PIANO CONCERTO

by

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Abstract

The *Piano Concerto* represents an experiment in form in which a set of five continuous variations are partitioned into three movements, corresponding to the listener's expectations of a traditional tripartite concerto. Through the analysis of phrase structure, pitch and motivic variation, links amongst the variations are uncovered and developmental strategies discussed in an attempt to clarify the processes of musical creation. By proceeding in analysis from the highest levels of organization downwards, structural trends emerge which lend consistency to the work— low level patterns often reflect larger structural forces. In addition, a variety of symmetrical constructs are extant in the form of consistently used pitch collections (e.g., [0 1 4 9], a triad with both M3 and m3, subset of [0 1 4 5 8]), phrase organization (as in the second variation and the second movement) and the grouping of the variations themselves.

Seeded initially as a recorded improvisation by the composer (which became the Aria), the Concerto displays formal tension as areas of rigid organization (Variations 1, 3, and 5) alternate with more freely organized regions (Variations 2 and 4), a dichotomy which springs from the Theme itself. The listener is taken on a linear journey through the telescoping development of material which maintains more or less explicit connections to the Theme throughout In general, the further into the work the listener progresses, the less literal the Thematic references become until a brief recapitulation appears at the end.

The aesthetic which drives this work is based on a fundamental adherence to traditional procedures, tempered with unique approaches to form. This aesthetic and certain cohabiting non-traditional aspects of the Concerto will be discussed in the analysis that follows.

Table of Contents

Abstract --- ii

Table of Contents --- iii

List of Figures --- iv

List of Musical Examples --- v

instrumentation --- vi

Part One: Score

- First Movement (Theme and Variations) --- 1
- Second Movement (Recitative and Aria) --- 28
- Third Movement (Rondo) --- 44

Part Two: Analysis and Commentary

A. Formal Concept --- 78

B. General Form of the Movements and Their Inter-relationships

- B1. First Movement --- 80
- B2. Second Movement --- 80
- B3. Third Movement --- 82

C. Detailed Analysis

- C1. First Movement

  - C1.1 Theme --- 84
  - C1.2 Variation 1 --- 85
  - C1.3 Variation 2 --- 90
    - C1.3.1 V_2 "Transitions" --- 92
    - C1.3.2 V_2 "Core" --- 92

- C2. Second Movement

  - C2.1 Recitative --- 95
  - C2.2 Aria --- 98

- C3. Third Movement

  - C3.1 Overview --- 105
  - C3.2 Formal Details --- 105

D. Conclusions --- 111

Endnotes --- 112

List of Figures

Figure 1 Links and Symmetries in the Overall Form ---------- 78
Figure 2 Overview of the First Movement ---------- 81
Figure 3 Overview of the Second Movement ---------- 82
Figure 4 Overview of the Third Movement ---------- 83
Figure 5 Phrase Structure of the Theme ---------- 84
Figure 6 Phrase Structure of V_1 ---------- 86
Figure 7 Phrase Structure of V_2 ---------- 91
Figure 8 Phrase Structure of the Recitative ---------- 95
Figure 9 Phrase Structure of the Aria ---------- 99
Figure 10 Phrase Structure of the Rondo ---------- 102-3

List of Musical Examples

Example 1 Thematic references in i:113-118 — 88
Example 2 Intervallic relationships in i:63-69 — 88
Example 3 Root relationships between initial and final chords in brass progression, i:69-118 — 89
Example 4 Use of [0 1 4 5 8] in ii:25-29 — 97
Example 5 Melodic relationships between the Aria and the Theme — 100
Example 6 Pitch centers of the Aria and their relationships — 101
Example 7a Melodic relationships between the Aria and the Rondo — 104
Example 7b Rondo vs. Aria — 104
Example 8 Inverted counterpoint involving [0 1 3] sets in the Rondo — 106
Example 9 Use of [0 1 3] sets to form scalar material — 106
Example 10a Brass chord (iii:95) derived from Theme — 108
Example 10b Harmonization of Aria melody using Theme-derived aggregates — 108

Instrumentation

2 Flutes (flute 2 doubling piccolo)

2 Oboes

2 Clarinets (B-flat)

2 Bassoons

4 Horns (F)

2 Trumpets (C)

2 Trombones

Bass Trombone

Tuba

Timpani

Percussion (2 players)

Player 1	Player 2
snare drum suspended cymbal crash cymbals 4 concert toms	bass drum

Solo Piano

Strings

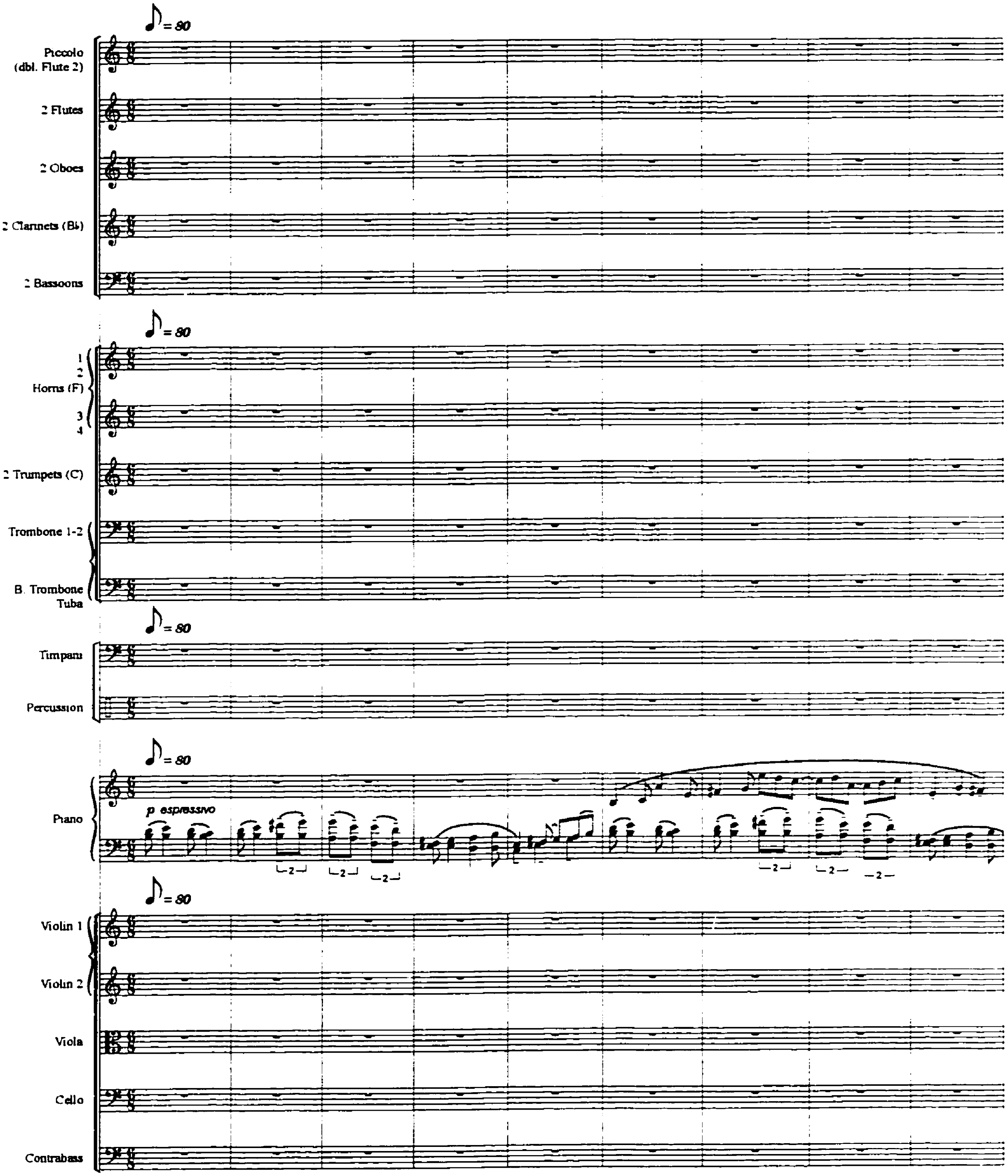
duration ca. 20 minutes

N.B. The score is **not** in "C". Pitches for transposing instruments appear as they do in the parts.

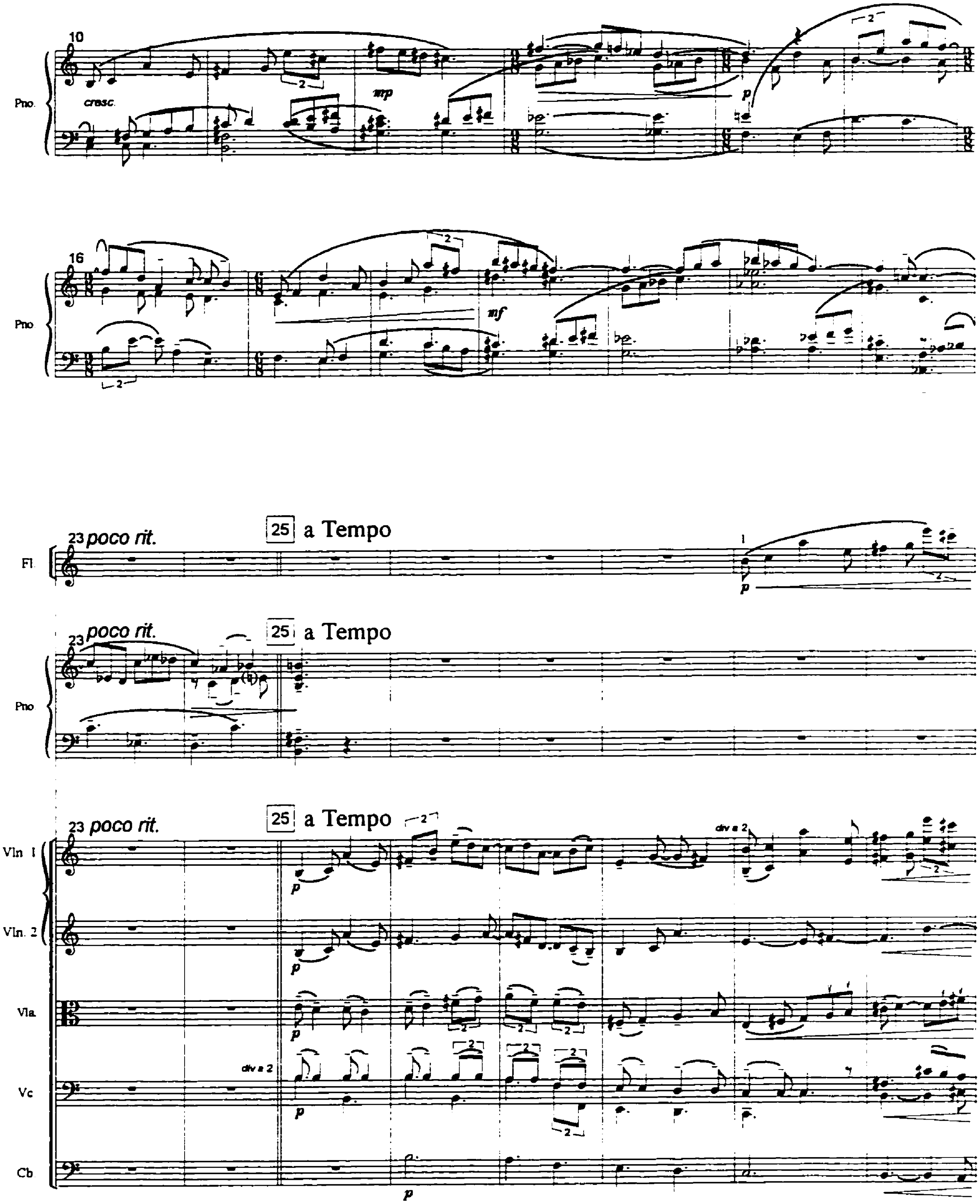
Piano Concerto

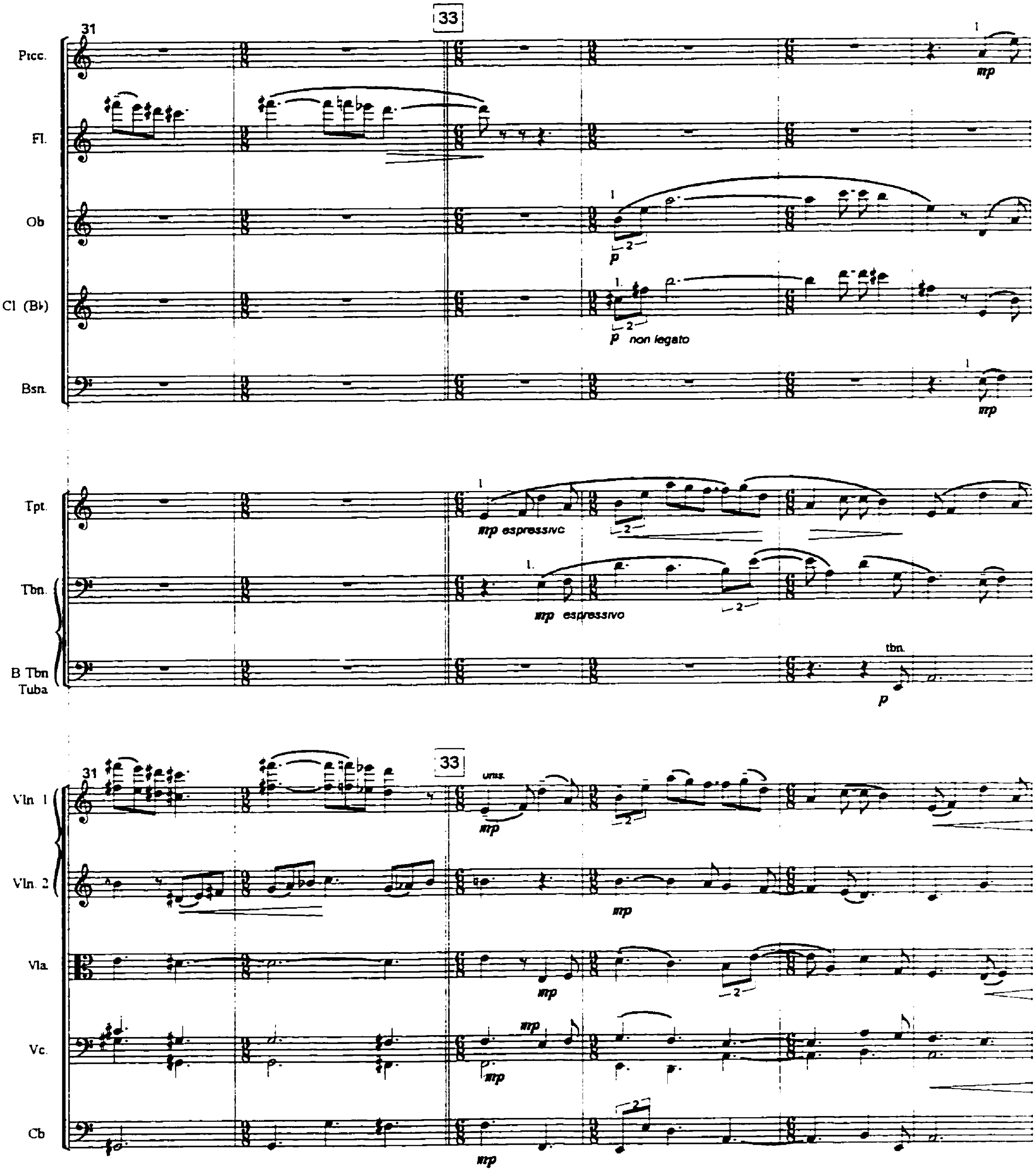
i. Theme and Variations

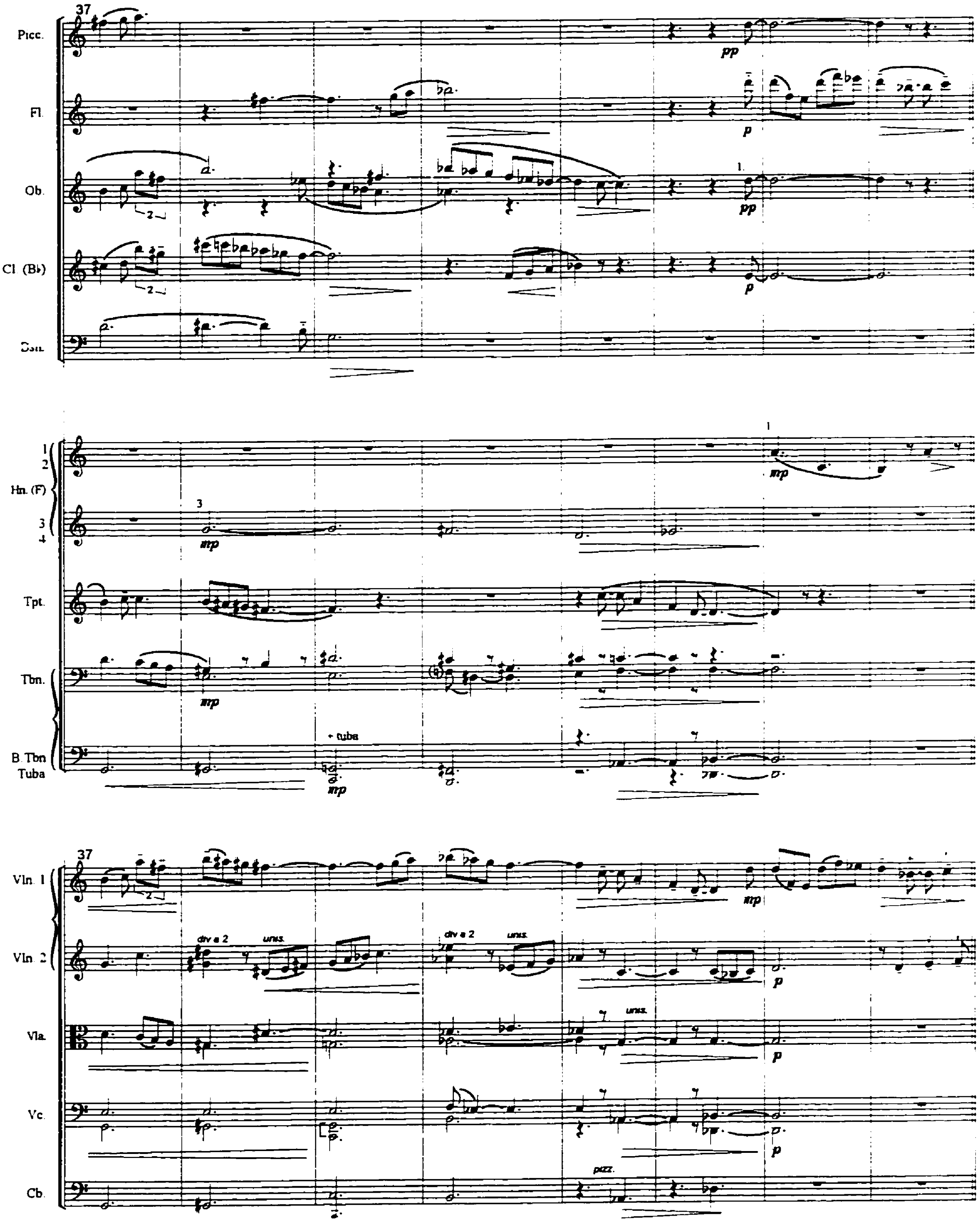
Chris Howard (1997)

