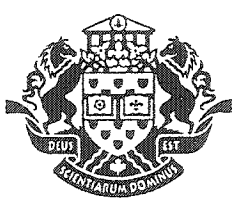

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Abstract

Minimalism was a period in music throughout the postmodern twentieth century initiated by the compositions of La Monte Young (1935-), followed by those of Terry Riley (1935-), developed by Steve Reich (1936-), and evolved by Philip Glass (1937-). Minimalist music was influenced by the non-Western music of India, created by the constant repetition of musical patterns to generate a hypnotic state on the listener through stasis.

The size of the minimalist audience has continually increased from the New York City loft-based performances of La Monte Young to the opera house performances of Philip Glass. The composer's goals for an audience, his musical adaptation, and the effect of stasis contribute to the differences in audience size. These three factors are examined through each composer's biography, early and late compositions, and concert reviews of the premieres. The techniques utilized by each composer have become more effective in the creation of stasis from the compositions of Young to Glass. The biographies of the four minimalists, their compositions, and the premieres serve as an excellent source in the examination of the connection between the composer and the audience.

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Introduction

Through the examination and analysis of minimalist music, this thesis will demonstrate the relationship between the four minimalist composers—La Monte Young, Terry Riley, Steve Reich, and Philip Glass—and their musical means of connecting with the audience. The continual evolution in composition and audience size from the works of La Monte Young to Philip Glass will be shown. Over the years of the performance of minimalism, an audience has been formed or built that is able to appreciate this genre of music and establish a personal connection with it.

In order to understand minimalist music, it is necessary to have an understanding of the American cultural and artistic scene throughout the late twentieth century. Throughout the first chapter, postmodernism is defined with its applications to minimalist music. This is demonstrated through the influence of Eastern music in the compositions of the minimalist composers and the use of stasis as a hypnotic device.

The four minimalist composers searched for their 'own' audiences in a variety of ways. Regarding musical composition, they developed certain musical techniques in order to captivate their audience members by producing a greater immediacy of stasis through repetition. Each composer adapted his musical style with distinct techniques to communicate effectively with their audience. The second chapter explores the role of the audience, communication between the composer and the listener, the physiology of the listener's ear and the effect of stasis, lifestyles of audience members, subcultures, and the influence of other musical movements that were evolving throughout this time period. This chapter forms a foundation for the understanding of the interrelation between the composer and the audience.

Although all four minimalist composers conversed with their audience through certain musical devices, this thesis demonstrates that, in the progression of the four composers, Glass has enticed his audience more effectively than Young. As a result, Glass's audience has developed into a larger, broader, and more multifaceted group of listeners. In Chapter Three on Young, Four on Riley, Five on Reich, and Six on Glass, each composer's biography is examined and its contribution to his later minimalist style. In addition, an analysis of melody, rhythm, harmony, and form in each composition is analyzed to demonstrate each composer's own technique in the generation of stasis. The following list displays each composer's unique technique of achieving stasis:

1. Young: droning technique
2. Riley: musical modules
3. Reich: phase-shifting
4. Glass: additive and subtractive processes

The analysis focuses on a specific group of compositions and provides examples from their earliest works to their latest works. This is a comparison of the different works with a view to charting changes in musical styles as the venues have changed. The analysis of each composition is divided into three distinct sections—the composer's goals for an audience, their musical adaptation to the audience, and the effect of stasis.

Following the analyses of the compositions, the concert reviews of these pieces in various American newspapers are examined to demonstrate the connection made with the audience at the time of the premiere. The concert reviews indicate the size of the audience, the audience's reaction to the music, the performing space, and the atmosphere.

The theoretical framework is the standard one for the historical study of music, and the types of literature and sources are included within each chapter.

The distinct evolution between the works of La Monte Young to the works of Philip Glass is evident through this thesis and the examination of the minimalist style. Young's goals for his musical style and his audience were very different from those of Glass and as a result, greatly affected the size and diversity of their audiences.

Chapter 1

Minimalism

An Introduction to Postmodernism:

Minimalism was an influential movement in the postmodern twentieth century, spanning from 1960 to 1990. In order to understand the period in which minimalist music was composed, it is necessary to give a background on this period in the fine arts. Postmodernism is not only a period in time, but an attitude that enables society to understand the history of art: "Postmodernism questions the idea that, if one artwork was created after another, the earlier one may have-or even could have-caused or uniquely influenced the creation of the later one."[1] In the fine arts, this period tends to reject the linearity of history through quotations of earlier styles:

> ...the quotations and references in postmodern music are often presented without distortion, without commentary and without distancing, composers treat them just as they might use citations of the present. If a musical style of two hundred years ago is employed in the same way-with the same degree of authenticity (that is, composed as it was when it was current) and belief (in its viability as a vehicle for musical expression)-as a newly developed style, then history is indeed challenged.[2]

There are many different factors that influenced the techniques used throughout this period.

One source of postmodernism was the psychological and sociological effects caused by the increased use of technology and the influence of the United States: "In the course of the twentieth century, modernity has been increasingly described as an irresistible process of the 'Americanization' of the entire world, as the United States

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[1]Judy Lochhead and Joseph Auner, eds. *Postmodern Music, Postmodern Thought* (New York: Routledge, 2002), 17.

[2]Ibid.

displaced Europe as the most powerful region."[3] The U.S. influenced the entire world through the combination of the consumption of values and the establishment of mass culture. This American influence took over individual cultures and created new ideas and possibilities around the world, but also created tension between cultural values. Throughout the second half of the twentieth century, the increasing use of electronic communications provided a means of extracting the cultural and societal traditions from other countries all over the world. The influence of other cultural traditions on the arts, as well as other disciplines, enabled scholars to incorporate these new ideas into their own work. In addition, technology created fragmentation that led to shortened attention spans, and to the discontinuity of the postmodern fine arts.

Postmodernism accepted the fact that everything had already been done before and introduced new cultural themes:

> The act of giving cultural value to particular texts or objects requires the exercise of aesthetic judgment, and the social history of aesthetics can be traced in the rise of these new classes seeking expression for their status and fulfillment through cultural competence.[4]

Richard Hamilton's *Just What Is It...?* was a theatrical work that focused on the distinction between modernism and postmodernism. This play:

> ...parodies the new life of commodities which was burgeoning in the mid-1950s. The man and woman are camp and kitsch, their objects are cute. The new is desirable, but desire objectifies men and women alike as 'ham', which presides over the picture as a large tin on the 'coffee table'.[5]

The advertising poster for this play displayed the new commodity-driven society.

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[3]Nigel Wheale, ed., *The Postmodern Arts* (New York: Routledge, 1995), 8.
[4]Ibid., 35.
[5]Ibid., 38.

There were many new techniques used in the postmodern fine arts that were distinct from the modernist techniques. These consisted of eclecticism, parody, irony, allegory, schlock, kitsch, camp, simulacrum, and realism. The technique, eclecticism was used most prominently: "...a picking-and –mixing of styles and themes is obviously endemic to all cultures, but some periods combine materials more willfully and more self-consciously than others."[6] The writers and artists of this period borrowed examples from a variety of different sources and produced their work with efficiency.

This period was initiated by Andy Warhol and the pop art movement of the 1960s. In Craig Owen's two essays on "The Allegorical Impulse", published in 1980: "...he proposed six strategies which might characterize postmodern art practice. These were *appropriation, site specificity, impermanence, accumulation, discursivity,* and *hybridization* (Owens 1992: 58)"[7] Owen's goal was to prove that the period from 1960 to 1990 moved away from classical modernism through the above strategies. *Appropriation* was a postmodern style that employed: "...the use of photo-mechanical reproduction of imagery in single or multiple form in order to challenge the uniqueness of the art image and its specific 'aura'. For example: Andy Warhol's *zoo Campbell's Soup Cans* (1962)."[8] The pop artists wanted to overcome art that was prestigious and refined by producing work that expressed the average lifestyle of the late twentieth century.

Postmodern composers readily accepted the musical diversity of the entire world, and quoted music from the past:

> Postmodernists are more content to let the music they refer to or quote simply be what it is, offered with neither distortion nor musical commentary...It cites-in fact,

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[6]Ibid., 43.
[7]Ibid., 119.
[8]Ibid., 120.

> appropriates-many other musics, including that of modernism. In a sense it challenges the notion of the past, since it may include references to music of virtually any era or culture.[9]

When viewing postmodernism as a way of thinking instead of a historical period, complications arise in the classification of musical techniques, since they are shared throughout both the modern and postmodern periods. There are several different techniques that are strictly characteristic of postmodern music, and the following is a list of these compositional practices. Many of these techniques were used in minimalist compositions:

"1.) it is not simply a repudiation of modernism or its continuation, but has aspects of both a break and an extension;
2.) it is, on some level and in some way, ironic;
3.) does not respect boundaries between sonorities and procedures of the past and of the present;
4.) challenges barriers between "high" and "low" styles;
5.) shows disdain for the often unquestioned value of structural unity;
6.) questions the mutual exclusivity of elitist and populist values;
7.) avoids totalizing forms (e.g., does not want entire pieces to be tonal or serial or cast in a prescribed formal mold);
8.) considers music not as autonomous but as relevant to cultural, social, and political contexts;
9.) includes quotations of or references to music of many traditions and cultures
10.) considers technology not only as a way to preserve and transmit music but also as deeply implicated in the production and essence of music;
11.) embraces contradictions;
12.) distrusts binary oppositions;
13.) includes fragmentations and discontinuities;
14.) encompasses pluralism and eclecticism;
15.) presents multiple meanings and multiple temporalities;
16.) locates meaning and even structure in listeners, more than in scores, performances, or composers."[10]

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[9]Lochhead and Auner, *Postmodern Music, Postmodern Thought*, 15.

[10]Ibid., 16-17. *"The Nature and Origins of Musical Postmodernism" by: Jonathan D. Kramer*: "Not many pieces exhibit all these traits, and thus it is futile to label a work as exclusively postmodern. Also, I [Jonathan D. Kramer] would find it difficult to locate a work that exhibits none of these traits. I caution the reader, therefore, against using these sixteen traits as a checklist to help identify a given composition as postmodern or not: postmodern music is not a neat category with rigid boundaries."

There are many different styles and classifications of postmodern music and each style employs a different combination of techniques from the above list. This listing of characteristics is applied to music, but may also be applied to the other fine arts. The postmodern artists not only accepted the fact that everything had already been done before, but they used the previous ideas to the extreme. This is demonstrated in the repetition throughout minimalist art and music.

Although each fine art has its own unique characteristics, they are all interconnected. Music and architecture are two very separate fields, but can be linked to one another through postmodern ideas:

> The linkage of terminology from one art form to another may simply recognize the shared artistic milieu of composers, writers, and visual artists working within the same time frame, but the most useful appropriations of terminology reveal tangible links in practice, technique, method, or aesthetic between the two art forms.[11]

Postmodern music is analyzed with the same methods as postmodern architecture. These ideas were discovered by the architect, Robert Venturi:

> ...complexity and contradiction, messy vitality, richness over clarity, many levels of meaning, a combination of forms, decoration and ornament for its own sake, mixed media, symbolism, representationalism, and starting with the listener's value system rather than seeking to impose the composer's values on the listener.[12]

The main connection between postmodern architecture and postmodern music is the increasing use of disunity.

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[11]Lochhead and Auner, *Postmodern Music, Postmodern Thought*, 119.
[12]Ibid., 135.

In this new commodity-driven movement, architecture was the most expensive and implicated art form. In the book, *Complexity and Contradiction in Architecture* (1966), Robert Venturi expresses his thoughts on this new movement:

> I like elements that are hybrid rather than 'pure', compromising rather than 'clear', distorted rather than 'straightforward', ambiguous rather than 'articulated', perverse as well as impersonal, boring as well as 'interesting'...I am for messy vitality over obvious unity.[13]

Postmodern architecture was concerned with extracting various fragments from eclectic sources and joining them together to create a historical allusion. Throughout this time period, eclecticism was also used in quotation music, minimalism, and theatre.

An Introduction to Minimalism:

The term *minimalism* appeared in the 1960s, but did not emerge as a common term until the 1980s. Throughout the 1960s, the minimalist style was not readily accepted by the general public at first, but as time pushed on, this style became an influential force in the arts:

> Meanwhile, elements of the minimalist style have been defused by time as well as by the media and marketing forces against which it stood, at least sometimes, in silent opposition, and by both the conservatism and commercialism of once-lunatic artists and musicians themselves.[14]

In the late twentieth century, *minimalism* was not easily definable, and does not have a standard definition today. Throughout this section, many different definitions of minimalism are given from various sources and in addition, I will create my own definition of the term.

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[13]Robert Venturi, *Complexity and Contradiction in Architecture* (New York, 1996), 16.
[14]Edward Strickland, *Minimalism: Origins* (Bloomington: Indiana University Press, 1993), 3.

In my own definition, minimalism involves the reduction of the unnecessary elements that tend to cover up the necessary elements within a particular work, constituting each individual art form. The minimalist artists used specific techniques to place an emphasis on certain objects, musical motifs, characters, and words, demonstrating the 'need' for them in society. Once stripped down to the essentials, the remaining or exposed material made a statement about postmodern society.

The term *minimalism* was originally used to describe a period in the visual arts, but it was eventually applied to all of the fine arts including, music, theatre, film, dance, literature, and architecture throughout the post-war United States:

> 'Minimalist' art of the 1960s and 70s shared two crucial characteristics with minimalist music: the reduction of artistic materials to their essentials and a regularity of formal design that could in some ways be said to parallel the regular pulsing upon which much, though not all, of the most popular musical minimalism is based.[15]

The reaction against Abstract Expressionism is often associated with the minimalist style.

In its early stages, this movement was given much ridicule:

> Despite three decades of unrelenting ridicule from mainstream composers and critics-who have coined such unflattering descriptions as 'going-nowhere music', 'needle-stuck-in-the-groove music', and 'wallpaper music'-minimalism has become an enormous commercial success.[16]

Although it was not readily acceptable at first, this style continually grew on many people throughout the late twentieth century. The most common definition of minimalism is the reduction of ideas and materials that make the most of even less. The art throughout this movement makes limited statements and uses the fewest possible resources with little

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[15]Stanley Sadie, ed. *The New Grove Dictionary of Music and Musicians* 8th ed. (London: Macmillan, 1998), s.v. "Minimalism," by Keith Potter.

[16]Robert Schwarz, *Minimalists* (London: Phaidon Press Ltd., 1996), 8.

complexity: "In its simplest definition, minimalism is a style distinguished by severity of means, clarity of form, and simplicity of structure and texture."[17] Although this definition could be applied to any one of the fine arts throughout this period, it was most easily applied to music.

In October of 1968, the English composer, Michael Nyman introduced the term *minimalism* into music from the visual arts:

> 'When I [Michael Nyman] introduced it to music in 1968, it was a valid art-historical term,' he said in 1991. 'And without thinking about it too much, it seemed that there was a musical parallel. That was twenty-three years ago, and one would think that the public's perception of the music would have changed. But we're all still hung with this albatross, which is used simply as a way of packaging something.'[18]

Concerning musical criticism, Tom Johnson was the first critic to describe a musical composition as being *minimalist*. He described a composition by Alvin Lucier in 1972, three and a half years after Michael Nyman's introduction: "Johnson notes that 'the most striking thing about the concert as a whole was its coolness."[19] Following this performance, his interest in minimalist music broadened and he wrote the article in June 1977, "What Is Minimalism Really About?" This article focused on: "a good basis for a more detailed consideration of musical minimalism's chief attributes: 'repetition...tiny variations...hyper-clarity...encouraging more subtle perceptions...making music less dramatic...[stemming] partly from certain Asian and African attitudes.'"[20] Nyman's use of these terms became common vocabulary for minimalist art.

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[17]Strickland, *Minimalism: Origins*, 4
[18]Schwarz, *Minimalists*, 8.
[19]Keith Potter, *Four Musical Minimalists* (Cambridge: Cambridge University Press, 2000), 2.
[20]Ibid.

In general, the minimalist style yields the use of elaboration and ornamentation and makes the most of the fewest possible resources. Although each artist maintained their own individual style from outside influences, they all shared one similar characteristic—the use of *stasis*:

> Minimalist art is prone to stasis (as expressed in musical drones and silence, immobile or virtually immobile dance, endless freeze-frame in the film, event-free narrative and expressionless lyrics, featureless sculpture, monochromatic canvases) and resistant to development (gridded or otherwise diagrammatic paintings and sculptures, repeated modules and held harmonies in music, simple and reiterated movements in the dance and film, the aborted or circular dialogues of the drama and fiction).[21]

In minimalist music, stasis slowed down the harmonic movement and restricted the dynamic range. The goal of the minimalist composer was to simplify music to its bare essentials, and stasis allowed the audience to enjoy this art form without intense concentration. Each minimalist composer adapted his music to suit the needs of his audience through the use of repetition in the melody, rhythm, harmony, and form of each composition. Through the repetition, each composer created some degree of stasis through a specific melodic or rhythmic technique. These individual techniques are explained in the following chapters.

Throughout the 1960s, two different developments in music emerged—quotation music and minimal music. The former used earlier music that recycled its components into new compositions and used large amounts of borrowed material: "There was a marked element of nostalgia in the quotation movement, reflected in the fact that by far the most frequently quoted type of music was tonal music of the common-practice

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[21]Strickland, *Minimalism: Origins*, 7.

period."[22] Quotation music today is found in different genres of current music, but has lost its attraction of the 1960s and 1970s.

Although quotation music decreased quickly towards the end of the twentieth century, minimalism is continually included in a variety of different musical styles. The minimalist style was extremely influential throughout the late twentieth century and made an impact on the general public in a variety of ways:

> No style of late twentieth-century music has provoked as much controversy as minimalism. To its supporters, its directness and accessibility restores the severed link between composer and audience. To its detractors, it is maddeningly simple-minded, no better than pop music masquerading as art.[23]

Throughout the postmodern period, this movement and other musical genres had a complex relationship with politics:

> New music, and the *avant garde*, has often been criticized for its tendency to avoid real concern for the ills of the world. Some European composers, however, like Henze, Nono and Cardew, viewed their writings in a political light recognizing the artist as an outlaw in society, an outcast and a dreamer, whose purpose was to incite reactions and demonstrations while stressing the dehumanization of contemporary life.[24]

Through this view, minimalism lacked substance and content, but had a powerful effect on the listener's state of mind and conscious thinking. This effect on the listener became more important than the substance of the music.

This movement followed the work of John Cage, but moved in the opposite direction: "A great deal of Cage's music remained improvisatory or capable of being

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[22]Robert P. Morgan, ed. *Modern Times: from World War I to the Present* (Englewood Cliffs: Prentice Hall, 1994), 26.

[23]Schwarz, *Minimalists*, 8.

[24]Christopher Norris, ed. *Music and the Politics of Culture* (London: Lawrence and Wishart Ltd., 1989), 229-30.

diagrammed or under-notated. The music of such minimalists as Reich or Glass is precisely notated, demanding a high level of control and coordination in its performance."[25] The goal of the minimalist composers was to fuse together the eastern and western concepts of music.

An Introduction to non-Western Music:

The first four minimalist composers, La Monte Young, Terry Riley, Steve Reich, and Philip Glass wrote music to engage audience members in the act of meditation. Through the combination of the simplest melodic materials, these composers discovered a way to engage audience members in this style of music. This was created through the combination of the western concepts of time and eastern cyclical phrases.[26] The act of meditation is appealing to the ear because it shifts the music away from the listener and creates a hypnotic state: "...but Young's concern was with protracted states and processes, producing not definable works but musical environments-harmonious conditions for meditation."[27] These four composers used extended durations of space, repetition, and gradual change, and were most influenced by the vertical time concepts of non-Western Music:

> La Monte Young has been influenced by Japanese Gagaku-theatre and Indian raga music and he and Terry Riley are both disciples of the Indian raga master Pandit Pran Nath. Philip Glass has based his rhythmic systems on the additive time-structures of tabla music and Steve Reich had adopted

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[25]Ibid., 232.

[26]*cyclical phrases*: In cyclical phrasing, time is considered to be vertical, and not directional. This forms certain durations of space, repetition, and gradual change over long periods of time.

[27]Paul Griffiths, *Modern Music: A Concise History* (London: Thames and Hudson, 1994), 187.

> certain rhythmic principles from the music of Ghana and the Ivory Coast, and also from Balinese Gamelan music.[28]

The four musical minimalists used concepts from non-Western music and created a hypnotic and meditative experience for the audience.

The meditative experience of minimalism is created through the repetition of melodic and rhythmic ideas throughout an entire composition. This use of repetition has an impact on the listener's nervous system:

> It is indeed the physical action of the sound on the nervous system that is openly involved here. But behind other, much less explicit formulations, such as that of R. Firth (1969, xiii), who refers to the "monotonous beating of a drum", or that of D. Carpitella (1966, 360), who speaks of the "obsessive rhythmic repetition" of the tarantella, one can still perceive the same idea of hypnosis as resulting from the manipulation through music of the nervous system of the person who will be or already is entranced.[29]

This style often transcends a listener into the act of meditation through continuous repetition, allowing the listener to immediately hear a change in rhythm or texture.

The earliest traditional Indian music was used as a form of communication. The minimalist composers have utilized this idea of communication between the sender and the receiver throughout their works:

> ...music may be considered from the viewpoint of the "message" it constitutes, from that of the "addresser" who transmits it, and from that of the "addressee" who receives it-or, if one prefers, from that of the "transmitter" and the "receiver". In the normal conditions of musical communication, the transmitter and receiver share a common code, so that the message sent by the former refers to a context understandable by the latter, and communication is established between them by the action of a certain contact.[30]

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[28]Wim Mertens, *American Minimal Music* (New York: Broude Inc., 1983), 88.
[29]Gilbert Rouget, *Music and Trance* (Chicago: The University of Chicago Press, 1985), 176.
[30]Ibid., 65.

According to Jakobson, the six factors of communication including the transmitter, message, receiver, code, context, and contact use a completely different linguistic function.[31]

Regarding the physiological response to non-Western music, musical vibrations in a trance-like piece create wave movements with large amplitudes. Although the external effects to minimalism play a large part in the overall experience, the internal factors must also be considered. In non-Western shamanic music, the performer's goal is to take possession over the audience and induce a trance-like state.[32] Shamanism provides a strong foundation in the understanding of minimalism and its hypnotic qualities:

> ...at the beginning the shaman drums, continually increasing and decreasing in tempo and the intensity, with a definite rhythm empirically discovered, in order to produce a physiological and psychic state in which a suggestion-the coming of a spirit-made by the shaman himself, may have an immediate effect...[33]

The trance-like state on the listener occurs from the continual increase and decrease in tempo and intensity: "It seems, too, that whatever its rhythmic form may be, the sound of the drum is thought to possess within itself the power to call upon spirits. And finally, the 'content of the text of the shaman's songs' also plays a part."[34] Both the music and the possession of shamanism create a different impact on each listener. The melody and rhythm heard by the listener change at varied times through hypnosis.

The two main components of Indian music are melody and rhythm:

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[31]Rouget, *Music and Trance*, 65, *Music and Possession*: "To use the terms proposed by R. Jakobson (1963, 214) for the analysis of language, music may be considered from the viewpoint of the 'message' it constitutes, from that of the 'addresser' who transmits it, and from that of the 'addressee' who receives it-or, if one prefers, from that of the 'transmitter' and the 'receiver'."

[32]Ibid, *Music, Shamanism, Mediumship, Exorcism*: "The active or passive character of the possessee's relation to possession music..."

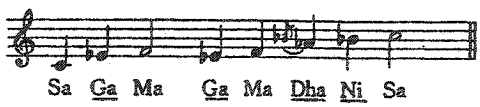
[33]Ibid, 128.

[34]Ibid.

> Harmony, as it developed in the West, with chords of three or more simultaneous pitches progressing in a logical succession, has never appealed to the Indian ear. For the Indian musician, chords create too much sound at once, and one cannot concentrate on what is most important: the melody line and the rhythm.[35]

The melody is the most important component, since it develops one particular grouping of notes at a time throughout an entire composition. The avoidance of harmony permits Indian composers to strictly focus on melody and rhythm. Through these two components, a melodic conceptual system called *raga* was developed by Indian composers.

The roots of *raga* originated in the tribal songs and poetry of India, which provided the first form of communication and allowed the sender and receiver to respond consciously or unconsciously. Raga provided a melodic foundation and a musical system where every note was represented by a powerful musical entity. This framework consisted of seventy-two parent ragas with hundreds of different combinations. This melodic system is examined against the Western scale. The following musical example demonstrates the construction of a pentatonic raga:



Example 1: Hindustani Melodic Concepts, *Raga*, *Sajana aye* is in a particular raga, *Rag Malkosh*, representation of *Rag Malkosh* in scale form.[36]

The idea of *scale* is foreign to Indian musicians:

> ...because melodic shape, rather than an abstract scale, accounts for the differences between one raga and others. Although I [Wade] can state that the pitches of Rag

[35]Bonnie C. Wade, *Music in India: The Classical Traditions* (Englewood Cliffs: Prentice Hall, 1979), 24.

[36]Ibid., 59.

> Malkosh are Sa, Ga, Ma, Dha, and Ni, it would be misleading for me to present them as a scale in Malkosh, because those pitches in that succession are not characteristic of Malkosh. (For this reason, the scales of ragas that are listed in record-liner notes are often difficult to hear in the music.)[37]

The individual raga has its own characteristics and is identified by its melodic shape, pitch registers, number of pitches, and ornamentation.

The Indian *drone* has greatly influenced the music of the four minimalist composers: "The drone is the sounding of a constant melodic pitch or pitch sequence that undergirds elaborate melodic improvisation. It adds a 'harmonic' element to the music."[38] This is demonstrated in the following example:

Melody: Sa - Re Sa | Ga Ma - Re | Ga Ma Pa Ga | Ma - |
Drone: Sa

Example 2: **The Melodic Drone,** ***demonstrating the drone element on the pitch "Sa"***[39]

The intervals between pitches are important, since the tonic and the fifth sound simultaneously.

There are many different factors that affect the use of time throughout Indian music. In many cases, a performance of the same piece may have multiple interpretations of length. These depend upon the style of the performer. In Indian music, *tala* is the foundation for rhythm, since the Sanskrit language of India follows the same rhythmic patterns as the music. The rhythmic cycles are composed of individual units that organize this complex system of rhythm. The types of rhythmic organization differ depending

[37]Ibid.
[38]Ibid., 48.
[39]Ibid., 49.

upon the piece, and a pulse is felt within the musician through the tapping of feet and clapping of hands:

> Rhythmic types can be categorized into two groups: (1) Free Rhythm-unmeasured and totally regulated by texts, and (2) Measured Rhythm-within a repeating cycle of beats, either in tala, or not specifically in tala, yet adhering to a recurring cycle of beats.[40]

The simplest rhythmic division consists of one beat with a variety of different subdivisions. The breath occurrences are taken before and after the key word of the text, and the heaviest beats fall on one and five. This idea of pulse is also found in the works of the four minimalist composers.

The structure of the melody and rhythm in Indian music constructed a foundation for the minimalist works of Young, Riley, Reich, and Glass. The main similarity between Indian music and classical minimalism is the use of reiteration: "...long sustained tones, repeated rhythmic, melodic, and/or harmonic patterns, cells, or phrases, or the like-that creates relatively static 'drawn-out' qualities."[41] This use of prolonged subtlety has been found prevalently throughout the work of the four composers. Glass comments: "The music is placed outside the usual time scale, substituting a non-narrative and extended time sense in its place."[42] The use of time in Indian music influences the utilization of rhythm and the generation of stasis in the compositions of Young, Riley, Reich, and Glass.

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[40]Robert Leopold Simon, *Spiritual Aspects of Indian Music* (Delhi: Sundeep Prakashan, 1984), 89.

[41]Brent Heisinger, "American Minimalism in the 1980s," *American Music* 7 (1989): 434.

[42]Ibid.

Chapter 2

The Audience and its Response

An Introduction:

Throughout the twentieth century, works of art have invoked different types of audience response with the postmodern rejection of traditional, melodic, rhythmic, and structural elements. In order to understand a particular reaction, one must first consider the audience's background and their knowledge of different artistic fields. The examination of Kurt Schwitters' *Ursonate* (1924) provides a strong foundation in the analysis of audience response.

Kurt Schwitters' *Ursonate* is a fifty-five minute long stage work that consists of two acts and demonstrates the importance of the audience in the performing arts. Moving through six phases of gibberish text, the audience continually responds in a different manner throughout each phase and within each performance. Below is an excerpt of the text in *Ursonate*:

Ooooooooooooooooooooooooooooooo (*leise*)
Bee bee bee bee bee ... ...
Ooooooooooooooooooooooooooooooo
Zee zee zee zee zee ... ...
Ooooooooooooooooooooooooooooooo
Rinnaekete ... bee ... bee ...
Ooooooooooooooooooooooooooooooo
ann ze ... ... ann ze ... ...
Ooooooooooooooooooooooooooooooo

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[43]

The first public performance of *Ursonate* took place at the house of Frau Kiepenhauer in Potsdam in 1924: "Those invited were the 'better sort' of people-and in Potsdam, the

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[43]Hans Richter, *Dada, Art, and Anti-art* (New York: Oxford University Press, 1978), 142.

military citadel of the old Prussian monarchy, this meant a crowd of retired generals and other people of rank."[44] The audience had never been exposed to this style of theatre: "At first they were completely baffled, but after a couple of minutes the shock began to wear off."[45] Following this premiere, *Ursonate* was continually performed throughout the twentieth century and to the present day. In each subsequent performance, the audience responded through laughter, tears, or hostility:

> I watched delightedly as two generals in front of me pursed their lips as hard as they could to stop themselves laughing. Their faces, above their upright collars, turned first red, then slightly bluish. And then they lost control. They burst out laughing, and the whole audience, freed from the pressure that had been building up inside them, exploded in an orgy of laughter. The dignified old ladies, the stiff generals, shrieked with laughter, gasped for breath, slapped their thighs, choked themselves.[46]

The reaction to the performance of this work is a result of the individual experiences of the audience members.

In Peter Froehlich's article, "The Public's Reaction to Abstract Performance Scores" that focuses on *Ursonate*, he concludes that each type of audience member reacts in a different manner towards the play—the naïve, the musicians, and the general public. Therefore, it is the experience of the audience that invokes a certain type of reaction. From Froehlich's own experiences when he performed the *Ursonate* in the Amazon, the audience members had no response or reaction and were not particularly bothered by the performance. The naïve audience is classified as those who are isolated from society as we know it and are not exposed to our art forms. There was no response when he performed in front of an audience of musicians, since they have knowledge of the *avant-*

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[44]Ibid.
[45]Ibid.
[46]Ibid.

garde period. Through their expectancy, they are not disturbed by the performance. The greatest response is from the general public, caused by the varying degrees of knowledge and the misunderstanding of the twentieth-century fine arts. This classification of audience members and the analysis of their response, adds to our understanding of the audience's reaction to artistic works.

Communication between the performer and the audience was another important relationship that resulted from the first performance of the *Ursonate*. Through the audience's hysterical laughter, Schwitters did not take offense: "He turned up the volume of his enormous voice to Force Ten and simply swamped the storm of laughter in the audience, so that the latter seemed to be an accompaniment to the *Ursonate*."[47] He continued to perform and remained confident:

> The din raged round him, like the sea against which, two thousand years earlier, Demosthenes had tried the strength of his voice. The hurricane blew itself out as rapidly as it had arisen. Schwitters spoke the rest of his *Ursonate* without further interruption. The result was fantastic.[48]

He realized that his communication with the audience was forming a relationship:

> The same generals, the same rich ladies, who had previously laughed until they cried, now came to Schwitters, again with tears in their eyes, almost stuttering with admiration and gratitude. Something had been opened up within them, something they had never expected to feel: a great joy.[49]

The reaction from the first performance of *Ursonate* is analyzed as a model for twentieth-century theatrical and musical performances.

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[47]Ibid.
[48]Ibid.
[49]Ibid.

In the examination of audience response, the audience is affected by a variety of factors including, social class, age, physiology, gender, lifestyle, ethnic groups, and sub-cultures:

> In the age of mass communication, people have access to an enormous diversity of music. The listening potential offered by live music is greatly expanded by recorded and broadcast music, giving a choice of music spanning national, cultural, social, and historical divides.[50]

Concerning the social psychology of music, "People sharing a taste for a particular type of music can be described as members of a *taste public* who subscribe to a *taste culture*."[51] Coined by Su-Lin Gann, the music taste public is classified as a social group and a music taste culture is classified as a set of aesthetic values in which this group shares.[52]

Social Class:

In the examination of audience classification, social class plays a significant part in the different types of audience members. Many studies have been conducted on audience members attending performances of classical music: "One obvious prediction, however, concerns classical music, which, as a putative element of 'high culture', should be preferred more by higher socio-economic status groups. This prediction is consistent with some empirical findings."[53] Regarding evidence, the association between the need for classical music and higher economic groups is a result of concert attendance:

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[50]David J. Hargreaves and Adrian C. North, eds. *The Social Psychology of Music* (Oxford: Oxford University Press, 1997), 142.

[51]Ibid.

[52]Ibid., 15, *Su-lin Gann*: "...social psychologist who studies the social, individual, and situational variables that determine teenage music preferences, which are of course a crucial factor in many other aspects of their lifestyles and behavior."

[53]Ibid., 143-4.

> In an American national, cross-sectional, social survey cited by Di Maggio and Useem (1978), where the measure was concert attendance during the previous 12 months, only four percent of blue collar workers were consumers of symphonic music, compared to 14 per cent of managerial workers and 18 per cent professionals.[54]

There were differences in the attendance of opera and ballet, and the consumption of folk, jazz, and rock: "...however, were less marked, with 20 per cent of blue collar workers, 26 per cent of managers, and 33 per cent of professionals having attended popular music concerts."[55] Another area of social class and different types of audience is associated with the Broadway musical: "...Broadway theater had acquired a degree of respectability and cultural legitimacy long before high art discourse became prominent in cinema or mainstream popular music."[56] In summation of the various studies conducted, the data collected between music and social class demonstrates that classical music is in minority compared to popular music. In terms of social class, people from higher socio-economic groups have a greater taste for classical music than the lower classes.

Age Groups:

Age groups affect the types of audience members who attend musical performances:

> One is a tendency for popular music, in its various forms, to appeal more to younger people. The existence of a distinctive youth, 'teenage' culture, centering on popular music, has long been recognized, and the commercially-slanted popular music of the best-seller charts has traditionally been aimed at this taste public.[57]

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[54]Ibid., 144.

[55]Ibid.

[56]Keir Keightley, "You Keep Coming Back Like A Song: Adult Audiences, Taste Panics, and the Idea of the Standard," *Journal of Popular Music Studies* 13 (2001): 17.

[57]Hargreaves and North, *The Social Psychology of Music*, 146.

The most direct observation to the differences between music and different age groups is a result of the evolution of musical tastes as a person grows older: "This persistence of tastes, coupled with the changes which take place over time in the popularity of musical styles and artists among the young, results in each generation having its own defining music and performers."[58] Concerning classical music, there have been few studies conducted on its relationship to age. From the data collected, classical music appeals to older age groups as a result of the prolonged exposure to this music over time.

Physiology:

The physiology of the human body and its response to various types of music is another factor when considering the connection between the composer and the audience. Movements within the human body are often connected to certain aspects of music. The connections and associations between the two are referred to as the *somatic experience*:

> The connection of the body to music is direct and immediate. A skilled conductor can convey what he requires of an orchestra by the silent movements of his hands, even though a minimal part of the message he conveys is codified by conscious rules. The conviction that music has a direct effect on the body arises among disparate cultures, and music has been used to promote trance and exorcise illness throughout history.[59]

Music is a transmutation of physiological impulses and is apart of our way of thinking: "Still, unlike mathematics or speech, much more distinctly than in painting (even abstract expressionist painting), and for much less obvious reasons than in ballet or acting, a sense persists of strong and precise and intimate correspondences between the details of music

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[58]Ibid.

[59]David Lidov, "Mind and Body in Music," *Semiotica* 66 (1987): 69.

and bodily properties..."[60] The gestures within the body correspond to the moods and emotions invoked through music.

There is an association formed with the listener's ear through the act of stasis, silence, and vertical listening:[61] "Steiner called this the spiritualization of music, the penetration of its inner nature."[62] Stasis also creates *spectralism*:

> Spectralism, like harmony, is in essence outside the world of linear time. In music, time is articulated by rhythm; in psychology, time is articulated by the process of chopping up and arranging experience into language, which separates us from the primary world and joins us to the linear symbolic order.[63]

The use of form is another structural idea that relates the minimalist composer to the listener:

> The activity of listening to form is largely a mental one: we add one note to another, one phrase to another, until eventually they stand in the memory as a structure. We choose which notes to connect with which others to satisfy our desire for rich meaning. We could try to listen to Haydn serially or...according to traditional Chinese musical syntax; whatever way it is, we make a choice and store the outcome in mental space.[64]

There are less psychological methods of listening to music that do not focus on harmony and melody, but the flavor of a particular moment in time.[65]

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[60]Ibid.

[61]*Jonathan Harvey's "In Quest of Spirit: Thoughts on Music" and Morton Feldman's "Give My Regards to Eighth Street: Collected Writings of Morton Feldman":* In these books, both authors comment on different ways the human body responds to music, and the different ways a listener is able to listen to certain types of music.

[62]Daniel N. Thompson, "Beyond Duality: Stasis, Silence, and Vertical Listening," *Current Musicology* 67-8 (2002): 494.

[63]Jonathan Harvey, *In Quest of Spirit: Thoughts on Music* (Berkley: University of California Press, 1999), 39-40.

[64]Ibid., 34-5.

[65]Ibid., *Jonathan Harvey states:* "...a listener does not always have to listen to the structural elements of the music such as harmony and form, but with the colour and the flavor of the moment. Although, as we've seen, all music has a dynamic, a sense of tension, it is occasionally possible to nudge

There are many different factors in the examination of the listener's reaction to music including, speed, dissonance, vibrato, and loudness:

> Consider, for example, how opposites compensate: *staccato* may cause us to hear connections; *piano subito* makes us intent. Meter displays subtle variations in somatic value through compound pulse (not compound meter: simple meter with recurring downbeats at one rate and beats at a multiple of this rate is a compound pulse).[66]

The different variables involving the use of pulse and the listener's reaction to these variables includes speed and intensity: "Speed is exciting. Intensity is involving. The values of simple pulse are fairly obvious: strong, foreground pulse as in folk dances and marches controls movement directly."[67] The use of accentuated pulse is important when listening to minimalist music because the listener becomes aware as soon as the pulse changes. Accentuated pulse is created through phase shifting and compound pulse is used subtly in between the shifts: "The values of compound pulse are less obvious. Compound pulse integrates two or more sets of values according to the relative intensity of the levels of beat within the same flow."[68]

In our twentieth-century listening experiences, we focus on one particular sound or drone: "A single, held tone is perhaps the most extreme form of stasis..."[69] In Harvey's book, he gives the two different views of Steiner and Takemitsu[70] from the early 1900s in relation to the importance of a single tone: "Steiner wrote as early as 1923 of how the single note would in future be found as rich in meaning as an entire

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music out of its context and hear it vertically, rather than as a horizontal line. Obviously, the music must invite this mode of perception."

[66]Lidov, "Mind and Body in Music," 82.

[67]Ibid.

[68]Ibid.

[69]Thompson, "Beyond Duality: Stasis, Silence, and Vertical Listening," 494.

[70]*Rudolf Steiner and Takemitsu*: early twentieth-century writers, focusing on music and the importance of listening.

symphony-a prophecy now coming true before our ears. This he called the spiritualization of music, the penetration of its inner nature."[71] In Takemitsu's opinion, he states that a single tone can stand on its own as a composition in itself: "For Takemitsu the 'single sound' (together with silence) produced by great masters of biwa or shakuhachi served as a model: 'A single strum of the strings or even one pluck is too complex, too complete in itself to admit any theory.'"[72] This idea of stasis is rooted in the music of India, appreciating a single drone and the production of an aesthetic experience for the listener. The interrelation between the composer and the audience in Eastern music occurs through the experiences of the human body. Harvey responds: "The unity of rhythm, pitch, and color, as Stockhausen long ago observed, is shown to be, like the rest of the universe, all a matter of tempo, of speed, of energy."[73] This experience is a result of the awareness of an object or change in rhythm.

The idea of heart beat matching the rhythm of music has been around for centuries. Plato and Aristotle believed that the states of mind could be altered by changes in music. It has been proven that music affects the human body through the central nervous system, autonomic nervous system, somatic nervous system, and the endocrine system. The heart's connection with the autonomic nervous system creates a point of emotional charge.[74] Rhythm affects the listener's body:

> Rhythm finds resonance in the whole organism. It is a matter of the two fundamental powers of life, namely, knowing and acting. Therefore, indirectly it effects the circulation, respiration, and all the secretions of the body in

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[71]Harvey, *In Quest of Spirit: Thoughts on Music*, 494.

[72]Ibid.

[73]Ibid., 501.

[74]Theodore R. Kozinski, "The Psychological and Physiological Effects of Music on the Heart Recovery Rate" (Master's thesis, Western Illinois University, 1970), 1.

> such a way as to arouse agreeable feeling. Herein we find the ground work of the whole organism to its pulsation.[75]

Tonal and rhythmic patterns affect the human body through a variety of levels including, emotional, rhythmic, intellectual, and psychic. On an emotional level, music affects an individual's moods and the human psyche is altered through an aesthetic response. Music has the ability to affect an individual intellectually through the stimulation of thought and imagery. Rhythm impacts the coordination of the human body.

Gender:

Gender influences the way a listener perceives different types of music. From the studies conducted and the differences between male and female musical preferences, various social psychologists have concluded:

> ...that males are more likely than females to prefer music described as 'hard' or 'tough', while females are more likely to prefer music which is 'softer' and more romantic. Music which tends to appeal more to males includes hard rock, progressive rock, heavy rock, rock 'n' roll, heavy metal, and, sometimes, jazz. Females are more likely to have stronger preferences for mainstream pop, pop hits, folk, classical, and for dance-oriented music such as disco.[76]

Throughout the twentieth century, certain types of popular music pertained to males over females:

> From the EuroMasters' frenetically sampled thrash guitars through to anthems like Sperminator's 'No Women Allowed' and Technoheads' comedy gabber hit 'I Wanna Be a Hippy', this music is characterized by jackhammer beats occasionally exceeding 200 beats per minute and rarely possess anything discernible in the way of melody or rhythmic variation. Angry, adrenaline-testosterone textures

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[75]Ibid., 2, *Kozinski,* cites the work of Podolsky.
[76]Ibid., 147.

> are pressed into the service of pure linearity, speed without content, direction without aim.[77]

This type of music focused on a male audience and portrayed messages about male domination. The title of the track, 'No Women Allowed' is only one example of the differences between male and female roles in the audience of musical performances.

Lifestyles:

Different lifestyles and musical tastes have a great impact on an individual throughout their life:

> For example, the tendency for a taste for classical music to be more common among the upper-middle class could reflect the fact that children growing up in upper-middle class homes are more likely to encounter classical music and to experience positive values associated with it.[78]

The children who are exposed to classical music in their childhood through music lessons form a greater appreciation of music later in life: "If this analysis is correct, a family belonging to a particular taste public is likely to provide a set of influences which increase the likelihood of its children becoming members of that taste public."[79] There are many problems associated with the musical influences of children in these studies, and these have occurred as a result of the difference between the influence of a child's peers and the influence of family.

Several studies have been conducted on the relationship between ethnic groups and musical tastes. In the analysis of audience members, musical tastes are divided between national, cultural, and ethnic factors. The dance distinguishes between different

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[77]Jeremy Gilbert and Ewan Pearson, *Discographies: Dance music, culture and politics of sound* (London: Routledge, 1999), 95.

