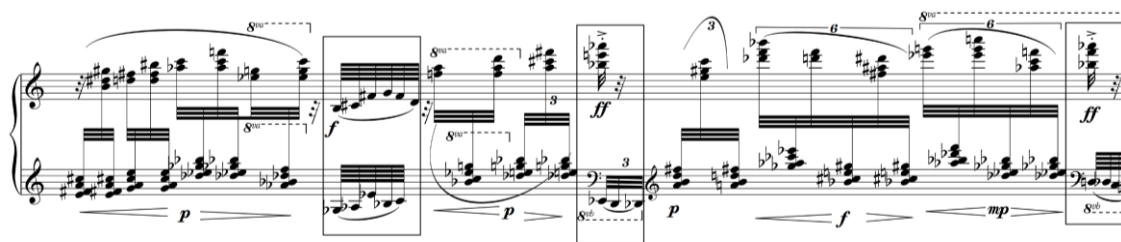
I have chosen the concept of the big bang to give a name to our musical configuration.”¹⁵⁸ Sciarrino goes on:

Imagine now a magnified and extended thesis in two groups of sound. The first group is more energetic, the second is light like a cloud and appears derived in the wake of the first.

The initial event tends to contract: it can even be instantaneous, a single chord, and it returns more energy, while the trailing-event tends to distend itself, to fray itself.

The energy concentrated on a very brief event and the majority of the energy is distributed upon one group of sounds; there the energy disperses.¹⁵⁹

He provides examples of the little bang as used by other composers such as, Boulez, Schubert, and Ravel. Sciarrino also uses his own piece, *Second Sonata* to demonstrate the technique (Ex.16). In *Second Sonata*, little bangs which are marked square are isolated and emphasized because of their dynamics and registers.



Example 16. Sciarrino, Little bang in *Second Sonata*, p.4, first system¹⁶⁰

In the previous example of music, *Lo spazio inverso* also appears this little bang effect with thick textural chord in the celesta (See Ex.14, m. 8). Among very quiet sound, these bang affects a dramatic effect and tension. These are reinforced by extreme register and contrast dynamic or technique on the quiet mood.

¹⁵⁸ Sciarrino, *Le figure della musica, da Beethoven a oggi*, 67-8.

¹⁵⁹ Ibid.

¹⁶⁰ Square marking by Salvatore Sciarrino, *Le figure della musica, da Beethoven a oggi*, 74, figure 52.

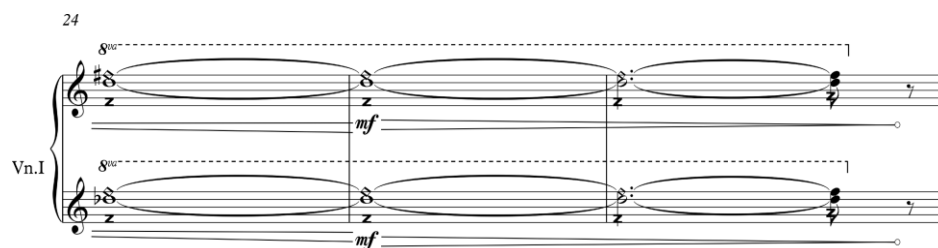
Extreme Registers

Another way Sciarrino evokes silence is through the use of extreme register. In his music, the use of extreme (usually high) register also emphasizes spatiality. This is also incorporated by using extended techniques (for instance, by using the natural or artificial 4th or 3rd harmonics on strings and flute harmonics). An example of this use of extremely high registers of strings can be seen in the third movement of the *Sei Quartetti Brevi* for string quartet. In the third movement, almost all of the parts are played in high register using harmonics. In mm. 37-39, even though the marking is *mf*, the result is still a very low volume of sound because of the register. At the end of the piece, the extremely high-pitched strings are given quiet dynamic markings, making them almost inaudible (Ex.17).

