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### Ives on His Own Terms: An Explication, a Theory of Pitch Organization, and a New Critical Edition for the "3-Page Sonata"

Carol Kitzes Baron

*Graduate Center, City University of New York*

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**Ives on his own terms: An explication, a theory of pitch  
organization, and a new critical edition for the *3-Page Sonata***

Baron, Carol Kitzes, Ph.D.

City University of New York, 1987

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IVES ON HIS OWN TERMS: AN EXPLICATION,  
A THEORY OF PITCH ORGANIZATION, AND  
A NEW CRITICAL EDITION FOR THE 3-PAGE SONATA

by

CAROL KITZES BARON

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

1987

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## Preface

Ives On His Own Terms grew out of a need to understand and express what I heard in Ives's music and intuited about him through his writings. In his music I was struck by both a compelling psychological immediacy and an "affective" or emotional distance, a combination that I continue to find fascinating. I was looking for the basis of a dimension that I felt was there but was elusive.

Reading his "literary" works--mainly the Memos, Essays Before A Sonata, and "Some 'Quarter-tone' Impressions"--I sensed that the peculiar country bumpkin style that Ives uses masks a keen and innovative intellect, absolutely driven to communicate his ideas about his own music and the music he knew and overwhelmed by his anger and frustration with the society he identified as musical. Critics, performers, the members of music societies were all under attack.

Specific areas of concern in Ives's writings were especially interesting to me. One area consists of his explanations of "the technical side of music" (Memos, p. 120); another consists of his pleas (to an unidentified, non-existent audience) for the acceptance of innovative ideas in music; the third, of his programmatic explanations of the music, which he takes for granted to be a natural part of their being. Enveloping this literary output is an all-embracing self-consciousness, expressed in the peculiarity of his writing style (Ives

can't finish a sentence without first interrupting himself) and in his elaborate explanations of the goals and meaning of music and of the idiosyncracies of his own musical style. In Essays Before A Sonata, the entire "Prologue" is devoted to the nature of meaning in music, concluding that all music is on some level programmatic and, thereby, summing up a preoccupation held apparently throughout Ives's career. The "Postlude" of Essays presents his view of the "substance/manner" dichotomy. Such intellectual/philosophical self-consciousness in the literary materials intimated that the music also would possess this trait.

My study of the 3-Page Sonata was first undertaken in a seminar class. I always felt that in this piece Ives was working with a system of tonality that was eluding me although certain obvious pitch class relationships were clearly on the surface. I continued to study this work and turned to other works as well. I became more and more convinced that Ives developed a rational, coherent system or systems; that by his nature, as revealed in the writings, he could only proceed in this way.

The division of the present study into three parts articulates the ramifications of the nature of Ives's imaging in the compositional process. This perception of its nature is derived from Ives's literary work and the way the music communicates. The imaging is rational and serious; the imaging relates the parameters of music directly to the

philosophical and intellectual dimensions of the work; it contains an aspect of intentionality in which both communicativeness and innovation are moral commitments. In such a value-imbued art, the compositional process, itself, is significant; to such a self-conscious artist, all aspects of the compositional process probably are deliberate. Moreover since Ives had the genius to imagine and execute the techniques of a transformed art, all aspects of this compositional process, in so far as they can be deduced, need to be studied. The three-part division of this study attempts this goal. Ives's aesthetic principles are components of each part. These parts are interrelated, one contributing to an understanding of the other.

Both directly and by inference, this study makes statements about Ives's music in general: it is not simply about the 3-Page Sonata. The focus on the 3-Page Sonata makes it possible to test the consistencies of the premises in detail. For example, the theory of pitch organization could be both derived from and applied to every technical detail of one piece without resorting to the selectivity necessitated in working with a broader repertory. The premises include the idea that the extramusical dimensions of Ives's music are essential elements in its compositional process and in the process of understanding it; that Ives's approach was highly rational and that he developed new systems of pitch relationships; and that an accurate reading of the score--of Ives's notation--gives us insight into both meaning and



language--"the technical stuff" (Memos, p. 120). These premises are basically applicable to all of Ives's work.

The specific technical findings in the 3-Page Sonata are limited in their applicability, however: Ives's works include a varied set of images; each work, being different, is involved with different kinds of relationships. Also Ives's tonal language is different in different periods and in different works. The basic elements of the pitch class system found in the 3-Page Sonata, however, are found in other works as well; one of those works, "In the Night," is discussed in Chapter 4.

In Part One, "An Explication," the extramusical dimension in Ives's music is explored. Chapter 1 identifies and interprets the concomitant literary materials for the 3-Page Sonata, and Chapter 2 identifies the program of the 3-Page Sonata in its musical forms.

Part Two is concerned with Ives's use of innovative pitch structures. Chapter 3 discusses the significance of innovation in Ives's compositional thinking; the remaining chapters are a theoretical/analytical treatment of the 3-Page Sonata. The 3-Page Sonata is an unusually appropriate work to use for demonstrating my premises about Ives's work because its program is about Ives's music and his ideas about music: It is both a didactic study--an Art of The Fugue, demonstrating the many and varied ways Ives's new language operates--and a satirical jab at conventional formulas.

One of the most satisfying outcomes of this study was being able

to unravel the meaning of several passages of Memos which contain theoretical "clues" to the "technical stuff." The initial and crucial discovery was a literary parody by Ives in "Memo 5" of a statement by one of the critics that he abhorred. Later, after gaining an understanding of the tonal language in the 3-Page Sonata, Ives's description of the tonal language of "In The Night" in "Memo 17" became clear. In addition, Ives's description of improvisatory techniques in "Memo 11" (page 42 ff.) and other memos as well became comprehensible when they were recognized in the context of "composed" music. The peculiarities of Ives's literary style have been fascinating but, for the most part, frustrating; the meaning of the technical descriptions has remained elusive. These discoveries open the way to a new appreciation of the role of Ives's literary work in relation to the music. In the context of this study, these discoveries corroborated important aspects of the theory of pitch structure that had been reached inductively, by inference.

In Part Three, a new critical edition of the 3-Page Sonata is presented. Chapter 5 is concerned with the problems of Ives's notation and a critique of available editions. Several examples are given of divergent readings of the manuscript. It is proposed that Ives's notation is meaningful as "signs" and must be retained wherever possible. Appendix IV contains a new edition of the music. The accompanying critical notes are, in essence, a manuscript study, which

identifies any deviations from the manuscript in the edition;  
identifies several places that are problematic; and describes Ives's  
compositional process in several places where erasures are not complete  
and changes can be identified. The goal of the edition is to present  
Ives's music "in his own terms," without altering Ives's beaming,  
accidentals, barring, etc.--to be as useful to scholars and performers  
as scrupulous editions of old music have been.

## Part One: An Explication

### Chapter 1: Introduction: Extra-musical Dimensions

Charles Ives's 3-Page Sonata, written in 1905, is the musical component of a diatribe by Ives against the values of the contemporary musical establishment of his time; it is a satire of the musical procedures that he perceived to be current and critically accepted. It is also a compendium of abstract compositional techniques and devices that Ives was interested in and used; and, most importantly, the 3-Page Sonata is a demonstration of Ives's new, indeed revolutionary, language. It is a "textbook" in music, a didactic tract in which Ives demonstrates, quite systematically, what his music is about; as such, this work can be compared to other works of music that are about music, e.g. Bach's Kunst der Fuge, a musical summation of Bach's fugal techniques, or Mozart's Musikalischer Spass, a parody and critique of the work of inferior composers.

There are literary components of the 3-Page Sonata, consisting of (1) a note Ives pinned to his copy of the first edition of the 3-Page Sonata, (2) a parody of a section of a book by music critic William James Henderson, What Is Good Music?,<sup>1</sup> which is now found in "Memo 5"

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1. William James Henderson, What Is Good Music? (New York, 1898), pp. 3-4. This book went through six editions in all and was reprinted in fifteen different years according to information found in the National Union Catalogue. John Kirkpatrick identifies Ives's copy as a 3rd edition published in 1905 in Memos (p. 31, footnote 3). However the book was not among those listed by Vivian Perlis's students in 1979 as having been found at Ives's West Redding, Connecticut home. The lists are in the Ives Collection in the Beinecke Library, Yale University and are catalogued by Vivian Perlis in Series X in Charles

in Ives's Memos,<sup>2</sup> and (3) marginalia on the composing score.<sup>3</sup>

The 3-Page Sonata is therefore an example of Ives's program music. It is an integration of musical sound and subject matter: the formal procedures, the rhythmic and pitch constructions, the literary components, and even the notation combine to articulate an extensive extramusical program.

#### Ives's Musical Vision and Aesthetics

Ives left us an unusual legacy of literary material that is, for the most part, related to his music. It contains his ideas about musical aesthetics, about specific pieces he composed, about the music of other composers, about musical techniques that interested him, about the values of the musical culture and society he knew, as well as his accounts of and reactions to the responses of various musicians and other people to his music. It includes extensive program notes, "memos," and verbal commentary on the music scores. The legacy is unusual because of its ambiguous character: highly informal, rambling, frequently sarcastic and angry and, at the same time, humorous--the

---

Ives Papers. Henderson was music critic for The New York Times from 1887 to 1902 and for the New York Sun from 1902 to 1937. He was the first in the United States to write a history of music that was not a compilation from foreign summaries; he wrote "from the standpoint of the journalist and music critic." (From Warren Dwight Allen, Philosophies of Music History (New York: Dover Publications, 1962 reprint) and Baker's Biographical Dictionary of Musicians, 5th ed. (New York: G. Schirmer, 1971)).

2. Charles Ives, Memos, edited by John Kirkpatrick (New York: W.W. Norton & Co., 1972), pp. 30-32.

3. From the Ives Collection, Yale Music Library, catalogued 3B15.

writings have the appearance of private ruminations recorded for personal use; however they clearly express, by their intensity and breadth, Ives's desire and serious intent to be understood by the music public.

Rosalie Sandra Perry, a scholar in American studies, maintains that Ives was aware that, because of the unusual nature of his musical vision, he needed to engage the listener in "his thought-stream": the literary writings provide what Perry calls "carefully dropped clues to unravel his scheme throughout his work."<sup>4</sup> Perry shows the relationship of Ives's work to a pervasive concern with the unconscious or subconscious in turn-of-the-century American writings, which apparently stemmed from Transcendentalist belief.<sup>5</sup> She identifies the source of Ives's compositional technique with what American psychologist William James was the first to identify in literature as "stream of

---

4. Rosalie Sandra Perry, Charles Ives and the American Mind (Kent, Ohio: Kent State University Press, 1974) p. 48 f.

5. Perry's work contains the most complete study of the identification of Ives's work with the Transcendentalist tradition (pp. 140-55). Earlier studies of Transcendentalist influences on Ives were by Wilfred H. Mellers, Music in A New Found Land (New York: Knopf, 1965) and Gilbert Chase, America's Music (New York: McGraw Hill Book Co., 1966). The most recent study of Ives and the Transcendentalist tradition, by J. Peter Burkholder, Ives: The Ideas Behind the Music (New Haven: Yale U. Press, 1985) purports to show that Ives came under the influence of Transcendentalism, particularly Emerson and Thoreau, at a relatively late time in his overall development as a composer. Among the most interesting writings on the subject are Ives's own: in Charles E. Ives, Essays Before A Sonata, the Majority, and Other Writings, edited by Howard Boatwright (New York: W.W. Norton & Co., Norton Library, 1970), first published in 1920 (New York: The Knickerbocker Press), reprinted 1962 (New York: Dover Publications); and Memos, op. cit.

consciousness."<sup>6</sup> Ives's seriousness about his composing, his sense of values, and his deliberate attempt to present "consciousness" made it necessary for him "to do two things: (1) represent the texture of consciousness, and (2) communicate some kind of meaning from it all" in order to avoid the possible impression of composing "nonsense."<sup>7</sup>

The amount of programmatic content in Ives's writings is noteworthy. Especially impressive is the fact that Ives wrote an entire book, Essays Before A Sonata,<sup>8</sup> to accompany the Concord Sonata.<sup>9</sup> Programmatic titles are frequently given to pieces and to movements. There are extensive marginal notes on the manuscripts. Although not literary or programmatic in the usual sense, the popular musical material Ives uses so frequently, presumably well-known to his New England community, carries associative, sometimes ideological, values.<sup>10</sup> And not least, there are the "memos" which the scholar-

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6. Perry, p. 48. "Consciousness," says Perry, "indicated the entire area of mental attention, from preconsciousness on through the levels of the mind up to and including the highest one of rational communicable awareness. Stream-of-consciousness works are thus concerned with the whole level of mental processes" (p. 42).

7. Ibid.

8. Ives, Essays, 1920.

9. Charles Ives, Second Pianoforte Sonata: "Concord, Mass., 1840-60" (New York: Arrow Music Press, 1947); reprint (Associated Music Publishers). First published 1920 (New York: G. Schirmer, Inc.)

10. Many musical quotations are listed in John Kirkpatrick's A Temporary Mimeographed Catalogue of the Music Manuscripts and Related Materials of Charles Edward Ives, 1874-1954 (New Haven: Library of the Yale School of Music), 1960. This work remains the indispensable tool for locating and identifying the manuscript scores, sketches, and fragments.

pianist John Kirkpatrick so intelligently and devotedly collected, edited, and published as Memos. Between 1931 and 1934 Ives organized many of his writings and added new material into what he called a "desultory scrapbook (= 'memos'--not memoirs--no one but the President of a nice Bank or a Golf Club, or a dead Prime Minister, can write 'memoirs')." <sup>11</sup> Memos is the single major source of information about Ives and his music, mainly consisting of Ives's writings about specific works as well as those about his musical ideas. This considerable body of literary material is an intrinsic part of the total aesthetic experience of Ives's music. The concrete images of the "takeoffs," imitations of realistic scenes or thought processes, such as "All the Way Around and Back," "The Gong on the Hook and Ladder," "Over the Pavements," "Tone Roads," and "The Unanswered Question"--all having very different types of images--and the highly complex ideas Ives means to communicate in the Fourth Symphony <sup>12</sup> or the Concord Sonata, need the literary material or ideas related to them to be understood fully.

The expression of extramusical dimensions in his music and its appropriateness were basic concerns to Ives: he is resolute about the particular path he had undertaken, and he was committed to communicating his ideas. In the opening statement of Essays Before A Sonata, he clearly articulates anxiety about his musical aesthetics. He begins as follows:

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11. Ives, Memos, p. 25.

12. Charles E. Ives, Symphony No. 4, "Preface" by John Kirkpatrick (New York: Associated Music Publishers, Inc., 1965). 2nd movement first published in New Music Edition score, Vol. 2, No. 21 (January, 1929).



How far is anyone justified...in expressing or trying to express in terms of music (in sounds, if you like) the value of anything material, moral, intellectual or spiritual which is usually expressed in terms other than music?...Can it be done by anything short of an act of mesmerism on the part of the composer or an act of kindness on the part of the listener?<sup>13</sup>

Ives then questions the value of the "extreme materializing of music" and of "the theory that music is the language of emotions and only that...Does not this theory tend to limit music to programs?--a limitation as bad for music itself, for its wholesome progress, as a diet of program music is bad for the listener's ability to digest anything beyond the sensuous or physical-emotional."<sup>14</sup> He calls for the word "emotion" to be interpreted "in a deeper sense--which may be a feeling influenced by some experience, perhaps of a spiritual nature, in the expression of which the intellect has some part." The classification of "program music" then takes on a broader meaning:

Is not all music program music? Is not pure music, so called, representative in its essence?...Do all inspirational images, states, conditions, or whatever they may be truly called, have for a dominant part, if not for source, some actual experience in life or of the social relation? To think that they do not--always at least--would be a relief. But as we are trying to consider music made and heard by human beings (and not by birds or angels), it seems difficult to suppose that even subconscious images can be separated from some human experience....Here is a program!--conscious or subconscious, what does it matter?<sup>15</sup>

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13. Ives, Essays, p. 3.

14. Ives also quotes the following statement of Henry Sturt (b. 1863): "The nearer we get to the mere expression of emotion as in the antics of boys who have been promised a holiday, the further we get away from art" (Essays, p.4), from "Art and Personality" in Personal Idealism, ed. Henry Sturt (London, 1902).

15. Ibid. pp. 4-7.

Ives's conclusion that all music has a programmatic or extra-musical dimension is related to questions most frequently addressed by philosophers of art who find meaning in abstract forms, structures, and gestures and whose work is therefore relevant to musical understanding. Such questions about the meaning of music have been addressed through various systems of thought, including the semiotic, the symbolic, the syntactical-structural, and the metaphorical. It was not incumbent upon Ives to develop a polished and consistent system for addressing these problems. His philosophical bent is expressed in The Unanswered Question<sup>16</sup> and in a section in Memos which recalls what must have been a quite serious conversation with a poet, dating back to his college days. Ives writes: "He quite agreed with me that music could 'proclaim' any part of the human experience." He then goes on to describe an example of his depiction of a very concrete, realistic image in musical notation:

To try to reflect a football game in sounds would cause anybody to try many combinations etc.,--for instance, picturing the old wedge play (close formation)--what is more natural than starting with all hugging together in the whole chromatic scale, and gradually together down to one note at the end. The suspense and excitement of spectators--strings going up and down off and on open-string tremolos. Cheers ("Brek e Koax" etc.)--running plays (trumpets going all over, dodging, etc. etc.)--natural and fun to do and listen to--hard to play.<sup>17</sup>

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16. Charles E. Ives, The Unanswered Question, see "Foreword," (Merion Music, 1953). The postface of the fair copy states that the original title was "'A Contemplation of a Serious Matter' or 'The Unanswered Perennial Question'" (from Memos, p. 157).

17. Ives, Memos, p. 61.

Ives's techniques, even the notation,<sup>18</sup> itself, were used in the services of projecting ideas and images. He describes composing other "takeoffs" and concludes that "this may not be a nice way to write music, but it's one way--and who knows the only real nice way? Right or wrong, things like these--some hardly more than memos in notes--show how one's mind works."<sup>19</sup> Such "sound-pictures" as the football game frequently cannot project the generating image even with the help of a programmatic suggestion. Ives is not alone in including such procedures in his compositional process. Programs played a significant role in the Baroque period, especially in the cantata settings of J. S. Bach, where the musical devices "painted" complex ideas as well as simple word images.

For most of his works, Ives has defined, in the various forms his literary contributions take, the subject matter of his music, what his music "expresses," the sources of its inspiration, and how it should be listened to. In an aggressive defense of program music Ives goes so far as to state in relation to the work Holidays:

If this piece is played separately, without outlining the program, it may give (and it has given) a wrong idea of what it is and what it was made for....They [the movements] could be played as abstract music (giving no titles [or] program), and then they would be just like all the other "abstract" things in art--one of two things: a covering up, or ignorance of (or but a vague feeling of) the human something at its source--or just an emasculated piece of nice embroidery! So if Washington's Birthday were put on a program with no program [notes], the D.A.R. would

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18. See Chapter 8 for an introduction to the idea that Ives's notation can be studied for its semiological relevance.

19. Ives, Memos, p. 64.

think it pretended to have something to do with Washington, or his birthday, or "these United States"--or with some speech by Senator Blowout!<sup>20</sup>

In summation, Ives's musical vision is inextricably tied to its programmatic content: This so-called "content" is "an ingredient of the musical work itself." The following generalization about program music by music historian Carl Dahlhaus contributes a relevant dimension in perceiving the totality of Ives's aesthetics:

If the subject specifies meanings for musical themes and motives, the opposite is equally valid: the broad significance and import of the subject is newly minted by musical themes and motives. Program music rests on the interdependence of its components.<sup>21</sup>

I would add that the breadth of new, abstract musical ideas that were available to Ives made the depiction of a wide variety of subjects and types of subjects possible and particularly vivid.

#### In The Context of 20th Century Musical Aesthetics

A certain uneasy mistrust of Ives's music and accompanying literary material may be found in the writings about Charles Ives's work. This mistrust is expressed in the work of a wide range of writers, all seeking to understand Ives's music and his historical position in the development of twentieth century music and American music in particular. In some instances it has led to what is tantamount to its rejection. Misunderstanding and rejection were

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20. Ives, Memos, p. 97 f.

21. William Dahlhaus, Esthetics of Music, trans. by William Austin (Cambridge: Cambridge University Press, 1982), p. 59.

likely to have been the fate of Ives's music a priori because twentieth century musical aesthetics rejected the validity of program music. The turn from the subjectivity of the nineteenth century was reinforced by the neo-classical tendency which turned to absolute music.

The predominantly contemporary view of program music is expressed trenchantly in both of the following statements from the musico-critical literature, notwithstanding that they are derived from different points of view. A scholar in an American publication writes from the perspective of contemporary values:

Today...it is generally agreed that music is an art in its own right, that it must work with its own tools, and that too great a reliance on outside program will weaken rather than enhance a composition's artistic merit. In fact, one cannot help feeling that a good deal of the interest of composers in program music is owing to a lack of purely musical imagination, a lack for which they try to compensate with an interesting program. In the last analysis, there are two types of program music: music that is good regardless of the program [my underlining], and music that is mediocre or poor although it is a skillful rendition of the program.<sup>22</sup> Another scholar, a European concerned with "the

precarious esthetic situation" of program music, writes from the mediating position of the historian of changing aesthetic values.

Program music is called

a dead genre in any New Music worthy of the name...the symphonic poem faces our century's esthetic prejudices all lined up against it, if we disregard so-called 'socialist' esthetics. The position of symphonic poems in general music consciousness may be characterized as an unhappy medium between no-longer and not-yet. Alienated from immediate understanding, they are not yet remote enough to be discovered and restored by historical

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22. Willi Apel, Harvard Dictionary of Music, 2nd ed., "Program Music." (Cambridge, Mass.: The Belknap Press of Harvard University Press, 1970), p. 696.

understanding.<sup>23</sup>

In this aesthetic environment, is it any wonder that Ives's staunchest advocates have felt the need to "apologize" for Ives's literary materials and disassociate them from the musical ones? For example, Howard Boatwright states in the "Foreword" to his edition of Essays Before A Sonata. The Majority and othe Writings: "A tally of the literary manuscripts reveals an interesting fact: most of what Ives wrote in words did not concern music directly."<sup>24</sup> He continues, "If music itself were his concern, he wrote music. But he used words to provide the general philosophical support for his compositions, and, of course, words were the principal weapon when his idealism led him (around 1918) away from attempting to reform the musical conventions of his youth toward attacking the weakness of our national and international life, as he saw them."<sup>25</sup>

In the "Preface" to Memos Kirkpatrick cautions: "In reading these Memos, one must constantly remember that Ives was not dictating them for publication, but only as a fund of data to be drawn on when needed--also to get things off his chest in a private way."<sup>26</sup> The idea

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23. Dahlhaus, p. 59.

24. This statement later proved to be untrue when all the material became available; in truth over half of the volume Boatwright edited is related to musical works.

25. Howard Boatwright, "Foreword," in Ives, Essays, p. viii.

26. John Kirkpatrick, "Preface," in Ives, Memos, p.21. "Aaron Copland thought it 'self-evident...that this publication [of 114 Songs] was not designed to give the music public a clear concept of Ives's gifts as composer.' It seemed to Copland that 'Ives...not only had no public in mind when printing this book, but he hardly had even the 'few friends' of whom he speaks in mind. For after gathering together the fruits of thirty years' work (which, in effect, literally was a kind of 'housecleaning') Ives found himself alone with his songs.'" [From

that prompted this comment, which has contributed to the conventional wisdom about Ives, contradicts Ives's own statements which repeatedly show his intention to clarify aspects of his music. The memos and other writings were put into as good physical condition as the music manuscripts by Ives, probably better. And Ives's Memos give substantial evidence of his concern with having his music performed and understood.<sup>27</sup> Accepting the conventional contemporary attitude toward program music, Ives's biographer Frank Rossiter concludes that, "from a purely musical point of view, these non-musical elements ["the song texts" and "the programmatic explanations of his instrumental works"] can be discounted. When a musician assesses the value of a piece of music, he is not concerned with the composer's choice of literary subject matter or his point of view toward that subject matter, but only with the expressiveness of the music itself."<sup>28</sup>

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Frank Rossiter, Charles Ives and His America (New York: Liveright, 1975), p. 183]. How similar were the circumstances surrounding the collection and preparation of the "memos." However, Ives's isolation from the music world is no measure of his expectation for his work vis-à-vis that world.

27. Among the unpublished portions of the autograph for "Memo 5," not retained by Ives in the typescript, is a list of music that Ives sent to Henderson: "of the music, which he has not heard but has copies of." Ives accused Henderson of knowingly writing "information that the 'Sun' assumed to sell to the public" that expressed "a mind somewhat arrested in development musically or prejudiced."

28. Frank Rossiter, Charles Ives and His America (New York: Liveright, 1975), p. 95. A recent apologist is J. Peter Burkholder, in "Quotation and Emulation: Charles Ives's Uses of His Models," Musical Quarterly, January, 1985, 1-26, who writes: "Because of the tendency of programmatic ideas to color our evaluation of music, especially Ives's music, on its own terms, it is important to stress that Ives's works do make sense as structures alone, beyond any extramusical meanings they may have" (p. 25). Also, "the programs he offers are not necessary to explain the structure of the music--it can stand on its own, pursuing its own inner logic--but provide a way in, offering an analogy to life, an analogy with many possible meanings" (p. 26). Burkholder believes that the structure of Ives's themes and entire

Tracing the history of misunderstanding of just one small piece, the 3-Page Sonata, may illustrate how contemporary aesthetic prejudice has prevented Ives's music from being understood and accepted on its own terms.

#### The 3-Page Sonata: The Literary Components

The title of the 3-Page Sonata<sup>29</sup> suggested the possibility that this work is about the idea of the sonata rather than simply a sonata or an imitation of a sonata--i.e., a "takeoff."<sup>30</sup> If we are correct, then the 3-Page Sonata operates on a dimension that is beyond the boundaries of strict musical analysis, in which the program is a factor in determining its logic. The question is, what is Ives saying about sonatas and music, and how well does he communicate his meaning? This dimension--beyond the boundaries of strict musical analysis--is also suggested by a note that Ives wrote to "put on top [of the] 3-page sonata:--'made mostly as a joke to knock the mollycoddles out of their boxes and to kick out the softy ears!'"<sup>31</sup> In this statement we see

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works depends directly on the structure of their models.

29. Charles E. Ives, Three Page Sonata, 1st edition, Henry Cowell, ed. (New York: Mercury Music Corp., 1949) and 2nd edition, John Kirkpatrick, ed. (Bryn Mawr: Theodore Presser Co., 1975).

30. Kirkpatrick calls the 3-Page Sonata a "takeoff of a sonata" in the "Editor's Notes" to the 1975 edition, p. 14.

31. Memos, p. 155, also Ibid. Kirkpatrick says this note was written "years later" "on a bit of music paper that he pinned on a copy of the Mercury printing." On the top of the first page of a copy of that edition in the Music School Library, Yale University, catalogued 3B15, the following contradictory note is written: "Mostly made as a joke to knock the mollycoddles out of their boxes! (from slip pinned on old mss)".



Ives as the critic of the academic "lilies" writing Germanic music, and of Rollo who "has a job writing his opinion about things the facts of which he doesn't know and doesn't try to know--or about music he doesn't hear or try to know,"<sup>32</sup> and of "softy ears" "running the opera and symphony societies in the country"<sup>33</sup> --in other words, the American musical cultural milieu in which Ives found himself.

#### Memo 5

Ives's angry remarks about music critics are sprinkled throughout Memos; the first part of Memos--it is arranged into three parts--contains Ives's extended responses to specific, contemporary music critics. Ives is particularly angered by William James Henderson;<sup>34</sup> the published version of his diatribe against Henderson in "Memo 5" reflects his somewhat refined and censored typescript. The original manuscript begins: "That God D--lady bird, apron string attached: W J H--Rollo--boy."<sup>35</sup> Ives was undoubtedly provoked by an article Henderson wrote that was printed in the Sun about three years before the memos were begun.<sup>36</sup> The article was based on an interview of Maurice Ravel by Olin Downes, which was printed in The New York Times

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32. Ives, Memos, p. 26.

33. Ibid., p. 41.

34. See Ives, Memos, "Memo 5," pp. 30 through 32.

35. Charles Ives Collection, Music Library, Yale University, Box 26, folder 5.

36. William James Henderson, "Music and Musicians," Sun, Sunday, March 3, 1928.

the previous Sunday.<sup>37</sup> Henderson accepted an opinion given by the French composer "that one potent reason why there was no influential school of American composition was that American writers were still thinking too much about Europe." In a long article, Henderson muses about the state of composition in the United States; he rejects the work of John Alden Carpenter and Henry Hadley, the group of composers that includes Edgar (sic) Varèse, Henry Cowell and their disciples, those who have used American idioms such as the "slave song," and "a certain set of present-day composers who are continually orating about their theories, their methods and their creations" through "incessant and immodest public posturings."<sup>38</sup> In effect, Henderson intentionally attacked all sectors of the musical creativity in the United States. He diagnoses the problem as the lack of an American folk music with deep and widespread cultural roots.

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37. Olin Downes, "Mr. Ravel Returns," The New York Times, February 26, 1928.

38. The last category is probably a second reference to Varèse, Cowell, et al. Elsewhere in the article Henderson says, "some one has got to find some day a musical speech which shall be incontestably the voice of America before we have a position of parity in the musical congress of nations. We venture to predict that the discoverer will not be a disciple of Edgar Varèse, Henry Cowell or even Henry Eichheim." Extracts from a League of Composers concert review by Henderson from the same period state: "Today for every twenty-minute parade of vacuity by a modernist there are a hundred pages of magazine matter dissecting his artistic constitution and translating his his mystic ideals....However, there was one sharply defined conviction which this writer got at the League of Composers concert. He was satisfied that there was not the faintest suspicions of American thought or feeling in the compositions of the Americans represented on the program" (from the New York Sun, December, 12, 1928).

Ives is infuriated that Henderson is following a pattern in 1928 that has persisted for

a century or two--when it comes to art, literature and especially music. They do exactly what Thoreau said " " they did--in 1852--and Mr. Twain said " " in 1880 [Ives wrote open and close quotation marks to be filled in later]. Americans have lost in other matters something of their independence and manhood--but when it comes to a fight to be themselves in their attitudes towards art, poetry, and especially music--they sap-like cringe before the European....W J H...insults the intelligence of old ladies even and they don't know it--he not only is in himself an insult to American music, but to all music.<sup>39</sup>

Ives's disdain of Henderson had a long history, going back to, at least 1905 when he presumably acquired his copy of What Is Good Music?<sup>40</sup> Since no manuscripts which provide the basis for the memos are extant, predating those of 1931 to 1932, it is not possible to date the origination of some of the memos; they are reflections on experiences dating back to Ives's teenage years. They contain perspectives on music he composed throughout his career. Ives was able to write about the music he composed thirty years earlier with the enthusiasm and intensity that could make the memos vital and vivid. Thus, in the following portion of the manuscript version of what became "Memo 5" in the Kirkpatrick edition, past and present concerns are easily blended. Ives wrote:

Rollo Henderson has for over 60 years heard & now knows the nice 3 Fundamental Triads--he also knows how a few more other chords have

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39. Charles Ives Collection, Music Library, Yale University, Box 26, folder 5.

40. See footnote 1 above.

been made into a nice bouquet around them for a 150 years or so...He can, & has been able for many years to detect a fantasia masquerading--see What is Good Music W J H p. 4 for " " [a blank line is provided to finish the idea] & he does not lift his brows at Brahms or convict Wagner of lunacy.<sup>41</sup>

The original statement by Henderson is a criticism of uneducated music critics; Henderson wrote:

No one presumed to pronounce an opinion on the merit of a picture or a statue who had not at least learned the difference between a pen-and-ink drawing and a water-color, and few persons would have ventured to write down Shakespeare an ass before having acquired a sufficient knowledge of poetry to tell a sonnet from a five-act tragedy. But it was deemed altogether fitting and, indeed, intellectually satisfying that Beethoven should be smugly patted on the back, Brahms viewed with lifted brows, and Wagner convicted of lunacy by persons who could not, while in the concert-room, detect a fantasia masquerading as an overture, nor a suite disguised as a symphony--nay, more, who could not tell when the composer dropped the elementary rhythm of the valse to take up that of the polonaise.<sup>42</sup>

Ives's completed insertion in "Memo 5" is a paraphrase of what Henderson wrote, turning Henderson's criticism into a burlesque of itself:

He has been able for many years to detect a fantasia masquerading as an overture, or a suite disguised as a symphony--nay more, he can now tell when the composer drops the elementary rhythm of the valse to take up that of the polonaise. He does not lift his brow at Brahms, and he does not convict Wagner of lunacy (see Rollo's own book, pages 3 and 4).<sup>43</sup>

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41. Ives Collection, Box 26, folder 6.

