UNIVERSITY OF CALIFORNIA

Santa Barbara

Part One:

The Integrity of Structure or the Structure of Integrity:

An Analysis of Charles Ives' *Hallowe'en*

Part Two:

Concerto

for Piano and Chamber Ensemble

A Dissertation submitted in partial satisfaction of the

requirements for the degree Doctor of Philosophy

in Music

by

David Thomas Schwartz

Committee in charge:

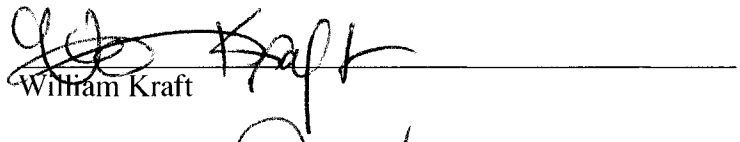
Professor William Kraft, Co-Chair

Professor Dolores M. Hsu, Co-Chair

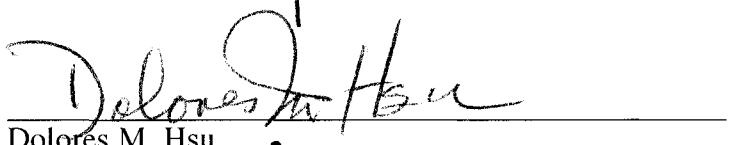
Professor Curtis Roads

June 2004

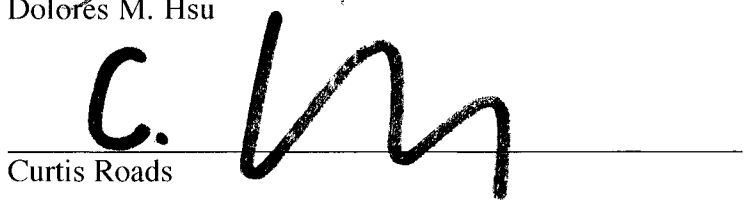
The dissertation of David Thomas Schwartz is approved.



William Kraft



Dolores M. Hsu



Curtis Roads

May 2004

Part One:

The Integrity of Structure or The Structure of Integrity:

An Analysis of Charles Ives' *Hallowe'en*

Part Two:

Concerto

for Piano and Chamber Ensemble

DEDICATION

Once Again,

For Colette

ACKNOWLEDGMENTS

With fondness and appreciation I wish to thank William Kraft for his support, his wisdom and his example, not only in the preparation of this dissertation but as my teacher and friend and as a composer without equal—thank you for your music.

I am also very thankful to Professor Dolores M. Hsu and Professor Curtis Roads for their assistance, advice and encouragement during the writing process and throughout my time at the University of California, Santa Barbara.

Thank you to Professor Patricia Hall for her invaluable comments on the initial draft of the Ives paper.

Thank you to Suzanne Eggleston Lovejoy at Yale University for her assistance in helping me to secure copies of the Ives sketches, MSS 14, The Charles Ives Papers in the Irving S. Gilmore Music Library of Yale University.

Thank you to George Sturm at Music Associates of America for his assistance.

Both the Ives sketches and Philip Lambert's analysis of the piano part for measures 1-8 are used by permission of Boelke-Bomart, Inc./Mobart Music Publications, Inc.

I am very grateful to the Department of Music, University of California, Santa Barbara, for providing financial support for my graduate study.

Thank you to my friend Richard Bellis, perhaps as gifted a man as I have ever had the pleasure to know, for his compositional advice and for allowing me the benefit of learning by watching him work.

Thank you to my old and very dear friend Christopher Paul Wills for allowing me to 'sing' the finale of the *Scherzo* over the phone and for his comment, "What's wrong with that?"which put an end to a very frustrating week.

I wish to thank my friend Paul Geck who incessantly hounded me to 'just finish' throughout my tenure as a graduate student and during the writing process. It truly annoyed me and may have even been of some benefit. Thank you for helping me prepare for my exams, Paul.

My debt to Professor Judith Eckelmeyer seems too great to fit into one or two sentences. She has taught, challenged, encouraged, inspired and supported me countless times and in countless ways. She is my mentor and my friend and from knowing her and working with her I am a better student, teacher and most importantly, a better person.

Thank you Dr. Greg D'Alessio for changing my entire outlook on composition.

To all my teachers at Loyola University of New Orleans, especially Steve Dankner, Sylvia Pengilly, Sandy Hinderlie and William Horne, thank you for teaching me. An extra thanks to William Horne for helping me begin the process of investigating *Hallowe'en.*

Thank you Phil Badalamenti for all of our long talks about art, architecture, history, literature, music, philosophy, politics and sports, among other things, and for being the first person to like the *Concerto.* I am very proud that you are my friend.

Thank you Bryan Pennington for being my guru.

Thank you Steve Fong for every minute we spent talking about music. I am blessed to have known you.

Thank you Mom and Dad for always believing in me. I am very lucky to have you as parents.

Finally, thank you Colette for loving me and letting me love you back.

VITAE OF DAVID THOMAS SCHWARTZ
May 2004

EDUCATION

Bachelor of Arts in Philosophy, Tulane University, New Orleans, Louisiana, May 1992
Bachelor of Music in Theory and Composition, Loyola University of New Orleans, Louisiana, May 1996
Master of Music in Composition, Cleveland State University, Cleveland, Ohio, May 1999
Doctor of Philosophy in Music, University of California, Santa Barbara, June 2004 (expected)

PROFESSIONAL EMPLOYMENT

2002-03: Teaching Assistant, Department of Music, University of California, Santa Barbara
2000-03: Personal Assistant to film and television composer Richard Bellis, Santa Barbara, California
2000-01: Teaching Assistant, Department of Music, University of California, Santa Barbara
2000-01: Personal Assistant to William Kraft, Department of Music, University of California, Santa Barbara
1998-99: Instructor, Department of Recreation, Shaker Heights, Ohio
1997-99: Assistant Program Annotator, Gala Subscription Series, The Cleveland Museum of Art, Cleveland, Ohio
1997-99: Teaching Assistant, Department of Music, Cleveland State University, Cleveland, Ohio
1995-96: Teaching Assistant, College of Music, Loyola University of New Orleans, New Orleans, Louisiana

PUBLICATIONS

Trio for Clarinet, Marimba and Tape, Unpublished thesis submitted in partial fulfillment of the requirements for the Master of Music degree in Composition, Cleveland State University, Cleveland, Ohio, 1999, 34 pp.

AWARDS

2nd Prize Corwin Metropolitan Theatre Awards; Chamber Music, *Divertimenti for Wind Quintet*, 2003

Ojai Festival Award for *Trio for Clarinet, Marimba and Tape*, 2001

Pi Kappa Lambda, National Music Honor Society, 1998

Merit/Service Scholarship, Department of Music, Cleveland State University, Cleveland, Ohio, 1998

Outstanding Composition Student Award, College of Music, Loyola University of New Orleans, New Orleans, Louisiana, 1996

FIELDS OF STUDY

Major Field: Composition with Professor William Kraft

Studies in Compositional Techniques of Electronic Music with Professor Curtis Roads

Studies in Film and Television Composition with Richard Bellis

Studies in the Songs and Symphonies of Gustav Mahler with Professor Judith Eckelmeyer, Cleveland State University, Cleveland, Ohio

Studies in the Philosophical Writings of Søren Kierkegaard with Professor John Glenn, Tulane University, New Orleans, Louisiana

ABSTRACT

Part One:

The Integrity of Structure or the Structure of Integrity:

An Analysis of Charles Ives' *Hallowe'en*

Part Two:

Concerto

for Piano and Chamber Ensemble

by

David Thomas Schwartz

Part I:

"The Integrity of Structure or the Structure of Integrity: An Analysis of Charles Ives' *Hallowe'en*" examines the compositional procedures employed by Charles Ives in *Hallowe'en.* Charles Ives described *Hallowe'en* as "one of the most carefully worked out (technically speaking), and one of the best pieces (from the standpoint of workmanship)" that he had ever done. First, what is the structure of *Hallowe'en*? Second, is this structure a thoroughly worked out and closed structure? If an analysis reveals that this is not the case, what could Ives have meant with his assertion about the structural integrity of *Hallowe'en*?

A case can be made for the validity of two contradictory interpretations regarding the structural integrity of *Hallowe'en.* On one hand musical analysis clearly contradicts Ives' claim by showing that there is a breakdown in the integrity of the compositional processes he initiates, for example, a canon. On the other hand analysis

confirms Ives' statement by showing that, rather than carrying such processes to their logical conclusions, the goal was for these systems to completely breakdown and therefore act as a musical metaphor for the stated program, a children's Halloween party.

Part Two

Concerto for Piano and Chamber Ensemble is an original music composition scored for flute, oboe/english horn, clarinet, bassoon, 2 French horns, 3 multi-percussionists, 2 harps, piano, 2 violins, viola, cello and bass. This music explores aesthetic issues raised in Part One concerning the use of formalized compositional processes.