[78]Hargreaves and North, *The Social Psychology of Music*, 150.

[79]Ibid.

cultural groups within an audience. The English bourgeoisie and the Commonwealth movement of the 1650s initiated the distinction between cultural classes with the *waltz*[80]: "Within English culture dance has traditionally been associated with the aristocracy or with 'the people'..."[81] Concerning demography, certain societies are more multicultural than others, and the result is a mixture of musical styles from all over the world. Although these societies live in the same demographic region, different musical tastes emerge out of different ethnic backgrounds: "Such differences have not been studied very systematically, but the literature provides some examples, including marked differences in the preferences of American blacks and whites:"[82]

> ...the term "rock 'n' roll" more accurately represents the widespread cultural and industrial recognition of a process of segmentation of the mainstream, white audience that had been developing since at least the late 1930s. Rock 'n' roll marks the point at which the discursively produced opposition between adult and teen audience segments is rendered most rigidly...[83]

Social psychologists have shown that the tendency for a white rock 'n' roll audience is greater than a black audience, who tend to favor jazz, blues, and soul.[84] From the multiple cultures co-existing within mass-culture, studies have demonstrated that certain ethnic groups listen to music that is characteristic of their cultural backgrounds.

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[80]Ibid., Chapter 6, *No Music, No Dancing: Capitalist modernity and the legacy of Puritanism.*

[81]Ibid., 98.

[82]Ibid., 147.

[83]Keightley, "You Keep Coming Back Like A Song: Adult Audiences, Taste Panics, and the Idea of the Standard," 8.

[84]Hargreaves and North, *The Social Psychology of Music*, 144-45, *Denisoff and Levine (1972),* "...we might also anticipate class differences in tastes for various popular music subcategories. Findings in this area are rather difficult to summarize, however, partly because of the categorization problem, and partly because of the rapidly changing popularity of popular music styles and performers. Although several studies have presented evidence that social class membership is not randomly distributed across various popular music subcategory taste cultures, these studies permit few easy generalizations about the precise relationships between social class and these taste cultures."

Subcultures:

In the classification of different musical groups and audiences, David Riesman published an article on minority and majority musical groups in 1950. In 1990, he reported on the distinction between these two groups: "The distinction Riesman made was between two groups of music listeners: a *majority* group and a *minority* group. Riesman's theory forms a link between Adorno's arguments[85] and the ideas of later subcultural theorists."[86] In this study, the majority group consisted of younger people who did not have strong opinions about particular types of music, and the minority group consisted of a small group of discriminating, but active listeners: "In contrast to the majority, members of the minority group tended to dislike the name bands and big stars and were dismissive of most of the music that could be heard on the radio."[87] The individuals in the minority group often listened to lesser known bands and developed their own language. They categorized themselves into a specific *subculture* through the vocabulary they used to describe the music and the musicians that they favored.

The term subculture refers to a subdivision in culture. In the 1940s and 1950s, sociologists who studied popular dance in Britain attempted to find a connection between social activities and music. These activities were associated with alternative value systems and throughout the late twentieth century, these groups were classified into subcultures. In 1979, Dick Hebdige wrote the book entitled, *Subculture*: "...and covering the appearance of punk in Britain and the subcultural styles that preceded it, Hebdige's book has had a great influence on later theoretical approaches to music

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[85]Keith Negus, *Popular Music in Theory*, (Hanover: Wesleyan University Press, 1996), *Chapter 1: Audiences*, Adorno wrote about music and culture in the period between 1920 and 1960, focusing on the reduction of people to masses.

[86]Ibid., 12.

[87]Ibid.

audiences."[88] Hebdige initiated his work with an examination of culture: "...social activities, meanings, values, beliefs, institutions and commodities and to consider how these elements were related in 'a whole way of life'. He did this by focusing on one part of British culture, a subculture."[89] In British subcultural theory, the term subculture refers to certain groups in a subordinate culture.

Hebdige emphasized that there was not one particular culture in Britain and that an individual's social experience and cultural activities were molded by a number of different factors including, gender, age, and class: "In this context, distinctive youth subcultures (such as the teddy boy, mod and punk) were seen to emerge as a 'response' to a subordinate social class position."[90] The youth subcultures were followers of certain types of music that built a relationship through different forms of expression:

> Hebdige made an important contribution to theories about the relationship between music, dressing, and dancing by indicating how a wide range of visual codes and cultural practices are interrelated and brought together as a style and in opposition to other styles. He demonstrated how young people actively use a range of existing artifacts and in doing so give new meanings to old commodities...[91]

From this perspective, individuals within a specific subculture are influenced by musical and visual styles that are portrayed by certain musicians.

The diversity of subcultures in our society has steadily increased since the early twentieth century. Prior to World War II, musicians were writing music for a very broad group of individuals and seeking the largest and most general audience possible:

> This meant that songs, singers, and bands aimed for a multigenerational, family audience, from grandmother to

[88]Ibid., 15.
[89]Ibid.
[90]Ibid.
[91]Ibid.

> grandson. Just as songwriters generally avoided gender-specific lyrics in order to facilitate performances by female and male performers (and thus increase opportunities for exposure), songs that were too mature in content, or too juvenile in approach, were generally seen as specialty material.[92]

The large audiences associated with the advent of rock 'n' roll in the 1950s lessened the subcultural groups: "Audience members from both adult and teen segments were keenly aware of the link between the standard and adult audiences."[93] In this genre of popular music, there was a very large rock subculture and no distinction between adult and teen audiences.

From the mid twentieth century to the present, the variety of different subcultures has steadily increased. Mass media played a role in the encouragement and formation of subcultural groups, and has encouraged teenagers to identify with musicians as role models. For example: "The sixteen year old, pogoing around the bedroom, deciding to 'be a punk' after seeing the Sex Pistols on TV..."[94] Teenage subculture has become more accepting and accommodating by various groups within different communities. There has been an increasing sense of tolerance for differences within a society. This diversity creates strength within a community:

> The tolerance of diversity is a very postmodernist viewpoint. Not only are we a global village, but each village in the global village seems to be filled with people from all over the globe. One implication of this new acceptance of different subculture groups, is the greater number of groups that seem to have formed. Changes in the face of society have given room for the computer to become a powerful influence.[95]

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[92]Keightley, "You Keep Coming Back Like A Song: Adult Audiences, Taste Panics, and the Idea of the Standard," 10.

[93]Ibid.

[94]Gilbert and Pearson, *Discographies: Dance music, culture and the politics of sound*, 24.

[95]Ibid.

Children often look outside of the family in search of their identity when both parents work.

The Minimalist Subculture:

The emergence of different subcultures throughout the late twentieth century has also had an impact on classical music, and this is evident in the subculture created from minimalism. The individuals within this subculture formed a connection with a specific composer not only through the social and visual aspects, but through the structure of the music. The works of the four minimalist composers were premiered in New York City: "...the scenes for this new music are the Brooklyn Academy of Music and the tawdry Symphony Space, housed in an old movie theater on Manhattan's Upper West Side..."[96] The majority of these followers were young and involved with the New York art scene: "...attracting crowds that are young, louche-chic, and avid..."[97] This type of music appealed to individuals who were in their early twenties. The music became a social activity for the audience:

> One of the many trajectories along which music develops is its social dimension. New forms of music can be new in many different ways, and one of them is what role they are intended to play in a listener's life, or, to put it another way, what use the listener will put them to. The difference between sitting quietly in a chair and only coughing in the spaces between movements, and screaming your head off in a stadium full of hysterical young girls is a real difference. The difference between apprehending the compositional subtleties of a Bach fugue and filling your apartment with Heavy Metal is a real difference. These

[96]Sennett, "Twilight of the Tenured Composer," 67.
[97]Ibid.

> differences have to do with what social activity the music addresses, what music is thought to be for.[98]

Prior to minimalism, the majority of audience members in classical music performances consisted of middle-aged people. The young people identified and formed a connection with minimalism: "The audiences are, indeed, deadly serious themselves: they behave as if performances of this music were as important as premieres of Stravinsky's work in Paris during the Ballets Russes."[99] In addition, the performances would often run throughout the entire night.

A Comparison of Twentieth-Century Music and Minimalism:

Over the course of the twentieth century, minimalism has continued to create a bond and a means of communication between the composer and the audience. Many other musical styles emerged during this time period, but they lacked communication.

The minimalist composer informs his listeners through the postmodern notion of recycling pre-existing materials. This is achieved through the repetition of a rhythmic motive that is continually varied to create stasis for the listener. The difference between minimalism and the various other styles was the use of materials, since many of these were rooted in the modernist style of composing: "The basic premise of modernism has been that each composition creates its own hypotheses which then work themselves out as the structure and content of the piece as revealed in time; external and pre-existing ideas are kept out of the discourse."[100] In the modernist style, the listener was continually

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[98]Mark Prendergast, *The Ambient Century From Mahler to Trance: The Evolution of Sound in the Electronic Age* (London: Bloomsbury Publishing, 2000), i.

[99]Ibid.

[100]Eric Salzman, *Twentieth-Century Music: An Introduction* (Upper Saddle River: Prentice Hall, 2001), 195.

presented with new material and no repetition and as a result, the modernist composers did not effectively identify with their audiences.

Serialism emerged prior to minimalism and opposed the constant use of repetition. This is evident in the work of Stockhausen: "Stockhausen's initial concerns were the complete isolation and definition of every aspect of musical sound and the extension of serial control into every domain."[101] In serialism's earliest form, the twelve-tone arrangement of pitches was played against twelve durations. The various points of intersection were plotted to create the composition:

> The reign of this strict and narrow interpretation of serial technique was in fact rather brief, although literally dozens and even hundreds of totally organized, post-Webern serial pieces were written, nearly all for small combinations of instruments and nearly all based on a highly rationalized arrangement of isolated, "pointillist" events and textures, often surrounded by generous amounts of highly organized silence.[102]

This totally organized use of rational music and control was distinct from other forms of composition throughout the twentieth century.

Although there were many different styles of music composed throughout the same time period as minimalism, one particular composer remained in opposition to the continual utilization of repetition—John Cage. His school of composition emerged from the music of Charles Ives and was largely based on chance: "The immediate impact came from the use of non-conventional sounds and noise, in the introduction of chance elements into music, in the general diminution of conscious control and manipulation and the challenge to received tradition and wisdom."[103] Cage's compositions were extremely

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[101]Ibid., 161.
[102]Ibid.
[103]Ibid., 163.

unique, but the listener did not retain a sense of structure through repetition: "He threw dice, used the I *Ching*, plotted star charts or the imperfections on a piece of paper-not to give the performers freedom, but to de-control the conscious manipulation of sound."[104] His compositions were based on randomness and did not retain a definition of time, which was one of the most important elements in the act of communication:

> Instead of being conceived as sound, performances may be based on visual definitions, programs of activity, ideas of non-sound or silence. Instead of defining time, the compositions are themselves defined by the random passage of time, extending to indeterminate or theoretically infinite length. Instead of a music of definable identity, we have conceptions whose essence is lack of identity.[105]

Although Cage's school seemed to be in clear opposition with that of serialism, they both shared some common elements:

> Both were, in their pure state, essential but relatively brief phases-a clearing of the ground, as it were, before reconstruction could begin. Both came out of philosophical attitudes about music and art: serialism analyzing, in Western determinist style, the activity of the mind and its internal order; indeterminacy contemplating an Eastern-influenced philosophy of activity in the indifferent external world.[106]

These two separate compositional schools were extremely distinct from the compositional practice of minimalism. The main difference was minimalism's employment of communication. The structure of minimalist music produced a formula where the listener anticipated the next change in texture and formed a relationship and sense of communication with the composer and the music.

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[104]Ibid., 164.
[105]Ibid., 167.
[106]Ibid., 167.

Communication is the main source and foundation for the link between the composer and the audience in minimalism. In the past, there were many problems associated with this connection: "Indeed, the 1960s made a kind of moral imperative of communication. Yet the problem remained as to how this desire for communication could be satisfied, and whether it was the composer who could solve it-bridge the gap."[107] The four minimalist composers abridged the gap by connecting and reaching out to their audiences through the structure of the music. Through this form of communication, the audience continually responded to the music: "By redefining, or at least challenging, audiences' traditional roles, they invited the public into the act of creation, offering a non-elitist, non-threatening means of encountering new aesthetic thought."[108] The minimalist audience was no longer separate from the composer, but actively participated in the composition.

[107]Sennett, "Twilight of the Tenured Composer," 69.
[108]Morgan, *Modern Times: From World War I to the Present*, 342.

Chapter 3

La Monte Young

An Introduction:

In the biographies of the four minimalist composers, musicologists compile their anecdotal material based on a particular framework in which their musical careers are presented. The presentation of this material is ordered to add interest and draw the reader into their fascinating careers and to popularize their music. In the biographies of both Young and Riley, emphasis is placed on their early influences of environmental sounds and their growing up in different rural areas of the United States.[109] In the biography of Reich, emphasis is placed on his train trips from New York to Los Angeles.[110] The author of Glass's biography places an emphasis on the early influences of his father's radio repair shop.[111]

Both Young and Riley attended university in California at UCLA and Reich and Glass in New York City at the Julliard School of Music. All four minimalist composers became most interested in composition during their university years, and particularly during their Master's degrees. If musicologists started the minimalists' biographies at the beginning of their careers with their university degrees, this would not help popularize their lives, however mutual and common influences would be brought to the surface more truly. The biographies present their earliest influences throughout childhood in order to distinguish between each composer and to give them a sense of identity, since they are often grouped together as one unit of 'the four musical minimalists'.

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[109]Robert Schwarz, *Minimalists* (London: Phaidon Press Limited, 1996), 16-25;
Keith Potter, *Four Musical Minimalists: La Monte Young, Terry Riley, Steve Reich, Philip Glass* (Cambridge: Cambridge University Press, 2000), 23 and 92.

[110]Ibid., 50-51;
Ibid., 153-4

[111]Potter, *Four Musical Minimalists: La Monte Young, Terry Riley, Steve Reich, Philip Glass*, 252.

In the next four chapters, the discussion of the lives and works of these composers will demonstrate the evolution in audience response from the work of Young to the work of Glass. For example, both Young and Riley adopted the 'hippy' lifestyle and therefore, expected to cater to a small audience of hippies like themselves. Reich was strongly influenced by World War II and wrote music that reflected society during this time period. In Glass's case, he was asked to write music in a variety of different areas during his student years, including musical theatre and Indian films. This early exposure to different art forms enabled him to write minimalist music for a broader audience.

The image of La Monte Young performing *The Well-Tuned Piano* in a small incensed-filled loft in New York City during the 1960s and 1970s for an audience of approximately thirty followers of his music, is one that still holds true to the present day; Young has remained in the same loft in New York City for the past thirty years, and still performs for a very limited audience. It seems that he was composing this minimalist music and performing it in front of his friends as a social activity and therefore, he never branched out in search of a larger audience. Although many biographers have painted a picture of Young's childhood as he grew up in rural America and was influenced by environmental sounds, these early experiences should only be taken as an 'anecdote' from his youth. Young's biographers use his rural experiences and place an emphasis on the influence of environmental sounds. They also use every possible means to relate these environmental sounds to his later works. It is questionable whether these rural anecdotes inform the music in the New York City loft.

The Early Years:

Throughout the various biographies of Young, biographers only focus on his musical life. In each of the main sections of his biography, emphasis is placed on the influence of a specific musical style. For example, throughout his childhood, biographers place an emphasis on the sounds that he heard all around him while growing up on the American frontier. They paint a picture for the reader of Young growing up in what was for them the middle of nowhere in a small log cabin on October 14th, 1935 in Bern, Idaho, which was a small dairy community of 149 hard-working citizens. His first experience with unchanging sounds, were the sounds of nature that could be heard through the walls of the log cabin. The following quotation demonstrates the emphasis that biographers and Young himself place on environmental sounds throughout his childhood:

> The environmental we can divide into the natural and the electrical or mechanical. In nature the wind, crickets, cicadas, outdoor resonances like canyons or the owls in the woods near Utah Lake. Under electrical we have the sounds of the power plant next to the Conoco station my [Young] grandfather ran in Montpelier.[112]

In 1941, the people of the American frontier were struggling from the effects of the Depression. Young's family hitchhiked to Los Angeles in order for his father to find work. Young's father, who was an amateur saxophone player, bought him an old saxophone and promised to give him lessons. Over the course of the next few years, he eagerly practiced from sheet music and old swing arrangements. After a few years in Los Angeles, they then moved to American Fork, Utah in order to find work. During his time in American Fork, biographers emphasize the environmental sounds that could be heard

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[112]Mark Alburger, *La Monte Young: Monograph in Music* (San Rafael: New Music, 1996), 2.

all around him. Since the Young family was struggling financially, La Monte was forced to move in with his grandmother, who lived next to a train yard. These unique train sounds created another source of inspiration for Young. Biographers discuss his attraction to the train yard and his interest in the train whistles and signals.[113] In many cases, Young and his biographers make it apparent that these environmental sounds were one of the 'main' influences of his later musical style. Through the examination of Young's compositions and his later minimalist style, the influence of these environmental sounds is apparent, but it is not the sole factor throughout his music.

Throughout Young's high school years at John Marshall High School from September 1950 to June 1953, emphasis is placed on his exposure to jazz and its influences in his later musical style.[114] He was immediately inspired by Charlie Parker and began diligently practicing the saxophone. Throughout his time at John Marshall he was also exposed to Arnold Schoenberg's (1874-1951) music by his harmony teacher, Clyde Sorenson who had been a student of Schoenberg. Sorensen wanted Young to become more immersed in classical music and brought him to his first symphonic concert. At this point, all he could think about was jazz. He was continually immersing himself in the bebop lifestyle and he eventually ran away from home. In the following quotation, Young describes the impact of the bebop lifestyle:

> My [Young] parents and grandparents were very upset that I was always playing in these night clubs, and they were also upset that I was playing with black musicians. I was meeting these Communist Jewish kids at John Marshall High School, and I was going out with girls who weren't members of the church. Here I was the first born, the first grandson; I had been a model churchgoer, and I was going down the drain. They even hid my horn in a closet in the

[113]Schwarz, *Minimalists*, 19.
[114]Ibid.

> bedroom, but I found it, and I literally ran out of the house with it and left home. I went to some cheap drive-in motel, and I got a job working in a seat-belt-buckle factory.[115]

Biographers create an image of his willingness to dedicate his life to music through the influence of jazz.

After becoming tired of living on his own and struggling, Young moved in with his paternal grandmother and enrolled at Los Angeles City College in September of 1953. For this period in his life, biographers focus on the influence of Schoenberg throughout his later musical style. During his years at college, he studied counterpoint at school and in private lessons with Leonard Stein, who had also been a student of Schoenberg. He continually studied privately with Stein until February of 1956 when he registered for a year at Los Angeles State College and returned to Los Angeles City College for the fall semester of 1956. Upon completion of college, Young enrolled at the University of California at Los Angeles in 1957 and majored in music with a focus in composition and ethnomusicology. He received his Bachelor of Arts degree in June of 1958.

For Young's time at UCLA, emphasis is placed on the influence of non-Western music, since he began to find the connection between various types of music from around the world:

> ...Young put his finger on the connection between medieval Western music and Asian music-and why both influenced him so profoundly. 'I [Young] feel that in most music peculiar to the Western hemisphere since the thirteenth century, climax and directionality have been among the most important guiding factors, whereas music before that time, from the chants through organum and Machaut, used stasis as a point of structure a little bit more the way certain Eastern musical systems have.'[116]

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[115]Ibid., 20

[116]Schwarz, *Minimalists*, 23;

The main connection between the two was the use of stasis. Young felt the affects of stasis in all of his early environmental and musical influences:

> Stasis: that single word summed up all of Young's musical interests. By the time he graduated from UCLA in June 1958, he was obsessed with Webern, with medieval music, and with non-Western music. And he had never forgotten the droning sounds of his childhood—the wind, the transformers, the lathes, the trainyards. All of these musics shared a predilection for immobility, for disrupting our comprehension of the passage of time.[117]

Anton Webern (1883-1945) was the most influential figure in his earliest compositions and pointed Young into the direction of new 'static' music or 'stasis'. Young employed the twelve-note method in his compositions for two years with compositions including, *Five Small Pieces for String Quartet* (1956) and *Trio for Strings* (1958), but differed from Webern's style through his increasing use of sustained tones: "In the evolution of Young's serial compositions from exercises in Second Viennese twelve-note music to the establishment of 'sustenance' as his own mature minimalism's chief concern, the extent and function of sustained sounds provide the main point of reference."[118] Webern had a tendency to repeat pitches at the same octave. This is found in his "Symphony, op. 21" and the "Variations for Orchestra, op. 30".[119] In Webern's serialist style, stasis was created through his continual repetition of twelve notes. Young developed his idea of minimalism using this serialist approach as an inspiration.[120] These initial works employed long static sections and ostinato figures that were combined with the twelve-

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For this point, also see: Potter, *Four Musical Minimalists: La Monte Young, Terry Riley, Steve Reich, Philip Glass*, 27-8.

[117]Schwarz, *Minimalists*, 23.

[118]Ibid., 29.

[119]Ibid.

[120]Ibid.

note method. His later works employed the use of sustenance. In comparison with the other three minimalists, Young's use of stasis is highly 'economic', since he was influenced by the twelve-note method and therefore, worked within the limits of serialism. As a result, his musical texture is sparse and relies heavily on sustained tones. Throughout the biographies of the four minimalist composers, biographers emphasize the influence of non-Western music and stasis throughout their musical compositions. In all four cases, the employment of stasis throughout their existing compositions created their minimalist style.

Young started to apply the use of stasis to his own compositions and in the summer of 1958 before entering Berkeley for graduate school, he wrote *Trio For Strings*: "...the benchmark Minimalist piece and an historic moment in the development of music. Instead of polyphonic character and movement, one heard silences and sound that seemed to hover without melodic or rhythmic development."[121] The following summer, he traveled to Darmstadt to hear Stockhausen talk about the music of John Cage and his belief that any sound could be utilized within a piece of music.[122] On his return, he was inspired to continue composing with the use of stasis and wrote several more compositions over the next few years.

In the early 1960s, Young wrote a group of conceptual works which were inspired by Cage. In the first of these works, the audience was not only invited to witness the performance, but find meaning in the composition. In *Composition 1960 #2*, the performer was instructed to build a fire in front of the audience and in *Piano Piece for David Tudor #1*, the performer was instructed to bring a bale of hay and a bucket of water

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[121]Mark Prendergast, *The Ambient Century: From Mahler to Trance-the evolution of sound in the electronic age* (London: Bloomsbury Publishing, 2000), 96.

[122]Schwartz, *Minimalists*, 28-9.

for the piano. These works of the 1960s were associated with the New York art scene and the new and innovative ideas about the 'thinking' of musical concepts.

Goals for an Audience in *The Well-Tuned Piano*:

The first step in Young's connection to his audience was his goals for their experience. These goals were strongly influenced by his lifestyle. He began his compositional career with a specific audience in mind, and he wanted to compose music for his social gatherings, which is reflected in the size of his audience, not too large for all members to feel included in the artistic experience of the occasion. Although the premiere of his *Well-Tuned Piano* was a great compositional milestone, his audience was very small in numbers.

Throughout Young's biography and in each one of his musical experiences, 'life-style' has become a guiding factor for his musical composition. In many instances, it seems that he wanted to compose minimalist music in order to live the New York 'hippy' lifestyle. Similarly when he ran away from home, he wanted to live the bebop lifestyle. His need to live the minimalist lifestyle is apparent in the size of his audience. For Young, the performance of his works was more of a social activity and he did not make much of an effort to attract the crowds, but was satisfied with his small group of followers, who were attracted to his music and his lifestyle.

The Well-Tuned Piano demonstrates an evolution in Young's minimalist style and dates back from 1964 with revisions in 1973, 1981, and the present. These dates represent certain milestones in the evolution of the piece.[123] The 1973 date marks the last

[123]Ibid., 34, *Well-Tuned Piano*: Young states that the piece has continually evolved, and will continue to do so into the future. This piece was a source of refinement throughout Young's compositional

year in which the piece appeared in a tape form and in 1974, Young presented *The Well-Tuned Piano* for the first time as a live work. The 1981 date represents the next step to its development and its five-hour realization of the work as it appears on the Gramavision CD. The 'present' refers to Young's continual evolution of this piece. Throughout the evolution of *The Well-Tuned Piano*, Young used many different structural techniques to draw his audience into the music.

Following the first tape-looped pieces of *The Well-Tuned Piano*, Young discovered a number of different compositional techniques that could be implemented with the use of a piano that possessed the additional lower notes.[124] He was commissioned for two more performances of the piece because of its great success, and the piano was purchased and installed in the Dia Art Foundation's New York space. This enabled Young to refine his tuning in a controlled environment. The humidity and temperature of this venue were constantly monitored for his performances, and the Dia Art Foundation funded over forty live performances of the piece and over forty-five recording sessions: "The recording in that month of *The Well-Tuned Piano* was Young's greatest achievement. The setting, in the mystical environment of Zazeela's *Magenta Lights*[125], where magenta and blue light refracted off aluminum mobiles, complemented

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career: "But appearances can deceive; in fact, the seventies was a period of refinement, especially in the tunings used in the *Dream House* environments and in the development of *The Well-Tuned Piano*."

[124]Ibid., 35, *Bösendorfer piano*, the additional lower notes was the Bösendorfer's trademark: "The offer of a space and a Bösendorfer piano which would be at his complete disposal over such an extended period led to two live performances in Rome. These two concerts had a galvanizing effect on La Monte and on the piece itself. What had before been a somewhat theoretical exercise ("wouldn't it be interesting if...") suddenly became a work that would captivate its composer's imagination in a way that seems to have no equal in recent musical theory."

[125]Ibid., 21, *Zazeela's "Magenta Lights"*: Marian Zazeela is La Monte Young's wife. She is a calligrapher who combines her light shows with Young's music. "Sound and sight (Young and Zazeela) combine in cosmic duet, images leaping and flickering with the supersonic rising transients of the music-a music whose deceptive slowness confirms the moral of the classic tortoise-hare tale: the slower you go, the faster you get."

the music perfectly.[126]" In 1987, Young performed his last series of the piece with additional material and extended the length to six hours.

The three main stages in the evolution of *The Well-Tuned Piano* are examined through the structure of the music and its relationship between the composer and the audience. From the 1964 version of this piece through to the present, there have been many evolutionary ideas that have caused the music to make an increasingly stronger bond with the audience through each year of its performance. Young is the first of the four musical minimalists to relate to his audience through the structure of his music.

Musical Adaptation to the Audience of *The Well-Tuned Piano*:

In minimalism, connection to an audience requires some degree of repetition, which brings about stasis. Throughout his works, Young used the repetition of melody, rhythm, harmony, and form to reach his audience. In addition to his use of repetition, he used different tunings to create stasis. His use of tuning and repetition will be analyzed throughout *The Well-Tuned Piano*.

The early influences emphasized in each section of Young's biography were combined together to create a unique musical style. Although environmental sounds, jazz, the music of Schoenberg, non-Western music, and the music of John Cage seem unrelated, Young had the ability to combine all of these styles and interconnect them. From his earliest to his latest compositions, the length of his sustained notes progressively became longer, and these compositions continually evolved into his present minimalist style.

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[126]Prendergast, *The Ambient Century: From Mahler to Trance: the evolution of sound in the electronic age*, 99.

In each of Young's performances of *The Well-Tuned Piano* spanning from 1964 to the present, he has bestowed different tuning within each performance. His unique tuning system utilizes 'just intonation' which is extremely different from equal-temperament tuning. This tuning sounds completely foreign to the Western ear and sends a vast amount of information to the listener. The purpose of his unique tuning systems was to create a meditative experience for the audience. His pure tuning is related to the purity felt through meditation. Young's tuning systems are based upon a musical language, and the foundation for his system is the use of repetition. He expresses the tuning in this composition through a texture in two parts that forms pure intervals expressed as simple ratios.[127] In the first few minutes of the piece, he uses the four pitch class sets of E-flat, B-flat, C, and F with six interval classes. These intervals are gradually used over the first two minutes of the piece.[128] When Young sits down to perform *The Well-Tuned Piano*, he prays that he will become the servant of the source of information that carries through him.[129]

The overall sound experience was different for each audience member as they moved around the room. From different angles and locations in relation to the piano, the audible overtones would change over a small distance. The location depended on where the listener was located among the modes of pitches and the reinforcement of acoustics. In the 1981 recording, certain pitches were not used at all and added resonance to the overall sound. In addition to the tuning, there are a number of different characteristics that distinguish one version from another. In the 1964 composition, Young established

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[127]Allison Welch, "Meetings along the Edge: *Svara* and *Tala* in American Minimal Music," *American Music* 17 (1999): 185.

[128]Ibid.

[129]Alburger, *La Monte Young: Monograph in Music*, 30.

three chords that formed a foundation for the piece—Tamiar Dream Chord, Opening Chord, and Rodeo-Rainforest Chord. This version used static improvisation on a very limited pitch set, and the use of stasis became no longer the main aesthetic, but was included within a larger framework in which directional development played a major role. The initial composition existed as a tape work and therefore, there is no examination of the audience's response in the first version of this piece.

Young made his first tapes of *The Well-Tuned Piano* in the summer of 1964 on a small spinet piano that he was continually tuning. He used repetition in order to create stasis through his saxophone improvisations, influencing the earliest form of this composition. The fast combination and permutation techniques that he employed on the piano were based on his work with the saxophone. He wanted to incorporate the harmonic structure of these improvisations into the piece through the fundamental E-flat used in many of his saxophone improvisations. The saxophone techniques accessed throughout this piece are referred to as 'clouds' by Young, and are played as fast permutations on a few selected notes in order to achieve stasis. In its early stages, Young separated the piece into three major chordal areas including, 'The Opening Chord', 'The Tamiar Dream Chord' and 'The Early Romantic Chord'.[130] The following example demonstrates the structural plan for these chords.

[130]Ibid. *Three main chordal areas*: These chords were established in 1964, "their articulation was achieved mainly by means of the fast permutation technique with fairly primitive results."

The Well-Tuned Piano: basic structural plan

'The Opening Chord'; E♭; mid-range, close position; simple statement

transition; adds notes to prepare for

'The Magic Chord'; A D; no pitches in common with 'The Opening Chord'

transition to

'The Magic Opening Chord'; E♭ B♭ and D A; mixes 'The Opening Chord' and 'The Magic Chord'; gradually unfolds in the setting of 'The Magic Harmonic Rainforest Chord' (most of the notes of the original E♭ key in a rising harmonic series, with 'The Magic Chord' added in); the longest section, with much new material added, including the major new section, 'Blues for Eurydice'

transition; unusual harmonic departures mixed with 'Baroque sequences'

'The Romantic Chord'; G-Dorian; from which 'The Magic Chord' is derived, since 'The Magic Chord' is a subset of 'The Romantic Chord'

'The Elysian Fields'; D-Aeolian

'Orpheus and Euridice in The Elysian Fields'; E♭ B♭ and D A, fused to create two new hyper-modes – one on D and one on E♭ – composed of similar-sized but not identical intervals, omitting the fourth degree

returning eventually to E♭ for

'The Ending', with a final statement, an octave lower, of the first two dyads

Example 3: La Monte Young: *The Well-Tuned Piano*, basic structural plan[131]

These chords were not employed in the later performances on the Bösendorfer piano.

Throughout 1974 and 1975, Young continued to experiment with the chordal areas: "...extraordinary periodic acoustical beats that become suspended in the air like a cloud over the piano..."[132] The clouds were created when Young discovered that he could synchronize the rhythms of the piano's hammers with the acoustical beats produced by his repetitious playing[133]: "The result is 'a type of resonance system' in which the pulses of the hammer rhythms combine with those of the waveforms in a symbiotic sort of feedback; 'a controlled, audible, acoustical synchronization between rhythm and frequency in live performance.'"[134] This was created through the rapid articulations of notes in a chord, producing a static resonance of harmonics and tones.[135]

There are nine main chords throughout this piece including, the Opening Chord and the Magic Chord. These divide pitches without duplication. In the first nine minutes

[131]Potter, *Four Musical Minimalists: La Monte Young, Terry Riley, Steve Reich, Philip Glass*, 86.
[132]Gregory Sandow, "The Ill-Conceived Piano," *Village Voice* 108 (1981): 26.
[133]Potter, *Four Musical Minimalists: La Monte Young, Terry Riley, Steve Reich Philip Glass*, 84.
[134]Ibid.
[135]Welch, "Meetings along the Edge: *Svara* and *Tala* in American Minimal Music," 185.

and thirty-eight seconds, Young only establishes pitches from the Opening Chord. The repetition of pitches within the first chord, implant an overall sound within the listener's ear. The chords used throughout this piece represent specific areas on the keyboard, and the themes are grouped together and based on certain pitch classes. In the progression of chords, each new chord is based on an earlier chord.

The clouds are the main level in which *The Well-Tuned Piano* functions as a musical work. They are important to the acoustic innovations, the themes, and the chordal areas:

> They are well named for rain imagery: they sometimes begin with a light patter of tones increasing in density, other times they start abruptly as full-blown storms. Themes thicken to become clouds, clouds thin out to reveal themes, and themes can occasionally be heard singing through the middle of the clouds. Some of the clouds are merely reiterations of a few pitches, in which Young attempts to create a resonance system by synchronizing his rhythms with the pulsing of the acoustical beats. Other clouds are more thematic in function, moving upward or downward through a series of tremolos.[136]

Through the light patter of tones that gradually increase, the listener becomes mesmerized by the constant flow of sound and repetition: "Once a cloud is set in motion, the ear may hear what sound like foghorns, voices, bells, even machinery, and often the 'missing fundamental' resulting from the complexes of rationally tuned periodicities."[137] Young's clouds initiate a number of different aural illusions for the audience.

In 1973 to 1974, Young changed the tuning from his earlier composition and adjusted the E up to a perfect fifth above A. The piece gradually transformed and the tuning conditions became adequate enough to hold a pure tuning and be recorded. This

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[136]Kyle Gann, "La Monte Young's *The Well-Tuned Piano*," *Perspectives of New Music* 31 (1993): 148.

[137]Ibid., 149.

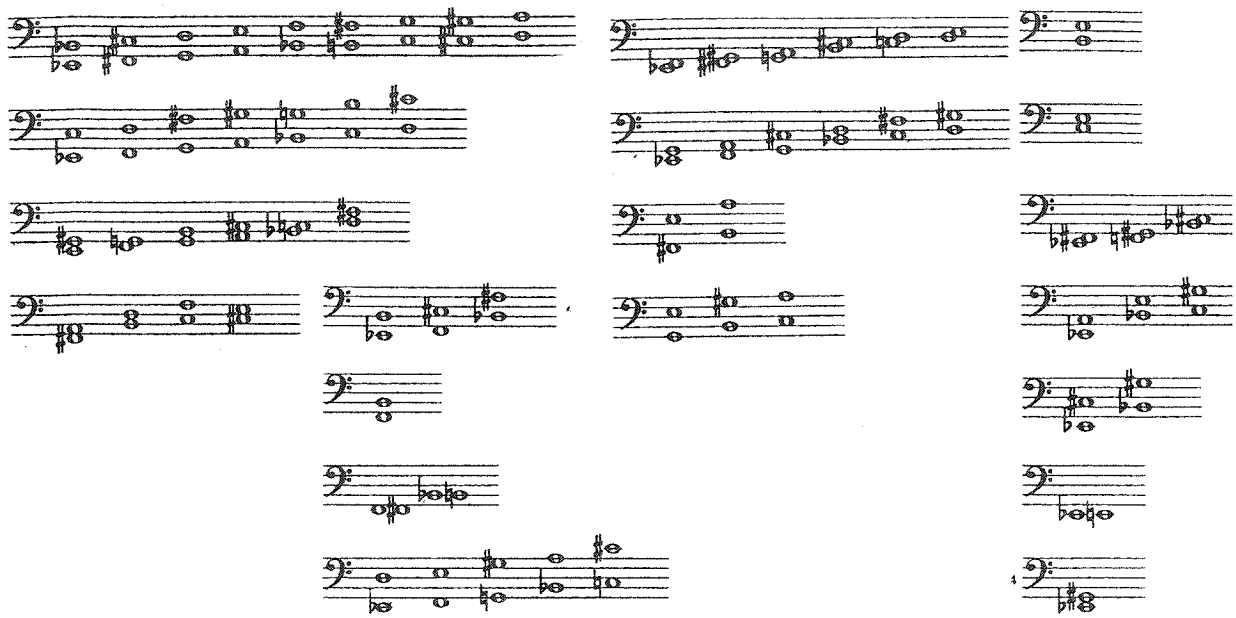
version of the piece was greatly inspired by the Indian composer, Pran Nath. The composition grew into a larger and more elaborate work that relied heavily on theme-based improvisation. The use of these recurring themes and their intervals created an overall form that enabled the listener to anticipate a change in tuning.

The composition has evolved minimally since the October 25th, 1981 version. The 1981 Gramavision recorded performance exercises many structural devices that communicate with the listener. This performance contains fifty-one themes, sequences, and improvisational patterns that alternate between harmonic areas. In the 1981 performance, Young adjusted the C-sharp and G-sharp to keep the tuning within the seven range limit, utilizing nine main chords.

Young implements both chromatic and pentatonic scales throughout the composition. In the chromatic, the scale does not uniformly ascend and the listener anticipates a scale that is ascending in the proper order, but hears the C-sharp lower than the C. In the pentatonic scale, Young limits the ranges of intervals between notes to create flexibility in the harmonic modulation. In his composition, he pictured the harmony before the melody and created a harmonic structure before any other elements were considered. From the audience's perspective, the listener is accustomed to hearing notes within a limited range and continually listens for specific intervals.

Through an examination of Young's tuning system in the piece versus the Western conventional tuning system, any twelve-pitch scale contains sixty-six possible two-pitch combinations or *dyads* in Western notation. In Young's tuning, thirty-two out of the sixty-six are expressible numbers that are no larger than sixteen and account for the

intervals in all of his themes.[138] This reoccurrence of intervals in each section of the composition generates an overall sense of structure for the listener. His system avoids interval ratios containing the number five, excluding the major third (5:4) and the minor third (6:5).[139] Instead, he uses the 'septimal' major third (9:7) and septimal minor third (7:6) in addition to other septimally derived intervals.[140] In the relationship between the composer and the audience, his use of the septimal major and minor thirds ally with the listener. The example below displays the sixty-six two-pitch combinations in Young's scale:

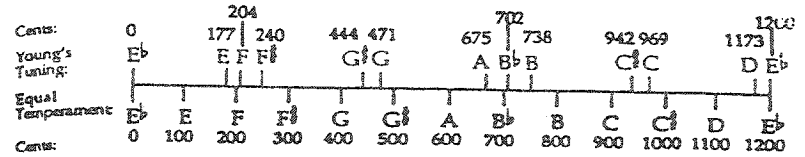


Example 4: La Monte Young, *The Well-Tuned Piano*, sixty-six two pitch combinations in Young's scale[141]

After the first four hours of listening, the audience becomes accustomed to hearing certain intervals and cannot imagine any other interval.

[138]Ibid., 137
[139]Ibid.
[140]Ibid.
[141]Ibid., 138.

The result of his intervals does not produce the twelve-pitch chromatic scale that we are accustomed to hearing.[142] Below is an example of this scale in relation to the typical Western scale.



Example 5: La Monte Young, *The Well-Tuned Piano*, pitches in the tuning system compared to equal temperament[143]

The distance that separates each adjacent note is varied. This piece employs the use of tonics that establish the drone through a bass note over which the intervals being played are consonant. Young's scale does not conventionally ascend and therefore, maintains the location of the perfect fifths wherever they occur in the piece. Through his unique tuning system, the music allows directional development that approaches the static, and each note and rhythm is determined by the one that follows. In the piano's upper range, the pure intervals are more difficult to identify and therefore, Young does not ascend above an eleventh past middle C.

The Effect of Stasis in *The Well-Tuned Piano*:

The four minimalist composers all use repetition in order to create stasis. The degree of stasis experienced by the listener is different as a result of each composer's specific techniques. Young repeats each note of his composition through droning or holding a tone for an extended period of time. Young's droning technique has proven the least effective and Glass's additive technique is the most effective in the audience connection. The difference between the techniques of both composers is Glass's ability

[142]Welch, "Meetings along the Edge: *Svara* and *Tala* in American Minimal Music", 184.
[143]Ibid., 185.

to create a greater immediacy of stasis for the listener. The stasis created through Young's repetitive droning technique progresses at a slower rate.

The Well-Tuned Piano combines both Eastern and Western elements of music. The Eastern elements of this piece include the static articulation of set tuning and continuity in which issues from before and after are irrelevant.[144] The similarities between this piece and Eastern music are the use of intonation, the shadings of pitches, and the improvisational passages. The Western elements are demonstrated through the time patterns of thematic development where earlier melodies return, but are altered and played at a different pitch. Young studied with Pran Nath, who was an Indian vocalist, and became greatly inspired by the Eastern elements of music. Pran Nath employed a number of different musical ideas in his singing and composing including, clear and expressive intonation, the preference for slow tempos, and the avoidance of intricate rhythms and syncopation.[145] He was known for his expressiveness, his connections between pitches, and his work with the drone of the *tanpura*.[146] In Indian music, the *tanpura* provides a constant background in which a solo instrument or voice would improvise. Young's droning technique is a continuous sound that provides tones in order for the soloist to achieve 'just intonation' or the purity of intonation. The sound that is achieved creates a state of meditation for the listener and is often called the 'drone state of mind'. Throughout this piece, directional development became more important than his use of stasis and improvisation became a primary element. In the composition, he also implements 'scalar melodies' which are used in Indian music, and are based on

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[144]Ibid.
[145]Ibid.
[146]Welch, "Meetings along the Edge: *Svara* and *Tala* in American Minimal Music," 182.

modal improvisation as a series of intervals. *The Well-Tuned Piano* actuates many of these Indian musical techniques.

In the overall structure of the piece, there are three main sections including clouds, thematic materials, and harmonic/contrapuntal formulas, and these are divided into nine individual sections.[147] The transition period between the sections is a vital element in the relationship between the composer and the audience. In this sense, the role of the transition period is to create a sense of anticipation for the listener, and to create an awareness of the upcoming change in texture. These periods are less harmonically stable than the main sections and they do not establish their own tonalities through drones or bass pitches. This weakness in the texture notifies the listener of the change within sections.

The musical structure of *The Well-Tuned Piano* draws the listener into the music and flow of ideas through the overlapping and limiting of pitches. This is demonstrated most prevalently in the passage entitled, "Sunlight Filtering through the Leaves." This section forms a connection with the listener through the repetition of a single note: "...what almost sounds like a single note repeated within the melody is actually two pitches only a fourth of a half step apart. The vibrant ambiguity of those shifts keeps the piece from palling over five hours."[148] Young changes the notes within the sections to create a feeling of conclusion for the listener.

Concerning the physiological reaction of the human body to *The Well-Tuned Piano*, Young explains how the music travels through the brain in his program notes: "...that his pieces probably need to be very long because-at least with the sounds he likes

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[147]Gann, "La Monte Young's *The Well-Tuned Piano*," 145.
[148]Ibid.

to use-the brain can more readily assimilate information that's repeated."[149] The listening experience is different for each listener. In specific instances, the listeners distinguish between Young's intervals and in other cases the listeners hear a mixture of sounds.

The first performances of *The Well-Tuned Piano* marked the classification of listeners into two main categories—structuralist listeners and ambient listeners. Young attracted the psychic qualities in both passive and aggressive listeners. In passive listening, the individual becomes entranced by the music and does not necessarily distinguish between the themes and the harmonic progressions. In active listening, the listener tracks the themes through the various harmonic areas to reveal the overall structure of the piece.

