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**PREMISE AND COMPOSITIONAL WORKING-OUT:
AN EXAMINATION THROUGH ANALYSIS
OF LIGETI'S CHANGING STYLE**

A Thesis in Two Volumes

by

HELEN HAUGHEY

**A THESIS SUBMITTED IN CANDIDACY FOR THE DEGREE OF
DOCTOR IN PHILOSOPHY**

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SCHOOL OF MUSIC**

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Introductory Area

Bar	1	22	25-32	43	52-3	59-68	115
Interval	3	Octave + Interval 2	Interval 6	1	4	5	5

Other prominent dyads + unisons

Bar	74	81	82	113	128	143
-----	----	----	----	-----	-----	-----

ex.1.1 Important dyads and unisons

Bar 5

Inst	Pitch	Beat 1	2	3	4
BF1	DF \sharp	4	5	6	5
Cl1	DF	7	7	-	-
Cl2	DF	6	-	-	-
BC1	DF	-	-	-	-
Cfg1	DF	8	8	7	6
Cfg2	DF	5	6	6	7
Hrn1		-	-	-	-
Hrn2		-	-	-	-
VCl1		-	-	-	-

Bar 6

Inst	Pitch	Beat 1	2	3	4
DF		4	4	5	5
DF#		-	-	6	6
DF#		-	-	7	7
DF#		-	6	6	7
DF		5	-	4	4
DF		8	-	-	7
DF		-	5	-	-
DF		-	3	3	-
		-	-	-	F \sharp ----

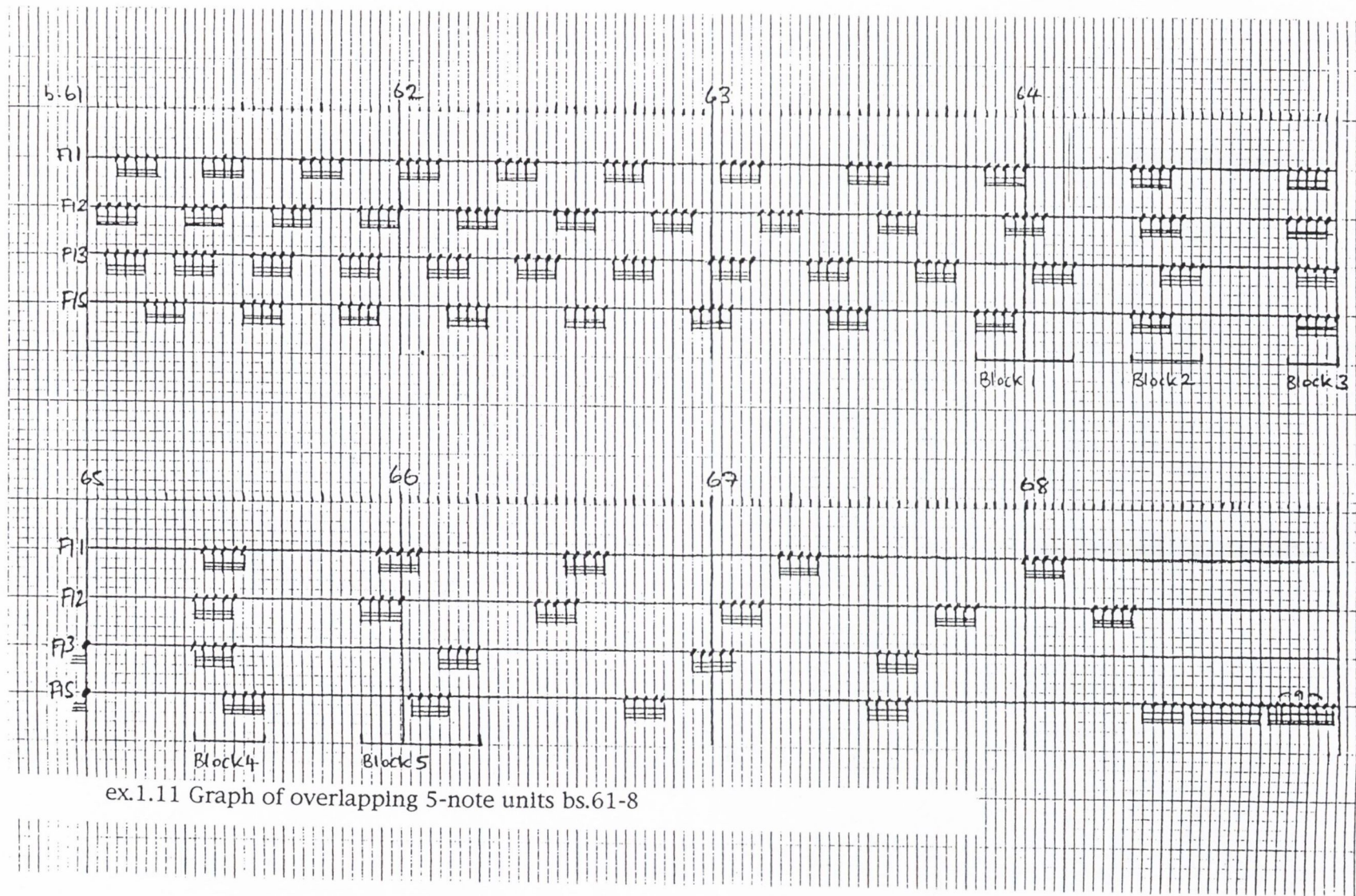
Bar 7

Inst	Pitch	Beat 1	2	3	4
BF1	D \sharp F \sharp	-	-	4	4
Cl1	DF#	-	7	-	DF 8
Cl2	DF#	8	8	-	7
BC1	DF#	7	7	-	8
Cfg1	DF	5	DF#6	6	-
Cfg2	DF	6	DF#6	5	-
Hrn1	DF	-	4	4	-
Hrn2	DF	-	4	4	-
VCl1	F \sharp	-----			

