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## Three case studies in twentieth-century performance practice

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THREE CASE STUDIES IN TWENTIETH-CENTURY PERFORMANCE PRACTICE

A Dissertation

Submitted to the Graduate Faculty of the  
Louisiana State University and  
Agricultural Mechanical College  
in partial fulfillment of the  
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in

The School of Music

by

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\* \* \*

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## ABSTRACT

Since the middle of the twentieth century, the study of performance practice has increasingly drawn the interest of musicologists; however, despite the extensive documentation pertaining to matters of performance, the twentieth century has largely been neglected. Twentieth-century composers often annotated their scores extensively with indications of tempi, dynamics, and phrasing or included explanatory notes with detailed instructions. Supplemental records, such as diaries, transcripts of coaching sessions, and composers' commentaries on interpretative issues further shed light on their intentions. Yet a piece is not shaped just by the score and the comments of the composer; rather, it exists diachronically, evolving over time as it is performed.

Thanks to the rapid development of the recording industry, the twentieth century is the first century for which documentation of this process exists in the form of recordings, partial aural records of the performance history of a piece. Recent studies have tried to demonstrate how recordings, especially those supervised by the composer, can suggest or clarify musical decisions in future performances of a piece. The studies have not, however, answered the question whether the recording history of twentieth-century pieces shows the emergence of performance trends.

Focusing on the recording history of three seminal pieces of the twentieth-century repertoire—Arnold Schoenberg's Fourth String Quartet, John Cage's Sonatas and Interludes, and Berio's *Sequenza III*—this dissertation examines how trends in performance practice emerge in the recording history of twentieth-century pieces. It investigates whether a certain performance practice is traceable from one recording to the next; whether certain trends are more prevalent at one time than another; and whether, despite the detailed annotations and primary source material available, recordings show a variety of interpretations rather than the emergence of one standard performance practice.

## CHAPTER 1: INTRODUCTION

Since the middle of the twentieth century, the study of performance practice has increasingly drawn the interest of musicologists. Especially in regard to early music, documents dealing with the establishment of an “authentic,” or historically informed, performance practice have steadily increased.<sup>1</sup> The same effort, however, has not been extended into the century that would lend itself best to such investigations, the twentieth, a period that offers more extensive and inclusive documentation pertaining to matters of performance than any other in music history.<sup>2</sup> Twentieth-century composers often annotated their scores extensively with indications of tempi, dynamics, and phrasing, or included explanatory notes with detailed instructions. Supplemental records, such as composers’ and performers’ diaries, transcripts or summaries of coaching sessions, and composers’ commentaries or responses on interpretative issues further shed light on their intentions.

Consulting these resources is the first step in determining the intention or concept a composer has regarding his composition. Yet a piece is not shaped just by the score and the comments of the composer; rather, it exists diachronically, evolving over time as it is performed.

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<sup>1</sup> For an introduction surrounding the issues of authenticity in early music see especially Nicholas Kenyon, ed., *Authenticity and Early Music: A Symposium* (Oxford: Oxford University Press, 1988); also Richard Taruskin, *Text and Act: Essays on Music and Performance* (New York: Oxford University Press, 1995).

<sup>2</sup> Most research concerning twentieth-century performance practice exists in the form of case studies of individual pieces and deals with issues of analysis and learning to play the repertoire rather than the establishment of a performance tradition over time. The exception is Mark Katz’s 1999 dissertation, which though primarily concerned with the effect of the phonograph, includes a chapter analyzing recording influences on violin performance of the twentieth century. Mark Katz, “The Phonograph Effect: The Influence of Recording on Listener, Performer, Composer, 1900–1940” (PhD Dissertation, University of Michigan, 1999). Among sources treating specifically the topic of performance practice are John Butt, *Playing with History: The Historical Approach to Musical Performance* (Cambridge: Cambridge University Press, 2002), which includes a section extending the issues surrounding the historically informed performance practice of early music into the late twentieth century and also pays special attention to the role of the composer in performance; Bengt Hambraeus, *Aspects of Twentieth Century Performance Practice: Memories and Reflections* (Stockholm: Royal Swedish Academy of Music, 1997), a quasi-memoir of the author’s role and involvement in twentieth-century music with special emphasis on performance practice; Arthur Weisberg, *Performing Twentieth-Century Music: A Handbook for Conductors and Instrumentalists* (New Haven: Yale University Press, 1993), which explains how to approach the performance of a twentieth-century piece; and Amy Michelle Strickland, “Luciano Berio’s *Circles*: An Exploration of Performance Alternatives” (MA Thesis, University of Alabama, 2006), an attempt to construct a history of performance practice of *Circles* based on the available evidence (the score and writings of the composer) as well as past performances.



Artists may take considerable leeway in observing the composer's indications in performance, especially in regard to dynamics, articulation, and tempo. One performer's interpretation may influence those of future performers, perpetuating certain practices whether or not they reflect the intentions of the composer. Thanks to the rapid development of the recording industry, the twentieth century is the first century for which documentation of this process exists in the form of recordings, partial aural records of the performance history of a piece. A wide array of these recordings is available for study, including those made under the baton or under the supervision of the composer. Recent studies have tried to demonstrate how recordings, especially those supervised by the composer, can suggest or clarify musical decisions in future performances of a piece.<sup>3</sup> The studies have not, however, answered the question whether the recording history of twentieth-century pieces shows the emergence of performance trends.

### **Aims and Directions of This Study**

How trends in performance practice emerge in the recording history of twentieth-century pieces is the central question for the dissertation. It investigates whether a certain performance practice is traceable from one recording to the next; whether certain trends are more prevalent at one time than another; and whether, despite the detailed annotations and primary source material available, recordings show a variety of interpretations rather than the emergence of one standard performance practice. The dissertation focuses on the recording history of the following pieces:

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<sup>3</sup> For the influence of recordings on performance practice see the groundbreaking article by Robert Fink, "'Rigorous (♩ = 126)': *The Rite of Spring* and the Forging of a Modernist Performing Style," *Journal of the American Musicological Society* 52, no. 2 (Summer 1999): 299–362. Robert Philip, *Performing Music in the Age of Recording* (New Haven: Yale University Press, 2004), discusses more clearly the impact recording has had on instrumental music, but excludes vocal music. See also Eric Clarke, "Listening to Performance," in *Musical Performance: A Guide to Understanding*, ed. John Rink, 185–96 (Cambridge: Cambridge University Press, 2002), and Peter Johnson, "The Legacy of Recordings," *ibid.*, 197–212. Timothy Day, *A Century of Recorded Music: Listening to Musical History* (New Haven: Yale University Press, 2000), demonstrates how listening to recordings over time can yield new insights into the staple pieces of the Western repertoire. For an introduction to the development of the recording industry see, for example, Michael Chanan, *Repeated Takes: A Short History of Recording and its Effects on Music* (London: Verso, 1995), and Pekka Gronow and Ilpo Saunio, *An International History of the Recording Industry*, trans. Christopher Moseley (London: Cassell, 1998).

Arnold Schoenberg's Fourth String Quartet, op. 37, premiered by the Kolisch Quartet in 1937; John Cage's Sonatas and Interludes, a piece for prepared piano premiered by the composer in 1948; and Berio's *Sequenza III*, a piece for solo voice premiered by Cathy Berberian in 1966.

The pieces were chosen based on two main criteria. The first criterion is a substantial number of commercially available recorded performances. The Fourth String Quartet has the longest recording history, ranging over seventy years; Sonatas and Interludes has a recording history of about sixty years, *Sequenza III* about fifty. To facilitate comparison, the recording history had to include at least one "authoritative" recording—a recording that has the approval of the composer.<sup>4</sup> Additionally, pieces were chosen that have been frequently performed and recorded by artists internationally, to allow for a comparison of as large a number of interpretations as possible.

The second criterion is the availability of documents pertaining to matters of performance practice, including the score, composer interviews, and commentary on performance issues from both the composer and performers. For all three pieces, the scores indicate to various degrees musical aspects such as tempo, dynamics, and articulation. In addition, the scores of all three compositions include a set of instructions for the performer, aiding, among other things, in the interpretation of non-conventional notation, the execution or alteration of pitch, and understanding of the structure of the piece.

Schoenberg's instructions are the shortest and explain the desired execution of articulations, dynamics, and ornamentation. The preface to Berio's *Sequenza III* explains the

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<sup>4</sup> The recordings I consider authoritative are Kolisch Quartet, *String Quartets Nos. 1–4*, recorded 8 January 1937, Archipon Arc-103/4, 1992, compact disc. Originally released on Alco Records ALP 1005, 1950, 33⅓ rpm; Maro Ajemian, *John Cage: Sonatas and Interludes for Prepared Piano*, recorded 1950, CRI Composers Recordings Inc. CD 700, 1995, compact disc. Originally released on Dial Records 19–20, 1951, 33⅓ rpm. Cathy Berberian, *Circles, Sequenza I, Sequenza III, Sequenza V*, recorded 1967, Wergo WER 6021–2, 1991, compact disc. Originally released on Wergo WER 60021, 1967[?], 33⅓ rpm.

nontraditional symbols used in the score. Some, such as symbols for laughter, mouth clicks, coughing, and gentle finger snapping, are distinctive of the composition. Lastly, Cage's table of preparations for Sonatas and Interludes specifies the type of objects to be used, as well as their placement.

To investigate a variety of performance-related problems, the pieces were also chosen based on the different challenges they present to performers. The first piece, Schoenberg's Fourth String Quartet, is the most traditional of the three but is heavily annotated with instructions for articulation, tempo, and dynamic changes. Berio's *Sequenza III* uses a traditional medium, the voice, in a—then—new way. It challenges the singer with unconventional notation, singing techniques, and rapidly changing emotive expressions. Cage's Sonatas and Interludes, lastly, is written for a new medium, the prepared piano. Unlike the unprepared piano, the instrument is resistant to subtleties of dynamics and articulations. The performer, besides having to "build" the instrument, must learn to navigate its limitations and unfamiliar soundscape.

Because of the difficulty of execution and the novelty of various aspects of performance practice related to the pieces, an "authoritative" recording could potentially set a strong precedent for future interpretations, as artists may turn to it for inspiration or to see "how it is done." Yet despite these recordings, many subsequent performances sound fundamentally different in their interpretation. One of the questions the dissertation will address is what divergences are common and what may be the cause of them. Technical aspects, such as ambiguities in the notation (misprints, ambiguously defined symbols, or absent instructions), for example, can result in a variety of interpretations. Likewise, the opinion or interpretation a composer expresses in his writings and coaching sessions may contradict annotations or instructions in the score. Furthermore, the artist may overlook, ignore, or be unable to execute

the instructions of the composer and seek other ways of performing the work. Whether or not the artist's background and repertoire lie primarily within the twentieth century may also play a role in the interpretation.

Since a variance in interpretation is to some extent expected and perhaps even desired by the composer, I examine what aspects, if any, reappear between recordings. By determining where these aspects originated (score, subsequent instructions of the composer, or artistic interpretation), I ascertain to what extent the performance practice of the pieces is the product of the composer's concept or the artist's interpretation.

### **Selection of the Recordings**

The recordings are chosen on the basis of a variety of criteria. The recording date is of particular importance to a study of the recording history, and an effort is made to include recordings from as many different decades as possible, beginning with the premier recording made under the supervision of the composer up to the most recent. For decades with a great number of recordings, such as the 1990s, several recordings may be included with an eye towards chronology; that is, included are those made during the beginning, middle, and end of the decade.

The performing artists' relation to the composer is also of interest. Where possible, the recordings are chosen both from artists who consulted with the composer and those who did not. In addition, the sample includes recordings that were especially important for the performance history of the piece and those deemed particularly successful renditions (as evidenced by reviews and references by other artists). Tables 1.1 through 1.3 give a summary of the recordings studied for each chapter as well as their date of recording and first release.

Table 1.1: Recordings of Schoenberg's Fourth String Quartet

Performers	Label	Recording	First Release
Kolisch Quartet	Archiphon	1937	1950
Juilliard Quartet	Columbia Records	1951–52	1954[?]
LaSalle Quartet	Deutsche Grammophon	1969	1971
Juilliard Quartet	Columbia Records	1975	1977
Schoenberg Quartet	Chandos Records	1991	2001
Arditti String Quartet	Montaigne	1993	1994
Leipziger Streichquartett	MDG Gold	1999	1999
Aron Quartet	Preiser Records	2002–03	2003
Quatuor Psophos	Zig-Zag Territories	2005–06	2007

Table 1.2: Recordings of Cage's Sonatas and Interludes

Performers	Label	Recording	First Release
Maro Ajemian	Composers Recordings	1950	1951
Yuji Takahashi	Fylkingen Records	1965	1966
Joshua Pierce	Wergo	1975	1977
Gérard Frémy	Etcetera	1980	1983
Nigel Butterley	Tall Poppies	1992	1993
Louis Goldstein	Greensye Music	1994	1996
Aleck Karis	Bridge	1997	1998
Boris Berman	Naxos	1998	1999
Herbert Henck	ECM Records	2000	2003
Margaret Leng Tan	Mode	2003	2006

Table 1.3: Recordings of Berio's *Sequenza III*

Performers	Label	Recording	First Release
Cathy Berberian, Studio	Wergo	1967	1967[?]
Cathy Berberian, Live	Ermitage	1969	1993
Linda Hirst	Virgin Classics	1986	1988
Christina Ascher	Signum	1994	1994
Isabelle Ganz	Mode	1996	2006
Louisa Castellani, Studio	Deutsche Grammophon	1994–97	1998
Louisa Castellani, Live	Polish Music Information Center	2003	2003
Salome Kammer	Wergo	2007	2008

## **Structure**

The dissertation is structured in five chapters. Chapter 1 provides the background against which the three chosen pieces are examined, introduces the process for selecting recordings, and outlines the aspects to be investigated. Chapters 2–4 are devoted to the respective pieces and their performance practice as demonstrated by various commercially available recordings. Chapter 5 conceptualizes the findings of Chapters 2–4.

Each of Chapters 2–4 is structured in two parts. The first part establishes the historical context for the piece and outlines the composer's concepts and views regarding aspects of its performance. Unfamiliar symbols or piece-specific score annotations are introduced and explained, drawing on the composer's instructions for other pieces where helpful or necessary. The goal of this part is to establish what may be construed as the composer's intentions and concept of the piece that may be reasonably expected to carry over into performance. The second part focuses on the recordings themselves. The performance aspects relevant to the piece are examined in a sample of recordings, focusing particularly on tempo and timing, faithfulness to the score, and individual artistry and musicality. The goal of this part is to establish the similarities and differences in the interpretations.

Chapter 5 conceptualizes the findings of Chapters 2–4, judging the extent to which, overall, performers follow the detail of the score and take the known intentions of the composer into account. Particular attention is paid to whether one performance may have had a perceptible influence on another, whether certain time periods favor a particular execution, and whether specific trends of performance are present throughout the performance of the work through time. It then addresses the question to what extent the establishment of a standard performance practice for the three pieces can be ascertained and concludes with an examination of what the findings may mean for performance practice of twentieth-century music in general.

## CHAPTER 2: SCHOENBERG'S STRING QUARTET NO. 4, OP. 37

In 1933 Schoenberg and his family left Europe to seek refuge in the United States from the growing Nazi threat, eventually settling in Los Angeles in September 1934. The move fundamentally reshaped Schoenberg's career, compositions, and outlook on music, as the American music scene differed substantially from the European. The composer realized early on that a quick assimilation, speaking the language, adapting to the local taste of the audience, and mastering the different customs pertaining to musical life (such as distribution, performance venues, and performers), would be imperative for making America his new home.<sup>1</sup>

The name of Schoenberg as a composer was already known when he arrived in America. Major orchestras had given performances of several of his orchestral pieces and important chamber works had been heard, most notably *Pierrot lunaire*; however, the Great Depression and concomitant loss of private funding led orchestras to program according to public demand, and in the 1930s mainly Schoenberg's tonal pieces (*Verklärte Nacht*, *Pelleas und Melisande*) were scheduled. Perhaps as a means to familiarize audiences with his most accessible music first, Schoenberg too began programming his tonal works.<sup>2</sup>

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<sup>1</sup> In the summer following his arrival in the US, the composer anglicized his name from Schönberg to Schoenberg and studied English in an effort to master the language. Schoenberg even encouraged the use of English translations for performances of his early works in America. Sabine Feisst, *Schoenberg's New World: The American Years* (New York: Oxford University Press, 2011), 113. In 1942, for example, he wrote to Erwin Stein requesting an English recording be made of *Pierrot*. "I want to make the suggestion that you record your performance. Mine is, unfortunately, . . . in German, which is much in the way of a full success. . . . I am sure an English version would beat the American records." Arnold Schoenberg to Erwin Stein, Los Angeles, 2 October 1942, in *Arnold Schoenberg: Letters*, ed. Erwin Stein, trans. Eithne Wilkins and Ernst Kaiser (New York: St. Martin's Press, 1965), 215.

<sup>2</sup> Sabine Feisst, "Schoenberg Reception in America, 1933–51," in *The Cambridge Companion to Schoenberg*, ed. Jennifer Shaw and Joseph Auner (Cambridge: Cambridge University Press, 2010), 248. Hans Heinz Stuckenschmidt recounts one of Schoenberg's pupils, Lowndes Maury, asking the composer why he chose to program *Pelleas und Melisande*, to which Schoenberg replied that the public did not yet understand his musical thinking and thus was not ready for his latest compositions. Hans Heinz Stuckenschmidt, *Schoenberg: His Life, World and Work*, trans. Humphrey Searle (New York: Schirmer, 1978), 377. Walter Bailey suggests that the varied sounds of Schoenberg's works from the 1940s were the direct result of his composing for the new audience. Walter B. Bailey, "Listening to Schoenberg's Piano Concerto," in Shaw and Auner, *The Cambridge Companion to Schoenberg*, 240.

The primary outlet for performances of his atonal works was chamber music, performed at inconspicuous academic settings and private venues such as salons, music clubs, and churches. These performances were rarely reviewed (though they were sometimes announced in the press) and many European-born composers were either unaware of performances of their works at such gatherings or simply did not take them seriously. During the 1930s, more than ninety performances of Schoenberg's chamber works were given, including performances of a cycle of all four of his quartets by the Kolisch Quartet. The frequency with which orchestras and small chamber ensembles performed his works belies Schoenberg's belief that his music was rarely performed in the United States.<sup>3</sup>

### **The Fourth String Quartet**

Schoenberg began working on String Quartet no. 4, op. 37, on 27 April 1936 as a commission by Elizabeth Sprague Coolidge, the American patron who had already commissioned his String Quartet no. 3.<sup>4</sup> Schoenberg aimed to create a twelve-tone work that was

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<sup>3</sup> Feisst, "Schoenberg Reception in America," 248–49. Also see Feisst, *Schoenberg's New World*, 154–57. Apart from anxiety and worry associated with his relocation, another reason for this belief may have been the lack of feedback readily available about performances of his works because of the vastness of the Americas. Feisst, "Schoenberg Reception in America," 247. In addition, the years following the war were marked by an increased nationalist pride in the United States, resulting in a growing prominence of American music and a certain suspicion of foreign, immigrant musicians and their effect on the American music scene. While the effects may have been overstated by immigrant composers, they nonetheless may have influenced Schoenberg's perception regarding performances of his works. Alan Lessem, "The Émigré Experience: Schoenberg in America," in *Constructive Dissonance: Arnold Schoenberg and the Transformations of Twentieth-Century Culture*, ed. Juliane Brand and Christopher Hailey (Berkeley: University of California Press, 1997), 60–61.

<sup>4</sup> Schoenberg knew Coolidge through Hans Kindler, the cellist of the *Pierrot* world premiere. Among the important concerts given under her sponsorship are an all-Schoenberg welcome concert and reception at the Library of Congress in 1933 and the Kolisch Quartet's presentation of Schoenberg's first three numbered Quartets at the Coleman Chamber Music Concerts in Pasadena in June 1936. Feisst, *Schoenberg's New World*, 176. For a chronology of Schoenberg's compositional process of the Fourth String Quartet see Christian Martin Schmidt, "IV. Streichquartett: Opus 37," in *Arnold Schönberg: Sämtliche Werke*, ed. Rudolf Stephan (Mainz: Universal Edition, 1984), 21B: 46–92 and Rudolf Stephan, "Zur Genesis von Schönbergs viertem Quartett," in *De editione musicis: Festschrift Gerhard Croll zum 65. Geburtstag*, ed. Wolfgang Gratzner and Andrea Lindmayr (Laaber: Laaber Verlag, 1992), 99–105. Schoenberg wrote three important chamber works during his time in America: the Fourth String Quartet; the String Trio, op. 45 (1946); and the *Phantasy* for violin and piano, op. 47 (1949).



accessible enough to appeal to the American public.<sup>5</sup> The premiere of the piece took place at UCLA's Royce Hall on 8 January 1937 performed by the Kolisch Quartet.<sup>6</sup> The work is dedicated both to Coolidge and the Kolisch Quartet with the words "To the ideal patron of chamber music ELIZABETH SPRAGUE COOLIDGE and to the ideal interpreters of it THE KOLISCH QUARTET."<sup>7</sup>

According to a review in the *New York Times*, the premiere was well attended and the audience (about 1500)<sup>8</sup> listened with interest to the new quartet, which "made a profound impression by a new atmosphere of emphasis and inner quietude in place of the nervous intensity and restlessness which mark the second and third quartets." The third movement in particular was lauded for its "cantilena legato line" and the overall comment suggested "that with this new quartet Schoenberg is nearer to romanticism than some cognoscenti claim him to be."<sup>9</sup> The composer summarized the premiere in his notes accompanying the record release of all four quartets as "a perfectly commonplace affair. There was no special excitement and, at least, the anticipation was in no way exaggerated." Yet he expressed being content "with the attitude of the

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<sup>5</sup> Feisst, *Schoenberg's New World*, 143. In his 1934 essay "Problems of Harmony" Schoenberg speculates that with time, audiences would come to "recognize the *tonality* of this music today called *atonal*" and "would not then be compelled to attempt to point out any other difference than a *gradual* one between the tonality of yesterday and the tonality of today." Arnold Schoenberg, "Problems of Harmony," in *Style and Idea: Selected Writings of Arnold Schoenberg*, ed. Leonard Stein, trans. Leo Black (New York: St. Martins Press, 1975), 284.

<sup>6</sup> The Kolisch Quartet was founded in 1921, then under the name Wiener Streich-Quartett, at Schoenberg's urging, to establish a permanent string quartet for the Verein für musikalische Privataufführungen. The group's first members were Rudolf Kolisch and Fritz Rothschild (alternating violin I and violin II), Marcel Dick (viola), and Joachim Stutschewsky (cello). Despite the Verein's dissolution in the year of the quartet's founding, the group persisted under the more permanent formation of Rudolf Kolisch (violin I), Felix Kuhner (violin II), Eugene (Jenö) Lehner (viola), and Benar Heifetz (cello)—after 1927 under the name Kolisch Quartet. In 1936 the quartet immigrated to the US and due to New York's musical climate and personnel changes dissolved soon thereafter. During its existence, the quartet specialized in works by contemporary composers. Apart from premiering Schoenberg's Quartets nos. 3 and 4, it also premiered Berg's *Lyric Suite* (1927), Webern's String Trio (1928), and Bartók's Quartets nos. 5 (1935) and 6 (1941). Berthold Türcke, "Rudolf Kolisch: Eine biographische Skizze," in *Rudolf Kolisch: Zur Theorie der Aufführung*, Musik-Konzepte, ed. Heinz-Klaus Metzger and Rainer Riehn (Munich: Text & Kritik, 1983), 123–25.

<sup>7</sup> Also on the program was Beethoven's String Quartet in A minor, op. 132. Peter Gradenwitz, *Arnold Schönberg: Streichquartett Nr. 4, Op. 37* (Munich: Wilhelm Fink Verlag, 1986), 15.

<sup>8</sup> Feisst, *Schoenberg's New World*, 144.

<sup>9</sup> Bruno David Ussher, "Schoenberg's New Quartet," *New York Times*, 17 January 1937.

public,” which “listened with respect and sincerity to the strange sounds with which they were faced and it seems a number of them were really impressed.”<sup>10</sup>

Part of the success of the work was due to its closeness to the classical tradition. The quartet is cast in four clearly defined movements, a first movement loosely in the mold of a sonata form, a lighter movement in the style of a scherzo, a slow movement, and a rondo. Despite Schoenberg’s use of serialism, the working of motives and themes is more reminiscent of quartets by Mozart and Haydn than those of late Beethoven.<sup>11</sup> Particularly the opening theme, stating the twelve-tone row, serves as an important structural marker.<sup>12</sup>

The score of op. 37 is heavily annotated with dynamics and expression markings. Apart from the more conventional ones, Schoenberg also uses some of his own symbols, which are explained at the beginning. Among them are signs denoting which voice has the principal part

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<sup>10</sup> Kolisch Quartet, *Schoenberg String Quartets Nos. 1–4*, recorded 8 January 1937, Archiphon Arc-103/4, 1992, compact disc, liner notes, 8. Originally released on Alco Records ALP 1005, 1950, 33⅓ rpm. Despite the success, Schoenberg remained hesitant about programming the last two quartets, writing to Kolisch “You know, I am always a little afraid of the two later string quartets.” Schoenberg to Rudolf Kolisch, 23 October 1944, Harvard University, Houghton Library, quoted and translated in Feisst, *Schoenberg’s New World*, 171.

<sup>11</sup> Reinhold Brinkmann, “Schoenberg’s Quartets and the Viennese Tradition,” in *Music of My Future: The Schoenberg Quartets and Trio*, ed. Reinhold Brinkmann and Christoph Wolff (Cambridge: Harvard University Press, 2000), 3. See also Gradenwitz, *Schönberg*, 21; and Michael Cherlin, “Schoenberg and the Tradition of Chamber Music for Strings,” in Shaw and Auner, *The Cambridge Companion to Schoenberg*, 49–50. Most analysts of the first movement identify a clearly defined first theme (mm. 1–6; dominant, energetic) and a second theme (mm. 66–71; lyrical). Two other recurring ideas (mm. 27–28 and 116–21) also serve as a guide for the listener. Feisst, *Schoenberg’s New World*, 143–44. See also Ethan Haimo, “The Mature Twelve-Tone Method,” in *The Arnold Schoenberg Companion*, ed. Walter B. Bailey (Westport: Greenwood Press, 1998), 129–56; and Matthias Schmidt, “IV. Streichquartett,” in *Arnold Schönberg: Interpretationen seiner Werke*, ed. Gerold W. Gruber (Laaber: Laaber Verlag, 2002), 2:23–24. In his own brief analysis of the first movement of the work, Schoenberg denies a close adherence to the classical form model for the quartet as a whole as well as individual movements: “Not only does the order of appearance of their functional constituents (themes, melodies, units, motives and other structural elements) differ from the conventional, but also whether they are repeated, elaborated or abandoned seems to depend on different factors. . . . There is no key to an analysis, tracing these forms to traditionally developed organizations.” LaSalle Quartet, *Neue Wiener Schule: Die Streichquartette*, recorded 1968–1970, Deutsche Grammophon DG 419 994-2, 1987, compact disc, liner notes, 58. Originally released on Deutsche Grammophon DG 2720 029, 1971, 33⅓ rpm. Though the quartet is a twelve-tone composition, Schoenberg strongly resisted analyzing the work in terms of its twelve-tone structure, saying “I could not do this. It would mean that I myself had to work days to find out, how the twelve tones have been used and there are enough places where it will be almost impossible to find the solution.” LaSalle Quartet, *Neue Wiener Schule*, DG 419 994-2, liner notes, 81. For a detailed analysis of the third movement see, for example, Silvina Milstein, *Arnold Schoenberg: Notes, Sets, Forms* (Cambridge: Cambridge University Press, 1992), 98–118.

<sup>12</sup> LaSalle Quartet, *Neue Wiener Schule*, DG 419 994-2, liner notes, 69.

(the *Hauptstimme*, marked **H**) and which voice has the secondary part (the *Nebenstimme*, marked **N**);<sup>13</sup> according to Schoenberg's directions, the parts in the score are marked to indicate the importance of each voice at any given moment in the quartet; unmarked parts are to be thought of as accompaniment.<sup>14</sup> Figure 2.1 shows the use of the symbols of *Hauptstimme* and *Nebenstimme* in the score.

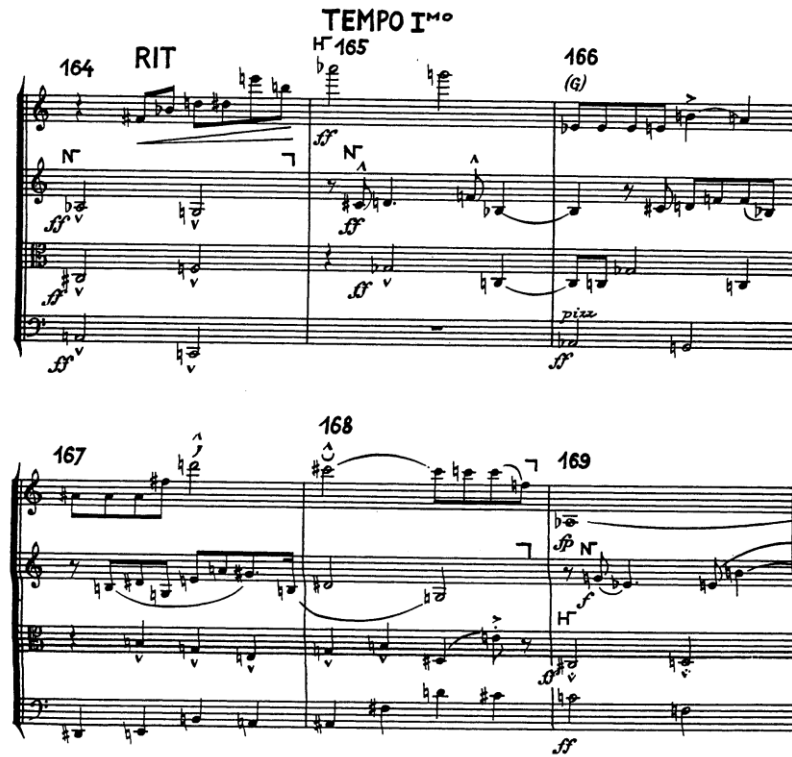


Figure 2.1: *Hauptstimme* and *Nebenstimme* Symbols in the Score (Violin I and II; mm. 164–69)<sup>15</sup>

<sup>13</sup> Arnold Schoenberg, *Fourth String Quartet* (New York: Schirmer, 1939), iv. A similar table of explanatory notes accompanies the *Third String Quartet* (1927). A variation of the symbol signifying the *Hauptstimme* is also found in the “Colombine” and “Valse de Chopin” movements of *Pierrot lunaire* (1912). In 1923 Schoenberg expressed dissatisfaction with conventional music notation in several essays, saying “that in musical notation one should express as little as possible with letters, or even words, and make ever-increasing use of signs (if possible, pictures) which have nothing to do with letters.” Arnold Schoenberg, “Pictorial Notation,” in *Black, Style and Idea*, 351–352. See also “Performance Indications (Dynamics),” *ibid.*, 340–41; “On Notation,” *ibid.*, 350–51; and “A New Twelve-Tone Notation,” *ibid.*, 354–62, written in 1924.

<sup>14</sup> “These indications are for the purpose of making clear to each performer the importance of his part. It follows that unmarked passages are to retire into the background as accompaniment.” Schoenberg, *Fourth String Quartet*, iv.

<sup>15</sup> Permission to reproduce all musical examples appearing in this chapter is gratefully acknowledged from the following source: *String Quartet, No. 4, Op. 37* by Arnold Schoenberg. Copyright © 1939 (Renewed) by G. Schirmer, Inc. (ASCAP). International Copyright Secured. All Rights Reserved. Used by Permission.

## Schoenberg and the Performer

Rudolf Kolisch, first violinist of the Kolisch Quartet and Schoenberg's brother-in-law, referred to the composer's "relentless exactitude" in his notation of the work and emphasized the importance of every note, gesture, and phrasing for the performance.<sup>16</sup> If the instructions were respected, the notation would aid in making the performance come to life; however, if they were not obeyed, the work would fail.<sup>17</sup>

As Kolisch relates, performance for Schoenberg grew directly from the notated score rather than from an interpretation of it: "The work of art is represented in performance in accordance with its construction. . . . It is not a mood that ought to be brought to expression, but rather a musical idea." If anything, the performers should carefully avoid projecting their own emotions into the performance: "It is not the feeling of the performer (*Aufführender*) that ought to be shown, but rather a theme, which perhaps contains this feeling."<sup>18</sup>

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<sup>16</sup> Rudolf Kolisch, "Schoenberg as Performing Artist," trans. Neil Boynton, *Tempo*, no. 193 (July 1995): 34–35. Kolisch taught seminars in music interpretation and performance at the New School of Social Research in New York. His first essay, entitled "Musical Performance: The Realization of Musical Meaning," involved studying and analyzing works primarily by Beethoven and the Second Viennese School. He also taught courses at the University of Wisconsin, Madison, from 1944 to 1967; at Darmstadt from 1953 to 1958; and the New England Conservatory from 1967 until his death in 1978. See Thomas Y. Levin, "Integral Interpretation: Introductory Notes to Beethoven, Kolisch and the Question of the Metronome," *The Musical Quarterly* 77, no. 1 (Spring 1993): 81–89, 87. Kolisch contemplated the publication of a book called *Theorie der musikalischen Reproduktion* as a possible collaboration with Theodor W. Adorno. Adorno was particularly impressed with Kolisch's approach to interpretation, one that emerges out of a close analysis of the work, an understanding of every element of its structure, instead of a sound ideal. See Adorno, "Kolisch und die neue Interpretation," in *Adorno: Gesammelte Schriften* (Frankfurt: Suhrkamp, 1984), 19:461. In an interview with Berthold Türcke, Kolisch touches on ideas for the book. Rudolf Kolisch and Berthold Türcke, "Gespräch," in *Rudolf Kolisch: Zur Theorie der Aufführung*, 9–113. The book was never completed.

<sup>17</sup> Kolisch, "Schoenberg as Performing Artist," 35. In a radio broadcast, Schoenberg relates the anecdote of a musician, who—after pointing out several mistakes made during a performance of one of the composer's later works—was told by the performing artists: "Maybe, but nobody noticed that!" Schoenberg concludes, "It seems that these players expected nobody would notice differences, which they themselves probably did not notice. I am the last to blame the failure of a work of mine on the more or less important shortcomings of a performance. Though they are not entirely without influence, especially if they spoil character and mood by false tempo, dynamics and expression." Arnold Schoenberg, "For the Radio Broadcast of the String Trio," May 1949, printed in *A Schoenberg Reader: Documents of a Life*, ed. Joseph Auner (New Haven: Yale University Press, 2003): 314–15.

<sup>18</sup> Kolisch, "Schoenberg as Performing Artist," 34. Schoenberg perhaps expresses this point most strongly in his preface to *Pierrot*: "The performers' task here is at no time to derive the mood and character of the individual pieces from the meaning of the words, but always solely from the music." Arnold Schoenberg, "Composer's

Schoenberg's attention to detail was particularly evident in his work as a conductor and with performers; he preferred to conduct his compositions as well as select the performers himself.<sup>19</sup> American composer Gerald Strang, a student of Schoenberg, describes how in rehearsals with the composer "every grade of dynamics had to be worked out and every attack, every phrasing, in every instrument, whether it was conspicuous or not, was the subject of endless attention and care."<sup>20</sup> Schoenberg expected the same dedication from his performers, insisting on an unusual number of rehearsals to assure that everything was polished and exactly how he envisioned it; if he was not consulted during the production process, not enough rehearsals were scheduled, or the outcome during rehearsals was unsatisfactory, Schoenberg even went as far as threatening to withdraw his support, cut the program, or not appear for the concert—as in this letter to Herbert Graf, who was preparing a performance of *Die glückliche Hand* and had asked the composer to attend the performance.

If you take the line that the author isn't wanted at rehearsals, I cannot have anything at all to do with it. I could not have granted the rights for such an important performance without reserving to myself a certain amount of influence on the final form my work would take. Should you not be able to meet me on this point, I should, however much I regretted it, have to dissociate myself from your production.<sup>21</sup>

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Foreword," in *Arnold Schoenberg: Verklärte Nacht and Pierrot Lunaire*, trans. Stanley Appelbaum (Mineola, NY: Dover, 1994), 54.

<sup>19</sup> Feisst, "Schoenberg Reception in America," 248. The importance of Schoenberg as conductor of his own works is noted, for example, by Olin Downes in his review of the 1940 US performance of *Pierrot*, conducted by the composer: "[Arnold Schoenberg] is one of the few composer-conductors who are indispensable for the complete understanding of their music. If conductors of our great symphony orchestras have come no nearer Schoenberg's real intentions than they came at previous hearings in this city of 'Pierrot lunaire,' then we have never heard the major Schoenberg scores." Olin Downes, "Pierrot lunaire: Schoenberg's Conception of His Score Brings Out Its True Merits," *New York Times*, 24 November 1940, printed in *Dossier de presse de Pierrot lunaire d'Arnold Schönberg*, ed. François Lesure (Geneva: Minkoff, 1985), 157–160, 158.

<sup>20</sup> Quoted in Rita H. Mead, "Henry Cowell's New Music Society," *Journal of Musicology* 1, no. 4 (October 1982): 449–463, 457.

<sup>21</sup> Schoenberg to Herbert Graf, Berlin, 14 March 1928, in *Arnold Schoenberg: Letters*, 129. Dissatisfied with the rehearsals of *Pierrot* for the 1935 San Francisco performance, Schoenberg cut all but seven numbers from the program, and instead had his First Chamber Symphony played twice. Feisst, *Schoenberg's New World*, 158–59. Also see Schoenberg to Marya Freund, Traunkirchen, 16 August 1922, in *Arnold Schoenberg: Letters*, 74. See also Schoenberg to Edgard Varèse, Mödling, 23 October 1922, in *Arnold Schoenberg: Letters*, 78–79 and Schoenberg to Fritz Windisch, Traunkirchen, 30 August 1923, in *Arnold Schoenberg: Letters*, 101–02. While in America, his attitude towards performers and rehearsals slowly began to allow for some creative flexibility, though he never wavered from the concept that the performer must communicate the author's idea of the work as coherently and

Schoenberg especially stressed the importance of attention to the written score in his chamber works, as any mistake would be much easier to hear: “It would be a good thing to draw the attention of the gentlemen of the orchestra to the fact it [the chamber symphony] is *chamber music* and must therefore be *played very exactly*, because every note can be heard!”<sup>22</sup> In addition, he considered transparency, the ability to hear every voice, as crucial for the full realization of these works; according to Eugene Lehner, the violist of the Kolisch Quartet, Schoenberg’s highest principle was “clarity above all else.”<sup>23</sup>

### The First Recording of the String Quartets

Schoenberg welcomed the possibility of having his works recorded. He viewed the gradual rise of the phonograph as a tool to introduce his music to a wide audience as well as provide some income in the form of royalties. When record sales gradually rose in the 1930s, a number of recording studios began expanding into classical music and added some of his works to their catalogues.<sup>24</sup>

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accurately as possible to the audience. He conceded that performance was also “the expression of the soul or character of the performer or of such persons of whom the player acts like an impersonator,” and that a certain artistic freedom in the execution of the work is allowable. Schoenberg quoted in Feisst, *Schoenberg’s New World*, 157. A possible explanation for Schoenberg’s changing belief is the change from a composer based performance culture to a performer oriented one. In his own conducting, this change expressed itself in fewer rehearsals and greater liberties in tempos or the execution of, for example, the Sprechstimme in *Pierrot lunaire*. Ibid., 157.

<sup>22</sup> Schoenberg to Paul von Klenau, Mödling, 13 November 1922, in *Arnold Schoenberg: Letters*, 81.

<sup>23</sup> Eugene Lehner, “A Statement by Eugene Lehner on the Present Recordings,” trans. Carsten Schmidt and Adrian Cornford, Kolisch Quartet, *Schoenberg String Quartets*, Arc-103/4, liner notes, 20. In preparing for a performance of his First Chamber Symphony, Schoenberg suggested the orchestra first rehearse each individual voice separately, paying absolute heed to the dynamic gradations (from *ppp* to *fff*), but especially to the complex nuances of combination dynamics such as *fp*, “since otherwise all the instruments would be swamped.” Schoenberg to Pierre Ferroud, Traunkirchen, 31 August 1922, in *Arnold Schoenberg: Letters*, 76–77.

<sup>24</sup> Feisst, *Schoenberg’s New World*, 179–80. Dika Newlin, a student of Schoenberg, recounts in her diary that recordings, particularly those of his own works, were a regular part of the Schoenberg household: “Uncle Arnold is going to play the records of his second, third and fourth quartets at his home next Tuesday afternoon (beginning at 4 o’clock and lasting God knows how long) and we’re all invited!” Dika Newlin, *Schoenberg Remembered: Diaries and Recollections* (New York: Pendragon Press, 1980), 210. A push to record Schoenberg’s works had come as early as 1930, when Richard Gilbert published a call to recording companies to include the composer into their catalogue. See Richard Gilbert, “Schönberg on Discs?: An Obtestation,” *Disques* 1 (March 1930): 4–5. About twenty of Schoenberg’s works were recorded and distributed between the late 1930s and 1951 on labels such as ALCO, Capitol, Columbia, Dial, Esoteric, and RCA Victor. Feisst, “Schoenberg Reception in America,” 290, n. 16.

Thanks to his close friendship with United Artists music director Alfred Newman, Schoenberg was able to persuade the Kolisch Quartet to record all four quartets as part of their preparations for the UCLA concert series.<sup>25</sup> The recording sessions were held mostly in the evening. The quartet would play through the piece with only the planned stops for disc changes; each segment was played back immediately and approved before moving on to the next. As second violinist Felix Kuhner recounts: “Since this was not a commercial undertaking, we just played it through, except for the most obvious things we had to repeat.”<sup>26</sup> According to Schoenberg’s pocket diary, the Fourth Quartet was most likely the last to be recorded on Friday 8 January 1937, the day of its UCLA premiere.<sup>27</sup>

In 1950, Alec Compinsky, cellist and founder of the record label ALCO, expressed interest in reissuing the Kolisch recordings on four long-playing discs. As this was a commercial rather than private undertaking, Schoenberg had to seek releases from the members of the Kolisch Quartet, who hesitated due to concerns about the quality of the recordings.<sup>28</sup> Violist

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<sup>25</sup> Fred Steiner, “A History of the First Complete Recording of the Schoenberg String Quartets,” *Journal of the Arnold Schoenberg Institute* 2, no. 2 (February 1978): 122–37. Schoenberg first met Newman through private lessons to the Hollywood film composing community. An ardent supporter of Schoenberg’s music, Newman made the recordings possible by convincing his superior, film producer Samuel Goldwyn, to allow Schoenberg the use of a United Artist music recording studio. *Ibid.*, 122–23.

<sup>26</sup> *Ibid.*, 126.

<sup>27</sup> The order of recording was as follows: First Quartet on 29 December 1936; Second Quartet on 30 December 1936; Third Quartet on 31 December 1936. There is no clear entry in the pocket book for 8 January 1937, only the word “record,” which presumably indicates the recording of the missing Fourth Quartet. Steiner, “History,” 124. The recordings were pressed onto black plastic compound discs, affixed with a red label, and housed in a plain black album with Schoenberg’s commentary and signature printed on the inside of the cover. According to Steiner, the First Quartet consisted of seven discs, the Second and Third of five each, and the Fourth of six (the sixth being recorded on one side only). 25 copies of the set were made and sold at about \$70; the performers received no free copies. Until their commercial release in 1950, Schoenberg would duplicate these recordings for friends. Feisst, *Schoenberg’s New World*, 180. Known buyers of the set were Hugo Friedhofer, Edward Powell, David Raskin, Gordon Sawyer, George Gershwin, and Urban Thielmann. Among institutions acquiring his albums were Bennington College, Harvard University, Smith College, and the Wilson Record Library in San Francisco. Steiner, “History,” 128.