The association between the composer and the audience and the effect of stasis is not only demonstrated through the structure of *The Well-Tuned Piano*, but through comments made by reviewers and audience members who attended the first performances of this work. The following concert reviews give an indication of the size of the audience, the atmosphere and performing space, and the types of people who attended. The example below demonstrates responses from various concert reviewers:

> Wonderful. Absolutely fantastic. It's one of the most elating experiences...I give myself up to the piece—you have to understand this! The piece carries me to the highest state of meditation [La Monte Young in Strickland, "American Composers," 66].

> ...a cosmic overview of life's tragedy...In the end the whole piece comes down to two things, the single notes and the clouds. Only La Monte could get away with that! [Terry Riley in Rich, 58].

> "The Well-Tuned Piano," with perhaps the most pretentious title in music history, is one of grace and intermittent power [Page, 65].[150]

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[149]Ibid.

[150]Alburger, *La Monte Young: Monograph in Music*, 30.

Although many of the reviewers for the premiere of this piece were not accustomed to this type of music, the overall response was positive and the connection was made between the composer and the audience.

The concert reviewer, Tom Johnson attended a number of different performances of *The Well-Tuned Piano* over the course of a few years starting in October of 1974 and wrote a review on the series of concerts entitled, "A La Monte Young Diary." Johnson continually notices an evolution in this piece and realizes that the later versions communicate with the audience more effectively through the structure of the music. Although there is a very small audience, the audience members are captivated by Young's musical techniques.

In May of 1975, Johnson attended a performance of *The Well-Tuned Piano* in the gallery space at 141 Wooster Street, New York City where Young was performing his work:

> Perhaps 60 to 80 listeners are there tonight, and Young sits at the piano in dim light, wearing his usual white toga, with his hair tied back. He starts out by moving his fingers slowly on perhaps half a dozen notes, one of which particularly collides with my Western pitch sense. As I listen to the strange chord and gradually become accustomed to the "out-of-tune" note, sometimes it begins to sound right and the others turn sour. Tuning systems like this can be quite disorienting.[151]

Johnson continues his diary of this composition through a discussion of Young's use of chord construction and its affects on the listener:

> Every so often Young changes chords, revealing a new set of intervals. The choice of new chords seems intentional, and these changes keep the music from becoming tedious, but it is still not very interesting. He's obviously improvising, and when he goes off into something with

[151]Tom Johnson, "A La Monte Young Diary," *Village Voice* 23 (1978): 121.

> rhythmic character he loses momentum. He hardly deals at all with the melodic possibilities of his strangely tuned chords. In short, he doesn't seem to be getting much mileage out of his system, and after about an hour and a half I become restless and want to leave. I'm told that the performance is supposed to go on for three hours...[152]

In the initial performance, Johnson demonstrates that Young did not fully make the connection with the audience. After leaving early, the owner of the gallery telephoned Johnson and was quite disturbed that he did not stay for the entire performance. On May 11th, 1975, Johnson talks to a friend who is about to attend a performance of the piece:

> "I don't care for it much," I explain. "He's got this elaborate tuning system, which is kind of interesting, but he doesn't do much with it. No good melodies. Not rhythmic ideas. No tonal or harmonic activity to speak of. He just wiggles his fingers on the keys, changing chords every 10 minutes or so. It's really a work in progress, I think."
> "Hasn't he been working on it an awful long time to consider it still a work in progress?" my friend responds. "He's been using that tuning system ever since 1964, you know."[153]

Young had devised his own tuning system in his early years of composing: "In a way, working with an invented tuning system is even more difficult than the other challenges Young has committed himself to at various times. It can take a long time to adapt our ears to intervals we aren't accustomed to and understand how they can work together."[154] After analyzing Young's methods of composition, Johnson considers this 1975 production of *The Well-Tuned Piano* to be a work in progress. In his opinion, the relationship between the composer and the audience has not fully been established.

In September of 1978, Johnson continues his diary of Young's performances of *The Well-Tuned Piano*. It has been three years since the initial performance:

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[152]Ibid.
[153]Ibid.
[154]Ibid.

> I [Johnson] decide I should go over to Young's 6:00 performance at the Heiner Friedrich Gallery on West Broadway and find out how the piece has developed. When I arrive the spacious room is dark, except for the theatrical lights focused on Marian Zazeela's paper rings, which undulate very slowly in the air and cast mysterious colored shadows onto white walls. Thirty or 40 listeners are gathered, most of them sitting or lying on large Persian rugs when Young comes out in his accustomed toga and begins playing the grand piano at one corner of the room.[155]

He states that the piano is Young's Bösendorfer Imperial, but it does not sound like a piano:

> He plays softly, and the instrument sounds so odd and tinny that I begin to wonder whether the microphones over the instrument are connected to some sort of weird amplification system. After 10 minutes or so, however, the sound doesn't seem so strange, and I figure that my ears just weren't accustomed to the odd tuning. Gradually Young settles into a limited set of pitches, and I begin to tune in on his frequencies.[156]

After falling asleep during this performance, Johnson attends another performance of *The Well-Tuned Piano* a few days later:

> This time I find it quite easy to adapt to the tuning system, and I appreciate the sound of the instrument more than before. A couple of times I think I am hearing a harp, but most of the time the instrument sounds like a good piano, though softer and gentler than most good pianos. The music itself is also attractive.[157]

During this particular performance, Young used a repetitive two-note pattern followed by long sections of tremolos. In certain sections, he used the pedal to create resonance:

> There is nothing very fast or virtuosic about Young's technique, but he plays well, and I can begin to appreciate his unique tuning system, not to mention the energy it takes to present a solo concert of this length. Some of the longer

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[155]Ibid.
[156]Ibid.
[157]Ibid.

> sections are particularly effective too. My favorite is a raga-influenced episode that reminds me a bit of the kind of textures Terry Riley gets out of his electric organ.[158]

Concerning the timing in these performances, Johnson states that Young never follows a strict beat:

> In fact, I don't hear anything all evening that I can really tap my foot to. Young is going for sonorities so much that he doesn't have much time for rhythm. But many of the sonorities are quite pleasant, as well as being quite odd, and I stay until the end of the performance, managing to focus on the slowly progressing music most of the time.[159]

Johnson talked to Young about the modifications that were made between the 1975 and 1978 performances. These modifications demonstrate that the 1978 version has evolved and is more connected to the audience than the 1975 performances. The major change in sound is a result of the rebuilding of the piano with single strings instead of double or triple strings.

Johnson appreciated the 1978 version of this piece more than the 1975 version, and felt that the musical structure had changed. The improvisation of the larger chords in the 1975 version was less appealing to the ear than the four or five-note groupings in the 1978 version. Johnson observed that the larger note groupings contained more notes with strangely tuned intervals and created a difficult listening experience.

The 1981 version of *The Well-Tuned Piano* was premiered at the Dia Art Foundation at 6 Harrison Street, New York City. Gregory Sandow discusses the initial performances in his review "The Ill-Conceived Piano" and demonstrates that the 1981 versions establish the connection between the composer and the audience more effectively than the earlier performances. Before entering the performance space, the

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[158]Ibid.
[159]Ibid.

audience members were required to remove their shoes. "With shoes safely off, you enter his performance space, a vast room awash in incense, bathed in the dim, pastel glow of Marion Zazeela's *The Magenta Lights*. You lie or sit on carpeting, soft through clothes, but bristly to your face."[160] Once the audience is seated, Young appears with his assistant:

> Young begins to play. He makes the gentlest, fullest, most embodied, and yet intense sound I've [Gregory Sandow] ever heard from a piano. A friend warned me that it wouldn't be like piano sound at all, but I found that so hard to imagine that I wasn't prepared. Think of piano notes without the initial sharp attack, hard to do because that's in fact what makes them recognizable: without it, they sound like woodwinds without the tangy woodwind savor.[161]

Sandow continues to describe the aesthetic and textual experience:

> Young's touch, the piano's unique tuning, its design, the sympathetic hum of strings not actually struck, echoes from the room itself-these things all combine to produce an insistent but seemingly nonphysical resonance, as if massive, slow, discorporate, solemn hummingbirds, critical of our solid world, had borrowed Young's piano to discuss and amaze us. The resonance sometimes even seemed to start before the crass, physical *clack* of hammer against string, and often drowned it out.[162]

In this 1981 performance, Sandow also feels that the chords throughout this piece are difficult to classify and cause the listener to 'think' about the music through the identification of chords.

In 1987, *The Well-Tuned Piano* was performed again at the Dia Art Foundation performance space. Kyle Gann's review, "La Monte Young: Maximal Spirit" discusses

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[160]Gregory Sandow, "The Ill-Conceived Piano," *Village Voice* 108 (1981): 26.
[161]Ibid.
[162]Ibid.

the evolution of this piece throughout the 1980s. The bond between the composer and the audience increasingly grows stronger with each performance:

> The play of combination and difference tones created astounding aural illusions. More than once I [Kyle Gann] became convinced Young was singing (he wasn't); the sound source would seem to suddenly shift location; I thought I heard foghorns, the roar of machinery, wood blocks, a didgeriddo, and most powerfully, the low, low vibration of the 18 cycles-per minute E-flat that the ear supplied as the "missing fundamental" of the piano's overtones.[163]

Gann states that he was completely mesmerized throughout the entire piece.

Through the continuous composition of *The Well-Tuned Piano*, Young formed a small audience and a group of followers who were able to appreciate and respond to his evolving music:

> ...his underground position is special. Having exercised a major influence for more than two decades before his first record on a commercial American label, he may underrate the extent to which his music is popularly regarded. Too, Young has detailed the frequent confusion, in those who have had profoundly spiritual experiences, of the ego with the Self from which creativity flows.[164]

The audience members who were completely attracted to this music like Gann, were able to find Young's underlying metaphors, were mesmerized by the tones imagined and actually played, and were fascinated by the aural illusions that Young created through the structure of his music. These structural elements have continually evolved from 1964 to the present and with each new performance, they create a stronger relationship with the listener.

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[163]Kyle Gann, "La Monte Young: Maximal Spirit," *Village Voice* 32 (1987): 70.
[164]Ibid.

Conclusion:

Young was content with performing in front of a small audience of thirty or forty people who were extremely attracted to his music. The individuals who attended his live performances were there because they wanted to devote their time to his music, they were connected to his music, and they wanted to support him. As a result of his small performance spaces and atmosphere, only a small group of people attended his concerts. At the time of his performances, the music appealed to a specific group of followers and not a wide range of listeners, unlike the music of Riley, Reich, and Glass.

Young continually worked on *The Well-Tuned Piano* for ten years before he performed in front of an audience. In many cases, he showed a reluctance to perform his music, and it seemed that he was only composing to satisfy a personal interest. His method of just intonation and the musical material upon which he constructed his improvisations were kept secret for years. In addition, he has not published a score for this piece. As a result, the extent of his influence has been minimal by lack of access, both to his music and to his theoretical work.

The Well-Tuned Piano was composed for live performances. The listeners could walk around the incense-filled room, sit on rugs, and capture an extremely different listening experience from all angles. The purpose of the piece was to reach the audience through a unique listening experience. The recorded versions of *The Well-Tuned Piano* may have been an attempt to reach out to a larger audience or may have been a demand of his already devoted audience. In the recorded version, the listener does not have to listen to the entire piece at one time and therefore, does not capture the listening

experience that Young had intended for the music. He reached his audience more effectively through his live performances than his recordings.

Chapter 4

Terry Riley

An Introduction:

Biographers of Terry Riley divide his life into sections similar to those applied to Young, with emphasis on a specific musical style throughout each section of his life.[165] The main difference between the composers is Riley's search for an audience and his willingness to try new musical ideas in order to attract an audience. Riley was influenced by Young's musical compositions and his lifestyle, but he knew that he had to branch away from Young in order to create his own, unique style. Throughout his compositional career, his audience became progressively larger and his music was more widely known. In 1990 when he was commissioned by the Kronos Quartet to write *Salome Dances for Peace*, he was pleased with the opportunity because this gave him a chance to reach out to a larger audience.

Biographers divide Riley's career into three sections including, his childhood and student years in northern California, time spent in France, New York, Scandinavia, Morocco, and Mexico, and the period in which he returned to the Sierra Nevada Mountains and has lived since 1974.[166] In Riley's early years, biographers stress the influence of environmental sounds; he was born on June 24th, 1935 and raised in the American West at the foothills of the Sierra Nevada Mountains in Northern California. He grew up in the small town of Colfax, which was home to a switching yard where trains would shuttle back and forth. Like Young, Riley's early influences revolved

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[165]Robert Schwarz, *Minimalists* (London: Phaidon Press Limited, 1996), 24-48;
Keith Potter, *Four Musical Minimalists: La Monte Young, Terry Riley, Steve Reich, Philip Glass* (Cambridge: Cambridge University Press, 2000), 92-150.

[166]Potter, *Four Musical Minimalists: La Monte Young, Terry Riley, Steve Reich, Philip Glass*, 92.

around the environmental sounds he experienced, while growing up in rural America. The influence of Riley's environment creates a certain image. Biographers accentuate the influence of environmental sounds in Riley's later musical compositions. Although Riley's later minimalist style does portray elements of environmental sounds, this is not the 'main' theme throughout his work.

The Early Years:

Similarly to Young, stress is placed on Riley's influence of jazz throughout his childhood and high school years. He frequently listened to the radio and became familiar with Cole Porter, George Gershwin, and Richard Rogers during the Second World War. His father was in the Marine Corps and took part in the Pacific Campaign, while Riley was raised by his grandparents. During the War, his family moved around quite frequently and after the War, Riley attended high school in the small town of Redding, California. In high school, he was most influenced by the latest developments in jazz and twentieth-century classical music. He began studying piano under Duane Hampton and focused on Bach, Debussy, and Milhaud. His future goal was to become a concert pianist. In his final year of high school, he moved with his family to Beaufort, South Carolina and experienced the American South. A year later, they moved back to Northern California and he attended Shasta Junior College.[167] Biographers also highlight Riley's move from state to state throughout his childhood. He experienced different areas of the United States, and was influenced by a variety of different cultural and social factors.

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[167]Ibid., 94.

In 1955, he attended San Francisco State University for two years and became increasingly interested in composition. He focused on the serialism of Schoenberg and Webern. Like Young, Schoenberg became an influential figure for Riley. At the same time, he studied the music of Poulenc at the San Francisco Conservatory with Adolf Baller. Throughout his time there, he became progressively interested in composition and wrote his first piece, *Trio*. This piece was the turning point in his life and his move towards composition and away from performance.

Throughout the biography of Riley, each biographer incorporates and focuses on the relationship between Young and Riley. In 1958, Riley attended the University of California at Berkley and met Young. Biographers accentuate Riley's fascination with Young's work. This is demonstrated in the following quotation:

> I [Terry Riley] was really impressed with La Monte in every way-his lifestyle, the kind of music he was writing, everything he did was different. He was extremely eccentric. He was very avant-garde in his dress: he didn't wear any socks, he had this little goatee and a beret, and he had long hair-and this was in the late fifties, way before the Beatles. I had other friends in San Francisco who were involved in the beatnik movement, and I was very attracted to the beats. So when I saw La Monte I thought, 'Oh yeah, this is a brother.' And he had very highly evolved thoughts about music, and I thought it was better than what I was getting from the teachers I came to study with.[168]

For the next two years, Young and Riley worked together on their musical compositions at Berkeley, and were most inspired by the work of John Cage. The inspiration from Cage is one of the main focuses throughout the biographies, perhaps because Cage was considered to be very *avant-garde* and willing to experiment with new musical styles. These compositions created great conflict within the music department:

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[168]Schwarz, *Minimalists*, 28.

> We [Young and Riley] dragged garbage cans down the stairways around the halls outside the theater. The audience got terrified, thinking there was an earthquake or that something was happening outside. They had expected that music was going to be accompanying the dance, and when they heard us they didn't know quite what was going on, because it made a tremendously ferocious sound inside the hall.[169]

This Cage-inspired work by both Young and Riley was seen as a detriment to the department: "So, when it came time to dole out money for the coming year, the university gave Riley a residency and Young a travel fellowship-in essence, a one-way ticket out of town."[170] Young left Riley behind at Berkeley and used his fellowship money to travel to New York City.[171] Throughout the biographies of Young and Riley, the conflict created within the music department by their *avant-garde* compositions is focused on quite heavily. The biographers have created an image for Young and Riley as being the 'trouble-maker' students who wanted to reject the traditional notions of melody and harmony. The image that is created follows into the neat little package that most *avant-garde* composers were placed in with their bizarre musical ideas.

In the spring of 1961, Riley graduated from Berkeley with his Master's degree. At this point in his compositions, he was continually moving away from Young's musical style of sustained tones and concept art. The main difference between their compositions was Riley's increasing use of repetition as a musical structure. The source of repetition came from his experimentation with tape looping, and the realization that stasis was created through repetition:

> I [Riley] think I was noticing that things didn't sound the same when you heard them more than once. And the more

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[169]Ibid., 30.
[170]Ibid.
[171]Ibid.

> you heard them, the more different they did sound. Even though something was staying the same, it was changing. I became fascinated with that. I realized it was stasis-it was what La Monte and I had talked about a lot in terms of his long-tone pieces-but it was stasis in a different application. In those days the first psychedelic experiences were starting to happen in America, and that was changing our concept of how time passes, and what you actually hear in the music.[172]

His first tape-looped piece, *The Three-Legged Stool* (1961) was created through loops made in his garage with a mixture of speech, piano, and distorted sounds:

> While the sources of some of this material-vocal moanings, perhaps laughter, and what sounds like a popular song on a 'honky-tonk' piano-can be identified, much of it is so distorted that even the composer no longer recognizes it. Frequencies could be altered by changing the speed of the tape, either gradually or suddenly, as well as accumulated and distorted by the echo device.[173]

This piece was followed by *The Four-Legged Stool* and *The Five-Legged Stool*: "...a lot of wine bottles outside, and all the tape loops would go out the window of the studio, around the wine bottles, and back into the studio."[174] These early pieces with tape-looping were influential in Riley's later works that did not involve tape. The continual repetition of sounds produced on the tape, generated a hypnotic-like trance on the audience.

Goals for an Audience in *In C*:

Riley recognized that he needed to record his work to communicate with a larger group of people in his own minimalist style. His composition and recording of *In C* was his first step in the move away from Young's style of composition and lifestyle.

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[172]Ibid., 35.
[173]Ibid., 98-9., *This tape-looping technique is further developed in the work of Steve Reich.*
[174]Ibid., 98.

In 1962, Riley and his wife and daughter traveled to Europe and spent most of their time in Paris, France, where he was hired to play piano at Fred Payne's Artists' Bar. For the next few years, they traveled to different cities and he performed at officer's clubs or military bases. He spent a large amount of time in Morocco and became fascinated by the street music, the Islamic calls to prayer, and the availability of hallucinogenic drugs. Riley was first introduced to these drugs by Young during their time at Berkeley. Both composers insisted that their drug experiences were an important component of their spiritual and musical development in the early 1960s: "...music was also able to transport us [Young and Riley] so that we would almost be having visions as we were playing. So that's what I was thinking about before I wrote *In C*."[175] This piece combined musical elements with African and Asian culture and included music that constituted a variety of different textures, trance, and shamanism.

After Riley's return to San Francisco in 1964, he began the composition of his piece, *In C*. During this time period, Steve Reich was also in San Francisco and was premiering his own works at the San Francisco Mime Troupe Theater. Riley attended this premiere and left at intermission.[176] Reich realized that he had walked out and questioned him, discovering that they had considerable differences in opinion about minimalist music. Although their opinions differed, they became close friends for a while and Reich offered to help perform Riley's *In C*. The first performance of *In C* was comprised of the following instruments: three Wurlitzer electric pianos, tenor saxophone, accordion, Chamberlain organ, two trumpets, clarinet, recorder, and soprano

[175]Ibid., 104.
[176]Ibid., 108.

saxophone. The calligraphic artist, Anthony Martin projected different shapes and colours onstage in connection with the music.

Musical Adaptation to the Audience of *In C*:

Riley's goal for *In C* was to use repetition more effectively than Young, an important step since it demonstrated the progression away from Young's minimalist techniques. Although Riley admired Young's use of drones and sustained tones, he wanted to achieve a style that focused on increasing amounts of repetition. Riley's use of repetition to create stasis became more pattern-oriented with the use of modules. Each module consists of a small rhythmic pattern that is repeated continuously, emphasizing the melodic rhythm. The modules reinforce the relationships between different melodies, and the contrapuntal lines become more elaborate and combined to form different types of counterpoint.[177] In this more melodic approach, the listener becomes hypnotized by the repetition and is aware of changes in melody, rhythm, and harmony.

The score of *In C* (1968) consists of a single page that contains fifty-three musical modules. Many years after the first performances of this piece, Riley produced a set of instructions for the performers: "Performance practice has consequently evolved quite freely with respect to the written source, making *In C* begin to resemble a kind of urban folk music rather than a 'composition' in a more conventional sense."[178] The instructions were seldom followed because Riley wanted the performers to use their own ideas and means of expression. They were only intended as a set of guidelines for the performers. The following is an excerpt from Riley's set of instructions for *In C*:

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[177]Ibid., 148-9.
[178]Ibid., 109.

...It is very important that performers listen very carefully to one another and this means occasionally to drop out and listen. As an ensemble, it is very desirable to play very softly as well as very loudly and to try to diminuendo and crescendo together.

Each pattern can be played in unison or canonically in any alignment with itself or with its neighboring patterns. One of the joys of IN C is the interaction of the players in polyrhythmic combinations that spontaneously arise between patterns. Some quite fantastic shapes will arise and disintegrate as the group moves through the piece when it is properly played.

It is important not to hurry from pattern to pattern but to stay on a pattern long enough to interlock with other patterns being played. As the performance progresses, performers should stay within 2 or 3 patterns of each other. It is important not to race too far ahead or to lag too far behind.

The ensemble can be aided by the means of a 1/8 note pulse played on the high c's of the piano or on a mallet instrument. It is also possible to use improvised percussion in strict rhythm (drum set, cymbals, bells, etc.), if it is carefully done and doesn't overpower the ensemble. All performers must play strictly in rhythm and it is essential that every one play each pattern carefully. It is advised to rehearse patterns in unison before attempting to play the piece to determine that everyone is playing correctly.

The tempo is left to the discretion of the performers. Obviously, not too slow but it should not be faster than performers can comfortably play.

It is important to think of patterns periodically so that when you are resting you are conscious of the larger periodic composite accents that are sounding and when you re-enter you are aware of what effect your entrance will have on the music's flow.

The group should aim to merge into a unison at least once or twice during the performance. At the same time if the players seem to be consistently too much in the same alignment of a pattern try shifting your alignment by an $1/8^{th}$ note or quarter note with what's going on in the rest of the ensemble.

It is OK to transpose patterns by an octave, especially to transpose up. Transposing down by octaves works best on the patterns containing notes of long durations. Augmentation of rhythmic values can also be effective...[179]

This set of instructions gave the performers a set of guidelines, but also allowed them the freedom to interpret the individual modules.

Riley was working strictly with tape-looping in his compositions until this period. His goal for *In C* was to represent the sounds heard in the tape-looping process through

[179]Terry Riley, In C (New York: unpublished score, 1964), 1.

live instruments. He wanted the instruments in each module to represent the repetition used in the tape loops. At the beginning of this composition, Riley did not plan on writing fifty-three modules: "That's just where it ended up...one of the motives had to be a long melodic loop. I had been working also with tape loops of varying sizes, and I realized that the long one would definitely be formally a big change in structure..."[180] The fifty-three modules are unique in themselves, but they are grouped together into categories according to their melody, rhythm, harmony, and form.

In C was written for any number and kind of instruments with an underlying pulse played on a keyboard instrument. The pitch range spans from middle C to the octave above it, and there are occasional transpositions at the octave. The composition begins with a steady pulse and is followed by each performer entering into the music whenever they choose to begin. The performers play any module at any time and may omit certain modules. This freestyle performance practice encourages the performers to listen carefully to each other and work together: "...more focused, more interestingly contrapuntal, encouraging close listening on the part of its audience as well as its performers."[181] The freedom of the performers builds the foundation for the structure of the piece.

In C normally lasts forty-five minutes, but can stretch to an hour and a half. This depends upon the number of times the modules are repeated. The full score is displayed on the following page.

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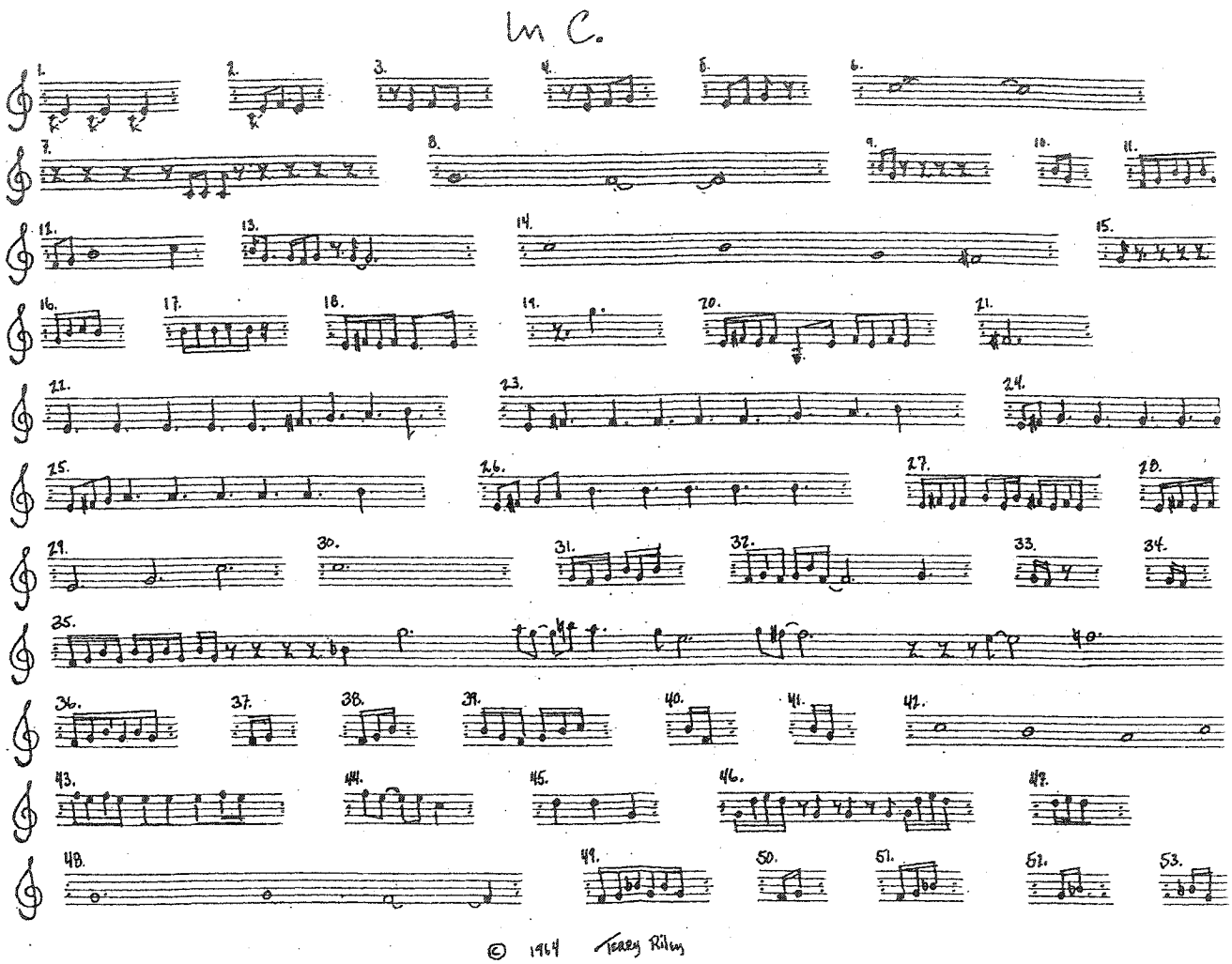
[180]Terry Riley, *Terry Riley: Monograph in Music* (San Rafael: New Music, 1996), 13.
[181]Ibid.



Example 6: Terry Riley, *In C*, complete score.[182]

[182]Potter, *Four Musical Minimalists: La Monte Young, Terry Riley, Steve Reich, Philip Glass,* 110.

Riley uses certain structural devices that form a relationship with his audience. These are created through Riley's use of melody, rhythm, harmony, and form throughout the entire piece. The fifty-three modules are small fragments of a main melody ranging from two sixteenth-notes to four whole notes. Certain modules can be classified into groups, according to their pitch and rhythm. Different combinations of the modules have the ability to fit together like a puzzle and create a smaller piece within a larger work.

The Effect of Stasis in *In C*:

Riley developed his own technique in order to generate a greater immediacy of stasis than Young. His main technique was the repetition of musical modules in the creation of stasis for the listener. Concerning melody in *In C*, the listener is drawn into the music through the repetition of the melodic patterns as a result of the musical modules. Riley's repetitious melodies have the ability to lure the listener into the music more effectively than Young's melodies. Riley's use of repetition produces a more mesmerizing experience and communicates with the listener faster than Young's use of long-held tones and stasis.

Riley's patterns move within a narrow range of notes and avoid the use of leaping. In modules twenty-two to twenty-six, there is repetition on dotted quarter notes[183], starting with the note E, and moving to the next note of the scale with each module. At module thirty-five, there is alternation in the two main passages:

> Module 35 alternates a semiquaver passage on the dominant seventh of C with the work's most extended lyrical utterance: a melody which manages to incorporate

[183]Ibid., 114, *Modules 22-26*: "It should be noted that the scalic ascents in quavers of modules 22-26 were originally conceived largely as dotted crotchets: an alternative more difficult to perform than the subdivision into repeated quavers common in versions subsequently disseminated."

> not only Bb and F#, but also B natural and F natural. The former pair suggests what Jazz musicians know as the 'Lydian dominant'. The presence of the natural as well as the flattened seventh, and the natural as well as the sharpened fourth however, creates the most ambiguous modal moment in the entire work.[184]

In module thirty-five, the main melody of the piece is exposed through this modality: "It comes as no surprise to realize that *In C's* single melody comes not only at the point of maximum modal conflict, but also at almost the exact point of the Golden Section (module 35 being as close to two-thirds of the way through the work's fifty-three modules as it is possible to come)."[185] This climatic point of the piece is followed by the return of the Ionian C major.

The rhythmic speed of *In C* alternates between triple and duple time. There are two classifications of modules—slow moving and fast moving. The slow moving modules consist of a variety of different combinations that use whole notes, tied notes, and quarter notes. These form a solid background for the fast moving modules and consist of a variety of different sixteenth-note patterns. The listener is aware of the change in rhythmic speed from duple to triple time.

Riley repeats certain chords continuously throughout the composition of *In C*. In the examination of harmony, the piece is not necessarily in the key of C, but rotates around the C-chord:

> The introduction, first of F# (module 14), then Bb (module 35 and, more consistently, from module 49) contributes important modifications to the C-major modality. In tandem with these alterations of accidental come more subtle changes of emphasis. While the opening modules duly stress C as the central pitch, module 8 introduces a

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[184]Ibid.
[185]Ibid.

> sequence of patterns in which G is emphasized by constant reference to the pitches of the dominant-seventh chord.[186]

In module 14, F-sharp is replaced by F-natural: "...introducing a somewhat Indonesian flavor to the proceedings..."[187] In modules fourteen to sixteen, the Lydian mode is heard throughout the layers of texture: "...the integration of F # into a C-based modality is, after all, recognized theoretically both in musics of the 'cultivated tradition (in Olivier Messiaen, for instance) and in jazz (notably in the Lydian-based theories of George Russell)."[188] Through a harmonic analysis of the second half of the piece, the pitches of the G-7 chord are played from module thirty-six to the end. At this point, the listener expects a return to C major, but in module forty-nine, there is a return to Bb major. This causes the listener to listen even more intently. The final modules of the piece suggest the Mixolydian mode in the key of C major.

There are two accidentals that occur throughout *In C* and play important roles—F-sharp and B-flat. The F-sharp is the root of two different applied chords, the secondary dominant (V/vii-diminished) and the secondary leading tone (vii-diminished/V). Riley uses the root of these two chords for different non-harmonic tones, and as auxiliaries, both complete and incomplete. These occur in modules eighteen, twenty, twenty-seven, and twenty-eight. The passing notes are used in modules twenty-two, twenty-four, twenty-seven, and thirty-five. In module thirty-five, the passing notes have a dual function as a suspension and a passing note. After listening to the first few modules, the listener is aware of the non-harmonic tones throughout the C major tonality. These are

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[186]Ibid., 113.
[187]Ibid.
[188]Ibid., 113-14.

used throughout the entire piece and produce a sense of overall structure for the listener through repetition.

The role of the B-flat is more complex than that of F-sharp. The former is introduced in module thirty-five as an auxiliary. Riley gives the listener a brief preclude to the lowered secondary diminished seventh chord (vii-diminished seventh/flat-vi). The F-natural is placed at the end of the bar, and Riley deliberately prolongs this seventh in order for the listener to make an association with this superfluous chord. This chord is heard again in module forty-nine, and Riley ends the piece with the chord in modules fifty-one to fifty-three (vii-diminished seventh/flat vi and then vii-diminished/flat-vi). The prolongation of this chord stresses its importance and converses with the listener.

Below is a complete harmonic analysis of *In C*:

C, E, F, G, B, F-sharp, A, B-flat, D: nine notes in the tone row

1.) C chord on a large scale

2.) smaller scale=notice the progressions in the key of C (tonality)

3.) **modules 1-7**=C chord; **modules 8-13** V7 (G7); **module 12** V7-I; **module 14** I-V auxiliary; **module 15** V; **module 16** V (C= auxiliary); **module 17** vii-diminished (C=auxiliary); **module 18** iii (F-sharp =auxiliary), **module 19** V; **module 20** iii (F-sharp=auxiliary + incomplete auxiliary), V (E=passing note) V/vii-diminished=F-sharp (E= auxiliary); **module 21** V/vii-diminished; **module 22** iii (F-sharp=passing note; A=passing note); **module 23** vii diminished/V=F-sharp, A (E=appoggiatura, G=passing note) vii-diminished; **module 24** iii (F-sharp=passing note, A=passing note); **module 25** iii (F-sharp=passing note) vi vii-diminished; **module 26** iii (F-sharp=passing note, A=passing note); **module 27** iii (F-sharp=auxiliary, F-sharp=passing note, F-

sharp=passing note, F-sharp=auxiliary); **module 28** iii (F-sharp=auxiliary); **modules 29-30** I; **module 31** V (F=auxiliary), **module 32** IV (G=auxiliary) V7; **modules 33-34** V7, **module 35** V7 (B-flat=auxiliary with octave displacement of G, A=appoggiatura) V (A=passing note) V iii (F-sharp=suspension that functions as a passing note), iii, IV; **modules 36-39** V7 (C=auxiliary); **module 40** viii-diminished; **module 41** V; **module 42** vi (B=passing note); **module 43** iii (F=appoggiatura, F=auxiliary); **module 44** I (F=appoggiatura); **module 45** V; **module 46** V (E=auxiliary); **module 47** ii (E=auxiliary); **module 48** V7; **module 49** V7 (B-flat=auxiliary) or (vii-diminished-seventh/vi-flat=B-flat); **module 50** V7; **module 51** vii-diminished-seventh/vi-flat=B-flat; **modules 52-53** vii-diminished/vi-flat=B-flat

Example 7: Terry Riley, *In C*, complete harmonic analysis of entire piece

Through the harmonic structure of the piece, Riley conjoins with his audience. This is achieved through the repetition of a selected group of notes, the use of non-harmonic tones, and the prolonging of chords. The listener's ear yearns to hear these musical devices and becomes enticed by the music.

Riley's use of structure and form in *In C* ally with the listener. The individual modules act as sections with an introduction to the module, the repetition of a rhythmic pattern, and a transition period. In the introduction to each module, there is an immediate awareness of a change in texture. Through the repetition of the rhythmic figure, the listener becomes mesmerized by the music. In the transition periods, Riley changes the melodic, rhythmic, or harmonic structure to actualize anticipation for the listener, and the upcoming module.

The interrelation between the composer and the audience of *In C* is also examined through the concert reviews that were written at the premiere:

> Performed in late 1964 at the San Francisco Tape Center with future Minimalists Steve Reich and Jon Hassell in the ensemble, *In C* not only broke ground in 'serious music' but showed how much New Music and psychedelia had in common. The piece came with coloured lights and an up beat. There was joy in repetition. Riley reflects: 'People like Morton Subotnick played. San Franciscan poets like Michael McClure came. There was a very positive response. It was just before the psychedelic era and all these people were looking for new kinds of poetry and music.[189]

Many reviewers have stated that new music was born out of the premiere of *In C*: "Several writers have called that debut a turning point as dramatic as (and opposite in significance to) the 1912 *Le Sacre du Printemps*[190]..."[191] The premiere of this piece was extremely important for the future of classical music audiences, and attracted a wide range of listeners with backgrounds in classical music, jazz, rock, and other popular music.

From the first performances of this piece to the more recent, Riley has continually captivated his audience members. After a performance of *In C* in 1990, Kyle Gann states:

> And yet: I only heard those songs once, and I remember the tune of every one. No bonehead present was so tone-deaf he couldn't figure the central idea, and Riley gripped you so firmly from the opening notes that when he spun distant variations on each tune with surefooted musicality, you had to follow. There's a reason *da-da-da-dummmmm* became the beginning of the world's most famous

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[189]Mark Prendergast, *The Ambient Century: From Mahler to Trance: the evolution of sound in the electronic age* (London: Bloomsbury Publishing, 2000), 102.

[190]Kyle Gann, "Terry Riley: A Revolution in 53 Melodies," *Village Voice* 35 (1990): 91;
Le *Sacre du Printemps*: "...this was a scandal not because of the audience's reaction, but because of that of the performers. Its cast of then unknowns included Pauline Oliveros, Steve Reich, Morton Subotnick, Jon Gibson, Phil Windsor, and Ramon Sender, who all later carried the influence into their own diverse musics."

[191]Ibid.

> composition. Riley didn't spread a veneer of sophistication over what he had to say, he said it honestly, and you couldn't mistake it.[192]

Riley was successful in capturing his audiences through his choice of rhythmic patterns and their repetition.

In a different concert review, the reviewer discusses Riley's blending of different musical styles and traditions throughout the piece:

> Certainly "In C" touches on pre-baroque, jazz, and Cageian traditions, yet some of its motives also rub up against Riley's own "String Trio" of 1960. The music has aleatory aspects (number of players, length of time) and is highly rhythmic, repetitious, basically consonant, and as tonal (or at least modal) as advertised. Perhaps through fortuitous accident, the net result is an energized Balinese music unsprung from its hinges. A communal joyous cacophony of secular yet spiritual ecstacy. It does not sound like a tape loop.[193]

The variety of musical and cultural influences incorporated into *In C,* are intriguing for any listener. Although there are a variety of different styles demonstrated throughout this piece, these are combined together into a minimalist style. The listener is most attracted to the music through Riley's continual use of repetition.

Goals for an Audience in the *Keyboard Studies*:

Riley continued to induce a larger audience in the years that followed his composition of *In C.* His next set of pieces, *Keyboard Studies* was an attempt to search for an even larger group of people by incorporating a variety of different styles and genres into his compositions, and to record. He began working on his keyboard style and incorporated his skills in blues, ragtime, jazz, and his work with the saxophone,

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[192]Kyle Gann, "Terry Riley," *Village Voice* 35 (1990): 84.
[193]Alburger, *Terry Riley: Monograph in Music*, 20.

which relies on the use of improvisation: "These works, based on very basic improvisational procedures and heavily informed by many years of study of North Indian Raga and Jazz, form the basis of nearly all the keyboard and piano playing I [Riley] have done."[194] In Riley's experimentation, he composed over six *Keyboard Studies* (1964-1966), but only notated two of these compositions:

> *Keyboard Studies* can best be viewed as a collection of ideas—some eventually notated, some not—assembled over a period of perhaps three years or more as the basis for improvisation. While intended largely for multi-tracked performance by Riley alone, the *Studies* could also be played by a keyboard ensemble, still providing opportunities for working with others and even for musicians to play without the composer present.[195]

In both *Keyboard Study No. 1* and *Keyboard Study No. 2*, Riley originally picked four notes and moved them around in various positions and repetitions to form a basis for these improvisational works. Through the evolution of the correlation between the composer and the audience, these first two studies further demonstrate Riley's conjunction with his audience.

Musical Adaptation to the Audience of *Keyboard Study No. 1*:

Riley continued to use repetition in order to communicate to his audience. *Keyboard Study No. 1*: "...was also called *Coule*; the title is a pun on the French word for 'flowing' or 'gliding' (or, in musical terminology, the 'slur' as a phrase marking), and Riley pronounces it, as though without its acute accent, 'Cool'..."[196] This study consists of a series of sixteen short modules that are further divided into three sections and played

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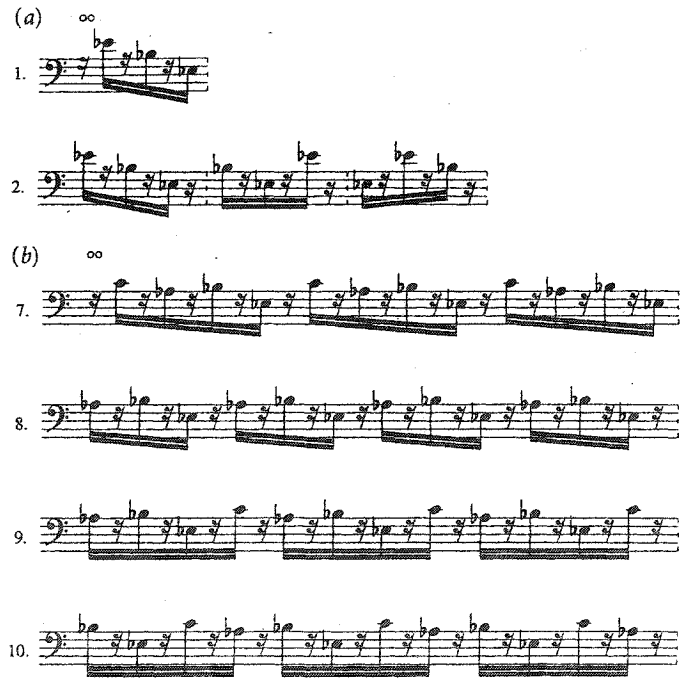
[194]Ibid., 29.

[195]Potter, *Four Musical Minimalists: La Monte Young, Terry Riley, Steve Reich, Philip Glass*, 122.

[196]Ibid., 123.

without a break. In addition to Riley's use of modules in *In C*, the interconnected modules in his *Keyboard Studies* create structure for the listener. In each section, the opening module is played and immediately followed by the second module. This is notated off the beat to produce a flow of semi-quavers.[197] The opening module forms an ostinato background in which the preceding modules are layered over this foundation and repeated an unspecified number of times: "Underneath the constant patter of semiquavers, some contrapuntal consistencies can be detected in the apparently chaotic kaleidoscope of the contrapuntal combinations..."[198] This is demonstrated in the below example:



Example 8: Terry Riley, *Keyboard Study No. 1*, modules 1-2 and 7-10[199]

[197]Ibid.
[198]Ibid., 124.
[199]Ibid., 123.

The sixteenth-note ostinato pattern that is heard underneath each section creates a hypnotic effect. The listener is aware as soon as there is a change in the sections.

