EYES WITHOUT LIGHT

by

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ABSTRACT

Supervisor: Dr. Stephen Chatman

"Eyes Without Light" is conceived and scored for symphonic orchestra. The title of this work reflects personal concerns regarding global environmental issues. The phrase "eyes without light", derived from the Gaelic term "sul gan solas", refers in this instance to the blind greed of multi-national industrial and political corporations which are responsible for the destruction of the earth's ecosystem (primarily the forests and oceans).

This work, influenced by the 19th-century symphonic poem initiated by Beethoven, Berlioz and Liszt, is programmatic in nature. The busy, confrontational destructiveness of mankind is represented by repeated or moving sixteenth notes at the beginning and end of the piece. These sections utilize varying densities of semitone clusters and are predominantly dissonant. The calmness and balance of the planet earth is represented by the middle section of the work, which consists primarily of slowmoving sustained lines. These sustained lines move to a sonority which is the structural focal point of the work (m 129-131). This sonority is resolved in the final measures. Both the focal point sonority and its resolution are constructed of P5 and P4 intervals. The aggressive destructiveness of mankind is emphasized by the repeated dissonant chords in the concluding measures (m 140-147, m 151-157) of the section.

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INTRODUCTION

"Eyes Without Light" is conceived and scored for symphonic orchestra. The title of this work reflects personal concerns regarding global environmental issues. The phrase "eyes without light", derived from the Gaelic term "sul gan solas", refers in this instance to the blind greed of multi-national industrial and political corporations which are responsible for the destruction of the earth's ecosystem (primarily the forests and oceans).

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INSTRUMENTATION

The instrumentation for "Eyes Without Light" consists of the following: 2 flutes, 2 oboes, 2 clarinets, 2 bassoons, 4 horns in F, 2 Bb trumpets, 2 tenor trombones, 1 bass trombone, 1 harp, 1 piano, suspended cymbal, bhodran (celtic frame drum), floor tom, tam tam, 2 tympani, bass drum, chimes, vibraphone, 12 1st violins, 12 2nd violins, 9 violas, 9 cellos, and 6 double basses.

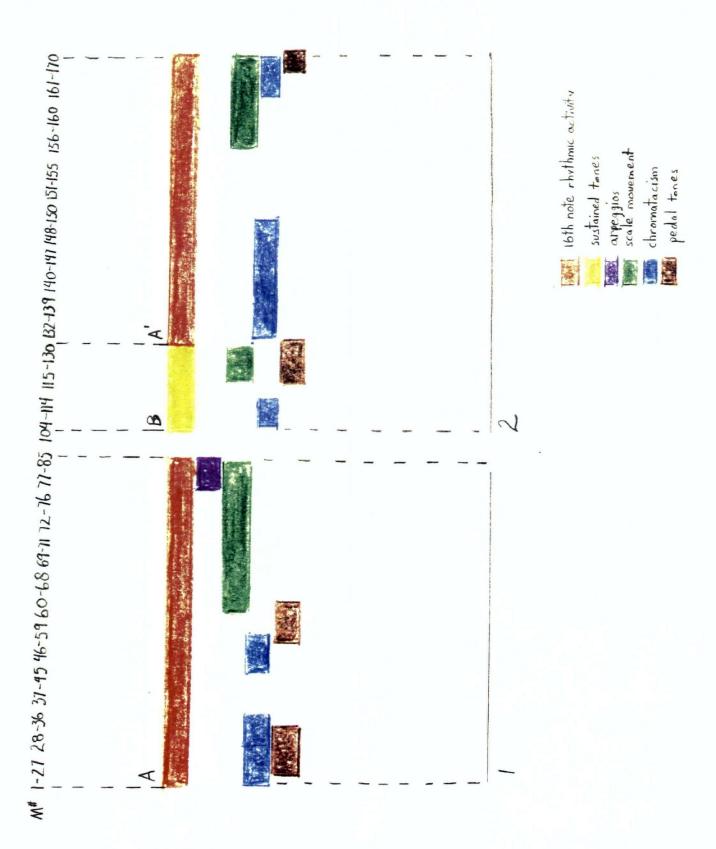
The exact number of players in each string section is suggested rather than mandatory in order to accommodate the divisi groupings and to balance the strings and winds. For example, 12 violins may be divided into two groups of 6, three groups of 4, or four groups of 3 players. Violas and cellos are divided into divisi groupings of one, two or three. If 12 players in each of these respective sections are not available, 9 players per section are sufficient. Divisi groupings of 9, 5+4, or 3+3+3 are suggested. In the instance of a 5+4 grouping, the larger number of players performs the lowest part. The double bass section is divided into two groups of 3, three groups of 2, or one group of 6.

FORM

The formal design is a single movement simple ternary A B A'. Structural form is delineated by rhythm, orchestration, and to a lesser extent, pitch. The most readily apparent characteristics of section A (bars 1-85) and A' (bars 132-170) are 1) consistent sixteenth note rhythmic activity, 2) animated tempo, 3) textural sectionalization between winds and strings, and 4) percussion solos. Section B (bars 96-131) is distinguished by 1) slow tempo, 2) predominance of sustained tones, 3) special effects by the strings, i.e., gliss and harmonics, and 4) winds and strings less sectionalized. Section A and A' are rhythmically active, and section B is more sustained or rhythmically inactive.

Example 1 illustrates the three structural divisions by means of a color code system. Respective colors are intended to convey the structural outline rather than any emotive impressions. Sections A and A' are indicated by a red color, which indicates sixteenth note rhythmic activity executed predominantly by the strings. Section B is indicated by yellow, which refers to rhythmic inactivity or sustained tones. The subsidiary colors of green, blue, purple and brown represent scalar movement, chromaticism, arpeggios, and drones or pedal tones.

Example 1.



The parallel locations of pedal tones (brown) and chromatic scale passages (blue) indicate a two part symmetry between bars 1-85 and bars 95-170. This symmetry suggests a subordinate two-part structure functioning independently from the three-part A B A' form.

The composite form may be further divided into sixteen subsections of unequal length. The subsections form a connected series or succession of events. Pitches in these subsections or individual events are organized by various means and each event occurs either as a continuation or as a result of the previous event or events.

The distinct subsections with corresponding measure numbers and type of scale use are illustrated below:

SECTION	MEASURE NUMBER	TYPE OF SCALE USE
1.	1-27	-3, 3, 4 note segments -chromatic (full)
2.	28-36	-chromatic (segments)
3.	37-45	-diads (segments)
· ·		
4.	45-59	-chromatic (full, reordered)
5.	60-68	-complete scale
6.	69-71	-6 note segments -whole tone
7.	72-76	-2 and 4 note segments
8.	77-85	-arpeggiated 4 note segments
9.	104-114	-chromatic (reordered diads)

11.	132-139	-chromatic (segments)
12.	140-147	-chromatic (reordered diads) -6 note segments
13.	148-150	-chromatic -4 note segments
14.	151-155	-repeated vertical 5 note segments -chromatic (reordered diads)
15.	156-160	-repeated vertical 4 note segments
16.	161-170	-2, 3 note segments, 5 note vertical segments

PITCH

The pitch content of the composition is based on either divisions or combinations of three octatonic scales which will be referred to as 'primary scales'. The three scales are constructed from a matrix illustrated in Example 2.

Example 2.

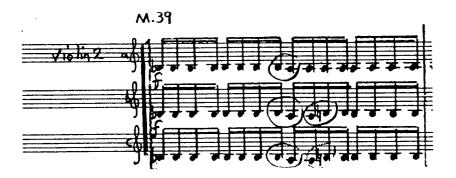
С		
Α	A#	В
F#	G	G#
D#	Ε	F
С	C#	D
1	2	3

Vertical alignment of pitches beginning on C, C# and D display three diminished 7th chords. Stepwise combinations of rows 1-2, 2-3, and 1-3 produce three possible primary octatonic scales. These scales, referred to as scale a, b and c (Example 3) yield the basic pitch material employed in the work.

ple 3.							
'a'							
С	C#	D#	E	F#	G	Α	A#
'b'							
C#	D	Е	F	G	G#	A #	В
'c'							
С	D	D#	F	F#	G#	Α	В
	'b' C# 'c'	'a' C C# 'b' C# D 'c'	'a' C C# D# 'b' C# D E 'c'	'a' C C# D# E 'b' C# D E F 'c'	'a' C C# D# E F# 'b' C# D E F G 'c'	'a' C C# D# E F# G 'b' C# D E F G G# 'c'	'a' C C# D# E F# G A 'b' C# D E F G G# A# 'c'

Scale segmentation and combinations are developed in the following six ways:

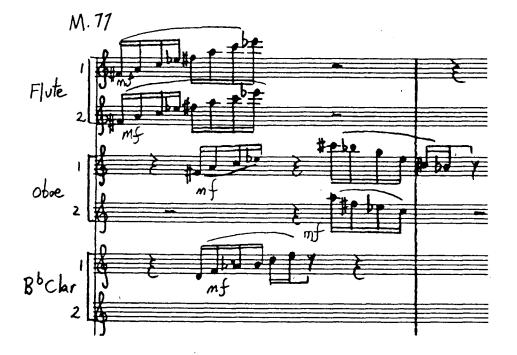
1. Diads



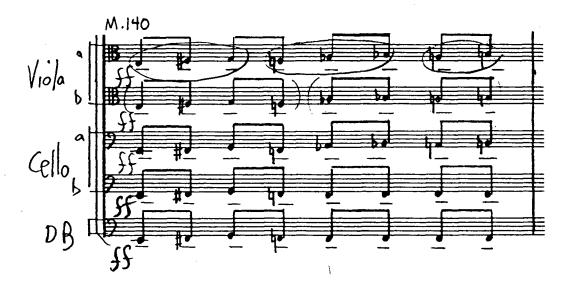
2. Complete Scale



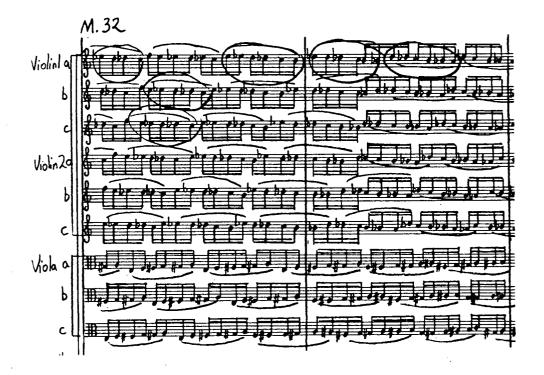
3. Arpeggiated Segments



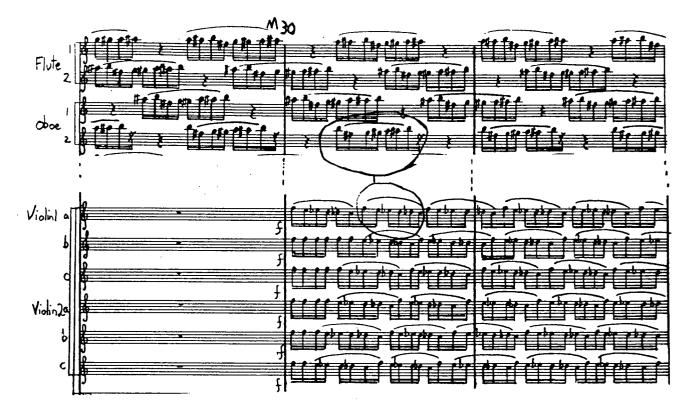
4. 3, 4, 5, 6, 7 note Non-Chromatic Segments



5. Chromatic Segments (composite scale segments derived from combinations of primary scales)



6. Complete Chromatic Scale (complete composite scales)



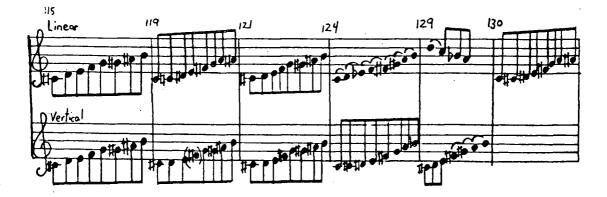
SCALE APPLICATION

Examples 4-8 illustrate nuances of scale groupings conforming to the six methods of scale application profiled previously. Pitches corresponding to scale 'a' (C C# D# E F# G A A#) are indicated by beamed stems notated above the staff. Pitches corresponding to scale 'b' (C# D E F G G# A# B) are indicated by beamed stems notated below the staff. Pitches corresponding to scale 'c' (C D D# F F# G# A B) are indicated by slurred lines. Consider the following observations regarding Examples 4 through 8. The ensuing examples indicate the fundamental pitches corresponding to the specific sections indicated.