<sup>28</sup> The altruistic nature of the initial recording enterprise almost halted the reissue. Ross Russell, the director of Dial Records, had hoped to contract the Kolisch Quartet for a new release of the four quartets. He filed a lawsuit arguing that the Kolisch Quartet had worked gratis, violating existing musician union standards, and thus ALCO could not use their takes to make commercial recordings. The eventual solution was a letter from the Kolisch members signing over all claims to potential remuneration from the recordings to Schoenberg. Despite the

Eugene Lehner was particularly resistant to the release, prompting Schoenberg to write a letter asking for his consent. In the letter the composer stressed the importance of circulating his work to the American public and reassured Lehner that the recordings were more than adequate:

And so even if the records were really as bad as you say, I cannot help being very glad if even one small company sees to it that the largest possible number of people get to know at least that part of my work. But it is not only that, I do not at all agree with you that these recordings are bad. I have often played them to friends and, on the contrary, everyone is immensely enthusiastic about them. One can always somewhat improve everything.<sup>29</sup>

Lehner eventually consented to the release; however, he was never content with the recordings.<sup>30</sup> Nonetheless, his objections, which in part seem overly negative and exaggerated in their harsh judgment of the performances, do not diminish the value of these early recordings as documentation of the playing of an ensemble so closely in touch with Schoenberg and his views on performance.

## Recordings

The recordings examined here were chosen based on the date of recording and establish a diachronic thread from the first recording by the Kolisch Quartet (1937) to the most recent by

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disagreement, Russell would go on to issue nine Schoenberg works (including premiere recordings of the First Chamber Symphony and *Ode to Napoleon*) between 1950 and 1951. Feisst, *Schoenberg's New World*, 181–82.

<sup>29</sup> Schoenberg to Eugen [sic] Lehner, Los Angeles, 10 February 1949, in *Arnold Schoenberg: Letters*, 268. Schoenberg frequently acknowledged that perfection in performance was impossible; for example, Schoenberg advised Russell to avoid too many retakes during a recording session, saying that it was pointless “to aim for a perfection which is not human.” Schoenberg quoted in David H. Smyth, “Schoenberg and Dial Records: The Composer’s Correspondence with Ross Russell,” *Journal of the Arnold Schoenberg Institute* 12, no. 1 (June 1989): 68–90, 80. Schoenberg expressed a similar attitude in a letter to pianist Eduard Steuermann, who had recorded some of the composer’s piano music: “I do not at all share your anxiety lest anyone should hear a wrong note. I am convinced that it has happened only a few times in the history of musical reproduction that some wrong notes did not get in.” Schoenberg to Eduard Steuermann, Los Angeles, 3 October 1949, in *Arnold Schoenberg: Letters*, 277. In his introduction accompanying the LP of the Second Quartet, Schoenberg relates having been asked by a gentleman whether he “had heard it already in a perfect manner.” Schoenberg answered, “Yes, during the composing.” The composer goes on to say that thanks to the Kolisch Quartet and the recordings, “everybody—and even myself—are in the position to hear it in a perfect manner, in a perfect performance.” Transcription in Kolisch Quartet, *Schoenberg String Quartets*, Arc-103/4, liner notes, 19.

<sup>30</sup> On occasion of the 1991 reissue of the Kolisch recordings on CD, Lehner expressed his thoughts on the matter in a personal statement accompanying the release. He emphasized that the inadequate practice time, inferior equipment, and lack of retakes had resulted in a version that did not adhere to Schoenberg’s principle of “clarity above all else.” Lehner, “A Statement by Eugene Lehner,” Arc-103/4, liner notes, 22–23.



Quatuor Psophos (2005–06). A second factor was artistic connections among the ensembles. Quartets often encountered each other's interpretations, be it through performances, recordings, teaching or coaching sessions, or personnel changes. One of the strongest connections among the quartets is Eugene Lehner, who after the Kolisch Quartet's dissolution went on to coach and encourage the newly formed Juilliard Quartet and, later, the Schoenberg Quartet.

The Kolisch recording of 1937 (released 1950) is the premiere recording of the work. During the last years of its existence, the quartet rehearsed frequently with Schoenberg, who in turn lauded the player's performances and interpretations. On the occasion of the premiere of op. 37, for example, he wrote, "The Kolischs played marvellously [*sic*]. Everything seems so simple, so self-evident in their performance, that one would think it is easy. Their virtuosity, their sonority, their understanding, their style, are admirable. I confess they are the best string quartet I [have] ever heard."<sup>31</sup>

The Juilliard Quartet recorded the Schoenberg Quartets the first time in 1951–52 (released 1954[?]).<sup>32</sup> Both Lehner and pianist Eduard Steuermann were influences on the quartet during its early years together and, thanks to Steuermann, Schoenberg met the members of the Juilliard Quartet in 1949; he reportedly enjoyed working with them.<sup>33</sup> Following several

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<sup>31</sup> Schoenberg to Elizabeth Sprague Coolidge, Los Angeles, 5 February 1937, in *Arnold Schoenberg: Letters*, 201.

<sup>32</sup> Henceforth referred to as the 1952 Juilliard Quartet. The Juilliard Quartet was founded in 1946 by William Schuman, then president of the Juilliard School. Its original members, represented on the 1952 recording, were Robert Mann (violin I), Robert Koff (violin II), Raphael Hillyer (viola), and Arthur Winograd (cello). Juilliard Quartet, *Complete String Quartets of Arnold Schoenberg*, recorded 1951–1952, Columbia Records SL-188, 1954[?], 33⅓ rpm. Apart from its work with Schoenberg, the quartet has championed the work of twentieth-century composers, most notably the works of Bartók. See Tully Potter, "The Concert Explosion and the Age of Recording," in *The Cambridge Companion to the String Quartet*, ed. Robin Stowell (Cambridge: Cambridge University Press, 2003), 90. See also Harriet Gay, *The Juilliard String Quartet* (New York: Vantage Press, 1974) for a documentation of the quartet's history from its inception until 1974.

<sup>33</sup> Robert Mann describes the encounter with Schoenberg: "After we finished . . . we waited anxiously. He was silent for a while. Eventually he said with a smile, 'I'm sorry to say I really must admit that you've played it in a way that I never conceived it.' Our hearts fell and we thought we had performed it in some atrocious manner, until he started chuckling and said, 'but you know, I like how you play it so much that I'm not going to say a word about how I think, because I want you to continue playing in that manner.'" Gay, *The Juilliard String Quartet*, 29.

personnel changes, the quartet re-recorded Schoenberg's complete string quartets in 1975.<sup>34</sup> The LaSalle Quartet's recording of 1969 (released 1971) falls chronologically between the two Juilliard recordings, and is the only recording available from the 1960s.<sup>35</sup> No recording is available from the 1980s.

During the 1990s, a number of recordings of the work appeared. To represent the beginning, middle, and end of the decade, I have chosen recordings by the Schoenberg Quartet (1991, released 2001),<sup>36</sup> the Arditti String Quartet (1993, released 1994),<sup>37</sup> and the Leipziger Streichquartett (1999, released 1999).<sup>38</sup> Lastly, I have included the two most recent recordings of

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<sup>34</sup> Henceforth referred to as the 1975 Juilliard Quartet. The new formation included Robert Mann (violin I), Earl Carlyss (violin II), Samuel Rhodes (viola), and Joel Krosnick (cello). Juilliard Quartet, *Arnold Schoenberg: The Five String Quartets*, recorded 12 May–4 June 1975, Columbia Records M3-34581, 1977, 33⅓ rpm.

<sup>35</sup> The LaSalle Quartet was founded in 1946 by students of the Juilliard School of Music; its original members were Walter Levin (violin I), Henry Meyer (violin II), Peter Kamnitzer (viola), and Richard Kapuscinski (cello). Kapuscinski stayed with the quartet from 1946 to 1955, when he was replaced first by Jack Kirstein (1955–75) and then Lee Fiser (1975–88). During its forty-two years in existence—the quartet dissolved in 1988—it championed primarily a twentieth-century repertoire. In 1972 the quartet released the first recorded edition of the complete works for string quartet by Schoenberg, Berg, and Webern.

<sup>36</sup> Schoenberg Quartet, *Arnold Schoenberg*, recorded 1991–2001, Chandos Records Chan 9939, 2001, compact disc, liner notes, 7. The main repertoire of the Schoenberg Quartet centers on the works of the Second Viennese School. The quartet was founded in 1976; its current members are Janneke van der Meer and Wim de Jong (violins), Henk Guittart (viola), and Viola de Hoog (cello). Robert Mann introduced the quartet to Lehner, who coached the artists between 1983 and 1991. In 1989 the members of the quartet received the distinction of becoming honorary members for life of The Friends of Arnold Schoenberg Institute of Los Angeles. See Niek Nelissen, "The Schoenberg Quartet Celebrates a Milestone," Website of the Schoenberg Quartet, <http://www.schoenbergquartet.nl/25years/quartcentury01.html> (accessed 10 August 2011). Their recording of Schoenberg's complete works for strings is dedicated to Lehner's memory. See also Henk Guittart, "The Emergence and Development of the Schönberg Ensemble," *Journal of the Arnold Schoenberg Institute* 6, no. 2 (November 1982): 247–55.

<sup>37</sup> The Arditti Quartet was founded in 1974 by Irvine Arditti as an ensemble specializing in twentieth-century music. The quartet has undergone a number of personnel changes; on the recording of Schoenberg's Fourth Quartet the players are Irvine Arditti (violin I), David Alberman (violin II), Garth Knox (viola), and Rohan de Saram (cello). Arditti String Quartet, *Arnold Schoenberg 2*, recorded May–June 1993, Montaigne MO 782024, 1994, compact disc.

<sup>38</sup> The Leipziger Streichquartett was founded in 1988 and its current members are Stefan Arzberger (violin I), Tilman Büning (violin II), Ivo Bauer (viola), and Matthias Moosdorf (cello). Apart from a broad range of repertoire, the quartet champions the performances of quartets by the First and Second Viennese school in its "Pro Quatuor" concert series at the Leipzig Gewandhaus (since 1991). Leipziger Streichquartett, *Arnold Schönberg: String Quartets No. 2 & No. 4*, recorded March 1999, MDG Gold MDG 307 0935-2, 1999, compact disc. On the recording, the first violin is played by Andreas Seidel. For ease of reference, I will be referring to the Leipziger Streichquartett as the Leipzig Quartet throughout the dissertation.

the work available, that of the Aron Quartet (2002–03, released 2003)<sup>39</sup> and Quatuor Psophos (2005–06, released 2007).<sup>40</sup> A summary of the recordings and their dates is given in Table 2.1.

Table 2.1 Recordings of Schoenberg’s Fourth String Quartet

Performers	Recording	First Release
Kolisch Quartet	1937	1950
Juilliard Quartet	1951–52	1954[?]
LaSalle Quartet	1969	1971
Juilliard Quartet	1975	1977
Schoenberg Quartet	1991	2001
Arditti String Quartet	1993	1994
Leipzig Quartet	1999	1999
Aron Quartet	2002–03	2003
Psophos Quartet	2005–06	2007

As focus for the examination of the recordings, I have chosen the first and third movement of the work. Both are heavily annotated with performance instructions concerning tempo, articulation, and character of expression, and contrast a rapidly flowing and rhythmically strict first movement (*Allegro molto; energico*) with a slower, more expressive, and rhythmically free third movement (*Largo*).

## Tempo

According to Kolisch, an accurate reading of the tempi is the most reliable factor in interpreting Schoenberg; they are carefully planned to give sense to the overall structure of the work and the relationship between musical ideas: “The structural balance of the work of art corresponds to that of its representation. His [Schoenberg’s] most sensitive feeling for form

<sup>39</sup> The Aron Quartet was founded in 1998 by Ludwig Müller (violin I), Barna Kóbori (violin II), Georg Hamann (viola), and Christophe Pantillon (cello). Apart from the classical repertoire, the quartet has devoted itself to performances of the works of the Second Viennese School. Aron Quartet, *Arnold Schoenberg: Streichquartette*, recorded December 2002–September 2003, Preiser Records PR 90572, 2003, compact disc.

<sup>40</sup> The French ensemble Quatuor Psophos was founded in 1997 at the Lyon Conservatoire. It is the first French quartet selected into the BBC 3’s New Generation Artists program (2005). The members on the recording of Schoenberg’s Fourth Quartet are Ayako Tanaka (violin I), Bleuenn Le Maître (violin II), Cécile Grassi (viola), and Ingrid Schoenlaub (cello). Quatuor Psophos, *Webern, Berg, Schoenberg*, recorded November 2005–March 2006, Zig Zag Territories ZZT 070502, 2007, compact disc. For ease of reference, I will be referring to the Quatuor Psophos as the Psophos Quartet throughout the dissertation.

reacts to the slightest violations against it, and regulates the relationship of tempi through tempo-transformation (*Tempoverwandlung*) as well as determining the degree of accelerando and ritardando.”<sup>41</sup>

In his 1926 essay on metronome markings Schoenberg asks: “Has not the author at least the right to indicate, in the copies of the work *he himself* publishes, how he imagines his ideas should be realized?”<sup>42</sup> In several instances, Schoenberg relates that performances of his works could be improved by the close adherence to metronome markings and should be judged in terms of the performers’ observation of them.<sup>43</sup> Levin suggests that Schoenberg, like Beethoven, viewed the invention of the metronome marks as “the moment when tempo has become an integral and non-negotiable component of musical conceptualization.”<sup>44</sup>

Yet Schoenberg does acknowledge that a certain flexibility may enter into performance depending on the skill of the performers: “The work [*Variations for Orchestra*, op. 31] will probably take 12–15 minutes to perform . . . , according to whether the ‘full’ tempi can be taken

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<sup>41</sup> Kolisch, “Schoenberg as Performing Artist,” 35. Also see Levin, “Integral Interpretation,” 81–89. For Kolisch, the relationship between tempo and the work drove his interpretation of other composers as well, especially Beethoven. See Rudolf Kolisch, “Tempo und Charakter in Beethoven’s Musik,” *Musik-Konzepte* 76/77 (July 1922): 3–88.

<sup>42</sup> Arnold Schoenberg, “About Metronome Markings,” in Black, *Style and Idea*, 342.

<sup>43</sup> Referring to Koussevitzky’s performance of his *Variations*, op. 43B, Schoenberg writes: “Some of the shortcomings of this performance derive directly from his disregard of my metronomical indications. Why he did this is unimaginable to me. At least so far he need not have failed.” Schoenberg to Fritz Reiner, Los Angeles, 29 October 1944, in *Arnold Schoenberg: Letters*, 221. Also the following letter to Bernard Hermann: “Let me tell you I find now that your performance [of the second chamber symphony] was very good, very convincing and expressive, though . . . I would say that the first movement was too slow. I am sure if you would try to read this movement now in the tempo which my metronome marks indicate, that everything would fit very well to this tempo.” Schoenberg to Bernard Hermann, Los Angeles, 30 August 1949, in *Arnold Schoenberg: Letters*, 275–76. See also Schoenberg to Pierre Ferroud, 31 August 1922, in *Arnold Schoenberg: Letters*, 77.

<sup>44</sup> Levin, “Integral Interpretation,” 84. Schoenberg was so resolute in matters of tempo that repeated disagreements between him and Joachim Stutschewsky, the original cellist of the Vienna String Quartet (later Kolisch Quartet), eventually led to Stutschewsky’s departure from the ensemble. See Alexander L. Ringer, “Arnold Schönberg und das Wiener Streichquartett,” in *Bericht über den 2. Kongress der Internationalen Schönberg Gesellschaft: “Die Wiener Schule” in der Musikgeschichte des 20. Jahrhunderts*, ed. Rudolf Stefan and Sigrid Wiesmann (Vienna: E. Lafite, 1986), 192–93.

(which depends, after all, on whether the orchestra can manage it).”<sup>45</sup> A similar remark is given in the instructions to the score for op. 37, where Schoenberg indicates under explanatory note no. 5 that “the metronome marks must not be taken literally—they merely give a suggestion of the tempo.”<sup>46</sup>

Two metronome markings appear in the first movement of op. 37; the original characterization *allegro molto; energico* is specified as ♩ = 152 and the *poco meno mosso* (m. 239) as ♩ = 108. In the rest of the movement Schoenberg uses verbal descriptors to notate changes in the overall tempo, always understood in relation to the *tempo primo*, and always returning to it. Important moments in the score—for example the return of the main theme in m. 66—are the most annotated: a series of *ritardandi* slows the pace of the previous section at the same time that the dynamics drop to *p* and the quartet, with the exception of violin I, plays *sul ponticello*, creating an eerie sound that, together with the slowing tempo, heightens the anticipation of the main theme’s return.

The third movement, likewise, has two metronome markings; the opening *largo* is given as ♩ = 78 and the *poco adagio* (m. 630) as ♩ = 66. Unlike the first movement, the metronome markings of the third movement are also given at the return of the opening theme (i.e. the return to *largo* in m. 664, again labeled ♩ = 78) and the return of the slower tempo (♩ = 66) at m. 680 (labeled *tempo*). Annotations occur primarily in the passage leading up to the *poco adagio* (m. 622–69; *ad libitum, a tempo, rubato, calando*), but not the rest of the movement.

Among the examined recordings, a 70 second time difference separates the fastest performance of the first movement (Kolisch Quartet, 8’05”) from the slowest (Schoenberg

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<sup>45</sup> Schoenberg to Wilhelm Furtwängler, Roquebrune, Cap Martin, 21 September 1928, in *Arnold Schoenberg: Letters*, 131.

<sup>46</sup> Schoenberg, *Fourth String Quartet*, iv. It is possible that Schoenberg meant to write “need not be” instead of “must not be,” mistakenly giving a word for word translation of the German “müssen nicht sein,” rather than the more appropriate idiomatic translation.

Quartet, 9'15"; see Table 2.2). The 1952 Juilliard Quartet takes almost exactly the same tempo set by the Kolisch Quartet, performing the movement at 8'07". The Arditti and Aron Quartets are somewhat slower at 8'26" and 8'29" respectively, while the LaSalle, 1975 Juilliard, Leipzig, and Psophos Quartets are yet slower at 9'03", 8'56", 8'48", and 8'54".<sup>47</sup>

A closer look at the durations of individual sections of the movement (Table 2.3) shows that the divergences in tempo are greatest in three sections: the opening *allegro molto* (mm. 1–65), the *tempo primo* (mm. 95–152), and the *un poco tranquillo* (mm. 188–238). The duration of the *allegro molto*, for example, is between 10 to 18 seconds slower in the recordings by the LaSalle, 1975 Juilliard, Schoenberg, Leipzig, and Psophos Quartets than in the Kolisch and 1952 Juilliard Quartets. In other sections, for example, the *a tempo* (mm. 66–94) or the *tempo primo* (mm. 165–88), the timings vary less. Even if small, the changes in tempo nonetheless have an effect on the character of the movement. The faster recordings (Kolisch, 1952 Juilliard, Arditti, and Aron Quartets) have a lighter and more flowing quality, and emphasize longer melodic lines, while the slower recordings (LaSalle, 1975 Juilliard, Leipzig, Schoenberg, and Psophos) appear heavy and serious, emphasizing individual gestures and phrases, as well as gradations in tempo.

In the first movement, the Kolisch and 1952 Juilliard Quartet follow the metronome markings almost precisely, beginning at an extremely rapid pace at Schoenberg's specified ♩ = 152. The pace not only aptly conveys the *energico* indication at the start of the movement but gives the first movement an animated, vigorous, yet sprightly quality that draws the listener in from the first few bars. The steadiness with which the ensembles maintain forward momentum allows Schoenberg's notated rhythms to mold the tempo nuances of the movement.

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<sup>47</sup> In a second review of the Fourth Quartet's Vienna performance by the Kolisch Quartet, Heller gives the total time for the quartet as "circa 35 minutes [etwa 35 Minuten]." Hans E. Heller, "Schönberg-Erstauflührung durch das Kolisch-Quartet," *Neues Wiener Journal*, 16 May 1937; quoted in Gradenwitz, *Arnold Schönberg*, 53. On the record, the quartet takes approximately 33 minutes, suggesting that the tempo is not the result of recording limitations at the time, but rather represents the tempo usually taken by the group in performance.

Table 2.2: Timings for Movement I of Schoenberg's Op. 37

		Kolisch Quartet	Juilliard Quartet 1952	LaSalle Quartet	Juilliard Quartet 1975	Schoenberg Quartet	Arditti Quartet	Leipzig Quartet	Aron Quartet	Psophos Quartet
<b>1</b>	Allegro molto; Energico ♩=152									
<b>66</b>	A tempo, ma poco tranquillo	1'50"	1'50"	2'08"	2'02"	2'06"	1'58"	2'01"	1'54"	2'00"
<b>95</b>	Tempo primo	2'42"	2'44"	3'07"	3'00"	3'08"	2'53"	2'56"	2'52"	2'57"
<b>153</b>	Poco a poco accelerando	4'10"	4'14"	4'47"	4'39"	4'52"	4'28"	4'36"	4'25"	4'33"
<b>165</b>	Tempo primo	4'27"	4'30"	5'04"	4'56"	5'11"	4'44"	4'55"	4'42"	4'49"
<b>188</b>	Un poco tranquillo	5'02"	5'05"	5'44"	5'35"	5'50"	5'20"	5'33"	5'16"	5'29"
<b>239</b>	Poco meno mosso ♩=108	6'30"	6'34"	7'22"	7'13"	7'29"	6'51"	7'10"	6'48"	7'07"
<b>274</b>	Tempo primo	7'50"	7'50"	8'45"	8'37"	8'58"	8'07"	8'31"	8'11"	8'35"
<b>Total</b>		8'05"	8'07"	9'03"	8'56"	9'15"	8'26"	8'48"	8'29"	8'54"

Table 2.3: Durations of Movement I for Schoenberg's Op. 37

		Kolisch Quartet	Juilliard Quartet 1952	LaSalle Quartet	Juilliard Quartet 1975	Schoenberg Quartet	Arditti Quartet	Leipzig Quartet	Aron Quartet	Psophos Quartet
<b>1</b>	Allegro molto; Energico ♩=152	1'50"	1'50"	2'08"	2'02"	2'06"	1'58"	2'01"	1'54"	2'00"
<b>66</b>	A tempo, ma poco tranquillo	0'52"	0'54"	0'59"	0'58"	1'02"	0'55"	0'55"	0'58"	0'57"
<b>95</b>	Tempo primo	1'28"	1'30"	1'40"	1'39"	1'44"	1'35"	1'40"	1'33"	1'36"
<b>153</b>	Poco a poco accelerando	0'17"	0'16"	0'17"	0'17"	0'19"	0'16"	0'19"	0'17"	0'16"
<b>165</b>	Tempo primo	0'35"	0'35"	0'40"	0'39"	0'39"	0'36"	0'38"	0'34"	0'40"
<b>188</b>	Un poco tranquillo	1'28"	1'29"	1'38"	1'38"	1'39"	1'31"	1'37"	1'32"	1'38"
<b>239</b>	Poco meno mosso ♩=108	1'20"	1'16"	1'31"	1'24"	1'29"	1'16"	1'21"	1'23"	1'28"
<b>274</b>	Tempo primo	0'15"	0'17"	0'20"	0'19"	0'17"	0'19"	0'17"	0'18"	0'19"
<b>Total</b>		8'05"	8'07"	9'03"	8'56"	9'15"	8'26"	8'48"	8'29"	8'54"



In the first movement, the Kolisch and 1952 Juilliard Quartet follow the metronome markings almost precisely, beginning at an extremely rapid pace at Schoenberg's specified  $\text{♩} = 152$ . The pace not only aptly conveys the *energico* indication at the start of the movement, but gives the first movement an animated, vigorous, yet sprightly quality that draws the listener in from the first few bars. The steadiness with which the ensembles maintain forward momentum allows Schoenberg's notated rhythms to mold the tempo nuances of the movement.

The tempo taken by these two quartets also gives the movement a sense of being tight knit, linear, and cohesive, one segment flowing smoothly into the next. The short eighth notes of the main rhythmic idea generate momentum, while the longer, lyrical lines come to the fore. At m. 66, for example, the viola enters with the *Hauptstimme* marked *dolce*, while the accompanying voices reiterate the four-note rhythmic figure from the beginning of the movement (Figure 2.2). With the movement proceeding at speed, the smaller phrases of the viola melody begin to form one long legato line and together with the warm register of the instrument recall the lyrical melodic style of the romantic era. This sense of linearity permeates the entire movement.



Figure 2.2: Movement I, mm. 66–70

While the Kolisch and 1952 Juilliard performances of the first movement set a strong precedent for a tempo in line with Schoenberg's indications, all of the other recordings are

slower in overall tempo. Only two—the Arditti and Aron Quartets—come close to a similar pace, finishing around 8'26" and 8'29" respectively. The overall character of their movement is likewise light, and the fast pace allows individual gestures to connect seamlessly from one to the other; however, the execution of the descriptive tempo indication is more exaggerated than in either the Kolisch or the 1952 Juilliard recording, especially during the *ritardandi* and the *accelerandi*.<sup>48</sup>

As stated above, the LaSalle, 1975 Juilliard, and Psophos Quartets all finish around the same time at 9'03", 8'54", and 8'56" respectively; the Leipzig Quartet is slightly faster at 8'48", while the Schoenberg Quartet is the slowest at 9'15". At the slower overall tempo, perhaps even more emphasis falls on the lyrical passages as the individual voices have time to revel in each sub-phrase. A particularly striking passage in the 1975 Juilliard recording is the *calando* in mm. 270–74 (Figure 2.3). The first violin's slow, lamenting descent in m. 273 seems to close the movement on a deeply moving note. The sudden return of the *tempo primo* at m. 274 is unexpected and sounds almost like an intruder on the calm mood.



Figure 2.3: Movement I, mm. 270–74

The emphasis on individual phrases at the expense of the long line is especially pronounced in the recording of the Schoenberg Quartet. The tempo, over a minute slower than that of the Kolisch Quartet, allows each gesture to be heard very clearly and it is the smaller

<sup>48</sup> For example, see the execution of the *ritardandi* in mm. 64–65 and 237–38.

phrases and individual gestures that are emphasized. That is not to say that clearly cantabile lines such as that of the viola in m. 66 are not played as melodically cohesive units, even with a sense of lyricism. It is more that individual phrases do not lead as effortlessly from one to the next as in the other recordings; as if the aim was to give listeners a clear sense of the individual parts that make up the movement rather than think of the movement as a cohesive, linear whole. In the first thirty measures, for example, it is as if six distinct musical events are heard.<sup>49</sup> The Schoenberg Quartet revels in the textural changes of each and plays them—adjacent yet distinct—as if they were separated by a clear boundary. In the Juilliard and Kolisch recordings the same events are played as an interconnected fabric, logically flowing from one to the next (except, of course, for those separated by a pause).

While the slower tempo of the Schoenberg Quartet allows each gesture to be heard, it does suppress the sense of forward momentum and the light quality. Instead, the slow pace feels somewhat heavy, dragging on as if to impose a scholarly seriousness on the music. The seeming correlation between a slower tempo and a change of character of the movement is not an isolated occurrence. A similar feeling of heaviness pervades the recording of the Leipzig, LaSalle, and Psophos Quartets. Though faster in overall tempo than the Schoenberg Quartet, the quartets' execution of the opening theme is equally deliberate, with each gesture clearly defined and brought out, sacrificing momentum and linearity for gestural clarity and emphasis. More than any of the other recordings examined, the LaSalle uses the slower tempo to emphasize statements of the main theme. This is especially audible at the *poco meno mosso* in m. 239. The performers deliberately pull back the tempo, allowing the cello to bring out the main theme in a

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<sup>49</sup> The sections are: mm. 1–6, the opening theme; mm. 7–9, the *Hauptstimme* in the violin II; mm. 10–16, the close of the first section; mm. 17–21, the *Hauptstimme* in the cello; mm. 21–26, the triplets in all voices; mm. 27–31, the *Hauptstimme* in the violin I.

warm, full-bodied, and lyrical line;<sup>50</sup> the theme becomes a landmark that orients the listener throughout the movement.

The tempo differences among recordings are even more pronounced in the third movement (see Table 2.4, page 31). The Kolisch Quartet plays the movement the slowest, taking a total of 9 minutes for the performance, while the Aron Quartet completes it nearly 2-1/2 minutes faster (at 6'31" minutes). The majority of the recordings fall within the 7–8 minute frame: Leipzig Quartet (7'02"), Psophos Quartet (7'13"), LaSalle Quartet (7'30"), 1952 Juilliard Quartet (7'42"), and Arditti Quartet (7'48"). The Schoenberg Quartet and 1975 Juilliard Quartet take 8'07" and 8'30" respectively. A look at the durations of the movement's sections (see Table 2.5, page 31) shows divergences as large as 38 seconds among the quartets (see, for example, the durations of the second *largo* section, mm. 664–80; over the course of 16 measures, the recordings are between 12 to 38 seconds faster than those of the Kolisch Quartet). The differences in tempo are especially poignant at the beginning of the movement, over the course of the opening theme.

Reviewers and analysts have repeatedly singled out the opening of the third movement as the highlight of the quartet. Bruno Ussher in his *New York Times* review commented, "The largo opens in foursome unison with a cantilena legato line as it has rarely been noticed in the quartets since the first one or the vocal part of the second. Musical logic prevails, but it seems more spontaneous, uncalculated and a certain ardor rather than rigor rules the idiom as a whole."<sup>51</sup> Similarly, an anonymous reviewer in the *Los Angeles Times* wrote, "There are passages, very surprising, when the four instruments are heard in unison and it produces an emotion not far

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<sup>50</sup> The line, however, does not continue. As the first violin picks up the *Hauptstimme* in m. 241, there is a deliberate break that separates it from the cello phrase. A similar strong emphasis on the cello voice is heard only in the Arditti recording.

<sup>51</sup> Ussher, "Schoenberg's New Quartet," *New York Times*, 17 January 1937.

from that kindled by beautiful sound.”<sup>52</sup> In his own comments on the movement, Schoenberg identifies the character of the opening as a “recitative,” the “rhapsodic character” of which “is continued, when the instruments part with the unison and contribute their own individual comments.”<sup>53</sup>

Schoenberg’s metronome marking of ♩ = 78 suggests a duration of approximately 30 seconds for the opening theme if played strictly in time. Notably, all ensembles but the Kolisch Quartet play the passage in a tempo close to Schoenberg’s indication (see Table 2.6). The Aron Quartet comes closest at 31 seconds and a metronome mark of ♩ = 77. The other quartets fall between 33 and 35 seconds, at a range of ♩ = 69–72, a seemingly acceptable difference given the *poco ritardando* in the last measure (m. 618). The Kolisch Quartet, however, plays the passage at ♩ = 53, taking a total of 45 seconds.

Table 2.6: Duration and Metronome Mark for Movement III, mm. 614–18

Performers	Metronome Mark	Duration
Kolisch Quartet	♩ = 53	45s
1952 Juilliard Quartet	♩ = 69	35s
LaSalle Quartet	♩ = 74	34s
1975 Juilliard Quartet	♩ = 69	35s
Schoenberg Quartet	♩ = 69	35s
Arditti String Quartet	♩ = 69	35s
Leipzig Quartet	♩ = 72	33s
Aron Quartet	♩ = 77	31s
Psophos Quartet	♩ = 72	33s

<sup>52</sup> *Los Angeles Times*, 12 January 1937; quoted in Gradenwitz, *Arnold Schönberg*, 47.

<sup>53</sup> LaSalle Quartet, *Neue Wiener Schule*, DG 419 994-2, liner notes, 73–74. Alexander Ringer likens the spirit and recitative-like character of the section to the “traditional Jewish high-holiday recitatives.” Alexander L. Ringer, *Arnold Schoenberg: The Composer as Jew* (Oxford: Clarendon Press, 1990), 76.

Table 2.4: Timings of Movement III for Schoenberg's Op. 37

		Kolisch Quartet	Juilliard Quartet 1952	LaSalle Quartet	Juilliard Quartet 1975	Schoenberg Quartet	Arditti Quartet	Leipzig Quartet	Aron Quartet	Psophos Quartet
<b>614</b>	Largo ♩=78				0'04"					
<b>626</b>	Grave	1'59"	1'36"	1'30"	1'39"	1'35"	1'34"	1'28"	1'21"	1'27"
<b>630</b>	Poco adagio ♩=66	2'59"	2'24"	2'15"	2'31"	2'20"	2'19"	2'12"	2'00"	2'10"
<b>664</b>	Largo ♩=78	5'09"	4'22"	4'12"	4'39"	4'36"	4'23"	3'57"	3'44"	3'58"
<b>680</b>	Tempo ♩=66	7'22"	6'12"	5'59"	6'40"	6'25"	6'15"	5'45"	5'19"	5'48"
<b>701</b>	Meno mosso	8'40"	7'25"	7'14"	8'09"	7'51"	7'33"	6'48"	6'20"	6'55"
	<b>Total</b>	9'00"	7'42"	7'30"	8'30"	8'07"	7'48"	7'02"	6'31"	7'13"

Table 2.5: Durations of Movement III for Schoenberg's Op. 37

		Kolisch Quartet	Juilliard Quartet 1952	LaSalle Quartet	Juilliard Quartet 1975	Schoenberg Quartet	Arditti Quartet	Leipzig Quartet	Aron Quartet	Psophos Quartet
<b>614</b>	Largo ♩=78	1'59"	1'36"	1'30"	1'35"	1'35"	1'34"	1'28"	1'21"	1'27"
<b>626</b>	Grave	1'00"	0'48"	0'45"	0'52"	0'45"	0'45"	0'44"	0'39"	0'43"
<b>630</b>	Poco Adagio ♩=66	2'10"	1'58"	1'57"	2'08"	2'16"	2'04"	1'45"	1'44"	1'48"
<b>664</b>	Largo ♩=78	2'13"	1'50"	1'47"	2'01"	1'49"	1'52"	1'48"	1'35"	1'50"
<b>680</b>	Tempo ♩=66	1'18"	1'13"	1'15"	1'29"	1'26"	1'18"	1'03"	1'01"	1'07"
<b>701</b>	Meno mosso	0'20"	0'17"	0'16"	0'21"	0'16"	0'15"	0'14"	0'11"	0'18"
	<b>Total</b>	9'00"	7'42"	7'30"	8'30"	8'07"	7'48"	7'02"	6'31"	7'13"

Certainly, the slow tempo of the Kolisch Quartet gives the most poignant rendering of the theme. The long, sustained first note, together with the gradual increase in bow pressure and dynamic, introduces a searching, melancholic, even haunting quality that takes hold of the listener and persists throughout the movement. Despite the *f* dynamic, the passage has a feeling of quietude; the music slowly grows into being out of the opening note and eventually settles into a subdued but steady pace.

At the fast tempo of the Aron Quartet, the opening passage takes on a different character. The listener's attention is grabbed immediately by an assertive, *f*, first note that leads into the theme with little repose. The following notes move by quickly, urging forward and continually picking up momentum. The surging line creates a feeling of angst and brooding, in contrast to the melancholic and searching character of the Kolisch recording. Instead of gradually building from nothingness, the theme of the Aron Quartet is loud and assertive, taking charge as soon as the opening note sounds.

The two interpretations persist. Both recordings by the Juilliard Quartet, as well as the Schoenberg and Leipzig Quartets, favor a melancholic and searching quality, while the LaSalle, Arditti, and Psophos Quartets favor an assertive, strong, and angst-ridden one. For these ensembles, the overall tempo is largely the same, and thus the changes in mood are perhaps more closely linked to matters of execution. The performance of the LaSalle Quartet, for example, is slower than that of the Leipzig Quartet, yet they differ in character. The LaSalle Quartet's performance seems stronger and more assertive as the ensemble rushes certain moments in the theme, such as the last beat of m. 614 and the start of the second phrase in m. 616. The Leipzig Quartet is steady in tempo, executing the notes in m. 614 with deliberate heaviness, and thus overall its sound is calmer and reflective.

Likewise diverse among the recordings is the interpretation of the *poco adagio* section beginning in m. 630. Table 2.7 summarizes the durations and metronome markings for the ensembles. Again, the Aron Quartet is closest to Schoenberg's metronome mark of ♩ = 66, with similar tempi taken by the Leipzig and Psophos Quartets. The tempo brings out the lilting quality of the 3/4 meter, and the section sounds reminiscent of a dance, light and flowing; the angst-ridden quality of the opening is lessened, especially by the Aron Quartet. The 1952 Juilliard, LaSalle, and Arditti Quartets likewise bring out a lilting and flowing quality in this section.

The slowest recordings are those of the Schoenberg, Kolisch, and 1975 Juilliard Quartets, at ♩ = 49, ♩ = 52, and ♩ = 53 respectively. At these tempi, the section seems stagnant; individual gestures, separated by the rests, stand out, and the sense of forward momentum and dance-like quality is lost. Instead, the ensembles continue the searching, forlorn, and melancholic qualities of the opening, forgoing the chance to lighten the mood for the listener.

Table 2.7: Duration and Metronome Mark for Movement III, *Poco adagio*, mm. 630–63

Performers	Metronome Mark	Duration
Kolisch Quartet	♩ = 52	130s
1952 Juilliard Quartet	♩ = 56	118s
LaSalle Quartet	♩ = 57	117s
1975 Juilliard Quartet	♩ = 53	128s
Schoenberg Quartet	♩ = 49	136s
Arditti String Quartet	♩ = 54	124s
Leipzig Quartet	♩ = 64	105s
Aron Quartet	♩ = 65	104s
Psophos Quartet	♩ = 62	108s

It must be said, however, that despite their differences in overall tempo, the quartets do maintain the temporal relationships between sections of the movements. That is, in the first movement the opening *allegro molto* is executed faster than the sections labeled *tranquillo* or, more specifically, the *poco meno mosso* beginning in m. 239. Likewise, the opening *largo* of the third movement is executed slower than the following *poco adagio*.



## ***Ritardando***

Schoenberg uses *ritardandi* in both the first and third movements, usually at the ends of sections. They may be applied to just a few notes, or sustain over several measures. In the first movement, *ritardandi* are indicated in mm. 61–65, prior to the statement of the lyrical second theme (m. 66); in m. 164, prior to the return of the first theme (m. 165); in m. 176, followed by one measure marked *pesante* (m. 177), but leading into the *poco mosso* (m. 178); and in mm. 237–38, as well as m. 257, both leading into sections labeled *poco meno mosso* (m. 239 and 258). In the third movement, *ritardandi* occur at the end of the main theme, m. 618 and m. 688; in m. 679, before the start of the new tempo; in mm. 699–700, leading into the *meno mosso* (m. 701); as well as the last beat of the movement (m. 703). In addition, an *allargando* occurs in mm. 662–63, preceding the return of the main theme in m. 664.

The Kolisch Quartet observes all the *ritardandi* occurring in the two movements with the exception of those at the end of the third movement's main theme (m. 618 and m. 668), the end of the third movement (m. 703), as well as the *molto ritardando* in mm. 64–65. In these instances, the speed taken by the ensemble is already very slow. Perhaps the group felt that a further retardation in tempo would have made the movement feel stagnant, especially since the quartet already executes a strong *ritardando* in m. 61. The change in speed is sufficient to slow the momentum the quartet has gained over the course of the preceding *pesante* passage.<sup>54</sup>

Particularly effective is the group's *ritardando* in m. 164; having worked up a frenzy of speed in the previous *accelerando* passage (see below), the quartet pulls back, creating a strong rhythmic suspension of time that resolves only when the first note of the main theme resumes the original tempo. Likewise strong is its execution of mm. 699–700; the quartet slows, giving the

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<sup>54</sup> In a similar instance of two *ritardandi* occurring in close proximity (mm. 237–38 and mm. 257–58), the group likewise favors the first occurrence with a stronger *ritardando* over the second; nonetheless, a slowing down is perceptible for both.

violin I's descending line the effect of staggering or tumbling down to a close. In other places, such as m. 176, the *ritardando* is more subdued and in fact does not occur in the measure indicated, but in the next (labeled *pesante*). In addition to the indicated *ritardandi*, the Kolisch Quartet also takes extra time in spots that are not so labeled. It slows, for example, in m. 93 as well as mm. 270–273. In both cases, the return of the *tempo primo* is imminent, and it is possible that the momentary delay is meant to emphasize it.

Just as the Kolisch Quartet, the 1952 Juilliard, Schoenberg, Arditti, and Psophos Quartets are faithful to the *ritardandi* where they are indicated, with the exception of those occurring at the end of the third movement's main theme (m. 618 and m. 668).<sup>55</sup> The LaSalle, 1975 Juilliard, Aron, and Psophos Quartets all play a *ritardando* at mm. 62, 164, 238, and 663, but none or a very limited one in mm. 176, 258, 679, and 700. Unlike the Kolisch Quartet, the 1952 Juilliard Quartet executes *ritardandi* at the end of the third movement (a slight pull-back) and in m. 65 of the first. In that measure, the notes of violin I become slower and slower, a sort of petering out before the fermata and change in tempo. A similar execution occurs in the recordings of the LaSalle, 1975 Juilliard, and Psophos Quartets. A *ritardando* at the end of the movement is also taken by the 1975 Juilliard, Schoenberg, Aron, and Psophos Quartets, though in each occurrence it is very slight.

The Leipzig Quartet is the only quartet not to execute *ritardandi* where they are indicated. With the exception of a very slight pull-back in mm. 238 and 663, the group continues at the speed they set for each section. In places such as mm. 61–62 and 64–66 there is no gradual slowing down, just an overall change in tempo. Is it possible that the quartet is taking Schoenberg's view (the notes of the score contain all the necessary information for performance)

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<sup>55</sup> The Arditti and Psophos Quartets execute a very slight *ritardando* in m. 668. In addition, the Arditti Quartet also slows slightly in m. 618. In m. 258, the Psophos Quartet does not noticeably slow, but rather comes to a complete stop.

literally, and is relying on the changes in note values and texture to guide the temporal relationships between sections?

The ensemble's choice not to execute the gradual tempo changes is particularly noticeable in the *accelerando* that occurs in the passage leading up to the return of the *tempo primo* and main theme in m. 165, perhaps one of the most exciting passages in the first movement. According to Schoenberg's indication, the *poco a poco accelerando* begins in m. 153 and lasts until m. 163. As with the *ritardandi*, the Leipzig Quartet does not execute the *accelerando*, but instead plays at a measured and steady speed throughout the section. In its interpretation, the passage loses the sense of forward momentum and excitement that comes through in the recordings by the other quartets, and instead feels sluggish.

All other quartets execute an *accelerando* in the passage; however, they do not start in m. 153. The earliest increase in speed occurs in the recordings by the Schoenberg and Psophos Quartets; they begin at m. 157, while the majority of the quartets (the Kolisch, 1952 Juilliard, LaSalle, 1975 Juilliard, Arditti, and Aron Quartets) begin at m. 160. The forward momentum generated by all but the LaSalle and 1975 Juilliard Quartets is very strong, especially so for the Arditti and Aron Quartets. The notes begin to tumble over each other and the quarter notes of m. 162 take on a hammering, driving character. Though the LaSalle Quartet does pick up the tempo in m. 160, the overall slow tempo of the movement prevents the group from gathering as strong a forward momentum as the other quartets. The 1975 Juilliard Quartet is likewise subdued.

### **Score Annotations**

#### *Hauptstimme*

The most prominent symbol used by Schoenberg over the course of the quartet is that denoting the *Hauptstimme*. In the first movement it is indicated in all but 33 of the movement's

284 measures,<sup>56</sup> while in the third movement it occurs in all but the opening 16 measures.<sup>57</sup> The indication occurs in conjunction with both a single and several parts, and either lasts several measures or just a few beats. The entrances may be spaced out or proceed in rapid succession.

Most often, Schoenberg gives the *Hauptstimme* to the part carrying the melodic line, usually the line with the longest rhythmic values. In other spots, particularly those where rapid entrances of the *Hauptstimme* occur, his choice underlines the voice carrying the most prominent rhythmic motive, or else the top voice of the parts playing the same rhythmic figure (Figure 2.4; see also the viola and cello in m. 220 in Figure 2.5). When two parts are marked *Hauptstimme* in the same measures they tend to be either in canon (such as the violin and viola in Figure 2.5) or another polyphonic relationship to each other



Figure 2.4: *Hauptstimme* in Movement I, mm. 64–65

<sup>56</sup> The only measures not containing a *Hauptstimme* indication are m. 61, mm. 83–93, mm. 106–108, mm. 112–15, mm. 157–64, mm. 195–97, and mm. 230–38.