The Effect of Stasis in *Keyboard Study No. 1*:

Riley's use of musical modules to achieve stasis evolved into his *Keyboard Studies*. This is demonstrated in his repetition of melody, rhythm, harmony, and form. The first study is rooted in a Dorian mode on E-flat, and includes the leading note of D-natural and D-sharp with the transposition at the octave.[200] In the first module, the notes are C-flat, B-flat, and E-flat and throughout the second module, the progression is as follows: C-flat B-flat E-flat, B-flat E-flat C-flat, and E-flat C-flat B-flat. This arrangement of inverted notes recurs in all of the modules throughout the entire composition. The below example is a set of Riley's instructions for playing the repetitive rhythmic figures in each module:

Each figure should be repeated in a continuous manner, for a long period of time, so that it turns into a stream of notes, moving steadily without accent. When an additional figure is introduced by the other hand, it should match the first figure in tempo and evenness. A figure may start on any note of its group.

Each hand should play all the figures, but one of the first two figures must be present at all times.

3 and 6 note figures, when played against 4 note figures, displace themselves 1 and 2 units respectively, and are useful in making precise changes in alignment.

A sequential order of left to right, top to bottom, should be followed. A performer may return to a previously played figure, but it is inadvisable to skip ahead.

All the above suggestions apply to group performance. The music may terminate when all are playing the final figure [Riley, "Keyboard Studies"].[201]

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[200]Ibid.

[201]Albuger, *Terry Riley: Monograph in Music*, 29.

The use of repetition employed by the performer with the creation of a steady stream of notes cultivates a trance-like state on the listener.

Through a harmonic analysis of *Keyboard Study No. 1*, the composer's connection to the listener will be demonstrated through his repetitive use of two main chords. Riley constructed this piece on specific chords and repeated them to create stasis for the listener. On a large scale, the following diagram illustrates the key of A-flat throughout the modules:

Modules 1-2=A and Modules 7-10=B

A) Eb-Bb-Eb-Eb-Bb-Eb-Bb-Eb-Eb-Eb-Eb-Bb B) C-Ab-Bb-Eb-C-Ab-Bb-Eb-C -Ab-Bb-Eb-Ab-Bb-Eb-Ab-Bb-Eb-Ab-Bb-Eb-Ab-Eb-Ab-Bb-Eb-C-Ab-Bb-Eb-C-Ab-Bb-Eb-C-Bb-Eb-C-Ab-Bb-Eb-C-Ab-Bb-Eb-C-Ab

Example 9: Terry Riley, *Keyboard Study No. 1*, key of A-flat

The following example demonstrates Riley's use of the two main chords of E-flat and A-flat:

Module 1-2=A and Modules 7-10=B

A) 1. (E-flat) Eb-Bb-Eb
2. (E-flat) Eb-Bb-Eb, (E-flat) Bb-Eb-Eb, (E-flat) Eb-Eb-Bb

B) 7. (A-flat, E-flat) C-Ab-Bb-Eb
8. (A-flat, E-flat) Ab-Bb-Eb
9. (A-flat, E-flat) Ab-Bb-Eb-C
10. (A-flat, E-flat) Bb-Eb-C-Ab

Example 10: Terry Riley, *Keyboard Study No. 1*, E-flat and A-flat chords

Throughout modules 7-10, he combines the A-flat chord with the E-flat chord. The following example demonstrates the use of the B-flat throughout modules 1-2 and 7-10:

E-flat	A-flat
1. Eb-Bb-Eb	7. C-Ab-Bb-Eb
2. Eb-Bb-Eb-Bb-Eb-Eb-Eb-Eb-Bb	8. Ab-Bb-Eb=suspension
	9. Ab-Bb-Eb-C=suspension
	10. Bb-Eb-C-Ab=appoggiatura

Example 11: Terry Riley, *Keyboard Study No. 1*, use of B-flat

B-flat is used throughout the modules as a non-harmonic drone note that makes reference to the E-flat chord for the continuity of the dominant chord. Riley prolongs the dominant chord throughout these modules via the B-flat. In the examination of audience response, the listener's ear becomes accustomed to hearing the E-flat, A-flat, and B-flat which produces a harmonic structure for the entire piece.

Musical Adaptation to the Audience of *Keyboard Study No. 2*:

Riley continued to use the repetition of musical modules to achieve stasis in his *Keyboard Study No. 2*, but he added an implied pulse, generating a greater immediacy of stasis for the listener.

In 1965, Riley recorded this solo improvisational piece, *Keyboard Study No. 2* or otherwise known as *Untitled Organ* as the first side of his LP, *Reed Streams*: "*Reed Streams* was made with this equipment on 4 and 5 November 1966, at the request of Mass Art Records, a small company based on Canal Street, with an issue of just one thousand copies."[202] Riley was given an old harmonium and two Revox tape recorders to create a system of experimentation for his solo keyboard pieces.[203] *Keyboard Study No. 2* exists in a variety of different forms and has been widely performed as an ensemble piece.

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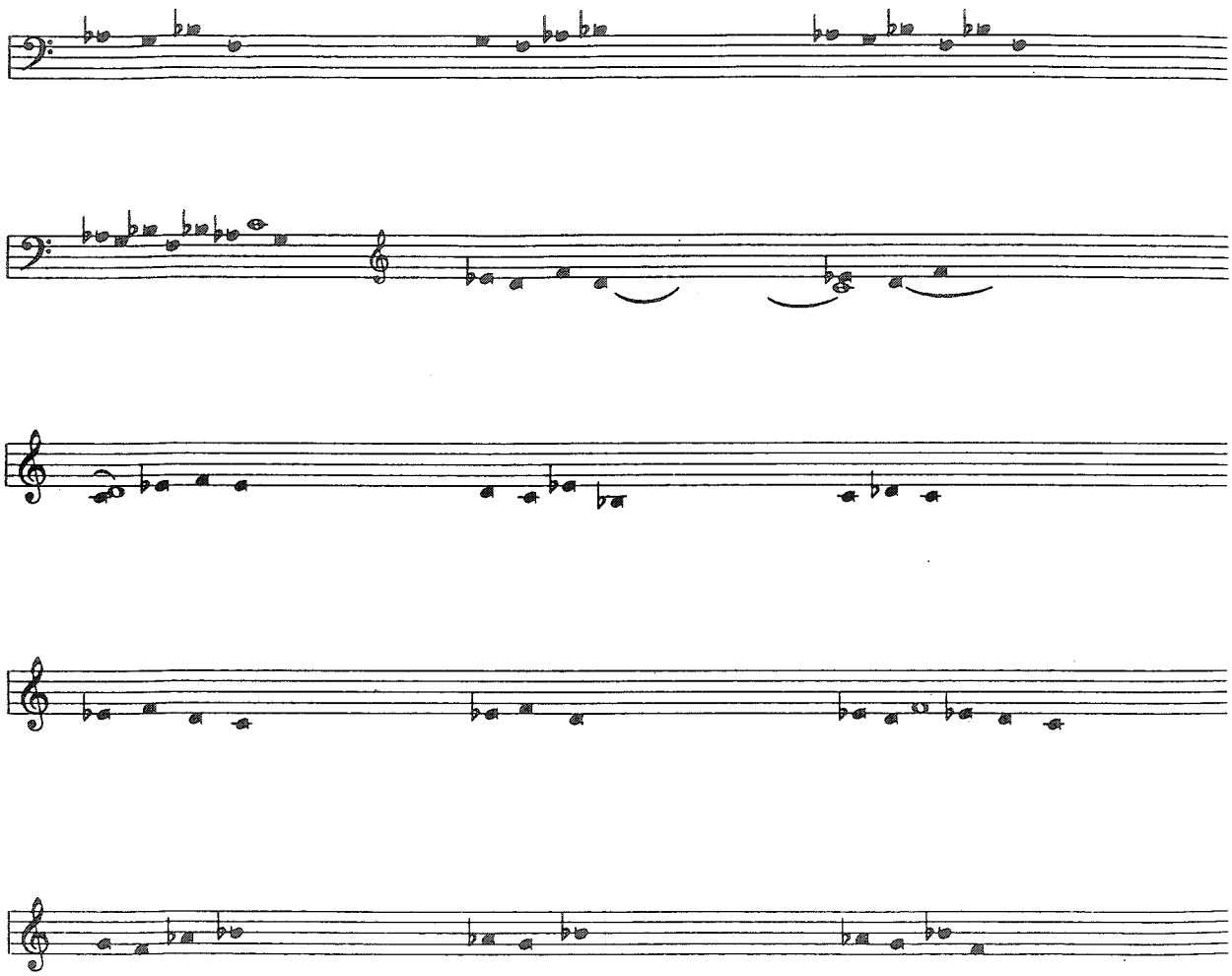
[202]Ibid., 124.
[203]Ibid.

The second study consists of a series of fifteen modules that are repeated in a continuous manner and are supported by the implied pulse. The most commonly available score for *Keyboard Study No. 2* is displayed below:



Example 12: Terry Riley, *Keyboard Study No. 2* (November 29, 1966), complete score[204]

For the performer, there is a choice of two modules that consist of four notes. There must be one module present at all times. The other modules are played against the two main

[204] Alburger, *Terry Riley: Monograph in Music*, 30.

modules and the performer is encouraged to play earlier patterns, but must not skip ahead to later patterns. The modules are broken down even further into cells according to their note groupings. The following example displays the location and number of beats in each of the fifteen cells:

Fm:	I	I	I	I (P)
	4	4	6	8
	V	V	V	
	4	3	4	
	IV	IV		
	4	3		
	V	V	V	
	4	3	4	
	I	I	I	
	4	3	4	

"Keyboard Studies" has continued to evolve over the years.

> I seriously started to consider my voice or role in this arena, which includes the Pantheon of my teachers and heroes, Duane Hampton, Adolf Baller, Wally Rose, Art Tatum, Bud Powell, and Bill Evans, in the mid-1960's when I began formulating and composing "Keyboard Studies" These works, based on very basic improvisational procedures and heavily informed by many years of study of North Indian Raga and Jazz, form the basis of nearly all the keyboard and piano playing I have done [Riley, Notes to Riley's "The Lisbon Concert"].

Example 13: Terry Riley, *Keyboard Study No. 2* (November 29, 1966), hexachord/pentachord (P) locations and number of beats in each of the modules[205]

[205] Ibid., 29.

The Effect of Stasis in *Keyboard Study No. 2*:

Riley achieves a greater immediacy of stasis in his *Keyboard Study No. 2* with his continued use of repetition through the melody, rhythm, harmony, and form in each musical module. The recurring chords throughout the musical modules and the implied pulse are used to create a greater level of stasis for the listener. Throughout this piece, there is a basic tetrachord consisting of F, G, A-flat, and B-flat that is transposed during certain periods to the fourth (B-flat, C, D-flat, and E-flat), and the fifth (C, D, E-flat, and F), and to the octave. This basic tetrachord is transformed into a pentachord with the addition of the C. In each of the cells, these collections contain three to eight notes that produce a steady stream of fast notes and sustained notes in only five of the figures.[206] There are certain pitches that must be sustained once the piece starts. These provide a drone underneath the continuous repetition of rhythmic figures, raising a trance-like affect on the audience.

This piece is rooted in a Dorian mode starting on F, but gradually expanding throughout the entire piece. The opening module and its four notes provide a foundation for all of the succeeding modules. These modules alter the original and basic shape through extension, transposition, inversion, permutation, and repetition, producing a canonic counterpoint.[207] The modules move gradually in a succession over the course of the piece:

> The fourth module additionally turns its penultimate note into a dominant drone, C: the first of five modules to create pedal points around which the music can swirl and eddy. The most commonly available version of the score

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[206]Ibid.

[207]Potter, *Four Musical Minimalists: La Monte Young, Terry Riley, Steve Reich, Philip Glass*, 125-26.

adds drones on D and F; another version adds F, G and B-flat.[208]

The repetition of specific harmonies in the musical modules, induce a hypnotic state through the effect of stasis.

The harmonic structure of this piece is analyzed similarly to *Keyboard Study No. 1* in relation to audience response. Below is an example of the overall structure of the piece in the key of C major. It may also be interpreted in the key of F minor:

Ab-G-Bb-F, G-F-Ab-Bb, Ab-G-Bb-F-Bb-F, Ab-G-Bb-F-Bb-Ab-C-G, Eb-D-F-D, C-Eb-D-F, C-D-Eb-F-Eb, D-C-Eb-Bb, C-Db-C, Eb-F-D-C, Eb-F-D, Eb-D-F-Eb-D-C, G-F-Ab-Bb, Ab-G-Bb, Ab-G-Bb-F

Example 14: Terry Riley, *Keyboard Study No. 2*, key of C major and F minor

Below is a breakdown of the three main broken tone clusters and melodic triads used throughout the modules:

Sustained tones:	**1.) Ab-G-Bb-F**	**2.) Eb-D-F-C**	**3.) D-C-Eb-Bb-Db**
Gestures:	**1.) Ab-G-Bb-F**	**5.) Eb-D-F-D**	**8.) D-D-Eb-Bb**
	2.) G-F-Ab-Bb	**6.) C-Eb-D-F**	**9.) C-Db-C**
	3.) Ab-G-Bb-F-Bb-F	**7.) C-D-Eb-F-Eb**	
	4.) Ab-G-Bb-F-Bb-Ab-C-G	**10.) Eb-F-D-C**	
	13.) G-F-Ab-Bb	**11.) Eb-F-D**	
	14.) Ab-G-Bb	**12.) Eb-D-F-Eb-D-C**	
	15.) Ab-G-Bb-F		

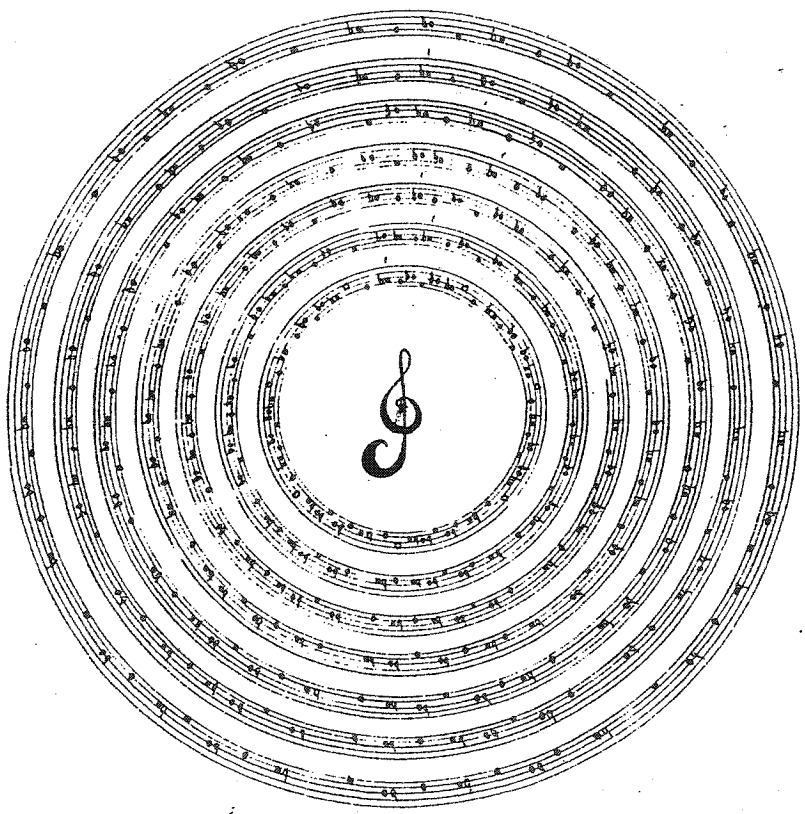
Example 15: Terry Riley, *Keyboard Study No. 2*, three broken tone clusters

The first set of broken tone clusters employs F minor and G minor, the second set employs D minor and C minor, and the third set employs C minor, B-flat major, and B-flat minor. Riley utilizes only one major chord. Similarly to *Keyboard Study No. 1*, he

[208]Ibid., 126.

limits the number of chords he accesses to conjoin with the listener through a small range of notes to create stasis.

The other version of *Keyboard Study No. 2*, in a circular form, adds the drones on F, G, and B-flat. The circular version of the score is displayed below:



Example 16: Terry Riley, *Keyboard Study No. 2*, circular version, page 7[209]

In this open-form, the modules are transcribed into concentric circles on an eight-page manuscript. The first four pages are dated from 1966 and the last four pages are dated

[209]Ibid.

from 1967. Pages six and seven are played twice, and pages two and five are notated entirely in the bass clef. In the above example, the outer ring employs a specific pattern of notes, and through each inner ring, this pattern is inverted in various combinations:

> Riley exerts some control on his patterns by deploying multiples of 4, 7 and 8 to give a total of fifty-six. But while the close connections of pitch and rhythm between the circles allows the unraveling of interesting contrapuntal combinations, no attempt is made to fill all the links in the canonic chain; the third and sixth circles (working outwards), for instance, simply duplicate each other.[210]

In this example of *Keyboard Study No. 2*, the duplication of modules reinforces the main chord for the listener:

> La Monte Young has pointed out that the reason why you never get tired of listening to the blues is that the pitches in the Dorian blues, the sad moaning blues, are in perfect agreement with the overtone series of the fundamental pitch...So in my [Riley] "Keyboard Studies", I play only on the pitches that are in the blues [Terry Riley in Knox, n.p].[211]

This statement made by Riley about Young demonstrates the need to intermingle with his audience through his harmonic techniques, and presents an important relationship between the two composers.

The first performance of *Keyboard Study No. 2* was recorded live in a single take. In this particular performance, Riley played a single pattern for a long period of time, and alternated with the polyphony of a pair of patterns.[212] The following concert review demonstrates Riley's connection to the audience through his use of repetition to bear stasis:

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[210]Ibid., 127.

[211]Albruger, *Terry Riley: Mongraph in Music*, 29.

[212]Potter, *Four Musical Minimalists: La Monte Young, Terry Riley, Steve Reich, Philip Glass*, 127.

> The initial ascending pattern F-A-flat-G-B-flat is first an ascending solo line, here, as everywhere, considerably higher than standard tuning...To this is joined a second handsworth of contrapuntal interest, rhythmic and metrical changes. The effect is one of extreme stasis, hypnosis, trance...True to the evolving minimalist aesthetic...[213]

In this instance, the reviewer was affected by the music through its hypnotic-like qualities, and was aware of the changes in rhythm and meter.

Goals for an Audience in *Salome Dances for Peace*:

By the mid 1980s, Riley had his career firmly established and was continually composing new pieces that were inspired by his travels through America, Europe, and Japan. During this time period, he was writing string quartets for the Kronos quartet and in 1986, he wrote *Salome Dances for Peace*: "The members of Kronos, with their unconventional appearance and equally unconventional repertory, have long championed the American minimalist composers..."[214] His composition of *Salome Dances for Peace* demonstrates his goals of composing music in other areas to captivate a broader audience.

In 1985, he began composing this cycle of five quartets as a ballet, writing the scenario and the music together. Over the two years of composition, the score evolved and there was no need for staging. *Salome Dances for Peace* describes mankind's universal quest for the inner truth. Riley incorporates elements of ancient myth, Biblical legend, and Native American culture:

> ...is a summing up of Riley's minimalist and post-minimalist interests: Beethoven, Bartok, blues, jazz, minimalist patterns, long-limbed melodies, Middle Eastern maqam, Native American imagery, New Age consciousness, North Indian raga, pop lyricism, 60's

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[213]Alburger, *Terry Riley: Monograph in Music*, 29.
[214]Schwarz, *Minimalists*, 97.

> sensibilities, and an East-West spirituality. Its long, programmatic narrative sweep betrays a grandeur not often found in the string quartet literature.[215]

This portrays a hero's attainment of certain powers in order to overcome evil and discover the truth: "But Riley's quartets were also examples of his devotion to music as a spiritual endeavor. A gentle and wise man, Riley has an oracular presence. Storytelling is among his gifts, and like his music, Riley's stories are cross-cultural."[216] Through this piece, he combined his unique compositional ideas with a performance-oriented approach to the music.

Salome Dances for Peace was first performed live by the Kronos Quartet in San Francisco at the Herbst Theatre on January 12th, 1990. This composition and his other works for the Quartet were a turning point in Riley's compositional career: "These pieces are the core of a new, more classical phase: multi-movement works, rarely static, moving from motive to motive and texture to texture with a sense of spiritual journey."[217] This piece incorporates a variety of different music from around the world:

> If anything points *Salome* back toward Europe, it's the highly motivic texture in a multi-movement form, though the modes are still clearly Eastern. Only a few years ago Morton Feldman theorized that multi-movement form was the one musical idea that was really dead in the late 20th century…I [Riley] feel like each thing I do should be something I haven't worked with before.[218]

Riley's inspiration came from his piece, *Harp of New Albion*: "I [Riley] had been working on the "Harp" and playing it quite a bit in Europe. One of the sections wouldn't fit for some reason, but I really liked the music. Then one day I was practicing and it just

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[215]Alburger, *Terry Riley: Monograph in Music*, 76.

[216]Terry Riley, liner notes for *Salome Dances for Peace*, Kronos Quartet, Elektra/Nonesuch 79217-2, 1989.

[217]Gann, "A Revolution in 53 Melodies," 91 and 94.

[218]Ibid., 94.

came into my head: 'Salome Dances for Peace' is what this music sounds like."[219] He wanted this work to be a ballet about the character 'Salome' and her creation of peace in the world: "So Salome in this case becomes like a goddess who—drawn out of antiquity, having done evil kinds of deeds—reincarnates and is trained as a sorceress, as a shaman. And through her dancing, she is able to become both a warrior and an influence on the world leaders' actions."[220] Riley started with a central idea and developed patterns to breed an unrelated theme.

Musical Adaptation to the Audience of *Salome Dances for Peace*:

Riley builds a bond with his audience through his continual use of rhythmic and melodic devices to develop anticipation for the listener. He originally intended this piece to be a ballet and as a result, the music is highly programmatic. He combines virtually every melodic, rhythmic, and harmonic element possible within one piece of music. Riley uses large amounts of ornamentation, pausing, sequential and scalar passages, and imitations of different sounds. Throughout the piece, he uses a running theme. This is generated through repetitive sixteenth and thirty-second notes. In addition, he has written in specific directions that instruct the performer to play certain passages 'like a conch shell' or with 'Ragtime feeling'. In each section, the notes range from thirty-second notes to whole notes, and the time signatures alternate between 2/4, 3/4, 4/4, 7/4, 6/8, 15/8, 4/16, 8/16, and 10/16. From a listening perspective, there is a constant shift in tempo that produces anticipation and uncertainty.

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[219]Alburger, *Terry Riley: Monograph in Music*, 76.
[220]Ibid.

Salome Dances for Peace is divided into five sections: 'Anthem of the Great Spirit', Conquest of the War Demons', 'The Gift', 'The Ecstasy', and 'Good Medicine'. 'The Gift' section bestows elements of blues and soul train that create a unique listening experience. This is also portrayed in the *Keyboard Studies*. Below is an example of the layout and durations of the entire composition:

Anthem of the Great Spirit	
The Summons	4:56
Peace Dance	11:02
Fanfare in the Minimal Kingdom	4:30
Ceremonial Night Race	4:39
At the Ancient Aztec Corn Races Salome Meets Wild Talker	2:06
More Ceremonial Races	:51
Oldtimers at the Races	3:50
Half Wolf Dances Mad in Moonlight	9:06
Conquest of the War Demons	
Way of the Warrior	5:08
Salome and Half Wolf Descend through the Gates to the Underworld	4:36
Breakthrough to the Realm of the War Demons	2:38
Combat Dance	3:54
Victory: Salome Re-Enacts for Half Wolf Her Deeds of Valor	:43
Discovery of Peace	3:40
The Underworld Arising	10:08
The Gift	
Echoes of Primordial Time	11:14
Mongolian Winds	4:10
The Ecstasy	
Processional	2:10
Seduction of the Bear Father	3:12
The Gathering	3:42
At the Summit	3:24
Recessional	1:53
Good Medicine	
Good Medicine Dance	13:28

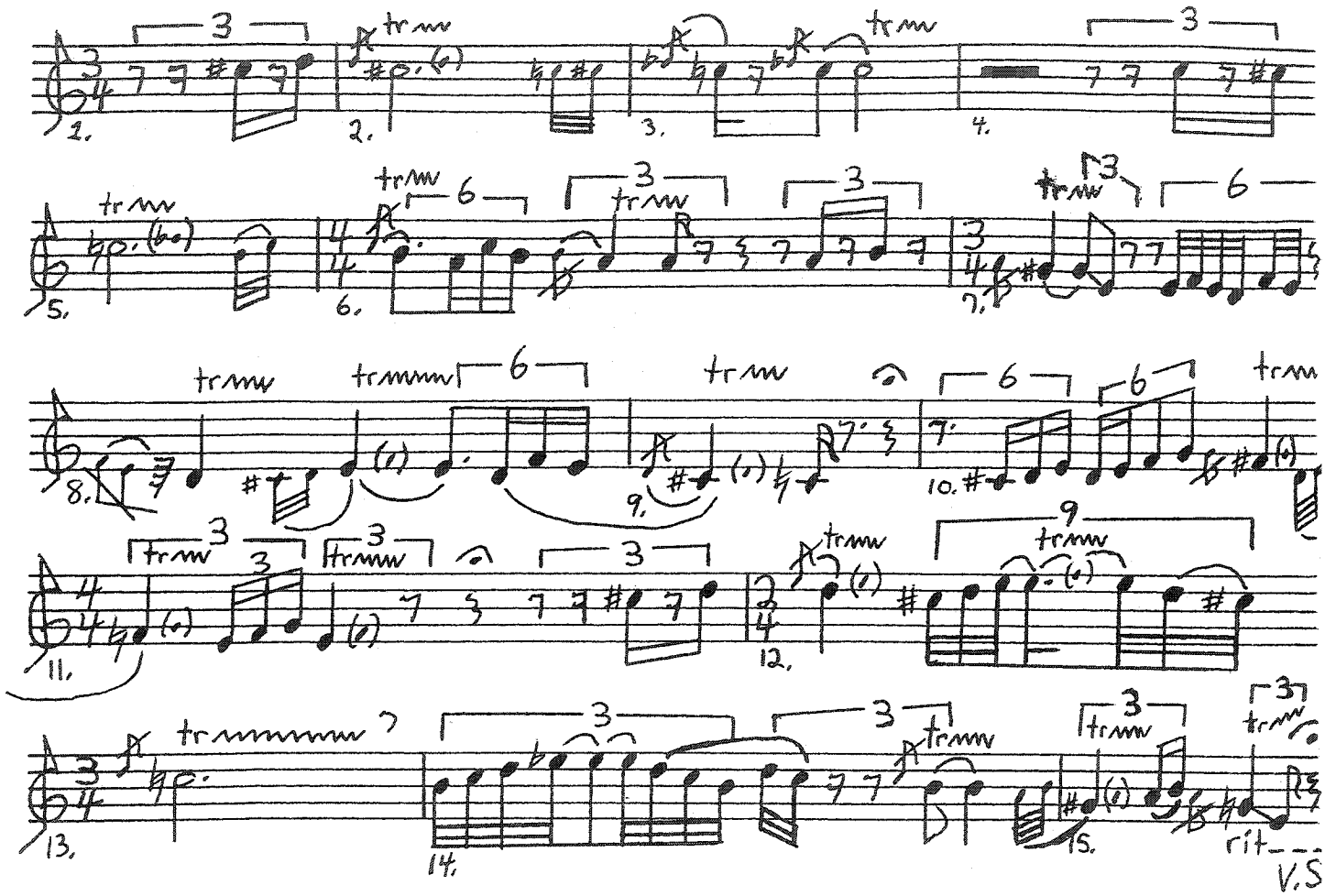
Example 17: Terry Riley, *Salome Dances for Peace*, layout and durations[221]

The first section, "Anthem of the Great Spirit" will be analyzed to demonstrate Riley's connection with the listener.

[221]Ibid.

The Effect of Stasis in *Salome Dances for Peace*:

Throughout *Salome Dances for Peace*, Riley utilizes his musical module technique, but with the establishment of pauses. This technique exercises the greatest immediacy of stasis in all of Riley compositions until this period. In the first part, 'The Summons', the strings begin the piece very abruptly, followed by a great pause. This alternates for approximately one minute and through this alternation, the violins begin to trill repetitively and continually interject. This section begins very disconnected and alternates between a disconnectedness and a smooth melody. The texture becomes very thick and each string part participates in the ascending and descending of virtuosic rhythmic patterns. The following page displays an example of the beginning of "The Summons".

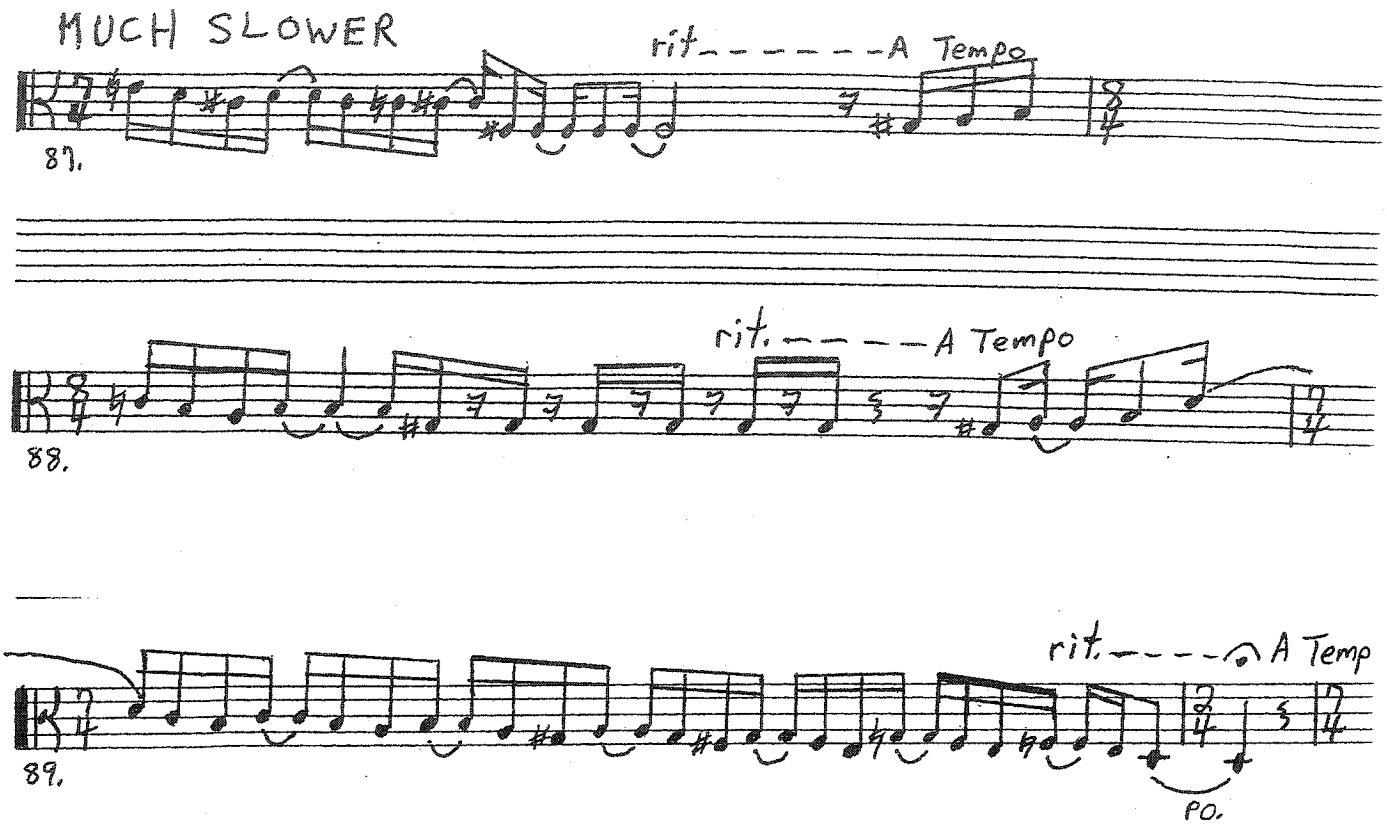


Example 18: Terry Riley, *Salome Dances for Peace*, beginning of 'The Summons' from "Anthem of the Great Spirit", first violin[222]

[222]Terry Riley, *Salome Dances for Peace* (New York: unpublished score, 1986), 1.

The listener continues to listen for the melodic pattern through the disconnected patterns and feels the 'need' to continue listening for the next occurrence.

The second part, "Peace Dance" begins with a fragmented rhythmic pattern, followed by a pause. Throughout this part, the dynamics continually alternate between *forte* and *piano*. The audience is captivated by the changes and through the texture, the listener focuses on short melodic passages that are played repetitively underneath the main texture. This occurs when the string parts play the same line, but slightly out of sync with each other to create a textural affect. The following page displays an example of the second part in the viola.

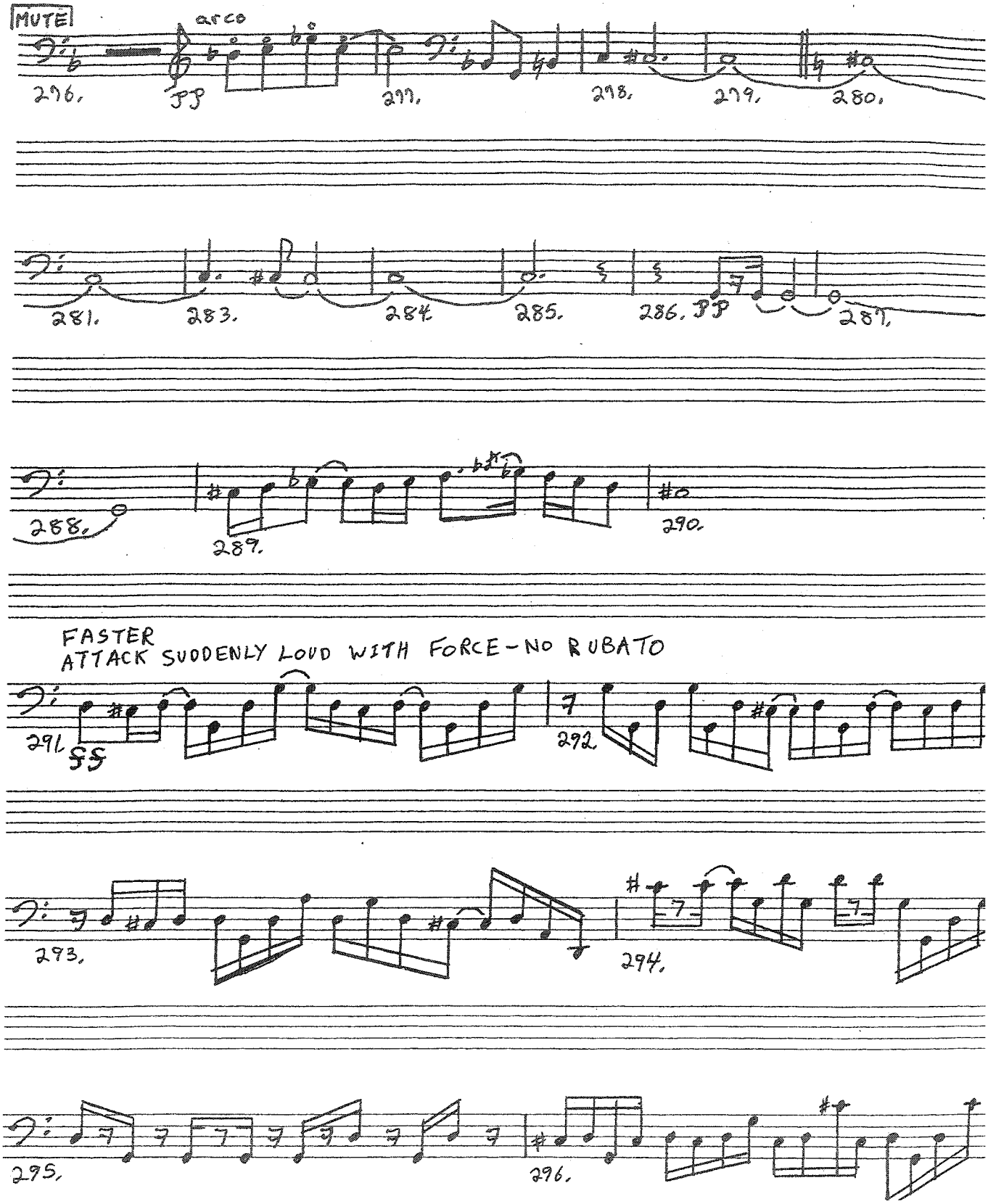


Example 19: Terry Riley, *Salome Dances for Peace*, part two from "Anthem of the Great Spirit", viola[223]

[223] Ibid., 4.

The third part begins with a walking bass pattern in the cello that sounds as if 'someone' is approaching from a distance. This bass line continuously alternates between a smooth and melodic line. Similarly to the second part, the violins play vigorously and use a raw fiddle sound. The listener becomes captivated by one pattern and is aware of changes in texture. The violins use a pizzicato technique and abruptly end the section in order to produce anticipation for the listener.

The fourth part greatly contrasts the third, since it begins very softly with a melodic pattern played in the violins. The instrumentalists use a variety of slide techniques to generate unique sounds. Following this soft passage, all of the strings create excitement through harsh, disjunct, and fragmented rhythmic patterns. The music becomes soft again, and the cello actualizes a sense of 'impending doom' for the audience. The violins play in long drones to produce a distancing effect for the listener. The alternation between the soft and harsh sections continues throughout the part. The following page demonstrates the fourth part in the cello.



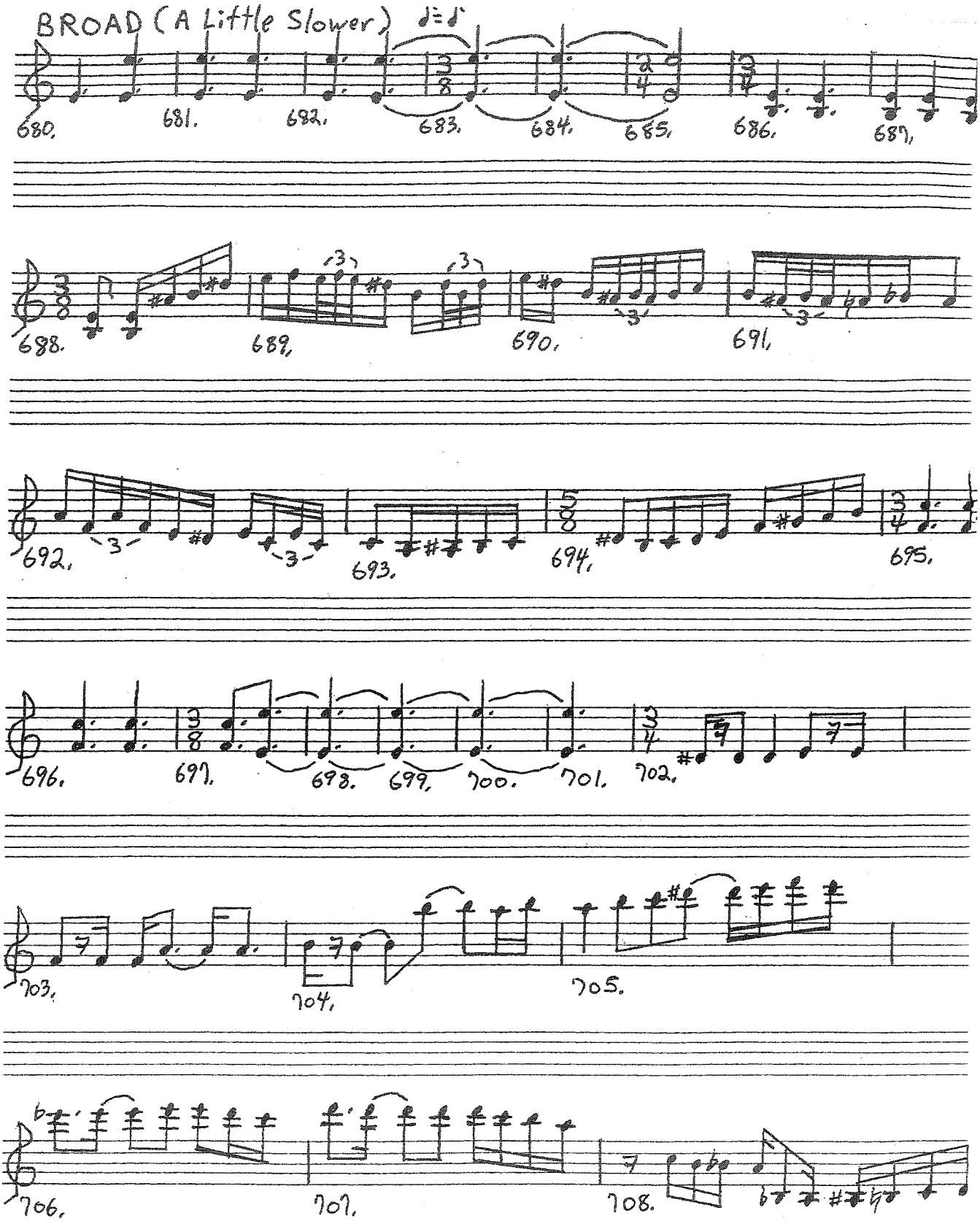
Example 20: Terry Riley, *Salome Dances for Peace*, part four from "Anthem of the Great Spirit", cello[224]

[224]Ibid., 14.

The fifth part begins with a quarter-note pulse in the cello that is contrasted by a smooth and melodic pattern played in the violins. This pulse is extremely repetitive, cultivating feelings of uncertainty for the listener. The fifth part leads directly into the sixth part.

In part six, the strings use a 'sawing' technique to portray the act of running. The running effect causes the listener to listen intently and question the next occurrence. This effect turns into a repetitive pattern with the walking bass in the cello, leading directly into part seven. The seventh part is a continuation of the sixth part, but the rhythms grow harsher, breeding intensity for the listener. This leads directly into part eight.

Part eight grows more complex with full texture and continuous scale patterns throughout the individual melody lines. Repetitive rhythmic passages are heard throughout the texture, and the listener becomes accustomed to listening to certain passages. The following page displays an example of the eighth part in the second violin.



Example 21: Terry Riley, *Salome Dances for Peace*, part eight from "Anthem of the Great Spirit", second violin[225]

[225]Ibid., 26.

The different rhythmic patterns utilized throughout the parts are re-instated in the final part to bear structure for the listener.

Riley's evolving connection with his audience is evident in the concert reviews of the premiere:

> "Salome is in all likelihood Riley's greatest work. Considering his status as one of the truly influential modern music composers of the past 25 years, that's saying quite a bit.
>
> The mere fact that anyone would attempt a two-hour magnum opus in this quick-fix of pop domination is impressive in itself. But "Salome" never lags; the ideas never quit.
>
> You marvel at how much musical information Riley has come up with—it's as though he's tapped into some inexhaustible wellspring of melody. After listening to "Salome," you feel as though a master myth-spinner has taken you by the hand and shown you the world in a way you never dreamed existed.[226]

From the audience's perspective, the most impressive element is Riley's ability to introduce a specific idea and demonstrate its evolution throughout the entire section.

The following concert review complements Riley for his great detail and virtuosity within the performance:

> There was still that old minimalist groove in repetition and patterns that extend for impressive lengths, but how much more the influence of jazz and the East in rich stacked chords and elaborately complex rhythms; witness in "15/16" the fifteen-beat left-hand ostinati against a right hand that balances the predictable and un- in the ascending scale flourishes of a Thelonius Monk shuffle. The exciting set concluded with the 7/8 "Black Sea", where Riley played with passion and animation, yet with a paradoxical calm reigning throughout.[227]

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[226]Alburger, *Terry Riley: Monograph in Music* [Ruben, 46], 78.
[227]Ibid., [Alburger, "Mavericks Part II"], 79.