42. Henderson, What Is Good Music?, pp. 3-4. See footnote 1 above.

43. Ives, Memos, p. 32.

We cannot know if Ives had previously committed this literary parody to paper and later copied from it or if he was working from his memory of ideas that originated in 1905. In the memo (written in 1932) that is meant to function as an "Introduction," Ives wrote that "one thing would come up from another thing--incidents that I or Mrs. Ives...might remember or refer to--various family scrapbooks, old letters, programs, clippings, margins in old books, music and manuscripts."<sup>44</sup> To Ives, even back in 1905, Henderson's interest and pride in knowledge of the music of Brahms or Wagner was anathema to his own interest in progressive musical techniques.<sup>45</sup> The musical parody of Henderson's work in the 3-Page Sonata, described in Chapter 2, can be dated to 1905.<sup>46</sup>

### Marginalia

In the marginalia of the manuscript, we find a comment that identified the piece with "Memo 5." The marginalia are generally sarcastically-worded instructions, obviously satirizing the conservative music critics and academicians whom he attacks repeatedly in Memos for their dependence on classical music as the basis of their

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44. Ives, Memos, p. 26.

45. Ives heard Wagner's "Götterdämmerung" on March 31, 1894 and wrote to his father as follows: "About all I can remember of the orchestra now, is that it was all diminished chords, whole-tones, and trombone. Everything all together is great....But it seems like a great deal of work over nothing." Letter is filed in Ives Collection, Yale University, in Box 33, folder 1.

46. A comment beneath the last measure of the composing score says: "End of '3 Page Sonata' Fini at Saranac Lake with Dave Aug '05.

aesthetic criteria. The following sampling from the comments on the composing score are in the order they appear:

back to 1st Theme--all nice Sonatas must have 1st Theme

March time (but not a March, Rollo)

on II T[ime] ~~X~~ repeat 2nd Theme (as is right! correct  $\Delta$   
from  $\odot$  to  $\odot$ )

on 2nd Time as recap to Coda

on II time we return as is usual to 1st development at  $\Delta$ "

"Now, class, [?] it is right to return to 1st Theme in M III"

"Doh! CHORD O TONICK! GOOD Nit SHIRT"<sup>47</sup>

Ives's note from the third movement of the composing score, "March time (but not a March, Rollo)," establishes an implicit connection between the 3-Page Sonata and the music critic William James Henderson. It recalls Henderson's statement about critics who are unable to tell "when the composer dropped the elementary rhythm of the valse to take up that of the polonaise."<sup>48</sup>

The question of dating the marginalia is not problematic. The handwriting of all the comments, except one, is uniformly small and in keeping with the handwriting of the music. The exception is: "I play the 3 meas. before over again but had something else can't find." The sense of this remark as well as the considerably larger handwriting

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47. Charles E. Ives, glossy print of manuscript of 3-Page Sonata, Ives Collection, negative Q 1770-72, Music Library, Yale University.

48. In the third movement Ives "drops" the elementary rhythm of the march to take up that of the waltz by cleverly combining both. See Chapter 2, p. 22 and pp. 26 ff, "The Rhythms of the Dance."

would suggest that it had been added years later, at a time when Ives's eyesight was beginning to fail. In fact, a comparison to the handwriting of other added to other manuscripts after the scores were completed shows that they also were larger.<sup>49</sup>

The note to pin to the 3-Page Sonata, the marginalia, and the musical parody are all given in the spirit of a challenge to the critic and the music public. By parodying Henderson's own clever words in a musical context, Ives is challenging Henderson at his own game: he is challenging Henderson to understand his innovative, progressive techniques.

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<sup>49</sup>. Handwriting comparisons were made especially with the remarks added to the top of the first edition of the 3-Page Sonata of 1949 and to an empty page related to the Fourth Symphony.

## Chapter 2

### Musical Form and Technique As Vehicles Of Meaning

#### An Explication of the 3-Page Sonata

The meaning of the 3-Page Sonata is articulated through the formal and technical procedures of each movement; the 3-Page Sonata is a satire of eighteenth-century musical conventions. Ives perceived the music of the eighteenth century and music based on it--the nineteenth-century music he knew--to be the music of concert audiences, academics, and critics: it was the paradigm by which they heard all subsequent music and the gauge by which they measured it. For Ives all of this music consisted of "three fundamental chords and a few more that have been made into a nice bouquet around them for 150 years or so." He perceived music society to be "too soft-eared and minded to find anything out for themselves," passively accepting the received wisdom.<sup>50</sup> After the publication of the 3-Page Sonata in 1949, the note Ives attached to his copy of the edition said it was "made mostly as a joke to knock the mollycoddles out of their boxes and to kick out the softy ears!"<sup>51</sup> Ives satirizes eighteenth-century music by distorting the formal procedures associated with the music of that period, developing an innovative pitch organization, and using novel technical devices.

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50. Ives, Memos, p. 30-31.

51. Ibid. p. 155.



Ives's attack of the criticism of William James Henderson is integrated into the 3-Page Sonata. In the first movement Ives creates a parody in music of Henderson's statement about "persons who could not, while in the concert-room, detect a fantasia masquerading as an overture, nor a suite disguised as a symphony." The first movement of this sonata uses fugal procedures although a note on the score refers to "1st theme" and "nice Sonatas"--"nice" is always a term of derision for Ives. The formal design Ives composed has a fugal subject "masquerading" as a first theme and a second theme "disguised" as a fugal episode. (The parallel literary parody contained in "Memo 5" is quoted in the previous chapter.) In the third movement Ives writes in the first measure of the score, "March-time but not a march, Rollo." The third movement marginalia implies a sonata-allegro movement, but the design of the movement is more reminiscent of dance forms; the thematic material, in fact, consists of distortions of several dances. The formal design of the movement is a unique integration of sonata-allegro procedures and dance forms in which neither is readily recognizable. The second movement is a textbook of new techniques. To summarize, through Ives's procedures in the 3-Page Sonata, the subject or content of the music--its program--is realized in a thoroughly original musical setting: the music becomes the program and the program becomes the music.

The programmatic nature of the 3-Page Sonata necessitates the use of an analytical approach which relates the musical materials to the verbal ideas. My analysis proceeds on two levels. The first level of analysis is concerned with the formal, motivic, textural, and tonal

techniques that relate to the program or subject of the music.

Borrowing a term from literature, the first level of analysis is called an "explication," an analytical technique in which a text--here the program--is clarified and interpreted in both the music and literary materials. The second level of analysis, in Part Two, is based on a specific pitch-theoretical framework that is formalized in Chapter 4. This level of analysis unravels the components of Ives's innovative language.

#### Movement One: Formal Procedures

The musical material of the first movement allegro-moderato is nonmetrical, dissonant, and contrapuntal. The thematic motives are abstract and difficult to perceive mainly because the chordal texture of the writing contradicts the contrapuntal material. The opening thematic section begins, in the right hand part, with a half-step down, a minor third up, and another half-step down--the intervals of the B-A-C-H motive from the Art of the Fugue, "Contrapunctus XIXc," in "parallel fourths." Interval-5 is used for the first five dyads and interval-6 for the next three dyads in the right hand part; they are followed by a mixture of different dyads and trichords. This thematic section contains fourteen notes and is twelve quarter notes long (see Example 2.01)

Example 2.01. 1st movement (Allegro moderato), p. 3, system 1-system 2: 4th quarter.

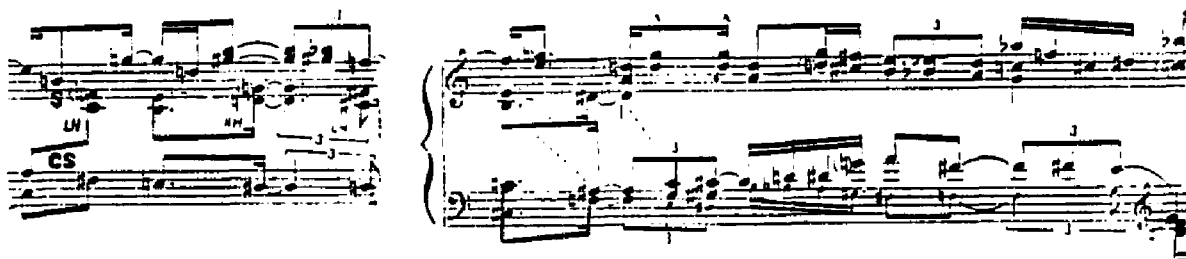
**Allegro moderato**

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S=subject; CS =countersubject

After a bridge one-and-a-half quarter notes in length, the theme is repeated in the alto and tenor voices, a minor sixth below, in an irregular diminution. "Parallel fourths" are used, as before, for the first eight dyads of the thematic section; however, interval-5 is used throughout in the second statement (see Example 2.02).

Example 2.02. 1st movement, p. 3, system 2: 6th  $\sharp$ -system 3: 6th  $\sharp$ .

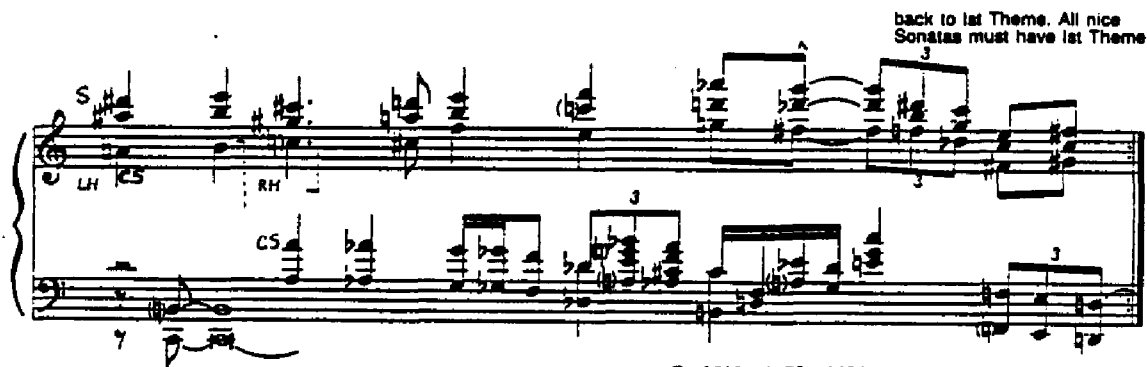


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S=subject; CS=countersubject<sup>52</sup>

For both of these entrances, as well as for the third statement--in inversion on  $D^\sharp$ , a whole-tone above, and displaced by the octave (see Example 2.03)--the same countersubject, with only minor variation, is always used (see Example 2.04); however the interval between the subject and countersubject differs each time.

Example 2.03. 1st movement, p. 4, system 2.

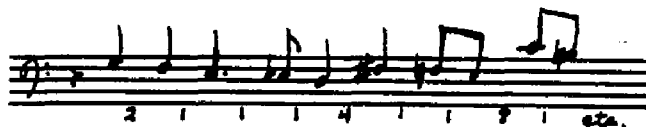


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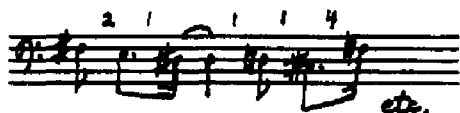
52. The restoration of the countersubject is discussed in Chapter 5.

Example 2.04. 1st movement: countersubjects.

a. CS, 1st entry (S on D<sup>b</sup>), p. 3, system 1: 2nd eighth.



b. CS, 2nd entry (S on F), p. 3, system 2: 6th d, 2nd d<sup>♯</sup>.



c. CS, 3rd entry (S on D<sup>♯</sup>), inverted, p. 4, system 2, 1st d.



d. 2nd CS, 3rd entry, p. 4, system 2: 3rd quarter.



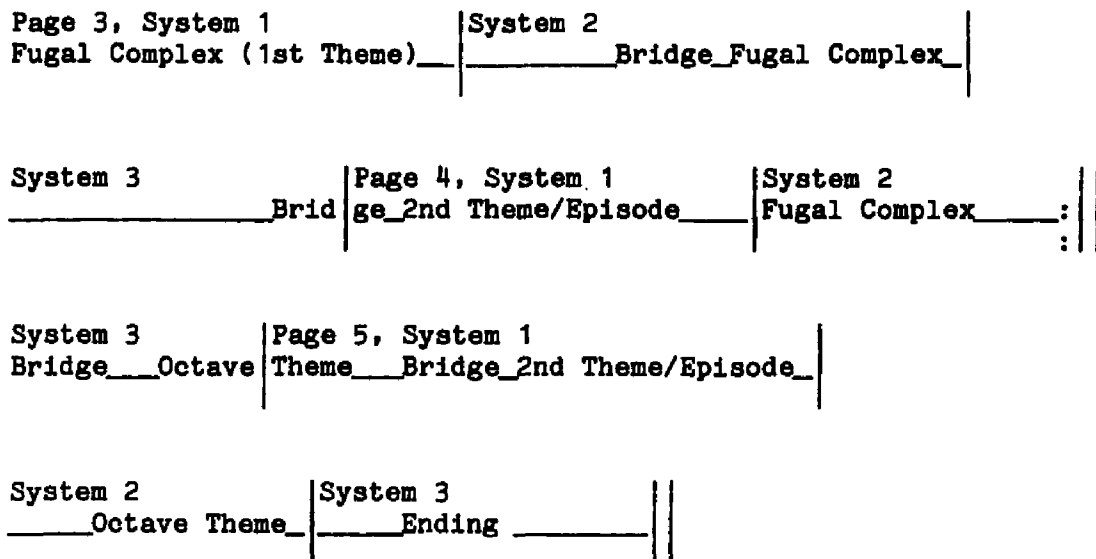
This movement is a type of fugue, i.e. it avails itself of fugal procedures.

Clues to the formal design of this movement are given both in the accompanying extramusical materials and in the procedures themselves. The title of the work and the marginal notes denote a sonata; however a contradiction is created by using fugal procedures: After the third fugal statement Ives gives the instruction, "back to 1st Theme all nice Sonatas must have 1st Theme," and accompanies it with a repeat symbol. The "second theme" first appears between the second and third

statements of the fugal complexes as a fugal episode (see edition, p. 4, system 1: from 2nd quarter through end of system); it is identifiable because of its reappearance, transposed, after the repeated opening section (see edition, p. 5, system 1: 6th quarter through system 2: 2nd quarter).

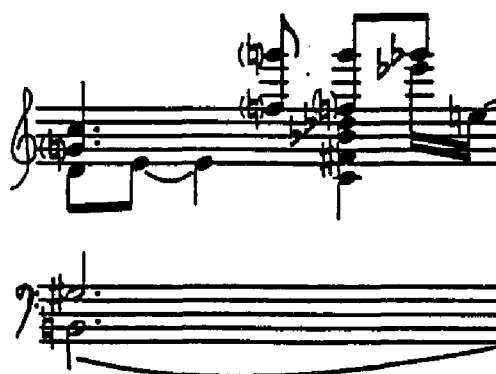
The following chart outlines the overall design of the first movement (see Example 2.05).

Example 2.05. Design of First Movement.



The repeat of the first section and the restatement of the first theme after the double bar are conventions of sonata-allegro procedures. Short bridge sections follow the first and second statements of the fugal statement. While the tonal functions of these bridges will be discussed in the second part of this study, for now let it be noted that changes to simpler textures mark these breaks from the material of the subject. In the first bridge, a higher register is exploited for contrast (see Example 2.06).

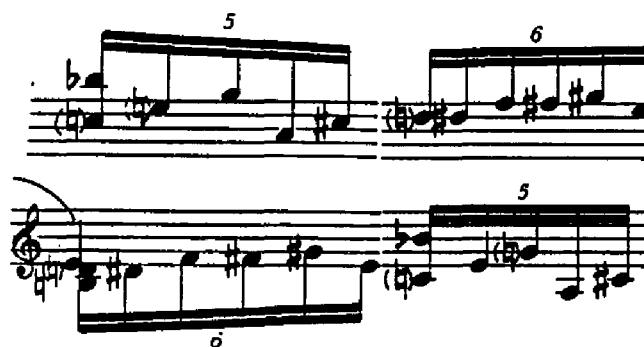
Example 2.06. 1st movement, p. 3, system 2: 4th quarter-5th quarter.



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In the second bridge (see Example 2.07), an example of invertible counterpoint makes another direct reference to Bach's contrapuntal technique--here, however, with rhythmic groups of five against six. The contrapuntal texture of this bridge contrasts with the chordal texture of the fugue.

Example 2.07. 1st movement, p.3, system 3: 6th m -p. 4, 1st m.



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A form such as this one never existed before: the movement uses both fugal and sonata-allegro procedures in contradictory situations. The contradictory procedures are constructed deliberately: Is the first theme the first theme of a sonata or the subject of a fugue? What is the second theme doing between two statements of the fugal complex?

Clues to Ives's thoughts and feelings about the procedures used and to the meaning of these procedures also are expressed in both the literary materials and in the compositional procedures. For example, in the literary materials, the term "nice" (see Ives's marginal notes in Chapter 1) is always used pejoratively; in the music, the fugal procedure in the 3-Page Sonata is effectively destroyed: Ives obliterates the conventionally contrapuntal texture of the fugal complex with chordal textures created by the "parallel fourths" of the subject and by the note-for-note accompaniment of the countersubject. Ives expresses his attitude about the fugal procedure in other contexts also. For example, in Henry Bellamann's program note of 1927 to the Fourth Symphony, undoubtedly prepared with Ives's guidance and approval, the fugue is described as "an expression of the reaction of life into formalism and ritualism," qualities Ives captured in a very simple, even a simplistic fugal composition.<sup>53</sup> (Other examples of

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53. Quoted from Kirkpatrick, "Preface," to Ives, Fourth Symphony, p. viii. To these notes Kirkpatrick added his interpretation of this movement: "In picturing 'the reaction into formalism' Ives could easily have composed a caricature, but it was more in his gentlemanly nature to want to show tradition in a kindly light--especially a family tradition--and the old fugue recalls his own participation with an authentic glow."

Reviewing other examples of Ives's use of fugal procedures, I found that they were in early works and/or had some programatic purpose. The "Fugue in Four Keys," dating from 1896 when Ives was at Yale, is described as "the first serious piece quite away from the



Ives's criticism of the fugal procedure are given in the section below, "Tonal Relationships.")

### Tonal Relationships

The intervallic relationships of the fugal subject entrances are most irregular by the common practice of conventional tonality. They begin on D<sup>b</sup>, F, and D<sup>#</sup> in the upper voices of the parallel fourths. The opening pitch classes of the countersubjects have a startling pattern in their relationships to the subject statements: at the "diminished fifth," "the diminished octave," and the "diminished fifth" again. These relationships are significant in the tonal language to be described in the second part. The opening pitch classes of these countersubject entrances, G, F<sup>#</sup>, and A, are perhaps meaningful in creating the first two of the three intervals of B-A-C-H (see Example 2.04).

Ives's criticism of the "rules" of the fugal procedure vis-à-vis tonal relationships of fugal entries is quite extensive, both in the musical and literary works. Couched in satire and humor, Ives's critical style is nevertheless devastating. In Memos he says,

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German rule book" (Memos, p. 38). The fugue of the 1st String Quartet, called "Chorale," was also a student work written in 1896, later revised for orchestra as the fugue, described above, of the 4th Symphony. Fugal procedures are used to portray a realistic situation ("Arguments," the title of the second movement) in the 2nd Quartet of 1911, a piece Ives says he "started...half mad, half in fun, and half to try out, practice, and have some fun with making those men fiddlers get up and do something like men" (Memos, p. 74). Chromatic Melody seems to have been an intellectual exercise that was never completed by Ives.

To show how reasonable an unreasonable thing in music can be--look at the fugue. It is, to a great extent, a rule-made thing. So, if the first statement of the theme is in a certain key, and the second statement is in a key a 5th higher, why can't (musically speaking) the third entrance sometimes go another 5th higher, and the 4th statement another 5th higher? And if it must hold to the same nice key system, why can't these themes come back in the same way? "Because Bach didn't do it," Rollo says, "and that's the best reason I know." The reasons of the others are not as good as Rollo's. One Mus. Doc. says, "Because it destroys tonality."<sup>54</sup>

This statement was a reflection on experiences he had as a student in Yale. Questioning the validity of conventional key relationships at the fifth, he concludes:

What are the true, fundamental, natural laws of tone? The people who talk and tell you exactly what they are, who teach them explicitly, who write treatises about them--ipso facto,--know less about them than the deaf man who wonders! They measure a vibrating string and want to tie your ears to it. When it's easy to catch the vibration, then it's natural, and they smile. When it's hard, then they scold or get mad, or go to sleep.<sup>55</sup>

Ives's "experiments" with new tonal relationships are described in a number of anecdotes in Memos.<sup>56</sup> In the 3-Page Sonata both interval-8 and interval-9, i.e. the major and minor sixth, play an important role

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54. Ives, Memos, pp. 49 f.

55. Ives, Memos, pp. 49 f.

56. An interesting example is to be found in Ives, Memos, pp. 57-58: "I tried to find three chords that might be used in a similar or parallel sense to the usual tonic, dominant, and subdominant...In this movement, D<sup>b</sup> was taken as the main chord (or the tonic), and B<sup>b</sup> (in this case a tone above the dominant A<sup>b</sup>) was used as the dominant, and the chord of E major (a tone below the subdominant G<sup>b</sup>) was used as the subdominant. These chords have a note in common with the tonic, and B<sup>b</sup> used as the dominant seems to have a stronger resolving value than the subdominant, E major." This description, for "In the Night," is discussed in Chapter 4, "Referential Collection."

in Ives's musical "lessons," replacing the stereotype of traditional tonality in which the "fifth" is the most important prolongational interval, harmonically and melodically, in creating structural definition. The interval-9 dyad C-A opens the first movement in the lower voices and is repeated before the second entrance of the fugal subject an octave higher (see Examples 2.01 and 2.02). The second theme/fugal episode also is accompanied by an interval-9 dyad; it is A<sup>b</sup>-F, a "minor sixth" above C-A, a transposition at interval-8. The second fugal entrance is stated a "minor sixth" below the opening D<sup>b</sup> on F, a transposition at interval-4, the complement of interval-8. When the second theme/fugal episode is stated in the section after the repeat, it is transposed at interval-4, from C to E, the same intervallic relationship that exists between the first two fugal entrances on D<sup>b</sup> and F, respectively. To summarize, interval-9/3 is the important harmonic interval; interval-8/4 is the interval of transposition. These intervals are integral to the pitch class relationships that will be revealed in Part Two of this study.

#### A Word About Ives's Rhythm in the First Movement

The rhythmic dimension of the first movement was also without precedent in 1905. The independence of the rhythmic and pitch parameters, the nonmetrical organization, the irregular divisions of the beats, and the simultaneous polymetric structures were radical departures from the music of the past. In the most complex polymetric construction, these subdivided half-notes are pitted against five subdivided quarter notes. (This passage is discussed in Chapter 5; see Example 5.09.)

### First Movement Conclusions

The caricature of eighteenth-century musical procedures is complete. Traditional tonality has been destroyed despite the appearance of a C pedal-point at the opening (see Chapter 1, Example 1.01). The linear integrity and the clarity of the polyphonic texture are effectively obliterated by the chordal writing; by the lack of rhythmic and recognizable melodic redundancy; and by the undifferentiated metrical flow. The overall impression is chordal or homophonic, with the normal consequence of the contrapuntal procedures reversed. The musical idea of the movement is not to be found either in the imitative techniques of fugue or in the reiterative elements of sonata form, but in the destruction of these procedures--a musical sarcasm, if one permits an affective interpretation, that is consistent with the sarcastic expression in the related "literary" program in "Memo 5."

### Movement Two: Formal Procedures

In the andante-adagio second movement, the parody of the "manner" favored by turn-of-the century taste in America, is accomplished through the blending of Ives's innovative techniques, particularly in the parameters of texture and register, with elements associated with classical style. This movement is actually a compendium of the techniques that are functional in Ives's new language--Ives's Art of the Fugue, his "state of the art," as will be demonstrated in Chapter 5. In this chapter the formal procedures and innovative technical devices which articulate Ives's meaning will be described.

### Texture

The andante-adagio develops a texture that is an important Ivesian innovation. Autonomous layers are established and maintained through polytonality, registral differentiation, rhythmic-thematic identity, and independent meters. This juxtaposition of independent bodies of ideas--musical masses--is projected through the separations of registral space and metrical differences. The texture consists, therefore, of a polyphony of independent structures or layers rather than individual voices. This texture, associated with many of Ives's works, may be Ives's most important innovation in musical style.<sup>57</sup> This technique is more dramatic when orchestra is used; but even in works for piano, Ives uses it to expressive advantage.

The andante immediately offers a contrast to the first movement's quasi-polyphonic technique, with its non-metrical, pervasive quarter-note rhythm and chordal texture. The texture of the second movement is, superficially at least, a homophonic melody and accompaniment, the characteristic texture of conventional slow second movements. However, the appearance of a homophonic texture in the second movement is as deceptive as the appearance of polyphony in the first movement (Ives continues to sarcastically challenge Rollo). In the andante the upper layer in the right hand, consisting of a succession of different

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57. Rudolph Reti wrote: "Ives for the first time in history establishes, or at least tries to establish, in quite a number of his compositions a polyphony of groups. A polyphony in which the elements are not musical lines but full metrical entities which carry within themselves their harmonic and contrapuntal life." From Tonality, Atonality, Pantonality (New York: Macmillan), p. 151.

figurative motives, and the lower layer, consisting of the broken chords of the left hand, coexist in the same time frame as a polyphony of autonomous structures or layers. In the last two measures of the andante a three-layered texture is introduced. The independent, thematic ostinatos of the middle and bottom layers and the melodic top layer, effectively open up a complete texture with three different, simultaneous groups. This polyphony of three layers continues through the following adagio and constitutes the texture for the remainder of the movement.

A shift of interest from motion in time to an awareness of space has taken place.<sup>58</sup> Ives's unique experiences in the discovery of musical space have far-reaching implications for technical innovation. In the context of the 3-Page Sonata, Ives's use of structural multiplicity is presented in the abstract, without complex references to images recaptured from memories of reality. Even the two quotations used in this movement function as vehicles for ideas about music: the quotation fragment in the opening two measures, Proprior Deo, suggests the style of an accompanied song; and "Westminster Chimes," in mm. 19 to the end of the movement, is used as a vehicle for a modulatory sequence.

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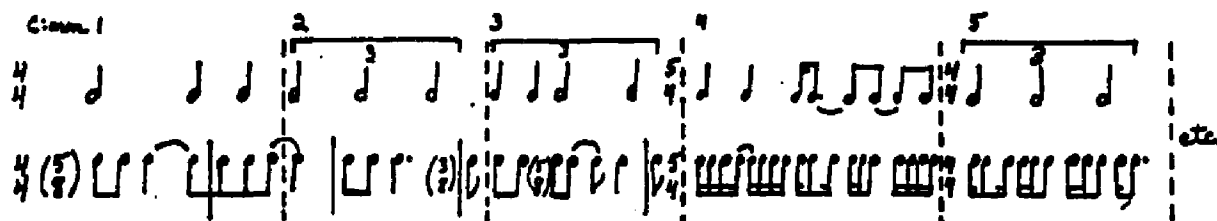
58. See James Drew, "Information, Space, and a New Time-Dialectic," Journal of Music Theory, Vol. 12, No. 1, 1968, for a study of multiplicity, the development of a new dimension in music, and new forms resulting from simultaneously presenting material, developed through study of the music of Webern and Ives.

In the andante-adagio each layer unfolds within its own spatial dimension: through different and contrasting motivic figuration in the upper layer, and primarily through rhythmic and metric variation in each of the three layers. The given meters serve as a frame of reference; the true, perceived meters are articulated by melodic phrases and by simple, repetitive pitch patterns which straddle the measures. The following diagram points out the metrical and rhythmic unfolding within each layer, the autonomy of each one, as well as the variety created by points of metrical congruity.

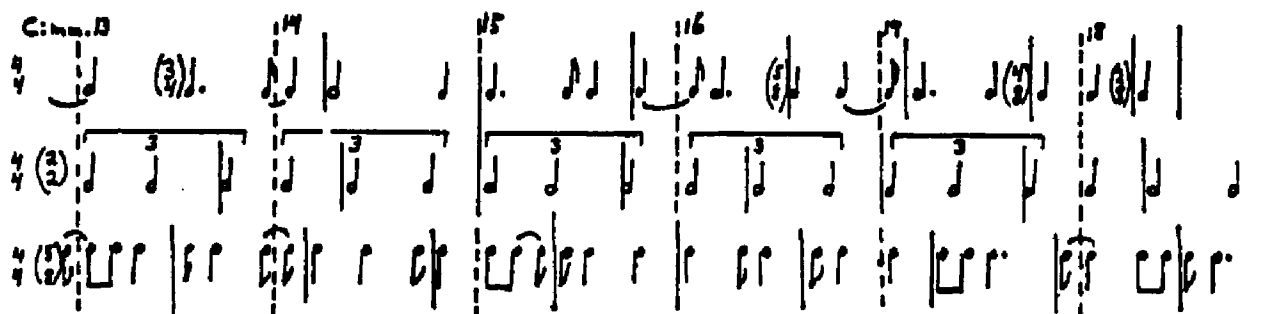
Example 2.08. 2nd movement, mm. 1-5, 13-24, 19-end: rhythmic and metrical variation in three layers.

Broken lines=measures; shorter, solid lines=implied metrical divisions. Given meters are as in ms; implied meters are added in parentheses.

Andante, measures 1-5.



Adagio, measures 13-24.



("Westminster Chimes" in top voice from measure 19.)





From a practical point of view, the amount and complexity of information in the diagram may be misleading. Despite the visual complexity, Ives did not write "eye music": This music was meant to be played and is, indeed, playable. Ives wrote at a time when performers found nothing in their tradition that could help them understand this music. Since then, however, his ideas have been absorbed into the common practice of contemporary music, and they appear in the works of many later composers.

### Tonal Relationships and Formal Design

On one level of analytical perception, the entire movement is organized by an encompassing tonal framework in the bottom layer. The division of the movement into two parts is defined by a change of tempo, andante followed by adagio; by a change in texture, from two to three layers, described above; and by a change in the tonal motion of the bottom layer, from a descending whole tone scale to the "prolongation" of B. In the Andante the bass line descends in whole steps from the G through F, E<sup>b</sup>, C<sup>#</sup>, to B. Each of these bass line pitch classes supports a broken triad, alternating between a major triad and a triad with two interval-7's. B, a transposition by interval-8/4 from G, is the "secondary tonal area"--the synthetic "dominant" of this movement--continuing the practice of the first movement in the use of interval-8 for transpositions of fugal subjects and themes. The adagio section begins with the "B prolongation" in the bottom layer through the simple repetition of the B triad in measures 13 through 18. The return to G in measure 30, the penultimate measure of the movement, is

achieved via a sequential pattern in the bass and middle layers in measures 19 (4th quarter) through 29. In these sequentially "modulating" measures, the "Westminster Chimes" tune is used in the top layer to modulate down melodically through a tritone, from C<sup>#</sup> back to G, maintaining a touch of realistic imaging in the sound of out-of-tune bells coming to rest.

In the context of this tonal framework, the pitch classes G and B, at structurally strategic places in the two-part design of this movement, are analogues, in Ives's composition, to tonic and dominant in binary form movements in diatonic tonality. The motion in the bottom layer from G to B and the return to G relates the two parts of the second movement by a mock "tonic-dominant" polarity. This "modulation" and "return" in a non-traditional tonal context is another joke at the expense of the proponents of classical tonality.

On another analytical level, the whole-tone relationship and the interval-8 transpositions are components of an innovative language in which the triads and trichords, both, have new meaning in the syntactical nature of the language. In Part Two of this study, such pitch class relationships will be shown to function in ways that are unique to that language, ways in which even the suggestion of analogies to diatonic music are precarious.

### Motivic Blocks

Above the pervasive pattern of broken three-note verticalities that make up the bass layer of the entire second movement, there is an unusual variety of motivic constructions in the upper layer of the

Andante and upper layers of the Adagio that create thematic or motivic "blocks." These blocks of motivic material are "lessons" in Ives's techniques in pitch manipulation, several of which will be analyzed in Chapter 5. There are five such blocks in the Andante. In the first block, above the G-D-B triad (mm. 1-3; see Chapter 4, Example 4.03), there is a quoted melodic fragment, "Proprior Deo," beginning on A<sup>#</sup> and suggesting the key of F<sup>#</sup> major. An apparent bitonal relationship exists between the two layers. However, bitonality is but one aspect of how the relationships can be understood; another level of tonal significance exists in the substructure, described in Chapter 4 (see Chapter 4, "Non-Prioritized Partitions," and Example 4.03). Above the F-C-G trichord of measures 4 and 5 (see edition, Appendix IV), verticalities containing perfect fifths are used. The E<sup>b</sup>-B<sup>b</sup>-G triad of measures 6 through 8 is accompanied by another abstract construction, consisting of verticalities with a variety of intervallic configurations, surrounded by overlapping motivic material from both the preceding and succeeding blocks. The fourth set of bass notes, C<sup>#</sup>-G<sup>#</sup>-D<sup>#</sup>, in measures 9 and 10 supports a five-note chord stream (see Chapter 4, Example 4.04 for structural significance of chord stream). And the final set of bass notes, trichord B-F<sup>#</sup>-D<sup>#</sup>, has an abstract melodic figure.