<sup>57</sup> The opening five measures of Movement III are played in unison, while in the following measures the violin I clearly leads; thus, no indication of a *Hauptstimme* is necessary.



Figure 2.5: Movement I, mm. 220–22

Among the recordings, the distinction between the voices carrying the *Hauptstimme* and those providing accompaniment is carefully observed by all quartets. The quartets' conscious effort to give it emphasis can be observed in every instance of its occurrence, but it is most successful where the *Hauptstimme* occurs in only one voice and over several measures, though even rapidly alternating occurrences, such as mm. 220–29 in the first movement and mm. 681–85 in the third, are executed for the most part successfully.<sup>58</sup> However, where the *Hauptstimme* is part of a homorhythmic texture, part of a rhythmically active passage, or applied to only a few beats, it is not always as audible.

Mm. 64–65 (seen in Figure 2.4 above) feature a homorhythmic texture in the accompanying voices, with the *Hauptstimme* being applied to the top accompanying voice, the violin II. According to Schoenberg's instructions, the violin II should be the most audible voice in the passage. Of the quartets, only the LaSalle Quartet achieves the indicated balance, with the violin II ringing out above the other two voices; in the other recordings, the balance is even in

<sup>58</sup> During mm. 220–29, the Psophos Quartet is the only quartet to abandon the sense of *Hauptstimme*; instead, the group, purposefully or not, maintains a more even voicing among the instruments, resulting in a wash of sound. Another notable exception is the Schoenberg Quartet's execution of mm. 134–38, Movement I. In this passage, the *Hauptstimme* occurs in the first violin, which has to quickly traverse large ascending leaps over a wide registral range. In every recording, the ear of the listener is drawn to the violin I, and while it is the focus of the Schoenberg Quartet's recording as well, the highest notes, usually those to ring out most clearly, suddenly retreat into the texture, almost as if someone has choked off the sound. A similar treatment of the melodic line of the violin I occurs in mm. 212–15, but not in mm. 206–211, even though the violin I has to traverse a similar range.

mm. 4–6, while in m. 64–66 the violin I comes through with the greatest strength because of its greater activity. The other voices retreat into the background.

When the *Hauptstimme* is placed in the outer voices, homorhythmic passages are easier to execute. In mm. 148–51, for example, it occurs in the cello as well as the violin I. The cello line is rhythmically offset from the upper three voices, which move in rhythmic unison (Figure 2.6). In this passage, all quartets achieve the indicated balance between voices. The execution is facilitated by the register of the two voices carrying the *Hauptstimme* (highest and lowest), as well as the rhythmic displacement, drawing the ear first to the cello, then the violin I.



Figure 2.6: Movement I, mm. 148–51

Rhythmically dense passages, those where all or most performers have a rhythmically active part, also pose a problem to the performers; one place in particular stands out, mm. 79–81 (Figure 2.7). The *Hauptstimme* is given a canonic treatment, in turn being applied to the violin II, cello, and violin I. Only the Juilliard Quartet (in both the 1951–52 and 1975 recordings) maintains a strong presence of the *Hauptstimme* throughout the passage, bringing out each entrance as it occurs. For the others, the *Hauptstimme* is lost in a wash of sound by the time the violin I enters in m. 81.



Figure 2.7: Movement I, mm. 79–81

Rhythmic density is also problematic in mm. 37–42 of the first movement, as well as mm. 676 of the third. In both passages, the quartets face the added challenge that the *Hauptstimme* is applied only to a few beats. In mm. 37–42, the *Hauptstimme* occurs first in the viola and cello before moving to violin I. Again the two Juilliard ensembles bring out the *Hauptstimme* clearly in every occurrence, as do the Arditti, Leipzig, and Psophos Quartets. Their execution is aided by the surrounding voices playing at a softer dynamic; however, the Kolisch, LaSalle, Schoenberg, and Aron Quartets play at the same dynamic throughout the passage. In contrast, only the Arditti and Aron Quartets achieve some success in bringing out the *Hauptstimme* in the cello of m. 676. The passage is too dense, the range of the cello too high,<sup>59</sup> and the moment too short for the part to ring through the wash of sound created by the simultaneously occurring *crescendo* to *ff* in all voices. Only when the *Hauptstimme* moves to violin I does it become clearly audible for all quartets in both of the passages.

### Nebenstimme

Annotations for the *Nebenstimme* occur much less frequently than those for the *Hauptstimme*. In the first movement, the *Nebenstimme* occurs in sixty measures, but in the third it occurs in only one. It appears primarily together with the *Hauptstimme*, usually in a part that

<sup>59</sup> The cello plays in the range of the viola for the first three notes of the *Hauptstimme* marking. The E<sub>2</sub> immediately following the end of the cello's *Hauptstimme* part, on the other hand, is very audible.

has the next most interesting rhythmic motive or other thematic idea; though it may occasionally occur on its own, as in m. 680 in Movement III, or in homorhythmic passages, as in mm. 4–5 and m. 164 in Movement I.

Compared to the quartets' faithful execution of the *Hauptstimme*, their execution of the *Nebenstimme* is inconsistent, and more often than not fails to stand out. It is most successfully executed in instances where its note values are longer than those of the surrounding texture and where it occurs in an outer part. All quartets, for example, successfully execute the *Nebenstimme* in the violin I mm. 117–21 and the subsequent occurrence of the *Nebenstimme* in the cello in mm. 123–27. When it moves to the violin II in mm. 129–33, however, only the 1975 Juilliard and Leipzig Quartets are successful in sustaining it throughout. When the surrounding texture is less rhythmically active, as in mm. 165–73, the quartets are more successful. The Kolisch, 1952 Juilliard, LaSalle, and Leipzig Quartets sustain the *Nebenstimme* in the violin II even as the texture becomes denser, while the 1975 Juilliard, the Schoenberg, Aron and Psophos Quartets bring it out at the beginning of the passage but lose it among the other parts during the following measures.

As in their execution of the *Hauptstimme*, the quartets do not bring out the *Nebenstimme* during homorhythmic moments such as mm. 4–5 and m. 164. The 1975 Juilliard Quartet is the only quartet to give noticeable emphasis to the violin II, which carries the *Nebenstimme* in both passages. Likewise problematic are passages during which the parts play softer dynamics, such as mm. 73–76 (Figure 2.8). The first occurrence of the *Nebenstimme* in the cello is marked *pp*, the same dynamic as the *Hauptstimme* in the violin I; violin II accompanies *ppp*. In all recordings, the dynamics are simply too soft to allow for a clear emergence of the *Nebenstimme*;







Figure 2.9: Movement I, mm. 1–5

Given the predominance of marks relating to accents and a hard, heavy, *martelé* stroke, Schoenberg seems to have envisioned a strong, resolute, and authoritative sound for the passage, with a clearly articulated, crisp, and dominant theme in the violin I. All quartets follow the spirit of Schoenberg's instructions, though there are subtle differences. The Kolisch, 1952 Juilliard, 1975 Juilliard Quartets express the character implied by Schoenberg's instructions particularly well. The authoritative character of the theme is invoked immediately with a strong emphasis on the two opening notes. The eighth notes of the theme in mm. 2–4 are played evenly, detached, and with a hard attack, giving the theme a crisp feeling overall. The accompanying voices are likewise even and detached, though their attack is not as hard as that of the violin I, allowing them to retreat into the background. Mm. 2–4 are articulated rather than connected, that is, they are separated by a very short pause, but because of the fast tempo the sense of linearity is not interrupted. Rather, the notes of each measure can be heard as clearly articulated gestures that together comprise the theme.

The crispness of the theme is lost in the recording of the La Salle Quartet, in part because the eighth notes of the theme as well as the accompaniment receive almost equal emphasis as the accented long notes, and in part because the slow tempo keeps the theme from gathering forward momentum. The eighth notes seem particularly sluggish. While they are short and clipped in the recordings of the Kolisch, 1952 Juilliard, and 1975 Juilliard Quartets, they are held their full

value in the LaSalle recording. Overall, the theme does sound authoritative, but perhaps in a pedantic rather than resolute manner, preaching rather than assertive.

The Schoenberg Quartet likewise loses the crisp character of the theme. Again, the slow tempo and execution of the eighth notes in the theme seem to be responsible. Rather than receiving equal emphasis, however, the eighth notes in the Schoenberg Quartet's execution run together, with the last eighth note seeming to rush into the accented note that follows the group. Instead of the hard, detached stroke Schoenberg specifies, the notes sound weak, almost like an upbeat gestures leading into the third beat.

By contrast, the Leipzig Quartet manages to maintain the crisp character of the theme despite the relatively slow tempo. Each note receives a clear attack and release, allowing each gesture to speak rather than run into the next. The emphasis the group gives to the accented notes is likewise strong. In overall character, however, the quartet is closest to the LaSalle Quartet in that the opening five measures sound somewhat pedantic.

Just like the Kolisch and both Juilliard Quartets, the Arditti Quartet plays the opening five measures with great resolve and authority. Their rendition is particularly strong in its emphasis on the notes marked with an accent, and a dynamic swell and vibrato is perceptible on the A $\flat$  of m. 3, but also the G $\sharp$  of m. 4, which according to Schoenberg's instructions should be unaccented, but not allowed to weaken. The accompanying voices in mm. 1–3 are so short, they almost sound snappy, emphasizing the crisp character of the passage. The Psophos Quartet likewise executes a swell on the A $\flat$  of m. 3 and emphasizes the G $\sharp$  of m. 4. Though it brings out each of the accented notes, the overall character of the passage is not as crisp as that of the Arditti Quartet, possibly because of the slower tempo, but also because of the quartet's observation of the full note values in the theme as well as the accompanying voices.

The sound of the Aron Quartet is singular in that the theme momentarily strays from its authoritative character because of a rhythmic irregularity. The culprit is the set of eighth notes leading to the A $\flat$  in m. 3. While all other eighth notes are played evenly, here the violin seems to trip up and plays the notes with a dotted rhythm (the first note lengthened, the others rushed), like a sudden stumble. The rest of the passage, however, is very dominant, with hard attacks, especially in the accompanying voices, and strong emphases on the sustained notes.

The opening theme of the first movement returns in its entirety in mm. 95–98 (cello; Figure 2.10) and 165–68 (violin I; Figure 2.11); as can be seen from the figures, Schoenberg slightly alters the annotations for each.<sup>62</sup> Most notable is the absence of the  $\text{!}$  mark over the eighth notes. If intentional rather than an oversight, the change could suggest Schoenberg wanted a slightly less domineering character for the theme at its recurrence, or at least a varied execution.



Figure 2.10: Theme in mm. 95–98, Movement I



Figure 2.11: Theme in mm. 165–68, Movement I

Of the recordings, most do indeed introduce subtle distinctions in their execution of the theme, but whether or not the change in execution is intentional is hard to determine, since the

<sup>62</sup> In mm. 95–98, Schoenberg omits the mark over the eighth notes, and indicates an accent over the C $\sharp$  in m. 94, the rhythmic equivalent to the previously unaccented G $\sharp$  in m. 4. In mm. 165–68, the eighth notes as well as the opening two half notes are unmarked, while the C $\sharp$  in m. 168 (again the rhythmic equivalent of m. 4) is marked as unaccented. At its first occurrence, the theme included a whole note following the third eighth-note chain; however, in both recurrences of the theme, Schoenberg indicates the end of the *Hauptstimme* with the last eighth note. No whole note appears following the statement of the theme in mm. 95–98, but it does follow the statement of the theme in mm. 165–68. The accompanying material from the beginning does not return in either passage.

touch is inconsistently altered. There is no clear trend, for example, to alter the touch on the eighth notes, especially in the first recurrence, which all quartets execute the same as they did their original statement. In the second recurrence, a legato rather than detached bowing on the last group of eighth notes (m. 168) can be observed in the LaSalle, 1975 Juilliard, Schoenberg, Arditti, Leipzig, and Psophos Quartets' recordings. The Psophos and Schoenberg Quartets also play less detached in m. 166, but not in m. 167. Changes in accent patterns are more consistent, but also subtle. All but the LaSalle and 1975 Juilliard Quartets, for example, put more emphasis on the now accented C $\flat$  in m. 98, and all soften their attack at the unaccented C $\sharp$  in m. 168.

Overall, the Aron Quartet is the most uniform in its execution, with both occurrences matching the style of eighth notes and accents of the original statement. The Arditti Quartet perhaps gives the strongest case for an intentional change of articulation, as all of their eighth-note groupings in mm. 165–68 are noticeably more legato than in the previous two statements. Though subtle differences are perceptible in the executions of all quartets, all follow the character implied by the articulation marks given by Schoenberg, playing a theme of a strong, dominant character that immediately grasps the listener's attention and draws him into the movement.

Compared to the first movement, articulation marks in the third movement are scarcer, limited to indications of accents, slurs, ties, and staccato marks (including Schoenberg's  $\text{—}$ ). In the main theme, for example, only the  $\wedge$  symbol is applied to the grouping of thirty-second notes in m. 614 (Figure 2.12). As before, the symbol indicates that the notes should not weaken and should be brought out. No such markings appear at the theme's recurrence in mm. 664–68 (Figure 2.13). The scarcity of the articulation marks seems to underscore the recitative-like, meditative character of the theme over one as dominant and authoritative as the theme of the first

movement. Again, the quartets are successful in their overall depiction of Schoenberg's apparent character and mood for the movement.<sup>63</sup>



Figure 2.12: Movement III, mm. 614–18



Figure 2.13: Movement III, mm. 664–68

In terms of articulation, the quartets are quite similar in their execution of the theme, stressing interconnectedness among the notes, that is, separating the notes only briefly when necessitated by repetition, giving no direct emphasis to notes other than that indicated by the dynamics, and sustaining each note the full value. A small difference results only from the treatment of the ^ mark in m. 614. The Kolisch, Arditti, Leipzig, and Aron Quartets play the three notes evenly with a strong emphasis on each. They are perceived as individual notes rather than a group, and while they lead into the E $\flat$  of m. 615, they do not sound like a pick-up to it; however, they do sound like a pick-up in the 1952 Juilliard, LaSalle, 1975 Juilliard, and Psophos Quartets' execution. The quartets place a stronger emphasis on the first note of the group and

<sup>63</sup> The theme's heavy dynamic annotations are discussed below.

then rush the following two notes to execute a strong arrival on the E $\flat$  in m. 615. The Schoenberg Quartet likewise plays the notes as a pick-up, with stronger emphasis on the first, but in its execution the figure takes on an almost overly romantic quality. The quartet slides with heavy bow pressure quickly from one note into the next, ending on the E $\flat$  with noticeable vibrato. This romanticism is absent in the other quartets, who, perhaps with the exception of the Psophos Quartet, play the passage much more dryly.

At the recurrence of the theme, only two quartets, the Leipzig and Aron Quartets, noticeably alter their execution. In its second execution, the Leipzig Quartet plays the first note of the group with a stronger emphasis, while the last two are a bit rushed. The Aron Quartet is likewise a bit faster in its second execution and lessens its emphasis on the individual notes. Both now sound closer to a pick-up to the following note than in its previous rendition. By comparison, the Kolisch and Arditti Quartets execute the return of theme in the same manner as before: the notes are played evenly, with a strong emphasis on each. As before, the 1952 Juilliard, LaSalle, 1975 Juilliard, and Psophos Quartets play the notes as a pick-up leading into the D $\sharp$  of m. 665, the first receiving an accent and the other notes rushing through. The Schoenberg Quartet likewise repeats its romantic approach to the figure, but in this case the pressure used to slide across the notes is so pronounced that the last two notes overlap, creating a momentary dissonance.

## **Dynamics**

Schoenberg also heavily annotates his scores with dynamic marks. Especially in the third movement, dynamic marks occur in almost every measure, ranging from *ppp* to *ff*. In the first movement, the range is *ppp* to *fff*. In addition to absolute dynamics like *p* and *f*, Schoenberg also

frequently indicates gradations, like *crescendo* and *decrescendo*, as well relative dynamics, like *sf* or *fp*.<sup>64</sup>

Just as the extensive annotations concerning articulation of the first movement's theme, Schoenberg seems to use the extensive dynamic annotations of the third movement's theme (see Figure 2.12 above) as a means to convey to the performer the general idea of the passage. The third movement's theme returns, though only once, with a slightly different dynamic annotation in mm. 664–68 (see Figure 2.13 above). The following discussion will look at each of these statements in turn.

### Movement III: First Occurrence of the Theme

Schoenberg gives the dynamic level for the first occurrence of the theme as *f*, with *sf* occurring in m. 617. In addition, he marks four *crescendo/decrescendo* pairs, suggesting that though the theme should have a strong presence; it ought to ebb and flow, like the rising and falling of the pitch patterns in the recitative it is to evoke, with clear phrases and individual climaxes.

The ebb and flow of the passage is evident in the Kolisch Quartet's execution, which is much freer in its dynamic profile than Schoenberg's indications might suggest. For example, the ensemble adds a *crescendo* over the course of the sustained note at the beginning; the first *sforzando* in m. 617 is not audible, while the second occurs on the F $\sharp$  immediately preceding the note to which it is applied. The feel of the passage is meditative and solemn. The group's dynamics shape each phrase of the theme to a clear climax through the indicated *crescendi* towards the last of the repeated notes and a cadence through executing the indicated *decrescendo*

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<sup>64</sup> In his brief essay on dynamics, Schoenberg writes, "Suppose one said: *sf* is an absolute dynamic, always meaning, for example, *ff*; then it could not be used when *ff* had already been reached. So it is simpler to say: *sf* is a relative dynamic, meaning that the note so marked (and *that note only*) is to be played one degree (or how many?) louder than everything immediately before and after, unless there is a different marking for the latter." Arnold Schoenberg, "Performance Indications (Dynamics)," in *Black, Style and Idea*, 340.



in mm. 616 and 618. The overall dynamic range is more or less limited, staying between *mf* and *f*.

In comparison, the execution by the 1952 Juilliard, Schoenberg, and Leipzig Quartets is less free. The quartets do add just the hint of a *crescendo* at the end of the sustained C $\sharp$  in m. 614, but otherwise execute the *crescendi/decrescendi* as indicated. A *sforzando* is noticeable in m. 617 and 618, though the F $\sharp$  preceding the second *sforzando* also receives emphasis, perhaps a result of the Quartets' attempts to execute the *crescendo* that is to occur on that note.<sup>65</sup> The feel of the overall passage, however, is the same: a sense of calm, meditative solemnity, and melancholy. Just as in the Kolisch recording, the dynamic fluctuation within the five measures are subtle and of limited range.

In the recordings by the LaSalle, 1975 Juilliard, Arditti, Aron, and Psophos Quartets the dynamic range is wider, particularly in the execution of the *sforzando*. The Arditti and Aron Quartets, for example, play with enough bow pressure and vibrato to cause a light scrape on both notes. Overall, these quartets follow the indications strictly, playing all dynamics as indicated. The wider dynamic range, especially on those notes marked *sforzando*, aids in introducing the feeling of angst that permeates these recordings.

### Movement III: Second Occurrence of the Theme

At its second occurrence, in mm. 664–68, the theme is now labeled *ff*, but only the *crescendi/decrescendi* in the second phrase are given. In addition, Schoenberg omits the second *sforzando*. The louder dynamic underscores the importance of the theme. The listeners cannot miss its return. The sustained *ff* first note immediately demands their attention. Perhaps the absence of the *crescendi/decrescendi* in the first phrase emphasize the tension set up by the altered melodic content, which this time creeps upward (and is placed one octave higher) in m.

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<sup>65</sup> The Kolisch Quartet likely emphasizes the note for the same reason.

665. Rather than a dynamic phrasing, the dramatic leap from E $\flat_5$  to G $_3$  marks the end of the first phrase.

In its execution, the Kolisch Quartet captures the assertiveness of the first note by beginning louder than at the beginning (*ff* instead of *f*) and sustaining the note without a *crescendo*. Though the group softens the dynamic slightly at the end of the first phrase, the softening is not as pronounced as in the first execution. The *ff* execution of the first phrase, especially during the course of m. 665, results in a sound reminiscent of pain or being overwhelmed with emotion instead of meditative calm. The calmness returns only in the second phrase, which the ensemble also executes more closely in line with the first occurrence. The note marked *sforzando* in mm. 667, for example, receives no clear emphasis, while the second C $\sharp$  (the rhythmic equivalent of the F $\sharp$  in m. 617) is again accented. The last note slowly subsides, as if to emphasize that all is calm again after the emotional turmoil.

The 1952 Juilliard, Schoenberg, and Leipzig Quartets are again the most subdued in dynamic range. The quartets start at a dynamic barely louder than their original *f*, and sustain the note without a *crescendo*. As indicated, the 1952 Juilliard and Leipzig Quartets execute no strong *crescendi/decrescendi* during the first phrase, but use a *decrescendo* to show the ending of the phrase in m. 668. As before, the 1952 Juilliard and Leipzig Quartets also accent the second C $\sharp$  in m. 617, as well as the second B $\sharp$  of the measure (the rhythmic equivalent of the second G $\flat$  in m. 617, previously marked *sforzando*). The Schoenberg Quartet's execution, on the other hand, is closer to its original one; it plays *crescendi/decrescendi* in m. 665 and 666 and accents the second C $\sharp$  and B $\sharp$  in m. 617. The pained feeling that entered the Kolisch recording during the course of the first phrase, is absent in these recordings.

Perhaps because their execution of the original statement already contained the seed for a feeling of pain, angst, or despair, the LaSalle, 1975 Juilliard, Arditti, and Psophos Quartets execute the phrases as before, though they do start at a louder dynamic. The groups emphasize the D $\sharp$  (beat 1) and the E $\sharp$  (beat 3) of m. 665, two notes that were previously the apex of a *crescendo*. The Aron Quartet is the exception; the group starts at about the same dynamic level (which at the first occurrence was already close to *ff*), but plays the first phrase without noticeable changes in dynamic. In the second phrase the interpretations differ somewhat. The LaSalle Quartet does not execute a *sforzando* over the second B $\sharp$ , which is in line with Schoenberg's indication. In its previous execution, the *sforzando* is quite strong. Likewise, the Arditti Quartet's execution, though still with a noticeable *sforzando* in both places, is not as strong as before. In the 1975 Juilliard, Aron, and Psophos Quartets the emphasis is about the same as before.

### Rapid Dynamic Changes

Overall, the quartets seem to make a definite effort to execute Schoenberg's dynamic markings, even in places where they change rapidly and the overall tempo is fast. One such spot is mm. 24–42. The dynamics range from *pp* to *ff* and the changes are often quite sudden as, for example, in mm. 24–25 (Figure 2.14); changes may even occur over a single note, as in mm. 32–33 (Figure 2.15), where Schoenberg indicates the use of *fp*.



Figure 2.14: Movement I, mm. 24–25



Figure 2.15: Movement I, mm. 32–33

In the Kolisch recording, the dynamics follow the score as indicated. Especially poignant is the contrast between the *f* and sudden *p* in m. 24–25 and the *crescendo* to *f* in m. 29–30. The *ff* dynamic in m. 31 does not come through as strongly as one might expect; however, the execution of the *fp* in the following measure is quite effective. The cello arrives at a strong *f* on the E $\sharp$  (m. 32) and pulls back to *p* at the second half of the beat.

The LaSalle, 1975 Juilliard, Schoenberg, Arditti, Leipzig, Aron, and Psophos Quartets also execute the passage as written. The Schoenberg and Arditti Quartets are particularly effective in their execution of mm. 24–25. They arrive on a strong *f* dynamic and drop to a barely audible *pp*. The loudest execution of the *ff* in m. 31 is done by Arditti Quartet; the notes in the cello and viola ring out like hammer strokes, only to dissolve into the increasingly dense rhythmic texture beginning in m. 33. The 1952 Juilliard Quartet gives the most dynamically subdued reading of the passage, though it too follows the indications. Notably, all quartets, including the Kolisch, play the violin I in mm. 26–28 at a slightly louder dynamic than the other voices, bringing out the *Hauptstimme* at the expense of maintaining a uniform *p* as indicated.

## Conclusion

Overall, the recordings chosen exhibit a strong adherence to the score and Schoenberg's indications. Particularly the indication of the *Hauptstimme* is respected wherever it occurs, though it may occasionally be obscured as in the case of a homorhythmic or rhythmically dense

passage. Most successful in executing the *Hauptstimme* are both Juilliard Quartets, who maintain its strong presence throughout the movements. For all quartets, the execution is occasionally aided by dynamics, where the *Hauptstimme* is played louder than the surrounding voices, even though it may be contrary to Schoenberg's instructions. The execution of the *Nebenstimme*, on the other hand, is less consistent. The Kolisch, 1952 Juilliard, LaSalle, and Leipzig Quartets maintain its presence most noticeably, while it tends to get lost in the recordings by the 1975 Juilliard, Schoenberg, Aron, and Psophos Quartets.

Schoenberg's articulation marks are likewise observed, though individual differences among the quartets result in different interpretations. The detached and even execution of the eighth notes of the first movement's main theme by the Kolisch, 1952 Juilliard, LaSalle, 1975 Juilliard, Arditti, Aron, and Psophos Quartets, for example, result in a dryer overall sound of the passage than in the execution by the Schoenberg and Leipzig Quartets.

In general, subsequent executions of a recurring passage, such as the recurring themes from movements I and III, are executed similarly to their original occurrence, though where Schoenberg's indications differ, subtle changes may be introduced. These changes are seemingly without pattern, as a group may change its execution in one movement, but be very uniform in another. The Aron Quartet, for example, has the most uniform execution in the first movement, but is one of the most diverse in the third; likewise, the Arditti Quartet is the most diverse in the first movement but more uniform in the third.

The quartets also closely observe Schoenberg's dynamic marks, even where they change rapidly or are applied to only one note. But while the quartets take limited liberties in the first movement, the third movement is executed more freely. The liberties taken, for example, by the Kolisch Quartet (an added *crescendo* and subdued *sforzando*) seem to have been chosen to

underscore the character of the passage as solemn and calm; the limited dynamic range executed by the 1952 Juilliard and Schoenberg Quartets, likewise contributes to the character. In contrast, the LaSalle, 1975 Juilliard, Arditti, Aron, and Psophos Quartets execute the passage in a much wider dynamic range, one that underscores the feeling of angst that permeates their recordings of the movement.

By far the greatest differences among the recordings emerge in their *tempi*. In general, the Aron Quartet (2002–03) follows Schoenberg’s markings most closely, particularly those in the third movement. Likewise, the Leipzig (1999) and Psophos (2005–06) Quartets are close to the composer’s indication in the third movement; however, they are somewhat slower in the first movement. The reverse is true for the Kolisch (1937), Juilliard (1951–52), and Arditti (1993) recordings: in their interpretation, the first movement follows Schoenberg’s metronome indications, while the third movement is played somewhat more slowly. The LaSalle (1969), Juilliard (1975), and Schoenberg Quartet (1991) follow their own, slower, tempi in both movements.

While the tempo of the first movement shows a remarkable congruency between the tempi of the 1952 Juilliard and the Kolisch Quartets, the same is not true of the third movement, where the Kolisches’ tempo is in noticeable contrast to Schoenberg’s indication. Their slow tempo—one which Schoenberg presumably approved, given his presence at the recording sessions—contradicts the composer’s insistence that the metronome markings be accurately executed. The striking difference might suggest that Schoenberg preferred the sound and character achieved by the slower tempo to that of his original metronome mark; perhaps it more clearly reflected his concept of the movement, which in the Kolisch interpretation seems akin to calm and repose, with a sense of melancholy and yearning. Certainly the recitative-like character

of the opening theme is poignantly portrayed in their deliberately slow and careful execution. It is possible that the opening tempo taken by the 1952 Juilliard Quartet in the third movement (♩=69)—a tempo much closer in line with Schoenberg's instructions—is in part due to Lehner's coaching.<sup>66</sup> His disapproval of the Kolisch recordings is well known, and it is possible that he advocated a deliberate return to an accurate reading of the tempo marks.

It also seems that the most recent recordings (those of the Leipzig, Aron, and Psophos Quartets) have become stricter in their observance of Schoenberg's indications in the score. Especially in the third movement, the Kolisch as well as the LaSalle, Arditti, Schoenberg, Juilliard, and Leipzig Quartets take certain freedoms deviating from the score—though they may be subtle—in the execution of articulations, dynamics, *ritardandi*, and *tempi*; the Aron and Psophos Quartets do so much less. Still, given the similarities in execution overall, the recordings show the emergence of one very strong performance practice, based on a close reading of the score, and with artistic freedoms taken primarily to underscore the character of a passage.

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<sup>66</sup> The Schoenberg Quartet—an ensemble Lehner also coached—takes the same opening tempo (♩=69).

### CHAPTER 3: JOHN CAGE'S SONATAS AND INTERLUDES

On 12 January 1949, pianist Maro Ajemian played at Carnegie Hall Cage's Sonatas and Interludes, at the time the composer's most substantial composition for the prepared piano and the result of a decade-long quest of writing for and experimenting with his new instrument.<sup>1</sup>

While most critics had responded only half-heartedly to previous demonstrations, the Carnegie Hall concert alleviated many doubts about the instrument as well as the composer:

John Cage came into his own last night, both as an inventor and a composer. Maro Ajemian played a sixty-nine-minute composition of his on one of his "prepared" pianos and there was no questioning the double impact on the select and intelligent audience that gathered to hear it at Carnegie Recital Hall. . . . It left one with the feeling that Mr. Cage is one of this country's finest composers and that his invention has now been vindicated musically.<sup>2</sup>

The prepared piano occupied Cage's interest primarily from 1938 to 1951, a period during which he wrote almost exclusively for the instrument.<sup>3</sup> In the late 1930s Cage was

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<sup>1</sup> The premiere of the work had taken place in the Spring of 1948 at Black Mountain College with Cage as the pianist. Monika Fürst-Heidtmann, *Das präparierte Klavier des John Cage* (Regensburg: Gustav Bosse Verlag, 1979), 175. On 14 April 1946, Ajemian had performed four sonatas of the cycle at Town Hall to positive reviews: "She was as signally successful in her readings for [sic] four sonatas by John Cage for 'prepared' piano, with their bizarre, ghostly tinklings, signifying little that was tangible." Noel Straus, "New Music Played by Maro Ajemian," *New York Times*, 15 April 1946. On 10 December 1946 she performed the Sonatas again, this time at a concert featuring only works by Cage (also on the program were *Three Dances* and *A Book of Music* for two pianos, performed by Ajemian and William Masselos). Lou Harrison, a fellow composer and friend of Cage, was particularly enthusiastic in his review of her performance: "Miss Ajemian must be especially mentioned for her readings of the solo sonatas in the center of the program. The resonances of the pieces find Cage introducing many unprepared tones which are pleasing and fresh in their context. Miss Ajemian caught well the introspective and ecstatic nature of the ideas in the pieces." Lou Harrison, "Ajemian-Masselos," in *Writings about John Cage*, ed. Richard Kostelanetz (Ann Arbor: University of Michigan Press, 1993), 25. The four sonatas played by Ajemian became, in order, Sonatas VII, IV, II, and III. Jeffrey Perry, "Cage's Sonatas and Interludes for Prepared Piano: Performance, Hearing and Analysis," *Music Theory Spectrum* 27, no. 1 (Spring 2005): 35–66, 59, note 22. At the time, Cage thought of these four sonatas as a complete set, and it was Ajemian's performance that inspired him to expand them into a large scale work. David W. Patterson, "The Picture That Is Not in the Colors: Cage, Coomaraswamy, and the Impact of India," in *John Cage: Music, Philosophy, and Intention, 1933–1950*, ed. David W. Patterson (New York: Routledge, 2002), 204. Cage's last major work for the prepared piano was the *Concerto for prepared piano and chamber orchestra*, completed in 1951.

<sup>2</sup> Ross Parmenter, "Ajemian Plays Works by Cage," *New York Times*, 13 January 1949. The reviewer emphasizes especially the level of growth the piece and the composer had achieved compared to the 1946 performance, where "the tiny and unusual sonorities were fascinating, but one could not be convinced they added up to music."

<sup>3</sup> Cage's pieces for or including a prepared piano are *Bacchanale* (1940), *Totem Ancestor* (1942), *And the Earth Shall Bear Again* (1942), *Primitive* (1942), *In the Name of the Holocaust* (1942), *Four Dances* (1943), *Amores* (1943), *Our Spring Will Come* (1943), *She Is Asleep* (1943), *A Room* (1943), *Tossed as It Is Untroubled* (1943), *The*



preoccupied with the future course music was to take. In his famous Seattle lecture entitled “The Future of Music: Credo,” he expressed his belief that it lay in the discovery and inclusion of noise and sounds outside the conventional Western spectrum: “I believe that the use of noise to make music will continue and increase until we reach a music produced through the aid of electrical instruments which will make available for musical purposes any and all sounds that can be heard.”<sup>4</sup>

Cage saw especially percussion music as the intermediary between the present day and the future: “Percussion music is a contemporary transition from keyboard-influenced music to the all-sound music of the future. Any sound is acceptable to the composer of percussion music; he explores the academically forbidden ‘non-musical’ field of sound insofar as is manually possible.”<sup>5</sup> Cage’s focus on percussion instruments allowed him to draw on a variety of sounds largely unexplored in the repertoire; but while conventional instruments could be the starting point, the new sound palette would come from experimentation and the invention of new

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*Perilous Night* (1944), *Prelude for Meditation* (1944), *Root of an Unfocus* (1944), *Spontaneous Earth* (1944), *Triple-Paced No. 2* (1944), *The Unavailable Memory* (1944), *A Valentine out of Season* (1944), *A Book of Music* (1944), *Daughters of the Lonesome Isle* (1945), *Mysterious Adventure* (1945), *Three Dances* (1945), *Music for Marcel Duchamp* (1947), *Sonatas and Interludes* (1946–48), *Works of Calder* (1950), *Concerto* (1950–51), *Two Pastorales* (1951–52).

<sup>4</sup> John Cage, “The Future of Music: Credo,” in John Cage, *Silence* (Middletown, CT: Wesleyan University Press, 1961), 3–4. Leta E. Miller has argued that the date of the original lecture, given in *Silence* as 1937, is erroneous and likely the result of a misrecollection by Cage. The more probable date is 18 February 1940, the date Cage gave a lecture before the Seattle Arts Council entitled “What Next in American Art.” The year 1940 also appears atop the manuscript of the lecture housed at Northwestern University. The later date implies that the ideas expressed in “The Future of Music” postdate rather than foreshadow some of his work with electronic instruments and percussion. Leta E. Miller, “Cultural Intersections: John Cage in Seattle (1938–1940),” in Patterson, *John Cage: Music, Philosophy, and Intention*, 54–56. Furthermore, David Patterson cautions the reader of *Silence* that many of its essays appear in non-chronological order, easily leading to confusion over what Cage said and thought when. Because Cage selected all the writings, anecdotes, and stories included in the work, it is as much an attempt of his to portray a certain persona as it is a document of his thought during a twenty-year period. David W. Patterson, “Words and Writings,” in *The Cambridge Companion to John Cage*, ed. David Nicholls (Cambridge: Cambridge University Press, 2002), 86. Further evidence that *Silence* constitutes a deliberate attempt by Cage to project a certain persona was recently offered by Philip Gentry, “Writing *Silence*” (Paper presented at the Annual Meeting of the American Musicological Society, San Francisco, 11 November 2011).

<sup>5</sup> Cage, “The Future of Music,” 5. He expressed a similar sentiment in his essay “Goal: New Music, New Dance,” in Cage, *Silence*, 87: “Percussion music is revolution. Sound and rhythm have too long been submissive to the restrictions of nineteenth-century music. Today we are fighting for their emancipation. Tomorrow, with electronic music in our ears, we will hear freedom.”

instruments: “At the present stage of revolution, a healthy lawlessness is warranted. Experiment must necessarily be carried on by hitting anything—tin pans, rice bowls, iron pipes—anything we can lay our hands on.”<sup>6</sup>

At an address before the National Inter-Collegiate Arts Conference in 1948, Cage asserted that the heart of the concept extended much beyond simply finding new objects to strike. Rather, his “healthy lawlessness” was geared towards discovering and including any and all sounds that did not exist in the Western musical sphere:

The term “percussion” . . . does not mean that all sounds used are obtained by the act of striking or hitting. It is used in a loose sense to refer to sound inclusive of noise as opposed to musical or accepted tones. Therefore, just as modern music in general may be said to have been the history of the liberation of the dissonance, so this new music is part of the attempt to liberate all audible sound from the limitations of musical prejudice.<sup>7</sup>

Thus a fundamental idea for Cage’s work from the late 1930s and onward was that the development of new sounds was possible through experimentation.<sup>8</sup> Cage’s Quartet for unspecified percussion instruments (1935) and Trio for woodblocks, tom-toms, bamboo sticks, and bass drum (1936) are results of this new concept.<sup>9</sup> Cage recounts that first experiments for the Quartet involved hitting whatever was at hand (tables, books, chairs, etc.) supplemented later with items found at junkyards and lumberyards, admitting that he “had no idea what [the Quartet] would sound like, not even what instruments would be used to play it.”<sup>10</sup>

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<sup>6</sup> Cage, “Goal: New Music, New Dance,” 87.

<sup>7</sup> Given on 28 February 1948, the address was not published until 1992. John Cage, “A Composer’s Confessions,” *Musicworks* 52 (Spring 1992): 6–17, 9.

<sup>8</sup> “I decided . . . to work with whatever producing means came my way, and always to have one ear to the ground in search of a new sound.” *Ibid.*, 10.

<sup>9</sup> The catalyst for this turn in Cage’s compositional output may have been Oskar Fischinger, a maker of abstract films, who allegedly talked to Cage about “the spirit inherent in materials.” See James Pritchett, *The Music of John Cage* (Cambridge: Cambridge University Press, 1993), 12; also Richard H. Brown, “‘The Spirit Inside Each Object’: John Cage, Oskar Fischinger, and ‘The Future of Music’” (Paper presented at the Annual Meeting of the American Musicological Society, Philadelphia, 15 November 2009).

<sup>10</sup> Cage quoted in Pritchett, *The Music of John Cage*, 12. For a discussion of the early percussion works and their implication for Cage’s development as a composer see David W. Bernstein, “Music I: To the Late 1940s,” in Nicholls, *The Cambridge Companion to John Cage*, 63–84.

## The Prepared Piano

Starting in 1937, Cage worked as accompanist for modern dance classes at UCLA and later the Cornish School in Seattle. Simple percussion accompaniments were standard for such classes during the 1930s, a convention that gave an immediate performance venue for his new percussion music, and its positive reception encouraged him to explore the medium further.<sup>11</sup>

In 1940, Syvilla Fort, then a student at the Cornish School, approached Cage to write an accompaniment for her dance *Bacchanale* on short notice.<sup>12</sup> According to Cage's account, there was not enough space in the Cornish Theater to accommodate the percussion ensemble necessary to realize the African-inspired sound he had in mind for the piece; he had to make do with a piano. Remembering his studies with Henry Cowell, who had altered the sound of the piano by muting and plucking the strings, Cage began experimenting with the soundscape of the piano itself. Early attempts to use either a pie plate atop the strings or nails between the strings were unsuccessful; though both preparations produced interesting sounds, they were too easily dislodged during playing. Cage then turned to threaded fasteners: "It dawned on me that screws or bolts would stay in position. They did. And I was delighted to notice that by means of a single preparation two different sounds could be produced. One was resonant and open, the other was quiet and muted. The quiet one was heard whenever the soft pedal was used."<sup>13</sup>

The new instrument, besides fulfilling a necessity, also fit well within Cage's own context of experimentation and the quest for new sounds:

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<sup>11</sup> Pritchett, *The Music of John Cage*, 12–13. Only two of these percussion works for dancers survive: *Credo in Us* (1942) and *Forever and Sunsmell* (1943). Pritchett speculates that some works were lost or discarded or perhaps improvised and thus never committed to score altogether. *Ibid.*, 22.

<sup>12</sup> Fort would later go on to become the supervising director of the Katherine Dunham School in New York. See Leta E. Miller, "Henry Cowell and Modern Dance: The Genesis of Elastic Form," *American Music* 20, no. 1 (Spring 2002): 1–24, 22, note 3.

<sup>13</sup> John Cage, "How the Piano Came to Be Prepared," in John Cage, *Empty Words: Writings '73–'78* (Middletown, CT: Wesleyan University Press, 1979): 7–8.

This was the beginning of the prepared piano, which is simply an ordinary grand piano muted with a variety of materials: metal, rubber, wood, plastic, and fibrous materials. The result is a percussion orchestra of an original sound and the decibel range of a harpsichord directly under the control of a pianist's fingertips. This instrument makes possible the invention of a melody which employs sounds having widely different timbres: as far as I know this is a genuinely new possibility.<sup>14</sup>

Compared to an entire percussion ensemble, the preparations had the advantage of being easily portable, and Cage began using the prepared piano as the primary instrument for his dance accompaniments, particularly those written for Merce Cunningham.<sup>15</sup> The composer wrote most of these works quickly and kept them simple in terms of both preparations and the music itself, which usually consists of a simple line (with or without accompaniment and composed of a limited number of tones) arranged in repeating patterns following a constant eighth- or sixteenth-note motion.<sup>16</sup>

The transition from collaborative to solo instrument began with *Amores* (1943), a four-movement suite for two prepared pianos and two percussion trios, and Cage's first work to use the prepared piano independent of dance.<sup>17</sup> It was performed at a concert of percussion music for the League of Composers at the Museum of Modern Art in New York on 7 February 1943.<sup>18</sup> In the following five years, Cage became increasingly complex in his demands on the pianist and

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<sup>14</sup> Cage, "A Composer's Confessions," 11.

<sup>15</sup> Between 1942 and 1951 Cage composed fifteen dances for Cunningham: *Credo in Us* (1942), *Totem Ancestor* (1942), *In the Name of the Holocaust* (1942), *Tossed As It Is Untroubled* (1943), *Root of an Unfocus* (1944), *Spontaneous Earth* (1944), *The Unavailable Memory Of* (1944), *Four Walls* (1944), *Experiences No. 1* (1945), *Mysterious Adventure* (1945), *The Seasons* (1947), *Experiences No. 2* (1948), *Dream* (1948), *Suite for Toy Piano* (1948), and *Sixteen Dances* (1951). *Shimmera* (1942), *Ad Lib* (1943), *Triple-Paced* (1943), 2nd version (1944), *The Encounter* (1946), and *Orestes* (1948), also written for Cunningham, are lost or unpublished. See Silke Hilger, "Cage und Cunningham: Von 'Rhythmic Structures' zu Zufallsoperationen," in *Musik-Konzepte Sonderband: John Cage II*, ed. Heinz-Klaus Metzger and Rainer Riehn (Weinsberg: Wilhelm Röck, 1990): 32–71, 33–34. For a unique insider's perspective of Merce Cunningham, his dance company, and Cage, see Carolyn Brown, *Chance and Circumstance: Twenty Years with Cage and Cunningham* (New York: Alfred A. Knopf, 2007).

<sup>16</sup> Pritchett, *The Music of John Cage*, 25–26.

<sup>17</sup> Cage, "A Composer's Confessions," 13.

<sup>18</sup> Cage's *First Construction* and *Imaginary Landscape No. 3* were also on the program, together with Cowell's *Ostinato Pianissimo*, José Ardévol's *Preludio à 11*, Harrison's *Counterdance in the Spring* and *Canticle*, and Amadeo Roldán's *Ritmicas*. The initial review of the concert was less than favorable, with its general verdict being that "the offerings on this program seemed inexplicably childish and tame," the reviewer's major criticism being a lack of rhythmic complexity. Noel Straus, "Percussion 'Music' Heard at Concert," *New York Times*, 8 February 1943.

the required preparations. While his *Bacchanale* used only twelve notes prepared predominantly with weather stripping, his first large-scale work for solo prepared piano, *The Perilous Night* (1943–44), used twenty-six notes prepared with screws, nuts, bolts, bamboo, wood, and cloth in addition to weather stripping.<sup>19</sup> The two most demanding pieces in Cage’s output for the prepared piano in terms of preparation and pianistic ability are the Sonatas and Interludes (1948) with forty-five prepared notes and the Concerto for Prepared Piano and Orchestra (1951) with fifty-five.