Over the course of Riley's compositional career, his minimalist techniques have continually evolved and connected to a larger audience than Young. From his early to his late works, his audience has increasingly grown as he has built his individual technique and his ability to ally with the listener.

Conclusion:

The main difference between Riley and Young revolves around Riley's need to search for a wider audience and his willingness to adapt to new styles in order to find an audience. Although Young and Riley were friends and admired each other, Riley felt that Young's use of sustained tones and droning was not identifying with his audience. Riley's new rhythmic and melodic techniques that focused on rhythmic directness and simplicity formed a stronger relationship with the audience. He continually searched for different performing opportunities and would not be satisfied by performing in lofts. He wanted to perform his compositions in a larger performance space and to record his work for a wider distribution. As a result, he was commissioned by numerous groups including, the Kronos Quartet. In addition, his minimalist style influenced various rock musicians including, Brian Eno. This has also contributed to a larger output and reputation. Through this influence, he was more widely known than Young and focused on a higher means of musical composition.

Chapter 5

Steve Reich

An Introduction:

The four minimalist composers are divided into two groups with Young and Riley in one, and Reich and Glass in the other. The main difference between the two groups is the size of the audience and the ability to attract the listener. Riley reaches out in search of a larger audience, but there is a significant difference between the audiences of Young and Riley, and Reich and Glass. From the very beginning of his compositional career, Reich's main goal was to attract an audience. This is evident in one of his first pieces, *Come Out*. This early work raised a variety of different concerns for mankind and attracted listeners through its sociological and political messages. Throughout Reich's biography, stress is placed on his train trips from New York City to Los Angeles. In his later work, *Different Trains* many of the issues surrounding his train trips are examined, including the comparison between the trains he traveled on and the cattle cars used to transport Jews during the Holocaust. In both of these tape-looped pieces, Reich is clearly hooking society in search of an audience through his social and political messages.

The Early Years:

Unlike La Monte Young and Terry Riley, Steve Reich was born and raised in New York City:

> Although Reich, who was born on 3 October 1936, is only a year younger than Young and Riley, he seems very much of a later generation-not only because his early minimalist language is indebted to them, but because his urban

> upbringing is so much more of our time than their frontier experience.[228]

Reich's father, who was a lawyer and his mother, who was a lyricist divorced when he was a year old. He spent most of his childhood shuttling by train between New York City where his father lived, and Los Angeles where his mother had remarried.[229] Although Reich's father was not musical, he insisted that he take piano lessons at a young age: "My father thought it was important that I take piano lessons, purely from a civilized middle-class perspective, Reich said with a hint of sarcasm."[230] By the age of fourteen, he had discovered Baroque music, twentieth-century music, and bebop. His friends were interested in both jazz and classical music, and each genre made a powerful impression on him. Out of these genres of music, he was most influenced by bebop. He began to study the drums and quit piano lessons. Like Young and Riley, the influence of jazz throughout high school is also prominent throughout Reich's biography. In addition, the biographers create the image of Reich moving away from the conservative music of his piano lessons to drum lessons and experimentation with jazz. After a short period of drum lessons, Reich formed his own jazz band. His biographers make it clear that his involvement in the jazz band formed a foundation for his later works with rhythm, pitch, and percussion instruments.

At the age of sixteen, Reich attended Cornell University for a degree in philosophy and a minor in music. Like Reich, Glass also attended University early and majored in mathematics with a minor in music. Reich was not interested in seriously studying music, but with the encouragement of his music history professor, William

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[228]Robert Schwarz, *Minimalists* (London: Phaidon Press Limited, 1996), 50.
[229]Ibid.
[230]Ibid., 51.

Austin, he decided to focus on the composers that most interested him. He realized that he was drawn to Baroque music, twentieth-century music, and bebop because of their steady pulse, clear tonal centres, and contrapuntal severity.[231] These elements are clearly demonstrated in his later minimalist style. In 1957, he graduated from Cornell and returned to New York City. In the fall of that year, he was studying composition with Hall Overton who was a composer of classical music and a jazz arranger. Overton also wrote many of the charts for Thelonious Monk and his band.

Inspired by Overton, Reich enrolled at the Julliard School of Music and began his graduate studies with the two American composers, William Bergsma and Vincent Persichetti. During his time at Julliard, he experimented with a variety of different styles, and attempted to compose music for the poetry of William Carlos Williams.[232] Reich set Williams poetry to music in his later work, *Desert Music*.

In the summer of 1961, Reich left Julliard and headed to San Francisco in search of a different musical scene. He had recently married while he was in New York and wanted to attend graduate school when he arrived in San Francisco. In 1962, he enrolled at Mills College. Biographers state that he was disappointed in the other music students and the institution.[233] He was in search of a new musical scene, but the musical styles at Mills were similar to those at Julliard.[234] During his time at Mills, Reich attempted to simplify serialism by composing twelve-tone music. He worked with Berio for three semesters. Berio noticed that Reich would continually repeat specific twelve-tone rows

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[231]Ibid.

[232]*William Carlos Williams*: was an American poet who used vernacular speech in his work

[233]Schwarz, *Minimalists*, 55-6;

Keith Potter, *Four Musical Minimalists: La Monte Young, Terry Riley, Steve Reich, Philip Glass* (Cambridge: Cambridge University Press, 2000), 156-7.

[234]Ibid.

allowing them to evolve.[235] His early experimentation with repetition was the genesis of his minimalist compositions.

In the analysis of Reich's compositions and his interrelation to the audience, he has demonstrated a greater connection to the listener than the previous minimalist composers. The compositional style of both Young and Riley did not utilize the phasing technique, but rather continuous repetition through stasis. Although Reich uses continuous repetition to create stasis, this is combined with the use of phasing to bond with the audience. Reich's establishment of repetition affects not only the rhythm, but also the content of the piece. He actuates a phase-shifting process that repeats the main metric cycle eight to twelve times, and each repetition builds a foundation for the rhythmic pattern that remains constant throughout the composition. In the following analyses of Reich's tape-looped and instrumental pieces, his connection to the audience is demonstrated through his use of the phase-shifting technique.

In the early 1960s, Reich began to experiment with tape-looping:

> In the autumn of 1964 Reich had brought his tape recorder to San Francisco's Union Square, where he recorded a young black preacher named Brother Walter warning of an impending apocalyptic Flood. He knew that Brother Walter's inherently melodious voice offered ideal material for a speech-based tape piece, but he was unsure how to use it. At first he attempted a collage-like work along the lines of *Livelihood*.[236] But *In C* suggested a new approach.[237]

He used Brother Walter's speech in the composition of his first mature piece, *It's Gonna Rain* (1965). This piece was a seventeen-minute composition based on a three-word

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[235]Schwarz, *Minimalists*, 57-8.

[236]Ibid., 59, *Livelihood* (1964): "Much more adventurous was *Livelihood* (1964), in which he hid a microphone in his cab and, unknown to his riders, recorded their conversations. The three-minute tape piece that resulted was a fast-cut collage of speech fragments, automotive sounds, and slamming doors."

[237]Ibid., 61.

fragment and from 1965 to the early 1970s, Reich used the phase-shifting technique in all of his works.

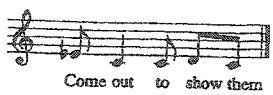
Goals for an Audience in *Come Out*:

Reich's goal was to contact a broader audience through the recording of his work, the political and social messages conveyed, and his use of human emotion. Following the composition of *It's Gonna Rain*, Reich composed *Come Out* (1966) in the same style. This was composed as a benefit and was presented at the Town Hall in April of 1966 for the re-trial of the six boys who were arrested for murder during the Harlem riots of 1964. This piece was clearly written in identification with the audience through its social and political messages. Reich used the voice of Danniel Hamm through tape looping and described the beating he endured from the riots. The police would only take the boys who were visibly bleeding, but Hamm only had bruises. He squeezed open a bruise on his leg in order to be taken to the hospital. His phrase, 'I had to, like, open the bruise up and let some of the bruise blood come out to show them' forms a foundation for this tape-looped piece.

Musical Adaptation to the Audience of *Come Out*:

Like Young and Riley, Reich used repetition in order to achieve stasis. His experimentation with repetition and tape-looping, cultivated a greater immediacy of stasis for the listener. Reich recorded the phrase, 'come out to show them' on both channels in unison, followed by the slow second channel. The following is a rhythmic example:

(a) *Come Out*, Basic Unit



Example 22: Steve Reich, *Come Out*, basic unit[238]

When the phase begins to shift, the reverberation gradually increases, slowly transforming into a canon. Eventually, the two initial voices divide into four and then into eight:

> By restricting oneself to a small amount of material organized by a single uninterrupted process, one's attention can become focused on details that usually slip by. A single repeated and gradually changing figure may well be heard as a composite of several figures. Finally, at any given moment, it is open to the listener as to which pattern within the pattern he hears.[239]

Below is a structural analysis of *Come Out*:

Progression

I) "I had to like open the bruise and let some of the bruise blood come out to show them"

***repeated three times, with a cut-off at the end of each phrase**

II) "come out to show them"

***repeated approximately 80 times before the listener hears a noticeable change in the texture**

III) "come out, out"

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[238]Potter, *Four Musical Minimalists: La Monte Young, Terry Riley, Steve Reich, Philip Glass*, 176.

[239]Steve Reich, liner notes for *New Sounds in Electronic Music*, Columbia/Odyssey 32160160, 1966.

***heard on the first channel layered over the second channel, "come out to show them"**

IV) "commu uma"

***the first channel is heard layered over the second channel, "come out to show them"**

V) "show them, show them"

***the second channel is heard prominently, the listener starts to focus on certain words and realizes as soon as they change**

VI) "show them, show them" (distorted)

***both channels are moving extremely fast and the words gradually become distorted**

VII) mechanical sounds of the tape loops

***the channels are moving even faster, and the listener can no longer distinguish between the words, the listener starts to focus on the 'swells' of the mechanical sounds**

VIII) mechanical sounds spin back and forth

***creates a hypnotic-like state on the listener**

IX) mechanical sounds continue to spin back and forth

***the volume diminishes and the spinning gradually fades into the distance**

Example 23: Steve Reich, *Come Out*, structure of the entire piece

The piece begins with an introduction of unaltered text that introduces the speech material:

> By selecting, however, only five words from this as the basis for the whole of what follows—a thirteen-minute piece in a single section—Reich achieves a more purely musical focus than he had managed in *It's Gonna Rain* with the aid of a more melodic phrase demonstrating greater pitch stability…[240]

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[240]Potter, *Four Musical Minimalists: La Monte Young, Terry Riley, Steve Reich, Philip Glass*, 177.

The phasing of the two words 'come out' produces a series of identifiable motivic developments. The text 'commu uma' changes in rhythm and emphasis is placed on the gradual process. The 'sh' of the word 'show' contains an almost percussive sound: "...many have compared it to maracas—which allows not merely timbral variety but also provides a starting point for more subtle manipulation of the material, as the 'sh' sound swoops the whole spectrum."[241] From the listener's perspective, the sounds produced from the words become detached from their meanings. Reich refers to these sounds as the 'resulting patterns'. Concerning harmony, the character of the text is indicated by a minor third, suggesting that the key is C minor. The speech-melody and its meaning are presented as they naturally occur, and the pitch and timbre are unaltered. This entitles the listener to feel the speech's original emotional power while intensifying its melody and meaning through repetition and rhythm.[242]

The Effect of Stasis in *Come Out*:

Like Young and Riley, Reich used a specific technique in order to manipulate repetition and create stasis. His production of stasis heavily relies on his own phase-shifting technique. This enables the listener to settle into one groove of music, and to immediately become aware of a change in the musical texture. In the examination of the phasing process and the composition's original words of 'come out to show them', the original unit does not move back to its original form, but divides exponentially into eight voices with predetermined arrival points. Once the original text reaches a particular point

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[241]Ibid.

[242]Steve Reich, liner notes for *Early Works*, Elektra/Nonesuch 79217-2, 1989.

in the process at approximately eight minutes into the piece, the voices increasingly move into semiquavers and produce a 'spinning' sound:

> This produces a kind of shimmer or blur lasting some five minutes, in which the words have become completely inaudible. The words 'come out' now yield a kind of soft, rounded blur, while 'to show them' has been transformed into alternating pulses of machine-like ferocity. Further panning across the stereo space adds another dimension to this wall of sound before the whole thing is eventually faded out.[243]

This blur begins and the words are distorted, leading the listener to focus on one particular level of sound. After approximately one minute, the blur becomes more intensified and the listener moves into another level of listening. At this point, a hypnotic-like state is generated on the listener. Although the words are distorted, the socio-political value of the text is not lost. The listener hears the text in extreme continuity throughout the piece. Although the text matures and is undistinguishable, the words are ingrained into the listener's ear.

Come Out is often regarded as a 'phonic' approach to the musical grammar it establishes for itself.[244] The piece does not only revolve around phonics, but uses intuitive control for the listener. The structure is created through the texture of the music with the addition of an emotional element. This is cultivated later in the work: "...provided by the words and their cultural resonances, which themselves help to make the musical results correspondingly richer. While still audible, the words of *Come Out*, already suggestive of social protest, achieve added weight through sheer repetition."[245] Throughout the piece, there is a gradual move from the actual text to texture that:

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[243]Potter, *Four Musical Minimalists: La Monte Young, Terry Riley, Steve Reich, Philip Glass*, 178.

[244]Ibid.

[245]Ibid.

"...yields, not purity of sound, but a dense complexity charged with the frustration and danger of pent-up repression, enhanced by the grim transmutation of a human outcry against injustice into the relentless machinations of a force beyond human control."[246] The listener is not only enticed into the music through the text and the texture, but also through the creation of the emotional impact.

From a physiological perspective, *Come Out* uses a transformational process. The listener perceives significant spectral change as a result of repetition.[247] The graduated phasing process leads to distant transformations of the text and voice, but the listener cannot determine exactly where the text is left behind. This is a question of aural choice:

> You can listen in a fairly abstract manner (freed direction), forgetting about the voice/text, or you can relate highlighted spectral qualities to their distant voice/text base. (Implied direction? How distant?) As far as the establishing of a new identity is concerned, if we think a new identity has been achieved we can certainly not put a source-cause label on it and would need to use spectromorphological and rhythmic terminology to define any new state.[248]

The transformation process is continually passing, but never arrives. The listener constructs temporary arrivals along the way, but never establishes a new state.[249] Therefore, there is a base identity, but there is no stable consequent identity: "...a firm source-cause as base but in the ultimate consequent environment anything between reminiscences of the source-cause and no source-cause at all."[250] The transformation

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[246]Ibid.
[247]Denis Smalley, "Defining Transformations," *Interface* 22 (1993): 287.
[248]Ibid.
[249]Ibid.
[250]Ibid., 288.

moves in implied or free directions from the base. The listener defines distance based on the individual's perception of direction.[251]

Goals for an Audience in *Drumming*:

Following the composition of several tape-looped pieces, Reich wanted to experiment with different types of music. His goal was to communicate with a larger audience through a different style of composition. He felt that he would achieve stasis more effectively if he learned to compose in a non-Western style.

In 1965, Reich returned to New York City where he apparently did not feel at home, and could not relate to the other artists and composers. Over the next few years, he continued experimenting with tape loops and composed several more pieces. He became fascinated with West African music after he attended a composition seminar at the Ojai Festival in California. He went to a lecture by the composer and scholar, Guther Schuller who was researching jazz's roots in West African drumming. He recommended the book, "Studies in African Music". In 1970, Reich became more serious about African music and discovered that the Ghanaian drummer, Alfred Ladzepko was teaching at Columbia University. He went there to meet Ladzepko and was advised to attend the University of Ghana to study African drumming.[252] He only stayed in Africa for five weeks, since he contracted malaria from mosquitoes.

Reich's trip to Africa influenced his compositional style and he grew fascinated with the rhythmic structure of West African music. This music was constructed of polyrhythms. Each player was assigned to a unique rhythmic pattern that was constantly

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[251]Ibid.

[252]Potter, *Four Musical Minimalists: La Monte Young, Terry Riley, Steve Reich, Philip Glass*, 207.

repeated. All of the patterns were played simultaneously and each had a different starting point.[253] Reich began to find similarities between his own techniques and African music.

> His music, too, was polyrhythmic, for the phasing process results in the layering of rhythmic patterns with different downbeats. His music, too, focused on rhythm rather than on melody or harmony. His music, too, used unrelenting repetition as a structural device. His music, too, favored a percussive severity of timbre. And his music, too, was a ritualistic activity that subjugated personal expression to communal process.[254]

His main concern as a Western composer was how he could 'honestly' write in a non-Western style. He was beginning to see other alternatives to this problem. Through his growing attraction to this music, he felt that he could not assimilate these foreign influences in composition and call them his own. Through this contemplation, he decided not to 'imitate' non-Western music, but to concretize his own style. He explains in an article in *The New York Times*:

> Alternatively, one can create a music with one's own sound that is constructed in light of one's knowledge of non-Western *structures*...One can study the rhythmic structure of non-Western music and let that study lead one where it will while continuing to use the instruments, scales and any other sound one has grown up with. This brings about the interesting situation of non-Western influence being there in thinking, but not in sound. This is a more genuine and interesting form of influence because while listening one is not necessarily aware of some non-Western music being imitated. Instead of imitation, the influence of a non-Western composer is likely to produce something genuinely new.[255]

These elements were employed in the following progression of his pieces: *Drumming*, *Music for Mallet Instruments, Voices and Organ*, and *Music for Eighteen Musicians*.

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[253]Smalley, "Defining Transformations," 72.
[254]Ibid.
[255]Richard Cohn, "Drumming," *Perspectives of New Music* 20 (1981): 234.

Through these works, Reich presented his incorporation of non-Western influences with the use of Western materials, combined together into his own unique form.

Musical Adaptation to the Audience of *Drumming*:

Throughout *Drumming* (1971), Reich accesses habitual repetition to generate a greater immediacy of stasis. The composition has no changes in rhythm or key, utilizing a build-up and reduction technique:

> Hypnotic and shimmering, *Drumming* was a perfect fusion of bongos, marimbas, voices, glockenspiels, whistle and piccolo. Reich had admitted that going to Ghana 'was a giant pat on the back' and confirmed his belief that 'percussion could be richer in sound than electric instruments.[256]

Drumming is divided into four sections and performed by thirteen musicians. They dress in white shirts and black pants and play from memory, bestowing extreme concentration. The sections are distinguished through instrumentation, and the first section is tuned for bongos, the second for marimbas and female voices, the third for glockenspiels, whistling, and piccolos, and the fourth for full ensemble. These sections are combined rhythmically and play continuously without a pause.

In *Drumming*, Reich establishes a relationship with the audience through his use of harmonic and rhythmic stasis and phasing, creating a hypnotic state on the listener. This piece evolves out of a twelve beat pattern that is continually repeated and remains in F sharp major. Reich's audible process consists of the gradual build-up of the twelve-beat pattern in several instruments. Each player has his own downbeat and creates a polyrhythmic structure. Following the construction of the patterns, he utilizes the

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[256]Mark Prendergast, *The Ambient Century: From Mahler to Trance-the evolution of sound in the electronic age* (London: Bloomsbury Publishing, 2000), 109.

phasing process. The performers contribute to this process through the selection of the resulting patterns. The performing discipline of this piece is similar to the musical discipline:

> I [Reich] am interested in perceptible processes. I want to be able to hear the process happening throughout the sounding music...Though I may have the pleasure of discovering musical processes and composing the musical material to run through them, once the process is set up and loaded, it runs itself...The distinctive thing about musical processes is that they determine all the note-to-note details and the overall form simultaneously.[257]

These patterns are melodic and result from the combination of two or more identical instruments, playing one or two beats out of phase with each other.[258] The listener is allured into the music for twenty to twenty-five minutes over a single uniform texture, and is notified of a change in texture through a change-over period. The audience becomes entranced by the music, while the fresh unmixed timbre emerges out of the old one.[259] In addition to phasing, Reich reaches his audience through a constant 'quaver-pulse'.[260] This is developed through the combination of different positions in the same rhythmic pattern, and is played by all of the instruments at the same time.[261]

The Effect of Stasis in *Drumming*:

Reich uses repetition in *Drumming* to produce stasis through his phase-shifting technique. After listening to the piece for only a few minutes, the effect of stasis overcomes the audience. Once the listener is settled into a listening groove, there is an

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[257]Ibid., 21.

[258]Steve Reich, *Steve Reich: Writings About Music* (Halifax: The Press of Nova Scotia College of Art and Design, 1974), 9.

[259]Michael Nyman, "Steve Reich: Mysteries of the Phase," *Music and Musicians* 20 (1972): 20.

[260]*Quaver-pulse*: timbre in the perpetual state of rhythmic animation

[261]Nyman, "Steve Reich: Mysteries of the Phase," 20.

immediate awareness of a change in texture. The audience is hypnotized by the technique through searching for specific patterns that underlie main themes.

Reich's technique is based on his process of gradually substituting beats for rests and rests for beats, occurring within a continuous rhythmic cycle. He divides this into two separate rhythmic procedures including, rhythmic construction and rhythmic reduction.[262] In rhythmic construction, he uses a process in which he is continually adds notes to each bar. This is demonstrated on the first page of the score (see below). In rhythmic reduction, the process is reversed and in each bar, a beat is omitted. This occurs at the end of each section as a transition into the next section, producing an awareness of a change in sections for the listener. The overall affect of his rhythmic construction and reduction is 'wave-like'.

Drumming is divided structurally into four distinct sections based on the overall instrumental sound. Throughout this piece, the main bond between Reich and the listener is his use of repetition and phasing. Each section employs similar rhythmic patterns, and the beginnings and endings of each section are similar. Once the instrumentalists have played a series of repetitions, the overall sound is similar to the 'patter of rain'. Throughout each section, the audience is mesmerized by one groove of music and the addition of rhythmic patterns. The listener then settles into another groove. Reich quotes certain musical styles within the repetitive structure. For example in the marimba section, he adds rhythms and harmonies that give the music an 'oriental flavor'. In other segments, the listener may hear vocals over top of the instruments. Each section produces a 'wave-like' effect for the listener, since the piece begins with a gradual

[262]Cohn, "Drumming," 235.

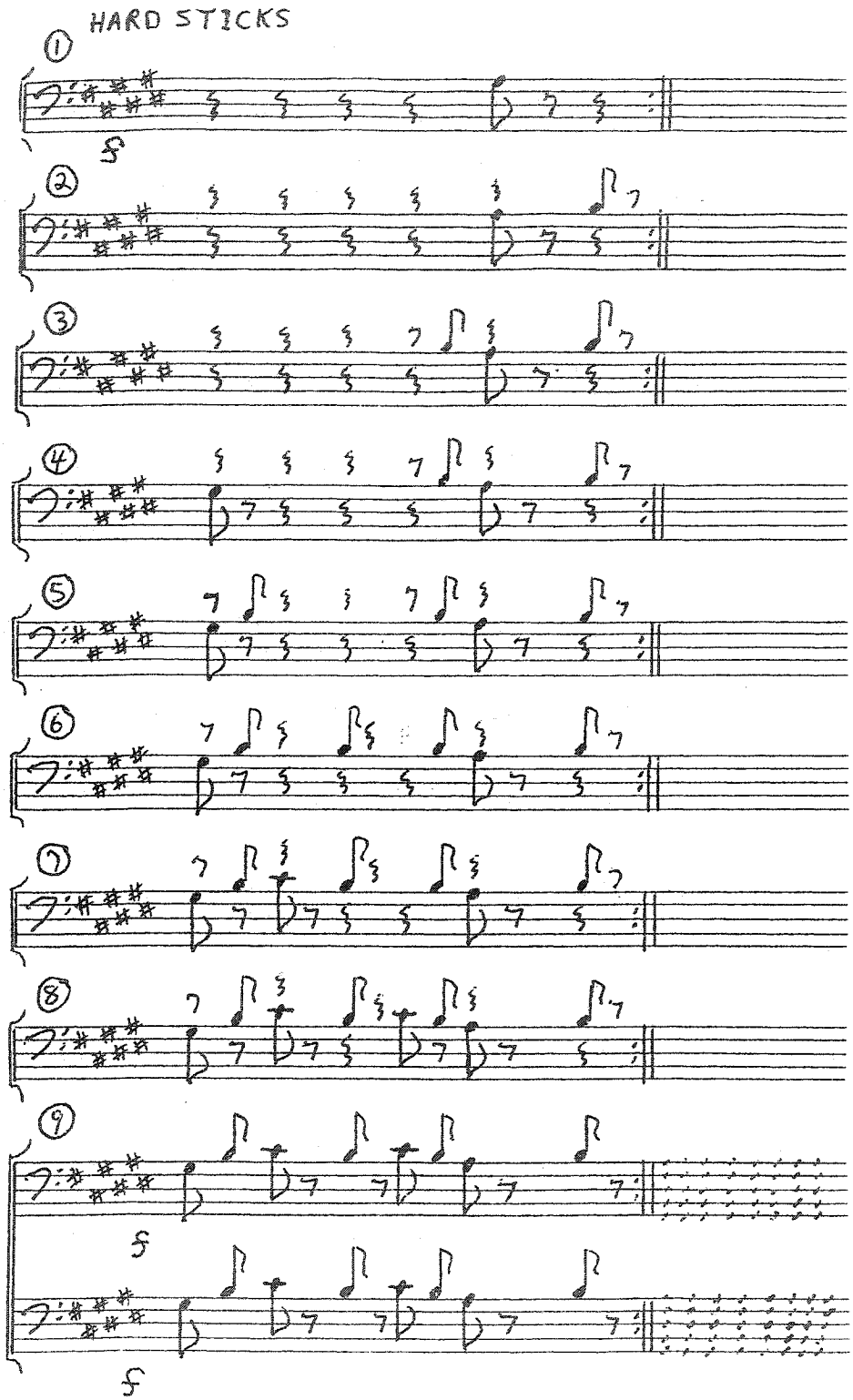
increase of instruments and sound. From a listener's perspective, *Drumming* is completely mesmerizing and hypnotic.

In the first section, the performance begins with two, three, or four drummers that play in unison at bar one. On each page of the score, Reich gives instructions for the performer. On the first page, he states:

> When one drummer moves to the second measure and adds the second drum beat the other drummers may either join him immediately or remain at bar one for several repeats. This process of gradually substituting beats for rests within the pattern is continued with at least six or eight repeats for each measure until all drummers have reached the fully constructed pattern at measure eight. At nine only drummers one and two continue, and after several seconds of getting comfortable in close unison, drummer two begins to slightly increase his tempo so that after twenty or thirty seconds he has finally moved one quarter note ahead of drummer one, shown at ten. The dotted lines indicate this gradual shift in phase relations between the two drummers. Throughout the piece the alternation of stems up and stems down indicate the alternation of right and left hands. The choice to which hand is indicated by steps up or down is left to the performers.[263]

The following page displays the first page of the score.

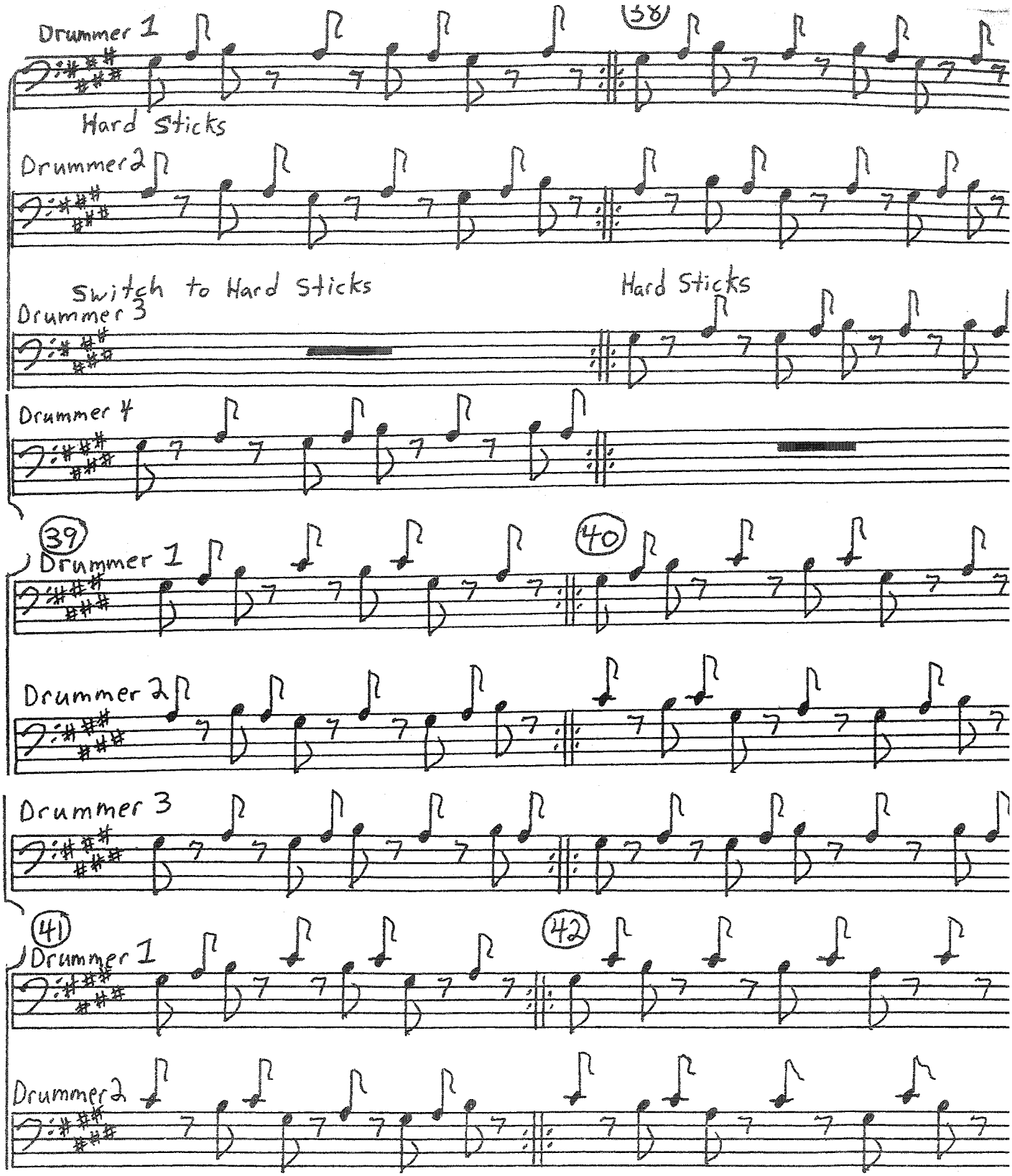
[263]Steve Reich, score, 1.



Example 24: Steve Reich, *Drumming*, first page of score[264]

[264]Terry Riley, *Drumming* (New York: unpublished score, 1971), 1.

At the beginning of the first section or 'drum' section, the texture is extremely sparse and begins with the beating of eighth notes on one drum. This is subsequently followed in a progression by the second, third, and fourth drums. Once this pattern of all four drums initiates itself, the texture becomes increasingly denser until the listener cannot distinguish between the individual notes. Certain patterns last for approximately ten minutes, while the listener becomes captivated by the rhythmic passages. After listening to the same passage for two minutes, the listener's ear focuses on various other rhythmic patterns within the complexity of notes. Certain drums play more prominently than others and these are heard above the texture. The switching from soft sticks to hard sticks also generates texture within the section. In various sections through the mass of sound, certain drums play a more soloistic line and others form a foundation with a steady pulse. The audience is extremely focused on the music by listening to the rhythmic passages within larger passages. Throughout bars 37 to 42, the drums are a beat out of sync. The following page displays bars 37 to 42.



Example 25: Steve Reich, *Drumming*, bars 37-42, drums playing one beat off from each other[265]

[265]Ibid., 6.

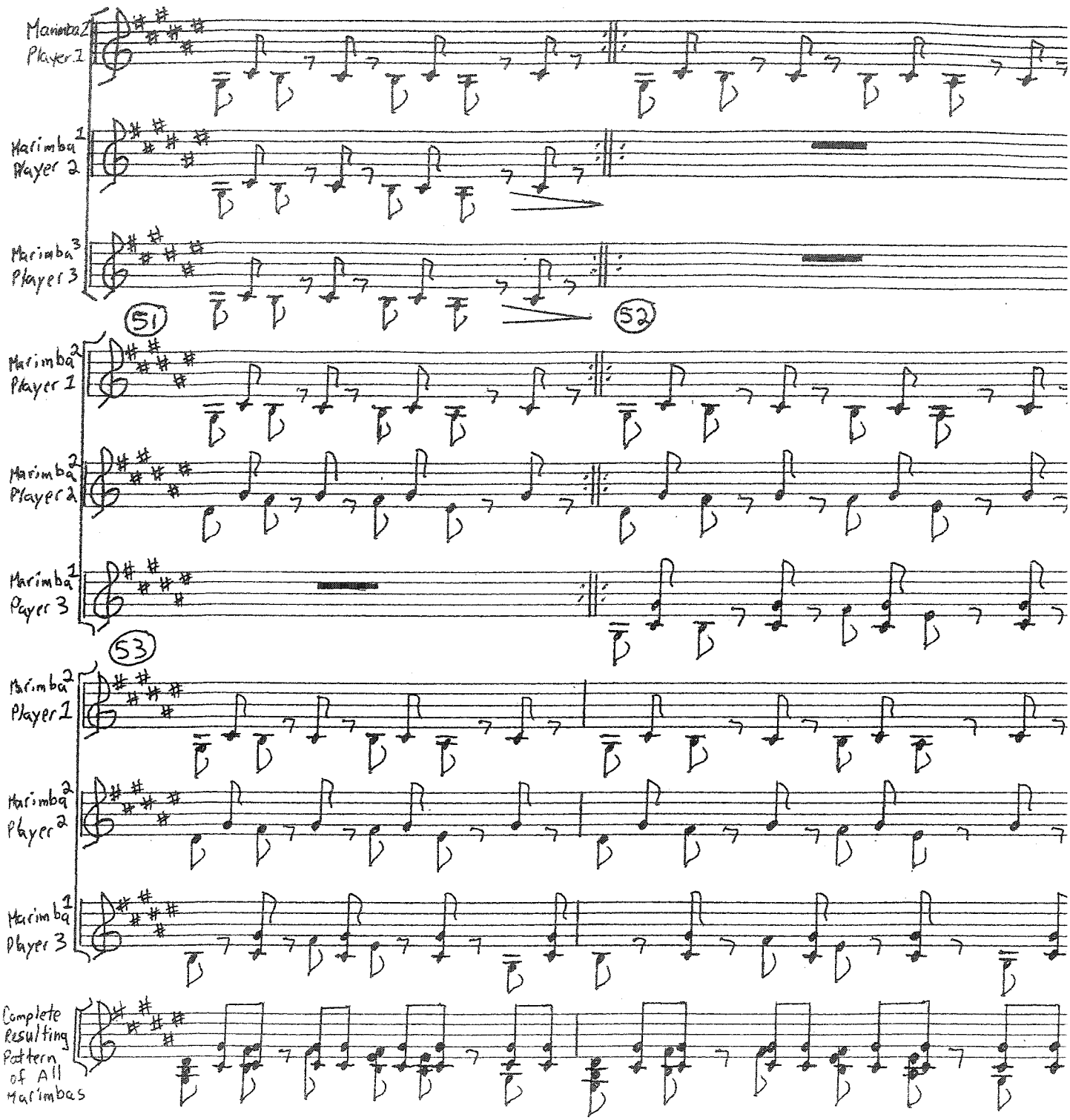
At the end of this section, the texture is thin similarly to the beginning, and the music moves into the marimba section.

The beginning of the marimba section starts with three marimbas in unison. Reich gives a set of instructions for this opening passage:

> After several seconds in unison, players two and three gradually fade out leaving player one alone at measure fifty. In a few seconds he is joined by player two, on marimba two at bar fifty one, and a few seconds later, at fifty two, they are joined by player three on marimba one. Player three then slightly increases his tempo so as to gradually move one quarter note ahead of the other two. At bar fifty three, two, three, or more female singers sing patterns resulting over this combination of three marimbas which is written out in full and called "complete resulting pattern of all marimbas". The singers not only double the exact notes and rhythmic set up by the marimbas, but also use their voices to precisely initiate the sound of these instruments by using a soft consonant attack like "B" or "D" with a "U" (as in "you") vowel sound. (A) is a duet which may be joined with (B) to form a trio. In (C) all the singers may sing one after the other so that the pattern is maintained constantly, one singer breathing while another sings. Other resulting patterns may be added or substituted for blank bars.[266]

The following page demonstrates the beginning of this section:

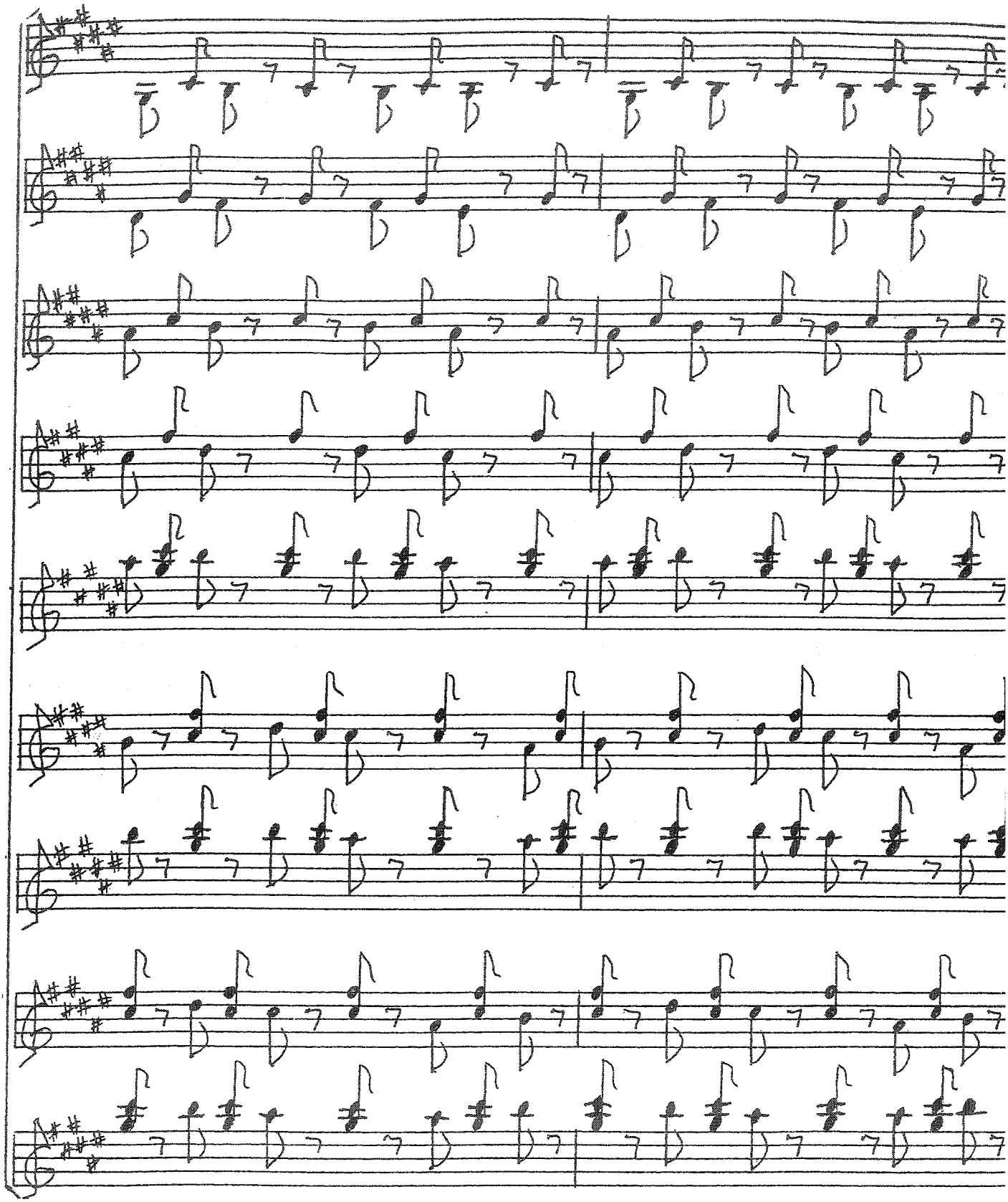
[266]Ibid., 8.



Example 26: Steve Reich, *Drumming*, bars 49-53[267]

[267] Ibid.

The marimba section begins with rhythmic virtuosity and eventually, the overall sound becomes less complex through a unison passage. This is combined with the voices and after a few seconds, the rhythm matures into a steady stream. In this part, the listener cannot distinguish between the notes. The overall sound is produced by the 'resulting' patterns which is a combination of all the rhythmic patterns at bar 63. The following page displays these patterns.



Example 27: Steve Reich, *Drumming*, bar 63, resulting pattern[268]

[268] Ibid., 13.

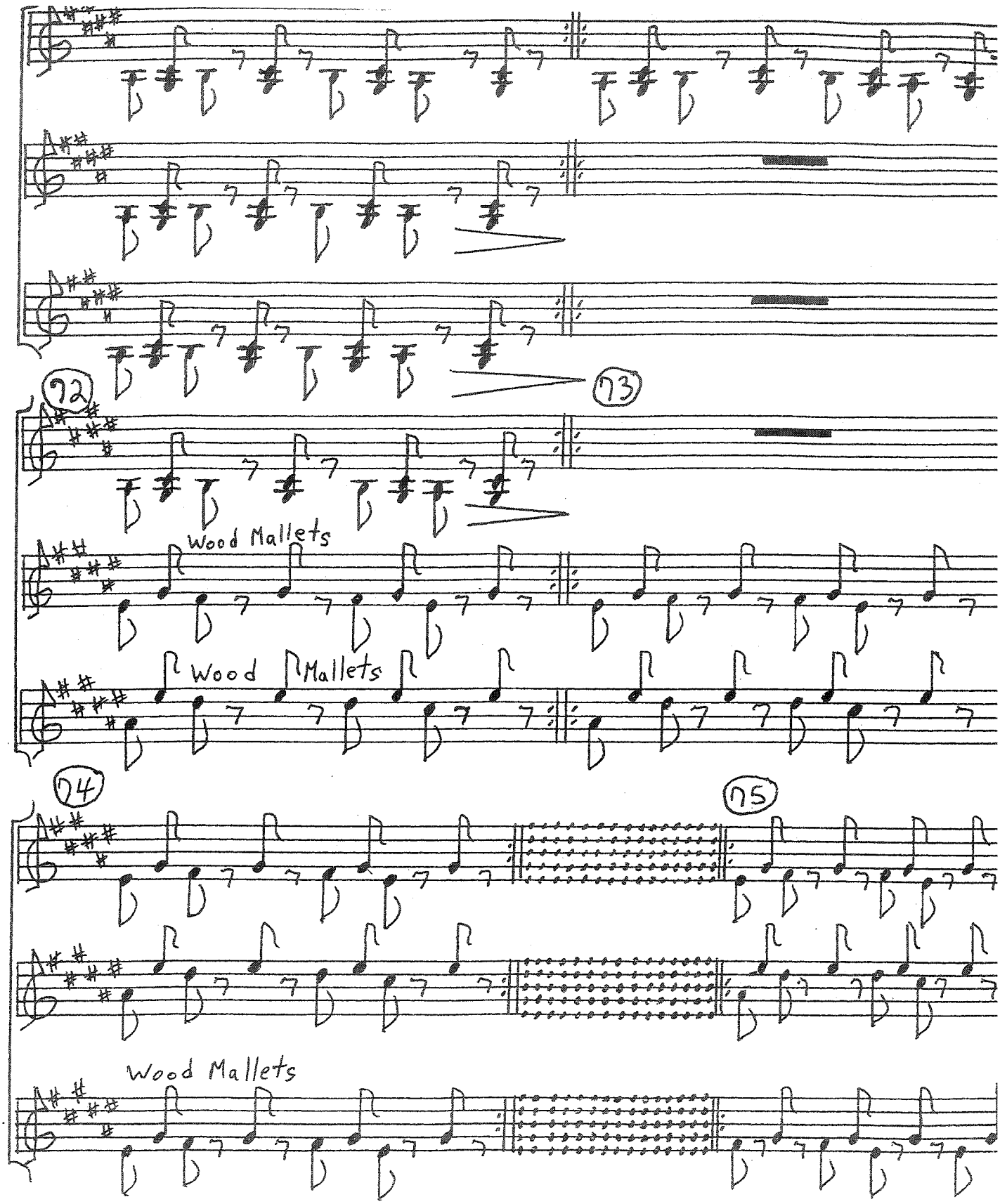
In addition, it becomes difficult for the listener to distinguish between the voices and the marimbas. After a few minutes, marimbas one and two stretch their range to produce a 'sharper' sound while marimbas three and four, lay a steady rhythmic pulse underneath the texture. This continues until the end of the section when the music transfers into the glockenspiel section.