Bar 8

Inst	Pitch	Beat 1	2	3	4
Bf1	D \sharp F \sharp	3	3	4	4
Cl1	DF	8E \flat G \flat 7E \flat G \flat 6			6
Cl2	DF	6	6E \flat G \flat 5		5
BC1	DF#	8	8E \flat G \flat 7		-
Cfg1	DF#	7	-D \sharp F \sharp	8	-
Trb	DF#	-	3	3	F#---
VCl1	F \sharp	-----DF \sharp 3			

ex.1.2a Pitch introduction, bs.5-8



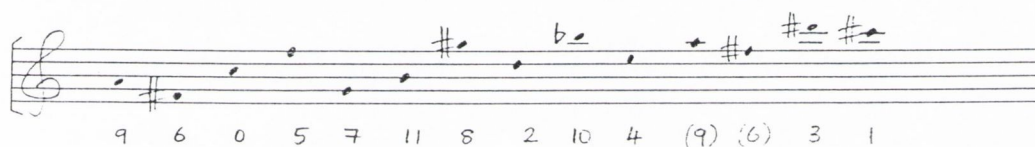
ex.1.11 Graph of overlapping 5-note units bs.61-8



ex.1.12 Increased spacing of 5-note units bs.59-64



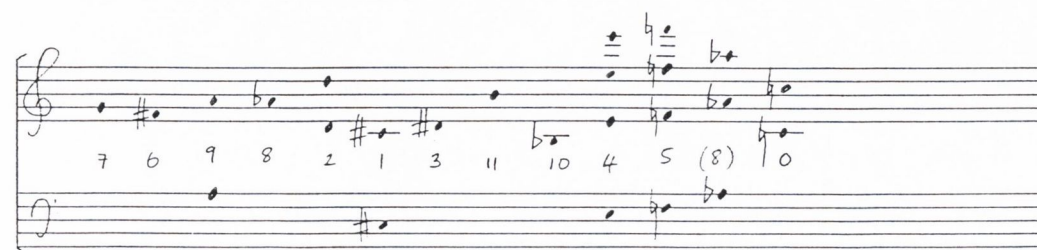
ex.1.13 Expansion outwards in ObD and CA lines, b.71



ex.1.14 12-note complex, ObS line, bs.80-81



ex.1.15 Local divergence, b.83.



ex.1.16 12-note complex, Fl/Ob/Cl lines, bs.83-87

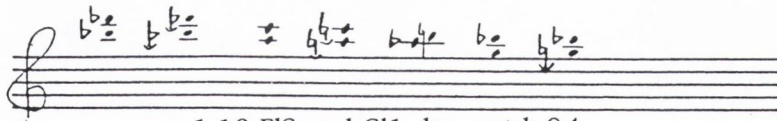
Handwritten musical notation for the first system, measures 7 and 8. The top staff is the treble clef with notes G4, Bb4, Bb4, G4, A4. The bottom staff is the bass clef with notes G2, Bb2, Bb2, G2, A2. Measure numbers 7 and 8 are indicated above and below the staves.

Handwritten musical notation for the second system, measures 9 and 10. The top staff is the treble clef with notes G4, Bb4, Bb4, G4. The bottom staff is the bass clef with notes G2, Bb2, Bb2, G2. Measure numbers 9 and 10 are indicated below the staves.

Handwritten musical notation for the third system, measures 11 and 12. The top staff is the treble clef with notes G4, Bb4, Bb4, G4, A4. The bottom staff is the bass clef with notes G2, Bb2, Bb2, G2, A2. Measure numbers 11 and 12 are indicated below the staves.

Handwritten musical notation for the fourth system, measures 13 and 14. The top staff is the treble clef with notes G4, Bb4, Bb4, G4, A4. The bottom staff is the bass clef with notes G2, Bb2, Bb2, G2, A2. Measure numbers 13 and 14 are indicated below the staves.

ex.1.17 Obs and Hp lines, b.88

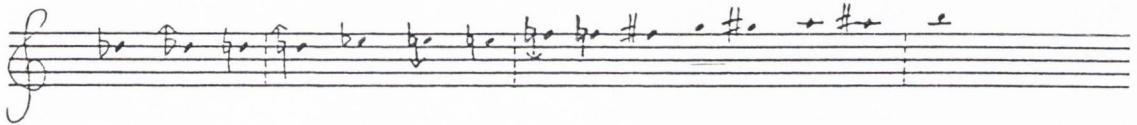


ex.1.18 FIS and CII descent b.94

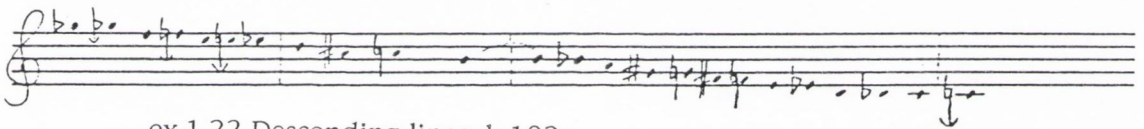


ex.1.19 Background texture, b.97

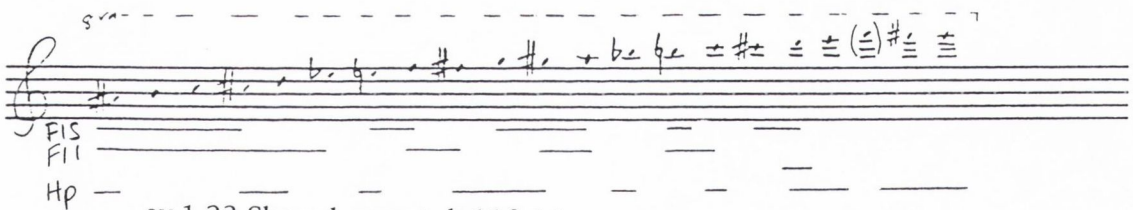
(ex.1.20--see over)