TABLE OF CONTENTS

Part One

Part Two

A. INTRODUCTION

Charles Ives described *Hallowe'en* as "one of the most carefully worked out (technically speaking), and one of the best pieces (from the standpoint of workmanship) that I've [he had] ever done."[1] This is a strong assertion from a composer who is known for the nontraditional methods he devised and employed for developing and organizing musical material. His comment, then, raises several questions. First, what is the structure of *Hallowe'en*? Second, is this structure a thoroughly worked out and closed structure? If an analysis reveals that this is not the case, what could Ives have meant with his assertion about the structural integrity of *Hallowe'en*? The following exploration will address these questions.

The two contradictory interpretations regarding the structural integrity of *Hallowe'en* are equally valid. Musical analysis contradicts Ives' claim by showing that there is a break down in the integrity of the compositional processes he initiates, for example, a canon. Analysis, however, can also confirm Ives' statement by showing that, rather than carrying such processes to their logical conclusions, the goal was for these systems to break down and therefore act together as a musical metaphor for the stated program, a children's Halloween party. I intend to examine both perspectives in order to come to an understanding of how *Hallowe'en* was composed and why particular compositional procedures may have been employed.

B. BACKGROUND

Ives lists *Hallowe'en* as a 1911 composition, but there has been some disagreement concerning the actual date of composition.[2] It seems that the first reading of the work had taken place sometime before 1920 by, as Ives described it, "a little orchestra from a theater just off the Bowery, in New York—and it was one of the few (or at least comparatively few) pieces that I remember sounded the first time exactly as I wanted it to sound."[3]

A less successful public performance occurred Sunday, April 22, 1934, at the Alvin Theater, conducted by Albert Stoessel. Ives comments regarding this performance are worth quoting if only because they reveal his inability to restrain his well-known contempt for any musical establishment that he viewed as conservative, and therefore useless as a viable musical entity.

> He beat time (Albert Stoessel) through three little pieces of mine, two jokes and a water color (a thumbnail sketch), at a concert in New York, April 22nd, 1934, which I understood was to be a rather impromptu, semi-serious kind——none or few rehearsals, music fairly easy for players and audience...I didn't go to the concert. But more than one other who did, said (not exactly in these words), 'Ally looked as if he didn't know what it was all about——stupid motions, stupid expressions on his face, neck and time beatin'——[he] looked bothered and surprised at the notes'...[4]

Hallowe'en is usually found in a trilogy titled *Three Outdoor Scenes*, 1898-1911, preceding *The Pond* and *Central Park In The Dark*. This grouping, though, was not made by Ives but by the publisher, Bomart.[5]

Hallowe'en is scored for two violins, viola, cello, piano and an optional bass drum.[6] The piece is designed to be played three or four times through using different combinations of these instruments. The first time only the second violin and cello play; the second time, only the first violin and viola; the third time the piano joins all four strings; and the fourth time, during which an optional bass drum may improvise along with the quintet, the piece ends with a short coda. The instructions indicate that each of the four passes is to be performed louder and more quickly than the previous pass. The overall sound of the work is that of organized chaos. Furthermore it is an ever-increasing chaos that concludes with a relatively traditional chordal cadence.

Ives described the program of the work as a depiction of a children's Halloween party where children take turns leaping through a bonfire.

> ...[*Hallowe'en*] is but a take-off of a Halloween party

> and bonfire——the elfishness of the little boys throwing wood on the fire, etc. etc....In this piece, I wanted to get, in a way, the sense and sound of a bonfire, outdoors in the night, growing bigger and brighter, and boys and children running around, dancing, throwing on wood--- and the general spirit of Holloween [sic] night——(and at the end, the take-off of the regular coda of a proper opera, heard down the street from the bandstand).[7]

C. ANALYSIS

Ives provided a brief analysis of *Hallowe'en's* compositional techniques:

> The four strings play in four closely related keys,[8] each line strictly diatonic. Then it is canonic, not only in tones, but in phrases, accents, and durations or space.[9]

There is an inherent contradiction at the core of this piece. The contradiction is the coexistence of organization and chaos. "Organized confusion" is how H. Wiley Hitchcock describes *Hallowe'en*:

> ...Hallowe'en was a night for leaping bonfires, pranks and practical jokes, 'tricks or treats'——a children's-party night. This was the sense that Ives sought to convey in this tiny work (14 bars plus a 4-bar coda)...The 'confusion' of the piece is created by the four strings, each of which plays even, rushing scales in a different major key (violin 1 in C, violin 2 in B, viola in Db, and cello in D), compounded by the piano's dissonant cluster-chords, of increasingly irregular durations, directions, and root-progressions. The 'organization' ——hardly perceptible but surprisingly rigorous ...[10]

Hitchcock describes the contradiction but he does not use the contradiction as the basis for a thorough investigation of the composition. The inherent contradiction between organization and chaos must be the key to understanding this work. After all, either this piece is 'carefully worked out technically,' or there is reason to doubt Ives'

boast. In order to further our understanding of *Hallowe'en* the present analysis will first identify those musical devices that by their very definition require a high degree of organization, such as a canon.

D. THE INTEGRITY OF STRUCTURE

When looking at the structural devices in *Hallowe'en,* most analysts have emphasized the canonic procedure in the stringed instruments. Conventionally, a canon is defined as an imitative composition in which the subject is imitated by one or more voices at fixed intervals of pitch and mensuration. The canons of J.S. Bach usually are the first such works that come to mind. Ives, however, employs an entirely nontraditional organizational pattern for his canon in this piece. In other words Ives conceived a canonic procedure that is not founded on the principles of functional harmony.

In what can be viewed as a kind of pitch class cycling process, varying distances of sixteenth notes connect the accented notes in each independent voice. Thomas Dyer Winters' description of the canonic procedure is to the point:

> Actually, two canons are operative, one between the first violin and viola, and the other, an exact inversion of the first until the second beat of m. 3, between the second violin and cello. As many as nine durations and as few as one (the sixteenth rests) fashion the wedge-like series of phrases...in each string layer. Each new phrase is set off not only by a melodic skip but also by accents and a change in direction of the scale...Since each line is so similar in content...the effect of the imitation is greatly reduced, leaving the more prominent metric wedge-palindromes as the audible, motion-producing process.[11]

Ives own sketches for *Hallowe'en* show that this procedure was integral to the compositional process (Appendix 1). The accented pitches constitute a kind of row and they are here provided.[12] Instruments are paired with their canonic partners.

Violin 1 (C Major): C A D E G F B
Viola (Db Major): Db Bb Eb F Ab Gb C

Violin 2 (B Major): B D# G# F# E A# C#
Cello (D Major): D F# B (F#) A G C# E

The pitch class cycling process is embedded with a palindrome process of graduating distances of diatonic runs, delineated by phrase markings, between the accented pitches. A sixteenth note serves as the basic unit of measurement for phrases. A numeric reduction is here provided. Bold numbers correspond to the 'tonic' pitch of each row.

Violin 1: **6** 11 6 5 4 3 2
1 2 3 4 5 6 6 1 7
8 9 8 7 6 5 1 4
3 2 1 2 3 4 5 6
7 8 9 8 7 6

Viola: **6** 11 6 5 4 3 2 1
2 3 4 5 1 5 7 3
8 9 7 **4** 7 2 5 5 1 4
3 2 1 2 3 4 5 6
7 7 4 6 8 **2**

Violin 2: **6** 10 6 5 4 1 3 4
4 1 6 7 10 9 8 7
6 5 4 3 1 2 3 4
1 5 6 7 8 9 8
8 5 7

Cello: **5** 10 3 1 2 5 4 1 3 4

5 6 4 4 1 8 8 9 7

6 1 4 7

6 4 1

5 6 7 11 8 10 6

Both the pitch class cycling process and the palindrome process are revealed by the sketches to be integral to Ives' compositional thinking. What is not as clear in the sketches is whether or not the piano, which appears as a random succession of highly chromatic chords, is guided by a similar organizational process. Phillip Lambert believes that he has found the governing process. He describes this as an "expanding wedge:"

> ...the elaborated wedge in the first eight measures of the piano part of *Hallowe'en*...is based on a series of transpositions of a pattern established first in mm.1-2. The pattern consists of a widely spaced sonority in the low register (in m. 1, octave Cs) answered by two higher and denser structures (end of m. 1 and beginning of m. 2). Starting in m. 3 (after a repetition of m. 1:1 at the end of m. 2), this three-element pattern——low chord/high chord/ high chord——is repeated five more times...in each pattern repetition, the right hand is transposed up a fifth from the first high chord to the second, while the left hand stays where it is in both high chords. And since the entire pattern moves up by the whole steps along with the whole-tone ascent in the upper voice of the low chords, the highest voice unfolds the sequence of ascending fifths...The resulting durational acceleration contributes to the general growth and intensification of the overall wedge expansion.[13]

A reproduction of Lambert's graphic analysis is presented as Appendix 2.

What is clear from the analysis of *Hallowe'en* is that Ives devised and employed three non-harmonically based generative processes to develop musical material. It is also quite clear from the dissection of these processes that, given Ives' claims about the structural integrity of this work, they are not as rigorously adhered to

as one might expect.

Analysis reveals that Ives establishes these three processes simultaneously but quickly abandons the algorithmic strictness of each procedure. Only the first violin appears to rigorously respect the pitch class cycling and the metric palindrome. The other three strings are not nearly as strict. To say that each of the canons is 'freely canonic' is an understatement. In the case of the cello, it is difficult to see how it is even a canonic imitation of the second violin. Even the piano's wedge process, identified by Lambert, is realized only through the first eight measures before it is obfuscated.