Example 4.



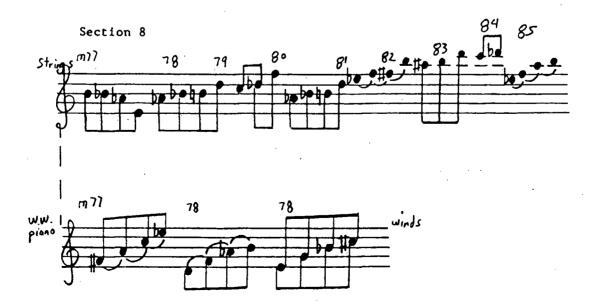
Section 10



Section 5 (m 60-68) and sections 10 (m 115-130) are examples of complete octatonic scale statements. Section 5 consists primarily of imitative linear descending stepwise scalar patterns. Each of the scales consist of the pitches E D Db B Bb Ab G F (scale 'b'). The closing scale statements are finalized by the addition of sustained E natural beginning in bar 65 (E D Db B A Ab G F E-). Section 10 (m 115-130) contrasts verticalized scales (a, b, c) sustained by the strings with rapidly moving linear statements of scales a, b, and c by the winds and brass. Linear scale statements are initially introduced as single lines (m 116) and eventually developed as contrapuntal lines (m 116-127).

Example 5.



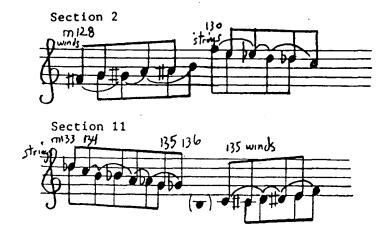


Sections 6 (m 69-71), 7 (m 72-76), 8 (m 77-85), 15 (m 156-160), and 16 (m 161-170) consist of two types of scale application: 1) composite diatonic scale segments derived from simultaneous combinations of primary scales a, b, and c, 2) scale segments derived exclusively from single scales a, b, or c.

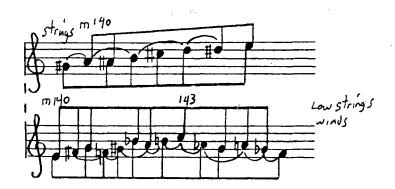
Sections 7 (m 71-76) and 8 (m 77-85) incorporate alternating 'composite' and 'primary' scale segments. The principal component of section 8 consists of arpeggiated overlapping 4 note segments (C Eb F# A/ C# E G Bb/ D F Ab B) which are articulated by the winds and piano.

Section 6 (m 69-71) consists of linear composite segments derived from the primary scales a, b, and c. Sections 15 (m 156-160) and 16 (m 161-170) consist of verticalized segments. Section 16 consists of composite segments derived from scales a, b, and c, and section 15 consists of segments derived from scale b exclusively.

Example 6.

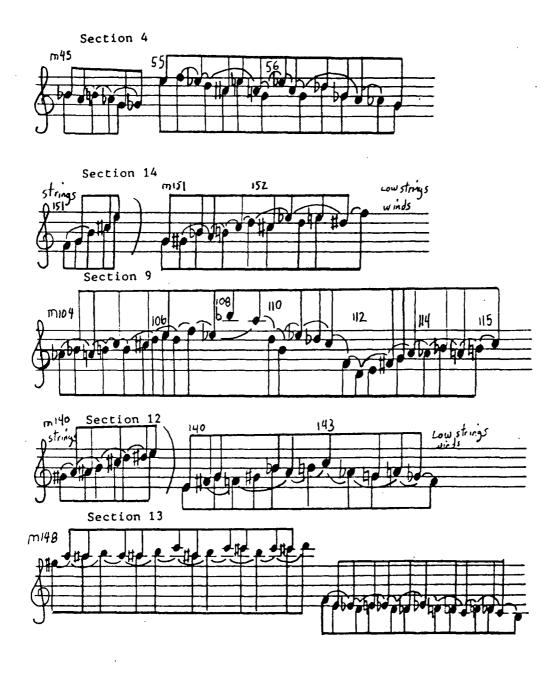


Section 12





As with 'composite' diatonic segments, chromatic scale passages are constructed by simultaneously combining multiple primary scales. Chromatic scale passages are designated as either 1) conventional or 2) reordered. Conventional chromatic segments consist of notes in normal chromatic order, i.e., C C# D D# E F etc., whereas reordered chromatic segments comprise chromatic pitches arranged in a non-conventional order, i.e., C D C# E D# F. Sections 2 (m 28-36) and 11 (m 132-139) utilize conventional chromatic segments, and section 4 (m 45-59) and section 12 (m 140-147) employ reordered chromatic segments.



Sections 4 (m 45-59), 9 (m 104-114), 12 (m 140-147), 13 (m 148-150) and 14 (m 151-155) use 11 and 12 note full chromatic reordered scales. The individual sections are associated with each other by means of a reciprical arrangement of pitches. For example, pitches of each section may be organized into groupings of 4 note patterns, i.e., Section 4- E F Eb D/ C# E C B/ Eb C B C#/ Section 9- Ab Bb A B/ C B C# D/ E D F Eb/ Section 12- E F# G F/ G# Bb A B/ C Ab G A/ Section 13- G# A A# B/A A# B C/ A# B C C#/ Section 14- G G# Bb A/ B C D C#/ Eb D E D#/

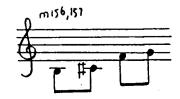
Example 8.



Section 6



Section 15



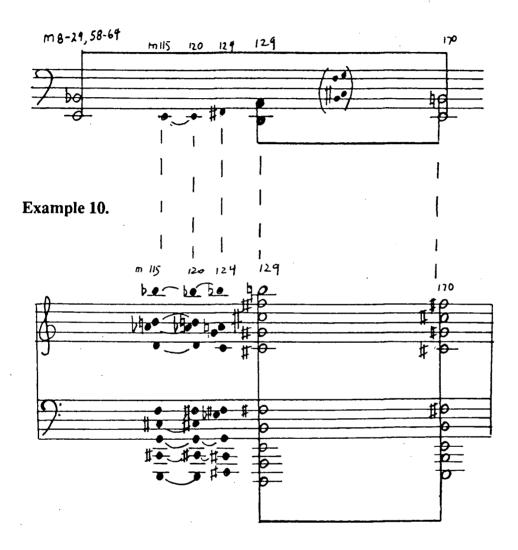
Although most patterns may be reduced to diad configurations, section 3 utilizes diads entirely. Section 3 (m 37-45) consists of whole tone diads derived from scales a, b, and c. (The whole tone segments of sections 6 and 15 also reduce to a diad format.)

SENSE OF PROGRESSION

The sense of underlying or 'background' tonal progression is effected by four essential components (see Examples 9, 10, and 11):

- Bb_j
 Sustained tritone pedal tones E³ in section A (m 8-29, m 58-64) by the double basses and cellos.
- 2) Harmonic movement articulated by the strings in section B (m 115-129).
- 3) Harmonic movement articulated by the winds and strings in section A' (m 140-170).
- 4) The resolution of i) the tritone E^b of section A (m 8-29, m 58-64), ii) the final sonority of section B (m 129) and iii) the penultimate sonorities of A' (m 140-169) in iv) the final sonority of A' (m 170).

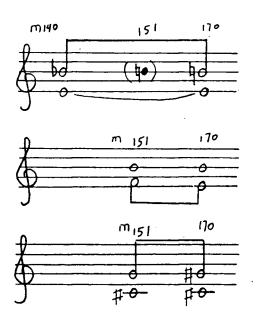
Each of the four components are described by the following examples:



The paramount 'background' harmonic 'resolution' of the sonority at m 129 is achieved at measure 170. This is the fundamental harmonic progression of the work. Example 10 details the motion of measures 115, 120 and 124, which is directed toward the interim destination of measure 129, and the resolution of measure 129 at the ultimate sonority (m 170). The subsidiary harmonies (m 115, 120, 124) preceding measure 129 are depicted by unstemmed quarter notes, and the movement of the sonority located at measure 129 toward the final sonoirty (m 170) is indicated by half notes beamed below the staff.

The penultimate sonorities (m 140-170) consist primarily of tritone intervals which are directed toward the final sonority at measure 170.

Example 11 A.



Example 11 A indicates the expansion of tritone intervals articulated by the winds at measure 140 into perfect fifth intervals located at measure 170.

Example 11 B.

165 m 161 170

Example 11 B represents the local stepwise movement from E natural (m 161) $F#_{]}$ $C#_{]}$ D# (m 166) to the final destination of G# in measure 170.

CONTEXT IN LITERATURE

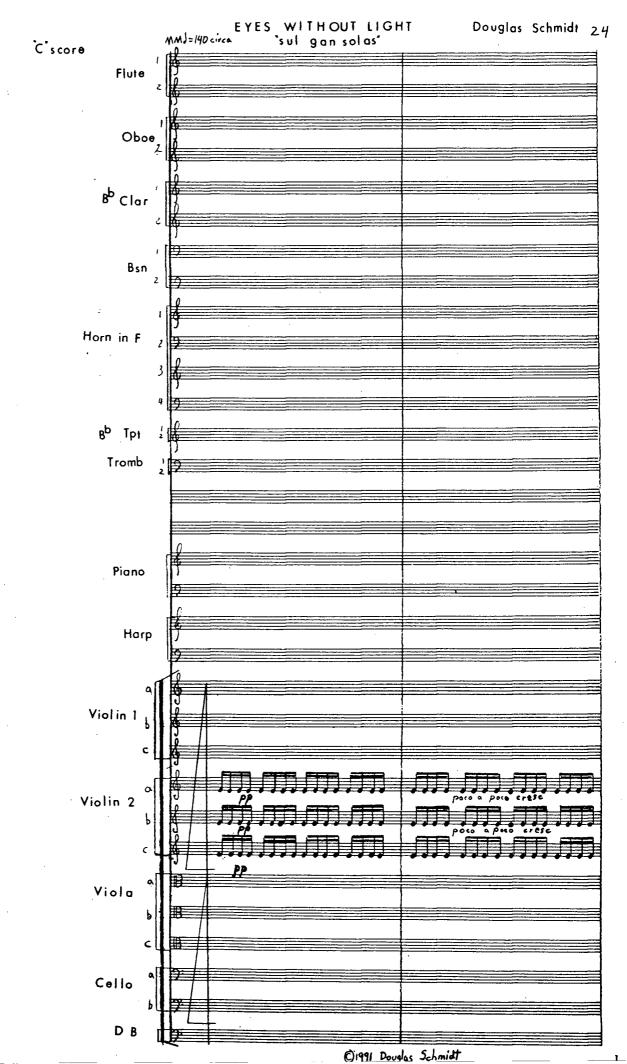
The following experiences or circumstances had a profound effect on my inspirations and compositional approach to "Eyes Without Light".

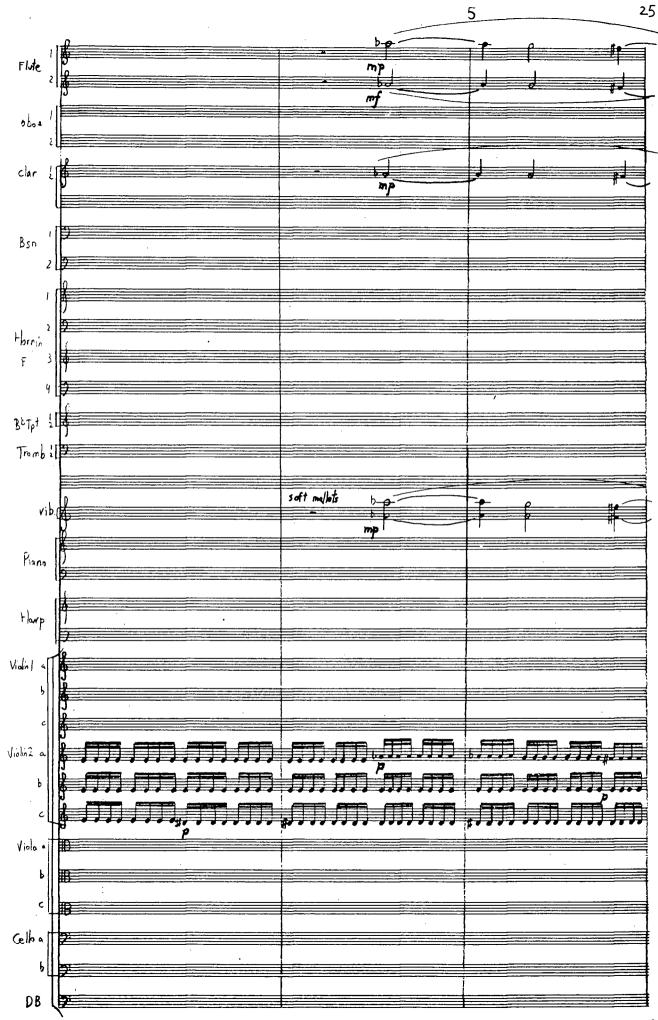
While at the Banff Centre for the Arts during 1986-1987, I attended lectures as well as private tutorials by Witold Lutoslawski. I was most impressed by Lutoslawski's 'chain' concept of structural development. In his work, short formal sections of a composition are linked to each other by common elements, with each subsequent section developing characteristics of preceding sections.