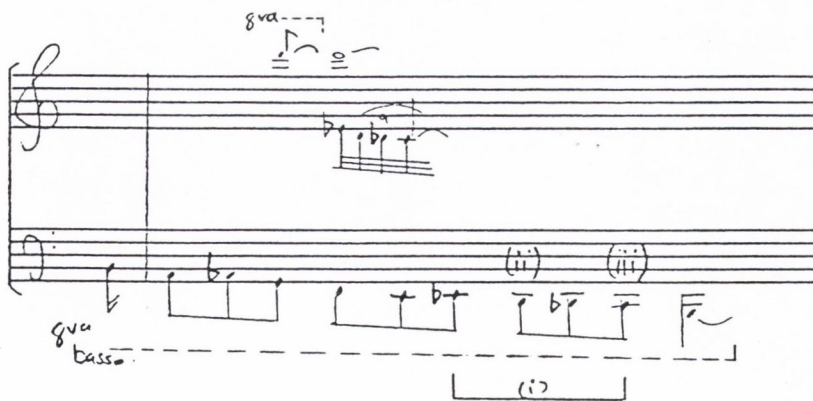
ex.1.21 Ascending lines, b.102



ex.1.22 Descending lines, b.102



ex.1.23 Shared ascent, b.110-11



ex.1.24 Pitch relationships, b.111

Handwritten musical score for measures 97-100, featuring a graph of attacks overlaid on the notation. The score is divided into four measures: 97, 98, 99, and 100.

Measures 97-98:

- Flute (Fl):** Circled notes include B, B \flat , B \flat , and B.
- Clarinet (Cl):** Circled notes include B \flat , B \flat , and A.
- Trumpet (Tr):** Circled notes include A, A, and A.
- Drum (D):** Circled notes include A \flat , A \flat , and A \flat .

Measures 99-100:

- Flute (Fl):** Circled notes include A, A \flat , A \flat , A \flat , A \flat , and G.
- Clarinet (Cl):** Circled notes include A \flat , A \flat , A \flat , and G.
- Trumpet (Tr):** Circled notes include A \flat and G.
- Drum (D):** Circled notes include A \flat and G.

The graph of attacks consists of horizontal lines connecting the circled notes across measures, with vertical lines indicating the onset of each note. Some notes are also connected by diagonal lines, suggesting melodic movement or specific articulation.

ex.1.20 Graph of attacks,bs. 97-100

Handwritten musical notation for example 1.25. The first staff contains a sequence of notes: a quarter rest, followed by a quarter note with a flat (F), a quarter note with a flat and a sharp (F#), and a quarter note with a flat and a sharp (F#). The second staff contains a sequence of notes: a quarter rest, followed by a quarter note with a flat (F), a quarter note with a flat (F), a quarter note with a flat (F), and a quarter note with a flat and a sharp (F#).

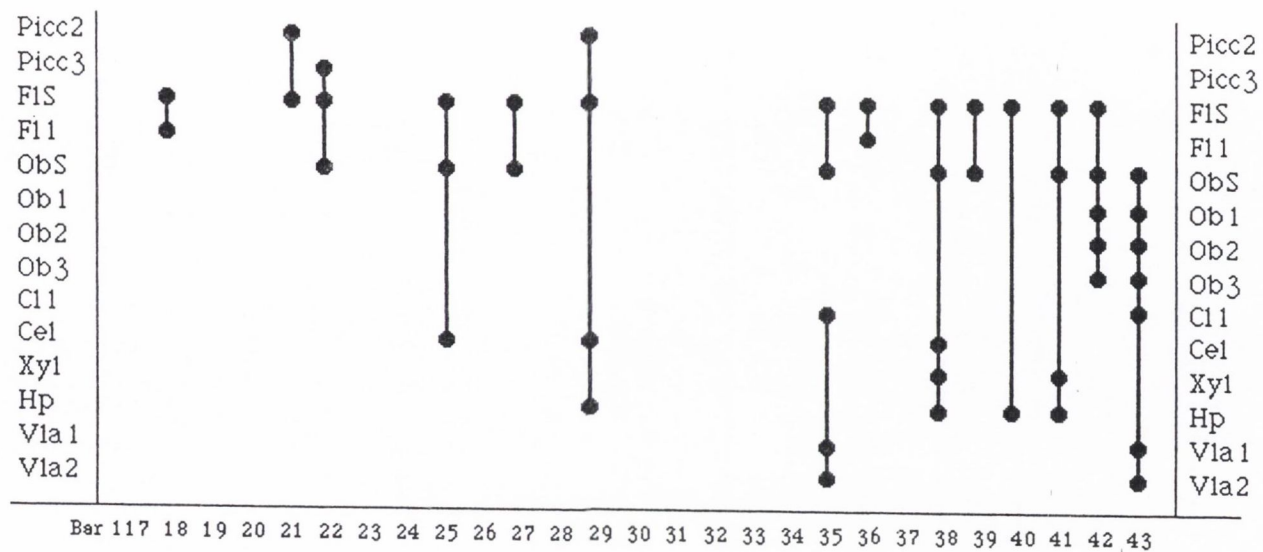
ex.1.25 Octave multiplication and simultaneous attack, bs.114-16

Handwritten musical notation for example 1.26. The notation is spread across three staves. Above the staves are measure numbers: b.22, b.43, bs.68-9, bs.69-70, b.105, b.106, b.112, and b.115. The notation includes various notes, accidentals (sharps and flats), and interval markings such as '8va' and '8vb' with dashed lines indicating octave shifts. There are also some boxed-in notes and accidentals.