Certainly these facts do not support Ives' assertion that his work is rigorously structured, 'technically speaking.' What then should we make of Ives comments respecting the integrity of the structure of *Hallowe'en*?

E. THE STRUCTURE OF INTEGRITY

Ives does qualify his previously quoted remark about the structural integrity of *Hallowe'en*: "I happened to get exactly the effect I had in mind, which is the only ([or] at least an important) function of good workmanship."[14] All right then, let us look again, from this new perspective, at the design of *Hallowe'en.*

Imagine the Halloween party that Ives described. A bonfire is built and children begin to take turns leaping through the flames one at a time, all the while stoking the fire. It is not difficult to see the children getting more and more excited, running around and jumping through the rising flames at increasingly irregular intervals and from all directions. As is so often the case with children's games, they quickly turn chaotic. This is what Ives was depicting with his musical metaphor.

Hallowe'en is meant to depict a children's Halloween party. In fact, this specific program is explicated in the performance instructions accompanying the published score where Ives directs that "the playing gets faster and louder each time, keeping up with the bonfire." A canon is an ideal musical metaphor for children

imitating each other, that is to say, chasing each other and leaping through the bonfire. It makes little compositional sense to construct a formalistic rule-bound canon in order to depict children at play.

Ives was likely addressing his creation of an ideal musical metaphor for the children's Halloween party when he heralded his pride for the workmanship: a canon that begins with a rigorous process that quickly devolves; wedge-like shapes and metric palindromes that do not faithfully follow a particular pattern; four major keys a semitone apart; the combining and recombining of instrument groups; the progression from *pp* to *fff* and from *allegretto* to *presto*; the improvised drum; the two canonic duos, one ascending, primarily, while the other descends; the highly chromatic piano part. All of these factors eliminate any possibility that the listener might be convinced that the composition is in any way traditional or formalistic. In other words, the focus is on the sound world that is created and not the processes employed to create that sound world. With all of these elements, it is hard to test the veracity of Charles Ives' assertion that his composition is "one of the most carefully worked out (technically speaking), and one of the best pieces (from the standpoint of workmanship) that I've [he had] ever done."

F. FORMALLY INFORMAL

Either Ives really meant what he said or he was exaggerating when he reflected on *Hallowe'en.* At this point a conclusion depends on whether one insists on a formalist definition for *technically worked out.* Briefly stated, formalism can be defined as strictly following a recognized form. Roger Scruton refines this definition to include "someone who believes that we understand music in terms of its formal organization——i.e. in terms of the balance, order, and architecture which is achieved through tones."[15]

For the formalist, Ives' veracity is suspect. He sets up processes but does not adhere to a single one faithfully and completely throughout the work. His canon is not a

thoroughly worked out and rigorous canon; his pitch class cycling process contains mistakes; his palindrome and wedge processes are quickly abandoned; the optional drum is aleatoric, which by definition can not be formally analyzed. For academics who view Ives as a recreational composer, *Hallowe'en* might be viewed as a musical curiosity that contains musical processes that would be fully and more masterfully realized later on by the likes of Arnold Schoenberg and Anton von Webern.

Following Scruton, Curtis Roads, in his book *Microsound*, elucidates the nature of formalism as an assessor of artistic coherence:

> In academic theory, formal coherence is one of the most vaunted characteristics of musical compositions. In general, coherence signifies "logical integration and consistency." This quality is not always easy to measure in practice. In its most obvious form, coherence manifests itself as a limitation in the choice of compositional materials and a consistency in the operations applied to those materials.
>
> ...music is not a purely logical system. Rigor is not synonymous with perceived musical coherence.[16]

Composition is primarily an exercise of an individual composer's aesthetic judgments. Certainly the use of formalized techniques may be appropriate given a particular circumstance. But the danger of relegating an entire composition to a logically derived process all but eliminates the right of a composer to exercise artistic, that is to say, aesthetic, *freewill.* Individual aesthetic judgment is precisely why no two compositions are identical, even in the case of a formalized genre like a fugue. Every musical situation demands its own particular set of solutions.

For the composer, Ives' veracity is earnest, if not irrelevant. *Hallowe'en* puts forth the question, how does one depict a children's Halloween party musically? It answers the question through the use of generative musical processes that degenerate in such a way that order becomes chaos. On top of it all, the processes that he creates and utilizes are in and of themselves playful, rather than academic. Ives' demonstrated insight is a marvel; of course children running through a bonfire should begin in an

organized fashion and quickly become a free-for-all.[17]

Perhaps one might turn around the question of formalism and argue that *Hallowe'en* is the very model of formalism. The program that Ives put forth, the process of organization becoming chaos, is strictly adhered to from the macro to the micro levels of this work, as analysis has shown. Furthermore, this author's attempts to rewrite this music by 'correcting the mistakes' in the processes, only revealed that Ives' musical choices were appropriate and carefully selected.[18] From this perspective Ives was quite formally following the logic of allowing his procedures to degenerate. Ives himself might have actually enjoyed the humor of the *stolen concept* argument offered here.

Ives, though, was no formalist. In fact he was decidedly anti-formalist. The *Fugue in Four Keys* he presented to and was rebuked for by his professor, Horatio Parker, is one of many frequently repeated stories that presents us with an image of Ives defying formalism, especially where he found it in academia or the musical establishment. His use of the phrase "technically speaking" could imply certain rigorous processes that one might find explicated in a text on counterpoint. But it is more likely Ives meant that he "...happened to get exactly the effect I [he] had in mind, which is the only ([or] at least an important) function of good workmanship."

Charles Ives referred to *Hallowe'en* as a "musical joke" that is not intended to be 'nice music.' Ives' assessment of this music as a musical joke is that "...it may not be a good joke, [but] the joke of it is: if it isn't a joke, it isn't anything."[19] Perhaps the joke lies not so much in the music that was created. Perhaps the joke lies in *how* the music was created, and for some of us, that joke is very funny.

NOTES

[1] Charles E. Ives. *Memos, 1st edition.* ed. John Kirkpatrick. New York: W.W. Norton & Company, Inc., 1972, 91.

[2] Hitchcock has suggested April 1, 1906—the date of composition based on the address "Pine Mt" and also "34 Gramercy Pk" on the sketches—an address that would have only been good up to 1908, see *Memos,* 157; Sherwood suggests, based on the paper used, a date closer to 1914 is more likely, see Gayle Sherwood's article, "The Choral Works of Charles Ives: Chronology, Style, and Reception." in *The Musical Quarterly 78* (Fall 1994): 429-47.

[3] Charles E. Ives. *Memos, 1st edition.* ed. John Kirkpatrick. New York: W.W. Norton & Company, Inc., 1972, 90-91. The date is unclear but Ives cites the performance as some 30 years earlier than the writing of his *Memos.*

[4] Charles E. Ives. *Memos, 1st edition.* ed. John Kirkpatrick. New York: W.W. Norton & Company, Inc., 1972, 90.

[5] Henry and Sidney Cowell. *Charles Ives and His Music.* New York: Oxford University Press, 1955, 222.

[6] In the published score Ives gave specific instructions for the performance of the piece including, "It has been observed by friends that three times around is quite enough, while others stood for four—but as this piece was written for a Hallowe'en party and not for a nice concert, the decision must be made by the players, regardless of the feelings of the audience." Ives then adds the postscript, "A bass drum or a drum during the last time may play the total rests in measures 3, 4, 5 and 8, and from there on may add his own part—impromptu, or otherwise."

[7] Charles E. Ives. *Memos, 1st edition.* ed. John Kirkpatrick. New York: W.W. Norton & Company, Inc., 1972, 91.

[8] Ives does not mean that the key areas are closely related with respect to the expression as it is associated with traditional functional tonality. But rather, the four strings actually are stratified among four major keys a semitone apart.

[9] Ibid.

[10] H. Wiley Hitchcock. *Ives: A Survey of the Music.* London: Oxford University Press, 1977, 69-70.

[11] Thomas Dyer Winters. *Additive and Repetitive Techniques in the Experimental Works of Charles Ives.* University of Pennsylvania, Ph. D. Dissertation, 1986, 74.

[12] It is worth noting that the accented pitches for each duo can be shown to correspond with a traditional functional tonal melodic/harmonic progression, e.g. vln./vla.---I vi ii I V7---vln/vcl---I vi7 IV vii^{o}.

[13] Philip Lambert. *The Music of Charles Ives,* New Haven: Yale University Press, 1997, 63-65.

[14] Charles E. Ives. *Memos, 1st edition.* ed. John Kirkpatrick. New York: W.W. Norton & Company, Inc., 1972, 91.

[15] Roger Scruton. *The Aesthetics of Music.* New York: Oxford University Press, 1997, 353.

[16] Curtis Roads. *Microsound.* Cambridge, MA: The MIT Press, 2001, 338.

[17] One might even suggest that the first violin, as a further reinforcement of Ives' program, the only instrument that adheres to the pitch class cycling and palindrome processes the most rigorously, reflects the one child in every bunch who wants the game to be played a certain way.