Example 17. Sciarrino, *Sei Quartetti Brevi*, III, mm. 53-56

According to Bunch, “the use of registral extremes is not only a way of creating a distinct type of musical space, but it is also a way of transforming pitches into timbres, sound.”¹⁶¹ In *Shadow of Sound*, the sound of the violin is a very high 3rd harmonics achieved by using tremolo. The resulting timbre is metallic and wholly unlike the strings’ original sound quality (Ex.18).

¹⁶¹ Bunch, “A Polyphony of the Mind,” 215.



Example 18. Sciarrino, *Shadow of Sound*, mm. 24-26

Furthermore, the use of extremely high registers with low volumes challenges our listening scope of dynamic and register. These extremely high notes reach the border between audible and inaudible pitch (and dynamics).

Sciarrino's goal is to make instruments and compositional designs exceed their own limits. His exploration of silence also exceeds these limits by using unusual timbres with extended techniques and extreme dynamics and registers. These techniques work together to evoke silence. In the next section, I will look at Sciarrino's silence in more detail in *Infinito Nero* and see what the relationship is between the context of the music and the acoustics and sonorities of the piece.

3.3 Analysis of *Infinito Nero*

In this section, we will look at how musical elements convey silence and reinforce the text in *Infinito Nero* “*estasi di un atto; frammenti da maria Maddalena de' Pazzi, ricomposti da Salvatore Sciarrino, per mezzosoprano e strumenti* (An Ecstasy in One Act; fragments by Mary Maddalena de'Pazzi, reconstructed by Salvatore Sciarrino, for mezzo-soprano and instruments).” *Infinito Nero* exemplifies Sciarrino's mature compositional style, in which his way of using silence is firmly established. His use of silence in this piece evokes the atmosphere and situation of Maria Maddalena's mystic experience. In the analysis that follows, I show how silence is depicted by musical elements and detail the purposes and roles played by silence in *Infinito Nero*. I examine the vocal gestures and their meanings according to the text about Maria Maddalena's mys-

tic experience and discuss how the instruments create ambient sound and evoke silence for nearly half of the duration of the piece. Finally, I explore the effects and roles of the quiet volume of this ambient sound.

Infinito Nero (1992-93) is written for flute, oboe, clarinet, percussion, mezzo soprano, violin, viola, cello, and piano. The text is based on the mystical utterance of Saint Maria Maddalena de'Pazzi (1566-1607), Carmelite saint, who communicated with God. In 1584-85, her fellow sisters transcribed what Maria Maddalena spoke and experienced when she entered a rapture in the convent of Santa Maria deli Angeli (Saint Mary of the Angels) in Florence. Armando Maggi, in "Performing/Annihilating the Word: Body as Erasure in the Visions of a Florentine Mystic," analyses *I colloquy* (The Dialogues) which is the transcriptions of the mystical speech of Maria Maddalena. He writes:

When she whispered, trembled, screamed, performed a solo "mystery play," spoke with a male voice in the person of the Father and/or the Word, Maria Maddalena was not addressing her audience, her convent sisters. She spoke exclusively because the Word wanted her to summon His being/voice... In her performances, the mystic attempts to "belch forth" the Word by means of language, gestures, silences... Maria Maddalena's visions/monologues/plays are both manifestations of the body/word and erasures of the body/word itself.¹⁶²

The text in *Infinito Nero* is from another transcription of what Maria Maddalena spoke, *Le parole dell'estasi* (The words of ecstasy),¹⁶³ a segment of the transcript chronicling her startling encounters with Christ and Satan, which was published in 1984.¹⁶⁴ Sciarrino was interested in mystics and encountered Maria Maddalena's story in the late 80s. He states about her vision that "She [Maria Maddalena] was an unpleasant, a 'devilish' figure: with her you cannot really differentiate

¹⁶² Armando Maggi, "Performing/Annihilating the Word: Body as Erasure in the Visions of a Florentine Mystic," *TDR* 41, no. 4 (Winter 1997): 110-1.

¹⁶³ See the translation of the text of *Infinito Nero*, Leydon, "Narrativity, Descriptivity, and Secondary Parameters," 312-3.