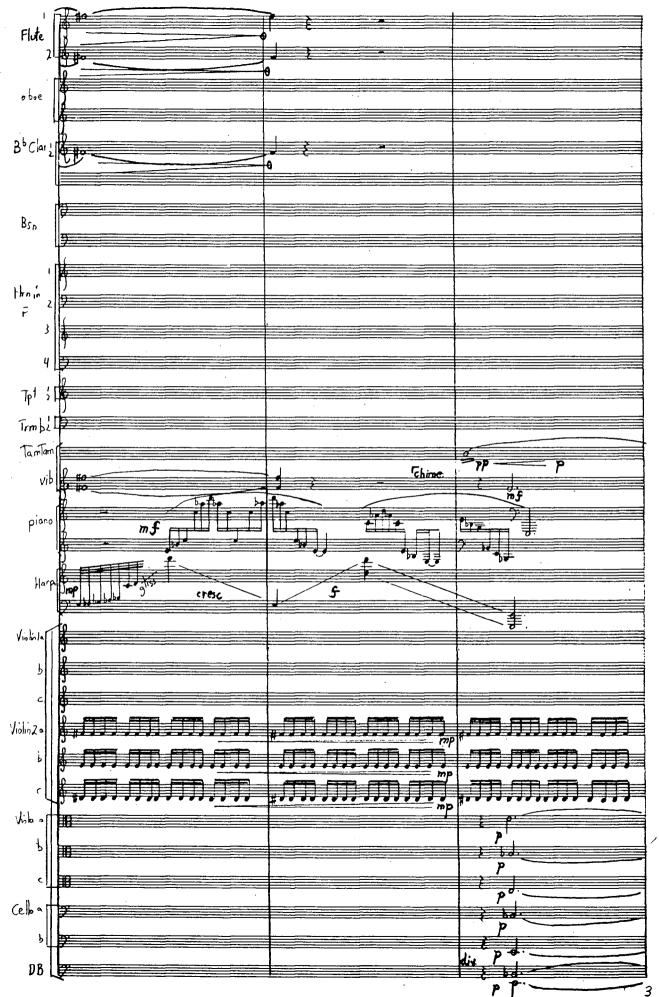
In 1984, John Adams gave a brief seminar at the University of British Columbia, introducing his minimal composition "Shaker Loops" for string orchestra. Although I do not consider my particular style of composing to be minimal, I was impressed by Adams' idiomatic style of string scoring, which frequently utilizes sixteenth note repeated tones.

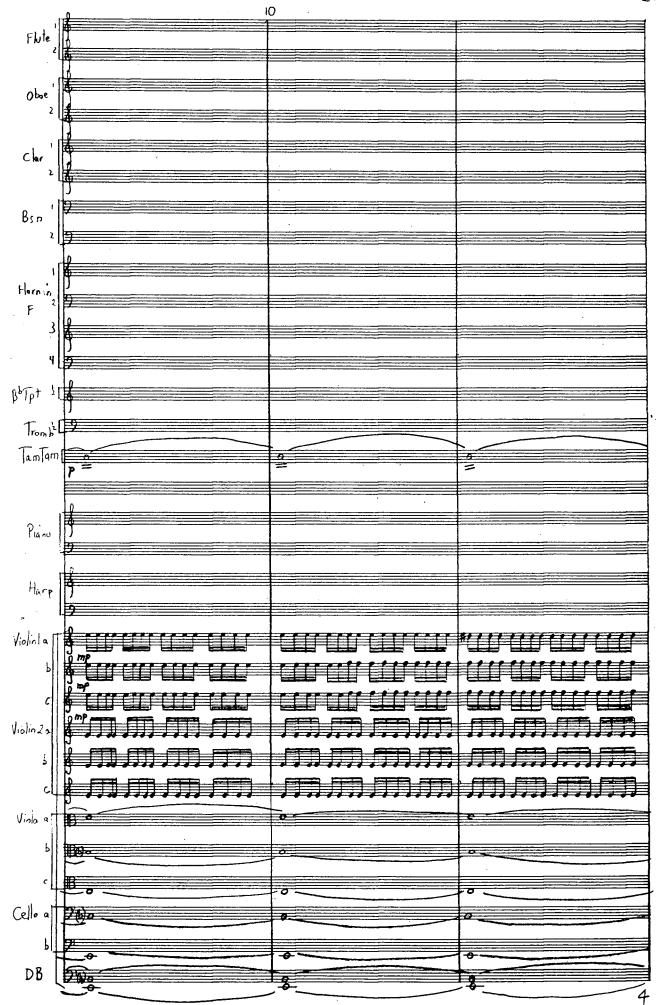
Since 1987, I have been interested in Celtic music, and have been actively performing Celtic-based music with other musicians throughout Canada. Thus, the percussion solos used in "Eyes Without Light" are derived from typical Celtic-based "Bhodran" frame drum beat patterns.

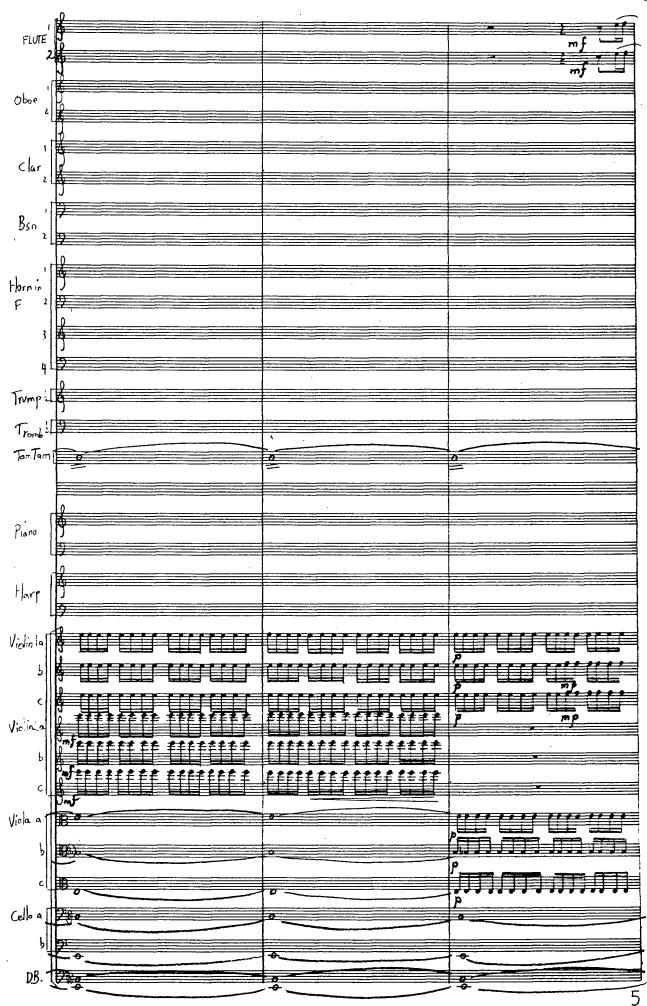
Perhaps the most marked influence on my personal style of composing is a result of performing and exposure to Brazilian jazz and ethnic music. I have been particularly inspired by the Brazilian jazz performer Hermeto Pasqual and his brother Sivuca. Segments of Hermeto's music freely utilize dissonance and virtuoso flourishes on various instruments. The fundamental ideas advanced by Pasqual, as well as the incessant drive of north Brazilian rhythms have affected my compositional ideas leading to the conception of "Eyes Without Light".