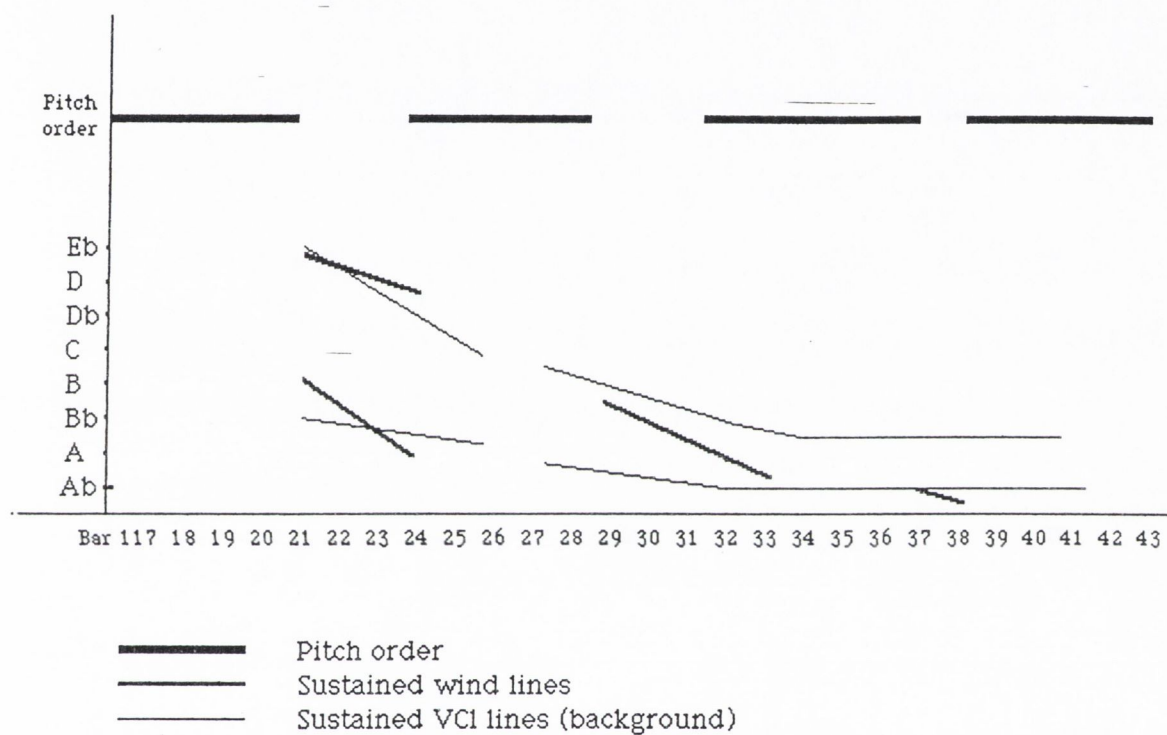
ex.1.26 Points of widest registral compass

Handwritten musical notation for example 1.27. It consists of three staves. The first two staves are in treble clef and the third is in bass clef. Each staff contains a sequence of notes with various accidentals (sharps and flats) and rests, illustrating a specific pitch order.

ex.1.27 Pitch order (not synchronised) Fl1, FlS, ObS, bs.117-18



ex.1.28 Graph of points of coordination
bs.117-43



ex.1.29 Graph of the interaction of three main types of material,
bs.117-43

Handwritten musical notation for ex.1.30. The notation consists of three staves. The top staff contains a sequence of notes with various accidentals (sharps, flats, naturals) and a 'sim' annotation above a note. The middle staff shows notes with accidentals and a slur. The bottom staff is mostly empty with a few notes. Vertical dashed lines connect notes across the staves, indicating sustained lines.

ex.1.30 Boundaries of the sustained lines, bs.121-41

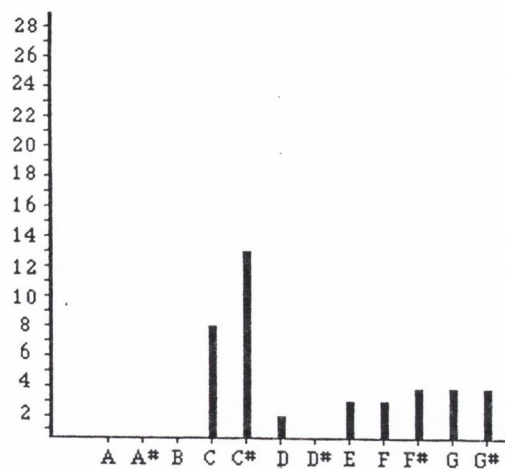
Handwritten musical notation for ex.1.31, illustrating rates of descent. It consists of three staves. The top staff (Flute I) shows notes with accidentals and a slur. The middle staff (Flute II) shows notes with accidentals and a slur. The bottom staff (Violin I) shows notes with accidentals and a slur. Vertical dashed lines connect notes across the staves, illustrating the rates of descent.