According to Cage’s recollection, a passing remark “to the effect that short pieces can have in them just as much as long pieces can” by American dance critic Edwin Denby inspired him to get to work on his Sonatas and Interludes.<sup>20</sup> A budding interest in Eastern philosophy and the beginnings of a new music philosophy focused on tranquility are both traceable in his approach to the piece.<sup>21</sup> The cycle consists of sixteen sonatas and four interludes, arranged in a palindromic array with the interludes serving as a bridge between groups of four sonatas as follows: Sonata I–IV, First Interlude, Sonata V–VIII, Second Interlude; Third Interlude, Sonata IX–XII, Fourth Interlude, Sonata XIII–XVI. The interludes are either through-composed (First and Second Interludes) or in four sections, marked by double bars (Third and Fourth Interludes). The Sonatas are either binary (having two repeated sections, Sonatas I–VIII) or have three repeated sections (Sonatas IX–XI). The forty-five prepared pitches are located primarily in the middle and high register of the piano, only three falling below G<sub>3</sub> (middle C = C<sub>4</sub>).<sup>22</sup> The table of preparations (Figure 3.1) for the work specifies the pitches to be prepared and the type of

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<sup>19</sup> Pritchett, *The Music of John Cage*, 27.

<sup>20</sup> Cage, “A Composer’s Confessions,” 13.

<sup>21</sup> At the time Cage was reading the work of Ceylonese philosopher Ananda K. Coomaraswamy and was particularly fascinated with his concept of the permanent emotions or aesthetic qualities (*rasa*). According to Cage, each of the sonatas and interludes tries to express one of the emotions which are the erotic, the heroic, the odious, anger, mirth, fear, sorrow, and the wondrous. See, for example, Pritchett, *The Music of John Cage*, 29.

<sup>22</sup> They are D<sub>3</sub>, D<sub>2</sub>, and D<sub>1</sub>.

preparations, as well as their location in reference to the strings and distance from the damper. The materials to be used in the preparation of Sonatas and Interludes are metal fasteners (screws, bolts, and nuts) as well as mutes (rubber and plastic).<sup>23</sup> According to his recollections, it took Cage at least three hours to prepare the piano for the piece.<sup>24</sup>

Cage is largely silent throughout his writing on how or why he chose a given preparation. In the case of the Sonatas and Interludes, he explains: “The materials, the piano preparations, were chosen as one chooses shells while walking along a beach.”<sup>25</sup> Pianist Margaret Leng Tan relates how the composer would experiment with different objects at his piano, a Steinway Model O, and begin composing around the sounds he discovered, tweaking and adding to the preparations as he went.<sup>26</sup>

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<sup>23</sup> A fastener is a device that joins together two or more objects. While they can be made from a variety of materials, Cage uses only metal fasteners in his Sonatas and Interludes. The difference between a screw and a bolt is the tapered end; a screw is tapered, a bolt is not. Also, while a screw is generally threaded, a bolt may only be partially threaded or not at all. Cage does not specify any type of threading for either fastener. Richard Bunker, who surveyed Cage’s works for prepared piano, grouped the materials used by Cage into four rough categories of metal, wood, cloth, and rubber. Within each category, Bunker distinguishes the following objects: metal: bolts, screws, washers, nuts, coins, wire, L-screws, U-bolts, and metal strips; wood: bamboo, paper, and cardboard; cloth: spring rail felt, grand understring felt, front rail punchings, and felt temperament strip; rubber and plastic: rubber 1/6” thick, rubber 1/8” thick, canning jar rubber, piano tuner’s rubber mutes, rubber pencil erasers, wiring insulation, lamp cord, vinyl or rubber tubing, foam rubber, sheet plastic, rubber and plastic washers. Richard Bunker, *The Well-Prepared Piano*, 2nd ed. (San Pedro: Litoral Arts Press, 1981), 21–40.

<sup>24</sup> “I was asked to play my Sonatas and Interludes in the home of an elderly lady in Burnsville, North Carolina, the only person thereabouts who owned a grand piano. I explained that the piano preparation would take at least three hours and that I would need a few additional hours for practicing before the performance.” John Cage, “Indeterminacy,” in Cage, *Silence*, 265.

<sup>25</sup> John Cage, “Composition as Process: I. Changes,” in Cage, *Silence*, 19.

<sup>26</sup> Margaret Leng Tan, “John Cage’s Prepared Piano,” *John Cage: Chess Pieces, Sonatas and Interludes, Chess Serenade*, vol. 7, *John Cage: The Works for Piano*, produced by Margaret Leng Tan & David Walters (2003; New York: Mode 158, 2006), DVD. In his Darmstadt lecture of 1958, Cage acknowledged improvisation as a method of composition for Sonatas and Interludes: “The method was that of considered improvisation (mainly at the piano, though ideas came to me at some moments away from the instrument).” Cage, “Composition as Process: I. Changes,” in *Silence*, 19. Tan met Cage in 1981 and worked closely with him until his sudden death in 1992. She is renowned for her interpretations of Cage’s works for prepared and toy piano. A documentary by Evans Chan details her career as a pianist and supporter of avant-garde music. Evans Chan, “Sorceress of the New Piano,” *Margaret Leng Tan: Sorceress of the New Piano*, produced by Evans Chan (2004; New York: Mode 194, 2008), DVD. She is also featured in Mari Yoshihara’s book *Musicians from a Different Shore: Asians and Asian Americans in Classical Music* (Philadelphia: Temple University Press, 2007), 166–70.



While Cage's table of preparations seems meticulously detailed at first glance, it actually leaves several factors undetermined. Under the heading "Distance from Damper (Inches)," for example, Cage specifies the placement for the preparation to sixteenths of an inch. The given measurements, however, are specific to Cage's own piano and are thus problematic when applied to another instrument. Cage does give the short annotation "damper to bridge = 4-7/16"; adjust accordingly," presumably indicating the distance on his own piano and giving the pianist a point of reference for adjustments on different pianos.<sup>28</sup> Unless the preparer is intimately familiar with the Steinway model, however, this annotation may not be sufficient information to locate the harmonic node—the point on the string that when depressed yields an additional harmonic—that might have been the goal of Cage's measurement.<sup>29</sup>

Furthermore, Cage is somewhat imprecise about the attributes of the preparations to be used (including information regarding their diameter, threading, and length). Only occasionally does the composer identify a type or a size, such as the furniture bolt used to prepare C<sub>7</sub> and the medium bolt used to prepare A<sub>6</sub>.<sup>30</sup> Since mass and diameter are among the more powerful

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<sup>28</sup> Cage, *Sonatas and Interludes*, Table of Preparations.

<sup>29</sup> In his preparation for *The Perilous Night*, Bunker adjusts the placement of the preparations for A<sub>12</sub>, B<sub>12</sub>, and D<sub>3</sub> to coincide with their harmonic node, having discovered that on several pianos they are close to them when following Cage's instructions for placement. Bunker, *The Well-Prepared Piano*, 37–38. Whether Cage sought out harmonic nodes with his preparations is not clear. In his 1948 address, for example, he praises the ability to produce microtones rather than pitches conventionally associated with Western music: "The prepared piano also makes possible the use of microtones, that is, pitch differences less than our conventional half-tones. This provides an auditory pleasure which has long been known in jazz and folk and oriental music, but which had been largely excluded from our standardized serious music." Cage, "A Composer's Confessions," 11.

<sup>30</sup> Tan has examined the box containing John Cage's own preparation materials for *Sonatas and Interludes* in possession of the John Cage Trust. Her examination shows that Cage used cast-iron screws and "heavy duty" square nuts that fit surprisingly snugly and jangle very little (Tan reports that she uses lighter ones). The furniture bolt, she discovers, is actually an eye-bolt (a bolt with a hook at the end). She is surprised to find that the preparations for F<sub>6</sub>, G<sub>6</sub>, and A<sub>6</sub>, identified by Cage generically as "screws," are of different sizes, which would result in somewhat different timbres. The greatest surprise is the bolt used to prepare G<sub>7</sub>, one the highest notes of the piece. Her expectation is to find a smaller bolt, since the strings this high up on the piano are close together; however, the bolt in the envelope is quite big, about an inch long, and so thick that she muses: "Physically I really don't know how John managed to insert this between these very narrow, extremely taught strings in this high end of the piano...but I'm sure it made a wonderful sound, because of its thickness, and its girth, and the fact that it is a big, big bolt." Margaret Leng Tan, "John Cage's Box of Preparations," *John Cage: The Works for Piano*, Mode 158. Bunker explains that Cage's indicators of size, given only in the generic as small, medium, and large, "should be



determinants of the timbre of the prepared note, slight changes or different choices of screw or bolt type result in a significantly different overall sound of the piece.<sup>31</sup> Likewise, the rubbers and plastics available for preparations vary in density and elasticity. Depending on the type of material used, the change in timbre can be pronounced, resulting in a muted note with virtually no resonance remaining, or it can be only slight, resulting in a note that sounds closer to an unprepared note.<sup>32</sup>

Furthermore, recent changes in the composition of metal fasteners likewise affect the timbre. Modern-day fasteners, composed primarily of metal alloys containing zinc or aluminum, are of a significantly lighter mass than those common during Cage's time, composed primarily of iron. Used in preparation, modern-day fasteners result in a higher overall pitch and less resonance, while iron screws result in a lower pitch and more resonance. In addition, modern-day fasteners allow more of the fundamental pitch to remain audible and create noise-effects, such as jingling and rattling, more readily than iron screws.<sup>33</sup>

In his foreword to Bunker's book, Cage acknowledges these variables as an inevitable outcome of the preparation process:

When I first placed objects between piano strings, it was with the desire to possess sounds (to be able to repeat them). But, as the music left my home and went from piano to piano and from pianist to pianist, it became clear that not only are two pianists

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primarily [a distinction] of length or mass rather than diameter." Bunker, *The Well-Prepared Piano*, 22. For a chart concerning the diameter and length Bunker finds suitable for a particular octave see *ibid.*, 24.

<sup>31</sup> In his examination of the principles and preparation variables of the prepared piano, Bunker states that the timbre of metal objects is dependent on numerous outside variables, namely "mass of the preparing object, sideways tension of the strings, relative placement of the object along the string length and strength, and rapidity of the keyboard attack." Specifically Bunker notes that "increasing the mass of the preparing object lowers the pitch of the resulting sound" and that lateral tension depends directly on the diameter of the object. *Ibid.*, 19.

<sup>32</sup> *Ibid.*, 32. A final variable is the rapidity and strength of the keyboard attack, which may significantly alter the timbre obtained from two identically prepared pitches. As Bunker states, "one of the most fascinating characteristics of the prepared piano is the seemingly infinite variety of the timbres available by varying only the keyboard touch. In this aspect the instrument is like standard percussion instruments." *Ibid.*, 19–20.

<sup>33</sup> Tina Huettneraich, "The Sound of the Present-Day Prepared Piano," (Paper presented at the Joint Meeting of the American Musicological Society Southern Chapter and the Southern Chapter of the Society of Music Theory, Louisiana State University, 9 February 2007). The noise-effects are primarily dependent on the size of the screws; their fit—loose or tight—determines the amount of rattling produced against the vibration of the string.

essentially different from one another, but two pianos are not the same either. Instead of the possibility of repetition, we are faced in life with the unique qualities and characteristics of each occasion.<sup>34</sup>

As he learned to compose for the new instrument, however, Cage was not aware of how drastically the soundscape would change from one preparation to the next.<sup>35</sup> Despite his emphasis on discovery and originality, not every preparation would do. The composer recounts hearing a particularly badly prepared rendition of his *Perilous Night* and “wish[ing] at the time that [he] had never written the music.”<sup>36</sup> Cage especially resented willful neglect of his instructions, even more so if they were done for the sake of amusing or extreme effects.<sup>37</sup>

According to Cage, the primary objective for a performer should be to put together a carefully planned preparation that transforms the piano into a different instrument: “The total desired result has been achieved if, on completion of the preparation, one may play the pertinent keys without sensing that he is playing a piano or even a ‘prepared piano.’ An instrument having convincingly its own special characteristics, not even suggesting those of a piano, must be the result.”<sup>38</sup>

While for most listeners the sound of the prepared piano resembled a percussion ensemble, others found the sound “Oriental” in nature, an observation Cage attributed to the lack

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<sup>34</sup> John Cage, foreword to Bunker, *The Well-Prepared Piano*, 6.

<sup>35</sup> “I learned many essential things about the prepared piano only in the course of the years. I did not know, at first, for instance, that very exact measurements must be made as to the position of the object between the strings and I did not know that, in order to repeat an obtained result, that particular screw or bolt, for instance, originally used, must be saved.” Cage, “A Composer’s Confessions,” 11.

<sup>36</sup> Cage, foreword to *The Well-Prepared Piano*, 6.

<sup>37</sup> Reflecting on her work with Cage on his *Etudes Australes*, pianist Grete Sultan recounts: “People think he didn’t mind how the performer put the music together but that is not at all true. He insisted that I play everything just exactly the way he wrote it. And he was very precise about his instructions. The idea that you can do whatever you want with his music is not right. For John, it meant that you didn’t really take his work seriously.” Grete Sultan, *Grete Sultan: The Legacy*, vol. 1, recorded 1959–1990, Concord Jazz 42030, 1996, compact disc, liner notes, 11–12. More recently, Benjamin Piekut has argued Cage’s dissatisfaction with Charlotte Moorman’s performance of his *26'1.1499" for a String Player* was in part due to her favoring effects over faithfulness to the score. Benjamin Piekut, “Murder by Cello: John Cage Meets Charlotte Moorman” (Paper presented at the Annual Meeting of the American Musicological Society, Philadelphia, 15 November 2009).

<sup>38</sup> John Cage, *Amores* (New York: Edition Peters, 1943), Preface.

of harmony, a staple concept of his approach to composition from the late 1930s onward.<sup>39</sup>

Unable easily to express the sounds produced by the instrument with conventional music terminology, reviewers often resorted to descriptive language when commenting on performances or highlighting individual sound effects.<sup>40</sup> Composer Peggy Glanville-Hicks captured some of the confusion in her 1948 essay on Cage and his new instrument:

It is difficult to describe the sound made by a prepared piano to those who have never actually heard it. . . . Here and there straight piano tones will be left “unprepared,” and these emerge from the thuddy texture like gongs in their shattering limpid elegance, their sound hovering poised in aural space as the less resonant notes pass in scurrying designs. . . . The “prepared” sound, however, may not only bear no relationship in timbre to its unprepared piano counterpart, but its tonality, pitch and whole position in the piano’s range territory may be totally unexpected.<sup>41</sup>

A certain uniformity or point of reference in referring to the sounds produced by different preparations is necessary to facilitate a comparison among individual recordings. In dealing with the problem, Perry has distinguished three types of notes within the Sonatas and Interludes; type-1 notes are intentionally left unprepared, type 2 are minimally prepared and though slightly

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<sup>39</sup> “The absence of harmony in my music frequently suggests to listeners oriental music. Because of this, the *Book of Music* was used by the OWI [Office of War Information] during the war as *Indonesian Supplement n. 1*, which meant that when there was nothing urgent to do on the radio-beamed-to-the-South-Pacific this music was used, with the hope of convincing the natives that America loves the Orient.” Cage, “A Composer’s Confessions,” 13. The four characteristics of sound are, as Cage states repeatedly, pitch, timbre, loudness, and duration, with the opposite of sound being silence. Since duration is formed by both sound and silence, “a structure based on durations (rhythmic: phrase, time lengths) is correct (corresponds with the nature of the material), whereas harmonic structure is incorrect (derived from pitch, which has no being in silence).” Cage, “Forerunners of Modern Music,” in Cage, *Silence*, 63, note 2.

<sup>40</sup> A particularly descriptive passage occurs in Ross Parmenter’s review of the 10 December 1946 concert of Ajemian and Masselos: “Once prepared, the pianos emit a series of unexpected sounds. Occasionally the sound is metallic, like the striking of a spoon on a frying pan, but most of the time the sounds are subdued and unresonant. At different times the instruments suggested last night Balinese gamelans, harpsichords, castanets, ticking grandfather clocks, and water dripping in rain barrels.” Ross Parmenter, “Prepared Pianos Give Odd Program,” *New York Times*, 11 December 1946.

<sup>41</sup> Peggy Glanville-Hicks, “... A Ping, Qualified by a Thud,” in Kostelanetz, *Writings about John Cage*, 29–30. Glanville-Hicks was an Australian composer active as critic, composer, and concert organizer in New York City from 1940 to 1960. She looked to Cage as a composer who had pushed the tonal envelope in exploration of new sounds and tonalities. For a detailed account on the influence of Cage on her development as a composer see Suzanne Robinson, “Homage to a ‘Non-Harmonic Genius’: Glanville-Hicks on Cage,” *Musicology Australia*, 29 (2007): 1–22. For a bibliography see James Murdoch, *Peggy Glanville-Hicks: A Transposed Life* (Hillsdale: Pendragon Press, 2002), which includes a discography as well as a filmography. For a discussion of her work as a composer see Victoria Rogers, *The Music of Peggy Glanville-Hicks* (Burlington: Ashgate, 2009).

detuned maintain a sense of their fundamental pitch, and type 3 are extensively prepared and thus detuned or muted to the point that no sense of their original pitch remains.<sup>42</sup>

In her monograph on Cage's works for prepared piano, Monika Fürst-Heidtmann uses a similar classification system based on the number of strings that are prepared for any given note. When no preparation is placed between the strings, the pitch is not altered. When the preparation is placed between only two strings (as is the case for most of the preparations in the highest register—A<sub>5</sub> through A<sub>7</sub>) one string is left to swing free, thus still allowing the underlying pitch to be perceptible. When the preparation is applied to all three strings (as is the case for the preparations using rubber or plastic—G<sub>3</sub> through G<sub>5</sub>), the pitch is masked completely and instead gives way to noise.<sup>43</sup>

Type-3 sounds, or notes for which pitch is masked completely, are the hardest to describe when listening across different recordings. Fürst-Heidtmann attempts to distinguish these notes further by grouping them according to the sound properties—register, color, and duration—that result from the use of different preparations.<sup>44</sup> Rubber and plastic preparations, she observes, damp and absorb the vibration and produce sounds that consist of little to no identifiable pitch and limited resonance. Metal preparations vibrate with the strings and thus produce sounds that consist of one or more identifiable pitches and a strong resonance. When two or more materials

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<sup>42</sup> Perry, "Cage's Sonatas and Interludes," 39.

<sup>43</sup> Fürst-Heidtmann, *Das präparierte Klavier des John Cage*, 62. The same fundamental change of pitch occurs when several preparations are used in combination. A notable exception occurs where Cage instructs the pianist to use the *una-corda* pedal, which shifts the hammers to the right to strike only strings 2 and 3. Since the free-swinging string is eliminated, the sound produced will be more in line with that of a type-3 preparation. The same technique may be used to dilute the very resonant sound created by a heavy preparation such as that found on F<sub>6</sub> (prepared by a screw between strings 1 and 2 at ¾" away from the damper, a furniture bolt and two nuts at 2⅛", and a screw with two nuts at 3¼" between strings 2 and 3). When the *una-corda* pedal is pressed, only the preparations between strings 2 and 3 are sounding. Bunker refers to preparations of two distinct sound profiles due to the use of the *una-corda* pedal as hybrid preparations. Bunker, *The Well-Prepared Piano*, 35–36. See also the discussion on pedaling below.

<sup>44</sup> She has termed the combination of these sounds a "Mischklang," a mix of sound. Cage, however, referred to them exclusively as "intervals." Fürst-Heidtmann, *Das präparierte Klavier des John Cage*, 62, note 1. Her extensive sound classification of the materials used in Cage's prepared piano *oeuvre* is summarized on pages 69 through 71.

of a different nature are used in combination, one or the other effect predominates; metal and rubber (used, for example, to prepare E<sub>b5</sub> and G<sub>#5</sub>) tend to result in a resonant and pitched sound, while plastic and rubber (used, for example, to prepare D<sub>4</sub> and G<sub>#4</sub>) damp it, allowing virtually no pitch to remain.<sup>45</sup> Lastly, a nut may be applied to each metal preparation to add mass, lowering the sound of the prepared pitch and, if the nut is fitted loosely, to add a noise effect, usually in the form of a “jangle, buzz, clink or rattle.”<sup>46</sup>

When describing the sound profile of individual recordings I will be drawing on typology as used by Perry and the sound properties as distinguished by Fürst-Heidtmann; however, to distinguish more clearly between those sounds that are heavily altered (type 3 for Perry and a preparation across three strings for Fürst-Heidtmann), I will separate the notes with a sense of pitch from those that are completely muted or distorted, thus adding a fourth type. In my examination, type 1 will be notes that are unprepared and thus give a regular pitch sound, type 2 notes that are minimally prepared and sound with strong sense of fundamental pitch. Type 3 and type 4 both refer to notes that are heavily prepared. Type 3 notes sound very distorted but maintain some sense of pitch, while type 4 notes are either completely devoid of pitch or so far distorted that they resemble an effect (for example a buzz, jingle, or gong) rather than a pitch in the conventional sense.<sup>47</sup> Furthermore, since each recording’s charm comes from the individualities rather than congruencies of the preparations, it will on occasion be necessary to draw on descriptive metaphors to express a particular effect.

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<sup>45</sup> Ibid., 62–64. Her classification is in line with that of Bunker, who equates the sound made by metal preparations to that of resonant metallophones such as gongs and bells, whereas plastic and rubber vaguely resemble the dead thud made by unpitched percussion instruments such as drums or woodblocks. Bunker, *The Well-Prepared Piano*, 21, 32–34.

<sup>46</sup> Bunker also observes that “heavy objects will produce a strong, short rattle; light objects will produce a longer, lighter vibration.” Ibid., 23.

<sup>47</sup> By my definition, a heavily muted note (one prepared with plastic) may still result in a type-3 sound, meaning a sound that is dulled, but maintains some sense of pitch. This is a necessary distinction, as not all artists prepare their muted notes in such a way that they deaden the sound completely. Likewise, a metal preparation may yield a type-4 sound, if it is applied in such a way that the effect is stronger than the sense of pitch.

## Recordings

In the notes accompanying the 1951 release of Ajemian's recording of the Sonatas and Interludes (a recording made in 1950), Cage offers the following advice to the pianist regarding the preparations and desired sound of the piece: "If you enjoy playing the Sonatas & Interludes then do it so that it seems right to you." Earlier, however, he had indicated that "if you want to adhere to past models, listen to the recording by Maro Ajemian . . . & then attempt to imitate that preparation."<sup>48</sup> His statements seem to confirm the composer's overall satisfaction with the preparation documented by Ajemian but also acknowledges his openness to other interpretations or soundscapes of the piece.

And indeed, the recordings show a great variety of soundscapes. Of the thirty-two complete recordings of Sonatas and Interludes available, I have chosen ten to provide an overview of the various preparations and their sound. Ajemian's recording (1950, released 1951) documents the sound of the piece closest to its premiere. Next is Yuji Takahashi's recording of 1965 (released 1966), the only recording of the work made during the 1960s.<sup>49</sup> To represent the 1970s, I have chosen American pianist Joshua Pierce's recording of 1975 (released 1977); to represent the 1980s, the recording of French pianist Gérard Frémy (1980, release 1983).<sup>50</sup> Like

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<sup>48</sup> Maro Ajemian, *John Cage: Sonatas & Interludes for Prepared Piano*, recorded 1950, CRI Composers Recordings Inc. CD 700, 1995, compact disc. Originally released on Dial Records DR 19–20, 1951, 33⅓ rpm; liner notes, 5, 8. Ajemian was a student at the Juilliard School. After graduation, she pursued a career as concert artist focused particularly on contemporary music and modern, often unknown, composers together with her sister, violinist Anahid Ajemian. In particular, she championed the works of Alan Hovhaness, a fellow Armenian composer. Using her position as performer and repertoire consultant to producers at MGM Records and Mercury Records, she facilitated forty-one recordings of Hovhaness's music as well as the first few of Cage's. Ajemian, CRI CD 700, liner notes, 8–9. Ajemian released two recordings of Cage in addition to the Sonatas and Interludes: *Amores*, Disc Company of America 607, 1947 and *Three Dances*, with William Masselos, Disc Company of America 643–648, 1950. See Rob Haskins, "John Cage and Recorded Sound: A Discographical Essay," *Notes* 67, no. 2 (December 2010): 382–409. Ajemian, who is also the dedicatee of the Sonatas and Interludes, died of heart-valve failure in 1978.

<sup>49</sup> Yuji Takahashi, *Yuji Takahashi Plays John Cage*, recorded 26–27 July 1965, Fylkingen Records FYCD 1010, 1997, compact disc. Originally released on Fylkingen Records FYLP X-101/2, 1966, 33⅓ rpm.

<sup>50</sup> Joshua Pierce, *John Cage: Sonatas & Interludes for Prepared Piano*, recorded 26–27 July 1975, Wergo WER 60156-50, 1989, compact disc. Originally released on Tomato Records TOM 2-1001, 1977[?], 33⅓ rpm;

Ajemian, Pierce and Frémy are well known for their Cage interpretations.<sup>51</sup> After 1990, recordings of the full cycle abound, with a total of fourteen available between 1990 and 1999. As a representative sample I have chosen Nigel Butterley (1992, released 1993), Louis Goldstein (1994, released 1996), Aleck Karis (1997, released 1998), and Boris Berman (1998, released 1999).<sup>52</sup> The recordings since 2000 are represented by Herbert Henck (2000, released 2003) and Margaret Leng Tan (2003, released 2006).<sup>53</sup> For ease of reference, Table 3.1 provides an overview of the artists examined as well as dates of recording and first release.

Table 3.1: Recordings of Cage's Sonatas and Interludes

Performers	Recording	First Release
Maro Ajemian	1950	1951
Yuji Takahashi	1965	1966
Joshua Pierce	1975	1977
Gérard Frémy	1980	1983
Nigel Butterley	1992	1993
Louis Goldstein	1994	1996
Aleck Karis	1997	1998
Boris Berman	1998	1999
Herbert Henck	2000	2003
Margaret Leng Tan	2003	2006

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Gérard Frémy, *Sonatas and Interludes for Prepared Piano*, recorded 1980, Etcetera KTC 2001, 1987, compact disc. Originally released in 1983, 33⅓ rpm.

<sup>51</sup> In 1991, Pierce won the Preis der Deutschen Schallplattenkritik for the third volume of his recording of John Cage's complete works for piano. Joshua Pierce, *Works for Piano & Prepared Piano*, vol. 3, recorded 1976–83, Wergo WER 60158-2, 1993, compact disc.

<sup>52</sup> Nigel Butterley, *John Cage: Sonatas and Interludes, Music for Marcel Duchamp, The Wonderful Widow of Eighteen Springs*, recorded June 1992, Tall Poppies TP 025, 1993, compact disc; Louis Goldstein, *John Cage: Sonatas and Interludes, Dream*, recorded 20 December 1994, Greensye Music 4794, 1996, compact disc; Aleck Karis, *John Cage: Sonatas and Interludes, Composition in Retrospect*, recorded 12–13 January 1997, Bridge 9081 A/B, 1998, compact disc; Boris Berman, *John Cage: Sonatas and Interludes for Prepared Piano*, recorded 11–13 July 1998, Naxos 8.559042, 1999, compact disc.

<sup>53</sup> Herbert Henck, *Locations*, recorded August 2000, ECM Records 1842/43, 2003, compact disc; Margaret Leng Tan, *John Cage: The Works for Piano*, vol. 7, recorded 1–2 October 2003, Mode 158, 2006, compact disc. In a 2007 article in *Gramophone*, Peter Dickinson surveys a number of recordings of Cage's Sonatas and Interludes, commenting briefly on the sound-effects of each and giving an overall value judgment of the interpretation. His list includes the recordings by Ajemian, Takahashi, Pierce, Frémy, Butterley, Karis, Berman, Henck, and Tan. In his assessment, he honors Tan with the Desert Island Choice Award. Peter Dickinson, "Fascinating Rhythm," *Gramophone*, February 2007, 46–51. I am grateful to Margaret Leng Tan for bringing this article to my attention.

To best highlight the different sound profiles achieved by the artists I have chosen pieces that show distinct aspects of the preparations: Sonata III, the First Interlude, Sonata VII, and Sonata XIV.<sup>54</sup> The First Interlude and Sonata VII are of similar animated character, but draw their melodic content from different areas of the preparation table: Sonata VII features the metal preparations of the middle and high register, with both right and left hand staying in the treble clef (the range of the piece is B<sub>3</sub> through E<sub>7</sub>), while the First Interlude features the muted and hybrid preparations of the lower and middle register (G<sub>3</sub> through C<sub>6</sub>). Sonata III and Sonata XIV are calmer in overall character and were chosen to highlight some of the effects not evident in the other two pieces. Sonata III, for example, is one of the few pieces in which Cage calls for *ritardandi*, while Sonata XIV contains the lowest note, D<sub>1</sub>. In addition, the four pieces show the different effects achieved by Cage's use of the pedal. Sonatas VII and XIV both use the *una-corda* and damper pedal throughout, the First Interlude uses primarily the *una-corda* pedal, and Sonata III uses a variety of pedaling techniques, ranging from none to all combined.

### **Preparations: Screws, Bolts, and Nuts**

The greatest diversity among artists is evident in notes altered with fasteners rather than mutes. The scope of sounds achieved ranges from type 2 to type 4. The first halves of both Sonata VII and Sonata XIV exemplify each artist's sound. In Sonata VII, the right hand plays notes almost exclusively within the range of E<sub>6</sub> to E<sub>7</sub>, an octave in which each note is prepared with varying types of metal fasteners between strings 2 and 3. In Sonata XIV, the left hand plays primarily in the range of G<sub>4</sub> to A<sub>5</sub> and again features mostly metal preparations between strings

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<sup>54</sup> Sonatas XIV and XV constitute a set called "Gemini" and are an homage to the work of American sculptor Richard Lippold. The connection between Cage and Lippold has recently been explored by Richard Brown, "'Hearing Through, Seeing Through': John Cage, Richard Lippold, and Open Sculpture" (Paper presented at the Annual Meeting of the American Musicological Society, San Francisco, 11 November 2011).



2 and 3. In addition, the *una-corda* and damper pedal are active in both pieces, giving maximum focus to the preparations.

Two distinct characters emerge during the first half of Sonata VII: mm. 1–6 have a calm character, proceeding for the most part in eighth notes with frequent pauses centered around A $\flat$  (Figure 3.2); mm. 7–11, labeled *più mosso*, have an animated character, proceeding at a faster pace with the right hand playing a dense web of what are notated as chromatically ascending and descending sixteenth notes (Figure 3.3) until a *ritardando* beginning at m. 11.<sup>55</sup>



Figure 3.2: Sonata VII, mm. 1–7<sup>56</sup>



Figure 3.3: Sonata VII, mm. 7–13

<sup>55</sup> The broken and solid line indicate the use of pedal; broken for the *una-corda* pedal and solid for the damper pedal (also see the section on pedaling below).

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Ajemian achieves a strong resonance through metal preparations. Her sound is rich, reverberant, and of a low register. Particularly in the first four measures, most of the notes are closest to type-4 with a strong, gong-like resonance, especially F<sub>6</sub>, G<sub>6</sub>, A<sub>6</sub>, and C<sub>7</sub>. In mm. 1–6 these notes begin or end the melodic figures and set the tone for the piece as calm and meditative. By contrast, A<sub>6</sub> as well as G<sub>6</sub> and B<sub>6</sub> are less resonant, their sound falling between type 3 and 4; they have a distinct pitch, but also a noticeable metallic click paired with high overtones. The sound suggests that the preparations for these notes were of smaller diameter and placed closer to the dampers, while the more resonant ones were of larger size and placed further away. A noticeable rattle occurs in conjunction with the C<sub>6</sub> in m. 4, even though Cage does not specify the use of a nut for that pitch; most likely the screw here fits more loosely between the strings than for any other note.

When Ajemian enters the *più mosso* at m. 7, the left hand's unprepared G<sub>5</sub> and B<sub>5</sub> ring through the type 3 and 4 sounds of the busy right hand. Because of the strong resonance of the prepared strings, however, the unprepared notes of the left hand blend with the prepared notes of the right hand, instead of striking the listener as foreign; overall, Ajemian's sound is extremely smooth. Her melodic shape closely follows that of the chromatic ascent and descent indicated in the score, giving each section a sense of build-up, high point, and closure.<sup>57</sup>

Yuji Takahashi's recording achieves a very different effect. His prepared notes are almost exclusively of type 4, but none have the low-pitched and gong-like resonance of Ajemian's (the most resonant notes are F<sub>6</sub> and A<sub>6</sub>; though their pitch is distorted, they lack the effect of a gong and are thus more of type 3). Instead, the notes have a high-pitched, non-resonant sound. One of the most interesting type-4 effects he achieves is on G<sub>6</sub>, which produces a high-pitched metallic

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<sup>57</sup> Cage indicates that one can tell a good preparation "by whether or not . . . the cadences 'work.'" Ajemian, *John Cage*, CRI CD 700, liner notes, 5.

click when struck, similar to two pieces of silverware clinking together.<sup>58</sup> B<sub>6</sub> has a bell-like quality with some resonance, akin to a bicycle bell. Both A<sub>6</sub> and G<sub>6</sub> sound very wooden (their attack is perceptible and they lack resonance), more like a knock than a pitch.

The metallic effect of his sound is especially apparent in the *più mosso* section. In contrast to Ajemian's recording, the unprepared notes in the passage stand out against the type-4 sounds of the right hand; their effect is much more jarring, as they clash with the metallic sound of the preparations rather than blending into a smoothly resonant texture. The different effects of G<sub>6</sub>, G<sub>6</sub>, and B<sub>6</sub> (notes frequently repeated during the chromatic passage), create a playful rather than meditative impression that is helped by the fast tempo (see below).

Pierce and Frémy return to the resonant and gong-like sound of Ajemian. With Pierce, however, the sound stems from the use of the damper pedal rather than type-4 preparations. A truly gong-like quality is evident only on C<sub>6</sub>; the other notes maintain a clear pitch profile though sounding about an octave lower throughout. Frémy, on the other hand, maintains type-3 sounds, most of which are distorted and sound out of tune (most notably A<sub>6</sub> and B<sub>6</sub>). As with Pierce, C<sub>6</sub> is one of the few type-four preparations, achieving a strong gong-like quality and resonance (F<sub>6</sub> does so as well, though to a lesser degree than Ajemian's). A notable exception is G<sub>6</sub>, almost a type-1 note, sounding exactly on pitch with only a hint of dulled resonance due to the preparation.

In the *più mosso* section, Pierce's unprepared notes blend almost perfectly with the type-3 notes of the right hand. Apart from the lower register and the slight sense of being out of tune, listeners could be persuaded that they were listening to an unprepared piano. Frémy similarly blends the prepared and unprepared notes with the right hand, but he is much heavier handed

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<sup>58</sup> Perhaps this change in sound was the root of Dickinson's opinion when he asserts that "Takahashi fails to get his preparations right." Dickinson, "Fascinating Rhythm," 48.

than Pierce, seeming almost to trudge through the Sonata in a performance so carefully measured it borders on tedium.

Butterley's preparations have resonance, particularly in the opening of Sonata VII; the notes are of type 3 and 4. Most of the type-4 notes, such as F<sub>6</sub><sup>#</sup>, G<sub>6</sub>, and B<sub>6</sub>, are gong-like sounds; however, they have a much quicker rate of decay and are higher in pitch than Ajemian's. Some, most notably the gong-like C<sub>7</sub>, are even bright and metallic. C<sub>6</sub> also has a strong buzz effect, suggesting that the screw sits loosely between the strings. In the *più mosso* passage, most of the unprepared notes blend with the right hand, but one note in particular, A<sub>4</sub>, stands out in jarring contrast to the rest of the passage.

Both Goldstein and Karis have a full, resonant sound that is also low in pitch; their preparations are closest to type 4, but a sense of pitch usually remains.<sup>59</sup> Goldstein, for example, has a particularly strong, low-pitched, and gong-like resonance associated with C<sub>6</sub> and E<sub>6</sub><sub>b</sub>. Though most of the pitches during the opening four measures are as resonant as those, they are not as low-pitched. Karis, on the other hand, features a greater number of type-4 preparations. Among the most interesting effects is E<sub>6</sub><sub>b</sub>, which gives a dull but pitched thud, similar to a cowbell being struck by a mallet but not allowed to resonate. F<sub>6</sub><sup>#</sup> and A<sub>6</sub><sub>b</sub> are gong-like and resonant, while B<sub>6</sub> introduces the metallic click already heard in Ajemian. Both artists blend the unprepared notes well during the *più mosso* section, even A<sub>4</sub> in the left hand.

Berman's recording presents a stark contrast. The rate of decay of the prepared notes is quick and almost all of them can be considered type 2, extremely high and thin. Some of the high notes are so bright that the listener might wonder if any preparation was applied at all and whether the notes are thus of type 1; when the unprepared notes enter with unexpected force in the *più mosso*, however, their extreme resonance makes the distinction between prepared and

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<sup>59</sup> Perhaps the best classification, especially of Goldstein's sound, is a type 3.5.

unprepared notes clear. In addition, Berman's notes (particularly F $\sharp_6$ , G $_6$ , and G $\sharp_6$ /A $\flat_6$ ) are accompanied by a buzz-effect, suggesting that he has placed the screws loosely between the strings. The extreme highness of his pitches could be the result of using modern-day fasteners of malleable alloys such as those of aluminum or zinc.

Recordings of the 1990s thus either continue to favor Ajemian's resonant sound (Karis and Goldstein) or, for the first time, Takahashi's brighter but less resonant sound (Berman); Butterley, perhaps unwittingly, bridges the gap between the two styles. The broadest range of timbre changes and effects of type-4 preparations, however, appears in the recordings made since 2000 (Henck and Tan).

In what is perhaps the most inventive preparation used by any of the performers, Henck manages to create the sound of a true percussion battery, with simulated claves (F $\sharp_6$  and G $_6$ ), gongs (A $\flat_6$  and A $_6$ ), tambourine (E $\flat_5$  and A $\flat_5$  in the left hand), and some piano (B $_6$  and D $\flat_7$ ); his interpretation, however, does maintain an overall pitch range higher than Ajemian's. His *più mosso* is quite resonant and the unprepared pitches of the right hand blend in well; only the left hand's A $_4$  sounds noticeably unprepared, probably due to its register.

Tan's recording, on the other hand, stands out as one that returns to a lower-pitched and more resonant preparation. But while the register is reminiscent of Ajemian's recording, most of Tan's notes are type 3 instead of type 4, maintaining a strong sense of pitch, particularly G $_6$  through D $\flat_7$ ; F $\sharp_6$  and C $_6$ , however, are quite resonant and gong-like. Similar to Pierce, even her prepared notes ring out. Their pitch allows the overall melodic line suggested by the score to come through, particularly during the *più mosso* section.

The sound profile of the artists carries over into Sonata XIV, two notable exceptions being Pierce and Berman. Throughout the first half of the piece, the right hand oscillates between

B $\flat$ <sub>5</sub> and D<sub>6</sub>, both unprepared pitches, while the left hand plays a recurring motive of A $\flat$ <sub>5</sub> and G $\flat$ <sub>5</sub>, occasionally dipping into what is notated as an arpeggiated G-major dominant seventh chord (Figure 3.4). All notes of the left hand except G<sub>4</sub> are prepared with fasteners between strings 2 and 3; G<sub>4</sub> is muted with rubber and plastic.<sup>60</sup> In the second half of the piece, the range of the notes expands and towards the end of Sonata XIV, D<sub>1</sub> (prepared with the American Pencil Company eraser #346) can be heard in mm. 33, 46, and 48 (Figure 3.5).

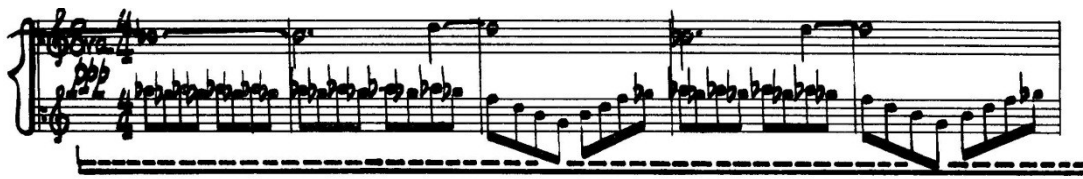


Figure 3.4: Sonata XIV, mm. 1–5



Figure 3.5: Sonata XIV, mm. 46–48

Ajemian's sound throughout the first half of Sonata XIV is full and resonant, featuring a type-4 gong-like sound of low pitch; however, G<sub>4</sub> is noticeably without resonance, resembling a dull thud (type 4). The unprepared notes of the right hand do ring out over the meditative, dreamlike wash of sound that is created by the left hand. D<sub>1</sub> sounds ominous, like a resonant thud (type 4) that draws the ear's attention and provides a sense of closure to the section.

Takahashi's sound of Sonata XIV falls again on the other side of the spectrum. It is quite high in pitch and less resonant, though the damper pedal does help carry the sound from note to note. The A $\flat$ <sub>5</sub> and G $\flat$ <sub>5</sub> motive of the left hand has a weak, bell-like sound, and a noticeable buzz

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<sup>60</sup> A $\flat$ <sub>5</sub> also has rubber in addition to the fastener (a furniture bolt).

occurs in conjunction with F<sub>5</sub>. G<sub>4</sub>, on the other hand, is quite resonant instead of muted (type 3). Takahashi also achieves a meditative character with his interpretation, even though the buzz of F<sub>5</sub> does intrude on the stillness of the passage. D<sub>1</sub> is as dull and dark as Ajemian's, though with much less resonance.

Pierce is one of the few artists whose preparation of Sonata XIV brings out nuances different from those found in his interpretation of Sonata VII. His overall soundscape is still very resonant, but higher in overall pitch, and instead of featuring type-2 and -3 sounds, Sonata XIV draws more heavily on type-3 and -4 sounds. G<sub>b5</sub>, for example, resembles a musical knocking figure, pitched but with the clear thud of striking a wooden object, while A<sub>b5</sub> has a metallic tone. Due to the insistent character of G<sub>b5</sub>, along with the fast tempo, the piece never settles into the same tranquil pace as it does in the hands of Ajemian or Takahashi. D<sub>1</sub> is likewise a dull thud, ominous and low.

Like Pierce, Berman's sound in Sonata XIV differs somewhat from that of his Sonata VII; though Sonata XIV is still extremely high in overall pitch and low in resonance, the preparations lean toward type-3 and -4 sounds, rather than the previous ones of type 1 and 2. G<sub>b5</sub> in particular has the same dull knock characteristic of Pierce. In addition, the note has a faint metallic overtone. A<sub>b5</sub>, on the other hand, is quite resonant and bell-like, sounding about an octave lower than notated. Likewise, G<sub>4</sub> is resonant (type 2) instead of the expected muted type 4. The character of Berman's Sonata XIV is meditative, despite the intrusion of G<sub>b5</sub>. D<sub>1</sub> is a very dry, dull thud.

The sound of Frémy, Butterley, and Goldstein's Sonata XIV hardly changes from that previously heard in Sonata VII. Frémy's sound is resonant and low, mostly of type 3, and in character feels as labored as his performance of the *più mosso* passage in Sonata VII. Butterley's

soundscape is resonant but significantly higher than Ajemian's.  $F_5$  also features a strong, buzz-like effect, suggesting that the screw is very small or fitted loosely between the strings. As with Takahashi, the rattle intrudes on the stillness of the line and contributes to the rather unsettling character of his interpretation of the piece. Goldstein, on the other hand, reclaims the meditative character even with the fast tempo that he takes. His preparations yield a cerebral gong-like sound, low in overall pitch, but with frequent overtones.

Surprisingly diverse among the three artists is the sound of  $D_1$  in Sonata XIV. Frémy's sound is a type-3 cacophony of pitches with strong resonance. Butterley plays it as a dull, low-pitched thud, similar to the previous executions of Ajemian, Takahashi, and Pierce. Goldstein's note, however, is barely audible. It has virtually no resonance and is easy to miss if the ear is focused on the rising and falling line of the right hand.