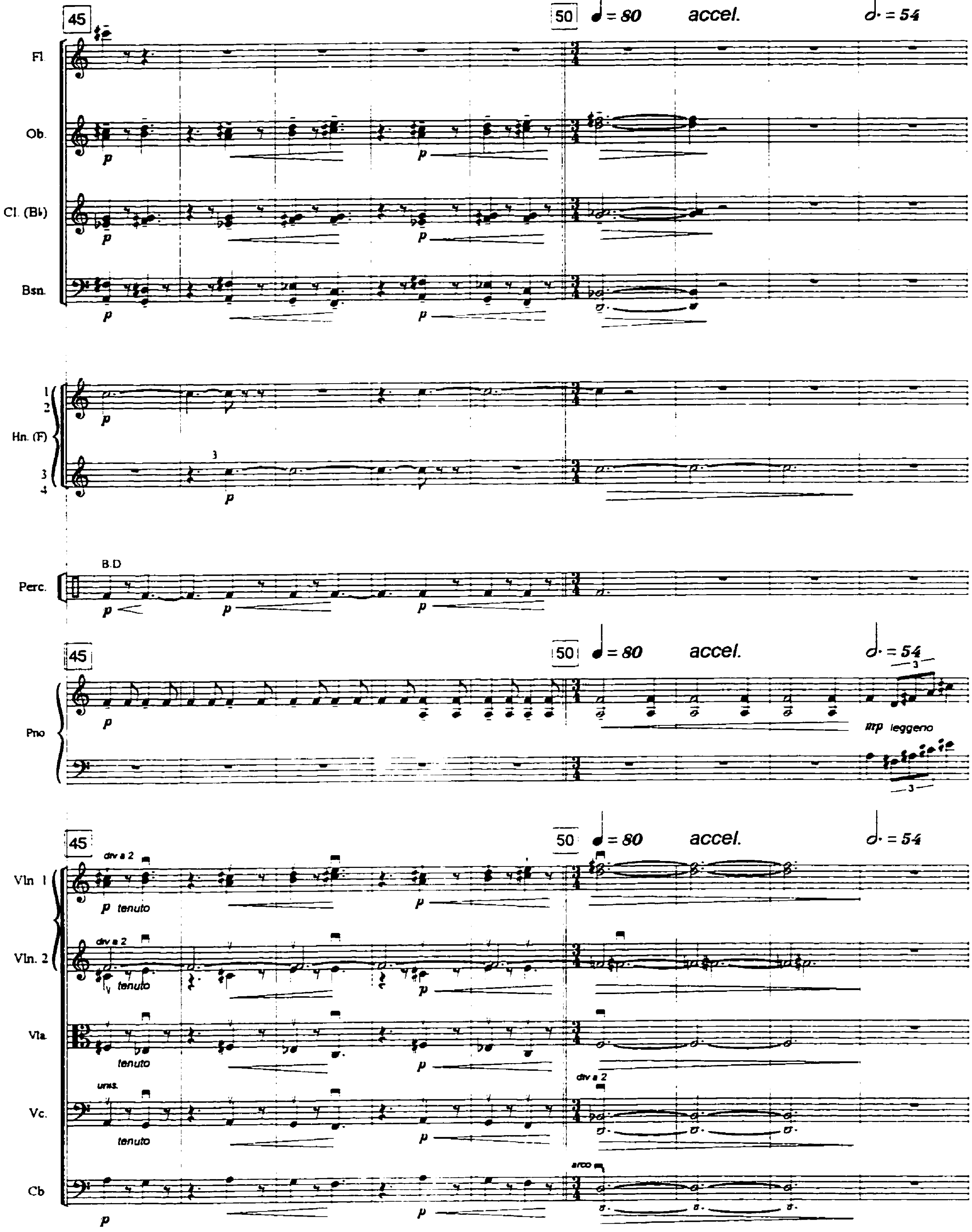

= 80
Piccolo (dbl. Flute 2)
2 Flutes
2 Oboes
2 Clarinets (B♭)
2 Bassoons
= 80
1
2
Horns (F)
3
4
2 Trumpets (C)
Trombone 1-2
B. Trombone Tuba
= 80
Timpani
Percussion
= 80
Piano
p espressivo
2
2
2
2
2
2
= 80
Violin 1
Violin 2
Viola
Cello
Contrabass

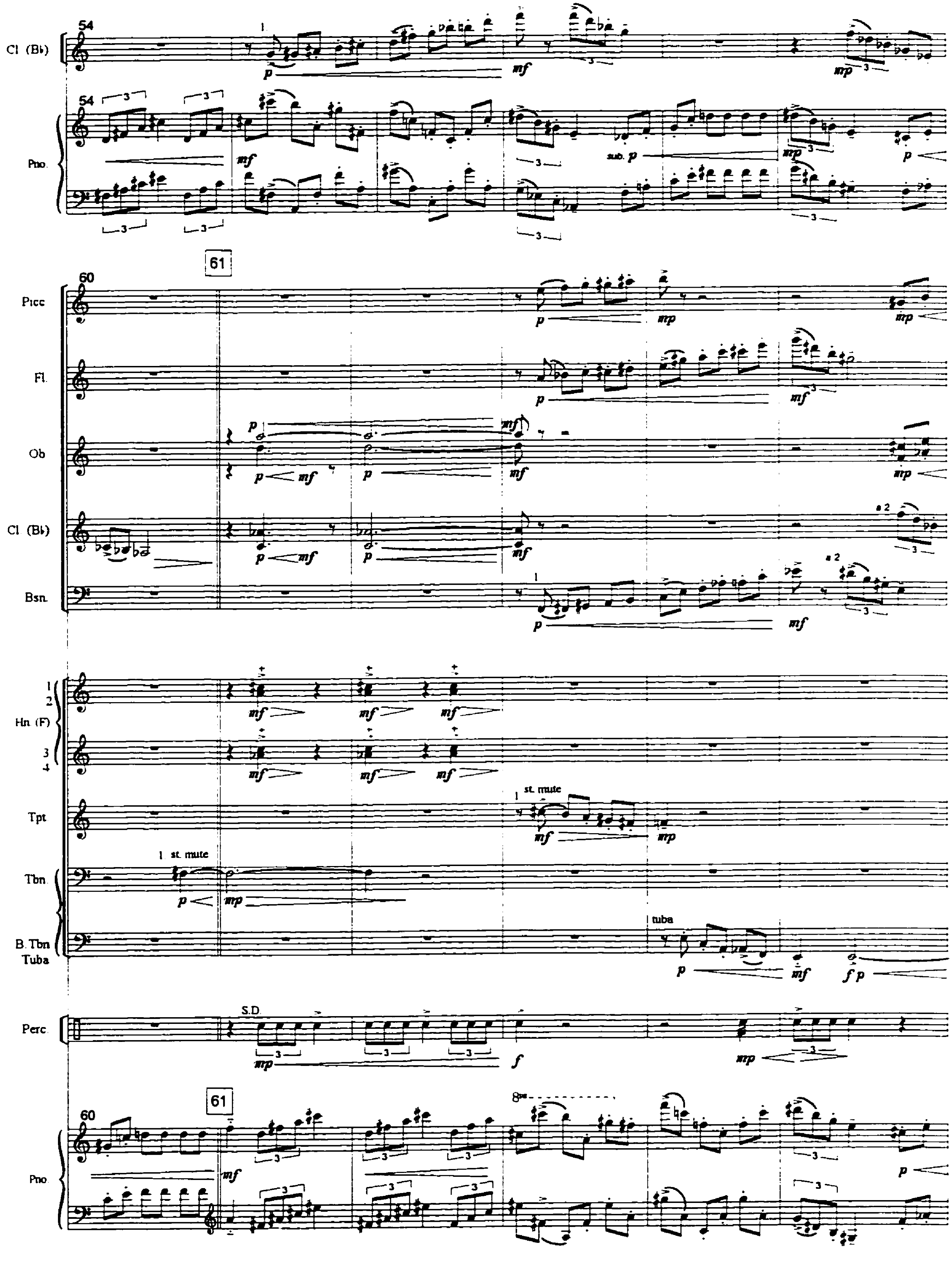
© 1998. Chris Howard

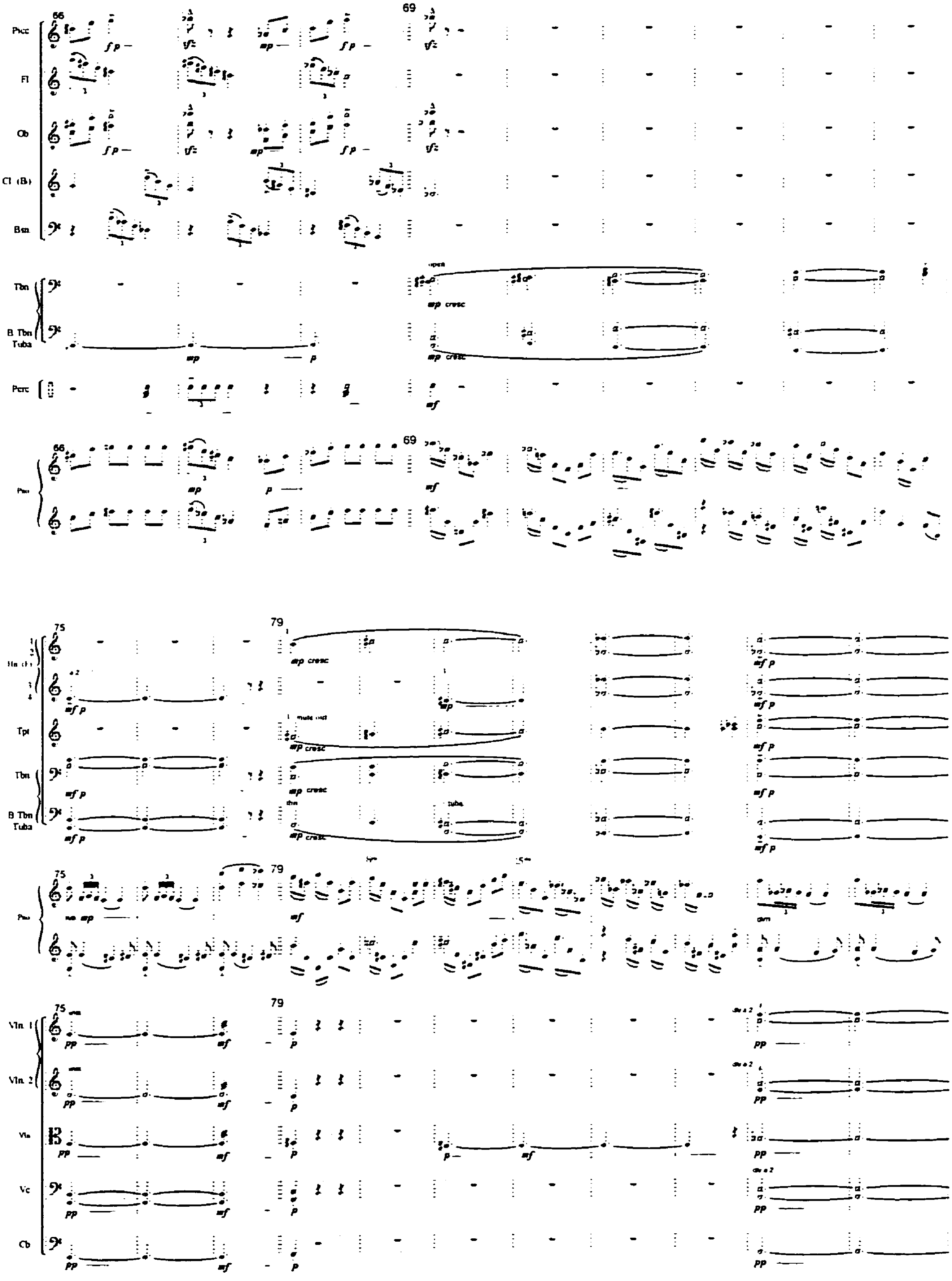

10
Pno.
cresc.
mp
p
16
Pno
mf
23 poco rit.
25 a Tempo
Fl.
1
p
Pno
Vln I
Vln. 2
Vla.
Vc
Cb
div a 2
p
2

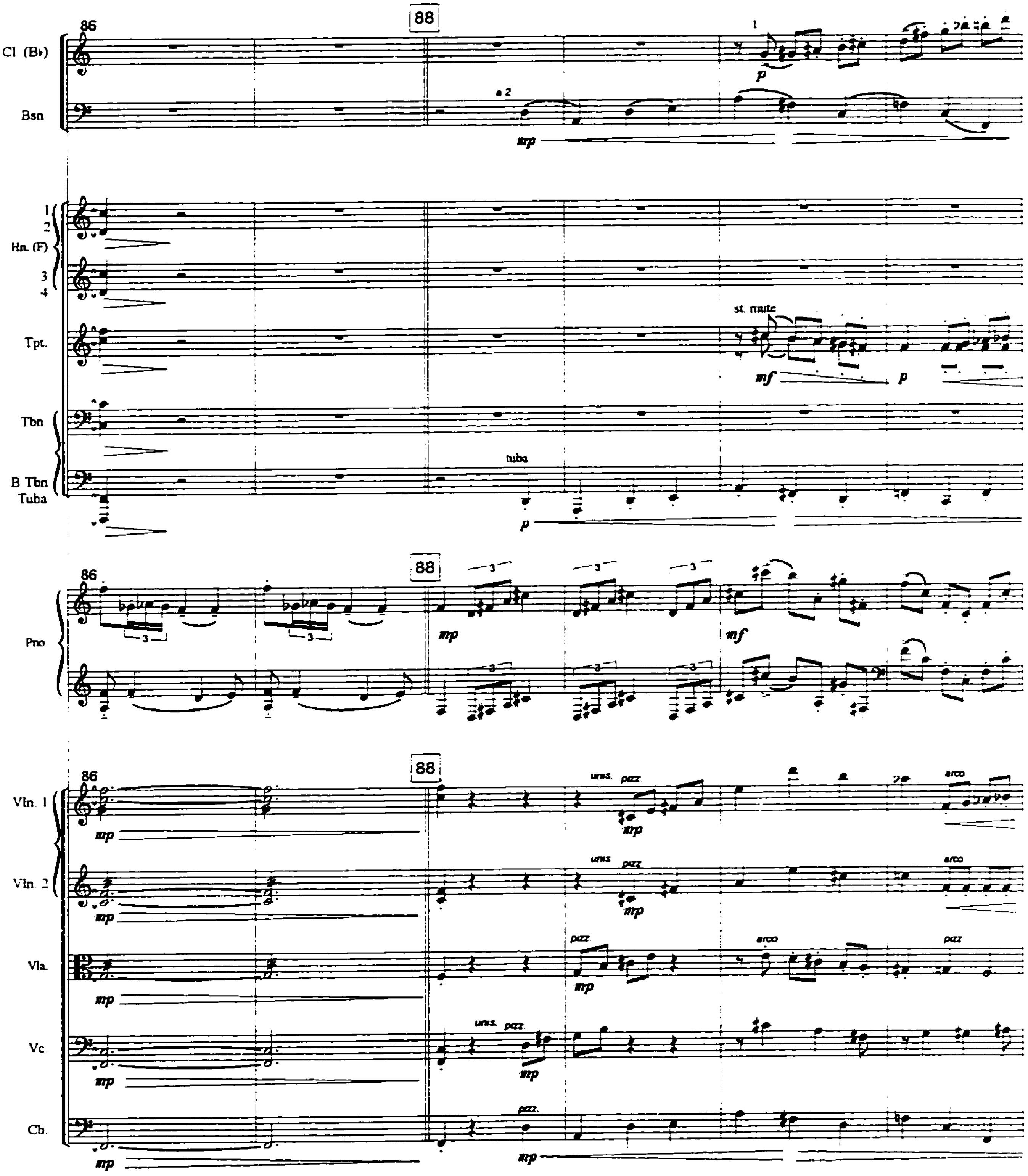

31
33
Picc.
Fl.
Ob
Cl (B♭)
Bsn.
Tpt.
Tbn.
B Tbn
Tuba
Vln. 1
Vln. 2
Vla.
Vc.
Cb
mp
p
non legato
mp espressivo
tbn.
unis.
2

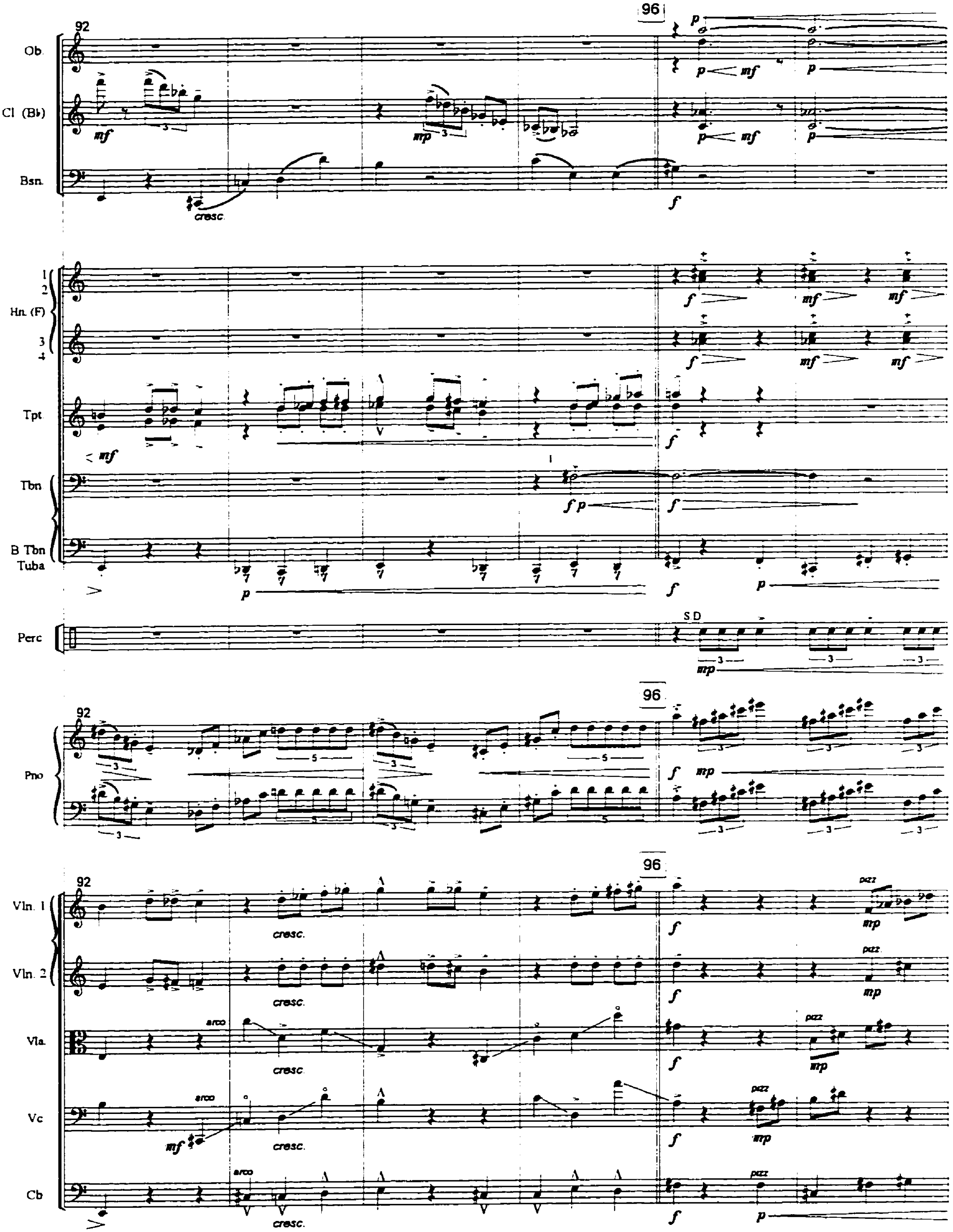

37
Picc.
Fl.
Ob.
Cl (B♭)
Bsn.
pp
p
1.
Hn. (F)
1
2
3
4
mp
Tpt.
Tbn.
B. Tbn
Tuba
+ tuba
Vln. 1
Vln. 2
div a 2
unis.
Vla.
Vc.
Cb.
pizz.