Fl I bs.129-32

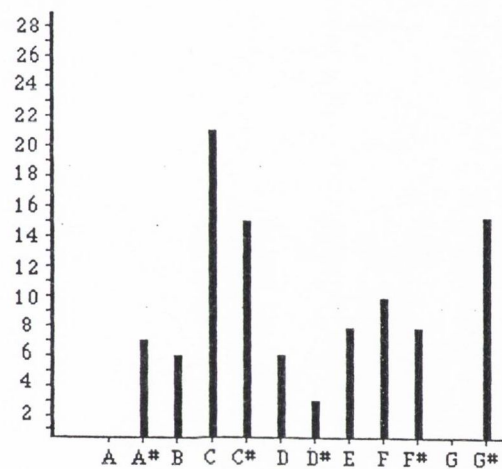
Fl II bs.129-31

VCI I bs.128-37

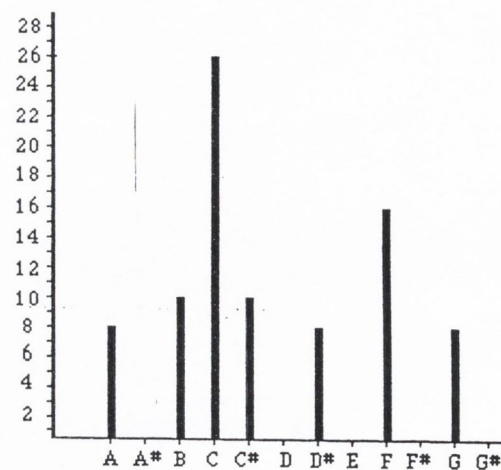
ex.1.31 Rates of descent



b.158



b.159



b.160

ex. 1.32 Pitch density, bs. 158-60.

Graphs of number of attacks per pitch

ex.2.1 Interaction of violin and horn, bs.1-9

ex.2.2 Wedging movement, violin, bs.1-9

ex.2.3 Horn subphrases (i)-iii)

ex.2.4 Reworking of 8/7 chord, bs.24-5

ex.2.5 Reworking of 8/7 chord, bs.28-9

ex.2.6 Linearisation, horn, b.30 and bs.31-2

A musical score for violin and horn. The violin part (top staff) features a melodic line with various intervals and accidentals, including a tritone. The horn part (bottom staff) consists of sustained chords with some movement. There are two triplets in the horn part, each marked with a '3'.

ex.2.7 Changing sonorities, violin and horn, bs.32-3

A musical score showing sustained chords. The top staff has three chords with notes and accidentals. Below the staff are the numbers 3, 6, and 15(=3). The bottom staff shows a single note with an accidental.

ex.2.8 Sustained chords, bs.32-3

A musical score showing cadential areas. The top staff has a melodic line with various intervals and accidentals. The bottom staff has a bass line with notes and accidentals.

ex.2.9 Cadential areas, bs.9 and 19

A musical score showing horn/violin chords. The top staff has a chord with notes and accidentals. Below the staff are the numbers 3, 7, 3, 9, 7, 13(=1), and 15(=3). The bottom staff shows a single note with an accidental.

ex.2.10 Horn/violin chords, bs.35-9

A musical score showing familiar intervals in new contexts. The top staff has a melodic line with various intervals and accidentals. The bottom staff has a bass line with notes and accidentals.

ex.2.11 Familiar intervals, new contexts, bs.60-61

The image shows two staves of musical notation in bass clef. The top staff contains a sequence of notes with two triplets of eighth notes and a slur over a quarter note followed by a dotted quarter note. The bottom staff contains a similar sequence, but with a slur over a quarter note followed by a dotted half note. Both staves include a sharp sign (#) above a note.

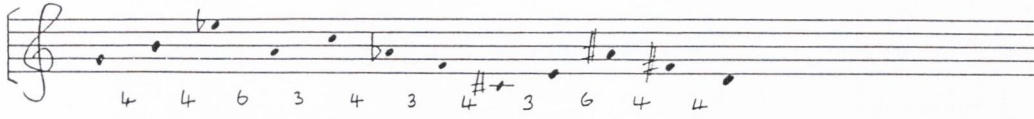
ex.2.12 Comparison of horn, bs.12 and 91

The image shows two staves of musical notation. The top staff features three groups of triplets of eighth notes. The bottom staff features a single group of triplets of eighth notes.

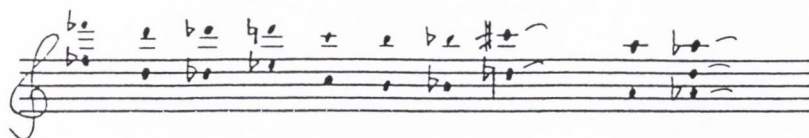
ex.2.13 Comparison of notelengths, above bars

The image shows two staves of musical notation in treble clef. The top staff shows a sequence of notes with a slur over the last two notes. The bottom staff shows a similar sequence of notes with a slur over the last two notes.