Perhaps the most striking interpretation of Sonata XIV is that of Karis. His touch and expressiveness are even and balanced, the quality of his preparations is a full, resonant string of bell-like type-4 notes. The unprepared notes of the right hand seem to rise up and melt back seamlessly into the left hand's melodic line, giving the piece a remarkable sense of tranquility. The only intrusion is the sound of  $D_1$ : given the resonance and peacefulness of the entire piece, its dull, quickly-decaying, and low thud is so alien that it sounds ugly.

Just as Henck's Sonata VII featured the most complex type-4 sounds, Sonata XIV also has a number of interesting effects.  $G_{b5}$  sounds like a knock on a hollow piece of wood to which  $A_{b5}$  adds just enough sense of pitch to carry the line, almost sounding like a musical echo to a percussive event. The preparations on Henck's dominant seventh chord alter the pitches in such a way that the shape becomes inverted. Instead of moving down and up, they move up and down.  $D_1$  is uncharacteristic of the resonance that otherwise permeates his sound; it is so strongly muted



that it can barely be perceived. Where it does peak through the ongoing musical texture, it sounds as if someone standing next to the piano reached into the soundboard and stroked across the piano strings.

Lastly, Tan in Sonata XIV uses preparations that produce type-3 sounds but are overall of a strong, resonant character and low in pitch profile, very close to the sound achieved by Ajemian.<sup>61</sup>  $G_{b5}$  and  $A_{b5}$  are perhaps the strongest occurrence of a type-4 sound. Their resonance is somewhat dulled, and both pitches have a subdued, gong-like character. In contrast,  $D_1$  is so resonant and loud that it does not seem prepared at all, a stark contrast to that of the other artists.  $G_4$  is another note that noticeably jumps out at the listener. It snaps up by at least an octave instead of following the indicated trajectory of the notes downward. In overall character, Tan's interpretation follows that of other artists in being tranquil and meditative, while the sound of  $D_1$  and  $G_4$  add her own signature.

### **Preparations: Mutes and Hybrids**

While the artists' metal preparations result in a wide range of sounds and effects, their muted preparations are generally similar. As has been said, the muting materials used in the Sonatas and Interludes are rubber and plastic and are applied to sixteen notes of the piece; however, most are paired with metal preparations on the same note, so called hybrid preparations. Where a mute is present, its impact on the prepared sound can vary from one extremely damping to one creating noise effects; the sound of the monophonic line of the opening four measures (see Figure 3.6) illustrates the varying degrees to which muted notes using hybrid preparations may be distorted.

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<sup>61</sup> Ms. Tan reports that her set of preparations for the piece is also composed of iron screws. Margaret Leng Tan, phone conversation with the author, 30 March 2012.



Figure 3.6: First Interlude, mm. 1–4

The three muted notes of the passage ( $A_{b5}$ ,  $E_{b5}$ , and  $B_{b4}$ ) are each prepared with rubber and either one ( $A_{b5}$  and  $E_{b5}$ ) or two ( $B_{b4}$ ) metal preparations. In Ajemian,  $A_{b5}$  is the pitch with the most resonance remaining, bridging the gap between resonant and muted sounds; it is still a type-3 note in that it has a pitch, but it is not as resonant as the notes around it. It sounds almost like a pitched knock rather than a bell like the other notes. Despite the two metal preparations,  $B_{b4}$  approximates type 4 more closely. It is perceived as a thud, like a knock against the door, without any sense of pitch. The note of which quality is altered most, however, is  $E_{b5}$ . It is completely muted (type 4), producing a dull thud that has a noticeable buzz stemming from the nut attached to the bolt. The presence of the buzz indicates that Ajemian fitted the nut loosely around the fastener, giving the nut room to vibrate against it.

The most percussive passage of the interlude occurs in mm. 51–65 (Figure 3.7). Though the piece is through-composed, the section serves as a bridge between the preceding and following material. The passage is centered on the notes  $B_{b4}$  and the dyad  $D_{b5}+E_{b5}$  ( $D_{b5}$  is prepared with rubber only) in the right hand, and  $G_3$  (two long bolts) and  $B_3$  (a hybrid of two bolts and rubber) in the left hand.<sup>62</sup>

<sup>62</sup> Additionally, mm. 54 and 60 also contain a dyad of  $E_5$  (rubber) and  $D_5$  (furniture bolt) in the left hand. For a discussion of the additional notes of mm. 54–55 in the right hand ( $C_6$ ,  $A_{b5}$ ,  $G_{b5}$ ,  $F_5$ , and  $C_5$ ) see the section on pedaling below.



Figure 3.7: First Interlude, mm. 51–65

Each note has a very distinctive sound profile and even though the pitches do not occur simultaneously, Ajemian's interpretation gives the illusion of layers of sound, rather than individual and separate events. The buildup is gradual and is foreshadowed by an isolated occurrence of the left hand figure in mm. 47–48 (Figure 3.8).



Figure 3.8: First Interlude, mm. 46–48

In Ajemian, both notes fall between types 3 and 4, having some sense of pitch and resonance; they are very soft (corresponding with Cage's *pp* indication) and give the impression of an oscillating bass pattern. The G<sub>3</sub> provides a low thud (probably stemming from the second

bolt, which is placed only 3¼" away from the damper) with enough resonance to carry into B<sub>3</sub>, which adds a higher, also resonant, thud.<sup>63</sup>

Beginning in m. 51, the right hand builds on this pattern by interrupting it either with B<sub>4</sub> or the D<sub>5</sub>+E<sub>5</sub> dyad following a syncopated rhythm. In Ajemian, the sound of B<sub>4</sub> and E<sub>5</sub> is heavily muted, with an added buzz on E<sub>5</sub>. Likewise, the rubber applied to D<sub>5</sub> completely masks any sense of pitch. Both hands together create the effect of a percussion ensemble; the bit of resonance that remains to the left hand pitches sustains their sound just long enough to be audible from one occurrence to the next, providing a foundation, while the right hand adds the percussive effects.

Like Ajemian's, the preparations of Takahashi, Pierce, Butterley, Berman, and Henck result in notes of predominantly type 3 and 4, with limited or moderate resonance occurring in conjunction with type 3; however, each artist's effect is slightly different. In Takahashi, for example, B<sub>4</sub> and E<sub>5</sub> sound similar; B<sub>4</sub> is an un-pitched thud and E<sub>5</sub> has a buzz effect), while his G<sub>3</sub> in m. 4 is extremely full and resonant, a sound that seems directly correlated to the use of the damper pedal.<sup>64</sup> Pierce has no notable effect accompanying E<sub>5</sub>, suggesting that he uses nuts that fit very tightly. G<sub>3</sub> is very soft and resonant, though that seems to be due more to the use of the damper pedal than the preparation.

Butterley is perhaps closest to Ajemian's muted, type-4 sounds. E<sub>5</sub> and B<sub>4</sub> approximate a dull thud with a buzz; however, G<sub>3</sub> results in a multi-pitched, detuned, and resonant sound. The

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<sup>63</sup> At an earlier occurrence of G<sub>3</sub> in m. 4, the addition of the damper pedal results in a very different sound. At that moment in Ajemian's interpretation, G<sub>3</sub> becomes a type-4 note that is perhaps best described as a mechanical click, similar to the hammer of a typewriter getting stuck in the middle of a strike. This particular sound only occurs during the moment the damper pedal is depressed. A particularly striking effect can also be heard in Takahashi. His use of the damper pedal during mm. 51–65 alters the sound of G<sub>3</sub> from one that was full and resonant in m. 4 to one that is now much more percussive, with a quicker rate of decay. The change is so drastic that it is possible Takahashi saved the use of the *una-corda* pedal for this particular section and did not as indicated employ it together with the damper pedal during m. 4.

<sup>64</sup> In addition, the A<sub>5</sub> in m. 54 is much duller and has much less of the original pitch than that of Ajemian.

same detuned sound is evident, to an even greater degree, in Tan (see below). As with Ajemian's  $G_3$  in m. 4, this appears to be a localized event due to the damper pedal, since  $G_3$  is much less resonant in the later passage beginning in m. 51.

Berman's and Henck's preparations are notable for the extreme effects their mutes achieve. Berman's muted pitches in the opening measures are exceedingly dull, weak, and thin (in contrast,  $G_3$  in m. 4 is fairly resonant). Both  $B_{b4}$  and  $E_{b5}$  have a buzz-like effect, but with an extremely quick rate of decay. The effect is similar to Ajemian's localized sound of  $G_3$  in m. 4, a typewriter hammer getting stuck in the middle of a strike. Henck's muted pitches are also dulled and knock-like (type 4) with no perceptible pitch.  $E_{b5}$  is accompanied by a high-pitched clink or jangle that stems from either an extremely loosely fitted nut or a small bolt. Likewise,  $G_3$  in m. 4 is extremely low, with a medium rate of decay, and of a quality that resembles that of a lightly struck kettledrum (type 4).

Though their individual inflections differ, during the passage starting at m. 51 most of the artists (Takahashi, Pierce, Butterley, and Berman) have a sound similar to Ajemian's, a layered percussion ensemble with a sustaining low left hand and accentuating percussive effects in the right hand.<sup>65</sup> The main exception is Henck. Because of his muted type-4 preparation of  $G_3$  (the kettledrum effect) and a similar one on  $B_3$ , the left hand does not sustain the sound from one note to the next; instead each note sounds on its own. When paired with the right hand, the separation is even more pronounced, and the line proceeds with a series of clearly separate percussive events. His performance is rhythmically steady, almost too carefully measured, and the string of

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<sup>65</sup> The different inflections apparent in each artist's interpretation stem from the differences in preparation. Butterley, for example, prepares  $B_3$  in such a way that it produces a stronger, resonant sound (almost type 2), that is much more prominent than  $G_3$ . When the left hand joins with the right hand, the percussive texture is permeated by the pitched  $B_3$ , focusing the ear of the listener on the rhythm of that note. As might be expected, Pierce, Berman, and Takahashi's interpretations are very percussive.

dull, muted thuds forestalls some of the excitement of other performances. The most interesting aspect of his passage is the pronounced jangle of  $E_{b5}$ .

In the interpretations of Frémy, Goldstein, Karis, and Tan, however, the focus is predominantly on type-3 sounds with medium to strong resonance. Pure type-4 sounds are rarer, and even strongly-muted notes tend to incorporate some sense of pitch. At the extreme is Tan.  $B_{b4}$  and  $E_{b5}$  are more detuned than muted (a rattle effect does accompany  $E_{b5}$ ), maintain a sense of pitch, and are without the knock-like quality that permeates the other recordings.<sup>66</sup>  $G_3$  is likewise detuned but very resonant. It is the only note to sound much higher (more than an octave) than the original pitch.<sup>67</sup> In Goldstein,  $B_{b4}$  is likewise pitched, though somewhat less pronounced, while  $E_{b5}$  has a strong buzz and detuned pitch. Both notes are of type 3.  $G_3$  encompasses a cacophony of pitches, including several overtones, and a strong resonance; its effect is similar to a train whistle going off in the distance. Noticeably resonant, Frémy and Karis both feature a full, low, and gong-like sound for  $G_3$ . On the other hand,  $B_{b4}$ , and  $E_{b5}$  are dulled to a knock with no sense of pitch remaining (type 4). In Karis,  $E_{b5}$  also features a buzz, while in Frémy it is accompanied by a strong rattle.

Karis's combination of sounds is perhaps the most interesting.  $G_3$  resonates as a bass foundation, while  $B_4$  and  $B_{b4}$  function as an inner voice playing dull percussive sounds. The dyad  $D_{b5}+E_{b5}$  introduces a top voice comprised of the musical knocking figure. It seems that Karis weighs his touch very carefully, alternating which voice he brings into focus throughout the passage. For Tan and Goldstein pitches rather than percussive events dominate the texture. While Tan is harsh in her attack, Goldstein approaches the passage much more softly, bringing out the melodic detail while Tan emphasizes the syncopated rhythm. Lastly, Frémy is closest to Ajemian

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<sup>66</sup> For Tan,  $A_{b5}$  in m. 54 is almost type 2.

<sup>67</sup> Goldstein also has a very resonant, pitched preparation of  $A_{b5}$ .

and the others, layering the sound from the lowest, most resonant note G<sub>3</sub>, to the shortest percussion effect of the dyad.

## Dynamics

Dynamics on the prepared piano are executable and may also change the sound of the prepared notes, especially where multiple preparations are used (a bolt and nut for example); for notes so prepared, a louder dynamic may result in additional effects (rattling or jingling).<sup>68</sup> In general, passages of notes prepared with metal fasteners respond better to changes in volume than those prepared with mutes, especially when extremes (such as *f* immediately followed by *p*) are juxtaposed.

The First Interlude's percussive passage (mm. 51–65) illustrates the effect muted preparations can have. Over the first four measures (mm. 51–54), Cage indicates a gradual *crescendo* towards the downbeat of m. 54, which reaches its fullest potential on the second half of the beat, at the D<sub>5</sub>+E<sub>5</sub> dyad of the left hand (the only time the left hand breaks its monotonous pattern). The line then continues at *f* before beginning a repeat of the measures just heard at *mf* (mm. 56–60).<sup>69</sup> This passage does not have a *crescendo*, even though it features similar melodic material. A *diminuendo* begins in m. 61, eventually decreasing to *ppp* in m. 65.

Ajemian's change in sound is slight, perhaps best described as encompassing an increase from *mf* to *f*, which she repeats over the course of mm. 56–60. By the time she reaches m. 65, she has gradually decreased her dynamic to *mp*. The change is very gentle. Butterley and Berman likewise focus on a gradual dynamic change. Both artists stay somewhat subdued in their climb to *f* but become more deliberate in their *diminuendo*, getting quite soft towards the end of m. 65. Another artist with a strong *diminuendo* but little *crescendo* is Goldstein. His

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<sup>68</sup> For dynamics demanding a particularly strong keyboard attack (*ff* or *fff*), the danger exists of dislodging the preparations, especially if they are loosely fitted between the strings.

<sup>69</sup> The dyad of the left hand repeats here without emphasis.

approach is perhaps the softest of all artists; with a very careful touch that brings out the nuances of his polyphonic texture, he slowly decreases the sound until it is barely audible. His loudest moment occurs as a result of his releasing the *una-corda* pedal (mm. 54–55).

The dynamic curve of Pierce and Frémy is quite clear, with a *crescendo* towards *f* and a *diminuendo* towards *pianissimo*, but no repetition of the *crescendo* over mm. 56–60. Where Pierce's touch in the passage is similar to Ajemian, Berman, Butterley, Goldstein, and Henck, however, Frémy's touch is quite harsh. Particularly during the *crescendo*, he attacks the notes with short, hard strokes, underscoring the percussive quality of the right hand. His touch softens somewhat toward the *diminuendo*.

For artists who execute a strong *f* dynamic, the harder attack can affect the sound of the notes. B<sub>3</sub> (prepared with two bolts and rubber) seems to be especially sensitive to dynamic fluctuations. At the height of his *crescendo*, for example, Takahashi bears down to such a degree that B<sub>3</sub> becomes distorted with a loud clacking metal sound that takes away all resonance. The sound is localized to that measure and does not recur for the rest of the passage, during which he uses a less aggressive touch. In Karis, who also features a strong *crescendo*, B<sub>3</sub> mutates from a type-3 sound with some buzz to a type-4 noise, a conglomeration of pitches, sounding as if someone had strummed hard across the strings of a guitar. The effect reappears briefly in m. 57 on the first beat, where he places another short accent, but disappears completely over the course of his *diminuendo*.

Where the dynamic contrast is extreme, the passage can even appear violent, as in Tan's interpretation. She attacks the notes in the right hand sharply, particularly B<sub>4</sub>; as she builds the *crescendo* she becomes increasingly aggressive, marking each note with a strong accent, and her



sound takes on a primal urgency. Again the effect subsides through her *diminuendo*, though she does not end as softly as the other artists, perhaps closer to *mf*.

It is in the interplay between muted and resonant notes, however, that the charm of Cage's prepared piano really comes to the fore. In those artists whose muted preparations yield predominantly type-4 notes (Ajemian, Takahashi, Pierce, Butterley, and Henck) the contrast of sounds in a line such as the opening of the First Interlude demands attention through its unexpected interruptions of a melodic figure, rhythmic displacement, and surprising noises. Where the muted preparations primarily yield type-3 notes (Frémy, Goldstein, Karis, and Tan), the contrast is less pronounced and the melodic line accordingly clearer.

## Tempo

Prior to 1950, Cage was largely silent on issues of tempo; in his reflections on the period, he asserts only that "the structure, then, was a division of actual time by conventional metrical means, meter taken as simply the measurement of quantity."<sup>70</sup> Most pieces prior to 1950 are either labeled with a metronome mark or a descriptive tempo indicator, though metronome marks predominate. In the Sonatas and Interludes, metronome marks occur at the beginning and occasionally at points of tempo change within the piece; verbal instructions are far less common and occur most notably in Sonata III, Sonata VII, and the Fourth Interlude.<sup>71</sup>

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<sup>70</sup> Cage, "Composition as Process," in Cage, *Silence*, 19; also quoted in Christopher Neidhöfer, "Beobachtungen zum Tempo bei John Cage vor 1950," in *Der Grad der Bewegung: Tempovorstellungen und -konzepte in Komposition und Interpretation 1900–1950*, ed. Jean-Jacques Dünki, Anton Haefeli, and Regula Rapp (Bern: Peter Lang, 1998), 90. Particularly in Cage's pieces for dance during this period, the time structure of the dance is determined in conjunction with the choreographer, either composing music and choreography at the same time, composing music to an existing choreography, or adding the choreography to existing music; during the 1950s, composer and choreographer worked independently of each other for the most part. In the documentary *Cage/Cunningham: A Film* by Elliot Caplan, Cunningham is seen dancing to Sonata III in a rehearsal dating to 1984. His gestures and movement speed do not correlate with the music; instead, Cunningham uses animated and fast gestures at moments when the music is barely moving, and stands still as the music moves in regular quarter notes. *Ibid.*, 91, 93.

<sup>71</sup> As pointed out by Neidhöfer, Cage's tempo marks for the Sonatas and Interludes are concentrated in two areas, ten pieces fall between tempo 56 and 76, eight between tempo 104 and 126. The exception is Sonata V at ♩ = 92 and the Third Interlude at ♩ = 96. Neidhöfer, "Beobachtungen zum Tempo," 97–98.

It is pianistically possible to take all pieces at the indicated tempi; however, a comparison of the recordings against the hypothetical durations derived from Cage's metronome marks shows a wide variety (see Table 3.2, page 93).<sup>72</sup> The recording closest to Cage's indications is Butterley's: he plays each piece almost exactly with the duration indicated by Cage's metronome marks.<sup>73</sup>

The other artists show a wide variety of tempi, though a trend emerges: performers after Butterley (1992) either play at Cage's tempo marking or faster, while those prior favor a slower pace. Ajemian's recording (1950) shows slower tempi in thirteen out of the twenty pieces, especially in the first half of the cycle; Frémy (1980) takes eighteen at a slower tempo. By comparison, Karis (1997) plays only eight pieces under tempo and Henck (2000) only nine. Faster renditions of the pieces are rare, and occur most notably in Pierce (1975) and Tan (2003).

In some cases, the tempo choice between artists seems to be influenced by the overall character of the pieces. Most performers, for example, play Sonata I at a much slower tempo than indicated (Ajemian, Pierce, Frémy, Karis, Berman) or at one slightly slower (Henck, Tan); the choice underscores the piece's homophonic texture and gives it a *gravitas* that highlights its importance as the first piece of the cycle. Similarly, all artists except Butterley play the last piece of the cycle, Sonata XVI, at a significantly slower pace, highlighting its role as conclusion.<sup>74</sup>

Sonata V, however, is played either faster than indicated (Ajemian, Takahashi, Pierce, Frémy,

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<sup>72</sup> The calculations are hypothetical in that they are based solemnly on the metronome marks. Verbal instructions, such as *ritardandi* or *rubato*, as well as the general give and take that occurs during actual performance, are not accounted for unless in the score they are followed by a metronome mark in parentheses (see Table 3.2).

<sup>73</sup> While Butterley's interpretation of the Third Interlude is slightly slower than Cage's indication, the difference is small enough that it may be considered a result of the give and take that happens during actual performance. The Fourth Interlude is the only piece to be noticeably slower, but as it is one of the few pieces annotated with specific indications of *ritardandi*, the slower tempo is the natural result of following them.

<sup>74</sup> Sonata XVI is one of the few pieces in which Cage gives metronome marks in conjunction with verbal instructions, showing a gradual but limited reduction in speed towards the final cadence. The first section of the piece is taken at  $\text{♩} = 58$ , with an unspecified *meno mosso* towards the first repeat (m. 31). The second section begins *poco meno mosso* at  $\text{♩} = 56$  and for the last five measures of the piece slows to *meno mosso* at  $\text{♩} = 54$ .

Henck, Tan), a choice befitting the piece's vivacious and lively character, or at tempo (Butterley, Goldstein, Berman, Karis).<sup>75</sup>

In other cases the tempi chosen by artists differ more widely. In Sonata VII, for instance, Cage's metronome marks indicate a duration of about 2'03", though the *ritardando* in mm. 11–13 would extend that by a bit. Of the artists, Tan and Goldstein come closest at 1'59" and 2'03"; Butterley and Henck are near enough at 2'07" and 2'10". Ajemian, Karis, and Berman, however, take longer, at 2'28", 2'24", and 2'28" respectively, while Takahashi and Pierce are fastest, at 1'48" and 1'46". The clear outlier is Frémy, at a surprising 2'58".

Obviously, such a diversity of tempo affects the character of the piece. For those artists slower than Henck's 2'10", the piece has a lyrical character that draws particular attention to the features of their preparations; at the faster tempo of Pierce and Takahashi the piece feels more like a mechanical exercise, an etude, especially during the fast moving *più mosso* passage (mm. 7–13). At Frémy's astonishingly slow tempo, on the other hand, the piece feels stagnant, labored, sluggish. Instead of allowing the preparations to work together to create a whimsical network of sounds, each is perceived almost as a stand-alone noise, disconnected from the next.

Frémy's second section differs substantially from the other artists. He is the only performer to take well over a minute (1'20", see Table 3.3, page 94) to play through the six measures and their repeat. He separates groupings by unusually long pauses; as a consequence, flow and linearity between figures are suspended, and the sense of disconnect between individual notes taken to the extreme. In contrast, Pierce takes only about half as long (0'42"); he moves at a rapid pace that connects the individual events into one line; for him, the second section becomes a small, playful vignette.

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<sup>75</sup> The change is particularly remarkable in Ajemian and Frémy. For Frémy it is the only piece that he plays faster than indicated; Ajemian also plays Sonata XI slightly faster.

Table 3.2: Timing of Sonatas and Interludes

	Cage	Ajemian	Takahashi	Pierce	Frémy	Butterley	Goldstein	Karis	Berman	Henck	Tan
<b>Sonata I</b>	2'34"	2'58"	2'29"	2'49"	3'18"	2'33"	2'31"	2'55"	3'04"	2'41"	2'41"
<b>Sonata II</b>	2'03"	2'22"	1'50"	1'58"	2'02"	1'56"	2'00"	2'00"	2'26"	2'00"	1'52"
<b>Sonata III</b>	1'56"	2'35"	2'27"	2'26"	2'34"	1'55"	2'22"	2'32"	2'23"	2'45"	2'28"
<b>Sonata IV</b>	1'55"	3'01"	2'38"	2'18"	2'28"	1'55"	2'00"	2'18"	2'01"	1'43"	2'23"
<b>First Interlude</b>	3'34"	3'40"	3'22"	2'53"	3'33"	3'36"	3'46"	3'34"	3'22"	3'12"	3'21"
<b>Sonata V</b>	1'45"	1'26"	1'20"	1'18"	1'34"	1'43"	1'43"	1'48"	1'45"	1'40"	1'32"
<b>Sonata VI</b>	2'00"	2'17"	1'41"	1'48"	2'30"	1'58"	2'12"	2'18"	2'20"	2'10"	2'05"
<b>Sonata VII</b>	2'03"	2'28"	1'48"	1'46"	2'58"	2'07"	2'03"	2'24"	2'28"	2'10"	1'59"
<b>Sonata VIII</b>	2'37"	2'50"	2'32"	2'36"	3'36"	2'38"	3'41"	2'50"	2'49"	3'10"	2'55"
<b>Second Interlude</b>	3'52"	4'12"	3'26"	3'37"	4'21"	3'55"	4'15"	4'06"	3'58"	3'50"	4'03"
<b>Third Interlude</b>	2'03"	3'00"	2'49"	2'43"	2'16"	2'18"	2'30"	2'32"	2'13"	2'33"	2'32"
<b>Sonata IX</b>	4'03"	3'58"	3'38"	3'50"	4'16"	3'54"	4'05"	4'24"	4'23"	4'33"	3'58"
<b>Sonata X</b>	3'30"	3'29"	3'08"	2'25"	3'54"	3'25"	2'37"	3'59"	4'04"	3'54"	3'05"
<b>Sonata XI</b>	3'34"	3'21"	3'30"	2'33"	3'45"	3'31"	3'45"	3'41"	3'33"	3'19"	3'13"
<b>Sonata XII</b>	3'13"	4'10"	3'18"	2'40"	3'46"	3'10"	2'34"	3'21"	3'28"	3'31"	2'48"
<b>Fourth Interlude</b>	2'01"- 2'12" <sup>76</sup>	2'40"	2'44"	2'36"	3'10"	2'28"	3'11"	2'57"	2'43"	3'06"	2'37"
<b>Sonata XIII</b>	3'51"	3'59"	3'55"	3'18"	4'37"	3'56"	3'45"	4'02"	3'51"	4'35"	4'03"
<b>Sonata XIV</b>	3'20"	7'04"	6'32"	5'04"	6'48"	3'15"	5'55"	3'21" <sup>77</sup>	6'16"	3'11"	5'53"
<b>Sonata XV</b>	3'20"					3'17"		3'20"		3'10"	
<b>Sonata XVI</b>	3'52"	4'57"	5'00"	5'16"	5'22"	3'45"	5'38"	4'22"	4'40"	6'12"	4'38"

<sup>76</sup> The Fourth Interlude is the only piece for which Cage specifies a range of tempo ( $\text{♩} = 66\text{--}72$ ).

<sup>77</sup> The first track ends exactly at the end of the piece. It is possible that it was split by a technician and he actually played the two pieces continuously.

Table 3.3: Timings for Sonata VII

	A Total	B Total	Piece Total
Ajemian	1'31"	0'57"	2'28"
Takahashi	1'08"	0'40"	1'47"
Pierce	1'04"	0'42"	1'46"
Frémy	1'40"	1'20"	3'00"
Butterley	1'20"	0'48"	2'08"
Goldstein	1'10"	0'53"	2'03"
Karis	1'29"	0'56"	2'25"
Berman	1'30"	0'58"	2'28"
Henck	1'18"	0'52"	2'10"
Tan	1'15"	0'44"	1'59"

The effect of tempo modifications such as *ritardandi* and *accelerandi* deserves special attention. Cage uses them sparingly and sometimes at surprising places, such as over rests or a sustained chord. Where they occur, they usually apply to only a limited number of notes. Typically they coincide with a natural stopping point, such as the end of a section or phrase, but occasionally, as in the case of the Fourth Interlude, they occur within the moving line.<sup>78</sup> Sonata III has three *ritardandi*. The first (m. 10) is short and seems to apply to the rests (Figure 3.9); the second is longer, lasting through mm. 23–24, and clearly marks the end of the section; the third occurs immediately following the return to the original tempo and seems to start over the last two notes of m. 25 and sustain into m. 26 (Figure 3.10).



Figure 3.9: Sonata III, mm. 9–10

<sup>78</sup> There are only six pieces that contain such an annotation. *Ritardandi* occur in Sonata I (mm. 11–12), Sonata III (see above), First Interlude (m. 100), Sonata VII (mm. 10–11), Fourth Interlude (mm. 12 and 15; it is unclear from Cage's annotation whether the *ritardando* in m. 15, which appears in abbreviated form over a rest, is meant to apply only to the pause, or extend also to the following three measures before the repeat), Sonata XII (m. 36), and Sonata XVI (mm. 42–45). *Accelerandi* occur in the Fourth Interlude (mm. 10–11 and 13–14) and Sonata XVI (mm. 40–42). Lastly, an *allargando* occurs one time in the Fourth Interlude (mm. 33–34).



Figure 3.10: Sonata III, mm. 23–26

Most artists ignore the two *ritardandi* in mm. 10 and 25–26 of Sonata III. Takahashi is the only one to execute both. In m. 10, he takes a slightly longer break; none of the other artists noticeably break or alter their tempo at that point. Between mm. 25 and 26, Takahashi separates  $D_{b4}$  and the following chord with a deliberate pause. Goldstein is the only artist to use a similar though less deliberate separation.<sup>79</sup>

All artists execute a *ritardando* over the extended passage in mm. 23–24. Again, Takahashi's is the most pronounced; he begins to slow down  $3\frac{1}{2}$  measures early (in m. 20). For others, the *ritardando* is less noticeable. Butterley, Pierce, Berman, and Tan mostly slow down towards the last three notes of m. 24, while Ajemian, Karis, Henck, and Frémy follow the score and start at about the second half of m. 23. Overall, none of them match Takahashi's extreme change of tempo, though all treat the rest before the return to tempo in m. 25 as a point of separation.

In the First Interlude, the *ritardando* falls at the end of the piece (Figure 3.11) and is observed by all artists, though to differing degrees. Cage's instruction, *poco ritardando*, seems to indicate that he was looking for a less pronounced effect, perhaps one similar to that produced by Ajemian, Pierce, and Frémy, who slow down only over the last three notes; Karis, Butterley, and Henck barely slow down at all. Takahashi, Goldstein, Berman, and Tan are deliberate in their decrease of tempo, stretching it out over the whole measure (as indicated in the score).

<sup>79</sup> Goldstein also deliberately lightens his touch on the last chord, perhaps as an added signal that a cadence is happening. A similar change in dynamic is noticeable but less pronounced in Berman.



Figure 3.11: First Interlude, m. 100

The sparseness of Cage’s tempo marks and the scanty execution by artists can perhaps be explained by the potential problems they pose for the pianist. Since the preparations tend to either add to or take away from the sustainability and resonance of the note to which they are affixed, the execution of a controlled increase or decrease in tempo becomes dependent on the note’s rate of decay. To sustain such an effect over a short passage of highly resonant notes, for example, would be difficult, as each note would continue to bleed into the next, thus masking the effect of the slight change in tempo. When faced with the prospect of breaking tempo (such as in the short *ritardandi* of Sonata III), most artists, including Ajemian and Tan, favor maintaining a sense of flow over Cage’s instructions, while they make a more concerted effort to follow them when they appear over a longer line.

One final thought on tempo in Cage concerns “Gemini,” Sonatas XIV and XV. When taken as a pair, the sonatas span four sections in ABCB form, each repeated. Sections A and C are both twenty measures long, while the B sections are thirty. With the exception of the C section, which introduces rests and larger leaps, the piece features walking eighth-notes at a metronome mark of ♩ = 120—the only tempo indication for the piece—suggesting a steady pulse, which is followed by all artists. The rhythmic regularity, paired with the repetition of the

oscillating motive between  $A\flat_5$  and  $G\flat_5$  discussed above (see Figure 3.5), creates the feeling of a temporary suspension or dissolution of time.<sup>80</sup>

## Fermata

Fermatas are encountered in the First, Third, and Fourth Interludes, as well as Sonata XVI. In the First and Third Interludes, as well as Sonata XVI, the fermata occurs either at the end of the piece or at the end of a section (marked by a repeat); however, in the Fourth Interlude it occurs in the middle of the measure (m. 23, Figure 3.12).<sup>81</sup>



Figure 3.12: Fourth Interlude, m. 23

The sustainability of the fermata depends largely on the preparations that are in play at the moment it occurs. In the First Interlude, for example,  $B\flat_4$  and  $A\flat_3$  are muted with rubber and two metal fasteners, but because of the use of the *una-corda* pedal, the fasteners have a limited effect, and the overall preparation is a dull thud (type 4) for all artists with the exception of Tan

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<sup>80</sup> Among the recordings, some discrepancy exists concerning whether the pieces should be performed continuously or with a slight break; Takahashi, Goldstein, and Pierce play the pieces without a break, while Ajemian, Frémy, Berman, and Tan separate them with a pause of varying length (Ajemian's is by far the longest). The score also seems to indicate a slight separation: A metronome marking of  $\text{♩} = 120$  appears at the top of Section A and Section C, marking the starting point of each sonata. Furthermore, the last measure of Sonata XIV shows Cage terminating the *una-corda* and damper pedal. Arguably, if Cage had wanted the pieces to connect, he would simply have allowed the pedal to be carried over into Sonata XV, which also opens with both pedals active. Whether performed continuously or not, the pieces are clearly linked through melodic content and pulse. The symmetry among the sections (particularly the identical B sections) as well as the eighth-note pace perhaps best achieve Cage's goal "to make the progress from the end of a section to its beginning seem inevitable." Cage, "Composition as Process," in Cage, *Silence*, 19.

<sup>81</sup> The Third Interlude has two fermatas, one at the end of the piece and one at the end of the third section (m. 20).



(whose preparation is of type 3, with some sense of pitch remaining). As a consequence, only Tan is able to sustain the two notes longer than their initial attack.

In the Third Interlude a fermata occurs over the last chord of the piece, which is only minimally prepared ( $E_5$  is prepared with rubber,  $G_5$  is unprepared, and  $B_5$  contains only a screw between strings 2 and 3); the resulting sound is resonant and sustainable, especially since the damper pedal is also in use. Likewise sustainable is the fermata in Sonata XVI, which occurs over  $G_5$  and  $F_4$ , both unprepared pitches; however, compared to the ending of the First Interlude, the recordings show that only Ajemian, Pierce, Frémy, Karis, and Tan noticeably sustain the sound at either fermata.

In the Fourth Interlude, the fermata occurs over a *glissando*. While most artists take the time to let the accumulated wash of sound subside, others move along in the composition. Frémy, Karis, and Henck both take a slow and deliberate approach that lets each note be heard and creates a strong momentary suspension of time. Berman and Goldstein move through the notes at a faster speed and delay their return to the original tempo by only a little. Ajemian, Takahashi, Pierce, and Butterley move through the *glissando* very fast, the notes blurring together, and while Takahashi and Butterley give a momentary break to let the sound subside, Ajemian and Pierce continue without stopping. Tan executes the *glissando* the fastest, ripping across the keys in one violent sweep. The effect stuns the listener and the piece resumes before the sound has completely dissipated.

## **Pedaling**

One of the ways in which Cage varies the effects of his preparations is through the use of pedaling. As previously stated, the use of the *una-corda* pedal allows only preparations between strings 2 and 3 to sound. The damper pedal can be used to add to the resonance of strings, even

those that are muted (those to which rubber or plastic has been applied), or to build on an already resonant effect achieved by metal preparations. Cage indicates where the pedals are to be applied with bars beneath the score, solid for the damper pedal, broken for the *una-corda* pedal (Figure 3.13).<sup>82</sup> Every piece of the Sonatas and Interludes uses one or both pedals.



Figure 3.13: Sonata III, mm. 25–26

Cage usually employs the *una-corda* pedal for notes that are prepared with metal preparations between strings 2 and 3, presumably because he wanted to highlight the sound of the prepared string rather than that of the unprepared string.<sup>83</sup> The effect of the *una-corda* pedal on the preparations is particularly striking during a passage in the First Interlude. The piece is played with the pedal depressed throughout except for two carefully notated passages (mm. 54–55 [Figure 3.14] and 66–67). The notes C<sub>6</sub>, A<sub>b5</sub>, G<sub>b5</sub>, F<sub>5</sub>, D<sub>5</sub>, and C<sub>4</sub> played without the sustain pedal during these measures, comprise the main melodic material of the First Interlude, as seen, for example, in mm. 46–47 (Figure 3.15).

<sup>82</sup> For each, Cage indicates the start and release through vertical lines at the beginning and end of the bar, though occasionally no such lines appear. They are missing at the beginning of Sonata I, the end of Sonata II (damper pedal), the beginning of Sonata V, and at the beginning and end of Sonata VII for both pedals. Presumably, the missing slant at the beginning of the pedal line indicates that the sustained sound is to be held through the start of the repeat. The missing slant at the end of the pieces seems to be an oversight, as Sonata III does not open with any pedal indication, while Sonata VIII opens with two pedal lines clearly offset from the previous sonata by a slant. Thus, the missing slant does not suggest that the sonatas should be performed continuously.

<sup>83</sup> Bunker even considers the *una-corda* pedal a preparation. See Bunker, *Well-Prepared Piano*, 38.



Figure 3.14: First Interlude, m. 55



Figure 3.15: First Interlude, m. 46

With the exception of  $A_{b5}$  and  $B_{b4}$ , the pitches are prepared with metal fasteners between strings 2 and 3.<sup>84</sup> During the first occurrence in m. 46 (hereafter: Passage A), only the strings with fasteners should sound since the *una-corda* pedal is depressed. Thus, their fundamental pitch should be distorted, resulting in a sound of either type 3 or 4. Lifting the pedal during mm. 54–55 (Passage B) should allow notes of type 2 or 3 to sound, the freely vibrating strings creating a stronger sense of fundamental pitch.

In each recording, Passages A and B sound distinctly different. Depending on how strongly the preparations alter the sound of Passage A, the difference can be profound or slight, but for every recording but Pierce's the return of a fundamental pitch is noticeable for Passage B.<sup>85</sup> The greatest differences are achieved by Ajemian, Takahashi, Frémy, Karis, Henck, and Tan, whose preparations yield sounds of type 4 during Passage A, with virtually no sense of fundamental pitch remaining; during Passage B, however, the addition of the free-swinging

<sup>84</sup>  $A_{b5}$  ( $G\sharp_5$  in the table of preparations) also has rubber across all strings, while  $B_{b4}$  has an additional screw between strings 1 and 2, as well as rubber between all three strings.  $E_5$ , prepared with rubber, only appears during the percussive section of the movement (mm. 51–65) and always in conjunction with  $D_5$ .

<sup>85</sup> For Pierce, the deployment of the *una-corda* pedal results in type-3 sounds (distorted pitches) instead of the previous type 2 sounds.

string alters the sound into a type 2. For Butterley, Goldstein, and Berman the change is less pronounced: even during the course of Passage A, their preparations (type 2 and type 3) retain a sense of pitch, some even sounding in the correct register.<sup>86</sup> The notes do exhibit the same weaker dynamic and lowered resonance of notes affected by the *una-corda* pedal on an unprepared piano. When the free-swinging string is added in Passage B, the change is still noticeable, and the fundamental pitch is securely established with virtually all prepared effects disappearing.

Unlike the *una-corda* pedal, the damper pedal does not alter the sound of the preparation. Cage uses it primarily with metal preparations, where it amplifies their resonant effect or helps sustain their sound when the note is long. The effect is audible particularly towards the end of Sonata III, where the damper pedal is added at moments during which the left hand repeats notes prepared with metal preparations (G<sub>3</sub> and C<sub>4</sub>), but is lifted where the left hand plays a dyad (D<sub>4</sub> and G<sub>4</sub>) of pitches prepared with plastic mutes (Figure 3.16).



Figure 3.16: Sonata III, mm. 29–30

Even in recordings featuring particularly strong muted notes (Takahashi, Goldstein, Butterley, and Berman), the addition of the damper pedal captures enough of the resonance to carry the sound for the complete value of the note. In the more resonant recordings of Ajemian,

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<sup>86</sup> Occasionally they are distorted, as in the buzz that accompanies Butterley's C<sub>6</sub>, or the very clear, ringing sound Berman achieves on the same note, almost as if someone rang a small little bell.

Pierce, Frémy, and Karis, the difference between the sustained sound and the muted sound of the dyad is particularly pronounced.<sup>87</sup>

While the damper pedal amplifies and sustains the resonance of the prepared note, its effect is more subdued than on an unprepared piano. For example, even a dense measure of prepared notes such as m. 18 of Sonata III can be played with the damper pedal down through the whole measure (Figure 3.17).<sup>88</sup> Instead of creating a jangle of noises, each note is still audible and clear in each of the sampled recordings. Some (Henck, Tan, Ajemian, Frémy, Butterley, Pierce, and Karis) are more resonant, others (Takahashi, Pierce, Berman, and even Goldstein, who usually favors a more resonant preparation) are very dry, with little or no blending of the individual sounds.



Figure 3.17: Sonata III, m. 18

## Articulation

In Sonata III, the pianist is instructed to play *legatissimo* beginning in m. 22 (Figure 3.18) and leading into the *ritardando* over mm. 23–24. The left hand features a chromatic string of largely unprepared notes (the exceptions are G<sub>♯4</sub> and G<sub>4</sub>, muted with plastic and rubber). The right hand has one unprepared note, G<sub>5</sub>, but the rest of the chromatic pitches are prepared either with metal fasteners between strings 2 and 3 (F<sub>5</sub>, F<sub>♯5</sub>/G<sub>♭5</sub>, A<sub>5</sub>) or muted (G<sub>♯5</sub>/A<sub>♭5</sub>). Playing a

<sup>87</sup> In m. 31 the muted D<sub>4</sub> (an eighth note followed by rests) occurs over the damper pedal, which does little to aid in the extension of the sound; however, the damper pedal does aid in connecting the notes of the right hand (F<sub>5</sub> and F<sub>♯5</sub>, both prepared with a screw, and G<sub>5</sub>, unprepared). The exceptions are Tan and Henck's preparations. Both artists have prepared D<sub>4</sub> in such a way that much of the original pitch remains, resulting in a dull but pitched thud resonant enough that the pedal captures its sound and carries it for the remainder of the measure.

<sup>88</sup> All notes but G<sub>5</sub> are prepared with either metal fasteners or rubber.

legato connection between unprepared notes is easy; much more challenging is creating the same sense of seamless connection between pitches that are muted or an alternation of unprepared and muted notes. Though Cage does not use the pedal, thus theoretically allowing for notes of type 2 (especially  $F_5$ ,  $F\sharp_5/G\flat_5$ ,  $A_5$ ), the pitches prepared with rubber and plastic still create a strongly muted sound that could potentially interrupt a legato line.



Figure 3.18: Sonata III, mm. 22–24

When realizing Cage's instructions, artists whose muted preparations are very strong, such as Takahashi, Pierce, Berman, and Henck, encounter the greatest difficulty in playing a legato line.<sup>89</sup> For artists like Ajemian, Frémy, Butterley, Goldstein, Karis, or Tan, who have a bit more resonance in their preparations, the line is sustainable but usually disrupted; Ajemian, for example, has no trouble connecting the unprepared notes, but particularly  $G\flat_5$  and  $A\flat_4$  are so dull (type 4) that their decay is immediate and creates a short separation; the resonance of Frémy's metal preparations likewise carries some of the line, but  $A\flat_5$  is particularly weak (type 3), and decays too quickly to connect to  $G_5$ . The artist closest to realizing a legato line throughout the three measures is Tan: her left hand is extremely smooth, the muted notes barely breaking in sound, while due to their resonance the prepared notes of her right hand carry the line.

<sup>89</sup> Takahashi is the only artist to prepare both  $E_4$  and  $A_4$  with a strongly muting material (probably plastic and rubber). The table of preparations at first glance does not indicate such a preparation; however, a closer look at the preparations for  $D\sharp_4$  as well as  $G_4$  reveals two small parentheses in which the pitches  $E_4$  and  $G\sharp_4$ ,  $A_4$ , and  $B\flat_4$  are given respectively. Takahashi must have read this to mean that  $E_4$  and  $A_4$  are to be prepared the same as  $D\sharp_4$  and  $G_4$ . It is unclear why Cage would indicate  $G\sharp_4$  and  $B\flat_4$  as well, since those two notes are represented with their own preparations in the actual table.