The Adagio is divided into two parts, each of which is an extended motivic block. The motivic idea of measures 13 through 19 lies in the polyphonic texture created by the three independent layers (see measures 11-12). Each of these layers is constructed simply but with the greatest contrast--the quintessential melodic line, two alternating

trichord verticalities, and two alternating broken triads. The independence of each layer is asserted further by their metrical divisions (see Example 2.08, measures 13-24). The "melodic" phrases of the top layer are in changing meters of  $3/4$  or  $6/8$ ,  $5/8$ ,  $4/8$ , and  $2/8$ ; the two middle layer trichords are in a  $2/2$  ostinato; and the bottom layer triad is in  $5/8$ . At no point do all three implied meters coincide in a common pulse; however, in measure 19, at the end of the section, the  $5/8$  and  $2/2$  metric pulses meet--resolve--ending a compound rhythmic cycle. The given meters and rhythms are somewhat less complex: the top and bottom layers are rhythmically congruent in the  $4/4$  meter, but the middle layer has a triplet in the space-of-four.

The motivic idea of the second part of the Adagio, measures 19 through 30, is diametrically opposed to the idea of the motivic block which precedes it although the three layers appear to be similar. The compositional idea lying behind the second section--its "motive" in Ives's lesson plan--is the use of diatonic contrapuntal techniques which are obscured by the new language. The bottom layer and middle layer are part of a sequence in which a rhythmic and tonal relationship is established, based on eighteenth century diatonic counterpoint, translated into Ives's new language. The independent top layer quotes the "Westminster Chimes" tune which is "modulating" down from an implied  $C^\sharp$  major to G major. The nature of the pitch class relationship is described in Chapter 4. The bottom layer has four broken triads in each sequential phrase; the  $5/8$  metrical pattern is continued from the previous section. The middle layer has eight trichords to each sequential phrase; the trichords move in pairs in a  $10/16$  or  $5/8$

lower layers are therefore metrically congruent, sharing the same pulse (see Example 2.08, from measure 19).

### Movement Three

In the last movement, despite Ives's references in the manuscript to "first" and "second" themes, "1st development," and "Coda"--all of which suggest sonata-allegro procedures--the form is related to classical dance movements. It consists of the alternation of two sections, Allegro and Più Moto, or segments from these two sections (see Example 2.09).

Example 2.09. Design of 3rd movement.

I (Allegro)			II (Più moto)			I	II	I	I "Coda"
X		Y	"1st dev."	(ragtime)		X			
a	b	c	d	e	e <sup>1</sup>	a <sup>1</sup> b	e <sup>1</sup>	d	(b) last 8th
		(bd)							
mm 1-10	11-13	14-16	17-22	23-31	32-40	41-53	54-62	63-67	68
						= 1-13	32-40	17-21	

I=Allegro, "1st theme"

II=Più moto, "2nd theme"

X="march time, but not a march, Rollo!" then introduction of waltz above march in m. 11.

Y=3rd 12-note series: first with waltz, then with irregular patterns of "1st Dev."

a="1st theme;" "opening declamation;" 1st 12-note series and march.

a<sup>1</sup>=same as above with added upper layer in right hand.

b=waltz-march combination; 2nd 12-note series.

c=combination of b (waltz) and d; beginning 3rd 12-note series.

d="1st dev.;" continuation of 3rd 12-note series; 4th 12-note series.

e=1st part of ragtime; "2nd theme."

e<sup>1</sup>=2nd part of ragtime; "0 to 0" (Ives's indication for 2nd part).

The design of these sections and the patterns of repetition are related to the binary and ternary forms used in dances and marches. Indeed, since the march, waltz, and ragtime are the three genres which dominate the thematic material, Ives is consistent in letting his ideas evolve out of appropriate, vernacular patterns. By blending these commonly known rhythmic genres with marginalia pointing to the use of a seemingly plausible, classical structure, Ives continues to challenge the musical establishment of 1905.

#### Pitch Motives and Formal Design

The third movement is organized with four twelve-note sets. The opening phrase of the Allegro has an ordering of the twelve pitch classes whose significance, historically, is its referential implications. It is necessary to note this imaginative and innovative conception used in a work written in 1905.

The opening phrase, in measures 1 through 5 (see edition) is accompanied by the instruction "1st time announced alone in octave ff-- as a Preface Declamation! March time (but not a March, Rollo)." The first part of the march section, therefore, is presented first in the left hand alone; in the repeat of that section in measures 41 through 45, new material is added for the right hand.

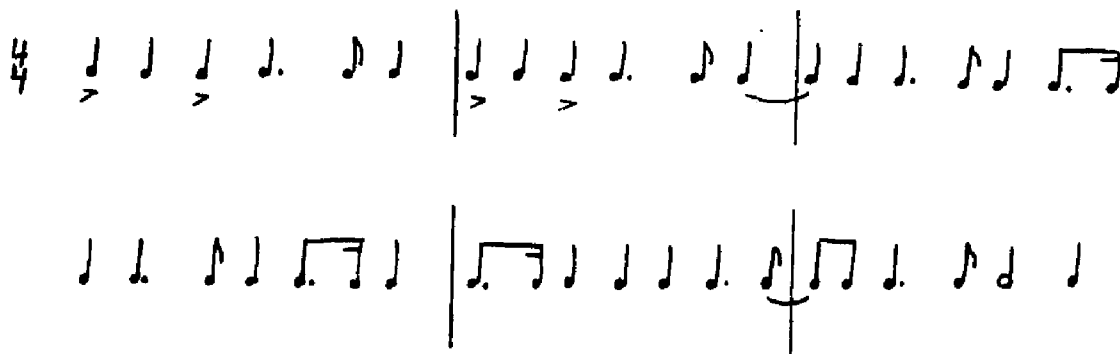
Following the first measure are several measures that have diatonic implications. Measures 2 through 5 establish a passing identity in "C major"; the extension of the march in measures 6 through 8 (46 through 48) has a "bitonal" identity of C<sup>#</sup>/D. The C major scale fragment in measure 5/45 is transposed to D major in measures 8/48.



This series is part of the "1st development" (see Example 2.09).

What Ives calls "1st development" (labeled "d" in Example 2.09, mm. 17-22) is characterized by the apparent randomness of the vertical units of the top layer--each one is constructed differently; by a growth in intensity; and by the anticipation of a diatonic tonal climax for the first ending (created by the simplification of the pitch class material in measure 22--in this measure the entire collection is from C major). Closer study reveals that Ives is composing his "interpretation" of a development section. The growth in intensity in this section is created by the increased density of notes in the right hand verticalities, consisting of as many as eight and the constant variation in the vertical constructions. In addition, the rhythmic groupings in each of the layers individually are constantly varied--a break from the rhythmic regularity of the previous measures. (In measures 14 through 16, the layers share a complex metrical relationship, but the rhythmic patterns of each layer are regular.) (See Example 2.11).

Example 2.11. 2nd movement, mm. 17-22, bottom layer.





The deterioration of the third twelve-note series in the left hand part begins in measure 18 and continues until the Più moto; it accompanies the breakdown in rhythmic regularity in these measures. The movement up the C major scale in measure 22, supported by repeated G's in the left hand, carries dramatic impact; the culmination of this section in the Più moto is a surprising and funny climax.

The Più moto, referred to as "second theme" by Ives, is a tortured ragtime--funny, but insanely so. Melodically this ragtime represents a negation of melody, consisting of only three notes in different combinations. The static accompaniment begins with two measure-long units that are repeated in an a b b a, a b b<sup>1</sup>c pattern (see Example 2.12).

Example 2.12. 3rd movement, measures 23-24.



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Because the ragtime rhythm is instantly recognizable, a relief of tension is experienced, but only momentarily.

### The Rhythms of The Dance

The rhythms and meters of the march, the waltz, and ragtime provide only the most basic material for Ives's rhythmic invention. Complexities develop in stages. The rhythm of the first ten measures is reasonably straightforward. In measures 11 through 13, the waltz in the top layer creates a polymeter with the 4/4 marching bass in the bottom layer.

Coincidental to the beginning of the Y section in measure 14, the meter of the bottom layer changes to six-in-the-space-of-four and is divided by Ives's phrasing into submeters of two and four (see Example 2.13, m. 14, bottom layer).

Example 2.13. 3rd movement, measures 11-22, rhythm and meters.

	m.11	12	13	14	15	16
top layer						
bottom layer						
measure						

	17	18	19	20	21	22
top layer						
bottom layer						
measure						

Broken lines =implied measures. Solid lines =actual measures.




If one hypothesizes that metronomically  $\text{♩}$  equaled 120, the  $\text{♩}$  now equals 180.

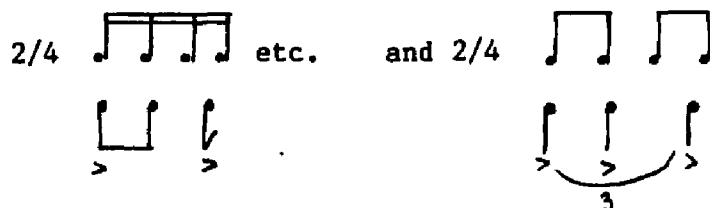
Beginning in measure 18 of the bottom layer, there is a division into a variety of implied metric pulses--implied by the irregular phrases--that include a seven beat group that can be understood as further divided into two and three; a four beat group; a five beat group that can be interpreted as two and three; a six beat group that can be divided into two and four; a three beat group; and a five beat group (see Example 2.13, mm. 18-22, bottom layer).

In the top layer of Y, measures 14 through 22, the rhythmic activity is accelerated and then decelerated, ending with a written-out ritard. In measures 11-16, with a 4/4 given measure, if the  $\text{♩}$  is taken to equal 120, the implied metric pulse of the waltz is 40. In measures 17 and 18, the implied meter is 2/2 in the top layer; the

metric pulse is therefore 60 ( $d=60$ ). In measures 19-21, the four beat measure is changed to a six beat measure. Here the  $\frac{1}{2}$  equals 180 and the metric pulse of the waltz is now 60 ( $d = 60$ ). In measure 22, the original meters--given and implied--are reinstated in the top layer (see Example 2.13, op. mm. 22 and 11, top layer).

The rhythm of the waltz is abstracted and used functionally as a cell in both layers. To reiterate: in the top layer of measures 11 through 16 the pulse of the waltz is 40. In the bottom layer of measure 14, the length of the waltz motive is contracted to  $\frac{2}{3}$  of its original time, with  $\frac{1}{2}$  equals 180, and the pulse of the waltz,  $d$ , equals 60. In measures 17 and 18, when the waltz rhythm does not appear in the top layer, it continues to be used in the bottom layer with  $d$  equaled to 60. In measures 19 and 20, the waltz rhythm returns to the top layer in the faster pulse of  $d$  equals 60. In measure 22 the waltz rhythm, in the top layer, returns to the original metric pulse of the waltz,  $d$  equals 40.

In the Piu moto section, the rhythmically syncopated nature of ragtime, recognized by association with real ragtime, is one level of rhythmic complexity, with its inherent metric divisions through the additive rhythms of three, three, and two:  $\frac{2}{4}$     (see Example 2.12). Greater complexities are created by the metric conflict of the accompaniment of three beats in the space of two; the eighth- and sixteenth-note subdivisions create metrical composite rhythms of 4:3 on two levels:



After the first measure the ragtime groups of two and three are transformed and expanded to include groups of four and five. Because of the abstract melody, the conflict of the polymeters, and the syncopation inherent in ragtime, the music is jagged, tight, and nervous. The Pil moto section is the most difficult to play in the entire piece although the opening metrical ratio is seemingly common--3 against 4. The problem is created by the lack of regular pulses in the ragtime rhythm: the additive rhythm is in conflict with the meter; in addition, Ives adds tied notes to those places where metric coincidence could occur.<sup>59</sup>

Ives wrote many ragtime pieces during the early 1900's. They are highly abstract although their affective moods are varied. Ives was obviously fascinated by ragtime, but not as an expression having inherent autonomous value. He ridicules the idea, popular during the second decade of the twentieth century, that "ragtime is the true

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59. Above the second measure of the Pil Moto, measure 24, in the manuscript is a note which we believe says "(2nd player may join (after box to body)." Kirkpatrick (in "Editor's Notes," Ives, 3-Page Sonata, op. cit., p. 21), believes that this bit of marginalia says, "(2nd player may join [in] after bow to ladies)." Study of Ives's handwriting leads the author to conclude that the words in question may be "box" or "bow" and "body" or "lady" but not "ladies." Either way, Ives's suggestion is made in recognition of the difficulty for the performer of 1905, or any period, to master the metrical contradictions between the parts of the right and left hands. Ives's note is not related to measure 20 [measure 83 in the Kirkpatrick edition], as indicated by Kirkpatrick.

American music."<sup>60</sup> He expresses his thoughts on the subject as follows:

Anyone will admit that it is one of the many true, natural, and nowadays, conventional means of expression. It is an idiom, perhaps a "set or series of colloquialisms," similar to those that have added through centuries and through natural means some beauty to all languages....To examine ragtime rhythms and the syncopations of Schumann or of Brahms seems to the writer to show how much alike they are not. Ragtime, as we hear it, is, of course, more (but not much more) than a natural dogma of shifted accents, or a mixture of shifted and minus accents...Ragtime has its possibilities. But it does not "represent the American nation" any more than some fine old senators represent it. Perhaps we know it now as an ore before it has been refined into a product. It may be one of nature's ways of giving art raw material. Time will throw its vices away and weld its virtues into the fabric of our music. It has its uses...<sup>61</sup>

In the last movement, the essence of the dance, i.e. its rhythm, is distilled, abstracted, and developed into functional cells. The convention of including dance movements in traditional works is satirized, by analogy, through the use of the vernacular waltz, march, and ragtime. These popular and easily recognizable forms are distorted, their most telling and identifiable qualities exaggerated--possibly even vulgarized--in order to communicate an extramusical program and Ives's psychological or affective message.

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60. Ives, Essays, p. 94. Ives found this quote of H.K. Moderwell (1888-?) in an article by Daniel Gregory Mason in The New Republic, October 16, 1915, pp. 247 f. Moderwell was a theater and music critic; he wrote Theater of Today, 1914, and co-edited with Mason the fourteen volume The Art of Music, 1915-1917.

61. Ives, Essays, p. 94.

### Other Interpretations of Form in the 3-Page Sonata

For many years the 3-Page Sonata was thought to be a single movement work, a "genuine sonata movement" in which Ives "occasionally pokes fun at the conventional sonata form," as Henry Cowell described it in the cover notes to the published score of 1949 (henceforth referred to as C).<sup>62</sup> In the context of this study, two questions are raised by the Cowell quotation: the first is, why were the formal design and procedures misunderstood? (On the simplest level, this problem should have been solved by reading the manuscript.) That several stages have been needed to arrive at a definitive reading--with the possibility that some details have still not been clarified or have been missed--is attributable, first of all, to the condition of Ives's manuscript. But another answer must be attributed to the dependence of Ives scholars on conventional musical models as functional vehicles for Ives's music.

The second question is, why were the available extramusical materials, particularly the marginalia, treated so simplistically? The answer to the second question is that (1) the extramusical materials were essentially dismissed because programmatic content was not believed to be needed for an understanding or appreciation of the music; or (2) when the extramusical materials were noted, they were read literally and superficially, but their real meaning was not understood.

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62. Ives, Three Page Sonata, 1949.

When H. Wiley Hitchcock discussed this work in Music in The United States, he said it is "actually a substantial eight minute work" which "compresses the traditional four-movement form into one, with a dramatic first section, lyric slow section, and last section alternating clangorous march motifs and jerky ragtime rhythms."<sup>63</sup> This interpretation describes the nature of the movements and has a conceptual precedent in nineteenth century complex single movement "sonatas," such as Liszt's piano sonata. The pianist Alan Mandel also described this piece as a single movement work: "The movement begins in traditional sonata form." The allegro moderato is Theme I, the andante is theme II: "The first and second theme sections are in appropriate key relationship. Thereafter, the academic sonata-allegro form is satirized."<sup>64</sup>

The piece was properly identified as a three movement work by Sister Mary Ann Joyce<sup>65</sup> and later by H. Wiley Hitchcock<sup>66</sup> and this writer.<sup>67</sup> John Kirkpatrick, as the editor of the second published edition of 1975 (henceforth K), presents an ambiguous picture of this

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63. H. Wiley Hitchcock, Music in the United States, 2nd ed. (Englewood Cliffs: Prentice Hall, Inc.), 1969, reprinted 1974, pp. 163-164.

64. Alan Mandel, "Notes on the Music," from Charles Ives, The Complete works for Piano (New York: Desto Records, DST 6458-6461).

65. Joyce, op. cit., p. 1.

66. H. Wiley Hitchcock, Ives, Oxford Studies of Composers (London: Oxford University Press, 1977), p. 43.

67. Carol K. Baron, "An Analysis of Charles Ives's Three Page Sonata," unpublished seminar paper, May, 1974.



matter. Measure numbering is continuous from beginning to end (bar lines were added to the first movement). The "Editor's Notes" are divided by some tempo indications: divisions are created before the Andante, Adagio, and Allegro by a horizontal line; the più moto is not set off. Therefore the divisions are not devised consistently by either movements or tempo indications. In one note, Kirkpatrick does refer to the "consistent barring of the 2nd and 3rd movements."<sup>68</sup>

The identification of the piece as a three movement work was the first step towards discovering the formal design. The next step was finding the patterns within the individual movements. For example, Cowell's edition transcribed the first movement without indicating that a repetition is called for. In the manuscript, enclosing repetition symbols exist at the beginning of the piece and after the third statement of the subject (see edition, page 4, system 2), where the following note is also placed: "back to 1st Theme--all nice Sonatas must have 1st Theme"). Joyce correctly added the second repetition sign; K wrote out the repetition.


The second movement is not accompanied by satirical comments aimed at the classical sonata but some conflict exists about its form. Joyce says, "The form of the second movement is a binary construction," but "since the final cadence point, measure 30, is similar to the first measure of the movement and, as such, constitutes an abbreviated return to the Part A, the movement might be considered a rounded binary form."<sup>69</sup> Hitchcock interprets the second movement as an "Adagio,

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68. Ives, 3-Page Sonata, 1975, p. 14, 1-30.

69. Joyce, p. 10.

preceded by an Andante and followed by an echo of it."<sup>70</sup> Robert P. Morgan cites a relationship between such short restatements at the ends of movements and Ives's development of a spatial orientation in music which replaces or suspends forward motion. Morgan states: "One of Ives's most pervasive techniques for accomplishing this is to make the motion circular--to make it run back on itself, thereby compromising its sense of forward progression and arrival. The most common form of this is a restatement at the end of a movement of the material that initiated it."<sup>71</sup>

The sequence of instructions for repetitions in the third movement is complex. C observes two of the instructions: in the penultimate measure of the piece Ives wrote, "now class [?] it is right to return to 1st Theme in M III." Despite his identification of the entire piece as a single movement form, Cowell correctly went back to the beginning of the third movement, added the verticalities of the top layer (cf. opening measures 1-5 to measures 41-45), but then ignored the interim marginalia and repeated the entire movement exactly. Arriving at the end of the Piu moto for the second time, C follows the instruction "on II time we return as is usual to 1st development at  " (measure 17). Using my symbols and measure numbers for diagramming the form (see Example 2.09), C's edition leads to the following interpretation:

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70. Hitchcock, Ives, p. 44.

71. Robert P. Morgan, "Spatial Form in Ives," An Ives Celebration, H. Wiley Hitchcock and Vivian Perlis, editors (Urbana: University of Illinois Press, 1977), p. 148.

I Allegro	II Più moto	I(with a <sup>1</sup> )	II	I(d)	"Coda"
mm. 1-22	23-40	1-22	23-40	17-21	last m.
				41-45	

Joyce's interpretation of the third movement is stated as follows:

This movement...is to be viewed as a sonata form because of the inscriptions found in the manuscript....It would appear that Ives conceived this part of the piece as a sonata type movement, although the sequence of themes which Ives clearly labels is A: B: B<sup>1</sup>CA<sup>1</sup>BC Codetta. There is no development section as such, and the recapitulation uses only a repetition--with slight variations--of the exposition. The codetta consists of material from Theme B."<sup>72</sup>

Joyce identifies "Theme A" as the opening six measures. From her edition, "Theme B" can be identified as measures 6-13 (the extension of the march theme in C#/D); B<sup>1</sup> can be identified as measures 14-22. She writes, "If it were not for Ives's referring to 'Theme A' and 'Theme B,' one would probably conclude that Theme B is a continuation of Theme A [which would have been the correct conclusion], and that the movement has but two themes." The più moto section is called "Theme C."

Joyce's edition does not have a repeat of "A." "B" is repeated following the instruction, "repeat 2nd Theme as is right and correct." This instruction is copied into Joyce's edition. However, the complete instruction is "on IInd Time repeat 2nd Theme as is right and correct" and "from ② to ②." What Joyce identifies as the "codetta" is what Ives calls "1st development." The following figure is Joyce's diagram of the third movement with measure numbers, from this new edition, corresponding to Joyce's edition:

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72. Joyce, p. 17.

A:	B:	B <sup>1</sup>	C	A <sup>1</sup>	B	C	Codetta
mm. 1-5	: 6-13	:  14-22	23-40	41-45	6-22	23-40	63-67+"coda"
				(op 1-5)			(=17-21)

Ives's marginalia, "1st development" and "Coda" are omitted;<sup>73</sup> his instructions are, therefore, selectively considered.

The overall solution in K to Ives's instructions for the formal design in the third movement is correct. (One error, made in K concerning a repeat sign in the measures 2-4, will be noted in Chapter 5.)

Clearly, the relative illegibility of the manuscript, which is a composing score, has been at the source of the various misreadings of the design; however, Ives's intentions are, overall, incontrovertibly indicated for the smallest details. I have considered the reasons for the discrepancy between Ives's notation and marginal notes and finally concluded that the problem arises from a need on the part of commentators to communicate their understanding of Ives's form through comparisons to classical forms. This procedure cannot work in this piece which was written, in my opinion, to satirize the classical forms on the intellectual level and to destroy them on the affective level.




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73. Joyce, pp. 17-19.

### Some Conclusions About the Manuscript

Visually the manuscript is difficult to read because Ives's handwriting is sloppy: it is made up of fast strokes, obscured at times by erasures, overwriting, and crossings-out by means of broad circular motions. Nevertheless the design is clear. A superficial glance at the manuscript leads to the identification of sections separated by heavier double bars as well as by tempo marks. With somewhat closer study of either of the published editions or the manuscript, one realizes that "sections" are clearly distinguished by identifiable thematic materials which are discretely contained. The manuscript reveals that the double bar before the andante (beginning of the second movement) and the one at the end of the piece, are darker than other double bars and use additional strokes. The double bar separating the second and third movements is simply and clearly written.

Ives uses double bars in a variety of other, generally conventional contexts. In the first movement, double bars with repeat signs surround the opening section, from the beginning through page 4, 1st system; after the 3rd quarter. In the second movement a double bar is placed just before the last two measures. It draws attention to the fact that the penultimate measure marks a return to the first measure of the movement. The last measure was rewritten; the crossed-out version had a fermata over the last chord which, I believe, was inadvertently not placed in the amended measure. In the third movement, which has the most complex design, double bars are used in five places besides the ending. The first two of these are a pair of

repeat marks surrounding measures 11 through 13. Since Ives writes in the manuscript in the top stave of measures 14 through 16, "I play the 3 measures before over again--had something else can't find," the repeat symbols refer to the top layer only, over the new material introduced for the bottom layer. The third use of the double bar is between measures 16 and 17 and is accompanied by the symbol , which Ives elsewhere identifies as marking the "1st development." It is a point to which the performer is instructed to return. The fourth use of the double bar is before the Piu moto, which indicates a change in tempo; a new key signature is added here. The fifth use is before the "Coda"--the last measure. Instructions accompany the double bar to return to the "1st Theme in M III," "to , a symbol repeated in measure 1, and "on II time we return as is usual to 1st development at .

All of these uses involve the repetition of material. Somewhat unusual repeat symbols are used to surround the material from the middle of the second measure to the end of the fourth measure because they use single lines with double flags:  .

#### Other Interpretations of the Signification of the Formal Designs and Marginalia

The misjudgments that make up much of the interpretations of Ives's procedures bring to mind Ives's criticism of abstract music and abstract art in general (see Chapter 1) for its imprecision in communicating the ideas underlying the work or for its lack of ideas. The problem of formal interpretation is not a universal musical one: it is Ives's aesthetic which makes awareness and pursuit of the programmatic aspects of compositional procedures a necessary component of the musical experience.

Ironically interpretations of the signification of this piece have been based on the marginalia on the manuscript more often than on the musical procedures. Cowell, quoted above, thought Ives was writing a "genuine sonata movement" in which "he occasionally pokes fun at the conventional sonata form," a reflection, we must conclude, of Cowell's sense of what Ives was about: the sarcasm of the marginalia was turned into a gentle spoof which in turn placed Ives in the past aesthetic tradition. Joyce introduces her analysis as follows: "The general scheme for the three movements is allegro moderato (improvisatory) for the first movement; andante and adagio (two-part form) for the second movement; and allegro (sonata form) for the third movement."<sup>74</sup> Of the third movement, she states: "This movement...is to be viewed as a sonata form because of the inscriptions found in the manuscript;" and "though Ives 'poked fun' at the form, he nevertheless admired the general principle on which the sonata is based: contrasting ideas that develop towards resolution, reconciliation, and unity."<sup>75</sup>

Hitchcock's interpretations of the work in Ives is closer to Ives's intentions.. He writes,

The work has satirical aspects...; the sonata's brevity...is a kind of jab at tradition (of the sort Milhaud was later to perpetrate in his three-minute symphonies and opéras minutes): and the manuscript has spoof marginalia...Nevertheless, although there are passages of great good humour, the music is seldom funny, and it has depths of inventiveness and integrity that belie its brevity. It may be an anti-sonata but it is not a parody."<sup>76</sup>

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74. Joyce, p. 2.

75. Ibid., p. 17.

76. Hitchcock, Ives, p. 44.

Of the last movement, Hitchcock writes: "All these dance rhythms--march, waltzes, ragtime--are basically simple, jaunty ones, but in context here everything is askew. Obviously, Ives planned very carefully that it be askew."<sup>77</sup>

John Kirkpatrick's interpretation of the sonata expresses the nature of the conflict he experiences about the music and the accompanying literary material in the marginalia. In the introduction to his "Editor's Notes," he writes as follows:

Apparently he composed it as a take-off of a sonata, and years later wrote a memo on a bit of music paper that he pinned on a copy of the Mercury printing: "made mostly as a joke to knock the mollycoddles out of their boxes and to kick out the softy ears!"

Given this take-off character, it is surprising that the piece contains the B-A-C-H motif..., a theme that Ives would have regarded most reverently. It is just possible that, after concocting Holding Your Own for Gustave Bach in 1903 "in memory of his old forebear" (Memos, p.34. 264), Ives may have felt he'd treated Bach facetiously, and been haunted by an impulse toward some worthy act of devotion. What more worthy than a vigorous composition aspiring to a Bach-like integrity and filled with Bach's name, first like a statement of allegiance, later like a private secret.<sup>78</sup>

Kirkpatrick is expressing his loyalty to traditional forms and his belief that Ives respected those forms as the basis of his own work.

Skepticism about the strength of Ives's aesthetic convictions and about the power of Ives's musical intellect have led to misinterpretations of the signification of Ives's music. The relationship of the marginalia and memos to the music have been treated superficially.

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77. Ibid., p. 46.

78. Ives, 3-Page Sonata, "Editor's Notes."



Attempts to use classical concepts and terminology to describe this work are as defeating as trying to fit the work into classical formal molds. In the marginalia, Ives's use of conventional formal terminology was sarcastic--a clue to the underlying meaning. It was not an indication of Ives's use of the forms or the formal components he was ridiculing, except in satirizing the form itself. On occasion Ives used classical forms in his mature work to create the musical metaphor whose essence could be captured through the use of a particular form or procedure, such as with the use of a fugue for one of the movements in the Fourth Symphony, described as "an expression of the reaction of life into formalism and ritualism."<sup>79</sup>

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79. See page 29, above, and footnote 54.

## Part Two: A Theory of Pitch Organization

### Chapter 3

#### Introduction: "What Part of Substance Is Manner?"<sup>80</sup>

Part One of this study, containing the first level of analysis, has considered the formal, textural, motivic, and tonal techniques that relate to the extramusical ideas--the program, or subject or "substance"-- of this music. The second level of analysis, in Part Two, focuses on the music-linguistic dimensions, what Ives called its "manner" --the vehicle or medium through which "substance" is conveyed. It will be shown that in Ives's aesthetic vision, the substance-manner dichotomy does not exist: these philosophical concepts merge as vital aspects of any authentic art, becoming aspects of each other.

As good performances of Ives's music become more available, it becomes clearer that an individual signature can be recognized. Pondering the factors of recognition by which this composer is generally identified, such as a great variety of technical devices, the use of quotation, and juxtapositions of incongruent tonal segments-- diatonic, whole-tone, atonal, polytonal, and quintal, quartal, and "piano drumming" harmonies--clarifies some part of the aural experience, but hardly in a substantial or reliable way. Even within the confines of discrete sections, Ives's music most frequently

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80. Ives, Essays, p.199.

maintains its identity. The "Ives sound" pervades the simplest works as well as the Concord Sonata and the Fourth Symphony. The consistency of this impression, identifying Ives's work (despite its great variety) and not that of any other American musical "quoter" or "experimenter," is both impressive and puzzling since the analysis of pitch organization, the factor most closely associated with the composer's sound or sonority, has been so elusive. This puzzle therefore calls for some attempts at unraveling: are there factors that create the Ives sound?

Ives's use of new sonorities and techniques can be traced to several motives. Among them we include

- 1) his place in the turn-of-the-century musical crisis,
- 2) his search for techniques that could reproduce analogues of real objects and ideas,
- 3) his exploration of the possibilities that exist in nature, and
- 4) his pervading belief in progress.

#### Ives's Place in the Turn-of-the-Century Musical Crisis

Both Ives and his father before him developed musical ideas that had not previously been expressed.<sup>81</sup> Ives recalls his father's own experiments with microtones<sup>82</sup> and his fostering innovative thinking

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81. See David Eisman, "George Ives As Theorist: Some Unpublished Documents," Perspectives of New Music, Fall/Winter, 1975. In the documents discussed, George Ives exhibits an extraordinarily original, critical mind. He writes about the misleading aspects of musical terminology (which impose affect-like implications, e.g., the "dominant"), the visual distortions of staff notation, and the misrepresentation of chromatic notes by imposing diatonic note names. He actually developed a system of integer notation. In his discussion of consonance and dissonance, he implies that such discriminations are a matter of habit.

82. Charles E. Ives, "Some 'Quarter-Tone' Impressions,'" in Essays, pp. 105-119. Originally published in Franco American Musical Society Quarterly Bulletin, March, 1925, p. 27.

that led to discovering new chords<sup>83</sup> and new rhythmic combinations.<sup>84</sup> An idea apparently developed by his father, called the "Humanophone," involved dividing melodic lines with wide leaps among different voices--an idea later developed by Webern.

One explanation of Ives's innovations in relation to the mainstream of European contemporary music at the turn of the century, is given in the following comment by Stephen Blum:

Ives's isolation from the work of his European contemporaries makes his career a particularly illuminating example of the manner in which musical techniques may evolve along similar lines from common pressures (and from the potential for change inherent in existing techniques), rather than from direct "influence." Despite his relative ignorance of the history of European music, Ives stands as one of the important composers who were led by the effects of Wagnerism to question the workings of musical syntax and rhetoric in somewhat abstract terms--a role he shares with Mahler, Busoni, and Schoenberg; with Debussy and Stravinsky; with the late Liszt and the early Bartók.<sup>85</sup>

This view of Ives's achievement is placed in the context of a discussion of Ives's intellectual engagement with current social, philosophical, political, and economic realities--the source, Blum says, of what Ives describes as "a constant anxiety" which impelled him in the creative directions he took.<sup>86</sup>

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83. Ives, Memos, p. 120.

84. Ibid., p. 139 f.

85. Stephen Blum, "Ives's Position in Social and Musical History," Musical Quarterly, 1977, p. 479.

86. Blum, p. 463.

Another explanation of his innovations, Ives's own, was stated to some extent in "memoranda started as an attempt to put down in some definite shape some of the things I'm asked about concerning my music."<sup>87</sup> What follows is, in fact, a discussion in "abstract terms" despite its colloquial language:

So they call [these things] unnatural, unmusical, un-meaning, based on no laws of art, nature, or humanity--when as a matter of fact they're based on deductions from quite simple premises, suggesting other logical premises from similar processes, but almost too self-evident to need explanation.

For instance Father used to say, "If one can use chords of 3rds and make them mean something, why not chords of 4ths? If you can have a chord of three notes and [one of] four, alternating and following, why not measures of 3/4 and 4/4, alternating and following?"<sup>88</sup>

This attempt to formulate some "definite shape" is hopelessly thwarted by Ives's ambivalence towards the musical public he is addressing, expressing both disdain and an intense desire to be understood. The painful distance between him and that public, including the professional musical world, is mitigated by invoking his father as a defense and arbiter of musical thought.<sup>89</sup>

Reading Ives's writings in Memos and Essays Before A Sonata, I find that Ives's mind is most incisive and forceful when he speaks

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87. Ives, Memos, p. 136.