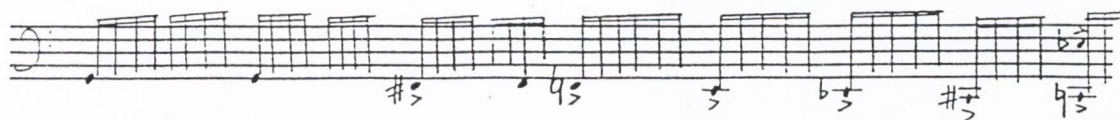
ex.2.14 Comparison of notelength in cadential areas, bs.19 & 99-101



ex.2.17 Symmetrical array (excluding pitch repetitions), bs. 1-4



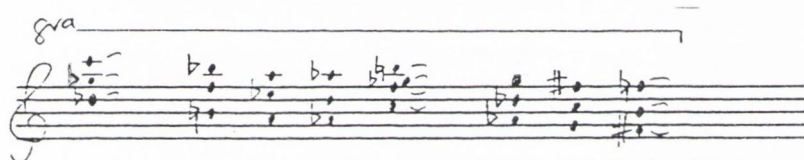
ex.3.1 Phrase (iii) of lamento ostinato, bs.6-9



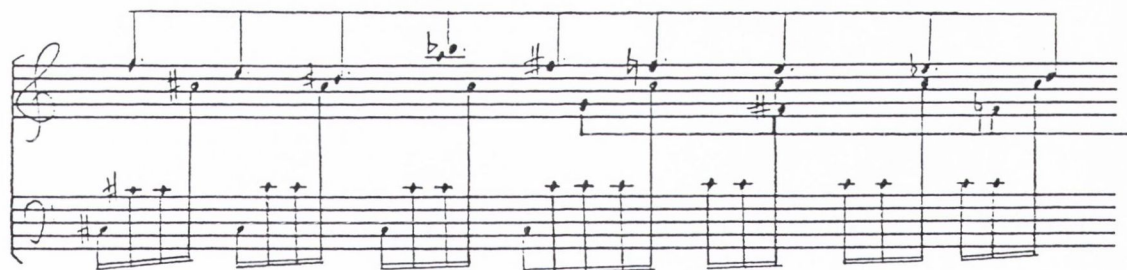
ex.3.2 Movement at bottom of ostinato, bs.13-15



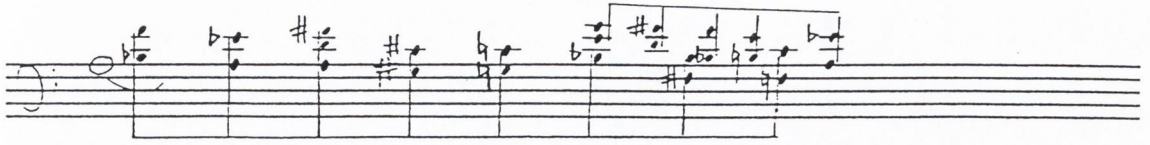
ex.3.3 Inversion of ostinato, bs.20-22



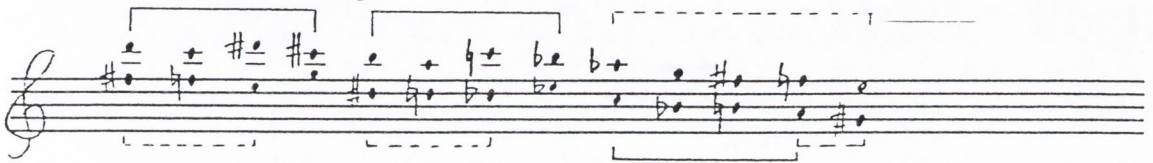
ex.3.4 Intensification of phrase (iii), bs.21-4



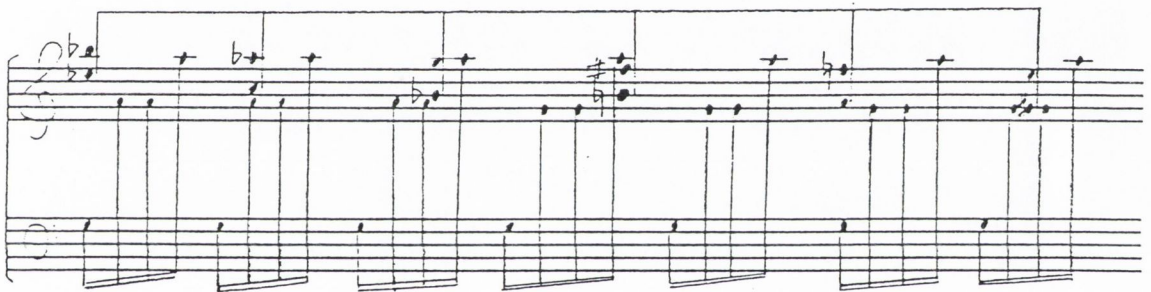
ex.3.5 Regrouping of ostinato and new accentuation, bs.29-32



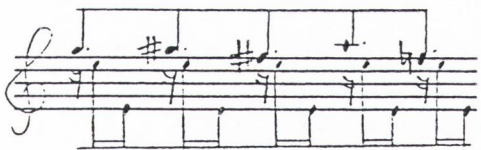
ex.3.6 Breaching of lower limit, bs.34-6



ex.3.7 Sideways chromaticism, bs.37-9



ex.3.8 Shifting limits, ostinato, bs.38-40



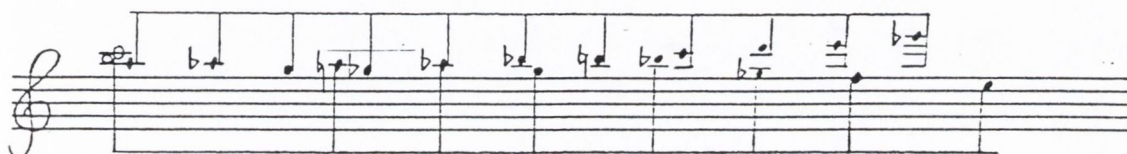
ex.3.9 Cooperation between ostinato and 3rd line, bs.43-4



