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SPEECH AND TEXT IN COMPOSITIONS BY JOHN CAGE, 1950-1992

by

MARC THORMAN

A dissertation submitted to the Graduate Faculty in Music in partial fulfillment of the requirements for the degree of Doctor of Musical Arts, The City University of New York

2002

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1/8/02
Date

Joseph Straus (PR)
Joseph Straus, Chair of Examining Committee

1/8/02
Date

David Olan (PR)
David Olan, Executive Officer

Philip Lambert

Philip Rupprecht

Ellie Hisama

James Pritchett
Supervisory Committee

THE CITY UNIVERSITY OF NEW YORK

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Abstract

TEXT AND SPEECH IN COMPOSITIONS BY JOHN CAGE, 1950-1992

by

Marc Thorman

Advisor: Philip Lambert

Cage's spoken-text compositions synthesize writing, composition, and visual elements to produce texts that function as musical scores for speakers. Other works employ speech as indeterminate compositional material. From the structured syntactic spoken-text compositions of the early 1950's to the anarchic, nonintentional works from 1970 to 1992 Cage invented a multitude of compositional techniques to accomplish his goal of "having nothing to say and saying it." This paper offers a comprehensive overview of spoken-text compositions and other speech-based works by John Cage, including several late unpublished works, to provide a full view of his works with text and speech. Over twenty individual pieces from the period 1950 to 1992 are extensively analyzed, focusing on compositional techniques and methodologies in the context of Cage's changing aesthetic and philosophical outlook, and in relation to his compositional developments in other genres.

The first part of the paper discusses works from three successive compositional phases from 1950 to1965: composition based on proportional rhythmic structure, composition using chance techniques, and indeterminacy in composition and performance. The second part examines works from 1970 to1992 when Cage abandoned syntax and developed new means of composing with text and speech: linguistic fragmentation and the mesostic poetic form. Both parts endeavor to establish the compositional basis and character of Cage's texts and to view his works for speakers as performance pieces.

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To my father

George Thorman
September 10, 1912 - May 19, 2001

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INTRODUCTION

"As I see it, poetry is not prose simply because poetry is in one way or another formalized. It is not poetry by reason of its content or ambiguity but by reason of its allowing musical elements (time, sound) to be introduced into the world of words."[1]

This short comment by John Cage sums up the fundamental principles and concerns of his work with spoken text in composition. There are four aspects to his texts, each influencing and interpenetrating with the others: the actual content of the text; compositional methods applied to text creation; means of notating rhythmic and other performance dimensions in spoken-text composition; and performance. These cannot be clearly separated, for Cage's texts often synthesize writing, composition, and visual elements into a performance score, and, in turn, Cage's experimental approach to performance often influenced the other factors. Cage's search for ways to produce texts without specific meaning or intention was the major philosophical force behind the changes that took place in his compositional techniques in regards to text, the representation of text, and its realization.

Cage's work deals with basic important questions. On one hand, his writings deal with issues of "meaning" and his goal was to create texts with nonintentional ideas. On the other hand, he wished to go beyond any meaning at all and to explore speech as a musical phenomenon separate from idea. In both cases the philosophy of anarchy is the principle

[1] John Cage, *Silence* (Middletown, CT: Wesleyan University Press, 1961), x.

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that lies behind Cage's approach to text composition. In freeing words from meaning and experimenting with the nature of speech in performance Cage created an amazingly varied and prolific body of work. This paper focusses on the compositional methodologies Cage adopted, adapted, and invented to create spoken-text works and how these helped to achieve his aim of "having nothing to say and saying it."

This paper offers a comprehensive view of spoken text in Cage's works from 1950 to 1992 in order to provide a fuller and more detailed appraisal of this genre than has hitherto been available. In addition to taking a more comprehensive view than previously attempted, this study also includes a wider variety of genres. The main focus is on Cage's spoken-text compositions, that is, works in which compositional procedures are applied to text, and visual aspects of the text serve as performance indications. This study considers both solo pieces and works that combine spoken-text compositions with other performance media. Text composition in vocal works, and works with untexted spoken material are also discussed when relevant. Previous analyses of Cage's writings have approached these works in terms of poetry, or have been concerned with content. The focus of the present analysis is on compositional aspects. Over twenty individual works are analyzed in depth. Many of these pieces, both old and new, have not received any extensive discussion in regard to compositional procedure. Several later works remain unpublished or widely unavailable and are discussed here for the first time. These include *Muoyce II*, *Letters to Erik Satie*, and *Stüfen*. In such cases, Cage's manuscripts and typescripts made available by the John Cage Trust have been examined to provide the first published attempt at understanding the compositional procedures and performance aspects involved.

The approach in this paper is to determine specific compositional procedures applied to text within the context of Cage's changing aesthetics and philosophy. Cage's compositional means and aims often paralleled or overlapped developments in other compositional genres, in some cases anticipating concepts and methodologies that later

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appear in works in other media. This paper also places his spoken-text compositions and other works with speech in the context of his overall compositional development and brings to light the influence of Cage's work in spoken-text composition on his work in other areas, and vice versa.

Individual spoken-text works from each period are analyzed in depth to demonstrate Cage's compositional procedures in spoken-text compositions and how these changed over time. Cage's compositional procedures are designed to allow visual aspects of the text to indicate or determine performance aspects. The question that Marjorie Perloff poses in regard to a printed version of a late poem can be applied to Cage's spoken-text compositions as a whole: "What status ... does the printed text have? It is, we might say, a score that must be activated, an incomplete verbal-visual construct that needs to be 'audiated.'"[2] Certainly Cage, who performed nearly all of the spoken-text compositions, considered a "silent reading" of the works to be incomplete. His often-repeated instruction that texts are "to be read aloud" and his insistence that the listener's *experience* during a musical performance is qualitiative different from an intellectual understanding of the concepts behind a work testify to the importance of the aural aspects of spoken-text compositions. Accordingly, a third perspective of this paper is the performance dimension of the spoken-text compositions.

This paper is divided into two parts that deal with Cage's text works that are mostly normatively syntactic and those that he described as "nonsyntactic" text works, respectively.[3] Cage's rejection of syntax in most of his writings after 1970 was a major

[2] Marjorie Perloff, "John Cage's 'What You Say...'," in *SoundStates: Innovative Poetics and Acoustical Technologies*, edited by Adalaide Morris (Chapel Hill: The University of North Carolina, 1997), 147. The mesostic, a poetic form akin to the acrostic, was invented by Cage. It is described in Chapter 4, below.
[3] Jackson Mac Low points out that "there is some question...as to whether any arrangement of language elements, no matter how different from normative syntax, doesn't in itself constitute a new, non-normative syntax." For this reason, Mac Low refers to these works as "asyntactical." (Jackson Mac Low, "Cage's Writings up to the Late 1980s," in David W. Bernstein and Christopher Hatch, *Writings through John Cage's Music, Poetry, and Art* (Chicago: The University of Chicago Press, 2001), 211-12). The more familiar term is retained in this paper, with Mac Low's caveat in mind.

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breakthrough that led to fundamental changes in his approaches to textual content and performance of spoken-text works, and to the creation of new poetic forms. The first part of the paper shows Cage's development toward this point and proposes that the compositional techniques for the later works, while refined and varied, were established in the earlier period, and that Cage had already discovered many of the musical aspects of speech that inform the later works. The second part deals with major works from the second "period" in Cage's spoken-text composition. These are divided into works that arise from avoiding syntax through the fragmentation of language into its constituent elements, works that use mesostics[4] as the textual material of compositions, and two mixed media works that fit into neither category. New compositional techniques and performance styles are examined in relation to the principles and methodologies that continued to form the basis of Cage's work with spoken text.

Part I is chronologically organized to follow the adoption and accrual of compositional principles and techniques that form the basis for the later, nonsyntactic works. These include establishing correspondence between time and spatial notation as a means of controlling tempo and large-scale rhythmic form in spoken-text work, and morphology based on alternating speech and silence as a means of organizing spoken-text compositions, as described in Chapter 1. Chapter 2 discusses chance-based compositional techniques in Cage's spoken-text compositions from 1952 to 1958. This period established the basic means of creating nonintentional discontinuity through text fragmentation and recombination that Cage was to return to and expand on throughout his career. Pairing independent performance parameters by chance resulted in a complex performance style.

[4] The mesostic is a poetic form akin to the acrostic and diastic in which the single letters of a word or name are used as a "string" and form the basis of the poem's structure. The main difference is in the format of the text: in acrostics the string runs down the left margin, in diastics the string letters appear within the vertically oriented text, and in mesostics the string runs down the center of the page with text added horizontally on one or both sides of the string letter. The form allows the poet to write new text or to construct a textual collage using one or more source texts. This writing discipline and poetic form, which Cage invented in the early 1960's, is described in detail in Chapter 4.

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Cage also brought speech into mixed-media events, creating a new form of theater and a new function for speech as an independent component in simultaneous performances with other media.

Chapter 3 traces the development of indeterminacy in Cage's works for speaking voices from 1955 to 1965. Important developments during this period are the combination of speech and electronic technology; composition with multiple speaking voices; and indeterminate compositional processes and performance aspects. This chapter also discusses three song texts that together embody the main techniques for creating nonsyntactic texts that Cage was later to apply to spoken-text works.

Part II begins in 1969 when Cage returned to and expanded on the earlier nonsyntactic song texts and created nonsyntactic works in visual and print media. These were the immediate precursors to Cage's break with syntax in works conceived as spoken-text compositions and composed for speakers. Inspired in large part by the writings and anarchistic philosophy of Thoreau, Cage created nonsyntactic texts to "demilitarize" language and "musicate" poetry. Cage pursued two (often intersecting) paths to create the anarchic, nonintentional texts/speech works from 1970 through 1992. Fragmentation of language into its constituent elements—phrases, words, syllables, phonemes—and chance-based recombination of linguistic fragments work together in varying combinations in many of Cage's most radical and important works from this period. Typography often assumes more complexity and importance as notation. Cage's second means of overcoming intentionality and the tyranny of conventional syntax was the invention of the mesostic. Chapter 4 describes the development of these two major modes of creating nonsyntactic, nonintentional texts for vocal performance.

Chapter 5 discusses compositional methods of breaking down language into elemental parts, and chance-based techniques for constructing textual collages. *Mureau* (1970) led Cage in a completely new direction in his spoken-text works, away from syntax

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and toward an investigation of the musical qualities latent in language when it is free of language-based meaning. *Empty Words*, which followed in 1973-74, is a systematic exploration of this process on an enormous scale. *62 Mesostics Re Merce Cunningham* (1971) combines linguistic fragmentation with the mesostic form and explores the extremes of phonetic pronunciation free of conventional meaning. *Muoyce II* and *One*^{12}, both composed in 1992, are the last of this group of works. The former is unpublished and has rarely been performed. This piece is examined for its unique characteristics in relation to related works in this group. *One*^{12} has likewise not been included in discussions of Cage's spoken-text works. It is suggested that the improvisation called for in this late piece from the "number series" can be related to an early time-bracket score for voice.

Cage explored the possibilities of multiple speaking voices to a far greater extent in the second major period of spoken-text composition. Chapter 6 discusses two such works that deal in different ways with issues of social control and anarchy. *Les Chants de Maldodor pulvérisés par l'assistance même* (1971) brings questions of social organization and resistance into the realization of the piece by allowing the participants to decide crucial aspects of how the performance is to be realized. The compositional process of "erasing" parts of a source to create a new work is an important aspect of this piece, and is closely related to similar procedures in Cage's musical compositions as well as in his later text compositions. *Lecture on the Weather* (1975) is a mixed-media statement on revolution and anarchy, based on Thoreau's philosophy and writings. In this work multiple speaking voices are part of a theatrical event that includes recordings, film, and lighting.

Chapter 7 discusses late works in which mesostics serve as textual material in compositions for multiple speaking voices. In *Letters to Erik Satie 1 and 2* (1978) Cage employs the mesostic form to generate ostinatos of single letters which are then vocalized, recorded, looped and overlayed. These unpublished works are analyzed in terms of compositional decisions and techniques involved in the planning and construction of the

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mesostics. I also attempt to reconstruct Cage's performance of *Letter to Erik Satie 2*, and suggest alternative realizations of the score. Digital technology applied to text composition became the means of creating most of Cage's late mesostics. Two texts composed with the aid of computer programs became the material for compositions for multiple speaking voices. The earliest are the group of tape pieces created between 1985 and 1987 that use Cage's performance of the eighteen mesostics of *Writing through the Essay: On the Duty of Civil Disobedience* as material for digital voice resynthesis. In particular, the discussion explores what role choice-based decisions played in determining the final form of *Voiceless Essay*, the accompaniment for Cunningham's *Points in Space*. *Stüfen: an Autoku for Siegfried Unseld* is an unpublished composition from 1989 for any number of performers. This work is described as an example of the musical aspects inherent in autoku poetic form, a variant of the mesostic, aspects that Cage began to deploy in extended works for multiple speaking voices during this period.[5]

By providing a fuller picture of the range and scope of Cage's work with text and speech in composition I hope to show how basic underlying philosophies concerning language and speech are demonstrated by specific compositional methods and techniques. In the process, questions concerning what role meaning has in different compositions, and in what ways speech can be considered music are addressed.

[5] The autoku is a version of the mesostic which uses an entire source text as the vertical string of letters. For each letter in the string a textual fragment containing the corresponding letter is located in the source text and used for that verse.

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PART I. STRUCTURE, CHANCE, AND INDETERMINACY IN SPOKEN-TEXT COMPOSITIONS, 1950-1965

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CHAPTER ONE

STRUCTURE AND CONTINUITY IN EARLY SPOKEN-TEXT COMPOSITIONS

Both *Lecture on Nothing* (1950) and *Lecture on Something* (1951) share with Cage's other compositions of this period the practice of predetermining a rhythmic structure and articulating that structure by content, i.e., sound and silence. However, the method of organizing *content* in the lectures, being based on language and syntax, is far different from procedures Cage used in non-spoken compositions during this period. This is clear from his 1948 lecture, "Defense of Satie," in which he compares language to material and syntax to method,[1] and also by the syntactic nature of the texts themselves. Language and syntax impose their own method on word-to-word continuity.

The following sections analyze the compositional processes involved in these two works, and show how Cage's changing compositional approach to structure and text results in two quite different experiences in structural clarity, recitation rate, and the use of silence.

1. *Lecture on Nothing* (1950)

In the foreword to *Silence* John Cage discusses his work as a writer and lecturer through 1961. He draws a distinction between his "conventional" and "unusual" lectures. The former are those "written to be printed—that is, to be seen rather than to be heard," or

[1] John Cage, "Defense of Satie," in *John Cage*, edited by Richard Kostelanetz (New York: Da Capo Press, 1970), 77-83.

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those "composed and delivered as conventional informative lectures." The latter "have been unusual in form ... because I have employed in them means of composing analogous to my composing means in the field of music. My intention has been, often, to say what I had to say in a way that would exemplify it; that would, conceivably, permit the listener to experience what I had to say rather than just hear about it."[2]

Lecture on Nothing (1950) is the first of these "unusual" lectures, since, as Cage explains, "it was written in the same rhythmic structure I employed at the time in my musical compositions."[3] The musical aspects of the lecture lie in the rhythmic formalization of text and speech.

The rhythmic structure of *Lecture on Nothing* is predetermined as in Cage's works beginning in 1939 and extending through the early 1950's. In this compositional methodology, the rhythmic structure is determined using square root relationships so that the proportions of the macro and micro structural levels are identical. The macro rhythmic structure consists of five large parts in the proportion 7, 6, 14, 14, 7, using twelve lines of text as the basic unit. The micro structure uses the same proportions to shape phrases and sentences, using "measures" as units. Four measures occupy each line.

Figure 1 shows the third twelve-line unit of the second large part of the lecture.[4] The text is to be read horizontally from left to right. Each line is divided into four "measures" separated by spacing, so that in the first line in the figure, the first measure contains the words "Now begins the" and the second measure contains the words "third unit." The words "second part" begin the third measure (with "of the" acting as an anacrusis). The fourth measure of this line is represented by a period in the text. The second line in Figure 1 begins with three measures of silence, which complete the seven-measure division of this microstructural part of the unit. (The bracketed number [7], and the other bracketed

[2] John Cage, *Silence*, ix.
[3] Ibid.
[4] See Cage's introduction to the lecture and the original page layout in *Silence*, 109.

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numbers in the figure, have been added to indicate the number of measures elapsed for each such division and to show the proportional scheme as applied to the microstructure.) The following six-measure microstructural part of the unit is comprised of three measures of text ("now the"/ "second part of that"/ "third unit"), one measure represented by a period, and two measures of silence. The total number of measures for this microstructural part is shown by the bracketed number, [6]. The twelve-line unit is completed by three more microstructural divisions, two of fourteen measures each, and a final segment of seven measures. Notice that the fifth, sixth, tenth, and twelfth lines in the figure are blank, representing silent measures that are counted in the total of each microstructural part.

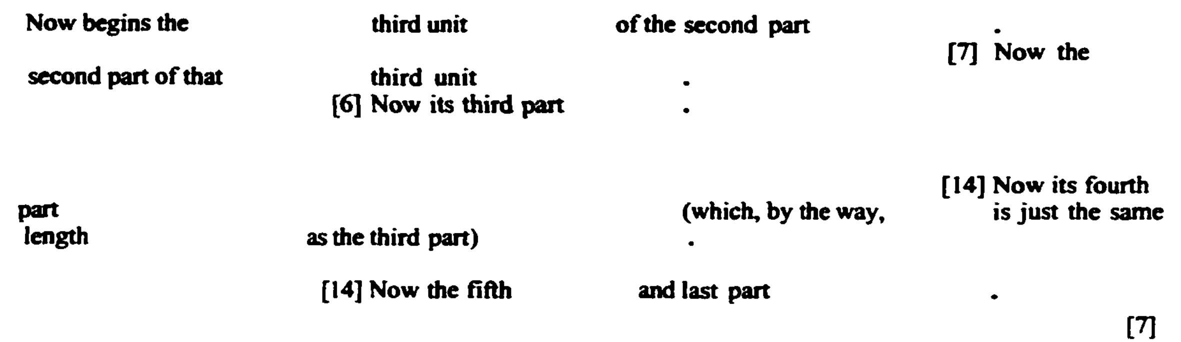

Figure 1. Microstructural Proportional Divisions in *Lecture on Nothing*

The microsctructural proportions shown in Figure 1 are replicated on a macrostructural level in the lecture itself: seven twelve-line units comprise the first part of the lecture, six units the second part, fourteen the third and fourth parts, and seven the final part. Throughout the lecture Cage uses various means of emphasizing proportional

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durations and clarifying structural sections. The treatment of text helps express the macro structure in several ways. Each large part is concerned with one of the compositional elements discussed (the fourth part is an exception, but is nevertheless a distinct section). Frequently, as shown in Figure 1, structural boundaries are "announced" in the text to make the structure explicit, or structural segments are separated by a line of silence. At the micro level, the proportional structural parts often correspond to phrases or complete sentences in the text (or even incomplete parenthetical phrases), as can be seen in Figure 1; but there is a suppleness and variety of phrasing that avoids any rigid or consistent correspondence. This multi-level treatment of rhythm is akin to traditional poetic units. Macrostructural parts correspond to cantos, twelve-line units to stanzas, microstructural parts to verses, and measures to feet.

Differences between traditional poetic form and Cage's text arise from the employment of a duration-based rhythmic structure. Since the proportions of the structure are of exact length, text and speech must be measured by clock time. It is the imposition of measured time on written material that makes *Lecture on Nothing* poetic, by Cage's definition, and also compositional. Timing applied to speech is carried out on smaller levels as well. On the level of the line Cage is able to control tempo and phrasing and to include silences by placing text in the temporal grid of the "measures". On the small-scale, word-by-word level, rhythms are created by speech patterns rather than poetic meter. Words and syllables are not measured by proportional lengths as in poetic meter or metric subdivisions. Cage realizes that the rhythms of speech are too subtle and elusive to be represented in exact rhythmic notation. Even on the metric level Cage allows the performer flexibility: a reading "should not be done in an artificial manner (which might result from an attempt to be too strictly faithful to the position of the words on the page), but with the *rubato* which one uses in everyday speech."[5] This of course assumes a language-based

[5] Ibid.

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type of speech whose rhythms, phraseology, and cadential aspects are governed by syntactic convention, so that time is imposed on the English language without fundamentally disrupting its rules.

This flexibility of phraseology within a rigid time structure had been part of Cage's outlook in musical compositions for many years. In his 1944 article "Grace and Clarity" he cites Coventry Patmore's comments regarding "a perpetual conflict between the law of the verse and the freedom of the language" in poetry. Although Cage offers this passage as an analogy of how time structure relates to dance movement (and , by extension, how meter relates to melodic phraseology), Patmore's view speaks directly to the way in which spatially indicated timing and verbal phraseology are related in *Lecture on Nothing:* "the best poet ... is he...who, in his verse, preserves everywhere the living sense of the metre, not so much by unvarying obedience to, as by innumerable small departures from, its *modulus.*"[6]

Proportional notational systems applied to text in order to govern recitation timing can be found in all of Cage's spoken-text compositions through 1965, reappearing in most of his spoken-text compositions from 1970-1992. Among other factors, it is through relating typography to performance that Cage's works in this area achieve compositional significance.

The substance of *Lecture on Nothing* explains Cage's compositional principles, and in many ways follows the ideas in "Defense of Satie."[7] Both view composition as the synthesis of four elements: structure, form (continuity), materials, and method. Structure—the division of the whole into parts—is an objective element, determined independently of content. It can "be thought out, figured out, measured. It is a discipline

[6] Coventry Patmore, *Prefatory Study on English Metrical Law* (1879), quoted in John Cage, "Grace and Clarity," reprinted in John Cage, *Silence*, p. 92.
[7] Cage, "Defense of Satie," 79-81.

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which, accepted, in return accepts whatever."[8] "It is like an empty glass into which at any moment anything may be poured."[9] Continuity is the succession of events. Events are comprised of musical materials, and ordered by compositional method.

Prior to 1950, Cage viewed continuity and its constituents—material and method—as matters of personal taste and means of expression. With the *String Quartet*'s use of gamut and canon, however, he achieved a disciplined, impersonal approach both to material and method, similar in effect to the disciplined character of rhythmic structure.[10] Continuity thus became objective, a matter of disinterestedness. By 1950 Cage had renounced expression as a compositional goal. Composition became instead a means of "freeing" sounds by creating an environment in which sounds could occur unmediated by the composer's intentions or taste in regard to the ordering of material or to the material itself. What remained the same in his thinking was that the function of content is to make audible the proportions of the independently determined rhythmic structure.

Many passages in *Lecture on Nothing* explain and demonstrate Cage's new aesthetic of disinterestedness in regards to continuity. At one point he addresses the issue directly: "What I am calling poetry is often called content. I myself have called it form. It is the continuity of a piece of music. Continuity today, when it is necessary, is a demonstration of disinterestedness. That is, it is a proof that our delight lies in not possessing anything. Each moment presents what happens."[11] This instantaneity of form is brought about by juxtaposition of ideas that are seemingly unrelated, and the spontaneity of ideas. Thus, Cage writes: "Most speeches are full of ideas. This one doesn't have to have any. But at any moment an idea may come along."[12] "If it does, let it. Regard it as something

[8] Cage, *Lecture on Nothing*, 111.
[9] Ibid., 110.
[10] James Pritchett originated and convincingly expounds upon this interpretation in his book *The Music of John Cage* (Cambridge: Cambridge University Press, 1993), 48-60.
[11] Cage, *Lecture on Nothing*, 111.
[12] Ibid., 119.

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seen momentarily, as though from a window while traveling."[13] Frequent use of present tense, self-reference, and the annunciation of structural divisions keep listeners aware of being within the time structure *at that moment.*

The "emptiness of material" that Cage achieved in *String Quartet* also has a counterpart in *Lecture on Nothing.* A major function of speech in the lecture is simply to express temporal relationships, so durations of speaking (or not speaking) are crucial, whereas the "content" (what is said) and "ambiguity" (how it is said) of conventional poetry are irrelevant. As Cage states in the lecture, "it makes little difference what I say or even how I say it."[14] Thus the lecture begins, "I am here, and there is nothing to say." Similar passages throughout the lecture emphasize what Cage referred to as the "emptiness" of material. Events often have no expressive goal, no direction, and no intentional relationships.

Instantaneity of form and emptiness of material in *Lecture on Nothing* reach their full impact in the fourth large unit of the talk, in which twenty-four lines are repeated at the same recitation rate, with small silences intervening at the same places, seven times (varying only with the reference to where "we are" in the rhythmic structure). This fourth part interrupts the tidy large-scale continuity of discussing different aspects of composition in each section, and creates a still, meditative section in the lecture. The first two units are shown in Figure 2.

Literal repetition of an entire passage of text on the scale demonstrated in this section of *Lecture on Nothing* is rare in Cage's text compositions. Here it is intended to create a specific effect related not only to the meaning of the text itself but also to the perceptual processing of extended repetition. Essential to the experience is time, and therefore sound (or silence). The effect cannot be achieved simply by looking at the text or

[13] Ibid., 110.
[14] Ibid., 112.

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Here we are now			at the beginning
	of the fourth large part		of this talk.
More and more		I have the feeling	that we are getting
nowhere.	Slowly	,	as the talk goes on
,	we are getting	nowhere	and that is a pleasure
.	It is not irritating	to be where one is	. It is
only irritating	to think one would like	to be somewhere else.	Here we are now
,	a little bit after the	beginning	of the
fourth large part		of this talk	.
	More and more	we have the feeling	
	that I am getting	nowhere	.
	Slowly	,	as the talk goes on
,	slowly	,	we have the feeling
	we are getting	nowhere.	That is a pleasure
	which will continue	.	If we are irritated
,	it is not a pleasure	.	Nothing is not a
pleasure	if one is irritated	,	but suddenly
,	it is a pleasure	,	and then more and more
	it is not irritating		(and then more and more
	and slowly	).	Originally
	we were nowhere	;	and now, again
,	we are having	the pleasure	
of being	slowly	nowhere.	If anybody
is sleepy	,	let him go to sleep	.[15]

Figure 2. Fourth Large Part of *Lecture on Nothing* (Excerpt)

[15] The entire passage appears in Cage, *Silence*, 118-24.

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reading silently. Recitation of the complete set of repetitions, following the tempo and pauses indicated in the original page layout, allows the listener to "experience" the idea "rather than just hear about it." Cage creates stasis and stillness through the repetitious nature of the text and its "irrelevance" to anything outside its own content.

The reading both expresses an idea and negates the idea of "idea," as the words become more and more the process and the experience they describe. Following the recitation of the entire passage, Cage does something remarkable. He remains silent for over a minute and a half (twenty-four blank lines), casting the listener into stillness itself. Meaning, repetition and duration-based rhythmic structure function together to demonstrate Cage's motto: "I have nothing to say and I am saying it and that is poetry as I need it."[16]

The stillness of this passage is influenced by Cage's studies with Gita Sarabhai and the writings of Ananda Coomaraswamy and Meister Eckhart. All stress the need for detachment from the self to acquire inner quietness in order to be open to "divine influences."[17] The Zen influence from Cage's contact with Daisetz Suzuki is obvious in the lack of specific goal or direction embedded in the text, and the a-logic that suffuses the entire lecture.

The effect of stasis in the fourth large part of the lecture is achieved partly through repetition/variation within as well as among units. The principle of repetition as variation, derived from Schoenberg musically and from Gertrude Stein literarily, recurs in many of Cage's later spoken-text compositions wherein repetition of words and phrases often functions as a unifying factor, both motivically and morphologically. The ensuing period of silence is a rhetorical device that comments on preceding text, but has larger implications. The following year, in composing the companion piece *Lecture on Something*, Cage takes

[16] Cage, *Lecture on Nothing*, 109.

[17] See Margaret Leng Tan, "Eastern Influences on Cage," in *John Cage at Seventy-Five*, edited by Richard Fleming and William Duckworth (Louisburg, PA: Bucknell University Press, 1989), 40-46; and Pritchett, *Music of Cage*, 45-47.

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as a basic morphological principle the duality of speech and silence, rather than clarity of rhythmic structure.

2. *Lecture on Something* (1951)

The subject of the lecture is the acceptance of silence (nothing) as the wellspring of all possibilities (somethings). As in the previous lecture, *Lecture on Something* is composed in such a way that its recitation allows the listener to experience the ideas presented in the text. But the two lectures offer two very different experiences. The rhythmic structure of *Lecture on Nothing* is expressed almost entirely by text; with one exception, silences occur at the micro level of the phrase or sentence. The structure of *Lecture on Something,* on the other hand, is expressed almost entirely by large-scale alternations of silence and text, and seems to be structured in such a way as to move towards a proportionately greater amount of silence. Silence is used on a scale not attempted previously.

This tendency towards and acceptance of silence is the basic subject of the lecture, and expands on the changes in Cage's views of continuity, materials, and method that are present in *Lecture on Nothing.* Most of the lecture is concerned with Morton Feldman's music and the implications it held for Cage: "[Feldman] has changed the responsibility of the composer from making to accepting. To accept whatever comes regardless of the consequences."[18] Continuity thus becomes a matter of "disinterest and acceptance. No-continuity simply means accepting that continuity that happens. Continuity means the opposite: making that particular continuity that excludes all others."[19]

In terms of material, Feldman's music represents multiplicity and freedom. "There is no end to the number of somethings and all of them (without exception) are

[18] John Cage, *Lecture on Something,* in *Silence,* 129.
[19] Ibid., 132.

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acceptable.... If one maintains secure possession of nothing (what has been called poverty of spirit), then there is no limit to what one may freely enjoy.... What is possessed is nothing."[20] The silences in Feldman's music are, to Cage, key to the undertanding of no-continuity:

> Something is always starting and stopping, rising and falling. The nothing that goes on is what Feldman speaks of when he speaks of being submerged in silence. The acceptance of death is the source of all life. So that listening to this music one takes as a springboard the first sound that comes along; the first something springs us into nothing and out of that nothing arises the next something; etc. like an alternating current. Not one sound fears the silence that extinguishes it. And no silence exists that is not pregnant with sound.[21]

Cage's much freer treatment of the rhythmic structure in *Lecture on Something* demonstrates this "alternating current" of speech and silence. Altogether, the lecture is comprised of four large portions of text, two of silence, and three sections in which smaller portions of text and silence alternate. Unlike *Lecture on Nothing*, where twelve-line text units are clearly delineated, the text portions in *Lecture on Something* are block-like. Typography offers few clues as to how these portions divide into smaller units, much less any indication of a macro-micro proportional structure.[22] This fits the character of the text with its concentration on one basic subject, rather than the division of parts according to subject matter in *Lecture on Nothing*. The style of writing is also more flowing and consistent, and matched by an overall faster recitation rate. All these factors work together to make textual portions function as large individual units. The silences, of course, have no intentionally perceptible inner divisions. Delineation of structural units is avoided, and

[20] Ibid.
[21] Ibid., 135.
[22] In some sections the text is indented (the first column missing), posing the questions of whether these sections are separate parts of the structure, and of how the missing column is to be interpreted--whether it should be ignored, thus shortening the time length of lines; interpreted as a silent gap at the beginnings of lines; or whether a slower recitation rate should be used to fit the words of the remainder of the line into the same time length as complete lines.

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silence takes a leading role in determining morphology.[23]

Figure 3 shows the morphology produced by the alternation of text and silence in *Lecture on Something.* The numbers in the figure are the number of lines of text (in boldface), or of silence. Small-scale alternations are grouped together as one section on one line. One interesting aspect shown by the figure is the symmetrical arrangement of the nine sections. In the fifth (middle) section, thirty-four lines are divided so as to form a palindromic arrangement of text/silence pairs (i.e., the pairs 3,2 and 4,5 that preceed the central 3,3 pair become 4,5 and 3,2 following the central pair). The other sections are divided equally on either side of this "axis." However, this symmetrical arrangement is offset by unequal sectional lengths. The midpoint of this middle section actually arrives two-thirds of the way through the talk because of the greater combined length of the first two textual sections. This reflects a process that takes place over the course of the lecture: textual blocks becomes smaller, while the silences tend to increase proportionately. The lecture begins with speech and ends with a silent section.

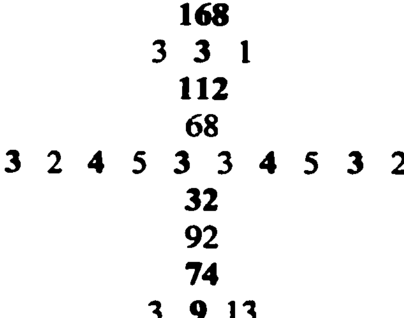

Figure 3. Alternations of Text (Boldface) and Silence in *Lecture on Something,* by Number of Lines

[23] Since Cage uses "continuity" and "form" synonymously, I have adopted the term morphology from his own writings to describe what is conventionally called musical form.

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The size and roles of the silent sections are also important. Some of the silences are small-scale, ranging from four seconds to just under a minute. They are nevertheless long enough to function as miniature sections, especially as they are coupled with textual sections of equivalent lengths. In contrast, the small-scale silences in *Lecture on Nothing* are not autonomous, nor do they seem disruptive or arbitrary. There is in the earlier lecture the same dualistic conception of sound and silence, as demonstrated in Figure 1. However, silences in the previous lecture are employed as breaks interspersed within continuous, self-contained sentences, or as unit demarcations, and also serve to create a slow recitation rate. An example from the beginning of *Lecture on Nothing* illustrates these functions:

				But
now		there are silences		and the
words	make		help make	the
silences	.[24]			

In comparison, the silences in *Lecture on Something* exemplify on a large scale the "discovery" that Cage made in the third movement of *Concerto for Prepared Piano and Chamber Orchestra*, composed earlier that year: "the interchangeability of sound and silence," these "two opposing possibilities being considered as events of equal standing."[25]

The two large silences in *Lecture on Something* can be viewed as fulfilling the project that Cage had envisioned in 1948 in "A Composer's Confessions"—a piece of four minutes and thirty seconds of "uninterrupted silence."[26] This idea came to fruition in 1952 with the composition of *4′33″*. The first of the large silent sections in *Lecture on Something*, at 4′31.8″ (sixty-eight lines), is nearly identical in length to the famous "silent" composition. The second, slightly over six minutes (ninety-two lines), is even more daring,

[24] Cage, *Lecture on Nothing*, 109.
[25] Pritchett, *Music of Cage*, 71.
[26] John Cage, "A Composer's Confessions," in *Musicworks* 52 (Spring 1992), 6-15. Reprinted in *John Cage: Writer*, edited by Richard Kostelanetz (New York: Limelight Eds., 1993), 27-44.

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its length unmatched by any other measured period of silence in Cage's previous works, and in few that follow. Yet Cage's conception of silence in this lecture is qualitatively different from the principle that informs *4'33''*; the revelation that silence does not exist had not yet formed in Cage's thinking. Indeed, the large silences of both *Lecture on Nothing* and *Lecture on Something* are placed at crucial points consciously chosen by Cage to demonstrate specific ideas. The first large silent section in *Lecture on Something* pointedly interrupts a sentence: "someone [in speaking of Feldman's music] said:... 'What about all those silences?' How do I know when." Here the text breaks off and is resumed after several minutes with "We never know when."[27] This large gap in the text serves an obvious rhetorical function. The second, larger, silent section is similarly placed so as to demonstrate the "meaning" of silence, coming immediately after the observation, "as in those silences that occur when two people are confident of each other's friendship, there is no nervousness, only a sense of at-one-ness." The ensuing silent section is followed by text comparing the Western concept of "going from nothing towards something" to the Eastern idea of "going from something towards nothing," serving as a comment on the preceeding silence.

The functional role of silence in the lectures, as opposed to the realization that silence is in fact comprised of unintended sounds, is underscored by Cage's references in *Lecture on Something* to sounds "extinguished" by silence, and to silences "pregnant" with sound. These and other references in the lectures show that prior to his experience of the anechoic chamber—what Cage described as "the turning point"[28]—Cage conceived of silence and sound in a dualistic relationship. While Cage envisioned a completely silent work as early as 1948, he had yet to find a means of composing it. Yet he had in a sense already paved the way for such a composition in the long periods of stasis and silence that

[27] Cage, *Lecture on Something*, 136-38.
[28] Cage describes the experience and its ramifications in John Cage, *For the Birds*, (Salem, NH: Marion Boyars Inc., 1981), 115-16.

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appear in *Lecture on Nothing* and, particularly, in *Lecture on Something.*

3. Summary

In the two works described in this chapter, Cage achieved a synthesis of poetry and composition made possible by the independence of rhythmic structure and content. Recitation becomes a musical performance insofar as material—spoken text and silence—articulates the rhythmic structure. Cage explains much of his compositional philosophy and outlook in the lectures, particularly indifference to material and continuity and the equivalence of sound and silence. However, while both lectures illustrate the relationship of sound and silence to rhythmic structure, Cage does not achieve in these written works the no-continuity or the objective outlook on material that more clearly characterize his musical compositions from this period. This is because he conceives of writing as normatively syntactic, effectively removing spoken text from a purely musical realm. Similarly, although speech and silence are treated as equivalent in the morphology of *Lecture on Something,* silences function rhetorically rather than in a "neutral" relationship to sound. On the other hand the long silences in both works represent a more radical approach toward silence than can be found in any of Cage's musical compositions until the creation of *4'33''*.

Lecture on Nothing is a work in which speech clearly articulates rhythmic structure and in which the role of silence is limited. In *Lecture on Something* the rhythmic structure is undetectable and morphology is clearly expressed by alternations of sound and silence. It is the latter approach that characterizes Cage's following works with spoken text. In the meantime, he had discovered a new compositional methodology, chance, which radically and permanently altered his approach to composition and his compositional methodology.

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CHAPTER TWO

CHANCE TECHNIQUES IN SPOKEN-TEXT COMPOSITIONS

Beginning in 1951, chance becomes a basic principle included in all of Cage's subsequent compositions. In Cage's work chance is an objectifying force. Chance operations based on the sixty-four hexagrams of the *I Ching* are used to determine specific compositional decisions.[1] Cage found in chance a discipline "to diminish activity ... of the ego and to increase the activity that accepts the rest of creation." Composition therefore became no longer a matter of "making of choices" but of "asking questions."[2] James Pritchett explains Cage's adoption of chance compositional techniques as stemming from an intersection of two events. First, his exposure to Zen led him to connect his view of music to the concepts of "unimpededness and interpenetration." As Pritchett writes, "a consequence of such a conception is that reality must be completely nondualistic, since the complete interrelation of all things cannot allow for any divisions or distinctions."[3] Second, Cage's well-known experience in the anechoic chamber revealed to him that the duality of sound and silence—as conceived in *Lecture on Something*—was in actuality a nondual situation: "Something is always happening that makes a sound."[4] Materials therefore came to dominate composition. "Cage now saw his field of action as an infinite space of sounds that are completely interconnected, yet unique ... Form simply becomes any arbitrary path

[1] This is described more fully below.
[2] Bill Woman, "The Music of Contingency: An Interview," in Richard Kostelanetz, *Conversing with Cage* (New York: Limelight Press, 1987), 42-43.
[3] Pritchett, *Music of Cage*, 75.
[4] John Cage, *45′ for a Speaker*, in *Silence*, 191.

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traced within the total space of possibilities."[5]

Cage spoke of the concept of no-mindedness as "*dis*organization" rather than "form,"[6] and explained the impact of this doctrine on his thinking (or not thinking):

> In Zen, one speaks of "no-mindedness." The idea of Nirvana is not a negative statement, but the "blowing out" of what is seen as an impediment to enlightenment. The ego is seen as the one barrier to experience. Our experience, whether it comes from the outside or from the inside, must be able to "flow through." Irrationality, or "no-mindedness," is seen as a *positive* goal, which is "in accord with" the environment.[7]

Chance was essential to Cage as a means of avoiding musical knowledge. This is explained in Cage's "Experimental Music: Doctrine" (1955) as follows: "In view, then, of a totality of possibilities, no knowing action is commensurate, since the character of the knowledge acted upon prohibits all but some eventualities." On the other hand, an "experimental action" (an action whose outcome is unknown) "generated by a mind as empty as it was before it became one, thus in accord with the possibility of no matter what, is ... practical.... It sees things directly as they are: impermanently involved in an infinite play of interpenetrations."[8] Pritchett points out the connection of this doctrine with the Zen doctrine of "no-mindedness," expressed in Huang Po's "Doctrine of Universal Mind":

> The overriding theme of Huang Po's teaching ... is the need to rid oneself of conceptual thought in order to apprehend ultimate Reality.... For Cage, no-mindedness meant that the mind should be alert to sounds, but empty of musical ideas; as Huang Po puts it: "The ignorant eschew phenomena but not thought; the wise eschew thought but not phenomena."[9]

Music of Changes, composed in 1951, marks the introduction of chance as a compositional technique in Cage's music and introduces many of the techniques that he

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[5] Pritchett, *Music of Cage*, 76.
[6] Roger Reynolds, "Interview," in Kostelanetz, *Conversing*, 68.
[7] John Cage, in *Biology and the History of the Future*, edited by C. H. Waddington (Edinburgh: Edinburgh University Press) 1972, quoted in Kostelanetz, *Conversing*, 13.
[8] John Cage, "Experimental Music: Doctrine," in *Silence*, 15.
[9] Pritchett, *Music of Cage*, 77.

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adopted or adapted in other compositions as well as in text compositions. For *Music of Changes* Cage modified the chart technique used in the *Concerto for Prepared Piano* by making each cell equally possible for each chance determination. More importantly he composed charts for other musical parameters—rhythm, dynamics, pedal—so that freely composed cell events were modified by the application of chance intersections with other chance-determined elements. To broaden the variety of events as the piece progressed, Cage devised a chance-based decision process by which a cell remained unchanged (immobile), or could become "mobile" in which case its contents could be replaced. Finally, chance was used to determine how many of eight independently composed layers of material would be "superimposed." Each of these decisions was realized through relating cells to the sixty-four hexagrams of the *I Ching*, and determining which cell would be chosen by arriving at a particular hexagram by tossing coins.[10]

The *I Ching* became a flexible tool whereby any number of alternatives could be related to the sixty-four hexagrams. A gamut of sixty-four values corresponding to the sixty-four hexagrams would result in an equal likelihood of any of the cells being chosen. Other correspondences could be constructed. A fifty-fifty decision could be arrived at by making two alternatives correspond respectively to odd and even numbered hexagrams, for example or an unequal distribution could be modeled so that, for example, in a choice between two alternatives, one might correspond to fifty hexagrams and the other to only fourteen hexagrams.[11] In some cases Cage used unequal divisions of the hexagrams to shape likelihood of events. For instance, in composing *Music Walk* (1959), Cage's notes show the hexagrams divided unequally into four parts, with the single sixty-fourth hexagram reserved for "free sound," the intended effect being the limitation of the

[10] See, e.g., David W. Bernstein, "'In Order to Thicken the Plot'", in *Writings through John Cage's Music, Poetry, and Art*, in Bernstein and Hatch, 22-40; and James Pritchett, "The Development of Chance Techniques in the Music of John Cage, 1950-1956" (Ph.D. diss, New York University, 1988), 107-156.
[11] The introduction of bias is a necessary condition for chance determination in Cage's view since it allows the composer to "identify with no matter what eventuality" rather than become involved in "an association with the scientific interest in probability." (Cage, "Indeteminacy," in Cage, *Silence*, p. 37.)

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occurence of indeterminate sounds.[12] Similarly, in the late work *One[12]* (1992) the appearance of single words is limited by confining this alternative to only two out of sixty-four numbers in a randomly-generated stream of numbers.[13]

Another means of controlling the shape of chance operations is the use of different ranges of values for various parameters of the composition. For example, in determining lengths of silence versus text the composer may use separate sets of durational values for each to bring about an intended proportional correspondence, without interfering with individual chance determinations or pre-establishing an exact outcome. Different ranges of values offer a means of intentional direction and shaping of the composition moreso than biased division of the *I Ching* hexagrams, since the latter is likely to be chance determined. In cases in which extensive notes by Cage are not available the analyst must try to interpret patterns in the score that suggest the use of bias and/or different ranges of values to bring about particular features of the individual works.

Many of the chance techniques that Cage used in his musical compositions appear in his spoken text compositions. The following sections explore four spoken-text compositions in which chance plays a role. In *Juilliard Lecture* (1952) continuity is radically affected by the application of chance to interrupt, "splice," and rearrange text. In *45′ for a Speaker* (1954) developments in text composition parallel those in musical composition from the same period. The role of chance in determining small-scale structural proportions is more apparent. Intersection of independently determined musical parameters results in unpredictable effects on material. The most significant intersection in text composition is between chance-determined values for length of time and amount of material. The complexity of these procedures led to a new performance style that emphasized musical and theatrical aspects of speech. In two lectures from 1958, *Changes*

[12] William Fetterman, *John Cage's Theatre Pieces: Notations and Performances* (Amsterdam: Harwood Academic Pubs, 1996), 41-42.
[13] This is discussed in Chapter 5, below.

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and *Communication*, Cage's application of chance techniques are mainly concerned with structure.

1. *Juilliard Lecture* (1952): Chance Techniques and Textual Continuity

Techniques of splicing, cutting, and mixing are usually associated with tape music. In 1953 Cage employed chance techniques to determine complex configurations for combining scraps of recordings of disparate sounds to create *Williams Mix*; but it was in the text composition of *Juilliard Lecture* that Cage first applied chance operations in compositional processes of "fragmentation and collage."[14] In *Juilliard Lecture* (1952) disparate texts are cut, spliced, and mixed. Cage discovered three means of creating textual discontinuity that become the basis of procedure in later works for speakers: interrupting a continuous text with silences or omissions reappears in *Les chants de Maldodor pulvérisés par l'assistance même* and is the principle of the sequential writing-through mesostics; reordering portions of a single source text is the basic procedure that re-emerges in *Mureau* and *Empty Words*; and splicing text fragments from a variety of sources is the compositional process followed in many of the late mesostics.

Examples of each type appear in *Juilliard Lecture*, as discussed below in relation to Figure 4, which outlines the structure of the lecture and shows how morphology[15] is created by alternating portions of speech and silence. Each number in boldface represents the number of lines of text; each number in ordinary type represents the number of lines of silence. The vertical lines in the figure are added to show parsing by text/silence "pairs."[16]

[14] John Cage, *A Year from Monday: New Lectures and Writings*, (Middletown, CT: Wesleyan University Press, 1969), 95. The lecture appears on 95-112.
[15] As explained previously, "morphology" is used here to mean form as distinct from both continuity and underlying rhythmic structure.
[16] The division into four major parts is as in Cage's text.

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Part 1 ***17*** 4 | ***6*** 6 | ***54*** + **13** 6 | **9** 5 | **3** 22

Part 2 **15** 2 | **28** 6 | **34** 11 | **5** 10 | **16** 18

Part 3 53 | **31** 21 | **16** 7 | ***13*** 4

Part 4 **12** 7 | **104** 9 | **12** 1

Figure 4. Structure and Morphology of *Juilliard Lecture* by Number of Lines of Text (in Boldface) and Silence

The first two text/silence pairs are illustrated in Figure 5, which shows the opening of the lecture. (An extra line of text from the following section has been added to show the exact amount of preceding silence.) In Figure 5, the first textual block of seventeen lines is followed by four completely blank lines. The next textual portion is spread over six lines and followed by six blank lines.[17]

The division of the lecture into four nearly equal parts, each with its own "splicing" characteristics and textual material, is a conscious compositional decision determining the overall structure and the characteristics of each part, while the morphology of the piece is formed by alternating text and silence as in *Lecture on Something*. The first two parts fall into five divisions defined by relatively large, block-like text fragments (shown in boldface in Figure 4) alternating with mostly shorter silent sections. In Part 1, silences break up a newly-written text (italicized numbers in Figure 4) into three portions. The end of the new text is spliced onto a passage from *Lecture on Something* that is also broken up by three intervening silences. The principles of interrupting a sequential text and merging different texts are both present in this part.

[17] To simplify the morphological scheme I have counted lines only partially filled with text as lines of text in the tabulations in Figure 4. Similarly, single blank lines within a block of text have not been tabulated as separate silent sections.

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In the course of a lecture last winter on Zen Buddhism, Dr. Suzuki said ,
: "Before studying Zen, men are men and
mountains are mountains . While studying Zen
things be-come confused : one doesn't know ex-
actly what is what and which is which .
After studying Zen, men are men and mountains are mountains
." After the lecture
the question was asked : "Dr. Suzuki
, what is the difference between men are men and
mountains are mountains before studying Zen and
men are men and mountains are mountains after studying Zen
?" Suzuki answered :

"Just the same , only somewhat as though you
had your feet a little off the ground."
Now, before studying
music, men are men and sounds are sounds.

While studying
music things aren't clear . After studying
music men are men and sounds are sounds. That is to say:
At the beginning, one can hear a sound and tell immediately
that it isn't a human being or something to look at
; it is high or low —

has a certain timbre and loudness,

Figure 5: *Juilliard Lecture*, Beginning of Part 1, Showing Sections of Text and Silence[18]

[18] Cage, *A Year from Monday*, pp. 95-96.

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Part 2 follows the same fivefold organizational pattern of text/silence pairs, but reorders and interleaves textual portions from (at least one) lecture on modern music.[19] The compositional principle of chance reordering and interleavings of portions of a text, as well as the change of source material, differentiate this part from the first.

The last silent section of Part 2 merges with the fifty-three lines of silence that begin the third part, forming a block of silence in the center of the lecture nearly five minutes long, and recalling the large silent sections in *Lecture on Something*. In Part 3 Cage brings in another pre-existent text, and mixes three types of material. A passage from *Lecture on Nothing* is split and placed on either side of an equally long section from *Lecture on Something*. This is followed by a portion made up of two passages from *Lecture on Nothing*. The final texual portion is newly written. All of the textual portions separated by silences.

In Part 4 a new process is used throughout. Textual portions are formed by combining short fragments drawn from all of the source texts used in the previous parts of the lecture. Thus the boldface numbers in Part 4 in the figure represent textual portions comprised of these short fragments, rather than continuous blocks of text or large textual passages with only a few inner divisions defined by change of textual material. There is a higher degree of fragmentation and a concomitant density of changing ideas and statements. The fragments, which consistently range from four words to several lines of text, are mostly self-contained, if aphoristic, ideas and statements. Others are incomplete phrases, but at least long enough to impart a sense of the original syntax and language. Yet the effect of all of these short fragments strung together in chance combinations eventually defeats any expectation of logical continuity of thought, as in the example below.

[19] Portions from this material also appear in Cage's lecture *Communication* (1958). See Cage, *Silence*, 43-47.

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> I have a story. There was once a man standing on a high elevation. A company of several men who happened to be walking on the road noticed from the distance that in European thinking, things are seen as good or not good. Because we are in the direct situation: It is. If you don't like it, you may choose to avoid it, but what silence requires isn't it. At the root of the desire to appreciate a piece of music, to call it this rather than that, to hear it without the unavoidable, extraneous new sounds is giving a lecture which brings us back to contemporary music. But taking off again and returning to the *Book of Changes*, Live happily ever after. And do we? Forever? Now?[20]

The composition of *Juilliard Lecture* is a combination of choice and chance-determined decisions. The division of the piece into four parts of identical lengths, and the use of different procedures to characterize parts, are conscious compositional decisions. Textual content is also a matter of taste and choice: the writing of new material is not affected by chance; which source texts to use is a choice-based decision; and selection of source texts seems to have been consciously controlled to differentiate the first three parts on the basis of material, and to contrast with the wider mix of sources in Part 4. Choice may have been a factor in other features related to structure: the symmetry of the first two parts of the lecture in terms of sectional structure, text/silence proportions, and morphology; and the placement of the long silent section; and the dispersal of newly written textual material.

Defining morphology by alternating speech and silence is of course a primary compositional decision, and it is reasonable to assume that Cage had in mind a rough idea of how much text he wished to include within the forty-minute overall length of the lecture, in effect establishing at least an approximate text/silence proportion. The four-part structure of the piece suggests that questions regarding sectional lengths may have been a matter of text/silence proportions within the limits of the lengths of the lecture's parts as well. A statistical analysis of the text reveals several interesting properties. The overall proportion

[20] See Cage, *A Year from Monday*, 109-10, for the original page layout of this passage.

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of text to silence in the lecture (in terms of seconds) is 1500 to 820, or nearly two to one. This proportion is approximated in the first half of the lecture when the total length of speech and silence is computed for the first two parts (772 to 388). In the second half of the lecture, the surfeit of silence in Part 3 is balanced out by the greater amount of speech in Part 4, but not enough to make the ratio of speech to silence (728 to 432) reduce to a 2:1 ratio. While these features may be coincidental, they suggest that Cage exerted some control over chance procedures based on initial decisions of text/silence proportions.

In the first part of the lecture short silences are interjected into large continuous textual passages. Parts 2 and 3 also create the effect of silences interrupting textual blocks. On the other hand, the effect of Part 4 is one of a sequence of short segments added together into larger textual portions.

It is easy to imagine that the additive compositional process for determining fragment lengths applies to Part 4, where smaller text fragments are parceled by "measures" (seconds) rather than lines, and combine in three large textual sections divided by silent sections of approximately seven and nine lines, respectively. Within the large sections, text fragment lengths range from one to sixteen measures, and intervening short silences from one to four measures long delineate text fragment divisions.[21] The second large textual portion of Part 4 can be parsed into smaller textual sections in terms of measures as follows, where numbers in boldface represent speech and numbers in ordinary type represent silence: **86** 2 | **86** 2 | **46** 2 | **51** 4 | **36** 1 | **20** 1 | **64**. A even finer scale of additive values occurs in each of these smaller textual portion, so that the first portion of eighty-six measures can be broken down into textual fragments whose lengths (in measures/seconds) are 14, 16, 12, 14, 10, 4, 9, 7. Thus the second textual portion in Part 4, consisting of 104 lines, is actually made up of about fifty textual fragments, and six silences of four seconds

[21] Other one-second silences are created when the measure is occupied by a period or comma, or when blank measures appear within a textual fragment.

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or less that divide textual portions.