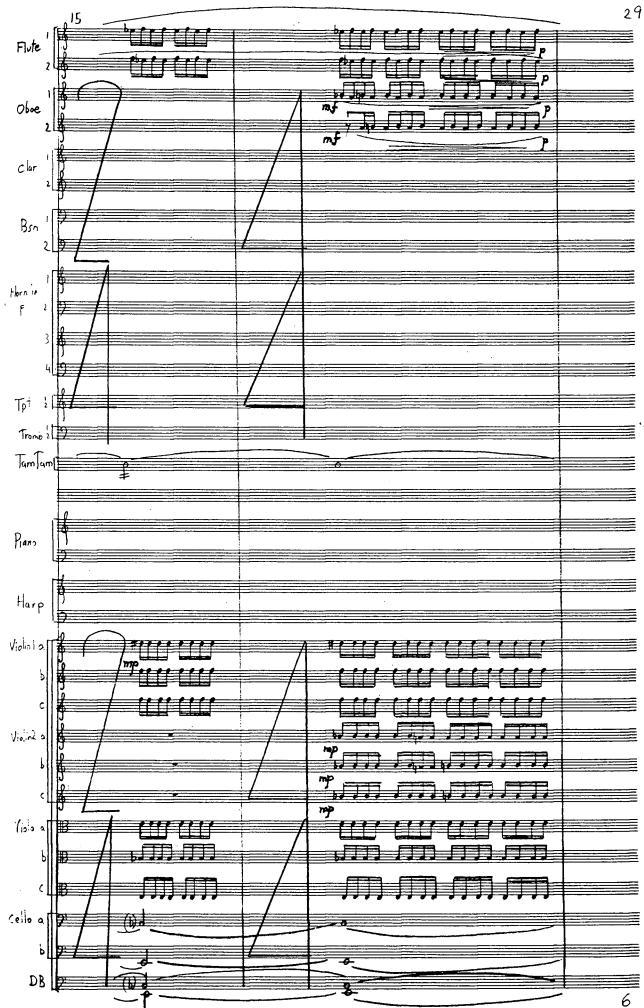


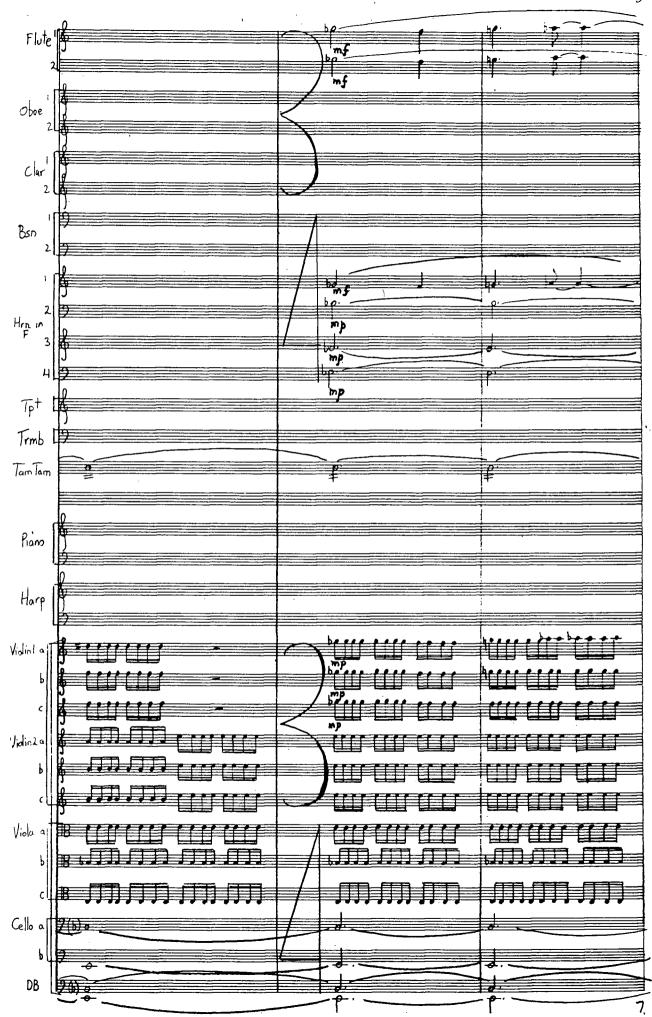


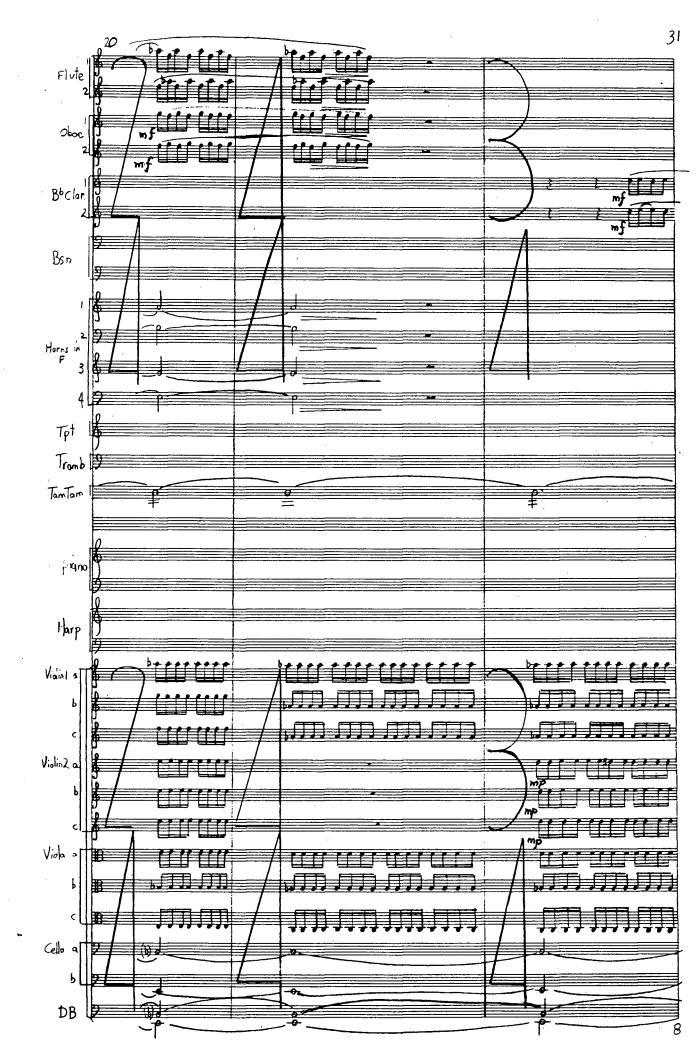


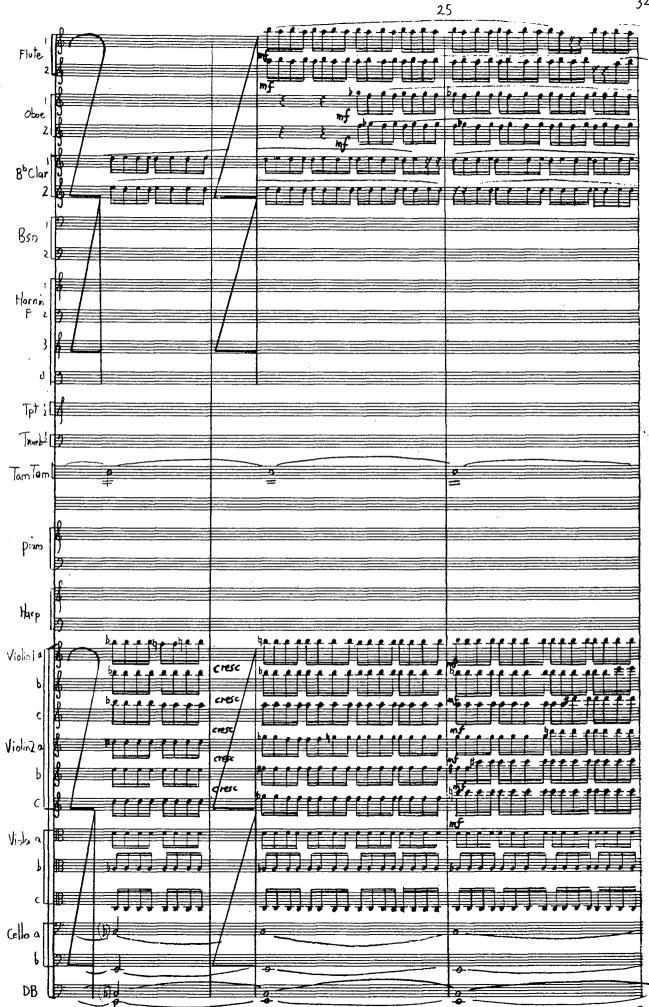




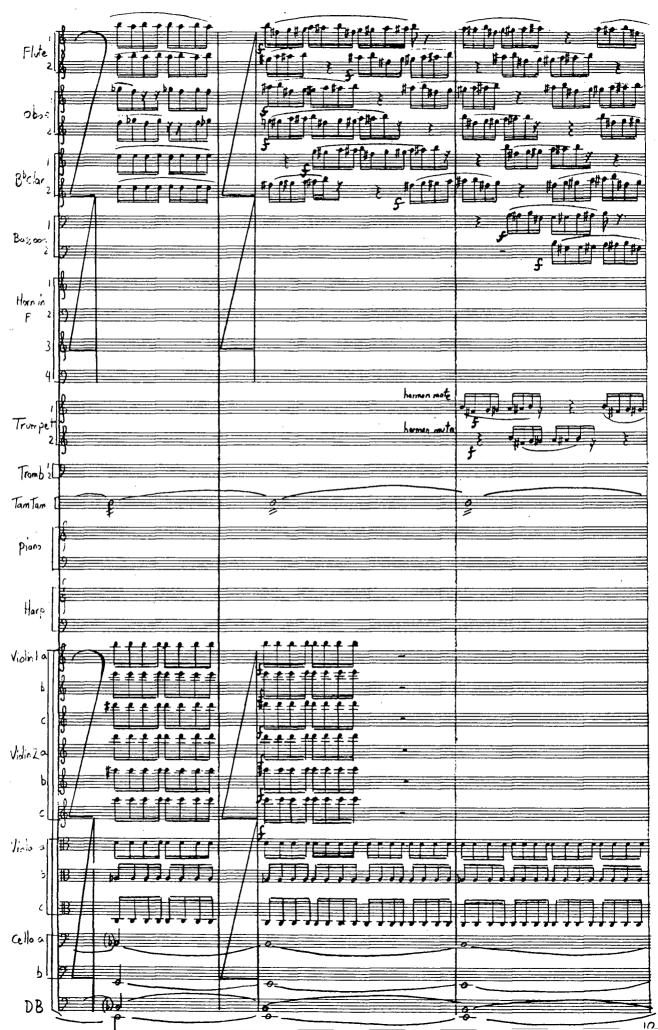