The glockenspiel section begins in a complexity of rhythmic texture. Reich gives instructions for the performers of this section. This is demonstrated in the instructions below:

> After several seconds players one and two gradually fade out leaving player three alone at bar seventy one. He is re-joined by players one and two both playing glockenspiel two at measure seventy two. Player three then very gradually fades out leaving players one and two only at bar seventy three. At seventy four player three re-enters in unison with player one, and after several seconds slightly increases his tempo so that in ten to twenty seconds he is one quarter note ahead of player one as shown at seventy five.[269]

The following example displays the beginning of the glockenspiel section.

[269]Ibid., 16.



Example 28: Steve Reich, *Drumming*, bars 70-75[270]

[270]Ibid., 16.

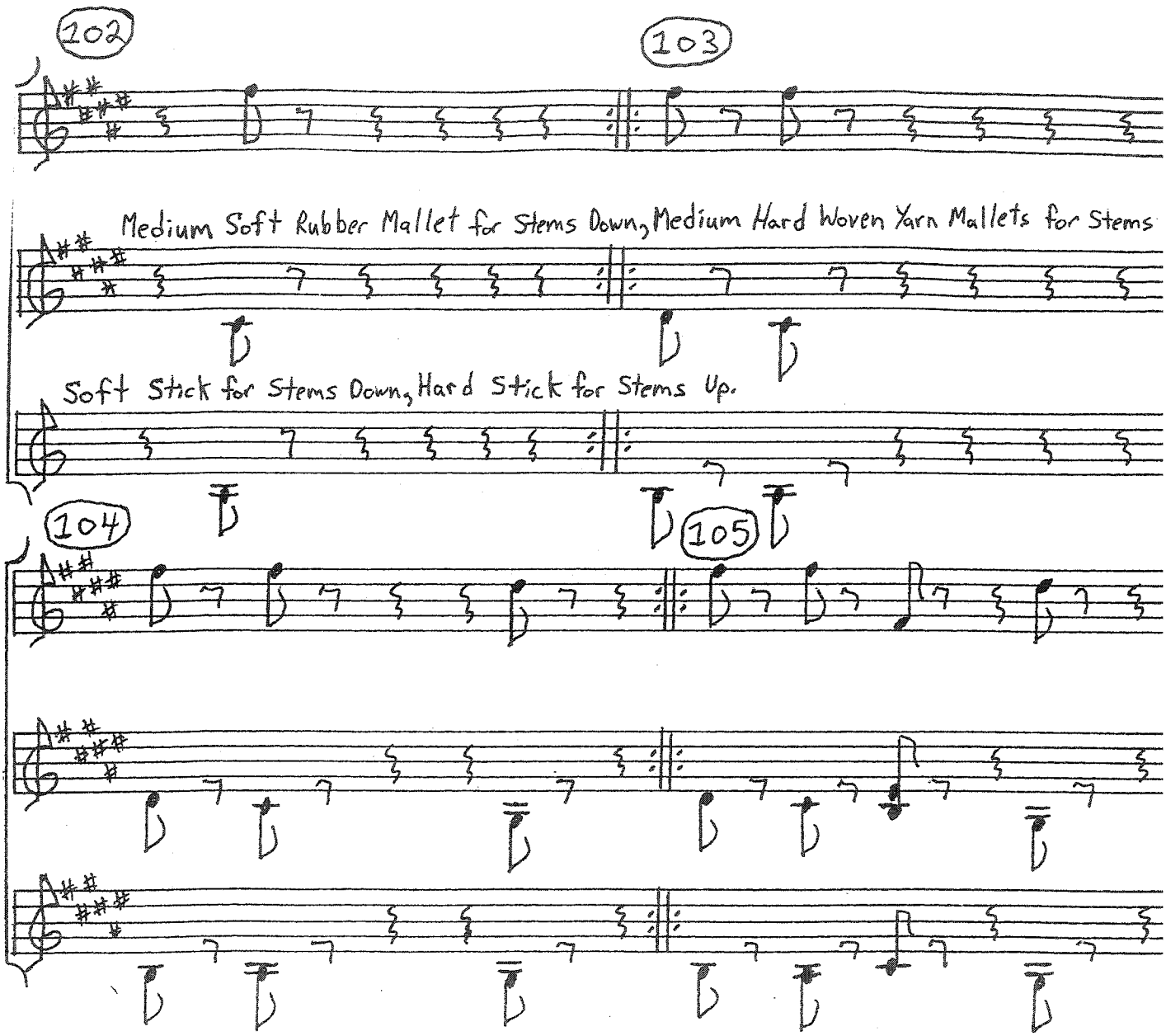
At the beginning of this section, the instrumentalists play similar patterns one beat out of sync, creating full texture and rhythmic complexity. After a few seconds, this texture decrescendos, and a new pattern emerges on higher notes to create a 'tinny' sound. The piccolo and whistling enter to re-emphasize this 'metallic' sound. The glockenspiels build a foundation underneath the texture for the whistling and piccolo sections, which continually change. Throughout this section, the music constantly moves in a 'wave-like' pattern, fading until the end of the passage.

The final section of *Drumming* produces the greatest hypnotic state on the listener. This section utilizes the greatest combination of all the instruments. Below is an example of Reich's instructions for the beginning of the last section:

> At 102 two players on glockenspiels are joined by two marimba players and two drummers. Any one player, on any of the three instruments may add the first new beat at bar 103 and the other players should, only after several repeats of bar 102, join him. This gradual substitution of beats resets as continued until all six performers are playing the fully constructed pattern at measure 109.[271]

The following page presents the beginning of this section.

[271] Ibid., 23.



Example 29: Steve Reich, *Drumming*, bars 102-105[272]

[272]Ibid., 22.

These bars begin similarly to the drum section, while each instrument joins into the texture through a gradual progression. The glockenspiels and marimbas play in unison and the drums play a separate pattern. Eventually, each instrument branches off and plays a completely different rhythmic pattern. This becomes more complex and the listener begins to hear specific patterns within larger patterns. The voice parts and piccolo join into the complexity, until the listener cannot distinguish between the notes. The phasing process is difficult to follow, since the timbral blending is at its fullest: "...Reich freely intermingles the various tone colors provided by the three instrumental families. A kaleidoscope of sound is the result—rich, animated, and hardly ever seeming repetitive, even though the listener by now has been hearing the same rhythmic pattern for over an hour."[273] The piece abruptly ends at its highest point of texture. From a listener's perspective in *Drumming*, the greatest identification with the music occurs through the searching for rhythmic patterns within larger patterns. This creates a high level of interest within an extremely repetitive piece. At this stage in his compositional career, Reich's music focused on a full sonorous texture, emphasizing the beauty of sound.[274]

In the live performances of *Drumming*, these: "...elucidated many of the shifts and processes which became visible and even dramatic, notwithstanding the consummate ease with which the work is now performed by the group."[275] The concert reviews for the premiere of this composition demonstrate his ability to incorporate musical techniques into his own work, and to captivate the audience. In Michael Nyman's

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[273]Cohn, "Drumming," 238.
[274]Ibid.
[275]Simon Emmerson, "Reich and Berio," *Music and Musicians* 25 (1977): 58.

review, "Steve Reich: Mysteries of the Phase", he comments on Reich's ability to charm the listener through his phase-shifting technique:

> The change-overs are managed by the new instruments doubling the exact pattern of the instruments already playing. These latter are gradually faded out (like a slow motion baton change in an eternal relay race)...This is especially beautiful when the soft warmth of the marimbas takes over from the harder, more neutral sound of the tuned bongos.[276]

There are no technical devices hidden within the structure of this composition, and the listener hears the different layers throughout the texture. Nyman comments in the same review:

> Yet the music is far from one-dimensional since the phasing process unlocks a fascinating dimension of 'impersonal, unintended, psycho-acoustical by-products of the intended process', which are beyond the composer's control and repay close attention on the listener's part. In *Drumming* they are particularly magical...[277]

Through this simplistic musical structure, a number of different cross-rhythms are produced. These patterns are a result of the vocal textures that imitate the instruments: "...by gradually fading in the patterns, cause them gradually to rise to the surface of the music; and then, by fading out, slowly to subside, allowing the listener to hear these patterns along with many others which are actually sounding in the instruments."[278] Reich's ideas are parallel to African drumming including his use of rhythmic structure, repetition, pulse, constant pitch, and the slowness of the rate of change. Reich has the ability to draw his audience into the music through these techniques, combined with his use of phase shifting.

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[276]Nyman, "Steve Reich: Mysteries of the Phase," 20.
[277]Ibid.
[278]Ibid.

Goals for an Audience in *Different Trains*:

Following his composition of *Drumming*, Reich's goal was to unite with a larger audience through a political statement. He wanted to use the techniques that he had developed in both *Come Out* and *Drumming* combined with new ideas to communicate his message.

Different Trains (1988) was originally written for the Kronos Quartet: "*Different Trains* began to crystallize as Reich found himself 'unexcited by the prospect of working with totally conventional forces'. So he turned to a newly-available electronic device, the sampling keyboard, and decided to combine it with the quartet."[279] From the beginning, Reich wanted to use recordings of voices for this piece, but was unsure about the subject matter:

> When I [Reich] was one year old my parents separated, and my mother went to California and my father stayed in New York. I used to go back and forth on these very romantic, very exciting, somewhat sad train trips of four days and four nights, with Virginia, the woman who took care of me. And the years that I did that were 1939 to 1942. You know the famous photograph of the little kid in the Warsaw ghetto with his hands up in the air? He looks just like me! I thought to myself, there but for the grace of God- I was in America, very sheltered and very fortunate, but had I been across the ocean, I would have been on another train. I would have been taken to Poland and I would be dead.[280]

After deciding on the title, Reich began to find individuals who had experienced train trips during the war. He found recordings of Holocaust survivors that shared their memories of the train trips: "These people came from vastly different cultures, but they all shared vivid recollections of trains- and they all had melodious voices that hovered on

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[279]Schwarz, *Minimalists*, 94.
[280]Ibid., 95.

the brink of song."[281] The work consisted of recorded voice samples and recorded train whistles that were layered overtop of a string quartet. The vocal samples and the train sounds were transferred to tape through the sampling keyboards and a computer. *Different Trains* is divided into sections, and the first major movement represents, "Before the War". This section: "...is filled with the unceasing clatter of tracks and the thrilling sound of whistles; it conveys 'the innocence, the expansiveness, the whole romance of the train in American folklore."[282] The second movement is entitled "Europe-During the War" and: "...is dominated by the wail of sirens and the horror of Nazi cattle cars. At its climax- when a survivor recalls Auschwitz, with its 'flames going up to the sky'- the unrelenting pulse suddenly ceases, and a sustained chord of shocking simplicity fades into the distance."[283] The last movement is entitled "After the War" and: "...attempts to recapture some of the earlier era's lost innocence, but finds it irrevocably tarnished by the intervening tragedy."[284] The speech patterns that are utilized in this composition act as vehicles for character and diversity. There are forty-four movements that consist of short sections and vary according to their character or meaning of a spoken phrase:

> In movement three, for example, Reich sets the words "one of the fastest trains" to a fast tempo busy with speaking and train whistles. In contrast, the next section, "but today, they're all gone", is set to a slower tempo with less vocal activity and no train sounds. Intended or not, this abrupt sectionalization gives one the fitting impression of being introduced to segments of a long train ride.[285]

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[281]Ibid., 96.
[282]Ibid.
[283]Ibid.
[284]Ibid.
[285]Brent Heisinger, "Steve Reich. Different Trains," *American* Music 10 (1992): 110.

This piece invokes a personal response from Reich, since he is Jewish: "I did this piece because, as a Jew, had I lived in Europe at that time, I would not be here. It tries to present as faithfully as possible the era in which I survived, and in which they perished."[286] Reich felt that this was the most realistic method in the presentation of this piece.

Different Trains became successful with the participation of the Kronos Quartet, who premiered this composition and recorded it for Nonesuch.[287] Kronos made four separate string quartet recordings, combined with the train and speech sounds. Reich's main goal for the piece was to:

> ...lead to a new kind of documentary music video theater in the not too distant future. Reich knew that his music-theatre work would assume the form of a vastly expanded *Different Trains*- that it would now present the documentary material, doubled by live musicians and singers, on video as well as audio. But as of yet he had no idea what its subject would be.[288]

His use of text has continually evolved from the 1970s. In his early works, women singers were featured: "...in particular, Reich used women's voices for their ability to act both as sustaining instruments and as highly mobile treble instruments capable, through the use of different consonants, of a wide range of percussive attacks."[289] In the

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[286]Ibid.

[287]Ibid., *Kronos Quartet*: "The members of Kronos, with their unconventional appearance and equally unconventional repertory, have long championed the American minimalists composers; in the early 1980s they coaxed Terry Riley out of compositional silence and eventually gave the first performance of his two-hour *Salome Dances for Peace* (1986), and in 1995 they released a disk devoted to Glass's four mature string quartets."

[288]Ibid.

[289]Ibid.

early 1980s, Reich's *Tehillim*[290] and *The Desert Music*[291] used texts to emphasis articulation.

Musical Adaptation to the Audience of *Different Trains*:

Reich's focus throughout *Different Trains* is his use of sound and music, and their relationship through repetition: "...establishes the illusion of the sonorous envelope through a texture that suggests both an internal, oceanic immersion in repetitive fragments of sound, *and* an obsessive, external, and iconic representation of trains."[292] This piece is an exploration of sound and language, since the intervallic structures of the accompaniment imitate the intervallic structures of the language.[293]

Through a structural analysis of *Different Trains*, Reich not only induces the listener through his lyrics, but through his musical techniques. This composition uses many techniques that are not found in Reich's previous works:

> ...instead of interlocking canons and slow-moving chords, there are sinuous melodies, rapid modulations, and frequent tempo changes. Up to four over-dubbed quartets are combined with the speech samples and train whistles, and the unconventional ensemble stoked Reich's creative juices far more than any traditional orchestra had ever done.[294]

His use of text is demonstrated in the following table.

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[290] *"Tehillim"*: a work written in the early 1980s in which live voices articulated different texts. This piece was written for four women's voices and accompanied by chamber orchestra. The singers were required to sing settings of the psalms in the original Hebrew.

[291] *"The Desert Music" (1984)*: This piece used a chorus of twenty-seven voices, with orchestral accompaniment, and settings of poetry by William Carlos Williams.

[292] David Schwarz, "Listening Subjects: Semiotics, Psychoanalysis, and the Music of John Adams and Steve Reich," *Perspectives of New Music* 31 (1993): 40.

[293] Ibid.

[294] Ibid., 97.

1 America - Before the war

'from Chicago to New York' (Virginia)
'one of the fastest trains' (Virginia)
'the crack train from New York' (Lawrence Davis)
'from New York to Los Angeles' (Lawrence Davis)
'different trains every time' (Virginia)
'from Chicago to New York' (Virginia)
'in 1939' (Virginia)
'1939' (Lawrence Davis)
'1940' (Lawrence Davis)
'1941' (Lawrence Davis)
'1941 I guess it must've been' (Virginia)

2 Europe - During the war

'1940' (Rachella)
'on my birthday' (Rachella)
'The Germans walked in' (Rachella)
'walked into Holland' (Rachella)
'Germans invaded Hungary' (Paul)
'I was in second grade' (Paul)
'I had a teacher' (Paul)
'a very tall man, his hair was concretely plastered smooth' (Paul)
'He said, 'Black crows invaded our country many years ago' ' (Paul)
'and he pointed right at me' (Paul)
'No more school' (Rachel)
'You must go away' (Rachel)
'and she said 'Quick, go!' ' (Rachella)
'and he said, 'Don't breathe!' ' (Rachella)
'into those cattle wagons' (Rachella)
'for 4 days and 4 nights' (Rachella)
'and then we went through these strange sounding names' (Rachella)
'Polish names' (Rachella)
'Lots of cattle wagons there' (Rachella)
'They were loaded with people' (Rachella)
'They shaved us' (Rachella)
'They tattooed a number on our arms' (Rachella)
'Flames going up to the sky - it was smoking' (Rachella)

3 After the war

'and the war was over' (Paul)
'Are you sure?' (Rachella)
'The war is over' (Rachella)
'going to America' (Rachella)
'to Los Angeles' (Rachella)
'to New York' (Rachella)
'from New York to Los Angeles' (Lawrence Davis)
'one of the fastest trains' (Virginia)
'but today they're all gone' (Lawrence Davis)
'There was one girl who had a beautiful voice' (Rachella)
'and they loved to listen to her singing, the Germans' (Rachella)
'and when she stopped singing they said, 'More, more' and they applauded' (Rachella)

Example 30: Steve Reich, *Different Trains*, 46 spoken phrases of text.[295]

[295]Christopher Fox, "Steve Reich's 'Different Trains," Tempo 172 (1990): 3.

Through the text, "Reich is attempting nothing less than a brief history of perhaps the most appallingly systematic onslaught, in this or any other century, by a government on the lives of millions of people."[296] In the third movement when the Pullman porter states, 'But today, they're all gone', he is referring to the luxurious trains on which he worked. From the listener's perspective, this may be referring to the millions of people who died over the course of the War.

Through the evolution of the music, the first movement begins confidently, but ends in silence at the end of the second movement. The third movement expresses:

> ...the immediate personal response of Holocaust survivors to their arrival in America, rather than a more general historical assessment of the world in the post-war years. As the movement continues, interweaving Rachella's voice with those of Reich's governess and Mr. Davis, and particularly as it concludes in the extraordinarily poignant music that accompanies Rachella's final reminiscence, Reich would seem to be suggesting that while America provided a new world in which to escape the external reminders of Nazi oppression, the internal wounds of the Holocaust are not so easily resolved.[297]

Although this piece is divided into three movements, there are several tempo-changes within each movement. Through his phasing technique, the pace of the music adjusts to accommodate each new phrase, resulting in the preservation of phrases. There are some instances in which Reich loops one or two words within a phrase to develop a new rhythm out of what is already present.[298] This occurs in the first movement:

> ...the second phrase starts as 'one of the fastest trains' (repeated three times), and then becomes 'one of the fastest trains, fastest trains' (repeated four times), and then becomes 'one of the fastest trains, fastest trains, one of the

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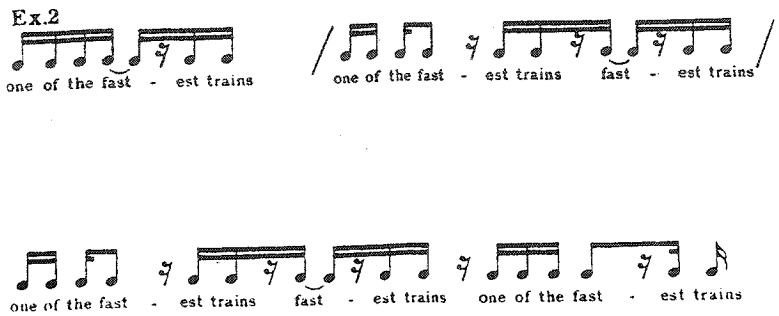
[296]Ibid., 2.
[297]Ibid., 4.
[298]Ibid., 6.

fastest trains' (repeated seven times before the next phrase is introduced...[299]

Below is an example of this repetitive text and rhythm:



Example 31: Steve Reich, *Different Trains*, 'one of the fastest trains'[300]

[299]Ibid.
[300]Ibid.

Reich forms an alliance with his audience through his clarification of speech and the instruments that echo each phrase of text. The instrumental imitations indicate the introduction of a new phrase of text. In the second movement, certain voices are submerged into the instrumental music. This produces a recurrent impression of the voice's inflection, enabling the listener to piece the phrase together. While this is occurring, ambiguity is set up between the music's narrative and the speaker's stories.[301]

Through a detailed harmonic analysis of the piece, each of the melodic lines reveals that Reich has used only three different types or categories of chords, including the harmonies of G, F, and A. It should be noted that each of the instruments and vocals have been analyzed separately. When infused or played as a whole entity, notes from each of these three chords are heard as broken tone clusters. In certain instances, the listener only hears the fragmented arpeggios of G, F, and A. The following chart demonstrates an example of the broken tone clusters and fragmented arpeggios throughout the composition:

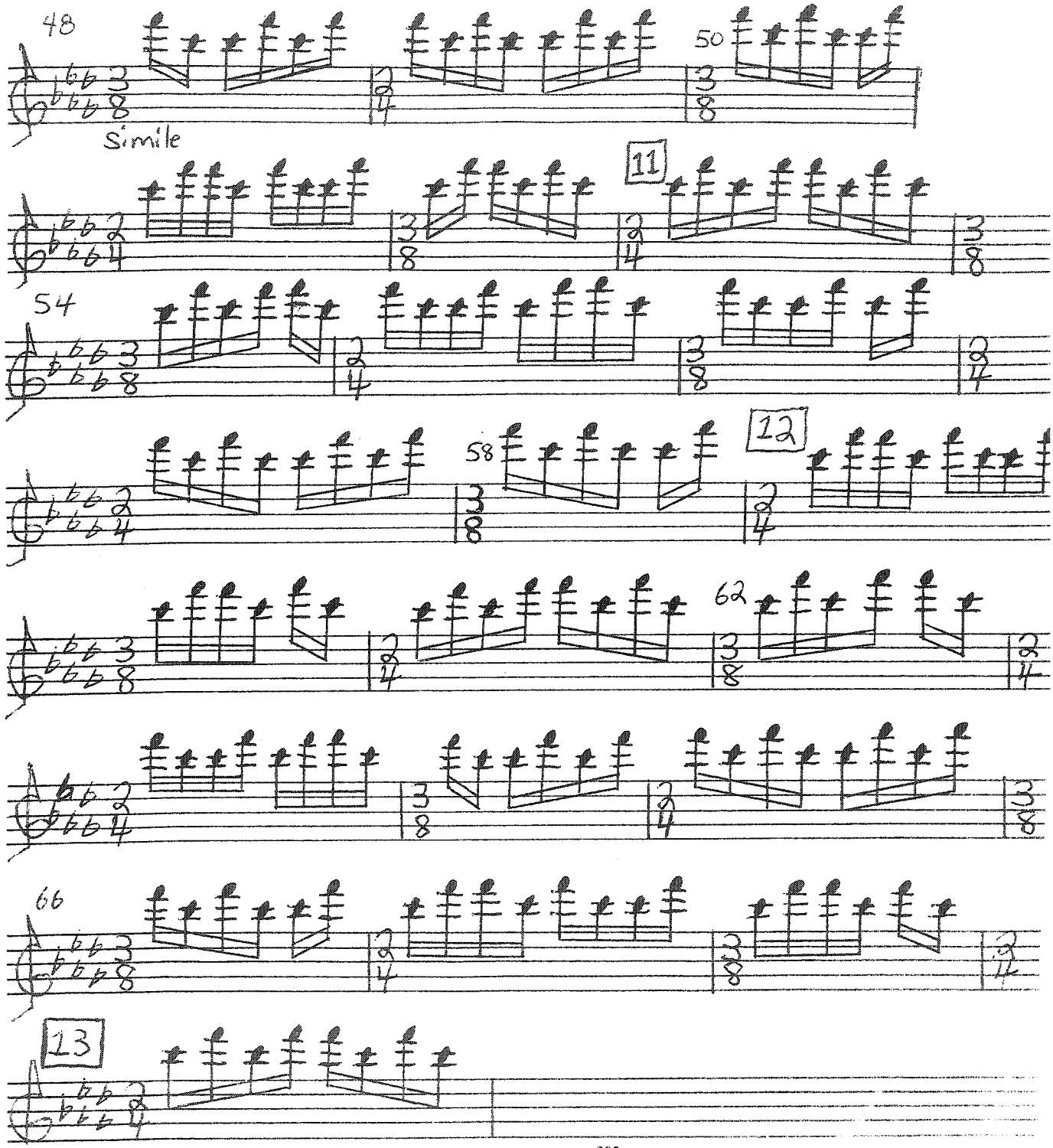
Broken Tone Clusters	**Fragmented Arpeggios**
Example (bars 303-318): Bb-Db F-Cb-E (G) (F) (A)	**Example: F-Ab G-B etc.**
(bars 269-318): G#-B-D C# (G) (F)	

***note: combinations of notes from all three harmonies, and combinations of notes from two of the three harmonies**

Example 32: Steve Reich, *Different Trains*, broken tone clusters and fragmented arpeggios

[301] Ibid., 7.

Below is an example of the first section of the violin part:



Example 33: Steve Reich, *Different Trains*, bars 48-69.[302]

[302]Steve Reich, *Different Trains* (New York: Boosey and Hawkes, 1998), 1.

Through an examination of each part, the recurring harmony of G is demonstrated in the tables below:

Violin

G major	Gb major	G minor	G# minor
Bars: 9-11	219, 221-222	105-114	19-38
G-D	Gb-Bb	G-Bb	G#-D#
111-15	239	102-138	41-62
G	Bb	G-Bb	B-D#
125-28	305-15		91-102
G	Bb		G#-B
136-38	317-80		104-30
G	Bb		B-D#
203-4	24-25		
B	Bb		
210-11			
B			

Viola

G major	Gb major	G minor	G# minor
Bars: 9-11	24-25	356-369	328-330
G-D	Bb	G-Bb	G#
152-53	383-85		336-350
G-B	Bb		G#
155-67			41-50
G			B-D#
175-76			
G			
180-81			
G			
233-47			
G-B			

Cello

G major	Gb major	G minor	G# minor
Bars: 9-28	226-30	243-63	326-38
G-D	Gb-Db	Bb	G#
304-23	237-41	349-62	31-8
G	Gb-Db	G-Bb	G#-D#
326-38	251-55		234-45
G	Gb-Db		D#
311-40	305-15		131-35

G	Db	G#
371-432	243-263	147-51
G	Bb	G#
		165-68
		G#

Example 34: Steve Reich, *Different Trains*, harmonic analysis of violin, viola, and cello with vocals, demonstrates the progression of harmony in G

The harmony of F that is interspersed throughout the parts is demonstrated in the tables below:

Violin

F major	F minor	F# minor	F# major
Bars: 14-23	45-6	141-52	234-45
A	F-Ab	F#-A	A#
17	46	60-80	271-84
F-A	F-Ab-C	F#-C#	A#
47-76	264-65	81-100	103-30
F-C	F-Ab	F#	A#-C#
95-113	265		151-67
121-24	F-Ab-C		F#-A#
132-36	3-16		
200-202	Ab-C		
207-208	288-99		
213-214	Ab		
232			
F			
155-96			
C			
266-95			
F-C			
117-122			
F-A			
186-200			
215-28			
250-66			
C			
18-57			
F-C			
26-30			
C			

Viola

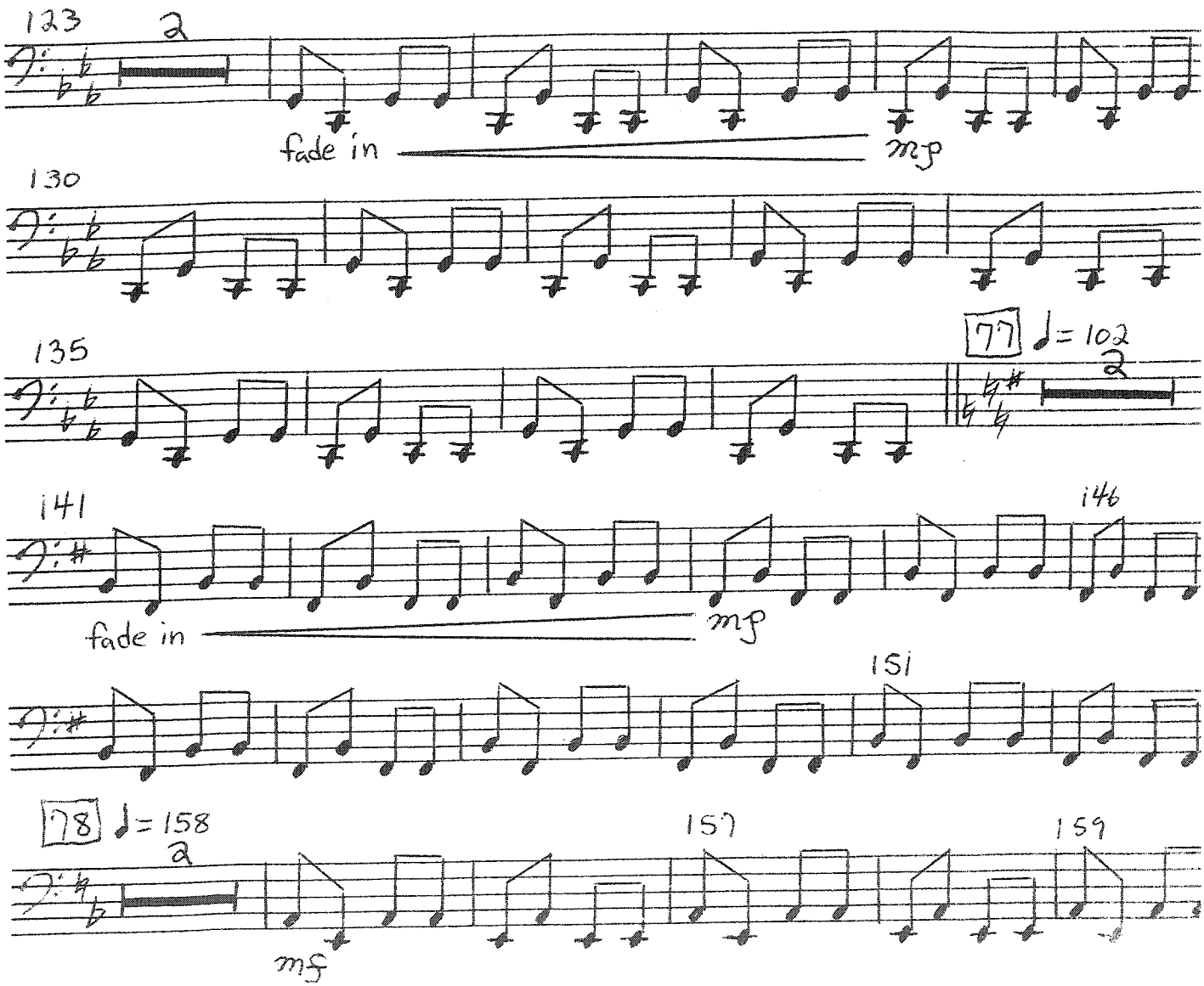
F major	F minor	F# minor	F# major
Bars: 14-23	31-76		334-35
A	F-Ab		F#
17	258-95		
F-A	F-Ab		
26-30			
C			
168-69			
F			
176-77			
F			
182-83			
F			
376-82			
C			
75-88			
F-C			
319-80			
F			

Cello

F major	F minor	F# minor	F# major
Bars: 95-138	37-39	186-200	186-200
C	F-Ab	F#	F#
234	270-71	271-86	271-86
F	F-Ab	C#	C#
245	9-16	119-23	119-23
F	F-Ab	C#	C#
376-85	287-299	127-31	127-31
F	C	F#	F#
287-99	287-99	135-39	135-39
C	C	C#	C#
319-80	319-80	143-47	143-47
C	C	F#	F#
		151-57	151-57
		C#	C#
		161-65	161-65
		F#	F#

Example 35: Steve Reich, *Different Trains*, harmonic analysis of violin, viola, and cello with vocals, demonstrates the progression of harmony in F

In bars 435-521 of the violin part, an A-flat augmented chord is implemented throughout this section. This chord is created by adding E to the F minor chord. The function of the E is to displace the F, and is also a derivative of the F harmony. In the viola part, an A-flat augmented chord is used throughout bars 65-72. Below is an example of the cello



Example 36: Steve Reich, *Different Trains*, bars 123-159.[303]

[303]Ibid., 10.

The following example displays the harmony in A for the cello part:

Cello

Bars:	**Harmonies:**
155-84	**E-A**
203-11	**E (5^{th} of A)**
215-28	**A-flat**
250-66	**E (5^{th} of A)**
271-86	**C# (3^{rd} of A)**
287-99	**C (3^{rd} of A)**
319-80	**C (3^{rd} of A)**
119-23	**C# (3^{rd} of A)**
123-27	**E (5^{th} of A)**
135-39	**C# (3^{rd} of A)**
139-43	**E (5^{th} of A)**
151-57	**C# (3^{rd} of A)**
157-61	**E (5^{th} of A)**

Example 37: Steve Reich, *Different Trains*, harmonic analysis of cello with vocal part, demonstrates the harmonies of A

The above harmonic analyses demonstrate the position of the three main harmonies used, and their repetition forms a foundation for the composition. The purpose of this analysis is to structurally prove that Reich has formed a compositional style in which the listener becomes accustomed to hearing certain harmonies. Reich links with his audience through the recurrences of the main harmonies of G, F, and A.

The Effect of Stasis in *Different Trains*:

The audience's identification with *Different Trains* is demonstrated through a physiological analysis of the music's impact on the listener. Reich uses the repetition of melody, rhythm, harmony, and form in order to achieve stasis through his phase-shifting technique. In this piece: "Reich establishes the illusion of the sonorous envelope through a texture that suggests both an internal, oceanic immersion in repetitive fragments of sound, *and* an obsessive, external, and iconic representation of trains."[304] The rhythmic aspect of the train ostinato creates an internal aesthetic of motion for the listener:

> The ostinato can, therefore, be labeled as a "process", but not set apart as a distinct object, over against the self. Described in spatial terms, it is a continuity "below", "above", or "around" the listener (depending on which pitch level is being attended to in the many-leveled quartet), not something which it is possible to "enclose" in a summarizing phrase, or from which it is possible to gain a controlling distance. It is more something that encloses the listener.[305]

Once the audience is drawn into a particular movement, the ostinato opens the musical space in the high, middle, and low registers. The listener identifies with the movement by situating themselves within the registral space:

> The first movement seems to ask for a comforting regression into the nostalgia for an earlier time—historically and perhaps developmentally. The second movement, with its holocaust tales, makes the horror of lost identity almost unspeakable, as it is imposed on those in that train.[306]

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[304]Naomi Cumming, "The Horrors of Identification: Reich's *Different Trains*," *Perspectives of New Music* 35 (1997): 135. (quoted by Robert Schwarz)

[305]Ibid., 136.

[306]Ibid.

The mechanical movement of this composition has the ability to link bodily motion with feelings that are created by the listener. The timbre of the voices also invokes an emotional response:

> If a listener to the first movement has adopted the interpretive strategy of participating in the driving movement of the train, aware also of its identity, his or her participation in the second movement can only take on a traumatic tone, as a form of entrapment in the drive towards death of the victimized people.[307]

The gestural inflection given to the vocal enunciations is important because it invokes the emotional content. Through this, the narrative is derived for the listener.[308] For example, the listener becomes captivated by the 'sound' of the Pullman porter's voice. Regarding gesture as expressive shaping, the listener is pulled into the music through the contours of the vocal excerpts. The socio-political message remains constant throughout the piece through the use of text and its continuity, and the replication of text through instruments.

There are three levels of signification that the voices function in *Different Trains*. The first deals with the materiality of the live recording, the second with the gestural shaping enhanced by repetition, and the third with the articulation of words through fragmented narrative. Reich establishes a number of different techniques in order to allure the listener into the text. The most powerful technique is the use of 'a child's terror in an adult voice.'[309]:

> The horror is there in the fear of children's voices, sounding through the voices of middle-aged people (probably in their sixties). The child becomes present in the adult's tone, as if moments in memory were fixed,

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[307]Ibid., 140.
[308]Ibid.
[309]Ibid.

> inexorable, unintegrated in the psyche. Rachella remembers her birthday in 1940 with a tone of abject disappointment, an invasion of this day a personal violation. One small child's disappointment focuses the violation of a country.[310]

The tone of her voice accompanied by the viola creates a great emotional impact on the listener. Reich also utilizes his 'textual repetition as a signifier' technique, tape-looping the social and political messages in continual repetition. The repetition of the character's words allows a space between the listener and the character in the interpretation of the message being sent.

The concert reviews for the premiere of *Different Trains* also reveal that Reich unites with his audience through the use of 'powerful' text combined with music. After the first performance of this composition, Kyle Gann wrote the review, "Like Veal, Only Chewier" and comments:

> ...the music shifted tempo occasionally, evoking the loneliness and landscapes of a long train ride as nostalgically as Honegger's *Pacific 231* once did modernistically. The Kronos' job was to pick (notated) melodies out of the spoken phrases (funny how tuneful "1941" sounded) and blend their music into the texture.[311]

The listener is captured by the repetition of the text and is aware of changes in texture. This occurs through the change in tempo. In a review of this piece by Brent Heisinger, he states: "But it is the imaginative use of strings to imitate vocal inflections that most captures my interest. The performance by Kronos is superb, especially the sensitive phrasing matching speech inflections."[312] The reiteration of the text through the instruments places an emphasis on important phrases, breeding an emotional impact on

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[310]Ibid., 143.

[311]Kyle Gann, "Live Veal, Only Chewier," *Village Voice* 34 (1989): 80.

[312]Brent Heisinger, "Steve Reich. Different Trains; Electric Counterpoint," *American Music* 10 (1992): 110.

the listener. This result is also described in a review by Alan Hall in the Musical Times: "Friendly steam whistles dissolve into siren wails and desperate screams as the quartet, live and on tape, propels motivic speech recordings through shifting moods and intensities."[313] This outlines a great contrast between the upscale passenger trains and the cargo trains used to transport Jewish people during the War.

Conclusion:

Reich's compositional style conjoins with his audience more effectively than the work of both Young and Riley. His societal and political message through human speech is one of the most effective techniques in his interrelation with the audience. His use of timbre and texture combined with the human voice and tape-looping also produce a noteworthy impact on the listener. He was continually in search of a larger audience and he knew that these messages throughout the post-war twentieth century would have a significant influence on his audience. In addition, his more technical approach to Eastern rhythm is more effective in identifying with the listener. His use of phase-shifting through stasis merges with the listener's ear and produces mesmerizing effects. Through this technique, Reich captivates his listeners through structural audibility, generated by a very slow rate of change.

Reich searched for a wider audience and was continually involved in various different types of music to heighten his reputation. Outside of his Manhatten audience, he developed various other audiences. He had an effect on the development of English experimental music, and since he was friends with Michael Nyman, his reputation in this area dramatically heightened. Reich also became known in the popular music scene, and

[313]Alan Hall, "New and Unfamiliar," *Musical Times* 131 (1990): 502.

was continually playing in various New York City night clubs in order to find a broader audience. In addition to this outreach, the recordings of his work enabled him to branch out more effectively. In every significant piece he has composed, an important record company has been behind him for the release. He captivated a larger and broader audience than Young and Riley as a result of his compositional techniques, his outreach and need to search for an audience, and his recordings.

Chapter 6

Philip Glass

An Introduction:

The size of the audience has steadily increased as a result of the evolution in compositional style from the work of La Monte Young to Philip Glass. Young's audience remains at approximately thirty 'followers' in each performance, while Glass's music caters to a much larger and expansive audience. Young is content to perform live for a small number of friends, but Glass continually branches out in search of a wider audience, composing in a variety of musical genres. As a result, Glass has become the most popular and well-known minimalist composer.

Although Glass has remained true to his original compositional style and works, he has demonstrated the ability to 'cross-over' and write music in other areas including, musical theatre, film, visual arts, and pop culture. Through these different areas, his compositional technique and his willingness to try new projects, he has collected a larger group of followers than the other three minimalist composers. Throughout Glass's music, it is evident that there is a great difference in compositional style between his own personal music and music that he has been contracted to write. In the works that he writes for himself, repetition is the main ingredient. In the music that he has been hired to write including film, repetition is also the main ingredient, but it has been softened to reflect the needs of the production. Overall, his later works have captivated a larger audience than his earlier works. He has established a stronger bond to his audience than the other composers through his repetition of melody, rhythm, harmony, and form, and the manner in which these elements are organized. The main link to his audience is his

ability to structure these musical elements in order to captivate the individual listener. He has 'mastered' the use of repetition that is combined with specific harmonies over the years, and his present compositional style has drawn in a larger audience than in the past. In an interview, Glass stated that 'when we hear music, we listen for a hook, and we can't find one in minimalist music. People learn very quickly to hear music in different ways.' His audiences have learned to listen to his music in a certain mode. This new form of listening generates a strong identification with his music. Glass potentially has two separate audiences namely, the individuals who listen to his own works and who also listen to his more popularized works, and the individuals who only listen to his popularized works. His audience has steadily increased, since his listeners of thirty years ago are still with him today, combined with a new generation. Although many feel that 'nothing' happens in his music, this chapter will demonstrate the wide range of possibilities and interpretations.

The Early Years:

Glass's biography of early influences demonstrates his willingness to incorporate his own musical style into other art forms. He was born on January 31st, 1937 in Baltimore. In contrast to Young, his 'anecdote' of childhood does not focus on environmental sounds, but the influences of his father's radio repair shop:

> When certain discs languished in the bins, unsold, he would bring them home and play them for his three children. In such a manner, Glass heard Schubert's Piano Trio in E flat major (his earliest musical memory, from the age of four), Beethoven string quartets, and later the Elliott Carter quartets and Shostakovich symphonies.[314]

[314]Robert Schwarz, *Minimalists* (London: Phaidon Press Limited, 1996), 108.

Through this early musical exposure, Glass began to take private violin lessons at the age of six and switched to flute and then to piano. Throughout his childhood, he was exposed to the music of West Virginia and the Appalachians, jazz, the music of the classical and Romantic eras, Bartok, and Hindemith. He attended high school at the Baltimore City College and played in orchestras, marching bands, and amateur television programs. Glass was influenced early on by his Uncles who had been involved with vaudeville and the Marx Brothers. Although Glass was extremely fascinated by the musician's lifestyle, his parents did not encourage him to become a musician. They were working class with aspirations of becoming middle-class, and did not feel that it wise for Glass to pursue the music business. Through his parent's expectations of him, biographers accentuate his rebellious behavior through his interest in music.