From this perspective, it is possible to view the first three parts as operating on the same principle but with a larger scale of values. For example, the third textual portion in Part 2 can be parsed into time lengths (by seconds) following changes in textual material as follows: 7, 31, 61, 5, 5, (3), 22. (The number in parentheses indicates silence.) However, this process becomes problematic when dealing with the first three parts of the lecture, since textual blocks are too large to conveniently be expressed in terms of measures. Indeed, text portions in the first three parts of the lecture are in multiples of four measures. If the beginning of a text portion occupies only three measures of its first line, its concluding line contains one measure; if the text portion begins with only two measures, it concludes with only two, and so on, so that all textual portions can be measured in terms of complete lines. Intervening silences in these parts, on the other hand, are not only small enough to be expressed in measures but are asymmetrical, that is, a silence beginning in the fourth measure of a line may last twenty-three measures, and so cannot be calculated using lines as a measure. This suggests that silences (with lengths chance-determined from a narrowed range of values) were indeed interjected at chance-determined points within the framework of overall length of text in each part of the lecture. This could explain the symmetrical fivefold design of the first two parts as the result of conscious decision regarding structure (i.e., how many silences to interject). In this scenario, the final silent section in each of these parts is simply the number of measures necessary to fill out the overall length. This view does not account for the anomolously large silence in Part 3, however, nor for its departure from the fivefold divisions of the preceding parts. Two possible explanations come to mind. The fifty-three lines of silence at the beginning of this part may be the counterpart of the anomolously large fifty-four lines of text in Part 1, indicating that Cage had purposefully reserved a value of out the normal range for both text and silence (as, for instance, he reserved a single hexagram for "free sounds" in *Music*

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Walk). Or the large silent section may represent two silent sections, in which case Cage intentionally included a break from the text/silence dyads in the first three parts of the lecture by substituting a silent section where ordinarily a text portion would appear in the pattern.

Whatever Cage's precise methodology in determining structure and morphology, continuity, the important effect of chance is on textual continuity and the processes that break up and recombine text. Fragments often begin and/or end with incomplete sentences as if literally torn from the original text. Textual portions are superimposed without any rational connection. And, while silences in the previous lectures serve rhetorical functions, silences in *Juilliard Lecture* are arbitrarily, cutting texts off in mid-sentence for purely structural reasons imposed on the text.

There are, then, several factors that exert the influence of chance on text composition: the arbitrariness of external structural elements, extraction of random portions of a pre-existent text, selection of source for the textual fragment, lengths of text/silence portions, and juxtaposition of textual fragments. Together, these factors objectify the finished piece of writing much as Cage's chance techniques objectify material and continuity in other compositional genres. Textual continuity loses much of its original force through fragmentation and gains unpredictability and nonintentional meaning through recombination. Text threads its way through time, much as the hero follows the random movement of the silver ball in the story that Cage tells at the end of Part 3. In *Lecture on Nothing* Cage talks *about* lack of direction and goal. In *Juilliard Lecture* textual continuity determined by chance brings this about. A new type of text emerges in which the author's voice is present but his original intentions with regard to meaning are often absent or mutated into irrationality by chance interventions. In particular, in the fourth part of the lecture speech is perceived phenomenologically as much as conceptually. The *experience* of the performance creates the "disorganization" and "irrationality" that characterize

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no-mindedness.

Cage's recitation of parts of *Juilliard Lecture* in *Theatre Piece No. 1* (1952) brought words into the theatrical arena by applying the principle of superimposition to mixed media. Many of Cage's most important mixed media works including speech build on this event. With superimposition, Cage found a way to combine spoken text works with other performances. In superimposed performances, indeterminacy enters into the relationship between the individual components of a musical or theatrical event. Superimposition remained a core principle throughout Cage's life. All of Cage's collaborations with choreographer Merce Cunningham after 1950 follow this principle, and many of Cage's major works are essentially superimposed performances on a large scale.

Cage conceived of any musical performance as necessarily including visual aspects, movement, and space, making it essentially a theatrical event. This is reflected in a new phase in Cage's use of works for speakers, as components in mixed-media events, beginning in the early 1950's. Earlier compositions that include spoken text treat the relationship of speech and music in conventional ways. In *Four Walls* (1944) Cage's piano music reinforces the expressive intent of Cunningham's choreography and spoken text.[22] In composing the music for a radio broadcast of Kenneth Patchen's *The City Wears a Slouch Hat* (1942), Cage matched events and emotions in the play with appropriate recorded sound effects and percussion writing. Similarly, in "Story"[23] for four performers speaking text scored in conventional rhythmic and dynamic notation, Cage uses canon and word painting and exploits tone color in such a way as to express and illustrate Gertrude Stein's text.

Theatre Piece No. 1 brought about a new approach to combining text with other media. This seminal event at the Black Mountain School revolutionized mixed-media

[22] See Michele Porzio, "A White Cage Inside Four Walls: Silence in 1944," in *Musicworks* 52 (Spring 1992), 28-39.
[23] John Cage, *Furniture Music* (Part 2: "Story")(New York: C. F. Peters Corp., 1940).

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theatrical events, by combining spoken text (Cage's reading of a portion of *Julliard Lecture*, M. C. Richards and Charles Olson reciting poetry) with instrumental performance, dance, visual art, and electronic media; and by establishing the principle of superimposition whereby independently created components having no pre-established correspondences or relationships occur simultaneously. The components are all "free rather than tied together."[24] Cage's original compositional intention to treat surrounding objects and the activities of the artists as "sound sources" was essentially musical. Theater entered more directly into the performance due to his concurrent interest in Dada theater and Antonin Artaud.[25] There was also a strong philosophical component involved.

The basis for superimposition is the Buddhist belief that all beings—sentient and non-sentient—are the Buddha, the center of the universe, and that all these centers are interpenetrating.[26] Daisetz Teitaro Suzuki's lectures, which Cage attended from 1948-51, provided an underlying Zen principle of utmost important to Cage's thinking and work:

> In the course of a lecture last winter at Columbia, Suzuki said that there was a difference between Oriental thinking and European thinking, that in European thinking things are seen as causing one another and having effects, whereas in Oriental thinking this seeing of cause and effect is not emphasized but instead one makes an identification with what is here and now. He then spoke of two qualities: unimpededness and interpenetration. Now this unimpededness is seeing that in all of space each thing and each human being is at the center and furthermore that each one being at the center is the most honored one of all. Interpenetation means that each one of these most honored ones of all is moving out in all directions penetrating and being penetrated by every other one no matter what the time or what the space. So that when one says that there is no cause and effect, what is meant is that there are an

[24] Michael Kirby, and Richard Schechner, "An Interview," in Kostelanetz, *Conversing*, 104. Cage was also inspired by "Schwitters' descriptions of Dada theater in a book that had just been published" (Cage, *For the Birds*, 164-65).
[25] Cage, *For the Birds*, 164-65.
[26] For an essay on the principles of interpenetration and nonobstruction and their relation to Buddhist philosophy, see Daniel Charles, "De-linearizing Musical Continuity" in *Musicworks* 52 (Spring 1992), 18-23.

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> incalculable infinity of causes and effects, that in fact each and every thing in all of time and space is related to each and every other thing in all of time and space.[27]

Cage linked this doctrine to spoken text via Antonin Artaud's *The Theater and Its Double*. As Cage explains:

> It gave me the idea for a theater without literature. Words and poetry may, of course, always enter into it. But the rest, everything that is in general *non-verbal*, may enter into it as well. We have to avoid one thing too directly supporting another: for example, the text supporting the action.[28]

Theatre Piece No.1 includes spoken text that functions as "words and poetry"; words simply "enter into" the happening. "But the principal thing is that they not begin with a text or try to express its aesthetic qualities. That was what Artaud had already envisioned."[29] Events are nonhierarchical, relationships nonintentional.

To compose temporal relationships between components, Cage invented a prototype of the time bracket, using chance operations to determine the timing and lengths of the events. Spatial separation of performers, and events occurring within and around the audience (the Black Mountain performance space was a theater in the round) became important aspects of Cage's musical/theatrical presentations, and emphasized the independence of the components. In later works involving spoken text Cage provided for the free movement, and even the participation of, members of the audience.[30]

Superimposition and the concept of time brackets were crucial to Cage's compositional development. Pritchett points out that Cage's music of the preceding decade

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[27] This passage comes from an article written around the same time as *Juilliard Lecture* and quoted in *Communication*. See Cage, *Silence*, 46-47.
[28] Cage, *For the Birds*, 52.
[29] Ibid., 166.
[30] For more on the composition and performance of this work, and its influence on theater, see John Cage, "An Autobiographical Statement," in Kostelanetz, *John Cage: Writer*, 243; and Kostelanetz, *Conversing*, 103-05, and 112-13; Kostelanetz, *John Cage*, 27-29; Fetterman,"Cage's Theater Pieces," 174-87; Laura Kuhn, "John Cage's 'Europeras 1 & 2': The Musical Means of Revolution" (Ph.D. diss., Los Angeles, University of California, 1992), 301-16; Cage, *For the Birds*, 164-66; and the Bibliography, below.

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"is almost exclusively monophonic, either in the traditional linear sense, or in the sense of a single layer of sounds" whereas the later works "are conceived of as several simultaneous layers of activity, each proceeding independently of the others."[31] Cage favored performances with a multiplicity of centers. An important aspect is spatial separation to prevent a "fusion between sounds" from occurring.[32]

Superimposition was a means of combining performance of spoken works with any other media. From another perspective, the purposeful absence of self expression and intention in Cage's texts made possible their independent co-existence with other components. In *Juilliard Lecture* the controlling characteristics of "literature"—drama, narrative, continuity, expression—are replaced by abstraction, shifting focus, discontinuity, ambiguity, and silence. Thus the accomplishment represented by *Juilliard Lecture* in terms of the treatment of words as material made possible the superimposition of spoken text and other media.

2. *45' for a Speaker* (1954): Chance Techniques and Independent Compositional Parameters

The adaptation of complex, chance-based compositional procedures to text and speech give *45' for a Speaker* an important place in Cage's works for speakers. Accordingly, it is the first of his spoken text works to appear as a composition in the C. F. Peters catalogue. Overall, the piece is so far from conventional discourse and logical presentation of ideas that the term "lecture" is inappropriate. Textually, this is partly due to the extremely disjunctive quality of continuity brought about by a higher level of cut-up technique, which short-circuits focus and intentional relations, and partly due to the distancing effect of borrowed texts and short forms, which tends to make the text less of a

[31] James Pritchett, "Understanding Chance Music" in *John Cage at Seventy-Five*, 254.
[32] Cage, *For the Birds*, 51.

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direct personal statement. Text is treated as compositional material and assumes abstract characteristics. Compositionally determined tempos, dynamics, vocal colors, and theatrical elements freed Cage to develop a new performance style that goes far beyond the "rubato" of "everyday speech" and the relatively unvarying dynamic level that characterize his previous works for speaker. The new expressive and theatrical elements are allowed to enter because they are applied by chance to text, defeating interpretation based on personal response to the "meaning" of text passages. Lastly, chance determination of all of these aspects brings about unforseen relationships and unintended continuity of ideas and word combinations.

45' for a Speaker is part of a series of works that share the characteristics of abrupt juxtapositions, shifting tempos, and a virtuosic, theatrical performance style.[33] The text is a kaleidoscopic mix of short statements on various subjects, quotes, and silences. The principle of no-continuity that is the subject of *Lecture on Something* is here demonstrated by the consistently discontinuous nature of the text itself. The work achieves "instantaneity" of form: "Each moment presents what happens."[34] Unlike the structural clarity brought about by proportional division or by interchange of speech and silence in earlier textual works, structure in *45' for a Speaker* is treated much more freely. In fact, it is impossible to discern the proportional scheme that Cage used in composing the piece.

The crucial event that brought about a more flexible treatment of structure was Cage's experience at the anechoic chamber at Harvard University in 1951, which led to the revelation that there is no silence, since environmental sounds are constantly occurring freely over time as part of "natural activity." Cage came to regard material as free to occur

[33] The series was begun in 1951 and abandoned after only five of the projected one hundred works were completed. In addition to *45' for a Speaker*, these works include *34'46.77" for a Pianist*, *31'57.986" for a Pianist*, *26'1.1499" for a String Player*, and *27'10.554" for a Percussionist*. See Pritchett, *The Music of John Cage*, 92-104; and John Cage, "To Describe the Process of Composition Used in Music for Piano 21-52," in Cage, *Silence*, 60-61.
[34] Cage, *Silence*, 175.

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anywhere within the rhythmic structure, with no necessity to define structural parts by change of material, or for events to coincide with structural boundaries. "The only structure which permits of natural activity is one so flexible as not to be a structure," he declared in *45′ for a Speaker*.[35] Cage continued to use rhythmic structure because it "allows anything to happen in it," but in another sense structure is "of no importance" because "it does not affect anything that happens in it."[36] In the works of this series, structure serves as a pre-compositional background element that is not perceptibly articulated by sounds, but rather as a neutral field into which sounds are "thrown."[37] Thus, Cage's first entry in the list of subjects for new material in *45′ for a Speaker* reads "Structure (emptiness) (in general no structure)."[38]

The process of loosening rhythmic structure was realized by applying chance-determined changes of tempo with each phrase in the first of the works of the series, which had the effect of compromising the proportions of macrostructural divisions. In the following works for piano, tempo changes were incorporated in spatial notation governed by timing in minutes, seconds, and fractions of seconds, rather than by beats and measures. Sections expressed numerically could then be expanded or contracted by a factor obtained by chance and the results used as the structural basis for a new composition.

This is in fact how Cage obtained the structure of the work;[39] but nowhere in the piece is the structure made clear. Complicating matters, a change in length was necessitated by limitations of recitation rate. Cage planned to perform the work in combination with a performance of another piece in the series, *34′46.776″ for Two Pianists*. As he explains,

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[35] John Cage, *45′ for a Speaker*, in Cage, *Silence*, 169.
[36] Ibid., 159.
[37] Pritchett quotes Cage's 1950 letter to Boulez in which he describes this compositional process as "throwing sound into silence". Pritchett comments on the phrase: "not making an expressive continuity, but simply composing individual sounds and letting them find their own expressiveness within a blank canvas of empty time." (Pritchett, *Music of Cage*, 74.)
[38] Cage, *Silence*, 146.
[39] This is explained in Cage's introduction to the piece in Cage, *Silence*, 146-47. The text of *45′ for a Speaker* follows on 148-92.

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> The second pianist's part had turned out to be 31′57.9864″. When I applied the chance factor to the numerical rhythmic structure in the case of the speech, I obtained 39′16.95″. However, when the text was completed, I found I was unable to perform it within that time-length. I needed more time. I made experiments, reading long lines as rapidly as I could. The result was two seconds for each line, 45′ for the entire piece."[40]

This is a radical departure from the previous lectures, where the amount of written material within a temporal grid is governed and spaced by a consciously determined recitation rate. In *45′ for a Speaker*, recitation rate is governed by the amount of written material within a section. As a result of this chance intersection Cage was forced to experiment with recitation rather than to adapt a consciously determined recitation rate to a predetermined structure. This allowed Cage to compose texts empty of intention in regard to recitation (no-mindedness), bringing about a situation in which performance became experimental, i.e., an action whose results were unknown. At first this was applied only to tempo. It was not until 1970 that an experimental reading of what Cage had initially intended as a purely written, visual, work led to the same experimental approach to timbre, duration, and other musical elements.

True to the axiom that chance had changed the nature of composition from making choices to asking questions, Cage described the composition of *45′ for a Speaker* as follows:[41]

> The text itself was composed using previously written lectures together with new material. Answers to the following questions were all obtained by chance operations:
>
> 1. Is there speech or silence?
> 2. And for how long?
> 3. If speech, is it old material or new?
> 4. If old, from which lecture and what part of it?

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[40] Ibid., 146. In the printed version, a different page format is used and as a result the number of lines is expanded, so that six lines of text occupy ten seconds, making each line slightly shorter than two seconds.
[41] Ibid., 146-47.

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5. If new on which of the following 32 subjects?
   [the list of subjects follows]
6. Is the material, new or old, to be measured in terms of
   words or syllables? And how many?

Analysis of Cage's compositional procedures must focus on how the formulation of the questions and the ways in which they are answered shape the resulting score. The following paragraphs discuss the decisions, compositional processes, and implications involved in each of these questions and finds that Cage's use of chance is controlled by determining ranges of values and establishing weights favoring certain outcomes in order to create intended features in textual composition. The analysis also notes important effects on notation and performance brought about through the intersection of chance parameters and identifies areas in which choice was a determining factor in compositional decisions.

The first of the questions concerns the proportion of speech to silence. Overall, there is more speech than silence in the text. This is true even when one takes into account the silences that result when a small amount of text occupies a relatively long length, and must be divided into several individual lines spaced by silences. The preponderance of text suggests that the first two questions were answered by chance operations favoring speech. However, in sections comprised of new material, it is often difficult to ascertain where subjects actually change; and while many passages comprised of old material are distinct from surrounding material, they are often comprised of short segments taken from the same text, making it unclear whether they represent a single chance decision.

Given these qualifications, examination of some textual portions that are clearly separated by silences can be described as consisting of at least five individual parts. It seems unlikely that so many portions in the lecture would result from answering the first question ("is there speech or silence?") in favor of speech five times in row if the answer was based on a simple fifty-fifty decision. This suggests that Cage may have weighted this decision in favor of speech.

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The second decision ("And for how long?") is more clearly limited. Over half of the silent portions are only one line (~1.66′′) or less, and rarely exceed ten seconds. Moreover, some of the longer silences are undoubtedly compounds of smaller silent segments. Text segments range from about one second to eighteen seconds. Thus it seems as though the preponderance of text is mainly a result of assigning a higher upper boundary to lengths of spoken segments. Thus even if Cage did not intentionally weight the first decision by dividing the sixty-four hexagrams into unequal "bins" favoring speech, the overall proportion of speech to silence can be explained by different ranges of value for speech and silence in making the second decision.

What is strikingly different in this work is the limitation on the range of values for *both* speech and silence, resulting in sequences of small irregular time segments. The effect in all the works of the series is similar—a rapidly changing texture made up of small-scale interchanges of sound and silence, in which the continuity of detailed sound events is not consciously determined. The blocks of text and the long silences of the previous lectures that define morphology on a large scale are absent in this fast-changing world of words, where ideas are "seen momentarily, as though from a window while traveling."[42] *45′ for a Speaker* has the disconnected character of the conditions under which it was written, "on trains and in hotels and restaurants during the course of a European tour."[43]

In the instrumental works of the series (though not in the work for speaker), each performer is free to order the pages in any sequence, making the structural units mobile,[44]

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[42] Cage, *Lecture on Nothing*, in Cage, *Silence*, 110.

[43] Cage, *Silence*, 147. Apollinaire's principle of *simultanisme* finds expression in "Transatlantique," another poetic account of a European tour by rail.The terms Shattuck uses to describe *simultanisme* are strikingly similar to the " interpenetration and nonobstruction" in simultaneous performances. *Simultanisme* is "a unifying principle [in which] all parts interpenetrate and interreact through contrast and humorous conflict rather than by discursive logic or conventional perspective," keeping texts open to "all combinations and interpretations" (Roger Shattuck, *The Banquet Years: The Origins of the Avant-Garde in France, 1885 to World War I* (New York: Vintage Books, 1968), 311, 315). While Cage's text has the qualities of interpenetrating ideas free of discursive logic and open to interpretation, the use of chance makes a crucial difference, since the text fragments are not consciously ordered or related, and Cage's intention is not unification, but multiplicity.

[44] Mobility of parts is a practice distinct from the "mobility/immobility" of cells in *Music of Changes*.

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and allowing the performer to determine continuity of phrases. Cage followed essentially the same process in *Juilliard Lecture*, reassembling blocks of text. The principle of cutting and recombining is the same as with tape splicing. In *Williams Mix* and *Juilliard Lecture* however, the continuity, once established, is fixed. Similarly, once Cage had constructed *45' for a Speaker* the continuity was determined by chance mixtures of pre-existent texts and new texts on a variety of subjects. It was not until the following year, in *Speech*, that Cage approaches using mobile units of text, enabling the performer to determine their sequence.

Several passages in *45' for a Speaker* intersplice two or more fragmented texts, as in the following example, whose very "subject" is the synchronicity of ideas that chance procedures bring about. (Italics have been added to make the alternating text pattern more apparent .)

> That two or more
> things happen at the same time is
> *It is entirely possible for something to*
>
> their relationhip: Synchronicity. That
> *Break for instance*
> means at the center moving out in all
>
> directions and then time is clearly
> *Should one stop and mend it?*
> luminous[45]

It is not clear how and why these composite passages came about; they seem to stand outside the compositional process as outlined by the compositional questions Cage formulated to write the work. They are analogous to those passages in the piano pieces of the series where two separate musical phrases are combined using special beaming that Cage devised. They also prefigure instances in Cage's tape piece *Fontana Mix* (1958) in which a surfeit of material brought about by chance procedures was solved by allowing

[45] Cage, *Silence*, 184.

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sounds to interrupt each other, a procedure that reinforces the essential similarity between tape splicing and recombination of text fragments. The composite passages in the work for speaker, however, are not necessitated by a surfeit of material—there is ample time to read the individual texts within two separate time frames. So it is likely that these passages are variations of the compositional procedure, and place two or more texts within one time frame. These passages are miniature examples of confusion in syntax brought about by interleaving short fragments of disparate texts. Like similar passages that operate on a larger scale in *Juilliard Lecture*, they demonstrate Cage's interest at this early stage in upsetting conventional meaning by allowing chance to intervene in syntactic continuity.

The above example also shows the new page layout brought about by abandoning the "measures" used in previous lectures and instead adopting a vertically oriented time line. This change of notation was necessitated by the process of adapting recitation rate to amount of text, and became the orientation for many of Cage's later text works. The vertical axis gives the effect of text running down the page, especially when consecutive lines are narrow.[46] It brings to light the latent vertical orientation in the "columns" formed by the spacing of measures in the earlier lectures, and anticipates similar columnar configurations in later works.[47]

Fitting chance-determined amounts of material into chance-determined time frames also necessitated formatting text in the allotted space. The passage quoted above shows Cage's division of the material into three groups of three lines each, with empty lines dividing the groups. Where to break lines, and how to format a smaller amount of material within a relatively lengthy time unit are evidently matters of choice, much as the determination of how many wing words to retain in a mesostic. As in nearly all of Cage's text compositions, the attractive, enlivening visual aspects (here, formatting, layout, and

[46] See, e.g., Cage, *Silence*, 150.
[47] One can trace a strong development of vertical orientation in Cage's writings that finds its final expression in the mesostic form. This issue is addressed in the second part of this thesis.

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typography) are creative responses to the utilitarian aspects of performance indications.

The third, fourth and fifth questions in the compositional process extend the practice of combining "old" and "new" material, first accomplished in *Juilliard Lecture*. New material in *45′ for a Speaker* is selected by chance from categories of subjects, much like categories of events in the instrumental pieces of the series, or the chart cells in previous works. One reason to include new material was to include discussion of Cage's changing aesthetics and new compositional techniques; but the large number of subjects, along with the short segment lengths, also results in a higher level of recombination, and thus of interpenetrating ideas.[48] The formulation of the questions regarding content indicates that Cage saw diversity as another means of creating no-mindedness. There is no organization to the thoughts that emerge and no logical connection between them partly because of the sheer number of and variety of subjects and source passages used in chance operations. Each new idea begins without intellectual preconception. The text is essentially noncommunicative. It does not express an intentional meaning but is, rather, anarchic with respect to the listener's perception.

The use of pre-existent ("old") material in both *Juilliard Lecture* and *45′ for a Speaker* is of profound importance for Cage's future writings and works for speakers. With the use of chance in conjunction with pre-existent texts, Cage found a new way of fulfilling the ideal he had set forth in *Lecture on Nothing*, of "having nothing to say, and saying it." Intermingling of source texts, many not written by Cage himself, achieves its full expression in the late mesostics that draw on a very large collection of sources, and whose automatic compositional procedures effectively remove Cage as author. Cage often described the mesostics as "a way of writing which though coming from ideas is not about them, or is not about ideas but produces them."[49] The basic means to achieve this result are

[48] The number of subjects was probably chosen for the number of subjects to facilitate selection by means of the sixty-four hexagrams of the *I Ching*.
[49] See, e.g., John Cage, *Themes and Variations* (Barrytown, NY: Station Hill Press, 1982), introduction.

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first deployed in *45′ for a Speaker*, with the important difference that all of the source texts in this work were written by Cage and interspersed with new material.

Lecture on Nothing, *Lecture on Something*, and *Juilliard Lecture* are the three pre-existent sources that can be identified in *45′ for a Speaker*. Though chance determines which part of the source is used, and how many words or syllables are to be extracted, Cage evidently exercised conscious choice in selecting specific passages. This is evident from the fact that these passages are nearly always complete sentences and often express self-contained, comprehensible ideas. Given the limitation imposed by selecting the amount of material according to a chance-determined number of words or syllables, it is evident that Cage sought out portions of source material that would conform to this limitation in a way that maintained sentence structure, reinforcing Cage's overall adherence to syntactic convention prior to 1970.

Quotation is another form of borrowed material that takes on a new importance in this piece. In addition to quoting himself by using previous lectures, Cage includes "quotes" as one of the subjects for new material. More than ten short unattributed quotes pop up unannounced as part of the mix of subjects and ideas. As in the case of the extended silent sections in previous lectures, borrowed material and quotation arise as compositional developments in spoken text works and only later in works for instruments and voices, for example, *Cheap Imitation* (1969) and *Hymns and Variations* (1985).

The sixth question in the compositional process of *45′ for a Speaker*—the measurement of newly written text using a chance-determined number of words or syllables—shows a new interest in applying changing tempos to text composition. To achieve changing tempos, Cage employed a variation of the technique originating in *Music of Changes* and found throughout the compositional processes of the series: the intersection of two chance-determined parameters. In this case, the independent parameters are 1) the duration, in time, of text portions, and 2) the number of words or syllables of text. In the

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earlier lectures, slower recitation rates match the "meaning" of the passage in which they are used, or are more or less fixed at a rate approximating that of normal speech. In *45′ for a Speaker*, chance pairing of different time-lengths with different amounts of material creates a very wide range of recitation rates; very fast rates reduce speech to a blur, while very slow rates extend and isolate incomplete word combinations and individual words. Moreover, the recitation rates arrived at by this method do not relate to the substance of the text, except perhaps by coincidence. Through chance techniques, text becomes abstract material treated irrelevantly with regard to tempo.

The discipline of fashioning texts on chance-determined subjects using a chance-determined number of words or syllables—together with the relatively short lengths of text portions—necessitated a compressed writing style. Ideas are summed up in a few words or sentences. Aphorism, parable, metaphor, allusion, self-reference, koan, question, word play, unusual sentence structure—these are the devices and short forms in much of Cage's writings, replacing expositional prose and straightforward discourse with suggestion and ambiguity. Like quotation, though in a different way, these devices allow Cage to distance himself from the material by permitting the listener to determine the meaning of what is being said, or, better, to avoid specific meaning and create a rich concatenation of ideas that more accurately reflects the multiplicity and profusion of nature. The short lengths chosen by Cage, and the resulting short forms that he developed in his writing style, are complements of the higher level of fragmentation and recombination of text, and find their correspondents in the fragmentary nature of phrases in the instrumental works of the series.

In addition to the compositional procedures involved in answering the questions posed at the outset, *45′ for a Speaker* brings into play the use of dynamics and theatrical elements not present in previous works for speaker. Dynamics in *45′ for a Speaker* are indicated typographically (three different typefaces correspond to "soft", "normal", and "loud"), and also paired with text portions by chance determinations. Cage weights this

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procedure as well, so that soft and loud passages occur much less frequently than a "normal" dynamic. These indications provide differentiation not only of dynamic level but also of vocal colors, and impart a theatrical quality to the recitation without establishing any logical connection between textual content and its execution, e.g., a straightforward explanation of technique delivered in a rushed whisper, or a single word shouted in the midst of silence. An additional theatrical aspect is brought about by the noise-producing actions (e.g., clap, slap table), vocal noises (e.g., snore, cough), and gestures (e.g., rub eyes, brush hair) indicated in the score.[50] In Cage's own words, the visual aspects of the piece place the work in the theatrical realm: "it is not a lecture, nor is it music; it is, of necessity, theatre."[51] Performance becomes a theatrical event rather than simply a reading of text.

Figure 6, taken from the third minute of the piece, shows some of these features. A time-line in ten-second units appears to the left of the text. At 3′10′′′the speaker is silent, and begins speaking about five seconds later. The portion begins with the shouted word "Time" (in boldface), and is comprised of newly written material on the subject "Time (and rhythm)". At 30′′′into the textual section, Cage quotes from *Lecture on Nothing*, and continues with newly-written material on the subject ""Square root and flexibility". The excerpt shown in Figure 6 ends with a quotation. Extraneous vocal sounds ("Hiss", "Cough") and actions ("Slap table") appear on the right-hand side of the text.

Superimposed performance of *45′ for a Speaker* and its companion instrumental pieces in the series brings the "world of words" into contact with instrumental sounds. As in the case of the Black Mountain event, the most radical aspect of superimposition of speech and music in these works is that there is no attempt at fusion or correspondence between them. They are irrelevant to and independent of each other. These two

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[50] For additional discussion of theatrical aspects of the work see Fetterman, "Cage's Theater Pieces," 381-85.

[51] Cage, *45′ for a Speaker*, in Cage, *Silence*, 166.

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10″

(Hiss)

Time,
which is the title of this piece,
(so many minutes
20″ so many seconds),
is what we
and sounds
happen in. Whether early or late:
in it.
It is not a question of counting.
30″ Our poetry now
is the realization
that we possess nothing.
Anything therefore (Slap table)
is a delight
(since we do not possess it)
40″ and thus need (Cough)
not fear.
This composition involves a flexible use of
the number 10,000: that
is to say 100 x 100 (sq. rt.).
The actual time-lengths
50″ *are changing.* This
work has no score. It should be abolished. "A statement concerning the
arts is no statement concerning the arts." It
consists of single parts. Any of them may
be played together or eliminated and at any
time. "To me teaching is an expedient, but I do

Figure 6: *45′ for a Speaker*, Excerpt[52]

[52] Cage, *Silence*, p. 151.

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factors—equivalence of function and independence of parts—put speech and instrumental sounds in a unique non-relationship.

Superimposition of *45′ for a Speaker* with all of the instrumental works in the series combines the speaking voice with multiple performances on piano, strings, and percussion instruments, expanding the sonic vocabulary and opportunities to compare instrumental sounds to those of the speaking voice.[53] Because the work is so closely linked to the instrumental works of the series in compositional methodology, style, and performance characteristics, superimposed performances of the spoken work and the instrumental works draw attention to similarities between the two types of media. Short sectional lengths and extremes of tempo and dynamics between sections make single textual passages correspond to musical phrases or phrase-groups. The speaking voice becomes a musical instrument *vis-a-vis* the orchestral instruments in the series. A combined performance of the works in the series puts speech in the position of being an element within musical texure, and this new-found ability of speech to function texturally adds a musical dimension to spoken-text works with multiple speakers and mixed-media events that include speech.

The principles of fragmentation and collage in conjunction with chance provided Cage with the basic compositional procedures that underlie nearly all of his subsequent spoken-text compositions. Chance was an objectifying facto r that produced a greater degree of unintentional continuity. Cage had begun to develop an anarchic approach to text. In the two lectures discussed above, however, Cage did not go so far as to break with syntax and language except in a few instances. Language is still seen as the proper medium for speech, syntax as its natural continuity, sentence structure as its basic unit, and ideas (however irrelevant) as its content. Nevertheless, Cage had developed compositional

[53] The pieces whose titles are number of minutes and seconds are part of a projected series of works written in the same manner. See Pritchett, *Music of Cage*, 95-96.

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procedures to apply chance to many aspects of text composition and spoken-text performance. He laid the foundation for combining speech with other media. And he began to reveal more musical aspects in spoken text.

3. *Changes* and *Communication* (1958): Chance Determination in Two Works in Lecture Form

Changes and *Communication*, both from 1958, are described by Cage as lectures rather than compositions and—together with a conventional lecture, "Indeterminacy"—are grouped under the title *Composition as Process* in their published form.[54] Naturally, a large number of Cage's written works were conditioned by the nature of the occasion for which they were written and the subject(s) on which he was requested to speak. The first two lectures from *Composition as Process*, *Changes* and "Indeterminacy," were prepared for the Darmstadt course for new music in September. Both deal with the compositional principles involved in indeterminacy, the major new compositional approach that Cage adopted after chance techniques had entered as a permanent basis of composition. The subject of *Changes* was suggested by the organizer of the event, who asked Cage to discuss in particular his *Music of Changes*.[55] Cage used the opportunity to discuss the changes that had taken place in his compositional approach, by comparing the fixed score of *Music of Changes* with new notational systems and open forms that allow performers multiple interpretations. The second lecture, "Indeterminacy," is less personal in nature, and more systematic. Its six parts, printed as blocks in small type "to emphasize the intentionally pontifical character" of the lecture,[56] each discuss a different aspect of indeterminacy in the music of Bach, Feldman, Earl Brown, Stockhausen, Christian Wolff,

[54] These appear in Cage, *Silence*, 18-55. The lecture, "Indeterminacy," is given here in quotation marks so as not to be confused with the spoken text work of the same name described in the following section.
[55] Cage, *Silence*, 18.
[56] Ibid., 35.

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and Cage himself. Cage methodically defines indeterminacy in straightforward prose, using examples to illustrate how different musical elements can be left indeterminate by the composer, and in what ways indeterminacy differs from chance. It is clear that for this event Cage wished to explain principles of chance and indeterminacy unambiguously.

While "Indeterminacy" exhibits none of the stylistic characteristics, compositional principles, or performance aspects of Cage's spoken-text compositions, *Changes* contains all three. The writing is a reworking and expansion of the defining characteristics of chance and indeterminacy, but told in first-person narrative form as the development of Cage's compositional thinking and practice from the chance-determined *Music of Changes* to the indeterminate works of the middle and late 1950's. As in much of Cage's prose, stories whose relevance can only be determined by the listener occupy the final paragraphs of the lecture. Cage seems to take delight in subverting grammatic complexity and sentence structure by devising sentences and sentence groups so long and involved that, while one can make perfect sense of them upon re-reading and reflection, in audition one forgets the middle, not to mention the beginning, of the sentence by the time one has reached the end. Printed in columns so narrow as to require excessive hyphenation, each line of text is to be read within one second. An example is given below, in Cage's original format.

The plan,
as preconceived,
was to use four
of the sounds in
the first sixteen
measures, intro-
ducing in each
succeeding struc-
tural unit
four more until
the exposi-
tion involving
all sixteen and
lasting through the
first four units

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was completed.
The subsequent
parts, three, two, three,
four, were composed
as develop-
ment of this in-
itial situ-
ation[57]

A performer of the piece has a difficult task keeping track of the timing of each line as well as the number of lines within a section of text or silence. The recitation tempo produced by the format is not particularly fast, but leaves little room for pause or emphasis. The listener must deal both with the complexity of the prose and a fairly fast, uniform delivery.

It is probable that the fine scale used for time units in *Changes* was necessitated by the strict timing scheme used to combine Cage's reading with instrumental performance. As he explains in the comments on the lecture:

> I decided to make a lecture within the time length of the *Music of Changes* ... so that whenever I would stop speaking, the corresponding part of the *Music of Changes* itself would be played. The music is not superimposed on the speech but is heard only in the interruptions of the speech—which, like the lengths of the paragraphs themselves, were the result of chance operations.

The paragraphs, indicated in the text by the symbol ¶, operate as in standard prose, and so must have been written first, with the interruptions (various lengths of silence) added to the finished text. It is possible that Cage adopted a format, perhaps a stenographer's notebook, as a spatial standard proportional to time units. This is, in fact, how Cage arrived at timing for *Where Are We Going? and What Are We Doing?* (discussed below). If so, we may imagine that Cage used the two-column format of the stenographer's notebook, numbering the lines on the first column, continuing consecutively

[57] John Cage, *Changes*, in Cage, *Silence*, 23-24.

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on the second column, for as many pages as it took to complete each paragraph. This established the one-second temporal grid. He then wrote the text in two columns, according to the numbered lines, the size of his handwriting corresponding to a medium tempo. The lengths of the added silent sections could then be noted and the manuscript used as a performance score. It is very easy to get lost while attempting to read the text and keeping track of each second without any numbering system, but knowing that the first section of speech lasts twenty-three seconds and is followed by four seconds of piano music provides the speaker with a time line that facilitates coordination with a stopwatch and with the piano part. In other words, the format of the printed version may be taken directly from the original manuscript but without the line numbering, and with silences represented by spatially proportionate blanks on the page.

In *Changes*, Cage apparently set parameters for paragraph lengths from two to about 205 seconds. But these outer limits are exceptional. Aside from these two paragraphs, the remaining twenty-five paragraphs fall in a range between approximately fifteen and 125 seconds, allowing enough room for descriptions and explanations of various works used as examples of compositional stages. The text is interrupted by silences thirty-nine times, and since the interruptions are chance-determined independently of paragraphs, they insert breaks within paragraphs, and also run different paragraphs together. Text is often chopped in mid-sentence and followed by a silent section before it resumes. The twenty-seven paragraphs occupy only three-quarters of the total time of the lecture, with silences accounting for the rest. This is due to the lower range of lengths for silences that Cage allows compared to text. Silent sections fall within a range between one and forty-three seconds. Text lengths (different from paragraph lengths, of course) range from one (only once) to approximately ninety-two seconds. Like the exceptionally long paragraph, Cage allows one exceptionally long textual portion of 121 seconds.

Changes is a chance-determined work with a fixed "score," and exactly specifies

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performance aspects (recitation rate, timing). The text itself, although difficult to follow due to Cage's writing style, is nonetheless logical and syntactically "correct." Discontinuity is created solely by the chance-determined interruptions and silences. The silences only apply to Cage's part, since they are "filled in" by Tudor's playing. This precisely timed yin-yang relationship between speech and instrumental music is unique in Cage's work and underlines the rigidly deterministic structure of the performances. There is perhaps some intentional irony in using the obviously fixed closed forms to talk about *Music of Changes*, while using the ostensible topic to talk about the changes that had since led Cage to indeterminacy. The rigid correspondence between parts in *Changes* is particularly striking when compared to the superimposed performances of Cage reading and Tudor supplying instrumental and electronic sounds that took place later that month and the following year (discussed below).

Communication, the last of the trio of lectures that make up *Composition as Process*, was completed in January, 1958, and so pre-dates the other two lectures in the set. The text is a collage of passages from pre-existing sources, and newly written material in the form of questions. Five of the ten sections of pre-existing material consist of short quotations (one or two sentences). Four sections include long passages of lectures or articles by Cage and others concerning contemporary music. A long story from Kwang-Tse concludes the lecture.

Each of the three types of material has its own typographic features. The sections taken from pre-existing texts are in capitals, with flush left margins and ragged right margins. Some are printed in long lines with many short gaps between sentences and phrases. In later passages the margins are indented and the texts printed as monolithic blocks.

The eight sections made up of questions range from two to fifty-six questions. Most questions are less than a line of type. These sections have flush left margins and are

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printed in an intermediate size type. Sections are characterized by the length of questions, as can be seen at a glance from the shape of the right margins in these sections. The first section is mostly short questions with a few long questions. In the following four sections, the ratio is gradually reversed so that most of the questions are long. The sixth section, with the largest number of questions, is made up almost entirely of very short questions. In the last two sections, questions are nearly all short or intermediate in length. Each of these sections thus has distinctive rhythmic characteristics defined by phrase lengths.

The concluding story switches to lower- and upper-case and is printed in the smallest typeface in the entire lecture. Cage adds nine parenthetical comments on his presentation of the text during the course of the lecture. These are limited to a few lines and printed in italics.

The typographical features of the pre-existent material, questions, and concluding story are illustrated in Figures 7, 8,and 9, respectively.

The compositional methodology behind this collage was already developed in *Juilliard Lecture*. There are however, new aspects to *Communication* in terms of material. The extensive quotation from other authors, and the mixture of authors, are new aspects of text composition in this work. The use of pre-existent text and mixtures of textual sources became an extremely important principle that Cage refined and used extensively in his writings and spoken text works, as discussed in the second part of this thesis. Self-referential comments function as in *Lecture on Nothing*, as a way of drawing attention to the organization of the text. These comments, acting almost as asides, keep the listener aware that the text is alternating between previous lectures, stories, and questions with no answers. Cage has "nothing to say" and is saying it. Questions also appear in later works from this period, especially in *Where Are We Going? and What Are We Doing?* (1961), as discussed below. In a sense, the questions in the lecture are a demonstration of Cage's compositional methodology. As he explained in interviews from 1979 and 1980, "My

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IF THERE WERE A PART OF LIFE DARK ENOUGH TO KEEP OUT OF IT A LIGHT
FROM ART, I WOULD WANT TO BE IN THAT DARKNESS, FUMBLING AROUND IF
NECESSARY, BUT ALIVE AND I RATHER THINK THAT CONTEMPORARY
MUSIC WOULD BE THERE IN THE DARK TOO, BUMPING INTO THINGS, KNOCKING
OTHERS OVER AND IN GENERAL ADDING TO THE DISORDER THAT CHARACTERIZES
LIFE (IF IT IS OPPOSED TO ART) RATHER THAN ADDING TO THE
ORDER AND STABILIZED TRUTH BEAUTY AND POWER THAT CHARACTERIZE
A MASTERPIECE (IF IT IS OPPOSED TO LIFE). AND IS IT? YES
IT IS. MASTERPIECES AND GENIUSES GO TOGETHER AND WHEN BY
RUNNING FROM ONE TO THE OTHER WE MAKE LIFE SAFER THAN IT
ACTUALLY IS WE'RE APT NEVER TO KNOW THE DANGERS OF
CONTEMPORARY MUSIC OR EVEN TO BE ABLE TO DRINK
A GLASS OF WATER. TO HAVE SOMETHING BE A MASTERPIECE YOU
HAVE TO HAVE ENOUGH TIME TO CLASSIFY IT AND MAKE IT CLASSICAL.
BUT WITH CONTEMPORARY MUSIC THERE IS NO TIME TO DO
ANYTHING LIKE CLASSIFYING. ALL YOU CAN DO IS SUDDENLY LISTEN
IN THE SAME WAY THAT WHEN YOU CATCH COLD ALL
YOU CAN DO IS SUDDENLY SNEEZE. UNFORTUNATELY
EUROPEAN THINKING HAS BROUGHT IT ABOUT THAT ACTUAL THINGS THAT
HAPPEN SUCH AS SUDDENLY LISTENING OR SUDDENLY SNEEZING ARE NOT
CONSIDERED PROFOUND.

Figure 7. *Lecture on Commitment*, Typography and Format of Pre-Existent Textual Sections[58]

[58] Cage, *Silence*, p. 46.

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Now that I've asked thirty-two questions, can I ask forty-four more?
I can, but may I?
Why must I go on asking questions?
Is there any reason in asking why?
Would I ask why if questions were not words but were sounds?
If words are sounds, are they musical or are they just noises?
If sounds are noises but not words, are they meaningful?
Are they musical?
Say there are two sounds and two people and one of each is beautiful,
is there between all four any communication?
And if there are rules, who made them, I ask you?
Does it begin somewhere, I mean, and if so, where does it stop?
What will happen to me or to you if we have to be somewhere where beauty isn't?
I ask you, sometime, too, sounds happening in time, what will happen to our experience
of hearing, yours, mine, our ears, hearing, what will happen if sounds being
beautiful stop sometime and the only sounds to hear are not beautiful to hear
but are ugly, what will happen to us?
Would we ever be able to get so that we thought the ugly sounds were beautiful?
If we drop beauty, what have we got?
Have we got truth?

Figure 8. *Lecture on Commitment*, Typography and Format of Questions[59]

[59] Cage, *Silence*, p. 42.

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Yun Kiang could not pursue his question ; but three years afterwards, when again rambling in the East, as he was passing by the wild of Sung, he happened to meet Hung Mung. Delighted with the rencontre, he hastened to him, and said, "Have you forgotten me, O Heaven? Have you forgotten me, O Heaven?" At the same time, he bowed twice with his head to the ground, wishing to receive his instructions. Hung Mung said, "Wandering listlessly about, I know not what I seek; carried on by a wild impulse, I know not where I am going. I wander about in the strange manner which you have seen, and see that nothing proceeds without method and order—what more should I know?" Yun Kiang replied, "I also seem carried on by an aimless influence, and yet people follow me wherever I go. I cannot help their doing so. But now as they thus imitate me, I wish to hear a word from you." The other said, "What disturbs the regular method of Heaven, comes into collision with the nature of things, prevents the accomplishment of the mysterious operation of Heaven, scatters the herds of animals, makes the birds sing at night, is calamitous to vegetation, and disastrous to all insects; all this is owing, I conceive, to the error of governing men." "What then," said Yun Kiang, "shall I do?" "Ah," said the other, "you will only injure them! I will leave you in my dancing way, and return to my place." Yun Kiang rejoined, "It has been difficult to get this meeting with you, O Heaven! I should like to hear from you a word more." Hung Mung said, "Ah! your mind needs to be nourished. Do you only take the position of doing nothing, and things will of themselves become transformed. Neglect your body; cast out from you your power of hearing and sight; forget what you have in common with things; cultivate a grand similarity with the chaos of the plastic ether; unloose your mind; set your spirit free; be still as if you had no soul. Of all the multitude of things, every one returns to its root, and does not know that it is doing so. They all are as in the state of chaos, and during all their existence they do not leave it. If they knew that they were returning to their root, they would be consciously leaving it. They do not ask its name; they do not seek to spy out their nature; and thus it is that things come to life of themselves."

Figure 9. *Lecture on Commitment*, Typography and Format of Concluding Story[60]

[60] Cage, *Silence*, p. 55.

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composition arises out of asking questions."[61] Accepting chance as a discipline "to diminish [the] activity ... of the ego and to increase the activity that accepts the rest of creation" meant "shifting of my responsibility from the making of choices to that of asking questions."[62] As in previous spoken-text works, quotation, questions, and self-referential comments are means of distancing Cage from the text. The ideas presented are not directly his own, while the questions are meant to discover underlying principles in music and composition without directly stating them.

4. Summary

Chance applied to text composition was a radical shift. Cage developed techniques of cutting up and reassembling text, and of drawing texts from multiple sources. These operations helped to free continuity of ideas from intention. The last part of *Juilliard Lecture* goes farther in breaking down syntax and combining disparate ideas than any of Cage's text compositions prior to 1970, and the principles and techniques that Cage devised for this work reappear in many of his later works applied in more radical ways. In this part of the work Cage achieved the ideal of "saying nothing" by allowing syntactic fragments to interact freely, opening the text to a free interpretation by the listener, rather than attempting to communicate specific ideas.

In *45' for a Speaker* chance intersection of parameters is a new compositional technique that brings about a fundamentally new performance style, particularly in terms of broadening the range of speech tempo and emphasizing coloristic and theatrical elements of performance. Timing is notated vertically, allowing the performer more leeway and bringing about a new typographical orientation of text on the page. Compositional strategies devised for this piece also helped to establish a concise writing style as the result of chance-

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[61] David Cope, "An Interview with John Cage," in Kostelanetz, *Conversing*, 215.
[62] Woman, "Music of Contingency," in Kostelanetz, *Conversing*, 42-43.

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determined lengths of textual passages.

In other ways Cage's use of chance in spoken text composition remains conservative. Often, his aims are basically the same as in the previous lectures, to present his own ideas concerning music and composition. Most of all, Cage views speech as a vehicle for language, and language as a conveyer of ideas. So while chance, sometimes in conjunction with pre-existent material, took texts further in the direction of abstract or indeterminate meaning and engendered new performance aspects that dealt with speech as musical material (particularly in respect to tempo), Cage's spoken text compositions do not go as far as his musical compositions. There is no analogue in his thinking at this time for instance that would correlate words to the infinite sound space, since continuity is perforce guided by syntax. The sharp distinction Cage maintains between speech and music reveals a dependence on the conceptual rather than pheonomenological aspects of speech. Looking back on his writings in *Silence* and *A Year from Monday*, Cage observed that they "didn't deal with the question of the impossibility or possibility of meaning. They took for granted that meaning exists."[63]

[63] Cage, *For the Birds*, 114.

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CHAPTER THREE

INDETERMINACY IN COMPOSITIONS WITH SPOKEN MATERIAL

In some ways indeterminacy is much more limited in works for speakers than in Cage's other compositions.[1] The indeterminate notational systems of instrumental and vocal works from this period find no correspondents in Cage's treatment of text and speech, and the sequence and timing of material are determinate in works for speakers. Also, Cage nearly always maintained tight control of material in his texts and works for speakers. It was not until 1961 that Cage began to apply indeterminate compositional processes to text, and not until 1970 that he extended indeterminacy to performance of spoken text in any significant way. The following sections discuss indeterminate aspects in Cage's writing and spoken-text composition.

The first section discusses *Speech* (1955), one of the rare instances in which Cage does not create a text for his own performance, and thus leaves the speaker's material as indeterminate as the material that happens to be broadcast on the radios. Superimposition of parts adds an additional element of indeterminacy. Yet Cage specifies the type of material and the manner of presentation in the speaker's part; and the structure of each part, though chance-determined, results in a fixed score. In combining the speaker's part with five radios Cage again treats speech, at least in part, as a timbral and textural element whose specific content is irrelevant. The speaking voice, especially when amplified in performance,

[1] Indeterminacy means that the score leaves open certain aspects of the music to the performer's interpretation. Cage's lecture "Indeterminacy" (1958) provides an excellent explanation of this principle and its various applications. See Cage, *Silence*, 35-40.

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becomes part of the mix of electronic sounds. The occurrence of multiple speaking voices, implicit in the work, relates both to *Theatre Piece No. 1* and looks forward to *Where Are We Going? and What Are We Doing?*. The indeterminate factors in *Speech*—unpredictable material, absence of a notational means of timing recitation, superimposition, multiple speaking voices—appear in conjunction only in works that Cage does not author or perform from a composed text. Cage was to extend indeterminacy into the composition and performance of his solo spoken-text works in different ways in compositions and events in the following years.

The second section of this chapter discusses Cage's texts for three vocal works written between 1958 and 1960. Although these are songs, the texts are nonsyntactic mixtures of linguistic fragments. Previous spoken-text compositions fragment text and appropriate pre-existent material, but in the texts for the three songs Cage goes much farther, breaking text into single phrases, words, and letters, and constructing entire texts without any newly written material. For pre-existent material Cage uses either a global search through a single text or through many unrelated sources. These aspects do not appear in his spoken-text compositions until more than ten years later. Indeterminate processes used to compose *Solo for Voice No. 2* are applied to text beginning only in 1961.

Indeterminacy (1958-59) for solo speaker is discussed in the third section. This work is comprised entirely of stories of different lengths, each read within one minute, and thus continues Cage's interest in varying speech tempos. Indeterminacy plays no part in the structure of the piece, nor in the syntactic continuity within textual units. However, these highly deterministic aspects of the piece serve as a framework for the nonintentional justaposition of stories, leaving the work open to interpretation and indeterminate with respect to relationships. Moreover, the work is in open form. Stories can be added, omitted, and their order rearranged so that no one continuity is fixed.

Two works, *Where Are We Going? and What Are We Doing?* (1960) and *Lecture*

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on Commitment (1961)—are discussed in the fourth section. The former is one of a group of spoken-text works composed using an indeterminate compositional method derived from *Cartridge Music* (1960), and Cage's first work to explicitly utilize multiple speaking voices and recorded speech. The latter work also has indeterminate compositional factors: the performer is is given materials—individual texts and timeframes—to construct a realization for performance. Thus, there is no fixed score in terms of ordering, and each realization will produce different recitation rates applied to textual units. Many other indeterminacy aspects enter into performance of both works. This section analyzes these pieces and considers the implications of their indeterminate performance parameters.

The last section discusses process pieces for which Cage did not compose a text, but used speech as sonic material. *Talk I* (1965) was an event in which Cage spoke extemporaneously while his voice was modified electronically. In *Rozart Mix* (1965) prerecorded speech and other sound material are made into tape loops and played back in multiple layers by the participants. In *Telephones and Birds* (1977) performers call phone numbers with prerecorded messages which are then broadcast through loudspeakers. In such pieces Cage provides only the means to realize the event. Structure, material, and continuity are indeterminate.

1. *Speech* (1955): Indeterminacy in Spoken Material and Superimposition of Speech and Electronic Media

Speech is unique in Cage's works for speakers. It is the only work in which he relinquishes control of spoken material to the performer, and his only work expressly written for speaker and radios. As early as the 1930's Cage had been thinking of recordings and radio simply as sound sources with little or no regard for content, and he included them as "instruments" (or "noise sources") in many works throughout his career, beginning with *Imaginary Landscape No. 1* (1939). In such compositions, the unpre-

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dictability of broadcast material adds a new level of chance, taking content out of the composer's compositional control. Something similar happens in the approach to text in *Speech*. The newsreader chooses text from two newspapers or news magazines. So while the nature and style of the material is given, the actual text is not determined by the composer (nor could it have been, if the newsreader chooses articles appearing after the work was composed). Formatting textual passages in blocks whose sequence is not predetermined is also a step toward applying the principle of mobile units to text. Though most of Cage's later works for speaker have the fixed continuity of the earlier lectures *Speech* is the first of works for speakers that allow the performer to omit or re-order the texts given in his or her part.

It is interesting to note that Cage does not remember hearing music on the radio when he was growing up. He heard the comedic dialogue shows favored by his father, but was mostly drawn to news broadcasts.[2] Even at age 75, Cage listened to radio only to hear the news, the time, and the weather.[3] Speech continued to dominate radio in the AM-frequency environment in which *Speech* was conceived. Underlying the piece is the near certainty of simultaneous speaking voices active between radios and the reader. This implicit aspect is tied to Cage's later development of works in which multiple speaking voices combine indeterminately. Selection of articles from current publications also ties in with the immediacy and contemporaneity of broadcast media. The material of the piece achieves the goals of bringing life into art and of creating a sense of being in the present moment.

Despite the factors that relate the speaker's part to some of the broadcast material, the newsreader remains distinct in the texture, due to several factors that emphasize consistency in his or her part. Consistency of material and delivery are two aspects. The

[2] See, e.g., John Cage and Richard Kostelanetz, "A Conversation about Radio in Twelve Parts," in Fleming and Duckworth, *John Cage at Seventy Five*, 274-76.
[3] Ibid., 299.