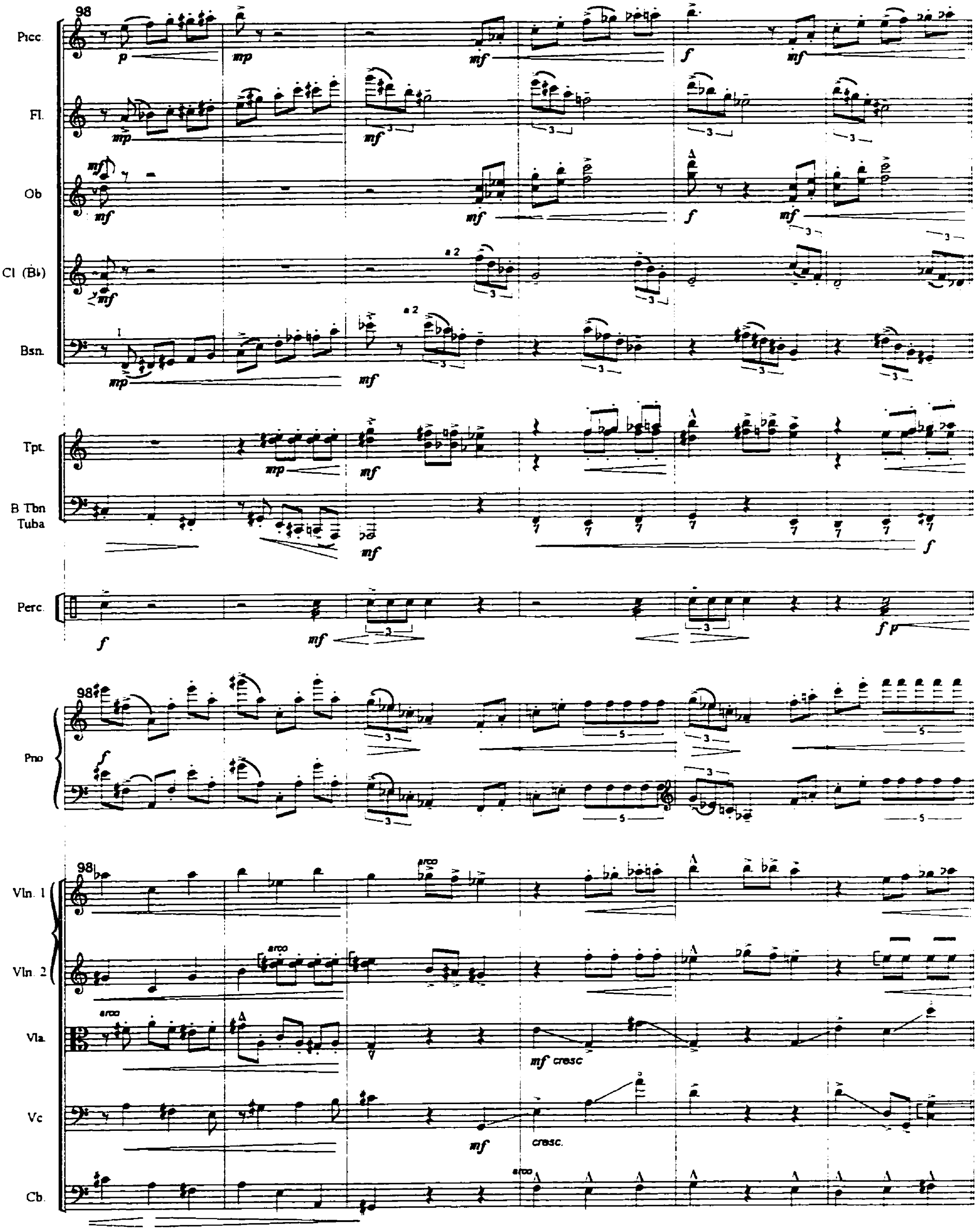

45
50
♩= 80
accel.
𝅗𝅥. = 54
Fl.
Ob.
Cl. (B♭)
Bsn.
Hn. (F)
1
2
3
4
Perc.
B.D
Pno
mp leggeno
Vln. 1
div a 2
tenuto
Vln. 2
Vla.
Vc.
unis.
Cb
arco
p

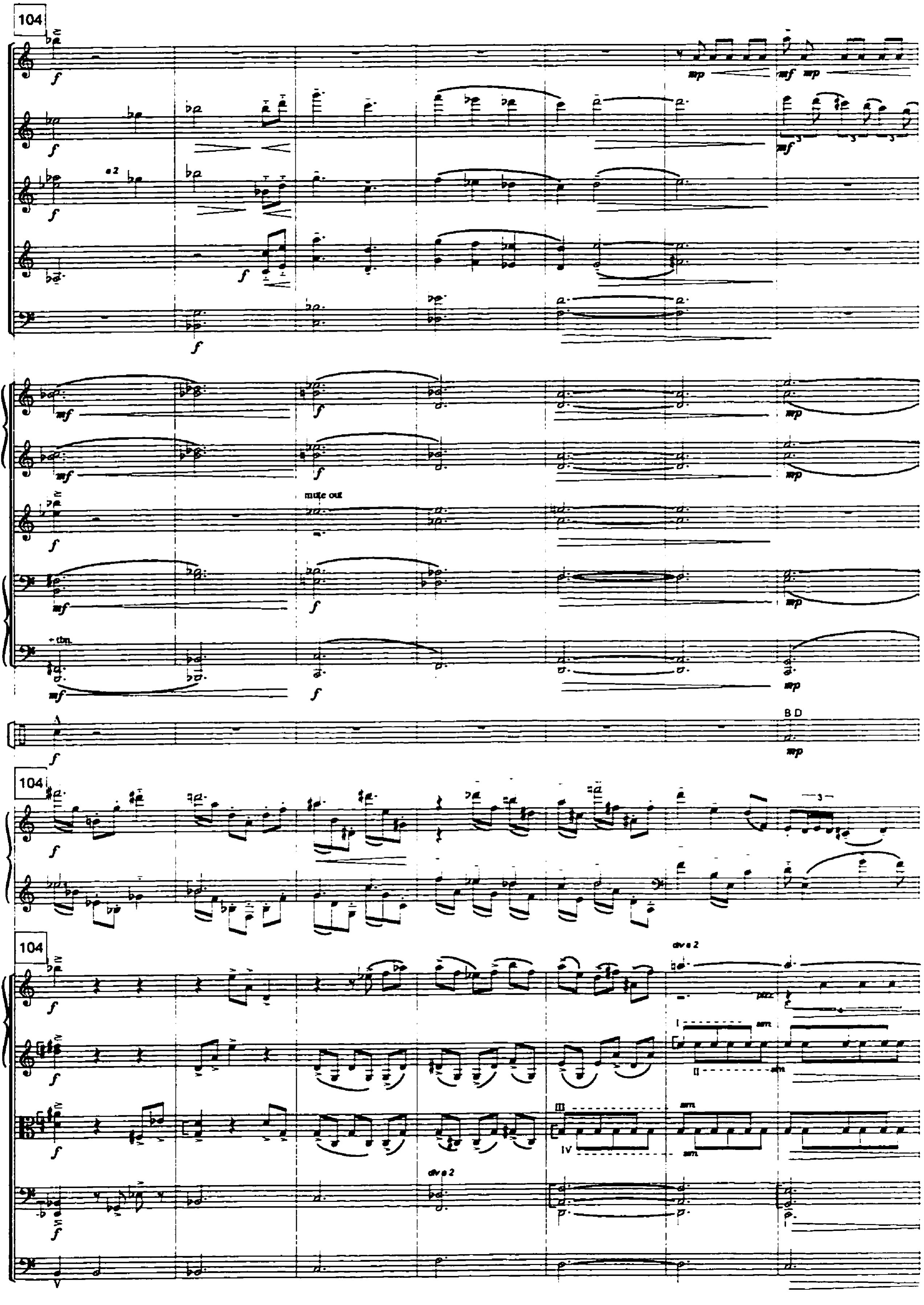

54
Cl (B♭)
Pno.
sub. p
60
61
Picc
Fl.
Ob
Cl (B♭)
Bsn.
a 2
Hn (F)
1
2
3
4
Tpt
st. mute
Tbn.
1 st. mute
B. Tbn
Tuba
tuba
Perc
S.D.
Pno.
8va
p
mp
mf
f
fp

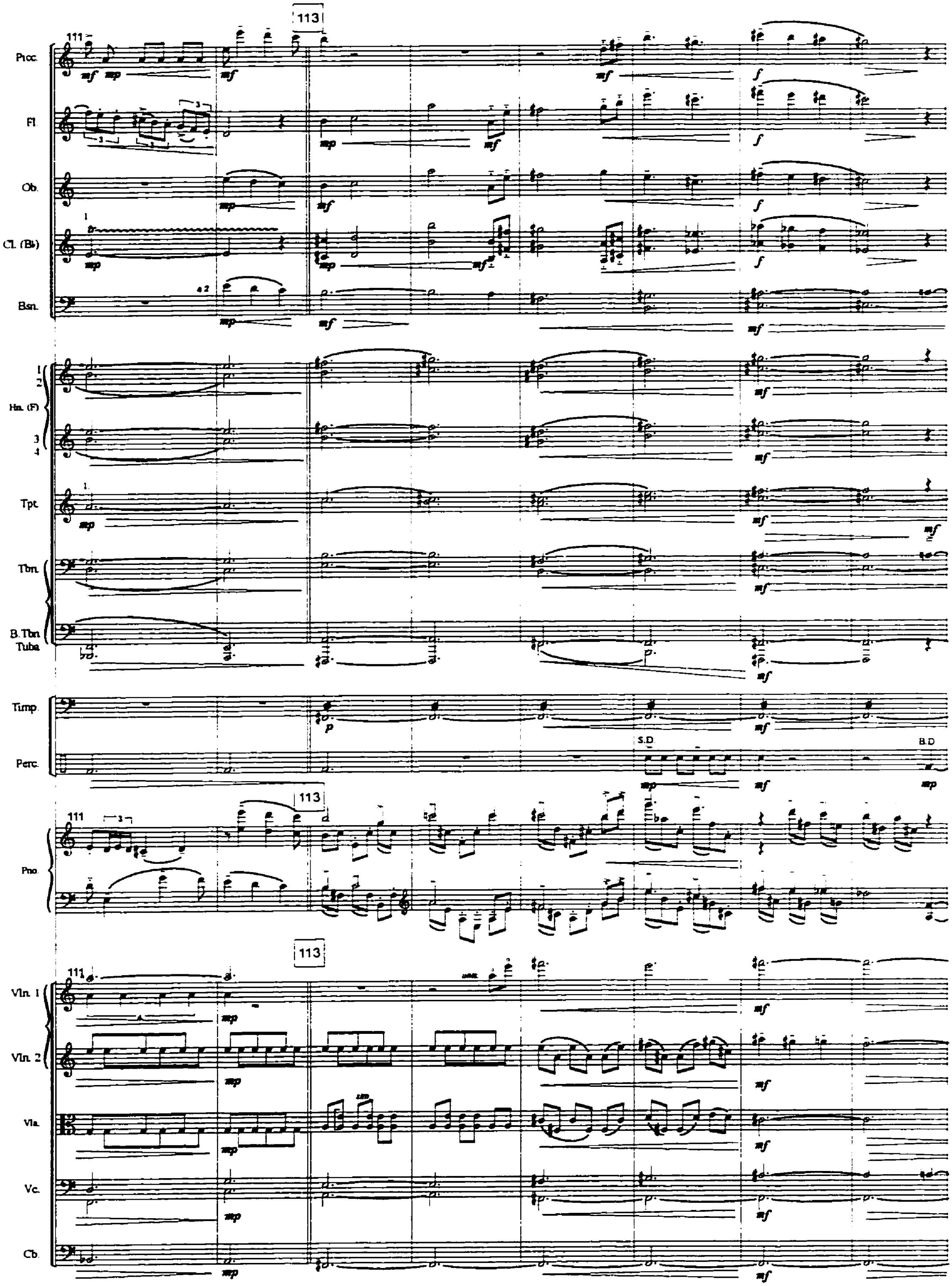

66
69
Picc
Fl
Ob
Cl (B♭)
Bsn
Tbn
B Tbn
Tuba
Perc
Pno
open
mp cresc
fp
sfz
mp
mf
p
75
79
Hn (F)
Tpt
mute out
a 2
tuba
Vln 1
Vln 2
Vla
Vc
Cb
div a 2
mf p
pp

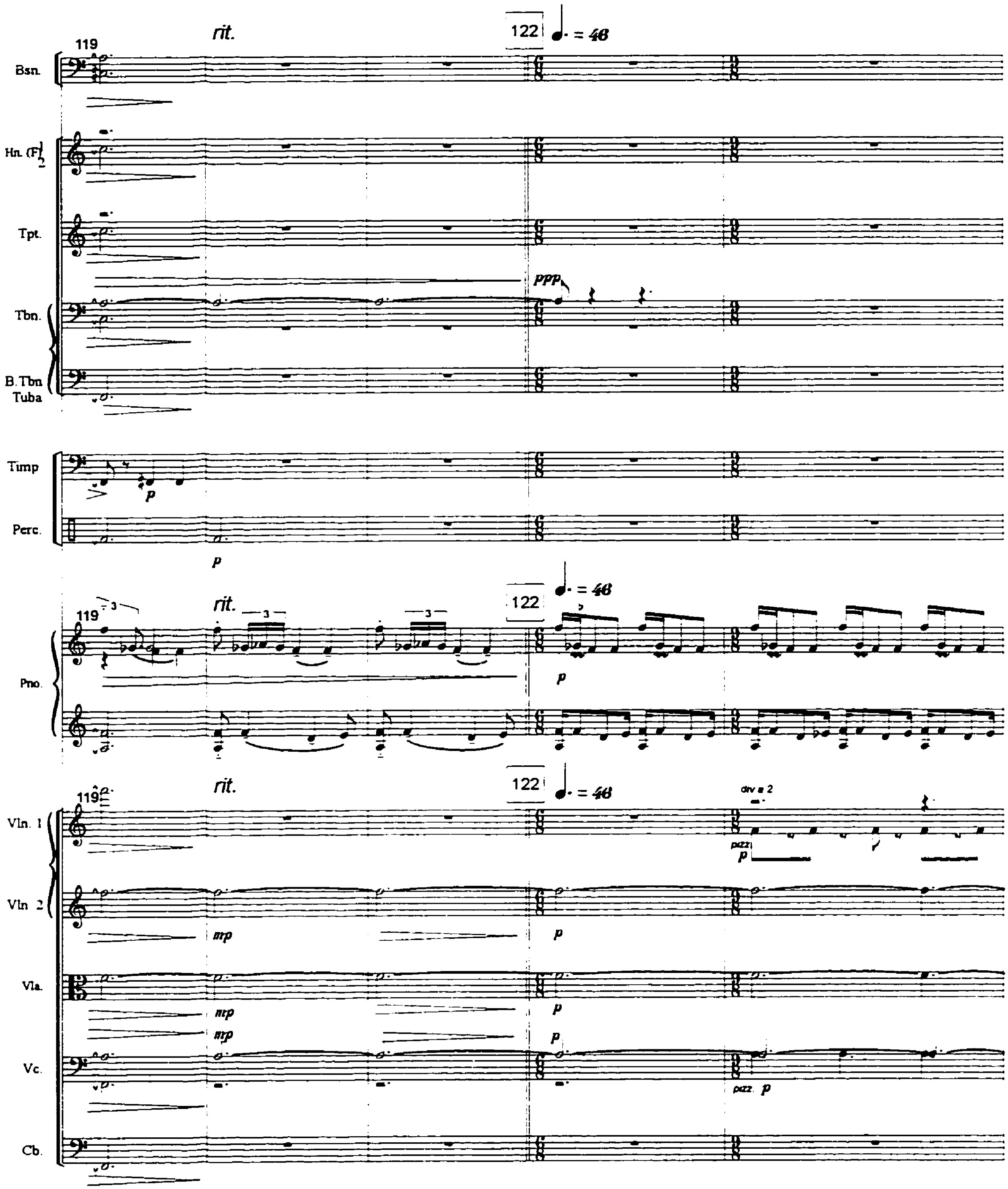

86
88
Cl (B♭)
Bsn.
a 2
mp
p
Hn. (F)
1
2
3
4
Tpt.
st. mute
mf
p
Tbn
B Tbn
Tuba
tuba
Pno.
mf
Vln. 1
Vln. 2
Vla.
Vc.
Cb.
unis.
pizz.
arco

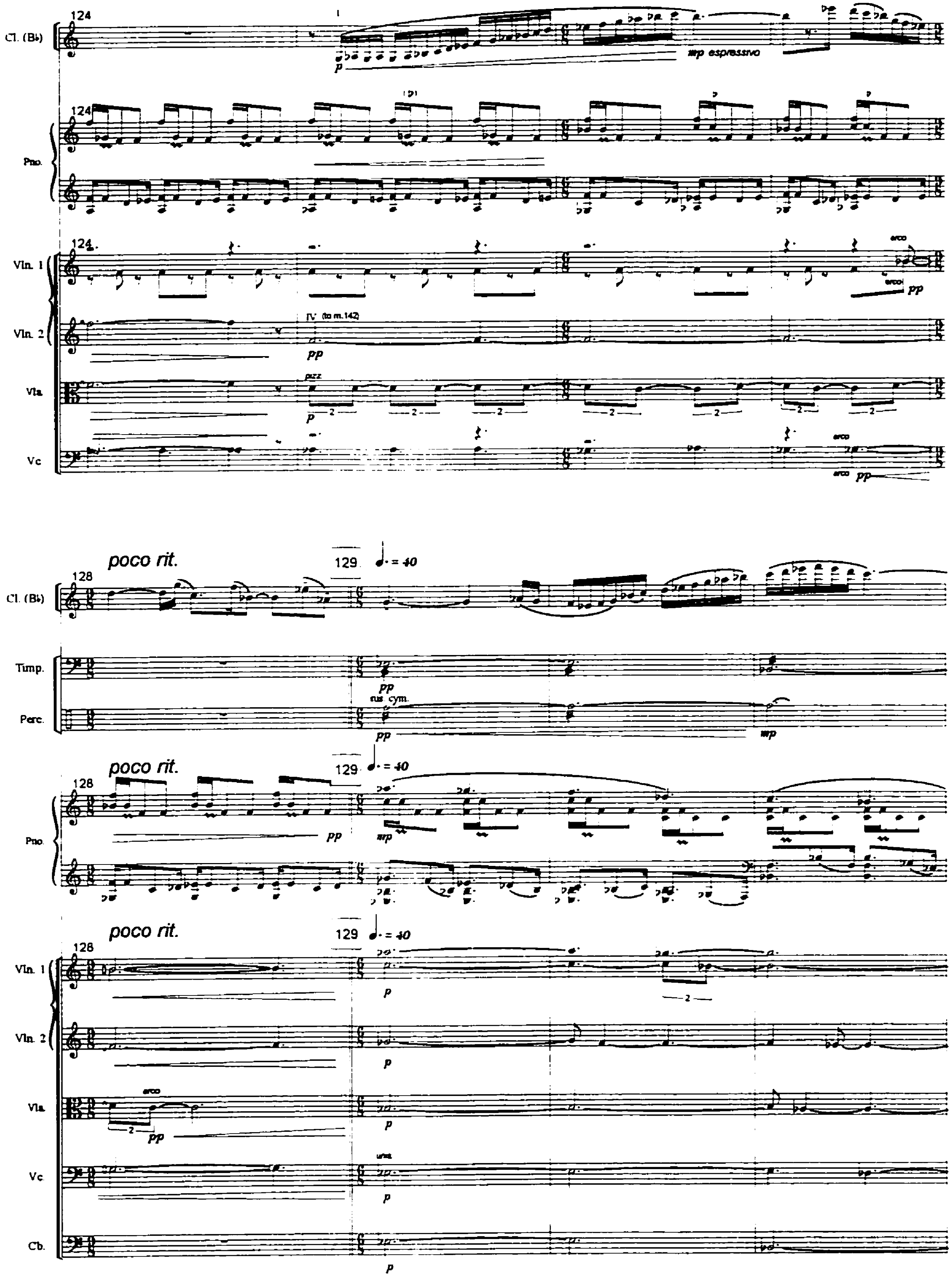

92
96
Ob.
Cl (B♭)
Bsn.
Hn. (F) 1 2
3 4
Tpt
Tbn
B Tbn Tuba
Perc
S.D.
Pno
Vln. 1
Vln. 2
Vla.
Vc
Cb
p
mf
mp
f
cresc.
arco
pizz
3
5