88. Ibid., p. 140.

89. Frank Rossiter explains the bases of Ives's relationship to his New England society, to his father, and to America's mainstream cultural values as having a neurotic, as well as a sociological, basis that hindered Ives's artistic pursuit and achievement in Charles Ives and His America.

about musical techniques. The technical and mathematical aspects of musical composition were of genuine interest to Ives even if he did not pursue them with any specificity or depth. He shares this indifference toward explaining the analytical-theoretical processes with other composers who were his contemporaries, such as Stravinsky, Bartok, and Bloch. However the lack of systematic explanations does not indicate ingenuousness about the role of a musical language in the compositional process. After all, the analytical-theoretical aspects of composition are, generally, the creative or re-creative concern of scholars and critics, not composers.

#### Ives's Search for Musical Analogues

Ives's search for musical analogues of real objects and intellectual concepts led to his development of innovative musical techniques, such as serialism<sup>90</sup> and metrical and tonal complexities. Some of his work with mimetic techniques were in experimental pieces that he called "takeoffs." He describes them in Memos as follows:

"Right or wrong, things like these--hardly more than memos in notes--show how ones's mind works. The only value probably of some of these things was that, in working these sound-pictures out (or trying to), it gave the ears plenty of new sound experiences--it strengthened the ear muscles, and opened up things naturally that later were used naturally and spontaneously."<sup>91</sup>

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90. Nachum Schoffman, "Serialism in the Works of Charles Ives," Tempo 138, September, 1981, pp. 21-32.

91. Ives, Memos, p. 64.

In maturity Ives concluded that these techniques had little value in themselves, that they were important only in their ability to transmit ideas--a program or a metaphorical image of the "Over-Soul."<sup>92</sup>

Blum suggests that "Ives aimed to elaborate musical structures which might measure up to the burden imposed by his awareness of the unrealized prospect for democracy in America." Original and insightful, Blum continues, "It was precisely through his 'anxiety' concerning possible relationships among sounds that Ives sought to criticize the forms of social stratification reflected in mechanistic notions of 'materials' and 'idioms,'" such as those suggested by Henry Cowell's "resources."<sup>93</sup>

Frank Rossiter agrees with Blum's evaluation of Ives's relationship to his contemporary social and political milieu; however, Rossiter's evaluation of Ives's achievements is antithetical to that of Blum. He says that "Neither in music nor in politics was Ives engaging in that 'search for order'...found to be characteristic of urban and professional men in the early years of the century," to which both Rossiter and Blum acknowledge Ives's opposition. Rossiter believes Ives was naive and a conservative, tied to nineteenth-century thought in these areas: "In opposing the politicians, capitalists, and other

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92. Ives wrote: "Occasionally something made in this calculated, diagram design way may have a place in music, if it is primarily to carry out an idea, or part of a program subject-matter, as in the above; but generally, or too much, or alone as such, it is a weak substitute for inspiration or music. In Memos, p. 164, from a marginal memo on pp. 10-11 of the pencil score of Majority in Ives Collection (5B10), Yale University.

93. Blum, p. 465.

leaders who (he felt) were frustrating the will of the people. Ives was placing himself in an old American tradition, the tradition of opposition to European autocracy and tyranny."<sup>94</sup>

Rossiter criticizes Ives for not having as his goal a principle of order comparable to that of Schoenberg and his followers:

He [Ives] was not capable of the complete intellectual overhaul of Western music that Schoenberg later effected. But he was freed from that necessity by an American come-outer tradition which held that one might withdraw from existing institutions and systems without feeling obligated to erect new ones in their place; it was enough to follow the promptings of one's own intuition, and this very unsystematic approach enabled Ives to compose music more advanced than anything being done in Europe at the time.<sup>95</sup>

I would suggest another critical position, i.e. that Ives's goal was to represent multiplicity, a different kind of "order." He achieved this through the juxtapositions of quotations, of diverse realistic images, of vernacular expressions and elitist art, of independent groups of musical constructions, of sacred and secular--together representing the totality of life and even chaos. Multiplicity is an organizational principle which had as its ideological analogue Ives's view of social organization and dynamics and was invoked, when it was appropriate, for the "idea" of the music. He was seeking "a language so transcendental that its heights and

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94. Rossiter, p. 138.

95. *Ibid.* p. 312. This presumptive lack of order was the basis of the negative evaluations of Ives's music by Elliott Carter ("The Case of Mr. Ives," *Modern Music*, XVI, 1939, pp. 172-76 and Virgil Thomson ("The Ives Case," *New York Review of Books*, XIV/10, 1970; reprint in *American Music Since 1900* [New York: Holt, Rinehart and Winston, 1971], pp. 22-30).



depths will be common to all mankind,"<sup>96</sup> where the "unity and the over-soul, or common heart" are "paralleled" through the "art activity."<sup>97</sup> In retrospect, expressions of multiplicity can be recognized in the work of Ives's more conservative European contemporary Gustav Mahler. Critical studies of multiplicity as an aesthetic goal have yet to be made.<sup>98</sup>

The representation of realism in Ives's music was at one with the intellectual and artistic currents of his time. In the advanced circles of thought at the turn of the century, the works of Morton Prince, William James, and others called for an awareness of the representation of human consciousness on the level of memories and "stream of consciousness."<sup>99</sup> Structural similarities are drawn by Perry between various works of Ives and those of the realist American novelists<sup>100</sup>; the similarities of these artists vis-à-vis their fundamental moral orientation is noted and pointed to as a peculiarly American aesthetic approach to realism.

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96. Ives, Essays, p. 8.

97. Ibid. pp. 99 f.

98. William Brooks in "Unity and Diversity in Charles Ives' Fourth Symphony," Yearbook for Inter-American Musical Research, X, 1974, analyzes the first movement of the Fourth Symphony from different parameters, showing the ways in which they are interrelated and unified.

Multiplicity is very different from the abdication of order, organization, and history, with which John Cage credits Ives in Michael Zwerin, "A Lethal Measurement," in John Cage, Richard Kostelanetz, ed. (New York, 1970), pp. 163-64.

99. Perry, pp. 40-42.

100. Ibid. pp. 63-65.

In the world of the visual arts, especially painting, realism was a cause célèbre in New York at the turn of the century. The similarities between Ives's work and his intellectual interests--especially in the ideas of the Transcendentalists--and those of his contemporaries known as the "New York Realists," pejoratively known as the "The Ashcan School," is most striking. (The notoriety which surrounded their work was grist for the mass media mill of that time--the daily newspapers; Ives was certain to have been aware of them.)

It becomes more and more apparent that the isolation that is associated with Ives's work as a composer and, indeed, his intellectual life did not impede his ability to develop as an innovator, artistically representative of the avant-garde of his own time.

#### Ives's Exploration of Nature's Potential

Ives's exploration of the possibilities that exist in nature stem from Transcendentalist philosophy and particularly from Thoreau's metaphysical concept of music. The Thoreau chapter in Essays<sup>101</sup> begins: "Thoreau was a great musician, not because he played the flute but because he did not have to go to Boston to hear 'the Symphony'....He was divinely conscious of the enthusiasm of Nature, the emotion of her rhythms, and the harmony of her solitude."<sup>102</sup> "In her, he found an analogy to the fundamental of Transcendentalism."<sup>103</sup>

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101. Ives, Essays, pp. 51-69.

102. Ibid. p. 51.

103. Ibid. p. 54.

Charles Ward writes that Thoreau "was intensely interested in perceiving what he thought to be the inherent musical qualities of the sounds and 'silences' of nature, but he also believed there to be a transcendental music behind these sounds of nature....Thoreau's particular understanding of music comes from an idealistic belief in Nature as a manifestation of the Spirit and in music as a realm of the Spirit expressing itself."<sup>104</sup> Ives's interpretation of this philosophy, according to Charles Ward, was expressed in various ways, such as the belief that music was the idea, spirit, or substance.<sup>105</sup>

Some musical experimentation was motivated by Ives's belief that he was releasing the "innate goodness" and "moral influences" of Nature. "Mother Nature, if man will but let her, will keep him straight--straight spiritually, and so morally and even mentally....she will reveal mysteries that mankind has long concealed."<sup>106</sup> To Ives musical innovation was a way of unlocking these mysteries and partaking of nature's bountifulness. In discussing his quarter-tone compositions, he says:

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104. Charles Ward, "Charles Ives's Concept of Music," Current Musicology, 18, 1974, p. 115 f.

105. Thoreau's transcendental philosophy of music can be traced to the early European Romantic thinking. See Friedrich Blume, "Klassik," Musik in Geschichte und Gegenwart, VII, 1031-32; trans. M.D. Herder-Norton, Classic and Romantic Music, (New York, 1970), p. 111; and M. H. Abrams, The Mirror and the Lamp, (London: Oxford University Press, 1953), reprinted as an Oxford University Press paperback, 1976, pp. 93-94.

106. Essays, pp. 53 f.

It will probably be centuries, at least generations, before man will discover all or even most of the value in a quarter-tone extension. And when he does, nature has plenty of other things up her sleeve. And it may be longer than we think before the ear will instinctively arouse and amplify the spiritual consciousness.

But that needn't keep anyone from trying to find out how to use a few more of the myriad of sound waves nature has put around in the air (immune from the radio) for man to catch if he can and "perchance make himself a part with nature," as Thoreau used to say.

Even in the limited and awkward way of working with quarter-tones at present, transcendent things may be felt ahead--glimpses into further fields of thought and beauty.<sup>107</sup>

#### Ives's Belief In Progress As A Principle of Necessity in Life and Art

Ives believed in evolution in the arts and in man's social institutions. He suggests a "platitude, viz., that progressive growth in all life makes it more and more possible for man to separate, in an art-work, moral weakness from artistic strength."<sup>108</sup> In Memos we read his criticism of contemporary music education:

I am fully convinced [that] if music be not allowed to grow, if it's denied the privilege of evolution that all other arts and life have, if [in the] natural processes of ear and mind it is not allowed [to] grow bigger by finding possibilities that nature has for music, more and wider scales, new combinations of tone, new keys and more keys and beats, and phrases together--if it just sticks (as it does today) to one key, one single and easy rhythm, and the rules made to boss them--then music, before many years, cannot be composed--everything will be used up--endless repetitions of static melodies, harmonies, resolutions, and metres--and music as a creative art will die--for to compose will be but to manufacture conventionalized MUSH--and that's about what student composers are being taught to do.<sup>109</sup>

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107. Charles Ives, "Some 'Quarter-tone' Impressions," Essays, p. 109.

108. Ives, Essays, p. 75.

109. Ives, Memos, p. 48.

Ives's intense concern with originality and experimentation--"the deductions from quite simple premises"--are in seeming conflict with the dichotomy that Ives adapted from Emerson of "manner" and "substance," a rough equivalent of the more conventional form and content. In fact, he expresses his sense of the necessity for "manner" to be innovative for its own sake. Ives's resolution is anticipated in the question, "what part of substance is manner?"<sup>110</sup> His explanation follows:

Many will resent the abrupt separation that a theory of duality in music suggests and say that these general subdivisions are too closely inter-related to be labeled decisively "this" or "that." There is justice in that criticism....Some will hold...that manner has a great deal to do with the beauty of substance, and that to make a too arbitrary division or distinction between them is to interfere, to some extent, with an art's beauty and unity. There is a great deal of truth in this, too. But on the other hand, beauty in music is too often confused with something that lets the ears lie back in an easy chair. Many sounds that we are used to do not bother us, and for that reason we are inclined to call them beautiful. Frequently--possibly almost invariably--analytical and impersonal tests will show, we believe, that when a new or unfamiliar work is accepted as beautiful on its first hearing, its fundamental quality is one that tends to put the mind to sleep. A narcotic is not always unnecessary, but it is seldom a basis of progress--that is, wholesome evolution in any creative experience. This kind of progress has a great deal to do with beauty--at least in its deeper emotional interests, if not in its moral values.<sup>111</sup>

In the 3-Page Sonata Ives found a way to make a quasi-theoretical and decidedly intellectual statement about his own music at the same time that he satirized fashionable music. To some extent the innovative nature of the language of this composition has already been

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110. Ives, Essays, p. 99.

111. Ibid., p. 97.

pointed to. The depth and extent of that statement now needs to be established. Our goal is to investigate the grammar and the syntactical relationships that Ives created to articulate the musical ideas of this work. I will show that whereas the musical ideas articulated his philosophical ideas about his music and contemporary musical culture--the program of the piece--his new musical language articulated the musical ideas.

## Chapter 4

## A Theory of Pitch Organization

If he should sometime be compelled to listen, or try to hear, and then try to tell others what is going on in this music, first from a technical standpoint...in the fundamental problems that have to do with all music in general...what would he say? What would he tell the public about what is taking place, as to its form, as to its tone-associations, as to its rhythms, as to its tonalities (poly-, a-, or others), its divisions of tones, as to the recurrence or sequences of the musical thought, its sound-centers, the relation of the different groups of tones and intensities, etc. etc? In the premises, what would he do?<sup>112</sup>

In this chapter we have set as our task uncovering some of the consistent characteristics of Ives's language and technique. By revealing the underlying structures in the 3-Page Sonata, we are suggesting a more systematic picture of how Ives composed than has been hitherto realized.

The 3-Page Sonata is program music in which the extramusical components are operative on every level of the compositional process and must be recognized in the process of understanding this music. The literary components of the extramusical dimensions are the note Ives pinned to his copy of the 3-Page Sonata, "Memo 5" which includes the parody of a section of a book by the critic William James Henderson, and the marginalia on the composing score. These materials are discussed in Chapter 1. The meaning of the formal design of the 3-Page

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112. Ives, Memos, "Memo 5," p. 32.

Sonata as an expression of the extramusical program was described in Chapter 2: One aspect of the program is the satirization of eighteenth-century musical techniques in the formal design of the work. The extramusical program is also expressed on a pitch-structural level, showing this work to be a compendium of Ivesian techniques. In this sense the 3-Page Sonata can be thought of as Ives's Art of the Fugue, although Bach wrote his work at the end of his career and this piece comes at the beginning of Ives's mature period.

All three movements consist of short sections, motivically identifiable as formal units, each one demonstrating a different compositional technique. The work is richly conceived as a demonstration of the techniques through which Ives could express his new language. This language is also, in part, tied to the articulation of an extramusical dimension. The nature of this underlying musical language--"its tonalities...its divisions of tones...its sound-centers, the relation of the different groups of tones"--and a number of Ives's compositional techniques are the concern of this chapter.

Systematic means are used to replace the centric nature and syntactical relationships of diatonicism (while retaining some but not all of its characteristics) with the new relationships and characteristics of a cyclically-evolved language. George Perle addresses himself to "the special properties of these 'non-reflexive' components of post-diatonic music" i.e. those not dependent on contextual meaning, which "derive from their cyclic partitioning of the tone material."<sup>113</sup> The questions that will be addressed are related to

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113. George Perle, Operas of Alban Berg, Vol. 2, Lulu (Berkeley: University of California Press, 1985), pp. 198 ff.



the objectives and goals of this composition. The analogies made to diatonicism, inevitable as they may be in the struggle to understand new musical approaches to composition, are generally only somewhat valid; they are however valid, here, in the context of describing the development of an innovative language by a composer dependent on diatonicism as the starting point or reference of his innovative "deductions"<sup>114</sup> as well as in regard to the extramusical references to diatonicism which exist in the music.

### The Referential Collections

Out of the field of undifferentiated semitones, Ives developed a system in which the use of unordered eight- and nine-note collections limits the pitch class field locally. The primary thematic units are referable to these 8- and 9-note collections, which we identify through Allen Forte's classification of pitch class sets.<sup>115</sup> The first and second movements use nine-note p.c. sets for most primary thematic

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114. From the passage: "So they call [these things] unnatural, unmusical, un-meaning, based on no laws of art, nature, or humanity--when as a matter of fact they're based on deductions from quite simple premises, suggesting other logical premises from similar processes, but almost too self-evident to need explanation." (Memos, 140).

115. Allen Forte, The Structure of Atonal Music (New Haven: Yale University Press), 1973, (2nd printing, 1977), pp. 179-181. We modified our use of Forte's p.c. set classifications for non-inversionally symmetrical sets by preceding the cardinal number with "I" for the inversional order because the content is different for prime and inversional forms with the same ambitus. Cf.  $T_n$  and  $T_n/T_nI$  types of sets in John Rahn, Basic Atonal Theory (New York: Longman, 1980). The first number in the set names is the cardinal number which indicates the number of pitch classes in a set; the second number is the ordinal number, which designates the position of the set in Forte's classification system.

units; only a few thematic units are referable to eight-note p.c. sets (see types of sets, below). The third movement uses eight-note p.c. sets.

Segmentation in the first movement reflects the contrapuntal procedures used in this movement. The formal units are melodically- or linearly-conceived. The primary thematic units of the first movement are the three statements of the fugal subject (see Chapter 2, "S" in Examples 2.01, 2.02, and 2.03); the two statements of the "second theme/episode" (1st statement: page 4, top layer, 1st system: from 2nd quarter to end; and 2nd statement: p. 5, top layer, 1st system: 6th quarter-2nd system: 2nd quarter); and the two statements of the octave theme (1st statement: page 4, bottom layer, system 3: 4th quarter-page 5, 3rd quarter, 1st eighth; and 2nd statement: p. 5, bottom layer, system 2: 3rd quarter-system 3: 1st quarter).

In the second movement, the segmentation includes the combined horizontal-linear/vertical-harmonic dimension. This dimension is represented by the formal units which consist of seven motivic blocks (see Appendices IIA and IIB for measure numbers), five of which (in the Andante) conform to the pattern of referable eight or nine-note p.c. sets (see Block 1 in Example 4.03, which uses p.c.set 9-11 [1,2,3,4,6,7,8,10,11]). In this dimension the p.c. sets function as essentially harmonic structures, a simultaneity. The last two blocks (in the Adagio) are longer and more complex.

Segmentation for the third movement includes that of separate, independent layers (which may be conceived linearly or in the combined horizontal/vertical dimension) as well as the combined vertical/

horizontal dimensions in non-layered writing. It is dependent on identifying cohesive, well-defined thematic fragments, such as the pitch and rhythmic motives of the march and ragtime, a unit defined by a chord stream as in the waltz, and discrete pitch class units such as the four partially ordered twelve-note sets (see Appendix III for measure numbers of the thematic units in the third movement). In this movement eight-note p.c. sets are the norm. They are related to the partially ordered twelve-note sets which are divided into mutually exclusive, functional subcollections of eight and four notes.<sup>116</sup> These twelve-note sets are comparable to Joseph Hauer's tropes (although Hauer's subcollections were limited to hexachords). See Appendix III.

The referential collections connote precompositional material comparable to the scales of the diatonic system or Schoenberg's set complexes. These constructions provide the elements of choice gained by the imposition of predetermined limitations--important also in diatonic music which is limited in its pitch classes by the content of scales.

Five types of eight- and nine-note p.c. sets are used. These five types are determined by the internal structures of the sets according to the presence of specific partitions of interval-3 cycles. (See below, section called "Pitch Class Cycles: Interval-3 Cycles.")<sup>117</sup>

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116. The term "ordered set" and "partially ordered set" refers to collections in which "a specified succession of the notes [is] assumed to be a defining characteristic of the set." See George Perle, Serial Composition and Atonality, 4th edition, revised (Berkeley: University of California Press, 1977), p. 46.

117. The terminology used to describe interval cycles is from George Perle, Lulu, pp. 199 f; see below.

They are classified as follows:

1. Type I sets, those sets used most frequently for primary formal units, contain paired interval-3 cycles consisting of one complete interval-3 cycle (of four p.c.'s) and one incomplete interval-3 cycle (of three p.c.'s), indicated as  $C3_{x,y}$  or  $C3_{x,y}^*$  (see below, "Pitch Class Cycles: Interval-3 Cycles"). This subset is p.c. set 7-31 (0,1,3,4,6,7,9).<sup>118</sup> The nine-note referential collections of this type also contain two additional p.c.'s from the third possible interval-3 cycle (to be further discussed below).<sup>119</sup> Of the total of twelve possible nine-note sets, six contain subset 7-31 and two additional pitch classes.<sup>120</sup> Ives uses four of these for primary thematic units in the first and second movements: p.c. sets 9-2 (0,1,2,3,4,5,6,7,9), 9-3 (0,1,2,3,4,5,6,8,9), 9-7 (0,1,2,3,4,5,7,8,10), and 9-11 (0,1,2,3,5,6,7,9,10). Of the total of twenty-nine possible eight-note sets, four contain subset 7-31 plus one additional pitch class from the third interval-3 cycle.<sup>121</sup> Ives uses two of these in the third movement: p.c. sets 8-13 (0,1,2,3,4,6,7,9) and 8-27

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118. Integers in parentheses following the name of the p.c. set represent the "prime form" of the set, through which the sets can be identified in Forte's classification system. Integers in brackets following the name of a set represent the pitch class collection, with C as zero and C# as 1, etc.

119. In regard to Scriabin's Seventh Sonata, Perle describes a 7-note collection with two additional notes which Perle calls "modal variants"--the only modifications permitted. The 7-note set is, in fact, p.c. set 7-31. Perle's explanation of the two additional notes in Scriabin's music is not applicable to the 3-Page Sonata for the following reasons: a) the spelling of the additional p.c.'s in Ives does not necessarily relate the them to those of the 7-note subset--e.g., as enharmonic substitutes; b) the order in which the additional p.c.'s appear in relation to the p.c.'s of the invariant set does not point to their use as "variants;" and, most significantly, c) the rate of change of the referential collections--changing for every formal unit in the first and second movements--does not permit reasonable time for modal variants to be meaningful. George Perle, Serial Composition, p. 41 f.; also "Scriabin's Self-Analysis," Music Analysis (August, 1984), 101-122.

120. P.c. set 9-10 contains 7-31 but not the two additional p.c.'s from the third cycle; it is classified as a Type III referential collection with two complete interval-3 cycles.

121. Like p.c. set 9-10, p.c. set 8-28 is a Type III referential collection (see footnote 8.)

(0,1,2,4,5,7,8,10); he uses one of these, p.c. set 8-27, for one primary formal unit in the first movement.<sup>122</sup>

2. Type II sets are eight-note p.c. sets that contain a paired interval-3 cycle, consisting of two incomplete cycles (of three p.c.'s each) and two additional p.c.'s from the third cycle. The four hexachordal subsets that contain two incomplete interval-3 cycles are: 6-Z13 (0,1,3,4,6,7), 6-Z23 ((0,2,3,5,6,8), 6-Z49 (0,1,3,4,7,9), and 6-Z50 (0,1,4,6,7,9). There are a total of sixteen eight-note p.c. sets of this type; of these, Ives uses p.c. set 8-2 (0,1,2,3,4,5,6,8) for primary thematic units in the third movement (see Appendix III) and 8-11 (0,1,2,3,4,5,7,0) and 8-23 (0,1,2,3,5,7,8,10) together in one motivic block in the second movement (see Appendices IIA and IIB). (Six other eight-note p.c. sets of this type are used for secondary formal units, such as inner and accompanying voices and bridge material, in the first movement.)

Type III and Type IV sets are used more sparingly.

3. Type III sets contain two complete interval-3 cycles (C3<sub>x</sub>, y<sub>x</sub>). These include two ten-note p.c. sets (10-3 and 10-6), one nine-note p.c. set (9-10), and one eight-note p.c. set (8-28). 8-28 (0,1,3,4,6,7,9,10) is commonly known as the p.c. set of the three octatonic collections. This set is expressed as 8-28 [0,1,3,4,6,7,9,10] on the middleground level of the sequential

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122. "Memo 17" from Ives, Memos, describes the pitch class material that was used in a piece called "In The Night" as follows:

I tried to find three chords that might be used in a similar or parallel sense to the usual tonic, dominant, and subdominant--a combination of chords that would not be undignified, that would have some musical sense and relation, and about which melodies and counterparts could be used as a natural outcome from these combinations. In this movement, D<sup>b</sup> was taken as the main chord (or the tonic), and B<sup>b</sup> (in this case a tone above the dominant A<sup>b</sup>) was used as the dominant, and the chord of E major (a tone below the subdominant G<sup>b</sup>) was used as the subdominant.

Ives is describing p.c. set 7-31 [8,10,11,1,2,4,5], with paired interval-3 cycle C3<sub>1,2</sub>\* (see below), which is used with one additional note, A--left unmentioned--from C3<sub>0</sub> to form p.c. set 8-18 [8,9,10,11,1,2,4,5]. P.c. set 8-18 is used exclusively for the first half of the composition and for the final verticality. "In The Night" is from Theater or Chamber Orchestra Set (New Music, Vol. 5/2, 1932; later Merion Music, Inc.; reprint by Kalmus, no date).

passage (see Examples 4.05d and 4.05e) of Block 7 in the second movement (see mm. 19-29 and Appendices IIA and IIB). The only other use of this set results from combining the pitch classes of the octaves only in the two statements of the octave theme in the first movement (see p. 4, system 3: 4th quarter-p. 5, 3rd quarter, 1st eighth; and p. 5, system 2: 3rd quarter-system 3, 2nd quarter) into p.c. set 8-28 [7,8,10,11,1,2,4,5]. The individual statements of the octaves are referable to self-enclosed transpositions of the same paired interval-3 cycle, C3<sub>1,2</sub>, in 6-Z23 [2,4,5,7,8,10] and 6-Z23 [8,10,11,1,2,4].

4. Type IV sets are eight-note sets having one complete interval-3 cycle and no three-note pair. There are eight p.c. sets of this type; Ives uses one of these, p.c. set 8-Z29, in the third movement only. This type is significant in the third movement where the division of two of the partially ordered twelve sets into complementary sets of eight and four results in the use of p.c. set 8-Z29 (0,1,2,4,5,6,7,9) and its complement for two different primary thematic units. (See mm. 1/41 in repeat-2/42, dotted eighth note, bottom layer; and mm. 14-20, bottom layer. Also see Appendix III.)

5. Type V sets used as referential collections represent the antithesis of tonality within Ives's tonal system. They consist of nine-note pitch class sets which contain all three three-note interval-3 cycles. Ives described the use of this type of referential set as "off-key"<sup>123</sup> (see further discussion below under "Prioritization"). There are five nine-note p.c. sets of this type: 9-1, 9-4, 9-6, 9-9, and 9-12; Ives uses three of these for primary thematic units. In the first movement p.c. set 9-1 [8,9,10,11,0,1,2,3,5] is used for the 3rd statement of the fugue subject. (The programmatic significance of this statement will be developed in the analytical section at the end of this chapter. See Example 4.02.) In the second movement, p.c. set 9-1 is used in the foreground for the top and bottom lines of each phrase of the sequence of Block 7 (cf. Example 4.05a and Example 4.05b; also see Appendix IIA.) In the Allegro of the third movement, p.c. set 9-4 (7,8,9,11,0,1,2,3,4) is used for one thematic unit--possibly making a programmatic statement there as well--(see Appendix III). P.c. set 9-6 [0,1,2,3,4,5,6,8,10] is used for the first part of the Piu moto section of the third movement (see Chapter 2, Example 2.12 and Example 2.09).

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123. Ives, Memos, p. 58. Ives describes an "off-key counterpoint part" in "In the Night," which uses nine-note sets with three three-note interval-3 cycles.

In the linear, contrapuntal texture of the first movement a variety of unordered smaller and larger sets, including twelve-note sets, are used for secondary primary units such as accompanying lines, statements of the countersubjects, and inner voices.

The p.c. sets that Ives uses as referential collections were conceived originally as combinations of major and minor thirds piled up vertically. There are several allusions to these combinations in Memos; these "chords," as they are called, replace traditional triads: "This boy's way--of feeling, if you can have two 3rds, major or minor, in a chord, why can't you have another one or two on top of it, etc."<sup>124</sup>

The relationship between these references in Memos to "chords" and, in effect, compositional techniques and the musical compositions, themselves, is subtle. The verbalizations are "clues," not explicit descriptions. The clues are obscure initially because the terminology is deceptive: Ives uses traditional terms such as triad, major, minor, tonic, dominant, and subdominant in contexts that are totally unrelated to diatonic tonality. He uses this terminology because it was generally understood and, therefore, useful for trying to communicate what he was doing. It is quite possible that the development of a new terminology, one that would have been appropriate to the new musical language he had evolved, was in his mind.<sup>125</sup> However, he chose to

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124. Ives, Memos, p. 120.

125. A tantalizing aside in "Memo 47" states: "see in [ms. on] technical side of music, in office safe--this paper tries to keep away from as much technical stuff as possible" (p. 120). The manuscript in the office safe was, apparently, lost.

express the memos describing compositional techniques, like the others, in an idiosyncratically personal, colloquial language.

Non-prioritized Partitions: Relevance for Quotations

The so-called "diatonic" and "bitonal" passages in the 3-Page Sonata are representative of Ives's use of such types of structures in many of his compositions. Measures 1 and 2 in the second movement (see Example 4.03) and measure 11 in the second movement are among the bitonally implicated passages in this work. Among the diatonically implicated fragments are measures 43 through 45 in the third movement. In every situation, the analysis of these passages shows that they are partitions of the underlying unordered referential collections, a different kind of organization from that of diatonicism. The diatonic and bitonal passages have no pitch structural reality of their own but are subsumed in the context of the larger, radical tonal framework.

In the examples mentioned above, in the first block of the second movement (mm. 1-3), the G major broken triad in the left hand part and the F<sup>#</sup> major fragment of "Proprior Deo" in the right hand are part of the referential collection, p.c.set 9-11 [1,2,3,4,6,7,8,10,11]. In measure 11 of Block 5 of the second movement, the C major collection in the top line is a partition of p.c. set 9-2 [11,0,1,2,3,4,5,6,8]. In measures 43 through 45 of the of the third movement, the diatonic fragments of the C major collection are partitions of I 8-27 [9,11,0,2,3,5,6,7].

The role of these passages in the pitch organization of the 3-Page Sonata sheds light on Ives's treatment of diatonic passages in his



other works. Frequently the diatonic passages are in the form of the quotations which permeate many of Ives's compositions. The pitch classes of these quotations can be understood as non-prioritized diatonic subsets of larger, non-diatonic pitch class collections.

#### Pitch Class Cycles: Interval-3 Cycles

One of Ives's most original compositional discoveries was that symmetrical divisions of the octave could be used as the basis of musical structures in place of the non-symmetrical divisions of the diatonic scales and chords.<sup>126</sup> The interval-5/7 cycle (which does not divide one octave but requires five octaves for the original pitch class to return) may be used as thematic or foreground phenomena; the interval-2 cycles have a special role (to be discussed below). The interval-3 cycles, however, are the basic grammatical units of Ives's musical language in the 3-Page Sonata, the foundation of the pitch organization, providing the elements of a syntactical substructure.

The interval-3 cycles are rarely used alone, in their pure form, or as complete cycles; they are, instead, pervasive subsets and supersets, appearing in many guises, in almost every melodic figure and verticality.<sup>127</sup> Ives's composition does not rely on motivic

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126. For a thorough description of the complex of interval cycles and the contrast of these divisions with those of tonal music, see Elliott Antokoletz, The Music of Béla Bartók (Berkeley and Los Angeles: University of California Press), 1984, p. 67.

127. The only use of the interval-3 cycle in its basic--"pure"--form, i.e. with no additional p.c.'s attached, is in the middleground reduction of the sequential passage of the second movement (mm. 19-29; see Example 4.05).

transformation or repetition as an abstract procedural premise; the interval-3 cycle or its subsets do not function as intervallic cells as they might in Schoenberg's music.<sup>128</sup> The guises in which the interval-3 cycles appear in the 3-Page Sonata are aspects of the different compositional techniques and procedures Ives is demonstrating: In his setting of these procedures and techniques, a component of the programmatic content of the 3-Page Sonata, the interval-3 cycles are operating on the level of the basic musico-linguistic substructure.

Three interval-3 cycles divide the system of twelve semitones. They are intervallically identical but have three different, discrete, p.c. collections. The use of the incomplete form provides a greater number of possible collections. For example, if three-note subsets are used, four different, although overlapping collections are created for each cycle. Therefore twelve different collections are created where before there were three.

The form in which the C3's generally appear is in pairs. In the referential collections they are identified as the subsets with one complete interval-3 cycle (of four p.c.'s) and one incomplete (three-

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128. In Schoenberg's music the cell is often used in transformational operations; it functions as an "atonal 'theme,'" i.e. as the thematic material in the musical design. The intervallic cell is defined by George Perle as "a kind of microcosmic set of fixed intervallic content" which is the integrative element of much atonal music--particularly illuminating in the analysis of the pre-twelve-tone music of Schoenberg and his disciples. It is used in transformational operations and "in association with independent details." From Serial Composition and Atonality, 4th edition, revised (Berkeley: University of California Press, 1977), pp. 9 f.

note) interval-3 cycle--p.c. set 7-31 (in the description of Type I referential collections)--or as the subsets with two incomplete interval-3 cycles--one of the four hexachordal subsets listed above (in the description of Type II referential collections). These collections are the paired interval-3 cycles, indicated as  $C_{30,1}$ ,  $C_{30,2}$ , and  $C_{31,2}$ . Asterisks are attached to the subscripts 0,1 or 0,2 or 1,2 to indicate complete cycles:  $C_{30*1}$ ,  $C_{31,2*}$ ,  $C_{31*2}$ , and so forth.