[18] I attempted to put all four instruments in one single key and found that doing so destroys the sound world by imposing a very unpleasant and awkward work pretending to reside in a world of functional tonality. Similarly I also attempted carrying out the palindrome and the accented pitch class cycling game strictly by following the model of the first violin. The result was simply perpetual motion that soon grows tiresome.

[19] Charles E. Ives. *Memos, 1st* edition. ed. John Kirkpatrick. New York: W.W. Norton & Company, Inc., 1972, 90.

BIBLIOGRAPHY

Cowell, Henry and Sidney Cowell. *Charles Ives and His Music*. New York: Oxford University Press, 1955.

Hitchcock, H. Wiley. *Ives: A Survey of the Music*. London: Oxford University Press, Inc., 1977.

Ives, Charles E. *Memos*. ed. John Kirkpatrick. New York: W.W. Norton & Company, Inc., 1972.

Lambert, Philip. *The Music of Charles Ives*. New Haven: Yale University Press, 1997.

Roads, Curtis. *Microsound*. Cambridge: The MIT Press, 2001.

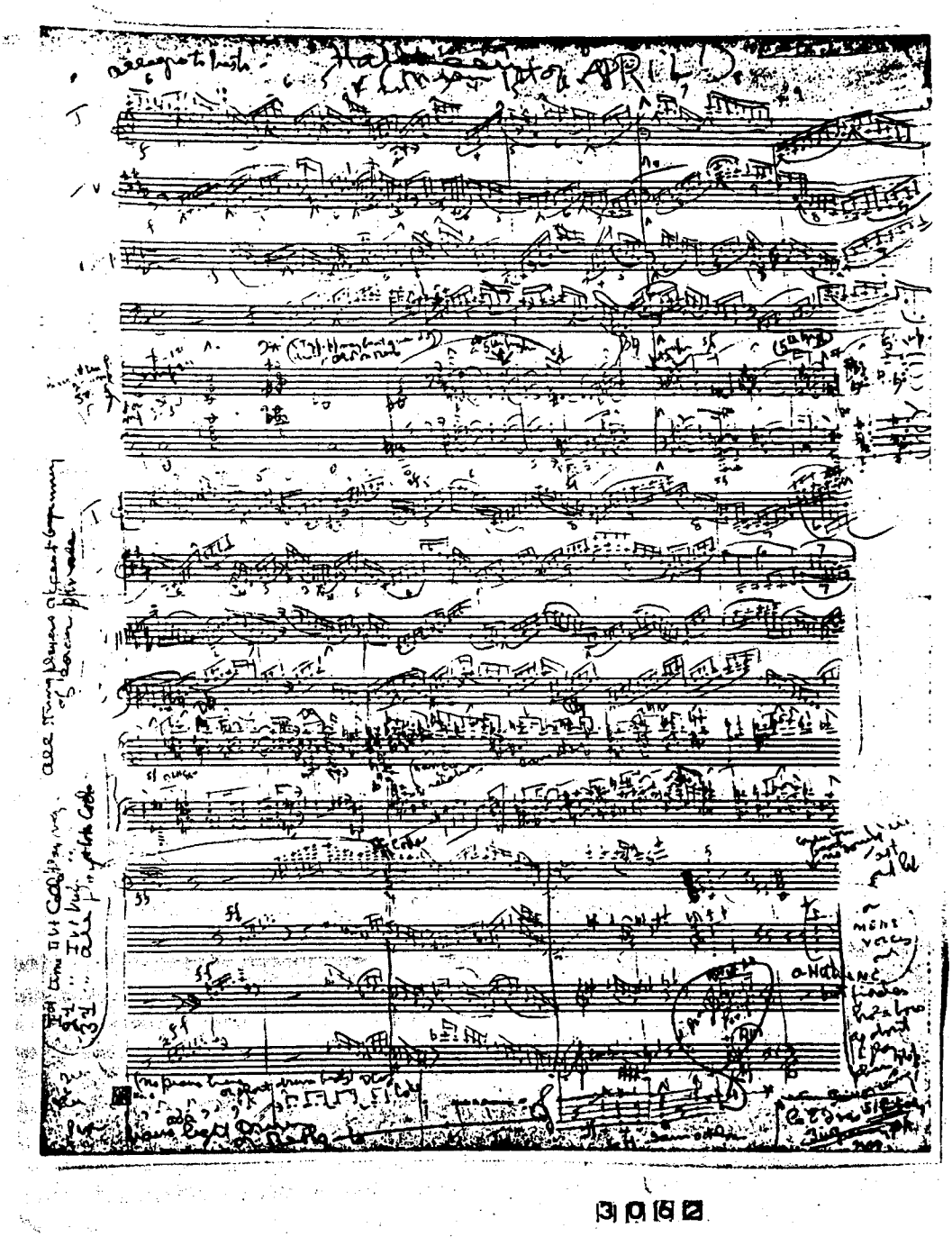
Scruton, Roger. *The Aesthetics of Music*. New York: Oxford University Press, Inc., 1997.

Sherwood, Gayle. "The Choral Works of Charles Ives: Chronology, Style, and Reception."*The Musical Quarterly 78* (Fall 1994): 429-47.

Winters, Thomas Dyer. *Additive and Repetitive Techniques in the Experimental Works of Charles Ives*.University of Pennsylvania, Ph.D. Dissertation, 1986.

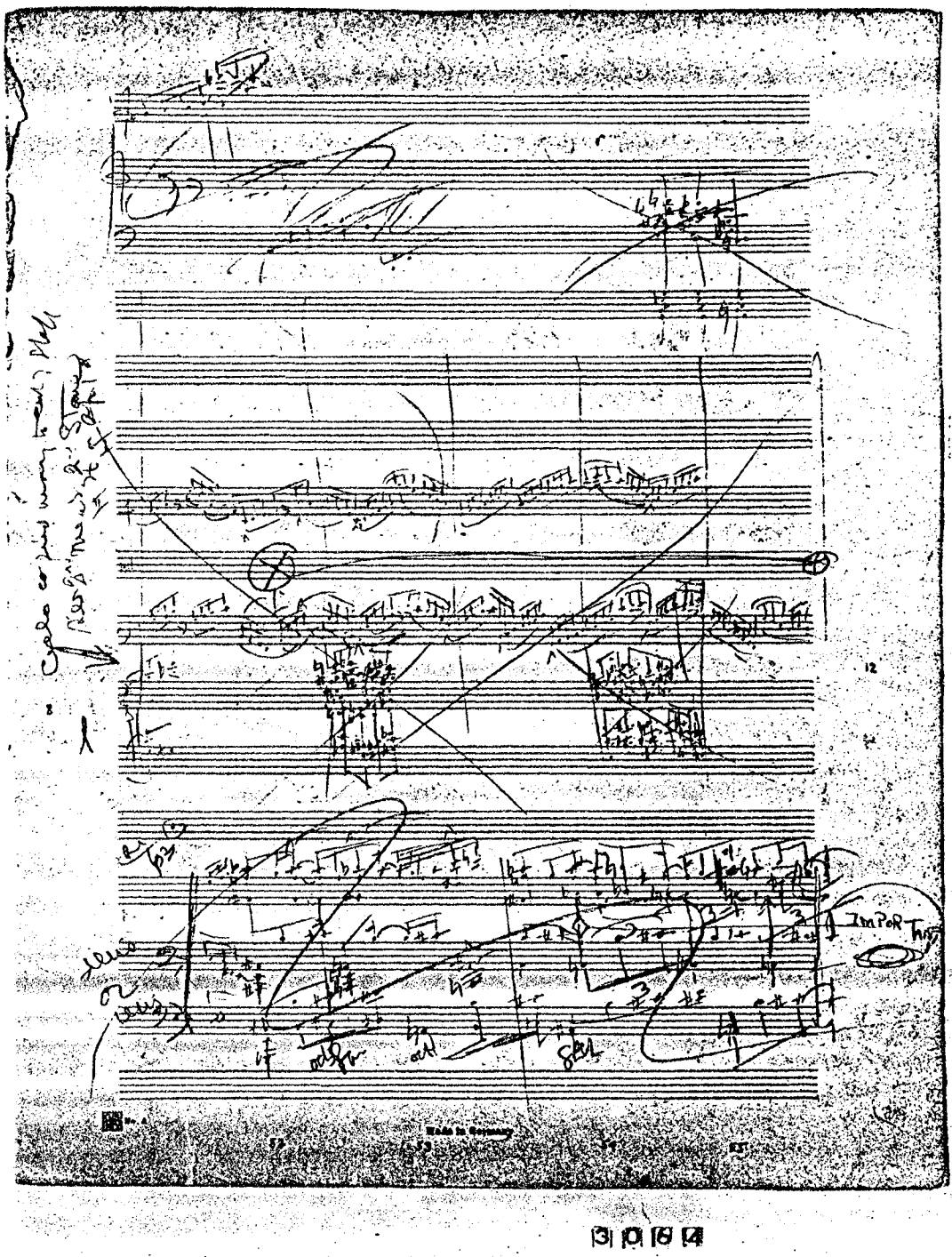
APPENDIX 1

Charles Ives' Sketches for *Hallowe'en*



Charles Ives' Sketches for *Hallowe'en* continued

Charles Ives' Sketches for *Hallowe'en* continued



APPENDIX 2

Philip Lambert's Piano Reduction

CONCERTO

For Piano and Chamber Ensemble

INSTRUMENTATION

Flute
Oboe/English Horn
Clarinet in B♭
Bassoon

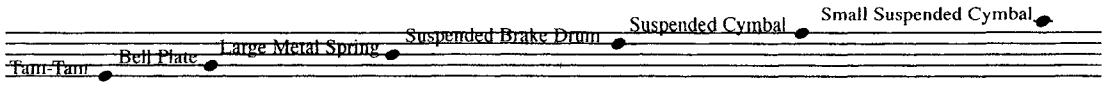
2 French Horns

Percussion 1: Tam-Tam, Sizzle Cymbal, Marimba, Xylophone, Suspended Cymbal, Ceramic or Bamboo Wind Chimes (or both), Vibraphone, 5 Temple Blocks, Splash Cymbal, Bongos