Likewise problematic is the execution of Cage's *staccato* marking in Sonata II, m. 16, which occurs over B<sub>4</sub> in the right hand and G<sub>4</sub> in the left (Figure 3.19).<sup>90</sup> B<sub>4</sub> is prepared with rubber and screws, G<sub>4</sub> with plastic and rubber. Despite the presence of the screws on B<sub>4</sub>, the sound created by all artists is that of a dull thud (type 4). The decay is so quick that while the sound may be reminiscent of the short, sharp snap of a *staccato* execution, it is actually a by-product of the preparation.<sup>91</sup>



Figure 3.19: Sonata II, m. 16

## Conclusion

Tracing the recordings of the Sonatas and Interludes from their earliest recording (Ajemian, 1950) to the most recent (Tan, 2003) reveals not just a variety of different approaches to the piece, but also a changing soundscape of the composition over time. A comparison of the metal preparations among the studied recordings shows the emergence of two separate trends in sound. Ajemian (1950) sets the precedent with a sound that is full, reverberant, and low in overall register. In subsequent recordings, artists either maintain a similarly resonant sound (Pierce, 1975; Frémy, 1980; Goldstein, 1994; Karis, 1997; Henck, 2000; and Tan, 2003) or they lean towards the opposite, a less resonant sound with quick decay (Takahashi, 1965; Butterley, 1992; and Berman, 1998).

<sup>90</sup> It reappears over G<sub>4</sub> in m. 24. The only other instance of a *staccato* appears in Sonata V, mm. 28 and 29.

<sup>91</sup> B<sub>4</sub> reappears without a *staccato* mark in the next measure, sounding just like the *staccato* version in every recording; the simultaneously occurring B<sub>2</sub> in the left hand (rubber and two bolts) provides an occasional resonance especially noticeable in Ajemian, Pierce, Goldstein, and Tan).

More specifically, Ajemian features sounds of both type 3 and 4; because of the pitch and resonance her prepared notes maintain, they blend well with the unprepared notes. The most noticeable of her type-4 preparations is a full, rich, gong-like effect, particularly in the lowest register, but overall the preparation of the instrument is not taken to an extreme. Pierce, Frémy, Goldstein, Karis, Henck, and Tan achieve a similar blend between prepared and unprepared notes, while Takahashi, Butterley, and Berman show a strong contrast. Furthermore, the degree of timbre changes increase over the course of the recording history. Frémy, Goldstein, and Karis remain close to Ajemian, featuring type 3 and 4 sounds; Takahashi, Butterley, and most of all Henck feature not only noise effects (clinking, knocking, or rattling) but also an increasingly metallic after-tone. Pierce and Tan move in yet another direction, using primarily type-3 sounds (Tan) or even type-2 (Pierce); their approach seems to highlight the melodic aspect of Cage's writing by maintain a strong sense of pitch, rather than emphasizing the percussive elements.

Most artists show the greatest abundance of type-4 sounds in passages featuring muted preparations. The exception is Tan, whose notes sound detuned rather than muted. Most of Ajemian's muted preparations are of type 4, as are those of Pierce, Takahashi, Butterley, Berman, and Henck. Of these artists, Takahashi and Pierce are the most percussive, while Ajemian and Butterley feature layers of sound with hints of resonance coming through; Henck again features the greatest number of effects. Frémy, Goldstein, and Karis, on the other hand, maintain a perceptible sense of resonance throughout their preparations: while a strong muted effect results in a greater percussive sound, the introduction of resonance allows for melodic material to infiltrate the layers of percussion music, creating a polyphonic effect.

One general trend accompanies the recordings. Whether artists favor the strong resonance of Ajemian or the limited resonance of Takahashi, their overall pitch range is



noticeably higher than that of Ajemian's recording, even in those that follow an overall resonant preparation; only two recordings, Goldstein and Tan, come close to matching her range. The variables left unspecified by Cage (especially size, length, and diameter of the material) account for part of the change, since even subtle differences can significantly alter the sound of a prepared pitch. More importantly, several items that were once staples of the hardware store are no longer available: Ajemian, for example, used iron screws in her preparation, which have a much greater mass than the alloy screws available today. If the pianist does not allow for the difference by adding more nuts or using a screw of bigger diameter, the sound of the pitch prepared with a modern-day fastener would be much higher. Another solution is to reconstruct a set using iron screws, as Tan has done.

Apart from altering the overall pitch of the work, the different emphases on the preparations also affect the executability of directives in the score. Strongly muted preparations, for example, make it harder to execute *legatissimo* touches, *ritardandi*, or fermatas, as the quick decay in sound hinders the seamless construction of a musical line unless the damper pedal is carefully employed. On the other hand, a strongly resonant preparation may aid in the execution of all three pianistic elements, but mask some of the more intricate rhythmic profiles that emerge from the interplay of percussive and melodic elements.

A point of diversity is the tempo of the individual pieces. Butterley is closest to Cage's metronome marks, and presents a turning point in the execution of the tempi. Recordings prior to Butterley (Ajemian, Takahashi, and Frémy) feature slower tempi overall (with Pierce being the only artist to play significantly faster than Cage's marks in eleven pieces), while those after Butterley (Goldstein, Karis, Berman, Henck, and Tan), increasingly play at tempo. Perhaps the gradual change in tempo is the result of artists' adapting to the instrument. As in compositions

for unprepared piano, differences in tempo have an effect on the sound. Differences in tempo can either underscore the character, such as the lively execution of Sonata V at a faster tempo (Ajemian, Takahashi, Pierce, Frémy, Henck, and Tan), or work against it, such as the extreme sluggish performance of Sonata VII by Frémy, or the fast execution of “Gemini” by Pierce and Takahashi.

Perhaps the increasing number of recordings that, like Butterley, Berman, and Henck, exhibit a large palette of different-sounding preparations rather than the conventional sounds associated with the early recording of Ajemian, are the natural extension of Cage’s original concept—experimentation to discover new sounds. Rather than referring back, though, these pianists look ahead, experimenting with the materials available to them until they have found what they perceive as a telling preparation for the piece. While effective, the focus of such preparations appears to be more to feature the variety of sounds one can pull from the piano, rather than a realization of the score or of the composer’s intention. Whether this is what Cage envisioned seems questionable judged by his noted misgivings about putting effects above faithfulness to the score.

## CHAPTER 4: BERIO'S *SEQUENZA III*

### The Conception of *Sequenza III*

Written over more than forty years, the *Sequenzas* are Luciano Berio's longest project.<sup>1</sup> Dedicated to, written for, and about "Cathy," *Sequenza III* of 1966 is in part Berio's summary ode to the vocal talents of his first wife, Cathy Berberian,<sup>2</sup> and in part his response to the experimental vocal pieces of the late 1950s and his own work at the Studio di Fonologia in Milan.<sup>3</sup>

Founded in 1955 under Berio's directorship, the Studio housed a bank of nine oscillators that allowed Berio to generate complex sounds without having to construct them layer by layer through rerecording. In 1956, Berio, together with Bruno Maderna, gave his first concert of electronic music via Radio Audizioni Italiane (RAI), which became an important avenue for dissemination of his electronic works. The same year, Berio and Maderna began organizing another such avenue, a concert series devoted to twentieth-century music called *Incontri Musicali*.<sup>4</sup>

Berberian's vocal ability proved to be another invaluable asset to Berio, especially the ease with which she could navigate different styles. He said: "[Cathy Berberian's voice] was

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<sup>1</sup> The *Sequenzas* and the dates of composition are as follows: *Sequenza I* for flute (1958); *Sequenza II* for harp (1963); *Sequenza III* for woman's voice (1965–66); *Sequenza IV* for piano (1965–66); *Sequenza V* for trombone (1966); *Sequenza VI* for viola (1967); *Sequenza VII* for oboe (1969); *Sequenza VIII* for violin (1976–77); *Sequenza IXa* for clarinet (1980), transcribed for saxophone as *Sequenza IXb* (1981); *Sequenza X* for trumpet in C and piano resonance (1984); *Sequenza XI* for guitar (1987–88); *Sequenza XII* for bassoon (1995); *Sequenza XIII* for accordion (1995–96); *Sequenza XIV* for violoncello (2002).

<sup>2</sup> "Sequenza III is not only written for Cathy but is about Cathy." Luciano Berio, *Two Interviews*, ed. and trans. David Osmond-Smith (New York: Marion Boyars, 1985), 94. The two were married from 1950 to 1964.

<sup>3</sup> David Osmond-Smith and Cathy Berberian, "The Tenth Oscillator: The Work of Cathy Berberian, 1958–1966," *Tempo* 58, no. 227 (2004): 2–13, 6. Berio was director from 1957 to 1959. For an account of the history of the Studio di Fonologia see, for example, Matteo Nanni, "Luciano Berio's Weg zur elektroakustischen Musik: Die Entstehung des Mailänder Studio di Fonologia Musicale," in *Luciano Berio, Musik-Konzepte*, ed. Heinz-Klaus Metzger and Rainer Riehn (Munich: Text & Kritik, 2005): 43–66.

<sup>4</sup> The first series ran in Milan in 1957. David Osmond-Smith, *Berio* (Oxford: Oxford University Press, 1991), 13.

almost a second Studio di Fonologia for me.”<sup>5</sup> Berberian had been experimenting with her voice since childhood, saying: “I didn’t recognize any barriers because nobody told me you couldn’t do so and so.”<sup>6</sup> In adulthood, she possessed a vocal agility and technique that were particularly suited to the experimental vocal pieces being written for her. A review from the 1966 festival of Radio Bremen, for example, calls her a “laryngeal acrobat” with “an amazing ability to produce any sounds.”<sup>7</sup>

In the 1950s, the resources at the Studio had drawn a number of important composers and literary minds to Milan, many of whom, like John Cage, Bruno Maderna, and Umberto Eco, were frequent guests at the Berios’.<sup>8</sup> Having become familiar with Berberian’s technical virtuosity by hearing her sing around the house, Cage composed *Aria* for her in 1958, which she took to Darmstadt in 1959.<sup>9</sup> Her performance generated a sudden interest in the limits of the voice in performance among the attending composers and Berberian soon found herself the preferred vocalist for a number of new pieces.<sup>10</sup> Though Berio—his attention still turned to

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<sup>5</sup> Berio, *Two Interviews*, 94.

<sup>6</sup> Cathy Berberian, interview by Charles Amirkhanyan, 28 May 1972, interview, Part 1, available from <http://radiom.org/detail.php?omid=OTG.1972.11.01.A>. Accessed 28 November 2010. All transcriptions of this interview are my own.

<sup>7</sup> “She is a laryngeal acrobat with a voice that is unbelievably beautiful, lyrical, but also capable of dizzying coloraturas; with an amazing ability to produce any sounds; with an incomparable mimetic intensity of expression. [Sie ist eine Kehlkopfakrobatin mit einer unglaublich schönen, lyrischen, aber auch schwindelerregender Koloraturen fähigen Stimme, mit einem staunenswerten Talent, Geräusche aller Art zu produzieren, einer mimischen Ausdrucksintensität ohnegleichen.]” Wolfram Schwinger, “Bremer Uraufführungen: Flucht in die Virtuosität,” *Melos* 33 (July–August 1966): 235. Translations are mine unless otherwise indicated.

<sup>8</sup> Jennifer Paull and most recently Kate Meehan have argued that due to the prevailing social standards of 1950s Italy, Berberian and her talents as a composer, creator, and singer were largely suppressed by the male composers surrounding her. Jennifer Paull, *Cathy Berberian and Music’s Muses* (Vouvry: Amoris International & Imprint, 2007), 16–18; also 30–41. Kate Meehan, “‘One Man’s Kitsch is Another (Wo)Man’s Kunst’: Cathy Berberian as Composer” (Paper presented at the annual meeting of the American Musicological Society, Indianapolis, IN, 4–7 November 2010). Francesca Placanica has recently shown the importance of Berberian’s performance practice for the composer’s compositional process in her paper, “‘Unwrapping’ the Voice: Cathy Berberian’s and John Cage’s *Aria* (1958)” (Paper presented at the annual meeting of the American Musicological Society, Philadelphia, PA, 12–15 November 2009).

<sup>9</sup> Osmond-Smith, *Berio*, 60.

<sup>10</sup> Janet K. Halfyard, “Provoking Acts: The Theatre of Berio’s *Sequenzas*,” in *Berio’s Sequenzas: Essays on Performance, Composition and Analysis*, ed. Janet K. Halfyard (Burlington: Ashgate, 2007), 104. As the reviewer of the premiere for *Sequenza III* put it: “The composers are going crazy over Cathy Berberian, the singer and all-

electronic music—did not immediately respond to pieces such as Bussotti's *Voix de femme* (1959), a vocal portrait of Berberian that juxtaposed exclamations, fragments from different languages, and speech, or Bruno Maderna's *Dimensioni II: Invenzione su una voce* (1959), a taped montage of Berberian's reading of a text consisting largely of phonemes, they nonetheless influenced his work in the 1960s.<sup>11</sup>

Berio's initial lack of interest did not mean that he did not work with Berberian; on the contrary, Berio drew heavily on her talents. As early as 1953 Berio wrote *Chamber Music*, his first composition made specifically with the range and timbre of her voice in mind.<sup>12</sup> Meeting Umberto Eco piqued Berio's interest in literature and words, especially James Joyce's *Ulysses*.<sup>13</sup> His interest sparked a new project based on the "overture" to the "Sirens" chapter of *Ulysses* and he recorded Berberian's readings of the English version; the result, *Thema (Omaggio a Joyce)* (1958), was a tape piece made up entirely of electronic modifications of Berberian's voice.<sup>14</sup>

It was not until the early 1960s, however, that Berio truly began exploring the limits of the voice, in particular, the voice of Berberian. A shift in focus at the end of the decade caused him to become less interested in large orchestral works (such as *Allelujah II* and *Quaderni*) and electronic works and instead focus on the solo performer.<sup>15</sup> Five substantial vocal pieces written during the period from 1960 to 1965 either electronically incorporated Berberian's voice or were

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around artist. In Bremen she shone with no fewer than four new compositions. [Um Cathy Berberian, die Sängerin und Allround-künstlerin, reißen sich geradezu die Komponisten. In Bremen glänzte sie mit nicht weniger als vier neuen Kompositionen].” Schwinger, “Bremer Uraufführungen,” 235. The other three pieces were Henri Pousseur's *Phonèmes pour Cathy*, Cage's *Aria with Fontana Mix*, and Berberian's own *Stripsody*.

<sup>11</sup> Osmond-Smith, “The Tenth Oscillator,” 6–7.

<sup>12</sup> Ibid., 2–3.

<sup>13</sup> Osmond-Smith relates that it was Eco who introduced Berio to Joyce's writings. Osmond-Smith, *Berio*, 61; Both Marie Christine Vila and Jennifer Paull (citing Vila) argue that it was, in fact, “Cathy Berberian who first introduced Berio to James Joyce as subsequently she did Umberto Eco.” Paull, *Music's Muses*, 39. Compare Marie Christine Vila, *Cathy Berberian Cant'actrice* (Paris: Librairie Arthème Fayard, 2003), 123.

<sup>14</sup> Osmond-Smith, *Berio*, 61. Berio originally planned an electronic work that would combine Berberian's reading with readings by mixed voices of French and Italian translations of the passage. “The result proved too challenging and was never broadcast.” Ibid.

<sup>15</sup> Osmond-Smith describes this change as a “spontaneous choice” that nonetheless “had happy consequences for the more general dissemination of his music.” Osmond-Smith, *Berio*, 29–30.

written for her voice and premiered by her: *Circles* (1960), *Visage* (1960–61), *Folk Songs* (1964), *Esposizione* (1965), and *Sequenza III* (1965–66).<sup>16</sup>

The overarching theme of these works was the dissolution of comprehensible language into sounds, a process Berio had already begun to explore in *Thema*. There, Berio grouped words from Berberian's reading according to phonetic content, and arranged them as a series of articulations impossible or extremely challenging to produce in natural speech. In *Visage* for two-track tape with the recorded voice of Berberian along with electronically generated sounds, Berio extended this process even further, abandoning text altogether and leaving Berberian to improvise with phonemes and gestures from any given linguistic model, without using words from an actual language.<sup>17</sup> To achieve the desired effect, Berio, according to Osmond-Smith, "provoked Berberian into action, waited until she produced something irresistible, and then pounced."<sup>18</sup> The end result, six hours of vocal material, was then manipulated by Berio into a 21-minute piece for two-track tape.

*Circles*, for female voice, harp, and two percussionists, is the first non-electronic vocal piece of this period. It too is based on the dissection of language into its basic parts and ultimately the transcendence of these parts into musical sound.<sup>19</sup> Berio uses poetry by E. E. Cummings—"Stinging," "Riverly is a Flower," and "N(o)w"—and mirrors the poems' gradual breakdown of language in his dissection of the text into individual phonemes, especially in the

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<sup>16</sup> Berio withdrew *Esposizione* and reworked large parts of it into *Laborintus II* (1965). The leading role of *Passagio* (1961-2), a large scale vocal piece for soprano, chorus A and B and orchestra also written during this period, was to my knowledge not written specifically for Berberian or with her voice in mind. Osmond-Smith states that neither Berberian nor Berio readily discussed whether the role of 'She' was written for her; Berberian never performed it. Osmond-Smith, "The Tenth Oscillator," 9. The premiere at the Piccola Scala in Milan in 1963 was sung by Giuliana Tivolacci.

<sup>17</sup> Osmond-Smith, *Berio*, 62–63. The Italian word "parole" ("words") is the only real word included in the piece. Ibid.

<sup>18</sup> Osmond-Smith, "The Tenth Oscillator," 8. According to Berberian's recollection to Osmond-Smith, in one of these marathon sessions Berio "goaded from her 'all sorts of laughter,'" leaving Berberian's diaphragm "bruised for two days." Ibid.

<sup>19</sup> Strickland, "Luciano Berio's *Circles*," 57.

third movement. In the last movement of the piece the voice's ability to articulate is abandoned for absolute sound: the voice ceases to be the messenger and instead blends with the harp and pitched percussion to form a homogenous ensemble.<sup>20</sup>

In addition to his experiments with language and text, Berio increasingly began incorporating theatrical elements into his compositions, foreshadowing his eventual focus on stage works in the 1970s and 1980s.<sup>21</sup> The first of these works, *Passaggio* (1961–62), is written for Soprano, Chorus A (in the pit), Chorus B (five groups of speakers in the auditorium), and orchestra. Berio places the female singer alone on the stage to act out the dramatic progression of a woman who is jailed, interrogated, and eventually freed. A choir and ensemble in the orchestra pit, as well as five groups of speakers placed in the auditorium, punctuate the unfolding story with a range of responses in various languages.<sup>22</sup> Berio's focus of the audience's attention onto the lone female protagonist's agony on stage is perhaps the closest link to the theatrical elements explored four years later in *Sequenza III*.

In 1965, the committee of the Pro Musica Nova Festival of Radio Bremen commissioned Berio to write a major work for Berberian to be performed there in 1966.<sup>23</sup> The festival, which was to take place on May 5–8, was advertised as featuring thirteen premieres (by Henri Pousseur, Yannis Xenakis, Karlheinz Stockhausen, and Berio, among others) and an introductory lecture by Theodor W. Adorno.<sup>24</sup>

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<sup>20</sup> Ibid., 9, 58.

<sup>21</sup> Osmond-Smith, *Berio*, 90.

<sup>22</sup> Ibid., 71.

<sup>23</sup> For an account of the history of the Bremen Festival see Amy C. Beal, *New Music, New Allies: American Experimental Music in West Germany from the Zero Hour to Reunification* (Berkeley: University of California Press, 2006): 142–50.

<sup>24</sup> For a full review of the events at the festival see Schwinger, "Bremer Uraufführungen," 234–37. Adorno's lecture was entitled "On Some Difficulties of Grasping Modern Music [Über einige Schwierigkeiten in der Auffassung neuer Musik]." See the announcement under "Rundfunk," in *Melos* 33 (March 1966): 105. In the lecture, Adorno credits the lack of tonality and lack of established harmonic formulas as markers of musical form as the primary obstacle for the listener wanting to gain access to modern music. Theodor W. Adorno, "Schwierigkeiten

The piece Berio conceived, *Sequenza III*, was the culmination of his experiments with both text and language up to this point, and of Berberian's vocal and theatrical ability. Using as its foundation a heavily fragmented text by Markus Kutter, the piece features the rapid execution of various shades of *Sprechstimme*, unusual vocal events (e.g., coughing, gasping, mouth clicking), as well as the projection of forty-four emotions at rapidly changing speeds.

### ***Sequenza III***

The score of Berio's *Sequenza III* comprises three pages, each containing a grid of ten-second segments marked by a partial bar line with an indication of elapsed time. Pages 1 and 3 contain sixteen segments each, whereas Page 2 contains twenty segments.<sup>25</sup> Based on Berio's grid, a performance of *Sequenza III* would last 8'40".

In an interview given in 1980, Berio acknowledges his sensitivity to "the excess of connotations that the voice carries, whatever it is doing."<sup>26</sup> He states that especially the inclusion of everyday sounds—the coughing, hacking, sneezing, yelling, laughing, crying, and other vocal events that occur during the course of the day—is an important element in *Sequenza III*:

The music of this century has tried to assimilate and control not only every aspect of "classical" singing, but also those aspects which, both because of acoustic considerations and because they disturbed the message, had necessarily been excluded from tonal music—along with the behaviour and the sounds of everyday life. . . . *Sequenza III* was very important for me because in it I tried to assimilate many aspects of everyday vocal life, including trivial things like coughing, without losing intermediate levels—laughter becoming coloratura virtuosity for instance—or indeed normal singing.<sup>27</sup>

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in der Auffassung neuer Musik," in *Theodor W. Adorno: Gesammelte Schriften*, ed. Rolf Tiedemann (Frankfurt am Main: Suhrkamp, 1982), 17:273–91.

<sup>25</sup> For ease of reference, I will be treating each 10 second segment as constituting one measure (as implied by the partial bar lines in the score); thus, the first segment (0'00"–0'10") is referred to as m. 1, the second segment (0'10"–0'20") as m. 2, and so forth.

<sup>26</sup> Berio, *Two Interviews*, 94.

<sup>27</sup> *Ibid.*



In a separate interview, Berberian pointed out that including everyday sounds in music is at the heart of her “new vocality,” a term that has become associated with her vocal acrobatics and for which she is credited as inventor:

We singers don’t have the possibility that a violinist has of taking the instrument and putting it in a box and closing it up. We use it all the time, like I am using it now. I’ll go out and I’ll buy something at the butcher, I’ll scold my daughter with the same voice and I’ll whisper sweet nothings into the right ear. . . . It is still the same instrument that I’ll be using when I am getting on stage. Now today, since what used to be known as just plain noise has been accepted as a common element in instrumental music, the new vocality is that concept put into voice.<sup>28</sup>

Berio, in particular, concerned himself with the meaning these everyday gestures could carry in addition to those more commonly associated with the singing voice. By introducing these gestures, he felt he could more readily express different emotive states, physiological events, and perhaps even psychological states through the voice alone: “From the grossest of noises to the most delicate of singing, the voice always means something, always refers beyond itself and creates a huge range of associations: cultural, musical, emotive, physiological, or drawn from everyday life, etc.”<sup>29</sup>

For this process to find its way into *Sequenza III*, Berio first had to find a suitable text for the work; one that could be fragmented so that he could bring out the musicality of each unit and superimpose gestures such as laughing or sneezing while still retaining a sense of coherence or interrelatedness between events.<sup>30</sup> Ultimately, Berio aimed to elevate these individual gestures to a point where they “could contribute something more than anecdotal detail.”<sup>31</sup>

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<sup>28</sup> Berberian, interview by Amirkhanian, Part 1.

<sup>29</sup> Berio, *Two Interviews*, 94.

<sup>30</sup> Ibid.

<sup>31</sup> Osmond-Smith, *Berio*, 60.

## Text

Berio approached Markus Kutter, husband of the Swiss harpsichordist Antoinette Vischer, for whom the composer had just written *Rounds* (1965), to send him a text “made up,” as he said, “of ‘universal’ words, that could be easily understood and would lodge themselves in the memory (house, night, woman, words, sing etc.);”<sup>32</sup> Kutter replied with the text shown in Figure 4.1.

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

Figure 4.1: Markus Kutter: Text for *Sequenza III*<sup>33</sup>

Berio was pleased with the result, since the phrases were easy enough to understand and “sufficiently ambiguous” to allow for a variety of textual interpretations and variations.<sup>34</sup> While Kutter makes no narrative explicit, the readers—thanks to familiar words like “woman,” “house,” and “night”—do get a sense of an underlying narrative, or story, featuring a female protagonist attempting to construct shelter before night comes. Berio wanted to carry this basic meaning over into the segmented text. In his 1980 interview, he described the process of segmentation as encompassing three main criteria: the dissection of the text into its parts, the introduction of virtuoso elements and everyday vocal gestures, and the inclusion of emotive expressions into the performance.<sup>35</sup>

To dissect the text, Berio “distinguish[ed] words, fragments of words, syllables and phonemes (consonants and vowels).”<sup>36</sup> In the score, Berio translated these into three different

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<sup>32</sup> Berio, *Two Interviews*, 95.

<sup>33</sup> Text reproduced by permission from Luciano Berio, *Sequenza III: Für Frauenstimme* (Vienna: Universal Edition, 1968). © Copyright 1968 by Universal Edition (London) Ltd., London © Copyright assigned to Universal Edition A.G., Wien/UE13723.

<sup>34</sup> Berio, *Two Interviews*, 95.

<sup>35</sup> *Ibid.*, 95–96.

<sup>36</sup> *Ibid.*, 95.

ways to write the text based on the degree of segmentation: “sounds or groups of sounds phonetically notated: [a], [ka], [u];” “sounds or groups of sounds as pronounced in context: /gi/ as in give, /wo/ as in woman,” and “words conventionally written and uttered: ‘give me a few words.’”<sup>37</sup>

Berio noted that though the poem is never stated in its entirety, the meaning of individual phrases and general context is not lost in performance, no matter how far the process of dissection is taken. Furthermore, Berio stressed that in his treatment of the segmented elements in the piece he introduced no meaning apart from Kutter’s original text. He took great care, for example, that no two syllables placed next to each other could accidentally form a word, thus avoiding the possibility that a new sense or context would be introduced.<sup>38</sup>

As a second criterion for segmentation, Berio considered the actual performer and voice behind the work, Cathy Berberian, and her ability to change rapidly between different modes of projection (speech or song) and to create even the most unusual vocal gestures on cue. He knew he had a performer who could handle the “extreme mobility of vocal characteristics, and the speed of transition from one to another,”<sup>39</sup> and thus began including as many virtuoso elements as came to his mind. Perhaps Berberian’s reaction to seeing the first version of *Sequenza III* is the most telling sign of the virtuosity the piece demanded: “absolutely impossible: there were six different types of laughter in a row.”<sup>40</sup> The vocal gestures Berio asks the singer to include in addition to those derived from singing and speaking are summarized in Table 4.1.

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<sup>37</sup> Luciano Berio, *Sequenza III per voce femminile* (Vienna: Universal Edition, 1977), English Instructions. Emphasis Original.

<sup>38</sup> Ibid.

<sup>39</sup> Ibid., 96.

<sup>40</sup> Osmond-Smith, “The Tenth Oscillator,” 12.

Table 4.1: Symbols of Unconventional Vocal Events in the Score<sup>41</sup>

L.	Laughter; must always be clearly articulated on a wide register
[?]	Bursts of laughter to be used with any vowel freely chosen
☐	Mouth clicks
△	Cough
ㄣ	Snapping fingers gently
+	With mouth closed
○	Breathy tone, almost whispered
←○	Breathing in, gasping
≡	Tremolo
d	Dental tremolo (or jaw quivering)
~	Trilling the tongue against the upper lip (action concealed by one hand)
+++ ≡	Tapping very rapidly with one hand (or fingers) against the mouth (action concealed by other hand)
nm	Hand (or hands) over mouth
nm ~	Moving hand cupped over mouth to affect sound (like a mute)
nd	Hands down

In the score, Berio represents the sung tones and whispered, unvoiced sounds as either ● and ○ or ☐ and ☐. The sung tones, according to his instructions, should be held until the next sound or to the symbol ⊏ while the whispered tones should be “as short as possible.” Those that are spoken are written on a single-line staff, while those that are sung appear on the regular five-line staff, even though their pitches are not to be taken as absolute.<sup>42</sup> Events written on a three-line staff indicate their position relative to the register (presumably of the performer).

### Emotive Expressions

As a third and final criterion for segmentation, Berio added forty-four different modes of expression that occur in conjunction with the vocal gestures or sung and spoken passages. They

<sup>41</sup> Symbols reproduced by permission from Luciano Berio, *Sequenza III: Für Frauenstimme* (Vienna: Universal Edition, 1968). © Copyright 1968 by Universal Edition (London) Ltd., London © Copyright assigned to Universal Edition A.G., Wien/UE13723.

<sup>42</sup> Berio writes, “[E]ach sequence of intervals (between ‘spoken’ sections) can be transposed to fit the vocal range of the performer.” Berio, *Sequenza III*, English Instructions.

can be divided roughly into two groups of articulation-based events (“gasping,” “nervous,” “whimpering,” etc.) and largely sung events (“languorous,” “tender,” “coy,” etc.).<sup>43</sup> In the piece they can occur in rapid, often unrelated succession;<sup>44</sup> at other times, the expressions build on each other, progressing or subsiding in tension.<sup>45</sup> Berio stressed, however, that despite their often descriptive label (“frantic,” for example) the expressions are not to be taken as complete literary equivalents or explanations of the vocal gestures they accompany: “These suggestions of emotional stages . . . reinforce in an allusive rather than a concrete fashion the gestural character of each instant.”<sup>46</sup>

Berio’s avowed goal in adding both the virtuosity and theatrical aspects as criteria for segmentation was to allow a multitude of associations and contexts other than those related to the text to enter the performance: “It seems to me that in *Sequenza III* the excess of connotations always finds a way forward, a form, whereas the rather elementary semantic ambit of the original text gets disproportionately dilated.”<sup>47</sup> Perhaps the best example of this is mm. 23–33. The section begins with a largely sung passage during which the phrases “give me,” “to sing,” and “a few words” of Kutter’s text are audible. In m. 27, Berio abandons the sung line in favor of spoken events and vocal gestures, while the text becomes an unintelligible jumble of phonetics and occasional syllables.

For one reviewer of the Bremen Festival, it was particularly the range of emotional expression that stood out:

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<sup>43</sup> Halfyard, “Provoking Acts,” 107.

<sup>44</sup> For example, mm. 29–30 move through the following string of expressions: “urgent,” “tense,” “frantic,” “joyful,” “tense laughter,” “dreamy,” “urgent,” “whining,” “tense laughter,” “frantic,” “urgent.” Here “joyful” and “dreamy” seem out of place amidst the sense of franticness and tenseness that is being created.

<sup>45</sup> In m. 32, for example, Berio shows an increase in tension and then release through his expressive markings: “very tense,” “increasingly desperate,” “extremely tense,” “echoing,” “serene.”

<sup>46</sup> Berio, *Two Interviews*, 96.

<sup>47</sup> *Ibid.*

Luciano Berio has written a new solo *scena* for Cathy Berberian (*Sequenza III*): despite all outward virtuosity he again and again lets different emotions break through. And how Cathy Berberian displays these states of the soul, with comfortable growling, enamored cooing, contemptuous laughter, heavenly beautiful, simply melodious cantilenas and fervent prayer-sequences (Berio's work ends with such a one)—it is really almost indescribable in this horrifying, though in the end pleasing, fullness of her often highly stylized expressive abilities.<sup>48</sup>

The review also emphasizes elements of acting; Berberian is said to “display” the different emotive states. While Berio acknowledges a theatrical element in the piece, he is quick to add that he is less concerned with the physical acting out of a gesture than he is with achieving the right tone and frame of mind for the singer to project the gesture: “The performer, however, must not try to represent or pantomime tension, urgency, distance or dreaminess but must let these cues act as a spontaneous conditioning factor to her vocal action (mainly the color, stress and intonation aspects).” At the same time, he adds that this conditioning is not conventionalized, and “must be experimented with by the performer herself according to her own emotional code, her vocal flexibility and her ‘dramaturgy,’”<sup>49</sup> thus allowing a certain degree of flexibility into the performance of the work.

Perhaps Berio anticipated that Berberian's interpretation of *Sequenza III* would discourage other artists from attempting the piece and wanted to provide a nod of encouragement. Nonetheless, following Berberian's seminal recording of 1967 it was not until 1986, three years after Berberian's death, that another artist, Linda Hirst, released her version. After Hirst's release, other artists soon followed suit, as shown below.

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<sup>48</sup> “Luciano Berio hat [Cathy Berberian] eine neue Soloszene geschrieben (*Sequenza III*): trotz aller äußerlichen Virtuosität läßt er doch immer wieder sehr differenzierte Gefühlskräfte durchbrechen. Und wie Cathy Berberian diese Seelenzustände darlegt, mit behaglichem Knurren, verliebtem Girren, verächtlichem Lachen, himmlisch schönen, schlicht liedhaften Cantilenen und inbrünstigen Gebetssequenzen (mit einer solchen schließt Berios Werk)—das ist eigentlich fast unbeschreibbar in dieser erschreckenden, letztlich aber doch beglückenden Fülle ihrer oft hochstilisierten Ausdrucksmöglichkeiten.” Schwinger, “Bremer Uraufführung,” 235.

<sup>49</sup> Berio, *Sequenza III*, English Instructions.

## The Artists and Their Recordings

The recordings available for *Sequenza III* fall into two main categories: those which were supervised by Berio and those which were not. The two recordings made under his supervision are Cathy Berberian's 1967 premier recording (released 1967[?]) and Italian soprano Luisa Castellani's recording (1994–97) for the 1998 release of the first complete edition of the (then thirteen) *Sequenzas*;<sup>50</sup> These recordings open the door into the mind of Berio and his approach to the piece in performance. In addition, both Berberian and Castellani released a live recording of their performances of the piece (recorded 1969 and 2003 respectively).<sup>51</sup> References to them are included where appropriate as they allow us to compare whether, and how, the artists carried their interpretations made under Berio to the stage.

Both Berberian and Castellani had a longstanding working relationship with Berio. Dedicatee, premier performer, and inspiration for the conception of the piece, Berberian's role in the creation of *Sequenza III* and her dedication to the demands of the new music, and relationship to Berio, have already been shown. It must be stressed, however, that as late as his 1981 interview, Berio said that he thought only Berberian could handle the extreme virtuoso demands of the piece, saying: "in fact, the most obviously . . . virtuoso element in *Sequenza III* is the extreme mobility of vocal characteristics, and the speed of transition from one to another: so much so that there have been a number of sad occasions when Cathy was not performing, on which I have been tempted to transcribe this work for two or three voices."<sup>52</sup> Even after their divorce in 1964, the two worked closely together until Berberian's premature death in 1983.

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<sup>50</sup> Cathy Berberian, *Circles, Sequenza I, Sequenza III, Sequenza V*, recorded 1967, Wergo WER 6021-2, 1991. Originally released on Wergo WER 60021, 1967[?], 33⅓ rpm. Luisa Castellani, *Sequenzas*, recorded 1994–97, Deutsche Grammophon DG 457 038-2, 1998, compact disc.

<sup>51</sup> Cathy Berberian, *Nel labirinto della voce*, recorded 21 January 1969, Ermitage ERM 136, 1993, compact disc; Luisa Castellani, *Warsaw Autumn 2003: 46<sup>th</sup> International Festival of Contemporary Music*, recorded 19–27 September 2003, Polish Music Information Center 6, 2003, compact disc.

<sup>52</sup> Berio, *Two Interviews*, 96.

Castellani made her opera debut in Berio's *La vera storia* in 1986. Like Berberian, Castellani has been a champion of Berio's works on recitals and recordings. In a 1993 radio interview, Berio said of her: "In fact, I can say that on some works that Cathy made, like my *Sequenza III* for voice, there is nobody today who can approach . . . Luisa Castellani for intelligence, ability, and control."<sup>53</sup> Further, on the 1998 release of the *Sequenzas* she is introduced as "Berio's preferred interpreter for performances of his own vocal works."<sup>54</sup>

In addition to the recordings by Berberian and Castellani, I have chosen for discussion four other interpretations out of the eleven recordings of *Sequenza III* available. The 1986 recording by British mezzo-soprano Linda Hirst (released 1988) was the first recording to appear after both of Berberian's releases, and is another example of a live recording. Hirst knew Berberian from her time as a member of Swingle II (who performed in several of Berio's works) and from attending Berberian's concerts; she appears regularly with ensembles devoted to avant-garde music such as Ensemble InterContemporain and Ensemble Modern.<sup>55</sup>

The 1990s offer a greater variety of recordings to choose from. In addition to Castellani's 1994–97 recording, I chose the 1994 performance by American singer Christina Ascher (released 1994) and the 1996 recording by American mezzo-soprano Isabelle Ganz (released 2006). Ascher's background includes not only vocal studies at Juilliard but also acting at the Herbert Berghof studio.<sup>56</sup> Ganz is the performer chosen to sing *Sequenza III* on the most comprehensive

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<sup>53</sup> Luciano Berio, interview by Sandro Cappelletto, 25 March 1993, available from Luisa Castellani, "Luisa Castellani: Musicista," Luisa Castellani, <http://www.luisacastellani.ch/berio.htm> (accessed 10 January 2011). Translation by Luisa Castellani. In 1996 she sang the role of Ata, conceived for her by Berio, in the premiere of his opera *Outis* at La Scala.

<sup>54</sup> Castellani, *Sequenzas*, DG 457 038-2, liner notes, 12. It is unclear who wrote the artist biographies given in the liner notes, though the accompanying introductory notes to the *Sequenzas* are by Luciano Berio.

<sup>55</sup> Linda Hirst, *Songs Cathy Sang*, recorded 4 July 1986, Virgin Classics VC 7 90704-2, 1988, compact disc. Hirst writes that she went to Berberian's concerts. Ibid., liner notes. It is not clear, however, whether Hirst saw Berberian perform *Sequenza III* or whether she worked with Berio on the piece.

<sup>56</sup> Ascher, Christina. *One Woman Tango*. Recorded 9–12 April 1994. Signum Disc SIG X52-00, 1994. Compact disc.



release of the *Sequenzas* to date, featuring all fourteen with their alternate versions and adaptations, as well as a reading of the fourteen verses for each *Sequenza* written by Italian poet and friend of Berio, Edoardo Sanguineti, in 1994.<sup>57</sup>

Lastly, I include the extrovert performance of German soprano Salome Kammer (2007, released 2008) as an example of a non-native English speaker and also as a representative of a more recent interpretation of the piece. Like Hirst, Kammer has worked with Ensemble InterContemporain and Ensemble Modern. She currently teaches contemporary music for singers at the Hochschule für Musik in Munich.<sup>58</sup> The recordings and their date of recording and release are summarized in Table 4.2.

Table 4.2: Recordings of Berio's *Sequenza III*

Performers	Recording	First Release
Cathy Berberian, Studio	1967	1967[?]
Cathy Berberian, Live	1969	1993
Linda Hirst	1986	1988
Christina Ascher	1994	1994
Isabelle Ganz	1996	2006
Louisa Castellani, Studio	1994–97	1998
Louisa Castellani, Live	2003	2003
Salome Kammer	2007	2008

Each recording offers a unique approach to the piece. Even between the live and studio recordings of Berberian and Castellani, significant differences exist in their approach to the text, interpretation of the vocal gestures, and character of the piece. Though they do take some, and

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<sup>57</sup> The adaptations are *Sequenza VIb* for cello adapted by Rohan de Saram (1981), *Sequenza VIIb* for soprano saxophone adapted by Claude Delangle (1995), *Sequenza IXc* adapted by Rocco Parisi (1998), and *Sequenza XIVb* adapted by Stefano Scodanibbio (2004). According to the Art Director of the set, Brian Brandt, Berio suggested performers for some of the *Sequenzas*. It is unclear from the set, however, who of the included artist fits this distinction. Isabelle Ganz, *The Complete Sequenzas*, recorded 11 October 1996, Mode 161/3, 2006, compact disc. The same year, another edition of the fourteen *Sequenzas* was released with Tony Arnold as the artist: Tony Arnold, *Luciano Berio: Sequenzas I–XIV for Solo Instruments*, recorded June 1998–May 2004, Naxos 8.557661-63, 2006, compact disc.

<sup>58</sup> Salome Kammer, *Salomix-max*, recorded 15–18 August 2007, Wergo WER 6709-2, 2008, compact disc.

quite distinct, interpretative freedoms, the artists' focus seems to be more on executing the vocal gestures as accurately as possible and less on the projection of different emotions and the telling of a story, though between the two studio recordings Castellani introduces more emotional detail than Berberian. Their live recordings, on the other hand, are much more in the moment of the piece, exploring greater ranges of expression and gestures, while sacrificing temporal accuracy to some degree.<sup>59</sup>

For the other artists two trends emerge; Ascher and Ganz appear to stay in their role as performers, focusing mainly on the execution of the vocal gestures; their interpretations are reminiscent of performers trying out different vocal techniques or warming up as if for an imaginary performance, while bringing out emotional nuances mainly as a means to highlight a vocal technique. For artists such as Hirst and Kammer, however, the emphasis seems to be not so much on close adherence to the score as on exploring a wide range of emotions, even toward creating a character—though, as I will show below, most of them follow Berio's instructions as closely, if not more closely, than Berberian. Hirst, for example, gives the impression of a madwoman in conversation with, mostly, herself while Kammer's protagonist, seemingly mad as well, is set on letting the whole world know about her condition. In the analysis below, I will explore these individual interpretations more closely, pointing out similarities and differences insofar as that they aid our understanding of the piece and relate to Berio's initial conception of *Sequenza III*.

### **Speech and Muttering**

Berio implicitly allows for different approaches to the portrayal of the protagonist in the instructions to the opening segment of the piece (see Figure 4.2). In the English instructions he

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<sup>59</sup> It must be said, however, that the studio of course gives one the ability to edit and splice together different tracks. Thus the perceived stiffness especially of Berberian's recording may be due to editing after the fact.

writes: “the performer . . . appears on stage already muttering as though pursuing an off-stage thought.”<sup>60</sup> The German instructions, however, are slightly different: “The performer . . . enters the stage muttering to herself, as if not even thinking about her entrance.”<sup>61</sup> Both imply a disassociation between performer and audience, but while the English gives a justification for the mutter, “pursuing an off-stage thought,” the German provides no such excuse. If this is a deliberate difference, the implication may be significant for the performer. In the English instructions she is given a reason for her behavior (she is pursuing an off-stage thought), while in the German she is not (she is simply muttering to herself). Because our perception of a person who is doing something unexpected changes based on whether we know why she is doing something unusual, one could argue that depending on which instruction the performer is following she would be more likely to portray a crazy character when following the German, less so when following the English. Even though the audience is not privy to the instructions, muttering is not an expected vocal behavior, and the conception of the performer may influence the perception of the audience.

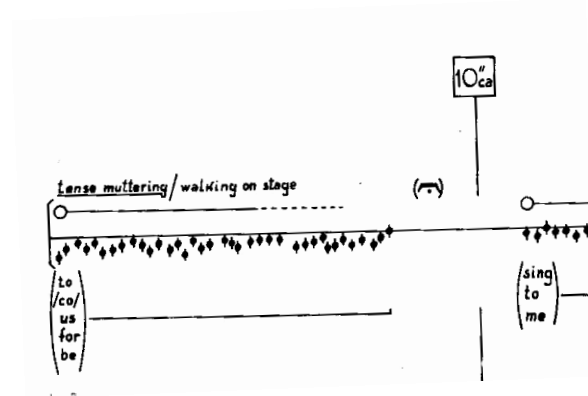




Figure 4.2: *Sequenza III*, mm. 1–2 (beginning)<sup>62</sup>

<sup>60</sup> Berio, *Sequenza III*, English Instructions.

<sup>61</sup> “Die Künstlerin . . . betritt die Bühne vor sich hinmurmeln, als dächte sie gar nicht an ihren Auftritt.” Ibid., German Instructions.

<sup>62</sup> Permission to reproduce all musical examples appearing in this chapter is gratefully acknowledged from the following source: Luciano Berio, *Sequenza III: Für Frauenstimme* (Vienna: Universal Edition, 1968). © Copyright 1968 by Universal Edition (London) Ltd., London © Copyright assigned to Universal Edition A.G., Wien/UE13723.