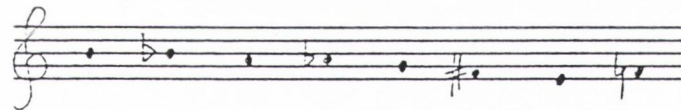
ex.3.10 A new 3rd line, bs.45-6



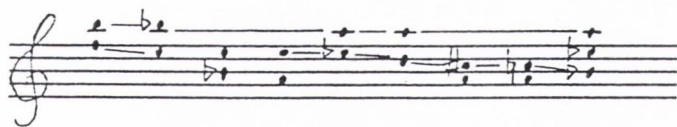
ex.3.16 Comparison of rhythmic profiles, bs.58-62 and 5-9



ex.3.17 Convergence of ostinato and 4/4 line, bs.76-7



ex.3.18 Regrouping of accented ostinato pitches, bs.82-3



ex.3.19 Chromatic descent on two levels, ostinato bs.83-5



ex.3.20 Descent bounded by ostinato, as expected/ as is, bs.84-5

Example 3.21 consists of three staves of music. The first two staves show a rhythmic pattern of eighth notes with various accidentals (sharps, flats, naturals) and stems. The third staff shows a single melodic line with notes and accidentals.

ex.3.21 Ostinato bs.86-7, with and without octave displacement

Example 3.22 consists of two staves of music. The first staff shows a rhythmic pattern of eighth notes with various accidentals. The second staff shows a similar pattern. A dashed line labeled '8ve' indicates an octave displacement between the two staves.

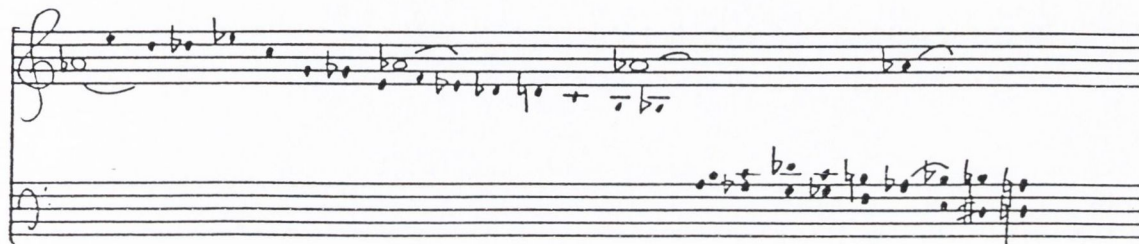
ex.3.22 4♯, 3♯ and 5♯ lines, bs. 89-90

Example 3.23 shows a single staff of music with sideways chromaticism, featuring notes with various accidentals (sharps, flats, naturals) and stems.

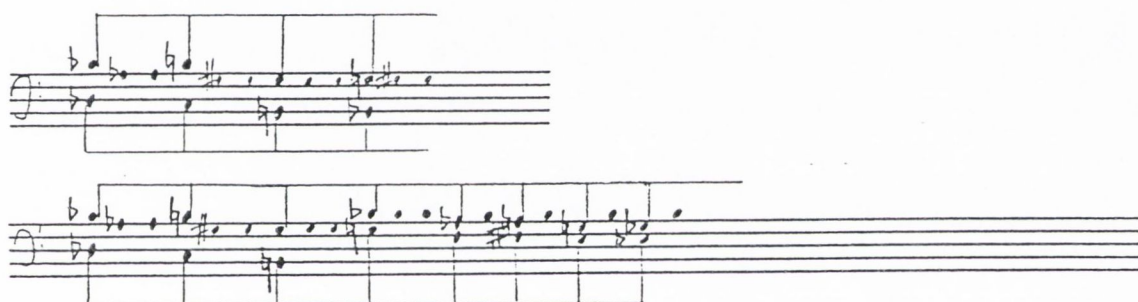
ex.3.23 Sideways chromaticism, 4♯ line, bs.90-91

Example 3.24 shows a single staff of music with registral expansion in 4♯ dyads, featuring notes with various accidentals (sharps, flats, naturals) and stems.

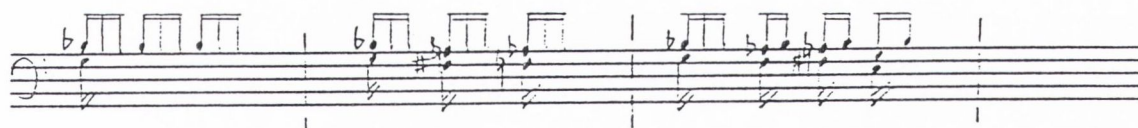
ex.3.24 Registral expansion in 4♯ dyads, bs.91-3



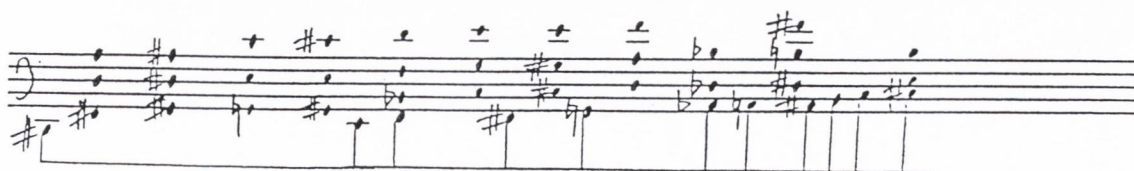
ex.3.25 Descent in 3/4 line, bs.90-94



ex.3.26 Ostinato, with and without octave displacement, bs.94-5



ex.3.27 Possibilities within a 3/4 grouping and actual lines, bs.94-5



ex.3.28 Interaction of ostinato ascent and 7/4 chords, bs.100-105

A musical score for piano accompaniment. The top staff is a treble clef with a key signature of one sharp (F#). The bottom staff is a bass clef with a key signature of one sharp (F#). The music consists of a series of chords and intervals, with some notes grouped together in a way that is irregular and non-standard. The notation includes various accidentals and note heads.