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nature of the material and the term "newsreader" suggest both utilitarian prose and a consistent, somewhat impersonal, reading style. Timbre is another factor. Cage disliked the "timbre" of radios, and his first composition for radios, *Imaginary Landscape No. 4* (1951) was a means of giving up his personal taste with regard to timbre.[4] *Speech* immerses the live speaking voice in a world of electronic timbres, including other speaking voices, music, and noises.

Continuity is another factor that distinguishes the newsreader's part. Aside from a few small fragmentary spoken sections, the newsreader recites continuous passages for several minutes at a time, while the constantly changing parameters in the radios' parts often create rapid discontinuities. Indeed, given the total amount of time for each news article, it seems that repetition of the articles is amost unavoidable. At a later date, Cage compared a news station that broadcast continuous news reports to Satie's *Vexations*: "The program, if you listen long enough ... more or less repeats itself ... because you come back to the weather at regular intervals and, in fact, to the same headline news."[5] The newsreader's dynamic level is relatively flat whereas the parts for radio most often have rapidly and continuously changing dynamics. Structurally, the consistency of the reader's part is emphasized both by the unbroken delivery of texts of relatively long duration, and by their relatively even distribution over the course of the piece. These structural aspects are discussed in the following paragraphs.

Speech has no fixed score but, like earlier works, consists of superimposable parts whose exact temporal relationships are indeterminate. Five performers turn radios on and off according to timings notated in minutes and seconds, as shown in Figure 10.[6] Cage specifies a range of time in which the performer may begin. The maximum value (e.g.,

[4] Cage discusses this in his lecture *Changes* (in Cage, *Silence*, 30-31), and in John Cage and Morton Feldman, *Radio Happenings* (Munich: Edition MusikTexte, 1993), 11-12.
[5] Alan Gilmore and Roger Shattuck, "Erik Satie: A Conversation," in Kostelanetz, *Conversing*, 161.
[6] The part for Radio 4 was chosen for its simplicity; the other parts are much more complex but follow the same notational scheme.

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9.155′′ in Figure 10) is set to ensure that all of the parts fit into the forty-two minute length of the piece. Cage also indicates dynamics in these parts.

Let moveable 0′ be a point between actual 0′ and 9.155′′, then

0′	on	fade in;fade out
17′24.854′′	off	
18′57.047′′	on	constant volume
40′58.480′′	off	

Figure 10. Part for Radio 4 from *Speech*[7]

The sixth part of the piece is for a newsreader, who chooses material from two newspapers or news magazines. The reader's part, like the on/off notation for the radios, consists of begin/end timings for reading portions of text. The indeterminacy of textual material led Cage to assign overall time lengths for text portions, a break with the previous practice of controlling recitation rate by providing timing indications for lines of type. Elapsed times between spoken sections constitute the periods during which the reader is silent. Figure 11 shows the approximate lengths of spoken portions (in boldface) and silences, along with Cage's indication of whether text is to be drawn from publication "A" or "B".

As seen from Figure 11, the overall amount of silence predominates over speech by roughly two to one, and the lengths of silent sections and of spoken sections are fairly

[7] John Cage, *Speech* (New York: C. F. Peters Corp., 1955).

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evenly distributed. Both of these factors are in contrast to the lectures discussed above, which contain proportionately more speech and have highly irregular sectional lengths, including at least one distinctively lengthy section of speech, silence, or stasis. These structural aspects are apparently the result of how chance decisions were structured. Four spoken sections are less than a minute, and only two exceed four minutes. Intervening silences are on a scale of higher values. As a result, silent sections are longer than their preceding spoken sections in all but one instance. This structure makes spoken sections significant and isolated events, related to each other by timbral and stylistic consistency, and by topic.

1′9″[1]	
6″	**A**
2′26″	
2′21″	**B**
5′24″	
2′15″	**A**
4′20″	
4′10″	**A**
41″	
6″	**B**
6′17″	
41″	**B**
2′54″	
20″	**B**
4′	
4′10″	**B**

Figure 11. Approximate Lengths of Spoken and Silent Sections in Newsreader's Part of *Speech*

[1] This represents the maximum time to delay entry after actual 0′.00″.

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2. Texts Composition in Three Solos for Voice (1958-1960): Linguistic Fragmentation and Multiple Source Collage

Beginning in 1957, Cage expanded indeterminacy by developing new notational methods and compositional techniques. Three vocal works during this period—*Solo for Voice No. 1* (1958), *Aria* (1958) and *Solo for Voice No. 2* (1960)—show many of the characteristics of these developments. The texts that Cage composed for these songs are interesting to compare to the more conservative texts for speaker written during the same period. The song texts are also quite significant in the development of later, nonsyntactic spoken-text compositions.[9]

Like *45′ for a Speaker*, the vocal works may be performed simultaneously with associated compositions, in this case the instrumental parts from *Concert for Piano and Orchestra*, and with Cage's work for magnetic tape, *Fontana Mix*. In the former, the part for piano presents an astonishing variety of newly-invented notations that expand indeterminacy by leaving many interpretations open to the performer, while the parts for the orchestral instruments are extensions of the point-drawing technique and have fewer indeterminate aspects in the notation. In these instrumental parts, individual notes separated by silences are treated as sound events, and musical parameters such as timbre, dynamic nuance, and playing techniques are applied to each note by chance techniques. Rhythm is interpreted by the performer, partly by proportional notation, and partly by the size of noteheads (large notehead indicating a longer length). Alternatively, notehead size may be interpreted as determining dynamic level (large notehead indicating higher dynamic), or both rhythmic and dynamic interpretations can be applied.

As part of this group of compositions *Solo for Voice No. 1* shares the same compositional techniques and notational devices as the parts for the orchestral instruments. Rather than being the main material of the composition, text becomes simply another

[9] This is considered in Part II, below.

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element—along with pitch, rhythmic definition, and dynamics—paired by chance to each sound event. The strong effect of sung pitches and pitch relationships, as well as the feasibility of elongation of vowels, add musical dimensions not clearly evident in ordinary speech. (As in traditional vocal music, non-pitched sounds—consonants—are not sustained.)[10] Also missing in the spoken works are the variety of styles and timbres that Cage calls for in *Aria*. Parameters such as pitch, rhythmic elongation, and dynamic nuance are not as clearly evident as in vocalized text, and in his own performances there is no dramatization of text by imposing an assumed style of reading. There is no graphic basis such as point-drawing that can be applied to speech.[11] Chance intersection of parameters in the spoken works is confined to creating varying recitation rates rather than complex sound events.

One can see this distinction in the case of *Sprechstimme*, which Cage offers as an optional style in *Aria*, while in the works for speaker neither relative pitches nor melodic contours are indicated. Also, rhythmic elongation at the level of the letter or syllable, common in sung text, is absent in the works for speaker. There is a lower bound to Cage's recitation rate. Text is spoken slowly, but it is still *spoken*; vowels are not elongated to such an extent that words and phrases break apart. Rather than stretching words beyond a slow speaking rate, Cage surrounds phrases with gaps of silence to fill a relatively long time length with a short text.

Because of the highly fragmentary nature of the vocal solos, texts are correpondingly fragmentary. All textual fragments are the results of *I Ching*-determined selection of phrases, words, syllables, and single letters. This technique of generating a high degree of fragmentation is nowhere evident again in Cage's spoken works until much

[10] Although Cage realized that the high proportion of consonants in English was a rich resource for discontinuity and noise, he did not apply such thinking to his texts at this point. Thus, the single letter W in the text sung on the syllables "double-you" rather than voiced phonetically as a whoosh of air.
[11] Cage did however use the paper imperfection technique to determine text placement in the 1957 written piece "2 Pages, 122 Words on Music and Dance." See Cage, *Silence*, 96-97.

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later. Moreover, the short length of each event, and the separation of events by silences, increase the level of discontinuity of textual fragments to an even higher degree than in *Juilliard Lecture* and *45′ for a Speaker*.

Equally important in *Solo for Voice No. 1* is the borrowing from other sources to create all of the texts for the vocal works. Although Cage borrows from other authors in previous works, outside material is confined to quotes and stories, the only exception being the news publications in *Speech*. Appropriation of texts to create a new text is a principle that is greatly expanded in most of Cage's later text compositions and writings. Drawing all textual material from a single author, as in *Solo for Voice No. 1*, is the principle behind *Mureau*, *Empty Words*, and the writing-through mesostics. Fragmentation and recombination of many disparate texts, as in *Aria*, is characteristic of many of Cage's later mesostics.

Solo for Voice No. 2 (1960) goes even farther in terms of linguistic fragmentation and the application of indeterminacy. There is no conventional score, but a set of separate sheets—all but one transparent—that the performer superimposes to determine specific events according to Cage's directions. It is in this way an adaptation of *Fontana Mix* (1958), Cage's composition for tape tracks and/or any type of instrument(s). Cage offers two means of preparing a program with the material for *Solo for Voice No. 2*. The "text" of the piece is actually nothing more than a circle divided into twenty-one equal parts with a different letter of the alphabet in each part. (All vowels other than Y are included. Among consonants, C, D, W, and X are excluded). This sheet and a second transparency with a shape drawn with broken lines are placed over a solid sheet marked with ten points.

> The proportion of the number of points outside the circle to the number of points inside the circle is the proportion of silence to sound. The vocalise is given in terms of vowels and consonants by the entrance(s) and exit(s) of the broken line with respect to the circle. A suggestion of pitch is given by the vertical (up and down) direction of the broken line within the circle. A suggestion of amplitude is given by the

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> horizontal (forward, louder, and backward, softer) direction of the broken line again within the circle.[12]

Alternatively, the sheets with the circle and the broken line can be superimposed any number of times to generate the material for vocalise, and the "vocal line" is determined by the superimposition of three transparencies: one contains parallel straight lines, one curves, and a third is "a rectangle bisected by a line parallel to the top and bottom lines of the rectangle."

> In this case, points, lines and curves within the larger part of the rectangle are musical relative to those within the smaller part which are speech, shouts, noises (produced by any means), etc. Points are short sounds; lines are sounds of varying length, curves are slides.[13]

Time is read proportionally with overall length of each operation determined by the performer.

By consigning "speech" to a separate category along with "shouts" and "noises" and apart from "musical" (sung) sounds, Cage once again establishes a boundary between the two modes of vocalization dependent above all on pitch definition. This is true even when the vocalization is at the level of the single letter.

Underlying the musical distinctions is Cage's view of the function of text in the spoken works. No matter how far he stretches syntax and meaning in the works for speaker, he never abandons them altogether. In the case of the vocal works comprehensible ideas and "meaning" are unimportant. Text serves as a vehicle for vocalization of complex musical events. Language is fragmented into linguistic elements. An individual letter or word, or a phrase in an unknown language is decontextualized. When textual phrases appear, they are short and isolated. Words and phrases are paired by chance to independently-determined vocal events, so there is no intentional relationship between text

[12] John Cage, *Solo for Voice No. 2*, instructions (New York: C. F. Peters Corp., 1960).
[13] Ibid.

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and song. The idea or image presented in the text may be at odds with, or irrelevant to, the musical elements of the event, subverting any conventional expressivity. Appropriated textual material is an important element in the vocal texts that Cage was later to apply to spoken-text compositions. In these ways the three song texts establish the basic principles that Cage began to apply to works for speaker(s) twelve years hence.

3. *Indeterminacy* (1958-59): Indeterminate Aspects in Composition and Performance

Indeterminacy brings together several aspects of Cage's previous works for speaker. This work consists of ninety stories, each to be read in one minute. Cage's reading of *Indeterminacy* was a component in several mixed-media works. In the 1958 premiere of the work at the Brussels Fair "it consisted of only thirty stories, without musical accompaniment. A recital by David Tudor and myself of music for two pianos followed the lecture." For his performance at Teachers College, Columbia, the following spring, Cage added sixty stories and Tudor superimposed a performance of piano parts from *Concert for Piano and Orchestra* "employing several radios as noise elements." In the 1959 recording Cage, isolated in a separate studio according to the principle of superimposition, read the text with a simultaneous performance by Tudor playing piano parts from *Concert for Piano and Orchestra* and using as "noise elements" tracks from *Fontana Mix*. On other occasions Cage read the work during simultaneous performance of works choreographed by Cunningham.[14]

Using the story format enabled Cage to adapt the the piece to different performance situations by adding or subtracting stories, and replacing stories with newly written ones. The work was therefore indeterminate in the sense that, theoretically at least, the principle of

[14] For the origin and history of the work, see Kostelanetz, *John Cage: Writer*, 75-80. A version of *Indeterminacy* with added notes by Cage appears in Cage, *Silence*, 260-73. Another version, which was performed simultaneously with Cunningham's *How to Pass, Kick, Fall, and Run* (1965) appears with notes by Cage in *A Year from Monday*, 133-40. The recording with Tudor, Folkways FT 3704 (1959) was reissued in 1992 (Smithsonian Folkways CD SF40804/5).

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mobile units could be applied to story form as it had been applied to page order in instrumental parts, and implicitly to the news articles in *Speech*. Mobility and nonintentional continuity are at the heart of the work, as Cage explains:

> My intention in putting the stories together in an unplanned way was to suggest that all things—stories, incidental sounds from the environment, and, by extension, beings—*are* related, and that this complexity is more evident when it is not oversimplified by an idea of relationship in one person's mind.[15]

Cage began by writing a list of stories as they occurred to him, with no intention of connecting stories according to any predetermined criteria. The uniform time frames and fixed texts, however, are highly determinate elements. Variety in tempo brought about by the intersection of independently determined textual lengths and time frames first appears in *45′ for a Speaker*. The rhythmic structure of *Indeterminacy* acts in a similar way, except that one parameter, the time frame, remains constant, giving contrasting recitation rates a common unit. As in *Speech*, time frames are expressed in overall length. This rhythmic treatment replaces the grids and vertical scales that articulate timings and govern recitation tempos on a fine scale in previous works, allowing the performer leeway in details of text placement and delivery within the time frame. Chance procedures involving measurement and collage are absent. The amount of text, as well as its narrative continuity, are the result of the self-contained story form.

Indeterminacy relies on large-scale apposition of these rhythmic and textual units rather than on the flexible rhythmic structures, higher and more varietal levels of cut-up, and small-scale control of recitation rates found in previous works. The work has the character of a set of variations for solo performer. However, in composition and performance, the units are treated with some flexibility. It is evident that some stories are

[15] Cage, *Silence*, 260. See also Kostelanetz, *John Cage*, 197-98, and Fetterman, "Cage's Theater Pieces," 387.

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connected—for instance, the telling of three related events in sequence. These instances bind units together, in effect creating larger units. Similar factors are present in rhythmic aspects of the piece. When short or long stories happen to occur in sequence, recitation rate remains relatively constant between two or more stories. In other cases, the stories are too long for Cage to read in a minute, and he often makes up for the lost time by reading surrounding stories in less than a minute, creating a large-scale rubato that gives the rhythmic structure plasticity. Even without these modifications, the relatively capacious length of one minute makes it difficult for the reader to perceive units as being of the same length. As long stories race by with a surfeit of information and short stories are filled with large gaps of silence, a listener's perception of the length of a minute changes. Minutes seem to expand and contract.

While some stories are serious and others humorous, all can be related to philosophical issues in Cage's approach to composition. Yet the relevance, or "point" of each story is implicit. Again, Cage uses story-telling as an oblique means of communication, allowing the listener to glean meaning within or among stories. *Indeterminacy* allows nonintentional connections and relationships to arise. On the other hand, choice is involved in the material to a high degree. The stories are selected by Cage. Cage's selection of stories is a unifying force in the work. Although some of the stories are from other sources, most relate personal experiences or conversations. Recurrent themes (e.g., Asian philosophy, stories about performances and musicians), and motivic subjects (e.g., Schoenberg as teacher, conversations with David Tudor) also serve as unifying factors.

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4. *Where Are We Going? And What Are We Doing?* (1960) and *Lecture on Commitment* (1961): Indeterminate Compositional Processes and Performance

In works for speaker from the 1950's Cage had incorporated indeterminacy in several ways. Superimposition of the speaking voice with instrumental and electronic sounds brought about a situation in which the relationships of the parts was flexible rather than fixed. The material for *Speech* is necessarily indeterminate, for both the speaker and the radios. Mobility of units in *Speech* and *Indeterminacy* introduced indeterminate continuities into works for speaker. With *Where Are We Going? and What Are We Doing?* and *Lecture on Commitment*, Cage moved further in the direction of indeterminacy by appplying indeterminate methods of composition to the production of text and by including indeterminate elements in performance of spoken-text works. In the first of these works Cage introduced the new textural element of multiple speaking voices through electronic technology.

At the same time he maintained many of the techniques and stylistic characteristics of his previous spoken-text works. Although the practice of chance determination by means of hexagrams is replaced by the new technique of the randomly layered transparencies of *Cartridge Music*, the compositional process results in correspondence between spatially measured amounts of newly-written texts and predetermined of lengths, as had been developed in *Changes*. The main morpohological feature is still alternation between spoken and silent sections of various lengths. A playful approach to conventional lecture, irrelevancy, becomes a major element in the compositional process. Narrative (closed story form) continues to be both a means of personalization and distancing. Syntax operates as the compositional method in these newly-written texts due to the absence of fragmentation and collage.

The following paragraphs discuss these two works in turn, first describing the compositional technique involved and then discussing indeterminate performance aspects

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and their effect on listener perception.

Cage describes the occasion for which *Where Are We Going? and What Are We Doing?* was written:

> When I was invited to speak in January 1961 at the Evening School of Pratt Institute in Brooklyn, I was told that the burning questions among the students there were: Where are we going? and What are we doing? I took these questions as my subjects and, in order to compose the texts, made use of my *Cartridge Music*.[16]

Cartridge Music (1960) is not a conventional score, but consists of materials provided by Cage that the performer manipulates to determine the specific features of sonic events. In this way *Cartridge Music* is a variant of the materials used for a performance of *Solo for Voice No. 2*, discussed in the second section of this chapter, above. In the case of the lecture texts the determinations to be arrived at were lengths of texts and silence, whether the text segment is written "on" or "off" a main subject, and where stories were to appear in the text.[17] Cage's method of composition is described in his notes to *Rhythm Etc.*, a lecture written the same year as *Where Are We Going? and What Are We Doing?*:

> *Cartridge Music* is a number of materials with directions for their use. There are twenty ordinary non-transparent sheets having biomorphic shapes. There are several transparent plastic sheets, one having points, a second having small circles, a third having a meandering dotted line, a fourth representing the face of a chronometer. By superimposing all the transparent sheets on that ordinary one which has the same number of biomorphic shapes [as given] subjects, and by adjusting the meandering line so that it intersected at least one point within one of the shapes and made at least one entrance and exit with respect to the chronometer, I was able to make a detailed plan for writing. Points within shapes were ideas relevant to a particular subject, points outside were irrelevant ideas. The circles were stories, likewise relevant and irrelevant. The numbers on the chronometer

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[16] Cage, *Silence*, 194.

[17] *Cartridge Music* was similarly used in several of Cage's written pieces during this period. These include *Rhythm Etc.* (1961); *On Robert Rauschenberg, Artist, and His Work* (1961); and *Jasper Johns: Stories and Ideas* (1963-64). See Cage, *A Year from Monday*, 73 and 120; and Kostelanetz, *Conversing*, 133-34.

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> were interpreted, not as seconds, but as lines in stenographic notebooks. I arrived, that is, at directives like the following: from line 24 to line 57, tell a story that is relevant to proportion, discuss an idea about rhythm, follow this with an idea that has nothing to do with balance. Obtaining many such directives, I then did the writing. Empty spaces follow from the method I've described.[18]

Thus, the content and continuity of each textual portion (event) in *Where Are We Going? and What Are We Doing?* is the result of an indeterminate configuration of the graphic materials of *Cartridge Music*. An event may be multipartite and combine ideas and stories relevant or irrelevant to the questions posed in the title (each represented by a biomorphic shape). Texts "on" a subject are cued by the words in the title, especially "going" and "doing". Related verbs spin a web of variations on movement (fly, drive, wander, rush, follow) and its counterpart (wait, stay). "What" and "Where" also appear many times, and Cage uses the pronoun "we" frequently. Like themes and motives in earlier text works, the repetition and variation of the title words is a unifying factor within and among the four lectures. The questions of the title are also reflected in Cage's text. Instead of providing definitive answers, Cage peppers the text with questions, recalling *Communication*.

Yet there is in the lectures a concentration on a central idea which might be called thematic. The idea of exploring an unpredictable chaotic world is expressed in terms of "home" and "field": "Home is discrete points. Space is an infinite field without boundaries...We're going out."[19] "Home" and "house," along with related nouns (hall, window, door, hearth, roof) form one set of images that runs throughout the lectures as a known secure place, whereas "the field" is limitless, with a "multiplicity of differences." "Existence ... is a field phenomenon, not limited to known discrete points on that field—the conventionally accepted ones—but capable of appearance at any point on the field. This

[18] Cage, *A Year from Monday*, 120.
[19] John Cage, *Where Are We Going? and What Are We Doing?*, in Cage, *Silence*, 198-99.

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brings about a change in our head."[20] "Our business has changed from judgement to awareness."[21] This theme emerges in the many stories of leaving home, traveling, and returning to home. The idea of leaving home and going into the field is alluded to in the story of getting lost in the woods, and summarized by Cage's comment elsewhere in the lectures: "We are always going and then coming back and going and coming back again. Eventually we will go and not come back at all."[22] On the other hand, there is no need for going or doing, since all of the events in the universe are interconnected. "In a grand sense, I do what you do and you do what I do."[23] "We don't have to go anywhere: it comes to us."[24]

The superimpositions of *Cartridge Music* materials are perfectly suited to this metaphor, a field of many points inside and outside of closed shapes, and a meandering line that has no direction or goal: "I take a sword and cut off my head and it rolls to where we are going."[25] Likewise, the simultaneous delivery of all four lectures immerses the listener in a field of words where, as Cage admits, "meaning is not easy to come by." The close link that Cage saw between multiplicity and electronic technology is reinforced by Marshall McLuhan's writings. In retrospect, Cage remarked that *Where Are We Going? and What Are We Doing?* was written "in awareness of McLuhan's point that nowadays everything happens at once, not just one thing at a time... [We] live as the effect of electronic inventions by means of which our central nervous sytems have been exteriorized."[26]

"Everything happening at once" is exactly what happens in *Where Are We Going? and What Are We Doing?*, Cage's first composition for multiple speaking voices. Shortly before completing this work, Cage remarked in a lecture at Wesleyan University:

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[20] Ibid.
[21] Ibid., 205.
[22] Ibid., 198.
[23] Ibid., 219.
[24] Ibid., 223.
[25] Ibid., 197.
[26] John Cage, "McLuhan's Influence," in Kostelanetz, *John Cage*, 170.

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> I want [the Fellows of Wesleyan] to speak for themselves, and all at once.... Even if you can't hear what they're saying because they're all talking at once, you'll at least get an idea of my attitude toward musical composition.[27]

For this piece Cage composed four separate texts that can be performed simultaneously. The instructions read:

> A performance must be given by a single lecturer. He may read "live" any one of the lectures. The "live" reading may be superimposed on the recorded readings. Or the whole may be recorded and delivered mechanically.[28]

Cage's interest in the use of recorded material here, expressed earlier in *45' for a Speaker*, is an interest in a technology that allows for multiplicity and spatial separation. The unique ability of recording technology to superimpose multiple readings by the same speaker is an essential element of the work. Cage and Tudor explored this ability in recording *Cartridge Music*, where they "used the facility of recording to achieve something otherwise impossible" by superimposing "four different ... distinct performances" by two musicians.[29]

Two passages in *45' for a Speaker* call attention to Cage's interest in defying comprehension and logic through multiplicity. Cage distrusted "communication," which he saw as "a way of calling attention to one's own psychology."[30]

> One loud-speaker is insufficient and so are two or three or four: five is when it seems to me to begin. What begins is our inability to comprehend.[31]
>
> Turn on several radios at once. There again one has a multiple loud-speaker system. Besides actually being in space, the mind no longer can function as A B C.[32]

[27] Cage, John, "Ladies of the Monday Club and Gentlemen of the Faculty," in Kostelanetz, *John Cage*, 137-38.
[28] Cage, *Silence*, 194.
[29] Cage, *For the Birds*, 49-50. See also Fetterman,"Cage's Theater Pieces," 118-20.
[30] Cage, *Silence*, 172.
[31] Ibid., 186.
[32] Ibid., 174.

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In relation to speech, this means that the mind at times can no longer interpret speech conventionally, as a vehicle to convey focused, complete ideas, but rather in layers or simultaneities where no one idea is allowed to dominate for any length of time, or where textural density results in incomprehensibility. Cage did not immediately follow up on multiple speaking voices in his compositions, although on occasion his readings of stories for Cunningham's *How to Pass Kick, Fall, and Run* (1965) "was elaborated when David Vaughan joined Cage in the simultaneous, but independent, reading of those stories."[33]

Further instructions provided by Cage bring in an array of indeterminate performance aspects:

> Four independent lectures to be used in whole or in part—horizontally and vertically. The typed relation is not necessarily that of a performance. Twenty-five lines may be read in 1 minute, 1 1/4 minutes, 1 1/2 minutes, giving lectures roughly 37, 47, 57 minutes long respectively. Any other speech speed may be used....Variations in amplitude may be made; for this purpose, use the score of my composition *WBAI*.[34]

What does Cage mean when he says the lectures are to be used "in whole or in part—horizontally and vertically"? A liberal interpretation would be that any part of any lecture may be read ("horizontally"), and therefore lectures could be of different lengths, and could be superimposed in any combination ("vertically"). Overall length, and therefore recitation rate, become indeterminate. This interpretation accords with Cage's comments, written a month later, regarding a recitation of *On Robert Rauschenberg, Artist, and His Work*, also composed by means of *Cartridge Music*: "It may be read in whole or in part; any sections of it may be skipped, what remains may be read in any order."[35]

Using the chronometer to determine number of lines in a stenographer's notebook is a means of determining textual lengths and recitation rates that Cage may have employed

[33] Mumma, Gordon, "From Where the Circus Went," in Klosty, *Merce Cunningham*, 67.
[34] Cage, *Silence*, 194.
[35] Ibid., 198.

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in other works.[36] The chronometer provides a range of from one to sixty lines for each event, limiting events to about three minutes according to the timing possibilities Cage gives in the introduction to the work. Fashioning text to units measured by lines, and then applying a regular time unit to number of lines, allows Cage to keep a consistent recitation rate in all four lectures. The wide variety of recitation rates in *45′ for a Speaker* and *Indeterminacy* is absent here. The three possibilities that Cage gives for timings by twenty-five lines would produce recitation rates within the range of normal speech, from about 2.4′′ to 3.6′′ per line. A much faster or slower rate, as permitted in Cage's instructions, would drastically change the the character of the performance. It is possible to interpret the instructions to mean that each lecture can be delivered at a different tempo. Since recitation rate within a lecture does not change, different tempos among four readings would create more distinct layering.

Applying *WBAI* to change dynamic levels is another example of electronic technology applied to speech in Cage's spoken-text compositions, and of indeterminacy applied to performance of *Where Are We Going? and What Are We Doing?*. This score was originally composed for an in-studio performance of *Communication* with David Tudor assisting in February 1960.[37] Cage describes this twenty-page score as "material for making a mechanical program [that] may be used in whole or in part by an operator of machines (e.g., amplifiers and tone control of the speaker's voice)."[38] The material in the

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[36] See the discussion of *Changes*, above.

[37] Udo Kasemets, Silence Archives, July 17, 2001. (Kasemets cites as his source the 1962 C. F. Peters Catalogue in personal email, July 19, 2001.)

[38] John Cage, *WBAI* (New York: C. F. Peters Corp., 1960). The material may also be used similarly with "tape machines in a performance of the *Fontana Mix* with *Solo for Piano*, *Aria*, etc.; L.P. playbacks with amplifiers and tone controls[;] and amplifiers and tone control of the speaker's voice in a performance of… *Indeterminacy: New Aspects of Form in Instrumental and Electronic Music* and *Communication*. The notation, in space, 3 systems, left to right on the page may be measured according to any rule (e.g. inch = 10 m., giving a total of 3 hours, etc.). A transparent graph [a nine-inch ruler dividing each inch into ten equal parts] is supplied to facilitate such measurements. The pages (and systems) need not be used in the order given; however, where an operation is indicated that begins or ends outside a selected area, it is to be ignored. Certain operations may be found impossible, e.g. 3 or 4 at once. Let the operator do what he can without calling in assistants." Cage composed *WBAI* for a radio performance (along with a lecture "Communication") which he presented with David Tudor assisting, in February 1960 and January 1961 over the New York station WBAI.

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twenty pages (whose ordering is indeterminate) consists simply of three systems each comprised of four horizontal lines that are broken at chance-determined points. The appearance of a line indicates one dynamic level, a break indicates zero (off), or a different level. Durations of lines and breaks are proportional in respect to a scale of measurement determined by the operator. Thus, if three pages are selected for a particular overall time length, durations will be proportionally longer, whereas if all twenty pages are used for the same time length, durations will be much shorter and changes will occur much more frequently. One could possibly interpret Cage's instructions as applying *WBAI* to one, two, or all three of the recorded lectures, as well as to the live reading, for superimposed combinations. Indeed, the four lines of each system of *WBAI* suggest a correspondence to the four lectures of *Where Are We Going? and What Are We Doing?.*

In practice, however, Cage seems to have used few of these options, relying instead on the recordings he made for C. F. Peters in 1961, which are all of the same length and delivered in basically the same overall recitation rate. Richard Barnes describes a performance by Cage in 1963:

> He reads or is silent into a microphone while his own voice reads or is silent from each of three tape recorders. Though he uses a stopwatch and a time score to make every performance pretty nearly identical to every other, no two people hear the same thing because you can't follow four voices at once and have to just listen to what interests you.[39]

It may be that part of the effect of the piece depends on similarity of superimposed readings, not only of the same speaker's voice, but also in tempo and length. This more conservative scenario makes it more difficult to discern individual readings, even with the spatial separation of loudspeakers. Thus, "indeterminacy enters into the actual perception" of the listener.[40] Certainly Cage aimed at an effect in which words and continuous thought

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[39] Richard Barnes, "Our Distinguished Dropout," *Pomona Today* (July 1966), in Kostelanetz, *John Cage*, 53.
[40] Ibid.

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were only partially and infrequently possible to comprehend. The performance is meant to mirror the chaos that is found in nature. It is clear how far Cage's thinking had evolved since 1948 when he insisted that "we must have structure; else chaos."[41] His introduction to *Where Are We Going? and What Are We Doing?* ends: "Here we are. Let us say Yes to our presence together in Chaos."[42]

Lecture on Commitment was written shortly after *Where Are We Going? and What Are We Doing?* and employs chance intersection of parameters as a process undertaken by the performer, rather than a score of fixed chance-determined decisions. It was written while Cage was a Fellow at Wesleyan Unversity's Center for Advanced Studies. He "was one of several members of the academic community all of whom ... were addressing the students on the same subject."[43] In *Lecture on Commitment* the chance intersection of time unit and length of text is made indeterminate by shuffling and pairing two sets of cards, following the same basic procedure of *Theatre Piece*, composed the previous year.[44] This technique also provides a compositional means of creating indeterminate continuity of texts, recitation rates, and overall length. The set of twenty-eight cards for time units contains one unit of 120 seconds, and twenty-seven units ranging between twenty and sixty seconds in increments of five. The twenty-eight texts are newly written in the familiar Cagean forms of comments, questions, and stories—some relevant to commitment, some not. Lengths of text in *Where Are We Going? and What Are We Doing?* are established by the format of the stenographer's notebook with lines corresponding to seconds; in *Lecture on Commitment*, the more open format of the cards delimits text length without imposing strict space/timing correspondences. The cards are in effect units that can receive varying amounts of text. The longest text is about 340 words. The others range from six to 142 words. The longest time

[41] Cage, "Defense of Satie," in Kostelanetz, *John Cage*, 77.
[42] Cage, *Silence*, 195.
[43] Cage, *A Year from Monday*, 112.
[44] The procedure for the lecture is explained in Cage's comments in Cage, *A Year from Monday*, 112. For *Theatre Piece*, see the score (New York: C. F. Peters Corp., 1960); and Fetterman, "Cage's Theater Pieces," 101 and 137-39.

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unit is paired with the longest text after the cards in each of the decks are shuffled. Otherwise, cards from the two sets are paired by drawing the top card from each deck and reading the texts in the corresponding time lengths.

From observation of the text, it becomes clear that Cage used each of the nine time units (20 seconds, 25 seconds, etc.) three times, then replaced one of the 35-second time units with the 120-second time unit. This scheme permits the exceptionally long narrative text to be read in an ordinary recitation rate, and to act as a weight in comparison to the shorter, elusive, and often quickly recited texts. Further, it sets a scale of nine values that can be divided equally in groups of three, so that (apart from the 120-second text) no one length predominates and time units receive nearly equal distribution, resulting in a heterogeneous mix of lengths each time the cards are shuffled.

To specify recitation rates in the printed version Cage again uses the line as a time unit, each line corresponding to five seconds. When there is a small amount of text in a relatively large time unit Cage compresses it at the beginning of the unit rather than allowing a slow recitation rate to fill up the unit (as in *Indeterminacy*), or suggesting any other placement of the text within the time unit (as with time bracket notation). Moreover, the recitation rates following Cage's timings are all fairly quick, even when they do not need to be. (Again, the long text is an exception, with a rate that allows for some breathing room.) In several instances in the printed version of the lecture, recitation rates are quite rushed. In the extreme example (which does not occur in the printed version), a chance pairing of the 142-word text with the time unit of twenty seconds would require an almost impossibly fast recitation rate. This in effect establishes a minumum time length for units. Tempos are indicated graphically by different type sizes in "an attempt to provide changes for the eye similar to the changes varying tempi in oral delivery give to the ear."[45]

Cage avoids slow speaking rates in order to create silences. Since most of the texts

[45] Cage, *A Year from Monday*, 112.

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are short enough to be read in twenty seconds, and since most time units are longer than twenty seconds, the intersection between text lengths and unit lengths most often produces large gaps of silence. Cage has planned the ratios so that there will be a relatively equal percentage of speech and silence overall, with the amount of silence slightly higher, no matter how the cards are paired. In this way, *Lecture on Commitment* continues the text pieces in which alternating spoken sections and silent sections are the main morphological feature (e.g., *Lecture on Something*, *Changes*, the newsreader's part in *Speech*, and the individual lectures of *Where Are We Going? and What Are We Doing?*). As a final indeterminate factor, Cage allows for the performer to establish his own time units to create a talk of a different length. Given the large, 142-word text portion, a performer would in effect need to establish a minimum length for time units of at least twenty seconds. Confining time lengths for units to a low range (say, between twenty and thirty seconds) would not allow for the variety of lengths or the sufficient amount of silence that are implicit features of the work. In effect, the range of options is limited to extending the overall length of the work by determining longer time units.

In many ways, *Where Are We Going? and What Are We Doing?* and *Lecture on Commitment* are Cage's most indeterminate spoken-text composition up to this point in terms of compositional procedure and performance aspects. In *Where Are We Going? and What Are We Doing?*, the structure and morphology of the four lectures follow from an ingenious adaptation of the flexible materials of *Cartridge Music*, a score similarly applied to several other spoken-text works from 1961 to 1964. This is Cage's only spoken-text work entirely composed with an indeterminate compositional method, using no chance procedures. The four lectures are the realization in text of a compositional process; texts both record the process and serve as scores. In *Where Are We Going? and What Are We Doing?*, indeterminate performance aspects—number of lectures read, recitation rates, overall lengths and durations, electronic manipulation—are variables that can lead to many

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distinct realizations. And, as Barnes points out in his description, the use of multiple speaking voices means that "indeterminacy enters in the the [listener's] actual perception."[46] However, while indeterminacy in compositional process, performance aspects, and perception all enter into the piece, text itself is determinate. The same holds true for *Lecture on Commitment*. Chance pairing of texts and time units is made indeterminate by the simple method of shuffling cards, and the performer can choose time unit lengths different than those devised by Cage. The texts of the lecture, however, are fixed and not subject to indeterminacy. These works demonstrate that Cage still thinks of speech as a separate realm where compositional principles can be applied, but an area that remains distinct from the realm of music. Material is choice-based, and language and syntax govern continuity and method, as in Cage's previous spoken-text compositions. Musicians, observes Cage, are "free of...the problems of language (meaning of words and conventions of syntax)."[47] It is clear that Cage regards texts and spoken texts as separate from music *per se*, but subject to compositional processes, above all in the rhythmic aspects of structure, timing, and tempo.

An indeterminate aspect of *Where Are We Going? and What Are We Doing?* is the complexity and specific configurations of texture. More important is the introduction of multiple speaking voices as a means of creating these textures. Texture created by speaking voices enters as an additional musical element in spoken-text composition, and acts to increase incomprehensibility. It often makes no difference what Cage is saying, literally, because superimposition often transforms speech into "meaningless" sound combinations. It becomes simply impossible to disentangle words and follow any line of thought. Thinner textures emerge from the tangle of voices as contrasting textures in which ideas, stories, questions come and go, coinciding, incomplete, and discontinuous. In 1951 Cage had begun to conceive of sounds as existing in an infinite sound-space. Hearing a simultaneous

[46] Barnes, ibid.
[47] John Cage, *Rhythm Etc.*, in Cage, *Silence*, 126.

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performance of all four lectures sets the listener adrift in an infinite word-space. Language becomes multi-dimensional. One again is reminded of Cage's distinction between prose and poetry formulated the same year in *Silence*. Poetry allows "time" and "sound" to "enter the world of words." *Where Are We Going? and What Are We Doing?* deepens this definition. Words become a world of sounds.

5. Indeterminacy in Events and Compositions Without Text: *Talk I* and *Rozart Mix* (1965)

Talk I and *Rozart Mix* do not conveniently fit into any category. Like many of Cage's works during the mid and late 1960's they have no score in any ordinary sense of the term. Both are examples of music arising from activity rather than from a composed score. Both also exemplify Cage's deepening interest in live electronic technology and continuing use of recordings. Another factor that these events share with many from the same period is the dissolution of the roles of performer and audience.

Talk I is not a composition, but a title retrospectively applied to a two-hour event in Ann Arbor in September 1965, during which Cage spoke extemporaneously in conversation with Robert Ashley and Robert Rauschenberg, choosing subjects at random from a list he had prepared. The list of subjects, along with notes on the performance, appears in *A Year from Monday*, where the subjects are scattered on the pages in a variety of spatial orientations.[48] Cues for stories and anecdotes, mushroom-related topics, the names of artists and musicians, and titles of Cage's own works account for at least half of the 118 subjects. Others are more general (e.g., "Raising money," "Teaching"), or are cues regarding specific issues ("Changes in aquariums," "American Foreign Policy/Fulbright"). In most cases, Cage's list entries are reminders for comments and stories that he had prepared mentally but not written down. This mixture of subjects is characteristic of Cage's *Diary: How to Improve the World (You Will Only Make Matters Worse)*, begun in 1965

[48] See Cage, *A Year from Monday*, 141-44. Cage elaborated on this format in Cage, *For the Birds*, 15-27.

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and continuing in printed installments through 1982. The short entries are wide-ranging in topic but with a sociopolitical bent that enters into Cage's compositions and spoken-text works in the following decade. Cage juxtaposes short aphoristic forms, resulting in frequent discontinuity of ideas.[49] Asked about the "confusing" nature of these writings, Cage stated:

> My confusion comes from the fact that I don't so much write about my work as I write about just anything that I notice and I think that many people would agree with me that what can be noticed now is extraordinarily confusing.[50]

The text of the *Diary* installments receives a sophisticated typographic treatment. As the *Diary* continues the number of type faces increases, typefaces change within, as well as between, entries, and other visual elements appear (e.g., underlining, various shades of gray print). These were intended purely as visual elements. However, in his recording of the complete *Diary* issued in 1992 Cage assigns changes in typography to changes in stereo placement, recording level, and equalization.[51] As in some of Cage's earlier texts, the number of sections, sentences, and words for each entry are dictated by chance operations.[52] The text encourages the reader to jump from any point in the text to any other, just as "adjacent articles in newspapers sometimes give ... an occasion for changing one's mind."[53]

For *Talk I* David Tudor supplied "throat-, lip-, and other microphones and various electronic components for modulating sound [and] prepared a sound system having six channels." Tudor and Gordon Mumma "manipulated the sound-system, [making] ... very

[49] An extensive analysis of Cage's *Diary* entries appears in Christopher Sultis, *Silencing the Sounded Self: John Cage and the American Experimental Tradition* (Boston: Northeastern University Press, 1998), 101-114. See also Richard Kostelanetz, "John Cage: Some Random Remarks," in Kostelanetz, *John Cage*, 193-210, and Sabatini, "Silent Performances," in Fleming and Duckworth, *John Cage at Seventy-Five*, 74-96.

[50] Hans G. Helms, "John Cage Talking to Hans G. Helms about Music and Politics" (Dusseldorf/Munich: Spress Cassette, 1975).

[51] Liner notes to *Diary: How to Improve the World (You Will Only Make Matters Worse)* (Wergo WER6231-2, 1992).

[52] Kostelanetz provides a facsimile of Cage's worksheet for part of the *Diary*. See Richard Kostelanetz, "Cagean Poetry," in Kostelanetz, *John Cage*, 167-69.

[53] Cage, *A Year from Monday*, 133.

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little of anything that was said ... comprehensible to the audience."[54] The independent actions of one performer altering those of another is a principle applied here by the actions of Tudor and Mumma electronically altering Cage's speech, in the same way that the application of *WBAI* is able to affect a reading of a lecture from *Where Are We Going? and What Are We Doing?*, or the dancers' movements are able to affect playback devices in a performance of the Cage/Cunningham collaboration *Variations V* (1966).[55]

Technologically, the use of contact microphones, electronic processing equipment, and multi-channeling goes much farther in altering speech than anything Cage had attempted up to this point, and Cage and Tudor continued the experiment, unsuccessfully as it turned out. During 1965, Cage's adaptation of *Indeterminacy* as the accompaniment to Cunningham's *How to Pass, Kick, Fall, and Run* was performed with "David Tudor ... using Cage's voice as a sound source for his complicated electronic modification procedures. The result was a montage of sonic fragmentation which increased in verbal unintelligibility with each performance. Complaints came not only from the audience but from the dancers [and] the electronic modification ... was eventually abandoned."[56]

The improvisatory, nonintentional aspects of the performance of *Talk I* were reflected in the performance environment. Cage placed chairs haphazardly on the roof of a parking garage with loudspeakers surrounding the audience members, who were free to come and go and to move around the space. The event can also be considered a forerunner of Cage's installation *Essay* (1987), with its multiple channels, dispersed loudspeakers, electronic alteration of speech, free movement of the audience in the space, and chairs placed at chance-determined points in the space.

Rozart Mix is not a work for live speaker, but expressly calls for speech as a

[54] Cage, *Silence*, 144.
[55] *Variations V* (Videotape), New York: Cunningham Dance Foundation, 1966.
[56] Gordon Mumma, "From Where the Circus Went," in Klosty (ed.), *Merce Cunningham*, 67. The idea was ressurected in 1972 in a simultaneous performance of Tudor's *Rainforest II* and Cage's *Mureau*. See Elliott Schwartz, liner notes to "David Tudor and John Cage, *Rainforest II/Mureau*," New York: New World Records CD 80540-2, 2000.

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major component in an indeterminate mixture of recorded sounds, producing, as in previous works, multiple speaking voices in an electronic technology environment.[57] Like *Talk I*, *Rozart Mix* was an event rather than a composition. There is no score, only documentation in letters between Cage and Alvin Lucier as to how the event was to be organized.[58] The work took advantage of the open spaces and many levels of the Rose Art Museum at Brandeis University (hence the punning title), with tape machines and loudspeakers placed at various positions around one large multi-level room. Audience members were asked to provide tape loops of various lengths, spliced randomly in a number of ways; and the performance was the process of audience members playing the tape loops on machines, changing loops, and repairing them as they broke.[59]

In his correspondence with Lucier, Cage specified that the tape loops should include "lots of speech" in addition to music and other types of sound, underscoring both his interest in speech as sound material, and his distinction between speech and other sound sources.

The high level of indeterminacy in *Rozart Mix*—the unspecified content of taped materials, random splicing configurations, and unpredictable simultaneous combinations of events—and the creation of the event by the actions of the attendees, demonstrates composition as process. Cage's 1952 tape piece including speech, *Williams Mix*, is similar to *Rozart Mix* in some respects—selecting recordings according to categories, using various intricate splicing configurations, combining different channels—but is compositionally quite different in that all decisions arrived at by chance are inscribed "like a

[57] In addition to the works intended to be recited and those employing recorded speech, Cage wrote many articles during this period. Many of these, including the first parts of the *Diary*, are in John Cage, *A Year from Monday*.

[58] See Kostelanetz, *John Cage*, 18-19; and Fetterman, "Cage's Theater Pieces," 227.

[59] The procedures for splicing are meant in part "to encourage a large number of breaks so that silences occur in the piece." While tape loops could be contributed by audience members, the realization depended on a large number of prepared tape loops, and a crew to operate machines and splice tape during the performance. Cage called for a large number of tape loops, in part to "fatigue the people who are making the loops so they can no longer work according to their likes and dislikes. They simply have a job to do." (Helms, "John Cage Talking").

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dressmaker's pattern" to create a fixed score which is then followed precisely to assemble the finished product.[60] Two versions of *Williams Mix* will therefore differ only in terms of the details of the specific contents of the taped materials. In retrospect, Cage described *Williams Mix* as "characteristic of an old period, before indeterminacy in performance. ... Although my choices were controlled by chance operations, I was still making an object. For that reason, this piece ... was equivalent to producing a Frankenstein. I denounced my own work."[61]

In 1972, Cage related *Rozart Mix* to his increasing use of indeterminacy:

> *Imaginary Landscape No. 1* ... was written in a rhythmic structure whereas the piano *Concert* is not in a rhythmic structure, it's a rather indeterminate piece in which all the parts are soloistic. And the *Rozart Mix* moves ... even farther toward indeterminacy since the tape loops used in it can be made by other people than by me, can have any sounds. ...The best description of my work [is *Silence*].... By silence I mean a freedom from one's intentions ... [and] in different ways those pieces would show... a greater and greater faithfulness to silence.[62]

In *Rozart Mix* Cage also achieved a music that had no distinction between performers and audience. According to Cage the first such event was *33 1/3* (1969).[63] A large number of records and playback equipment was supplied and the music resulted from the actions of those attending the event. *Cassette* extended this idea to cassette tape players and televisions. *Address* combines *33 1/3* and *Cassette*. *Newport Mix* also falls into this category.[64]

Telephones and Birds (1977) is a similar type of work, in that the recorded material

[60] See Cage's notes on the composition and realization of *Williams Mix* in Kostelanetz, *John Cage*, 109-11.
[61] Richard Kostelanetz, "Conversation with John Cage," in Kostelanetz, *John Cage*, 19.
[62] Helms, "John Cage Talking."
[63] Ibid.
[64] For descriptions see H. Wiley Hitchcock (editor), *The Phonograph in Our Musical Life* (Brooklyn College: Institute for Studies in American Music, Monograph No. 4, December 1977); and Charles, *For the Birds*, 169-70.

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is to a large extent indeterminate. The piece was used as the accompaniment to Cunningham's *Travelogue*, designed by Robert Rauschenberg, which received its premiere in January 1977.[65] The score used "recordings of bird song by Norman Robinson, from the Australian National Collection of Recorded Bird Calls. In addition, telephone numbers were dialed during the performance (according to a chance process), and the results played over the sound system." The telephone numbers were pre-recorded spoken messages including: the Rare Bird Nework, horse race results and sports news, Dial-A-Prayer, Dial-A-Money-Saving-Tip, Dial-A-Plant, Dial-A-Joke, Dial-Your Stars, weather, time, and "arrival and departure information courtesy of Pan-American World Airways."[66]

6. Summary

The preceding survey demonstrates Cage's increasing use of indeterminacy as a compositional principle in works for speakers, from the fixed timings of *Speech* to the open-ended process of *Rozart Mix*. Each of the works from this period represents a new approach to indeterminacy in regards to text and speech. In *Speech* we encounter not only the principle of superimposition of parts without fixed temporal relationships that Cage had first employed in 1952, but also indeterminacy of material and the extension of mobile units to the part for speaker. The stories of *Indeterminacy* similarly function as mobile units, making this composition an open form, and permitting the listener to make connections between stories without the mediation of the composer. In *Where Are We Going? and What Are We Doing?*, *Lecture on Commitment*, and other text compositions during this period, indeterminate arrangements of the flexible materials of *Cartridge Music* are the means of constructing texts. More decisions regarding length and amount of material are

[65] An excerpt from a performance of *Travelogue* can be seen on video produced by KETC Public Television in 1987, *The Collaborators: Cage, Cunningham, Rauschenberg* (New York: Cunningham Dance Foundation).

[66] Harris, Melissa (editor) and David Vaughan, *Merce Cunningham: Fifty Years* (New York: Aperture, 1992), 199-200.

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left to the performer. *Talk I* and *Rozart Mix* abandon the musical score altogether and substitute process by the participants as the means of creating the performance.

Cage had also approached the speaking voice in a new way, as an instrument capable of producing sound without relying on language to provide meaning, through the textural complexity of multiple speaking voices and distortion of the speaking voice by electronic manipulation. These important factors continued for figure in future compositions and performances.

Yet Cage's texts during this period remain conservative insofar as they employ language and conventional syntax in their construction and abandon chance techniques of fragmentation and collage that he had begun to explore in *Juilliard Lecture*. The song texts are, of course, an exception. In the three vocal works from 1958-1960 Cage achieved a new kind of textual material, fragmentary, nonsyntactic, and free of intention. Part II of this thesis is concerned with works for speaker stemming from this strain of compositional practice, as well as compositions based on mesostic texts.

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PART II

NONSYNTACTIC TEXT COMPOSITIONS, COMPOSITIONS FOR MULTIPLE SPEAKING VOICES, AND SPEECH IN MIXED MEDIA WORKS, 1970-1992

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CHAPTER FOUR

DEVELOPMENT OF NONSYNTACTIC SPOKEN-TEXT WORKS

Cage's works for speaker through 1968 form a major contribution to spoken-text composition. Yet he had not produced a true sound text entirely free of conventional meaning. This had been a concern as early as 1960, when he attempted to construct a "collage" in which he had "written no words," but for which he had "determined the whole process. The result would have been a composition of mine." But after eight months of working with "a series of letters and/or numbers of different sizes," to create eight simultaneous events on a page, Cage abandoned the attempt.

> I was confined in my use of words to the notion of communication, which in the case of sound I have been willing to abandon. Towards what I have to say, I haven't been willing to change my notion of communication from what is conventional and accepted. My own use of language tends toward saying what I have to say, rather than what the words themselves have to say.[1]

Kostelanetz voiced similar criticisms of Cage's *Diary*:

> Not only is the type laid out in horizontal lines, but Cage also usually composes in sentences which ... similarly impose unnecessary restraints. Indeed, even though he must know that precisely in syntax and linearity is the inherent conservatism of language as an expressive medium, Cage still strives for aphorisms, which are, after all, linear *bon mots*.[2]

---

[1] Lars Gunnar Bodin and Bengt Emil Johnson, "Bandintervju med Cage," in Kostelanetz, *Conversing*, 134-135; and the notes to John Cage, "Jasper Johns: Stories and Ideas" in Cage, *Silence*, 73.
[2] Richard Kostelanetz, "John Cage," in Richard Kostelanetz, *The Old Poetries and the New*, (Ann Arbor: University of Michigan Press, 1981), 247-48.

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One senses Cage's impatience to overcome syntax, and language as "communication," in the following passages from the same year, as well as a hint at what was to come—the breakdown on language into its components, and the means of creating nonsyntactic texts.

> Project: Discover way to translate Far Eastern text so western men can read orientally. Communication? Bakarashi! Words without syntax, each word polymorphic.[3]
>
> Dealing with language (while waiting for something else than syntax) as though it's a sound-source that can be transformed into gibberish.[4]

Four years later, Cage developed the methodologies that allowed him to achieve these goals. Several developments in Cage's work—compositional, visual, and textual—coalesced in this and the following year to lead to Cage's first important compositions using text and speech free of normative syntax. Two different methods governed nearly all of Cage's subsequent writings and compositions involving speech: linguistic fragmentation, and the mesostic.

The year 1970 marks a new phase in Cage's writings and compositions. Cage turned from creating texts free of conscious, intentional ideas to composing text collages of pre-existent texts. Two authors in particular, Joyce and Thoreau, became increasingly important to Cage. Joyce reflects an interest in speech as musical material to produce "nonsense." When asked if it were important for a poet to make sense, Cage replied,

> Just the opposite. A poet should make nonsense ... for example, if you open *Finnegans Wake*, which is I think without doubt the most important book of the twentieth century, you will see that it is just nonsense. Why is it nonsense? So that it can make a multiplicity of sense, and you can choose your path, rather than being forced down Joyce's. Joyce had an anarchic attitude toward the reader so that the reader could do his own work.[5]

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[3] John Cage, *Diary: How to Improve the World (You Will Only Make Matters Worse) 1965*, in Cage, *A Year from Monday*, 7.
[4] John Cage, "Seriously Comma" (1965), in Cage, *A Year from Monday*, 29.
[5] Interview with Lisa Low, "Free Association," in Kostelanetz, *Conversing*, 147.

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Thoreau represents a growing concern with political and social issues, specifically anarchy, that appears in many of Cage's works from this period, and an interest in speech as generating nonintentional ideas. Cage followed both directions in his spoken-text works.

Two chance techniques emerged for composing text collage. The global technique searched source text(s) randomly. The writing-through method generally searched a single source text sequentially. Both techniques were adapted to the mesostic—a writing discipline akin to the acrostic—that Cage invented in the early 1960's. In 1969-1970 he began creating texts that broke down source texts into single words, syllables, and letters selected globally from source texts. Many of these works use a large variety of typeface and size.

These nonsyntactic and visual aspects of the texts led Cage to improvise readings and to create new performance styles that drew on all the resources of his voice. Cage had been reading aloud works by Joyce for many years for his own enjoyment. In creating and performing the writings-through of *Finnegans Wake* he was being true to the author's intention that the novel be read aloud and heard as "a kind of piece of music." Cage interpreted Joyce's term "poetrewed music" as "poetry as music."[6] His writing-through mesostics and other texts based on writings by Joyce and Thoreau continued in the direction of speech as "nonsense," often emphasizing the sonic aspects of the voice rather than searching for conventional meaning.