¹⁶⁴ Siglind Bruhn, *Saints in the Limelight: Representations of the Religious Quest on the Post-1945 Operatic Stage* (Hillsdale: Pendragon Press, 2003), 471.

between God and the devil, her visions are all similarly frightening (Here you really experience the pathology of visions.).”¹⁶⁵

According to Maggi, the transcript includes also description of silent moments:

The words themselves are repeated and varied throughout both portions of the text, the excerpts from the mystic’s monologues and the nuns’ exegesis of those very excerpts. After reporting the mystic’s first words, the transcribers state that she kept quiet for a long while, interrupting her silences with deep sighs and scalding tears. Her sisters also point out that she comes out of her rapture “sometimes to take care of her physical needs.” According to the nuns, Maria Maddalena enters this vision at “the 21st hour,” whereas the Word has been/is buried at “the 24th hour.” After inserting their *a posteriori* interpretations of the dynamics of the forthcoming/past vision, the nuns transcribe a second introductory excerpt from the mystic’s words:¹⁶⁶

The Carmelite sisters did not ignore Maria Maddalena’s silent moment and wrote down “[silence]” in *I colloqui*. For example:

And it will be fulfilled the time of forty hours [silence] so that at the dawn of your happy day of Sunday I’ll be there, yes [silence] one can really call it the day of the Lord.
(2:286)¹⁶⁷

In *Infinito Nero*, Maria Maddalena is represented by the mezzo soprano. Let us first look at how Maria Maddalena’s silence appears through the vocal gestures. It first appears shortly in mm. 44-45 amongst quietness by other instruments with an incomplete sentence “*L’anima si trasformava nel/ sangue, tanto da non in-*” (The spirit was transforming into blood) and disappears into the silence until m.89. Long moments of musical silence dotted with a very short moment of fragmented melody with incomplete text for the voice part evoke silence. There are many other moments the voice utters incomplete sentences or repeats specific words or phrases. For example, “*pensare*” is repeated three times in mm.98-99 and “*timui timore amoris*” is repeated six times in mm.151-156. Sciarrino states that during Maria Maddalena’s utterance, four of eight sisters re-

¹⁶⁵ Salvatore Sciarrino, liner notes, *Infinito Nero; Le voci sottovetro*, Kairos CD #1202, 23.

¹⁶⁶ Maggi, “Performing/Annihilating the Word,” 114.

¹⁶⁷ Numbers mean the volume and page number of *I colloqui*. Maria Maddalena Pazzi, *I colloqui*. Tutte le opere. 2 vols. ed. Bruno Nardini (Florence: Curiae Archip, 1963) (Quoted in Maggi, “Performing/Annihilating the Word,” 114. trans. Armando Maggi).

Silence is not only evoked in individual parts but also by the ways in which parts relate to one another. Let us look at how musical silence and ambience are achieved through the use of quiet volume and extended techniques. The quiet ambient moments brought about by the winds' use of tongue ram and breath from mm.1-89 give us the image of Maria Maddalena's Carmelite sisters waiting for Maria Maddalena's speaking or the sound from their breath, or perhaps even Maria Maddalena's silence and the sound of her breath. It is interesting that the voice never itself creates the breath sound in any ways, but is rather always created by other instruments. Sciarrino commented about the silence in this breath part in the beginning:

Silence is not empty, it gives birth to sound. Not only in music. That is also part of the experience you gain in life. Perhaps I will find my dark silence now. This is very important for me. I would never have thought that I could write this. This beginning with the rhythm of breathing. You don't know whether what you hear is your own heart or your breath. That is the beginning. I don't want any amplification for this because the listener's ear must feel the difference between the breath and heartbeat of the silent Maria Maddalena. We don't need to know whether it is my heart or an instrument, the wood of the piano...¹⁶⁹

This unfamiliar timbre of instruments generated by the use of extended techniques, combined with lengthy repetition, and unsureness where the sound is coming from has the potential to make the audience feel uneasy. Aaron Helgeson in "What is Phenomenological Music?" discusses Sciarrino's thoughts on ambiguity and its role in the sound of breath sound:

Certain types of sounds, breathing for instance, are not only ambiguous but also very powerful. Because it is not clear who has breathed. One might think the instrument is the one breathing and not the performer (the flutist for example). Yet one hears the breath and begins to breath with it. Thus, there is a sort of triangulated identification of musical representation.¹⁷⁰

¹⁶⁹ Sciarrino, liner notes, 24.