Although these subcollections of the referential collections are subsets of the octatonic "scales," they are not referred to by this name because I do not believe that Ives recognized this formation as independent of its component interval-3 cycles. In addition, a) octatonic passages are infrequent in the linear thematic material; b) the triadic vertical constructions that can be constructed on the octatonic collection, conceived as a scale, are not used; c) the interval-3 cycles are used both individually and in pairs; and d) Ives conceived of his collections as vertical combinations.

The total p.c. content of the paired cycles is never used at one time. In the verticalities the paired cycles are reduced to smaller subsets and still maintain the sonorous identity of the paired cycle. In the contrapuntal writing of the first movement the paired cycles are represented by two to four p.c.'s from each of the individual cycles. Therefore a great variety of pitch class collections is available to the composer within a given tonally prioritized area.<sup>129</sup> The cycles

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129. If two three-note interval-3 cycle subsets were to be used, sixteen different collections would be available for every paired cycle (and forty-eight different collections are available for all three paired cycles). Each pitch class can appear in twelve different subsets in each of the paired interval-3 cycles. (Each pitch class can appear in twenty-four different subsets in the total cyclic system.) If two two-note subsets are used, thirty-six different collections are

also may be expressed in the linear dimension as the horizontalization of the harmonic units, i.e. as broken "chord-cycles." (In Ives's contrapuntally conceived passages, the vertical/ horizontal relationship of interval-3 cycles is comparable to that of triads in diatonic music.)

### Prioritization

Tonal priority in the 3-Page Sonata is created by the assertion of the authority of paired interval-3 cycles in the construction of the individual musical passages or a movement. Prioritization is asserted on a substructural level; it is established through the pervasive use or reiteration of the incomplete, paired interval-3 cycles. Identified also as p.c. sets 7-31, 6-Z13, 6-Z23, 6-Z49, and 6-Z50, the paired interval-3 cycles are the pervasive subsets of the p.c. sets used as the referential collections of the tonally-affirming sections. (The one exception is the use of p.c. set 8-Z29 with one complete cycle--a Type IV set--for two thematic units in the third movement.) They are operative in the vertical, the linear, and the combined vertical-horizontal dimensions.

The paired cycles are used strategically in their projection as the sonorous basis of the work. For example, interval-3/9 is used as the opening dyad of every movement. In a system of pitch organization

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available for every paired cycle (and one hundred and eight different collections are available for all three paired cycles). In this case, each pitch class can appear in eighteen different subsets for each paired interval-3 cycle (and each pitch class can appear in thirty-six different subsets in the total cyclic system).

based on the interval-3 cycles, this interval can represent the entire cycle derivatively. In the first movement the prioritization of the paired interval-3 cycles is established through techniques that are suitable to the contrapuntal procedures used. For example, the opening dyad is tied to a pedal in the bass layer of a contrapuntally-conceived fugal complex, a technical device which further asserts the authority of the dyad. When the bass layer moves into the inner voices of the cycle, it further reinforces the priority of the cycle. The interval-3/9 is retained as the bass layer moves to another cycle. The sonority of the interval-3 cycle is clearly established. At the same time, the linked cycle of the pair establishes its authority in the top layer through motions to other voices, register, and rhythmic weight (see Example 4.01). In the second statement of the fugal complex, a pedal is again registrally established but in the top layer. The two statements of the "second theme/episode" also project interval-3 cycles registrally, in layers, through interval-3, -6, and -9 dyads.

Tonal motion in the thematic blocks of the second movement is clearly heard. In fact, at the opening of Block 5 (m. 11) tension is created by the lack of change in the prioritized paired cycle since change was anticipated through the precedent developed in the preceding blocks. The motion to another paired cycle in the second part of Block 5 (m. 12) creates a satisfying sense of resolution in the cadential figure.

Prioritization in the third movement is of a different nature. The paired interval-3 cycle  $C3_{0,2}$  is the subset of the referential collections used in the top layer;  $C3_1$  is the subset of the referential

collections used in the bottom layer (see Appendix III). The reiteration and transformations of the eight- and four-note partitions of the partially ordered twelve-note series are used to create relationships among different thematic units. For example p.c. set 4-13 (0,1,3,6) is used in the "waltz" section in all twelve transpositions (top layer, measures 11-13 and repeated 14-16). In the section containing the fourth twelve-note series (see chapter 2, Example 2.10 and Appendix III), self-enclosed transpositions of p.c. set 4-13 are used to delimit the section by their presence in the first verticality supporting the twelve-note series (top layer, measure 17/63, 3rd verticality, [9,10,0,3]), the penultimate verticality (top layer, measure 19/65, 3rd verticality, [6,7,9,0]), and in the four-note partition of the twelve-note series (top line, m. 19, first four verticalities, [3,4,6,9]). P.c. set 4-13 [0,1,3,6] is the top layer of the penultimate verticality of the entire piece (last m.). P.c. set 8-Z29 [1,2,3,4,6,7,8,10] and p.c. set I 8-Z29 [10,0,1,2,4,5,6,7] are transformations by inversion and transposition.

#### The Non-Prioritized P.c.'s: Chromatic Elaborations

A characteristic of Ives's referential collections is their inclusion of non-prioritized pitch classes--the one or two additional notes from the remaining interval-3 cycle. While the prioritized cycles are always p.c. set 7-31 or the hexachordal subsets that retain two three-note interval-3 cycles, the additional pitch classes have no special relationship to the prioritized subsets.<sup>130</sup> Their inclusion

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<sup>130</sup>. See footnote 5.

creates a self-contained system of "chromatic elaboration" within each "referential system." In the contrapuntal style of the first movement--the movement which has a fugal subject "masquerading" as a first theme and a second theme "disguised" as a fugal episode--these pitches facilitate an analogy to diatonic contrapuntal style: The additional p.c.'s provide the various diminutions in the contrapuntal textures; they provide the "chromatic" element within every referential "system," i.e. the "non-tonal" or unprioritized element. They exist as an integral component of Ives's language: he created self-enclosed collections which provide a conceptual dichotomy, with both the invariant prioritized segments and the possibilities for chromatic implications in all dimensions, not limited by diatonic voice-leading models except by choice (see Examples 4.01, 4.03, 4.04, and 4.05 below and the accompanying analytical discussions).<sup>131</sup>

#### "Off-keyness"

"Offkeyness" represents a similar dichotomy in Ives's musical language. "Off-key" is a term that Ives used to describe sections of music in which no prioritized collection is operative.<sup>132</sup> The

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131. Ives describes the use of such additional notes in "Memo 47," in which he is describing his use of the interval-2 cycle as referential material (note that he describes the pitches as verticalities): "For instance, [I remember] going over some of these chords with Father--one, which I played for fun etc. (often ever since), was C<sup>q</sup>-E<sup>q</sup>-G<sup>#</sup>-B<sup>b</sup>-D<sup>q</sup>-F<sup>#</sup>-B<sup>b</sup>-D<sup>q</sup>- and then saying, "Now if you will play this B<sup>q</sup> [as] B<sup>b</sup>, and stop at F<sup>#</sup> [for the] top, there won't be any half-tone dissonance." But I remember we both liked the one with B<sup>q</sup> better." From Ives, Memos, p. 120.

132. In Memo 17, Ives describes an "offkey" part in "In The Night" as follows: "in the off-time and off-key counterpoint part, the four 16ths going with the four-rhythm are phrased in three" (p. 58). The "off-key part" consists of the three diminished triads--all three interval-3 cycles.

referential material for such a section is the fifth type of p.c. set, described in the section above called "Referential Collections." This type of set consists of nine notes with three three-note cycles, none of which are prioritized. The five possible "offkey" referential collections (see above, "Referential Collections," Type V) are used sparingly in the 3-Page Sonata. Their use does not interfere with the establishment of the overall prioritized sonority and provides contrast. Perhaps they should be thought of as chromatic elaboration on the global level of the composition. Such a concept, it seems to me, would be in keeping with Ives's propensity for imaging in ideas.

#### Tonal Motion From Area To Area

Motion from one tonal area to the next occurs with the change from one thematic complex to the next: The prioritized paired cycles, in general, change with each new formal unit in the first two movements of the 3-Page Sonata. In the first movement, tonal motion takes place through modulations as well (see Example 4.01). The rate of change of the prioritized pitch collections contributes to the dynamic character of the first two movements.<sup>133</sup>

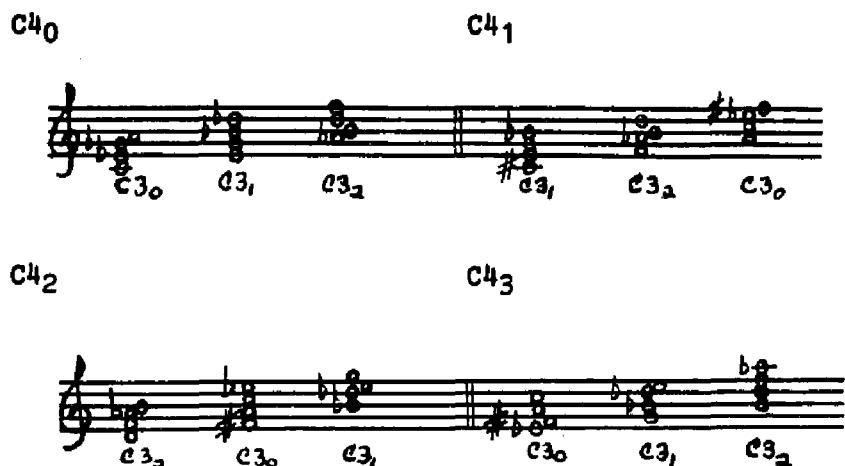
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133. Contrasting this music with Debussy's Syrinx or Scriabin's Seventh Sonata--useful examples because they are also based on referential collections with invariant subsets--demonstrates a relatively rapid rate of change in Ives and a slow rate of change--indeed, a dynamically static condition--in Debussy and Scriabin, where few referential collections and one prioritized cycle are maintained over long stretches. In Scriabin, tonal motion involves transpositions within the same cycle. (See Perle, Serialism, p. 41 f.)





Figure 4.02. Motion along the trajectory of interval-4 cycles.



If the trajectories of C1/11 or C5/7 were used, all C3's in every transposition would result. ("Offkeyness" occurs when a cycle travels along the trajectory of a different cycle for adjacent verticalities or arpeggios and no priority is established.)

If a moving cycle uses its own trajectory or that of a sub-cycle or compound cycle of itself--for example, C3 moving along the trajectory of C3, C6, or C9--all sub-cycles of C3--a closed system of transpositions will occur as in the sequence of the second movement (see Example 4.05, below).<sup>134</sup> When the moving cycle is also complete, then a transposition will occur with the same collection maintained at another level; when the moving cycle is incomplete, the collection changes but within a closed system. The same principle is true for paired cycles as well.

<sup>134</sup>. See Perle, p. 41.

While the use of the trajectory of C2's (or another interval cycle) by the paired interval-3 cycles can produce modulations to the other two paired interval-3 cycles, it does not do so automatically since two paired C3's can be built on any step of the cycle. Therefore it is possible to move along the trajectory of a different cycle and remain in the same prioritized area (see Figure 4.03).

Figure 4.04. Non-modulatory motions.



C3<sub>0,1</sub> C3<sub>1,2</sub> C3<sub>0,2</sub>      C3<sub>0,1</sub> C3<sub>0,2</sub> C3<sub>1,2</sub> C3<sub>0,1</sub> C3<sub>0,2</sub> C3<sub>1,2</sub>  
 C3<sub>0,2</sub> C3<sub>0,1</sub> C3<sub>1,2</sub>      C3<sub>0,2</sub> C3<sub>1,2</sub> C3<sub>0,1</sub> C3<sub>0,2</sub> C3<sub>1,2</sub> C3<sub>0,1</sub>

(Note that the trajectory need not be bass oriented.)

The role of the interval-2 cycle (the whole-tone cycle) is special in the 3-Page Sonata. These interval cycles are the agents of "modulation." The term modulation is used here to mean a change in an extended prioritized tonal area--not for adjacent motions.

In the first movement, motion along the trajectory of the interval-2 cycles creates the transpositions to new tonally prioritized areas of paired interval-3 cycles. The relationship of the opening p.c.'s of the three statements of the fugal subject, D<sup>b</sup>, F, and D<sup>#</sup>, is determined by their motion along the trajectory of C2<sub>1</sub>. Interestingly, the first and last p.c.'s of the entire first movement articulate the

C2 relationship: in the bottom layer, the opening p.c. in the bass is C and the final p.c. is F<sup>#</sup>, preceded by A<sup>b</sup> which is the bass note; in the top line the opening p.c. is D<sup>b</sup> and the final one is A--the relationships are determined by the interval-2 cycles.

Interval-4/8 cycles, the subcycles of interval-2 cycles, create the synthetic tonic-dominant relationships that exist in the first movement between the C in the bass of the opening fugal complex (the opening of the first movement) and A<sup>b</sup> of the 2nd theme/episode (p. 4, first system: second quarter); and between the entries of the statements of the second theme/episode on C and E (p. 4, top line, 1st system: second quarter and p. 5, top line, 1st system, 6th quarter). In the second movement the modulation at T4/8 is operative where the goal of the bass line is from G in Block 1 to B in Block 5.<sup>135</sup>

#### Some Analytical Applications

In the following section some analytical applications of the theoretical premises, presented above, will be considered.

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135. C2's are prioritized in some cadential passages. They seem to play a pivotal role in these places. For example in the first movement, before the double bar, the collection of the last two verticalities is C-D-E-F<sup>#</sup>-G<sup>#</sup> (p. 4, system 2, before repeat sign). In the final section of the first movement (p.5, 3rd system: 3rd quarter to end) the top line prioritizes F, E<sup>b</sup>, C<sup>#</sup>, B, A, G of C2<sub>1</sub>; the last three p.c.'s of the bass in this section are D, A<sup>b</sup>, and F<sup>#</sup> of C2<sub>0</sub>. The octave theme complex which precedes the final section also prioritizes C2<sub>0</sub>.

**Example 4.01.** 1st movement, (Allegro moderato), p. 3, system 1-system 2: 4th quarter, first statement of the fugal complex: rhythmic reduction.

Example 4.01 is a rhythmic reduction for the first statement of the fugal complex (see Chapter 2, Example 2.01). The white notes in the graph all belong to the prioritized paired interval-3 cycle; the black notes are chromatic, i.e. they are from the third cycle. Four-part scoring is used: (1) the fugal subject in the top line is referable to p.c. set 9-2 [8,9,10,11,0,1,2,3,5].<sup>136</sup> (2) The accompanying layer in the alto is identifiable as the lower voice in the "parallel fourths" motive of the subject. This layer and that of

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136. The apparent conflict between the prioritized interval-3 cycles of the referential collection of the fugal subject and the prioritized cycles of most of the section is comparable to the p.c. collection in diatonic music in which there is a cadence at V and the leading tone of V is used: the pitch class collection is in a key different from the key that is prolonged.

(3) the countersubject in the tenor use twelve note collections. (4) The bass has the pedal-point C-A, establishing the prioritization of C3<sub>0</sub> until the cadence at the end of this section.

The prioritization of the paired interval-3 cycle C3<sub>0,1</sub> is expressed contextually in a number of ways that are appropriate to the contrapuntal texture. The strongest devices are the bass pedal of C3<sub>0</sub>--C and A; the motion of the cycle into inner voices--F<sup>#</sup> and C; and its linking of the bass pedal with the p.c.'s of the tenor line. (The pedal remains in force until the bottom layer moves to B-G<sup>#</sup>, which is linked to C3<sub>1</sub> in a "modulation" to C3<sub>1,2</sub>.) Reinforcement comes from the top line through motions to other voices of the prioritized cycle, and the registral placement and rhythmic weight for the e<sup>b11</sup>/d<sup>#11</sup>'s. The linked C3<sub>1</sub> is prioritized through the opening notes for the subject of both the antecedent and the consequent (the 1st and 9th notes of the melody). The momentary prioritization of C3<sub>0,2</sub> through a cadence at the antecedent/consequent juncture (see brace) is established through the clarification of the sonorities of the two individual cycles, their motions to inner voices, their reinforcement through pitch density within the same cycle (see asterisks), and the placement of each cycle, separately, in adjacent verticalities at the cadence.

An immediate "middleground" level can be spoken of by analogy with diatonic music. For example, C3<sub>0,2</sub> is characterized as a passing chord (with motion into an inner voice) and C3<sub>0,1</sub> may be thought of as hierarchically elevated. The non-prioritized p.c.'s serve as diminutions in the contrapuntal texture. Certain aspects of the diatonic voice-leading model are adapted to the expression of this

cyclic language. The authority of the pitches of the prioritized paired cycle is distinguished from the elaborative role of the non-prioritized pitches. Also the cycles function as triads in their adaptability to being identified in both the vertical and horizontal dimensions. However distinctions between consonance and dissonance are not operative in this voice-leading model. Since the pitch classes of two interval-3 cycles are simultaneously prioritized and the interval relationships created by the juxtaposition of these pitches with each other is the same as the interval relationships created by the juxtaposition of these pitch classes and those of the unprioritized cycle, interval classes can not be determinants of voice-leading relationships. Therefore the diminutions from the unprioritized cycle are more appropriately described as "chromatic" when, as here, a paired cycle provides the prioritized content.<sup>137</sup>

The paradoxical character of the prioritized pair--of the two cycles as a pair and as two individual individual C3's simultaneously--creates some of the most interesting sonorous distinctions within the overall sonority. The individual cycle is affirmed in several ways: the polyphonic implications in single voices--indicated in the top voice by the slurs between  $c^{11}$  and  $e^{b11}$ ,  $b^1$  and  $g^\sharp 1$ , and  $f^1$  and  $d^1$ --are expressed through the intervals of the individual C3's; the pedal-point C-A and its interaction with inner voices; and then the B- $g^\sharp$  as the lowest interval--all prioritize individual interval-3 cycles.

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137. In the analytical discussion of the sequence in Example 4.05, dissonant-consonant relationships exist in a redefinition of these terms.

The verticalities are predominantly made up of subcollections of paired interval-3 cycles. Each of the two cycles is represented by two to three pitch classes. The chromatic p.c.'s that are present--they are relatively sparse--function as passing notes, appoggiaturas, and neighbor notes of various kinds, i.e. ornamental notes. However although the voice-leading model of diatonicism is adapted to this new language in the contrapuntally-conceived writing of the first movement, an important detail to note about the vertical p.c. language is Ives's use of a chromatic note at the final cadence: In the final verticality of the section, C is an "unresolved" chromatic p.c. in the prioritized tonal sphere of  $C3_{1,2}$ . The voice-leading model, therefore, reflects the adaptation from diatonic music of the compositional procedures used in this section, in which an Ivesian dichotomy is nonetheless maintained.

Example 4.02: 1st mov't. P. 4, system 2 to end, 3rd statement of fugal complex. To clarify the distribution of the three interval-3 cycles, 3 different note-heads are used:  $\circ$  for  $C3_0$ ,  $\bullet$  for  $C3_1$ , and  $\square$  for  $C3_2$ .

The musical score consists of five staves. The first staff is labeled 'fugal subject' and contains a sequence of notes with various symbols (circles and squares) above them. The second staff is labeled 'accomp.' and contains a sequence of notes with various symbols (circles and squares) above them. The third staff is labeled 'c.s. upper staff' and contains a sequence of notes with various symbols (circles and squares) above them. The fourth staff is labeled 'e.s. lower staff' and contains a sequence of notes with various symbols (circles and squares) above them. The fifth staff is labeled 'pedal-point' and contains a single note with a symbol (square) above it.



The third and last statement of the fugal complex (see Chapter 2, Example 2.03) is an inversion and transposition of the first statement (cp. Example 2.01). Whereas the second statement of the fugue subject was hidden in an inner voice (see Example 2.02), this last statement is in the highest register used thus far and the highest register used in the movement. The countersubject is present in two staves in its essential intervallic contour; the one in the higher staff is closest to the original and like the subject is inverted.

This example demonstrates an "offkey" section. In the first and second statements of the fugal complex, the authority of the paired interval-3 cycles was created by a variety of devices, most effectively by registral pedals: in the first statement in the bass; in the second statement in the top voice. In the third statement, all three interval-3 cycles are equally operative. Perhaps symbolically, the fugal subject is referable to p.c. set 9-1, which contains three three-note interval-3 cycles; the higher countersubject is referable to p.c. set 9-4, also containing three three-note interval-3 cycles. Both 9-1 and 9-4 are Type V referential collections, not used in the previous statements (see above for types of referential collections).

The tonal ambiguity of this section is created by the lack of reinforcement in the upper voices for the pedal C-B, at the beginning of this section, and B-c<sup>1</sup> at the antecedent-consequent juncture. At this intermediate "cadence," the verticalities consist of equal mixtures from the three cycles or move from one pair to another. Although dramatic registral gestures are made that could have been used dramatically to reinforce the prioritization of a tonal area, no tonal

priorities are established. Indeed the last two verticalities articulate a whole-tone cycle.

Example 4.03: 2nd movement. Measures 1-3: Block 1.

Andante

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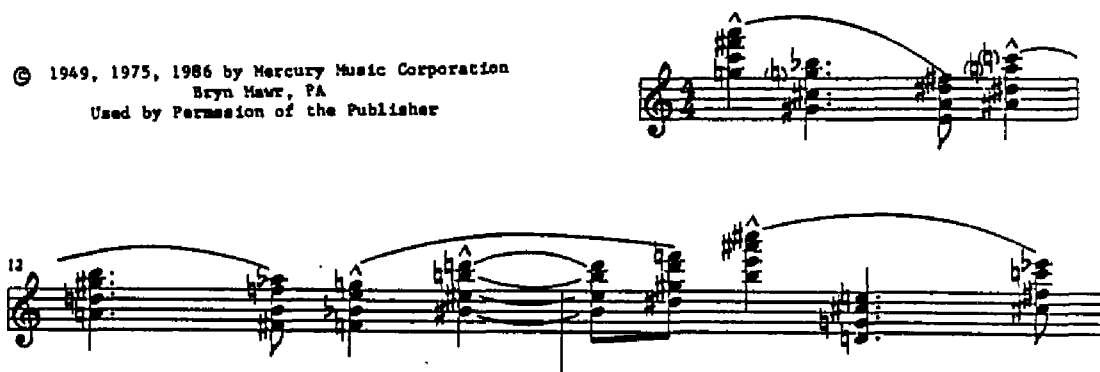
The referential collection in Block 1 is expressed in the combined vertical/horizontal dimension. It is p.c. set 9-11 [1,2,3,4,6,7,8,10,11]. The prioritized subset is p.c. set 7-31, denoting the first type of referential collection, with  $C3_1, 2$ . The two additional notes are  $F^\sharp$  and  $D^\sharp$ .

A superficial evaluation of the opening material of the second movement would suggest the prioritization of the bitonal areas of  $F^\sharp$  major and G major. The simple triadic contour in the top line contains the opening five notes of the melody "Proprior Deo," beginning, it would seem, in the key of  $F^\sharp$  major; this melody is placed over the broken-chord formation for the G major triad. However that is not how the opening of the movement is heard. The interval-3  $G-A^\sharp$  is prepared by the attacca ending of the previous movement through tonal ambiguity (created with two whole-tone cycles), leading into the p.c.'s G and A chromatically. The second sounded verticality is  $b-g^\sharp_1$  from the paired cycle. ( $F^\sharp$  is, ironically, a chromatic note in the referable

collection; in the third measure, the remainder of the melody uses p.c.'s from C3<sub>1,2</sub>.) This example of so-called bitonality is really an example of diatonically implicated passages--not diatonic passages--which have no pitch-structural independence but are instead non-prioritized partitions of the referential collection of the entire section. I believe this example is representative of the way Ives's uses quotations in his mature works.

Example 4.04a: 3rd movement. Measures 11-13 and 14-16.

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The melody of the "waltz theme" is one of the four partially-ordered twelve-note sets of the third movement. The waltz theme also demonstrates one type of Ives's "piano drumming" chords, known more commonly as chord streams and chord parallels. The combination of these two compositional procedures juxtaposes a technique learned in the context of improvisational composition and a highly complex intellectual construction.

In a memo that is rather obscure at first glance, Ives describes his youthful improvisations in "piano drumming." He writes, "I found that I kept a different set of notes going in each hand, and that the right-hand chords would move up and down more, and change more, than

those of the left hand." A careful reading discloses that Ives is talking about two different actions of the right hand part: one involves "moving," and the other involves "changing." I believe "moving" means maintaining a set of interval classes through various transpositions, in other words parallelisms or chord streams. "Changing" means producing a different interval structure from one chord to another, varying the interval patterns of the "chords." The improvisational nature of "changing" chords represents a kind of "doodling" or "faking."<sup>138</sup>

Pertinent also is Ives's description of "a popular chord in the right hand" used for "piano drumming" because of its similarity to the verticalities used in the "waltz theme" as well those used in another chord stream in the second movement (measures 9-10). Ives's criteria for these chords include the following: 1.) they must "keep away from triads, etc., that suggested a key" and 2.) they have "the little finger run into a 7th or octave-and-semitone over the lower thumb note."

In the segmentation of chord streams, only the top line is structurally relevant. In this configuration the parallelisms destroy the independence of the lines.<sup>139</sup> This segmentational practice

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138. This quote and the following material on "piano-drumming" is from Ives, Memos, "Memo 11," pp. 42-43. Examples of "changing chords" are second movement, m. 6, 3rd quarter through m. 7; and 3rd movement, m. 17, top layer, 3rd quarter through m. 19, 4th quarter of the sextuplet, supporting the fourth twelve-note series.

139. Ives says in the same memo, cited above, "they had little to do with the harmony of the piece, and were used only as sound-combinations as such."

produces results that are consistent with the results obtained for surrounding material. The twelve-note series in the top line of the "waltz theme" is partitioned into two subsets of eight and four pitch classes, p.c. sets 8-2 [6,7,8,9,10,11,0,2] and I 4-2 [1,3,4,5]. P.c. set 8-2 prioritizes p.c. set I 6-Z23 [6,8,9,11,0,2] with paired interval-3 cycle  $C3_{0,2}$ . The eight-note partition is used for the first two measures, and the four-note partition is used for the third measure. The two additional chromatic notes in the referential collection are G and B<sup>b</sup>. The further segmentation of the first two measures divides the eight-note collection into two four-note p.c. sets, each with one of the individual, three-note interval-3 cycles plus one of the additional notes (see Example 4.04b).

The penetration of the paired interval-3 cycle in the "waltz theme" is a fascinating conception. Interval-3 cycles plus one chromatic p.c. are included in every dimension of the musical fabric, i.e. in every line and every verticality. In measure 11,  $C3_0$  plus one additional note exist in both the vertical and horizontal dimensions simultaneously; in measure 12,  $C3_2$  is used in both dimensions. The four-note sets associated with this section have a homogenous construction (except for the 4-2 partition): The p.c. set of the twelve verticalities is 4-13 (0,1,3,6). Like the p.c. sets 4-12 (0,2,3,6) and 4-18 (0,1,4,7) in the horizontal dimension of measures 11 and 12, respectively, p.c. set 4-13 also consists of one interval-3 cycle and an additional note. The additional notes in all three four-note sets is always related to one of the notes in the interval-3 cycle by an interval-1 (see Example 4.04b and "summary" below).

Example 4.04b. 3rd movement. "Waltz theme": segmentation.

1. 12-note set: p.c. set 8-2 [0,7,8,9,10,11,0,2]  $C3_{0,2}$

2. p.c. set I 4-2 [1,3,4,5]

2. Vertically, every  $C_3$  in 4 positions

3. Vertical extra notes: lowest line of chord stream

4. top line of chord stream

Summary: 4-12 (0,2,3,6), 4-13 (0,1,3,6), 4-18 (0,1,4,7)

Subset 3-10: (0,3,6) (0,3,6) (0,3,6)

Also 4-2 (0,1,2,4)

**Example 4.05a:** 2nd movement. Measures 19, 4th quarter-22, 1st quarter: sequential phrase.



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The sequence is a technical convention in Baroque and Classical music; its appearance in Ives's work is most unusual. In the 3-Page Sonata it is another demonstration of Ives's understanding of eighteenth century techniques put to the task of illustrating his own language (see measures 10 through 29).

Against the basic interval-3 cycles, Ives creates an innovative reinterpretation of consonance and dissonance in an analogy to the diatonic system: Intervals-3/9, 6, and 12 of the interval-3 cycles are stable and consonant and the other intervals are treated as dissonances. The contrapuntal 5-3 motions in the outer voices show Ives exploiting the "forms" of diatonic consonant-dissonant function and the psychological dimensions of tension-release. The analytical procedure followed is a reference to the diatonically determined voice-leading progressions Ives is parodying.

The first sequential phrase is given in Example 4.05a. The sequential technique embraces the middle and bass layers which are rhythmically congruent (cf. Examples 4.05a and 4.05b).<sup>140</sup>

Example 4.05b.

The musical score for Example 4.05b consists of two staves. The upper staff is in treble clef and the lower staff is in bass clef. The upper staff contains notes with accidentals (sharps and flats) and is labeled with 'Ap' (appoggiatura) and 'PN' (passing note) above certain notes. The lower staff contains notes with accidentals and is labeled with 'Ant.' (anticipation) above certain notes. Below the lower staff, there is a series of figured bass notations, which are integers used for interval classes. These figures are: 12 6 5, 12 6 3, Ant. 11 5 3, 12 6 5, 12 6 3, Ant. 11 5 3, 12 6 5, 12 6 3, 11 5 3, 12 6 5, 12 6 3, Ant. 11 5 3, 12 6 5, 12 6 3. The sequence of figures corresponds to the notes in the lower staff.

The transpositions of the sequential phrases at interval-3 are along the trajectory of the same cycle, establishing a self-enclosed system of transposition.<sup>141</sup> Because incomplete cycles, i.e. three-note subsets, are used, the transposition creates some aural variety through the changing collections, but it is essentially static.

In Example 4.05b, rhythmic displacement with "dissonant" intervals is clarified. (Figured bass notation is indicated with the more tonally objective integers used for interval classes.) The diminutions are seen to be appoggiaturas, anticipations, and passing notes: The interval-3 cycles are introduced by appoggiaturas; through rhythmic

140. The upper layer and inner voices of the broken triads" are rhythmically incongruent, moving as independent layers. The "modulatory" version of "Westminster Chimes" in the top layer fills in an interval-3 cycle from C<sup>#</sup> to G, consistent with the self-enclosed transpositions of C3 in the sequence. The bass triads are configurations structurally comparable to the chord streams, without structural meaning as a complete unit.

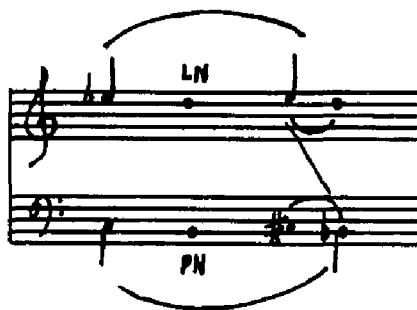
141. Transpositions along the trajectory of the same cycle in a sequence are comparable to the "tonal" sequence in contrast to the "modulatory" or "chromatic" sequence in the diatonic system.



displacement both the resolution and anticipation of the following cycle in the inner voices takes place simultaneously.

Each sequential phrase divides into halves which are heard as antecedent-consequent. In the first phrase, shown in the example, the antecedent-consequent is marked by a change in direction through a skip upward to  $F^\sharp$ , with inner voice  $E^b$ --and  $B^b$  beneath  $D^b$ --implied in the compound lines. Using only the outer voices in Example 4.05c, the reduction eliminates the diminutions of the "foreground;" the "middleground" diminutions are retained.

Example 4.05c.



In the top line D is the lower neighbor to E; B in the bass is a passing note to  $B^b$ . In Example 4.05d the final middleground reduction for the entire sequence is shown to be a 6-3 progression: in the goal of the first phrase, the outer voice E of  $C3_1$  is the structural pitch class of the top line;  $B^b$ , the lowest voice of  $C3_1$  is the structural pitch class in the bottom line.

**Example 4.05d. Measures 19, 4th quarter-29: "middleground" reduction.**



In Example 4.05e the 6-3 motion asserts  $C3_{0,1}$  through the paired arpeggiation of  $C3_0$  and  $C3_1$ . The p.c. collection on this level is p.c. set 8-28 [0,1,3,4,6,7,9,10], with two complete interval-3 cycles.