Percussion 2: Tam-Tam, Timpani (32", 28", 25", 23"), Suspended Cymbal, Chinese Cymbal, Xylophone, Bell Plate, Tubular Bells

Percussion 3: Tam-Tam, Vibraphone, Sizzle Cymbal, Marimba, Suspended Cymbal, 5 Bongos (Tuned to Perc. 1 Temple Blocks), Ceramic or Bamboo Wind Chimes (or both)

* Suggested percussion layout for Senza Misura Section of *Scherzo*. Any vibrating metallic instruments of indefinite pitch may be substituted, if necessary.

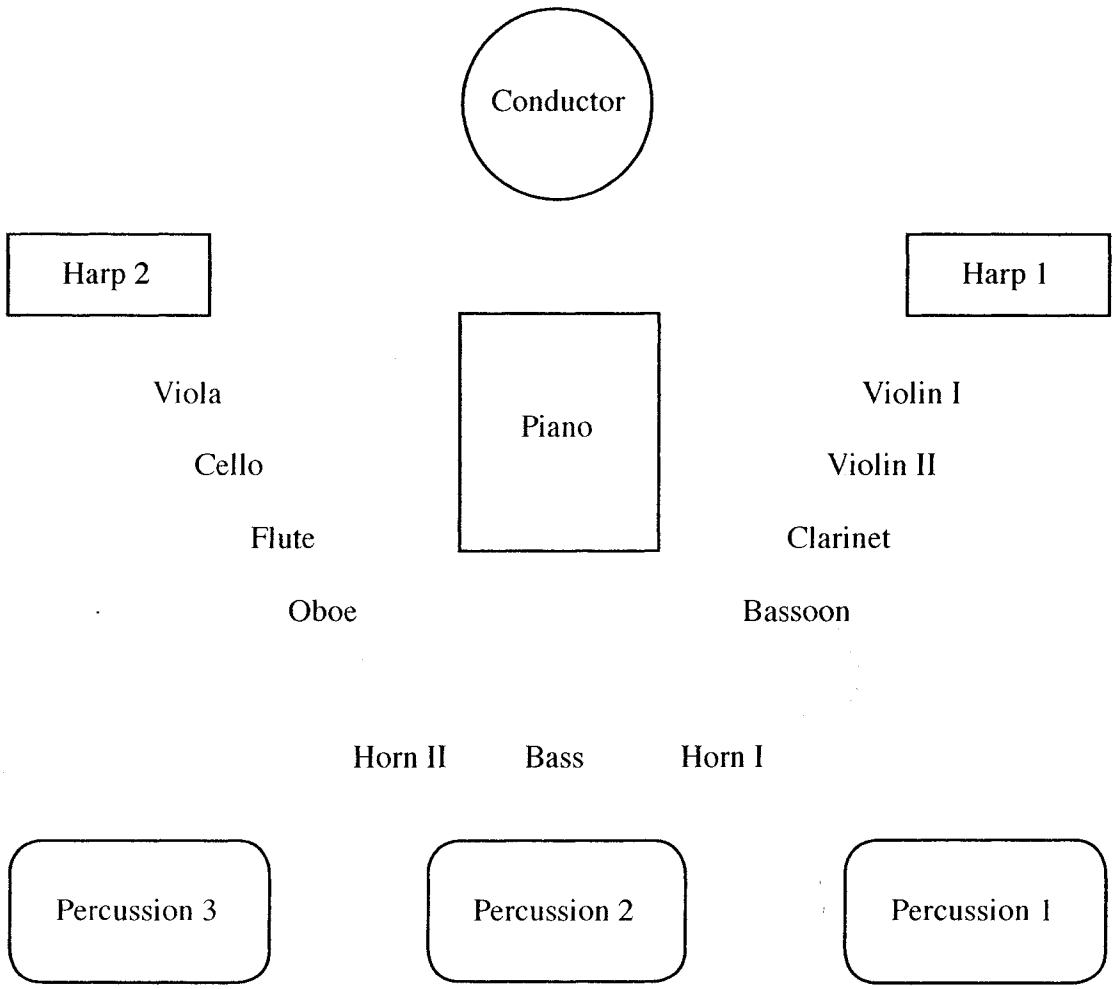


2 Harps (electronic keyboards with harp matches may be substituted)

Piano

Violin I
Violin II
Viola
Cello
Bass

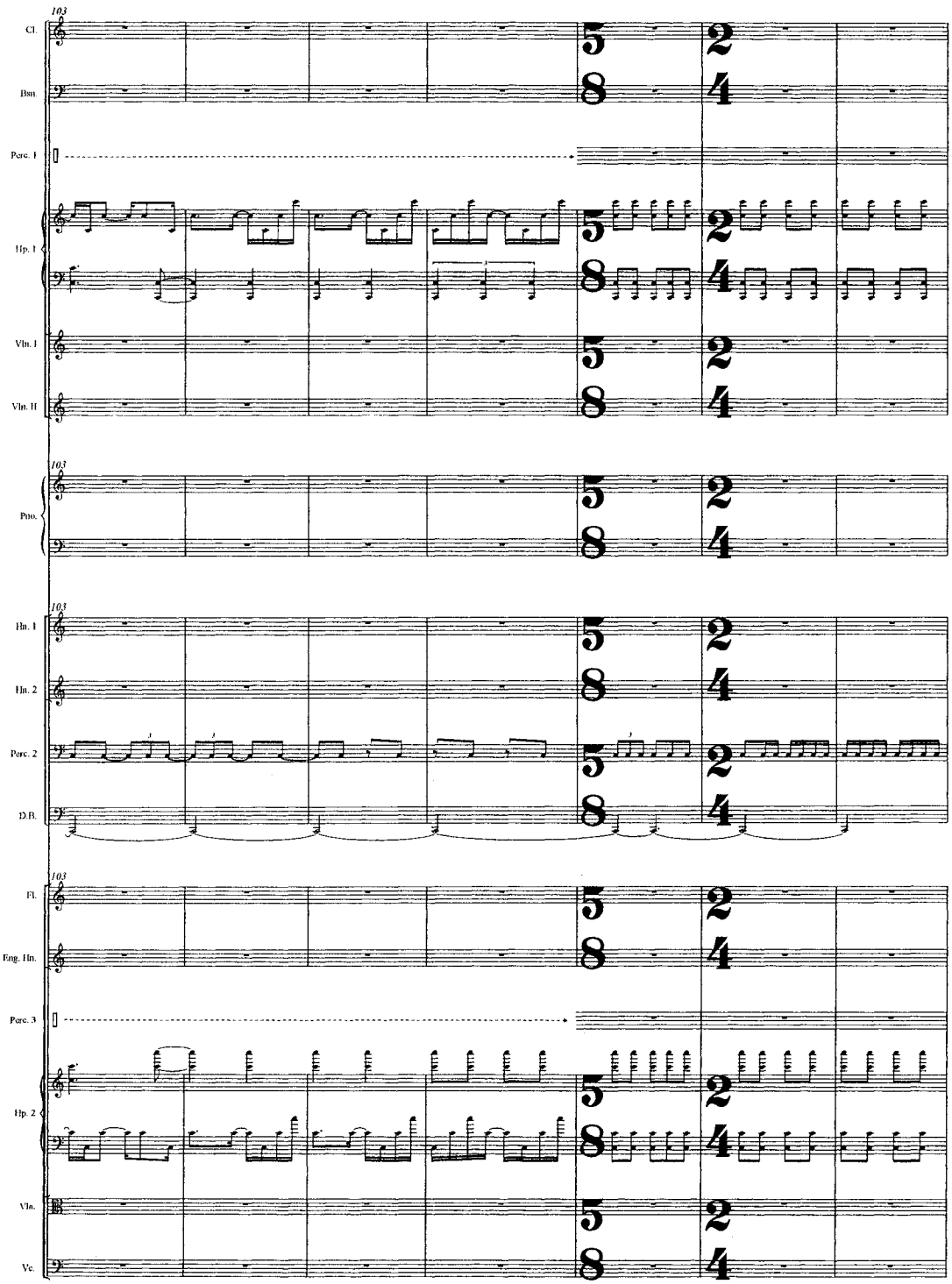
SUGGESTED SET-UP

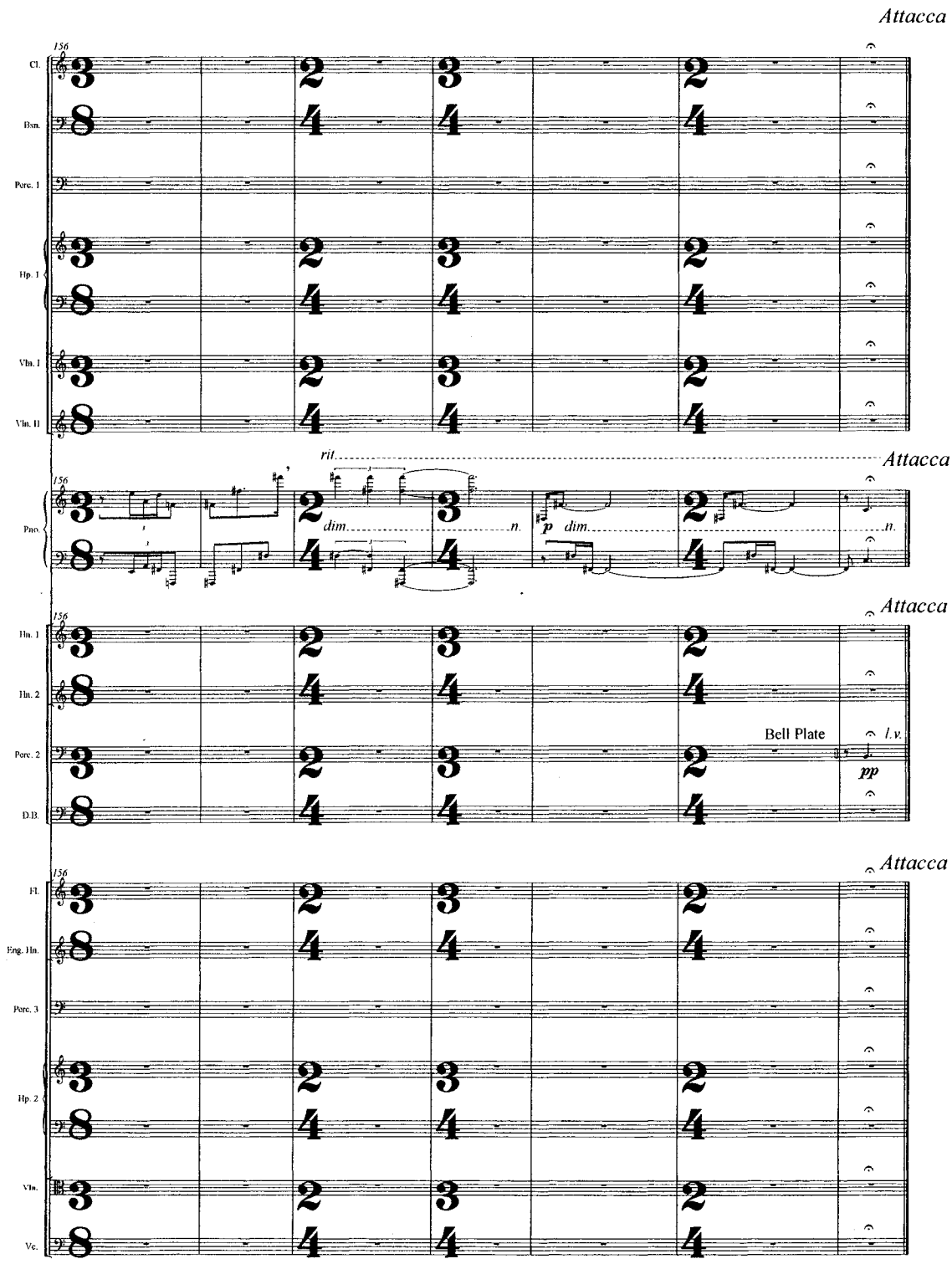


* Conductor's Note: If keyboard instruments are substituted for one or both harps, and if space permits, seat "Harp 1" keyboardist behind Percussion 1 and "Harp 2" keyboardist behind Percussion 3. If only one mixing board is used Harp 1 should be left channel only and Harp 2 right channel only. Speaker placement could be placed where acoustic harp player would sit, and even slightly offstage, but it is important to achieve a good sound, should another solution present itself.