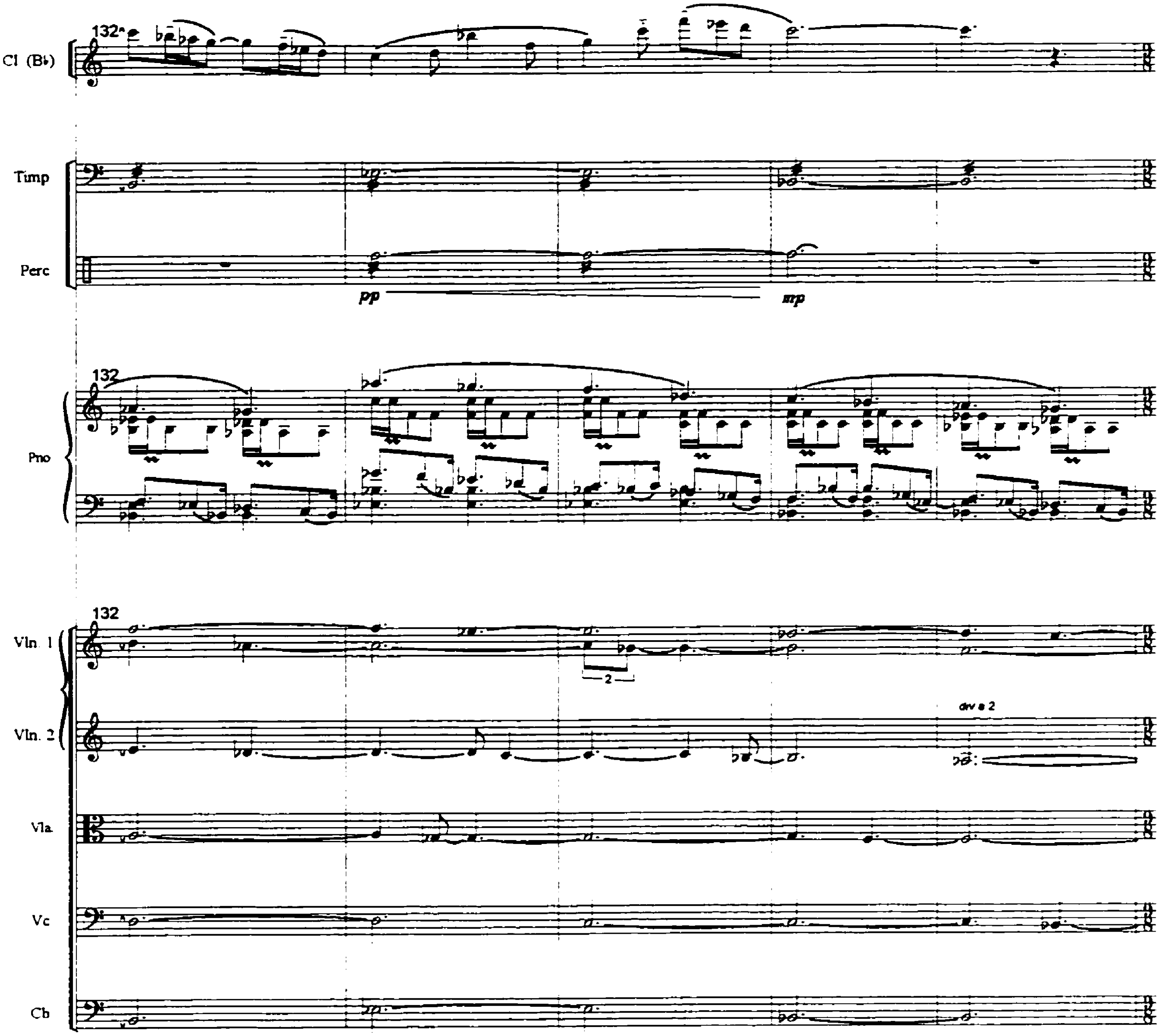

98
Picc.
Fl.
Ob
Cl (B♭)
Bsn.
Tpt.
B Tbn
Tuba
Perc.
Pno
Vln. 1
Vln. 2
Vla.
Vc
Cb.
a 2
arco
mf cresc
cresc.
p
mp
mf
f
f p

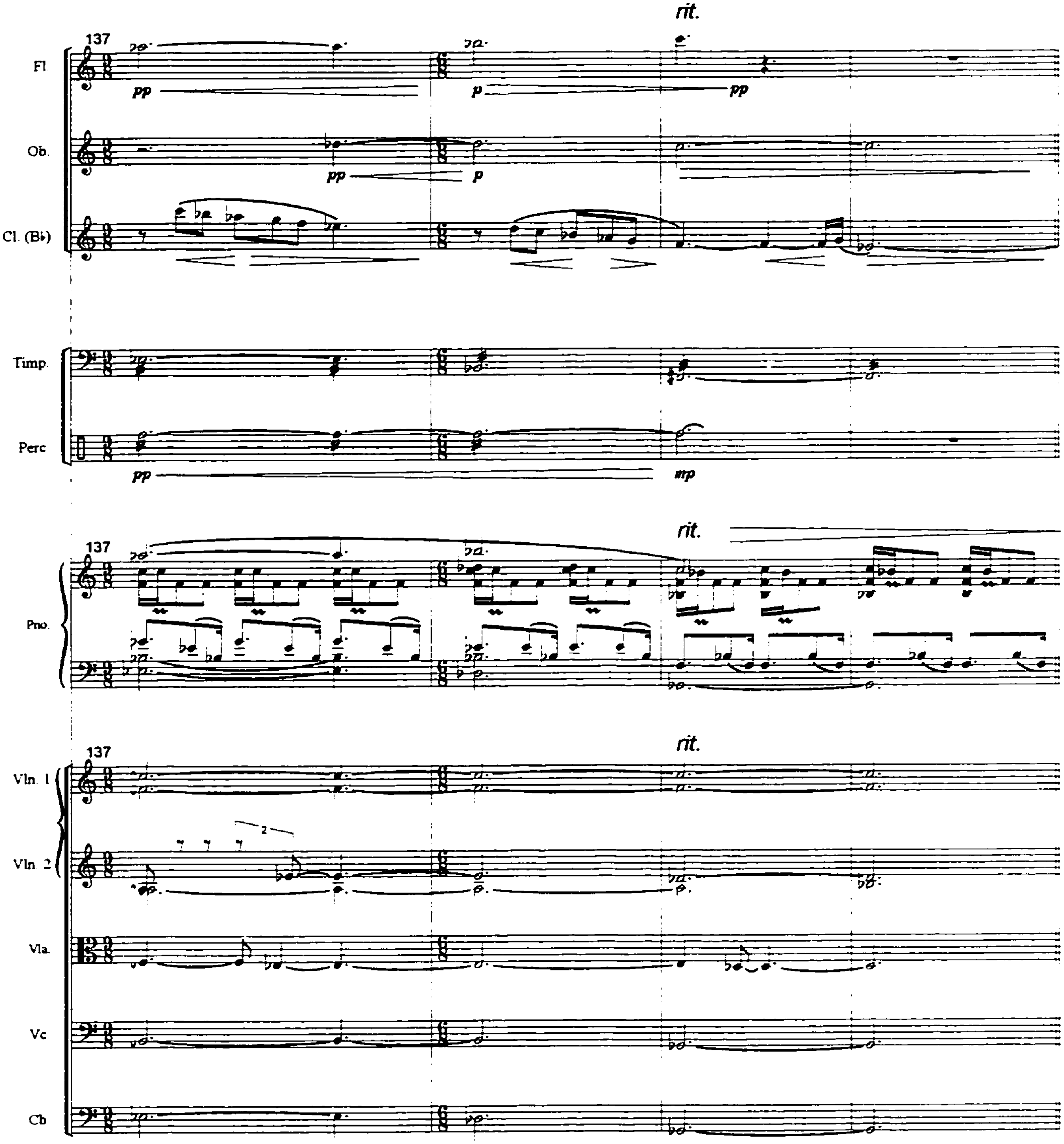

104
Picc.
Fl.
Ob.
a 2
Cl. (B♭)
Bsn.
Hn. (F)
1
2
3
4
Tpt.
mute out
Tbn.
B.Tbn
Tuba
+ tbn.
Perc.
B D
104
Pno.
104
Vln. 1
div a 2
pizz.
Vln. 2
I
II
sim.
Vla.
III
IV
sim.
Vc.
div a 2
Cb.
f
mf
mp

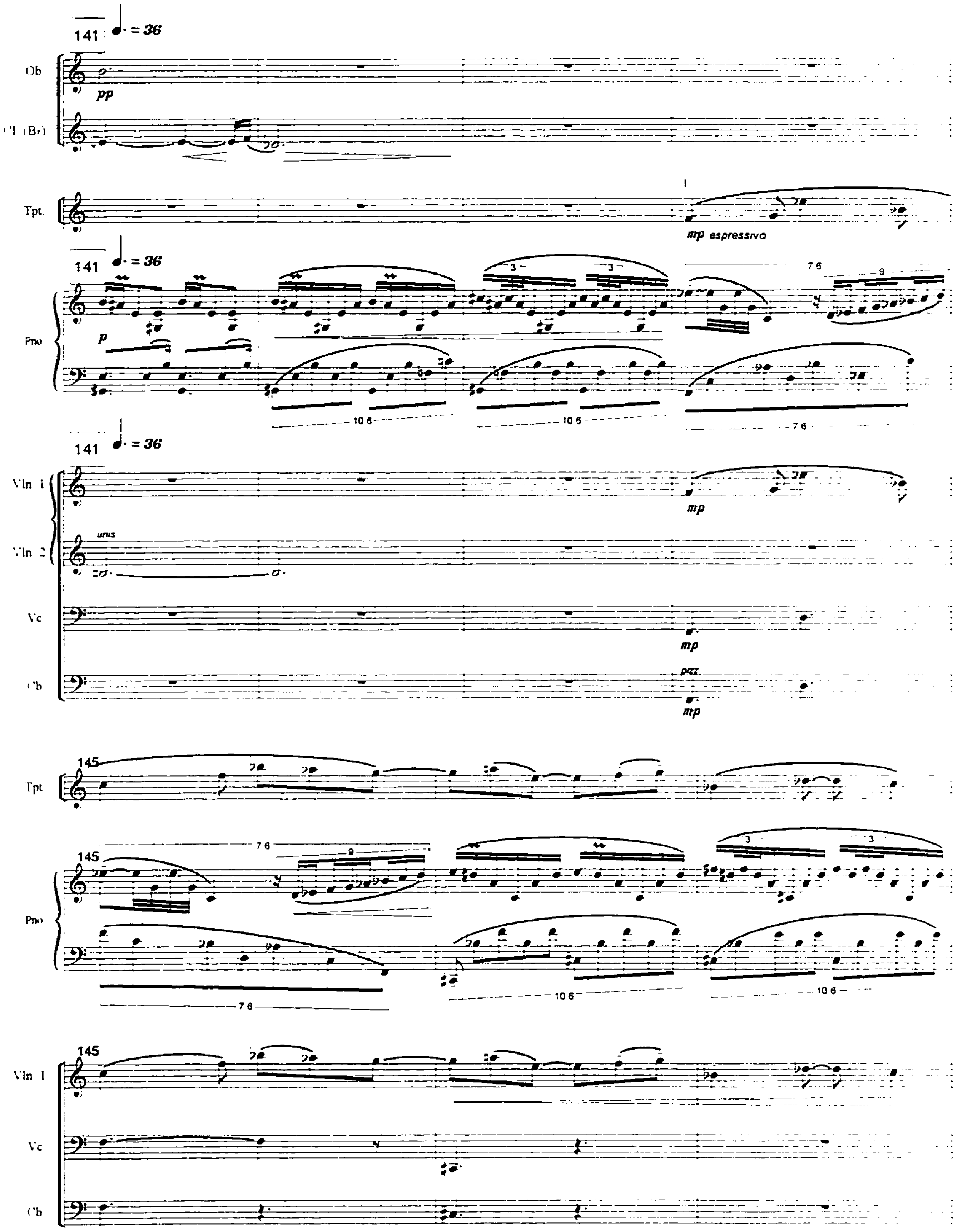

111
113
Picc.
Fl.
Ob.
Cl. (B♭)
Bsn.
Hn. (F)
1
2
3
4
Tpt.
Tbn.
B. Tbn.
Tuba
Timp.
Perc.
S.D.
B.D.
Pno.
Vln. 1
Vln. 2
Vla.
Vc.
Cb.
mf
mp
f
p

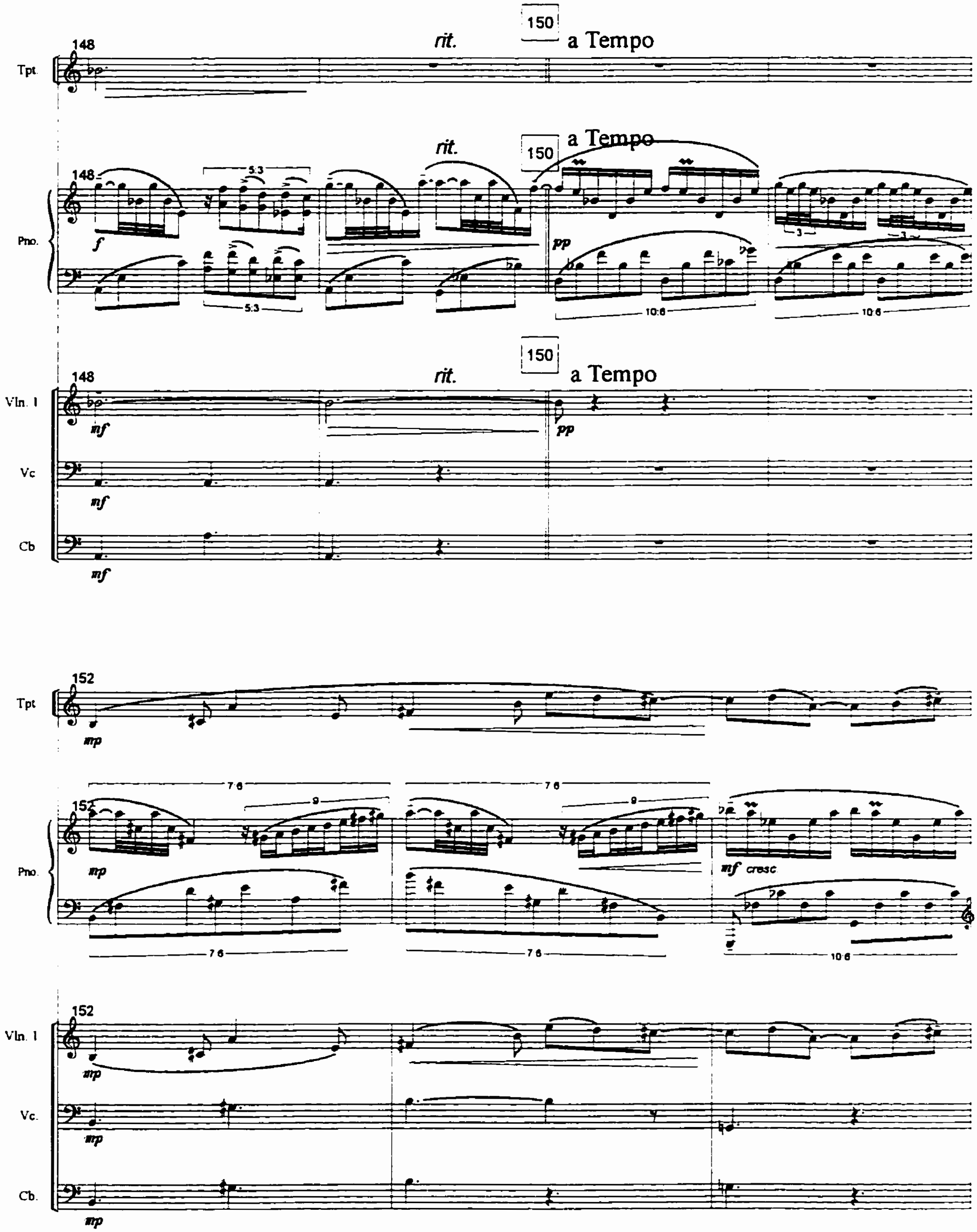

119
rit.
122
♩. = 48
Bsn.
Hn. (F) 1 2
Tpt.
Tbn.
ppp
B.Tbn Tuba
Timp
p
Perc.
p
Pno.
3
p
Vln. 1
div a 2
pizz.
p
Vln 2
mp
p
Vla.
mp
p
Vc.
mp
p
pizz.
p
Cb.

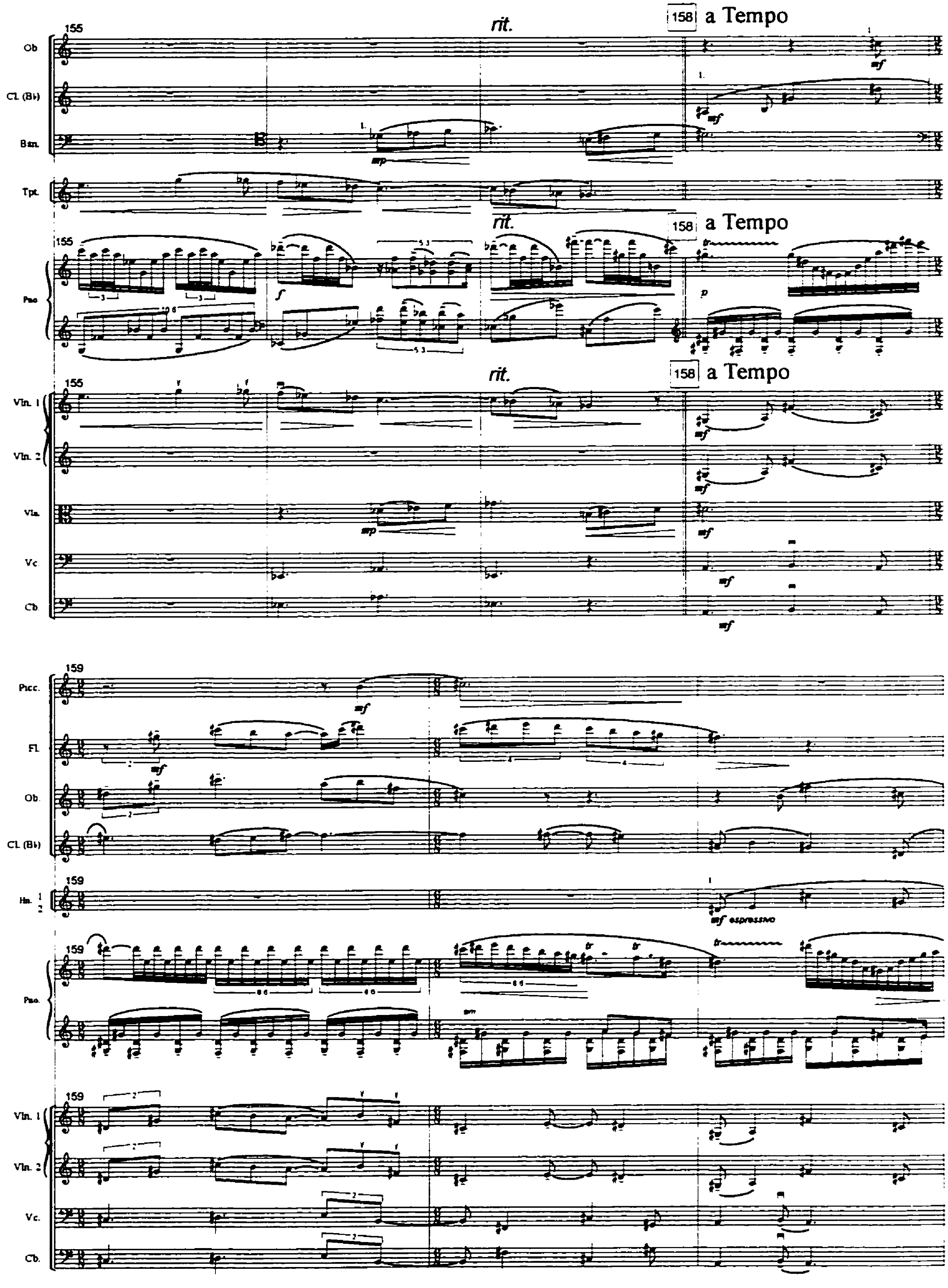

124
Cl. (B♭)
p
mp espressivo
Pno.
Vln. 1
arco
pp
Vln. 2
IV (to m.142)
pp
Vla.
pizz
p
Vc.
arco
pp
poco rit.
129
♩. = 40
128
Timp.
pp
Perc.
sus cym.
pp
mp
Cb.
p