**Example 4.05e. Entire sequence: arpeggiation.**



## Summary

In the 3-Page Sonata Ives uses a tonal system in which the twelve-note pitch class field is limited by eight- and nine-note referential collections; the basic harmonic units are the three interval-3 cycles. These referential collections used for primary segments include six- and seven-note subsets, containing paired interval-3 cycles which are

prioritized. The referential collections also contain one or two additional pitch classes which are chromatic, i.e. they are from the remaining unprioritized cycle. In the compendium of techniques that make up the 3-Page Sonata, the chromatic notes can be used as diminutions in parodic contrapuntal passages. The concept of consonance/dissonance is reinterpreted; in Ives's work it is created contextually. "Offkeyness," the antithesis of priority, is an important component of the language; it is an Ivesian form of "atonality."

We have attempted to understand the technical-linguistic aspects of the extramusical program of the 3-Page Sonata in this chapter. "In the premises,"<sup>142</sup> we hope that we have succeeded.

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<sup>142</sup>. See quotation which opens the chapter.

### Part 3: A New Critical Edition

#### Chapter 5

#### The Need for A New Critical Edition: Meaning in Ives's Notation

The three earlier editions of the 3-Page Sonata--two of which were published do not adequately represent Ives's work in the light of today's knowledge. Henry Cowell's edition of 1947<sup>143</sup>, hereafter C, now out-of-print, transcribes the pitches quite accurately; however, both the verbal and musico-symbolic instructions for the repetition of sections, as well as various details such as accent marks and octave indications, were omitted. Also, an accurate transcription of Ives's more difficult rhythmic configurations remained elusive. The overriding problem that faced Henry Cowell in preparing the first edition was, clearly, the difficulty of reading the manuscript, a composing score, replete with erasures, insertions, and interspersed sketches. Sister Mary Ann Joyce's edition, hereafter J,<sup>144</sup> recognized the instructions in the score for sectional repetitions; nevertheless the repetitions are inaccurately interpreted in J. John Kirkpatrick's edition, K,<sup>145</sup> the only available published edition, correctly interpreted Ives's instructions for the formal design with the

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143. Op. cit.

144. Op. cit.

145. op. cit.

exception of one place. The various errors that were made in transcribing Ives's instructions vis-a-vis the repetitions of sections in the first and third movements, were addressed in Chapter 2. Each edition made progress in correctly representing the pitches, rhythms, and design of the work; each depended on the previous editions in meeting the challenge of transcribing the manuscript.

Problems in the presently available edition are:

1. The spellings of the pitch classes are enharmonically changed.
2. In several places the pitches are altered. These alterations include changes of existing pitches and the addition and elimination of pitches.
3. Lines drawn for alignments between the staves are misinterpreted as bar lines.
4. The rhythmic notation is altered. These alterations include transcriptions into other meters for compound rhythms, the addition of bar lines, the reorganization of the notation for rhythmic values, and the elimination of ties.
5. Rhythms are transcribed incorrectly.
6. Formal aspects of the music are visually obscured by realignments of pitches between the staves for pianistic reasons.
7. Some of Ives's accent marks are eliminated; other accent marks are added.

The revisions in K are discussed by Kirkpatrick in his "Editor's Notes." The explanations for the revisions seem to be based on arbitrary decisions which misinterpret Ives's compositional techniques, formal design, and extra-musical intentions. Specific examples of such editorial revisions will be cited below.

One major editorial decision Kirkpatrick made was to change Ives's spellings. He reasons that

wherever Ives's non-conformist spellings offer unreasonable hindrances to memorizing, they are changed to what is hoped will be helpful....Many of these are chords from his habit of "piano-drumming" (*Memo*, p. 11), which he uses here as parallels, the top note imagined as the root (with at least one unresolved appoggiatura thrown in), making a melodic rather than a syntactic harmony. The parallel respellings are not mentioned below,<sup>146</sup>

i.e., in the critical notes for specific sections of music. The first point which must be made is that the term, "melodic harmony," is a peculiar concept and not explained. Secondly, if standards of conformity are applied to Ives's spelling, then distortions will result. For example, Ives's innovative pitch organization was not based on the diatonic melodic and harmonic directions that Kirkpatrick apparently assumes to be operating. The so-called "piano-drumming" of Ives's childhood, which Kirkpatrick claims as the source of the non-conformist chord spellings, are described by Ives as "sets of notes" which had "little to do with the harmony of the piece, and were used only as sound-combinations as such. For the explosive notes or heavy accents in either drum, the fist or flat of the hand was sometimes used." More to the point is the following explanation by Howard Boatwright about how Ives heard these spellings: "Ives's way of listening was of the type which can imaginatively project finer pitch distinctions upon the artificial regularities of equal-tempered

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146. Kirkpatrick, "Editor's Notes" for Ives, *3-Page Sonata*, 2nd edition, *op. cit.*, p. 14

tunings."<sup>147</sup>

Ives passionately defended his spellings. Kirkpatrick, himself, related "an incident in which he attempted to suggest a change of spelling to Ives, and was literally blown off his feet by a storm of temperament which the suggestion released. The note had to be just as Ives had written it."<sup>148</sup> Ives addressed the question of his so-called unorthodox spellings many times, defending them instead of changing them. We quote from a rather long selection from Ives-Memos that was added in pencil to the cover of a copy of the first edition of the Concord Sonata. This note was written sometime between the time the work was privately printed and the time of the announcement of the first public performance, for January, 1939, by John Kirkpatrick:<sup>149</sup>

Then another complaint from Prof. \$5,000 is the combination of notes in the chords. If he can't get his Jadassohn out and check it up, then it really isn't nice music etc. etc. "He puts notes in a chord that don't belong in it--and he usually has too many notes--he doesn't understand harmony--for instance, on page 3 there is a B# and B in the same chord--that is wrong" (Grandma Prof. says)." It is not, you g--d--sap!--takin' money for emasculating music and students...the mind, ear, and thought don't have to be always limited by the "twelve"--for a B# and a C are not the same--a B# may help the ear-mind get higher up the mountain than a C# always. It has another use, perhaps a more

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147. Howard Boatwright, "Ives's Quarter-Tone Impressions," Perspectives of New Music, Vol. 3, No. 2, Spring/Summer, 1965, 29.

148. Ibid., 29, fn. 12

149. Lawrence Gilman received the copy of the Concord Sonata, which contained this manuscript, because of a request he made for the loan of a copy to study in preparation for the January 20, 1939 performance which he reviewed. See Ives-Memos, p. 185 f. Kirkpatrick dates this memo as 1923 or later (p. 188).

important [use] than a nice little guide in a resolution--it makes a chord, in some cases, more a help and incentive for the ear and mind to say (nearer to) what it feels. For instance, in the key of C, B going up to C, sometimes under certain moods, is sung (regardless of the piano) nearer to C than the B on the piano, and, going down from C to B, farther away. Now when both the two B's are used in chord, there is practical, physical, acoustical difference (overtone, vibrational beats) which makes it a slightly different chord than the B's of an exact octave--and [even] on the piano the player sees that and feels that, it goes into the general spirit of the music--though on the piano this is missed by the unimaginative....<sup>150</sup>

In the following statement Ives demonstrates his intellectual awareness of working with new tonal systems and discriminates between the new tonal systems and the diatonic system in the matter of tuning:

When a movement, perhaps only a section or passage, is not fundamentally based on a diatonic (and chromatic) tonality system, the marked notes (b, #, or b) should not be taken as literally implied resolutions, because in this case they do not exist. The eye mustn't guide or enslave the ear too much or entirely in all cases.<sup>151</sup>

Toward the end of the same manuscript Ives gives an example of where a conventionally spelled chord would be misleading:

Suppose two curves, an up and down, start on Eb and Db, and are held down hard through the arpeggios and back, and we don't land in Ab--that sign isn't fair, Rollo, it points us the wrong way--so the signmaker makes it C# and Eb, and the music via the ear takes its own way up the mountain better, and feels better about [it].

Ives follows this introduction to the problem with an example from "Thoreau," and concludes: "This is just one technical explanation of

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150. Ives, Memos, pp. 189 f.

151. Ibid. p. 190.



why certain notes have been written as they have, in the Sonata and other music."<sup>152</sup>

Ives's elaborate verbal defenses--there are several in Memos--articulate his sensitivity and extraordinary concern with the direction, as well as the stasis and degrees of motion, of individual tones in complex harmonic and also microtonal contexts as they relate to the resultant overtones;<sup>153</sup> rational decisions were made. The integrity of Ives's choices, clearly tied to his compositional process, must be respected in editions of his music.

Furthermore it is worth considering the idea that the notation was, in itself, meaningful to Ives, the "signmaker," even beyond its use in conveying pitch subtleties--of immediate interest in the foregoing discussion--and in conveying ideas about rhythms and meters, i.e., for gestures or signs to communicate additional information to the performer and other students of his music, toward its interpretation in performance and toward its comprehension as an intellectual and psychological document. In this context consider the following:

To my way of hearing and thinking, a sharp is a kind of underlying sign of, or senses and reflects or encourages, an upward movement, tonal and more perhaps spiritual, at a thing somewhat more of courage and aspiration--towards than the flat carries or seems to--the flat is more relaxing, subservient, looking more for rest [and] submission, etc.--often used as symbols as such, when they're not needed as the signs of tonality in the usual way.<sup>154</sup>

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152. Ibid., p. 195.

153. Boatwright, Perspectives, p. 30.

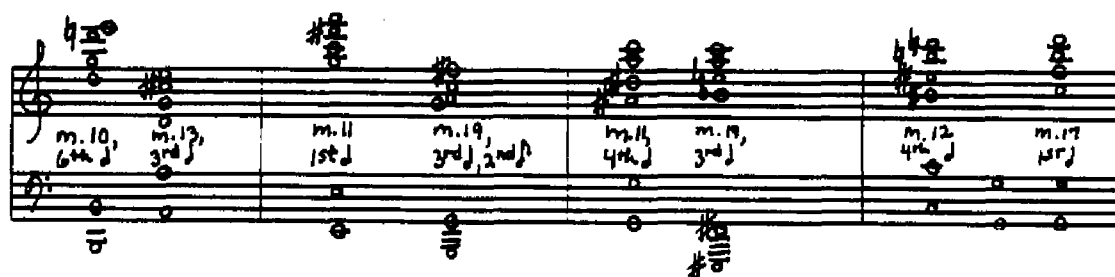
154. Ibid.

The semiotics of Ives's notation could make a study unto itself.

One particularly interesting example, demonstrating Ives's concern with the pitch notation, exists in the third movement in the chord stream of the waltz section and the following "1st Development" section. The spelling of the same "well-tempered" piano pitches, in several verticalities, is varied with the second use of each verticality (see Example 5.01).

Example 5.01. 3rd mov't., p. 8, m. 10, 5th quarter through p. 9, m. 17.

a.                      b.                      c.                      d.



One detail that is interesting is that the E# and B# in m. 12 (and in the repetition of that verticality in m. 15) are the only use of these spellings for those pitch classes in the entire piece (see Example 5.01)! Through these spellings, Ives tells us that the pitches of these verticalities function differently in each context, on some level, i.e. acoustically, or psychologically, or both.

Ives plainly spells the music the way he wants it; he gives us his point of view on the significance of his spellings, not once, but several times. To my mind, changing spellings because they "offer

unreasonable hindrances to memorizing" is a flimsy justification for going against such clearly and strongly stated wishes of the composer.

The pitches are editorially revised for a variety of circumstances in K. For example, the tied  $e^1$  on p. 3, system 3, 3rd quarter, is eliminated in K (cf. Examples 5.02a and 5.02b). The explanation given is: "in S [the manuscript score], this  $e^1$  is tied to a quarter  $e^1$ , which the Rh [right hand] metrics have no room for and which M [the Cowell edition] places as an upstem 3.b quarter over the  $d^1$  [better omitted--Ives may well have meant to cross it out]."<sup>155</sup> No question of "room" in the "metrics" exists. The tied  $e^1$  is the final note of the second statement of the fugal subject and meant to be held over--the completion of that voice and rhythmically in agreement with the fugal subject in the first statement (see Example 5.02).

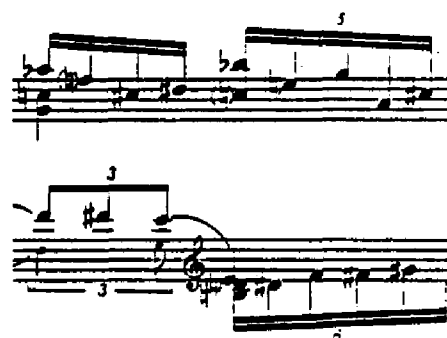
Example 5.02. 1st movement, 3rd system: 5th-6th quarters.

a. K: m. 7, 2nd-3rd quarters

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155. Kirkpatrick, 3-Page Sonata, p. 15, 7,3.d of 2.b.

Another example of changing pitches occurs in measures 11-12 of the second movement. There,  $c^{111}$  (tied over the bar line) is changed to  $b^{b11}$ . Kirkpatrick's explanation is: "S [the manuscript] has the last note as  $c^{111}$  (as in M [edition by Henry Cowell]), but with what is probably " $b^b$ " tentatively written above [excellent revision, the surprise of this  $b^{b11}$  filling the unarticulated 1.b]."<sup>156</sup> The sign above the C looks like a pp; the correctness of  $c^{111}$  is unequivocal.

At the end of the opening measures of the third movement, in the bottom staff, Kirkpatrick added  $A\sharp$  beneath  $F\sharp$  to compensate for not having the octave below these pitches on the piano. In the "Editor's Note" that corresponds to the  $F\sharp$ , he states that the manuscript has "the single  $F\sharp_1$ , below which very few pianos have an octave [better use a make-shift  $A\sharp_{11}$  than add the octave above and lose the downward 9th]."<sup>157</sup> If the manuscript score is followed closely, one notices that a line which follows the instruction "Octs" is interrupted beneath the  $F\sharp$  and resumed again beneath the following pitch. In measures 3 through 5 of the third movement, Kirkpatrick adds a  $B_{11}$  beneath  $F_1$ , stating "S has most of the octaves spelt out, emphasizing the depth of the single 1.b  $F_1$ , for whose octave-below the best makeshift is probably  $B_{11}$ ."<sup>158</sup> In fact, Ives wrote an alternation of single note  $F_1$ 's and octave  $F_1$ - $F$ 's. No revision or correction was required.

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156. Ibid., p. 19, 41, 4.b, Rh.

157. Ibid., p. 20, 62, last d, Lh.

158. Ibid., p. 20, note 64-65.

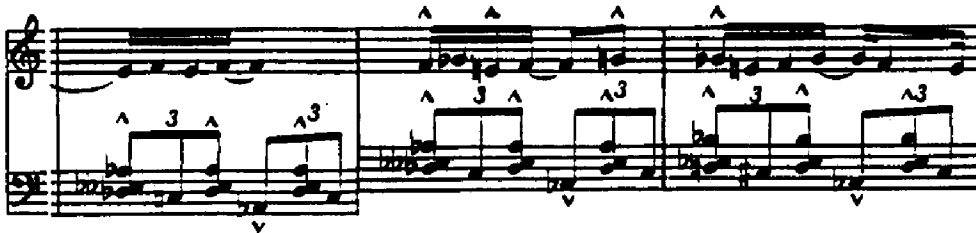
In the Più moto section of the third movement, mm. 35-36, Kirkpatrick removes the tie across the measure and adds accent marks above that were not in the manuscript (see Example 5.03). The corresponding "Editor's Note" states: "S [manuscript] had tied  $f^1$ , but with the tie emphatically crossed out, retained in M [Cowell edition] [much better untied]."<sup>159</sup> In the manuscript the tie is, in fact, circled carefully. Had Ives wanted to eliminate the tie, he would have erased it--the manuscript contains many erasures. (See Appendix 9, the critical note for third movement, measure 35.) Concerning the addition of the accent marks, Kirkpatrick states: "S had  $e^1$  changed to  $g^1$ , probably for another B-A-C-H ( $f^1$ - $e^1$ - $g^1$ - $g^b1$ , implying accents on  $f^1$  and  $e^1$ )." I cannot see the change from  $e^1$  in the manuscript that Kirkpatrick describes.

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159. Ibid., p. 21, 99, 1.b.

Example 5.03. 3rd movement, measures 35-37.

a. K: m. 98-100



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In the third movement, m. 19, 4th verticality, (K: m. 82), Kirkpatrick alters a pitch. The explanation in the "Editor's Notes" is: "S [Ms] has  $g^b$  and a, M [Cowell] has  $a^\sharp$  (no  $g$ ) [probably wrong-- the stable thumb position certainly meant to focus attention on the transposed B-A-C-H motif.]"<sup>160</sup> K has  $g^b$  and  $a^b$ . Actually, the manuscript has  $g^b$  and  $a^\sharp$  on the fourth verticality;  $g^b$  and  $a^b$  are used in the following five verticalities. The solution in K is pianistic; however a questionable idea is expounded to justify the changed pitch.

Recomposing through the elimination of accent marks takes place in the second movement, in measures 11-28 (K: mm. 41 to 58.) The following explanation is given: "SM [manuscript and Cowell edition]

160. Kirkpatrick, 3-Page Sonata, p. 21, 82, Rh, 4.d.

have starting each slur, also in Rh in 49-51 in S (in 49-58 in M) [better omitted in view of the bell character of the top line, which requires constant pedalling and delicate blurring]."<sup>161</sup> Actually, Ives uses the accent marks--there are no staccato marks in the manuscript--to clarify the phrasing in the middle and bottom layers.

Editorial revisions or errors in the notation of rhythm exist on three levels: one, through metrical transcriptions of the rhythms for pedagogical purposes; two, through reading the manuscript incorrectly; and three, through misinterpreting the notation. In the second movement, in measures 13 through 59--about two-thirds of the movement--the first and third types of changes occur simultaneously (see Examples 5.04, Ia and b and IIa and b).

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161. *Ibid.*, p. 18, 41-58, Lh.

Example 5.04, I. 2nd movement, m. 13 (K: m. 43).

a. K.



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Adagio

[—J—J means 100 melody (copy on 3 staves)  
better to have another player or bell-castles top



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II. 2nd movement, m. 19 (K: m. 49).

a. K.



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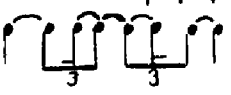



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(Ives uses two staves in the manuscript but gives instructions to use three.)

The clearest way to show the ideas in the three layers is exactly the way Ives wanted it written: on three systems with each rhythm independently articulated. K attempts to reconcile these rhythms to a 4/4 meter that, moreover, enables the performer to relate the eighth-note subdivisions of all three lines to the bass layer. This then



results in  , with sixteenth-note triplets, a fussy but correct reading of  $\overline{\text{p p p}}$  . Unfortunately in K this transcription appears as  , with an incorrect placement of the triplet sign. The simplest way of rendering  $\overline{\text{p p p}}$  into a 4/4 meter is by using eighth-note triplets, i.e.  , as given in the editorial suggestion in the new edition.

Another revision involves reevaluating note values and using ties so that a note or chord appears on every beat of each layer. The metrical congruence of the top and bottom beginning in measure 13 and, then, of the middle and bottom layers beginning in measure 19, is clear without this revision. Moreover, the duple pattern implied by the alternation of the same two verticalities in the middle layer is obscured.

In these passages the revisions obscure the idea of the three autonomous layers: in measures 13 to 18, the triplet-to-the-measure, constructed with duplets, coexisting with the 4/4 meter, constructed of quintuplets, along with the 4/4 meter constructed of a varied-length pattern; in measures 19 through 59, the triplet-to-the-measure, with the quintuplets of 16th notes, and quintuplets of 8th notes.

The information Ives communicates through his rhythmic notation goes beyond the specification of the musical rhythms. Through his notation, Ives seeks to articulate musical ideas, "Spirit," and metaphors for intellectual concepts. Therefore, the "signs" of the music must be maintained in editions. The notation of polyrhythms and poly-layered textures creates the visual counterpart of images of multiplicity in sound-experience, and both the visual and auditory

experience suggest multiplicity as an organization-al factor in social interaction--perhaps the clearest metaphor projected in Ives's music. Notation is, after all, an aspect of the technique or "manner" which, for Ives, must be appropriate to the substance (see Chapter 3 of this study).

K adds bar lines to the first movement, which was written without them by Ives. The editor's note reasons that "SM [manuscript and Cowell] are unbarred (except after 11, 22, 23, 30) [better as suggested below, in view of the consistent barring of the 2nd and 3rd movements]."<sup>162</sup> First of all, there is no metrical barring in the manuscript, whatsoever, for the first movement. The measures that Kirkpatrick points out contain: the double bar with flags, a repeat sign signifying a return to the opening at the end of m. 11; a line drawn for purposes of alignment between the notes of the staves after the measures Kirkpatrick numbers 22 and 23; and a double bar after 30, which is the end of the movement. Secondly, the bar lines serve a vital role in the rhythmic concepts of the second and third movements. By contrast, the addition of bar lines contradicts the musical intention of a metrically undifferentiated flow. In the "Editor's Notes," Kirkpatrick uses a variety of reasons for where he places the bar lines; most frequently it is the presence of a bass-register note.

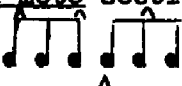

In the "Editor's Notes" of another piece that Kirkpatrick edited, he supplied the following note for changing bar lines:



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162. Ibid., p. 14, 1-30.

Most of the piece is adapted from Ives's Second Symphony...but with some changed barlines, showing how little Ives cared about the relation of metric barring to musical rhythm. The rhythm was either so clear and strong or so improvisationally fluid in his imagination that he grew to resent barlines, and sometimes went out of his way to make them ignored. But for ordinary mortals, realistic barlines are essential to memorizing. For this reason some of Ives's barlines are changed in this copy as explained below.<sup>163</sup>

No evidence can be found in Ives's work in regard to barlines to support the attitude that Kirkpatrick attributes to him.

One other editorial revision in notation is the following: in the Più moto section of the third movement, K restemmed the left hand part to  from Ives's , i.e., from 3-to-the measure to 2-to-the-measure with triplets. The editor's explanation is: "SM have measure-triplets composed of three 2-note beams...[better beat-triplets...to clarify relation to Rh, the accents accounting for the 3/4 ideal]."<sup>164</sup> While this section is the most difficult to play in the entire piece, the revision is no help. Moreover, it distorts the relationships Ives wants to describe by his notation.

Several errors stem from a misreading of the manuscript. For example, in the third movement, in the middle of measure 2 and at the end of measure 4, there are indications for a repeat:  . Cowell and Joyce do not include these repeat signs in their editions.

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163. John Kirkpatrick, "Editor's Notes" for Charles Ives, Study No. 21: Some South-Paw Pitching, Mercury, 1975.

164. Kirkpatrick, 3-Page Sonata, p. 21, 86-91 & 95-100, Lh.

Kirkpatrick recognized the presence of the signs, but he read them incorrectly. He interpreted the opening sign to be a bar line as well as the opening repeat sign, adding a 2/4 meter sign before the repeat in measure 2 and arbitrarily rebarring the measures between the repeat signs to reinstate the 4/4 meter. Actually, the meter of measures 1 through 3 is 4/4; measure 4 has only two beats, and Ives did not provide a meter change. The closing 2/4 measure connects smoothly with the second half of the third measure for the repeat. The alteration creates a musical distortion by doing away with Ives's apparent plan for a contraction in the final measure, which heralds a resolution after the repeat.

Another revision occurs in the Più moto section of the third movement, in a place where the notation is very subtle. In the Più moto (mm. 23-30), the top staff, excluding the cadential figures, consists of only three pitches,  $e^1$ ,  $f^1$ , and  $g^{b1}$ . The notation for these pitches is unusual because there is a key signature--for the top staff only--with five flats. Therefore, in almost every measure Ives puts a natural sign before every E. In measure 28, of the first part of the Più moto, and in measure 37, the comparable measure in the second part of the Più moto, the natural sign is left out, calling for  $e^{b1}$ . This notation may be considered a type of Ivesian gesture, i.e., a trick or a lesson. In K, the key signature has been removed. The "Editor's Note" says: "S has Rh key-signature of five flats (Db major, understood through 102) not in M [better not used, since S spells out all accidentals except  $g^b$ ]."<sup>165</sup> As a result five pitches in measures

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165. Ibid., p. 21, 86, heading.

37, 38, 59, and 60 are incorrect.

Another extensive set of alterations in K is the redistribution of pitch material between the staves for pianistic reasons. The visual clarity of the musical thought is frequently impeded, as in the passage in Example 5.05, where the fourths of the second fugal entrance are separated.

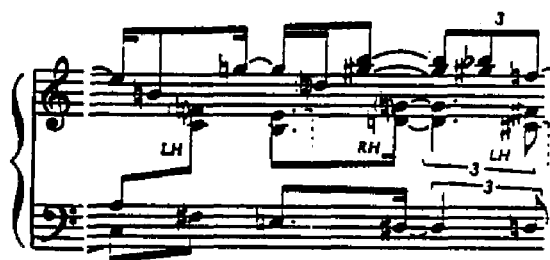
Example 5.05. 1st movement, 2nd system, 3rd-5th quarters (K: m. 5).

a. K



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There are several problematic sections in the 3-Page Sonata. In the first movement, the bottom voice drops out for four beats (2nd system, 8th quarter note through the 3rd system, 2nd quarter note). (See Appendix IV, critical notes for the first movement, 3,2:8.q-3:2.q.) Kirkpatrick adds parallel fourths as a suggested completion, explaining: "[copy missing--the present conjectural realization in small noteheads continuing the 2.b 4ths and going into tritones, like Rh in m.2-3.]"<sup>166</sup> "Measures" 2 and 3 contain the third through

166. Ibid., p. 15, 6(3.b)-7(2.b), Lh.

thirteenth notes of the subject, with their accompanying intervals below (see Example 2.01, top layer, from eb<sup>11</sup> to the 16th-note d<sup>11</sup>.) Note that the parallel fourths are used from the first through the eighth verticalities. The ninth through the fourteenth melodic pitches of the subject are accompanied by a variety of intervals; the pitches of the subject to which Kirkpatrick added the parallel fourths were the ninth through the fourteenth, precisely those that were not accompanied by fourths in the opening subject entry. (Interesting to note is that the third entry of the subject ends with the eighth pitch, in parallel fourths.) (See Appendix IV, critical notes for first movement, 3,3:2.q-3:6.q.)

Although Ives's rhythmic notation is generally unambiguous, two passages in the first movement are problematic. In the first such passage, either the rhythmic notation is incorrect or a vertical line in the manuscript, put in to indicate alignment between the staves, was added incorrectly. See Example 5.06.

Example 5.06. 1st movement, from the Ms.

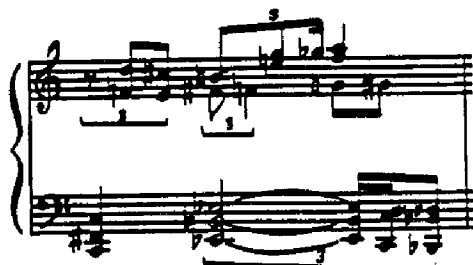


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The fact that four editions produced four different solutions is interesting to review. See also Example 5.07 and compare.

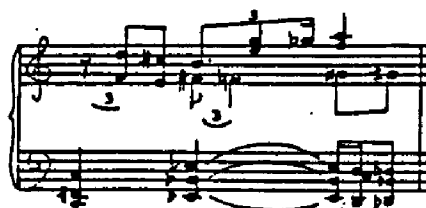
Example 5.07. 1st movement, p. 4, system 3, 1st-3rd quarters.

a. Cowell



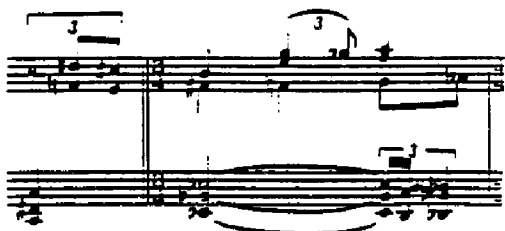
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b. Joyce



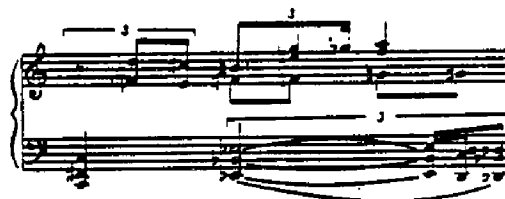
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c. Kirkpatrick



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d. new edition



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C transcribed the manuscript most closely, with one rhythmic change in the alto voice. J observed the sign for the vertical alignment. Since this alignment conflicts with the 3:2 relationship between the parts in the treble and bass staves, Joyce changed the left hand half-note to a quarter note and eliminated the 3:2 relationship. K's solution also observed the alignment but changed the right hand triplet eighth notes to quarter notes, again eliminating the 3:2 relationship, and transferring the the triplet sign to the smaller quarter note unit. The new edition accepts the solution in C, which assumes that the error in the manuscript consists of the indication for the alignment; however

it follows the manuscript, which has no triplet sign for the alto voice.

The last five beats of the first movement presented the same kind of problem: again, a line intended to indicate staff alignment, creates confusion. In editing this phrase, Kirkpatrick disregarded the alignment indication. Moreover, his solution saved it from the procrustean solution of C, which was followed in J. However, Kirkpatrick revised the note values of the manuscript for each of the three groups to quarter notes, where they were, in fact, correctly notated as half notes by Ives for 3 in the space of 5; also Kirkpatrick created triplets for the first two groups when only the third group was designated as a triplet (see Example 5.08).

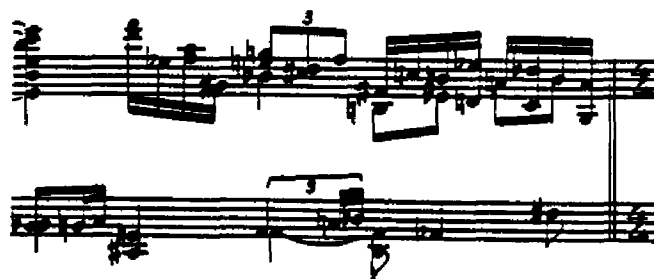
Example 5.08. 1st movement, p. 5, 3rd system.

a. Ms



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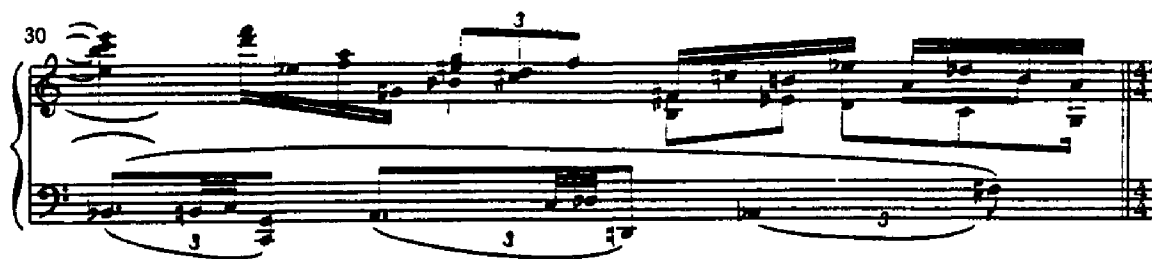
b. C



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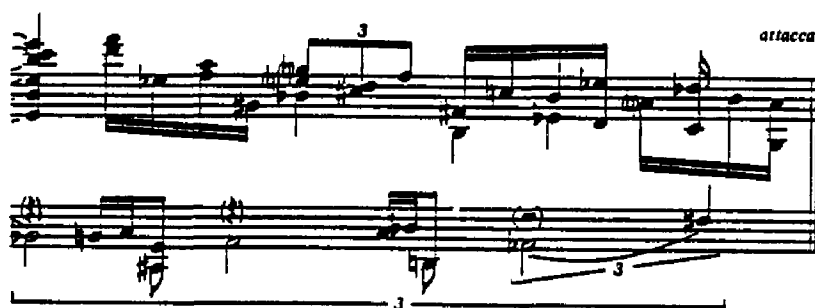


c. K



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d. new edition





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In the sections of the manuscript which contain both of the passages discussed above, in Examples 5.05 and 5.08, Ives added many lines to indicate alignments. They were probably added as an afterthought and two errors resulted.

The Kirkpatrick edition, with one exception--the repeat in measures 2-3 of the third movement--observes the formal design of Ives's work. However, Kirkpatrick expresses his dilemma concerning the final measure of the "Development," i.e. the measure before the "Coda." He writes as follows:

How far to go before the final "coda"--83?--84?--85? [in new edition: 20?--21?--22?]-is not an easy decision. The coda's high eb<sup>111</sup> seems obviously designed to hitch onto the d<sup>111</sup> ending 85 (133?) and to fulfil [sic] the crescendo wedge in 85--and S [the manuscript] has (under the last G of 85) an only slightly erased C (for "Coda"?--the other Lh erasures in the 2.half of 85 being no longer legible). But apparently Ives tired of (or was inwardly embarrassed by) the strong G of 85, and wanted the C major chord of the coda to sound less traditionally cadential. So he cut out either one or two measures before the coda, evidently not being able to decide how many...[for the purposes of this copy, better to include 85 as 133, calling the coda 134-135, so that one can choose for oneself, which is what Ives usually wanted his performers to do.]<sup>167</sup>

The given evidence on the manuscript contradicts this "Editor's Note;" Kirkpatrick's editorial predecessors followed Ives's instructions, going from measure 84 in K [m. 21 in new edition] to the "Coda" on the repeat. Ives originally made a mistake here, which he then corrected. First he wrote above the bar line following measure 20 [K: m. 83]: "On 2nd or Recap to Coda  bottom!!" Then an arrow was drawn after the comment directly to the following bar line. Below the bar line following measure 20, Ives wrote: "on Recap to Coda," which is crossed out. Then he wrote the same approximate instructions above the bar line following m.21. This time he wrote above the bar line, "to Coda;" below he wrote, "2nd Time as recapit to Coda  ." The editorial revision was, therefore, uncalled for. This deviation from the instructions on the manuscript creates several serious distortions.