Later texts are mesostics, a type of acrostic poetic form that Cage invented and refined over the years, as discussed more fully below. With few exceptions Cage's mesostics retain complete words or partial phrases when drawing from source texts, or are newly written using standard English. Only one set of mesostics makes use of the variety of typeface and type size that Cage's other works for speakers employ. Most of the mesostics are concerned with ideas more than with speech as sound per se, although the

[6] John Cage, *Roaratorio: An Irish Circus on Finnegans Wake*, edited by Klaus Schöning (Königstein/ Taunus: Atheneum Verlag, 1985), 103.

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ideas they may generate are indeterminate and nonintentional. Cage often described these poems as "a way of writing which though coming from ideas is not about them, or is not about ideas but produces them."[7] The primary compositional decision in such works is the choice of source text(s). Other than Joyce, Cage tends to work with texts whose primary concern is the articulation of ideas through ordinary prose, often on subjects of social concern (Thoreau and other anarchist writers, Buckminster Fuller, Marshall McLuhan) or related to artists (Morris Graves, Jasper Johns).

Other compositional procedures involve locating text fragments in the source text(s). In the sequential writing-through mesostics this is a more or less automatic process determined by the letters in the mesostic "string," standardized to the extent that the whole process could be accomplished with computer programs. In mesostics composed from multiple sources, chance determines which source text (and sometimes which string) to use. Choice-based decisions are how much of the original text to retain for each fragment, and how to divide the mesostic text into parts (stanzas). In Cage's performance of most of these works, words are delivered clearly, without the extremes of pitch, the concentration on color, and other musical aspects of recitation that characterize the more fragmented experimental works. Although timing remains an essential performance element often included in the text, tempo is usually normal speaking rate. Because the procedure used to construct mesostics from pre-existent texts is basically a writing discipline with little variation between mesostics, and because performance aspects rarely go beyond conventional poetry recitation, individual works of this type are not discussed in detail in this paper. On the other hand, mesostics that have unusual and unique features, or that are used as the basis for compositions, are discussed in following chapters.

Nearly all of Cage's written works from this period were meant to be read aloud by a soloist (himself). He did however include recitations of spoken-text works in two mixed

[7] See, e.g., John Cage, *Themes and Variations* (Barrytown, NY: Station Hill Press, 1982), introduction.

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media events during this period.

The following sections discuss text collage and mesostics in turn. The first section traces the development of fragmentation and collage in song texts and visual works that laid the foundation for Cage's first such texts for speakers. The second section recapitulates the development of the mesostic poetic form. These two approaches to text composition determined nearly all of Cage's subsequent writings and spoken-text compositions.

1. Linguistic Fragmentation and Collage in *Song Books* and *Not Wanting to Say Anything about Marcel*, 1969-1970

Chapter 3 discussed fragmentation of language into phrases, single words, and individual letters in the vocal texts from 1958 through 1960 (*Solo for Voice No. 1*, *Aria*, and *Solo for Voice No. 2*). In a three-month period from 1969 to 1970 Cage completed ninety additional pieces for solo voice (and/or theatrical performance). The resulting compositions, *Solos for Voice No. 3-92*, are collectively titled *Song Books*.[8]

Cage's contact with Thoreau's writings was in large part responsible for initiating his new approach to language, words, and texts. "Realized I was starved for Thoreau," Cage recounted regarding his encounter with the *Journal* in 1967.[9] Cage was struck by Thoreau's statement that sentence structure reminded him of marching feet. This metaphor strengthened Norman O. Brown's comparison of syntax to the arrangement of an army.[10] In the foreword to *M*, Cage summarizes the significance of the new, nonsyntactic texts that he had produced since 1969:

> Syntax ... is the arrangement of the army. As we move away from it, we demilitarize language.... A single language is pulversized; the boundaries between two or more languages are crossed; elements not strictly linguistic (graphic, musical)

[8] For further discussion of *Song Books* see William Brooks, "Choice and Change in Cage's Recent Music" in Gena and Brent, *A John Cage Reader*, 82-100.
[9] John Cage, *Empty Words: Writings '73 - '78* (Middletown, CT: Wesleyan University Press, 1979), 11.
[10] See Cage, *Empty Words*, 133; and Kostelanetz, *Conversing*, 149.

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> are introduced; etc. Translation becomes, if not impossible, unnecessary. Nonsense and silence are produced, familiar to lovers. We begin to actually live together, and the thought of separating doesn't enter our minds.[11]

In *Song Books* Cage uses the isolated phrases, words, syllables, and letters of the earlier vocal solos. Other techniques that later appear in text compositions are evident in these works as well. There is a multiplicity of unrelated source texts. Twelve of the texts are based on Thoreau's *Journal*, and two use the opening sentences of Thoreau's essay *On the Duty of Civil Disobedience*.[12] The *Journal* and *Essay* figure prominently in many important works over the next two decades. Books on mushrooms, newspapers in many languages, geographical glossaries, constellations, Indo-European linguistic roots, and Cage's own early short mesostics are among the sources used in the vocal texts. Some texts prefigure later writings-through and mesostics in specific ways: mixed texts by Fuller, McLuhan and Brown, three authors who reappear in *I-VI* (1989-90); mixed letters and syllables from *Finnegans Wake*, a source Cage was to exploit fully in the writing-through mesostics of that work beginning in 1977; mixed words and phrases from Cunningham's *Changes: Notes on Choreography*, as in *62 Mesostics Re Merce Cunningham* (1970); and text comprised entirely of single letters, foreshadowing the last part of Cage's radical work for speaker, *Empty Words* (1973-74).[13]

In other solos Cage uses cut-up techniques, in some cases allowing the performer to "make any use of the text given, repeating words and phrases freely."[14] While most texts are sung, some solos call for speech, or for a mixture of vocal productions.[15] As in some of the

[11] John Cage, *M* (Hanover, NH: University Press of New England, 1970), n.p.
[12] These are solos 3, 4, 5, 17, 20, 27, 30, 45, 49, 52, 53, 85; and solos 34 and 35.
[13] See solos No. 59, 84, 73, and 45, respectively.
[14] John Cage, *Song Books*, (New York: C. F. Peters Corp., 1969), 83. This applies to solos 20, 21, 33, 34, 35, and 56.
[15] E.g., "Sprechstimme may be used where the text has some length...A virtuoso performance will include a wide variety of styles of singing and vocal production." (Ibid., 42); "Shout the text at the highest [amplified] volume without feedback like a football cheer-leader." (Ibid., 233); "Use only the extremes of your vocal range: falsetto, grunts" (Ibid., 243).

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earlier works for spoken text, typeface "may be interpreted as changes in intensity, quality, dynamics."[16] Many solos are reworkings or realizations of *Theatre Piece*. In these, "changes in type-face may ... be ... interpreted [as] the degree of emphasis with which something is done."[17] Cage had used variety of typefaces in spoken-text works prior to 1970, but with fewer changes, a smaller number of fonts and sizes, and in such a way as to predetermine links between typography and specific performance aspects. In *Song Books*, changing typefaces are indeterminate elements whose significance is interpreted by the performer. In this way the use of typeface in the vocal solos anticipates the indeterminacy of changing typography in *62 Mesostics Re Merce Cunningham*.

Cage's first work other than song text to break completely with syntax is a visual work, *Not Wanting to Say Anything about Marcel*, "composed and executed" at Hollander's Workshop, New York, with Calvin Sumsion in 1969.[18] Asked to write a memorial text for Duchamp, Cage responded, "I would like to do what I've been wanting to do: to make a text that had no syntax."[19] Using *I Ching* operations, Cage subjected the dictionary to chance operations, eventually pinpointing specific words or illustrations.[20] He used chance operations to determine which of the 261 typefaces to use for each letter, and the "status" (appearance) of each letter ("Is it present? Is it in the process of disappearing ...? Is it disappearing structurally? ...Or is it being eaten by some disease?").[21] Each word was then transferred onto one of seven transparent plexiglass sheets (its placement and orientation also the result of *I Ching* operations), and the sheets superimposed.[22]

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[16] Ibid., 2. This applies to solos 4, 5, and presumably, to 43, 65, and 70.
[17] Ibid., 27. This applies to solos 6, 7, 9, 10, 19, 31, 61, 76, 77, and 87.
[18] Kostelanetz, *John Cage*, 41.
[19] Interview with Don Finegan *et al.*, "Choosing Abundance/Things to Do," in Kostelanetz, *Conversing*, 135. See also Kostelanetz, *John Cage*, 187-89; and Richard Kostelanetz (ed.), *John Cage (ex)plain(ed)* (New York: Schirmer Books, 1996), 105-109.
[20] This may have been suggested by a passage in Duchamp's *Notes* regarding subjecting the dictionary to chance operations. Marcel Duchamp, *Marchand du Sel* (Paris: Le Terrain Vague, 1958), 79. See also John Cage and Calvin Sumsion, "Plexiglass IV" in *Source* 4:1, (January 1970).
[21] Finegan, in Kostelanetz, *Conversing*, 136.
[22] See Cage, *For the Birds*, 114; and Kostelanetz, *John Cage*, illustrations facing143.

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With the achievement of the new poetic form of the mesostic, and the techniques for breaking down language into smaller units, Cage had developed the tools that enabled him to create his first great nonsyntactic text compositions. *Mureau, 62 Mesostics Re Merce Cunningham*, and *Empty Words* clearly demonstrate Cage's new thinking about language. Whereas in the earlier spoken-text works he had conceived of poetry and language as relying on syntax (no matter how varied or disguised), and had felt the necessity to "make sense" with prose, he now was able to declare that "there isn't such a thing as a thing that doesn't make sense. So language that we thought had to make sense in a particular way can make sense in other ways."[23]

In the *Diary* he states a related idea about language and meaning:

> Syntax, like government, can only be obeyed. It is therefore of no use except when you have something particular to command....The mechanism of the *I Ching*, on the other hand, is a utility. Applied to letters and aggregates of letters, it brings about a language that can be enjoyed without being understood.[24]

Cage returned to methods he had developed in *Mureau* and *Empty Words* and applied them to texts by Joyce. *Muoyce (Writing for the Fifth Time through Finnegans Wake)* (1980) and *Writing through Ulysses: Muoyce II* (1992)—for speaker and tapes of traffic sounds—are not, despite their titles, sequential writing-through mesostics but columnar texts created by searching each section of the source globally, and maintaining the proportions of the original. In *Music for Voice* (1985), and even more so in *One*^{12} (1992), the speaker improvises on single words and letters.

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[23] Interview with Robert Cordier, in Kostelanetz, *Conversing*, 140.

[24] John Cage, *M*, 215.

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2. Development of the Mesostic Form: Producing Nonintentional Ideas in Text Composition

With the invention of the mesostic Cage returned to texts comprised of complete words. With few exceptions the mesostic texts do not fragment language beyond this level. In an interview with Richard Kostelanetz in 1968 Cage related his renunciation of syntax and his new use of words to the writings of Gertrude Stein:

> Shouldn't we expect ... poetry to fulfill Gertrude Stein's semantic implications to reawaken the sound and sight of a word and their relation to its meaning, to gloriously destroy the context, the adjectival, and syntactical inhibitions that make all poetry verbiage?[25]

Elsewhere he spoke of his nonsyntactic use of words in *Empty Words* and the mesostics, respectively:

> Words may be used in ordinary ways to reach desired ends, to give pleasure, to distinguish between right and wrong spiritually, and then ways may be discovered to drop all those concerns and let each word be free of all the others....I use chance operations ... to free the words from language. Or I follow a system like the mesostics on the name of the author to free the words from their original intentions.[26]

It was natural that pre-existent texts, subject to fragmentation through chance compositional procedures, should result in fragmented texts while the mesostics, arising from newly-written poetry, should continue as a writing discipline in which words are retained. Cage's early writings in the direction of the mesostics were occasional poems on the names of friends. These had a horizontal orientation. The earliest, from 1963, was written for Edwin Denby, whose first name appears as the capital letters in the first two lines:[27]

[25] *New York Times*, March 17, 1968, D9, reprinted in Kostelanetz, *John Cage*, 23.
[26] John Cage, reply to letter from Giampaolo Guerini, March 17, 1981 (John Cage Archives, Northwestern University).
[27] The entire poem appears in Kostelanetz, *John Cage*, 149.

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rEmembering a Day i visited you
seems noW as I write that the weather theN was warm

In 1969 Cage invented a new format, the mesostic, in which the subject's name forms a vertical "string" that runs down the center of the page. An example is "For S. Fort, Dancer", where the string is the first name Syvilla:

had there been two compoSers
You
might haVe asked the other one
to wrIte your music.
i'm gLad
i was the onLy one
Around.[28]

In 1970 Cage used the mesostic form to compose *62 Mesostics Re Merce Cunningham*. This established the mesostic as a significant poetic form that could act as the basis of text composition. Most of Cage's writings from this point on are mesostics, or include mesostics as part of the texts, and nearly all of these were intended for his own readings and performances. He expanded the form in terms of length and invented numerous variations on the form. In particular, the autoku, in which the entire source text is used as the string, became a variant of some of Cage's most interesting mesostics. This form is discussed in Chapter 7, below, in relation to *Stüfen: an autoku for Siegfried Unseld*.[29]

Inspired by the use of chance operations in Cage's music compositions, Mac Low began in 1954 to produce text collages using chance operations. In works from 1960-1963 he used algorithmic methods to locate words in a source text corresponding to the letters in

[28] Cage, *Empty Words*, 10.
[29] Many of the variants are found in *The First Meeting of the Erik Satie Society* and discussed in the introduction to that work.

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acrostic strings.[30] Cage was well aware of Mac Low's work, and wrote the incidental music for Mac Low's *The Marrying Maiden* (1958). Cage commented on both the similarities and differences in their work in an interview:

> I thought for a while that, since he was involved, as I am, with chance operations, I ought not to bother using chance opeartions with language; but then when I saw that I was interested in nonrepetition, it was as though I could enter the same field Jackson was in without stepping on his toes. And that's why I continued to do it.[31]

Of the writers Cage most admired, Ezra Pound formats text in ways most similar to mesostics, particularly in columnar formatting and centralized vertical placement of text. Describing "The Return" (1912), Kent Kenner notes that "the first thing we need to do with such a poem is *see* it on the page: its irregular stanzas, its regular left-hand margin, its equally regular secondary margin that runs exacty down the middle."[32]

Pound's eighty-fifth and eighty-sixth *Cantos* (1955) closely resemble Cage's mesostic format. As Flory points out, "on most of the pages [Pound] runs a line of [Chinese characters] straight down the middle so that they become a kind of 'unwobbling pivot' around which are grouped the transliterations and renderings in Latin, French, and English."[33] The "unwobbling pivot" refers to the Chinese character Chung ("in the middle/whether upright or horizontal")[34] shown in Figure 12. This ideogram schematicizes the appearance on the page of the mesostic form.

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[30] See Perloff, "John Cage's 'What You Say'..," in Morris (ed.), *Sound States*, 131-32; and Jackson Mac Low, letter to Nick Piombino, June 1997, "Jacson Mac Low," Electronic Poetry Center, SUNY at Buffalo, http://epc.buffalo.edu/authors/maclow/

[31] John Cage, interviewed by Richard Kostelanetz, in Kostelanetz, *Conversing*, 205. For Mac Low's views on the differences in his approach as compared to Cage, see Jackson Mac Low, letter to Piombino.

[32] Kent Kenner, *The Mechanical Muse* (Oxford: Oxford University Press, 1987), 44-45.

[33] Wendy Stallard Flory, *Ezra Pound and the Cantos: A Record of Struggle* (New Haven: Yale University Press, 1980), 234.

[34] Ezra Pound, *Canto LXXVII*, 464. The ideogram is also the title a work by Confucius that Pound translated twice (*L'Asse che non vacilla* (1945), and *The Unwobbling Pivot and the Great Digest* (1947)).

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Figure 12. Chinese Character "Chung"

Likewise, the the Chinese ideograms in "Rock Drill de los Cantares" form a central vertical spine that makes a "perfectly good line of poetry [when read] from top to bottom," similar to the capital letters of the mesostic string that spell out names; and multilingual "transliterations and renderings" in "Rock Drill" surround the Chinese characters much like the wing words provide the horizontal dimension in Cage's mesostic poems.[35]

Collage and quoted material in the Cantos also find correspondents in Cage's poetry. Pound mixes languages and dialects, numbers, abbreviations, onomatopoetics, and neologisms, in addition to Chinese ideograms, hieroglyphs and other visual elements. Pound was also one of the first modern poets to include long passages of quoted material from source texts. Pound's interest in quotation and pre-existent texts, much like Cage's own, is tied to his mistrust of subjectivity and his belief in the criteria of "accuracy" and "impersonality."[36]

Although it is interesting to speculate on the influence of Pound's typography on Cage's work, vertical orientation and columnar format are present in many of Cage's text works before the mesostic was developed as a form. In *Lecture on Nothing* and *Juilliard*

[35] George Kearns, "Reading Pound Writing Chinese: A Page from Rock Drill" in *Ezra Pound*, edited by Harold Bloom (New York: Chelsea House Publishers, 1987), 202. Pound's marginalia also recall the scattered punctuation marks surrounding the central body of text in Cage's *Writing for the Second Time through Finnegans Wake*.
[36] Kenner, *Mechanical Muse*, 44; and Flory, *Ezra Pound*, 60-61.

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Lecture for instance, Cage's explanation that the text is to be read horizontally actually calls attention to the vertical columns formed by lines being broken into four spatially separated "measures." Vertical orientation of text and timing becomes overt in *45′ for a Speaker* and even more so in *Changes*, in which the narrow columns with flush left margins are emphasized by vertical lines to the left of each column. In *Where Are We Going? and What Are We Doing?* the texts of the four lectures are layered in vertical groups of four lines that form two columns down each page, a "compromise" solution to the problem of representing simultaneity visually.[37] Reading a group of four lines vertically results in a mixture of fragments from the four different lectures to produce a "new," nonsyntactic poem, as in the example below.

> seeing things just as they are in
> did we know? Is what we're
> what we're doing would be a
> world, but in the world of art.[38]

The columnar format of previous texts is at its most spacious in the *Diary*, with number of characters in each line chance-determined within parameters to produce one wide, undulating column per page.[39] The absence of time units to indicate recitation rate (Cage intended the text to be a printed work rather than a spoken-text composition) allows the text to flow down the page in a single block, unbroken by gaps representing silences. By 1982, the flush left-hand margination had been abandoned, the variety of typefaces purposefully reduced. The column takes on a simpler, stocky, shape.[40]

As others experimented with performing these earlier texts, alternative readings became explicit for Cage, and moved him further toward an anarchic approach to text

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[37] Cage, *Silence*, 194.
[38] Ibid., 212.
[39] Cage, *A Year from Monday*, 3.
[40] Cage returned to the Diary format in *Where Are We? and What Are We Eating? (38 Variations on a Theme by Alison Knowles)*, in Klosty, *Cunningham*, 55-62. (Reprinted in *Empty Words*, 80-97.) For further information and analysis of this work, see Marjorie Perloff, "'Unimpededness and Interpenetration': the Poetic of John Cage," in Gena and Brent, *A John Cage Reader*, 4-16.

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composition:

> I have noticed that people looking at these [texts] I am doing, instead of following a line, begin jumping over the page, inventing words that I don't even know are there, and that is what I wanted to do with music—to let people hear it in their *own* way. And now I am hoping to find a language in which people can read in their own way, no matter where they come from.[41]

Most of Cage's mesostics took one of three forms: freely written mesostics; writing-through mesostics which usually operated sequentially through a single text; and mesostics assembled by chance procedures from pre-existent sources. The freely written mesostics are consciously-determined, syntactic texts. The mesostic string provides a discipline; Cage must word his ideas so that the sentences incorporate the string letters, and often must phrase ideas to fit the length of words in the string. These works employ the writing procedure of the early short mesostic poems, but expand their scope and significance.[42]

Cage next developed two procedures for producing mesostics from pre-existent texts. The writing-through method involved searching sequentially through a single source text for words corresponding to letters of the string. This began in 1977 in what was to become the first of five writing-through mesostics using *Finnegans Wake* as the source.[43] Cage completed writings through mesostics of Pound's *Cantos*, Ginsberg's "Howl," Thoreau's *On the Duty of Civil Disobedience* and other texts. The second writing through of *Finnegans Wake* forms the basis for one of Cage's most elaborate musicircus events. *Roaratorio: An Irish Circus on Finnegans Wake*, produced at IRCAM (Institut de

[41] Interview with Lanza, Alcides, "...We Need a Good Deal of Silence...," in Kostelanetz, *Conversing*, 137.
[42] Examples include *Sixty-One Mesostics Re and Not Re Norman O. Brown* (1971), *James Joyce, Marcel Duchamp, Erik Satie: An Alphabet* (1981), *Composition in Retrospect* (1982), and *Overpopulation and Art* (1992).
[43] Cage, *Roaratorio*, 155. See the Bibliography, below, for the publication history of these writing-through mesostics. For additional information on compositional methodology, see John Cage and Richard Kostelanetz, "Talking about Writings through Finnegans Wake," in Gena and Brent, *John Cage Reader*, 142-50.

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Recherche et Coordination Acoustique/Musique) in Paris, begun as a radio play in which Cage's reading of the text was superimposed with sound-collage tapes that mixed recordings of sounds and places referred to in *Finnegans Wake*, using the mesostic as a "ruler" to place each recording in the mix. *Roaratorio* was first presented in this form as a radio play, and later staged with the addition of Irish musicians, dancers and lighting.[44]

The second method for creating mesostics involved assembling fragments of text by searching globally through source texts for words corresponding to the string letters. The global mesostics were written between 1982 and 1992.[45] Cage applied the global method to single sources and to multiple sources, using as many as 487 pre-existent texts in the Norton Chair Lectures delivered at Harvard University in 1988-1989.

Both the writing-through and the global mesostics are essentially collages. Source texts are fragmented at the level of words and phrases so that vestiges of syntax may remain, but the overall character of the mesostic is nonsyntactic. Of the two methods, the global method is more compositionally complex, but not as burdensome as the chance techniques in *Mureau* and *Empty Words*. Searching for words corresponding to string letters eliminates the need to calculate each location by counting lines and letters, as in the earlier works. Even so, the large-scale mesostics of 1985 and later could not have been completed without the development of computer programming to search texts automatically according to the writing-through and global methods.

For the most part there are no unusual typographic features in the mesostics that would indicate performance parameters applied to recitation, but Cage usually controlled recitation rate in his performances by a vertical time line following the orientation of the

[44] Cage, *Roaratorio*. See also William Brooks, "*Roaratorio* Appraisiated," in *Writings about John Cage* (Ann Arbor: University of Michigan Press) 1993, 222-24; Richard Kostelanetz, "John Cage as a *Hörspielmacher*", in Kostelanetz, *Writings about John Cage*, 213-21; Kostelanetz, *Conversing*, 150 and 165-68; Revill, 265-68; and Pritchett, *Music of Cage*, 179-80.
[45] Major works in this category include the texts for *The First Meeting of the Erik Satie Society* (1985); *Art is either a complaint or do something else* (1988); *Time: 3 Autokus* (1987); *Paintings relate to any moment* (1988); *I-VI* (1988-89); and *Anarchy* (1989).

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mesostic, or, alternatively, by assigned a regular time unit length for each stanza.

The following chapters are concerned both with text collages and compositions based on mesostics. Chapter 5 discusses works that relate to collage techniques. These include the earliest spoken-text works to utilize fragmentation applied to a source text, *Mureau* (1970) and *Empty Words* (1973-74); *62 Mesostics re Merce Cunningham* (1970), in which linguistic fragmentation and collage techniques are combined with the mesostic form; and Cage's nonsequential writing-through of Joyce, *Writing through Ulysses: Muoyce II* (1992). *One*^{12} (1992) is an indeterminate work that calls upon the speaker to improvise phonemically.

Chapter 6 discusses *Les chants de Maldodor pulvérisés par l'assistance même* (1971) and *Lecture on the Weather* (1975), two mixed media works that include multiple speaking voices but do not employ the mesostic form. These are the only such spoken-text works by Cage to appear after 1961. Both works reflect Cage's growing concern with anarchy and its relation to composition and performance.

Chapter 7 is concerned with works that use the mesostic form as the basis of compositions for multiple speaking voices. *Letters to Erik Satie 1 and 2* are unpublished scores from 1978 that use the mesostic form to layer ostinatos made up of single letters. Cage's 1985 writing-through mesostics of Thoreau's *Essay: On the Duty of Civil Disobedience* account for several related works realized through digital speech resynthesis. *Essay* is the title of two versions of a tape piece as well as a sound installation that combines all of the synthesized readings, while *Voiceless Essay* uses only the consonant sounds of four of Cage's readings and became the accompaniment for Cunningham's *Points in Space*. *Stüfen, an autoku for Siegfried Unseld* (1992), an unpublished work, is unique among Cage's mesostics in that the text may be recited or sung by any number of performers.

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CHAPTER FIVE

FRAGMENTATION AND COLLAGE IN SPOKEN-TEXT WORKS

This chapter deals with works that defeat syntax by breaking down language into its constituent elements—phrases, words, syllables and letters. Cage wanted to "demilitarize" language, to take away the controlling influence of syntax which forces the listener down a single path—the author's intended meaning—and instead to create works in which ideas are nonintentional and meaning indeterminate.

Although Cage had applied fragmentation to texts in vocal solos described above, he had not yet discovered a way to do so in spoken texts, and one feels this was due to what he perceived to be his own performance limitations and his conception of speech as distinct from music. In this regard it is interesting that *Mureau*, the first of Cage's written works that consistently avoids syntax by means of linguistic fragmentation and collage, was originally conceived of as visual work. It was only through experiments with reading the text that Cage became aware of the possibilities of new modes of performance of spoken-text works based on nonsyntactic text. *Mureau* led Cage in a completely new direction in his spoken-text works, away from syntax and toward an investigation of the musical qualities latent in language when it is free of syntax. *Empty Words* is a systematic exploration of this process on an enormous scale. It has four parts, each constructed like *Mureau* by drawing fragments from Thoreau's *Journal*. The first part includes phrases, words, syllables and single letters, the second omits phrases, the third omits words and the

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last omits syllables, leaving only single letters. *Empty Words*, unlike *Mureau*, was from the beginning conceived of as a spoken piece. Cage had divested language of syntax on the page, and was now searching for a way to find the "simplest musical elements" in the elements of speech.

62 Mesostics re Merce Cunningham also extends the discoveries Cage made upon experimental readings of *Mureau*, written earlier that same year. Unlike *Mureau* and *Empty Words*, this work was constructed using the writing discipline of the mesostic, and drawing from many sources rather than one. In its level of fragmentation and use of typography it is unique among Cage's mesostics. There are no wing words in the Cunningham mesostics, only single words or syllables for each string letter. The text employs nearly 730 different typefaces and sizes, and typeface and size change with each letter, providing indeterminate suggestions for performance. A performance of the mesostics is thus an exploration of the extremes of phonemic pronunciation. This work represents another experimental approach to finding music in linguistic components, free of conventional "meaning."

Muoyce (Writing for the Fifth Time through Finnegans Wake) (1980) and *Writing through Ulysses: Muoyce II* (1992) apply the techniques of *Mureau* to Joyce. Neither is a sequential writing through, but both pieces maintain the divisions and proportions of the original text. *Muoyce II*, a work for speaker and tapes of traffic sounds, is the most compositionally complex of the *Mureau/Muoyce* group. For these reasons it will be discussed in more detail.

The last section considers *One*^{12} (1992), a work for speaker that is part of the "number pieces," so named because of the construction of their titles. This composition is Cage's most indeterminate work for solo speaker and calls upon the performer to improvise.

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1. *Mureau* (1970) and *Empty Words* (1973-74): Demilitarizing Language, Finding Music in Speech

Mureau (1970) opened a new world of text-music relations. Originally conceived as a written text, it is Cage's first sound-text composition. The origin of *Mureau* was "a text taken straight from the *Song Books*, which deals directly with letters syllables, etc., mixing them in such a way that you could call it a *Thoreau Mix*."[1] The *Song Books* and *Mureau* led Cage to conceive of language in an entirely new way, one that led to a breakthrough from the "meaning" of language and "making sense" with words, to creating texts with little or no meaning. In turn, Cage was inspired to explore new performance techniques to deal with nonsyntactic word combinations and with linguistic components: "As soon as you surpass the level of the word, everything changes; my [earlier] essays didn't deal with the question of the impossibility or possibility of *meaning*. They took for granted that meaning exists."[2]

The source material for *Mureau* is Thoreau's *Journal*, specifically all the indexed references "of anything that could be remotely thought to be connected with music."

> Having agreed to write a text about electronic music, and having noticed that ... Thoreau listened to sound as electronic composers listen to it, not just to musical sounds but to noises and ambient sounds generally, it occurred to me that making a chance-determined mix of his remarks in the *Journal* about sound, silence, and music would make a text relevant to electronic music. Therefore, I gave it the title *Mureau*—*Mu* (music) *reau* (Thoreau).[3]

Each reference from the *Journal* was subjected to chance operations "in terms of sentences, phrases, words, syllables and letters. I made a permutation of those five possibilities, so that it could be each of the five alone, or in any groups of two, ... three, ...

[1] Cage, *For The Birds*, 113.
[2] Ibid., 114.
[3] Richard Kostelanetz, "John Cage in Conversation, Mostly About Writing," in Kostelanetz, *Conversing*, 137.

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four, or finally all five."[4]

While Cage considered *Mureau* to be a "written work" rather than a "lecture,"[5] he began to explore the implications of performing it as a spoken-text composition. This work marks a new phase in his activities as a performer as well as a spoken-text composer, and sparked his interest in group performances of spoken texts.

> I approach language in different ways so as to reach a discourse which *appears* to make sense. One day, I gave [*Mureau*] in the form of a lecture.... The result has no meaning, or only a very little.... When I improvised by myself, I used all the resources of my voice and all the elements of language without falling back upon known words or a syntax. I found this experience thrilling.[6]

Cage found that others, too, were liberated by the reading. Listeners were "almost immediately delivered from all those constraints of language that we consider fixed once and for all and that we imagine to be impossible to eliminate."[7]

The nature of the text, perhaps *because* Cage had not originally thought of it as spoken text, opened up several new approaches to performance. Cage found new vocal resources that were not apparent until he began to voice the *elements* of language—single letters and irrational combinations of letters suggested that linguistic components are open to multiple interpretation—and to distinguish between typefaces by changing reading styles. A new, musical, continuity could be achieved in which words were no longer vehicles for ideas, but suggestive fragments free of syntactic order. Words and syllables could themselves be treated as multi-faceted sonic events made up of individual components—single letters. The new approach to language represented opportunity for an

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[4] Ibid. The following passages in this interview, through page 147, detail the techniques used in creating *Mureau* and *Empty Words*.
[5] Ibid., 139-40. Mureau was written in columns for publication in the periodical *Synthesis*.
[6] Cage, *For the Birds*, 113-14. For performances of Cunningham's *Landrover* (1972) Cage read "a short fragment from his *Mureau*, which he would place somewhere in the large, remaining silence of his section." (Mumma, in Klosty, *Merce Cunningham*, 70.)
[7] Ibid.

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infinite variety in tone color, dynamics, pitch, and duration, particularly with a wide variety of typographic features that suggested interpretive vocal corresondents.[8] In *Mureau* changes in typeface occur frequently, even in adjacent letters. These were intended to give visual variety to the written text, but Cage discovered that the wide variety of typefaces could also be used as indeterminate performance indications. Figure 13, an excerpt from *Mureau*, shows these characteristics.

Empty Words (1973-74) extends *Mureau* "beyond Thoreau's remarks about sound and music to the whole of the *Journal*,"[9] going further in systematically breaking down language and in exploring the musical qualities of speech. Performed in its entirity, it is Cage's longest continuous work for speaker, each of the four sections lasting two and a half hours. The first section mixes phrases, words, syllables, and single letters; the second words, syllables, and letters; the third syllables and letters; and the fourth only letters. Figures 14 and 15 show excerpts from the first section and the fourth section, respectively. The fourth section is meant to begin at dawn, "with the opening of the doors to the outer world so that the sounds would come in—because ... it was a transition from literature to music, and my notion of music has always been ambient sound anyway, silence."[10] Cage drew a distinction between *Mureau* and *Empty Words* in terms of genre, since he originally conceived of the former as a literary work, whereas from the beginning he conceived of *Empty Words* as performance, and he often performed it in whole or in part.[11] *Mureau* also figured into multi-media performances by Cage, notably in 1972 in Bremen with Cage performing *Mureau* in a four-channel realization (three pre-recorded tracks being readings by Cage), and Tudor "actively engaged in real-time processing of

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[8] Cage used an IBM Selectric typewriter, which was capable of producing several different fonts.

[9] Kostelanetz, "John Cage in Conversation," in Kostelanetz, *Conversing*, 140.

[10] Ibid.

[11] *Empty Words* figures in mixed-media performances as well. During the 1970's and 1980's Cage and Cunningham collaborated on works titled *Dialogue* that combined theater, dance, and speech. Both spoke aloud as part of the performance, Cage sometimes reading portions of *Empty Words*. See Fetterman, "Cage's Theater Pieces," pp. 341-49; John Cage, notes on *Dialogue*, New York: John Cage Trust; and Kostelanetz, *Conversing*, 128-30, 140, and 194.

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Figure 13: ***Mureau*** **(Excerpt)**

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Figure 14: *Empty Words*, Part I (Excerpt)

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Figure 15: *Empty Words*, Part IV (Excerpt)

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Cage's vocal material, using it to generate electronic loudspeaker-filter events," with eight loudspeakers placed around a large concert hall from which the seats had been removed for the occasion.[12] That same year Cage used recording of his performances of *Mureau* to mix with recorded birdsongs and environmental sounds at the electronic music studio at the State Universeity of New York at Albany, resulting in *Birdcage*.[13]

In composing *Empty Words*, Cage first determined that each of the four sections would have at least four thousand events (phrase, word, syllable, or single letter, depending on the section).[14] Many of the compositional processes follow those of *Mureau*. Separate chance operations drew each event from a specific page and line of the text. The length of each line was limited by a maximum number of characters. As in *Mureau*, words, syllables, and single letters are often "run together" with an either/or *I Ching* decision. Unlike *Mureau*, Cage purposefully omitted sentences in this work to avoid complete syntactic units. The format of the text was also chance-determined in ways that make *Empty Words* different from *Mureau*. To stagger indentations so that the columns of text had the "wavy" margins of the *Diary*, the indentation of each line changed according to the number of characters in combination with *I Ching* chance determinations. Textual grouping was also the result of chance factors: the appearance of a period in the source text determined how many events were to be contained in each stanza. The creation of stanzas is of crucial importance to timing in the first two parts of *Empty Words*, as is evident in the introductory texts to each part of the work, discussed in the following paragraphs.

The composition of the four introductory texts follows procedures Cage had developed in writing the *Diary*. Like the text of the complete work, the introductions become sparser with each of the four parts. The first two introductions explain Cage's

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[12] Schwartz, notes to *Rainforest II/Mureau*, p 9.

[13] The process of composing and realizing *Birdcage* is described by Joel Chadabe in his book *Electric Sound* (Upper Saddle River, New Jersey: Prentice Hall, Inc., 1997), 270-71.

[14] The method of composing is described in detail in Kostelanetz (ed.), *John Cage (ex)plain(ed)*, 120-125; and Kostelanetz, *Conversing*, 140-47.

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compositional method. The second two deal with performance issues. Cage describes the recitation of Parts I and II as follows: "Searching (outloud) for a way to read. Changing frequency. Going up and then going down: going to extremes."[15] Cage adds other possibilities for indeterminate performance aspects: "Other vocal extremes: movement (gradual or sudden) in space; equalization. (Electronics.) Do without whatever's inflexible. Make a separate I Ching program for each aspect of a performance. Continue to search."[16]

In the first two parts tempo is governed by a uniform stanza length determined by the performer. "That brings about a variety of tempi (short stanzas become slow; long become fast)." In Parts III and IV, both timing and recitation style are changed. Cage's introduction reads: "To bring about quiet of IV (silence) establish no stanza time in III or IV. Not establishing time allows tempo to become naturally constant. At the end of a stanza simply glance at the second hand of a watch. Begin next stanza at next 0 or 30. Instead of going to extremes (as in I and II), movement toward a center (III and IV). A new breath for each new event. Any event that follows a space is a new event."[17]

The timing scheme for stanzas in Parts I and II is derived from the uniform time frames of *Indeterminacy* while the timing scheme for stanzas in Parts III and IV operates in a manner similar to that of the mesostic stanzas in *62 Mesostics Re Merce Cunningham*. If each of the four parts is to last two and a half hours, recitation timing parameters change significantly between the first and second parts. The first part contains 223 stanzas, and the second only 172, requiring a recitation timing scheme of about forty seconds per stanza in Part I and fifty-three seconds per stanza in Part II (again, assuming the two-and-a-half-hour space per part that Cage established as a maximum).[18] In addition, the stanzas in Part I are, on average, longer than those in Part II and so require faster recitation rates. In each part of

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[15] Cage, *Empty Words*, 51.
[16] Ibid.
[17] Ibid.
[18] Cage adheres reasonably closely to the fifty-three-second timing per stanza in a recording of his reading of Part II (allowing for differences in machine speeds between the original recording and dubbing and playback machines). (Cassettes from the John Cage Trust provided to the author, provenance unknown.)

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Empty Words, Cage begins stanzas at the beginning of the time frame (as in *Lecture on Commitment*) rather than dispersing the text over the entire time frame (as in the short stories of *Indeterminacy*) or placing the recitation of the stanza anywhere within the time unit (as events are placed in time brackets in the later "number pieces"). The placement of text at the beginning of the time frame creates an overall morphology of alternating sections of speech and silence in which silent sections become of significant length.

The systematic elimination of word combinations, words, and syllables until only single letters are drawn from the source is a movement toward more and more silence, and a "transition from language to music.... Making music by reading outloud. To read. To breathe. IV: equation between letters and silence. Making language saying nothing at all. What's in mind is to stay up all night reading."[19] The differences in performance styles between the parts are described by Cage regarding his performance at the Naropa Institute in Boulder, Colorado in 1976:

> I had in some performances read the first part with electronics, changing the timbre of my voice, and changing its position in space ... when I finished the fourth part, with its long silences up to eleven and twelve minustes, and just a few letters otherwise, I felt there was no need to change the timbre of the voice, and also no need to speed it up and slow it down ... but to establish a tempo for a line whether it had letters in it, or whether it was part of a silence, so that there would be a movement toward a center, or a coming to quietness, or you might even say, a coming from the loss of the aspects of langage, to a having of the simplest elements of music.[20]

The slides of Thoreau's drawings were to be similarly reduced, as explained in the introduction to Part III: "In [Part] I: use, say, one hundred and fifty slides... ; in IV only five,"[21] so that they "suggest a meditative experience."[22] Recalling that "the Bodhidharma

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[19] Ibid.

[20] Interview with Anthony Brown, in Kostelanetz, *Conversing*, 125.

[21] Cage, *Empty Words*, 51.

[22] Brown, in Kostelanetz, *Conversing*, 125.

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(when he came from India to bring Buddhism into China) sat facing a wall in China for ten years,"[23] Cage sat with his back to the audience in the last part of the performance. This theatrical element is included in the introduction to Part IV: in the first part the performer sits "face to face" with the audience. In the second and third part sideways, facing a different side for each part. "Finally sitting with one's back to the audience (sitting *with* the audience), everyone facing the same vision."[24]

Empty Words carries formal scale to an extreme that challenges listeners' willingness to explore new experiences. Performances of earlier works (e.g., the *Variations* series; and *Reunion* (1968) whose first performance lasted five hours) had extended time to the point at which "tempo no longer exists. Just quantity." This related to the principle of abundance that Cage derived from Buckminster Fuller. When asked why he had chosen Thoreau's *Journal* for the source of *Empty Words*, Cage claimed that he had chosen this text "only" because of its extreme length (two million words).[25] In spoken-text composition, one is reminded of the three-hour "full program" that Cage suggests for *62 Mesostics Re Merce Cunningham*. No other spoken-text work by Cage (and very few of Cage's other works) approaches the length of *Empty Words* however. Speaking of his performance of *Muoyce* in Frankfurt where half the audience had left by the end of two and a half hours, Cage commented:

> People think, perhaps, that they are no longer irritated, but they still have great difficulty paying attention to something they don't understand. I think that the division is between understanding and experiencing. It has to do with experiences; and if you understand something, then you walk out once you get the point, because you don't want the experience. You don't want to be irritated ... But the avant-garde continues, and it is experience.[26]

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[23] Cage, *Empty Words*, 51.
[24] Ibid., 65.
[25] But as Kostelanetz points out, the work is "still dealing with a very pregnant, resonant, and, to [Cage], very relevant, text.... So there was an exercise of choice in selecting it." (Kostelanetz, *Conversing*, 144.)
[26] Thorman Wulffen, "An Interview with John Cage," in Kostelanetz, *Conversing*, 115.

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Cage himself underwent such an experience in 1963 when he arranged for the performance of Satie's *Vexations*, a few measures of piano music repeated 840 times. "I think the experience over the eighteen hours and forty minutes of those repetitions was very different from the thought of them, or the realization that they were going to happen. For them to actually happen, to actually live through it, was a different thing.... I had changed and the world had changed."[27] Several years later Cage spoke in a similar way regarding an eight-hour performance of *Empty Words*: "I ... think our time sense is changed, or that we have changed it. With all these pieces that I've written in recent years, they can be quite long, hours long." Indeterminacy however, had added a new twist: "All of them can also be just a few seconds long...They don't have to be played for any particular length."[28] This explains the indeterminacy of stanza lengths. It is not necessary to adhere to lengths that would result in a two-and-a-half-hour recitation of any of the entire parts of *Empty Words* if, for instance, one were to perform only a few stanzas, although such an abridgement would not carry the impact of a full performance, or enable a listener to experience the gradual process of the "musicalization of speech".

Cage's performances of the last parts of *Empty Words* caused uproars on two occasions. In the reading at the Naropa Institute soon after the completion of the work, the reaction "was so intense, and violent, that the thought entered my mind that the whole activity was not only useless, but that it was destructive." Poets, friends of Cage who had been in the audience, accused him of "bringing the monsters in among the Buddhas."[29] In Milan in 1977 Cage had no sooner begun performing Part III "than the audience [of three thousand!] began an uproar." Cage recalls: "[the audience] joined me, so to speak, in performing. Some of them were opposed to what I was doing and some of them were in

[27] 1973 interview with Alan Gillmor and Roger Shattuck, "Erik Satie: A Conversation," in Kostelanetz, *Conversing*, 223.
[28] Interview with David Sylvester and Roger Smalley, "John Cage Talks," in Kostelanetz, *Conversing*, 148.
[29] Anne Waldman and Marilyn Webb, "Empty Words, IV," in Kostelanetz, *Conversing*, 127.

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favor of what I was doing, and many of them wanted to do whatever they wanted to do. And so this continued for two hours and a half. Nobody left."[30]

Besides Thoreau, Cage was influenced by the Chinese concept of "full words" (nouns, verbs, adjectives, or adverbs) and "empty words" (articles, connectives, pronouns). From *Empty Words* on, this concept became a major factor in his text compositions, and made explicit the musical nature of words free of meaning.[31] "Emptiness of meaning ... is characteristic of musical sounds....So when words are seen from a musical point of view, they are all empty ... of intention ... because we don't know if the full word intends to be an adjective or a verb or a noun, it's the reader who brings the intention to it."[32] Cage drew an analogy between empty words and noise by noting that in the Norton Chair lectures there was:

> a tendency on the part of the empty words ... to become important and to give us a kind of meaning.... and some of the other words suffer of course because the empty ones are no longer at their service[;] the words that we thought were so meaningful become almost meaningless ... the benefits can come i think from taking the lesser of two things and supporting it rather than the stronger one as for instance noise as opposed to musical sound and in this case empty words as opposed to full words and in the case of our society the poor instead of the rich.[33]

Chinese ideograms also reflected an alternative way of thinking about language, one that was anarchic and not limited by intention:

> English is actually a slave language whereas Chinese language is actually anarchic.... Chinese langage lacks syntax in the strict sense that English has it. Where yes and

[30] Ibid. The recording of this incident is truly frightening at points. Boos and whistles soon give way to jeering unison chants and the situation quickly becomes chaotic. (Ampersand CD Ampere6, "John Cage: Empty Words (Parte III)," Chicago, 1992. Originally issued on Cramps.)

[31] Cage noted Stein's extensive use of empty words when describing the "minimal muscal events" in Virgil Thomson's Susie Asado as being "as commonplace as the is's and the and's of Miss Stein's prose." (Katherine Hoover and John Cage, *Virgil Thomson* (New York: Yoseman Press, 1950), 138.)

[32] Richard Kostelanetz, "John Cage in Conversation," in Kostelanetz, *Conversing*, 142.

[33] John Cage, *I-VI*, (Cambridge, MA: Harvard University Press) 1989, 252-54. (The original contains no capitalization or punctuation.)

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> no are very clearly opposites in English they are not in Chinese … one could give consideration to a number of characters for a long time because different meanings would come from the same characters whereas in English if you spend a long time with a sentence you tend to go toward one idea rather than toward many.[34]

Cage's performance of *Empty Words* as well as the mesostics that came later was conditioned by his vocal limitations. "Ever since I stopped smoking about six years ago a kind of cloud has come over my voice, and more and more my interests move toward the voice and toward the use of the voice in connection with music in performance. I had in mind … to read all of *Empty Words* … but now I don't now whether my voice would put up with it."[35] Cage's reading style became less flamboyant and extreme in his recitations, but experimentation with electronics continued. Charles Junkerman describes a Cage performance at Stanford in 1992 as "Cage's voice itself was not singular and authorial, but multiplied three times on distortion-free DAT tapes, and synchronized with his own live speech so that the audience could not identify with certainty the original source for the words they heard."[36]

2. *62 Mesostics Re Merce Cunningham* (1970): Linguistic Fragmentation in Mesostic Composition

This work represents the point at which the mesostic emerges as the major form that Cage employed in nearly all his subsequent writings and spoken-text compositions. Unlike the early freely written syntactic short poems intended as personal gifts, *62 Mesostics re Merce Cunningham* is a major work intended for performance. The Cunningham mesostics are unique among Cage's mesostics in their level of fragmentation, text being confined to

[34] Hans G. Helms, "John Cage Talking".
[35] Kostelanetz, "John Cage in Conversation," in Kostelanetz, *Conversing*, 147-48.
[36] Charles Junkerman, "'nEw/foRms of living together': The Model of the Musicircus," in *John Cage: Composed in America*, edited by Marjorie Perloff and Charles Junkerman (Chicago: University of Chicago Press, 1994), 51.

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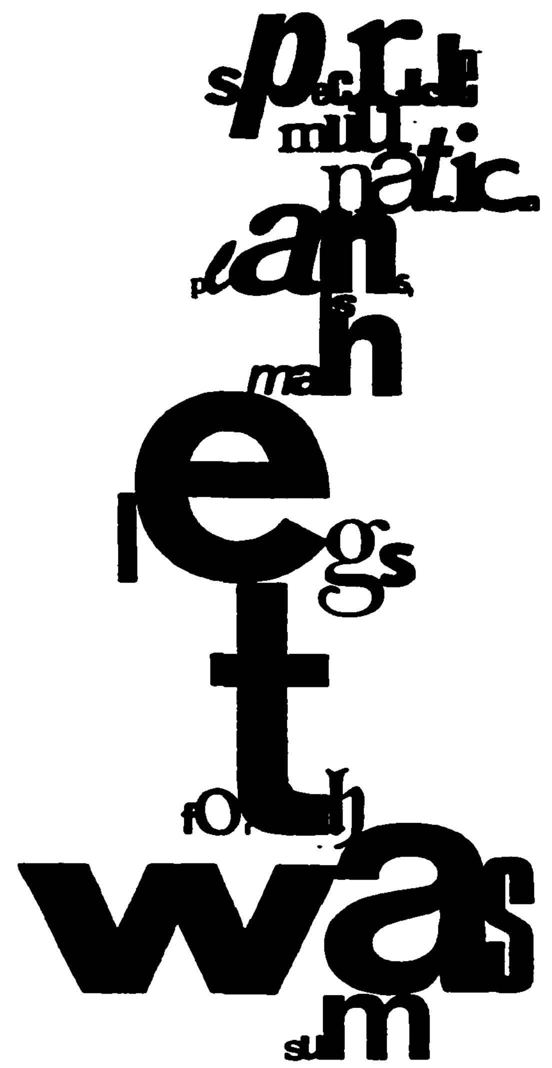

Figure 16. ***62 Mesostics re Merce Cunningham*** **(Excerpt)**

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single words, syllables, or combinations of syllables for each string letter. Cage reaches an apex in typography, with a profusion of typefaces and sizes, and a frequency of change, that appear nowhere else in his writings. Figure 16 shows one of the mesostics. The performance of the work demanded an entirely new approach to text and its vocalization and built on the experiments of *Mureau* in the direction of exploring musical parameters of speech.

In this work Cage drew upon the compositional techniques developed in the *Song Books*, *Not Wanting to Say Anything about Marcel*, and *Mureau*, and combined them with the mesostic form. Each section is a fifty-percent mesostic using either MERCE or CUNNINGHMAN as the string.[37] The mesostics are not freely written like earlier mesostic poems. Instead, the words and syllables that correspond to each letter of the string are "*I Ching*-determined mixtures of syllables and words from Cunningham's *Changes: Notes on Choreography* and from thirty-two books that had been useful to his work, chosen by him from his library."[38] Cage pinpointed events in the source texts and reassembled them using the same chance techniques he had developed to construct *Mureau*; but in the Cunningham mesostics he drew from a large number of sources, and selected only words and syllables, omitting sentences, phrases, and single letters. The radical step Cage had taken in *Mureau* of deriving the entire text from pre-existent material is in the Cunningham mesostics expanded to multiple sources, and applied to the mesostic form. Moreover, the purposefully high-level fragmentation of texts demonstrated the mesostic form's hospitality to non-syntactic text construction. Concatenation of text fragments from multiple sources was wed to the discipline of the mesostic, establishing a basic procedure for many of Cage's later mesostics, including the voluminous Norton Chair Lectures of 1989 in which 487 texts are

[37] In a fifty-percent mesostic "a given letter of the name does not occur between itself and the preceding lettter of the name." For example, in the MERCE portion of the string the letter C cannot appear between the R and the C of the string.
[38] John Cage, *62 Mesostics Re Merce Cunningham* (New York: C. F. Peters Corp., 1971).

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subjected to chance procedures to provide the wing words of mesostic strings.

After the texts had been assembled Cage used chance procedures developed in *Not Wanting to Say Anything about Marcel* to match each individual letter to one of about 730 different typefaces and sizes available in transfer sheets. The complexity of the procedure and the large variety of typefaces in the gamut interact with the mesostic form to create visually arresting constructions. Cage had been experimenting with typography and formatting for many years, and in the previous few years, the *Diary*, *Mushroom Book*, and *Mureau* emphasized more complex and multiplicitous graphic effects. No doubt Cage was influenced by McLuhan's *Gutenberg Galaxy* (1962): "Typographic changes ... are noises which erupt in the book!" remarked Cage, comparing the "mosaic" form of *Gutenberg Galaxy* to his compositions which welcome "the multiplicity of all noises that exist or may occur." McLuhan's work is not a "linear tool" but an open form that "can receive anything. And it will work even better when it breaks all restrictive conventions, all forms of organization, all the norms, including typography."[39] Cage certainly achieves this in the Cunningham mesostics which almost literally "erupt" on the page and cry out for vivid vocalizations of text far removed from Cage's previous conception of speech.

It is obvious from the multiplicity of sources and typefaces Cage assembled to compose *62 Mesostics Re Merce Cunningham* that he intended it to be a substantial work. Determining overall length was then a question of how many stanzas to write. This in turn may have been the result of establishing a total of 435 events (each event being the combination of letters for one string letter). Starting with the number of events allows chance to determine the sequence of strings, i.e., whether a stanza is to be written on MERCE or on CUNNINGHAM. Since the MERCE string has five letters and the CUNNINGHAM string has ten, the chance-detemined sequence of strings will eventually sum to either 430 or 435. In the former case, Cage could simply use MERCE as the string

[39] Cage, *For the Birds*, 117.

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for the final mesostic. Moreover, bias could be introduced in the string selection without disturbing the process of accumulating 435 event "slots" of the framework. That thirty-seven of the mesostics use the shorter string may reflect such a bias; however there appears to be no bias that produces any particular patterning of the MERCE and CUNNINGHAM strings.

Once the framework had been constructed, three compositional procedures remained: determining the content of events (word/syllable decisions), determining the source and location of event components, and determining the typography of letters. These are discussed in the following paragraphs.

Since Cage describes the material in terms of words and syllables, it is reasonable to assume that one-syllable words are counted as words rather than syllables. In this case, the proportion of events comprised of words to those comprised of syllables is roughy equal. Events comprised of single words are in a range averaging about 230 and events comprised of syllables in a range averaging 201.[40] So one may infer that the first decision was the word/syllable determination and that this was on a fifty-fifty basis (or close to it).

There is, however, a clear bias toward the use of one-syllable words. Out of approximately 240 words used in the mesostics, only fifty are words of more than one syllable. On the other hand, single syllables and multisyllabic combinations are about evenly split at approximately 100 and 96, respectively. For both multisyllabic words and syllabic combinations there is an inverse relationship between number of syllables and frequency of occurrence. Two-syllable words occur thirty-five times, three-syllable words nine times, and four- and five-syllable words twice each. Similarly, for multisyllabic combinations there are forty-six events with two syllables, twenty-nine with three syllables, eighteen with four syllables and two with five syllables. Only one six-syllable word and

[40] It is not always possible to determine if the event is a word, or a syllable from a multi-syllable word, e.g., "tries".

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one six-syllable combination occur.[41]

Further micro-manipulations of text complicate the picture without significantly affecting the proportions. One is the use of "syllable exchange" within a word. The complement is the intersection of syllables from different words. Cage employs the former type of syllable exchange six times, once each in words of two, three, four, and six syllables (e.g., "cinematography" becomes "raephymacintog"), and twice in words of five syllables. In the latter type of syllable exchange, words are joined to syllables (e.g., "arformed") or syllables from different words intermix (e.g., "incalduced"). Syllable exchanges "produced new words not to be found in any dictionary but reminiscent of words everywhere to be found in ... *Finnegans Wake*."[42]

A second operation in composing the mesostics would be to determine which source to use for locating the word or syllable(s) that satisfied the fifty-percent mesostic rule, for each string letter. Given the large number of events, a simple chance determination giving equal weight to all of the sources would ensure that each was used at some point. However, since Cage requested thirty-two books from Cunningham, a number easily related to the sixty-four hexagrams of the *I Ching*, it seems logical that an initial decision would have been whether to use either the book by Cunningham or one of the other sources.