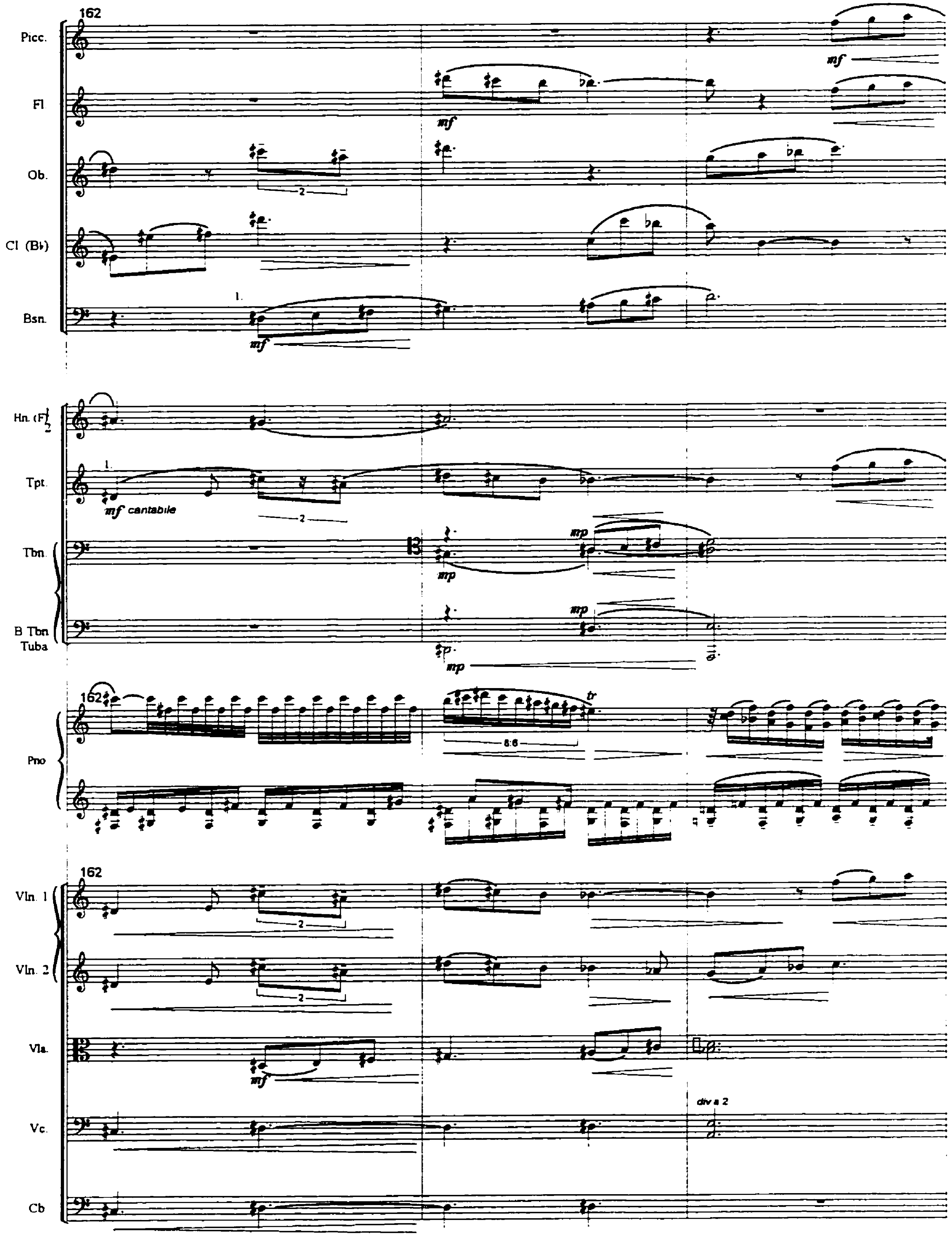

132ᵃ
Cl (B♭)
Timp
Perc
pp
mp
132
Pno
132
Vln. 1
2
Vln. 2
div a 2
Vla.
Vc
Cb

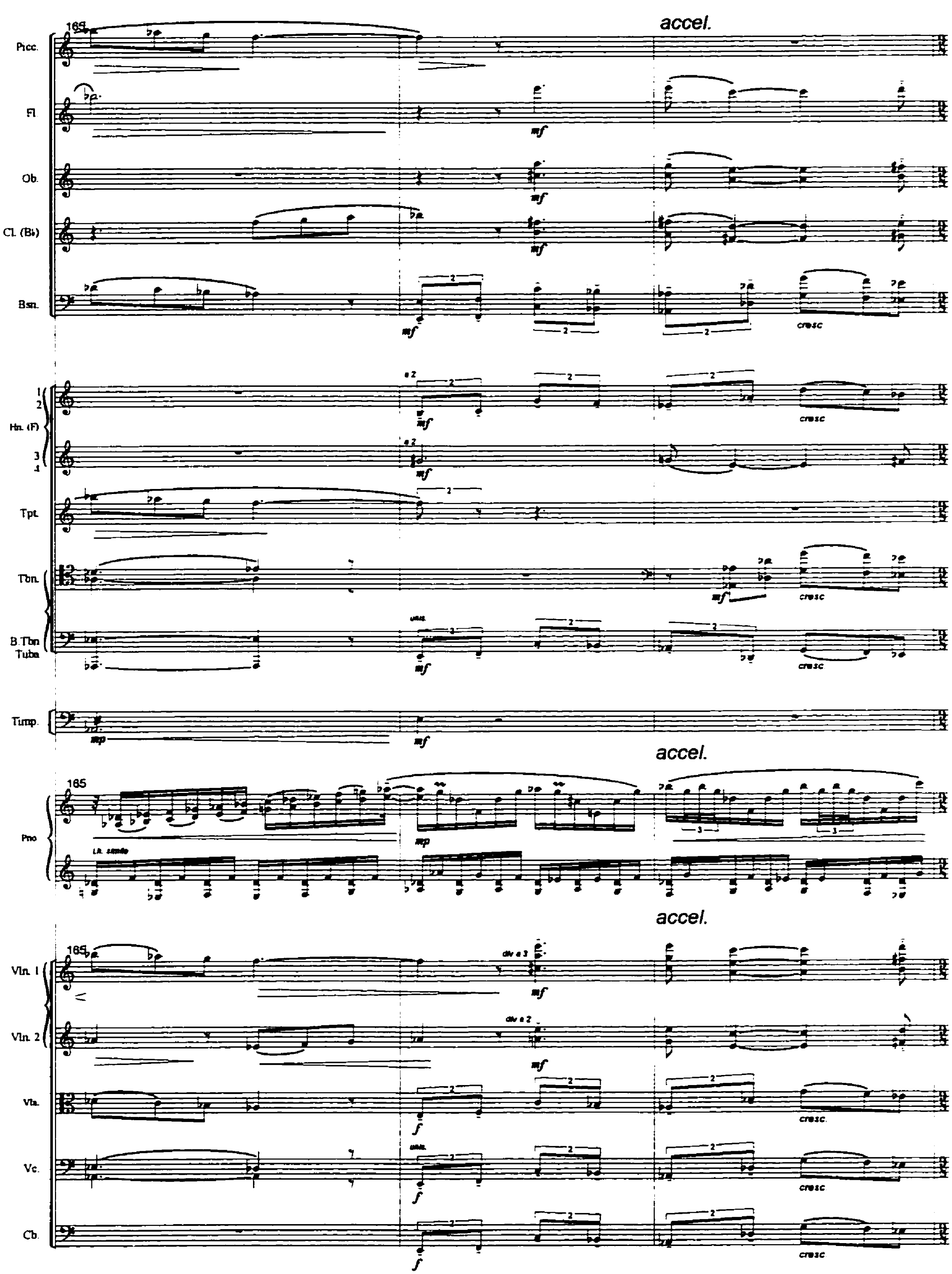

rit.
137
Fl.
pp
p
pp
Ob.
pp
p
Cl. (B♭)
Timp.
Perc
pp
mp
rit.
137
Pno.
rit.
137
Vln. 1
Vln. 2
2
Vla.
Vc
Cb

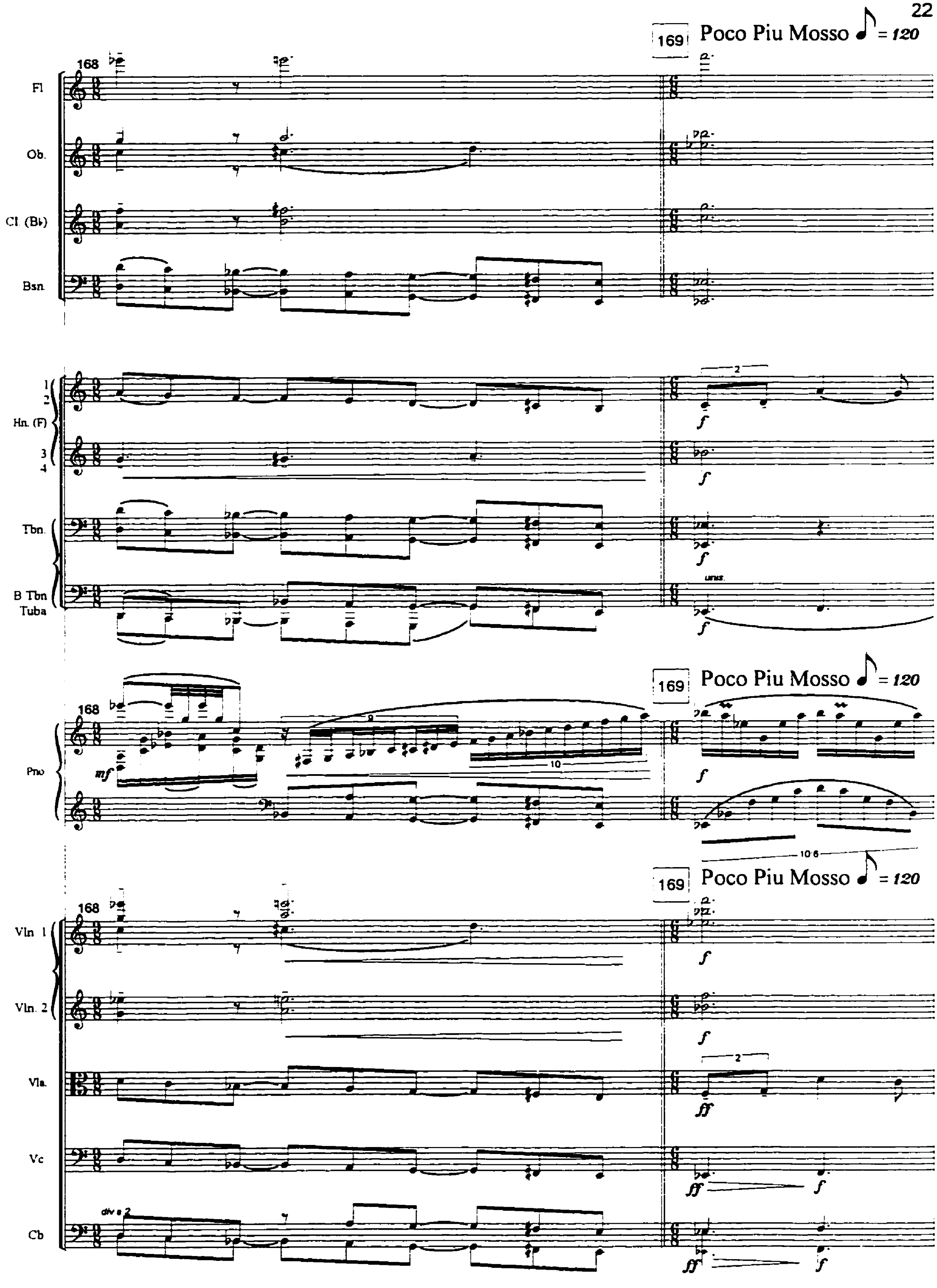

141
♩. = 36
Ob
pp
Cl (B♭)
Tpt
I
mp espressivo
141
♩. = 36
Pno
p
3
3
7 6
9
10 6
10 6
7 6
141
♩. = 36
Vln 1
mp
Vln 2
unis
Vc
mp
Cb
pizz
mp
145
Tpt
145
Pno
7 6
9
3
3
7 6
10 6
10 6
145
Vln 1
Vc
Cb

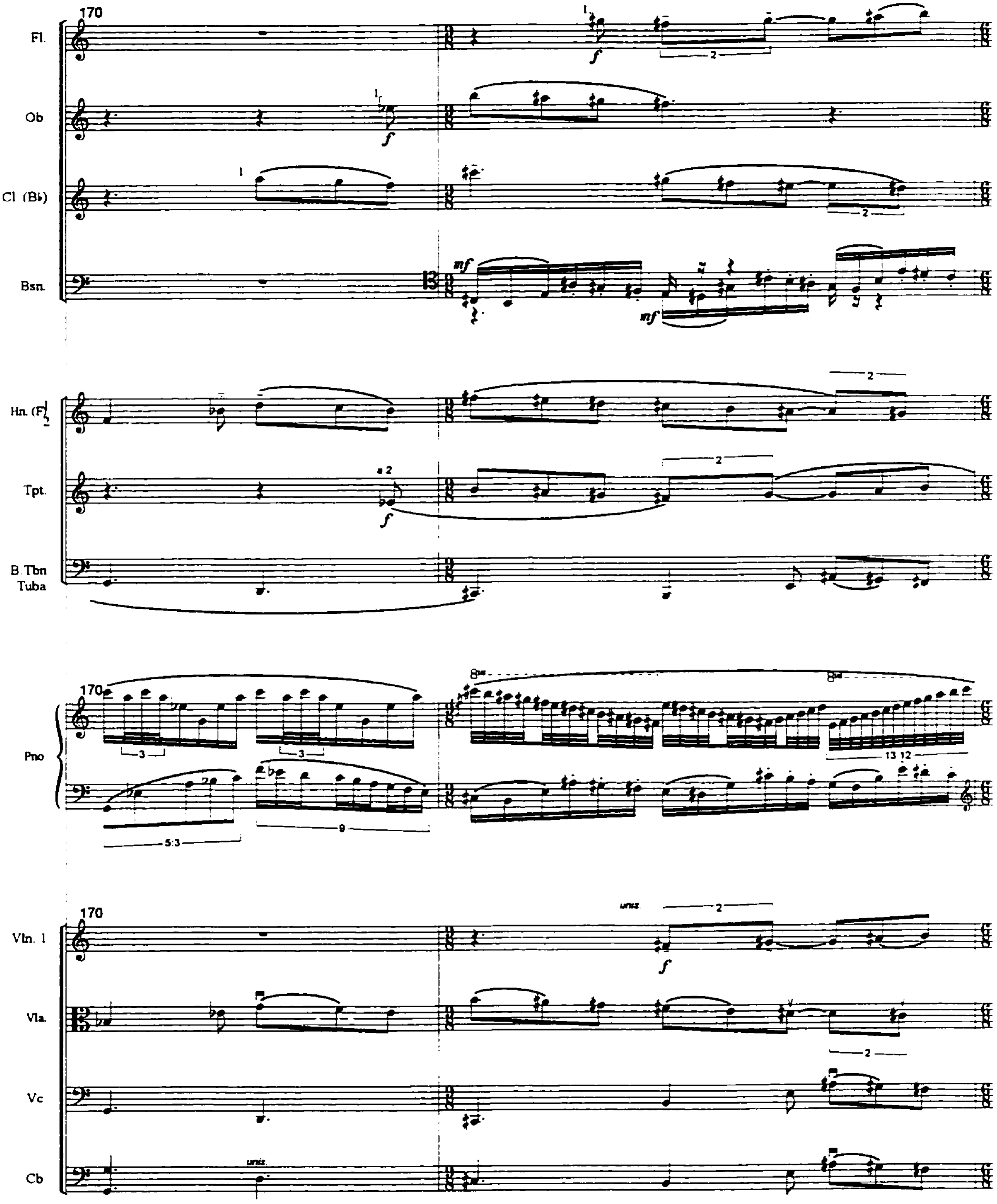

148
150
rit.
a Tempo
Tpt.
Pno.
5:3
10:6
3
f
pp
Vln. I
Vc
Cb
mf
152
mp
7:6
9
mf cresc.
Vln. I
Vc.
Cb.

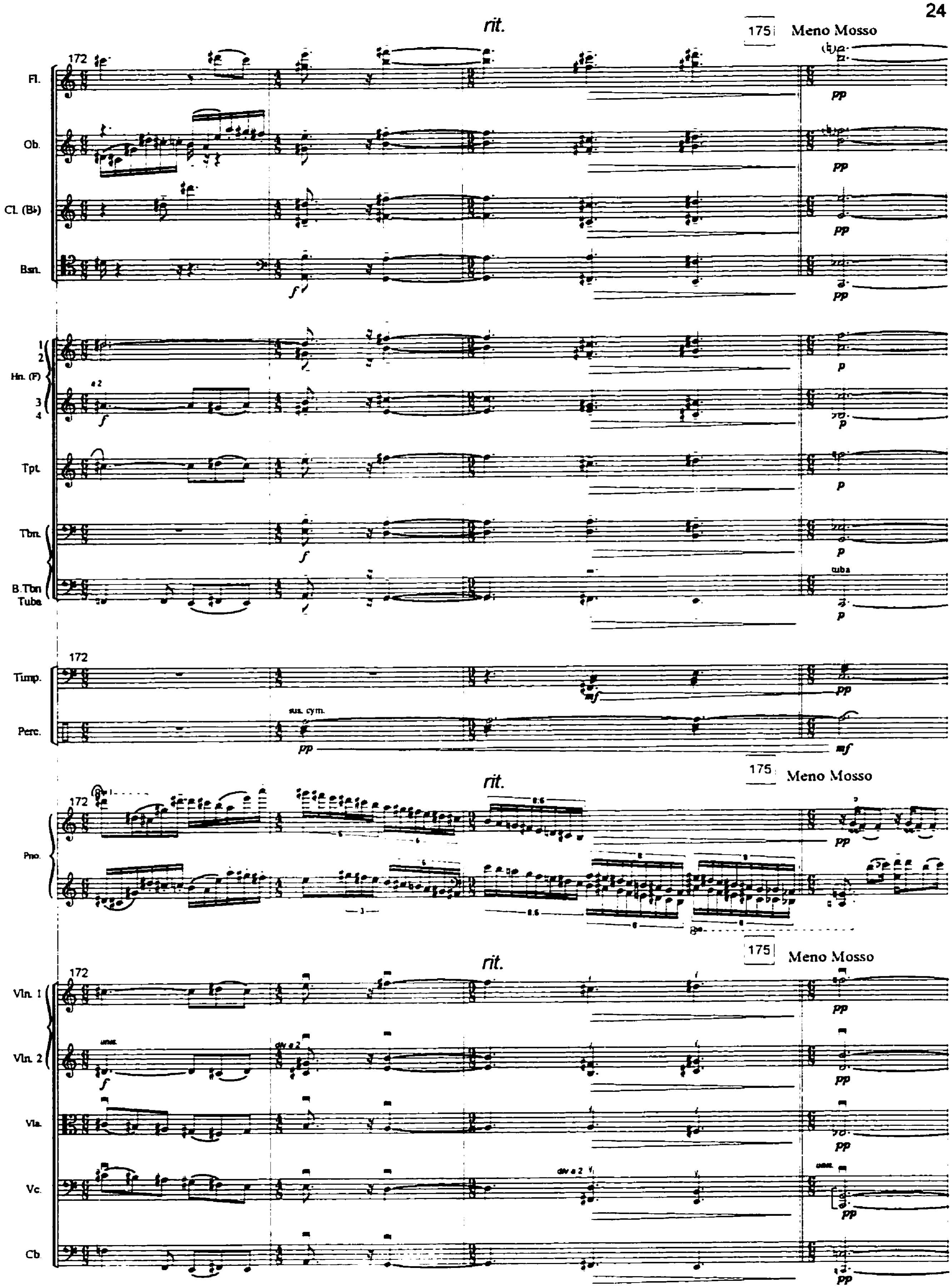

155
rit.
158 a Tempo
Ob
Cl. (B♭)
Bsn.
Tpt.
Pno.
Vln. 1
Vln. 2
Vla.
Vc.
Cb.
mp
mf
f
p
tr
159
Picc.
Fl.
Hn. 1 2
mf espressivo
sim