The analysis of this movement, in Chapter 7 of this study, clarifies the tonal logic of the progression to the "Coda," as well as that of the cadence of the first ending. Partially an outrageous

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167. Ibid., p. 22, 128-133?

musical joke, the cadence fulfills the requirements of a tonal system that couldn't possibly have been understood in 1905 and that we are only now trying to define. It reinterprets the roles of the G and C chords; the expectation of dominant-tonic resolutions, demanded by "Rollo," is dallied with. (The "strong G of 85" would not have resolved directly to C in the cadence even if Kirkpatrick's suggestion were valid since Ives preceded the final C with an F for the entire penultimate measure, connoting a plagal cadence.) The editorial revision and the editorial notes are, therefore, incorrect.

The justification--"so that one can choose for oneself, which is what Ives usually wanted performers to do"--presents a fairly well-circulated idea, that Ives was permissive about how his scores should be played. This idea should be opened to examination. It seems to be based, mainly, on three sources, all related to the Concord Sonata. In addition, interest in completing several works with verbal instructions that Ives had never worked through, such as Chromatic Melody,<sup>168</sup> seems to have contributed to this idea--a generalization having developed from the need for a justification, although I don't think one is needed under those circumstances.

One source related to the Concord Sonata is a personal correspondence from Ives to Kirkpatrick (via Mrs. Ives since Ives was too ill to write himself), written partially in answer to Kirkpatrick's request for detailed information about source prototypes of the "Emerson"

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168. See the sub-chapter "Three Realizations of Chromatic Melody in An Ives Celebration, edited by H. Wiley Hitchcock and Vivian Perlis (Urbana: University of Illinois Press), 1977, pp. 87-109.

movement and about the later Emerson Transcriptions, which Kirkpatrick also received from Ives. Kirkpatrick provides an excerpt of his letter to Ives, which includes the following:

The later Four Transcriptions from Emerson...seem to me an exposition of certain substances which don't properly form part of the actual musical texture, but which hang about the music in no less necessary way. The printed version is so strongly organized a lyric and rhythmic continuity that what remains is to plumb its nature and evolve a manner of presentation. The transcriptions offer valuable clues to the musical intention, but provide more additional notes than can well be taken care of...<sup>169</sup>

Ives answered:

It seems to me usually (perhaps not at every time of the day) that the printed movement is nearer Emerson than either the first score or the transcriptions by themselves, and think you are right in keeping to that. The transcriptions seem to grow away from Emerson in some places. They may have too much of the "dash and dagger" which he had...and not enough of his other fields of action and contemplation--though some of the fuller measures in the transcriptions, when they don't interfere with the general line of the sonata, it may be well to play.

Ives mentions some specific places in the transcriptions that could be used and says "As I remember, I did something of this kind when I used to play the movement. However, do whatever seems natural or best to you, though not necessary the same way each time." A first sketch of the letter reads

as long as it seems natural to you and doesn't disturb the line of the whole sonata--I haven't played it for some time, but I remember that I didn't play it or didn't feel it exactly this same way all the time--sometimes more of the transcriptions seemed better, far more often they didn't.<sup>170</sup>

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169. Ives, Memos, p. 198.

170. Kirkpatrick's letter and Ives's response are in "Appendix 8" of Memos, pp. 198-204. Quotations are from pp. 200-201. Ives made

Ives expresses reasonable satisfaction with what appears in the printed edition, although some years later he did prepare a revised edition. In view of the absence of expressions of ambivalence or indulgence in regard to other works, one wonders if Ives wasn't responding to the specific situation, related to the letter he received from Kirkpatrick rather than commenting on his work in general. In Memos Ives wrote that "Emerson" is "the only piece [my underlining] which every time I play it or turn to it, seems unfinished....It may have something to do with the feeling I have about Emerson, for every time I read him I seem to get a new angle of thought and feeling and expression from him."<sup>171</sup>

The second source is in Ives's own notes in the printed score of the Concord Sonata: "For the most part, this movement is supposed to be played as fast as possible and not too literally," and several "ad lib's" are given in the notes.<sup>172</sup> These given options are related to technical problems, e.g, hand size and speed. The options are practical and not improvisatory or compositional.

The third source, the "memos" which are "Ives's counter-reactions" to responses received from some recipients of the 1920 privately-published editions of the Concord Sonata and Essays, states:

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revisions for the second edition of the Concord Sonata between 1940-47 with the help of George F. Roberts. Roberts attests to Ives's precise intentions in his notation in Vivian Perlis's Charles Ives Remembered (New Haven and London: Yale University Press, 1974), pp. 186-188.

171. Ives, Memos, p. 79.

172. Ives, Concord Sonata, op. cit., unnumbered back pages.

"Especially in Hawthorne, it's more important to get the 'gist and swat' agoing than to slow up to get the written notes."<sup>173</sup> Ives then responded to the question "What do you mean by not to play literally?'--etc." His answer is:

Several reasons--but Rollo never tries to think what. One [reason is] that [it's] better not to--or [you] don't have to (which is the best [reason]) play everything and piece and measure the same every time--not as Josey Hoffman et al play Beethoven, this nice little note just this way, etc....In fact, these notes, marks, and near pictures of sounds<sup>174</sup> etc. are in a kind of way a platform for the player to make his own speeches on.<sup>175</sup>

Ives is exhorting the performer to play with involvement, to "interpret" the score, to use the score as a medium for self-expression. I believe that nothing more extraordinary was intended.

In a letter Ives wrote to Nicolas Slonimsky in 1935, Ives unambiguously expressed his attitude about changes to his scores, even by himself. He wrote: "Am not sure I'd make any changes in the score....Generally speaking, I don't like to change anything once finished."<sup>176</sup>

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173. Ives, Memos, p. 191.

174. Note the phrase "near pictures of sound" as an example of how Ives envisioned the function of notation.

175. Ives, Memo, p. 191.

176. David Wooldridge, Charles Ives: A Portrait (London: Faber and Faber, 1975), 227. In Ives Collection, Box 32, folder 4.

### Conclusion

The transcriptions of the 3-Page Sonata in previous editions present distortions of the music. The Cowell edition is deficient in its transcription of the rhythms and formal design, its disregard of phrasing indications, accents, and Ives's instructions for filling in octaves. In addition, a number of notes are wrong, of special concern at an important cadence at the end of the Andante section of the second movement. The deficiencies of the Kirkpatrick edition have been treated extensively in the body of this chapter: pitch spellings are changed, and numerous pitches are transcribed incorrectly or altered. Rhythms are transcribed incorrectly, and altered rhythmic transcriptions and added bar lines distort the metrical conception. Formal aspects of the music are obscured by realignments between the staves.

This new edition relied on an extended study of the manuscript. It is needed in order to restore the original notation for pitch spellings, to correct rhythms never before transcribed accurately, and to correct pitches, especially at the above mentioned cadence. Also the missing countersubject of the second fugal statement was restored with a logical and harmonically feasible solution. In addition, practical suggestions for understanding somewhat difficult compound meters were made discretely, with small editorial notation; and Ives's verbal comments on the composing score are presented in this score.

In the previous editions, musicologists, performers, and ultimately the public are limited in their access to Ives's musical thoughts. The accuracy, imagination, and general clarity of the

notation Ives created to express his musical concepts is actually a remarkable aspect of his compositional skills. The fact that this music lay unperformed, was considered unperformable for many years by many, and is still difficult to put into publishable form does not reflect on Ives's compositional skill or the validity of his notation. Without attempting here to evaluate the universality or, ultimately, the aesthetic value of this and other works of Ives, we believe that when Ives's own ideas about his work are better understood and accepted, including its programmatic component, on his own terms, at least the doubts about his ability will be laid to rest.

For today's performers of contemporary music, very little elucidation is necessary; one can now take the attitude that in a score like the 3-Page Sonata, accurately transcribed, the notation speaks for itself.

#### Goals of the New Edition

The main goal of the new critical edition, presented in Chapter 5, is to represent Ives's work as it appears in the manuscript. The focus of the "Critical Notes," therefore, is the composing score, itself. Ives's corrections and legible sketches are described. All editorial revisions and other deviations from the manuscript are noted; all places which were or still are problematic are discussed. It is the intention of this editor to satisfy the criteria of a reliable scholarly edition.

At the same time, through editorial suggestions for the realization of some difficult combined rhythms--typeset as editorial



suggestions through the use of smaller type--and several suggestions for right hand and left hand alignments, a practical edition is made available. Accidentals not appearing in the manuscript were added for clarity and are in parenthesis.

It is hoped that the criteria used for this edition will help create a model, when needed, for future editions of Ives's music.

## Appendix I

## Tonal Motion and Prioritized Cycles in The First Movement

Page 3, System 1		System 2	
Fugal Complex (1st Theme)		Bridge Fugal Complex	
C30,1	----->	C31,2	--- C31,2

System 3		Page 4, System 1		System 2	
Bridge		ge_2nd Theme/Episode		Fugal Complex	:
C30,1	C31,2	C31,2	(offkey)	C20	

System 3		Page 5, System 1	
Bridge__Octave		Theme__Bridge_2nd Theme/Episode	
---	C31,2	---	C30,2

System 2		System 3	
__Octave Theme		Ending	
C31,2		C21	
		C20	

Appendix IIA  
Theoretical Overview of The Second Movement

pss=prioritized subset    r.c.=referential collection

mm.	1-3	4	5
Andante:	<u>Block 1</u>	<u>Block 2</u>	
1.C3's	C3 <sub>1</sub> <sup>*,2</sup>	C3 <sub>0</sub> <sup>*,2</sup>	C3 <sub>0</sub> <sup>*,1</sup>
2.pss	7-31 [7,8,10,11,1,2,4]	6-24 [8,9,11,0,3,5,]	6-25 [10,0,1,3,6,7]
3.r.c.	9-11	8-11	8-23
	[1,2,3,4,6,7,8,10,11]	[3,5,7,8,9,10,11,0]	[5,6,7,8,10,0,1,3]

mm.	6-8	9-10
	<u>Block 3</u>	<u>Block 4</u>
1.C3's	C3 <sub>1</sub> <sup>*,2</sup>	C3 <sub>0</sub> <sup>*,2</sup>
2.pss	7-31 [2,4,5,7,8,10,11]	7-31 [8,9,11,0,2,3,5]
3.r.c.	9-3	I 9-3
	[2,3,4,5,6,7,8,10,11]	[8,9,11,0,1,2,3,4,5]

mm.	11	12
	<u>Block 5</u>	
1.C3's	C3 <sub>0</sub> <sup>*,2</sup>	C3 <sub>1</sub> <sup>*,2</sup>
2.pss	7-31 [11,0,2,3,5,6,8]	7-31 [10,11,1,2,4,5,7]
3.r.c.	9-2	I 9-3
	[11,0,1,2,3,4,5,6,8]	[10,11,1,2,3,4,5,6,7]

mm. 13-----19

Adagio: Block 6

12-note unordered collections:

top layer 6-26 [7,8,9,0,1,2]

middle layer I 5-7 [10,11,3,4,5]

bottom layer 4-17 [11,2,3,6]

(segmentation avoids C3 partitioning; see Example 5,02)

mm.	20-----29	30-31
	<u>Block 7 Sequence (middle layer &amp; bass line)</u>	<u>Repeat of M.1</u>
	C3 <sub>0</sub> <sup>*,1</sup> (middleground reduction)----->	C3 <sub>1</sub> <sup>*,2</sup> fragment
	Linear directed motion of outer voices	
	uses 9-1 for each sequential phrase:	
	[10,11,0,1,2,3,4,5,6]	
	[7,8,9,10,11,0,1,2,3]	
	[4,5,6,7,8,9,10,11,0]	
	[1,2,3,4,5,6,7,8,9]	

## Appendix IIB

## Prioritized Paired Cycles in The Second Movement

Block 1	C3 <sub>1,2</sub>	[I]*
Block 2	C3 <sub>0,2</sub>	[IV]
	C3 <sub>0,1</sub>	[V]
Block 3	C3 <sub>1,2</sub>	[I]
Block 4	C3 <sub>0,2</sub>	[IV]
Block 5	C3 <sub>0,2</sub>	[IV]
	C3 <sub>1,2</sub>	[I]
Block 6	unprioritized	
Block 7	C3 <sub>0,1</sub>	[V]
Repeat	C3 <sub>1,2</sub>	[I]

\* Tonal areas created by prioritized paired cycles compared to an analogous pattern in diatonicism.



Appendix IV

3-Page Sonata

by Charles E. Ives

Carol K. Baron  
editor

## A New Critical Edition

### Introduction

This edition is based on both autographs and editions. The autograph sources include a composing score and three short sketches. There are three previous editions.

#### Autographs

##### I. Composing Score

The primary source was the manuscript (Ms) in the Ives Collection, Yale University, catalogued 3B15. It contains the final and only complete form of the 3-Page Sonata, such as it is, with two short sections missing. This manuscript is a composing score, as contrasted with a fair copy, and is encumbered by the problems frequently inherent in such a document. While Ives's handwriting, in the best of circumstances, was never the clearest, his manuscript scores, which are typically composing scores and sketches, are particularly difficult to read and, occasionally, even illegible.

The manuscript consists of three sides of two sheets of score paper, with twelve staves, divided into six paired-stave systems. The movements follow each other directly: the first movement uses three-and-a-half paired staves on page 1; the second movement uses the remaining two-and-a-half paired staves and continues through four

paired staves of page 2; the third page uses the last two paired staves on page 2 and all of page 3. The pages are numbered in the upper right hand corner. "3-Page Sonata" is written neatly on the top center of the first page. The end of the piece contains the date "Aug '05.

The two sheets of score paper are both marked as follows: "THE SUPERB' A. W. TAMS MUSIC LIBRARY, NEW YORK." The first page of the 3-Page Sonata is written on the reverse side of one of the sheets of score paper and upside down. The front side contains a sketch called "Largo (String Chorus & Choir (distant) of Angels," which has been identified as belonging to the 3rd Orchestral Suite (by Kirkpatrick in Catalogue, p. 96). The second and third pages of the piece are written on both sides of the second sheet of score paper.

## II. Sketches on the composing score

The composing score contains seven sketches for the 3-Page Sonata, interspersed with the final version: Sk4, Sk5, Sk6, Sk7, Sk8, Sk9, and Sk10. These sketches are numbered after three found elsewhere because we believe they were written later, i.e., at the time of the final composition.

## III. Preliminary Sketches

Three short sketches have been identified elsewhere in the Ives Collection. The location of these sketches is of interest because they are all found on pages containing sketches for the 3rd Orchestral Set, catalogued 1A8 in the Ives Collection, Yale University. The first (Sk1) is for a bridge motive of the 1st movement (on page 3, system 3, 6th quarter of this edition); the second (Sk2) is for measures 1-3 of



the 2nd movement (top of page 6); the third (Sk3) is for measure 4 of the second movement. The sketches are described in the critical notes below for the appropriate measures in the score.

The autograph of Sk1 is problematic. I discovered, in the course of my work, that it had been altered, imitating Ives's handwriting. The alteration added seven downward stems and two beams, a "6" above the lower staff, and the words "or 7." Compare the following copies of Sk1.

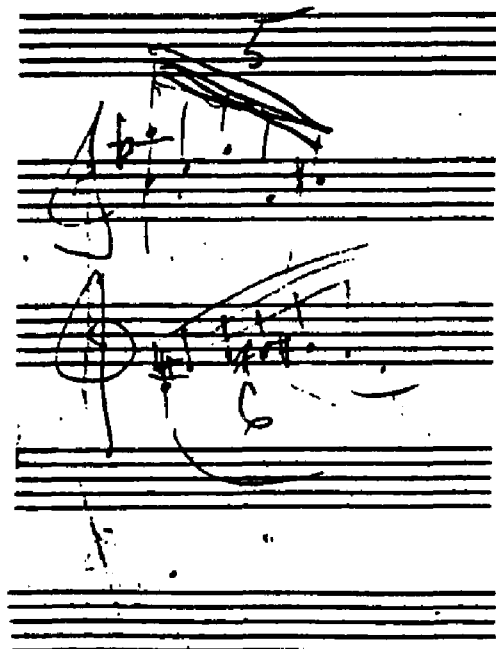


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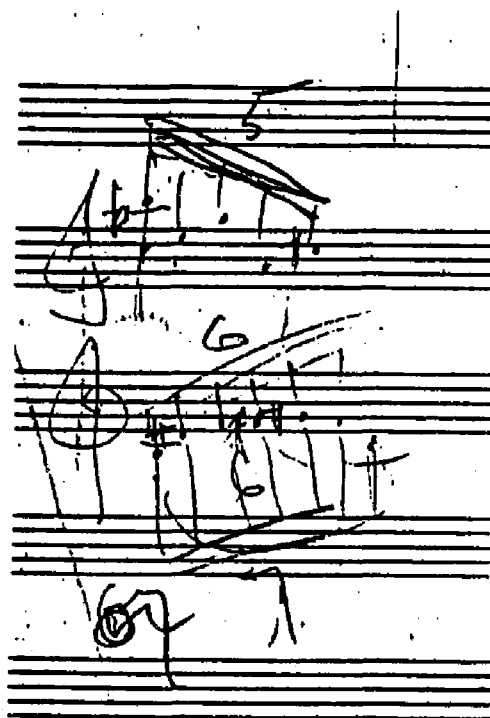


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The addition to the autograph was made after the early Spring of 1974 when I received a reproduction, made from the autograph itself, which does not contain the additions. The manuscripts were microfilmed later in 1974; in that copy of the autograph, the alteration is present.

Dating these three sketches is a problem. The conflicting evidence is as follows:

1. The paper used for 1A8 is marked: "Carl Fischer, New York No. 7-16 lines." Also, it contains a logo consisting of a lion's head and the words "MONARCH BRAND warranted." This score paper is a different brand from that used for the composing score.
2. Sk1 is written on the reverse of a page of sketches for the 3rd Orchestral Set which contains the date and place of composition: "Asheville Feb 27 1919."
3. Sk2 and Sk3 are written on the reverse side of a page of the 3rd Orchestral Set, containing sketch material labeled "section D," also on the Carl Fischer score paper.

The conflict between the 1919 date and that at the end of the 3-Page Sonata, points to the need for a cautious approach to the evidence. Kirkpatrick notes Ives's habit of writing on the back of other pieces "to save buying new paper"--Ives's words (Catalogue, p. viii). Moreover, Kirkpatrick, on the same page, points to a few instances of Ives's adding incorrect addresses and dates retrospectively. However, in his edition of the 3-Page Sonata, Kirkpatrick states that the three sketches in 1A8 were made retrospectively (in K, p. 14).

The contradictions to the retrospective theory are implied in questions that arise: 1.) why would Ives sketch sections of a piece, completed in 1905, in 1919? and 2) if Ives was rethinking the work or these specific ideas, why do they appear in less crafted form? The possibility must be considered that Ives sketched on these pages for the 3-Page Sonata and then used the other side, many years later, for sketching sections of the 3rd Orchestral Set. Another possibility is that the date on the 3rd Orchestral Set is incorrect.

The strongest pieces of evidence that they are preliminary sketches appears on Sk2 for the opening measures of the second movement. On the heading of the sketch is written "Adagio." On the composing score, Adagio was written first; then "Andante" was written over that, pointing to a correction, ipso facto, a later development. Another piece of evidence, from the same sketch, involves the clarification of the pitch class collection for this section. In Sk2, what became the first two verticalities of measure 3 were becoming clarified: a.) the accidentals are very difficult to read here, b.) one of these pitches is a B#, a pitch class not appearing in the final version of that section, and c.) the spelling for this pitch, B#, is used only one time in all three movements of the composing score.

#### Lost Sketches

We must assume that two additional sketches, at least, are lost: those for the two missing sections (see critical notes below). Also, a comment directing attention to the "Bell air" "in the sheet" may be referring to a lost sketch, although the music for this section is apparently complete (see 3,3:2.q-3.5q and 11, 14-15).

### Editions

There are three editions: the first by Henry Cowell (referred to as "C" in the critical commentary), Mercury Music Corporation, 1949; the unpublished edition by Sister Mary Ann Joyce (referred to as "J"), University Microfilms 71-11,042; and the more recent one by John Kirkpatrick ("K"), Mercury Music Corporation, 1975.

### Extramusical Dimensions

Recognition of the programmatic and extra-musical dimensions in much of Ives's music is important for understanding the meaning of the music and Ives's intentions. The verbal instructions and commentary accompanying the music on the manuscript of the 3-Page Sonata, combined with my analysis of the formal procedures used in the work, led to the discovery of a piece of writing that is the concomitant literary program for the music, available as Memo "5" in Ives-Memos (p. 30-32), (W.W.Norton, 1972.)

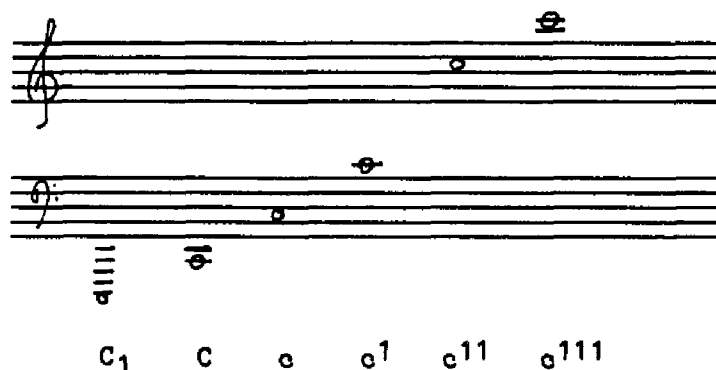
Memo "5" is a diatribe about the contemporary world of music criticism. Specifically, it attacks the writing of William James Henderson in What Is Good Music? (New York, 1898). The 3-Page Sonata parodies, within the context of its formal organization, a specific section of Henderson's text. In addition, it cleverly distorts classical conventions by providing incongruous settings for known procedures. The first movement is a combination of fugue and sonata-allegro, using B-A-C-H as the fugal subject in a chordal texture; the second movement is a lyrical two-part form that is highly contrapuntal; and the third movement is a dance form, based motivially on the march, waltz, and ragtime.

### Critical Notes

Ives's notation of accidentals presents problems because it contradicts general practice today. Accidentals are used by Ives before every note that is modified. He uses the natural sign to cancel accidentals only for notes that follow closely. The lack of an accidental before a note, therefore, means that it is natural. Consistency between staves is not attended to: Ives thought in independent lines and layers. Editorial additions were needed and are placed in brackets, are in parentheses.

Rh = right hand part; Lh = left hand part.

Registration is indicated as follows:



Pitches of verticalities are connected with dashes.

First movement:

Ives's non-metrical rhythmic conception in the first movement is notated in the manuscript without bar lines. References in the critical commentary will, therefore, need to refer to systems in the edition instead of measures. For example, a comment beginning 3,4: is referring to page 3, system 4; 4,5:1.q,1.8,2.16 means page 4, system 5,

1st quarter, 1st eighth, 2nd 16th. The colon always follows the number of the system; the period stands for st, nd, rd, or th as in 1st, 2nd, 3rd, 4th, etc.

For the 1st system of the first movement, only, the digit after the system number and colon will be to the number of the verticality--the single note or interval--in order to avoid counting the opening 8th rest. Thus, 3,1:8 means page 3, 1st system, 8th verticality.

3,heading-On left side, Allegro crossed out; Allegro Moderato written below.

3,1:-Repeat sign in Ms. outside system; consists of double bar and flags.

3,1:1-Lh. The rhythmic measurement of whole-note A and breve C is relative, not precise. A is repeated after 6 1/2 quarters; C should be held until change of harmony in B $\flat$ -g $\sharp$ , system 2:3.q. Sustaining pedal should be used to hold both pitches. Parallel situation in 4,2:1.q-2.q.

3,1:1-Lh. d for repeat only; tied over from 4,2:9.q,3.8th, before double bar and end-repeat sign. In Ms not shown in 1st m. but tie indicated before double bar. Editorial eighth note.

3,1:10-Rh, b $\flat$  changed from b $\sharp$ ; triplet changed from two eighths. Top line originally had two eighth notes, tied a $^1$  and b $^1$ , connected with a beam; followed by quarter note f $^1$ -b $^1$ .

1st version



3,1:10-11-Lh, eighth notes c $^1$  and b were originally quarter notes--beneath the tied a and b of Rh. Flags were added. This correction and the one described immediately above, could have been made as Ives notated this section or it could have been made later.

3,2:1-Ms. Lh, bass pedal A is half-note; editorial revision to quarter-note, following unequivocal requirements of Rh.

3,2:3.q-Ms. Lh, B $\flat$  and G $\sharp$  changed from quarter notes to whole notes, possibly intended as half-notes using stem from quarter

notes. Upward stem is on left side instead of right side of new noteheads. Slur with whole-note may have been used as a convention, as described above (3,1:1), for indefinite length. Editorial revision adds dots.

- 3,2:8.q-Rh, triplet changed from two 16ths and an 8th, the rhythm of the preceding Rh quarter.
- 3,2:8.q,2.8-3:2.q-A faint line separates  $g^{11}$ - $b^{11}$ ,  $f^{11}$ - $g^{11}$ ,  $e^1$ ,  $e^{11}$ - $g^{11}$ ,  $d^{11}$ ,  $g^{11}$  from the pitches below.
- 3,3:1.q-Ives wrote b in both the treble clef and also the bass clef; he drew a line between them, indicating the continuation of the parallel interval-5, now split between clefs. Editorial broken lines point out the continuity.
- 3,3:2.q-3:5.q- The bottom layer drops out after the  $f^4$ . In Ms, Lh, beginning under tenor  $d^{11}$  (middle of 3rd system in edition) is a partly illegible comment, "for [?] see [?] pp2 in copy." John Kirkpatrick suggests that it might be, "for LH see top p. 2 in copy" (K, p. 15). Editorial completion of bottom layer uses the 1st statement of the fugal countersubject as a model (1st system, 8. verticality [f]-2nd system, 3.q [ $g^{\#}$ ]). While these pitches are appropriate and may have been used by Ives, he may have continued with a five-note compound texture as in verticalities immediately preceding and at the end of the first fugal complex.
- 3,3:5.q-In Ms, stem for  $g^1$ - $c^{11}$  goes up, continuing pattern of parallel interval-5's, and is separated from new layer, introduced above, placed slightly to the right. Stem continues past the g to the triplet unit below, to align.
- 3,3:6.q,1.16-In Ms.  $e^1$  is in bottom staff tied to previous  $e^1$  while  $b^1$  and  $d^1$  are placed in top staff, as in edition.  $e^1$  is the final note of the second statement of fugal subject. Cp. top line opening-2:3.q and alto/tenor lines in 2:6.q-3:6.q. [Ives conceptually separated the formal units; he completed the previous section, maintaining visual consistency, then began next section.]
- 3,3:6.q,1.16-Lh, there are two small vertical lines drawn before  $d^1$ --beginning of sharp sign--and edited out by means of repeated circles, before being crossed out with two horizontal lines. Was possibly anticipating  $\#$  before following D.
- 3,3:6.q-Sk1 from 1974 microfilm (Q 2997) and Ms.different in Lh. Sk1:  $b$   $d^{11}$   $f^1$   $f^{11}$   $g^{11}$   $f^1$  followed by  $d^1$ . Last two pitches connected by small slur; also bracket-slur for rhythmic notation of 6-to-the-beat. Ms. places  $d^1$  above b, creating interval and fitting into 6-to-the-beat; final  $f^1$  changed to  $e^1$ , as given. For present condition of autograph copy of Sk1, see under description of sources and copies of autographs, above.
- 3,3:6.q-4,1:8.q-In Ms, all voices are written on top staff only. In the edition two treble staves are used because the independent voices could not be indicated on one staff as Ives does, by having internal stems. The following possible reasons are suggested for Ives's use of only the top staff: a.) The comment, described above re: the lost material, extended into the lower staff of this section. b.) Ives had to continue with the following thematic

unit--the 2nd theme/episode--in the top staff because he wrote a sketch further on in the lower staff of the same system and, therefore, had to complete all layers on one staff. c.) Ives placed this two-beat motive and the entire 2nd theme/episode which follows, in the top staff because it visually prepared for the low C-B pedal-point accompanying the 3rd fugal entrance. d.) The addition of a new high layer (beginning 3,3:6.q) coincided with idea of eliminating lowest layer at this point, until the entrance of low C-B and the 3rd fugal entry; use of only the top staff, visually marks the idea. An indication contradicting explanations b., c., and d. is an arrow beneath the 3rd quarter of the 2nd theme/episode (4,1:4.q), which leads into the sketch below, possibly indicating that Ives meant for the lower staff to be used for this section but that the sketch was in the way.

I believe Ives meant to place the passage containing 5-against-6-in-the-space-of-1-beat in the treble staff: he conceived it that way in the sketch, and the comment (see above, 3,3:2.q-3:5.q) could have been placed so that it did not interfere.

- 4,1:2.q-Rh, alto layer,  $db^{11}$ , flat sign over partially erased probable sharp sign. Top layer  $c^{111}$  originally quarter note, as was following  $a^{11}$ ; beam connecting them added.
- 4,1:2.q-Lh,  $a^b$ , flat sign written over probable natural sign.  $a^b$  changed from half-note to quarter-note by partial filling-in.
- 4,1:3.q-5.q-The sketch in the lower staff is crossed out with small circular motions that Ives used in several places for obliterating a sketch. The pitches are illegible. An arrow pointing down to the sketch from the top staff may indicate that Ives intended for the material above to be written in the lower staff. (See above, 3,3:6.q-4,1:8.q.)
- 4,1:6.q-Accent written below  $d^{111}$ , partially erased, then written above as for other  $d^{111}$ 's in the passage.
- 4,2:1.q-2.q-Lh, breve C and half-note B parallel the opening interval-9 breve C-half-note A. The repetition of C and B an octave higher, inverted, in 4,2:7.q parallels the motion from C-A into inner voices A-f#, Lh in 3,1:6.q. C-B should be held with sustaining pedal until repeat sign and return to held C-A at opening.
- 4,2:6.q-Lh, in Ms, triplet verticalities, only bottom notes a and  $a^b$  are written in lower staff; however, pitches of both verticalities connected by beam as in edition. Partial erasures above  $db$ , a, and  $a^b$  show that a and  $a^b$  were moved to lower staff, and connecting beam moved from below to above triplet, connecting triplet to  $db$ 's of lower layer.
- 4,2:3.q, 5.q, 6.q, 7.q, 8.q, and 9.q-lines drawn for aligning notes in both staves. Notes of top staff written first; lower staff notes frequently needed to be squeezed in. [Ives composed polyphonically, writing one voice or layer, then another, frequently not leaving correct space for voices not yet written down; reminiscent of J.S. Bach.]



- 4,2:7.q,3.and 4.16's-Lh. In Ms, notes  $e^{b1}$  and  $g-(a^\sharp \text{ unclear})-d^1$  placed in upper staff. Noteheads for  $a$  and  $g$  are ambiguously placed.
- 4,2:8.q-In Ms, Lh verticality  $e^1-g^1-c^{11}$  placed in upper staff. In edition, placed in lower staff to maintain clarity of voices.
- 4,3:2.q-In Ms, a line drawn between 1.q and 2.q to align verticalities of both staves.
- 4,3:2.q-3.q-Lh tied notes erased and rewritten, apparently, to spread out under notes in Rh.
- 4,3:3.q-Line drawn for alignment from tied  $e^b$  in lower staff to  $g^1$  in upper staff. Contradicts rhythmic notation; assumed to be incorrect. Such an error exists in only one other place (see below: 5,3:2.q-6.q) See 4,3:3.q-5,3:(end of movement).
- 4,3:3.q-4.q-Line drawn, in three parts, from top of upper staff through bottom of lower staff, apparently to assure alignment, considering the 3-in-space-of-2 in Lh and the poor alignment.
- 4,3:3q-5,3:(end of movement)-11 more lines are drawn for aligning music in upper and lower staves. Contains interesting examples of 1) Ives's writing material in one staff, then needing to squeeze notes into spaces too small; 2.) beginning new material of both staves lined up, then becoming separated. Alignment indications are assumed to have been added later; resulted in two errors. See 4,3:3q and 5,3:2.q-6.q.
- 4,3:3.q-5,1:3.q-Notes in lower staff written first, then notes of upper staff squeezed in.
- 5,1:3.q-5.q-Lh. Demonstration of Ives's conception of absolute rhythmic values and independence of voices and layers. Cp. below, Lh, 5,2:3.q. A more practical solution has 3 dotted quarter-notes ( $g$ ,  $e^{b1}$ ,  $a^{b1}$ ) tied to eighth-note--to align on the beat--with shared stem beamed to  $f^\sharp$ -sixteenth-notes. Ives's solution maintained in edition. Ives is making a fine distinction between held voices and melodic idea. In Ms, the stem of  $a^{b1}$  goes up; separately drawn stem connects  $g$  and  $e^{b1}$ , without descending below the  $g$ . Erasures made to spread apart tied  $a^b$  and  $f^\sharp$ 's to the right, to correct the alignment.
- 5,2:1.q-1st verticality of beat in both staves fit on printed staves; then Ives extended staff into the right margin for remaining verticalities. In Lh, only top note of repeated verticalities written out.
- 5,2:1.q,dotted 8.-2.q-Rh,  $e^{11}$  tied over to following system, but not written out in Ms. with the other notes.
- 5,2:2.q,2.8-Rh,  $e^1$  added after beam written; placed slightly below beam. Lower beam originally connected  $g^1-c^{11}$  to  $b^1$ .
- 5,2:2.q-3.q-Lh, between staves, erasure of possible  $a^1$  on 2.q, followed by erasure on 3.q, 1.8, then 16th notes  $f^\sharp^1$  and  $g^1$ . Incompleteness of an idea is unusual; therefore its inclusion is questionable.
- 5,2:3.q-Lh, last E-d-e written as dotted quarter followed by eighth in Ms. Editorially revised to tied note to clarify complex rhythm. The rhythmic values are not absolutely correct since quarter-note that is part of triplet does not have full quarter value as needed for dot, used in Ms, or for tie, used in edition. Alignment incorrect in Ms.