Variations

C Score

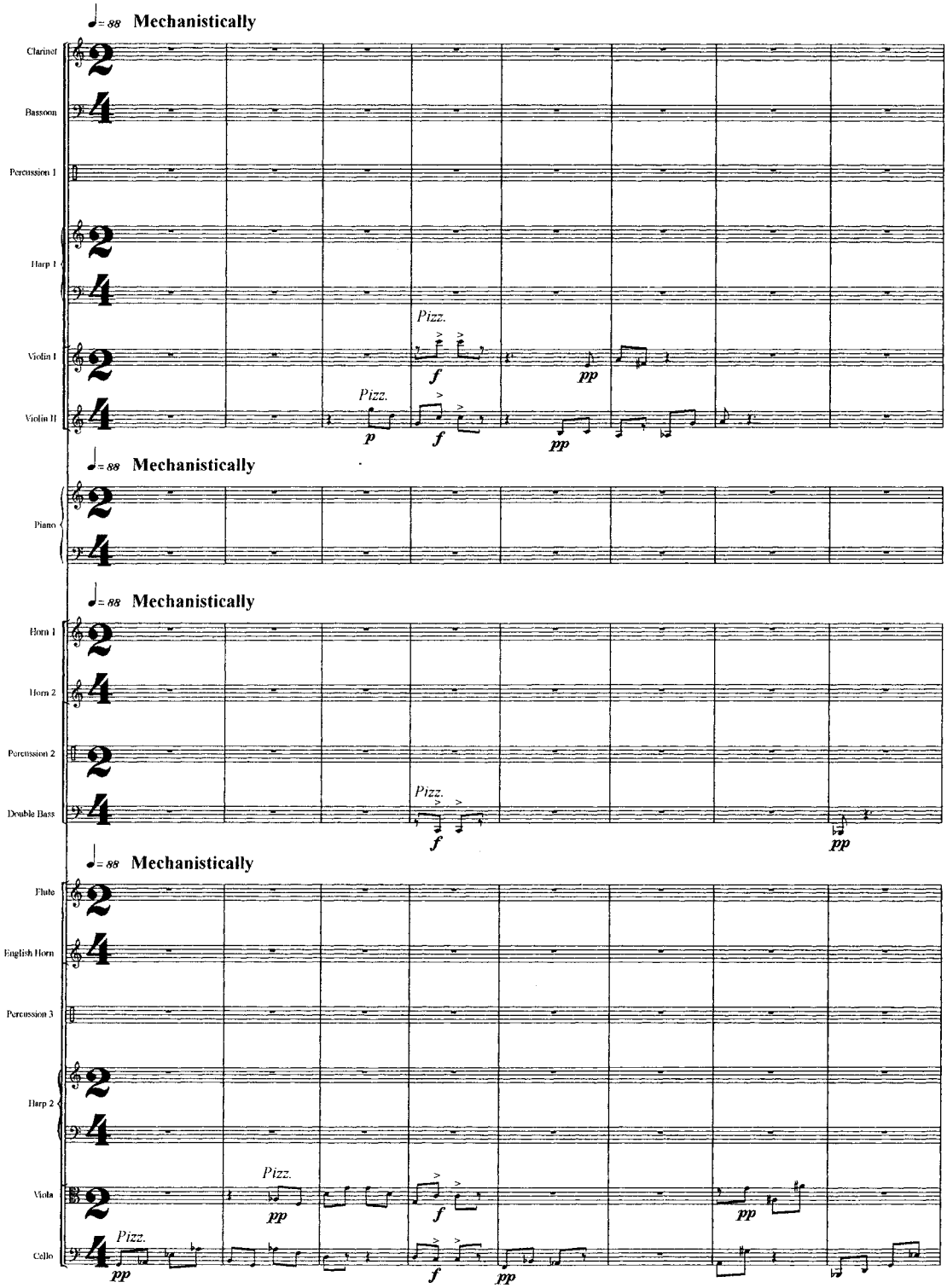


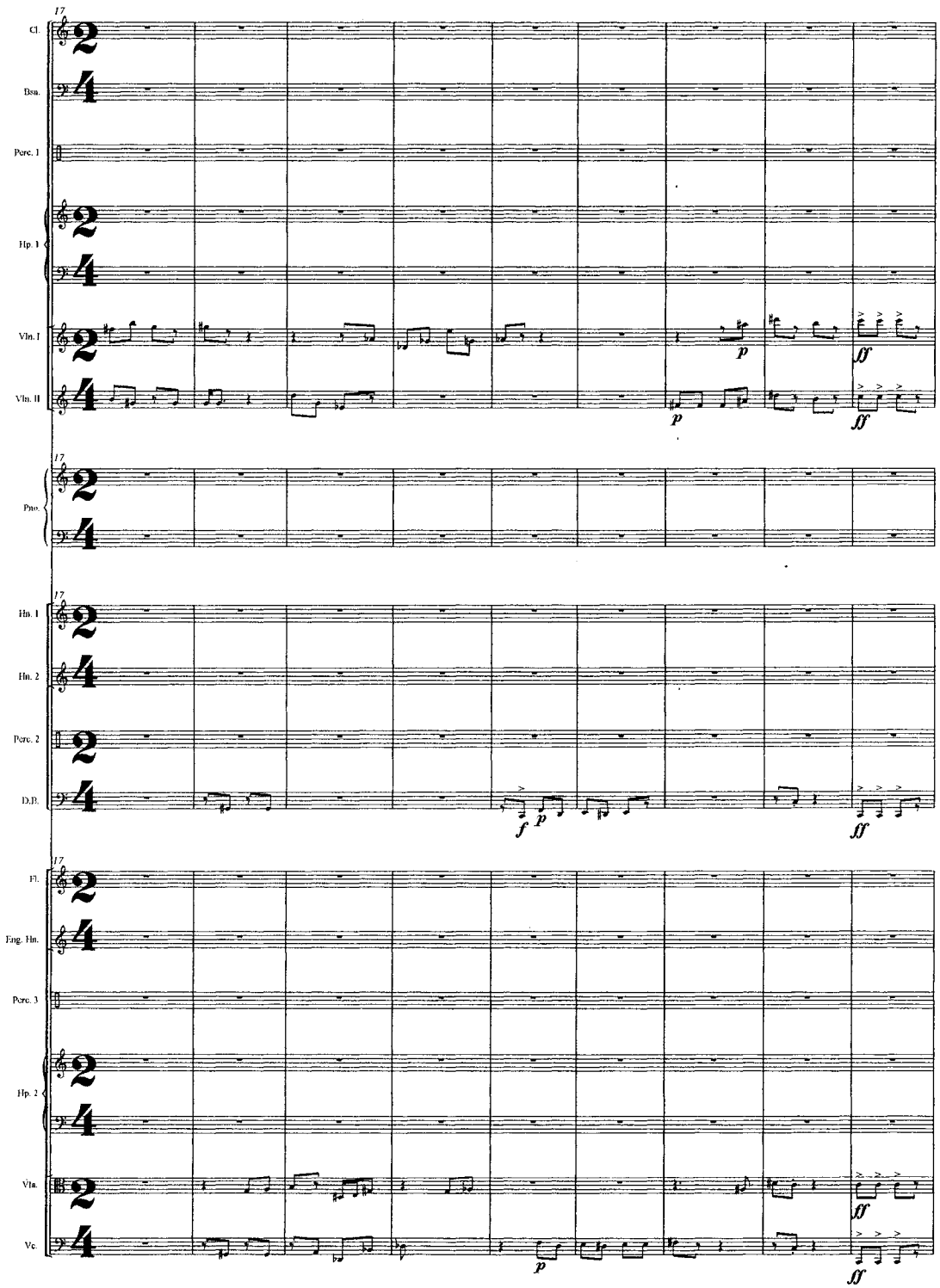


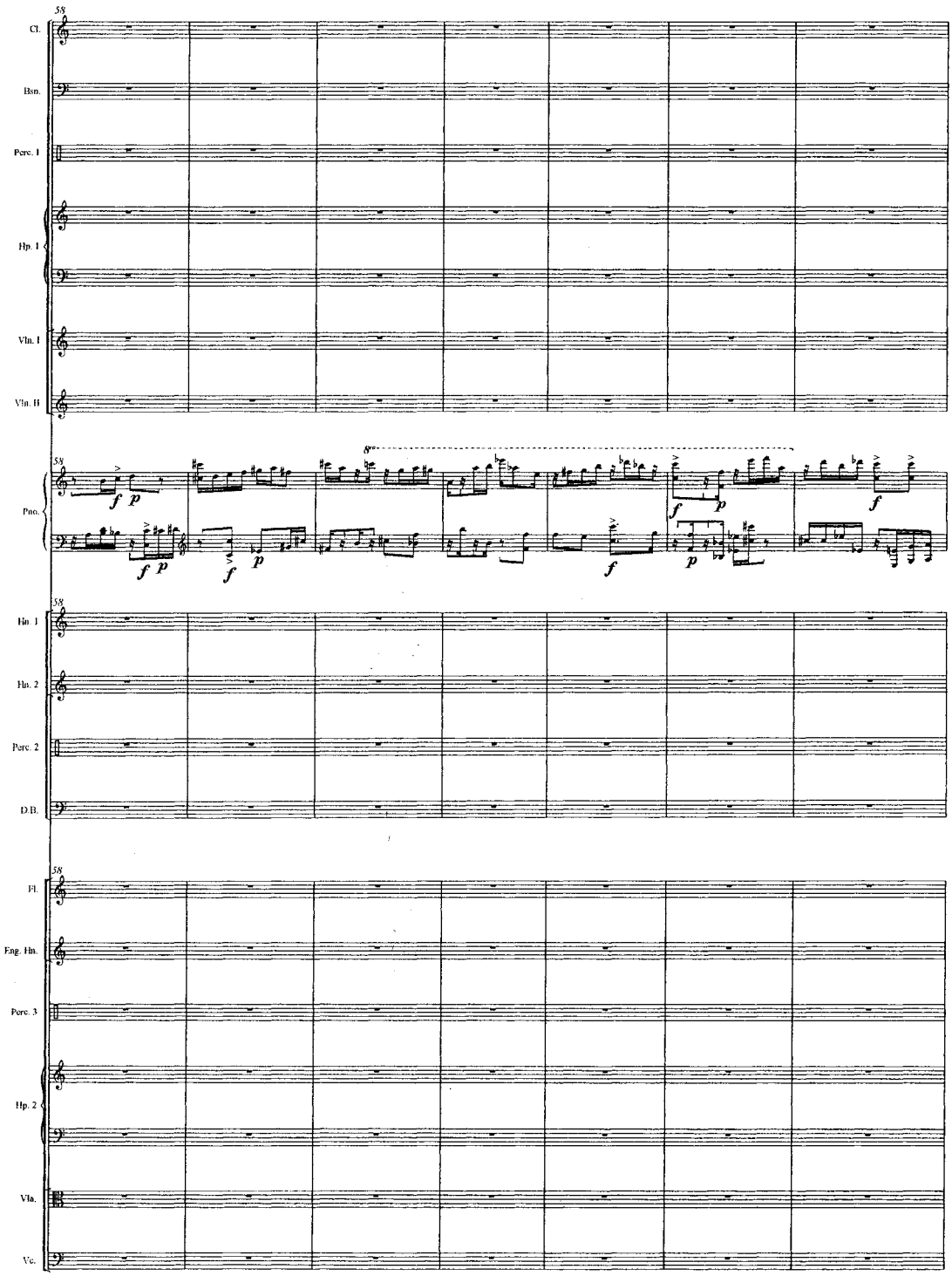
Langsam

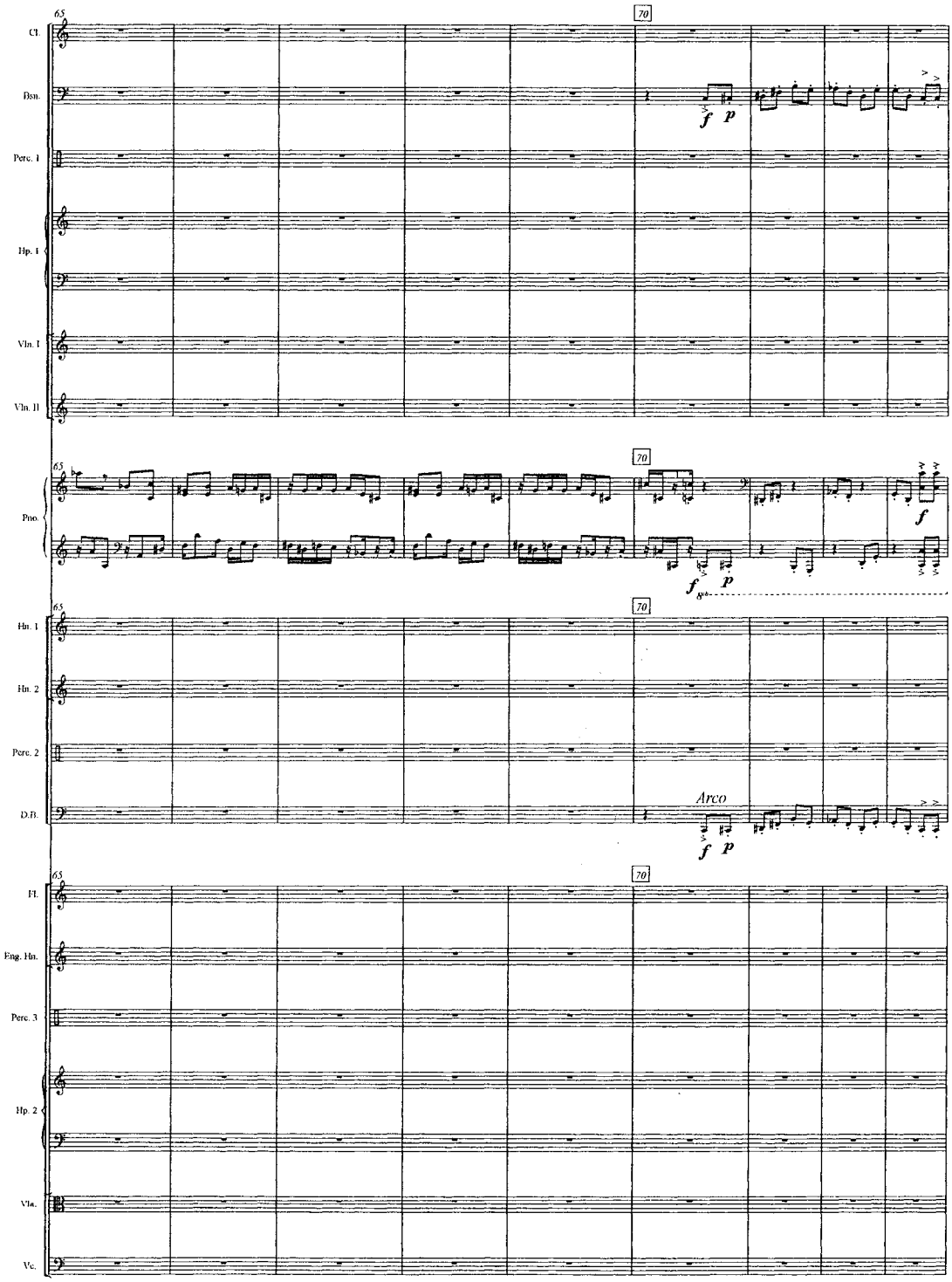
C Score