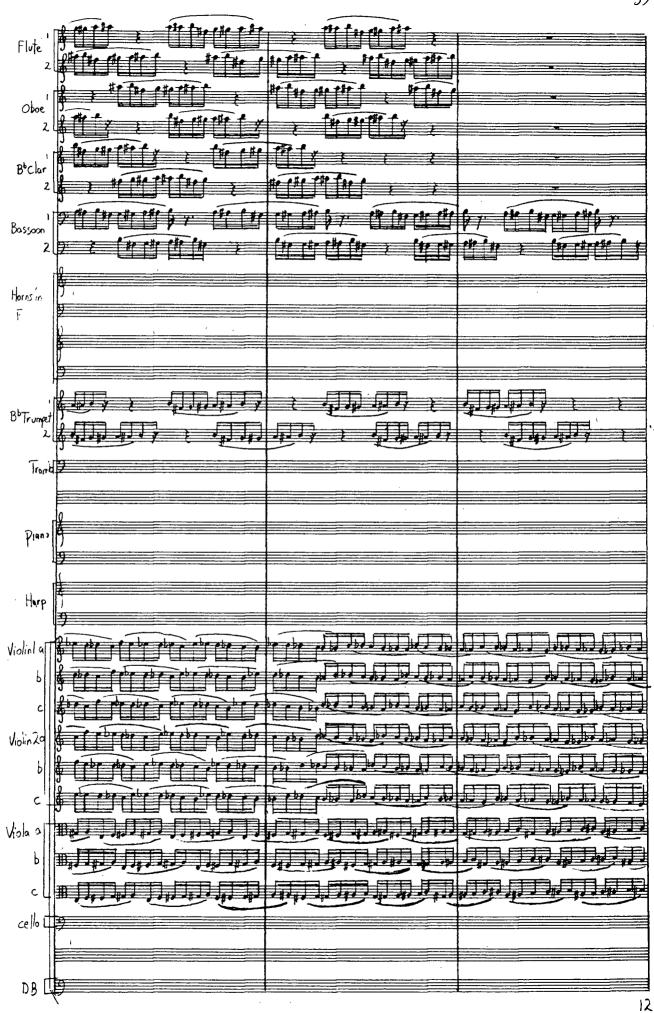


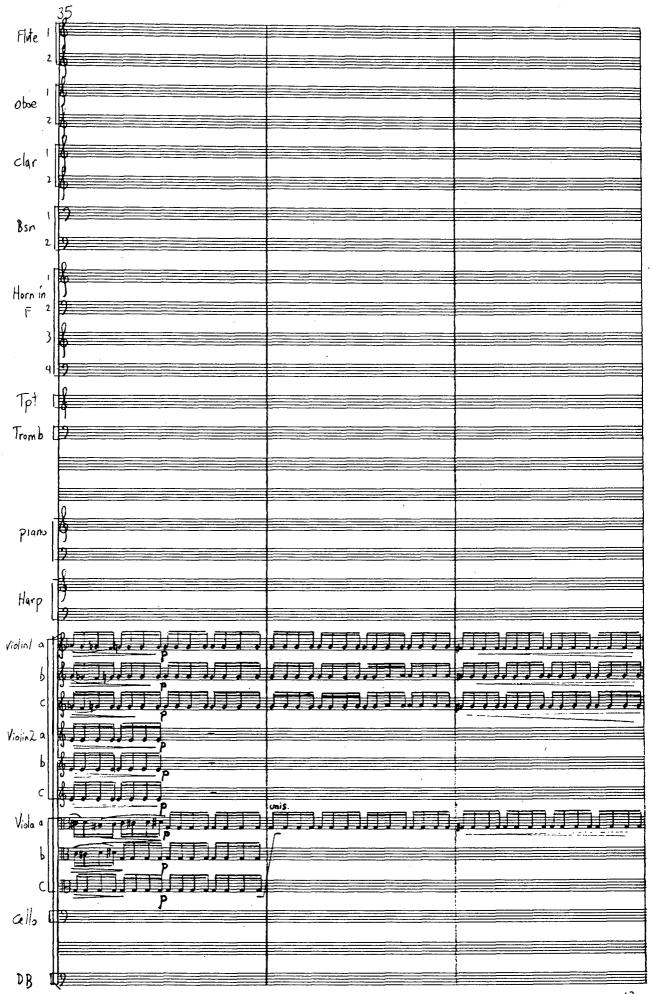


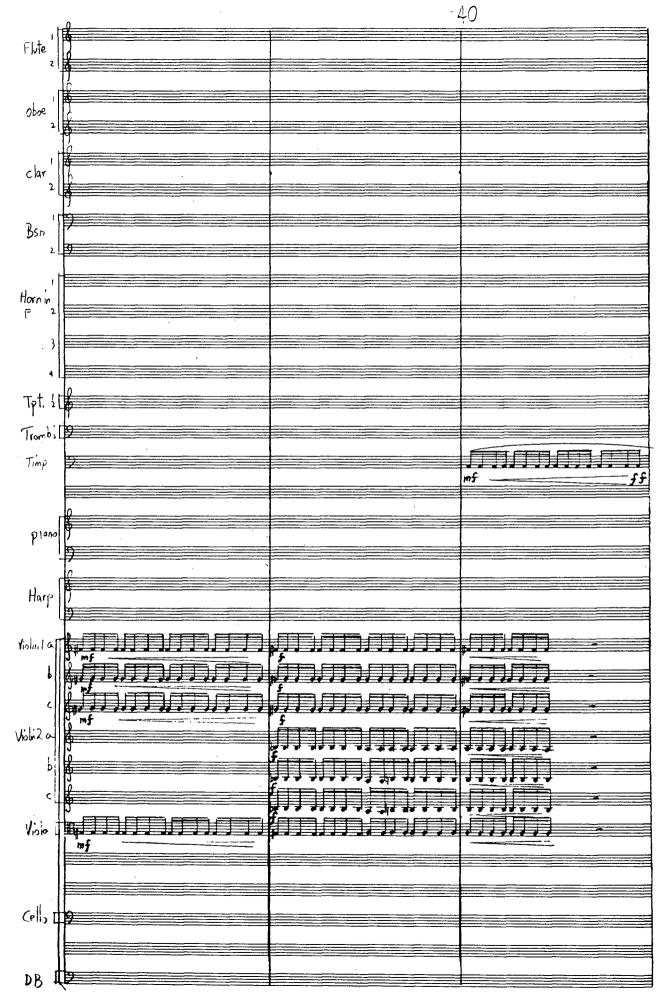
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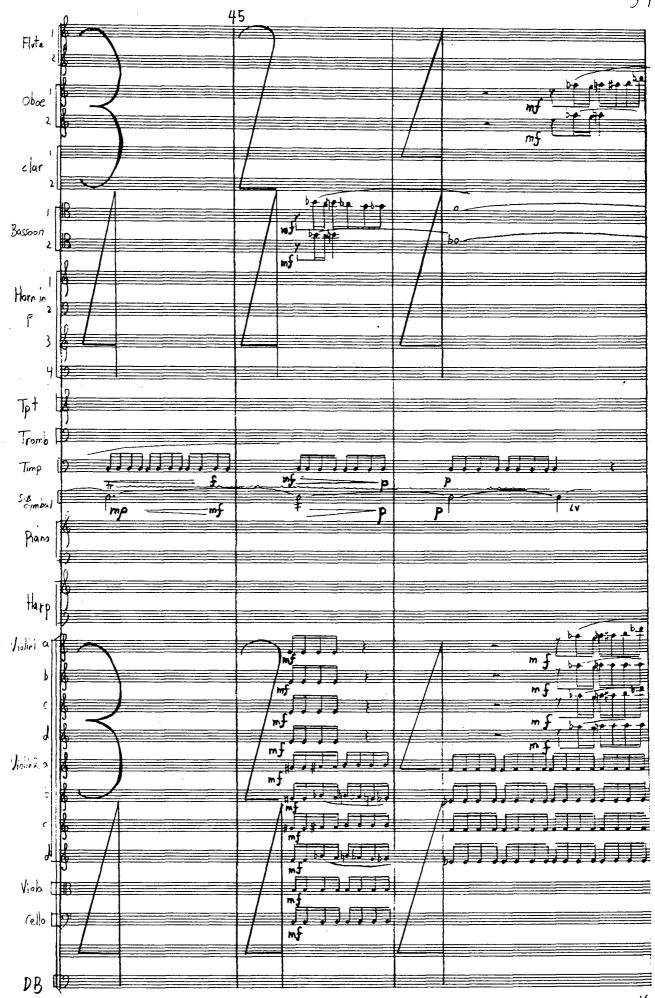