¹⁷⁰ Salvatore Sciarrino, "Entretiens: Slavatore Sciarrino et Gianfranco Vinay" (Metz: Centre Acanthes, 6, July 2008). Transcribed from archival recordings by Alice Teyssier and translated by Aaron Helgeson. (Quoted in Aaron Helgeson, "What is Phenomenological Music?" *Perspectives of New Music* 51, no. 2 (Summer 2013): 10-11).

In the beginning, before the voice sings, breath and the tongue ram sound played by the flute, oboe, and clarinet dominate the texture until m.43. In m.6, strings play using a harmonic tremolo, which Leydon describes as Maria Maddalena's shuddering, "a brief convulsion of Maria's quiescent body" as discussed in Ex.13, and in m.42 the piano plays a single high note. In mm. 11-41 the flute, oboe, and clarinet play same technique, tongue ram. In this part, although the sound is heard as simple repetition at first, every measure of flute, oboe, and clarinet is played slightly differently. The tongue ram of the flute plays every downbeat (its breath plays different time points in mm.8 and 11) and the clarinet tongue ram always appears one sixteenth beat after. However, the notes of the oboe get slightly moved back after the clarinet and oboe play at the same time in m.6. After this, they do not align again. Bruhn states that the oboe's playing may be heard as the "heart's closing beats" and the winds' irregular tongue strokes "materialize after ever longer lapses, conveying the tantalizing sensation that we are listening in on somebody's threatening heart failure."¹⁷¹ Because of sudden interruptions by other instruments (in mm.6 and 42) and an inexact pattern of repetition, it is impossible to expect the pattern of rhythm and timbre for the audience. Helgeson points out that "their unpredictability only heightens their ambiguity."¹⁷² This ambiguity associated with the very quiet volume is a very powerful effect and creates much tension.

Another kind of silence worth examining is the silence from ambient sound in the second section. The sections in *Infinito Nero* can be divided mainly by the change of the vocal gestures and text. From m.100, the second type of voice appears; the voice sings different registers with a more prolonged passage, evoking an image of a dialogue between God and Maria Maddalena (see Ex. 20). In this section, as another ambient sound, the repeating strokes on the bass drum solo appears in mm.101, 112, and mm.116-118 sounding like a heartbeat. Ambient sounds such as breath and heartbeats regularly repeat as the human heart keeps pulsing. From m.100, the flute

¹⁷¹ Bruhn, *Saints in the Limelight*, 487.

¹⁷² Helgeson, "What is Phenomenological Music?," 11.

flowing blood in Maria Maddalena's head (or body).¹⁷³ Leydon describes this as Maria Maddalena's "intake and outflow of breath and blood."¹⁷⁴

After this evocation of blood and breath, the third type of vocal gesture, which features a sustained note, appears. The text of the sustain notes is "o," and this shows Maria Maddalena's gradual entrance into an ecstatic state. In this state her words are replaced by exclamation. The pitches she sings are low, and it contrasts with the high pitches of the instruments. In this section, Maria sings in Latin, *timui timore amoris mors intravit per fenestras* (I was afraid of the fear of love, Death came in through windows). According to Bruhn, the use of Latin demonstrates that Maria is in rapture. He comments that Maria, "engrossed in her rapture, not only quotes latin but even engages in (voluntary or inadvertent) puns in the learned language."¹⁷⁵ In the last section, the rapid glissando of the main vocal gesture appears again with a new, pentatonic vocal gesture starting in m.183. The child-like pentatonic melody may suggest that Maria Maddalena, in her enraptured state, resembles a little child. This recalls us Matthew 18:3, "Truly I tell you, unless you change and become like little children, you will never enter the kingdom of heaven."¹⁷⁶ The pentatonic melody is imitated by high violin part in mm.192 and 199. From m.190 onward, only the strings play very high pitches with harmonics and glissandi (Ex. 21). Their high register contrasts with the lower register G3-C4 of the voice in the previous moment. The part of the high strings without the voice and other instruments is interpreted as an indication of Maria Maddalena's complete transformed rapture, a gesture of submission to God. Maria Maddalena's silence here recalls silence in the very beginning of the piece. Whereas the first silence of Maria Maddalena in the beginning of the piece means the process or before she enters the rapture or trance