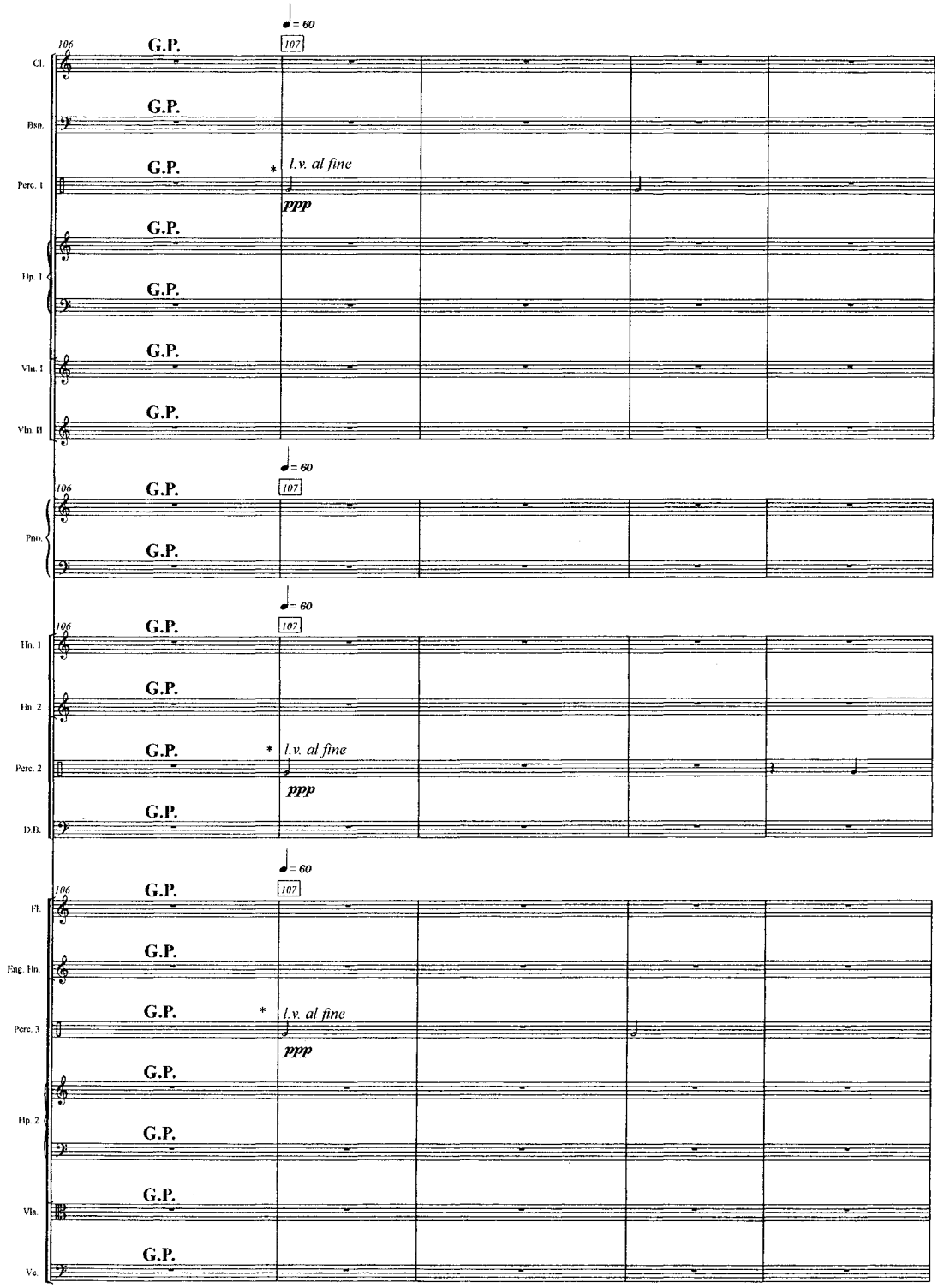
Scherzo



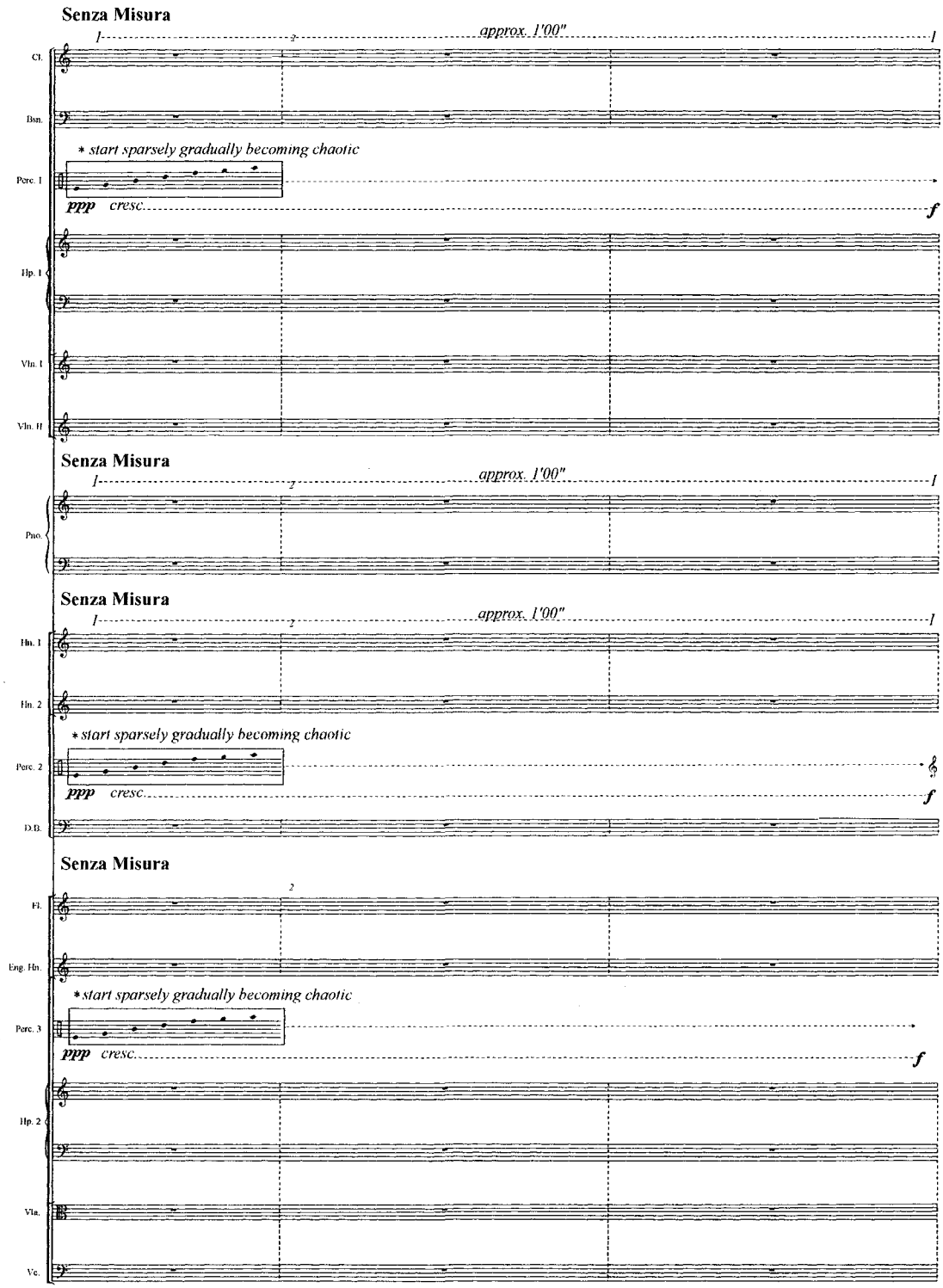








*Refer to instrumentation page for set-up.



* The percussionists should play sparsely, at first exploiting the spatialization of sound and timbre and gradually becoming more chaotic into the conductor's cue at 111. This section should sound random and spontaneous as in the alarm clocks introduction for Pink Floyd's *Time*.