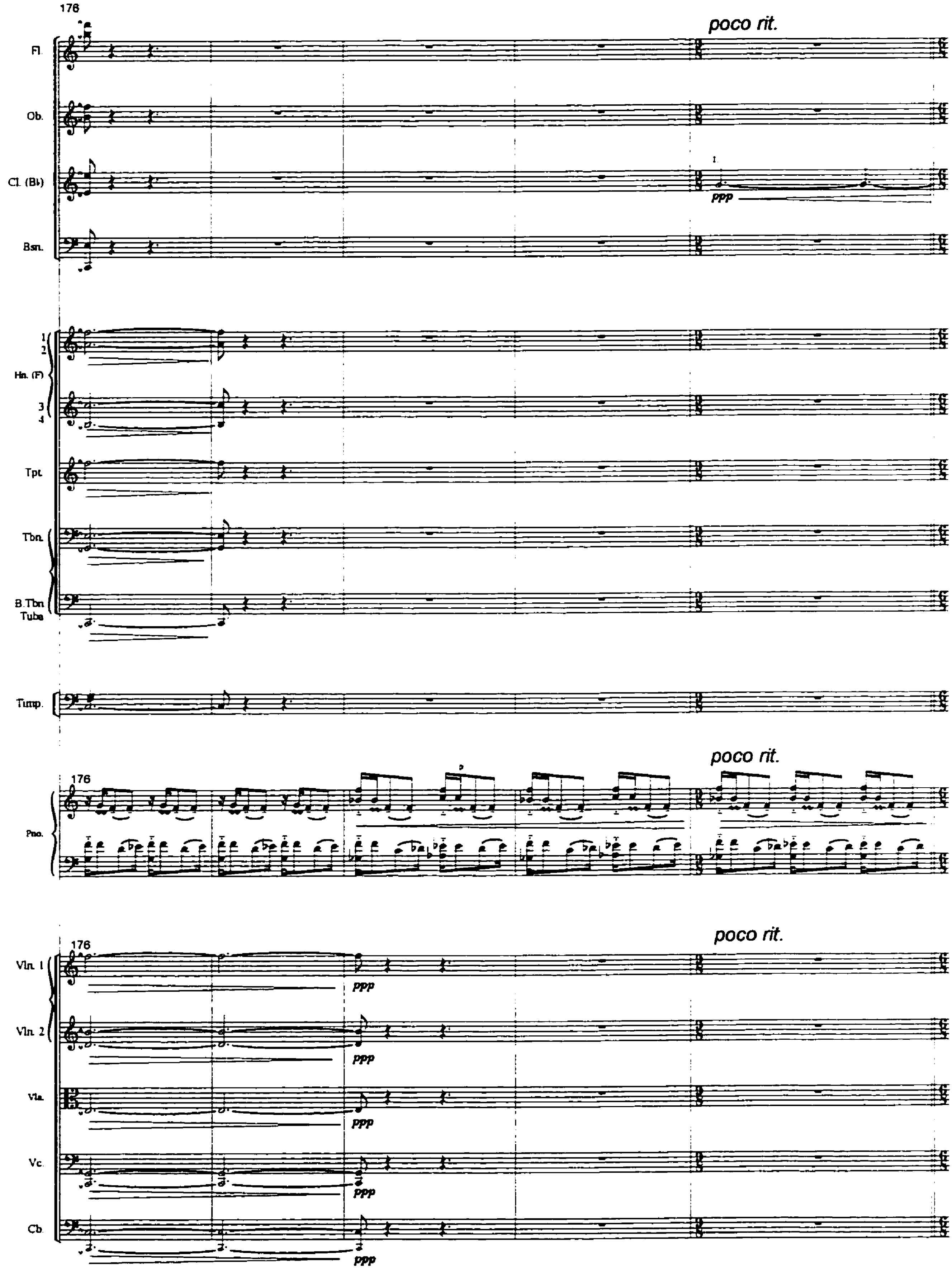

162
Picc.
Fl.
Ob.
Cl (B♭)
Bsn.
1.
mf
2
Hn. (F) 1 2
Tpt.
1.
mf cantabile
Tbn.
mp
B Tbn Tuba
Pno
8:6
tr
Vln. 1
Vln. 2
Vla.
Vc.
div a 2
Cb

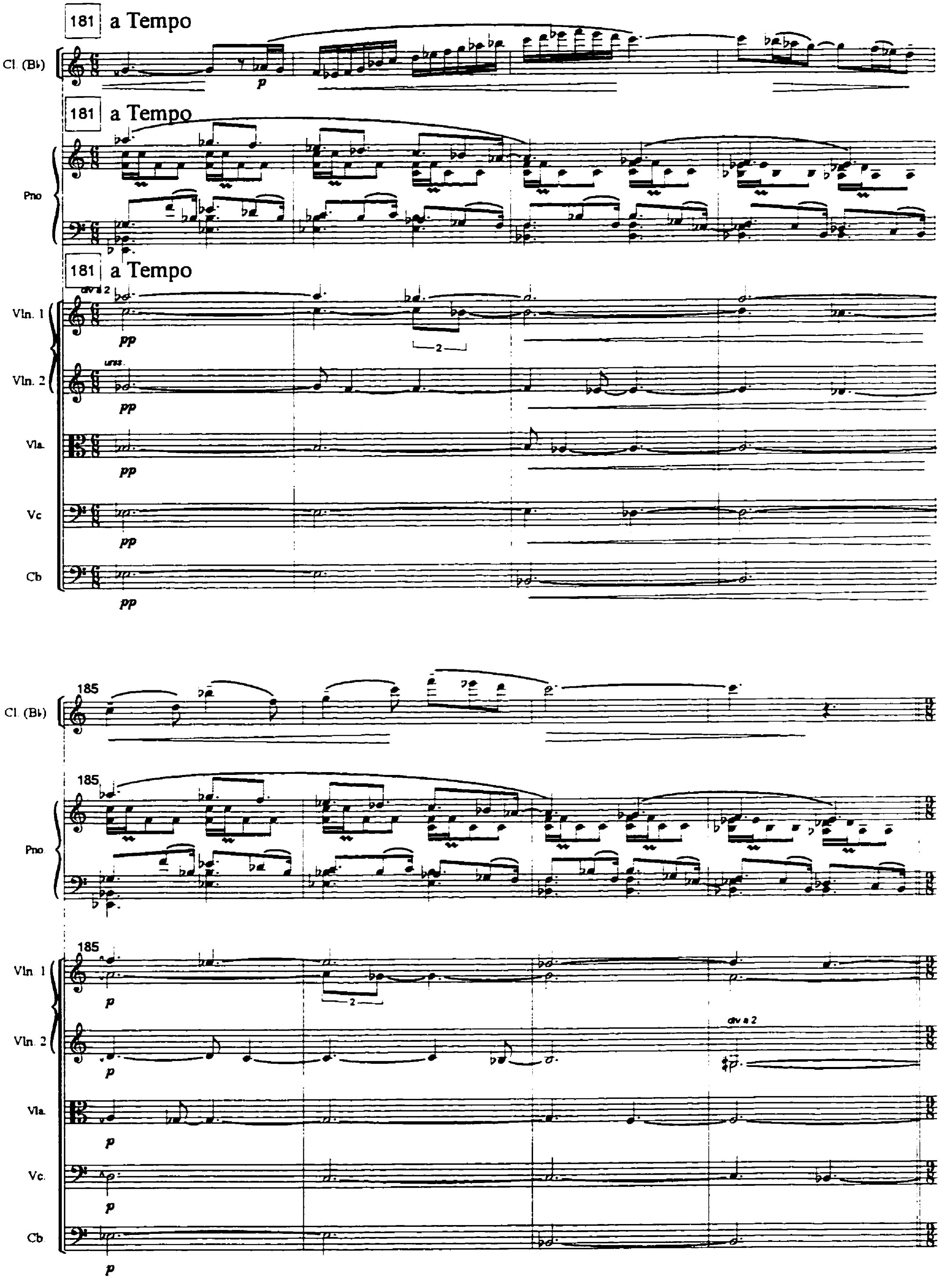

165
accel.
Picc.
Fl.
Ob.
Cl. (B♭)
Bsn.
Hn. (F) 1 2
3 4
Tpt.
Tbn.
B.Tbn
Tuba
Timp.
Pno
Vln. 1
Vln. 2
Vla.
Vc.
Cb.
a 2
unis.
div a 3
div a 2
mf
mp
f
cresc

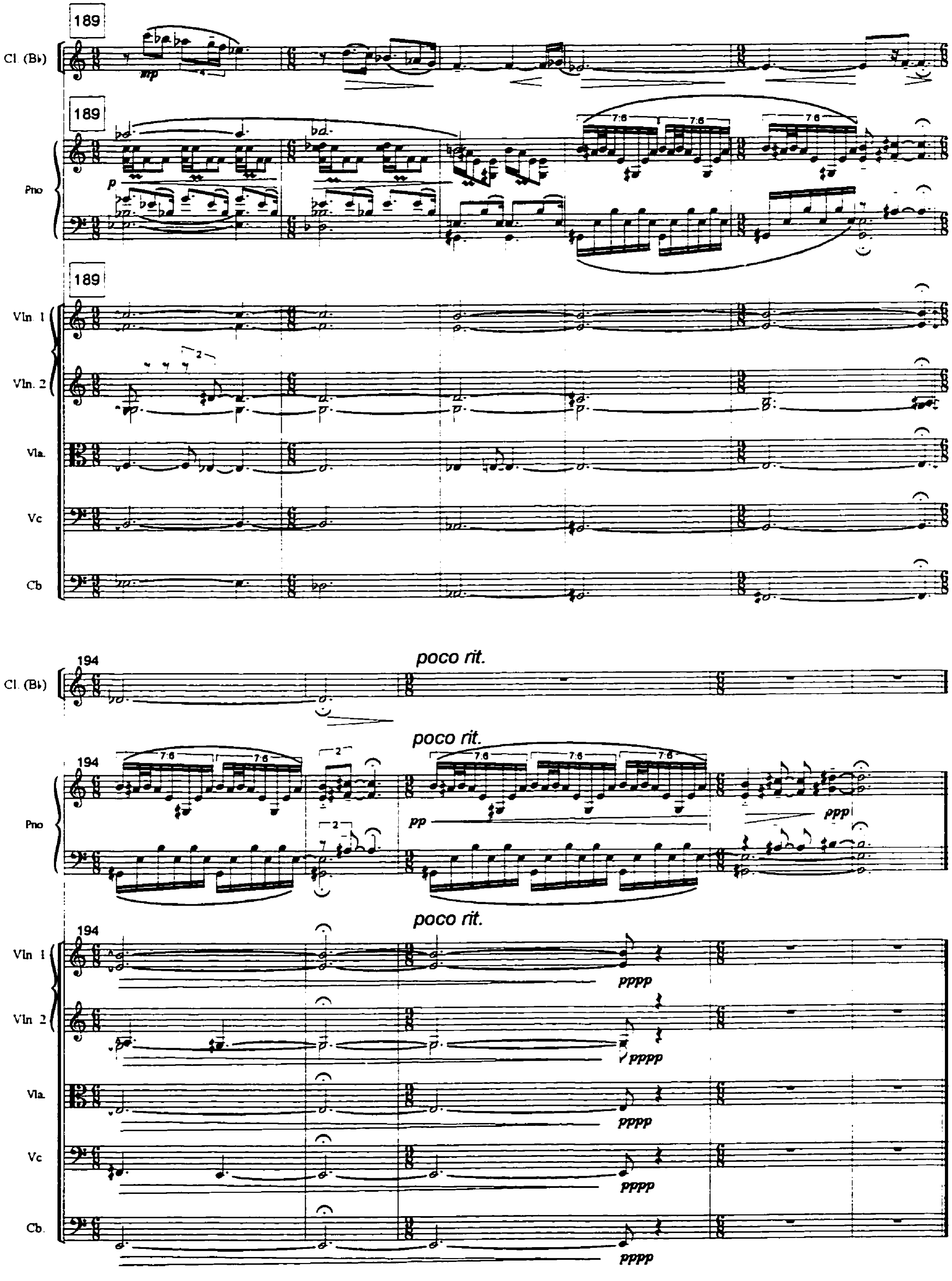

169
Poco Piu Mosso ♪ = 120
168
Fl
Ob.
Cl. (B♭)
Bsn.
1
2
Hn. (F)
3
4
Tbn.
B Tbn
Tuba
unis.
Pno
mf
f
9
10
10:6
Vln. 1
Vln. 2
Vla.
Vc
Cb
div a 2
2
ff


170
Fl.
Ob.
Cl (B♭)
Bsn.
Hn. (F) 1 2
Tpt.
B.Tbn Tuba
Pno
Vln. 1
Vla.
Vc
Cb
f
mf
a 2
8va
unis.
2
3
5:3
9
13:12

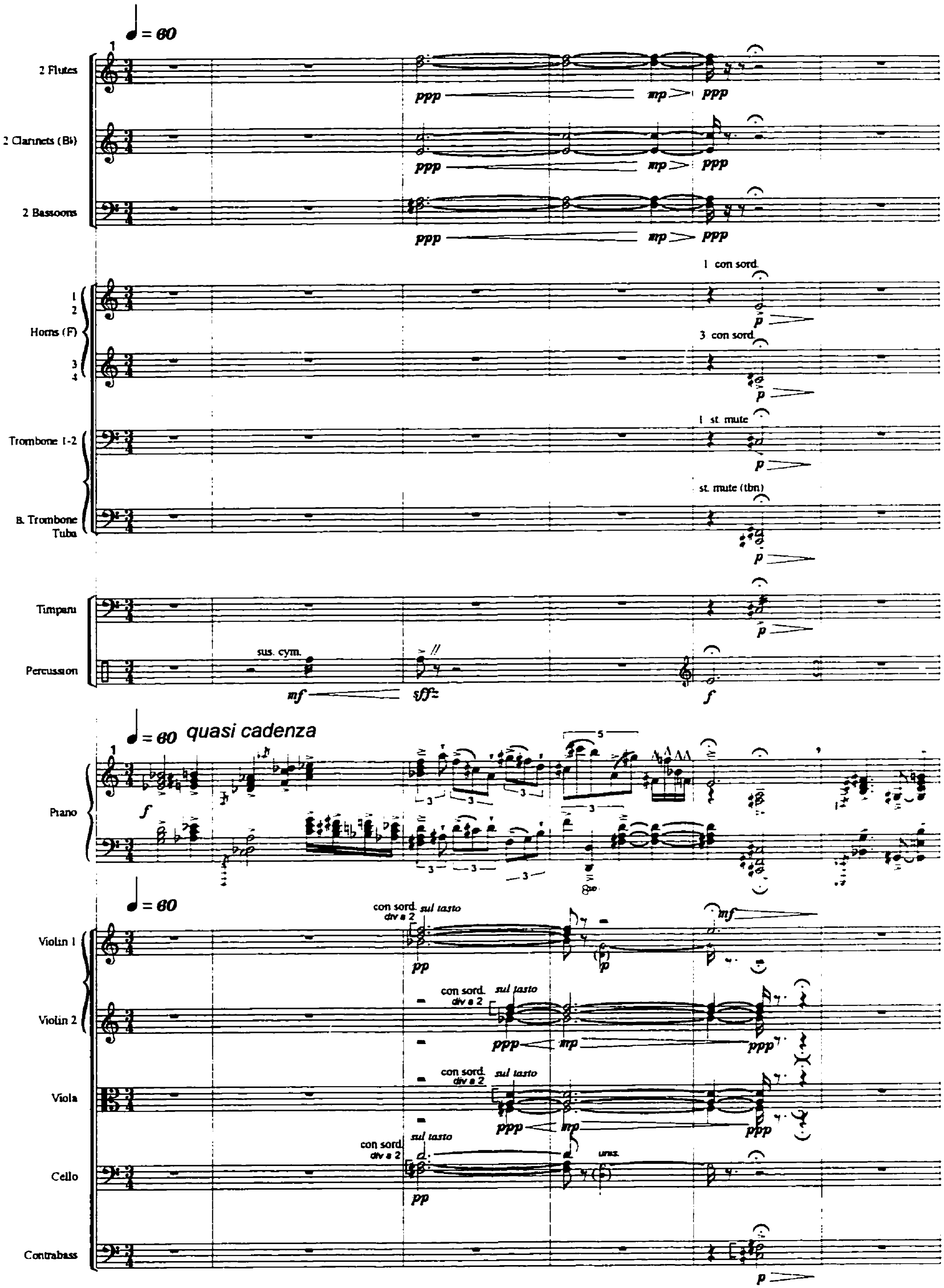

rit.
175
Meno Mosso
172
Fl.
Ob.
Cl. (B♭)
Bsn.
Hn. (F)
1
2
3
4
a 2
Tpt.
Tbn.
B.Tbn
Tuba
tuba
Timp.
Perc.
sus. cym.
Pno.
Vln. 1
Vln. 2
unis.
div a 2
Vla.
Vc.
Cb.
f
pp
p
mf

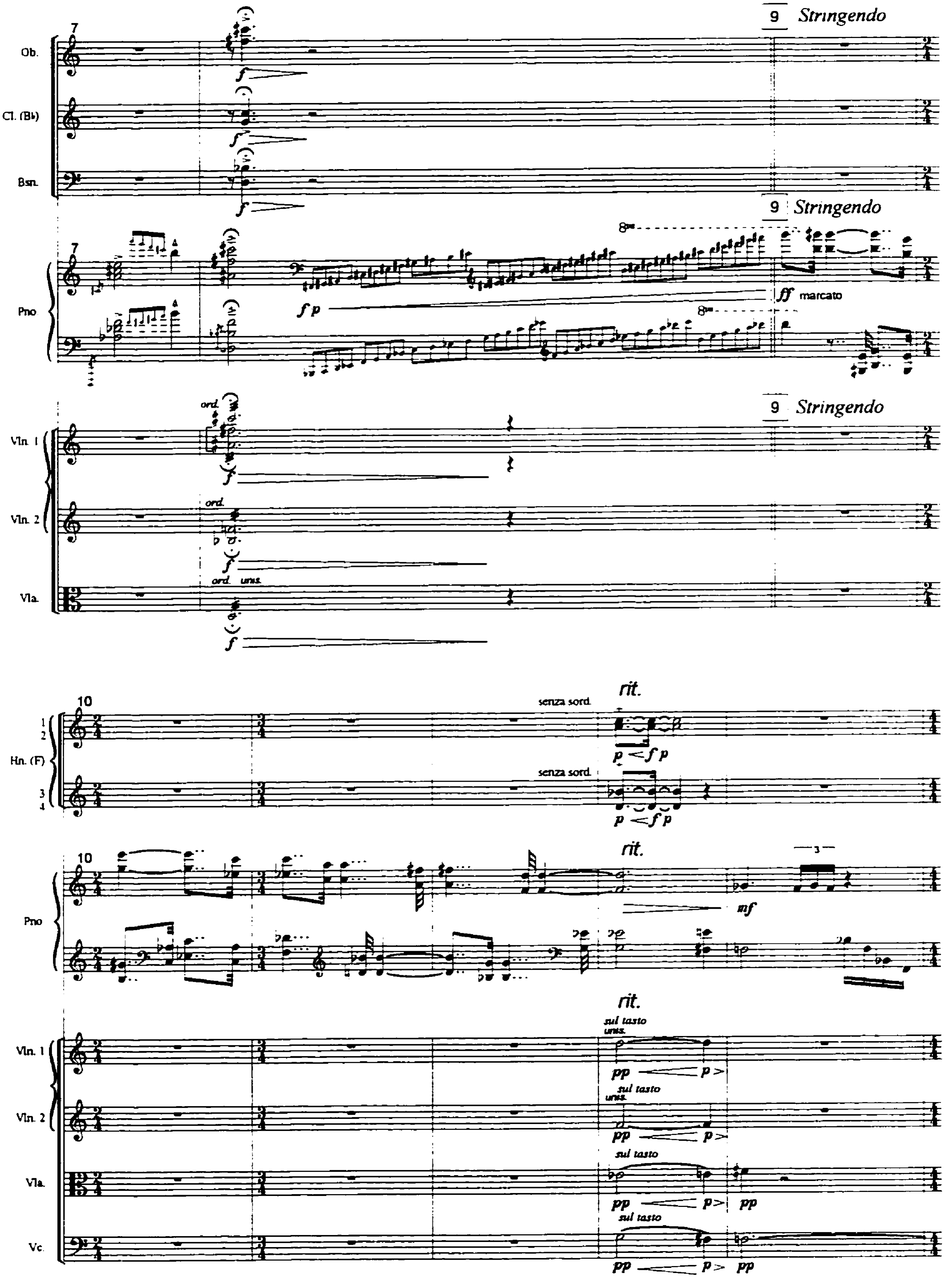

176
poco rit.
Fl.
Ob.
Cl. (B♭)
Bsn.
1
2
Hn. (F)
3
4
Tpt.
Tbn.
B.Tbn
Tuba
Timp.
176
poco rit.
Pno.
176
poco rit.
Vln. 1
Vln. 2
Vla.
Vc.
Cb.
ppp