At the age of fourteen, he applied to the University of Chicago, passed the entrance examination, and began his studies in mathematics and philosophy at the age of fifteen, similarly to Reich. He graduated in 1956, began composing, and was influenced by the compositional styles of Ives and Webern. There is little stress placed on his sudden transition into the field of music. He was studying music because *he* wanted to and he wanted to rebel against his parent's expectations of him. Following his time at the University of Chicago, his increasing interest in music led him to enrollment at the Julliard School of Music, and it was here that he met Steve Reich. Both minimalists studied under William Bergsma and Vincent Persichetti. Glass became interested in the New York art scene and went downtown often to hear various jazz composers. In May of 1961, he attended a performance by Young in Yoko Ono's loft: "'He wasn't playing music, he was just drawing a line,' said Glass. 'I thought it was amazing that anybody

would do that. That was very avant-garde to me at the age of twenty-three. I was shocked by it and I remembered it.'"[314] Throughout his encounters with Young in New York City, Glass was impressed by Young's ability to create unique musical and artistic compositions and perform them in front of a small audience.

In 1961, Glass received his Master's degree from Julliard and moved to Pittsburgh where he was the beneficiary of the Ford Foundation program. This was a program that placed composers in public schools: "So at the age of twenty-seven, Glass was a working composer and a productive member of society, able to write easily in a style that would offend no-one. There was nothing about his career that suggested the radical direction he would pursue only a few years later."[315] Glass's early career as a composer demonstrates his ability to please the general public and to write in a specific style in order to seek an audience.

In 1964, he decided that he needed a change in his compositional career and after receiving a two-year Fulbright fellowship, he traveled to Paris, France to study with Nadia Boulanger.[316] Glass met with Boulanger three times a week for lessons and once for 'Black Thursday', where a group of selected students would meet with her for a group lesson. Glass was very interested in Palestrina, Monteverdi, and Mozart. Boulanger thought the three were model composers. At this point in his compositional career, he

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[314]Ibid., 111.

[315]Ibid.

[316]Ibid., 112, *Nadia Boulanger*: "...the most renowned composition teacher of the twentieth century, the woman who single-handedly taught generations of American composers, beginning with Aaron Copland and Virgil Thomson. No one was better equipped than Boulanger to give Glass the rigorous technique that he felt he lacked. Boulanger was legendary for her brutal contrapuntal regime, and in the past Glass has described her as a 'monster.' Today he looks back on those days more charitably, admitting that 'I couldn't write the music I'm writing today without the technical mastery of basic compositional skills that I learned with her.'"

had not yet branched out into his own unique style and his interest in these composers demonstrated a more conservative approach to musical composition.

In Glass's second year of lessons with Boulanger, he was hired as a music director for the film, *Chappaqua*. He was not only required to compose for this movie, but also transcribe the film music written by the Indian sitarist, Ravi Shankar from Eastern notation to Western notation. Glass worked with Shankar and his tabla player, Alla Rakha for several months and gradually, he learned the basic rhythmic principles of Indian music. He discovered that these rhythmic structures were built up by an additive process in which beats were joined together to create a rhythmic cycle. The Indian approach to rhythm strongly influenced Glass's later compositional style through his use of the Indian additive process. This technique is employed throughout the majority of his works. In Indian music, the use of harmony does not exist and the music focuses on rhythmic elements. His biographers center on his Indian music influences, since they have formed the basis for his own unique minimalist style.

Glass creates his 'own' core aesthetic through the combination of the rhythmic principles of Indian music and his own inventive harmony and harmonic changes. His use of stasis became more effective in alluring the listener than the other three minimalists. The main difference is Glass's use of structure through additive rhythms and cyclical structuring. These techniques produce a continual and repetitive rhythmic structure to unite with the listener's ear. His early utilization of stasis is evident in the incidental music he wrote for Samuel Beckett's, *Play*. This was one of the first productions to be produced by an American experimental theatre company. After completing the music for *Play*, he handed out copies of the score to the performers, who

became infuriated about the repetitive structure of the music. His composition for *Play* and *Chappaqua* demonstrate his early work as a cross-over artist that incorporate his own musical style, but are willing to adapt to the needs of musical theater and film.

Goals for an Audience in *Music in Twelve Parts*:

Glass's main goal for his early piece, *Music in Twelve Parts* was to implement elements of his earlier compositional techniques and combine them with new techniques to achieve a greater immediacy of stasis. He knew that these structural techniques would connect to a larger group of people, but he needed to search for a new and innovative way of achieving stasis. With these ideas in mind, he decided to travel to India to study non-Western rhythmic principles.

In 1966, he finished his studies with Boulanger and was feeling confident about his own musical language. Glass and his new wife, Joanne Akalaitis traveled to Asia to study Eastern music. They spent four months traveling through India and in January of 1967, they returned to New York City. His career as a minimalist composer began. Instead of using Reich's phasing technique, Glass developed his own musical process based on the additive rhythmic structure of Indian music. His first piece that utilized this new musical style was *Strung Out* (1967) for solo amplified violin, followed by *1 + 1* (1968) and *Two Pages* (1968). Over the next few years, he continually composed pieces in this musical style: "None of these pieces have any changes in instrumentation, rhythm, tempo or dynamics; all reject goal-oriented, developmental model of Western music; all favor a non-directional steady-state that suspends the passage of time."[317] His *Music with*

[317]Ibid., 123.

Changing parts (1970) used the additive process with expansion, leading directly into his *Music in Twelve Parts*.

Musical Adaptation to the Audience of *Music in Twelve Parts*:

Glass composed *Music in Twelve Parts* from 1971 to 1974. This piece is important because it highlights Glass's own personal style without any adaptation into other genres. He wrote this composition to express his own personal style that features his 'hardened' use of repetition. Glass actuates extreme repetition in order to generate stasis through a specific musical technique. In addition, this work incorporates the different musical techniques accessed in his earlier works. The majority of the audience members at the premiere would have been individuals who were interested in classical music. The compositional style of this early piece portrays the 'sharp edge' of his musical style and his use of continuous repetition, divided into a formal structure:

> *Music in Twelve Parts* is a punning title. On the one hand, the work is scored for twelve musical lines (two each for the three electric keyboards, and six for amplified winds and, occasionally, a soprano). On the other hand, the work consists of twelve sections, each about twenty minutes in length. A complete performance typically took nearly five and a half hours- including a one-hour dinner break.[318]

Music in Twelve Parts began as a single-movement work and was performed at Yale University in April of 1971. The 'parts' in the title originally referred to the individual instrumental lines:

> We [Glass and ensemble] played it at a concert in 1971, and afterwards someone in the audience asked me when I was going to write the other 'parts'. I realized that they meant 'parts' in the sense of sections. And that's where I got the idea for the whole piece. At first I tried to keep the

[318]Ibid., 127.

> idea of twelve contrapuntal parts throughout, but it broke down right away. It seemed like a useless encumberance.[319]

The original composition became Part One of twelve parts. The purpose of the piece was to provide the audience with a summary of all the minimalist techniques he had implemented up until that point. Within the twelve movements, there are some that are interconnected and others that are played as a separate piece. In addition, some of the movements employ the unison writing of his early works, some use a complex and intertwining counterpoint, and some employ new techniques. Many of the sections within the piece use chromaticism and modulation to distant keys: "In Part 12, the bass-line grows by additive means from a brief cadential progression to a chromatic scale that embraces all twelve tones..."[320] In section twelve, the composition moves into tonality through root-movement harmony.

The Effect of Stasis in *Music in Twelve Parts*:

Throughout *Music in Twelve Parts*, Glass achieves the greatest immediacy of stasis up until this point as a result of his additive technique. This is expressed in the repetition of the melody, rhythm, harmony, and form. In the examination of harmony, Glass unites with his audience through harmonic progressions and transitions between sections. This piece makes a tonal statement, and the key of each individual section cumulatively builds up over the entire composition: "Continued advantage is taken of the fact that apparent modal stasis activated by rhythmic repetition readily leads to ambiguity

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[319]Keith Potter, *Four Musical Minimalists: La Monte Young, Terry Riley, Steve Reich, Philip Glass* (Cambridge: Cambridge University Press, 2000), 312.

[320]Ibid.

between any key and its relative major or minor, and this is exploited from the outset..."[321] Below is an example of the tonal structure for this piece:

Part	*Tonality*	*Pitches used*	*Number of pitches*	*Chord/scale type*
Date of composition				
1 (April 1971)	F-sharp minor (A major)	F# A B C# D E	6	13th/Aeolian (without 3rd)
2 (March-May 1973)	D-flat major (B-flat minc)	D♭ E♭ F A♭ B♭	5	pentatonic
3 (July 1971)	G major (D minor)	G A C D	4	stacked fourths
4 (August 1971)	C major	C D E F G A B	7	major
5 (August 1971)	B major/Mixolydian	B C# D# E F# G#	6	13th/major or Mixolydian (without 7th)
6 (February-March 1972)	D-flat major (F minor)	D♭ E♭ F A♭ B♭ C	6	major scale/stacked fifths
7 (September 1972)	C minor	C D E♭ E F G A♭ B♭ B		harmonic minor plus E and B
8 (July 1973)	F Mixolydian	F G A B♭ C D E♭	7	13th/Mixolydian
9 (winter 1973-4)	A major	A B C# D E F# G# E♭ G B♭	7 8, 9, 10	major scale plus "tritonic triad"
10 (ditto)	F-sharp minor>A major	A B C# E F#	5	pentatonic
11 (ditto)	A major/E major/F#-minor A-flat major C major	A B C# D# E F# G# A♭ B♭ C D♭ E♭ F C D E F G A B	7 6 7	Lydian/stacked fifths major scale/stacked fifths major scale
12 (April 1974)	A major/ C minor modulating >>>	A C# E F# C E♭ F G >>> +	4	A^6 C-minor^4 modulating

Example 38: Philip Glass, *Music in 12 Parts*, tonal structure[322]

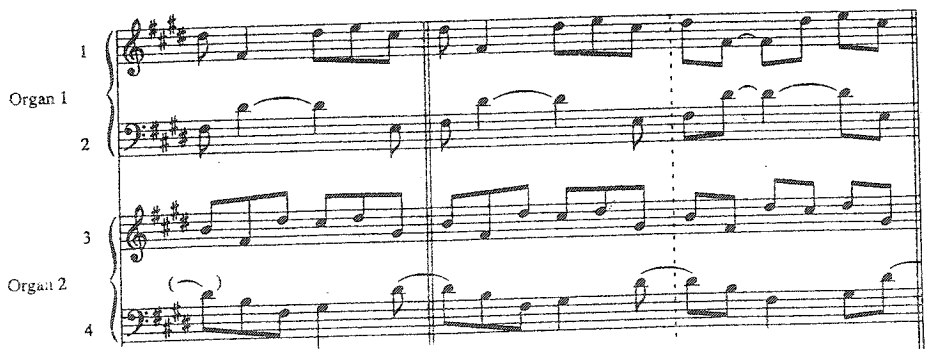
[321]Potter, *Four Musical Minimalists: La Monte Young, Terry Riley, Steve Reich, Philip Glass*, 313.

[322]Ibid., 314.

The transitions between the keys cause the listener to anticipate a change in the sections. The key connections between the movements also concretize a sense of harmonic structure for the listener. In Parts One and Two, the key connections move in a more conventional manner with tonic and dominant relationships, whereas the key connections between Parts Three and Four are separated by a tritone. Part One is considered to be Glass's first slow minimalist piece. Parts Three, Four, and Seven use similar patterns to Part One, and Parts Two, Five, Six, and Eight use augmentation and diminution within the rhythmic cycle. Many of the sections within this piece stand out as a result of their unique structure. Part Five is highlighted because of its unusual harmonic progressions and tempo changes:

> Part 5 in particular stretches and contracts a slow trill until your concept of beat becomes elastic, tempo ceases to be a constant. And, lacking dance movement to aid rhythmic subtlety the way the Hopis do, he's achieved that flexibility in an idiom Westerners can master, and in so doing added a thrilling new term to the classical vocabulary.[323]

The opening two figures of Part Five are demonstrated below:



Example 39: Philip Glass, *Music in 12 Parts*, Part Five, rehearsals one and two[324]

[323]Kyle Gann, "Philip Glass: Rehearsal Plays," *Village Voice* 35 (1990): 94.

[324]Potter, *Four Musical Minimalists: La Monte Young, Terry Riley, Steve Reich, Philip Glass*, 316.

In the Organ 2 part, there are various doublings that occur in the bass and produce a cross-rhythm. Throughout this part, continuity is raised for the listener by the repetition of quaver patterns in both the treble and bass clefs. The meter has the potential to be in either 6/8 or 3/4, and the listener distinguishes between the meters.

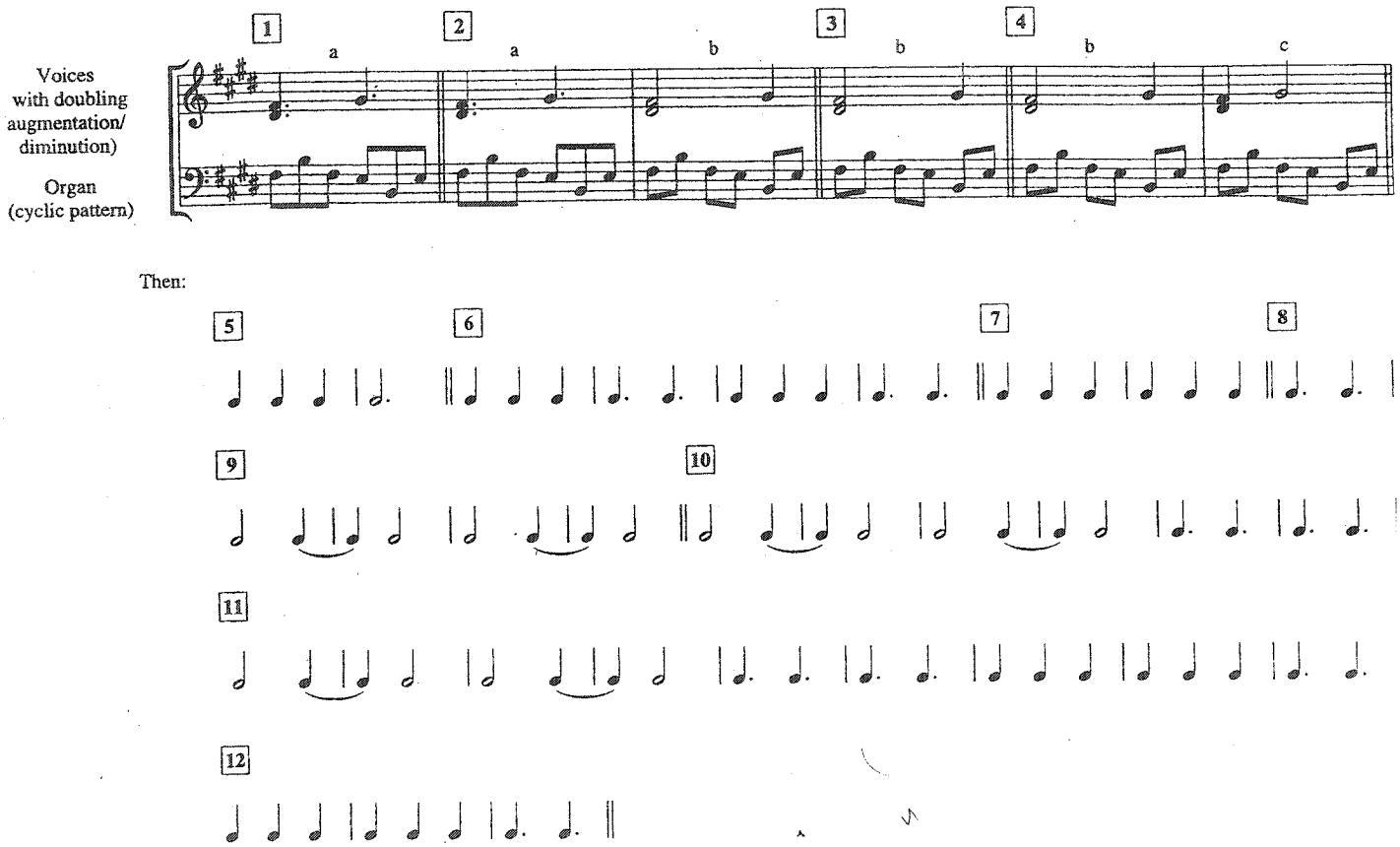
From a listener's perspective, this part begins very abruptly with full, rhythmic complexity. The overall texture is very 'bright', 'upbeat', and full of sonority. The repetitive sixteenth-note rhythmic pattern in the keyboards remains constant throughout the section. After a few seconds, the full ensemble partakes in a slightly varied rhythmic pattern. The voices are heard prominently above the ensemble, and the listener continually listens for smaller patterns within larger patterns. Eventually, all the parts participate to form an overall pattern, and specific parts become focal points throughout the texture. The music entices the listener through the utilization of continual repetition, multiple layers, and patterns within patterns.

Through a harmonic analysis of the above example, it is evident that Part Five revolves around the B major chord. In rehearsal one, the first half of the bar exercises the B major chord (B, D#, and F#). In the second half of the bar, the B major chord is played with the C# minor chord, combining notes from both chords. This harmonic pattern is used repetitively throughout the section. The recurrence of this chord produces harmonic structure for the listener.

The top instrumental line in Part Five is detected above the other melodies, providing a v-vi-v-iii root movement.[325] The voice parts combined with instrumental doubling initiates the process of augmentation and diminution. The audible augmentation

[325]Ibid., 318.

and diminution process that unfolds against the cyclical rhythm is demonstrated in the example below:



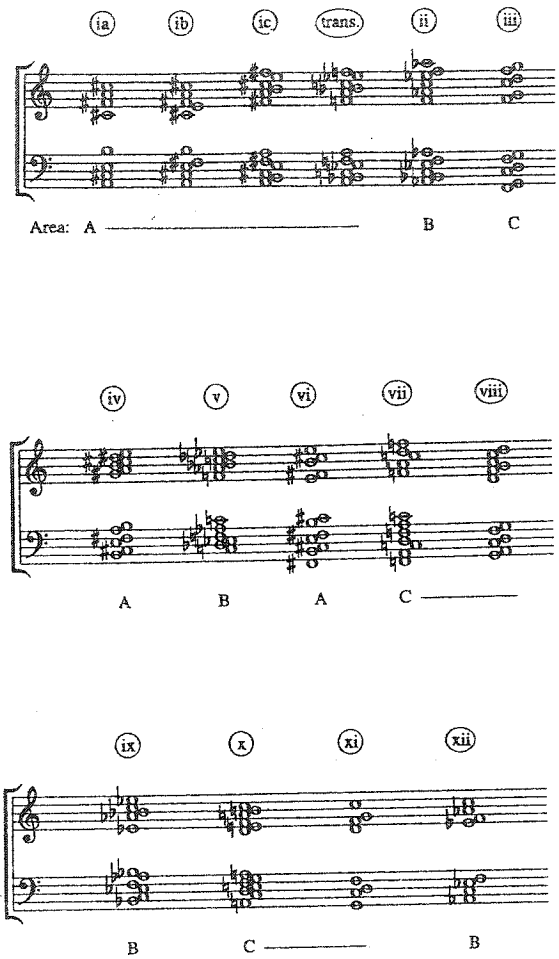
Example 40: Philip Glass, *Music in 12 Parts*, part five, rhythmic structure[326]

[326]Ibid., 317.

In rehearsals one to four, the listener is drawn into the rhythmic figures as they unfold through the additive process, cultivating an alternating and repetitive scheme.

In addition, Parts Eleven and Twelve stand out for their infusions of harmonic motion with the additive process. Through listening, Part Eleven begins abruptly with a repetitive sixteenth-note pattern. This part begins with the keyboards, woodwinds, and singers to produce a bright mass of sound. The keyboards support the entire ensemble and play the same motif as Part Five. This part is divided into eight sections according to the changes in key. In the first section, the singers' figures are noticed prominently above the instruments. The audience realizes the continual change between the chords and remains focused on these prototypes. In the second section, the listener continues to focus on the specific motifs within motifs. In each subsequent section, the transition is marked by the change in key set by the woodwinds. Throughout the remainder of the sections, the listener becomes mesmerized by specific figures, listening for patterns within patterns.

Part Eleven consists of twelve chords that define the three main tonal areas. The following page displays an example of Part Eleven.



Example 41: Philip Glass, *Music in 12 Parts*, Part Eleven, twelve basic chords[327]

[327]Ibid., 319.

Through a harmonic analysis of Part Eleven, the listener's relation to the music is explained. In Area A, the chords i, iv, and v are constructed on the bass notes A, B, and F# to produce five pitches that increase in density. The chord built on the bass note B, contains seven pitches of the A Lydian mode. G# and D# are added and when the bass note proceeds to F#, a four pitched chord is produced through stacked fifths. In Part B, the bass notes, Ab, C, and Bb are built on stacked fifths that produce a five pitched chord on Ab. When Db is added, the pitches of the Ab scale are produced, except G. Part C consists of the bass notes, F, F, G, A, G and are built on stacked fifths. These three tonal areas are juxtaposed and cause the listener to sense a pattern in the chords: "...yet periodically doubling back to delay its natural consequences in favor of repeating a whole sequence to raise the dramatic temperature by thwarting the listener's expectations."[328] The listener evaluates the music through expectation for the progression of chords.

Through a rhythmic analysis of this part, Glass's association to the audience through the application of the additive process to harmonic motion will be explained. Part Eleven is divided into ten-quaver units and further divided into two subdivisions with five quavers in each division: "...the main thrust behind Part Eleven's unfolding, allowing tonal expansion, and the expectations this brings, to take on a more important role than in anything the composer had previously written."[329] The combination of the additive process with harmonic motion produces repetitious patterns that draw the listener into the music not only through the rhythm, but through the expectations of the harmony.

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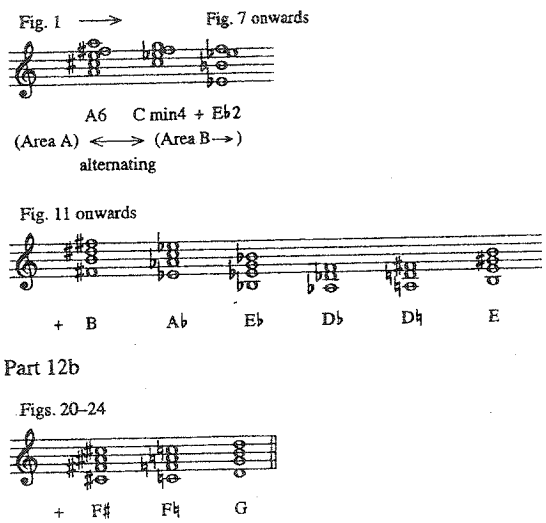
[328]Ibid., 320.
[329]Ibid.

In Part Twelve, the three chordal areas of Part Eleven are replaced with two chordal areas. In the first, there is an added sixth chord on the major triad of A. In the second, there is a chromatic sequence beginning on C minor. The following example demonstrates the harmonic outline of Part Twelve.



Example 42: Philip Glass, *Music in 12 Parts*, harmonic outline[330]

[330]Ibid., 322.

Throughout the first section of the part, the A-6 and C-minor chords alternate to raise a listening groove for the audience. The listener is aware of the chord changes with the addition of the B-flat added onto the C-minor chord. This creates the second chordal area that continues to expand and abandons the three flats in the key signature. This sustained expansion contrasts and alternates with the first chordal area for the remaining bars.

Glass concretizes a mesmerizing state for the listener in Part Twelve through his alternation between sections. Throughout this part, there is continual rotation between a main rhythmic section and the transition period. This period gradually increases in length through each shift and develops a sense of anticipation for the listener. The singers continually sing a fragmented, syncopated, and repetitive rhythmic figure above the overall mass of sound. This is the main focus for the listener. The voices remain prominent and the keyboards build a foundation underneath the texture. Eventually, the transition period grows longer and there is a break in the texture. This sounds increasingly out of place, and the listener continually questions the next musical occurrence. Following each transition period, the audience settles back into the groove created by the sound mass. After several minutes of the alternation between the main rhythmic figure and the transition period, the listener anticipates the transition period and the pause. This moratorium becomes wider with each alternation, and is eventually replaced by an organ pedal tone to produce a feeling of impending doom. The delay in the texture provides interest for the listener through the complexity, since the audience is continually listening for the hiatus. Eventually, this pedal tone is joined by a vocal interlude and with each alternation, the singing matures and the melody becomes

catchier. This section ends the piece abruptly with the extension of the transition period, overcoming the main rhythmic pattern.

The correlation between the composer and the audience in *Music in 12 Parts* is demonstrated through concert reviews of the premiere. In 1976, Keith Potter wrote the review, "Post-avantgarde":

> His *magnum opus*, called *Music in twelve parts*, composed between 1971 and 1974, was the subject of an Arts Council Contemporary Music Network tour of nine English cities from November 15 to 23, played by the composer's own ensemble of seven musicians, himself included...Since no-one in this country has yet proved willing to act as Glass' Bayreuth, nobody experienced the work as its composer considers it should ideally be done, but by getting to two of the nine concerts, each including four or five parts, I managed to hear nine: Nos 9-12 at the York Arts Centre (November 19) and Nos 1-3 and 7-8 at the Round House (November 23).[331]

Throughout this review, Potter makes several observations about the piece, including its similarities to Glass's earlier works: "...repetitive structures of additive and subtractive processes and cyclical devices are allied to stable, largely tonal harmony and a steady quaver-beat."[332] He establishes elements of his early works to create a more complex style. This is exercised by an increased number of instrumental parts and a greater variety of texture.

Potter states that Glass is more concerned with the sound of his music rather than the structure, and refers to his 'musical presence':

> The composer's interest in the psychoacoustical results of this high degree of amplification- the unplayed (resultant) notes clearly heard in performance or the illusion of voices singing for instance- has led him to consider this sound-

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[331]Keith Potter, "Post-avantgarde," *Music and Musicians* 24 (1976): 48.
[332]Ibid.

> quality as an essential 'sub-text' to the structure (as essence) of the music itself'.[333]

Glass's concern for the 'sound' of the music over the structure is an example of his alliance with the audience.

In the review, "Philip Glass: Rehearsal Plays", Kyle Gann discusses the release of *Music in 12 Parts* on Virgin Records. Gann states that this composition recaps his earlier work, but also anticipates his later works:

> Part 9's irregular scales top *Music in Fifths* for rhythmic novelty, then end with an ecstatic fluttering wilder than electrified Messiaen. Part 12, based on an elegantly Webernesque (and hexachordally combinatorial!) 12-tone row, beats out the Spaceship scene from *Einstein on the Beach* for harmonic weirdness. Part 1, its repetitions veiled in silken counterpoint, seems the most inspired moment in Glass's output.[334]

Many of Glass's audience members remained dedicated to him and his music throughout his compositional career. These listeners attended the performances of his earlier works as well as *Music in 12 Parts*. The overlapping of his musical styles throughout this piece, generate a sense of structure for the audience.

In a concert review in the Musical Times by Michael Gorodecki, he discusses the overall affect that is created through *Music in 12 Parts* and refers to comments made by Glass:

> Glass explains that he is quite deliberately writing music in which 'nothing "happens" in the usual sense'...so that the listener may move toward another mode of listening 'in which neither memory nor anticipation has a place...It's hoped that one could then perceive the music almost as a "presence".[335]

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[333]Ibid.
[334]Gann, "Philip Glass: Rehearsal Plays," 94.
[335]Michael Gorodecki, "Music through Glass," *Musical Times* 133 (1992): 413.

Through Glass's repetitive structures, he develops another mode of listening for the audience, enabling the listener to become entranced by the music.

Goals for an Audience in *The Civil Wars*:

By the mid-1980s, Glass was extremely prolific, writing music in a variety of different areas. The film, *Koyaanisqatsi* (1981) featured his music and allowed him to transpose non-narrative drama into a cinematic context.[336] The title is translated as, 'life out of balance' from the Hopi Indian language:

> The film, which has no dialogue or plot, contrasts placid, panoramic photography of unspoiled nature at its grandest with hyperkinetic scenes of urban life and environmental despoliation—and lets the images speak for themselves. What sounds like a simple-minded notion turned out to be surprisingly compelling, thanks in no small part to Glass's score.[337]

The music employed elements of the Romantic style and combined both the calm of nature and the ferocity of technology.[338] This film was one of many projects in which Glass adapted to the particular needs of the film director. At this point in his career, he clearly demonstrated that he was writing music in a variety of different genres to enchant a larger audience.

One of Glass's later operas, *The Civil Wars: a tree is best measured when it is down* was collaborated with the stage designer, Robert Wilson.[339] This opera demonstrates Glass's willingness to branch out into other musical genres in order to captivate a pandemic audience. The audience members at the premiere were interested in

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[336]Schwarz, *Minimalists*, 151.

[337]Ibid., 154.

[338]Ibid.

[339]*Robert Wilson*: Glass collaborated with Robert Wilson on numerous occasions, including his opera trilogy, *Einstein on the Beach*, *Satyagraha*, and *Akhnaten*.

both classical music and theatre. This opera created publicity throughout Europe for Glass and therefore, an increase in ticket sales. Although this work reached out to an even larger and more diverse audience, he remained focused on his hardened and repetitive compositional style. The music of this opera demonstrates Glass's ability to maintain his own personal style, but adapt to the needs of theatre.

This multimedia project started in 1982 when Robert Wilson traveled to Rome in search for support of his Olympic Theatre plans. The Comune di Roma sponsored him for the operatic section of the opera for the opening of the Olympic Arts Festival in Los Angeles. This opera is a saga based on the American Civil war:

> ...expanded to become an apology for the war for civilization. Between its fourteen scenes, there are thirteen 'knee-plays'- pre-recorded nonsense, generally concerned with the main plot. The Roman section of the work is an opera for five singers, large chorus, vocal octet and full orchestra: it lasts up to an hour and 50 minutes, whereas the entire work is about twelve hours long.[340]

Glass captivates his audience through the subject matter of this opera because it portrays strong political messages that reach out to individuals in society. *The Civil Wars* is a twelve-hour epic including, the following characters: Soprano- Snow Owl and Alemena, Alto- Mother and Mrs. Lincoln, Tenor- Garibaldi, Baritone- Abraham Lincoln, Bass-Hercules, Small Mixed Chorus-Eight voices, Large Mixed Chorus, and orchestra:

> A "Snow Owl" appears on a deserted battlefield, accompanied by "a gigantic Abraham Lincoln" and "the Earth Mother." Lincoln wants to fight the world's evil. In later scenes Hopi dancers mingle with followers of Garibaldi; the young Robert E. Lee floats weightlessly in a spaceship, observing his future surrender to Grant; Hercules- the founder of the Olympics, according to legend- "descends a ladder that reaches from infinity as the

[340]Ibid.

chorus asks him to return to earth for the good of mankind."[341]

In Wilson's stage design, he incorporates literary, historical, visual, and musical symbols as a form of communication with the audience. The historical elements of this opera do not correspond with 'real' history, the visual effects are usual for Wilson, and the musical elements contain a mixture of introductions to various songs.

The Civil Wars is symbolic, metaphysical, and realistic with staging that ranges from ancient Athens to our future. This opera includes elements from Seneca's Hercules plays in Latin and Italian, the opening section resembles the storm music of Verdi's *Otello*, and the chorus at the opening of the final scene reflects Stravinsky's *Oedipus Rex*. The second scene is a dance with a tenor aria for Garibaldi.

The stage design for the third scene is a desert landscape, the background is a spaceship, and there is a porthole where the audience witnesses a man floating through the air: "A mourning Mrs. Lincoln enters followed by eight black-clothed figures (octet): the scene is conceived as a homage to the negro spiritual. The melody of 'Jacob's Ladder', heard in the orchestra, comes back as a canon in Hind's lament."[342] The stage design for the fourth scene is empty and dark, and a ladder descends from the sky with Hercules: "...the offstage chorus sings the final text of Seneca's *Hercules Oetaeus*, asking Hercules to return to earth for the good of mankind. Trees of all continents slowly start crossing the stage."[343] From inside the spaceship, Mrs. Lincoln as a young girl announces the end of the war. Lincoln descends from the stage and sings the text that was originally sung in the first scene: "The characters of the labours of Hercules enter:

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[341]Gregory Sandow, "An Echo, Not a Choice," *Village Voice* June 12 (1984): 76.
[342]Ibid.
[343]Ibid.

Charon, Persephone, Omphale, Jason, Atlanta, Atlas, Jupiter and Juno (vocal octet). The octet intones Wilson's paraphrase of Hercules, enters bearing the Olympic torch and gives it to Hercules remaining alone..."[344] At the end of the opera, Hercules sings an aria about his death and ascension into heaven.

Musical Adaptation to the Audience of *The Civil Wars*:

Glass uses his hardened and repetitive style throughout this opera to achieve stasis. In the score, there are several techniques that are new to Glass's compositional style:

> ...sharp contrasts between sections of a single scene, for example (which we certainly didn't hear in *Satyagraha*), and forceful, even Italianate vocal declamation, including melodramatic octave leaps when the Snow Owl cries out in the night to children who've died. As those octave leaps might suggest, the score also has the emotional undertow I've found in all Glass's recent works, from *Satyagraha* to the tiny pieces for string quartet that he wrote for Mabou Mines...[345]

The Rome section is one particular part that stands out in the opera, and has been performed separately by Neal Stulberg and the Los Angeles Philharmonic Orchestra and the American Composers Orchestra. This non-narrative portrays the future, present, and past. It also contains long sequences of broken chords, syncopated rhythms, rotating harmonies, and expressive vocal melodies.

In this work, Glass's conjunction to the audience is demonstrated through a variety of different structural techniques. The main ingredient in the relationship is the use of structure and its manipulation throughout the composition. There are certain

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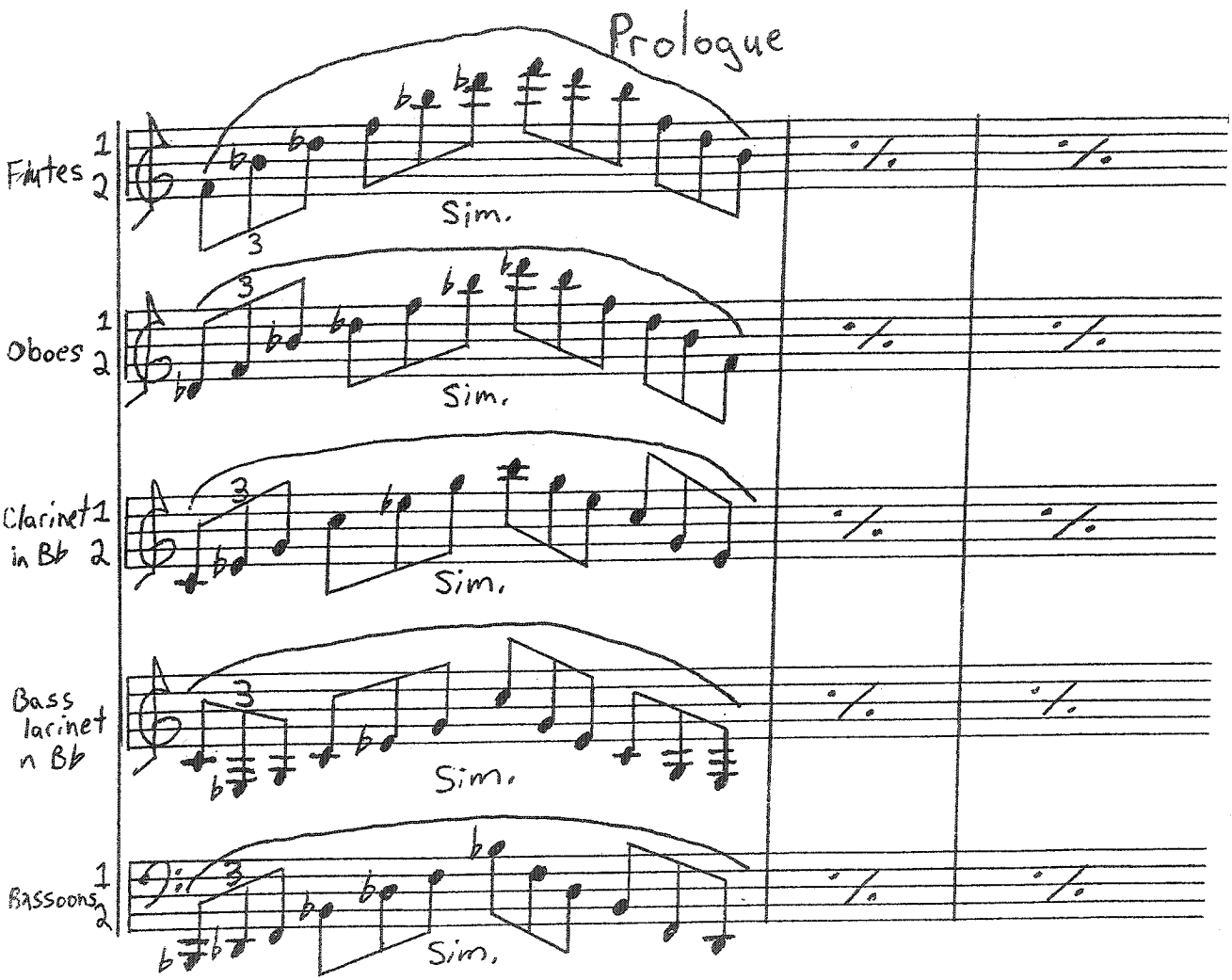
[344]Ibid.
[345]Ibid.

musical characteristics that are added in each subsequent section through the additive process. Glass divides the scenes of the opera into three further divisions—an introduction to each section, a thematic melody, and a transition into the next section. The introduction defines each section through specific musical characteristics that are often heard in later sections and provide a sense of structure for the listener. The thematic melody refers to melodic and rhythmic patterns that are heard continuously throughout certain sections of the scene. The transition section incorporates certain musical devices to generate anticipation for the following section. The strongest connection is made through the establishment of a repetitive rhythmic figure throughout the part. This is implemented to entice the listener into the music, raising a hypnotic or trance-like state. The connection is made stronger when Glass varies the repetitive figure throughout certain sections, allowing the listener to anticipate a change in the rhythm.

The Effect of Stasis in *The Civil Wars*:

The musical structure of *The Civil Wars* displays Glass's strong connection with his audience through his additive technique. A structural analysis of the prologue, first interlude, and Scene A of the opera will demonstrate the link between the composer and the audience, and the effect of stasis. The orchestral score consists of flutes, oboes, clarinet in B-flat, bass clarinet in B-flat, bassoons, horns in F, trumpets, trombones, tuba, percussion, harp, soprano, alto, tenor, baritone, violins, viola, cello, and double bass. At the beginning of the prologue, Glass develops anticipation for the audience by initiating the piece with long-held whole notes in the trombones and tubas. The first melodic theme in 4/4 time, is played through continuous triplet patterns in the flutes, oboes,

clarinet, bass clarinet, bassoons, and strings. The horns and trumpets play continuous eighth-note patterns, and there are no vocal parts. The following page displays an example of the first melodic theme.



Example 43: Philip Glass, *The Civil Wars*, prologue, first melodic theme[346]

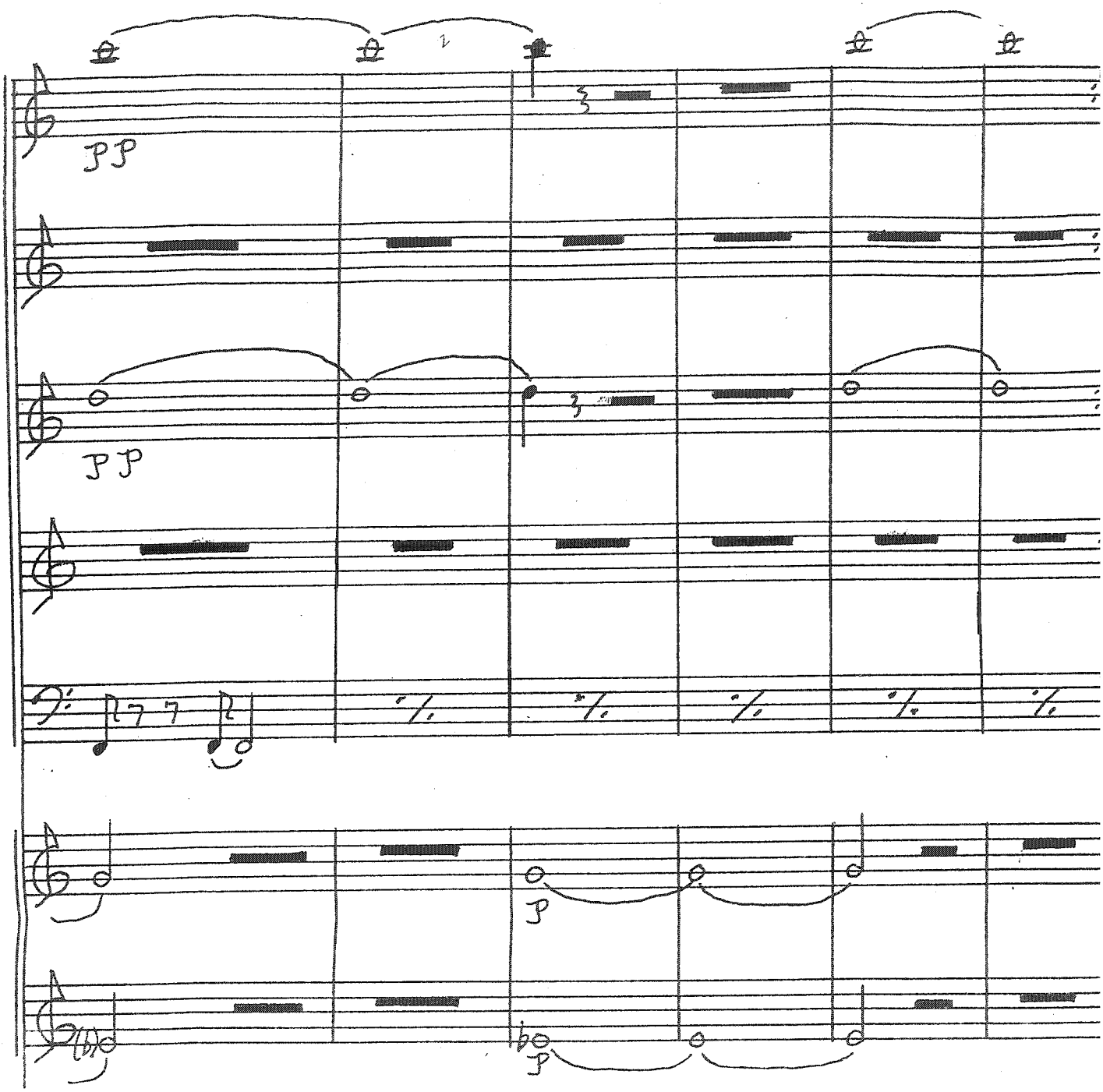
[346]Philip Glass, *The Civil Wars* (Bryn Mawr, Penn: Dunvagen Music Publishers Inc., 1984), 25.

At rehearsal 1 continuing to rehearsal 4, the texture becomes thinner and employs flutes, oboes, clarinet, bass clarinet, bassoons, and trumpets. These instruments play a continuous and *legato* passage that consists of a half note tied to a dotted half note tied to an eighth note. From the listener's perspective, this continual passage produces a hypnotic state. At rehearsal 5, the texture becomes thicker with an alternating eighth-note pattern in the clarinet and bass clarinet, the addition of harp, alto singing *I am ra-ra-mi-cant-*, and strings. The transition period occurs at rehearsal 8 with an alternation between the clarinets and oboes. At rehearsal 9, the first melodic theme returns. This transition into the triplet theme allures the listener in and breeds an awareness of a change in rhythm. At rehearsal 12, the triplet pattern is varied through an ascending and descending triplet figure in the flutes, oboes, clarinet, and bass clarinet. This pattern continues until rehearsal 14 when flutes and clarinet alternate the pattern. At rehearsal 15, all parts except the brass play this triplet pattern in the creation of full texture.