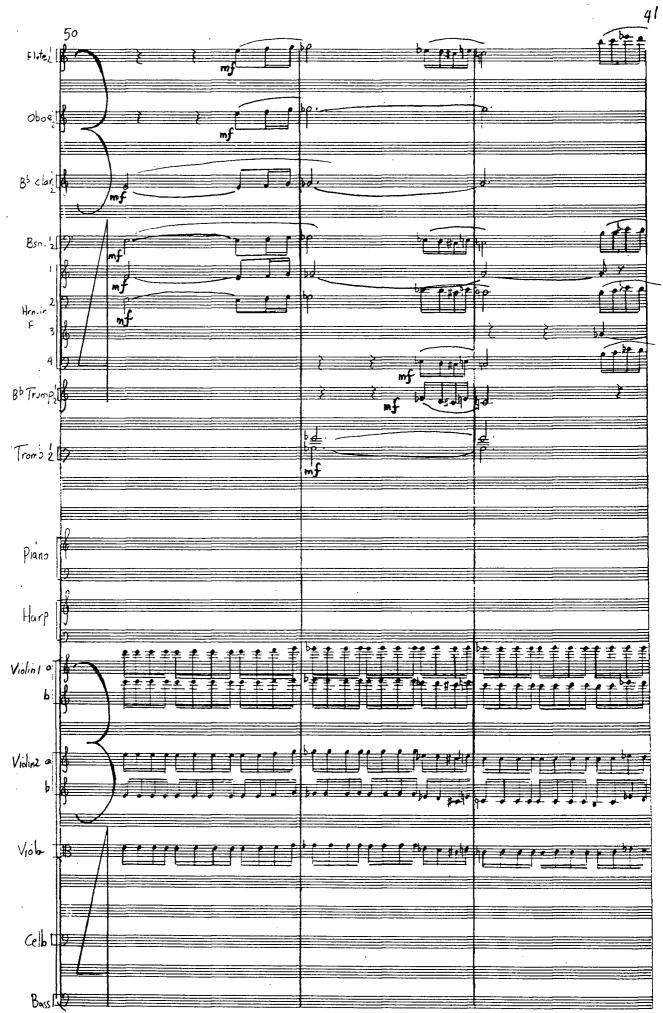




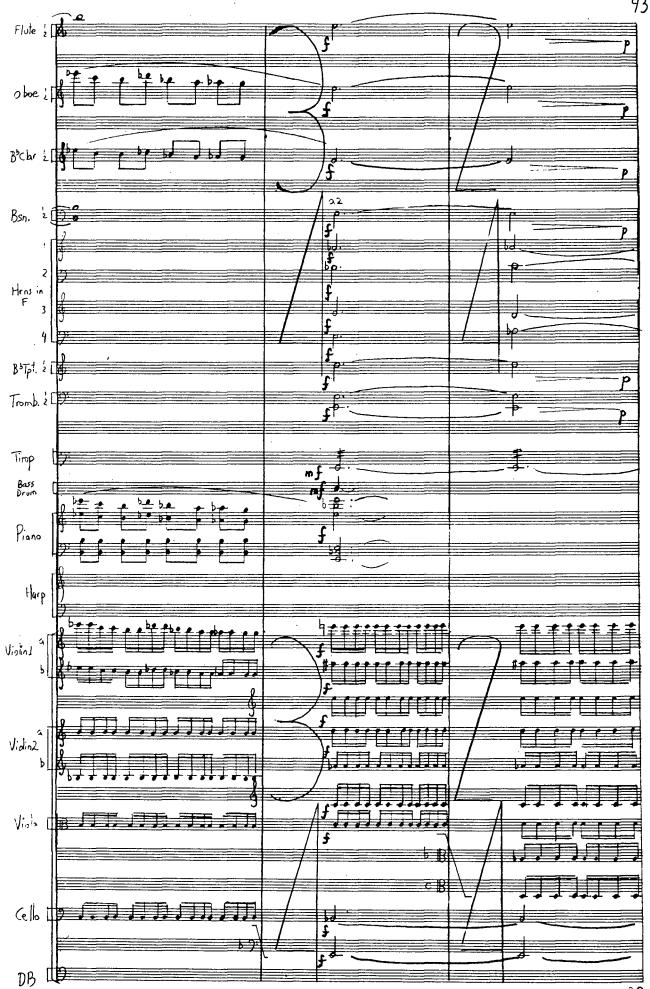


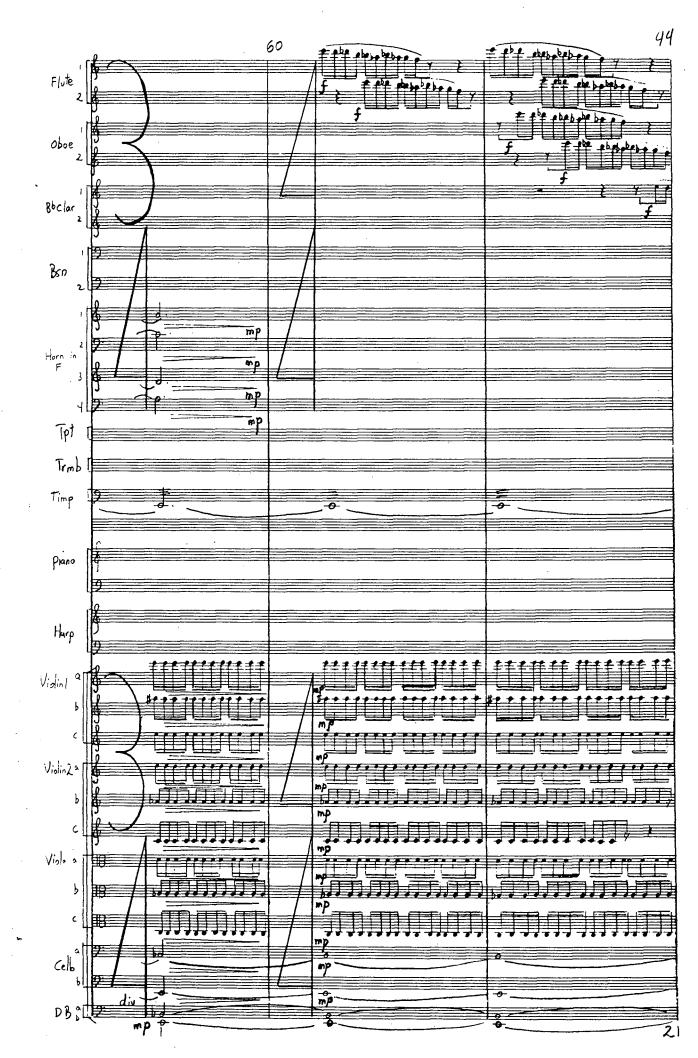


















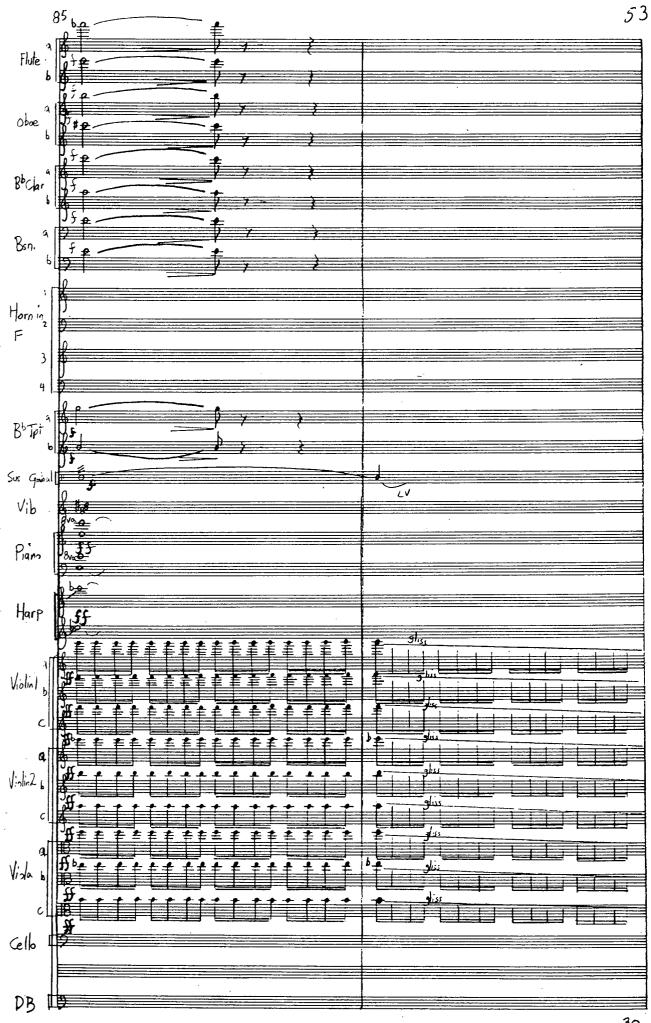


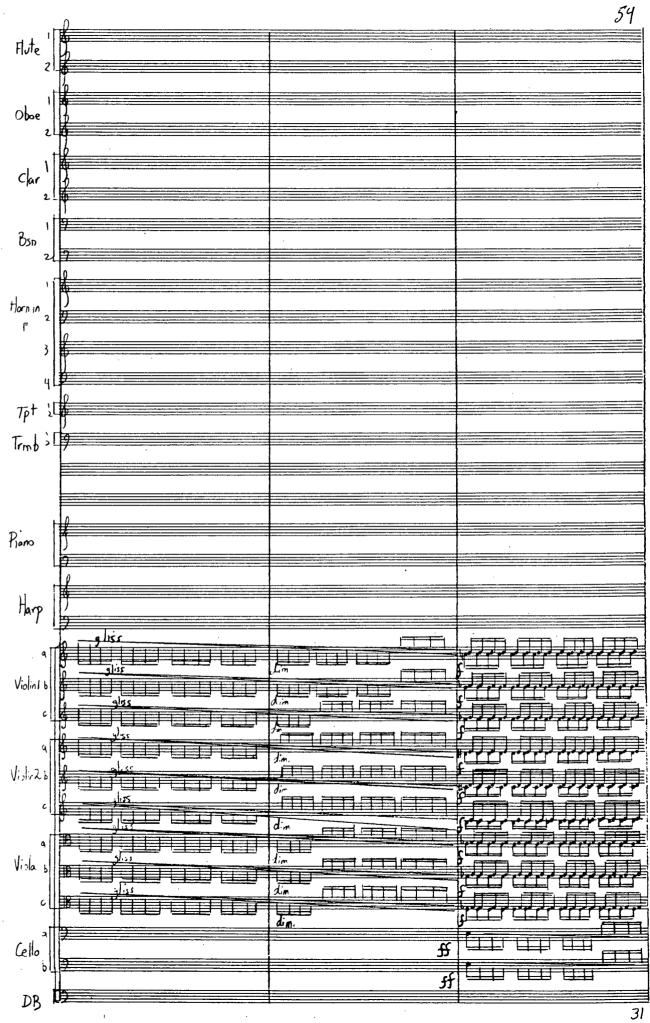




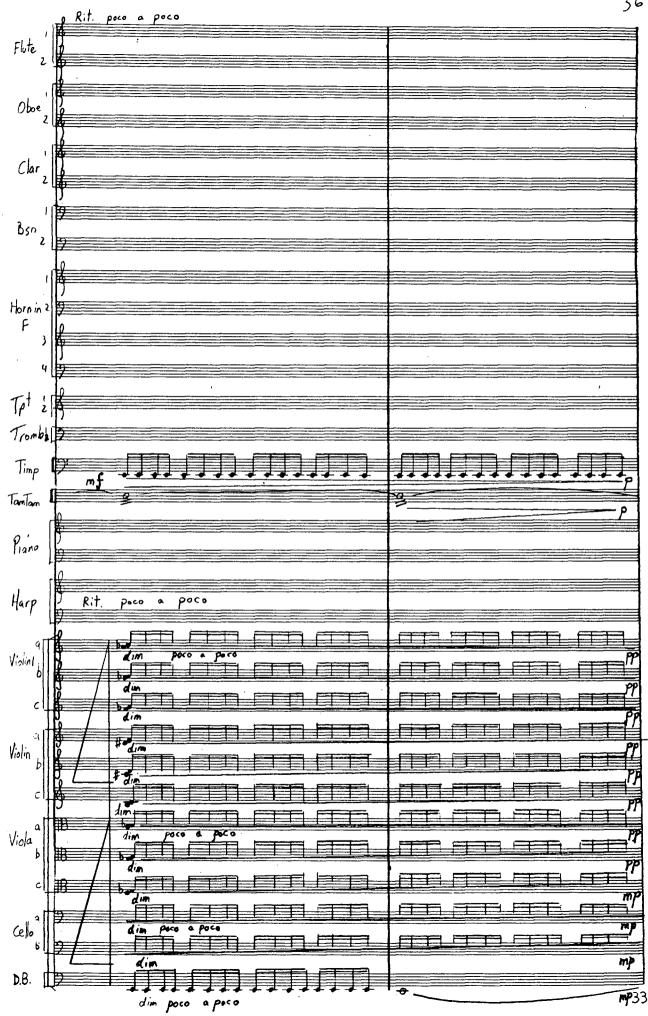




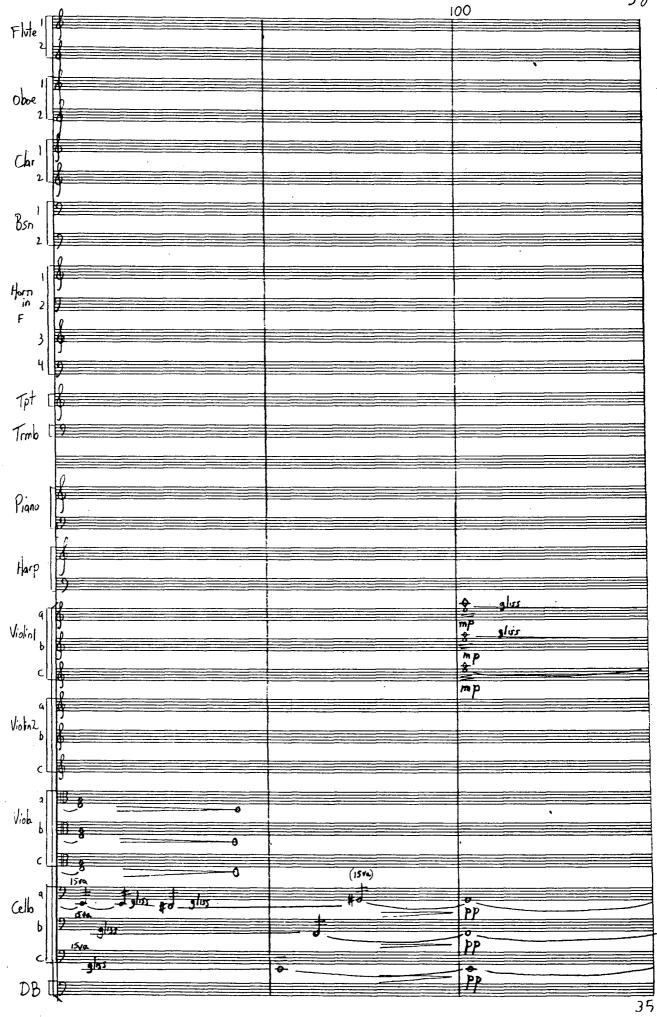