ex.3.29 Irregular groupings, bs.105-7

Two musical staves showing a juxtaposition of accents. The top staff is a treble clef and the bottom staff is a bass clef. The music features a series of notes with accents, and an alternative version of the same notes is shown below. The notation includes various accidentals and note heads.

ex.3.30 Actual juxtaposition of accents and an alternative, b.106

A musical score for piano accompaniment. The top staff is a treble clef and the bottom staff is a bass clef. The music consists of a series of chords and intervals, with some notes grouped together in a way that is complementary to the other staff. The notation includes various accidentals and note heads.

ex.3.31 Complementary sonorities, bs.106-7

A musical score for piano accompaniment. The top staff is a treble clef and the bottom staff is a bass clef. The music consists of a series of notes and chords, with some notes repeated in a way that creates an ostinato effect. The notation includes various accidentals and note heads.

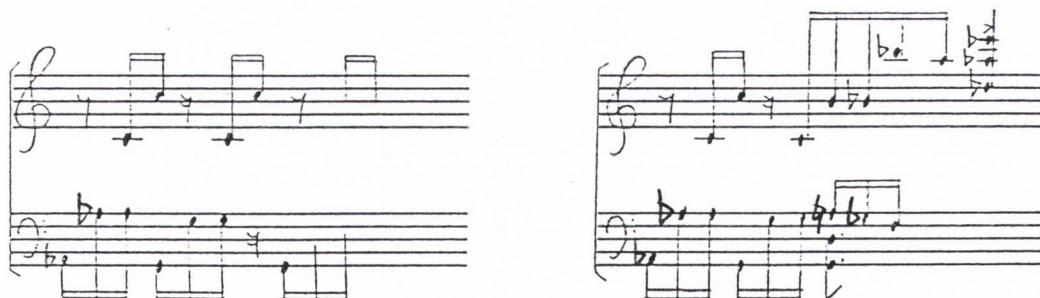
ex.3.32 Ostinato activity bs.107-12



ex.3.33 Convergence and divergence in 4/4 lines, bs.108-9



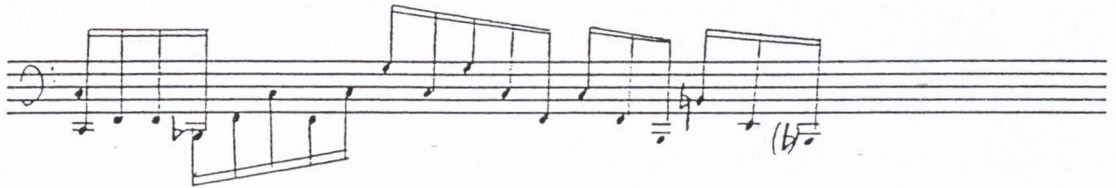
ex.3.34 Movement in ostinato, bs.109-10



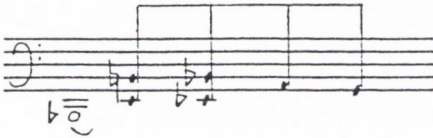
ex.3.35 Expected and actual ostinato pattern, bs.111-12



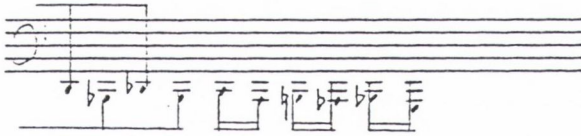
ex.3.36 Adaptation of descending pitch process using octave multiplication, b.112



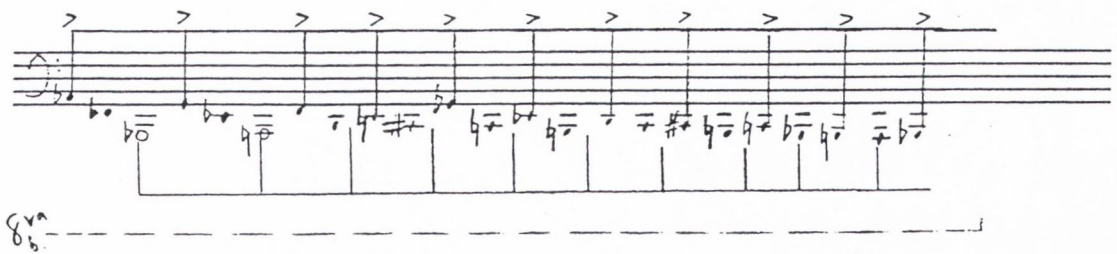
ex.3.37 Symmetrical groups, ostinato bs.113-4



ex.3.38 Fixing of lower limit, b.114



ex.3.39 Sideways chromatic descent, b.115



ex.3.40 Layers of descent, bs.117-9

b.91 b.98
15^a →

b.99 b.105 b.107

b.107 b.112 b.122

8^{va}

ex.3.41 Registral convergence, divergence and descent, bs.91-122

8^{va}

016 016 016 016 016 016 016 016 027 037

m m m m m

ex.3.42 Chord types, bs.30-36

ex.3.43 Varied chord types derived from chromatic movement, bs.62-72