The sixty-two mesostics represent the high point of Cage's visual treatment of text and integration of visual aspects with performance indications. The instructions for performance repeat those in many of the vocal solos: "type face and size differences may be used to suggest an improvised vocal line having any changes of intensity, quality, style, etc., not following any conventional rule."[43] Type face and size are chance determinations

[41] As explained in Chapter 2, above, the appearance of only two six-syllable events in the Cunningham mesostics is in all probability not a coincidence, but typical of Cage's practice of designing the chance procedure to ensure a limited number of appearances of the extreme value in a set of parameters.
[42] Cage, *62 Mesostics re Merce Cunningham*.
[43] Ibid.

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performed for each letter of the text, bringing about a full range of possibilities for phonemic vocalizations. Cage instructs that "words and syllables are not to be made clear: rather, attention is to be given each letter.... Do not search to establish any pronunciation rule."[44] Electronic amplification magnifies these effects.

Paying attention to each letter means that even a single syllable becomes a complex event (the word "light", for instance, has five sonorities, all of which can change during execution), so that wing words would prove too unwieldy and make events too long to be practicable. This also explains the predominance of single syllables and one-syllable words. Words also need to be short since, although "tempo is free," "each mesostic when performed should hold together: like a single cry, shout, or vocal event, not including in it longer silences than those necessary for breath (exception: punctuation marks at ends of lines), breathing, if necessary, taking place at the end of a word or syllable."[45] Recitation rate controlled by rhythmic structure is replaced by an improvisational performance style which stresses discontinuity. The temporal aspect of performance, based on breathing, is also completely different from the controlled recitation rates of earlier spoken-text compositions.

Total time-length, as well as periods of silence, are indeterminate factors within the parameters of Cage's instructions:

> A performance will include at least five separate mesostics (but may present all of them, though the complete work should be a full program: from one and one-half to three hours). According to the number of mesostics performed

[44] Ibid. This improvisational element is important in Cage's experience with performance of speech compositions, and relates to indeterminacy as a performance principle. In "Indeterminacy" Cage described the cues and time brackets in Christian Wolff's *Duo II for Pianists*, which call on the pianists to react instantaneously and spontaneously, and asked: "How is each performer to fulfill th[e] function of being alert in an indeterminate situation?... his attention is given inwardly and outwardly with reference to the structure of his mind to no matter what eventuality." (John Cage, "Indeterminacy," in Cage, *Silence*, 39).
[45] Ibid. In a 1978 interview with Rose Slivka, Cage also spoke of breathing in relation to *Empty Words* as "a whole area to be investigated.... Breathing and speaking and the use of them for the voice. I know enough about it to know it has an effect upon the mind." (Rose Slivka, "Lifecraft," in Kostelanetz, *Conversing*, 148).

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> and according to the total time-length determined, space each in silence (e.g. in the case of the decision to perform all of them in a three hour period, allot approximately three minutes to each mesostic plus its succeeding silence (exception: the last one); say, one takes twenty seconds then follow it with two minutes and forty seconds of silence; let a single mesostic plus its succeeding silence equal at least one and one-half minutes; a shortest performance will therefore be something less than seven and one-half minutes).[46]

In the Cunningham mesostics, the abandonment of syntax combined with the visual elements of the score suggested new ways of performing a text work, making speech songlike: "To raise language's temperature we not only remove syntax: we give each letter undivided attention setting it in unique face and size; *to read* becomes the verb *to sing*."[47]

It is easy to sense Cage's joy at being released from the meaning of language and discovering a new personal means of expression deriving from attention to speech components. "To sing" is a metaphor for bringing the typography to life, for *62 Mesostics Re Merce Cunningham* synthesizes text, speech, and song. Cage's text scores offer far more opportunities for imaginative vocalizations than does traditional song, which relies on definite pitch as its defining characteristic. This is most evident in the case of unvoiced stops (P, T, K,) and fricatives (e.g., F, S, SH). When magnified by elongation and/or other modes of emphasis, consonants are noise elements foreign to song. On the other hand, definite pitches can be sustained on vowels in a way that is more characteristic of song than speech. There is moreover a middle area in the voiced stops (B,D, G) and fricatives (e.g., V, Z) and in the nasals (e.g., M, N) and semi-vowels (e.g., W, L, R) and in coloring "pure" vowel sounds with the whisper fricative (H).[48] Relative pitch affects even the noisy syllables, such as S and T, while liquescent phonemes like M and N cannot be articulated without pitch content. An imaginative performance is an examination of the *colors* of

[46] Ibid.
[47] See Cage, *M*, 107.
[48] See Charles Dodge and Thomas Jerse, *Computer Music: Synthesis, Composition, and Performance* (New York: Schirmer Books, 1985), 220-25.

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language. The same attention to individual phonemes and typography elicits a rhythmic and dynamic complexity and range that is musical rather than speech-based. The typography transforms speech into music by means of the components of language itself.

3. *Writing through Ulysses: Muoyce II* (1992): Writing through Joyce Globally

In 1980, Cage completed *Muoyce (Fifth Writing through of Finnegan's Wake).* Unlike the previous sequential writing-through mesostics on Joyce's text, *Muoyce* is a "collage of typescript"[49] that applies the chance methodology and typographical format that Cage had devised to create *Mureau.* Cage "flew over" the source text "landing through chance operations here and then there, on a letter, or a syllable, or a word, or a phrase."[50]

Of course *Muoyce* is quite different from *Mureau* because of the difference between the two source texts, and Cage had to find a new way of performing the Joyce-derived text. Even three years after its composition Cage said "I think it is certainly the most difficult text to read [aloud] that I have ever encountered." As with *Mureau* and *Empty Words*, he arrived at a new recitation style through experimentation. "When I first wrote the text, I had great trouble pronouncing it. I didn't know what the sound of it should be, or could be. I tried everything I could think of, and among the things I tried was whispering. When I whispered it, and voiced the italicized syllables, it clicked for me."[51]

Writing through Ulysses: Muoyce II (1992) for speaker and tapes of traffic sounds, is Cage's last text work. Cage loved the "unpredictability" of traffic and took pleasure in the traffic sounds outside his apartment on Sixth Avenue in Manhattan.[52] Andrew Culver's performance notes for the piece are particularly detailed, giving exact positioning of

[49] Interview on audiotape with Charles Amirkhanian (1983), in Kostelanetz, *Conversing*, 151.
[50] Interview with Klaus Schöning, "Silence Sometimes Can Be Very Loud," in Kostelanetz, *Conversing*, 151.
[51] Ibid.
[52] See Revill, 263-64; and John Cage, "Tokyo Lecture and Three Mesostics," *Perspectives of New Music* 26:1 (1986), 9.

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loudspeakers and playback instructions. The solo reader is to be "close miked" and the reading combined with "six [stereo] tapes of traffic sounds recorded in different cities." Four loudspeakers for the voice are to be positioned facing the ceiling so that the voice is "omnidirectional ... a sound that appears to come from everywhere." The reading and tape playback both take "about one hour. Strict synchronization, between tapes, and between tapes and performer, is not required." The six traffic tapes "have within them greatly varying dynamics," requiring experimentation with levels. "Once set, adjustments should not be made during the performance. The level setting for the live voice should allow it to be heard; it may occasionally and momentarily be overshadowed by very loud traffic events."[53]

The composition of the text is a unique hybrid of the global and sequential techniques. Like *Mureau*, *Empty Words*, and *Muoyce*, the text of *Muoyce II* is composed by randomly selecting source text fragments and arranging them in a columnar format. Unlike these earlier works, text composition follows the structure and proportions of the source text, and uses only words, an aspect it shares with the sequential writing-through mesostic form.

Muoyce II does not follow the source text sequentially from beginning to end, but it does preserve the structure, sequence, and proportions of the chapters of Joyce's *Ulysses*. Cage uses the global technique *within* each chapter to generate the corresponding section of the text rather than allowing the entire text to be the field for every chance determination. Cage's procedure preserves the proportions of the source text as well as the sequence of chapters, condensing each forty-five-line page of the source text to one forty-two-character line, creating columns of uniform width. In *Muoyce (Writing for the Fifth Time through Finnegans Wake)*, by contrast, the proportions of the seventeen parts of the source were

[53] Andrew Culver, Performance Notes to *Writing through Ulysses: Muoyce II*, New York: John Cage Trust.

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only "more or less maintained."[54] Since each chapter in the edition of *Ulysses* that Cage used ends with an incomplete page, Cage even went so far as to work out percentages to proportionately reduce the number of characters in the final lines of each section of *Muoyce II*.[55] In both *Muoyce* and *Muoyce II* variety of typeface is confined to occasional words in italics or capitals. Words in italics or capitals that occur in the source text are maintained as such in Cage's text, and he also uses the asterisks that appear in Chapter 10 of *Ulysses* in his own text.

The first page of the autograph manuscript of the score gives an example of how Cage constructed the first thirteen sections of the text. Figure 17 is a photocopy of the opening section of Cage's manuscript, and Figure 18 shows how the text appears in the finished typescript.[56] The numbers at the top left-hand side of Figure 17, ("1=17"), indicate that this is the first section of the text, containing seventeen lines. Each word in this section is drawn from the first chapter of *Ulysses* by chance procedure that is apparently unordered in terms of the source's original continuity.[57] This is consistent with the compositional practice in previous texts where the questions asked are: which page? which line? and which word? Once a line of text had been constructed, a simple chance determination was made for each pair of words as to whether to "tie" them, or to leave a space between them, as indicated in the notation in Figure 17: "1=tied 2=space." (Tied words are indicated by the curved lines that connect words in the manuscript.)[58] This process proceeded line by line. "Tied" words had of course appeared in earlier text collages, but this process is unique to this work.

[54] John Cage, *X: Writings '79-'82*, (Middletown, CT: Wesleyan University Press, 1983), 171.
[55] The version Cage used is that edited by Hans Walter Gabler (New York: Vintage Books, 1986).
[56] John Cage, *Writing through Ulysses: Muoyce II*, in John Cage, *Anarchic Harmony: Ein Buch der Frankfurt Feste, Alte Oper Frankfurt*, edited by Stefan Schädler and Walter Zimmermann (Mainz: Schott), 151-173. Cage's manuscript at New York: John Cage Trust.
[57] E.g., "bathtowel" is found only on line 535 of the original text, "pier" on 700, "Englishman" on 430, etc. Words could be drawn from the text more than once.
[58] If this process resulted in lines with fewer than forty-two characters Cage simply crossed out ties (e.g., between "them" and "reached" in the second line in Figure 17). When a line ended with too many characters, he hyphenated the final word (e.g., "English-man").

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Figure 17. ***Writing through Ulysses: Muoyce II*****, Page 1 of Manuscript (Excerpt)**

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on eyes was keep abathtowelup pierEnglish-

man alsoRomanthem reached love inAnd gras-

shalms thewith Bucksomelastatmobile woman

he want of couldwith cliffs He thebe talk-

ingKinch said We'll<u>dead</u> skin God tosmartly

Figure 18. ***Writing through Ulysses: Muoyce II*****, Transcription of Page 1 of Typescript (Excerpt)**

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Section 14 moves closer to a linear writing through by drawing words for each line of text from the corresponding *page* of the novel.[59] Section 15 has two unusual features. Since this section lasts 200 seconds, the performer must use an extremely fast recitation rate.[60] As can be seen in Figure 19, below, this section also departs from compositional procedure in previous sections. Following Joyce's format of a play for this chapter of *Ulysses*, Cage grouped characters, dialogue, inflections, and implied staging into three categories: characters, "speech" (with inflections), and "actions." He maintained Joyce's original typesetting for each category. Cage first determined the number of occurences for each category: twenty-eight persons, twenty-nine speeches with eleven inflections, and ten actions.

The beginning of the fifteenth section appears in the manuscript as in Figure 19.[61] Characters' names (STEPHEN, TALBOYS, etc.) seem to have been organized first by determining how many names (from two to five) or, possibly, number of letters, were to appear in each of these lines, and then determining by chance which names to use. The "actions" are randomly drawn from passages in the source that are parenthesized and in italics, and each line must contain a reference to some action ("e.g., "swirling"). These lines Cage indents. More puzzling is the means by which the lines containing "speech" are organized, since these do not consistently contain forty-two characters, Roman or otherwise, as would be indicated by Cage's note "1-42" in the left-hand margin of the manuscript. Evidently Cage felt free to disregard the columnar format in this section of the text and probably constructed these passages by determining the number of words and then simply dividing lines and "typing words as necessary."[62]

---

[59] Lines 5-8 are out of order in the manuscript, suggesting that Cage may have considered mixing the order of lines but quickly changed his mind.
[60] Although it is 148 lines long, Cage evidently counts all blank lines in this total.
[61] All editorial marks and marginal notes are as they appear in the original manuscript.
[62] Many untied words in the manuscript are changed to tied words in the typescript. Line endings also vary between the two versions, with the typescript often dividing lines that appear as one line in the manuscript. And in the typescript, right-hand parentheses consistently are omitted or moved to the end of the line.

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6-42 inaudibly
(action) *(a lets swirling Bella Bloom in and why)*

STEPHEN VIRAGO TALBOYS, ZOE

1-42
(speech) Dublin this that *(breathing and)* which the thee

BLOOM CARR BLOOM BLOOM BLOOM

ani my virgin six. *(in from)* smoke. I cause That's

Keats are the on said ... ... spoiled

(a the her Don Space seated O'Dowd, from Dedalus)

Figure 19. *Writing through Ulysses: Muoyce II*, Transcription of Section 15 (Excerpt)[63]

[63] John Cage's manuscript, 1992, New York: John Cage Trust.

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Section 17 also differs in format from the rest of the text. Cage maintains the question-response format of this chapter of *Ulysses*. Each of the eight questions in Cage's text is a composite drawn from the hundreds of questions in the source text. Responses, likewise, are taken from the corresponding parts of the source, each response (and a couple of questions longer than forty-two characters) following the columnar arrangement of forty-two characters per line (except for shorter last lines). The manuscript shows that questions and responses were constructed independently and later paired, the first question with the first response, and so on.[64]

The final section of *Muoyce II* varies the technique used to compose Sections 1 through 13. In this section Cage uses only pairs of words as they appear in the source. The only exception is the last word, "yes," of Cage's text. This is because it is the only word to appear in this line in the Gabler edition; and by an amazing coincidence it is also the last word of the novel.[65]

3. *One*^{12} (1992): Linguistic Fragmentation and Improvisation

One^{12} (1992) for "a Lecturer" brings together all of Cage's previous developments in the text collages discussed above. *One*^{12} is the only work in the "number pieces" series for speaker.[66] Cage wrote and read the text in Milan.[67] In this score, we find Cage continuing to search for new ways of vocalizing letters, contrasting full and empty words, and mixing whispering and speaking. The score consists of Cage's instructions:

---

[64] This recalls the pre-written answers Cage prepared to read as responses to audience questions after his recitation of *Lecture on Nothing*. (See *Silence*, 126) and the scattered questions and answers in Cage, *For the Birds*, 15-27.)

[65] Cage also abandons tying words in this section, and instead uses marginal justification to achieve a columnar format.

[66] The titles in this series (begun in 1987) indicate the number of players; the superscript refers to the chronological order of composition. *One*^{12} is the twelfth composition for a soloist in the series. *Four*^{2} (1990), scored for chorus, is the only other noninstrumental work in the series.

[67] It is dedicated to Alfonso Frateggiani Bianchi of the *Quaderni Perugini di musica contemporanea*.

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Given an IC supply[68] for 12 (640 numbers between 1 and 12):
2-11 = whispered/vocalized vowels/consonants of each number;
1 = empty word (connective, pronoun, conjunction, article);
12 = full word...in each case spoken.
Improvisation (free vowels, consonants, words).[69]

This is a large, challenging work. It is not difficult to understand why Cage's preparation for performance involved much experimentation, and why he spent a good deal of time practicing.[70] Assuming that the numbers were random, it is evident that words would occur infrequently. With numbers between two and eleven making up the bulk of the choices, the number of letters (assuming six letters as an average choice) would quickly mount into the thousands. Altogether the number of letters and words could easily reach 3,500, close to the 4,000 events that Cage considered sufficient for each part of *Empty Words*.[71] Cage's own performance in Perugia lasts about twenty-seven minutes and contains fifteen empty words and ten full words.[72]

In addition to the sheer length of the piece, the performer must develop the skill to improvise words and letters (since Cage gives no specific material), and to call on various means of articulating letters and words—speaking, whispering, vocalizing. This is one of the few works in which Cage allows for improvisation. His well-known distrust of improvisation as an "undisciplined" action is summed up in an interview from 1966. A disciplined action is "doing something beyond the control of the ego." Improvisation, on the other hand, is "generally playing what you know, and what you like, and what you feel;

[68] The footnote inserted here in the score reads: "program by Andrew Culver, a simulation of the coin oracle of the I Ching."
[69] John Cage, *One*[12] (New York: C. F. Peters Corp., 1992); Cage's instructions appear in *S'Epos: John Cage, Quaderni Perugini di Musica Contemporanea 2*, edited by Ulrike Brande and Alfons Fratteggiani Bianchi (Palermo: Societat Editrice in Palermo, 1993). Interestingly, the last four words in parentheses do not appear in Cage's manuscript at New York, John Cage Trust.
[70] Conversation with Mark Swed, April, 1995. A recording of Cage's performance was recently issued by Galerie Rupert Walser (Munich, 1999).
[71] See Kostelanetz, *Conversing*, 145.
[72] "John Cage" (sound recording), Munich: Galerie Rupert Walser, 1999.

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but those feelngs and likes are what Zen would like us to become free of."[73] In 1984 Cage spoke of his quest for a way to include improvisation as an element in his compositions:

> What I would like to find is an improvisation that is not descriptive of the performer, but is descriptive of what happens, and which is characterized by an absence of intention. It is at the point of spontaneity that the performer is most apt to have recourse to his memory. He is not apt to make a discovery spontaneously. I want to find ways of discovering something you don't know at the time that you improvise—that is to say, the same time you're doing something that's not written down, or decided upon ahead of time.[74]

One way Cage mentions as a means of nonintentional improvisation is to place different numbers of events within time frames. This recalls the time bracket, a notational device that allows for the use of both chance operations and indeterminacy. A time bracket is essentially a set of durational parameters. In works in which the time bracket notation is fully developed, Cage determined the number of brackets, their placement, length, and overlap, while allowing the performer to determine specific entrance points and durations for events within the brackets. The time brackets are characteristic of all of the "number pieces" and the lack of time brackets in *One*^{12} is anomolous.

It is interesting to compare the lack of notation in *One*^{12} to a more fully notated work, *Music for Voice* (1985), which is among the earliest of the time-bracket pieces in the *Music for...* series (1984-87).[75] The notation for voice is closely related to the first of the piano works from the series, with single letters replacing the chords in the "pieces" sections and single noteheads corresponding to single notes on the keyboard in the "interlude" sections. The opening of the work appears in Figure 20, below, which shows the first

[73] John Cage, in a panel discussion with Stanley Kauffmann as moderator. "The Changing Audience for the Changing Arts/Panel," in Kostelanetz, *Conversing*, 223-24.
[74] Bill Shoemaker, "The Age of Cage," in Kostelanetz, *Conversing*, 222.
[75] For further analysis of this work in the context of the *Music for* ... series and the "number pieces," see Benedict Weisser, "Notational Practice in Contemporary Music: A Critique of Three Compositional Models (Luciano Berio, John Cage, and Brian Ferneyhough)," Ph.D. dissertation, The City University of New York, 1998.

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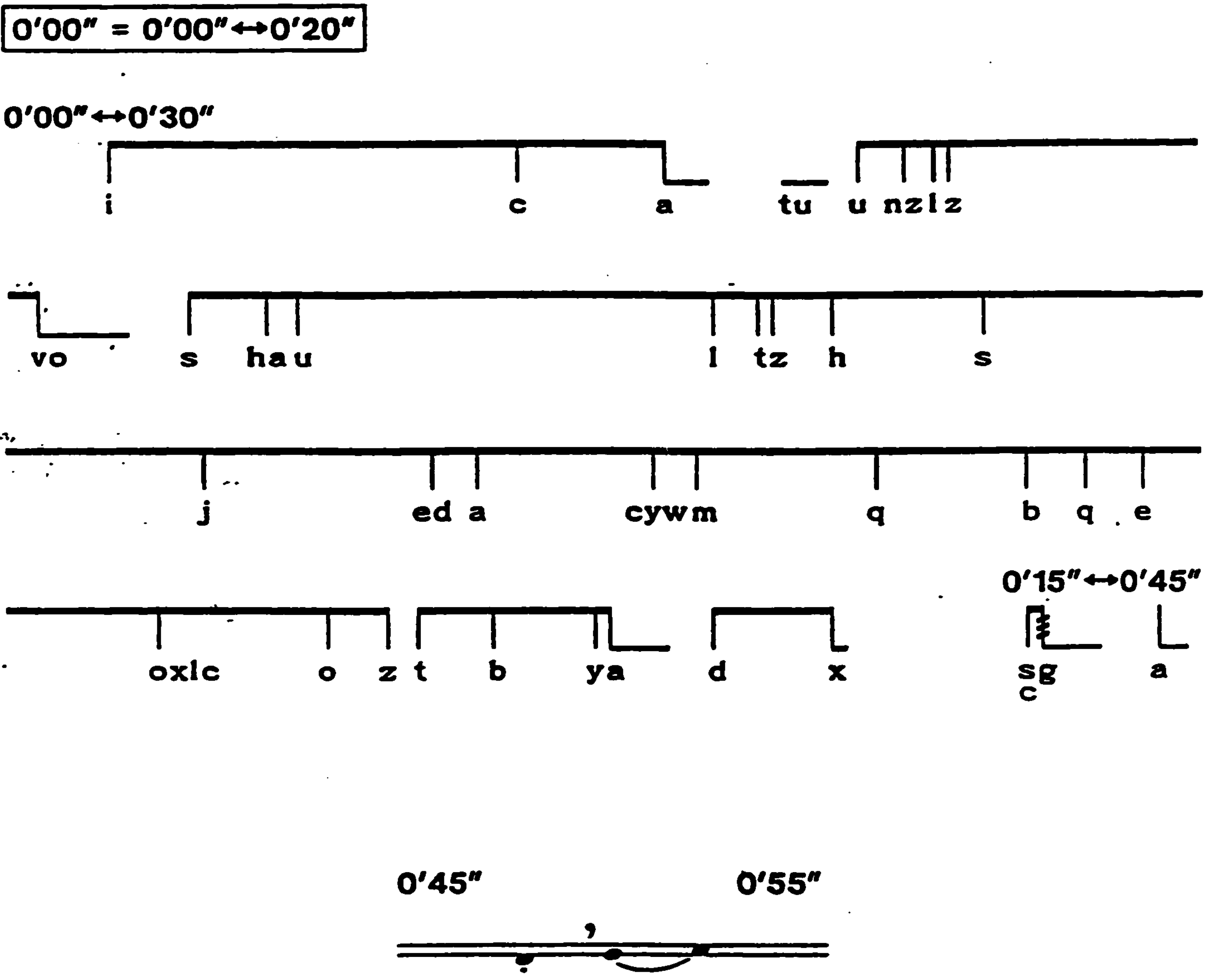

Figure 20: *Music for Voice* (Excerpt)

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"piece" and the first "interlude." The first time bracket is thirty seconds and contains forty-five letters. The second bracket may overlap the first by fifteen seconds, in which case all forty-five letters would have to be pronounced in the first fifteen seconds of the first bracket. The second bracket allows the performer to place only four letters anywhere within the thirty-second period. An "interlude" follows. Here the vocal material is indeterminate. Three vocal events take place within ten seconds in the interlude. So the score continues for nearly thirty minutes, the time brackets in the "piece" sections ranging from thirty, forty-five, or sixty seconds (seventy-five seconds once) and nearly always overlapping by fifteen seconds, and the "interludes" isolated (no overlapping), containing only a few events, and lasting five, ten, or fifteen seconds. Pieces and interludes alternate singly or in groups. Pieces consist of a pair of time brackets (as in the figure), except for three instances where there are groups of three, four and seven pairs. Interludes appear mostly singly (as in the figure), but there are four instances in which interludes are grouped by two, four, or five.

If one were to substitute single words for the events in the interludes, the structure of *Music for Voice* would give a good approximation of *One*^{12} and conversely the IC-generated numbers called for in the instructions of *One*^{12} could be adapted to a time-bracket structure similar to *Music for Voice*.

5. Summary

The compositions discussed above share basic compositional technique and aim: chance-controlled fragmentation and collage applied to text to produce intentionally nonsyntactic scores. Freedom from syntax allowed Cage to free himself from expressing his own ideas in texts.Yet each of Cage's collage works for speakers has its own compositional methodology and produces a unique effect due to the way Cage organizes his material and structures the determination process. These pieces also represent Cage's growth as a performing artist and extend his explorations in combining speech and

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electronic technologies.

Typography often became the leading indication for indeterminate performance. Listeners' perception of speech was freed from the strictures of language. The disconnect between composition, performance, and reception that Cage made explicit in musical works operates as well in these text collages. The abandonment of communication, achieved through chance operations, is here applied to language.

The leap into anarchic text collages seems to have come as a revelation for Cage. He had been struggling with the issues of language and syntax throughout the 1960's without being able to find a solution. The catalytic discovery of Thoreau's *Journal* and Brown's comparison of syntax to military organization as described by Cage, possibly related to his opposition to the War in Vietnam, seemed to provide the motivation to create the first of these works, and the prevailing view is that they represent a new stage in Cage's texts. However, Cage had developed and acquired all the necessary means to produce the post-1970 texts in his previous text pieces as well as in the song texts and in visual text works. The essential differences are the use of pre-existent text(s) as the sole material, the degree of fragmentation, and the detailed disciplines of assemblage.

The new works also neutralized text in the sense that the collages of pre-existent texts and the handling of text as abstract material removed intentional ideas (or any ideas at all). These pieces are not personal in the way that nearly all of Cage's previous writings are, despite the distancing effects that Cage often uses in the earlier works and the abstract quality of text that is achieved, for example, in the last part of *Juilliard Lecture*. Being experimental, the works can be performed by anyone or, for that matter, any number of speakers. Although Cage wrote these pieces as solo works for his own performances, he began as early as 1970 to experiment with group improvisations of spoken text. The following chapters discuss works that are composed for multiple speaking voices.

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CHAPTER SIX

COMPOSITIONS FOR MULTIPLE SPEAKING VOICES AND MIXED MEDIA

This chapter deals with two mixed-media works with parts for multiple speaking voices. *Les Chants de Maldodor pulvérisés par l'assistance même* is a composition for a "francophone public of no more than 200 persons." A kitchen timer and a tape recorder with playback system are other components that may or may not come into play.[1] In this piece Cage developed a new technique of "erasing" portions of a source text, a compositional principle that proved to be important in both his musical compositions and in future writings. *Lecture on the Weather*—a work for speakers, recordings, and film—entails almost the opposite technique of creating text. In this case, large blocks of texts drawn from Thoreau's writings are assembled for each part. Both works are important in terms of Cage's larger concern with anarchy and revolution, and his attempts to expand musical anarchy to a social realm. Apart from superimposed recordings of speech and a late mesostic text, *Stüfen: an Autoku for Siegfried Unseld*, these two works from the early 1970's are the only works by Cage that expressly call for a large number of speakers.

[1] John Cage, *Les chants de Maldodor pulvérisés par l'assistance même* (New York: C. F. Peters Corp., 1971).

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1. *Les chants de Maldodor pulvérisés par l'assistance même* (1971): Erasure Techniques Applied to Text

With *Mureau* Cage began experimenting with performance of texts by large groups, attempting to transform audience members into participants. In his 1972 interview with Hans Helms he stated: "I like ... music by many many people and ... more and more in my performance I try to bring about a situation in which there is no difference between the audience and the performers." He recounts a performance at the University of Minnesota in which he was "asked to chant ... for a class of forty people, and after doing that for a short length I handed out the pages from which I had been chanting and shortly we were all forty chanting together."[2]

Cage was searching for a kind of music in which "the division between performers and audience no longer exists: a music made by everyone." He "learned this" at Western Michigan University, Kalamazoo, where two hundred untrained voices rehearsed *Mureau*, "not attempting to make words clear, but giving attention to individual letters. The feelings we had and the sounds heard were such that we all looked forward to the next evening's performance." But the performance was a disappointment. "The social situation soon changed. Not all, but some, in one way or another, aggressively drew attention to themselves."[3]

Perhaps Cage had the experience at Kalamazoo in mind when in the following year he devised another experimental reading by up to 200 untrained voices, *Les chants de Maldodor pulvérisés par l'assistance même.* The score consists of instructions and 200 parts, each part being a different page from a paperback edition of Isodore Ducasse's *Les Chants de Maldodor*. On each part a large number of lines has been crossed out. Each audience member receives the instructions and one part. The instructions concern

[2] Hans G. Helms, "John Cage Talking".
[3] Cage, *M*, Foreword.

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performance decisions that participants vote on: whether to read the text loudly or softly, whether to use an amplified kitchen timer as a chronometer to keep track of the 1′30″ timeframe in which the performance is to take place, and whether to record and play back the performance. In the first two cases, the majority decision is implemented, and in the last case, the minority decision is implemented. In each case, "le public" may "rebel" against the decisions in ways specified: repeatedly crying "Lautréamont," pronouncing the poet's *nom de plume* lettristically, or dancing in the aisles.

Les chants de Maldodor pulvérisés par l'assistance même thus becomes as much a theater piece as it is a composition for speakers. Audience members not only perform the piece, but determine—both as individuals and groups—how it is performed, turning group recitation into a process that incorporates the actions of the audience.[4]

Cage's title, choice of text, and provisions for "rebellion" reflect on French culture in a way that the *Europeras* reflect on the European operatic tradition, by appropriating cultural artifacts and reprocessing them. Cage's humorous and long-winded title brings to mind Salvador Dali's "Jeune vierge autosodomisé par sa propre chasteté." The use of Isodore Ducasse's nightmarish epic, written just over a century before Cage "pulverised" it, is a direct reference to the French Surrealist tradition. (Another more practical reason for the choice of text is its abundant length.) The process of voting and rebelling relates to the tradition of republicanism and protest such as embroiled the nation shortly after Ducasse's death. There is an ironic cast to Cage's choices. He was no champion of Surrealism; the French poets he most admired were Mallarmé and Char. He claimed never to have voted in his life and, although he viewed civil disobedience as an honorable act, he disapproved of political demonstrations. Perhaps the peculiar indeterminate aspects of the piece are related more specifically to Cage's disappointment with the Paris performance of a Cage

[4] One is also reminded of Cage's description of his performance of *Empty Words* in Milan: "Some of them were opposed to what I was doing and some of them were in favor of what I was doing, and many of them wanted to do whatever they wanted to do."

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musicircus the previous year, as related to Daniel Charles:

> In the United States, the first two musicircuses came off in an atmosphere I felt to be harmonious with my ideas on world improvement. A lot of people working together without getting in each other's way. In France, the same idea fell prey to ... a sort of social constipation! ... It's not that I want to deny the multiplicity and variety of individuals.... Except, when I speak to the French, they answer me by culture, they cling to their culture as property, and they can't give up that property. It sticks to their skin. It separates them from other peoples with another culture.[5]

James Pritchett sees the composition as related to *Etcetera* (1973), *Etcetera 2/4 Orchestras* (1986) and the orchestral version of *Cheap Imitation* (1970). Each in a different way present performers with situations of "freedom and control, anarchy and government." Pritchett believes these works are "an embodiment of the kind of possibilities that Benjamin Tucker, an early American anarchist, suggested."[6] He quotes Tucker as follows:

> We [anarchists] offer cooperation. We offer non-compulsive organization. We offer associative combination. We offer every possible method of voluntary social union by which men and women may act together for the furtherance of well-being.[7]

Certainly the composition is concerned with power, consensus, and protest as processes that engage the participants and whose outcome is unknown, but in this case Cage seems to be offering not only social union within groups but competition among groups and individuals. The officious, "constipated" process of following instructions, counting votes, and announcing decisions nearly dwarfs the actual ninety seconds it takes to perform the piece. In fact the piece is a kind of game, in which even the actions that arise have an air of absurdity—amplifying a kitchen timer, dancing in the aisles, shouting letters.

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[5] Cage, *For the Birds*, 180.
[6] Pritchett, *Music of Cage*, 193-94.
[7] Ibid.

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From another perspective, the working out of the instructions by the audience is a large-scale enactment of Cage's composing process. Determining alternatives through a chance-based quantitative system is how Cage composed. Vote counting is simply a variation of the *I Ching* processes. From this perspective, majority and minority "rule" are merely numerical conveniences that are used as chance decisions to bring about one of several combinations of alternatives. The performance is a realization of the audience's "composition," the quasi-political process to a convenience for determining the outcome.

Cage's compositional method for preparing the parts is simple in concept. On each part he has crossed out at least half of the lines of the text (and a few additional words) leaving less than fifteen lines to be read aloud. Each of the parts has a different configuration of crossed-out lines/words. Some parts are nearly all black horizontal lines with only a few words not crossed out. The first works to use a pre-existent score on a large scale are the three instrumental versions of *Cheap Imitation* (1969-77), which follow the entire score of Satie's *Socrate* but select only one voice line (or instrumental line) for each phrase. The similarity of this procedure to the writing-through process that began in 1977 of sequentially following a source text but omitting vast amounts of surrounding material is obvious. In the writing-through mesostics, however, there is no surrounding harmonic material, so that omission occurs on a linear dimension. Cage's procedure in *Les chants de Maldodor pulvérisés par l'assistance même* is a link between the earlier instrumental pieces and the later writing-through mesostics, for it is the first of Cage's text works that operates by simply omitting parts of the pre-existent source text rather than extracting and reassembling passages from the source text, leaving only traces of the source text. (The comparison with Rauschenberg's famous "Erased de Kooning Drawing" of 1953 is inevitable.)

The methodology was perhaps developed as a practical means of producing a large number of parts efficiently, without having to resort to elaborate and time-consuming

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procedures of extraction and recombination for all 200 parts. To create the parts Cage literally unbound a cheap paperback and no doubt used *I Ching*-determined values for how many and which lines/words to omit. The minimum number of lines is evidently half a page, so that most of the source text is obliterated. Since so much of the text is omitted the most efficient way to create the parts would have been to determine how many and which lines/words were to be left untouched and then cross out the remaining material.

The omission of material from a single source in this work and the writing-through mesostics are "erasure" techniques that Cage later adapted to other sources and media. The *Quartets* for concert band and twelve amplified voices (1976-78) erase individual notes in voice parts of hymns by William Billings, Jacob French and Andrew Law.[8] *Some of "The Harmony of Maine" (Supply Belcher)* (1978), for organ and three assistants, and *Hymns and Variations* (1979), for twelve amplified voices singing on vowel sounds, are similarly composed.[9]

2. *Lecture on the Weather* (1975): Composition as Transformation

Lecture on the Weather is described as "materials for an unconducted radio broadcast or theatrical performance."[10] The mixed-media work was commissioned by the Canadian Broadcast Company to celebrate the Bicentennial of the American Revolution. Composing the piece involved personal retrospection as well, as Cage explained:

> Since the bicentennial is an occasional piece in referring to the past, I thought besides referring to the past of the United States, I would refer to my own past too, which is basically my silent piece *4'33"*.[11]

[8] The first of these were to be performed as part of a musicircus, *Apartment House 1776* (1976) together with *Renga* (1975-76) for orchestra. See Pritchett, *Music of Cage*, 3-4 for a description of the composition of these pieces.
[9] Ibid., 196-97.
[10] John Cage, *Lecture on the Weather* (C. F. Peters Corp., 1975).
[11] Cole Gagne and Tracy Caras, "An Interview with John Cage," in Kostelanetz, *Conversing*, 81.

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The theatrical performance and broadcast were to be about thirty minutes in length. Cage expanded the structure of *4′33″*, allowing performers to agree upon a multiplication factor within the range of five to eight, giving a minimum overall length of 22′45″ and a maximum length of 36′22″.[12]

Cage specifically requested that the performers for the broadcast be Americans living in Canada, that is, men who had refused to participate in the draft, out of conscience, during the Vietnam War. In Cage's preface to the piece, he quotes Emerson on Thoreau: "If he brought you yesterday a new proposition, he would bring you today another not less revolutionary." Cage then ties this statement to Thoreau's influence on Gandhi and Martin Luther King, Jr. Those men who had refused to serve in the war had, in Cage's thinking, exemplified what King found revolutionary in Thoreau, namely, "withdrawing . . . cooperation from an evil system. . . . I began to think about Thoreau's *Essay on Civil Disobedience*. . . . I became convinced that what we were preparing to do in Montgomery was related to what Thoreau had expressed."[13] Cage described *Lecture on Weather* as "a *dark* bicentennial piece. Like Thoreau, it criticized the government and its history."[14]

4′33″ was the realization of a revolution in Cage's thinking regarding silence as unintended sounds, of accepting rather than controlling and thereby allowing the world of environmental sounds to enter. The application of Cage's own experience on a social level had been a concern since the mid-1960's. In the 1966 *Diary* he writes: "Private prospect of enlightenment's no longer sufficient. Not just self- but social-realization."[15] He includes this diary entry again twenty-two years later as part of the source material for *Anarchy*. The expansion in scale of *4′33″* that occurs in *Lecture on the Weather* is analogous to expanding this personal experience to a social level. Anarchy, rather than the control and

[12] Cage, *Lecture on the Weather*.
[13] Quoted by Cage in the Preface to *Lecture on the Weather*.
[14] Kostelanetz, "John Cage in Conversation," in Kostelanetz, *Conversing*, 83.
[15] Cage, *M*, 53.

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force of government, is necessary to fulfill Cage's dedication in *M*: "To us and all those who hate us, that the U.S.A. may become just another part of the world, no more, no less. (1967, repeated 1973)."[16]

The materials for performance consist of parts for twelve "speaker-vocalists (or - instrumentalists)", any four of which are omitted in performance.[17] Other materials include recordings and film. The recordings include breeze (continuous throughout the performance), rain (fading in at 11-12% of elapsed time), and thunder (entering at 63-70% of elapsed time). Further instructions read: "In a theatrical situation gradually lower the lights so that when [the recording of thunder] enters the house is utterly dark ."[18] At this point a film by Luis Frangella is to be screened, "representing lightning by means of briefly projected negatives of Thoreau's drawings."[19]

The timings for the recordings are of the same proportions as Cage's original proportions for the movements of *4'33''* (i.e., 30'', 2'23'', 1'40''). The materials on the recordings re-enact conditions of the premiere on the work at Tanglewood in 1952. The back of Maverick Concert Hall, in which David Tudor performed the work, is open to the surrounding forest. During the first movement the audience heard the sound of winds in the trees. As the second movement began, rain started to patter on the roof. During the third movement audience members began to murmur and whisper. As Tudor signaled the end of the piece the audience broke into an uproar.[20] Cage's re-enactment in *Lecture on the Weather* ends differently: since people "are speaking all the way through this work, ... the progression is not breeze to rain to speech, it's breeze to rain to thunder."[21] With Thoreau's drawings as flashes of light, "Thoreau himself became the thunder."[22]

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[16] Cage, *M*, np.
[17] Cage, *Lecture on the Weather*.
[18] Ibid.
[19] Cage, *Empty Words*, 3.
[20] See Larry J. Solomon, "The Sounds of Silence: Cage and *4'33''*," (1998), www.azstarnet.com/~solo/-4min33se.htm; and Ellsworth Snyder, "A Conversation with John Cage," in Kostelanetz, *Conversing*, 82.
[21] Snyder, in Kostelanetz, *Conversing*, 82.
[22] Kostelanetz, "John Cage in Conversation" in Kostelanetz, *Conversing*, 82.

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Thunder and spoken text in *Lecture on the Weather* relate to Cage's unfulfilled project from this period, referred to as "Thunder Piece"[23] or "Atlas Borealis and the Ten Thunderclaps."[24] Cage was interested in McLuhan's interpretation of Joyce's ten thunderclaps in *Finnegans Wake* as metaphors for revolutions in technology. In describing the projected piece, Cage stated, "since the Thunderclaps of *Finnegans Wake* describe the various stages of the history of human civilization, and in particular, of technology, the last thunderclap will represent the electronic technology of our era."[25]

Cage had initially conceived of the work at least as early as 1969 as part of his residency at the University of Illinois.[26] He envisioned the performance as "a tempest"[27] and "the transformation of a live orchestra and chorus into a genuine hurricane."[28] Daniel Wolf writes that the spoken texts of *Lecture on the Weather* "could be heard as derivative from the ideas of the thunderclap piece."

> The idea was to transform, electronically, the sounds of the spoken words into sounds of weather. In 1987, [Norman O.] Brown, still anticipating a completed work, described the piece was to be "more like going to a storm than to a concert". The piece was never finished. In part ... [because] ... the technical resources needed to transform speech into the sounds of weather were only tentative.[29]

Cage's plan was quite ambitious:

> My next project ... is to make as realistically as possible a thunderstorm. To take an actual thunderstorm and to measure it and then to use the ten thunderclaps in *Finnegans Wake* and have them actually sung. To have components, electronic

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[23] Jeff Goldberg, "John Cage Interviewed," in Kostelanetz, *Conversing*, 99.
[24] Interview with Geneviere Marcus, "John Cage: Dean of the Musical Avant-Garde,"in Kostelanetz, *Conversing*, 99.
[25] Cage, *For the Birds*, p. 212.
[26] This was to be the second of two projects. The first, *HPSCHD* (1967-69) a musicircus including seven harpsichordists and fifty-one computer-generated tapes, was completed in collaboration with Lejarin Hiller, and occupied the entire two-year period of Cage's residency.
[27] Cage, *For The Birds*, 173.
[28] Ibid., 141.
[29] Email from Daniel Wolf (based on his conversations with Cage, Norman O. Brown, David Tudor, and Andrew Culver), May 20, 2001. *Archives of Silence*, http://newalbion.com/artists/cagej/silence/

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> components, made so that what the singers sing is transformed to fill up the envelopes of the actual thunderclaps is the idea. And to have the strings pizzicato, which will make raindrops and the rain falling on different materials because the thunderclaps in *Finnegans Wake* are a history of civilization's technology. Well, that is, to my mind, a response to Jasper Johns' beer cans. Because it sets out to make something which is as much as possible this other thing.[30]

In *Lecture on the Weather* Cage performs this transformation on a large scale. The weather elements are not produced by electronic manipulation of live instruments and voices but by the actual sounds electronically recorded and amplified. The recreation of murmuring voices is also transformed electronically. Each of the speakers has his own sound system, "each sound system given an equalization distinguishing it from the others."[31] This requirement is rather elaborate compared to the playback of one to four tapes in *Where Are We Going? and What Are We Doing?*. The heterogeneity of the men's voices enhanced electronically in *Lecture on the Weather* stands in contrast to the homogeneity of one voice multiplied through tape playback in which timbral distinctions are not decisive. The separate sound systems allow performers to be separated and placed at different points in the performing space. Yet Cage delightedly admits that recitations are "so superimposed that you can't understand anything."[32]

This is partly because of the large number of speakers and partly because of the generous amount of textual material Cage provides. As is true in *Les chants de Maldodor pulvérisés par l'assistance même*, there is no new textual material in this piece: but since there are only twelve parts instead of two hundred, it is practical to use an additive rather than a subtractive method to generate texts. The texts for the speakers' parts are chance-assembled passages from Thoreau's *Journal*, *On the Duty of Civil Disobedience*, and

[30] Finegan, in Kostelanetz, *Conversing*, 203.
[31] Cage, *Lecture on the Weather*.
[32] Ibid., 83.

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Walden. Each speaker constructs a program (i.e., order of pages, lengths of silences) from his own material to fill the agreed-upon overall performance time. The lengths of parts range from just under three pages to fourteen pages. Some passages are only a sentence; others fill an entire page. The majority of passages tend to be paragraphs, resulting in long continuous recitations. Such unbroken portions of appropriated text occur in *Juilliard Lecture* and *Communication*, but in both of those earlier pieces these passages are mixed with different lengths and formats of text, and with new material. Apart from the texts of *Lecture on the Weather*, unbroken syntactic passages are absent during the period of atomizing source texts and destroying syntax. Nor did Cage ever return to such large units in text composition.

In a sense, the large size of the text passages matches the expanded scale of the work. Twelve amplified voices speaking simultaneously and continuously could easily merge into an overall sound reminiscent of surrounding thunder. On a more practical level, appropriation of long passages sped up the composing process.[33]

Another unique feature among Cage's spoken-text compositions is the inclusion in the speakers' parts of undulating lines of varying lengths, drawn by Cage, "so that the performer has a book which is illustrated with musical notations."[34] Duration of these drawings is indeterminate, depending on the breathing of the performer, as in the case of mesostic stanzas. The illustrations are "suggestions for vocalise (or sound production by some other means) not requiring a second breath."[35] These drawings are early examples of artwork that Cage incorporated in later scores, and are very much like the "oriental brushstrokes" that are found in instrumental scores of the 1980's. In these scores Cage instructs: "Play ... not turning the sound on or off ... but brushing it into existence as in

[33] Time was at a premium in 1975 and 1976. In addition to *Lecture on the Weather* Cage accepted other Bicentennial commissions, including the musicircus *Apartment House 1776*, a "cheerful ... celebration of the bicentennial" in contrast to the "dark" character of *Lecture on the Weather*. *Renga*, for orchestra, and *Quartets I-VIII* for concert band, were also commissioned for 1976. (See Revill, *Roaring Silence*, 252-53).
[34] Ibid., 82.
[35] Cage, *Lecture on the Weather*.

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oriental calligraphy where the ink (the 'sound') is not always seen, or, if so, is streaked with its absence, or changes of intensity."[36] The addition of the illustrations introduces an unpredictable, pitched element into the mix of sounds, the "brushing into existence" of these vocalizations (or instrumental sounds) inviting comparison to the recordings of breeze. This aspect of the parts shows that Cage was thinking of the individual recitations not as a mass sounds contained in one "envelope" but as distinct and nuanced performances. Among Cage's later spoken-text compositions, only the stratified version of *Essay* and *Stüfen: an Autoku for Siegfried Unseld* specifically entail such a degree of differentiation between individual voices (or tape tracks of Cage's voice).

Lecture on the Weather has multiple overlapping references to revolution. The celebration of the American Revolution is transformed into a criticism of the power and dominance in United States government policies and compared to an anarchic revolution, embodied by the principles of Thoreau and the revelation of *4'33''*. Thunder represents the technological revolution that has brought the world together and, without governmental interference, could provide the basic necessities for all the world's people.

3. Summary

Les chants de Maldodor pulvérisés par l'assistance même is significant in two respects. It is Cage's first score for multiple live speaking voices. Second, the erasure technique establishes the principle of creating a new text by omitting portions of a source without the necessity to establish any particular recombinations or, in the case of a sequential text, any recombinations at all other than those created by the sequence of remaining text portions. When combined with the mesostic discipline, omission of text resulted in the writing-through mesostics. A similar technique in later instrumental and

[36] John Cage, *Twenty-Three* (New York: C. F. Peters Corp., 1988). Cage introduced this description in his instrumental works with *Ryoanji* (1983-85).

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vocal pieces may have been suggested by the omissions of text in these earlier works for speakers.

This piece is one of only a few works with text that exemplify Cage's experimentation with breaking down the boundary between audience and performers. In *Rozart Mix* the actions of those present resulted in superimposed taped speaking voices (as well as other recorded sounds). In *Les chants de Maldodor pulvérisés par l'assistance même* the live speaking voices members of the audience are superimposed, erasing the performer/audience paradigm. In both works the participation of those present also transforms the course of action into a theatrical event.

In *Lecture on the Weather* live multiple speaking voices are fully integrated into a more complex mixed-media theatrical performance. The work is far less indeterminate than *Les chants de Maldodor pulvérisés par l'assistance même*, which offers a number of possible alternative realizations and where the number of participants can greatly affect the nature of the performance. *Lecture on the Weather* is a fixed score with regard to performing media, its structure is set within fairly narrow parameters, and Cage provides no alternative outcomes. The speakers' performances however are indeterminate to the degree that each speaker creates his own program from the materials in his part.

There is some irony in *Les chants de Maldodor pulvérisés par l'assistance même*. The initial decisions made by the participants are based on a quasi-political process concerned with power and opposition but the actual spoken-text performance creates a chaotic chorus of voices no matter how votes were cast or which decisions prevailed. The fact that the decision of the minority is to be followed in one of the voting processes puts minority rights on an equal level with the rule of the majority. In both cases the "law" embodied by the instructions subjects one group to the power of the other. The only means out of the dualistic situation is individual rebellion, which is effectively powerless. Even withdrawal from the rules of the game and rebellion are channeled into prescribed means of

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expression by the instructions. It is interesting to consider this piece in light of Cage's views on exactly these matters, expressed several years after the composition of the piece:

> It is unimaginable that one particular attitude alone would be able to unleash what you envision under the name revolution. I believe instead that the revolution is in the process of unrolling right before our eyes on all levels—and that we aren't aware of it....Protest movements could quite easily, and despite themselves, lead in the opposite direction, to a reinforcement of law and order. There is in acceptance and non-violence an underestimated revolutionary force. But instead, protest is all too often absorbed into the flow of power, because it limits itself to reaching for the same old mechanisms of power, which is the worst way to challenge authority! We'll never get away from it that way![37]

Lecture on the Weather represents the alternative: silence writ on a grand scale is the "underestimated revolutionary force" of acceptance as "an expressly political force."[38]

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[37] Cage, *For the Birds*, 236.

[38] Jonathan D. Katz, "John Cage's Queer Silence; or, How to Avoid making Matters Worse," in Bernstein and Hatch, 60.

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CHAPTER SEVEN

MESOSTICS AS THE BASIS OF COMPOSITIONS FOR MULTIPLE SPEAKING VOICES

This chapter discuss works in which mesostics are used as the basis for compositions with multiple speakers: *Letters to Erik Satie 1 and 2* (1978); the group of works based on Cage's writing-through mesostics, *Essay: On the Duty of Civil Disobedience* (1985-87); and *Stüfen: an Autoku for Siegfried Unseld* (1989). Together, these pieces sum up Cage's developments in spoken-text compositions and represent new experimental approaches that Cage developed in performance practice.

Letters to Erik Satie 1 and 2 (1978) have many unusual aspects in Cage's mesostic writings. They are unique in adapting the mesostic form to generate combinations of single letters which are then recited as ostinatos and overlaid through tape mixing. The first section of this chapter analyzes these scores in terms of compositional decisions and techniques. I attempt to reconstruct Cage's own performance of *Letter to Erik Satie 2* in mixed media events and discuss indeterminate aspects of performance related to the scores.

The second section explains the creation of the various versions of *Essay* (1985-87), computer voice resyntheses of Cage reading his writing-through mesostics of Thoreau's *On the Duty of Civil Disobedience*. The form of one version, *Voiceless Essay*, is discussed in some detail as to what decisions might have been choice-based in Cage's fomatting of tape tracks for the accompaniment to Cunningham's *Points in Space*.

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Stüfen: an Autoku for Siegfried Unseld is the only composition by Cage that uses the mesostic as textual material for multiple speakers/vocalists. The third section of this chapter discusses the autoku form of the mesostic, the means of transforming the text into a composition, and performance considerations.

1. *Letters to Erik Satie 1 and 2* (1978): Linguistic Fragmentation and Electronic Media

These two "letters" to Erik Satie are the only mesostics consisting solely of single alphabetic letters. One group of letters is formed by the mesostic string, ERIK SATIE. Other single letters, or groups of letters, occupy the positions where wing words normally appear in Cage's mesostics. The string and all of the wings are performed as ostinatos of various lengths and iterations. Instructions appear in the score as follows:

> Make a loop of Erik Satie pronounced lettristically; while it is playing pronounce the ostinati (accessory ostinati) the required (1=2) number of times in so far as poss. in chorus (all at once).[1]

Figure 21 is a transcription of only the mesostic portion of the score for *Letter to Erik Satie 1*. Figure 22 shows the full score for *Letter to Erik Satie 2*. The mesostic is the typed central figure, with timings (enclosed in boxes and circles) and other notes in Cage's hand. Figure 23 is a transcription of the mesostic portion of *Letter to Erik Satie 2*, showing Cage's timings in italics.[2] The main ostinato in both mesostics is the vertical string in capital letters, ERIK SATIE. Accessory ostinatos are the single letters or groups of letters extending horizontally on either side of the string letters. Numbers in superscript represent the number of iterations for each accessory ostinato.

[1] John Cage, *Letter to Erik Satie 1*, typescript (New York: John Cage Trust (1978)). The typescript also shows that *Letter to Erik Satie 1* was completed on May 6 and *Letter to Erik Satie 2* the following day. The first letter is dedicated to Walter Marchetti and the second to Juan Hidalgo, long-time close friends and musical collaborators. Both composers assisted Cage that year in *Il treno*, "'happenings' on three excursions for 'prepared trains' on June 26, 27 and 28." (Revill, 265). Cage had originally entitled the first score *mesostinatostic 1*, but dropped this unwieldy title for the pun on "letters." (*Letter to Erik Satie 1*, typescript). Cage performed both in Milan, and *Letter to Erik Satie 2* in London and New York.

[2] John Cage, *Letter to Erik Satie 1* and *Letter to Erik Satie 2*, manuscripts and typescripts (New York: John Cage Trust (1978)).