¹⁷³ Text is *influirsi influissi influiva rinfluiva e il sangue influiva rinfluiva influissi rinfluire rinfluisce rinfluisce influissi rinfluivono influissii rinfluivono superesaltando* (Flowing in in-glowing influx flowing out and the blood flowed in flowed out flows out flows out out-flowing influx outflowing overexerting).

¹⁷⁴ Leydon, "Narrativity, Descriptivity, and Secondary Parameters," 324.

¹⁷⁵ Bruhn, *Saints in the Limelight*, 478.

¹⁷⁶ Mt.18:3 NIV.

ister, in the range of cello.¹⁸⁰ Indeed, the musical quietness suggested by the high range of the strings combined with the real silence of the voice in this last part suggests an ethereal ambience and finalizes Maria Maddalena's process of transformation. The silence in *Infinito Nero* emphasizes and highlights not only Maria Maddalena's silence and her excitement but also narrates the journey of her transformation.

3.4 Conclusion

Sciarrino's research of musical space and silence originates in a rejection of Darmstadt school's serialism. Sciarrino's dislike of the Darmstadt composers' privileging of their own logic and form (thereby ignoring the reactions of the audience), led him to seek ways in which the audience could easily understand his music. He achieved a sense of spatialization through contrasted texture and dynamics that can affect audiences' perceptions directly, and mimic natural phenomena with enough repetition that the audience can easily recognize recurring material.

Moreover, his use of musical silence represents the product of much of his researching of new sounds and sonorities and is situated on the border between sound and silence. Sciarrino's silence, achieved largely through the use of extended techniques, soft dynamics, and extreme registers. In *Infinito Nero*, Sciarrino achieved not only actual silence through the minimal and fragmented gestures of the voice, but also evoked musical silence through ambient sound played by instruments. The ambient sound itself evokes human breath and heartbeats is very quiet, but because of the use of contrasted motion and unusual sound quality, this maximizes musical tension. The silence in *Infinito Nero* is used for emphasizing Maria Maddalena's expression and mystic experience.

¹⁸⁰ Ibid., 326.

Conclusion

Despite different backgrounds, philosophies, and aesthetics, these three composers have all crafted unique approaches to musical silence. Both Cage and Takemitsu's uses of silence are related to Eastern aesthetics and philosophies. Cage's view of noise, sound surrounding us, and the concept Takemitsu called "stream of sound" share a common view of sound. Takemitsu's "stream of sound" recalls Cage's anechoic chamber experience and Cage's resulting thoughts about noise. In addition to the concept, Burt states that Takemitsu and Cage's thoughts on silence are both based on oriental concepts, especially the Japanese spatial concepts *ma* and *sawari*, which are parallel with Cage's "interest in the individualized sound-phenomenon."¹⁸¹ Burt goes on to say, "Takemitsu's understanding of *ma* obviously approximates...John Cage's aesthetics of 'silence' as a space teeming with sonic events rather than a mere void—a less than surprising congruence, perhaps, when one considers Cage's own 'Eastern' philosophical orientation."¹⁸² However, they have different approaches to the compositional process: Unlike Cage, Takemitsu always tries to notate his silence, marking its presence with sounding elements. In addition, many of his silences are derived from the sounds of instruments. The relationships and associations between sounds and silences are also important; Takemitsu frequently attempts to emphasize the balance between sound and silence.