5,3:2.q-6.q-If Rh of this section was written first, it was irrationally spaced; Lh squeezed in. Or, possibly, Ives wrote Lh first, immediately followed by double bar marking end of movement, and then needed to squeeze in the Rh. [Ives had little regard for rational spacing of noteheads, except for alignment purposes.] Rhythmic notation is problematic. 5 beats in Rh are above 3 half notes in Lh with a 3 and large bracket. The 3 is interpreted to mean 3 half-notes-in-the-space-of-5; could have been more clearly indicated as 6 quarters-in-the-space-of-5. (Same notation used in 2nd movement, mm. 3 and 5.)

A line drawn, as if for alignment between first group of 16ths in Rh (3:3.q) and second half-note in Lh, confuses the issue; assumed to have been drawn later, incorrectly, as an after-thought. (See above, 4,3:3q for other example of Ms error resulting from alignment indication.) Another possibility is that the line of alignment is correct--possibly a formative correction--and the large bracket and 3 should have been erased or meant simply to indicate that there are three beats in Lh. If so, then the tied quarter-note verticality of the Rh, above Lh half-note value, should be a half-note. The error in this solution is less likely since more extreme. The latter solution would create a totally regular metric relationship, with 6 quarters against 6 quarters. The solution remains somewhat speculative.

5,3:2.q-6.q-Lh. The notation of this section is dreadful. The half notes Bb, A, and Ab and their downward stems are absolutely clear. All other notes have a mixture of stemming directions. Using the values precisely as given in the Ms, it was necessary either to add the rests to clarify what seems to be closest to Ives's intentions, as here, or to add an upward stem to each half note for a quarter value, in place of the quarter rest.

#### Second Movement

5,4: = page 5, measure 4

- 6, heading-on left side, corrected: Adagio written over with Andante. Sk2 (see "Introduction," above) has Adagio; an important argument that the sketch was a preliminary piece of work.
- 6,1-3:-Sk2 is for mm. 1-3 of the Andante. A comparison to Ms. shows that Sk2 is simpler and less interesting rhythmically, and 4 mm. long. See above, "Preliminary Sketches." In Ms in m. 2 the triplet rhythm is added in the top layer, using f<sup>#1</sup> whole note and g<sup>#1</sup> half note--not in Sk2. c<sup>#1</sup> has down stem in Ms, up stem in Sk2. In Sk2 mm. 3 and 4, top line is a<sup>#</sup>, b<sup>#</sup>, d<sup>b11</sup>; alto layer is partially legible, probably f<sup>#1</sup>, f<sup>1</sup>, c<sup>#1</sup>. In Ms, m. 3, top line is a<sup>#1</sup>, c<sup>#11</sup>, d<sup>b11</sup>, e<sup>11</sup> over d<sup>#1</sup>, d<sup>b1</sup>, d<sup>b1</sup> as in edition.
- 6,3:3.half note-Alto voice, sharp before d<sup>1</sup> corrected to flat: erased ledger line is visible; is sharp in Sk2.
- 6,4:1.q-2.q-Rh, application of 8va for 1st quarter, only, indicated by encircling b<sup>b</sup>-f<sup>1</sup> and 8va written in top staff, followed by "loco" written above 2.q, a<sup>b</sup>-e<sup>b1</sup>, in top staff.
- 6,4:-Stemming and slurs for grace notes erratic.

6,5:-Rh, triplet sign given twice: one is between the first and second half-note dyads; another is for entire measure, indicating 3-half-notes-in-the-space-of 4-quarters. First one may be left from an aborted idea. However, Ives may have meant this complex relationship. The 2nd dyad would then need to be a whole-note; the notation includes short stems for all three dyads: the first and third have down-stems and the second has stem between the two pitches, on the right side of them--somewhat ambiguous in this matter. The compound rhythm for the alternative reading may be understood as follows:

$$\begin{array}{c} 6 \\ 4 \end{array} \left| \overset{3}{\text{p}} \text{ } \overset{3}{\text{p}} \text{ } \overset{3}{\text{p}} \right| = 4 \text{ } \text{♩}'\text{s} \quad 9 = 3 + 3 + 3$$

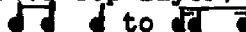
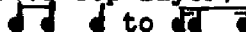

OR

$$\begin{array}{c} 6 \\ 4 \end{array} \left| \text{p} \text{ } \overset{3}{\text{o}} \text{ } \text{p} \right| = 4 \text{ } \text{♩}'\text{s} \quad 9 = 2 + 4 + 3$$

The editorial decision, vis-a-vis rhythmic notation, is made somewhat ambivalently.

- 6,9:-Crossed out sketch between upper and lower staves is totally illegible.
- 6,9:-Lh, Ms has all d<sup>#</sup>'s; C has all d<sup>b</sup>'s. Cowell's scrupulous adherence to his understanding of Ives's notation implies that his revision came from Ives. However, such a revision contradicts what would otherwise be the exact transposition of Lh, m. 4. Edition follows Ms as opposed to C and K.
- 6,10:-Example of Ives's practice of not aligning sharps and flats with their respective notes. (See below.)
- 6,11-18:-Top layer notes are connected by arrows. Comment on top of page, over mm.14-18: "(-----> d -----> d) means top melody" refers to this notation.



- 7,11-end of movement:-Top and middle layers written on upper staff in Ms with instructions above to "copy on 3 staves." In Ms, stems of top layer are all up and middle layer are all down; unnecessary when divided between both staves.
- 7,11:2.q-The three triplet notes, tied e<sup>111</sup>, d<sup>111</sup>, and c<sup>111</sup>, are lightly crossed out, but there is no correction; therefore retained.
- 7,11:4.q-Top layer, correction to triplet for f<sup>11</sup>, d<sup>111</sup>, c<sup>111</sup> from  to  to triplet: originally in 5/4 meter. This correction is related to rhythmic problem in the middle layer, described below.
- 7,11:4.q-Middle layer in m.has tied quarter and two half notes in Ms, equaling five beats. Second half note would have fit under rhythm of 5/4 . Correction in top layer not made in middle layer in Ms. Editorial revision of 2nd half-note to quarter-note.
- 7,11:4.q-Above C<sup>111</sup> a sign that seems to be pp.


7,12:-Top layer, partial erasures in Ms show, originally, tied quarter-note c<sup>111</sup>, to quarter-note g<sup>111</sup>, quarter-note e<sup>111</sup>, d<sup>111</sup> (of undeterminable value, then to eighth note), to a<sup>#111</sup>. Over the d<sup>111</sup> are the remains of what was previously a fermata or a tie, and the remnants of a possible flat for the note that followed. Corrected after tied c<sup>111</sup> to notation of edition.

There are five aspects to the overall correction to note: 1.) g and e crossed out with both circles and horizontal lines. 2.) e<sup>11</sup>, clearly, and g<sup>11</sup>, less clearly, were added to verticality beneath d<sup>111</sup> (see 4.q.2.eighth)--fitted in with smaller heads. 3.) Eighth note e<sup>11</sup>, preceding eighth note d<sup>111</sup>, is squeezed in and tied to preceding note. 4.) The two ledger lines for d<sup>111</sup> are turned into a sharp for the following c<sup>111</sup>, now serving both functions. 5.) A 5/4 measure exists in both the top layer and the middle layer although the metric sign is not added and conflicts with the bottom layer (see below). Edition retains incorrect notation of Ms since no ambiguity in performance would result. Simple revision would change top layer, final dyad from half-note to quarter-note.




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- 7,12:-Middle layer, Ms has 5/4 as in previous measure; note that 5/4  $\text{p p}^{\circ} = \text{p p p}$ . The 5/4 is retained here and in top layer. See immediately above.
- 7-12:-Bottom layer, in conflict with two above layers, having only 4 beats in the measure. Practically, since there are fermatas in all layers, the conflict is visual only, indicated by broken bracket.
- 7,13:-Rh, top layer, dyad  $f^{11}-c^{111}$  corrected from quarter-note to half-note. Between  $f^{11}-c^{111}$  and  $a^{111}$ ,  $d^{111}$  is crossed out. Smudge beneath  $a^{111}$  is used to conceal a note below, maybe  $b^{11}$ .
- 7,13-18:-Slurs, begun by Ives, connect pairs which have arithmetic progression in eighth-note values: 6, 6, 6, 6, 5, 5, 4, 2.
- 7,13-19:-Lh, bottom layer, originally contained all  $d^{\#}$ 's. The correction in Ms consists of: 1.) Natural sign written over sharp sign in 13:2.q; 14:2.q, 2.8; 19:1.8. 2.) Natural sign written over erasure in 15:4.q; 17:3.q.
- 7,15:-Middle layer,  $f^1$  preceded by sharp that is crossed-out.
- 7,15:3.q-Top layer, tied  $c^{\#111}$  corrected from quarter to eighth, connected by beam to  $c^{111}$ .  $C^{\#}$  correction added after writing arrow pointing to 4.q.
- 7,16:-Middle layer,  $f^1$ , preceded by sharp--crossed-out.
- 7,18:-Measure followed by "-----> to Q" in right margin. Logic of progression to m. 19 precludes idea that an insertion is missing; meaning of this sign and the following comment (see 8,19-20:) are, therefore, unknown."
- 8,19-20:-Ives's comment above system: "(for Bell air see  $\phi$  in the sheet." For the word "the," the "t" is not crossed and "e" is omitted lh. A study of Ives's handwriting shows both omissions to be fairly common for this word. An accent belonging to bottom layer of system above can make "h" appear to be a "k": In K (p. 19), comment transcribed as: "in ink sheet."

- 8,19:4.q-Lh, 8va beneath c in Ms. Edition written octave below, beginning on C.
- 8,19-9,29:-Accent marks and lines of alignment are generally placed between bottom and middle layers, accents applicable to both layers, at beginning of coincident phrases. These two layers are rhythmically synchronous, with implied 10/16 meter in top layer over implied 5/8 meter in bottom layer. The accents and alignments mark the 10/16 phrases, consisting of paired trichords, and the 5/8 phrases, with triads in varying rhythmic configurations. Both layers are part of a sequential passage between mm. 19-29, the phrases designated by editorial broken lines.
- 8,19-9,30:-Top layer, notes in pencil written over in ink.
- 8,23:-Middle layer, rhythmic notation in Ms is incorrect, consisting of:  --seems to be careless error. Measure is split in half between two systems. Erasures obliterated nature of corrections.
- 8,23:3.q-Top layer, d<sup>111</sup> or d<sup>#111</sup> written twice and erased first time (end of system) and crossed-out second time (beginning following system).
- 8,25:-Middle layer, rhythmic error in Ms; left out eighth-note value. First time Ives uses shorthand notation. See immediately below.
- 8,25, 27-28; 9,28, 29:-Middle layer, in four places Ives did not notate the rhythm of the middle layer, using a shorthand notation instead, consisting of "a 2" and a bracket, or simply "2". In the last instance he used only a bracket.
- 8,26:-Middle layer, error with eighth note missing. Same error as in m. 25.
- 9,30:-Alto layer, has two a<sup>#</sup> half-notes, 2nd one under 4th quarter. Revised in edition to dotted half-note and quarter-note, following the given alignment and the precedent in m. 1.
- 9,31:-Ending revised in two crossed-out sketches between mm. 30 and 31.
- 9,31:-Error in rhythmic notation in all voices. Bottom layer half-note revised in edition from half-note to whole-note: half-notes in above voices revised to dotted half-notes. Fermata placed over crossed-out first version, not transferred to final version in Ms.

### Third Movement

- 9,heading:-Ms, left side, Allegro.
- 9,1:-Unusual sign used for repetition sign, placed at beginning between staves. Matched at end of m. 40: "to  ." In 3rd movement Ives used verbal instructions in Ms for sectional repetitions which are too complex to execute using normal repetition signs.
- 9,1-5:2.q-Comment between Lh and Rh staves: "1st Time announcing alone in octaves ff--as a Preface Declamation!" spread over 5 mm. in Ms. Rh material not played until repeat in m. 41.
- 9,1-2:-Comment between Lh and Rh staves, beneath comment given above 9,1-5:2q: "March time (but not a March--Rollo)."
- 9,1:1.q-Lh, triplet sign missing for C<sup>#</sup> and E.

- 9,1-2:-Lh, "Oots" written below C# and E, followed by squiggly line that breaks into separate strokes through G, not used under tied F#'s and F<sub>1</sub>; used again under tied A's.
- 9,2:-Measure is divided by an open-repeat sign: a double line, and double flag. See 9,4:.
- 9,2:2.q-Lh, accent above tied note A. Editorial revision places it on previous A. Slur from accented E in m.1 to tied A in m. 2.
- 9,2:3-4.q's-Written in lower staff: "Octaves LH."
- 9,4:-A 2/4 measure, but metric change not indicated. At end of m. a close-repeat sign.
- 9,6/14,46-10,13/15,53:-Lh, alternation of half-notes and quarter notes in Ms, editorially revised with added stem for implied quarter note value. (10,10/15,50:5.q-Lh, quarter note instead of half note is inconsistent; retained.
- 9,7/14,47:-Originally, from mm. 6 through 10, the alternation of C# and G# were spaced quite regularly; m. 7 was either part of m. 6 with 6 beats, or a 2-beat measure paralleling m. 4. M. 4 and m. 6 precede the same five-note diatonic scale fragment, but outlining different keys. As in m. 4, no meter change is indicated. Ives's correction consists of squeezing in 1) a bar line, 2) a 3/4 metric indication, 3) the Lh octave C#'s on the 3rd beat, and 4) the Rh dotted quarter note and eighth note a<sup>1</sup>'s on the 3rd beat. A new measure was created. Editorial revision added Lh double stem and dot to half-note octave C#'s.
- 10,9/14,49:3.q-Rh, d# and b not rewritten for tied verticality, but slur implies their repetition.
- 10,9/14,49:4q-"Oots" written between staves, referring to repetition of preceding verticality in m. 10.
- 10,10/15,50:1.q,4.16; 2.q,1.8 and 2.8; 3.q,1.16-Rh, only d#<sup>1</sup> written. See immediately above.
- 10,10/15,50:-Crossed-out sketch for m. 6 between 2. and 3. quarters.
- 10,10/15,50:-A line between staves, after 4.q, not for alignment and possibly, therefore, a barline. Indicated by broken line in edition.
- 10,11-13/15,51-53:-Open- and close-repeat signs surround these measures. Circled numbers 1, 2, and 3 are written above each measure. These signs are related to number indications over upper staff in mm. 14-16 and comment 11,14-15 (see below). The repeat signs seem to have been added as an after-thought.
- 10,13-11,14/15,53-54:-Comment above m. 14/54, with arrow drawn from barline at end of m. 13/53: "On II time [illegible] repeat 2nd Theme (as is right! correct ^ from ③ to ④."
- 11,14:-"Oots" written twice, beneath 3. and 4.q's of sextuplets, respectively.
- 11,14-15:-Rh, comment: "I play the 3 meas. before over again but had something else can't find."
- 11,14-16:-Circled 1,2, and 3 written over measures, indicating use of previous measures in Rh. This compositional decision is an alteration, by default, of original idea.
- 11,14-17:-Editorial suggestion transcribes Rh from 4/4 to 6/4.

- 11,14-12,22/16,63-67:-With metric change from 4/4 to 6/4 the value of the quarter-note is reduced by 1/3:  $\dot{d} = \dot{d} \cdot$ .
- 11,17/16,63:-Sign between staves, indicating point of repeat: . Relates to comment at end of m. 40/62.
- 11,17/16,63:1.-3.q's-Rh, rhythmic idea changed from  a continuation of previous waltz-theme, and the simple relationship to Lh of 3 beats against 3 beats (or 6/4 for entire m. in both layers). Corrected to maintain Rh 4/4. Error exists because dot after 2.q not erased; however, line drawn aligning Rh eighth-note on 3rd beat to Lh F# on 4th beat of sextuplets. Editorial suggestion for m. 17/63 applicable to m. 18/64.
- 11,17-12,22/16,63-67:Lh, bottom layer indicated by single note. Indication "Octs" in m. 14 applies to these measures as well.
- 11,18/16,64:-Rh, fourth verticality is incorrectly dotted; revised editorially. Error may have been made afterwards, with dot added to resemble the triplet groups which follow in m. 19.
- 11,19-12,20/16,65-66:-Rh, two triplet brackets in each measure mark metric change from 4/4 to 6/8; Lh, bracket and 6 used.
- 12,20-21/16,66-67:-Rh, comment above barline, end of m. 20/66: "on 2nd or Recap to Coda  bottom ." The arrow leads to the barline at the end of m. 21/67, followed by the comment "to Coda;" the arrow and the second comment correct the original instruction, i.e. the Coda follows m. 21/67. Lh, crossed-out comment beneath barline at end of m.20/66, "Recap to Coda;" followed by arrow leading to correction of error at end of m. 21/67 with comment: "2nd Time as recap to Coda .
- The harmonic relationship of m. 22 to m. 23 (Piu moto) and m. 67 to the Coda is describe in Chapter 7 of editor's study of this work.
- 12,23:-heading, left side, "Piu moto."
- 12,23:-Dynamic marks placed as given. Forté may refer to accents.
- 12,23:-2/4 meter not given here in Ms; however, given in m. 32, following 3/8 of m. 31.
- 12,23/15,54:-Five flats in Rh only.
- 12,23-28/13,32-37:-Lh, the material of mm. 23 and 24 are marked "A" and "B" in Ms and thereafter designate the two respective measures, precluding the need to write them out.
- 12,25 and 13,34:-In addition to "B," Ives wrote out part of the material in order to indicate that the last eighth note here is Ab instead of c#.
- 12,23-28/13,32-37:-Lh, Ab consistently doubled stemmed in Ms, but dot given only in m. 23. Lh, Ives used both the 3-to-the-measure and 6-to-the-measure, the former in m. 23 between staves; the latter in m. 24 below the Lh staff. Rh rhythm begins with rhythm of ragtime. Synchronizing the ragtime rhythm with the triplet rhythms in these measures is deceptively difficult. The practical compound rhythm of 3 eighths against 4 sixteenths to the half measure, is made difficult by the tied notes of Rh on beats.



- 12,24:-Comment above: "(2nd player may join) (after box to body)."  
Is Ives's humorous recognition of unusual difficulty of this passage.
- 12,28 and 13,37-38:2.16-Rh, only in these parallel situations  $e^1$  is not preceded by natural sign, indicating the use of the flat called for by the key signature.
- (13,32-40)/15,54-16,62:-Sign above system: "● II-----to-----  
●." Refers to instructions after waltz-march," end of m.13/53:  
"On II time repeat 2nd theme (as is right! Correct  $\wedge$  from ● to ●"  
shown in edition for 2nd time.
- 13,35:-The tie between  $f^1$  and  $f^1$  of the following measure is circled, very neatly and darkened, perhaps because the same note is tied twice in succession.
- 13,35-38:-Numerous corrections were made in these measures. Also, in the last system of the Ms there are two sketches for these mm. One, on the top staff of the last system, is crossed out. The second is in the bottom staff of the last system, below the first sketch, seems to be for the più moto section, in a general way. They appear between m. 40/62 and Coda. The following are transcriptions of the sketches:



- 13,36:-Flat is written at end of m. 36 for  $g^1$  in m. 37.
- 13,37:-Word "etc" between staves, erased. Also erased, Rh above staff: eighth note  $e^{1b}$ .
- 13,40/16,62:Rh, beam in Ms is above; revised in edition for consistency with preceding m. and consistency for tied over verticality.  
Final C#'s: in Ms, lowest octave,  $C_1$ , missing; added to edition by reference to opening of 3rd movement which follows in repeat, m. 41. Lh, Ms stem down for  $C_1$ ; revised for C (and  $C_1$ ) to stem up for consistency with opening of 3rd movement, which follows in m. 41 repeat.
- 13,40/16,62:-two comments follow this m. Between staves and in bottom staff: "to  $\text{♩}$  Now class wh [?] it is right to return to 1st Theme in M III." These comments are followed by the sketches for the Più moto. Above and in top staff: "on II time we return as is usual to 1st development at  $\text{♩}$ ."
- Coda:-Preceded by word "Coda" written three times: above top staff, between staves, and in bottom staff.  
Comment at side of final chord in bottom staff: "Doh! CHORD right O TONICK! GOOD Nit SHIRT."
- End page:-Comment beneath last m., with arrow pointing up: "End of '3 Page Sonata' Fini at Saranac L. with Dave Aug '05."

# 3-Page Sonata

(1905)

Charles E. Ives  
Edited by Carol K. Baron

## I.

**Allegro moderato**

*mf*

7

3

LH

RH

3

5

3

3

6

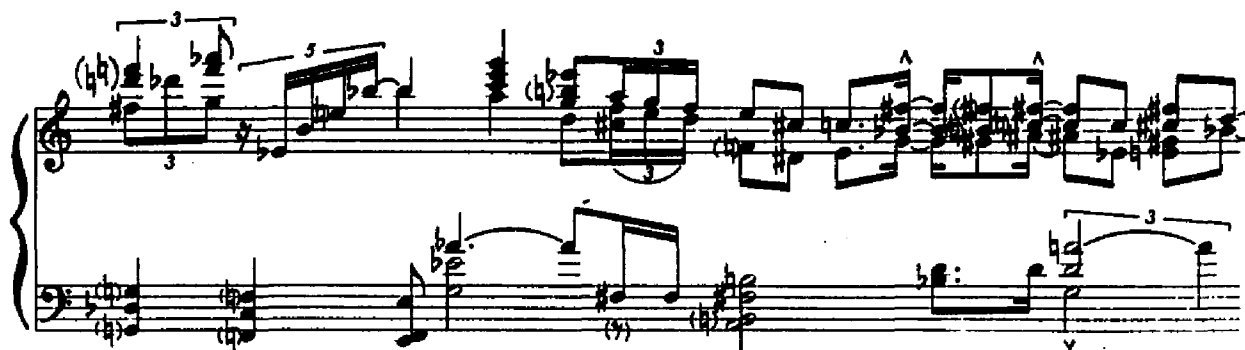
\*Used in repeat only.

First system of a musical score. The right hand (RH) features a sixteenth-note scale (marked '6') and a triplet of eighth notes (marked '3'). The left hand (LH) features a five-note scale (marked '5') and a triplet of eighth notes (marked '3'). The key signature has one flat (B-flat), and the time signature is 3/4.

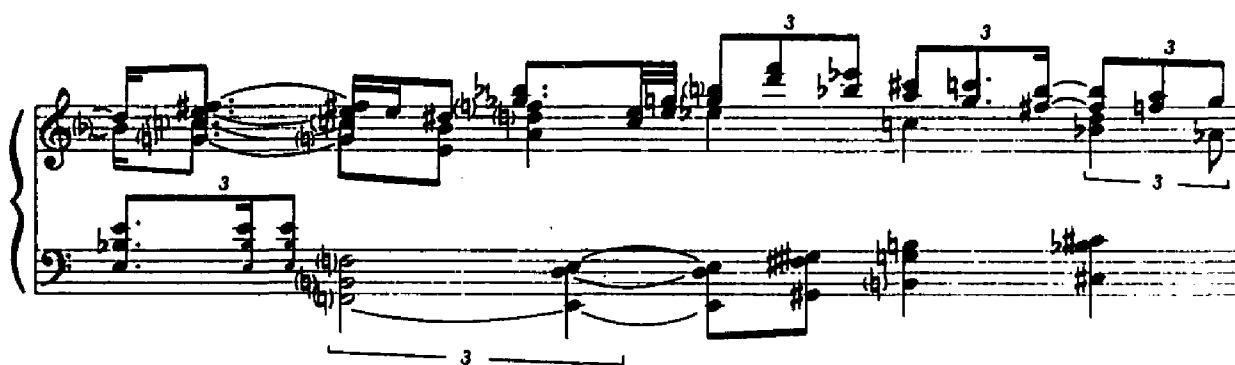
back to 1st Theme. All nice  
Sonatas must have 1st Theme

Second system of the musical score. The right hand (RH) features a triplet of eighth notes (marked '3') and a triplet of sixteenth notes (marked '3'). The left hand (LH) features a triplet of eighth notes (marked '3') and a triplet of sixteenth notes (marked '3'). The key signature has one flat (B-flat), and the time signature is 3/4.

Third system of the musical score. The right hand (RH) features a triplet of eighth notes (marked '3') and a triplet of sixteenth notes (marked '3'). The left hand (LH) features a triplet of eighth notes (marked '3') and a triplet of sixteenth notes (marked '3'). The key signature has one flat (B-flat), and the time signature is 3/4.



The first system of musical notation consists of a grand staff with a treble and bass clef. The treble staff begins with a key signature of one flat (B-flat) and a common time signature. It features a triplet of eighth notes, followed by a sixteenth-note triplet, and then a series of chords and single notes. The bass staff provides a harmonic foundation with chords and a few moving lines. The system concludes with a triplet of eighth notes in the treble and a single note in the bass.



The second system of musical notation continues the piece. The treble staff features a triplet of eighth notes, followed by a series of chords and single notes. The bass staff includes a triplet of eighth notes and a series of chords. The system concludes with a triplet of eighth notes in the treble and a single note in the bass.



The third system of musical notation concludes the piece. The treble staff features a triplet of eighth notes, followed by a series of chords and single notes. The bass staff includes a triplet of eighth notes and a series of chords. The system concludes with a triplet of eighth notes in the treble and a single note in the bass. The word "attacca" is written at the end of the system.

## II.

**Andante**

*p*

*3va* *loco*

6

9

Musical score for measures 11-12. The score is written for piano (p) and includes a right-hand melody and a left-hand accompaniment. The right-hand melody features triplets of eighth notes and a final measure with a half note and a fermata, marked "rit.". The left-hand accompaniment consists of eighth notes and quarter notes.

### Adagio

(→→→ means top melody (copy on 3 staves)  
better to have another player or bells-celesta top

Musical score for measures 13-15. The score is written for piano (p) and includes a right-hand melody and a left-hand accompaniment. The right-hand melody features a triplet of eighth notes and a final measure with a half note and a fermata. The left-hand accompaniment consists of eighth notes and quarter notes.

Musical score for measures 16-17. The score is written for piano (p) and includes a right-hand melody and a left-hand accompaniment. The right-hand melody features a triplet of eighth notes and a final measure with a half note and a fermata. The left-hand accompaniment consists of eighth notes and quarter notes. The word "etc." is written at the end of the measure.

Musical score for measures 18-20. The score is written for piano (p) and includes a right-hand melody and a left-hand accompaniment. The right-hand melody features a triplet of eighth notes and a final measure with a half note and a fermata. The left-hand accompaniment consists of eighth notes and quarter notes.

19

3

3

3

ossia 3

etc.

22

3

3

3

25

3

3

3

28  $\text{rit.}$   $\text{pp}$

## III.

**Allegro**

1st Time announcing alone in octaves  $\text{ff}$  — as a Preface Declaration!

March time (but not a March-Rollo)

4



10

8

OC18

This system contains measures 8 and 9. The key signature has two sharps (F# and C#). Measure 8 features a complex, rapid sixteenth-note melody in the right hand, while the left hand plays a steady eighth-note accompaniment. Measure 9 begins with a long, sustained note in the right hand, marked with a fermata, before continuing with the melodic line. The system concludes with a double bar line.

10

This system contains measures 10 and 11. Measure 10 continues the melodic development in the right hand with various ornaments and slurs, accompanied by the eighth-note bass line. Measure 11 shows a continuation of the right-hand melody with a prominent slur and a fermata over a final chord. The system ends with a double bar line.

12

This system contains measures 12 and 13. Measure 12 features a wide interval in the right hand, marked with a fermata, and a slur over the subsequent notes. The left hand continues its eighth-note accompaniment. Measure 13 continues the right-hand melody with a slur and a fermata over the final notes. The system concludes with a double bar line.

I play the 3 meas. before over again—  
but had something else can't find

The musical score is written for piano on a grand staff (treble and bass clefs). It consists of three systems of music, labeled 14, 16, and 18 at the beginning of each system.

**System 14:** The first system contains measures 14 and 15. Measure 14 has a treble clef and a key signature of one sharp (F#). The bass line features a sixteenth-note triplet marked with a '6' and a slur. Measure 15 continues the bass line with another sixteenth-note triplet marked with a '6'. The right hand plays chords in the treble.

**System 16:** The second system contains measures 16 and 17. Measure 16 has a treble clef and a key signature of one sharp (F#). The bass line features a sixteenth-note triplet marked with a '6'. Measure 17 continues the bass line with another sixteenth-note triplet marked with a '6'. The right hand plays chords in the treble.

**System 18:** The third system contains measures 18 and 19. Measure 18 has a treble clef and a key signature of one sharp (F#). The bass line features a sixteenth-note triplet marked with a '6'. Measure 19 continues the bass line with another sixteenth-note triplet marked with a '6'. The right hand plays chords in the treble.

The score includes various musical notations such as slurs, ties, and dynamic markings. The word "etc." appears at the end of the third system.

to Coda

Musical score for measures 20-21. The score is written for piano with treble and bass staves. Measure 20 features a triplet of eighth notes in the right hand and a sixteenth-note pattern in the left hand. Measure 21 continues the triplet in the right hand and the sixteenth-note pattern in the left hand. A triangle symbol at the end of measure 21 indicates a Coda. A note on the right side of the page reads: "2nd Time as recap to Coda bottom!!".

Musical score for measures 22-23. The score is written for piano with treble and bass staves. Measure 22 features a triplet of eighth notes in the right hand and a sixteenth-note pattern in the left hand. Measure 23 continues the triplet in the right hand and the sixteenth-note pattern in the left hand. A note on the right side of the page reads: "(2nd player may join) (after box to body)".

Musical score for measures 24-25. The score is written for piano with treble and bass staves. Measure 24 features a triplet of eighth notes in the right hand and a sixteenth-note pattern in the left hand. Measure 25 continues the triplet in the right hand and the sixteenth-note pattern in the left hand.

Musical score for measures 26-27. The score is written for piano with treble and bass staves. Measure 26 features a triplet of eighth notes in the right hand and a sixteenth-note pattern in the left hand. Measure 27 continues the triplet in the right hand and the sixteenth-note pattern in the left hand.

31

34

37

39

Now, class(?) it is right  
to return to  
1st Theme in MIII

**Allegro**

41

3

43

46

48

octis

Musical score for measures 50-51. The score is written for piano in 4/4 time. Measure 50 features a complex chordal texture in the right hand with many accidentals, while the left hand plays a steady eighth-note bass line. Measure 51 continues the right-hand texture with a long, expressive slur over the final notes.

On II time  $\times$  repeat 2nd Theme (as  
is right! correct  $\Delta$  from  $\odot$  to  $\odot$ )

Musical score for measures 52-53. Measure 52 shows a continuation of the complex right-hand texture. Measure 53 features a more active right hand with sixteenth-note runs, while the left hand maintains its eighth-note pattern.

**Più moto**

$\odot$  II

Musical score for measures 54-56, marked **Più moto**. The tempo is increased. The right hand plays a continuous sixteenth-note melody. The left hand features triplet patterns, indicated by a '3' over the notes and a downward-pointing arrow.

Musical score for measures 57-59. The right hand continues with sixteenth-note runs. The left hand has triplet patterns, marked with a '3' and a downward arrow. The piece concludes with a final measure in measure 59.

60

63

65

67

to Coda

2nd Time  
as recap  
to Coda  
bottom!!

Doh!  
CHORD  
O TONICK!  
Good Ni[gh]t SHIRT

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