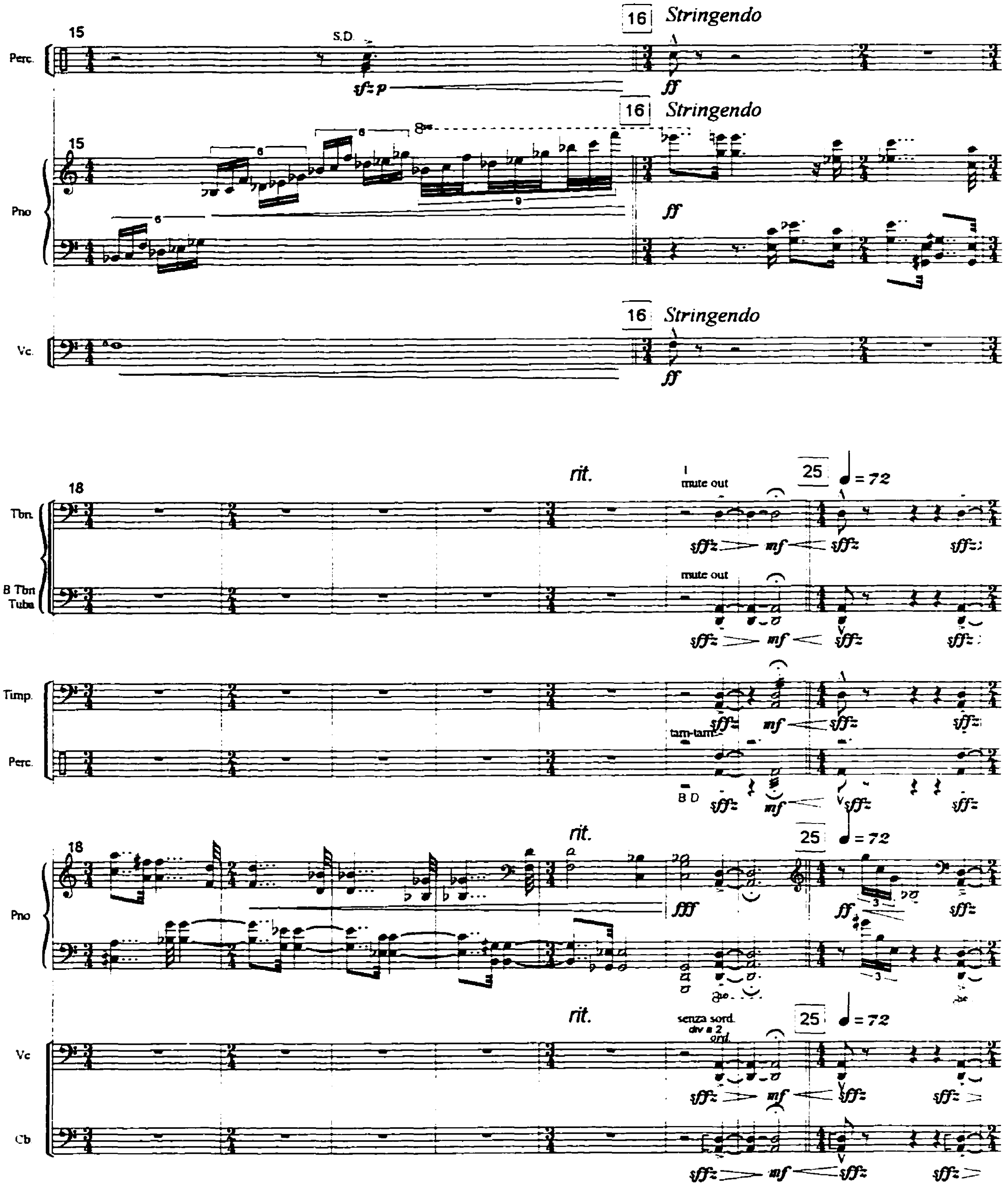

181
a Tempo
Cl. (B♭)
p
181
a Tempo
Pno
181
a Tempo
div a 2
Vln. 1
pp
2
Vln. 2
unis.
pp
Vla.
pp
Vc
pp
Cb
pp
185
Cl. (B♭)
185
Pno.
185
Vln. 1
p
2
Vln. 2
p
div a 2
Vla.
p
Vc.
p
Cb
p

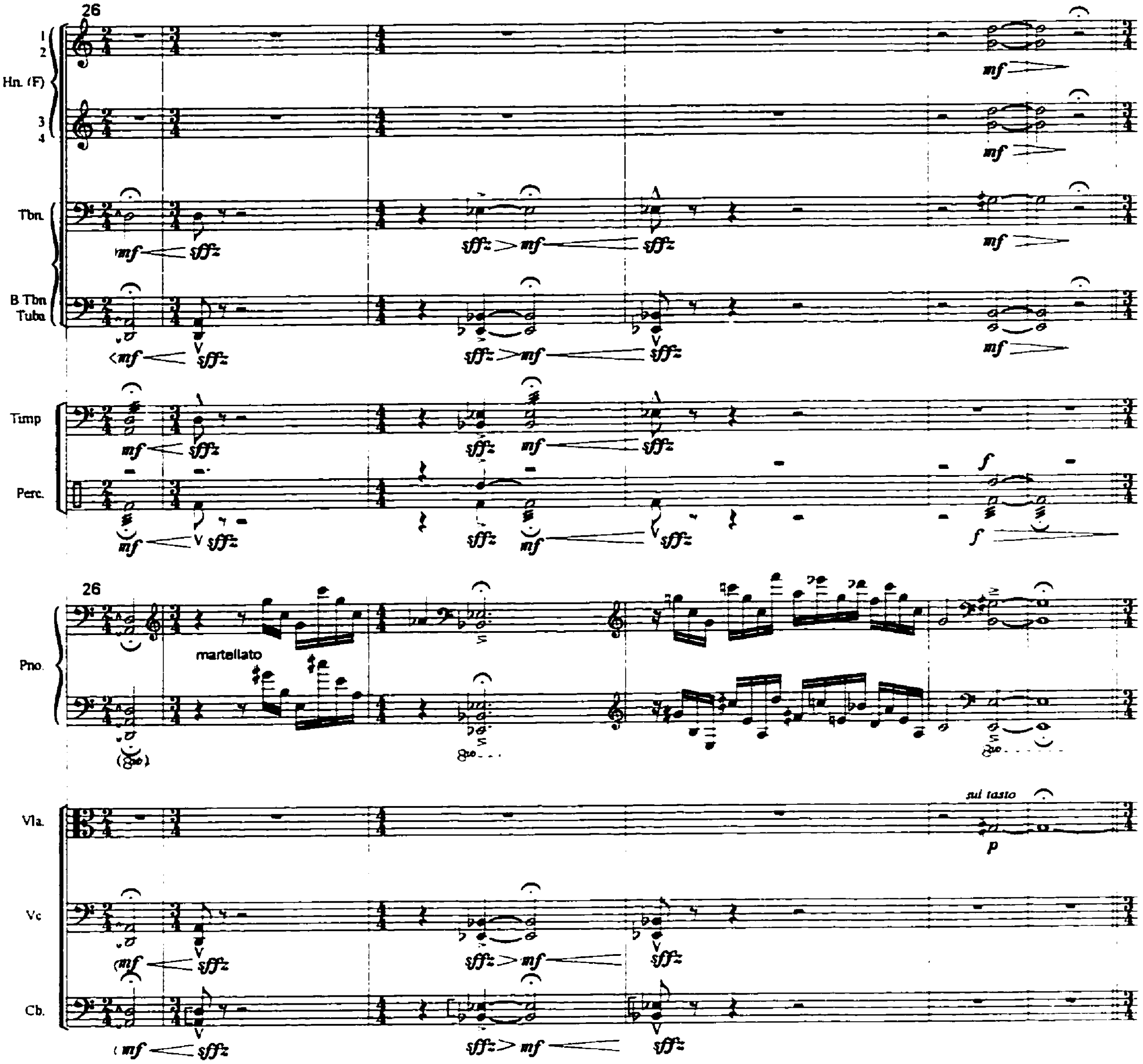

189
Cl. (B♭)
mp
Pno
p
7:6
Vln. 1
Vln. 2
2
Vla.
Vc
Cb
194
poco rit.
pp
ppp
pppp

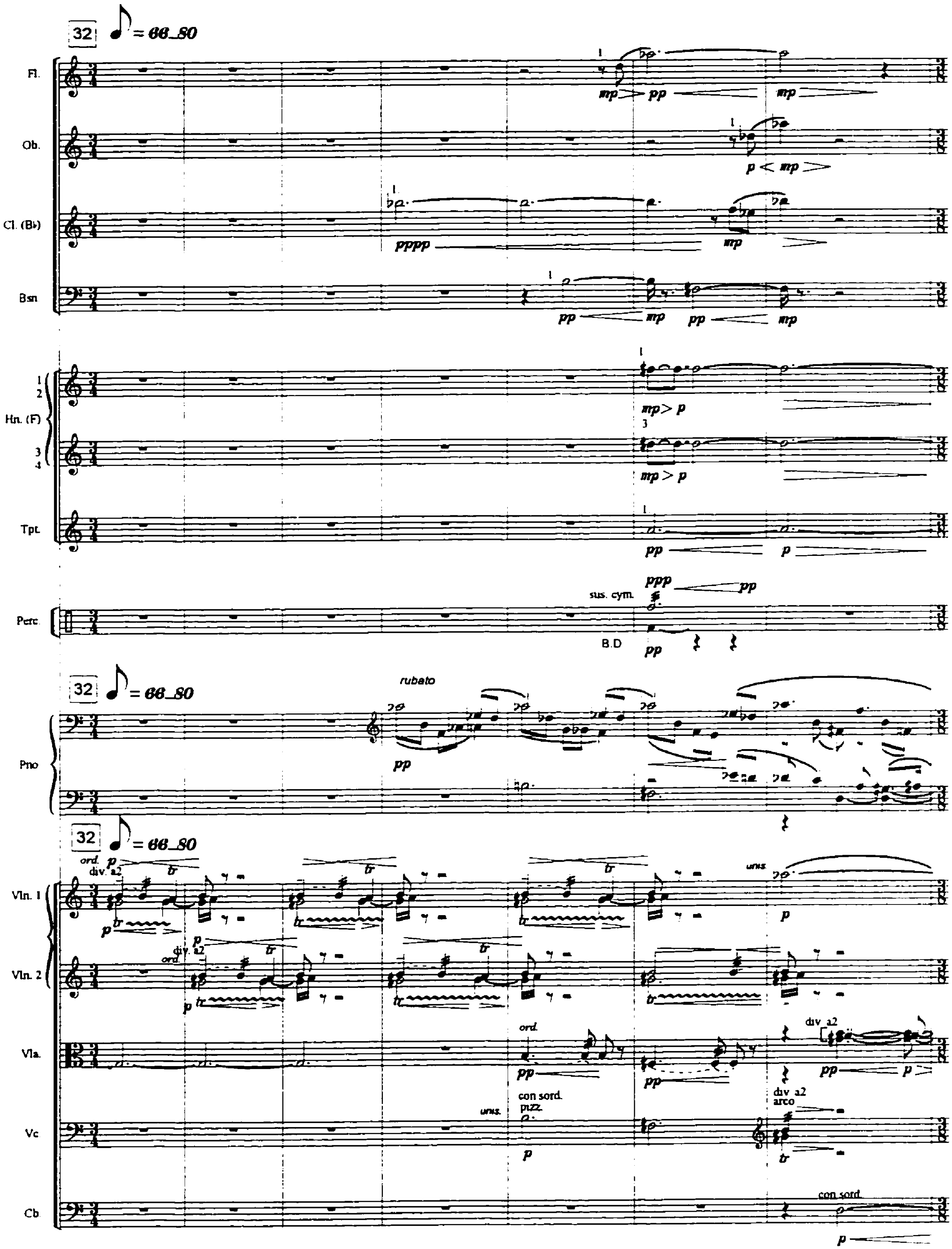
ii. Recitative and Aria

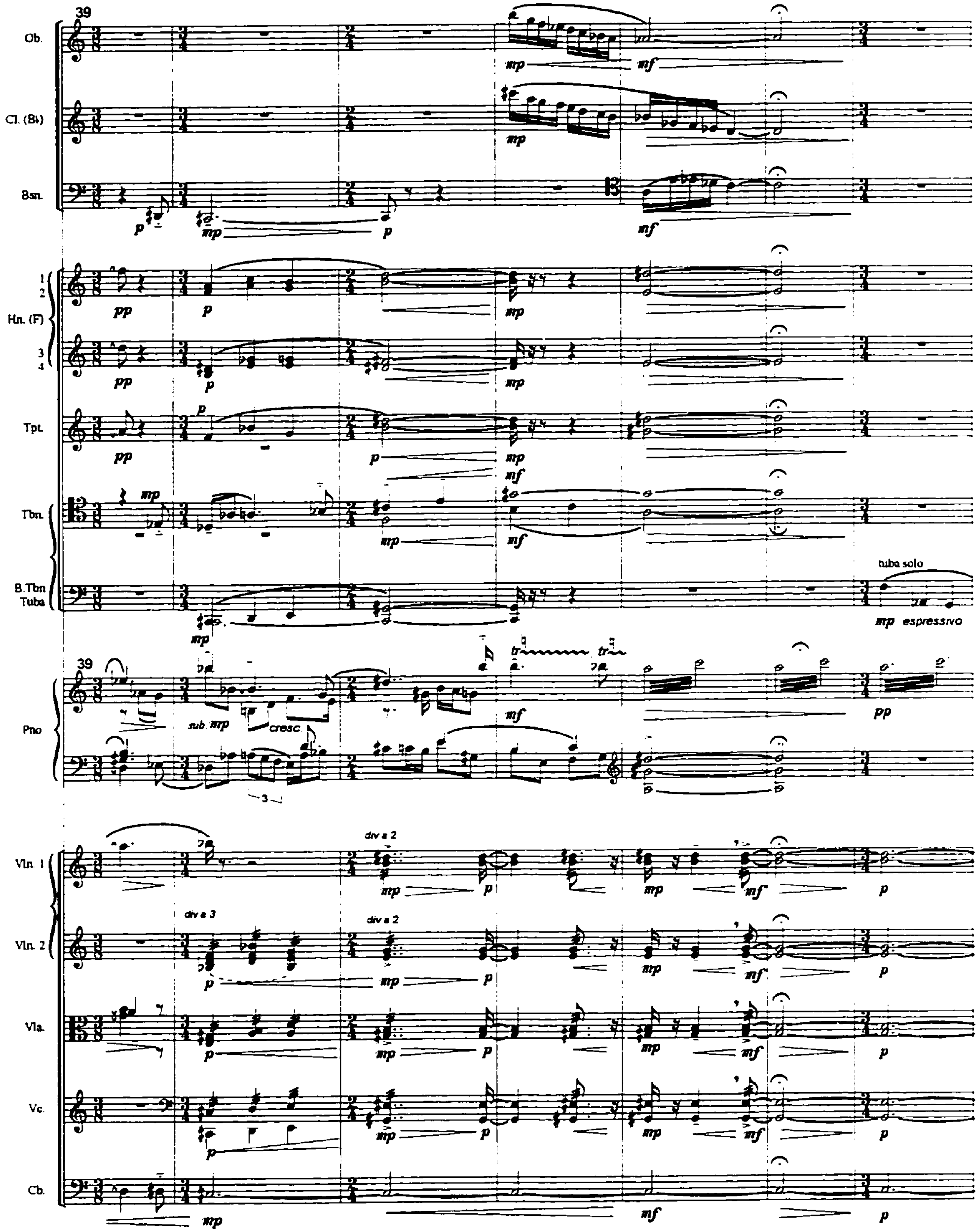

♩= 60
1
2 Flutes
2 Clarinets (B♭)
2 Bassoons
ppp
mp
ppp
Horns (F)
1
2
3
4
1 con sord.
3 con sord.
p
Trombone 1-2
1 st. mute
B. Trombone Tuba
st. mute (tbn)
Timpani
Percussion
sus. cym.
mf
sfz
f
♩= 60 quasi cadenza
Piano
f
5
3
8vb
♩= 60
Violin 1
Violin 2
Viola
Cello
Contrabass
con sord. div a 2
sul tasto
pp
mp
mf
unis.

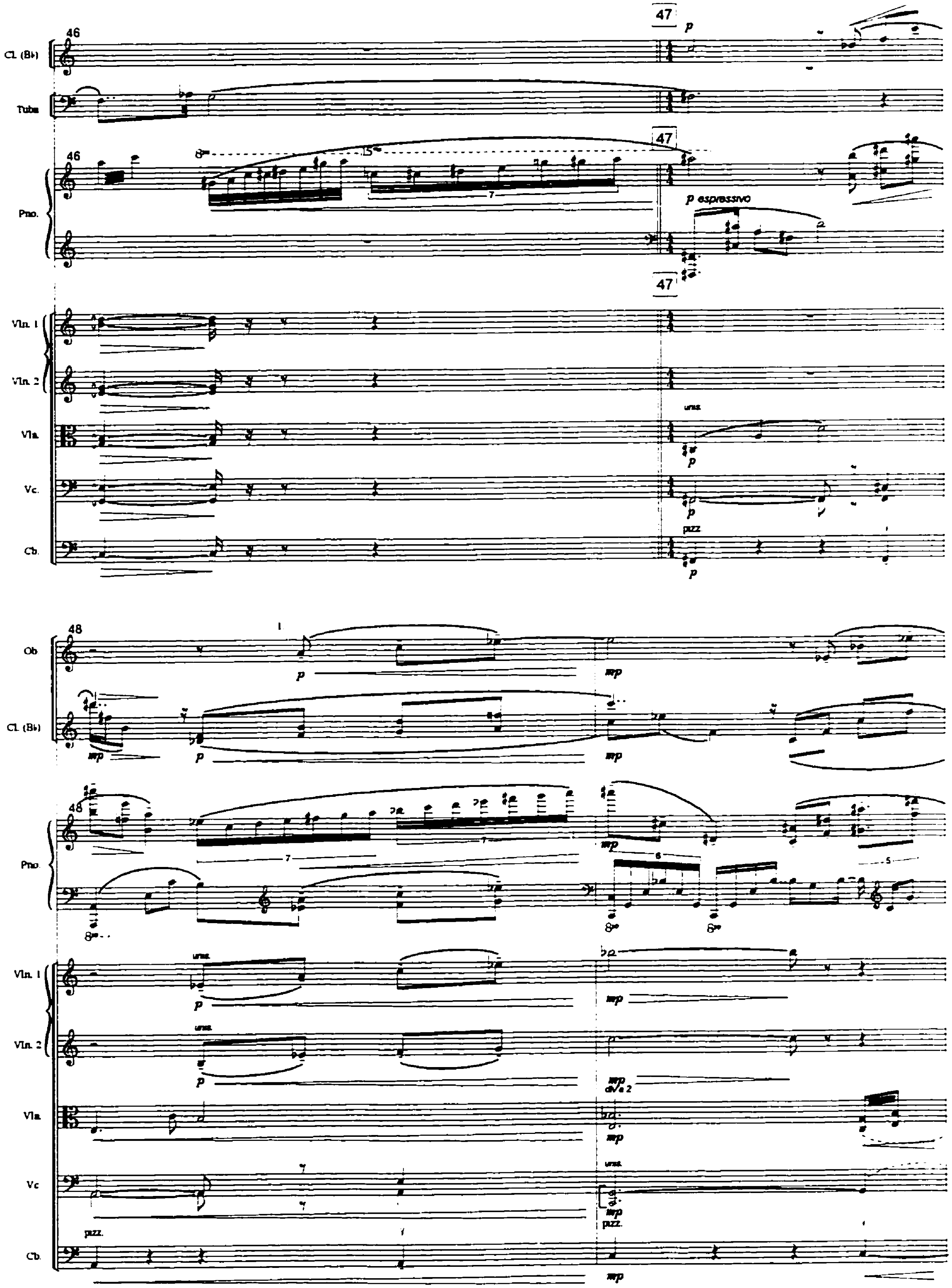

7
9 Stringendo
Ob.
Cl. (B♭)
Bsn.
f
Pno
fp
ff marcato
8va
ord.
ord. unis.
Vln. 1
Vln. 2
Vla.
10
senza sord.
rit.
Hn. (F) 1 2 3 4
p < f p
mf
3
sul tasto unis.
sul tasto
pp < p >
pp
Vc.