Sciarrino's use of the ambient sound imitating breath and heartbeats in *Infinito Nero* also recalls Cage's anechoic chamber experience. Whereas Cage acknowledged this ambient sound and wanted people to listen for it, Sciarrino emphasized that noticing this ambient sound provides an important frame for listening to music:

Perhaps it comes from the change in my way of writing. Until now I may not have used sounds and noises so consciously and precisely, also in technical terms. I go deeper also

¹⁸¹ Burt, *The Music of Toru Takemitsu*, 92, 237-8.

¹⁸² Ibid. 237-8.

into the sound of silence, something I was not able to do before...The newer pieces [from *Infinito Nero*], however, are almost naked, sober, and that is an important element when listening to music. Only this way does music go under the skin.¹⁸³

However, there are stark differences in the use of noise between the two composers. Sciarrino artificially made ambient sound using notated instruments, thereby lending them musical elements like rhythm, pitch, and timbre. Whereas Cage brings natural sound and/or silence within the frame of music with no intention and control, Sciarrino intends to control the materials of natural sound and silence. As Metzger asserts, while Sciarrino seeks to blur the border between sound and silence, Cage asserts that there is no border between sound and silence.

Both Takemitsu and Sciarrino notice the importance of silence and surrounding ambience and try to associate silence with other musical elements. Takemitsu raises the status of breath and/or pause in *Garden Rain* (as discussed in Chapter 2), by offering more function and controlling specific durations in order to produce tension. However, Takemitsu does not control or manipulate the silences themselves and only manipulates conventional sound material in the form of notes, reifying the distinction between notes and the silence that surrounds them silence. Sciarrino assigns ambience to the role of musical elements and treats it as sonic material. In other words, Sciarrino makes the “naked” ambient sound wear colorful clothes in the form of like rhythm, timbre, or texture. Whereas Takemitsu’s awareness of silence allows him to accept silence as an important musical element corresponding to sound and attempts to offer more meaning in the framing of his music, Sciarrino brings silence and musical ambience *into* music using notation. In this way, ambience becomes a sonic material. The two composers’ concepts of silence are also influenced by their differing perception of space. Takemitsu’s use of the spatial concept of *ma* leads him to conceptualize space as being filled with meaningful gestures or actions which is based on traditional Japanese thoughts and philosophy, but Sciarrino’s space is a more tangible concept

¹⁸³ Sciarrino, liner notes, 24.

than those of Takemitsu and relates to a more visual dimension. Whereas Takemitsu's concept of silence relates space to time, (for example, by using long decays and pauses), Sciarrino associates space with layers of sound controlled by dynamics and textures.

In much contemporary Western art music, composers relish the freedom to develop musical languages and vocabularies that are not restricted by any past style of music. In this context, contemporary composers who acknowledge the importance of silence in music emphasize the role and function of silence in their own way, depending on their own background and philosophy. All three composers that I have discussed have disparate backgrounds; their interest in musical silence comes from different places. Cage's use of silence is inspired by Zen as well as his broader philosophical research and personal connections. Takemitsu's use of silence is inspired by traditional Japanese philosophy and spatial concept of *ma*. Sciarrino's use of silence is one of several ways that he seeks new sounds or sonorities against the dominant style of the time. The roles and uses of silence are also different in each composer's music. Yet despite their different backgrounds and compositional techniques, they share an appreciation of silence and ambient sound, distinguishing their music from that of other composers.

The use of silence in all of these composers' music forces us to think about and listen to the silence and ambient sound surrounding us. Cage's silence represents a starting point to pay attention to and listen to ambient sound that might have previously been considered noise. Takemitsu's use of long pauses and decays invites us to meditate in the silent moment and listen to the boundary between the disappearing sound of instruments and ambient sound. Sciarrino's use of extremely quiet sound, approximating the volume and timbre of ambience, challenges the scope of our listening practice. By experimenting with musical silence, each composer encourages us to question the distinctions between music, noise, sound, and silence and to consider the broader effects these distinctions can have.

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