Rehearsal 18 marks a transition period, since long-held notes are heard in all parts with the exception of flutes, oboes, clarinet, and strings. The texture becomes thinner at rehearsal 19 with only flutes, bassoons, horns, viola, cello, and the alto, continuing the solo. In rehearsal 22, the texture changes and the soprano joins the alto in a duet. This duet continues with instrumentation that rotates between full texture and thin texture. Rehearsal 37 informs the listener of a change in structure, and the repetitive eighth notes in the strings transform into triplet patterns. Rehearsal 38 initiates a baritone solo until rehearsal 45. This is pursued by a soprano and alto duet, accompanied by bass clarinet, bassoons, violins, and cellos. The change in texture is marked by a repetitive eighth-note pattern in the trumpets, heard earlier in the prologue. At rehearsal 57, the texture

becomes thin with the flutes and oboes. This texture becomes thinner at rehearsal 59 and initiates the baritone solo. His solo continues until rehearsal 67 and is traced by a soprano solo, accompanied by the melodic theme played in clarinet and violins. At rehearsal 84, there is full texture and all the instruments play the melodic theme, excluding the brass section. This is superceded by a soprano and alto duet. The prologue ends with full texture and the exclusion of the voices.

The first interlude begins with a 'hum', actualizing anticipation for the audience. This is generated through an eighth-note figure played in the double bass. Flutes, clarinet, viola, and cello play tied whole notes. The following page displays an example of the beginning of the first interlude.

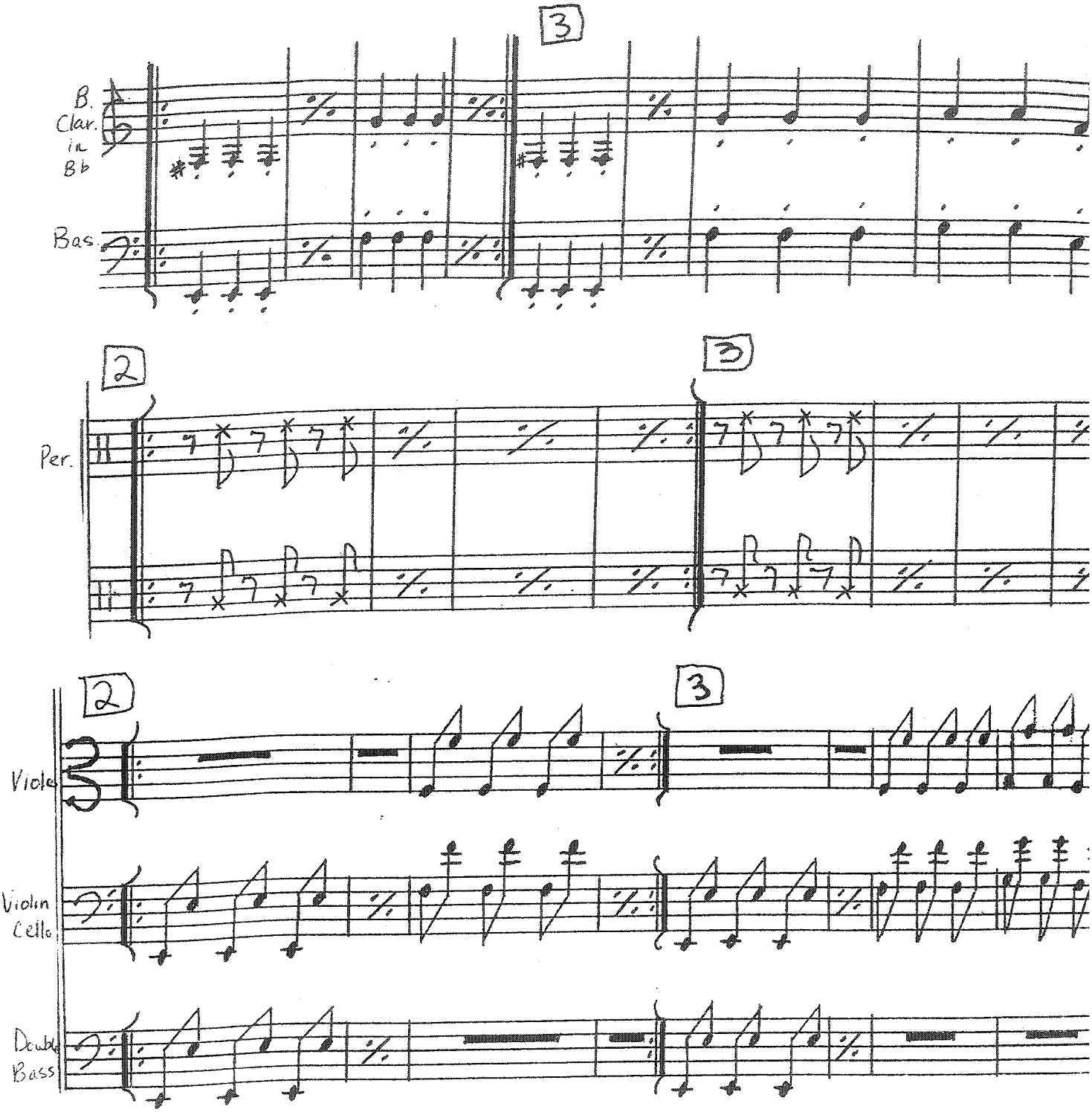


Example 44: Philip Glass, *The Civil Wars*, beginning of first interlude[347]

[347] Ibid., 2.

This long drone builds a foundation for the orchestra and immediately draws the listener into the melancholic music. Throughout this interlude, there is a continual call and response between the brass section and the flutes and piccolos. From the listener's perspective, there is a sense of distance between the two groups of instruments. The initial call from the brass sounds very 'dark' and mysterious. The answer in the flutes and piccolos extends into an ascending line and sounds very 'bright' and 'optimistic'. The listener senses that the brass will eventually trade rhythmic and melodic lines with the flutes and piccolos. The brass begins to play more extended melodic lines and through this texture, there is a continuation of the underlying rhythmic pulse in the bass instruments. The brass switches melodic lines with the flutes and piccolos and to the listener, the roles are reversed—the brass is bright and the flutes and piccolos are dark. This proceeds in a circular pattern and eventually, the music at the end of the interlude becomes identical to the beginning. This circularity creates structure for the listener.

The most important aspect of Scene A in relation to the association between the composer and the audience is its alternation of two main melodic themes. Scene A is in 3/4 time and begins with the first melodic theme. The bass clarinet and bassoons begin with the continuous repetition of quarter notes that are played *stacatto*, the triangle and wood block alternate between eighth notes and eighth rests, and the cello and double bass continuously play eighth notes with octave leaping. This thin texture at the beginning also attributes to a heightened sense of anticipation by the audience. The following page demonstrates the beginning of Scene A.

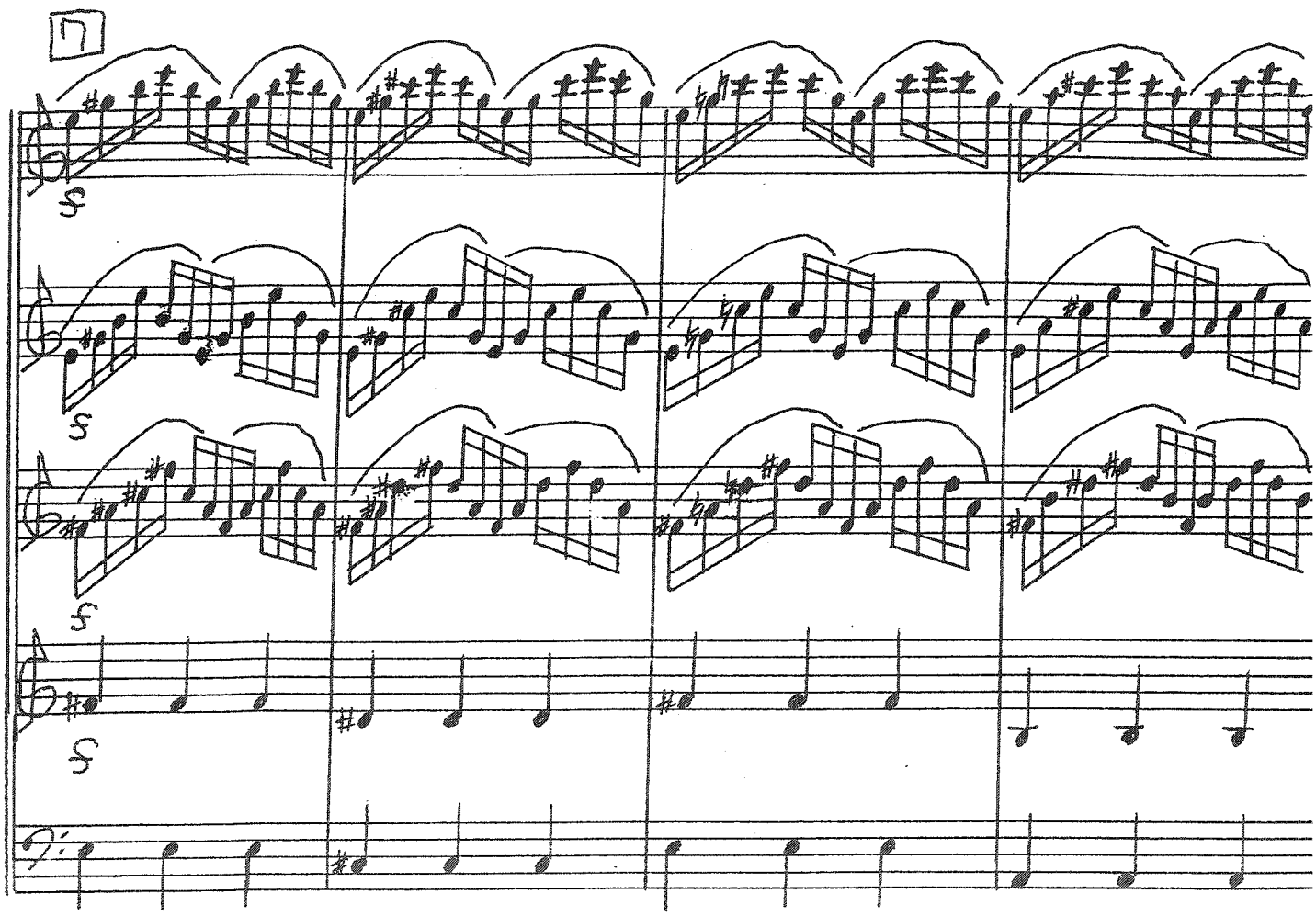


Example 45: Philip Glass, *The Civil Wars*, beginning of Scene A[348]

[348] Ibid., 84.

From rehearsals 3 to 4, there is a transition period, followed by the addition of flutes, oboes, clarinet, violins, and all voices singing the text, *ha-ha-ha-ha.* These sections are very rigid, rhythmic, and extremely repetitive.

At rehearsal 6, the flutes, oboes, and clarinet break the rigidity of the previous sections through the second melodic theme—a repetitive and melodic sixteenth-note pattern. Below is an example of the second melodic theme in sixteenth notes.



Example 46: Philip Glass, *The Civil Wars*, Scene A, second melodic theme in sixteenth-note patterns[349]

[349]Ibid., 90.

The bass clarinet and bassoons play repetitive quarter notes and the trombones shift between half notes. The percussion contributes a sixteenth-note and eighth-note pattern, the chorus sings in quarter and whole notes, the violins play in continuous sixteenth notes, and the viola and cello partake in repetitive quarter notes. At rehearsal 8, the texture thins and the transition into the next section is marked by the snare drum that plays a military sounding eighth-note pattern. At rehearsal 9, the chorus returns to its text, *ha-ha-ha-ha* and the percussion plays its previous patterns. The return of specific parts also creates structure for the listener.

The second melodic theme returns at rehearsal 11 and the full orchestra plays sixteenth-note patterns. At rehearsal 14, the chorus continues to sing the text *ha-ha-ha-ha* repetitively and at rehearsal 16, this text regresses back to the sixteenth-note motifs. This alternation occurs throughout each rehearsal until rehearsal 22. At this point, there is a transition period, marked by a fragmented rhythmic model, enabling the listener to hear small fragments of later passages. At rehearsal 23, the horns and trumpets contribute dotted whole notes, the tubas play continuous quarter notes, and the snare drum, cymbals, and cello partake in continuous eighth notes. This is followed by thin texture at rehearsals 25 and 26 with the omission of vocal texture. The break in texture grants the listener a break in concentration.

The transition period into rehearsal 28 consists of the full orchestra, participating in eighth-note and quarter-note figures. This leads into the second melodic theme with the continuous sixteenth-note pattern. At rehearsal 30, the first melodic theme occurs with its rigid eighth-note motifs. Rotation between the two patterns occurs until rehearsal 40. This creates closure for the audience. The tenor's first solo begins and is

accompanied by violin I, viola, and cello. The transition at rehearsal 41 is marked by the tenor passage, *acque del passato com voi ritrovar*. This is traced by an entry in the wood block with an eighth-note motif, pursued by bass clarinet and bassoon partaking in a quarter-note pattern, and followed by a cello passage. Rehearsal 42 moves the listener back to the tenor vocal line with a shift between the eighth-note and sixteenth-note themes progressively until rehearsal 57.

The texture of the snare drum and the cymbals at rehearsal 57 becomes increasingly thin. At this point, the full chorus participates on the text, *ah*, alternating between half notes and quarter notes in repetition. From rehearsals 59 to 66, there is alternation between the two melodic themes. At rehearsal 67, all of the instruments cut out with the exception of horns, trumpets, trombones, percussion and strings that play the first melodic theme. At rehearsal 68, the patterns are completely different with disjunct rhythmic patterns in eighth notes played by flutes, oboes, clarinet, bass clarinet, bassoons, and strings. The brass plays continuous quarter notes underneath disjunct melodic patterns. Rehearsal 69 concludes the scene with a reversion back to the tenor solo and the sixteenth-note patterns of the second melodic theme. There is alternation between the first and second melodic themes until the end of the scene.

The second interlude is full of smooth and flowing melodious lines combined with solo flute, oboe, and bassoon. The interlude begins with full strings that contribute long sustained tones combined with a smooth and melodic flute solo. The addition of the bassoon produces a sense of anxiety or warning for the listener. This is superceded by an oboe solo, responding to the bassoon. The call and response between the flute, oboe, and bassoon continues until there is a break in this smooth texture by a repetitive section.

This abrupt and startling section consists of repetitive sixteenth-notes contributed by the full orchestra and alternate repetitively between two chords to create a sense of energy for the listener. The bass instruments provide the main support for this section through a walking bass pattern. Following this energetic section, the trumpet, flute, oboe, and bassoon play the oboe's original line. Throughout this interlude, the listener associates each instrument with a different feeling and similarly to the first interlude, the instruments exchange roles with each other.

The concert reviews for *The Civil Wars* demonstrate the relationship between both Glass and Wilson, and the audience. In a review by Martin May in *Opera*, he comments on the communication presented in the opera: "Wilson and his collaborators, it seems to me, practice a form of solipsist communication: they present literary-historical-visual-musical symbols (in that order), and whatever these symbols connote in your own apperceptive mass is what you take from them."[350] The order in which these symbols are presented is important in the association between the composer and the audience. Before the musical symbols are presented, a background on the plot is relayed to the audience for a greater understanding of the music. In addition, the presence of time is important for both the visual and musical aspects of the opera. May states:

> ...he deals quite directly with time itself, a most profound subject. Arguably, reason is no good for this purpose, and thus the presumably deliberate abnegation of one of mankind's great conceptual achievements—triangulation—implied in the subtitle of the work. But as everyone's time-flows are (probably) individual, the artist can merely lay out the material, and as all of us are accustomed to our own perceptions the experience is pretty banal.[351]

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[350]Martin May, "The Civil Wars," *Opera* 38 (1987): 270.
[351]Ibid.

Through the perception of time, each audience member experiences the literary, historical, visual, and musical symbols from a different perspective.

Goals for an Audience in *The Hours*:

Since his stage works of the 1980s, Glass has written music in a variety of different musical fields including, concert music, opera, popular songs, and film music. He has supplemented his experimental works with more commercial projects, connecting his experimental music of the 1960s and 1970s to these other fields. In the past few years, he has focused on various film projects including, his orchestral score for the film, *The Hours*. This film has been a great success and has circulated his music to a wide audience, especially those individuals who were not previously acquainted with his music. *The Hours* demonstrates the increasingly strong connection Glass has created with his audience, and the progression away from La Monte Young. This work has been distributed to the mass population and has communicated with a wider range of audience members than any minimalist composer has ever achieved in the past. It demonstrates Glass's ability to maintain his compositional style, but to adapt to the needs of film through a more 'softened' edge. This relationship has been developed through his structure of the music that has an even stronger ability to draw in a more diverse audience.

Stephen Daldry's film is based on Michael Cunningham's 1999 Pulitzer Prize winning novel and intertwines the stories of three women—a book editor in New York in 2001 (Meryl Streep who plays Clarissa), a mother in Los Angeles in 1951 (Julianne Moore who plays Laura), and an author in England in 1923 (Nicole Kidman who plays

Virginia). Throughout the book/film, each character perseveres in spite of feeling like a prisoner in their own life. The depictions encapsulate each character's life within a single day and draw many similarities between all three women. Their stories join together throughout, and in the end, they share a moment of recognition.

The music for this film was co-commissioned by the Milwaukee Symphony Orchestra and the Brooklyn Philharmonic Orchestra. It is a piano concerto in three movements, arranged by Michael Riesman and orchestrated for strings, harp, and celeste. In the composition of the score, Glass had to decide between keeping his audience oriented to the shifts in time and place, or to use his music to interconnect the three stories together. In the end, he decided that he should tie the stories together and use rhythmic themes that would carry the tension through the stories. He used the piano predominantly throughout the film in order to avoid any problems with orchestration that would be related to the three different time periods. His use of repetition is evident in this music, but it has been softened to suit the needs of the film. This repetition combined with his choice of harmonies is extremely effective in captivating the listener. His unique minimalist style is a reinforcement of the transcendence outside of time and space, which is the essence of the story.

Musical Adaptation to the Audience of *The Hours*:

Throughout the score of *The Hours*, Glass uses repetition, but with a 'softened' edge to suit the needs of the film. In writing the music for his film scores, Glass first begins with a script. He watches it several times, takes inspiration from it, thinks inside and outside of it, and allows himself space to employ his own musical techniques:

> I [Glass] saw a rough cut, originally with a temp track of all my music, which was not so easy to listen to. The first thing I did was remove that so I could think about it. I saw the movie needed music to do a very specific thing. That was to hold the film together. From scene to scene, you didn't want different music. The music should be a bridge to carry you from place to place. When you go from Virginia Woolf playing with her niece in the park and cut right to Laura in the kitchen getting her medicine, the music is such that its almost like Laura is right next to Virginia.[352]

He included two of his previous pieces, *Satyagraha* and *Metamorphosis* into this film score. Although the entire film is primarily based on piano music, the music of the opening scene featuring the strings combined with the drama, captivates the audience from the very beginning.

The Effect of Stasis in *The Hours*:

Although Glass uses a different level of repetition throughout this score, it continues to generate a greater immediacy of stasis for the listener. The opening scene portrays the strongest bond between Glass and his audience. *The Hours* begins in the 1923 story with Virginia, who writes a suicide note to her husband and at the same time, her voice is projected as if she is reading the letter aloud. There is no music, as she reads her own words: 'I'm doing what seems to be the best thing to do'. This statement initiates the string quartet softly in the background, playing a repetitive rhythmic pattern and portraying a sense of extreme melancholy. The following example displays this rhythmic pattern:

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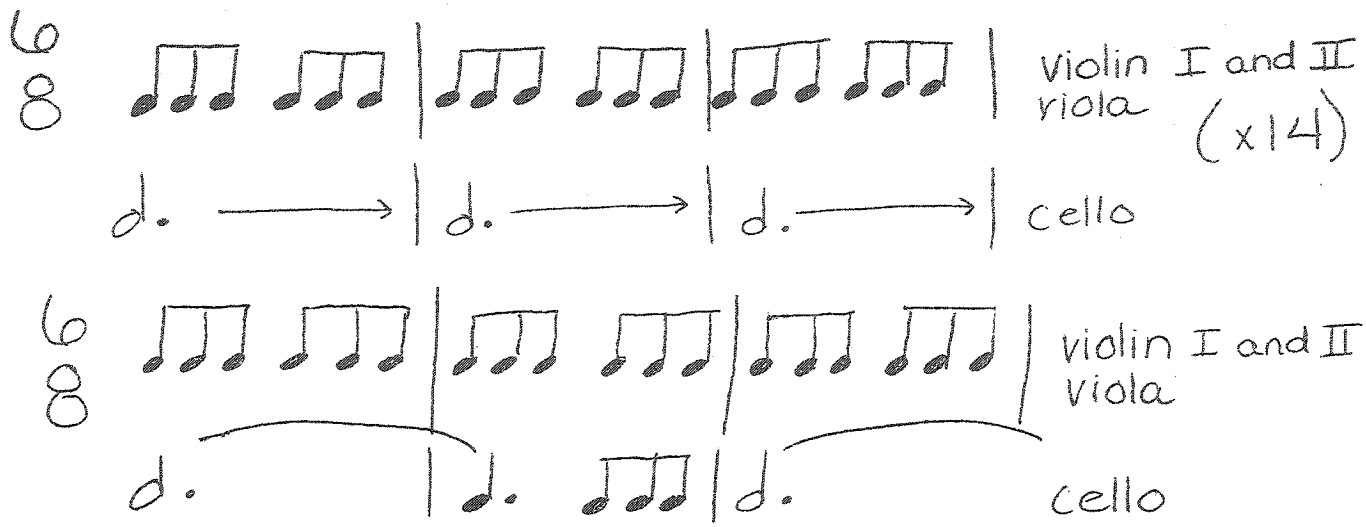
[352]Daniel Robert Epstein, *The Hours* www document, (2003), 2003; available from the world wide web: <http://www.ugo.com/channels/filmtv/features/thehours/philip.asp



Example 47: Philip Glass, *The Hours*, "The Poet Acts," rhythmic pattern[353]

This figure is played five times, starting on the tonic of the key before moving into the dominant. Once it changes, the lower strings are heard more prominently and create intensity as Virginia's husband is reading the note. At this point, the cello initiates a figure that is heard above the other strings and continues as she is walking into the water. This scene adds a sense of urgency for the audience:

> Urgency would have been the subtler motivation, perhaps. But it's a very complicated film. The kind of film that, if you stop paying attention to it, you get lost. You get drawn into it and stay with it. The strategy of the music dealt with the emotional point of view of the film, which in this case was very specific.[354]

The intensity grows stronger with this figure and produces anticipation for the individual listener. The music alternates between the tonic and the dominant, while her husband is running out of the house. The music settles back down to its original soft strings, while Virginia is drowning in the water. This scene is traced by the first segment from the piano concerto. The audience sees the mornings of three different women in three different eras. Glass primarily utilizes the piano throughout the score to create a sense of intimacy with the audience, the characters in the film, and their intimate moments.

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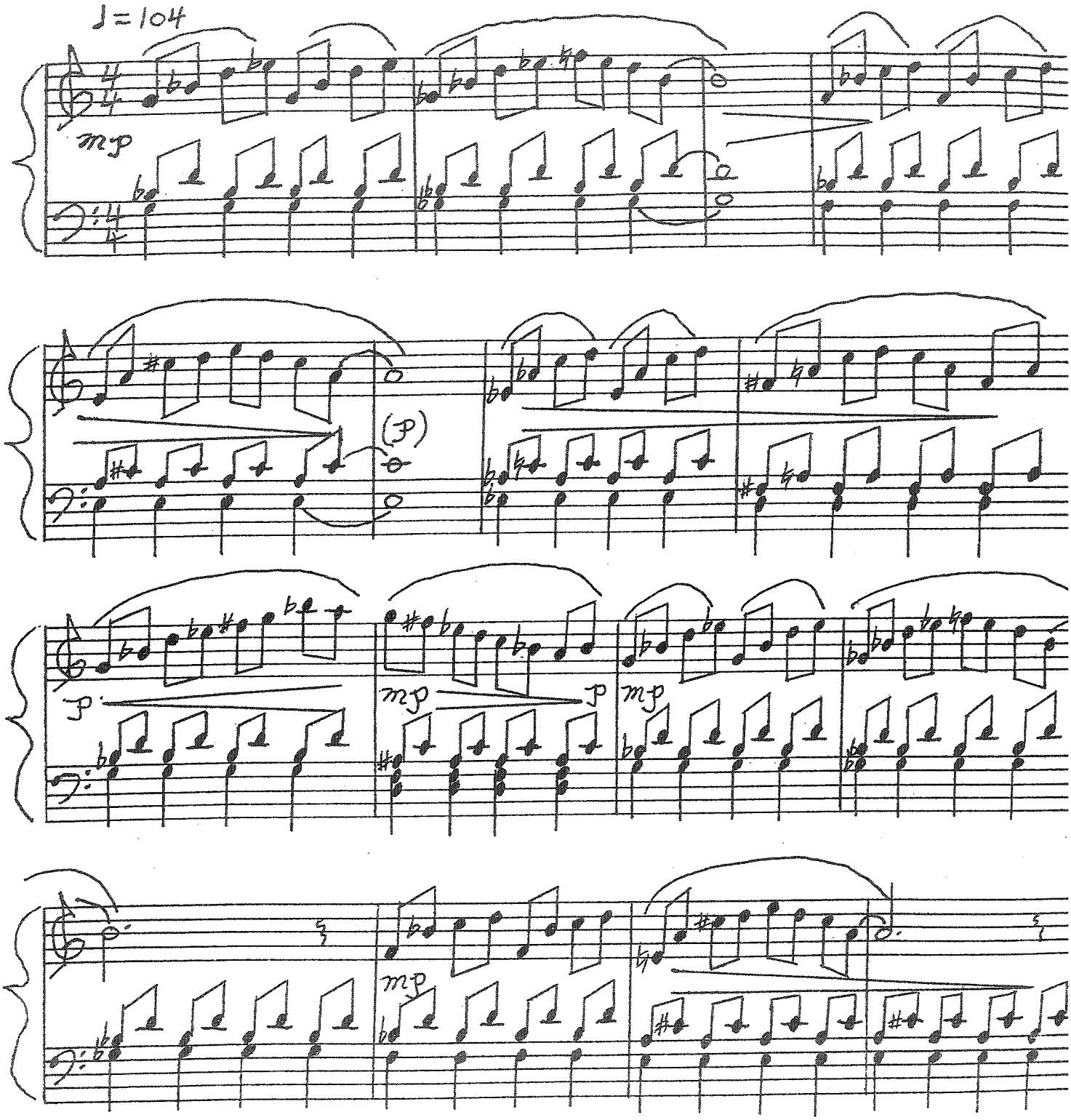
[353]Philip Glass, *The Hours*, Michael Riesman and the Lyric Quartet, Nonesuch 79693-2, 2002.
[354]Robert, *The Hours*, www.ugo.com/channels/filmtv/features/thehours/philip.asp

Following this scene, the introduction of the characters is supported by the "Morning Passages" section of Glass's piano concerto. This piano part is extremely repetitive and there is very little change throughout the section. The right hand of the piano plays a set of two arpeggios pursued by a tied whole note, and supported by the left hand, playing continuous eighth-notes. The following page demonstrates a passage from the beginning of this piece.



Example 48: Philip Glass, *The Hours*, "Morning Passages"[355]

[355] www.musicnotes.com

There is a subtle change in dynamics throughout this section that gradually crescendo and decrescendo.

This introductory scene is divided into three sections and focuses on the mornings of Laura, Virginia, and Clarissa. The scene begins with the Los Angeles setting and is supported by fragmented passages of the continual eighth notes in "Morning Passages". The initial scene is extremely depressing and is transformed into a more upbeat scene. This creates a sense of anticipation, since the viewer/listener does not know what to expect from the movie. The fragmented figure expands into the continuous arpeggio figure, and clips of the three settings are given. The three have striking similarities, and the music remains the same for each setting and situation. In each setting, the women's spouses are introduced and supported by a repetitive figure on the piano. This figure is played as they approach their houses, and is transformed into a melodious string section once they reach their houses. From a listener's perspective, the smooth and flowing string sections demonstrate their love and care for these women. Once the women have woken up and are ready to start their days, the piano music grows increasingly stronger and the main melody line is doubled at the octave. In all three settings, the spouses set out a bouquet of flowers to show how much they care. This act is supported by the repetitive rhythmic figures on the piano. Throughout the film, the women demonstrate their unhappiness by this over bearing affection, and Glass demonstrates this through his alternation and representation of the piano and string sections. Overall, this introductory scene draws the viewer/listener into the lives of the characters and story through the music.

Glass's interrelation to the audience is clearly demonstrated through reviews of this film. Many reviewers have stated that the film, combined with Glass's music is more captivating for the audience than the original book:

> Glass in this adeptly explores the inner lives of three women and a day in each one of their lives that curiously mimic the others. While I found Cunningham's novel too tedious to tolerate, this music managed to give me insight into the story. Strings and piano counterpoint create impressions of time and reception, with a strong theme of moving water and air that are major themes in Glass's previous work.[356]

The main goal of the three characters is to push ahead in their lives. Glass contributes to this sense of 'pushing on' through music that is continually moving in repetition. Cunningham feels that Glass's musical technique is very appropriate in relation to the theme of this film. He states: "We are creatures who repeat ourselves, we are humans, and if we refuse to embrace repetition—if we balk at art that seeks to praise its textures and rhythms, its endless subtle variations—we ignore much of what we mean by life itself."[357] This statement was made in defense of the critics who feel his music is too repetitious for the film.

There are some reviewers who feel that the movie cannot exist without the music, and the music cannot exist without the movie. Concerning the overall structure of the film, the music has become a part of this structure. This is demonstrated in the following review:

> A film of this caliber requires an equally complex, moving score, and Glass not only provides it, but inspires the movie. Each piece illuminates and frames each scene

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[356]Epinions, *The Hours—The Original Soundtrack* www document, (Epinions: 2003), 2003; available from World Wide Web: <http://www.epinions.com/content_106713681530

[357]Ronald Schepper, *The Hours (Nonesuch)* www document, (Stylus Magazine: 2003), 2004; available from World Wide Web: <http://www.rjschepper.com

> without imperfection. In the theater, you sit in awe at the methodical action on the screen as your ears hear the fluid, grand movements and its as if Glass is reading the mind of the audience scoring the movie as you think it should be. It is impossible to imagine this movie without the music, and the music without the movie.[358]

Glass has provided a musical structure that articulates the structure of the film.

In the following review, the reviewer discusses the music's ability to reiterate the emotions of the characters:

> ...the music becomes an emotional sounding board for each character's desperate salvation. "Hours"—timeless still-life score transcends changes in period and manner by simply maintaining Glass's static sanguine melodicism laced with dense Moebius—stripped violins and chilly time signatures. Ripe with pensive suspense, Glass' music—to say nothing of Riesman's soft, distant piano twinklings—is heartbreaking without sap.[359]

The melancholic melodies and harmonies of the music that express the emotions of the three characters draw the listener into their lives.

Many reviewers have stated that the music connects to the audience more effectively as a standalone piece:

> ...the score as a standalone experience is very different. The unending sense of melancholy is really beautiful; Glass doesn't waver from strings-and-piano through the whole score, but as opposed to its distancing effect on screen, on album it provokes the opposite reaction and draws the listener in, envelopes him.[360]

Although the music allures the audience into the film, the voices of the characters often distract the listener from the music. The listener remains focused on the music of the

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[358]Schepper, *The Hours* (Nonesuch), www.rjschepper.com

[359]A.D. Amorosi, *Philip Glass—The Hours* www document, (2003), 2004; available from World Wide Web: <http://www.citypaper.net/articles/2003-02-27/reviews.shtml

[360]James Southall, *The Hours* www document, (2003), 2003; available from World Wide Web: <http://www.moviewave.net/titles/hours.html

soundtrack with no distractions, and is encompassed by the overall sound and the stasis created through repetition.

Conclusion:

Glass reaches his audience most effectively, since he always responds to what he feels the audience is doing when listening to his music. It is this need to satisfy the audience that becomes most prominent in the relationship between the composer and the audience. He adapts to the particular needs of his audience within each musical area that he performs. In his more classical music, he expects his audience to listen more structurally, since he anticipates a certain type of audience. In his popular music, he softens the edge of his repetition in order to cater to different listeners. For this particular group of listeners, he writes music that revolves around a clear beat as well as a tune.

His willingness to adapt to a variety of different musical genres has enabled him to captivate the largest audience: "...crossing and re-crossing the borders normally erected between, for instance, 'concert music' and opera on the one hand, and popular songs, music for films and even television advertising on the other."[361] From the earliest point of his career, he performed his works abroad in order to reach out to a more multifaceted audience, gaining reputation in Britain and West Germany in the 1970s. He has maintained both his classical composition and his more commercial composition throughout the years. In many cases, he composes commercial works in order to subsidize his larger classical projects.

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[361]Potter, *The Four Musical Minimalists: La Monte Young, Terry Riley, Steve Reich, and Philip Glass*, 341.

Conclusions

Throughout the postmodern movement of the late twentieth century, it was difficult for most composers to find an audience *and* a group of followers. But the four musical minimalists, La Monte Young, Terry Riley, Steve Reich, and Philip Glass, had the ability to find a specific group of listeners and to connect to their audiences through specific compositional techniques.

From the compositions of Young to Glass, the audience has continually increased in size and diversity. This is a result of the evolution in compositional techniques, the recording of the pieces, the distribution of the scores, and the incorporation of minimalism into other genres. The above attributes are a result of each composer's search for a larger and more diverse audience.

Although the background of each minimalist composer is different, the four minimalists share some common characteristics that may have contributed to their later styles—they were all born in America in the mid-1930s, grew up with American popular music, endured and rejected conservatory training, became familiar with the sounds and rituals of Asia, and became religiously devout at some point in their lives.[363] These commonalities between the four minimalists may only have been coincidence, but biographers have noted that these were all contributing factors to their later compositional output.

Young's anecdotes from his childhood, growing up in Bern, Idaho have painted a picture that can be related to his later minimalist style and output. The biographers access an image for Young that focuses on his rural American roots. He did not grow up in the city submersed in a vast population, but grew up in a small town of 149 people and

[363]Robert Schwarz, *Minimalists* (London: Phaidon Press Limited, 1996), 13.

therefore, it seems that he was content to perform in front of a small audience. It is apparent that Young made a small effort to search for a larger group of listeners and was satisfied to perform in front of a small group of friends. He did not want to compete against the other minimalists for audience members. His greatest attempt to reach out to a larger group was his recording of *The Well-Tuned Piano*. This recording may have been a request of his small audience.

Biographers create an image of Riley growing up in rural America. From the beginning of his compositional career, it is apparent that he was in search of an expansive audience. Initially, Riley had a very small group of listeners, but wanted to move away from the loft-based performing spaces into a more public sphere. Although he admired Young, his main goal was to move away from his compositional style and more effectively connect to his listeners. He made his scores readily available and recorded all of his work.

Reich's anecdotes from his childhood pertain to his later compositional output. Biographers create an image of Reich growing up in the bustling city of New York and therefore, Reich felt the need to captivate a larger audience. He demonstrated a greater effort to search for a pandemic audience by writing compositions in both classical and popular genres. He performed in a variety of spaces in New York City in search of a more diverse audience. In addition, his phase-shifting technique created a greater immediacy of stasis and communicated with his listeners.

Like Reich growing up in a large city, Glass demonstrated the greatest need to identify with a larger audience through his compositional techniques and his willingness to adapt to specific audiences in a variety of genres. Similarly to Reich, he composed in

both the classical and popular fields, but also crossed over into film and theater. His film music has contributed to his reputation and captivates both minimalist listeners and the general public. He performed extensively in Europe in search of a more worldly reputation, and many of his interviews have been televised in order to reach out over a broad spectrum of listeners.

This thesis demonstrates that the connection between the composer and the audience is created through the structure of the music, the repetition of musical elements, and the specific techniques adapted by each composer to reach the listener. The specific compositional techniques that are evident in the work of the four minimalist composers have continually evolved. Throughout the history of minimalism from the early minimalist styles of Young to post-minimalism, each subsequent composer has brought his own unique qualities to the style. The following list demonstrates the evolution in compositional style from the work of Young to Glass:

1. increasing repetition of melody, rhythm, and harmony
2. the overall form has progressed
3. a greater immediacy of stasis through specific techniques:

i. Young: droning technique

ii. Riley: musical modules

iii. Reich: phase-shifting

iv. Glass: additive and subtractive processes

The evolution of repetition throughout the compositions of the four minimalist composers increasingly became more prominent through the repetition of rhythmic patterns, melody, and chord progressions throughout the compositions. The utilization of repetition is more

evident in the compositions of Glass than in the compositions of Young. Stasis within these minimalist compositions became a foundation and framework for the entire composition. The use of stasis was similar to elements employed throughout Western classical music: "The contemplative quality of Gregorian chant, the stasis of medieval organum, the repetitive, motoric rhythms of Baroque music—all share certain qualities with twentieth-century minimalism."[364] The greater immediacy of stasis progressed from Young to Glass through their individual techniques.

From the compositions of Young to Glass, the overall form of the minimalist compositions continually evolved and as a result, Glass's works are more structured than Young's works. In Glass's minimalist style, he continually reinstates specific chordal progressions, rhythmic and melodic motives, time signatures, and key signatures to develop an overall sense of structure for the listener. Transition periods are incorporated into the compositional styles of all four minimalist composers, but they become most prominent in the work of Reich and Glass. These periods break up the continuous rhythmic patterns when the listener is entranced, and create an awareness of a change in texture.

Young's use of stasis was influenced by serialism, employing static harmonies and sparse textures. His approach to stasis was articulated with unchanging dynamics over long periods of time, setting the agenda for a style that was built on the examination of the innards of sound.[365] Young was involved in the drug culture during this time and composed through non-progressive stasis to create a heightened perception of tuning. His exploration with tuning, just intonation, and improvisation in *The Well-Tuned Piano*

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[364]Schwarz, *Minimalists*, 10.

[365]Stanley Sadie, ed. *The New Grove Dictionary of Music and Musicians* 8th ed. (London: Macmillan, 1998), s.v. "La Monte Young," by Edward Strickland.

have defined his unique minimalist style. This meditative experience for his audience connected to his purity of sound, through his tuning in just intonation.

Riley wanted to move away from Young's approach and create stasis through the repetition of underlying notes within his minimalist works. His first well-known piece, *In C* focused on the alluring combination of modal material in constant repetition with unvarying fast pulses.[366] His employment of musical modules and his work with repetition has laid a foundation for later minimalist composers.

Reich's establishment of stasis was based on his phase-shifting, raising an awareness of changes in texture for the listener. This technique was employed through his tape-looping pieces, *Come Out* and *Different Trains* and his purely instrumental pieces, including *Drumming*. He initially created this technique through his exploration in pulse and his concern with the establishment of an 'unfolding' procedure. The main difference between the compositions of Reich and those of Young and Riley is his focus on composition and his avoidance of improvisation. His phase-shifting technique explored: "...the gradually shifting relationships that result when modal musical material is deployed against itself contrapuntally."[367] Through this technique, he created an awareness of the shifting processes, and made them clearly and deliberately audible to the listener.[368]

Glass creates the greatest immediacy of stasis. Through his additive and subtractive techniques, he has the ability to mesmerize the listener through endless and circular repetition. His employment of endless repetition is most notable in his *Music_in*

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[366]Stanley Sadie, ed. *The New Grove Dictionary of Music and Musicians* 8th ed. (London: Macmillan, 1998), s.v. "Terry Riley," by Edward Strickland.

[367]Stanley Sadie, ed. *The New Grove Dictionary of Music and Musicians* 8th ed. (London: Macmillan, 1998), s.v. "Steve Reich," by Paul Griffiths.

[368]Ibid.

Twelve Parts and *The Civil Wars*. In his more recent work in other genres including the music for *The Hours*, he continues to use his most crucial ingredient—repetition through additive processes, but has placed a greater importance on melody and timbre to soften the repetitive edge.

Although all four composers are still writing, Glass remains prolific in both his personal and popularized compositions and is presently composing a new opera. His more popularized compositions have helped to fund his more personal compositions. Glass's personal, compositional style today has retained many of the characteristics of his earlier minimalist works. He softens his popularized style to suit the needs of the genre for which it is being composed. His large audience of both classical and popular listeners is an indication of his success and therefore, he connects most effectively to the largest group of listeners.

Following the minimalism of Glass in the late twentieth century, a new style emerged called *post-minimalism*. This new style revolved around the two American composers, John Adams and Meredith Monk, who are a generation younger than the four musical minimalists. Like in many 'post' movements, various compositional techniques are added to the previous style. Post-minimalism took minimalism and: "...enriched it with a new expressive power and an impudent delight in stylistic juxtapositions."[369] In addition, these composers stripped away the continuous repetition of minimalism, avoided Eastern musical techniques, and structured the music between blocks of repetition and blocks of silence or 'motionless pools of sound'.[370] The main focus of this style was the reappearance of harmonic motion. This was emphasized to encompass the

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[369]Schwarz, *Minimalists*, 170.
[370]Ibid., 178.

narrative development across wider time spans.[371] Adams took the pure minimalist form and rendered it impure to create an eclectic mass of American musical culture.[372]

The postmodern movement has encompassed both minimalism and post-minimalism. The main feature of postmodernism that is evident in both these styles is the use of eclecticism. Minimalism continually evolved as a result of the work of the previous composer and in each new stage of minimalism, new musical techniques have been added to the style. The work of Glass incorporates his own musical style with the styles of Young, Riley, and Reich. The post-minimalist style employs a greater degree of eclecticism than the minimalist style. The main focus of post-minimalism includes the use of repetition from the minimalists, but also includes work with harmonic motion. The post-minimalists have combined minimalism with their own unique styles and include the rotation of minimalism and silence.

Regarding the future of minimalism, the four minimalist composers wrote in a specific style and were influenced by American popular culture: "The harmonic simplicity, steady pulse and rhythmic drive of jazz and rock-and-roll had an incalculable impact on the pioneering minimalist, who grew up listening to popular music and playing in bands."[373] Future composers writing in this style could never duplicate the style of the four minimalists because the influence of popular culture throughout the late twentieth century had a great impact on these composers. The four minimalists are now in their seventies and those who are still composing, will probably continue to write in the same minimalist style as their previous works.

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[371]Stanley Sadie, ed. *The New Grove Dictionary of Music and Musicians* 8th ed. (London: Macmillan, 1998), s.v. "Minimalism," by Keith Potter.

[372]Schwarz, *Minimalists*, 170.

[373]Schwarz, *Minimalists*, 10.

The post-minimalists and other composers who have experimented with the minimalist style will continue to use eclecticism to implement the techniques of the four minimalists with a variety of other styles and techniques. In the future, this eclectic nature will become too complex with the incorporation of too many ideas. At this point, composers could go back to the original minimalist style and strip away the musical ideas, but this all speculation.

In conclusion, the minimalism of the four musical minimalists, La Monte Young, Terry Riley, Steve Reich, and Philip Glass provided a frame work for various other musical styles throughout the late twentieth century, and will continue to influence other musical styles in the twenty-first century. The foundations of minimalism are malleable and will continue to evolve. In the words of John Adams:

> Minimalism was like a bucket of fresh spring water splashed on the grim and rigid visage of serious music. I [John Adams] can't imagine how stark and unforgiving the musical landscape would be like (sic) without it. But I think that as an expressive tool the style absolutely had to evolve and become more complex.[374]

The evolution in the complexity of minimalism from the compositions of La Monte Young to the compositions of Philip Glass, form an increasingly stronger connection and relationship between the composer and the audience.

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[374]Ibid., 179.

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