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m ^{16}	**E**	
	R	y m y ^{17}
j l ^{6}	**I**	
o ^{50}	**K**	h ^{55}
	S	q w ^{26}
f m f j p b v n j b ^{39}	**A**	p ^{1}
h ^{16}	**T**	
f m z w j g f ^{16}	**I**	u g ^{54}
x v j m v j ^{32}	**E**	

Figure 21. ***Letter to Erik Satie 1*****, Transcription of Mesostic Portion of Score, Showing Vertical String (ERIK SATIE) and Accessory Ostinatos with Number of Iterations**

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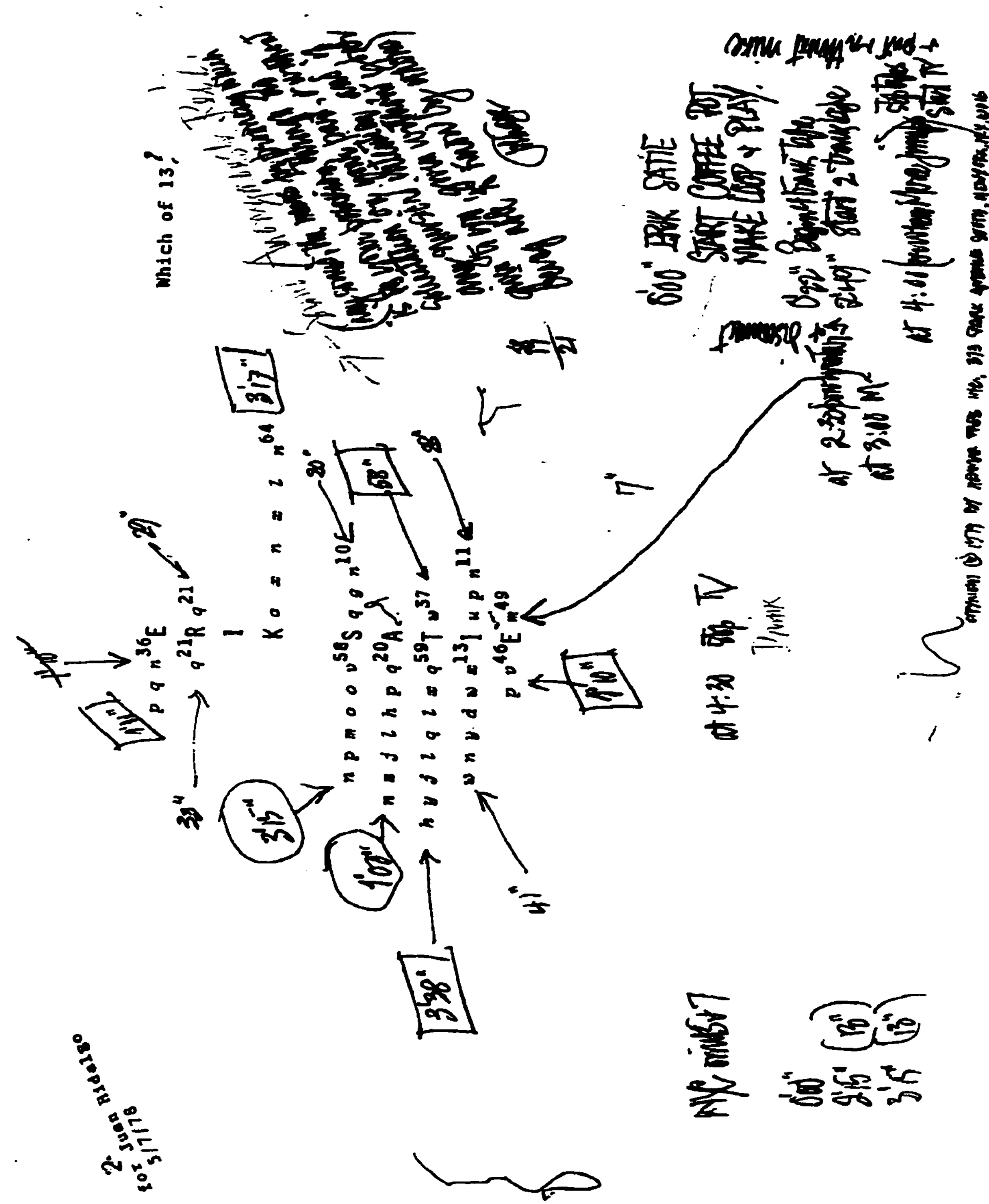

Figure 22: *Letter to Erik Satie 2*, Cage's Score

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1'11''	p q n[36]	**E**		
33''	q[21]	**R**	q[21]	*29''*
		I		
		K	c x n x l n[64]	*3'17''*
3'15''	n p m o o v[58]	**S**	q q n[10]	*20''*
1'00''	n z j l h p q[20]	**A**		
3'38''	h y j l q l x q[59]	**T**	w[37]	*58''*
41''	w n y d w x[13]	**I**	u p n[11]	*28''*
1'10''	p v[46]	**E**	m[49]	[?]

Figure 23. ***Letter to Erik Satie 2*****, Transcription of Mesostic Portion of Score with Cage's Timings**

Note: Timings are numbers in italics

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The ERIK SATIE ostinato begins the work and is the only ostinato heard throughout the performance. This distinction between the "main" ERIK SATIE ostinato and the "accessory" ostinatos (the horizontal ostinatos forming the wings) is reinforced by differences in length and in color, as discussed below. For the accessory ostinatos, one can infer that the compositional decisions were: 1) the number of accessory ostinatos; 2) whether accessory ostinatos were to appear on both sides, neither side, or only one side of the string letter (and in the latter case, which side); 3) the number of letters in each ostinato; 4) the number of iterations for each ostinato; and 5) which letters to use. These decisions are discussed in turn in the following paragraphs.

1) The first decision may have been predetermined based on the resources available for the performance in Milan. Instructions necessitate one tape machine to play back the tape loop of the reading of the "main" ostinato (ERIK SATIE). In Cage's performance the accessory ostinatos (the wings) were allotted to twelve tracks available on five additional machines, with one of the accessory ostinatos in *Letter to Erik Satie 2* either omitted or recited live, as discussed below. It may be that after determining the number of accessory ostinatos, Cage constructed each by chance procedures and then assigned them positions on the mesostic string. The order of the remaining decisions given here is not necessarily Cage's, but this ordering is not crucial to the outcome.

2) The second decision governs density of accessory ostinatos. As can be seen in the two figures above, each mesostic is divided into two sections corresponding to ERIK and SATIE. The first section is lighter not only because ERIK is shorter than SATIE by one letter, but also because Cage may have designed the compositional process to ensure that accessory ostinatos would be fewer in the ERIK section. Such a choice-based decisional process in both mesostics is more clearly operative in the left-side/right-side decision, with more ostinatos appearing on the left side of the string letter.

The second mesostic has a greater overall density, partly because of its "extra"

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(thirteenth) ostinato, but also because many aspects of this mesostic suggest that Cage used higher and broader scales for determining number of letters and number of iterations for accessory ostinatos. The following paragraphs discuss these two decisions.

3) For both mesostics, not only are there more ostinatos appearing on the left side of the string letters, but these ostinatos also contain more letters than right-side ostinatos. Within this context, Cage seems to have used broader ranges for determining lengths of accessory ostinatos in the second mesostic compared to the first. The overall range of length in both mesostics combined is 0-10, but the range for number of letters in the right-side ostinatos in *Letter to Erik Satie 2* is 0-6 while in *Letter to Erik Satie 1* the corresponding range seems to have been restricted to 0-3. As a result, the first mesostic has five ostinatos with only one letter, while the second mesostic has only two ostinatos with one letter.[3]

Similarly, the left-side ostinatos of the second mesostic reflect what appears to be a bias toward a greater number of letters for accessory ostinatos compared to the first mesostic. In total, *Letter to Erik Satie 2* has a total of forty-eight letters as compared to thirty-seven in *Letter to Erik Satie 1*. Another factor may be at work in determining ostinato lengths in both mesostics. Because ostinatos of four, five, and nine letters are absent in the accessory ostinatos in both scores, it is possible that Cage omitted these lengths from the gamut for accessory ostinatos to further distinguish the ERIK SATIE ostinato, which has four letters in its first portion, five in its second portion, and nine overall. This is plausible considering that the string letters were similarly extracted from the gamut of letters for accessory ostinatos, as discussed below.

4) The higher range for number of iterations in *Letter to Erik Satie 2* is another factor that accounts for its greater density. The number of iterations in *Letter to Erik Satie 2*

[3] If the unequal placement of accessory ostinatos on the string is more than coincidental, it is a planned visual aspect of the score that does not carry over into performance.

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is in the range of 10-64, while the range in *Letter to Erik Satie 1* is 1-59. The combined range (1-64) might well correspond to the sixty-four hexagrams of the *I Ching*. In this case the sole appearances of the extreme values (1 in the second mesostic and 64 in the first) is probably by intention.[4] This would be consistent with a general inclination to ensure choice of extreme values in chance operations in Cage's composition. It is likely that Cage used a two-stage procedure to determine the number of iterations for the other accessory ostinatos, first determining a sub-range (i.e., 2-9, 10-19, ... 50-59) and then the specific number within that sub-range. This well-established method seems to be operative here because each of the sub-ranges (with the exception of 40-49 in *Letter to Erik Satie 1*) is represented in both mesostics. It is also likely that this two-stage decision was the same for each ostinato since there is no apparent relationship between ostinato length and the number of iterations assigned.

5) To begin selecting letters for the accessory ostinatos, Cage first extracted all the letters of the string (E, R, I, K, S, A, and T) from the gamut of letters for accessory ostinatos.[5] This gives the ERIK SATIE ostinato its own characteristic colors, particularly since it contains three vowels (two of which appear twice) and a sibilant. The letters remaining in the gamut for accessory ostinatos are nearly all consonants, i.e., contrasting noise elements. Cage further differentiated the two scores by establishing a bias in the second mesostic toward letters missing in the first, and perhaps by further types of letter interchanges. The letters N, Q, C, and D are missing from *Letter to Erik Satie 1*. Conceivably this could be simply the result of chance. However, in *Letter to Erik Satie 2* there is a decided bias toward N and Q, as if to make up for their previous omission. On the other hand, the letters F, B, and G are missing from the second mesostic, perhaps

---

[4] The performance instruction "1=2" indicates that the one iteration assigned to this ostinato represents the *repeat* of the letter.

[5] This is indicated by a marginal note in the score:

```
a    e    i k          rst
 bcd  fgh  j   lmnopq    uvwxyz
```

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intentionally so as to balance the absence of letters in the first mesostic. The letters C and D, also absent in the first mesostic, may have been constrained to be chosen (at least) once in the second mesostic so as to include all letters of the alphabet within the two scores combined.[6] The more frequent appearance of certain letters is reinforced in performance, particularly when tape loops are superimposed.

The total number of letters in each mesostic, the omission and interchange of letters, and the more frequent appearance of certain letters (different for each mesostic) are factors in addition to textural differences that give the two works distinct characteristics.

The instructions to "pronounce the ostinati in so far as poss. in chorus (all at once)" is an indeterminate element of the score. For his own performance of *Letter to Erik Satie 2* at Sadler's Wells Theater, London in July, 1980 Cage used multiple tape playback to layer ostinatos so as to produce increasing textural density. This performance was part of the "accompaniment" for Cunningham's *Tango*, with lighting, sets, and costumes by Mark Lancaster. The first part of the accompaniment was Cage's performance of *Letter to Erik Satie 2* along with the "waving sound" of a coffee pot heating up. In the "middle part" Cage turned on a television set and turned it off after thirty seconds. In the last section of the dance Cage "swilled" tea with a throat microphone attached to his throat.[7] The inclusion of the coffee pot incorporates into the performance Cage's composition *Sound Anonymously Received*. This 1969 work "for an unsolicited instrument" had no score, but one is provided retrospectively in Cage's hand in *Letter to Erik Satie 2*:[8]

> any sound, the means for producing which is in your
> possession, through no solicitation on your part, & without
> any musical intention, and, if given to you, given without
> your being able to know by whom.

---

[6] A few other letters (M and J in the first mesostic and P in the second) appear with slightly above-average frequency but this is more likely to be coincidental.

[7] John Roberts and Silvy Panet Raymond, "Some Empty Words with Mr. Cage and Mr. Cunningham," *The Performance Magazine*, 2:7 (1980), 6.

[8] See Fetterman, "Cage's Theatre Pieces," p. 375 for a description of the first performance of this work, which consisted of Cage blowing a whistle once during a multi-media performance.

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The "waving sound" of the coffeepot provides an additional ostinato whose tempo increases along with the increasingly dense texture of the accessory ostinatos. Perhaps the four-minute limit for the performance of the mesostic was in part influenced by how long it took the coffeepot to get water hot enough to brew tea.

From Cage's notes in the manuscript and in the typed draft of the score, it is possible to reconstruct a timetable for the London performance, as shown in Figure 18, below. Cage gives starting times for five tape players, and gives a four-minute time limit for completion of the recitations (although the time limit may be modified—presumably shortened—depending on "when Merce jumps"). Each of these starting times can be paired with one of the timings noted for ostinatos (the italicized numbers in Figure 23) to total four minutes. For example, the starting time for the four-track tape machine, 0′22″, corresponds to 3′38″ (the timing for the ostinato on the left side of the string letter T). Similarly, the two-track tape player starts at 2′49″, corresponding to 1′11″; cassette player 1 starts at 3′27″, corresponding to 33″; etc. Each italicized number in Figure 23 thus represents the total time for the corresponding ostinato, including its complete set of iterations.

Cage therefore organized the performance by first recording himself reading each of the accessory ostinatos only once. He then made a tape loop of each reading and ascertained the *total* time length of each accessory ostinato, i.e., the length of the complete set of iterations indicated by the numbers in superscript in the score. For example, the first accessory ostinato in the score, "p q n", with thirty-six reiterations, lasted 1″11″, while the fourth accessory ostinato, "c x n x l n", with sixty-four iterations, lasted 3′17″. Each *complete* accessory ostinato (including all iterations) was then dubbed onto a separate track of one of the machines. Of the ostinatos assigned to a particular machine, the longest was dubbed from the beginning of one track. In the case of the four-track machine, this was the ostinato on the left side of the T in the mesostic string, ("h y j l q l x q") which, with fifty-nine iterations, lasted 3′38″. Cage then calculated the difference between this ostinato

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0′00″ ERIK SATIE
Start coffee pot
make loop & play

0′22″ Begin 4-track tape

0′45″ start Cassette 3

2′30″ Pour water and disconnect [coffee pot]

2′49″ Start 2-track tape

3′00″ M [with arrow pointing to last accessory ostinato]

3′27″ start Cassette 1

3′32″ start Cassette 2

4′00″ (or when Merce jumps) Stop tapes
start TV and put on throat mike

4′30″ Stop TV
Drink

Figure 24. *Letter to Erik Satie 2*, Cage's Timetable for London Performance, July 1980

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length and the remaining ostinatos assigned to the machine, and used the resulting times as the starting points for dubbing the three remaining ostinatos onto three other tracks. For example, on the four-track machine twenty-one seconds were allowed to elapse on the track before the ostinato lasting 3′17″ was dubbed.[9] Figure 25 shows how Cage formatted the twelve ostinatos onto separate tracks of the five tape machines. This design ensured that at 3′40″ all of the dubbed ostinatos would be heard together ("in chor. (all at once)"), and end simultaneously at 4′00″.

Given Cage's timings for each complete ostinato, and the number of iterations in each, the length of each iteration can be ascertained and can act as a timeframe to examine duration and spacing aspects in Cage's realization. The longest iteration among the accessory ostinatos is about 3.7 seconds, allowing for a maximum length of less than a half-second for each of the eight letters (if spaced evenly). It is difficult to imagine a much faster recitation rate, so that in tape loops of ostinatos with a higher number of letters, there would be little or no silence between iterations. Timed ostinatos with only one letter allow for up to 1.6 seconds for one iteration, reflecting the extra amount of blank tape needed to complete a tape loop of sufficient length to mount on the machine. These ostinatos would therefore contain small gaps of silence between iterations.

The nature of Cage's own performance raises performance issues concerning medium, texture, duration and other indeterminate aspects in the works. The following paragraphs discuss these performance aspects.

Cage includes the questions "Which of 12?" and "Which of 13?" in the scores of *Letter to Erik Satie 1* and *Letter to Erik Satie 2*, respectively. These questions evidently refer to the number of ostinatos in each mesostic. In *Letter to Erik Satie 2* the "answer" is in all probability the last ostinato, the single letter M, which is unaccounted for among the

[9] A reference to this calculation appears in the marginalia of the manuscript and typescript scores as "38-17=21".

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	Track 1	Track 2	Track 3	Track4
4-Track Tape:				
Ostinato length	3′38″	3′17″	0′58″	0′41″
Start time	0′22″	0′43″	3′02″	3′19″
Cassette 3:				
Ostinato length	3′15″	1′00″		
Start time	0′45″	3′00″	NA	NA
2-Track Tape:				
Ostinato length	1′11″	1′10″		
Start time	2′49″	2′50″	NA	NA
Cassette 1:				
Ostinato length	0′33″	0′29″		
Start time	3′27″	3′31″	NA	NA
Cassette 2:				
Ostinato length	0′28″	0′20″		
Start time	3′32″	3′40″	NA	NA

Figure 25. *Letter to Erik Satie 2*: Reconstructed Tape Format of Accessory Ostinati

Note: Track numbers are given only as a convenience. They do not necessarily correspond to Cage's assignations of ostinatos to tracks on any one machine.

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twelve available tape tracks. There is no clear timing indication for this ostinato. Instead, there is in Cage's timetable the entry "3′00″ M" with an arrow leading to this last ostinato. A reasonable explanation is that Cage recited this ostinato live. If this is true, then a live recitation of one ostinato is a planned compositional aspect of both scores. (Since the earlier mesostic contains only twelve ostinatos, corresponding to the twelve available tracks, a live recitation would be unnecessary.) This explanation is in accord with the simultaneous live and taped readings in Cage's performances of *Where Are We Going? and What Are We Doing?*, and with the mix of live speaker and broadcast voices in *Speech*. As mentioned above, it seems likely that Cage would approach composition knowing the limitations of the resources available for performance, and therefore would not only prescribe a maximum number of accessory ostinatos at the outset, but perhaps determine the specific number of ostinatos for each mesostic.

Another consideration involving live recitation concerns timing in Cage's performance. Timings noted by Cage in the score of *Letter to Erik Satie 2* are carefully linked to ostinatos by arrows, except in the case of the last ostinato. A timing appears in the vicinity of the ostinato, but not close enough to show a direct link. Moreover, this timing is given as 17″ in the manuscript, and 7″ in the typescript score, a mistake in copying which indicates that the correct number was not of crucial significance.[10] In any case, neither timing is long enough for a full recitation of the ostinato. One possibility is that Cage simply used one second as the time unit for one iteration. This method would make it easy to keep track of the number of iterations, and to coordinate the playback of the cassette tapes at 3′27″ and 3′32″. The length of the ostinato would also nearly fill up the four-minute cutoff point.

The possibility that Cage performed one of the ostinatos live brings up an

[10] Several other irrelevant notes are carried over from the manuscript. For instance, an incorrect timing appears at the top of the mesostic, crossed out, in both scores. Another example of Cage changing information but leaving the changes evident in the finished work is the untitled mesostic written in 1980 that appears in Cage, *X*, 117.

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interesting point. In his own performance Cage uses tape playback to achieve precise timing, duplicate his own voice, and give a mechanical regularity to the ostinatos. A live performance of all ostinatos by different voices, or a mix of taped and live recitation, are alternative interpretations of the performance instructions. Similarly, the questions "Which of 12?" and "Which of 13?" could refer to any number of ways of differentiating one of the ostinatos in each score. Another interpretation, pertaining to the part of Cage's instruction "in so far as possible", would be simply to omit the recitation of some accessory ostinatos. Cage employed this option in his New York performance of *Letter to Erik Satie 2*, as indicated by his note in the score, "NYC omit 5 & 7".[11]

Cage's timing strategy for tape loop playback creates a cumulative effect. Three accessory ostinatos are gradually added to the ERIK SATIE ostinato over the course of the first half of the performance. The remaining accessory ostinatos enter in quick succession over the second half of the piece, reaching maximum density at 2′40′′. At this point the texture is comprised of thirteen tape loops, each with a different length, resulting in multiple overlapping cycles. Over the next eighty seconds this thick texture of vocalized letters continues, and at four minutes from the initiation of the piece, all of the recordings end simultaneously. Other realizations following Cage's instructions would result in different textural densities. For instance, if one were to begin accessory ostinatos at 0′22′′, divide the remaining length into two equal parts and layer ostinatos onto tracks so that their midpoints coincided, textual density would increase, peak at 2′05′′, and decrease symetrically from 2′25′′. Number of channels, track mixing, and number and placement of

[11] This must refer to the tracks on the third cassette player, which contain the fifth and seventh consecutively counted ostinatos (counting both right-side and left-side ostinatos from the top of the mesostic). It cannot refer to the fifth and seventh string letters, since these include ostinatos assigned to both the four-track machine and to a cassette machine, and thus would eliminate too many ostinatos. Nor can it refer to the unlikely combination of the fifth right-side ostinato and the seventh left-side ostinato, since the start time for the former is given in the score and is shorter than the latter. This being the case, it is logical to assign the seventh (consecutively counted) ostinato, rather than the 1′10′′ ostinato, to the third cassette machine. In the performance at City Center in October, 1978, the television received more prominence and the amplified tea drinking seems to have been omitted. See Harris, *Cunningham*, 206.

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loudspeakers are additional indeterminate factors affecting texture.

Cage's instruction to "pronounce" the ostinatos "lettristically" also gives the performer(s) a great deal of leeway in terms of color and rhythm.[12] Cage's performance results in a busy, dense texture. Alternatively, a performer could choose to use differing recitation rates within or among ostinatos, place durational emphasis on single letters, leave gaps between letters, and/or extend the amount of silence on tape loops to achieve a totally different effect. These considerations bear on Cage's questions in the scores regarding "which of 13?" (or 12). Suppose the answer for *Letter to Erik Satie 2* was the longest ostinato, timed at 3′38″. As mentioned above, Cage's quick recitation rate for ostinatos, and the use of tape loops, meant that breaks within or between iterations were few or none; but it is difficult to see how this ostinato could be recited live in the same time length as the recorded, looped version in Cage's performance, or, for that matter, within the four-minute time period Cage assigned for his performance. Therefore, it is possible that the four-minute time length was derived from this ostinato's total time length (including all iterations), with an additional twenty-two seconds added before tape playback to allow for the ERIK SATIE ostinato. A live recitation of ostinatos would almost of necessity have to allow for more time overall, considering the limits of performers' physical stamina. Whatever medium or combination of media a performance includes, timing considerations must be worked out in advance in order to accurately realize Cage's instructions.

[12] Vaughan's description of Cage's performance is not very helpful: "Cage's music ... began with Cage vocalizing the letters of Satie's name." (Ibid.) The ambiguous nature of Cage's term "lettristically" presents another performance consideration. It seems most likely that Cage used the term "lettristically" to indicate a recitation of letters' "names" as in earlier works (e.g., *Aria*) rather than a phonetic/phonemic pronunciation of letters as in the post-1970 works for solo speaker, viz. Part 4 of *Empty Words* and *One*[12], in which a spacious timeframe allows the performer to focus on phonemic properties of each letter. Cage's relatively fast delivery rates in the tapes prepared for *Letter to Erik Satie 2* reveals that the timeframe for accessory ostinatos was short. Pronouncing letters by name also extends the pun of the title into the aural dimension.

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2. Compositions Based on *Writings through the Essay: On the Duty of Civil Disobedience* (1985-1987): Computer Technology Applied to Speech

By 1977 Cage had developed two techniques for text composition. The global technique used chance to locate random positions in a source text. This technique first appears in *Juilliard Lecture*, is refined in *Empty Words*, and first applied to the mesostic form in *62 Mesostics re Merce Cunningham*. The linear technique, originating in 1977 with the writing-through mesostics, located words sequentially throughout a source text according to the mesostic string. In 1984-1985 these two techniques were facilitated by computer programs. The program Mesomake was designed according to the linear technique to read a source text sequentially, selecting words for each string letter subject to constraining rules (whether the mesostic was a fifty-percent mesostic or one-hundred-percent mesostic). The program Mesolist gathered all possible words from a source text for each letter of the mesostic string and chose one of the possibilities by chance.[13] This section and the last analyze works using Mesomake and Mesolist, respectively.

This section describes the composition and realization of *Essay* and discusses the works that Cage derived from his recitation of the text. Cage's writing-through of Thoreau's *On the Duty of Civil Disobedience* is part of the materials ("presents for Satie") in the performance piece *The First Meeting of the Erik Satie Society* (1985), for three "characters": Cage (represented by a reader), Satie (represented by the audience), and a cabaret singer (with accompanist). During the same time, music of Satie (e.g., *Vexations*, or parts of *Musique d'Ameublement* played simultaneously) is performed "in another part of the same building ... so that its presence is felt throughout the meeting." The texts for this performance piece are a compendium of different types of mesostics: kus,

[13] Culver, Andrew, "A Note and a Table in the Tenth Year: John Cage and the Computer," *Musicworks* 52 (Spring 1992), 24-26. A one-hundred-percent mesostic does not not permit the appearance of either of two successive letters of the name between their appearances in the name itself, e.g., in the string MERCE, both R and C would be constrained from appearing in wing words between the R and the C. See also James Pritchett, James Tenney, Andrew Culver, and Frances White, "Cage and the Computer: A Panel Discussion," in Bernstein and Hatch (eds.), 190-209.

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writing-through mesostics, and rengas.[14]

The writing-through mesostics on Thoreau's text are the major written work in the collection. These were among the first of the computer-generated mesostics using Jim Rosenberg's computer program, Mesomake, to generate a writing-through mesostic given a source text and mesostic string.[15] Thoreau's essay was also one of the few sources that Cage subjected to the "[R]ussian egg option," whereby "each time the mesostic process used a word from the source it was removed; each time the end of the source was achieved, a new writing through began at the beginning of what remained of the source.[16]

The result was a series of eighteen mesostics tending toward decreasing lengths. Cage recorded each mesostic, allowing nine seconds for each stanza. The resulting total time lengths for each recitation varied from 20′42′′ to 36′′. Cage then expanded or contracted reading times through computer voice resynthesis to make each reading the same, chance-determined, length of 16′49′′. This project began in 1985 at the Center for Computer Music at Brooklyn College under the direction of Charles Dodge. Unlike conventional analogue techniques, in which any change of speed results in a corresponding change in pitch, computer voice resynthesis allows the parameters of pitch and tempo to be altered separately.[17] Thus, Cage's shortest readings could be expanded by nearly two

[14] Cage's mesostics ending with "ku" (taken from "haiku") are short one-hundred-percent global mesostics using Mesolist in conjunction with IC. Those written for *The First Meeting of the Erik Satie Society* are *Relakus*, *Mesdamekus*, *Musickus*, *Cinekus*, and *Sonnekus*. The Japanese poetic form of the renga is constructed of successive lines written by different poets, who try to make each line "as distant in possible meanings from the preceding line as he can make it. This is no doubt an attempt to open the minds of the poets and listeners or readers to other relationships than those ordinarily perceived." Cage's renga is titled *Variations with Interludes and Variations*, "derived from five mesostics of equal length written on any of seventeen subjects in relation to Erik Satie and his work, the four aspects of composition as I formerly understood it, structure, method, material, form[;] the four Indian ways of placing attention, artha, kama, dharma, moksha[;] and the nine permanent emotions of classical Indian aesthetics... All of these source texts are relevant to Satie but renga is produced by letting I Ching chance operations determine which of the five source poems provides the first line, which the second, etc." (John Cage, *First Meeting*, introduction).

[15] See Culver, "A Note," 24-26.

[16] Culver, Andrew, "John Cage's Essay: Installation Notes," Kassel, Germany, 1987. Cage had attempted a Russian egg writing through of Allen Ginsberg's "Howl" manually and found it too difficult to complete. (See Cage, *I-VI*, 341-350.) The computer-generated version, *Writing through Howl*, (1985) is reprinted in Kostenaletz, *John Cage: Writer*, 165-76.

[17] See Dodge and Jerse, *Computer Music*, 225-38.

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hundred percent without affecting pitch. The resulting computer resyntheses were then digitally mixed to create several works. A mix of four tracks, *Voiceless Essay* became the accompaniment for Cunningham's *Points in Space*. Four different mixes of the four tracks were also combined and exist in two versions. Two mixes of all the computer resyntheses, both entitled *Essay*, became tape pieces. Finally, a mix of all of the resyntheses was used as the sound component for an installation, also called *Essay*.[18]

By the summer of 1985, Ken Worthy and Frances White, working at the Center for Computer Music at Brooklyn College, completed the resynthesis of four of the writings through (IV, IX, XV, and XVI). These were eventually used for Cage's *Voiceless Essay*, the accompaniment for Cunningham's *Points in Space*, both commissioned by the British Broadcasting Company and shot as a video in London in 1986. In Cage's description, "the structure of the music is analogous to that of the dance, having the same number of parts, but their lengths, being chance determined, are different."[19]

When the four completed tapes were played for Cage, Cunningham, and Elliot Caplan (Filmmaker in Residence at the Cunningham Dance Foundation) for consideration as the accompaniment for *Points in Space*, Caplan voiced concern that the comprehensible words with their literal references "took away from the tension of the dance." Cage agreed, and decided to use "more consonants."[20] As Cage was aware, this was possible to effect through computer voice resynthesis, which depends on the separation of vowels ("voiced" components) and consonants ("unvoiced" components).[21] The voiced components were therefore eliminated, leaving only the noise-like consonants, and totally eliminating comprehensibility. It is interesting to note the pre-planning in this case, and the choice-based decisions that were arrived at by concensus concerning the suitability of the music

[18] See also Pritchett, *Music of Cage*, 180.
[19] John Cage, "An Essay on Essay," in *John Cage: Sound Installation. Writings through the Essay: On the Duty of Civil Disobedience* (Tokyo: P3 Art and Environment, 1991), np.
[20] Telephone interview with Elliot Caplan, August, 1993.
[21] See Dodge and Jerse, *Computer Music*, 226-28.

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for the dance (and presumably vice versa). It is the only instance in the many superimposed music/dance performances by Cage and Cunningham that words were judged to be interfering elements and accordingly modified. As it turned out, the decision was fortuitous. A distinct version of *Essay* was created whose isolation of the noise elements of the speaking voice create vast silences, changing textures, and unique sounds.

Since *Points in Space* was a video production, Cunningham and Caplan worked from the choreographic structure of the dance, "...and adapted that to the camera. Each section had its own visual sequence in terms of camera movement and editing." Each section has its own choreographic and visual characteristics as well. There are twelve major dance segments, many articulated by internal sectioning, and two groups of dancers identifiable by costume type. At the beginning of the performance individual dancers from the two groups interact. In the middle section, the groups appear separately, and at the end there is an ensemble section for both groups together. Although it almost certainly was not planned, Cage's edit of the four tape tracks resembles this overall form, with multiple tracks and faster tempos at the beginning and end, and single tracks and slower tempos in the center.

This symmetrical structure may have been influenced by Caplan's request to allow silence at a certain point in the mix. One particular section of the dance suggested to Caplan a Renaissance painting, and he wished to change the lighting and to have silence during this section to strengthen the effect. Cage agreed to arrange the structure of the sound material to allow silence to occur during this section. Although this worked out to Caplan's satisfaction, it "may only have been a coincidence", and while Cage agreed to his request, in reality "he might have ignored it."[22] Since the dance is nearly ten minutes longer than the completed tape tracks, the tape material had to be distributed over the longer time period.

[22] Telephone interview with Elliot Caplan, August, 1993.

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The overall timing that Cage worked with was twenty-seven minutes.[23] There are two consecutive dance sections in which Cage's voice is heard only briefly for a few times, the first occurring about ten minutes into the performance, and the second following at about four minutes later and lasting about two minutes. The former section, with its still, posed choreography, solid pastel costumes against a golden portion of the set, and Caplan's chiaroscuro lighting does indeed resemble a Renaissance painting. If this placement was intentionally devised to accommodate Caplan's request, it helps to explain why the remaining tracks are placed on either side of the nearly silent section.

Of the four tape tracks, the one with the fastest recitation rate (an average speaking rate) is easily identifiable. Speech patterns are discernible in the flurries of staccato consonant noises extracted by resynthesis. The nearly unchanged tempo of Cage's original recitation allows the listener to grasp the general regularity of stanza lengths and separation of stanzas by silence. Cage's reading of the ninth mesostic is elongated by resynthesis to a tempo about three times as slow as the fastest tempo. Here speech patterning and stanzaic integrity break down and one is aware of the individual consonants. Both of these tracks are divided in the *Voiceless Essay* mix so that they occur together at the beginning and at the end. At about nine minutes into the dance the most elongated resynthesized recitation is heard alone. The elongation process makes individual consonants major events resembling huge exhalations or long sibilants with gradual timbral changes, and expands pauses between stanzas into silences of neary two minutes. The "Renaissance painting" section of the dance takes place during a pause between stanzas of this track. Toward the end of the segment, the six elongated consonants of the next stanza are heard—separated by short silences where the vowels have been extracted—over the course of about a minute. The succeeding pause between stanzas explains the silence of the following dance section. After

[23] The complete dance is about twenty-six minutes, so for about thirty seconds both at the beginning and end of the video only Cage's voice is heard while the camera focuses on Bill Anastosi's sets.

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the two nearly-silent dance sections have concluded, the earlier tracks resume and are joined by a third, very elongated resynthesized recitation. Even in this more polyphonic section the texture remains light because so much material (vowels and pauses between words) has been eliminated.

When all of the resyntheses were completed in 1986 they were overlayed and transferred to tape, producing the tape piece entitled *Essay*. Cage also discovered that digital voice resynthesis afforded the possibility of altering the pitch of the voice without affecting duration. A second version of *Essay* was created in which the computer-resynthesized readings were "broadcast by chance operations to points in a two octave range of which the center was the pitch of the unstratified form", and a different total length of 14′04′′ was determined by chance.[24] *Essay* thus existed in two forms: the first was referred to as "unstratified," the second as "stratified." The shorter overall length of the latter further compressed the three longest readings, bringing about faster tempos than in the unstratified version. Originally Cage intended to lower the freqency range of "slow" readings by degrees corresponding to tempo. Fortunately he changed his mind in favor of allowing frequency range and tempo to intersect by chance, producing more interesting frequency/tempo mixtures.[25]

The thirty-six tapes of both versions of *Essay* (unstratified and stratified) were used as the sound material for an installation at Kassel, Germany in 1987, and later at different sites, first using auto-reverse cassette decks and later compact discs, so that a performance "continued without repetition for the duration of the Installation."[26] In an installation of the piece the separate tracks are distributed among thirty-six loudspeakers, in a space in which

[24] Cage, "Essay on Essay".
[25] In a June 3, 1985 letter to Charles Dodge, Andrew Culver wrote: "What John is interested in is a lowering by some intermediate degree. The most lowering will still go to the shortest and the others will fall in accordingly." (Brooklyn College, Center for Computer Music.)
[26] Cage, "Essay on Essay". Later installations were November 1989-January 1990, Wexner Center for the Arts at Ohio State University; January 1991, Espaie Poblenou, Barcelona; May-June 1993, Berlin (the space is a Baroque church now used for performances and the arts); April-May, 1993, P3 Art & Environment, Tokyo; and March-April 1994, Theater Marstill, Munich.

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people are free to move about. Later installations added lighting design. In some installations chairs from the area surrounding the site and reflective of the history of the community were arranged by chance in the space (recalling *Talk I*). The eighteen printed mesostics were also displayed.

The various versions of *Essay* are works that are tied to computer technology. Neither the text nor the treatment of the speaking voice would have been possible without it. More than any other text piece by Cage, simultaneous recitation tempos becomes a major factor of the piece. Cage was influenced by McLuhan's ideas on time in *Understanding Media*, and in particular in comparing the Western sense of mechanical time to that of the other cultures. In a 1988 lecture concerning his autoku *Time*, Cage read the following passage from McLuhan's book:[27]

> Time for them [the Hopi] is not a uniform succession or duration, but a pluralism of many kinds of things co-existing. "It is what happens when the corn matures or a sheep grows up...it is the natural process that takes place while living substance acts out its life drama." Therefore, as many kinds of time exist for them as there are kinds of life. This, also, is the kind of time-sense held by the modern physicist and scientist. They no longer try to contain events in time, but think of each thing as making its own time and its own space. Moreover, now that we live electrically in an instantaneous world, space and time interpenetrate each other totally in a space-time world.[28]

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[27] Cage's lecture appears in Heinz-Klaus Metzger, and Rainer Riehn (editors), *Musik-Konzepte Sonderband John Cage II* (Munich: Edition Text und Kritik, 1990), 264-265. Quoted in Benedict Weisser in his discussion of time in Cage's late works, "Notational Practice in Contemporary Music: A Critique of Three Compositional Models (Luciano Berio, John Cage, and Brian Ferneyhough)," Ph.D. dissertation, The City University of New York, 1998, 83.

[28] McLuhan, Marshall, *Understanding Media: The Extensions of Man* (New York: McGraw-Hill, Inc., 1964), 147-48. In this passage McLuhan quotes from Edward T. Hall's *The Silent Language* (Garden City, NY: Doubleday (1959)).

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3. *Stufen: an autoku for Siegfried Unseld* (1989): Musical Aspects of the Autoku Form

This section explains the autoku form and how it was generated using Mesolist, by first discussing "Sculpture Musicale", a short example of the form, and then *Stüfen, an autoku for Siegfried Unseld*, a large-scale work that serves as the text for a performance by multiple speakers and/or vocalists.

The autoku is a mesostic in which the entire source text serves as the string of the mesostic. Some of the earliest examples, including "Sculpture Musicale," were part of Cage's lecture in Tokyo in 1986.[29] Figure 26, below, is a transcription of one of the four draft versions of "Sculpture Musicale" at the John Cage Trust, and Figure 27 is the corresponding portion of the printed text. In the figure, the numbered words on the left-hand margin represent the computer printout of the Mesolist program, showing all the possible words that can be used for each string letter of the autoku. Chance operations then determined which of these words was to be used (checked off in Cage's draft and indicated in Figure 25 by "x"). Digits following each word in the list refer to the location of the word in the computer-formatted document.

Once the string words had been chosen, Cage wrote them on the right side of the page. He also wrote the surrounding words of the source text under the heading "options", using a slash (/) to show whether words preceeded or followed the string word. He then chose which of these words, if any, to use in conjunction with the string word, crossing out unwanted words.

For some letters of the string there were no corresponding words in the text that fit the fifty-percent mesostic rule, for instance the P of "sculpture". In the draft, these were written as capital letters and then crossed out. In these cases Cage left a blank line in place of the letter, thereby creating a new stanza. Cage also nearly always began a new stanza

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[29] John Cage, "Tokyo Lecture and Three Mesostics," *Perspectives of New Music* 26:1 (1988), 6-25. The reprinted version in Kostelanetz, *John Cage: Writer*, 177-94, does not use the same typefaces and is visually less effective.

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options

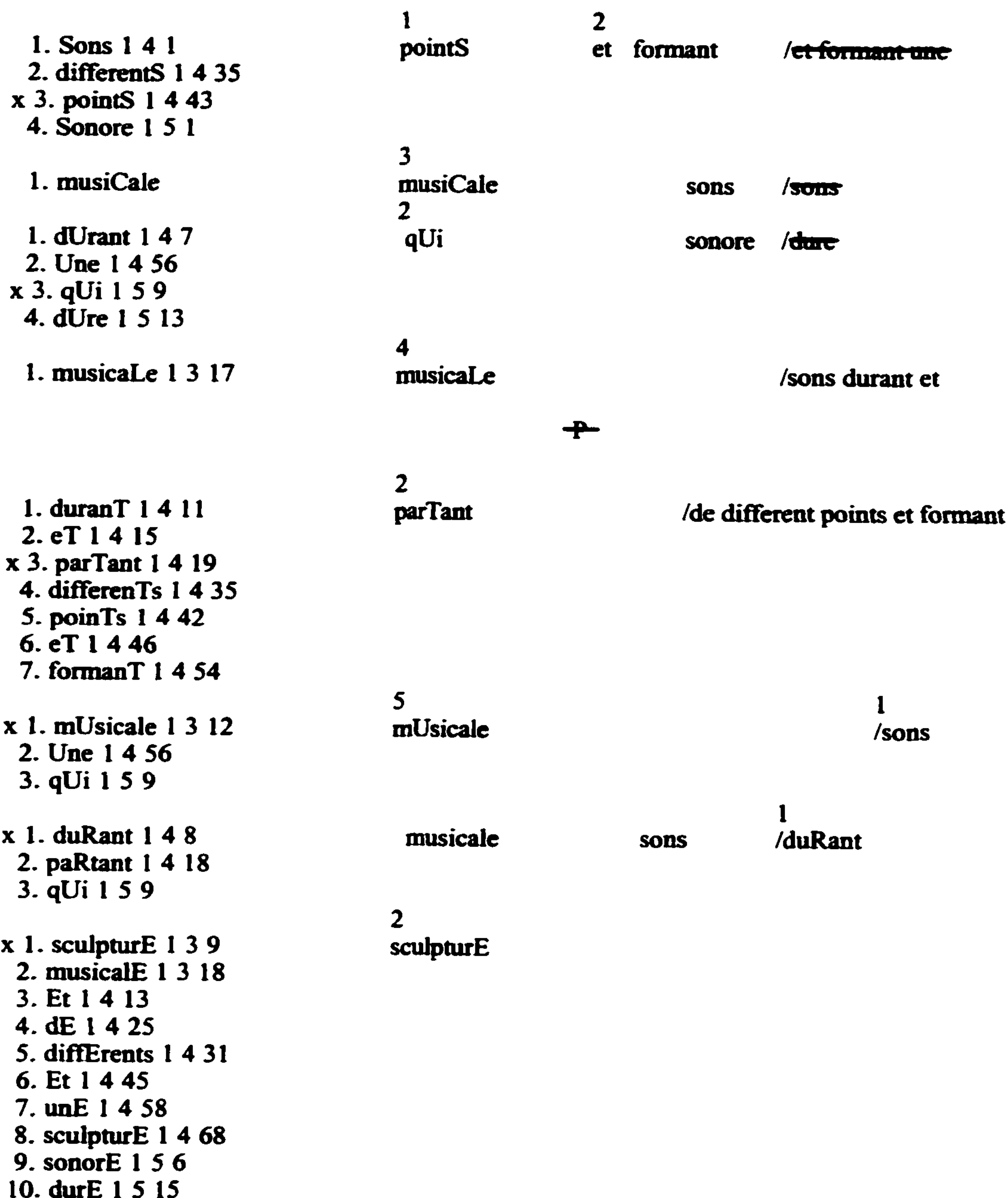

Figure 26. Transcription of Cage's Draft for "Sculpture Musicale"[30]

[30] New York: John Cage Trust

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```
            p o i n t S   e t formant
               musiCale
                  qUi
            musicaLe

                  parTant de
                  mUsicale sons
         sons  duRant
               sculpturE

  p o i n t s   e t  forMant
                 scUlpture
                   Sonore
                  quI
                  sCulpture
                  durAnt