The musical effect Berio asks for in the opening segment is complex. First, he uses the symbol  to indicate that the notes should be sung as short as possible. The notes, however, are written on a single line, which Berio reserves for actions that are spoken. This mode of execution is supported by the expression “tense muttering.” Lastly, the  symbol for “almost whispered,” is written above the notes. Given the three elements in support of a spoken rather than sung execution, it is likely Berio may have had in mind a softly spoken, yet pitched rather than whispered, gesture.

In her studio recording Berberian speaks rather than whispers (i.e., her iterations occur on a pitch, though in the sense of someone speaking rather than singing). She executes the gesture blankly, almost detached, staying at the same pitch until the last gesture, where some animation enters her voice by way of gently rising and falling pitches. Her live recording is missing m.1, but in what follows, Berberian similarly speaks on pitch rather than whispers. Castellani’s studio interpretation, by contrast, comes closer to a whisper, especially in her rendition of “sing to me;” its pitchless and breathy quality is haunting. She speaks at a barely audible dynamic, slurring syllables together rapidly. Furthermore, Castellani’s studio rendition of the opening segment takes significantly longer than Berberian’s studio performance; it lasts 15 seconds instead of the indicated 10 seconds; in contrast, the first segment of her live recording, though also executed as a whisper, is noticeably shorter, lasting only 5 seconds on the recording.<sup>63</sup> The extra time in the studio recording emphasizes the idea behind the passage: that of a protagonist coming on stage, muttering, lost in thought. Berberian’s studio performances, on the other hand, emphasize the literal instruction “tense” through the use of steady dynamics, pitch, and enunciated delivery of the syllables.

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<sup>63</sup> It is of course possible that the first seconds of her performance were not picked up, if, for example, a stationary microphone was used.

In her studio recording, Castellani further increases the poignancy of her muttering by fading into nonsense syllables rather than using the phonemes indicated during passages of extensive muttering (such as m. 1, but also m. 6). She emphasizes the “[s]” sound of “us” but also introduces a sound “[sch]” that is not indicated in the score but that creates a sound similar to what a listener overhearing someone else’s conversation from afar may pick up.<sup>64</sup> Berberian, too, does not so closely follow the syllables in her studio recording; though in m. 1 she begins on those indicated in the score, she soon begins incorporating other, seemingly unrelated, syllables and phonemes.<sup>65</sup> Her use of other syllables that resemble but are not part of the original text is reminiscent of *Visage*, where Berio recorded Berberian experimenting with vocal gestures and phonetic material that, though suggestive of a language, did not in fact belong to any.<sup>66</sup>

Hirst, Ascher, and Kammer (the last especially)—unlike Berberian—whisper for almost the entire duration of the opening gesture and overall stay very close to the indicated syllables.<sup>67</sup> Especially Kammer’s whisper makes the listener’s skin crawl: it is extremely breathy, ghostly, and hollow, and sounds as if she were standing directly behind the listener, breathing and whispering into his ear.<sup>68</sup> Hirst’s rendition is extremely soft, though she clearly enunciates the consonants of the syllables, resulting in a long string of “t, t, t, t” and “c, c, c, c” sounds. Like Castellani’s studio rendition, the effect is similar to a listener overhearing a conversation from afar. The repeated articulation of a single consonant, however, suggests to the listener that all is not well with the protagonist. Ascher, who is the only artist to audibly walk on stage, sharply

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<sup>64</sup> Her live recording is hard to judge, as especially m. 1 is very short and soft, presumably because of her distance from the microphone at the beginning.

<sup>65</sup> Though no comparison is possible to the opening segment of her live recording, in m. 6 Berberian does deviate similarly from the written syllables, in fact even more so due to her very fast speed.

<sup>66</sup> Out of the recordings available, the only other recording to fade noticeably into nonsense syllables during the periods of muttering is that of Tony Arnold (released 2006).

<sup>67</sup> Using a pitchless whisper is a trend that persists in every recording I have evaluated, including those mentioned above and those of Heller, Schadeberg, and Arnold.

<sup>68</sup> Perhaps to achieve this effect Kammer stood particularly close to the microphone.

enunciates the consonants of the first segment “t” “c” but then relaxes her enunciated attacks in the following segments; in m.6, for example, her articulation of the same consonant is much softer, while the syllables Berio emphasizes in the score “(/gi/, me, /ut/)” are accented. Ganz, who is the only artist whose whisper is somewhat more pitched and much less breathy than, for example, Kammer, focuses on the element of repetition. She repeats the text “(to, /co/, us, for, be)” more quickly and more often than any of the other performers—as if she was fixating on the same thought, repeating it over and over in her head (like testing the accuracy of her memorization of the segment), but instead projecting it aloud.

## **Laughter**

From the start, Berio conceived laughter as a pivotal element in *Sequenza III*. One may recall Berberian’s reaction to being presented with a first version that featured “six different types of laughter in a row.”<sup>69</sup> It was laughter that, for Berio, extended ultimately into coloratura and into virtuosity.<sup>70</sup> Even though Berio cut back on the laughter in revisions of the work (there is no spot that features six different types in a row in the final version), it still takes a prominent role in punctuating series of increasingly tense vocal gestures such as in m. 30 (Figure 4.3). Two symbols are used to show laughter in the score: “L.,” which stands for laughter that “must always be clearly articulated on a wide register” and “[?],” which stands for “bursts of laughter to be used with any vowel freely chosen.”<sup>71</sup> Berio distinguishes between “nervous laughter,” “open laughter,” “tense laughter,” and “frantic laughter” (written as “nervous L.,” etc.).

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<sup>69</sup> Osmond-Smith, “The Tenth Oscillator,” 12.

<sup>70</sup> Berio, *Two Interviews*, 94.

<sup>71</sup> Berio, *Sequenza III*, Instructions.

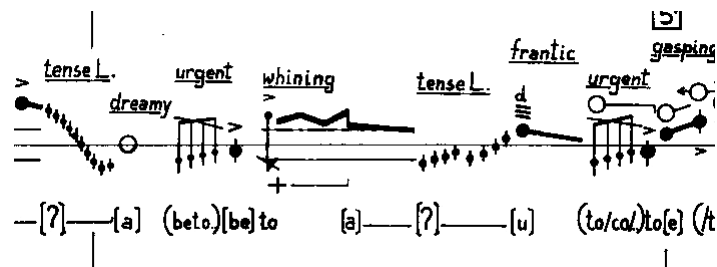


Figure 4.3: *Sequenza III*, m. 30

In the score, a series of different shades of laughter (such as mm. 27–31, which proceed from “open” to “tense” to “frantic” laughter) implies a progression of increasing tension throughout the passage.<sup>72</sup> The open laughter in m. 27 grows out of the proceeding event; a series of rising and falling phonemes on [u], [i], and [e] (Figure 4.4). All six performers execute the phonemes as actual laughter “(hu, hi, he)” of varying intensity, thus linking the two sections together.

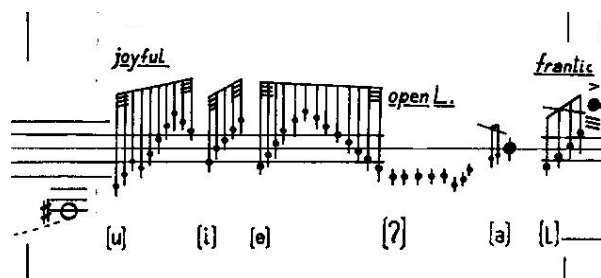


Figure 4.4: *Sequenza III*, m. 27

There is a perceptible difference in the way each artist approaches the expression “joyful” accompanying the phoneme figure. While the word joyful seems to imply a positive inflection, the laughter of Berberian, Ascher, and Ganz does not seem to follow this instruction. Berberian’s laughter in her studio recording sounds studied and somewhat stiff, not humorous; her execution is deliberate, following the indicated contours and ending in a low register, drawing out the last

<sup>72</sup> In addition, the word “anxious” is used in conjunction with “[ʔ]” between mm. 41 and 42 as well as “whining” in mm. 44–45. An inconsistency (or perhaps added challenge) occurs in m. 44. While in the previous segments the laughter was stretched over a figure of executable length, here it is confined to a grace note to be executed as short as possible. Berio may have had in mind something resembling the gasping figure of m. 31, in which each symbol—given as “[ ]” instead—is executed as a single “ha” by all performers.

laughing gesture. In her live recording, on the other hand, Berberian abandons a clear laughing gesture for the first three phonemes and instead places a high and fast moving “hu-i” (sounding almost like a ghostly wail) before ending again in a deliberately drawn out and menacing “ha.” Ascher, who up to this point has been relatively subdued in her execution of the articulated events, suddenly goes into a dramatic frenzy, sounding almost manic. She rises to the high extremes of her register, with gulps of breath underscoring each ascent. Her final laughter on “ha” sounds, to my ear, evil. Likewise, in Ganz’s interpretation, the laughter—based on “he” with a drawn out and very nasal “e”—could be described as deliberately ugly.<sup>73</sup> Castellani (both recordings), Hirst, and Kammer, in contrast, approach this section more lightly, evoking amusement rather than pain—almost like an inward chuckle. Their contours appear less strained, stay within a smaller range, and follow a more natural pitch pattern (a soft rising with a decrease in dynamic) that someone who is actually laughing might use.

Though Berio clearly intended different shades of laughter, they are virtually indistinguishable in all but one of the recordings. Berberian’s, Ascher’s, and Castellani’s remain centered on a deliberate and pronounced “ha,” Ganz’s “he” sound is nasal and ugly throughout, Hirst’s—at the opposite end of the spectrum—extremely breathy (though the breathiness renders her “nervous laughter” the most poignant). But Kammer distinguishes them consistently: her “nervous laughter” is guttural, her “tense laughter” like someone weeping and chuckling at the same time, her “open laughter” comic, and her “frantic laughter” over the top in range and expression—almost like someone gasping for air after coming up from underwater. Overall, the

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<sup>73</sup> Ganz is the only performer not to use “ha” as her syllable of choice for laughter sequences. She is also the only one who glissandos through the preceding event, though “hi” and “he” are clearly distinguishable as separate events.



laughter in all of the interpretations rarely seems happy;<sup>74</sup> on the contrary, it is primarily associated with negatives. For example, it sounds at times choked (Berberian [Studio]), wailing (Berberian [live]), scheming (Castellani [both]), and ugly (Ganz), while at others it sounds private (Hirst) or manic (Ascher and Kammer).

## **Tempo**

Another aspect central to *Sequenza III* and its performance is the overall timing of the piece and of individual vocal gestures. Depending on whether the artist stays close to Berio's indications or chooses to rush or slow down passages, a different character emerges.

Furthermore, when the artist takes additional time or speeds up the pace she may illustrate the passages she finds more important and the aspects she wants to emphasize to the audience.

In his 1980 interview Berio indicated how important it is to stay within the allotted time frame and to follow the indicated durations of the gestures and the whole piece in both *Sequenza I* and *Sequenza III*; however, he does allow for some limited flexibility reflecting performer's varying degrees of virtuosity: "The piece [*Sequenza I*] is very difficult, and I therefore adopted a notation that was very precise, but allowed a margin of flexibility in order that the player might have the freedom—psychological rather than musical—to adapt the piece here and there to his technical stature."<sup>75</sup>

Overall, Berio was adamant that individual durations should be respected to preserve the integrity of the piece. This is reflected especially in the studio recording of Berberian which, at an average length of 10 seconds a segment, finishes at 8'48", just eight seconds over the specified duration. The timings of the individual recordings are summarized in Table 4.3 (page

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<sup>74</sup> Halfyard clearly does not understand Berio's use of laughter as comical: "Yet, while in *Aria* the laughter was employed as a literal reference to humor . . . *Sequenza III* was anything but." Halfyard, "Provocative Acts," 104.

<sup>75</sup> Berio, *Two Interviews*, 99.

132–33). As can be seen from the table, Berberian’s timings for the individual sections match Berio’s instructions almost perfectly. Ganz and Ascher also stay very close to the score in their performances, finishing at 8’36” and 8’22” respectively. Castellani’s studio recording is somewhat faster than Berberian’s, finishing at 8’12”, her individual segments are, for the most part, of the required 10-second duration.<sup>76</sup> In contrast, all three live recordings are noticeably shorter—Berberian, 7’12”; Castellani, 7’15”; Hirst, 7’14”—averaging approximately 7’14”, almost 1’30” short of the indicated duration.<sup>77</sup> Likewise, Kammer’s recording is still over a minute shorter than the score specifies, finishing at 7’31”.

In the live recordings the artists execute individual segments much faster than in the studio recordings. For example, the average length of the segments in Berberian’s live recording is only 8 seconds, while that of her studio recording is 10 seconds; that is, in the live recording several segments are shorter than the score indicates (mm. 42, 17, and 30, for example, are 3, 4, and 4 seconds long respectively). Likewise, the average segment length of Castellani’s live recording is 8.4 seconds, while that of her studio recording is 9.5 seconds. Table 4.4 below gives each artist’s average segment length for the piece as a whole; the individual durations of each segment appear in Table 4.5 (page 134–35).

Table 4.4: Average Duration of Segments in Seconds

Berberian Live	Berberian Studio	Castellani Studio	Castellani Live	Hirst	Ascher	Ganz	Kammer
10.1	8.3	9.5	8.4	8.4	9.7	9.9	8.7

<sup>76</sup> By far the longest rendition published, taking a total of 9’25”, is Christine Schadeberg’s version of 1995.

<sup>77</sup> For ease of comparison to the other recordings, I have added 10 seconds to the total time of Berberian’s live recording (7’02”) to account for the missing first segment. In her chapter on *Sequenza III*, Halfyard also points out the time difference between the two Berberian recordings and Berberian’s accuracy in the timings of her studio recording. She asserts that the first 10 seconds have been cut because they were masked by audience applause Halfyard, “Provoking Acts,” 108, note 22.

Table 4.3: *Sequenza III*, Timings<sup>78</sup>

M.	Score	Berberian (Studio)	Berberian (Live)	Castellani (Studio)	Castellani (Live)	Hirst	Ascher	Ganz	Kammer
1	0'00"	0'00"	0'00"	0'00	0'00	0'00"	0'00"	0'00"	0'00"
2	0'10"	0'10"	0'10" <sup>79</sup>	0'15"	0'05"	0'16"	0'08"	0'11"	0'10"
3	0'20"	0'20"	0'17"	0'23"	0'13"	0'23"	0'13"	0'18"	0'17"
4	0'30"	0'30"	0'23"	0'30"	0'21"	0'31"	0'21"	0'27"	0'27"
5	0'40"	0'39"	0'32"	0'40"	0'30"	0'38"	0'30"	0'38"	0'38"
6	0'50"	0'50"	0'40"	0'50"	0'41"	0'49"	0'41"	0'48"	0'50"
7	1'00"	0'58"	0'43"	1'00"	0'52"	0'53"	0'46"	0'53"	0'56"
8	1'10"	1'10"	0'54"	1'08"	1'02"	1'00"	0'56"	1'05"	1'09"
9	1'20"	1'20"	1'00"	1'17"	1'07"	1'05"	1'01"	1'12"	1'16"
10	1'30"	1'29"	1'05"	1'25"	1'16"	1'09"	1'09"	1'21"	1'23"
11	<b>1'40"</b>	<b>1'40"</b>	<b>1'10"</b>	<b>1'35"</b>	<b>1'22"</b>	<b>1'14"</b>	<b>1'15"</b>	<b>1'26"</b>	<b>1'30"</b>
12	1'50"	1'47"	1'19"	1'43"	1'31"	1'26"	1'27"	1'38"	1'40"
13	2'00"	1'58"	1'30"	1'54"	1'40"	1'34"	1'38"	1'48"	1'50"
14	2'10"	2'10"	1'40"	2'02"	1'52"	1'42"	1'48"	2'00"	2'00"
15	2'20"	2'19"	1'47"	2'11"	2'00"	1'52"	1'58"	2'10"	2'13"
16	<b>2'30"</b>	<b>2'28"</b>	<b>1'55"</b>	<b>2'22"</b>	<b>2'06"</b>	<b>2'03"</b>	<b>2'07"</b>	<b>2'18"</b>	<b>2'21"</b>
17	<b>2'40"</b>	<b>2'39"</b>	<b>2'10"</b>	<b>2'32"</b>	<b>2'15"</b>	<b>2'07"</b>	<b>2'18"</b>	<b>2'27"</b>	<b>2'32"</b>
18	2'50"	2'47"	2'14"	2'40"	2'21"	2'15"	2'26"	2'34"	2'39"
19	3'00"	2'58"	2'25"	2'53"	2'31"	2'24"	2'35"	2'47"	2'47"
20	3'10"	3'09"	2'35"	3'07"	2'38"	2'32"	2'45"	2'59"	2'55"
21	3'20"	3'18"	2'40"	3'12"	2'47"	2'41"	2'55"	3'09"	3'02"
22	3'30"	3'28"	2'47"	3'21"	2'53"	2'51"	3'04"	3'20"	3'08"
23	<b>3'40"</b>	<b>3'34"</b>	<b>2'52"</b>	<b>3'30"</b>	<b>2'58"</b>	<b>3'00"</b>	<b>3'12"</b>	<b>3'31"</b>	<b>3'14"</b>
24	3'50"	3'42"	2'57"	3'40"	3'04"	3'07"	3'18"	3'38"	3'20"
25	4'00"	3'55"	3'06"	3'52"	3'17"	3'12"	3'30"	3'47"	3'27"

<sup>78</sup> Times in normal type are approximate; Times in bold type indicate segments that can be accurately timed (see also page 138, n. 85).<sup>79</sup> For ease of comparison, 10 seconds have been added to the start time of each segment to account for the missing first measure (see page 133, n. 82).

Table 4.3 continued

M.	Score	Berberian (S)	Berberian (L)	Castellani (S)	Castellani (L)	Hirst	Ascher	Ganz	Kammer
26	4'10"	4'05"	3'16"	4'00"	3'21"	3'20"	3'40"	3'55"	3'34"
27	4'20"	4'17"	3'26"	4'10"	3'31"	3'33"	3'53"	4'05"	3'42"
28	4'30"	4'27"	3'33"	4'21"	3'41"	3'42"	4'02"	4'14"	3'49"
29	4'40"	4'40"	3'39"	4'30"	3'48"	3'48"	4'13"	4'22"	3'59"
30	4'50"	4'48"	3'45"	4'40"	3'54"	3'54"	4'29"	4'31"	4'08"
31	5'00"	4'58"	3'49"	4'50"	4'01"	3'59"	4'36"	4'39"	4'16"
32	5'10"	5'08"	3'58"	5'00"	4'10"	4'08"	4'48"	4'49"	4'26"
33	5'20"	5'19"	4'05"	5'10"	4'22"	4'19"	5'00"	5'02"	4'35"
34	5'30"	5'30"	4'17"	5'22"	4'30"	4'31"	5'10"	5'15"	4'44"
35	5'40"	5'39"	4'31"	5'32"	4'40"	4'39"	5'23"	5'27"	4'53"
36	5'50"	5'46"	4'38"	5'40"	4'48"	4'48"	5'30"	5'35"	5'00"
37	6'00"	5'56"	4'44"	5'50"	4'53"	4'56"	5'39"	5'42"	5'05"
38	6'10"	6'07"	4'53"	5'58"	5'00"	5'03"	5'46"	5'52"	5'15"
39	6'20"	6'14"	5'01"	6'05"	5'06"	5'10"	5'53"	5'59"	5'23"
40	6'30"	6'24"	5'09"	6'15"	5'14"	5'14"	6'04"	6'07"	5'30"
41	6'40"	6'32"	5'14"	6'23"	5'20"	5'16"	6'13"	6'14"	5'37"
42	6'50"	6'42"	5'21"	6'30"	5'28"	5'21"	6'22"	6'24"	5'46"
43	7'00"	6'51"	5'27"	6'37"	5'32"	5'25"	6'30"	6'33"	5'54"
44	7'10"	7'00"	5'32"	6'46"	5'37"	5'30"	6'40"	6'43"	6'01"
45	7'20"	7'10"	5'38"	6'56"	5'47"	5'36"	6'58"	6'51"	6'08"
46	7'30"	7'22"	5'50"	7'06"	5'58"	5'43"	7'10"	7'04"	6'16"
47	7'40"	7'36"	6'01"	7'16"	6'10"	5'56"	7'21"	7'19"	6'27"
48	<b>7'50"</b>	<b>7'48"</b>	<b>6'14"</b>	<b>7'26"</b>	<b>6'21"</b>	<b>6'06"</b>	<b>7'35"</b>	<b>7'35"</b>	<b>6'39"</b>
49	8'00"	7'57"	6'22"	7'32"	6'29"	6'14"	7'39"	7'45"	6'48"
50	8'10"	8'09"	6'31"	7'42"	6'41"	6'30"	7'52"	7'58"	6'58"
51	8'20"	8'19"	6'40"	7'52"	6'47"	6'39"	8'00"	8'08"	7'08"
52	8'30"	8'34"	6'57"	8'02"	6'59"	6'54"	8'13"	8'25"	7'22"
	8'40"	8'48"	7'12"	8'12"	7'15"	7'14"	8'22"	8'36"	7'31"

Table 4.5: *Sequenza III*, Durations

<b>M.</b>	<b>Score</b>	<b>Berberian (Studio)</b>	<b>Berberian (Live)</b>	<b>Castellani (Studio)</b>	<b>Castellani (Live)</b>	<b>Hirst</b>	<b>Ascher</b>	<b>Ganz</b>	<b>Kammer</b>
<b>1</b>	0'00"	10	10	15	5	16	8	11	10
<b>2</b>	0'10"	10	7	8	8	7	5	7	7
<b>3</b>	0'20"	10	6	7	8	8	8	9	10
<b>4</b>	0'30"	9	9	10	9	7	9	11	11
<b>5</b>	0'40"	11	8	10	11	11	41	10	12
<b>6</b>	0'50"	8	3	10	11	4	5	5	6
<b>7</b>	1'00"	12	11	8	10	7	10	12	13
<b>8</b>	1'10"	10	6	9	5	5	5	7	10
<b>9</b>	1'20"	9	5	8	9	4	8	9	7
<b>10</b>	1'30"	11	5	10	6	5	6	5	7
<b>11</b>	<b>1'40"</b>	7	9	8	9	12	12	12	10
<b>12</b>	1'50"	11	11	11	9	8	12	10	10
<b>13</b>	2'00"	12	10	8	12	8	10	12	10
<b>14</b>	2'10"	9	7	9	8	10	10	10	13
<b>15</b>	2'20"	9	8	11	6	11	9	18	8
<b>16</b>	<b>2'30"</b>	12	15	10	9	4	11	9	11
<b>17</b>	<b>2'40"</b>	8	4	8	6	8	8	7	7
<b>18</b>	2'50"	11	11	13	10	9	9	13	8
<b>19</b>	3'00"	11	10	14	7	8	10	12	8
<b>20</b>	3'10"	9	5	5	9	9	10	10	7
<b>21</b>	3'20"	10	7	9	6	10	9	11	6
<b>22</b>	3'30"	6	5	9	5	9	8	11	6
<b>23</b>	<b>3'40"</b>	8	5	10	6	7	6	7	6
<b>24</b>	3'50"	13	9	12	13	5	12	9	7
<b>25</b>	4'00"	10	10	8	4	8	10	8	7
<b>26</b>	4'10"	12	10	10	10	13	13	10	8
<b>27</b>	4'20"	10	7	11	10	9	9	9	7

Table 4.5 continued

<b>M.</b>	<b>Score</b>	<b>Berberian (S)</b>	<b>Berberian (L)</b>	<b>Castellani (S)</b>	<b>Castellani (L)</b>	<b>Hirst</b>	<b>Ascher</b>	<b>Ganz</b>	<b>Kammer</b>
<b>28</b>	4'30"	13	6	9	7	6	11	8	10
<b>29</b>	4'40"	8	6	10	6	6	16	9	9
<b>30</b>	4'50"	10	4	10	7	5	7	8	8
<b>31</b>	5'00"	10	9	10	9	9	12	10	10
<b>32</b>	5'10"	11	7	10	12	11	12	13	9
<b>33</b>	5'20"	11	12	12	8	12	10	13	9
<b>34</b>	5'30"	9	14	10	10	8	13	12	8
<b>35</b>	5'40"	7	7	8	8	9	7	8	7
<b>36</b>	5'50"	10	6	10	5	8	9	7	5
<b>37</b>	6'00"	11	9	8	7	7	7	10	10
<b>38</b>	6'10"	7	8	7	6	7	7	7	8
<b>39</b>	6'20"	10	8	10	8	4	11	8	7
<b>40</b>	6'30"	8	5	8	6	2	9	7	7
<b>41</b>	6'40"	10	7	7	8	5	9	10	9
<b>42</b>	6'50"	9	6	7	4	4	8	9	8
<b>43</b>	7'00"	9	5	9	5	5	10	10	7
<b>44</b>	7'10"	10	6	10	10	6	18	8	7
<b>45</b>	7'20"	12	12	10	11	7	12	13	8
<b>46</b>	7'30"	14	11	10	12	13	11	15	11
<b>47</b>	7'40"	12	13	10	11	10	14	16	12
<b>48</b>	<b>7'50"</b>	9	8	6	8	8	4	10	8
<b>49</b>	8'00"	12	9	10	12	16	13	13	10
<b>50</b>	8'10"	10	9	10	6	9	8	10	10
<b>51</b>	8'20"	5	17	10	12	5	13	17	14
<b>52</b>	8'30"	14	15	10	16	20	9	11	9
	8'40"	13	6	9	7	6	11	8	10

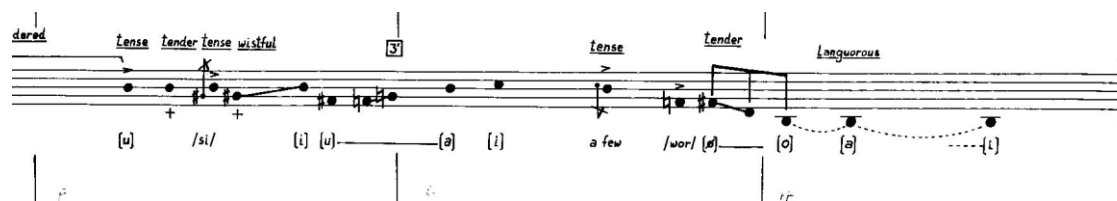
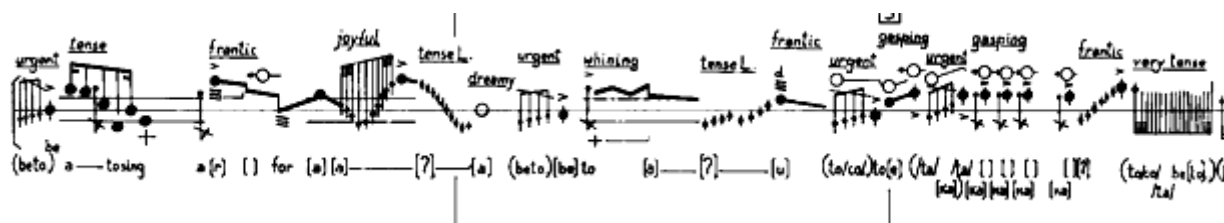
Aside from the duration of their interpretation, however, all artists tend to execute the vocal gestures as written (sustaining the pitches or stretching vocal gestures for an approximately equal amount of time as suggested by the pitches' similar spacing along the staff) even though Berio's score does not clearly indicate how long each gesture within the 10-second segment should last.

A pattern exists, however, concerning the different durations among the recordings. In general, the sung passages stay closer to the indicated 10-second duration, while the largely spoken passages are executed faster on average, especially in the live recordings. Berio does not specify such a divergence in tempo nor do the studio recordings show it. The timings illustrate the change in speed; the middle sections (mm. 27–32 and mm. 42–44) consist primarily of spoken events and other vocal gestures and—with the exception of the studio recordings—are executed on average faster than the sung sections that precede and follow it.

Perhaps the greatest tour-de-force for the performer are mm. 27–32, as they contain a dense jungle of rapidly changing vocal gestures, more than in any other section of the piece; this section quickly traverses a wide range, requiring frequent register changes, as well as alternating frantically through a host of emotive expressions, ranging from “joyful” to “very tense.” There are also few resting points between segments; instead, the last vocal event spills over the bar line or elides with the first vocal event of the new segment (see Figure 4.5), creating a continuous flow of gestures.<sup>80</sup> Compared to the calm appearance of any sung segment of the previous section (see Figure 4.6), the spoken segments look busy and hectic even on paper.

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<sup>80</sup> Berio connects most of the segments of *Sequenza III* in this way. This interconnectedness among segments frequently makes an accurate timing of the beginning and ending of individual segments within the recordings unfeasible. Thus, for those segments that are elided or whose beginning is otherwise obscured, the times in the timing chart are approximations. Some vocal gestures, however, do coincide with the start of a new segment. The ones that are preceded by a pause before the bar line (for example, m. 1) can be timed more accurately and are represented in the table in bold font.



During this section, Berberian and especially Castellani—in their studio recordings—are closest to the score of any of the performers in the execution of the individual vocal gestures. Berberian’s spectrum of sounds, range, and dynamics during this section is extensive and she effortlessly shifts from one gesture to the next—each one separated by a small break—with a dazzling display of vocal virtuosity. She does, however, miss the pick-up “a” in segment m. 29 (or perhaps it got swallowed in a clumsy tape splice), and takes some artistic freedom, stressing, for example, the briefly sung passage “a few me.” Berberian slows down and lingers on the notes, almost as if relishing or caressing the pitches, glad for a familiar face in a world of strange noises.<sup>81</sup> She sings the gesture beautifully, even though Berio indicates that it should be executed with a certain breathiness.<sup>82</sup> At the same time, Berberian’s dramatic performance style throughout the passage emphasizes those emotions associated with articulation-based events

<sup>82</sup> Schadeberg similarly executes the passage “a few to me” by slowing down and drawing out the sung pitches.



(“tense,” “frantic,” “urgent,” etc.), but the contrasting emotions (“dreamy,” “distant,” “tender,” “languorous”)—those associated with sung events—receive less emphasis.

While in the studio recording Berberian’s interpretation of the passage is accurate in terms of vocal gestures, Castellani’s is meticulous. Every event is precisely executed, every slur observed, every grace note hit (even the pick-up missing in Berberian’s recording), almost as if Berio had deliberately pointed out spots that he felt needed to be correctly executed. Her timing, too, is precise: she does not linger over the first sung event and introduces breathiness, making it sound as alien as the noises surrounding it. The effect disappears as she gets to the second sung gesture, consistent with the score. Her execution of the dreamy “[a]” is pained—not reminiscent of a sigh at all: she rather sustains a whining, breathy “ah,” as if the short sung sections have thrown her off track and she is seeking refuge in the experimental gestures that follow. Yet there is also a sense of playfulness that enters her interpretation. Her rendition of “whining” in segment m. 30, with its nasal quality, for example, evokes the image of a small child confronted with a potentially embarrassing situation: whining with a thumb in the mouth, lips tightly pressed, and shifting uneasily from one foot to the other. Though Castellani’s studio recording has dynamic contrast, she does not go to the same extremes as Berberian, nor does she articulate her gestures as forcefully: one gesture connects fluidly to the next at roughly the same dynamic level and pitch, rather than dropping suddenly in range and jumping from one to the other.<sup>83</sup> Castellani also emphasizes the emotions associated with the sung events, such as “coy” and “dreamy” more than Berberian.<sup>84</sup>

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<sup>83</sup> In her live recording, Castellani is actually somewhat less fluid, especially in the opening laughter, on which she spends quite a bit of time. In contrast to Berberian’s live recording, however, she still follows each vocal gesture as closely as in her studio recording.

<sup>84</sup> This is true for the rest of the piece as well, especially the passage of mm. 13–16.

For the other artists, the accurate execution of the vocal gestures takes a secondary role to the portrayal of emotions. Hirst's interpretation, for example, rushes and elides the gestures together, though one can easily follow her trajectory through the score. The speed at which she takes this section (faster than any other artist) conveys panic and a loss of control, something that seems to fit well with the character markings of the passage ("frantic," "urgent," "very tense," etc.). While Berberian does convey a sense of agitation (especially in m. 34) this sense of urgency and the frantic is missing from her interpretation, largely because of the time she takes between gestures.

Ganz's interpretation again emphasizes what I have termed the ugly side of the sounds. She deliberately chooses diphthongs ([ae], [ei], [ou], etc.) for most of what Berio indicates to be sung as normal vowel sounds ([a], [e], [u], etc.). One could say that her gasping in m. 33, with the actual open "[a]," sounds almost pleasing in contrast to the diphthongs beforehand. In her interpretation—at an average duration of 9.5 seconds per segment one of the longest for this passage—there is a sense of deliberate testing of and playing with all of the different gestures, as if a vocalist were warming up or as if she had come across an unfamiliar piece and was taking her time getting to know it; in particular, her execution of the cough in m. 28 sounds as if she is clearing her throat in anticipation of the sung phrase that soon follows.

Ascher, who for the most part has stayed subdued and almost sluggish in her performance up to this point, suddenly pulls out all the stops.<sup>85</sup> She covers a huge vocal range, rising to the top of her register at the high point of each vocal event, as if a coloratura soprano were warming up. She throws herself into each gesture, sustaining some much longer than indicated, shortening others or skipping them altogether. Of all the artists, she is the only one to introduce new features

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<sup>85</sup> This passage is so different in character from the rest of her interpretation that it almost sounds as if it should not be part of the piece. Whereas at other spots her interpretation seems carefully prepared, throughout this section she seems to let herself completely go.

in the interpretation. For example, on “for [a]” in m. 29 she turns deliberately operatic, singing and sliding through the gesture with a dark vowel sound, while the other artists articulated the passage rather than sang it. Instead of connecting the joyful laughter event that follows as the other artists did, Ascher continues with a punctuated ascent into heights worthy of the Queen of the Night before collapsing again into maddening laughter. The laughter then turns ugly in m. 30, like Ganz, with an extreme nasal “e” sound.

Kammer’s execution of the passage is almost tame in comparison to the dynamic range of the rest of her recording. The relatively soft dynamic with which she performs the laughter and sighing gestures, often breaking up or drifting off into silence, gives the feeling of an inner dialogue, of a person chuckling to and talking to herself or perhaps remembering an amusing incident in years past. In the few moments where she seems to come to herself, as in the sung passages, she becomes extremely aggressive, increasing her dynamic level and forcing out her vowels (such as the “[e]” in “me” in m. 28 or the “[i]” in “sing” in m. 29). When she gets to the gasping gesture in m. 33, her first three gasps are soft, quick, and seemingly internal; the gasp at the end, separated by a pause, however, is loud, forceful, and inflected upward. The effect she creates is almost as if she, having become aware of an observer, turns around, gasps in his face, and then turns away laughing maniacally.

While the performers differ significantly in their approach to the vocal gestures, those passages that are primarily sung are similar overall. There is little deviation from the written words, syllables, or phonemes, and those that occur seem to be aimed towards bringing out the implied words more strongly. The sounds “[na]” and “[ait],” placed right next to each other, for example in m. 24, become the word “night” in every performance but Castellani’s studio recording; instead, she deliberately nasalizes the second sound, seemingly to distinguish them.

One wonders whether Berio deliberately asked her to differentiate in order to be closer in line with his avowed goal not to place two sounds or syllables next to each other that could form a syllable or word.<sup>86</sup>

For the sung events, the most significant differences among performances occur in mm. 38–40 (Figure 4.7). The passage emphasizes the word “before” from Kutter’s text, suggesting that it is of great urgency for the protagonist that help arrive “before night comes”—even though the phrase is not actually completed until almost the end of the piece. Berio indicates the urgency of this passage with his use of emotive expressions (“urgent,” “extremely intense,” “frantic,” “increasingly desperate,” etc.); in addition, based on register position relative to the piece, the pitches he calls for should be the highest of the piece for every performer. M.19 even has a leap from the highest register point to the lowest and back. Furthermore, Berio marks almost every pitch with an accent.

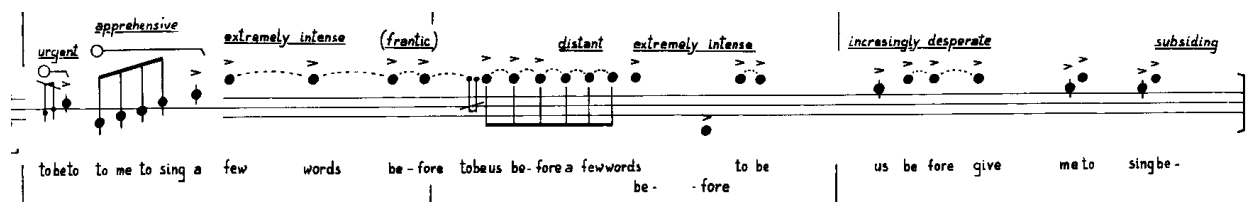


Figure 4.7: *Sequenza III*, mm. 38–40

For each performer this section is clearly the dynamic climax of the piece. Each sings in an extremely high register of varying—but always loud—intensity. The recordings vary, however, in the degree of emotions, panic, and desperation they portray. Hirst again creates the most forward momentum and arguably the most effective portrayal of a frantic and desperate protagonist shouting for the awaited help to arrive “before” disaster strikes. Her iterations are high and loud, and they collide with each other as she barely has time to catch her breath. Such a

<sup>86</sup> Berio, *Two Interviews*, 95.

forward drive and a feeling of panic or anxiety are not evident in Berberian's studio recording. Each pitch is cleanly enunciated and given an appropriate dynamic shading ("distant," for example, is sung softly), but due to her relative calm tempo, the passage lacks a sense of desperation. Her live recording is the same, though in m. 20 she is straining (perhaps in response to the emotive command "increasingly desperate"), as if struggling to sustain and project the high pitch. Castellani's studio recording is, similarly, clearly enunciated and reserved, though her leap down on "before" in m. 19 is deliberately low and strained (in her live recording she almost loses the pitch). She also becomes increasingly breathy in m. 21.

Rather than building intensity through speed, Kammer again puts the listener on edge with the range of her expressions, which at best suggest sobbing, at worst being strangled. She strains to hit the high notes, sliding up and down the pitch she lands on, as if looking for something or someone to grasp. Again her dynamic shading and increased breathiness seem to suggest a turn from addressing the audience (in mm. 18 and 20) to addressing only herself (in the "distant" portion of m. 19). Compared to what might be termed Kammer's "death squeak," Ganz's and Ascher's interpretation of the passage are very much alike. Both seem sluggish, lacking both desperation and forward momentum. Each of the high pitches is deliberately placed, with carefully chosen shades of dynamics, in the manner of a singer practicing how best to project a difficult high note.

After all this frantic activity, the piece ends with a passage of relative calm. Berio relaxes the rigidity of the last three segments by using dotted bar lines (Figure 4.8) instead of solid ones. The singer is thus given latitude to execute these last measures, which are predominantly sung, at a tempo that emphasizes the final message, "allowing before night comes to sing," to resonate with the listener. The change of pace provides a welcome relief from the intensity of the

preceding segments and is observed by every performer. Whatever strain and panic either the protagonist or the singer may have undergone in each recording is resolved in song.

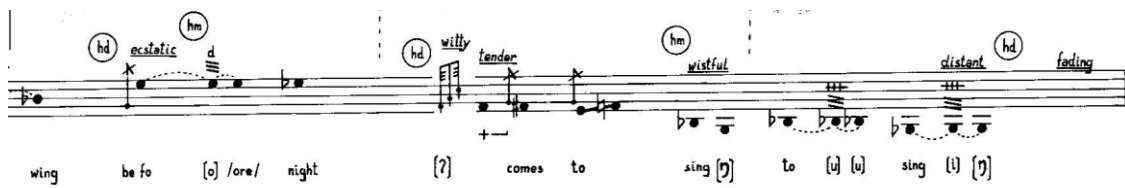


Figure 4.8: *Sequenza III*, mm. 50–52

## Conclusion

When comparing recordings of *Sequenza III*, it is tempting to hold up each recording against the studio performance of Cathy Berberian. Halfyard says: “It would probably be impossible for anyone familiar with the extended vocal repertoire to perform *Sequenza III* without an awareness of Berberian looking over her shoulder (so to speak), given how much of the repertoire was written for her or influenced by her.”<sup>87</sup> However, as Castellani’s studio interpretation shows, Berio introduced changes in the second recording of the piece. While both of the recordings emphasize the execution of the (then) new vocal techniques, Berberian (1967 and 1969) emphasizes them more than Castellani (1994–97 and 2003), who favors the emotive aspect of the work. Likewise, the recordings by other artists fall into groups of those focusing more exclusively on the individual vocal gestures (Ascher [1994] and Ganz [1996]) and those deliberately playing up the emotive aspect and narrative, putting in the center of the stage an actual protagonist instead of a singer (Hirst [1986] and Kammer [2007]). Thus, the recordings suggest an increased focus on the technical aspect of the piece, the extended vocal repertoire, during the 1960s (with Berberian) and the early to mid-1990s (with Ascher and Ganz), while

<sup>87</sup> Halfyard, “Provocative Acts,” 108–09. If Berberian’s seminal performance is a subconscious stumbling block for other performers, this may be a reason why there were not more performances recorded during Berberian’s lifetime.

during the 1980s and late 1990s to the present the emphasis shifts towards emotive expression and narrative (with Hirst, Castellani, and Kammer).

The recordings examined here show that in regard to certain vocal events such as the execution of the muttered phonemes or laughter, those made under Berio's supervision actually seem somewhat less representative of the score than those made by other artists. While Kammer, Hirst, Ascher, and Ganz follow Berio's instructions closely (executing the phonemes as written or including varying shades of laughter), both Berberian and Castellani, though they follow the score for the most part, take artistic freedoms in their studio recordings (interjecting new syllables into their muttering, for example). Perhaps Berio, as the composer, felt he had the freedom to add or change nuances of the work, or to authorize nuances introduced on his singers' initiative, where others felt more obliged to respect the indications in the score. The studio recordings made under the composer's supervision do show a close adherence to the notated time frame of the piece and the 10-second duration of each vocal segment. Especially in Castellani's recordings, the extreme difference in duration of the opening segment (15 seconds in the studio recording and 5 seconds in the live recording) seems to suggest Berio's deliberate influence on the timing in the studio recording.

It is noticeable that the adherence to the 10-second duration is less tight in every live recording examined here including those of performers whose studio recordings were supervised by Berio, possibly because in the heat of the moment the performer rushes ahead or follows through on a figure that is intended to be more drawn out in the score. Furthermore, without the composer looking over their shoulders, the performers may have felt more at ease to adjust the timing to suit their performance style.

In regard to vocal gestures, the performers in general take care to follow the score as closely as possible, even while seeking to project their own interpretation on the piece. In the middle section of Page 2, for example, each artist tries to find her way through Berio's jungle of gestures as accurately as possible while capturing the aspects of the piece she finds most important. For Hirst and Kammer, this seems to be the story element of the piece—the sense of urgency, desperation, and panic that the main protagonist undergoes as night approaches; while Ganz, Berberian, and Ascher, on the other hand, seem to emphasize the abstract, the extended vocal techniques themselves, and delegate any story to the sidelines. In fact, Ascher is the only artist to deliberately ignore (or perhaps better: uniquely interpret) Berio's instructions during mm. 29–32 and thus depart from the norm established by the studio recordings of Berberian and Castellani that others appear to follow more closely. Lastly, Castellani in her studio interpretation strikes a balance, featuring the new vocal techniques while also playing into the emotive aspects of the work, gradually drawing the listener in and making him privy to the protagonist's emotional state.