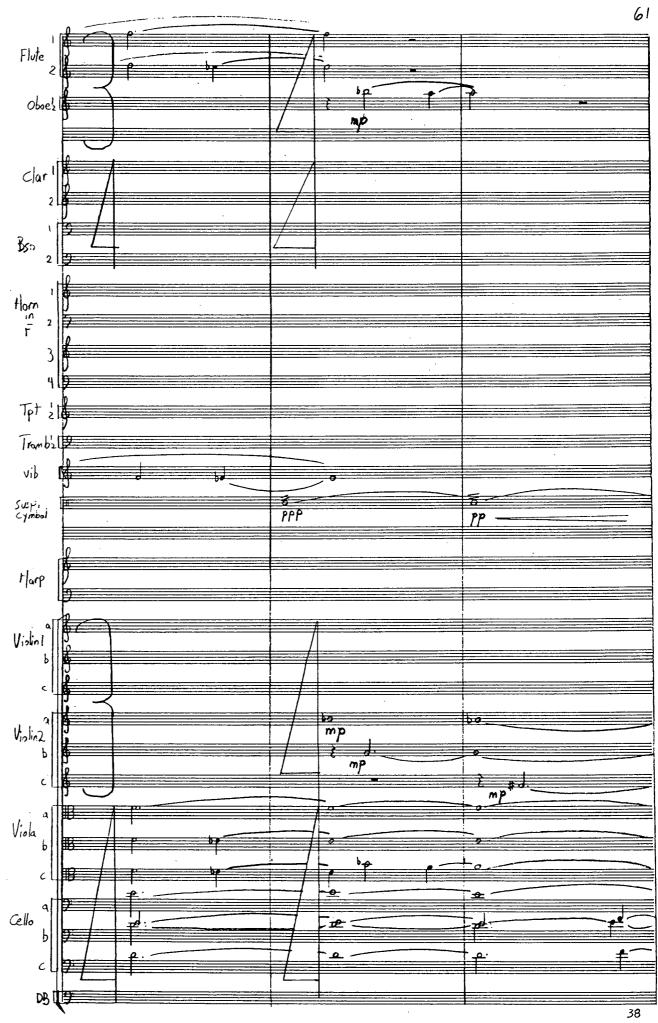






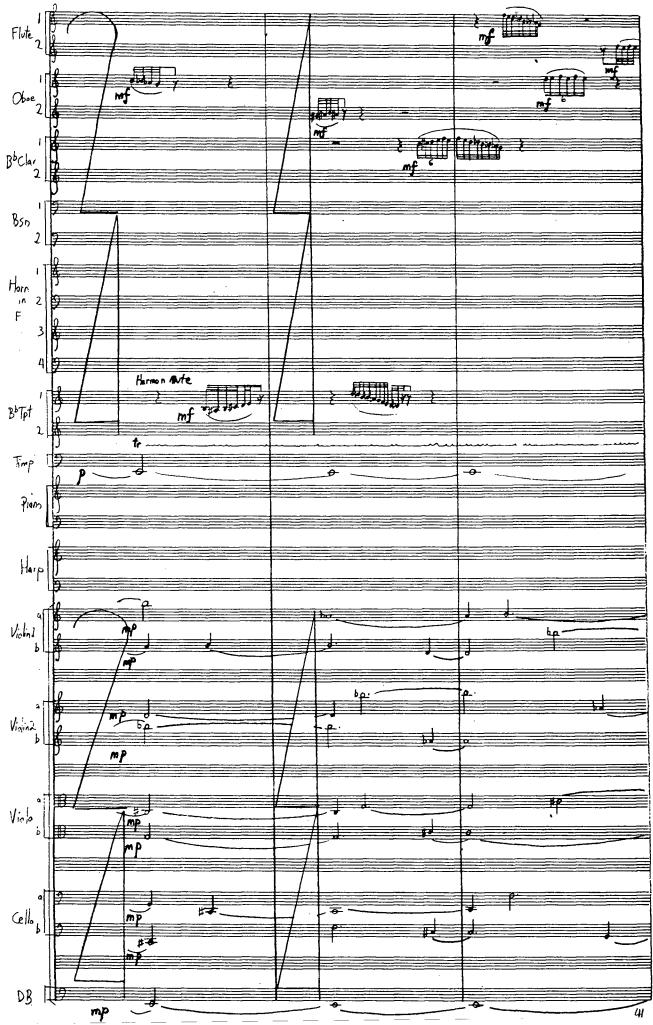














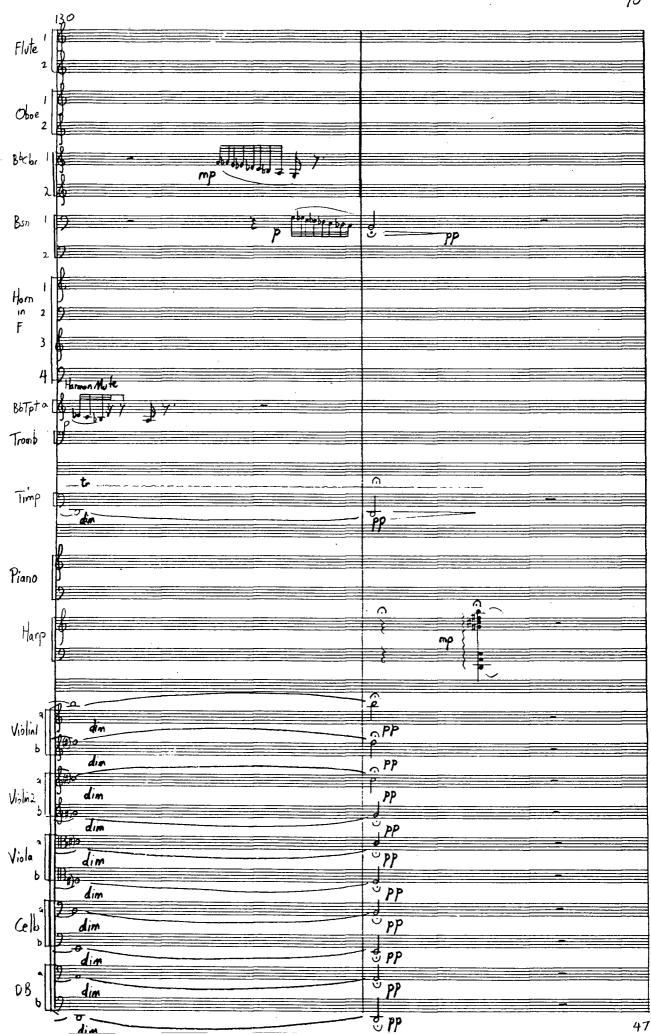


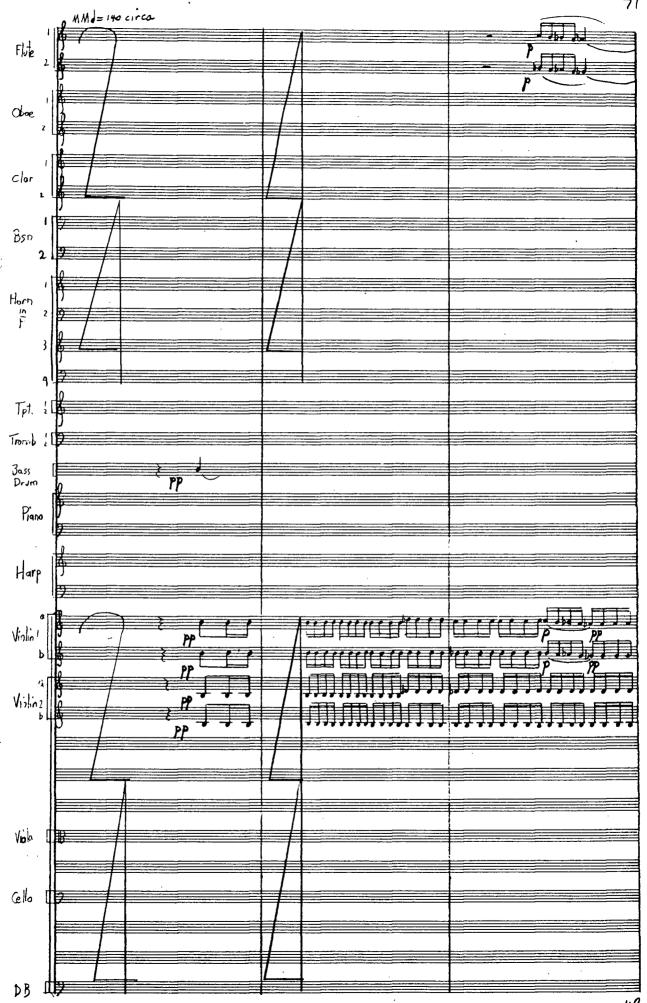


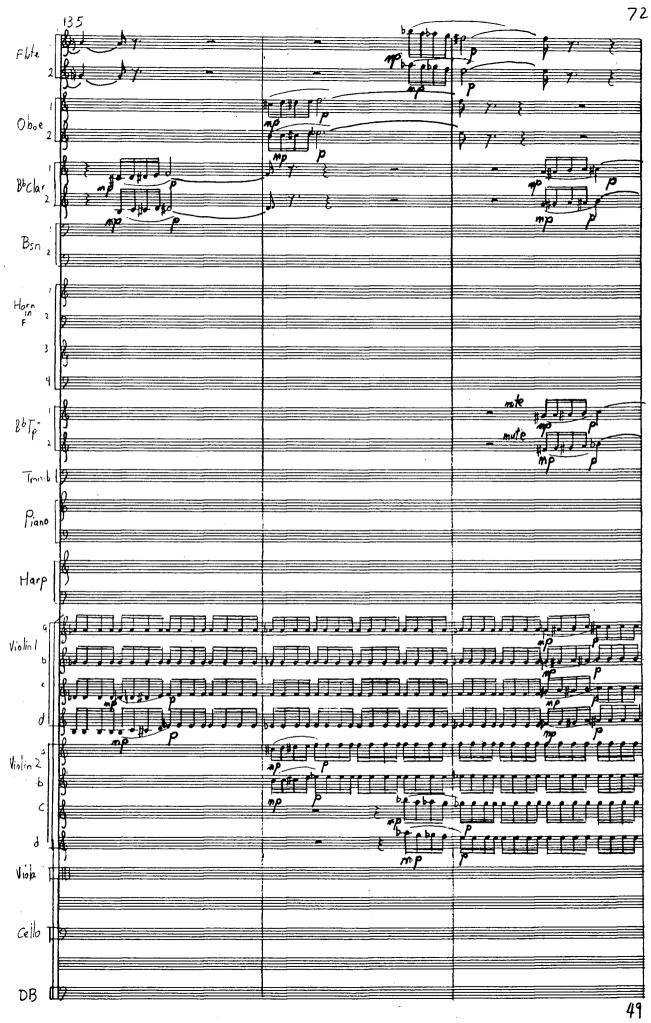


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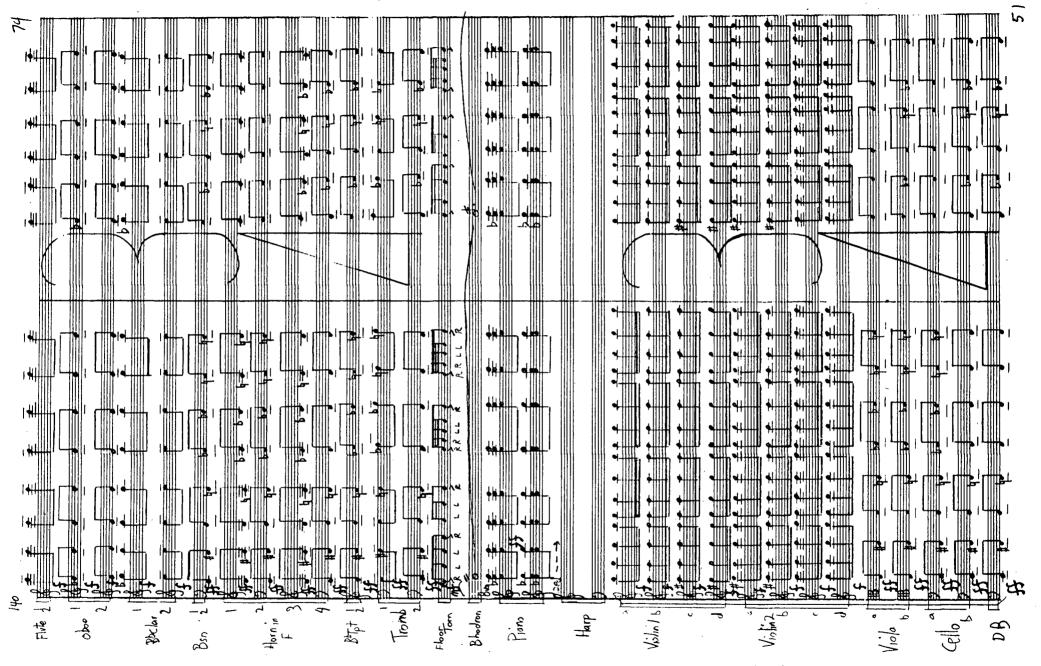