           musicalE
```

Figure 27. "Sculpture Musicale" (Excerpt)

with the first letter of a new word in the string. Thus, the first two words of the original text, "sculpture musicale" are preserved in the mesostic's string (SCUL[P]TURE MUSICA[L]E) but the letters in brackets cannot be used and are replaced by blank lines, so that four stanzas result.

The remaining numbers in Figure 26 represent the typefaces that Cage planned to use for different portions of text. The changing typefaces can be seen in the example of the published work.[31]

[31] The numbers that appear next to and above string words may indicate that Cage originally considered using five typefaces instead of the three typefaces in the finished work. These numbers are used only in the first part of the manuscript. In the remainder of the manuscript boxes, circles, and wavy lines enclose words to denote the three different typefaces that Cage eventually decided to employ.

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In 1982 Cage wrote in the introduction of *A Collection of Rocks*:

> [when I was younger] I couldn't live with sculpture, [but] now I find that I love the immobility and calm of a stone in place.... I have found a way of translating burglar alarms (a constant unchanging insistent sound in New York) into Brancusi-like images while I am sleeping. This has led me to find pleasure ... in the immobile never-stopping sounds associated with modern convenience and comfort (the refrigerator, the humidifier, the computer, feedback, etc.).[32]

Cage's musical score *Sculptures Musicales*, published in 1989, also relates to the mesostic. The entire score reads as follows:

> "Sounds lasting and leaving from different points forming a sounding scupture which lasts" (Marcel Duchamp). An exhibition of several, one at a time, beginning and ending "hard-edged" with respect to "silence", each sculpture within the same space the audience is. From one sculpture to the next, no repetition, no variation. For each a minimum of three constant sounds each in a single envelope. No limit to their number. Any lengths of lasting. Any lengths of non-formation. Acoustic and/or electronic.[33]

"Sculpture Musicale" is both visually and aurally an actualization of an analogous experience, using typography and speech as compositional and performance material. The columnar format and undulating margins around the string are much like a Brancusi sculpture, or a mobile in which a limited number of words seem to spin around a central axis in various combinations, the different typefaces creating an illusion of perspective and depth. When recited, a similar effect is created by the recurrence of the same words in slightly different combinations. Material is static and unchanging, but continuously variable.

In *Stüfen: an autoku for Siegfried Unseld* (1989) the autoku is expanded in scope. Cage used as source text Hermann Hesse's poem "Stüfen", a source whose length is

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[32] John Cage, *A Collection of Rocks* (New York: C. F. Peters Corp., 1982). See also Cage's comments in an interview with Joel Eric Suben in Kostelanetz, *Conversing*, 212.
[33] John Cage, *Sculptures Musicales* (New York: C. F. Peters Corp., 1989) Tudor's realization of this score was used as the music for Cunningham's *Inventions* (1989).

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comparable to the English-language autokus he had produced in the previous two years.[34] The mesostic is proportionally longer than the short autokus in the Tokyo lecture, expanding 151 words from original poem to ten times that amount. Cage's typescript runs twenty pages, with text divided into 177 stanzas. Naturally the length of the mesostic text means that there is more opportunity for repetition, so that amount of repetitiveness is about the same as the shorter autokus, but the amount of material makes the process much more complex. In a monophonic reading, text seems as if it may be sequential and it is only evident through a full recitation that the text consists of nothing *but* repetitions.

This effect is enhanced by the nature of the source text.[35] Hesse uses rhyme, assonance, and repetition as unifying relationships in the poem, and these reinforce the unified, cyclic nature of the autoku. Assonance in "Stüfen" occurs most frequently with vowels and diphthongs "u/ü" (e.g., *Tugend, Blüht*), "au" (e.g., *Zauber, Kaum*), and "ei" (e.g., *Weisheit, vielleicht*). Moreover, most of the rhymes in the poem are between words with these same vowel/diphthong relationships (*Tugend /Jugend, Dauern /Trauern, Zeit /Tapferkeit*). Another group of similar sounds is formed by thirteen words beginning with "w". Repetition and variation in "Stüfen" include the repetition of single words (e.g., *Raum, jedem*) and the constellation of words centering around *leben* (e.g., *Lebensrufe, Lebensstufe*). Also, Cage consistently retains empty words in the wing words, and these add to the repetitive character of the text. This is particularly true of *und* and *uns*, which together appear far more times than any other word in the mesostic, and are also related to the group of words featuring the "u/ü" vowels. Moreover, words from the source text most often occur in combinations (e.g., *so droht, ohne Trauern*).

Naturally, the atuoku amplifies these relationships so that they reinforce its cyclic

[34] Other autokus of comparable length include *Paintings Relate to Any Moment*, (1988), *Art is Either a Complaint or Do Something Else*, (1988), and the three autokus that comprise *Time* (1987) (see Bibliography).
[35] Unseld is the author of two books on Hesse, and Cage chose this text because it was Unseld's favorite poem.

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nature. The recurrences essentially become a musical aspect of the piece in that they create a lexicon of *sound combinations,* each of which is associated with a speech-based rhythmic pattern; perception is centered around the patterning of motives, regardless of the language or the signification of the text. Cage's large-scale autokus retain a characteristic sense of the constant presence of the complete source. In Cage's words, "the poem loses iteself by using itself."

Cage addresses the issue in response to questions during the seminars held in conjunction with his readings at Harvard University in 1988-89. In response to a question asking if there were specific ways in which he thought of the lectures as poetry Cage replied: "in the way of breathing and the sound[,] the changing or not changing of sounds." The questioner asked if Cage thought of images that "come from the words." He responded: "as the words recur something more like music seems to me to develop." He gives an example of this perceptual process: "I heard that before[,] the two words winter night or iranian fishermen."[36] As Retallack points out, in the autoku form this aspect of repetition and variation intensified. "Culver says that, after his first use of the autoku method, Cage was excited and delighted. He exlaimed, 'It's so musical!'"[37]

The following paragraphs describe the composition of the text for the mesostic.

Figure 28 shows stanzas 33 through 36, which together make up the portion of the string: ESMUSSDASHERZBEI[J]EDE.[38] The means of constructing the text is the same as "Sculpture Musicale." Letters that have no corresponding word that fulfills the fifty-percent mesostic rule are omitted from the string. In *Stüfen*, this shortens the string by thirty-five letters. The computer program chooses each string word randomly from all the possibilities in the source text that satisfy the fifty-percent rule; chance procedure

[36] Cage, *I-VI*, 404-405. There is no punctuation or capitalization in the original text.
[37] John Cage and Joan Retallack, *Musicage: Cage Muses on Words Art Music*, edited by Joan Retallack (Middletown, Conn: Wesleyan University Press, 1996), 66.
[38] The J is not used in the string since there is no corresponding word in the text that fulfills the fifty-percent rule.

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[33] wiE an einer heimat
neuen raumen entgegenSenden
neuen rauMen
lähmender gewohnUng
ruf an unS
deS lebens
neimals en Den
Auch noch
Stüfe heben
alter weicHt

[34] blüht
stüfE heben weiten kaum
deR uns
das herZ

[35] Blüht
dEm alter

[36] ruf an uns
wIrd
dEs lebens
Darf nicht
tugEnd

Figure 28. Transcription of *Stüfen, an Autoku for Siegfried Unseld* (Excerpt)[39]

[39] New York: John Cage Trust

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determines which of these possibilities to use; and Cage selects wing words from the source text that precede and/or follow the chance-determined word (or, alternatively, elects to use none of the surrounding source text). The global technique of assembling the mesostic means that the word order of the source text is preserved within the wing words in each line of the mesostic, but that single words or phrases from the source are randomly mixed in the mesostic.

Cage's stanza division is a choice-based compositional procedure. He disregards punctuation in the source text, and the separation of words in the string, that had governed textual division in works discussed above. For example, the string letters of stanzas 33 and 34 together form four consecutive words from the source (*es muss das Herz*), but the word *Herz* is broken, making two strings, ESMUSSDASH, and ERZ, respectively. Cage frequently uses a variation of the broken string word by ending stanzas with the wing words belonging to the following stanza, and beginning stanzas with wing words belonging to the previous stanza. For example, the beginning of stanza 34 (*blüht*) is, in Hesse's poem, the continuation of *alter weicHt*, which ends stanza 33.[40]

The example also demonstrates the range of stanza lengths in the autoku. Stanza 33, with forty-four syllables, is the second-longest stanza in the score, while the seven-syllable length of stanza 35 is rather short (the shortest stanza being only two syllables). Stanza 34, at twelve syllables, is of average length. This range follows the practice of breath-based determination of length that Cage had first employed in *62 Mesostics Re Merce Cunningham*, but without that work's intentional distortion of rhythmic parameters of ordinary speech. From this perspective, one can estimate that is is possible to recite stanza 34 within about twelve seconds without undue elongation of syllables or appreciable pauses between words, and within the capacity of a single breath. This approximate maximum length is ample considering the nine-second recitation length for each stanza of

[40] Cage uses this procedure fifty times in the autoku.

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Essay for his own performance of that text. As in all of Cage's mesostics, each stanza holds together, and is separated from its partners by a short silence.

While *Stüfen* shares basic text composition procedures with Cage's other autokus, the work is a special case of the mesostic form, even within the subgenre of Cage's long autokus, since it is his only composition for any number of performers reading and/or singing the text. He had experimented with such a performance during a talk in 1988, by having twelve audience members read stanzas of the Jasper Johns autoku from *Time* within time brackets.[41]

Marjorie Perloff attended a similar performance of *What You Say...* in September, 1987 at UCLA. She reports that it was performed by "a dozen or so readers," and she quotes Cage's instructions from the program notes:

> For any number of readers able to read in one breath any of the 124 "stanzas" (a "stanza" is a line or lines preceeded and followed by a space).
>
> Each reader, equipped with a chronometer, and without intentionally changing the pitch or loudness of the voice quietly reads any 4 "stanzas" at any 4 times in each minute of the agreed-upon performance time.
>
> The readers are seated or stand around the audience or both within and outside it.[42]

Cage evidently found such a performance mode satisfying enough to apply it to *Stüfen* two years later. Cage's instructions for performance read:

> any number of readers and/or singers (using no vibrato, singing very quietly) each at his own point in space (not in a group together) for any agreed upon number of minutes each reader having the complete autoku reading 1, 2, or 3 (3 for one time only) stanzas per minute (spaced within the minute in any way) the stanzas taken from any parts of the autoku.[43]

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[41] Metzger and Riehn, *Musik-Konzepte*, 264-65.
[42] Marjorie Perloff, "John Cage's 'What You Say...'," in *Soundstates: Innovative Poetics and Acoustical Technologies*, 136.
[43] John Cage, *Stüfen: an Autoku for Siegfried Unseld* (New York: John Cage Trust, 1992).

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Cage himself did not speak German, nor even like Hesse's poetry, but chose this particular work because it was Unseld's favorite poem.[44] Certainly the poem has a sonorous beauty of its own that comes through regardless of Cage's intentions or lack thereof.

Cage makes the text available to others to perform, again reaffirming performance as an essential aspect of his composed writings. Cage set several short mesostics in *Song Books*, and in the five years previous to *Stüfen* he had used other "ku"-type mesostics as song texts: *Sonnekus²*, *Mirakus²*, *Selkus²*, and *Whiskus*.[45] However, these are short works—or works made up of short self-contained sections—for solo voice. These texts are essentially sequential, whereas the autoku is repetitive and circular (especially since the original text also contains much repetition). Thus, both because of the amount of material and the unified nature of the text, performance with multiple voices is suited to the text.

Stüfen can be regarded as an extension and expansion of *ear for EAR (Antiphonies)* (1983): singing voices spatially separated, overlapping one another or heard alone, and sharing the same textual material, are aspects that can characterize a performance of *Stüfen* as well. On the other hand, the later work has no restrictions on the number of performers. The text can be realized by a single performer, the maximum number of performers being dependent, at least in part, on the contingencies of the performance space and its allowance for spatial separation. In *ear for EAR* timings and durations are contingent on other performers' cues. This is possible because of the utter simplicity of the text and the relatively small group of trained performers. The indeterminacy of *Stüfen* makes cueing impractical, while the length and richness of the text makes notated pitches both impractical and unnecessary. The text can be adapted for any number of performers, trained or untrained, speaking or improvising song. Nor is there any need to establish textual

[44] John Cage in conversation with Joan Retallack, "Cage's Loft, New York City," in *Musicage: Cage Muses on Words Art Music*, edited by Joan Retallack (Wesleyan University Press, 1996), 66.The mesostic form can be applied to generate text in any language. Cage wrote mesostics in Polish, French, German, and Japanese, and Spanish. In an interview he remarked, "These I could not hear. All I could do was look." (Wulffen, in Kostelanetz, *Conversing*, 153-54.)
[45] See Bibliography, below.

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sequence. Stanzas, although fixed in sequence in the text, are treated as mobile units in performance.

As in *Indeterminacy*, Cage specifies regular time units of one minute for the occurrence of events. Unlike the earlier piece, the time units function as do the time brackets of the "number pieces": performers can place events anywhere within the time unit. Texture is controlled by the stanza lengths and the number of stanzas allowed within a time unit. Assuming an average recitation of a stanza lasts about ten seconds, then, given the limitation on the number of stanzas within a one-minute time unit, each performer's recitation would consist largely of silence. In a spoken text performance with even ten or twelve performers the texture would remain light, independent recitations sometimes overlapping but distinguished by spatial separation. With twenty performers the texture would consist of a shifting combinations of a recitations, most often five or less, creating a web of shared words across space. A large number of performers would require a proportionately large space, so while a heavier texture with less text comprehensibility would result, distance and location in space relative to the listener would become more important factors, particularly if, as in the *Essay* installation, audience members could move around the performance space. Each of these options works in its own context, but creates a distinct experience. Cage's instructions are flexible enough to allow for any number of realizations of the composition.

Many factors make *Stüfen* unusual among Cage's writings and spoken text compositions. It is one of only a few large-scale autokus that Cage produced, and one of only two major mesostics using a German-language text. It is one of the very few instances in which Cage did not perform the text himself, and the only mesostic specifically open to an indeterminate number of performers (in fact, the only instance in which Cage explicitly instructs that the mesostic may be performed by more than one person). Other unique aspects are the mix of speech and song that may be produced in performance, the

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indeterminate ordering of stanzas in performance, and the application of the time-bracket principles to recitation timing.

4. Summary

This chapter has attempted to bring to light later works by Cage that are not widely available and to establish compositional decisions and techniques involved in each.

Letters to Erik Satie 1 and 2 are miniatures with many distinct features. They are the only mesostics in which single letters form the wings. The generous timeframe allowing for a focus on phonemic properties of single letters in the fourth part of *Empty Words* and *One*[12] is replaced by a shorter time frame and faster recitation due to the "lettristic" pronunciation of the letters, at least in Cage's performance. Cage creates a dense layering of voices by using tape loops to accommodate a greater number of simultaneous recitations than the four lectures of *Where Are We Going? and What Are We Doing?*. These works are also the only case in which ostinatos of the speaking voice are purposefully built in to the compositional conception.

Although separable in performance, the two *Letters to Erik Satie* are similar to *Europeras 3 and 4* in that they are paired and have contrasting characteristics in performance, particularly in regard to textural density and letter exchange. While the case cannot be proved that these result from intention, it is more likely that they reflect such a conception on Cage's part and are accomplished through control of compositional techniques. Both the scores and the performance—the latter reconstructed here from Cage's notes—are historically important in relation to the one-time *Dialogue* performances by Cage and Cunningham for which there are few detailed descriptions and no notes or scores.

The planning that went into producing *Voiceless Essay* is unusual in that Cage, Cunningham, and Caplan together made a major choice-based decision that motivated the

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new musical version, rather than following previous practice of working separately and superimposing the dance and music in performance. Choice may have also played a role in Cage's mix for the finished version of *Voiceless Essay* by agreeing to accommodate Caplan's request for silence at a particular point in the dance, necessitating control over the chance parameters that determined the structure of the mix.[46]

Stüfen, an autoku for Siegfried Unseld is perhaps the most significant and beautiful of Cage's unpublished texts. Its compositional significance is in the extended use of the autoku form and in the instructions for performance for multiple voices that transform the mesostic into a composition. The instructions follow up on many years of experiments with multiple speaking voices, both taped and live. In particular, Cage seems to have found in the long autoku form a new means of using the mesostic as the basis for performance by a group of speakers/vocalists. This is partly due to the quasi-fugal, motivic nature of, and the unity provided by, the expanded autoku form itself,[47] and partly due to the innovation of applying time brackets to the stanzaic format.

Other than the exceptional works *Les chants de Maldodor pulvérisés par l'assitance même* and *Lecture on the Weather*, Cage's autoku for Unseld is his only work with text to specifically invite performance by live multiple speakers/vocalists. Considering that he had previously experimented with a such a performance of the autoku *Time*, this work represents a new direction that Cage might have pursued in later years.

All of the works discussed in this chapter (with the exception of *Voiceless Essay*) are virtually unknown pieces whose dissemination and realization could only benefit our understanding of Cage's development as a composer and a writer .

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[46] There are, in addition, several other versions of mixes using only the unvoiced portions of Cage's recitations in the possession of The John Cage Trust in New York.

[47] The effect is strengthened in this case by the repetitions and word relations in the source text. Other factors that favor a multi-voiced performance are the tonal beauty of Hesse's language and even the subject of the poem. None of these aspects of the poem were of interest to Cage however.

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CHAPTER EIGHT

CONCLUSIONS

Cage's spoken-text compositions cross boundaries between speech and music, between writing and musical composition, and between conventional meaning and "nonsense" in the perception of spoken text. Although many writers, composers, and performers have explored the issues related to spoken-text composition and the musical nature of the speaking voice, only Cage has produced a body of work that covers the entire range of compositional techniques and performance practices involving spoken text and the use of speech as compositional material.

Cage's revolt against language in the works following 1970 is a significant milestone in the development of his spoken-text compositions. Yet all of the developments during this period stem from earlier works with text and speech. By 1970 Cage's search for ways to create nonintential texts was well underway. In the lectures of 1950-51 Cage draws on many distancing effects in the text that de-emphasize subjectivity. Chance was the main objectifying factor that helped to remove intentional continuity in earlier text composition. The principles of fragmentation and collage of multiple sources in conjunction with chance that characterize the later works were already in place in 1952. The song texts of 1957-1960 go as far in this direction as any of the later nonsyntactic texts. In early works such as *45' for a Speaker* that allow chance parameters to intersect and affect text and performance in unpredictable ways, Cage went further in treating text as abstract material, and developed a performance style outside of the limits of ordinary speech.

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Although the chance methods Cage used in text compositions differ from the cut-up techniques that Brion Gysin and William Burroughs were experimenting with during the same period, both operations share the goal of creating a new text that brings about unforeseen and unintended combinations, using fragments from a source or sources chosen or written by the author. Burroughs immediately saw the intervention of chance in the cut-up technique as a way to transcend linear thinking imposed by syntax and language, and thereby to reveal the true nature of mind—discontinuous, fragmentary, time-less. He therefore often worked with small-scale text units, frequently smaller than sentences, to compromise or obliterate the syntax of the source text. The number of fragments generated by this small-scale treatment also made possible a high density of recombinations. Cage, in all of his texts through 1970, worked almost exclusively with segments long enough to accommodate complete statements, for the most part preserving the conventions of language and syntax present in the source text(s).

Later Cage realized what Burroughs had apprehended from the beginning, that the militaristic, hierarchical structure of the English language shapes thinking. Cage's first response was to systematically diminish syntax until he pulverised language altogether in works in the early 1970's. Cage's performances of his textual works became experimental. Time, as in his musical works, was often free of measurement. His delivery took on characteristics of song, particularly in regard to a more definite pitch content and melodic contour in performances of *Empty Words*, and this experimental, improvisatory approach to spoken text continued throughout his life.

In Cage's text works we find an evolving means of resolving what he regarded, at a essential level, as the dualism between speech and music. In music, sounds are free to be themselves—but is spoken text "just" sound? To what extent does content matter? Over the forty-two year period covered in this study Cage's goal remained unchanged: To have nothing to say, and to say it. He met this goal in different ways and to different degrees as

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he developed compositional techniques. Crucial to Cage's concept of spoken text is the *sound* of the speaking voice in relation to time. The concrete poetry aspects of Cage's writings are rarely purely visual. At the least, they convey information about how text must be performed in relation to time, which was for Cage the fundamental element in music. Yet for the most part spoken text is not treated purely as sound in Cage's works, no matter how chance techniques manipulate material. This is evident in the dualistic view Cage holds of speech and music as different types of sound events in the works through 1970, in which text has conventional meaning, even if that meaning is purposefully made unclear. Cage maintains complete control of textual material in the nonsyntactic works as well. His aim was to distance himself from intentional ideas in the later writings so that the listener could bring her own interpretation to the spoken text. Most of the mesostics, however, do not completely abandon meaning but simply change the definition to "unintended" meaning.

Yet the issue of meaning cannot be conveniently compartmentalized. Even when musical aspects of speech dominate linguistically-based aspects, human utterance is at some level meaningful, as Jackson Mac Low points out:

> There is no language that doesn't have meaning as an intrinsic part of it. From the beginning, I have built poems from all sorts of language units using chance operations. I think at every point you have, at the minimum, the lexical meaning or dictionary meaning of the word along with all sorts of other meanings. I have come to the position now that even the separated phonemes, often used in my performance works, have meaning. If a human being makes a sound, that is meaningful; also, there is never a sense that the sound alone operates. The sound and the meaning are always interpenetrating. Often, in writing texts that read right along, the sound will lead me to the next meaningful sentence. There is interpenetration of the two, as against some people think, only sound. As a matter of fact, I have never met any so-called sound poets, here or in Europe, who weren't also interested in meaning.[1]

[1] Thomas Gladysz, "An Interview with Poet, Composer and Fluxus Artist Jackson Mac Low," Thomas Gladysz Journalism Archive, www.pandorasbox.com/archive/maclow.html. Originally published in *The Burning World* (East Lansing, Michigan), 1986.

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Crucial to nearly all of Cage's works with speech is control of material. The mesostic may be an ingenious discipline to produce unintentional ideas, but all of the ideas arise from the source text(s), and sources are those that correspond to Cage's philosophy and tastes. If expressivity and communication are rejected as goals, Cage nevertheless is concerned with "ideas" in many of the spoken-text pieces and he evidently exercised personal judgement in the origin of the ideas produced by collage techniques and the mesostic discipline. Cage allowed indeterminacy to enter into spoken material in only a handful of works. Only the nature of the material is specified in the newsreader's part in *Speech* and in the recorded speech called for in *Telephones and Birds*. The performer of *One[12]* must construct the textual material himself. In the tape works in which speech is combined with other "categories" of sounds (e.g., *Williams Mix* and *Rozart Mix*) and in the conversations of *Talk I*, the nature of the material is not confined to text recitation and can achieve a more spontaneous and indeterminate character. In all other cases Cage's works for speech are spoken-text compositions, and the direction and nature of the texts is most often concerned with formulating ideas of value. Conversation is restricted in Cage's spoken-text world to the intersection of texts from a pantheon of thinkers and writers important to Cage himself.

The meaning of "meaning" in perception of spoken text changes when text is so fragmented, disorted, or texurally dense (or a combination of these) as to lose all sense of language and traces of syntax. "Ideas" cannot be formed without resource to signification. Vocalization of syllables and single letters may evoke emotional responses but are impossible to hear as linguistically meaningful. They are purely vocal sounds, the elements of speech. Similarly, ordinary speech in some of Cage's performances has been transfigured by electronic technology to such an extent that words become unintelligible. Multiple speaking voices have a similar effect, partly or completely cancelling each other out. In these cases, the musical aspects of speech as sound come to the foreground.

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Fragmentation, collage, electronic manipulation of the speaking voice, and multiple speaking voices—all of these factors also began prior to the abandonment of syntax.

The demilitarization of language (and linguistically based thinking) that Cage embarked upon in 1969 and 1970 is certainly of enormous import in terms of his writings and his approach to spoken-text composition and performance. But in many respects his works subsequent to this watershed amplify and extend developments that can be traced to his previous works for speakers. Thus, while Thoreau provided the impetus for an anarchic approach to text compositions and the song texts and visual works were immediate precursors of similar works for speakers, the principles and techniques of the post-syntactic works had in large part been established and accumulated. Equally important in the case of works such as the Cunningham mesostics, *Empty Words*, and *One*[12] is the new approach toward performance that went hand-in-hand with the new approach to text, and transformed speech into a multi-faceted exploration of the sounds of the speaking voice, and the transformation of voice by electronics in such pieces as the *Essay* series.