Berio's different approach to Berberian's recording of 1967 and Castellani's recording of 1998 may have been a logical change reflecting his changing approach to composition from the 1960s to the 1990s. For the composer, the 1960s was a period of experimentation, focused almost exclusively around the ability of Berberian, the exploration of vocal virtuosity, and new vocal and instrumental techniques. In Berberian's interpretation, the individual vocal events are the most significant element, emphasized by dramatic changes in her dynamic and vocal range. Virtuosity and articulated events are at the forefront of the piece, while the projection of emotions and the establishment of a narrative are of lesser importance. By the 1980s, however, Berio had moved away from vocal experiments toward a more lyrical approach to the voice—



favoring linearity and a cohesive whole—reflected in his turn toward folk music on the one hand and opera on the other; as Osmond-Smith says: “The balance between visual and aural components that Berio was to achieve in his major theatrical works of the seventies and eighties was reached by disciplining the gestural urgency of the idiom that he developed during the sixties into a melodic and harmonic continuity.”<sup>88</sup> Castellani began working with Berio during the 1980s, long after he had abandoned the style of the sixties. Indeed, she came to Berio through his operas and perhaps as a result brought his new style into her interpretation of *Sequenza III*. Her approach is linear: connecting each gesture to the next in a cohesive manner, staying away from dynamic extremes, and adding the dimension of emotions to her interpretation.

The emphasis on the projection of emotions in addition to the virtuoso execution of the vocal gesture is also present in recent recordings. Even in recordings that showcase primarily the extended vocal techniques, such as those of Ascher and Ganz, one hears an increasing emphasis and awareness on emotive aspects (such as the muttering and laughter) similar to Castellani’s. Hirst’s recording, however—the first recording of the piece by another artist after Berberian’s of 1967—is the first to emphasize the development of a narrative; perhaps as a deliberate attempt to set her performance apart from Berberian’s. In my opinion, it is the most recent recording—Kammer’s—that takes the narrative idea furthest, in conveying the struggle of the protagonist in performance through the multitude of different expressions and shades being used. Perhaps due to her acting background Kammer seems able to identify with the story (or one possible story) of Kutter’s text and tries to project it onto the stage.

Of course, audio recordings capture only one aspect of the performance. Seeing a performer such as Cathy Berberian present *Sequenza III* on stage would surely add another dimension to one’s understanding of the piece. As Piero Rattalino writes in the foreword to

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<sup>88</sup> Osmond-Smith, *Berio*, 91.

Berberian's CD *Nel labirinto della voce*: "For those who saw her, Berberian's recordings are like family photos that are there to bring back emotions that have been *lived*."<sup>89</sup> Likewise, the review of the premiere performance of the piece suggests that Berberian put on quite a show, vocally and visually for the audience.<sup>90</sup> It is, of course, possible that the subsequent editing and splicing of the final version of both Berberian's and even Castellani's studio recordings may have tended to dispel forward momentum or emotions that may have in fact been present during their performances. Nonetheless, the increasing emphasis on emotion and narrative seems to suggest a shift in the interpretation of the piece; while the 1960s emphasized the extended vocal techniques, the 1980s and onward increasingly emphasize the theatrical, dramatic element. Arguably, the new vocal techniques of the 1960s are no longer as "new" to modern day audiences as they once were, and as a consequence artists have to incorporate dramatic aspects to once again dazzle the audience or make the performance and thus the piece their own. Today's performer must decide whether she identifies with the concept of the piece as a showcase of vocal techniques or with the idea of a protagonist and narrative; as far as Berio's interpretation of the piece is concerned, both seem to be supported by the difference in recording between Berberian and Castellani.

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<sup>89</sup> Piero Rattalino, "The War of the Two Ladies," ERM 136 ADD, trans. Erin Siegels, liner notes.

<sup>90</sup> Schwinger, "Bremer Uraufführung," 235. Emphasis mine.

## CHAPTER 5: CONCLUSION

For performers and scholars alike, the body of recordings available for a piece is an important research tool, as it captures and preserves a partial aural record of the work's diachronic development from the first performance to the most recent. While the examination of authoritative recordings can give us some understanding of the composer's views and approaches to his composition, subsequent recordings document the degree to which artists follow or deviate from elements of the premier recording, the score, and the composer's intentions; in addition, the examined recordings allow inferences regarding influences of one performance on another, as well as whether or not a performance practice has been established.

### **Recordings as Evidence of the Composer's Intentions**

A recording made under the supervision of the composer has a certain authority, particularly when dealing with a new instrument (such as the prepared piano) or the use of a traditional instrument in a new way (voice). For such pieces, the artists do not have a strong traditional point of reference for their execution and the performance thus sets a strong precedent for subsequent interpretations of the work. Especially when the score leaves aspects of performance unclear or unspecified, these recordings become an important document of what the composer may have envisioned.

Cage's table of preparations to the Sonatas and Interludes, for example, is lacking several necessary specifics such as type, size, and material of the preparations used, all of which have the potential to alter the sound of the instrument. Ajemian's 1950 premier recording thus becomes an important source as to the soundscape of the piece, which in her performance is resonant, low pitched, and full. Cage reportedly acknowledged that Ajemian's sound reflected

his original intent.<sup>1</sup> Furthermore, he gives performers who “want to adhere to past models,” the advice to “listen to the recording by Maro Ajemian. . . & then attempt to imitate that preparation.”<sup>2</sup>

Anyone attempting to “imitate that preparation” will find that Ajemian’s sound is likely due to the metal preparations she used. Metal fasteners during the 1950s were made out of iron, whereas today they are made from metal alloys such as aluminum and zinc.<sup>3</sup> Modern-day fasteners made out of metal alloys have a much lighter mass than those made out of iron which, when used in preparation, will alter the soundscape to one higher in register, less resonant, and with increased noise effects (rattling, clinking, etc.). If using modern-day fasteners, then the artist must either compensate for the loss of mass by, for example, adding more nuts or using fasteners of a larger size, or assemble a set of fasteners made from iron, as Tan has done.

The potential for setting a precedent for subsequent performances of a recording made under the supervision of the composer seems particularly strong when the piece is written for the capabilities of a specific performer. Berio’s *Sequenza III*, for example, was written specifically for the voice of Cathy Berberian and her unique ability to quickly traverse a series of complex and rapidly changing vocal gestures. According to Berio, Berberian’s performance set the standard for the piece, so much so that he contemplated transcribing the work for multiple performers when she was not available. Her 1967 studio recording, made under Berio’s close supervision, highlights these techniques in a dazzling display of vocal acrobatics, while the emotive expressions and narrative elements of the text are underplayed.

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<sup>1</sup> Cage, in a conversation with Monika Fürst-Heidtmann on 23 September 1976, confirmed that Ajemian’s preparation “reflects that which he originally intended [das wiedergibt, was er ursprünglich intendierte].” Fürst-Heidtmann, *Das präparierte Klavier des John Cage*, 182, n. 1.

<sup>2</sup> Ajemian, CRI CD 700, 5.

<sup>3</sup> Fürst-Heidtmann’s monograph on Cage’s prepared piano works contains a list of preparations reportedly used by Ajemian in the 1950 recording showing the use of iron screws. It is unclear whether the source of her detailed list is Cage himself, Ajemian, or another document. Fürst-Heidtmann, *Das präparierte Klavier des John Cage*, 184.

However, Berberian's recording is not the only one made under the supervision of the composer. Castellani's studio recording, recorded nearly thirty years later (1994–97), presents a different interpretation of the piece. Though the vocal elements are still an important feature of her performance, she endows them with richer emotional and narrative detail. In addition, her approach to the vocal elements is linear, each gesture being connected to the next in a cohesive manner, and stays away from dynamic extremes. If Berberian's *Sequenza III* is a dazzling collage of striking vocal events that impresses itself on listeners and leaves them in awe of the capabilities of the human voice, Castellani's is an interior monologue that gradually draws listeners in and makes them privy to the protagonist's emotional state.

Castellani's studio recording may document how a composer's approach to a piece can change over time. During the 1960s, the time of Berberian's recording, Berio was preoccupied with exploring the capabilities and limits of the human voice, and perhaps as a result the vocal events are the most significant elements of Berberian's interpretation. By the time of Castellani's recording, Berio's interests had moved towards stage works and a more lyrical approach to the voice.<sup>4</sup> Perhaps as a result, Castellani—who came to Berio through his operas—brought his new style into her interpretation of *Sequenza III*.

When examining the recordings made under the supervision of the composer, it is thus important to consider the historical context of their creation. One of the striking features of the Kolisch's 1937 recording of Schoenberg's Fourth String Quartet—the much slower than indicated tempo of the third movement—may have been partially due to the circumstances of the recording. With little or no time for retakes at the recording session, there may have simply not been a chance to redo the performance at a tempo in line with Schoenberg's metronome mark. It

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<sup>4</sup> Osmond-Smith, *Berio*, 91.

is, of course, equally plausible that the Kolisches' tempo, which certainly gives the most poignant rendering of the third movement's theme, changed the composer's mind.

It does seem to be the case in the examined, authoritative, recordings that if the performers deviate from the score, they do so for the sake of increasing the poignancy of a particular effect. The slow tempo of the Kolisches' opening theme for the third movement is one example, but it also occurs in Berio and Cage. In Berio, both Berberian and Castellani interject additional syllables into their interpretation of the muttering at the beginning of *Sequenza III*. Especially Castellani's introduction of sounds relating to "[s]" in her opening segment sounds similar to a hushed conversation a listener may overhear from afar. Berberian introduces syllables rather than sounds, creating an effect similar to *Visage*, in which Berio recorded Berberian's experimentation with nonsense syllables that, though suggestive of a language, did not in fact belong to any. In Cage, Ajemian deviates from Cage's metronome marks, perhaps to highlight the character of a particular sonata. Her rendition of the first and last sonata, for example, is noticeably slower than indicated, imbuing them with a sense of *gravitas* that perhaps emphasizes their roles as opening and closing movements of the work. Likewise, the rhythmic and sprightly character of Sonata V is brought out even more by her faster than indicated tempo.

### **Elements of Performance Specified by the Composer**

In general, the recordings examined all showed a strong adherence to the score, with tempo being the greatest variant. Interpretative freedom is greatest in the nontraditional pieces—Berio's *Sequenza III* and Cage's Sonatas and Interludes—while the greatest influence of one performance on another can be seen in the most traditional piece, Schoenberg's Fourth String Quartet.

## Authority of the Score

In Schoenberg, the quartets make a deliberate effort to execute the annotations such as *Haupt-* and *Nebenstimme*, articulation marks, and dynamics as indicated by the composer. In Cage, the artists are particularly close to the score in their observation of the pedal marks; and though a successful execution of the appropriate note values, glissandos, dynamics, pedaling, articulation, and rests is directly linked to the manner in which the notes are prepared, each artist makes an effort to execute them in the manner indicated.<sup>5</sup> Even in Berio's *Sequenza III*, the multiple layers of challenges are met by all artists, who execute the vocal gestures in the score as indicated.

In addition, the recordings of Berio's *Sequenza III* suggest that, in a controlled studio environment, the artists focus more closely on the composer's intentions than in the heat of the moment on stage. The tendency to rush, skip, or misread gestures, as well as to mispronounce or obscure text, is most evident in the live recordings examined (Berberian, 1969; Hirst, 1986; and Castellani, 2003), which of course offer no chance to retake or edit the performance. In addition, theatricality seems to be a factor of greater importance, perhaps as a means to capture the attention of the audience. Berberian's live performance, for example, is said by the reviewer of the premiere of *Sequenza III* to have effectively displayed the emotions, in addition to dazzling the audience with her vocal acrobatics.<sup>6</sup>

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<sup>5</sup> Preparations may alter the sustainability of the note to which they are applied. Mutes, in particular when applied to all three strings, may damp the note to such an extent that virtually no sustainability exists, making a legato connection between notes impossible. Likewise, metal preparations can be applied in such a way that the note decays quickly or maintains some sustainability (especially where a sense of fundamental pitch remains). A note with strong sustainability may bleed into a rest or muddle a passage or gesture such as a glissando. The *una-corda* pedal can also affect the preparations, as its use shifts the hammers to strike only strings two and three of the note. Depending on the preparations and their placement, the character of the note can be very different when that pedal is applied. Despite these challenges resulting from the preparations, however, a close adherence to the score can be observed for all artists.

<sup>6</sup> Schwinger, "Bremer Uraufführung," 235.

In some instances, the most recent recordings are even closer to the score than the premier recordings. Kammer's 2007 recording of *Sequenza III*, for example, not only gives an accurate reading of the symbols and phonetics, but also consistently distinguishes between the different emotive expressions and gestures, especially in her shading of the various types of laughter. Tan's 2003 recording of Sonatas and Interludes returns to the soundscape of the premier recording through the use of iron screws and her tempi for the individual movements are also closer in line with those indicated in the score. Likewise, the Aron Quartet's recording (2002–03) executes articulations in a manner similar to that of the Kolisch Quartet, but also is the most faithful with regard to Schoenberg's metronome marks in both the first and third movements.

At the same time, some of the most recent recordings also put an increased emphasis on effects. Kammer's performance, for example, is the most "over the top" in range of dynamics and expressions. Henck's 2000 recording of the Sonatas and Interludes features the most diverse preparation of any performer—at times sounding like a whole percussion ensemble—and the most noise effects. At other times, however, the recent recordings move away from the score as, for example, the Leipzig (1999) Quartet's choice to execute no artificial *ritardandi* but leave the effect to changes in note values.

In general, it is the effect the composer's articulation and dynamic marks seem to suggest for a passage that is most closely followed by the performers, though inflections may subtly differ. The theme of the first movement of Schoenberg's Fourth String Quartet, with its *ff* dynamic and frequent accents, is authoritative and assertive; that of the third movement, with its *crescendo/decrescendo* pairings, quiet and reflective. Likewise, the artists capture, for example, the sense of *gravitas* that stems from the homophonic texture of the first piece in Cage's Sonatas



and Interludes, as well as the meditative character of “Gemini,” i.e., Sonatas XIV and XV, reflected by the walking eighth-note pattern. In Berio, the ghostly character of the opening muttering comes through in a whispered execution of the syllables, as does the sense of frantic urgency of the spoken segment on page two of *Sequenza III*, with its jungle of quickly changing vocal gestures and events.

### Tempo

Of all aspects related to performance, tempo is the most diverse among the recordings. Most notably at indicated speed are the studio performances of Berio’s *Sequenza III*, perhaps because the clearly marked segments, all of ten-seconds’ duration, discourage extreme flexibility in tempo. Especially Berberian’s and Castellani’s studio recordings, made under the supervision of the composer, adhere closely to the ten-second durations, suggesting that tempo and timing were of particular importance for the composer: Berberian’s average duration of 10.1 seconds per segment is almost exactly in line with Berio’s instructions, while Castellani’s 9.5 seconds per segment is only slightly less strict. The studio recordings by other artists—with the exception of Kammer (2007; 8.7 seconds)—also follow Berio closely, with Ascher’s (1994) average duration being 9.7 seconds and Ganz’s (1996) an even closer 9.9 seconds. The live recordings are noticeably faster at an average duration of Berberian (1969) 8.3, Castellani (2003) 8.4, and Hirst (1986) 8.4 seconds per segment; in these performances, the length of each segment can vary widely, with some segments being executed as fast as 4 seconds.

The discrepancies in tempo are greater in performances of Cage, but greatest in Schoenberg. Perhaps performers regard the metronome marks, but especially the verbal descriptors (which occur much more frequently in Schoenberg), as relative rather than absolute indications of tempo, especially when applied to long sections of the piece or movement; that is,

without the rigidity of the 10-second timeframe, the artists may be more likely to take freedoms, resulting in a variety of different tempi.

In Cage, each piece of the Sonatas and Interludes carries its own metronome mark. Over time, the tempi become closer in line with Cage's indications. Prior to Butterley's 1992 recording, for example, Ajemian, Takahashi, and Frémy favor slower tempi than indicated in the score, while those following Butterley (Goldstein, Karis, Berman, Henck, and Tan) play at tempo or faster. The change may be due to the artists' adapting to the altered soundscape of the instrument.

Schoenberg likewise applies metronome marks to the beginning of both the first and third movement, as well as verbal descriptors. The recordings show that most of the quartets choose a tempo slower than indicated for the first movement, but faster than indicated for the third. In the first movement, for example, only the Kolisch (1937) and 1952 Juilliard Quartets begin at ♩ = 152, a metronome mark exactly in line with Schoenberg and resulting in an overall time of 8'05" and 8'07". The LaSalle (1969), 1975 Juilliard, Leipzig (1999), and Psophos Quartets (2006) are slower, resulting in an overall time of 8'48" to 9'03".

In the third movement, the difference is especially pronounced. Schoenberg's two metronome marks are ♩ = 78 and ♩ = 66. The majority of the quartets, the Leipzig, Psophos, LaSalle, 1952 Juilliard, and Arditti Quartets (1993), however, take a tempo between ♩ = 69–74 and ♩ = 54–64 instead, resulting in an overall time of 7'02" and 7'48". Notably, the Kolisch Quartet plays the movement at a much slower tempo than indicated by Schoenberg, at ♩ = 53 and ♩ = 52, taking a total of 9 minutes. By contrast, the Aron Quartet takes the movement at ♩ = 77 and ♩ = 65, almost exactly in line with Schoenberg's instructions, resulting in an overall

length of 6'31". Despite their changes in tempo, however, all quartets observe the relative tempo relationships within a movement or section.

The Kolisch Quartet's strong diversion from Schoenberg's original indication in the third movement, if intentional, suggests that the composer may have changed his opinion, favoring the slower overall pace of the Kolisch Quartet over a faster, less poignant, interpretation. The 1952 Juilliard and the Schoenberg Quartets, however, take the movement at a tempo much faster than the Kolisch Quartet, at ♩ = 69, ♩ = 56 and ♩ = 69, ♩ = 49 respectively, finishing at 7'42" and 8'07". Both quartets coached with Eugene Lehner, a former member of the Kolisch Quartet. It is possible that his influence is reflected in the faster tempi. Reportedly dissatisfied with the original recording, he may have advocated a return to a tempo more closely in line with Schoenberg's original metronome marks. It is thus possible that the faster tempi taken by the Schoenberg Quartet and also the 1952 Juilliard Quartet hint towards a particular performance practice as the result of Lehner's influence.

### **Elements of Performance not Specified by the Composer** Interpretative Freedom

Perhaps because the Fourth String Quartet is the most traditional of the pieces, the performers take little artistic freedom in their interpretations; the discrepancies are confined largely to matters of tempo and occasional changes in articulation. By contrast, they are more pronounced in both Berio and Cage, pieces using new techniques or a new instrument. In Berio, interpretative freedom is shown primarily in the inflections given to the phonetics and text as well as the emotive expressions. Their execution allows for a variety of subtle changes that can alter the overall character of the performance. For example, the artists might explore a darker side in their execution of the expression "joyful" and the accompanying laughter, performing it

as menacing (Berberian), ugly (Ganz), or even evil (Ascher); or they may favor a more literal, lighter expression, performing it as amusing or happy (Castellani, Hirst, and Kammer).

In Cage, interpretative freedom is greatest in the overall soundscapes the artists achieve with their preparations. Despite its detail in matters of placement, Cage's table of preparation is insufficient to account for all the variables that may be introduced in the selection of fasteners and mutes. While the subtleties of each artist's preparation are too numerous to recount here, in general terms Ajemian, Pierce, Frémy, Goldstein, Karis, Henck, and Tan favor preparations that result in resonant sounds of a low register that blend well with the unprepared notes of the piece, while Takahashi, Butterley, and Berman favor preparations that result in less resonant sounds of a higher register that stand in stark contrast to the unprepared notes. In addition, Ajemian, Frémy, Goldstein, and Karis put less emphasis on the noise effects (clinking, knocking, or rattling) created by certain metal preparations (nuts or loose fitting bolts). Takahashi, Butterley, and Henck, on the other hand, emphasize these, while Tan and Pierce move in the opposite direction, favoring a stronger sense of pitch over noise content.

### Artistic Influences

Unlike the amount of artistic freedom, notable influences of one performance on another appear strongest in the case of Schoenberg, while they are more subdued in Cage, and barely perceptible in Berio. In Schoenberg, The Kolisch Quartet's extremely slow tempo for the third movement certainly sets a strong precedent for other quartets to follow. Though none take the movement quite as slow, the 1975 Juilliard and Schoenberg Quartets both come within 30 seconds to 1 minute of the Kolisch's tempo for the movement. The Schoenberg Quartet has a direct connection to the Kolisch Quartet through Eugene Lehner, its former member, who coached with the group. Likewise, Lehner consulted with the newly formed Juilliard Quartet, and

it is also possible that his and Schoenberg's opinions were passed down through Robert Mann, the first violinist of the Juilliard Quartet from 1946 to 1997, that is, during both of the Quartet's recordings.

Furthermore, the congruence between the tempo of the Kolisch and 1952 Juilliard ensemble during the first movement, as well as similarities in matters of articulation and dynamic range, may also suggest a possible influence. The recordings by the Kolisch Quartet were released in 1950, a year before the Juilliard's first recording. As mentioned in Chapter 2, however, the Juilliard Quartet also reportedly consulted with Schoenberg prior to its 1951–52 recording, so the similarities of aspects of its performance may be related either to the composer's input or the coaching of Lehner, or to both.

The recordings of Berio's *Sequenza III* offer no similarly strong evidence that individual performances influenced each other. Even though the artists are faithful to the execution of the score, the inflections given to the symbols and emotive expressions make each recording distinctive. In Cage's Sonatas and Interludes, the variety of factors that influence the preparations and thus overall sound of Cage's Sonatas and Interludes also preclude a strong connection among the recordings, though the recordings seem to suggest a general preference for either the soundscape of Ajemian (in Pierce, Frémy, Goldstein, Karis, Henck, and Tan) or that of Takahashi (in Butterley and Berman).

To recreate the precise effect of another artist, the performer would not only have to know the contents of that performer's set of preparations, but also the position of the preparations on the instrument, which in addition would have to be of the same size and model. The closest connection may be an approximation of the register and certain effects, like an increased resonance, through the use of similar materials and experimentation. Tan's use of iron

screws, for example, allows her to more closely approximate the register and resonance of Ajemian's recording, or rather, the soundscape of the piece at the time of its composition. Tan, who consulted with Cage until the composer's death in 1992, explains that Cage particularly liked her preparations, and though she did not coach the piece with the composer, she feels confident that her soundscape reflects his intentions, likely because she has made an extensive effort to locate materials that would have been available during the time of Cage's conception of the pieces for prepared piano in general. For example, she has preserved old fashioned weather stripping—an item that today is virtually unprocurable—to use in her preparation of *Bacchanale*, a piece that uses it almost exclusively.<sup>7</sup>

### **Recordings as Documents of Performance Practice**

A performance practice emerges when certain features of an interpretation are repeated in subsequent performances and persist across time. Recordings can serve as a tool to capture these aspects and help the scholar document them through time. For Schoenberg, the recordings show the emergence of one strong performance practice, while in the recording history of both Berio and Cage the emergence of two prevalent performance practices can be traced.

#### Performance Practice in Schoenberg

For Schoenberg's Fourth String Quartet, the Kolisch Quartet's 1937 premier recording sets the precedent, and shows a faithful execution of the score in most aspects, including articulation, dynamics, and composer-specific indications such as *Haupt-* and *Nebenstimme*. Throughout the work's recording history, other quartets have similarly tried to stay as faithful to the score. Though individual differences exist, they are not sufficiently diverse to establish separate performance practices. The LaSalle, 1975 Juilliard, Arditti, Aron, and Psophos Quartets

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<sup>7</sup> When asked whether other artists' performances or recordings have influenced her approach to the piece, Tan reports that she does not listen to recordings. Margaret Leng Tan, phone conversation with the author, 30 March 2012.

have a greater dynamic range than the Kolisch, 1952 Juilliard, and Schoenberg Quartets, which lends a heightened feeling of angst. Overall, however, the approach seems to be quite consistently a close reading of the score—except for the Leipzig Quartet with its omission of the indicated *ritardandi*.

The recordings do show a trend in the performance practice of the tempi for each movement. For both the first and third movement, a middle ground—a range of tempi taken by the majority of the quartets—can be established. For the first movement, that range is 8'48" to 9'03" (taken by the LaSalle, 1975 Juilliard, Leipzig, and Psophos Quartets); for the third movement, that range is 7'02" to 7'48" (taken by the 1952 Juilliard, LaSalle, Arditti, Leipzig, and Psophos Quartets). These tempi, however, are not supported by the Kolisch recording and thus presumably Schoenberg himself; rather, the first movement is executed on average more slowly than indicated beginning with the 1969 LaSalle recording, while the third movement is executed faster, beginning with the 1952 Juilliard recording.

#### Performance Practice in Cage

Ajemian's 1950 premier recording of Cage's Sonatas and Interludes is rich in resonant, gong-like sounds of a low register. Her preparations focus less on noise effects (clinking, knocking, rattling) and more on creating a unique blend between the resonance of the prepared notes and the natural resonance of the unprepared ones. Rather than emphasizing the preparations, in a sense turning the prepared piano into a novelty item, she uses the soundscape achieved by them to underscore the melodic line and overall character in each piece.

The resonant quality of Ajemian is traceable in a number of recordings, most noticeably Pierce (1975), Frémy (1980), Goldstein (1994), Karis (1997), and Tan (2003). For all of these recordings, the metal preparations in particular exhibit a strongly resonant quality, though only in

the case of Goldstein and Tan do they approach the low register of Ajemian's recording. As mentioned above, the change may be partially due to the change in metal fasteners available to artists. Tan's reported use of iron screws and even Goldstein's low register seem to show a deliberate attempt to return to the original register of the piece. Tan's recording, however, incorporates more effects than Ajemian and features a greater presence of unprepared notes. Perhaps she deliberately attempted to return to an interpretation that highlighted the melodic content of the work rather than striking preparation-effects.

A second performance practice is documented by the recordings of Takahashi (1965), Butterley (1992), and Berman (1998). All three recordings feature a soundscape of less resonant preparations. The notes tend to decay quickly, have a tinny metallic sound, and are overall of much higher pitch than those of the other artists. In addition, their soundscape shows a greater presence of noise-effects stemming from the preparations, such as rattling, knocking, or clinking.

In general terms, a resonant, low-pitched soundscape for the piece is prevalent in the 1950s (Ajemian) and returns in the most recent recording (Tan 2003). An equally resonant soundscape, though higher in overall pitch, is notable for recordings of the 1970s and 80s (Pierce and Frémy). In the 1960s, Takahashi's recording introduces a less resonant soundscape that returns during the 1990s; however, the 1990s show a variety of interpretations. Butterley and Berman both feature a less resonant preparation, while Goldstein and Karis feature a more resonant one. In addition, the 1990s show an increase in the prevalence of noise effects (Butterley and Berman) that extends into the year 2000 (Henck and, to a lesser degree, Tan).

#### Performance Practice in Berio

For Berio's *Sequenza III*, two different performance practices are documented. The first descends from Berberian's 1967 premier recording, which highlights the extended vocal



techniques, while the emotive expressions and narrative elements of the text are underplayed; the second first appears in Hirst's 1986 recording, the first recording by another artist since Berberian's premier recording. It features a richer emotional and narrative detail, though the vocal elements are still an important feature of the performance. Hirst's performance thus sets the precedent for a narrative and emotive-expression oriented performance practice, which is later confirmed in the 1994–97 recording by Louisa Castellani, also made under the supervision of the composer.

The same two performance practices are perceptible in the other recordings and coexist chronologically. Ascher (1994) and Ganz (1996), like Berberian (1967), showcase the vocal gestures and extended techniques. The artists feature the voice and its capabilities, while using emotional nuances to highlight vocal techniques. Kammer (2007), like Hirst (1986) and Castellani (1994–97) emphasizes instead the emotional and narrative content, while the extended vocal techniques serve as a vehicle for the development of a character on stage.

On the one hand, Berberian's (1967) and Castellani's (1994–97) studio recordings, both prepared under Berio's supervision, suggest that the composer's vision of the piece had developed in the meantime, perhaps reflecting his increasing interest in the composition of music for the stage, music that stands in the Italian tradition of lyric drama. On the other, the two performance practices may be the result of an increasing familiarity of the artists with the extended vocal techniques required in the piece's execution. During the 1960s, Berio's experiments with the capabilities of the human voice produced a number of then unfamiliar and challenging demands for the performing artist. Today, these techniques have become more commonplace in vocal music, perhaps shifting the focus of the work from one featuring the

technical aspects of the vocal events, gestures, and extended techniques to one featuring the emotive expression and narrative.

### **Implications for Twentieth-Century Performance Practice**

When approaching a twentieth-century piece, artists not only have the score to consult for their interpretation but may draw on the performance practice that is documented by recordings of the piece. The value of a recording made under the supervision of the composer is particularly strong; not only does the recording clarify elements of the score, suggests appropriate tempi, and gives an interpretation of the piece, but it establishes a strong precedent for future performances.

Especially for pieces that use a new instrument or use a traditional instrument in a new way, having an authoritative recording can yield insight into the piece's soundscape and artistic elements that may not be readily apparent from the score. In addition, the recording can clarify or validate a composer's vision where it deviates from what is written or evidence a changing approach over time. Artists performing Berio's *Sequenza III* may feel validated in their choice to bring out or exaggerate the emotional detail because of Castellani's performance.

At the same time, the historical context and circumstances of the recordings must be considered. The Kolisches' slow execution of the third movement of Schoenberg's Fourth String Quartet, for example, sets a strong precedent for ensembles wanting to take the movement at a similarly slow tempo, a decision that otherwise might be discounted as going against the composer's intentions. While the Kolisches' recording makes the choice plausible, the circumstances surrounding the recording may warrant a certain caution.

To determine the establishment of a performance practice, it is not just such authoritative recordings that are important. Subsequent recordings document which aspects of the premier recording are carried forward, which differ from the score and the composer's intentions, and

which are introduced as the result of an artist's own interpretation. Taken as a whole, these recordings are the primary evidence of the evolution of a piece's performance practice. When the majority of subsequent recordings validate the premier performance, a single, strong performance practice emerges, as in the recording history of the Schoenberg's Fourth String Quartet. Subsequent recordings, however, may introduce an interpretation that differs substantially from that previously documented. When continued by other artists, it may evolve into a second performance practice of the work, as in the recording history of Cage's Sonatas and Interludes, and sometimes even one that is validated by the composer in a later recording, as in the recording history of Berio's *Sequenza III*.

There is no doubt that for both Berio and Cage the premier recordings set a strong precedent. For both pieces, however, the very next performance committed to tape (Hirst and Takahashi) breaks away from the premier performance rather than validating it. In Hirst, the emphasis shifts from extended vocal techniques to emotional expression and narrative, in Takahashi the resonance of the preparations is lessened and the overall register of the piece is higher. Both Hirst's and Takahashi's performances become the starting point for another performance practice that can be traced through time. Thus, subsequent recordings of a piece can be of similar importance for the development of a performance practice of a work.

Perhaps a possible explanation for two performance practices stems from the relative newness of elements of the piece at the time of its conception. The first performance sets a strong precedent as to the interpretation of the work, especially when made under the supervision of the composer. As the "newness" of the instrument or the techniques fades and the artists grow more familiar with them, the interpretation may evolve. Additional aspects that were neglected beforehand may enter into an artist's interpretation or new facets previously unavailable to the

performers may open up new avenues of sound. When this is the case, a strong possibility exists towards the establishment of two performance practices, one that stays closer to the original interpretation and one that strays away from it. It is here that recordings become an invaluable tool for the researcher. Having recordings of the subsequent performances available for study helps trace the beginnings of these practices to a performer or time period.

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- Taruskin, Richard. *Text and Act: Essays on Music and Performance*. New York: Oxford University Press, 1995.
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- Vila, Marie Christine. *Cathy Berberian Cant'actrice*. Paris: Librairie Arthème Fayard, 2003.
- Weisberg, Arthur. *Performing Twentieth-Century Music: A Handbook for Conductors and Instrumentalists*. New Haven: Yale University Press, 1993.
- Yoshihara, Mari. *Musicians from a Different Shore: Asians and Asian Americans in Classical Music*. Philadelphia: Temple University Press, 2007.

## APPENDIX A: RECORDED PERFORMANCES

### Luciano Berio, *Sequenza III*

Arnold, Tony. *Luciano Berio: Sequenzas I-XIV for Solo Instruments*. Recorded June 1998–May 2004. Naxos 8.557661-63, 2006. Compact disc.

Ascher, Christina. *One Woman Tango*. Recorded 9–12 April 1994. Signum Disc SIG X52-00, 1994. Compact disc.

Berberian, Cathy. *Circles, Sequenza I, Sequenza III, Sequenza V*. Recorded 1967. Wergo WER 6021-2, 1991. Compact disc. Originally released on Wergo WER 60021, 1967[?]. 33⅓ rpm.

\_\_\_\_\_. *Nel labirinto della voce*. Recorded 21 January 1969. Ermitage ERM 136, 1993. Compact disc.

Castellani, Luisa. *Berio: Sequenzas*. Recorded 1994–97. Deutsche Grammophon DG 457 038-2, 1998. Compact disc.

\_\_\_\_\_. *Warsaw Autumn 2003: 46<sup>th</sup> International Festival of Contemporary Music*. Recorded 19–27 September 2003. Polish Music Information Center 6, 2003. Compact disc.

Ganz, Isabelle. *The Complete Sequenzas*. Recorded 11 October 1996. Mode 161/3, 2006. Compact disc.

Heller, Joan. *To the Verge*. Recorded January 1994. Neuma 450-89, 1994. Compact disc.

Hirst, Linda. *Songs Cathy Sang*. Recorded 4 July 1986. Virgin Classics VC 7 90704-2, 1988. Compact disc.

Kammer, Salome. *Salomix-max*. Recorded 15–18 August 2007. Wergo WER 6709-2, 2008. Compact disc.

Schadeberg, Christine. *Berio: The Great Works for Voice*. Recorded 7 July 1995, Mode 48, 1995. Compact disc.

### John Cage, *Sonatas and Interludes*<sup>1</sup>

Ajemian, Maro. *John Cage: Sonatas and Interludes for Prepared Piano*. Recorded 1950. CRI Composers Recordings Inc. CD 700, 1995. Compact disc. Originally released on Dial Records DR 19–20, 1951, 33⅓ rpm.

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<sup>1</sup> Only complete performances are listed. Also see the online John Cage database, which maintains a comprehensive discography of all of Cage's oeuvre. André Chaudron, contact, "John Cage Database," accessed 20 June 2012, <http://www.Johncage.info>.

- Berman, Boris. *John Cage: Sonatas and Interludes for Prepared Piano*. Recorded 11–13 July 1998. Naxos 8.559042, 1999. Compact disc.
- Bertoncini, Mario. *Zeitenwechsel*. Recorded 6 December 1991. Edition RZ Parallèle 20001, 2001. Compact disc.
- Butterley, Nigel. *John Cage: Sonatas and Interludes, Music for Marcel Duchamp, The Wonderful Widow of Eighteen Springs*. Recorded June 1992. Tall Poppies TP 025, 1993. Compact disc.
- Cardini, Giancarlo. *John Cage: Sonatas and Interludes for Prepared Piano*. Recorded May 1994. Materiali Sonori MASO CD 90115, 1999. Compact disc.
- Damgaard, John. *John Cage: Sonatas and Interludes for Prepared Piano*. Recorded 1971. Membran Quadromania 222190-444, 1971. Compact disc, 2004. Previously released on Classico 262. Compact disc.
- Dupuy, Jean Pierre. *John Cage: Sonatas and Interludes*. Recorded 7–8 July 1996. Stradivarius STR 33422, 1997. Compact disc.
- Frémy, Gérard. *Sonatas and Interludes for Prepared Piano*. Recorded 1980. Etcetera KTC 2001, 1987. Compact disc. Originally released in 1983, 33⅓ rpm.
- Goldstein, Louis. *John Cage: Sonatas and Interludes*. Recorded 20 December 1994. Greensye Music 4794, 1996. Compact disc.
- Hinterhäuser, Markus. *Sonatas and Interludes (1946–48)*. 1 September 1996. Col Legno WWE 1 CD 20001, 1996. Compact disc.
- Henck, Herbert. *Locations*. Recorded August 2000. ECM Records 1842/43, 2003. Compact disc.
- Karis, Aleck. *John Cage: Sonatas and Interludes, Composition in Retrospect*. Recorded 12–13 January 1997. Bridge 9081 A/B, 1998. Compact disc.
- Kolundžija, Nada. *John Cage: Sonatas and Interludes, Music for Marcel Duchamp*. Recorded 1981. Diskos LPD-930, 1981. 33⅓ rpm.
- MacGregor, Joanna. *Perilous Night*. 9–11 September 1998. SoundCircus SC 003, 1998. Compact disc.
- Ovens, Tim. *Sonatas and Interludes*. Recorded [?]. CordAria CACD 566, 2002. Compact disc.
- Pierce, Joshua. *John Cage: Sonatas & Interludes for Prepared Piano*. Recorded 26–27 July 1975. Wergo WER 60156-50, 1994. Compact disc. Originally released on Tomato Records TOM-2-1001, 1977, 33⅓ rpm.

- \_\_\_\_\_. *Between the Keys: Microtonal Masterpieces of the 20th Century*. Recorded 1987–88. NewPort Classics NPD 85526, 1992. Compact disc.
- \_\_\_\_\_. *John Cage: A Tribute*. Recorded 23 May 1999. Ants Records AG 06, 2004. Compact disc.
- \_\_\_\_\_. *Live at the DOM*. Recorded 22 April 2000. SoLyd Records SLR 0303, 2002. Compact disc.
- Rosenberg, Daniel. *Sonatas and Interludes (1946–48) for Prepared Piano*. Recorded 8–9 April 1986. VQR Digital VCQ 2001, 1986. Compact Disc.
- Schleiermacher, Steffen. *John Cage: Complete Piano Works*. Vol. 1. Recorded 6–8 December 1996. MDG 6130781-2, 1997. Compact disc.
- Simonacci, Giancarlo. *John Cage: Complete Music for Prepared Piano*. Recorded June 2005. Brilliant Classics 8189/1-3, 2006. Compact Disc.
- Skuta, Nora. *Sonatas and Interludes*. Recorded October 2004. Hevhetia Records HV 0011-2-131, 2005. Compact disc.
- Steinberg, Julie. *Sonatas and Interludes for Prepared Piano*. Recorded December 1995. Music & Arts CD 937, 1996. Compact disc.
- Takahashi, Yuji. *Yuji Takahashi Plays John Cage*. Recorded 26–27 July 1965. Fylkingen Records FYCD 1010, 1997. Compact disc. Originally released on Fylkingen Records FYLP X-101/2, 1966, 33 $\frac{1}{3}$  rpm.
- \_\_\_\_\_. *Sonatas and Interludes for Prepared Piano*. Recorded December 1975. Denon 33C37-7673, 1986. Compact disc. Originally released on Denon X 7059-ND, 1975. 33 $\frac{1}{3}$  rpm.
- Tan, Margaret Leng. *John Cage: The Works for Piano*. Vol. 7. Recorded 1–2 October 2003. Mode 158, 2006. Compact disc.
- Tilbury, John. *Cage: Sonatas and Interludes for Prepared Piano*. Recorded December 1974. Explore Records EXP0004, 2006. Compact disc. Originally released on Decca HEAD 9, 33 $\frac{1}{3}$  rpm.
- Vandré, Philip. *John Cage: The Piano Works*. Vol. 2. Recorded 17–18 December 1994. Mode 50, 1996. Compact disc.
- Wakao, Kumi. *John Cage: Sonatas and Interludes*. Recorded 7 November 1999. Mesostics MESCD-0011, 1999[?]. Compact disc.



## **Arnold Schoenberg, Fourth String Quartet<sup>2</sup>**

Arditti String Quartet. *Arnold Schoenberg 2*. Recorded May–June 1993. Montaigne MO 782024, 1994. Compact disc.

Aron Quartet. *Arnold Schönberg: Streichquartette*. Recorded December 2002–September 2003. Preiser Records PR 90572, 2003. Compact disc.

Juilliard Quartet. *Complete String Quartets of Arnold Schoenberg*. Recorded 1951–52. Columbia Records SL 188, 1954[?]. 33⅓ rpm.

Juilliard Quartet. *Arnold Schoenberg: The Five String Quartets*. Recorded 12 May–4 June 1975. Columbia Records M3 34581, 1977. 33⅓ rpm.

Kohon String Quartet. *Arnold Schoenberg: The Complete String Quartets*. Recorded 1967[?]. Vox SVBX 590, 1967[?]. 33⅓ rpm.

Kolisch Quartet. *Schoenberg String Quartets Nos. 1–4*. Recorded 8 January 1937. Archiphon Arc-103/4, 1992. Compact disc. Originally released on Alco Records ALP 1005, 1950, 33⅓ rpm.

LaSalle Quartet. *Neue Wiener Schule: Die Streichquartette*. Recorded 1969. Deutsche Grammophon DG 419 994–998, 1987. Compact disc. Originally released on Deutsche Grammophon DG 2720 029, 1971. 33⅓ rpm.

Leipziger Streichquartett. *Arnold Schönberg: String Quartets No. 2 & No. 4*. Recorded March 1999. MDG Gold MDG 307 0935-2, 1999. Compact disc.

New Vienna String Quartet. *Arnold Schoenberg: The Complete String Quartets*. June 1967. Philips 289 464 046-2, 1999. Compact disc. Originally released on Deutsche Grammophon SLPM 139 449, 1970. 33⅓ rpm.

Pražák Quartet. *Arnold Schoenberg: String Quartet No. 4, op. 37, Verklärte Nacht, op. 4*. Recorded 27–28 April 2006 and 9–10 January 2007. Praga Digitals PRD/DSD 250 234, 2007. Compact disc.

Quatuor Psophos. *Webern, Berg, Schoenberg*. Recorded November 2005–March 2006. Zig-Zag Territoires ZZT 070502, 2007. Compact disc.

Schoenberg Quartet. *Arnold Schoenberg*. Recorded 29 June–1 July 1991. Chandos Records Chan 9939, 2001. Compact disc.

Wihan Quartet. *Pfitzner und Schönberg: String Quartets*. Recorded April 2000. Arcodiva UP 0028-2 131. Compact disc.

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<sup>2</sup> Also see R. Wayne Shoaf, “The Schoenberg Discography,” last updated 04 June 2006, accessed 27 June 2012, [http://www.usc.edu/libraries/archives/schoenberg/as\\_disco/shoaf.htm](http://www.usc.edu/libraries/archives/schoenberg/as_disco/shoaf.htm).

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Movement I: mm. 1-5, 24-25, 32-33, 64-70, 73-82, 95-98, 148-51, 164-69, 220-22, 266-8,  
270-74  
Movement II: mm. 407-09  
Movement III: mm. 614-18, 664-668

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Sonata II: m. 16

Sonata III: mm. 9–10, 18, 22–26, 29–30

Sonata VII: mm. 1–13

Sonata XIV: mm. 1–5, 46–48

First Interlude: mm. 1–4, 46–48, 51–65, 100

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Symbols for vocal actions from the English instructions to the performer  
Page 1: m. 1–2 (0–20s)  
Page 2: mm. 18–20 (2:50–3:20), m. 27 (4:20–4:30), mm. 29–31 (4:40–5:10)  
Page 3: mm. 38–40 (6:10–6:40), mm. 50–52 (8:10–8:40)

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## VITA

Tina Huettenrauch was born in Markkleeberg, Germany, where she received her first instruction in music at the Rudolf Hildebrand Schule. She came to the United States in 2000 and graduated from Powell Valley High School in Big Stone Gap, Virginia, in 2001. She then attended Millsaps College in Jackson, Mississippi, where she earned a Bachelor of Arts degree in 2005, majoring in music with a concentration in piano performance and graduating *magna cum laude* and with Honors in Music. Her honors thesis “The Extent of Poetic Influences upon the Composition Process: A Comparison of Settings of Goethe’s Poem *Kennst du das Land*,” was supervised by Professor Lynn Raley.

In 2005, Tina entered the graduate program in musicology at Louisiana State University, where she received the Master of Music degree with a minor in music theory in 2008. Her thesis, “The *Mise en scène* of Rossini’s *Le Siège de Corinthe* and the Conventions of Staging at the Paris Opéra in the 1820s” was supervised by Andreas Giger. At LSU, Tina has served as a teaching assistant in both music history and theory. In 2009 she served as instructor of record for MUS 2054. Professionally, she has presented at regional and national meetings of the AMS and served as Student Representative of the Chapter in 2007 and 2008. Tina is a member of Mu Phi Epsilon music honorary and Phi Beta Kappa.