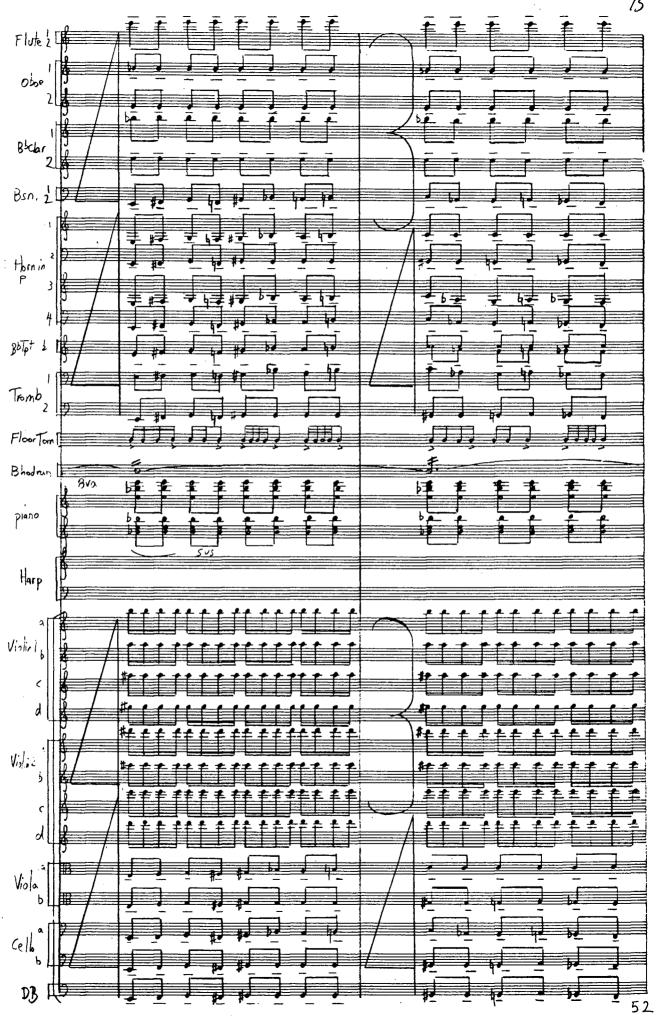


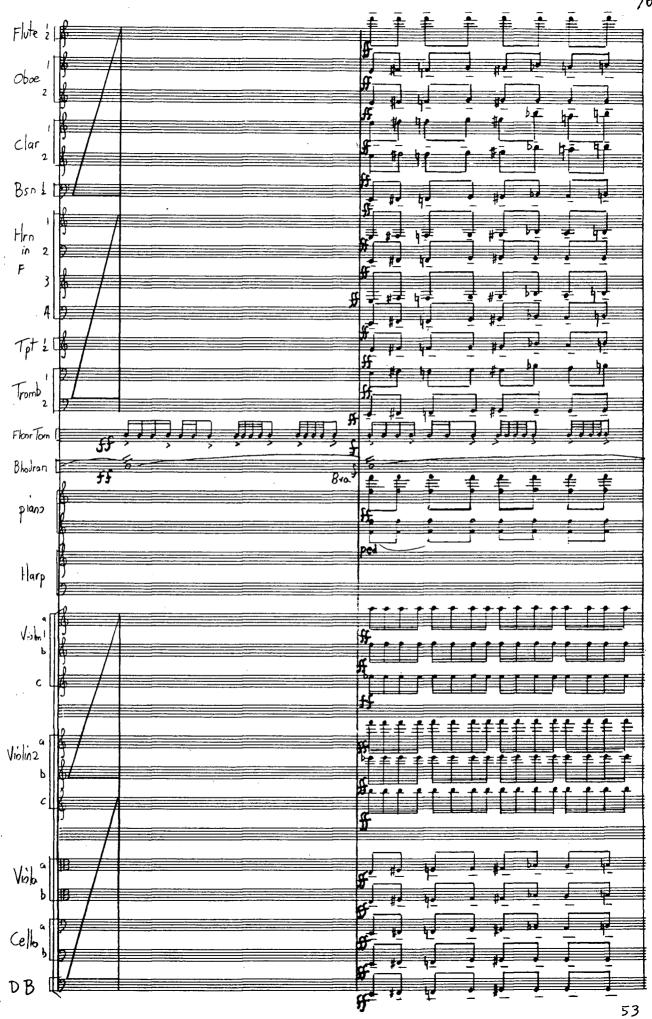




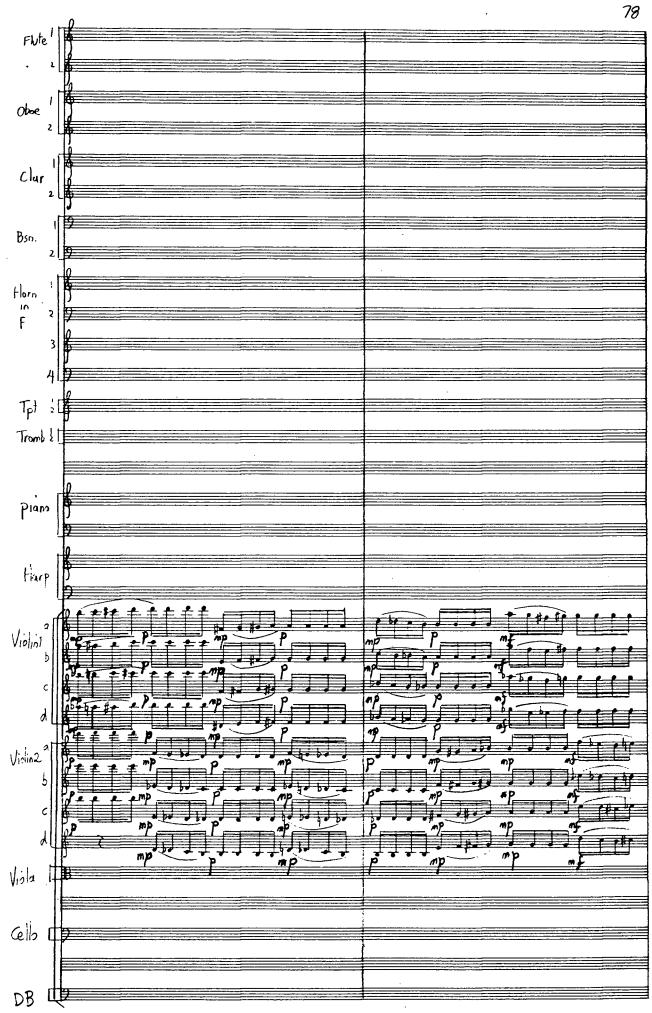


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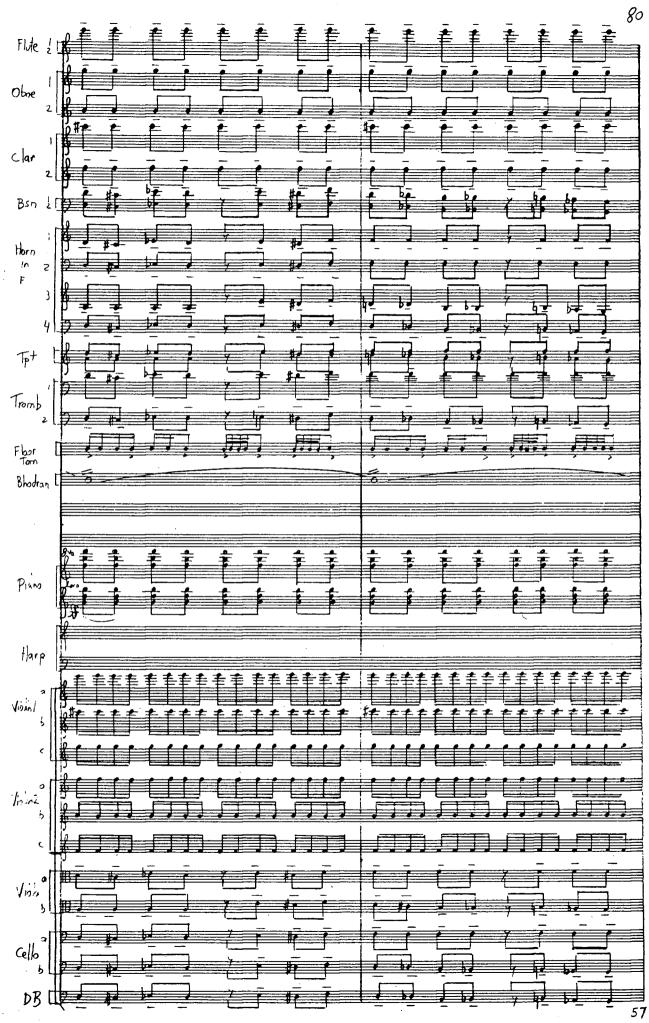


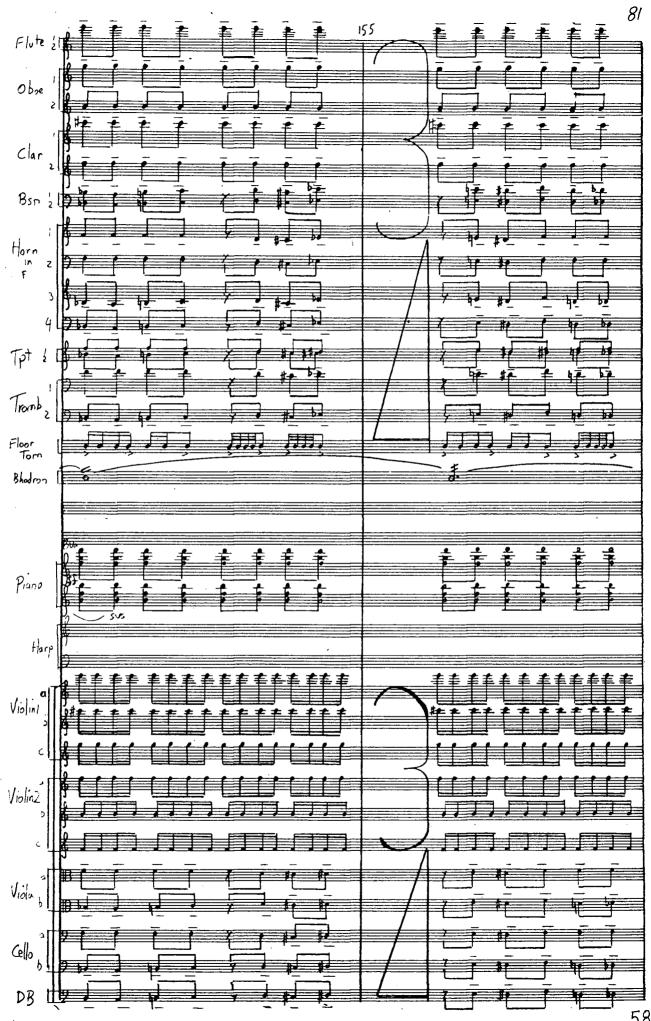


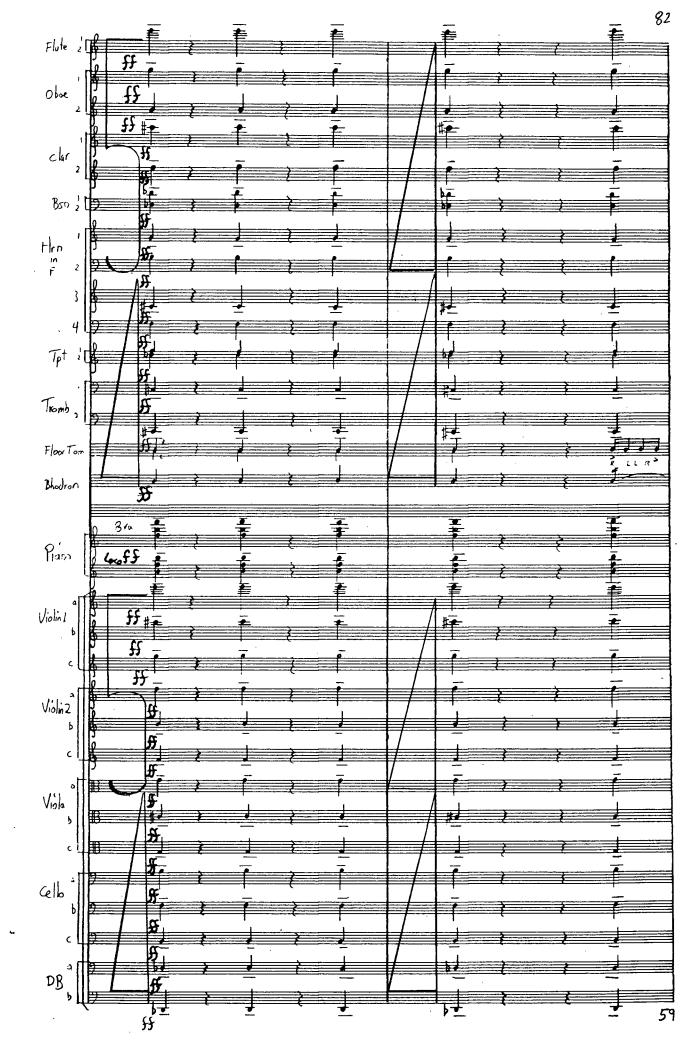


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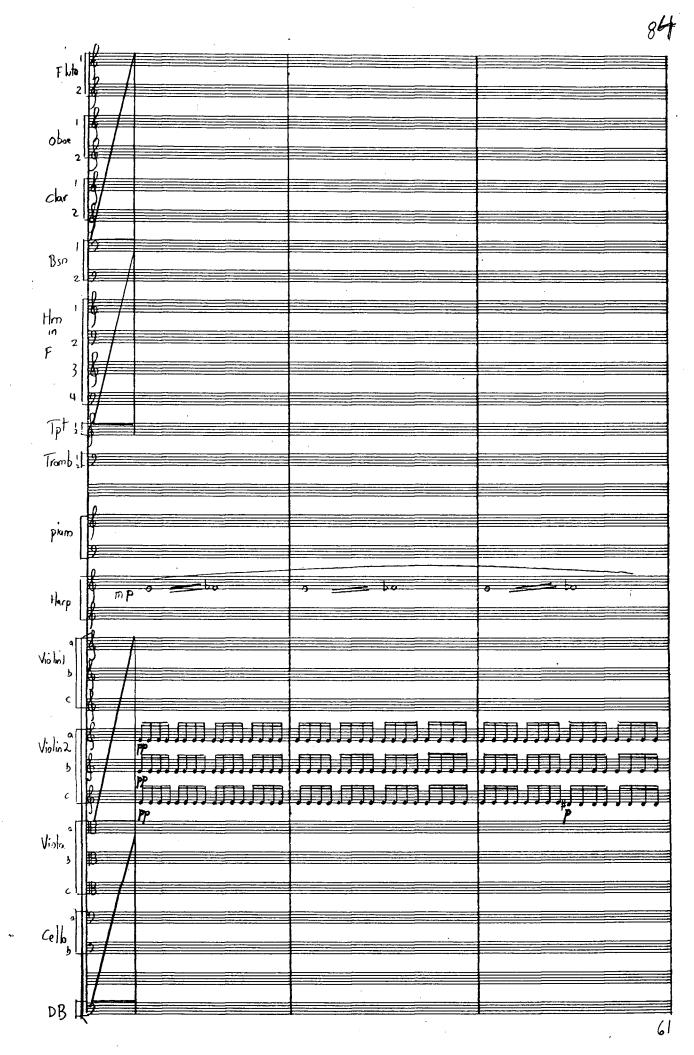




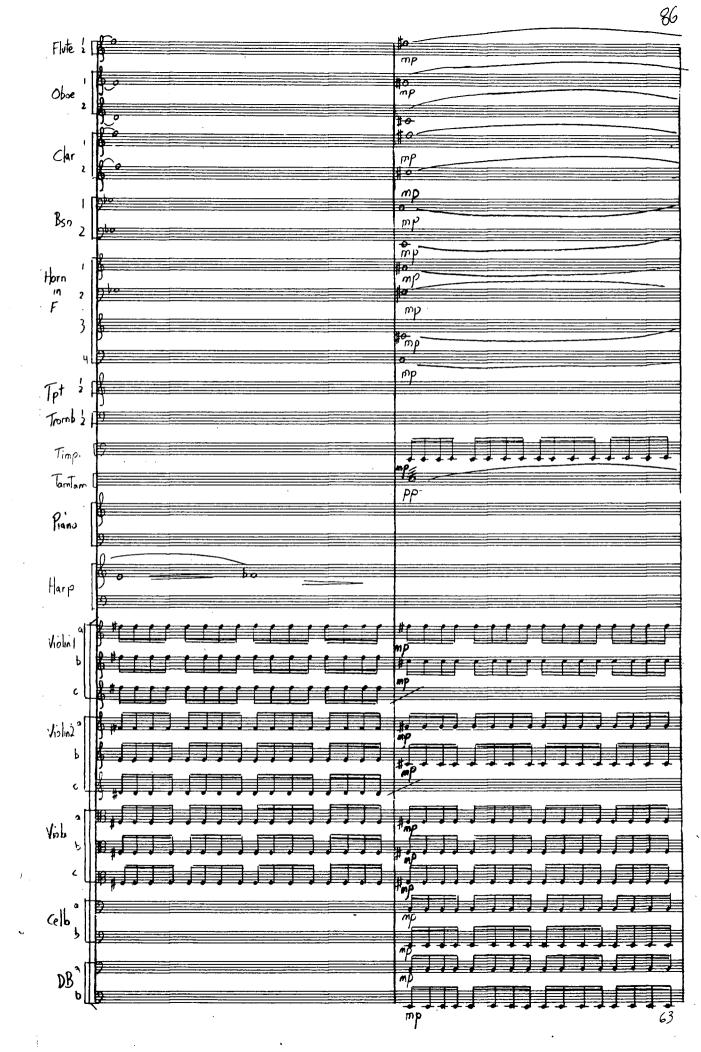


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