This paper has stressed the compositional aspects of Cage's texts and spoken-text compositions, finding that they share with the music compositions aesthetic principles, compositional techniques, and philosophical aims. Proportional rhythmic structure, chance techniques, and indeterminacy that Cage developed in his musical works are often directly applied to textual material. In other cases developments appear first in the text pieces and find correspondents in later works. Long silences appear in the lectures before the composition of *4'33''*. Fragmentation and collage of text preceed tape splicing. Notation that later became formalized as "time brackets" arises first in a mixed-media work that superimposes spoken text and other performances and visual components. Quotation and erasure of pre-existent material is found first in Cage's text pieces and only later in his musical compositions.

There is often a tendency to regard most of Cage's works discussed in this paper as

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writings. As this paper has shown, such a view falls far short of apprehending the true nature of these works and their compositional and musical significance. Cage's genius in working with text as compositional material was to form new means of producing and performing texts, crossing boundaries between poetry, music, and theater. These works illuminate Cage's aesthetics and philosophy by demonstrating the principles involved instead of just writing about them. Cage searched for ways to have nothing to say and to say it, and succeeded in meeting this goal with fertile imagination, compositional discipline, and astonishing invention.

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(* = mixed media work)

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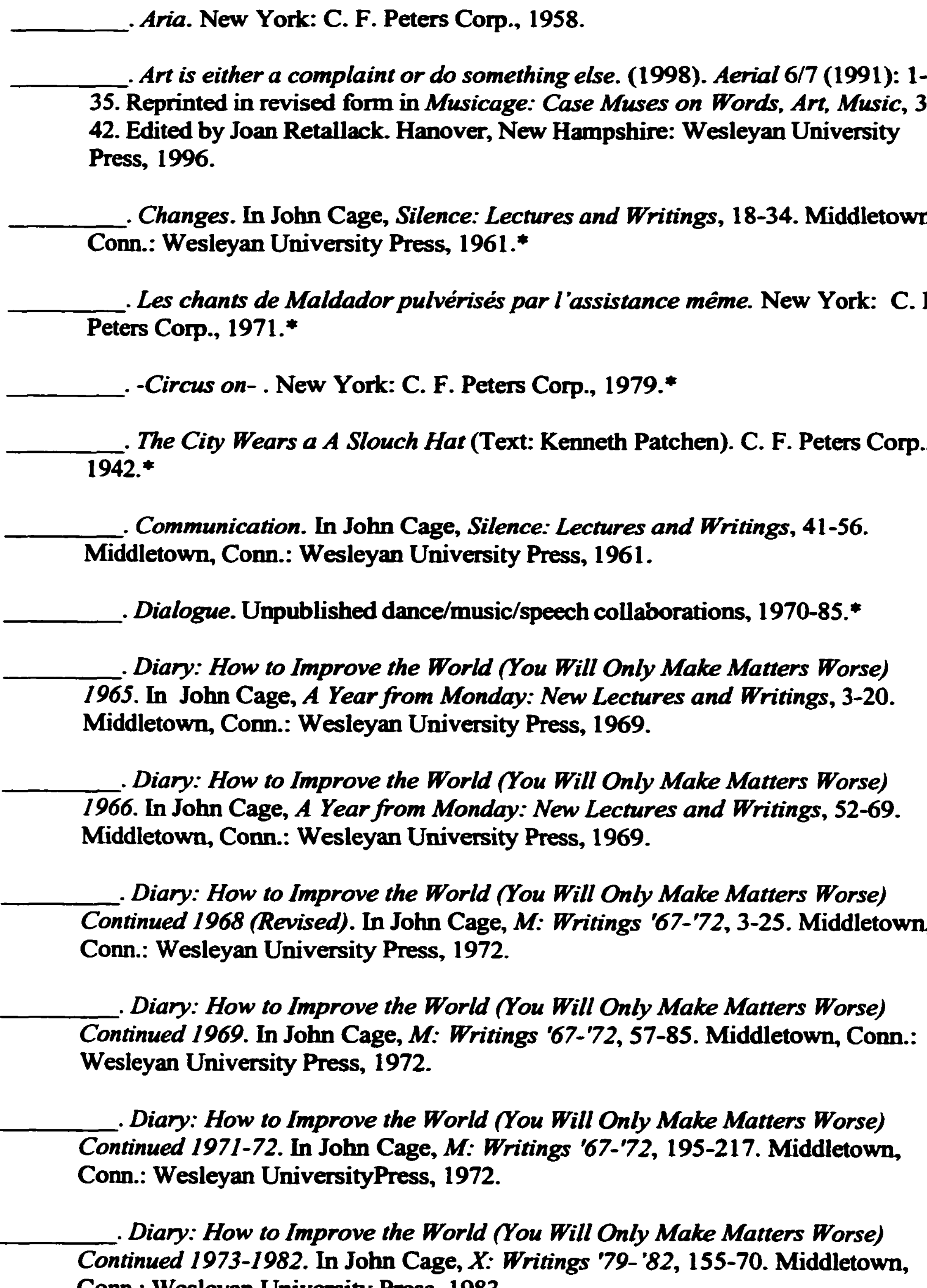

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I AM RIGHT. YOU ARE WRONG.

by

MARC THORMAN

A dissertation submitted to the Graduate Faculty in Music in partial fulfillment of the requirements for the degree of Doctor of Musical Arts, The City University of New York

2002

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1/8/02
Date

Joseph Straus (PR)
Joseph Straus, Chair of Examining Committee

1/8/02
Date

David Olan (PR)
David Olan, Executive Officer

Philip Lambert

Philip Rupprecht

Ellie Hisama

James Pritchett
Supervisory Committee

THE CITY UNIVERSITY OF NEW YORK

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Abstract

I am right. You are wrong.

. " * : + @

by

Marc Thorman

Advisor: David Olan

This composition is a realization of William Burroughs's text, "I am right. You are wrong."[1] The text is recited by

. " * : + @

a speaker, while the six typographical symbols that recur throughout the text are used as the basis for the scoring of two trios, each consisting of prepared piano, a string instrument of the violin family, and percussion; or two duos (without percussion). The voice and string instruments are amplified; other amplification used as necessary. The two trios are placed on either side of the speaker. The speaker reads the text using a time line as a guide. Instrumentalists improvise using the six symbols derived from Burroughs's

[1] William Burroughs, "So Who Owns Death TV" in *The Burroughs File* (San Francisco: City Lights Books, 1984), 102-05.

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typographical symbols.

The composition has three major sections, following the structure of Burroughs's text, in which a rigid dualism gives way to ambiguity and chaos.

In the first part, the separated trios often emphasize the antagonistic aspects of the first part of the text through antiphony or by pairing of instrumental types. In Burrough's text the typographical symbols appear under certain words. This correspondence is retained in the score, so that instrumentalists must follow the speaker's part to syncronize entrances and other rhythmic aspects with the natural speech rhythms.

The middle section of Burroughs's text consists solely of the six typographical symbols, so that the second section of the score is instrumental and, like the text, becomes more chaotic. Instrumentalists play an indeterminate number of symbols given in time bracket notation, leaving exact rhythmic placement to the performer. The rigid antagonism of the first part dissolves into more complex, shifting textures. Performers gradually depart from the unison A (symbol @) of the first section. Short tape portions of voices reciting the words of the title punctuate this section, at times comprehensible and at times so electronically altered that the words are transformed into unrecognizable sounds.

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The third section of Burroughs's text is a cut-up of the first part. The instrumental grouping in this section were derived from a cut-up of the first part of the score. The speaker's part is no longer governed by a time line, and instrumentalists are freer in deciding where to place sounds in relation to the speaker's part.

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ACKNOWLEDGEMENTS

I am grateful to Pauline Oliveros and fellow participants of her graduate seminar at Brooklyn College who helped to motivate this composition and provided the vocal material for the tape portions, and to Allen Ginsberg who recorded a reading of the text for the premiere performance. I wish to thank David Olan, my advisor, and Charles Dodge, my teacher throughout most of my graduate studies, for their help and support. Willliam Burroughs's text is reprinted with the permission of Wylie, Aitken & Stone, Inc.

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CONTENTS

I am right. You are wrong.

Instructions 1

Score 8

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INSTRUCTIONS

SPEAKER:

Timings are given at the end of every other system. Syllables and words in bold capital letters are cues for instrumentalists, not necessarily accented syllabes/words. Underlined words are emphasized. Commas indicate a break (pause, breath).

INSTRUMENTALISTS:

The two trios are placed on opposing sides of the speaker.

Play single symbols as the speaker pronounces the corresponding syllable/word in bold capitals. Vertical arrows are sometimes used for clarification. Single symbols are sometimes extended by repetition (≈≈≈) or horizontal lines (*______). Play symbols in brackets, e.g.,

[• ≈ *]
(I am right.)

as a phrase, following the rhythm and pitch contour of the speaker as far as possible. Adjacent symbols within brackets

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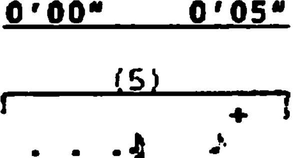
may overlap or be played contiguously. (The corresponding words appear in parentheses under the bracketed symbols for convenience.) Exact simultaneity among instrumentalists playing the same phrase is not necessary. Occasionally, bracketed symbols precede the corresponding spoken phrase. Play these as if you were speaking the words.

From letter **M** through letter **Q**, symbols appear under time brackets corresponding to thetime line at the top of each system, e.g.,



The number in parentheses is the total number of seconds the time bracket lasts. Rhythmic placement of the symbols within the time bracket is free, though immediately adjacent symbols should be played sequentially as a group. (In this section vertical alignment does not indicate rhythmic unison.) Duration of each symbol is free within the parameters of the time bracket. Any number of symbols within a time bracket may overlap. Up to half of the symbols within a time bracket may be omitted. In this section, ***p*** = dynamic range ***pp*** - ***mp***; ***f*** = dynamic range ***mf*** - ***ff***; and ***m*** = mixed dynamics, from ***ppp*** to ***fff***.

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From letter **Q**, play single symbols following the speaker as before. Symbols appearing under brackets in this section, e.g.,

[I am right]

≈

may be played at any point during the corresponding spoken phrase. Duration is free within the parameters of the brackets.

Further instructions and keys for reading the symbols in the score follow, below.

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PREPARED PIANOS (Pno1, Pno2) (Amplified)

Leave at least 45 individual strings unprepared. Include indefinite pitches, microtones. Play on the keys and/or inside the piano as indicated. For "inside the piano" use any merthod of playing strings or body (scraping, bowing, mallets, sticks, etc.).

Typewriter Symbol	Score Symbol	Performance
•	●	one short sound, low/medium pitch
■	≈	trill or tremolo
*	*	one or more simultaneous sounds, high pitch
:	♪	two timbrally similar sounds in rapid succession (not necessarily descending in pitch)
+	+ ♪	mute string(s) with hand or other material, or use prepared string(s) with muted tone color (all other symbols without muted quality)
@	@	A, concert tuning, anywhere on the instrument, otherwise as noted in score
	⌒	sustain with damper/sostenuto pedal(s)
	(off)	dampen any vibrating strings

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STRINGS (Str1, Str2) (Both amplified with separate systems)

Use a variety of tecniques in addition to *ordinario* (e.g., *sul ponticello*, *sul tasto*, scratch tone, etc.). Include microtones, indefinite pitch.

Typewriter Symbol	Score Symbol	Performance
•	●	one short sound, low/medium pitch; arco
■	■	trill, wide vibrato, or tremolo; arco; vary rates
*	*	harmonic (or double-stop harmonics); arco
:	♪	two timbrally similar sounds in rapid succession (not necessarily descending in pitch)
+	+ ♪	left-hand pizzicato
@	@	A, concert tuning, anywhere on the instrument, any technique, otherwise as noted in score

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PERCUSSIONISTS (Perc1, Perc2) (Amplification as required)

For each percussionist a total of 12-26 mixed single Ainstruments and sets of like instruments (a set counts as one in the total). Use a variety of materials including wood, skin, and metal. Include at least five instruments/sets of definite pitch, and at least one electronic instrument/set.

Typewriter Symbol	Score Symbol	Performance
•	●	one short sound, low/medium pitch
■	≈	trill, roll, or tremolo; vary rates
*	*	one or more (simultaneous) sound(s), high pitch
:	♬	two timbrally similar sounds in rapid succession (not necessarily descending in pitch)
+	+ ♪	one sound, muted (avoid muted quality in other symbols)
@	@	A, concert tuning, otherwise as noted in score
	⌒	let vibrate (if applicable)
	(off)	dampen any vibrating instruments

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ELECTRONICS (Elec)

TRIO 1	TRIO 2
(Perc1, Str1, Pno1)	(Pno2, Str2, Perc2)
L	**R**

Speaker

Speaker, pianos, and strings amplified; percussion amplified as necessary. Trio 1 = left channel, Trio 2 = right channel. Establish an overall balance between instruments, speaker, and tape playback with speaker always comprehensible. Delay, reverberation, and stero placement as indicated in the score.

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I am right. You are wrong

± +

• ≈ ♪ ♪ ●

Marc Thorman

0'04"

Spkr I am right.
mp

Pno 1 [• ≈ ±]
(on keys only)

(I am right.)

Str 1 [• ≈ ±]

(I am right.)

Perc 1 [• ≈ ±]

(I am right.)
mp

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Spkr You are wrong.

Pno 2
(on keys only)

+
[𝅘𝅥𝅯 𝅘𝅥𝅮 @]

(You are wrong.)

Str 2

+
[𝅘𝅥𝅯 𝅘𝅥𝅮 @]

(You are wrong.)

Perc 2

+
[𝅘𝅥𝅯 𝅘𝅥𝅮 @]

(You are wrong.)

mp

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Spkr You are wrong.

Pno 1 [𝅘𝅥𝅯 +𝅘𝅥𝅮 @]

(You are wrong.)

Str 1 [𝅘𝅥𝅯 +𝅘𝅥𝅮 @]

(You are wrong.)

Perc 1 [𝅘𝅥𝅯 +𝅘𝅥𝅮 @]

(You are wrong.)

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Spkr I am right.

Pno 2 [• ≈ ±]

(I am right.)

Str 2 [• ≈ ±]

(I am right.)

Perc 2 [• ≈ ±]

(I am right.)

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A

0'22"

Spkr I am right?
mp

Pno 1 [• ≈ ±] ?

(I am right?)

mp

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Spkr you are wrong.
mf

Pno 2 [𝅘𝅥𝅯 +𝅘𝅥𝅮 @]

(You are wrong.)

Str 2 [𝅘𝅥𝅯 +𝅘𝅥𝅮 @]

(You are wrong.)

Perc 2 [𝅘𝅥𝅯 +𝅘𝅥𝅮 @]

(You are wrong.)

mf

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Spkr you are wrong?
mp

Str 2 [♪ ♪ @] ?

(You are wrong?)

mp

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Spkr I am right.
mf

Pno 1 [• ≈ ±]

(I am right.)

Str 1 [• ≈ ±]

(I am right.)

Perc 1 [• ≈ ±]

(I am right.)
mf

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B

0'39"

Spkr	I	am	**COP**	kicks	in	door'	**FLA**shes	his	dirty
	<		*f*						
Pno 1			•				≈		
Str 1			•				≈		
Perc 1			•						
			f						
Pno 2			•						
Str 2			•						
Perc 2			•						
			f						

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Spkr	rotten	hunka**TIN**	´ **YOU**	dragged	a**WAY** in	hand**CUFFS**
Pno 1			♪ *mf*			@ ⌒
Str 1						@
Perc 1						@ ⌒ *mf*
Pno 2					+ ♪	@ ⌒
Str 2					+ ♪	@
Perc 2		* *mf*			+ ♪ *mf*	@ ⌒

0'48"

Spkr	are	<u>wrong</u>	<u>man</u>	has	cornered	a	<u>**RAT**</u>	´ I	am´	he
Pno 1	⌒						@ *f*			
Perc 1	⌒						**(off)**			
Pno 2	⌒						**(off)**			
Perc 2	⌒						**(off)**			

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Spkr **RAISes** a heavy **STICK**′ **RIGHT** ′you the **RAT**

Pno 1 * f

Str 1 ≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈ *
p —— f

Perc 1 ≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈
p —— f

Pno 2 * f

Str 2 * • f

Perc 2 ≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈ ♪
p —— f p

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0'56"

Spkr gives a squeak of **TER**ror are the rat bares

Perc 1 * f

Pno 2 *

Perc 2 * f

Spkr his **YEL**low teeth ′stick falls ′**DY**ing rat

Str 1 + ♪ p

Str 2 + ♪ p @

Perc 2 @ p

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quicker

Spkr twitches ′ I am **COP** **CLUBS** man in riot **SCENE** ′

f

Pno 1 • ≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈

p —— *f*

*

Str 1 •

f

Perc 1 •

f

Pno 2 • ≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈

p —— *f*

*

Str 2 •

f

Perc 2 • ≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈

p —— *f*

f

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C

Spkr	you	are	he	**KICKS**	him	into	the	**WA**gon	wrong
Perc 1				♪ *f*					
Pno 2								+ ♪	
Perc 2								+ ♪ *mf*	

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slower

Spkr he slams **DOOR** ' I am execu**TION**er enters

piu p

Pno 1 > @

Str 1 > @

Perc 1 > @

f

Pno 2 > @ • *p*

Str 2 > @

Perc 2 > @

f

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Spkr	DEATH	cell	right '	with	two	GUARDS '		you
Pno 1	≈≈≈~~~~~~~~~~					(off)		
Str 1	≈≈≈~~~~~~~~~~					*	*	
	p							
Pno 2						*	*	
Str 2						*	*	
						p		

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1'23"

Spkr **COME** along ′ are strapped into electric **CHAIR** ′

Pno 1 + ♪ ⌒

Perc 2 + ♪ ⌒

mf

Perc 2 ♪ *p*

1'28"

---

emphatic

Spkr wrong ′ smoke curls up from electrodes ′ "I pro-
poco f

Pno 1 ⌒

Perc 2 ⌒

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1'33"

slightly quicker

Spkr	nounce	this	man	**DEAD**"	' **WRONG** '	Harry *piu p*	S.
Pno 1				(off)	@ *f*		↓
Str 1				@ *f*			↓
Perc 1							• *p*
Pno 2					@ *f*		
Str 2				@ *f*			
Perc 2				(off)			

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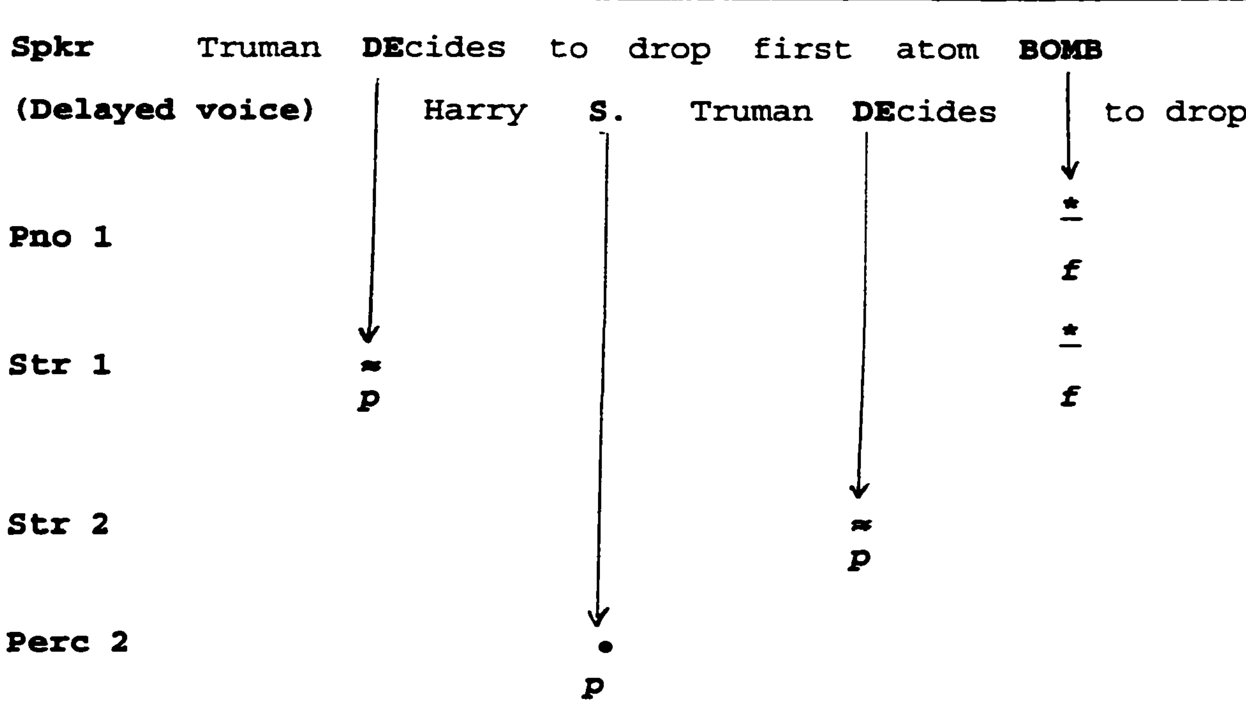

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Spkr				I *piu f*	am	right	′you	**PEO**ple
(Delayed voice)	first	atom	**BOMB** ↓					
Str 1								
Perc 1								♪ ***p***
Pno 2			* ***f***					
Str 2			* ***f***					

					distinct		
Spkr	in	Hiro**SHI**ma	are	wrong	′film	shows	burned
Pno 2		+ ♪ ***p***					

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D

1'53"

			faster						
Spkr	**CHIL**dren '	I	am	<u>**COP**</u>	<u>**BREAKS**</u>	through	door	"I	
				f					
Pno 1				•	≈≈≈≈ *p*<*f*				
Str 1	@ *ff*			•	≈≈≈≈ *p*<*f*				
Perc 1				• *f*					
Pno 2				• *f*	≈≈≈≈ *p*<*f*				
Str 2					≈≈≈≈ *p*<*f*				
Perc 2				• *f*					

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Spkr	am	a	po**LICE**	officer	right	e**NOUGH**."
Pno 1			* ***mf***			
Str 1			* ***mf***			
Perc 1						* ***f***
Pno 2			* ***mf***			
Str 2			* ***mf***			
Perc 2						* ***f***

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2'00"

moderate

Spkr **MIXED** time and place he was looking for a
mp

Str 1 : ____
pp

Str 2 : ____
pp

Spkr teen age drug party. ' He has strayed into

Str 1 (:) ____

Str 2 (:) ____

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2'10"

Spkr Dillinger's hideout ′you are Dillinger COvers

Pno 1 + ♪ ***f***

Str 1 (:) ————————————————

Perc 1 + ♪ ***f***

Str 2 (:) ————————————————

deliberate

Spkr him with submachine gun ′<u>wrong</u> <u>copper</u> ′raised

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E

2'19"

Spkr	hands	**TER**ror	´ <u>**I**</u>	am	right	he	**HOLDS**	**GUN**	on
Pno 1		+ ♪ *f*	•				≈≈≈≈≈≈ *mf*	*	
Str 1			• *f*						
Perc 1		+ ♪ *f*	•						
Pno 2		+ ♪ *f*					≈≈≈≈≈≈ *mf*	*	
Str 1							≈≈≈≈≈≈ *mf*	*	
Perc 2		+ ♪ *f*					≈≈≈≈≈≈ *mf*	*	

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distinct, not too fast

Spkr cop's stomach ' 1914 movie two men arguing

2'29"

Spkr outside bar ' coats off ' man **1 KNOCKS** man 2

Elec (pan to R . . . .) (pan to L . . . . .)

Pno 1 ≈≈≈≈≈≈≈≈≈≈≈≈≈≈

Str 1 ≈≈≈≈≈≈≈≈≈≈≈≈≈≈

Perc 1 ≈≈≈≈≈≈≈≈≈≈≈≈≈≈

p <

Pno 2 •

Str 2 •

Perc 2 •

mf

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Spkr	**DOWN** ′	**<u>YOU</u>**	**ARE**	**WRONG**	man	**2**	**GETS**	up ′	<u>I</u>
Elec						(pan to R			
Pno 1	*					•			
Str 1	*					•			
Perc 1	*					•			
	< *mf*					*mf*			
Pno 2		♪ *mf*					≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈		
Str 2				@ *f*			≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈		
Perc 2			+ ♪ *mf*				≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈ *p*		

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Spkr am right ′he throws **RIGHT** to jaw sequence

Elec . . . .) (pan back and forth

Pno 2 ≈≈≈≈≈≈≈≈≈≈≈ *

Str 2 ≈≈≈≈≈≈≈≈≈≈≈ *

Perc 2 ≈≈≈≈≈≈≈≈≈≈≈ *
f

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slowly

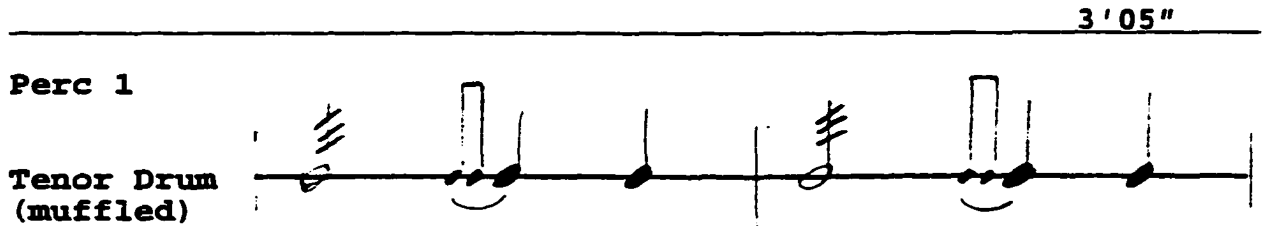
Spkr	repeated ′	up ′	down ′	fade	out ′	The	End.
Elec	erratically . . . .) (center)						

F

3'05"

Perc 1

Tenor Drum (muffled)



pp distant

Perc 2

whistling wind sound effect

pp distant

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Spkr The general is making a difficult **DE**cision
mp

Elec (Low level of reverb.)

Str 1 ≈≈≈≈≈≈≈≈≈
p<*f*>*p*

Perc 1 (sim.) . . . .
(Ten.Dr.)

Str 2 ≈≈≈≈≈≈≈≈≈
p<*f*>*p*

Perc 2 (sim.) . . . .
(wind)

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3'12"

slower

Spkr in the Pentagon ′dim ′jerky ′far away ′he paces

Str 1 ≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈ (>)

Perc 1 (Ten.Dr.) (sim.) . . . .

Str 2 ≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈ (>)

Perc 2 (wind) (sim.) . . . .

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Spkr up and down the office ' he buries his face

Perc 1 (sim.) . . . .

Perc 2 (sim.) . . . .

3'21"

Spkr in his hands ' he looks up at the **AMER**ican

Elec (increase ampl. and reverb. to . . . .

Pno 1 *

Str 1 *

f

Perc 1 (sim.) . . . .
(Ten.Dr.) (very gradual crescendo to end of section)

Pno 2 *

Str 2 *

f

Perc 2 (sim.) . . . .
(wind) (very gradual crescendo to end of section)

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quicker . . . . (resolute)

Spkr flag ' he picks up phone ' <u>YOU</u> <u>are</u> <u>wrong</u>
f

Elec . . feedback) (reverb. off, ampl. normal)

(*)

Pno 1

(*)

Str 1
ff

Perc 1 (sim.) . . . .
(Ten.Dr.)

(*)

Pno 2

(*)

Str 2 ♪
ff p

Perc 2 (sim.) . . . .
(wind)

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G

3'32"

Spkr	Commies	' atom	bombs	fall	on	**MOS**cow	Moscow	
(Delayed voice)						↓		atom bombs
Pno 1						+ ♪		
Str 1						+ ♪ ***mf***		

Perc 1 (sim.) . . . .
(Ten.Dr.) (crescendo)

Perc 2 (sim.) . . . .
(wind) (crescendo)

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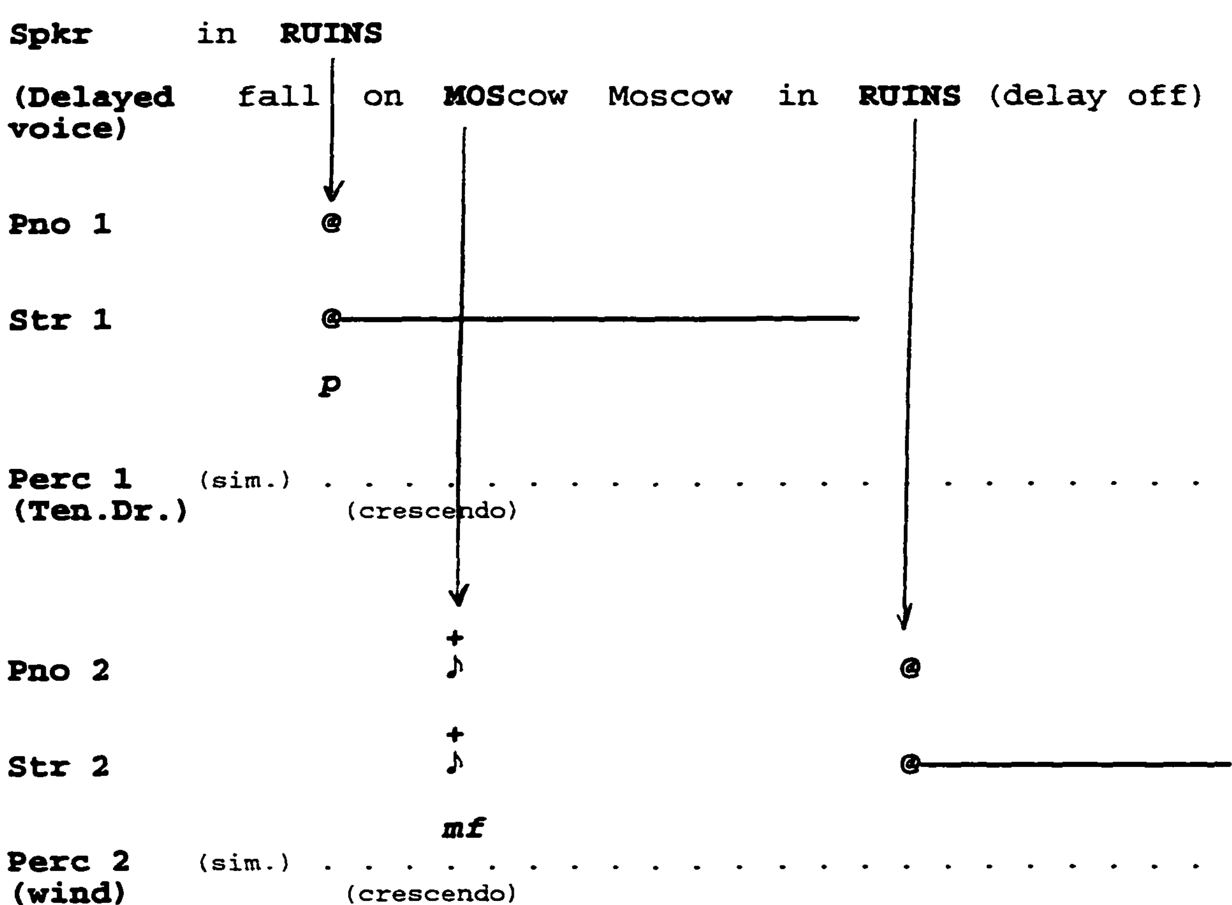

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3'43"

	(emphatic)						*(emphatic)*
Spkr	I am right '	counter	**MIS**siles	**WHI**stle	you are		

Pno 1 ≈≈≈≈≈≈≈≈≈≈ *

Str 1 ≈≈≈≈≈≈≈≈≈≈ * ———————

p

Perc 1 (sim.) . . . .
(Ten.Dr.) (crescendo)

Pno 2 ≈≈≈≈≈≈≈≈≈≈ *

Str 2 (@) ——— ≈≈≈≈≈≈≈≈≈≈ * ———————

p

Perc 2 (sim.) . . . .
(wind) (crescendo)

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Spkr	<u>wrong</u>	′ **PEN**tagon blows	**UP**	′ mush**ROOM** cloud	
Elec		(increase		reverb	
Pno 1		♪ *mf*	+ ♪ *f*	@———— *mfp*	*crescendo*
Str 1	(*)____		+ ♪ *f*	@———— *mfp*	*crescendo*
Perc 1 (Ten.Dr.)	(sim.)	(crescendo)			
Pno 2		♪ *mf*	+ ♪ *f*	@———— *mfp*	*crescendo*
Str 2	(*)____		+ ♪ *f*	@———— *mfp*	*crescendo*
Perc 2 (wind)	(sim.)	(crescendo)			

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Elec . . to . . . . feedback . . (cut abruptly)
ff

Pno 1 (@) ——— (cut abruptly)

Str 1 (@) ——— (cut abruptly)

Perc 1 (Ten.Dr.) (sim.) . . . . (cut abruptly)
ff

Pno 2 (@) ——— (cut abruptly)

Str 2 (@) ——— (cut abruptly)

Perc 2 (wind) (sim.) . . . . (cut abruptly)
ff

Pause 1-2"

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H

4'01"

Spkr Am I right?
p

Str 1 [≈ • ±] ?
(Am I right?)
p

Spkr You are wrong.
mf

Pno 2 [𝅘𝅥𝅯 + 𝅘𝅥𝅮 @]
(on keys)
(You are wrong.)

Str 2 [𝅘𝅥𝅯 + 𝅘𝅥𝅮 @]
(You are wrong.)

Perc 2 [𝅘𝅥𝅯 + 𝅘𝅥𝅮 @]
(You are wrong.)
mf

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Spkr Are you wrong?
p

Str 2 [♪ ♪ @] ?
(Are you wrong?)
p

Spkr right I am.
mf

Pno 1
(on keys) [• ≈]
(right I am.)

Str 1 [• ≈]
(right I am.)

Perc 1 [• ≈]
(right I am.)
mf

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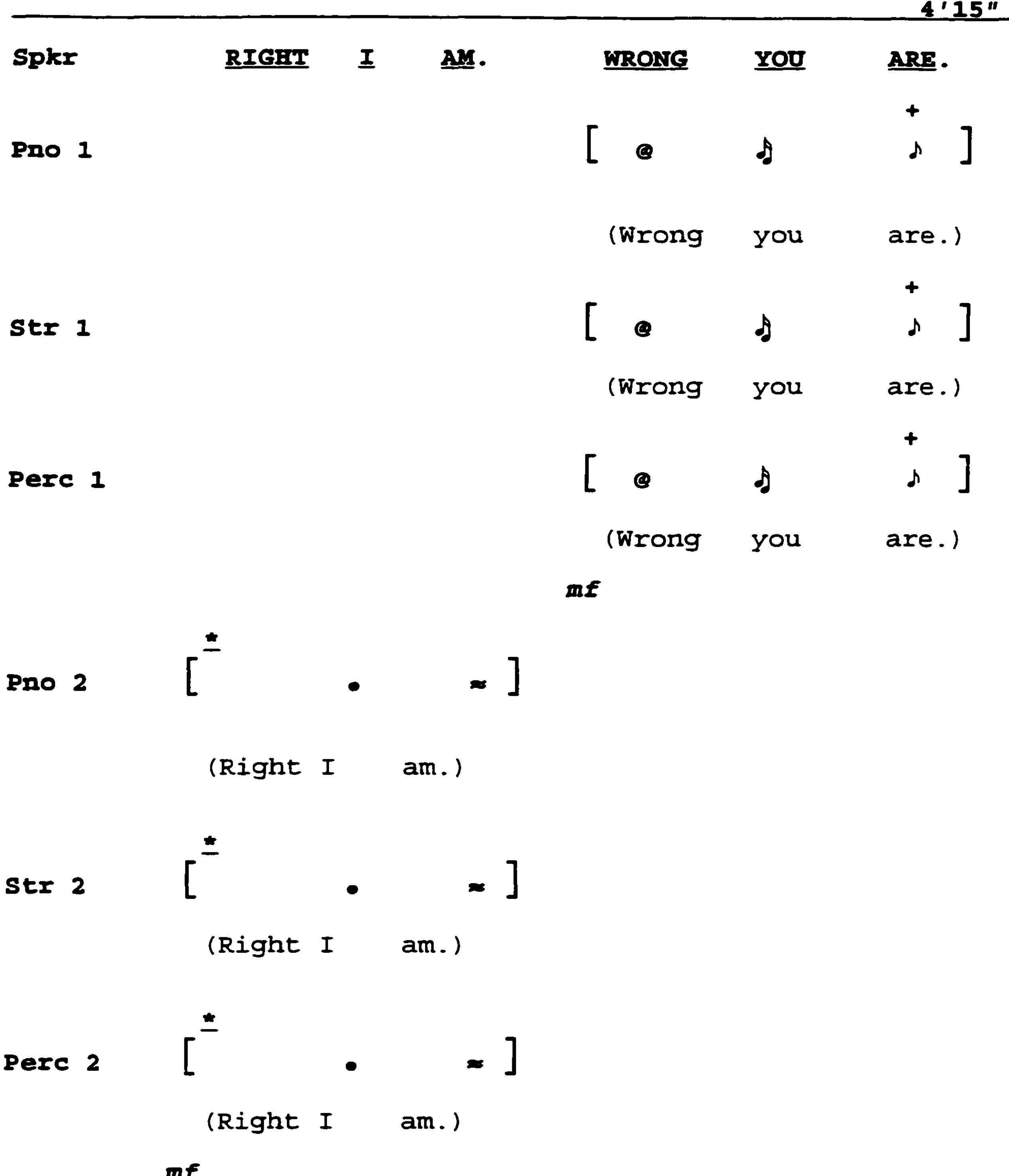
4'15"



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I

4'18"

Spkr	Right?	Wrong?
	gliss	
Str 1	<u>*</u>/	
	(**Right?**)	gliss
Str 2		@/
		(**Wrong?**)

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Spkr I am? Are you?

Pno 1 [• ≈] ?

(I am?)

Perc 1 [• ≈] ?

(I am?)

Pno 2 [+♪ ♪] ?

(Are you?)

Perc 2 [+♪ ♪] ?

(Are you?)

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Spkr Right our wrong:

Str 1 [* + ♪ @ • ≈ ♪]

(Right our wrong: I am you.)

4'32"

Spkr I AM YOU. WRONG ARE YOU RIGHT?

Pno 1 [• ≈ ♪]

(I am you.)

Perc 1 [@ + ♪ ♪ *] ?

(Wrong are you right ?)

Perc 2 [@

(Wrong

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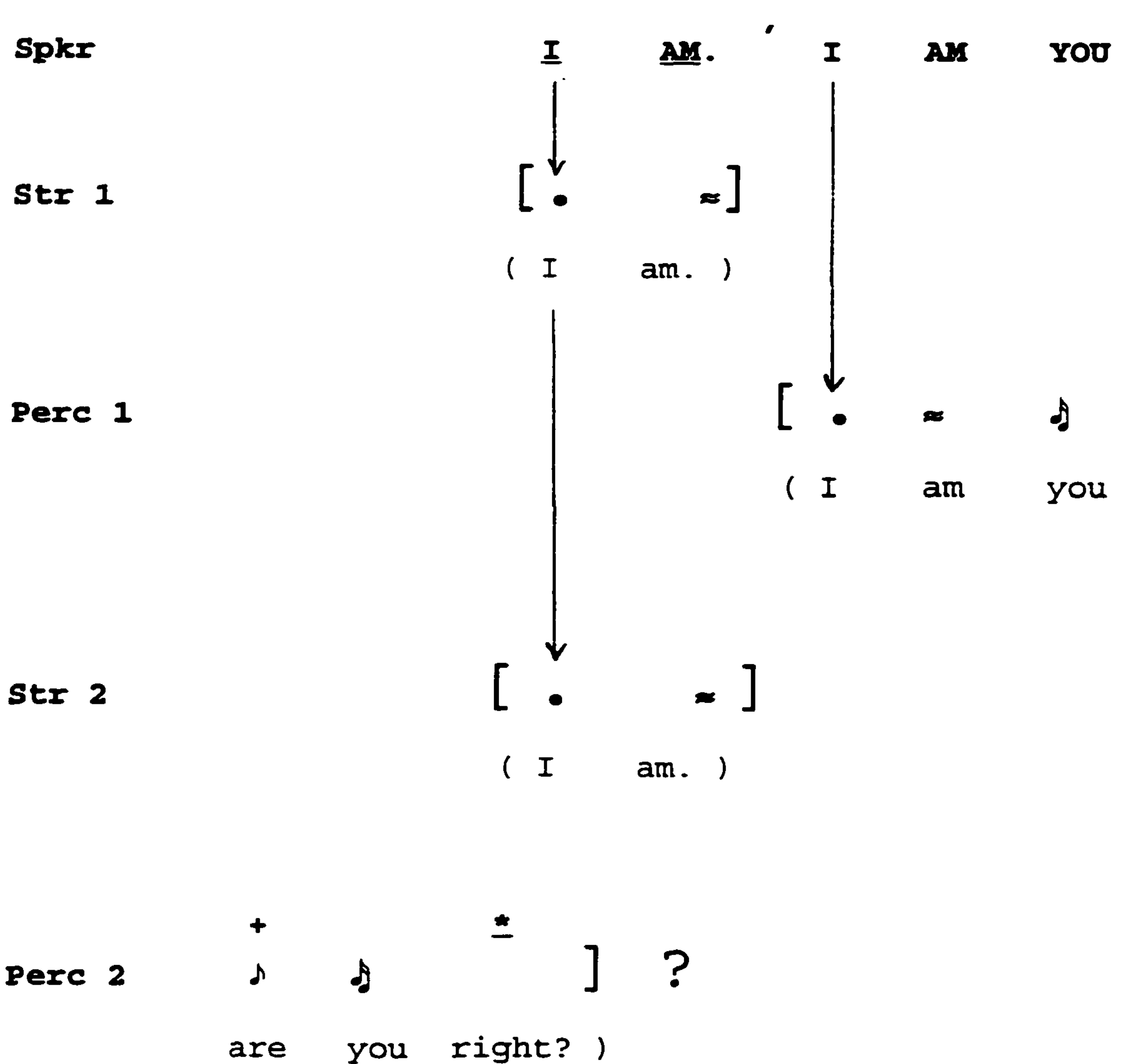

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4'38"

Spkr **RIGHT OR WRONG.** <u>Wrong</u> you are.

↑

Pno 1 [• ≈ ♪ ± + ♪ @]

(I am you right or wrong.)

Perc 1 ± + ♪ @]

right or wrong.)

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Spkr **I** **WRITE.** Am. I write

Str 1 [• ± ♪ + ♪ @]

(I write you are wrong.)

Perc 1 [• ±]

(I write.)

Perc 2 [• ±]

(I write.)

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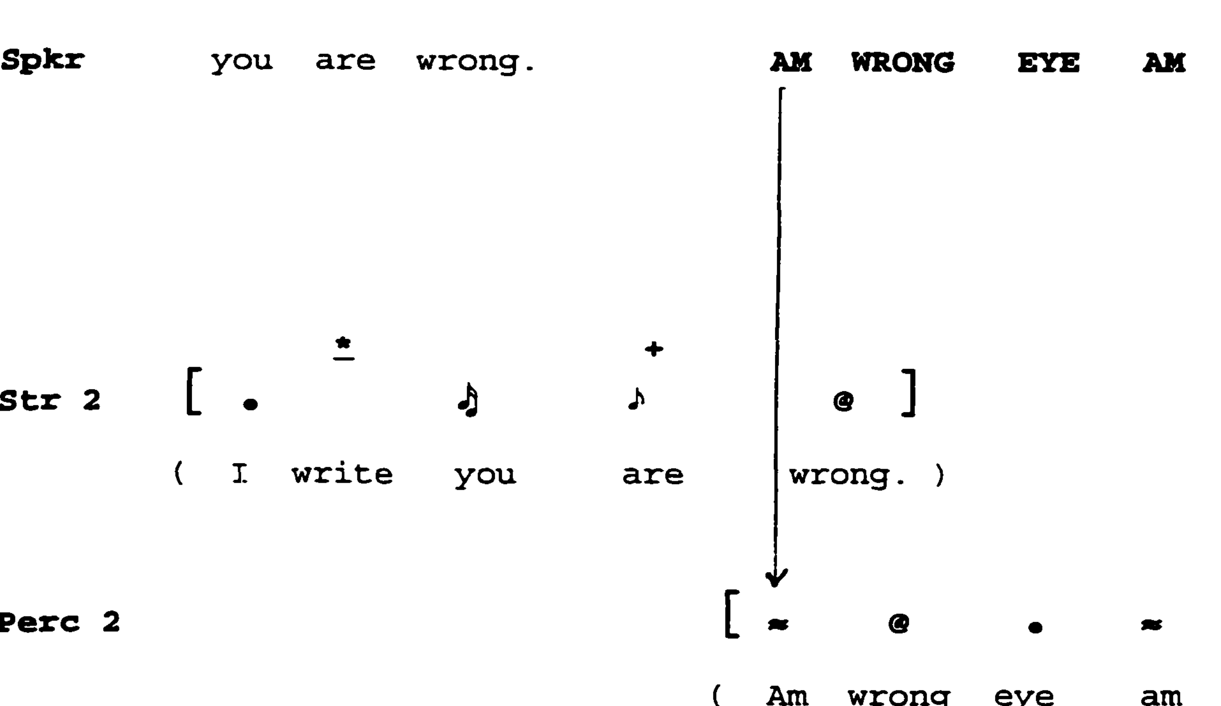

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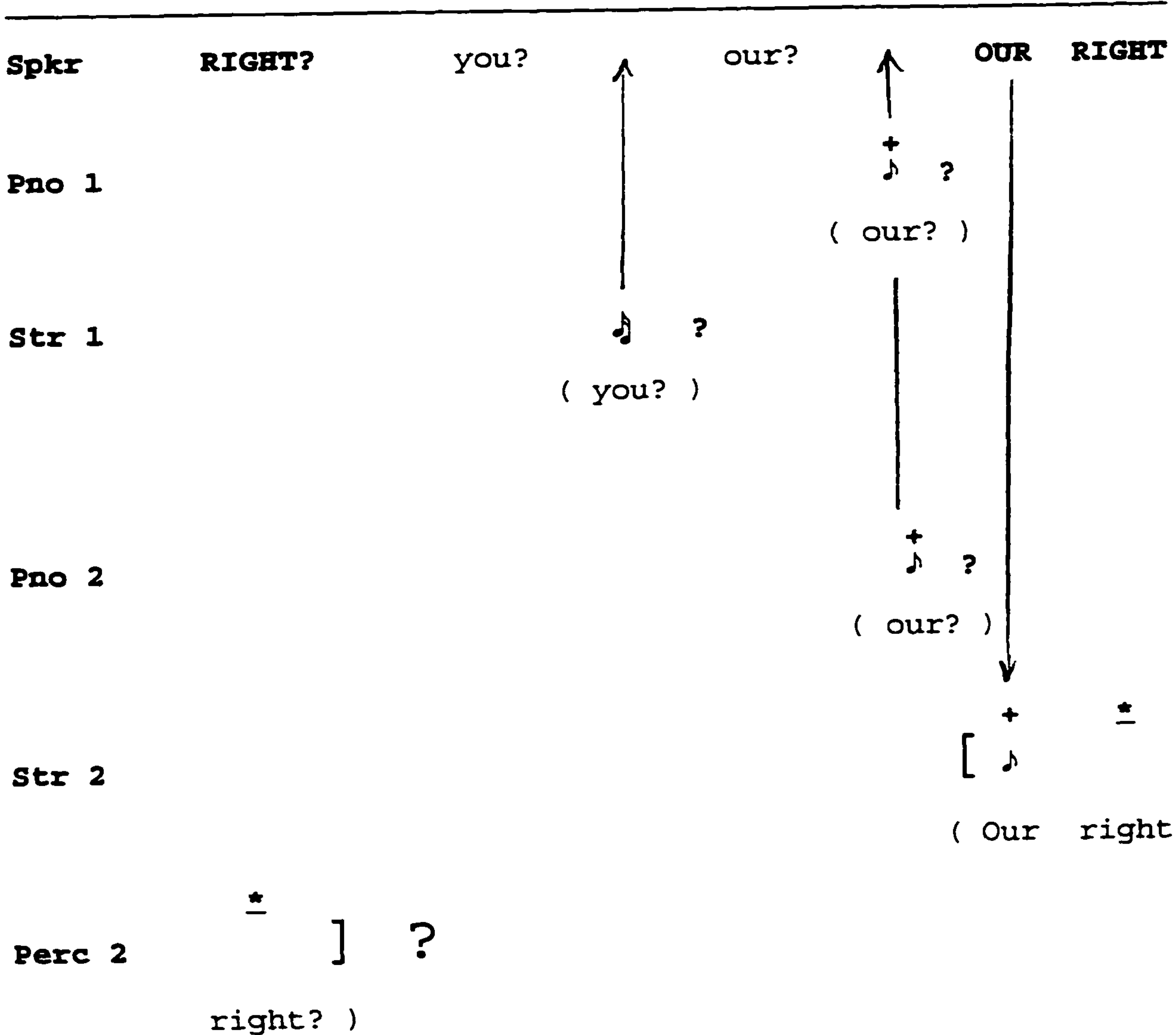
J



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(distinct and

Spkr **EYE AM WRONG YOU.** Right or wrong

+ ±

Perc 1 [♪ • ≈ @ ♪]

(Our right eye am wrong you.)

Str 2 • ≈ @ ♪]

eye am wrong you.)

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assured)

Spkr you am I. Am wrong right?

Pno 1 [* + ♪ @ ♪ ≈ •]

(Right or wrong you am I.)

Str 1 [≈ @ *] ?

(Am wrong right?)

Pno 2 [≈ @

(Am wrong

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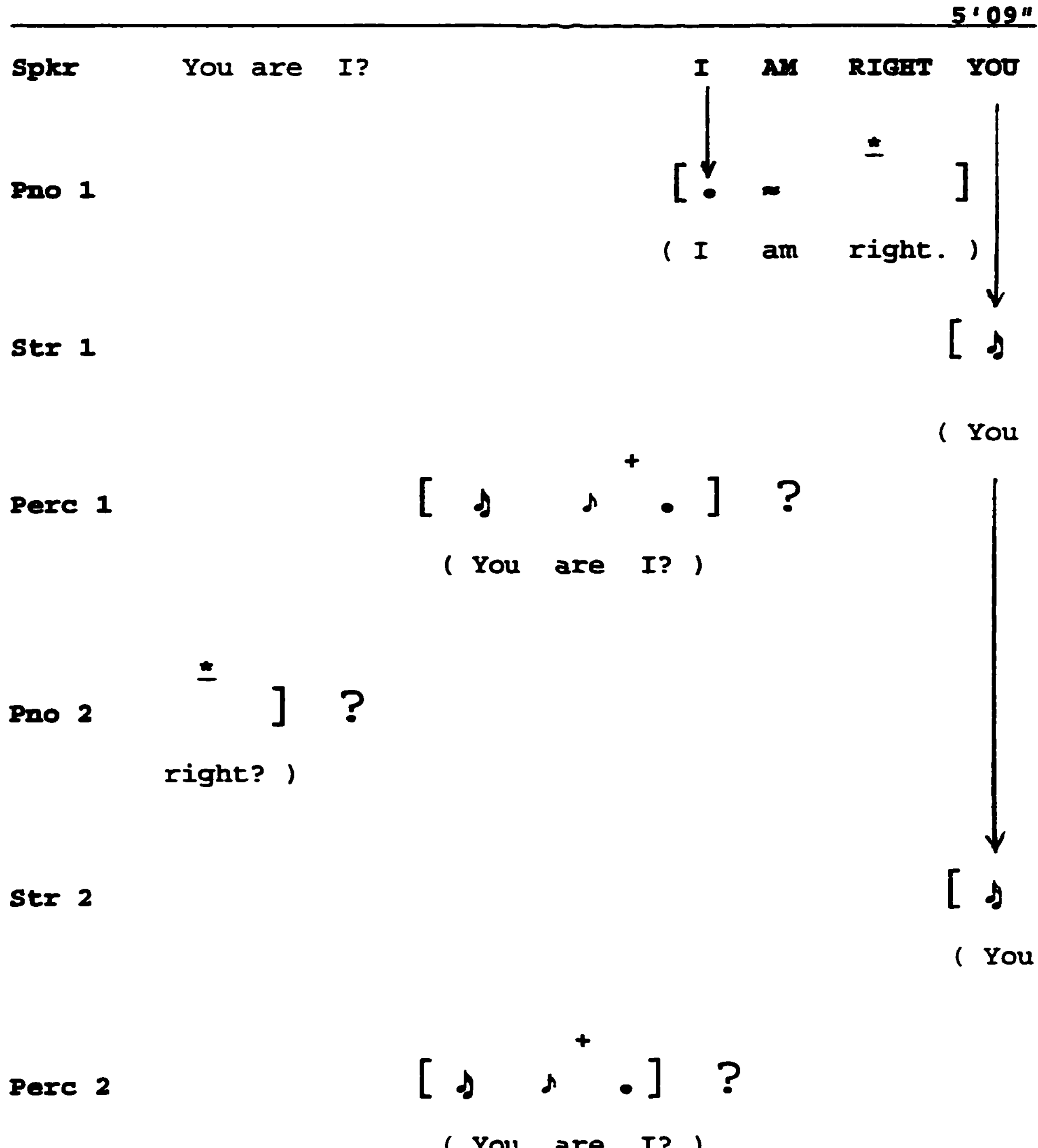

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K

Spkr **ARE WRONG WRONG WRONG I I I I AM AM AM AM**

Pno 1 @ ≈

+

Str 1 ♪] • ≈

are)

Perc 1 @ • ≈

Pno 2 • ≈

+

Str 2 ♪ @] •

are wrong.)

Perc 2 @

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Spkr	RIGHT	RIGHT	RIGHT	YOU	YOU	YOU	YOU	ARE	ARE	OUR	OR
Pno 1	*					𝅘𝅥𝅯				+ ♪	
Str 1				𝅘𝅥𝅯							
Perc 1			*					+ ♪			
Pno 2		*			𝅘𝅥𝅯				+ ♪		
Str 2							𝅘𝅥𝅯				+ ♪

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Spkr	ARE	ARE	OUR	WRONG	YOU	OR	RIGHT	AM	I	I	I	RIGHT
Pno 1			+ ♪	@				≈≈≈≈≈	≈≈≈≈≈	≈≈≈≈≈	≈≈≈≈≈	
Str 1				@	𝅘𝅥𝅯							±
Perc 1	+ ♪			@								±
Pno 2		+ ♪		@					•		•	
Str 2				@	+ ♪					•		
Perc 2				@								±

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L

5'32"

Spkr	**AM**	**OR**	**WRONG**	**YOU**		
Pno 1	≈				[• ≈ ‾]	(I am right.)
Str 1			@		[• ≈]	(I am right.)
Perc 1					[• ≈ ‾]	(I am right.)
Perc 2	(off) ♪ +			♬		

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Pno 1 • ≈ ** ⌒ ◡

Str 1 (*)___________

Perc 1

Pno 2 [♪ +♪ @]

(You are wrong.)

Str 2 [♪ +♪ @————] • • ≈ *

(You are wrong.)

Perc 2 [♪ +♪ @] • ≈ *

(You are wrong.)

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5'40"

Pno 1 (off) >

Str 1 ♪ ♪ + ♪ @

Perc 1 ♪ ♪ + ♪ + ♪ @

Pno 2 ♪ + ♪ + ♪ @ @

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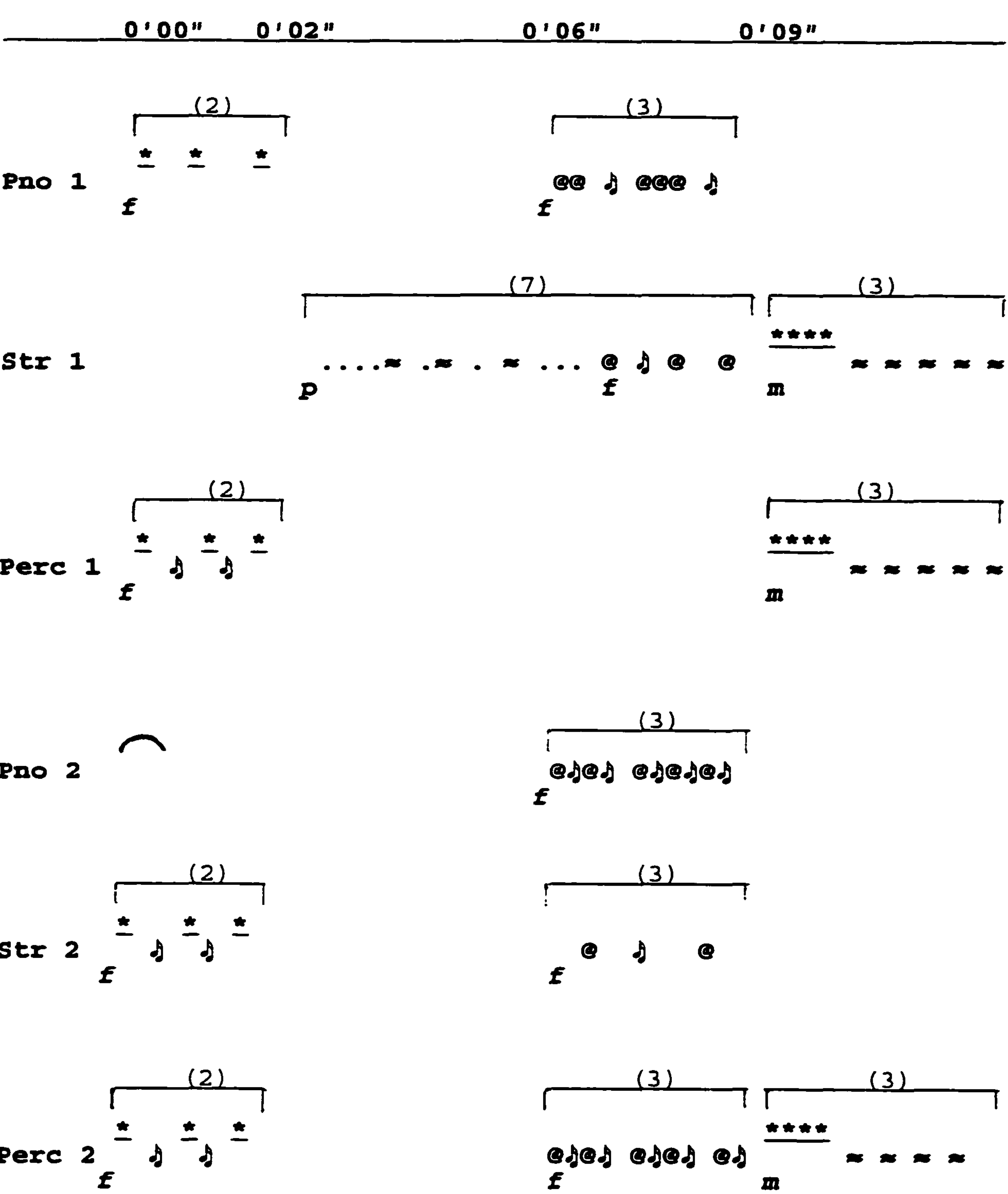

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0'12" 0'24"

(12) (6)→

Pno 2 @@@ ♪ @ ♪ @ ♪ .. . . ♪ @ ♪ @ ♪ ♪ @♪♪ ≈≈ ≈
p *m*

(12) (6)→

Str 2 @@ ♪ @ ♪ @@ ♪ @ . . . . ♪ @ ♪ @ ♪ @ ♪ ♪
p

(12) (6)→

Perc 2 ♪ @ @ @ @ ♪ ♪ . . . @ ♪ @ ♪ ♪ ♪
p *m*

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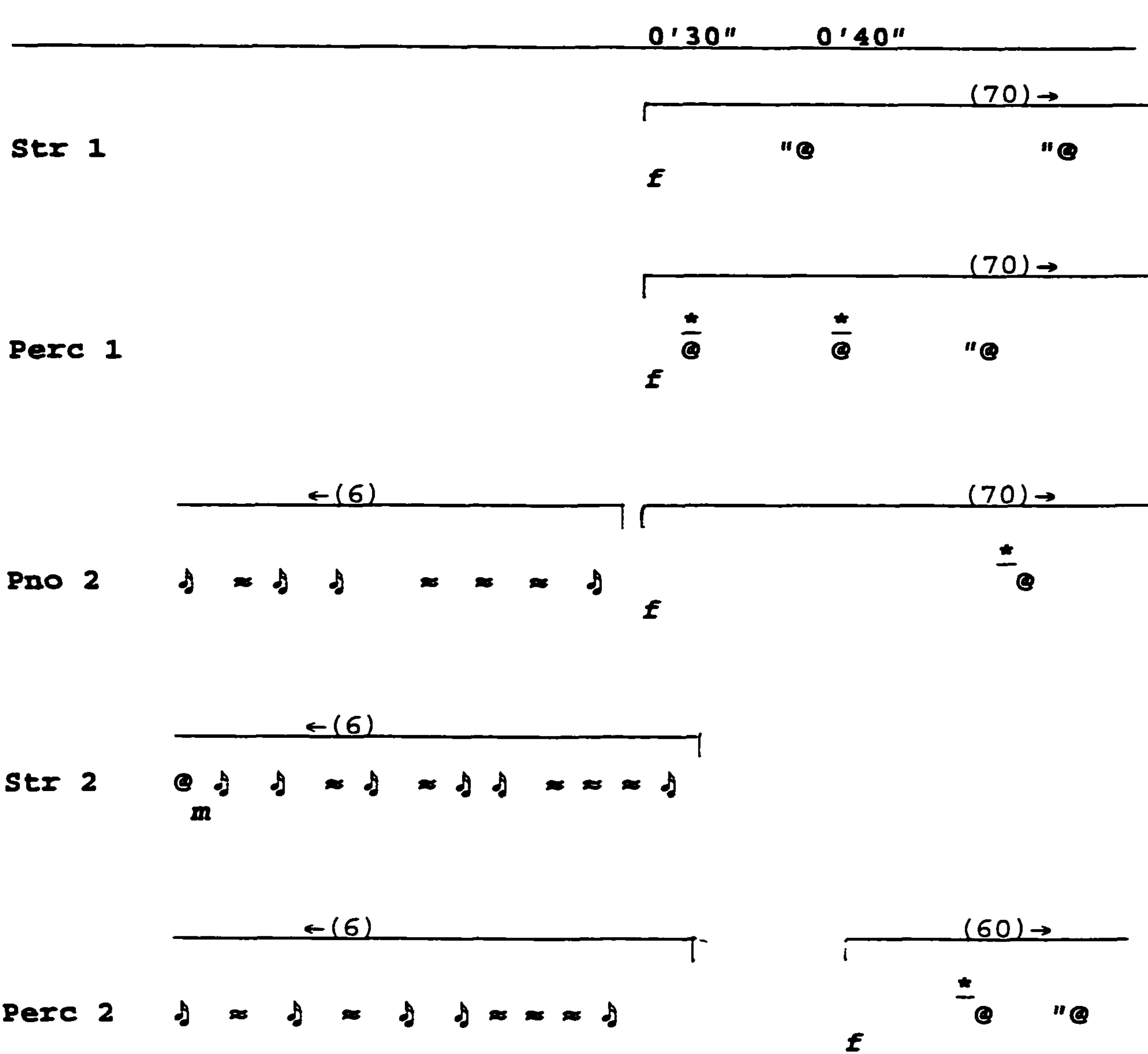

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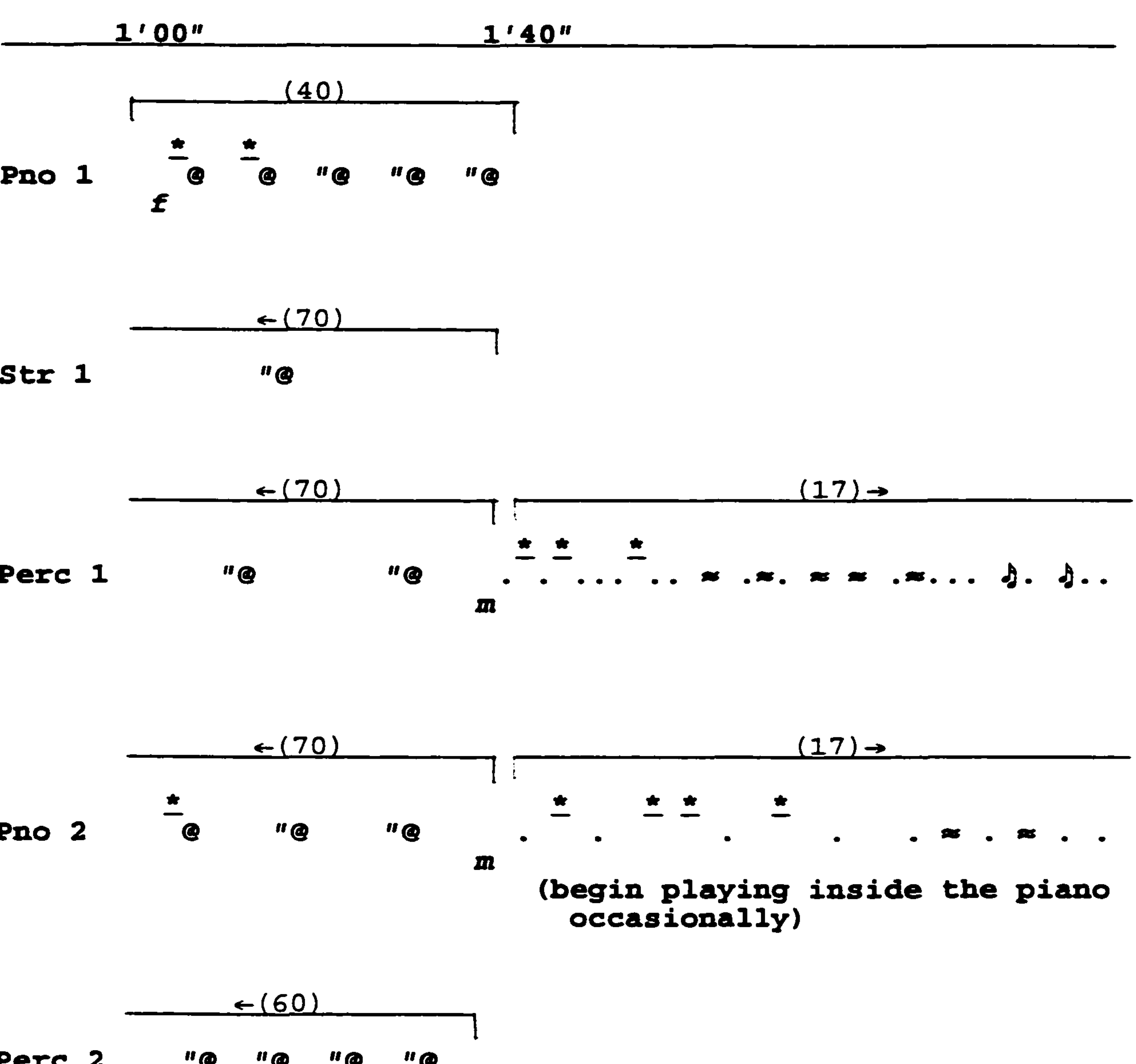

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N

1'48" 1'57" 2'06" 2'08"

(20)

Pno 1 @ @ @ * @ @ ≈ ≈ ≈ * ≈ ≈
p
(begin playing inside the piano occasionally)

(20)

Str 1 @ ♪ @ * @ * @ @ ≈ ≈ ≈ * ≈ ≈
p

←(17) (11)

Perc 1 ♪ ♪ ♪ ≈ ♪ ♪ @ ♪ ≈ @ ≈ @@
p

←(17) (32)→

Pno 2 + ♪
f

(17) (32)→

Str 2 @ ♪ @ @ ♪ @ * @ * @≈ @≈ @ @@ + ♪ * + ♪
p *f*

(32)→

Perc 2 + ♪ * + ♪
f

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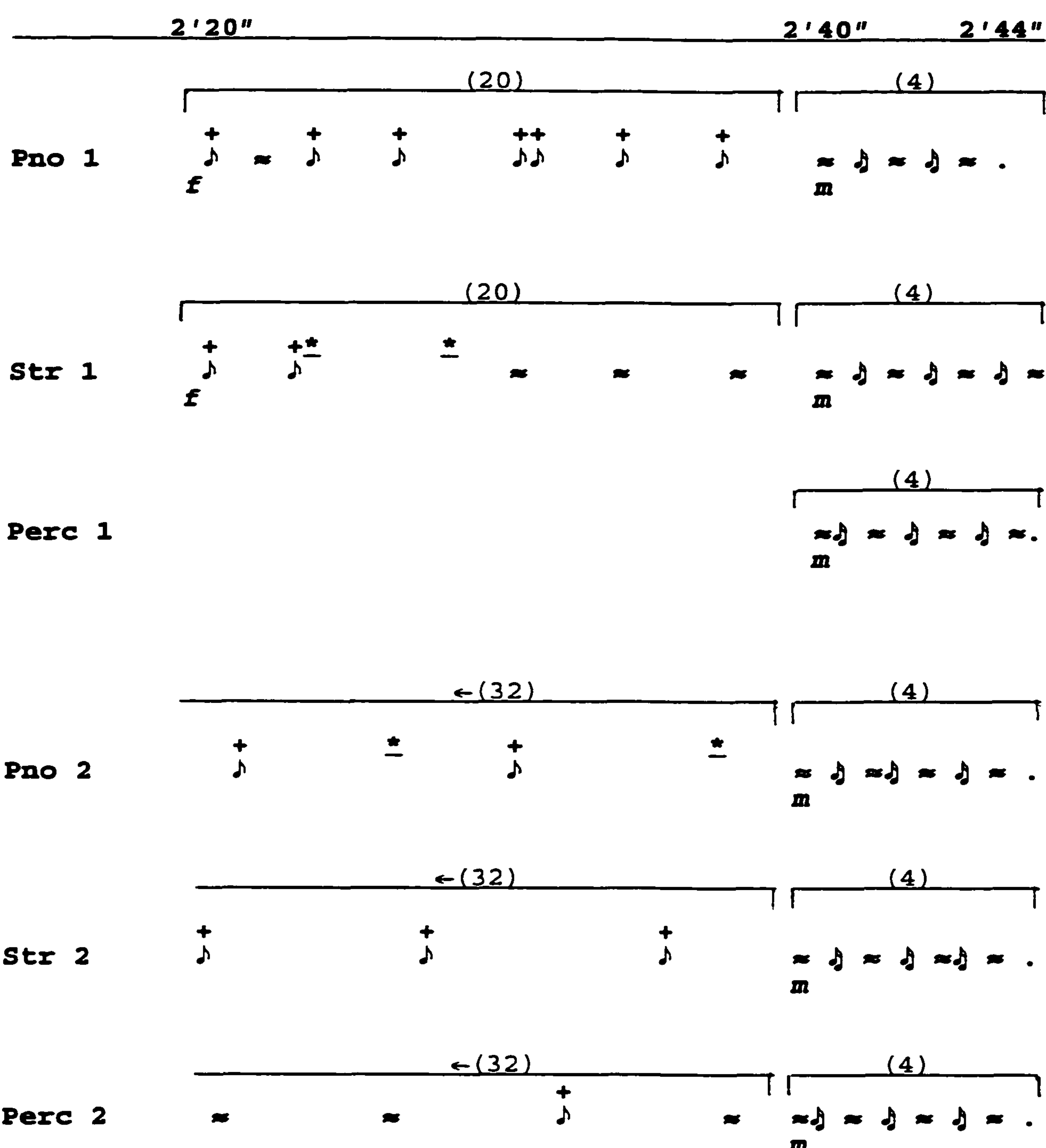

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(2'44") 2'48" 2'51" 3'02"

(14)

Pno 1 @ @ + ♪ @

p

(grad. replace A with Bb; grad. increase amount of playing

(14)

Str 1 + ♪ @ + ♪ @ + ♪ @ + ♪ @ + ♪ @ + ♪ @

p

(gradually replace A with Ab)

(14)

Perc 1 + ♪ + ♪ @ + ♪ @ + ♪

p

(gradually replace A with Ab)

(7)

Str 2 . . @ . @ . @ . @ . . . . .

(grad. replace A with Bb)

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(4) (38)→

Pno 1 . . m m

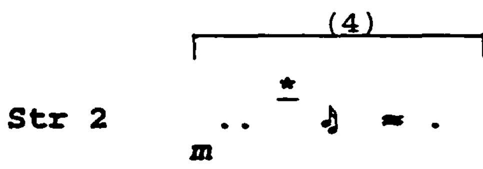
inside the piano)

(4)

Str 1 ..... ≈ . m

(38)→

Perc 1 m



(4)

Perc 2 ..... ≈. m

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O

3'17" 3'25" 3'44"

←(38)

Pno 1 ++*+ ♪♪ ♪ ≈ ≈.♪ @♪ ♪ @♪♪@♪ ♪ ♪ ++ + + + * ♪ ♪ ≈ ♪ ≈ ♪♪≈ ≈ ++
(@=Bb)

←(38)

Str 1 ≈♪♪ ♪≈.≈≈. ♪ @ ♪ ♪ @♪♪@♪ ♪ ♪ ♪ ♪ ≈ ♪ ≈♪♪≈≈
m (@=Ab)

←38)

Perc 1 ♪ @ ♪♪ ♪ @♪♪@♪♪♪@♪♪♪ ♪ ≈ ♪ ♪ ≈ ≈♪
(@=Ab)

(35)→

Pno 2 ≈ @ ≈ @ ≈ @ @ ♪ ♪ @ . .
(@=Ab)
(increase amount of playing inside the piano)

(35)→

Str 2 @ ≈ @ ♪ @ . . @ ♪
(@=Bb)

(35)→

Perc 2 ≈ ≈@ ≈ ≈ @ ♪

(@=Bb)

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(3'44") 4'00"

←(35)

Pno 2 @ ♪ @ . @ ♪@ @@ ♪♪≈♪♪ ♪ ♪♪ ≈ ♪♪

←(35)

Str 2 @ . @ ♪ @ ♪ ♪ ♪♪ ♪♪≈♪♪

←(35)

Perc 2 ♪ @ .@♪ . @ @ ♪♪ ♪♪ ♪♪ ♪

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(4'00")	4'07" 4'08"	4'12"

Pno 1 (4)

Perc 1 (4)

Pno 2 (5)

Str 2 (4)

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(4'12")

(17)→

Pno 1 ♪ @ ♪ @ +♪ @ +♪ @ @ @ +♪ @ . . @ ♪ ♪ ♪

p (grad. replace Bb with B)

(17)→

Str 1 ♪ @ @ @ @ . @ . +♪

p (grad. replace Ab with G)

(21)→

Perc 1 ♪ @ ♪ @ +♪ @ @ @ . @ . . @ +♪ +♪ @ . . . @

p

(19)→

Str 2 ♪ @ ♪ +♪ +♪ @ @ . @ . @ +♪ @

p

(17)→

Perc 2 @ ♪ @ +♪ @ +♪ @ @ . . @ +♪ +♪ @

p

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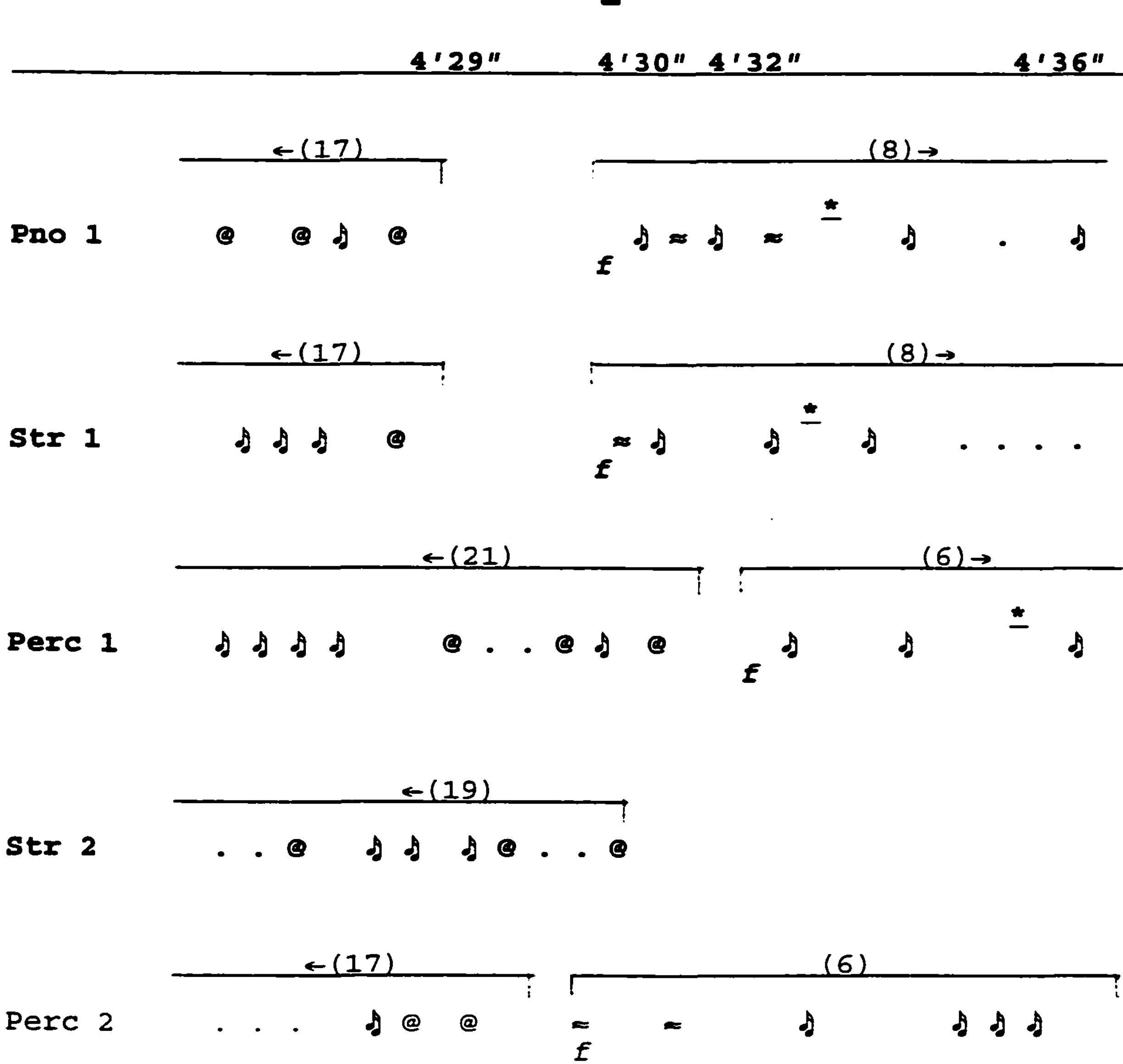
P



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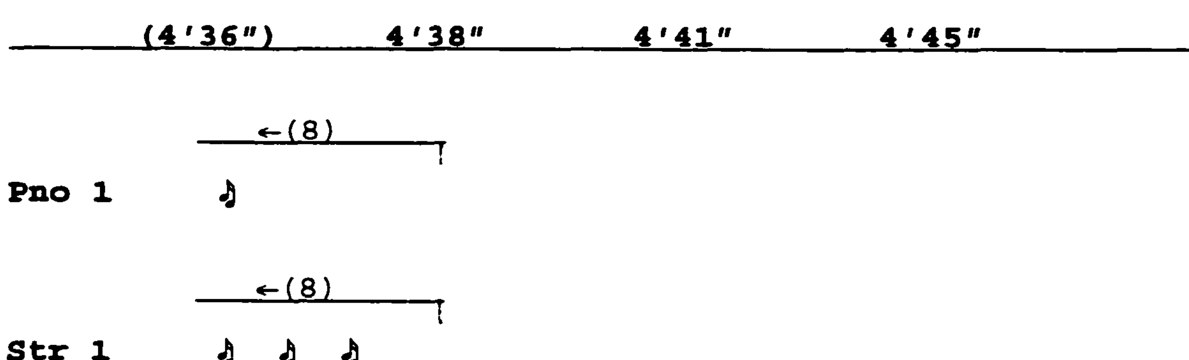

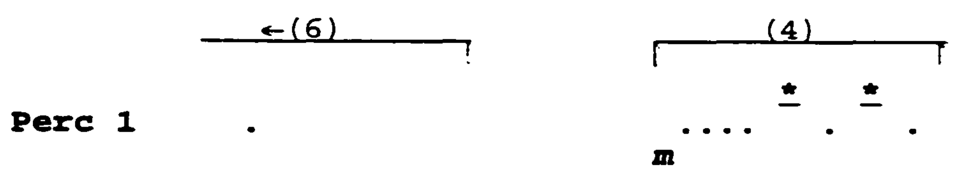

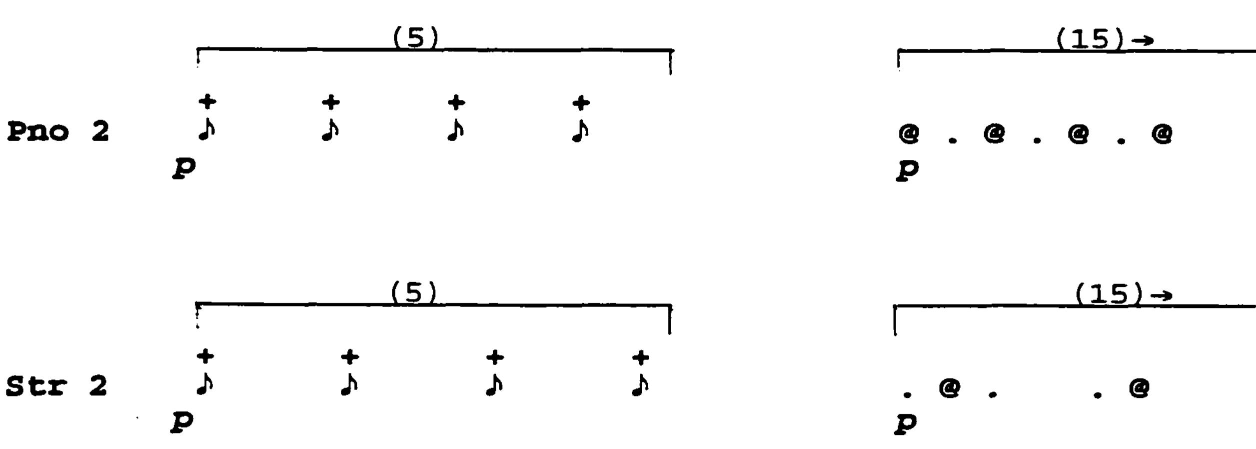

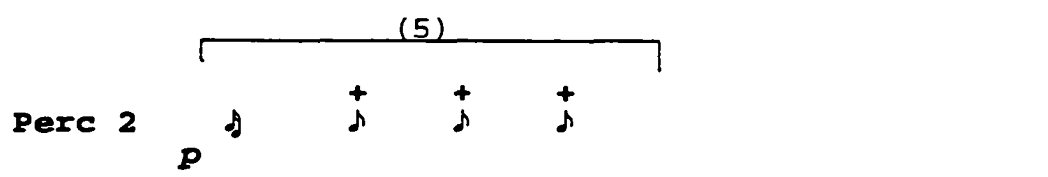

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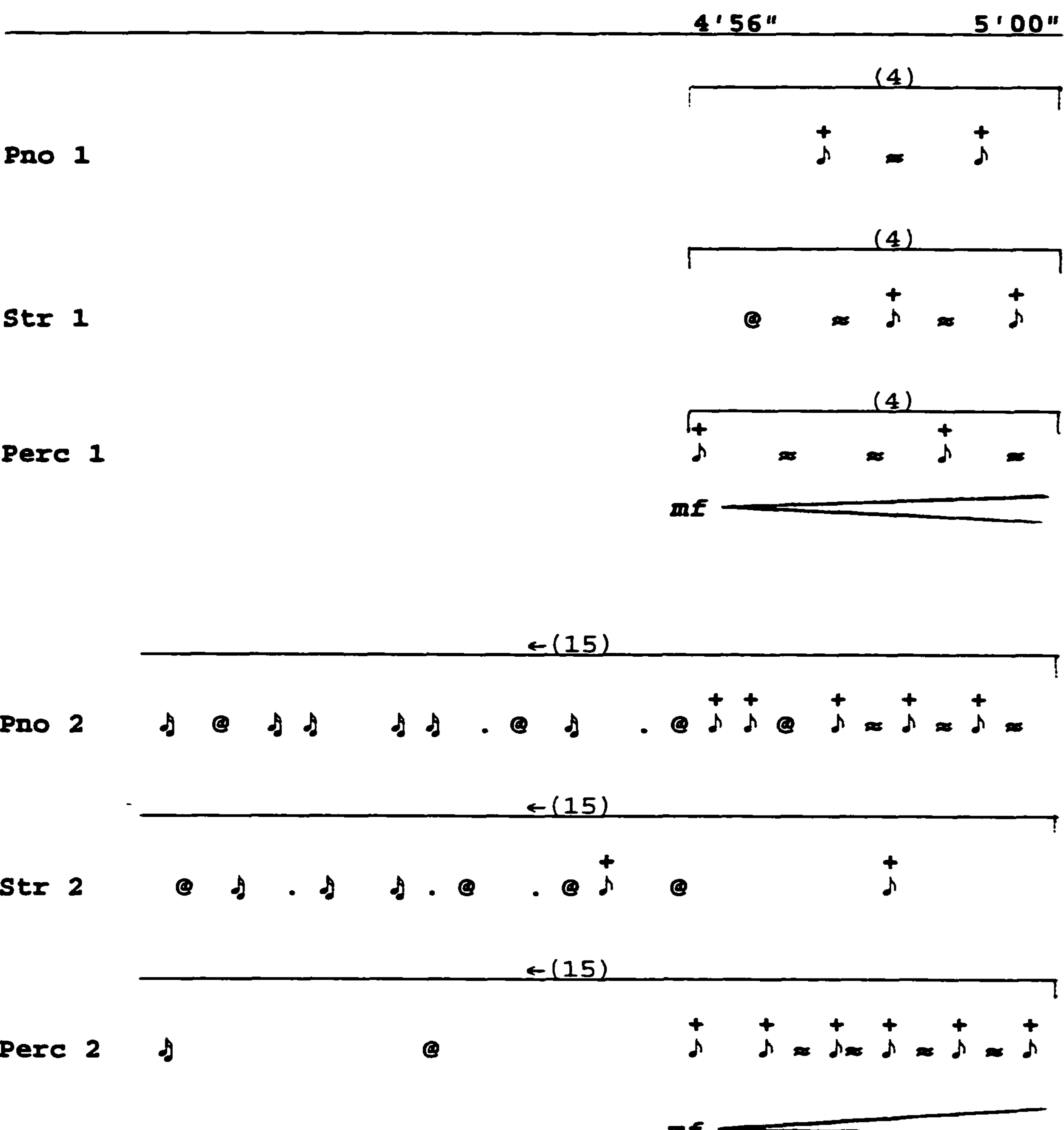

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Q

Spkr Breaks through door Im a po**LI** ' flashes his
f

Pno 1 ≈≈≈≈
(inside piano only)

Str 1 ≈≈≈≈

Perc 1 ≈≈≈≈

f>*p*

Pno 2 ≈≈≈≈
(inside piano only)

Str 2 ≈≈≈≈

Perc 2 ≈≈≈≈

f>*p*

Elec (Start tape playback)

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Spkr dirty rotten hunka **TIN** ʹ time and place he

Perc 1 * f

R

Spkr was looking for are wrong ʹ **He puts the cuffs**

(Tape) ____________ →

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Spkr **on?** ´ he has strayed into Dillingers **RIGHT**

Pno 2 *

Str 2 *

Perc 2 *

f

(Tape)→

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Spkr	stick	him	with	**[submachine gun]**	´<u>wrong</u>	´<u>cop</u>	´<u>rat</u>
				*			
Pno 1							
				*			
Str 1							
				*			
Perc 1							
				f			
				*			
Pno 2							
				*			
Str 2							
				*			
Perc 2							
				f			

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Spkr	bares	his	yel**LOW**	teeth	′detective	knocks	man
Str 1			+ ♪				
Perc 1			+ ♪				
			p				
Pno 2			+ ♪				
Perc 2			+ ♪				
			p				

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S

Spkr to floor ʹif **YOU ARE** gay **[I am right** ʹ

Pno 2 • *p*

Str 2 + ♪ *p* ≈

Perc 2 𝅘𝅥𝅯 *p* •

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quickly . . . .

Spkr seconds with Karate] [<u>you</u> <u>are</u> <u>wrong</u> you are

Pno 1 * +♪

Str 1 * +♪

Perc 1 * ♪

mf *mf*

Pno 2 ♪

Str 2 (≈)

Perc 2 ♪

mf

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Spkr	**he kicks]**	him	into	a	**distinct** 1914	movie	outside	bar
Pno 1								
Str 1								
Perc 1								
Pno 2								
Perc 2								

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Spkr	coats	off	ʹHarry	S.	Truman	de**CIDES**	to	drop
Pno 1						≈≈≈≈≈≈		
Str 1						≈≈≈≈≈≈		
Perc 1						≈≈≈≈≈≈		
						pp		

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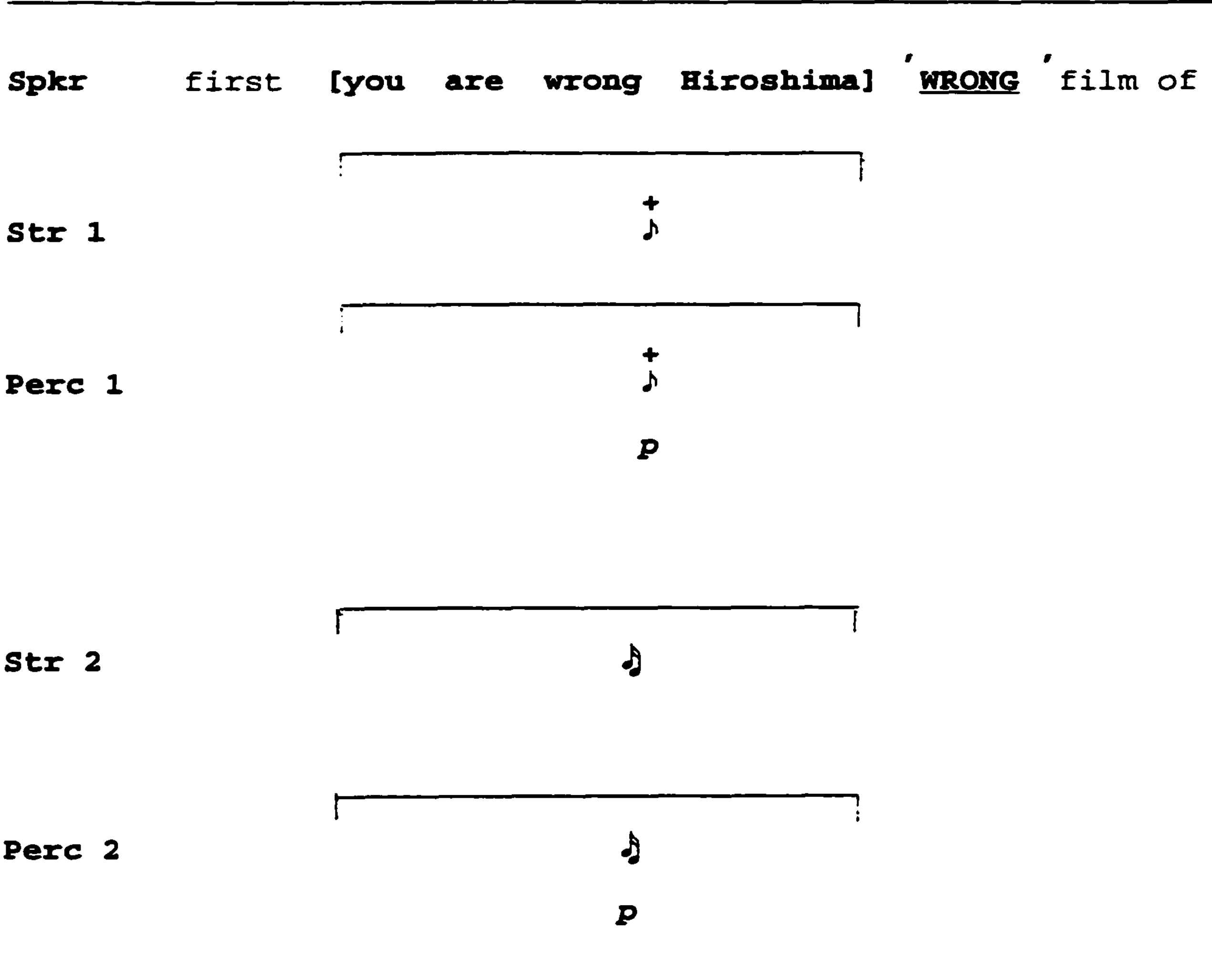

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				slower				
Spkr	**RIGHT**	to	jaw ′	**sequence**	**repeat**	′**child**	′**I**	**am**
Pno 1	*							
Str 1	*							
Perc 1	* *f*							
Pno 2	*							
Str 2	* *f*							
Perc 2								

(Tape) ____ →

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Spkr **executioner** is making a difficult deCIsion

Pno 2

Str 2

Perc 2

p

(Tape)_______________

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Spkr	**moderate** **YOU** come along ' strapped into head electrodes '
Str 1	𝅘𝅥𝅮
Perc 1	𝅘𝅥𝅮 *p*
Pno 2	𝅘𝅥𝅮
Perc 2	𝅘𝅥𝅮 *p*

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U

---

faster

Spkr I am **COP** **KICKS** in the door ríght of**FI**cer right
f

Pno 1 • ≈

Str 1 • ________

Perc 1 • ________

f

Pno 2 • ________

Str 2 • ________

Perc 2 • ≈

f

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slower

Spkr enough ´**MIXED** ´you ´he sticks a gun in a
poco piu p

Pno 1 ⌒ **(off)**

Str 1 :———————————
pp

Perc 1 ⌒ **(off)**

Pno 2 ⌒ **(off)**

Str 2 :———————————
pp

Perc 2 ⌒ **(off)**

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V

deliberate

Spkr teenage drug party **cornered rat** **I** am right

Pno 1 • ____________

Str 1 (:) ____________________ • ____________

Perc 1 • ____________

p

Pno 2 • ____________

Str 2 (:) ____________________ • ____________

Perc 2 • ____________

p

(Tape)____________→

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	quicker							
Spkr	**<u>NOISE</u>** *f*	´man *mf*	**KILLS**	him	in	30	seconds	detective
Pno 1	≈≈≈≈≈≈							
Str 1	≈≈≈≈≈≈ *f*							
Pno 2			*					
Str 2			*					
Perc 2			* *mf*					

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Spkr **dying** ′ I am right′ right ′ **HAR**ry 2 **GETS** up′

Pno 1 (on keys)

Str 1

Perc 1

Pno 2 (on keys)

Perc 2

(Tape) →

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Spkr I **AM RIGHT**' he **THROWS** atom **BOMB** 'I **AM RIGHT**'

Pno 1 (•)__≈

Str 1 • ______________ ≈

Perc 1 • ____________________________ ≈

Pno 2

Str 2 • __≈

Perc 2 • __≈

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				slower		
				ʼ		
Spkr	you	**PEO**ple	in Hi**RO**shima	survivors	burned	the
Pno 1	**(off)**	𝅘𝅥𝅯				
Str 1		𝅘𝅥𝅯				
Perc 1	**(off)**	𝅘𝅥𝅯				
		p				
Pno 2			+ ♪			
Str 2			+ ♪			
Perc 2	**(off)**		***p***			

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ritard. to end

Spkr	**Pentagon** '	**dim** '	**jerky** '	**faraway** '

(Tape) ______________________________ →

Spkr **smoke.**

Str 1 * ______________________________
pp

Str 2 * ______________________________
pp

(Tape) ______________________________

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