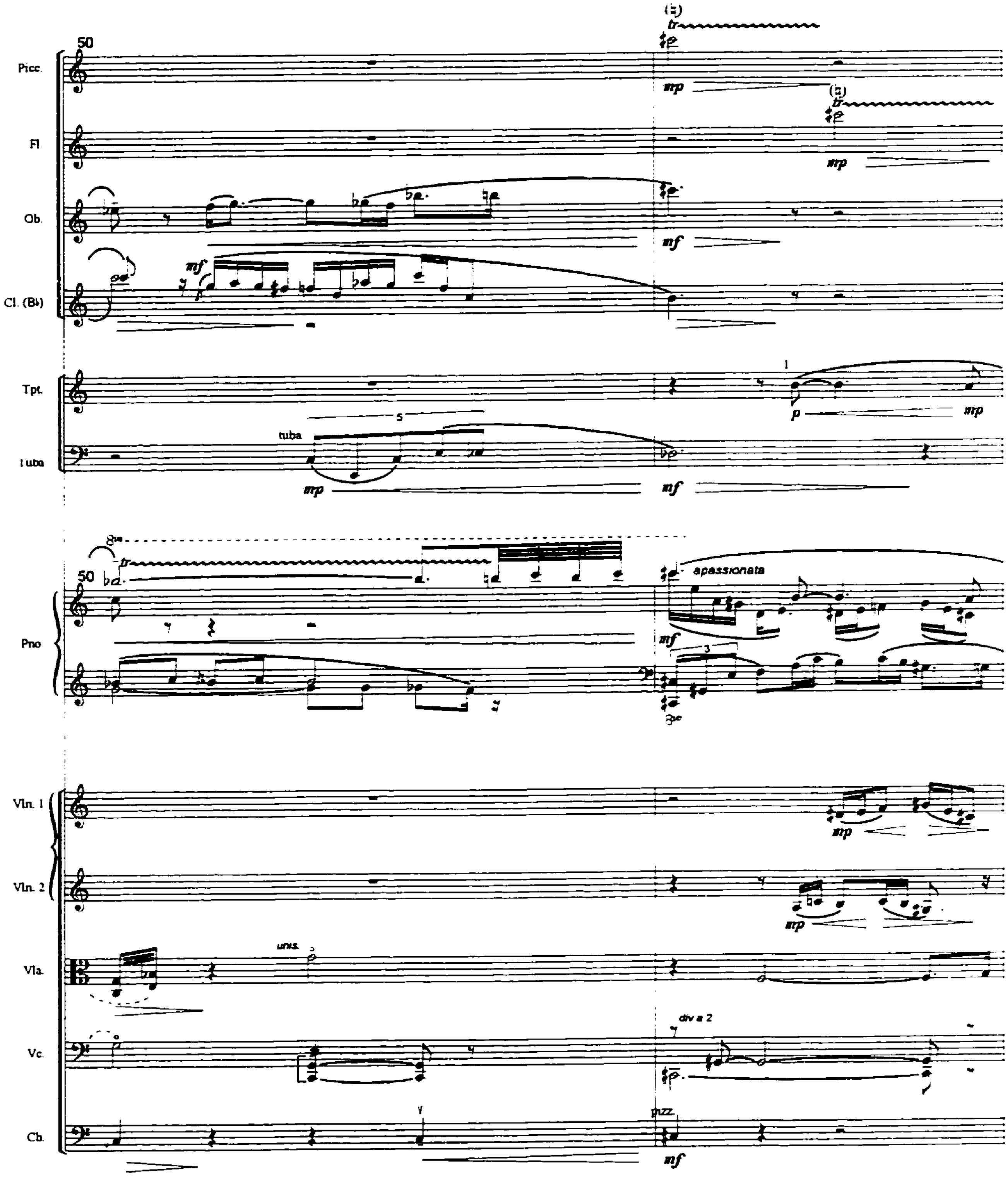

15
S.D.
sf p
16
Stringendo
ff
Perc.
Pno
8va
6
9
Vc.
18
rit.
I
mute out
25
♩= 72
Tbn.
B Tbn
Tuba
sffz
mf
Timp.
tam-tam
B D
Perc.
fff
senza sord.
div a 2
ord.
Vc
Cb
3

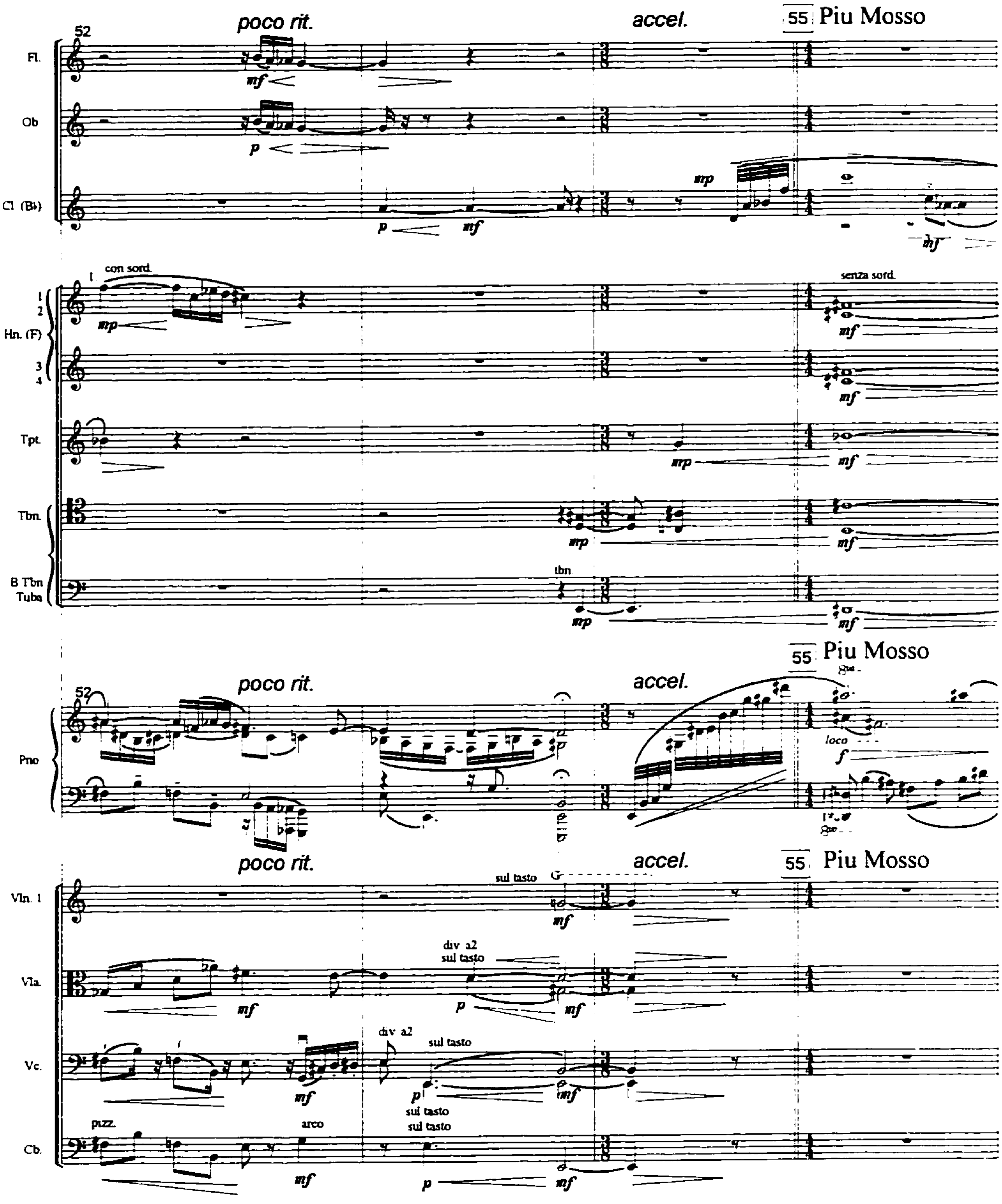

26
Hn. (F)
1
2
3
4
Tbn.
B Tbn
Tuba
Timp
Perc.
Pno.
martellato
Vla.
sul tasto
Vc
Cb.
mf
sffz
f
p

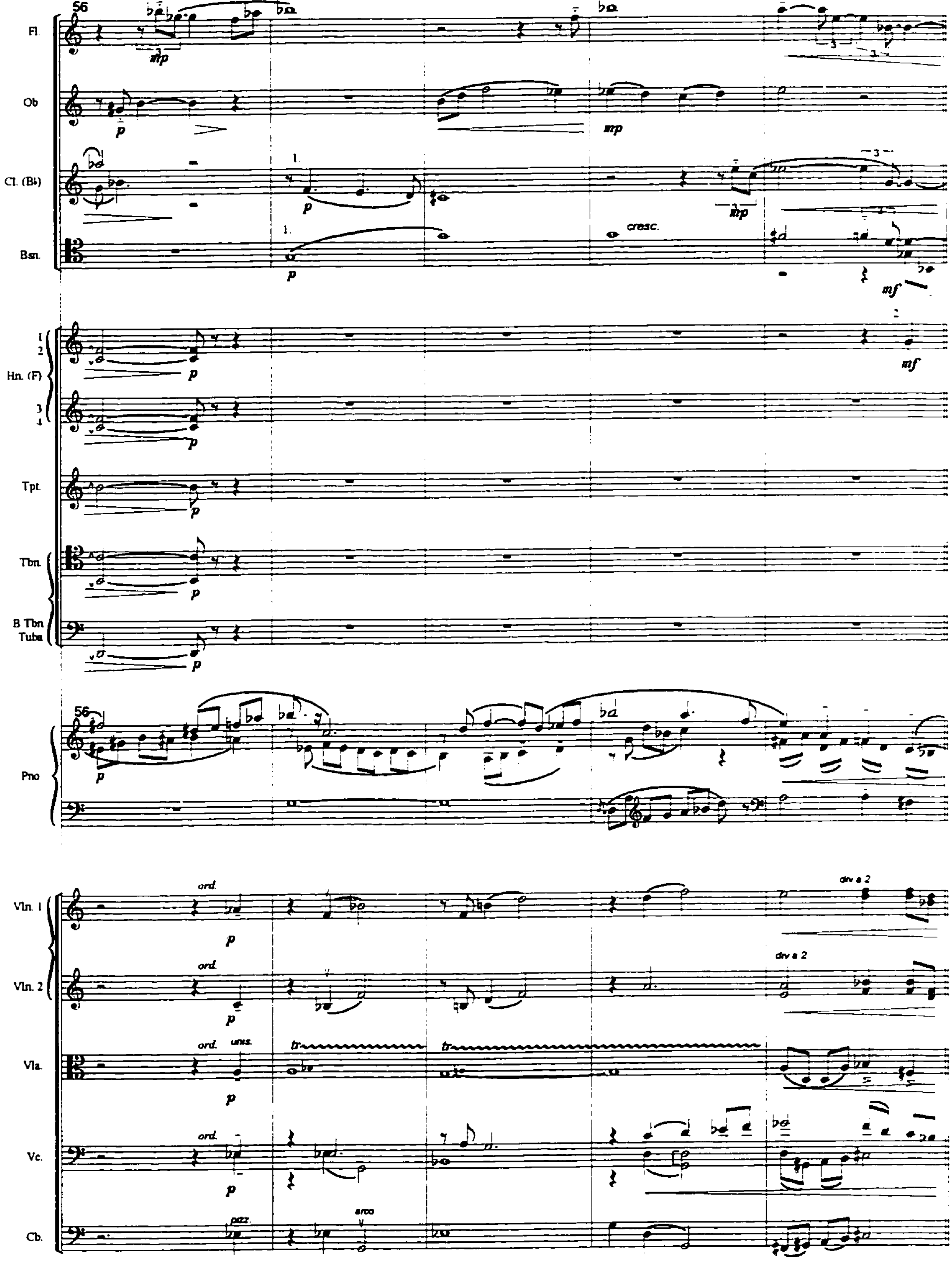

32
♪ = 66–80
Fl.
Ob.
Cl. (B♭)
Bsn
Hn. (F)
1
2
3
4
Tpt.
Perc.
Pno
Vln. 1
Vln. 2
Vla.
Vc.
Cb.
mp
pp
p
pppp
sus. cym.
ppp
B.D
rubato
ord.
div. a2
tr
unis.
con sord.
pizz.
arco
div a2

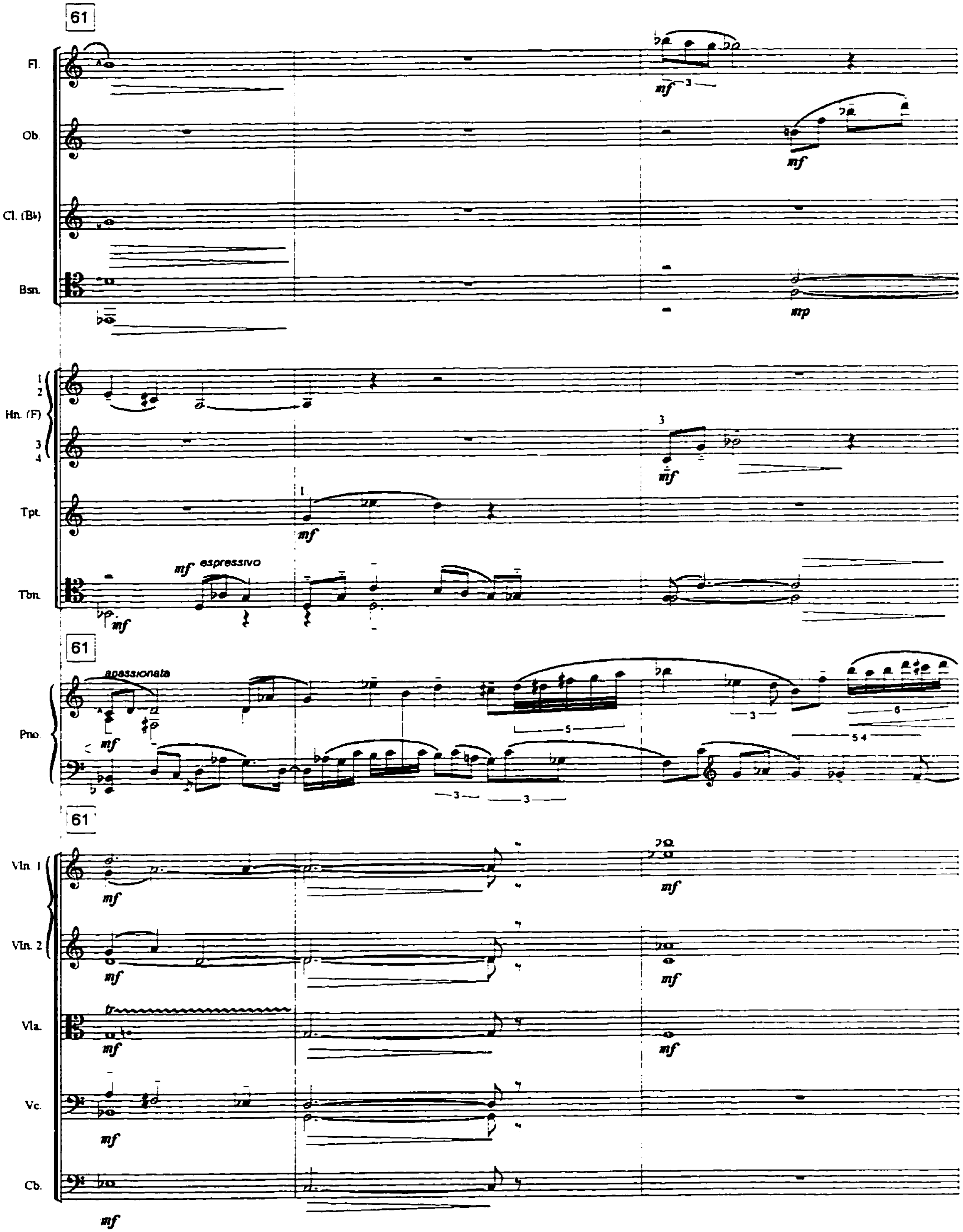

39
Ob.
Cl. (B♭)
Bsn.
Hn. (F)
1
2
3
4
Tpt.
Tbn.
B.Tbn
Tuba
tuba solo
mp espressivo
39
Pno
sub. mp
cresc.
3
tr
Vln. 1
Vln. 2
Vla.
Vc.
Cb.
div a 2
div a 3
pp
p
mp
mf

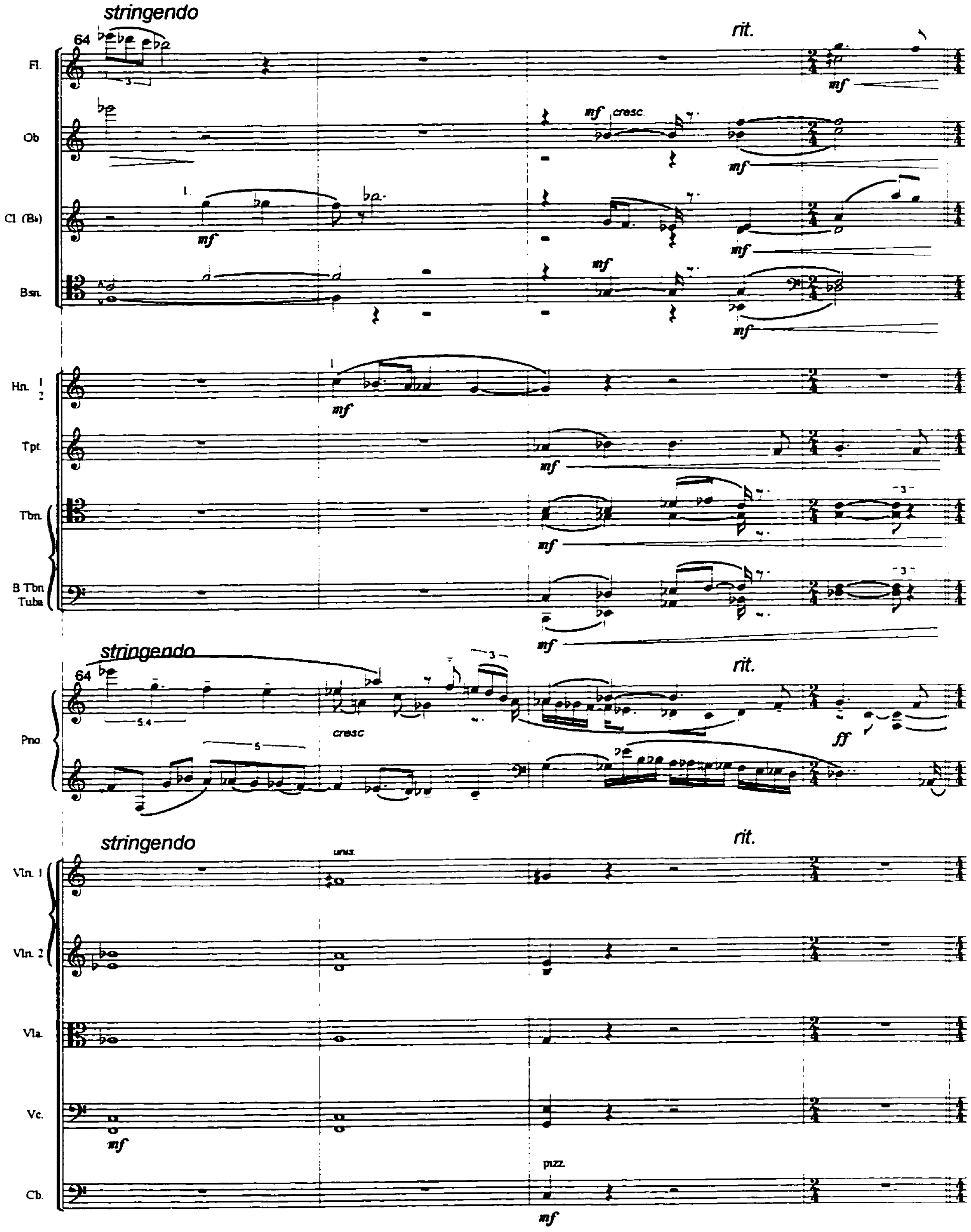

46
Cl. (B♭)
Tuba
Pno.
Vln. 1
Vln. 2
Vla.
Vc.
Cb.
47
p
p espressivo
unis.
pizz.
7
15
8
48
Ob.
Cl. (B♭)
Pno.
Vln. 1
Vln. 2
Vla.
Vc
Cb.
mp
p
6
5
div. a 2
unis.
pizz.

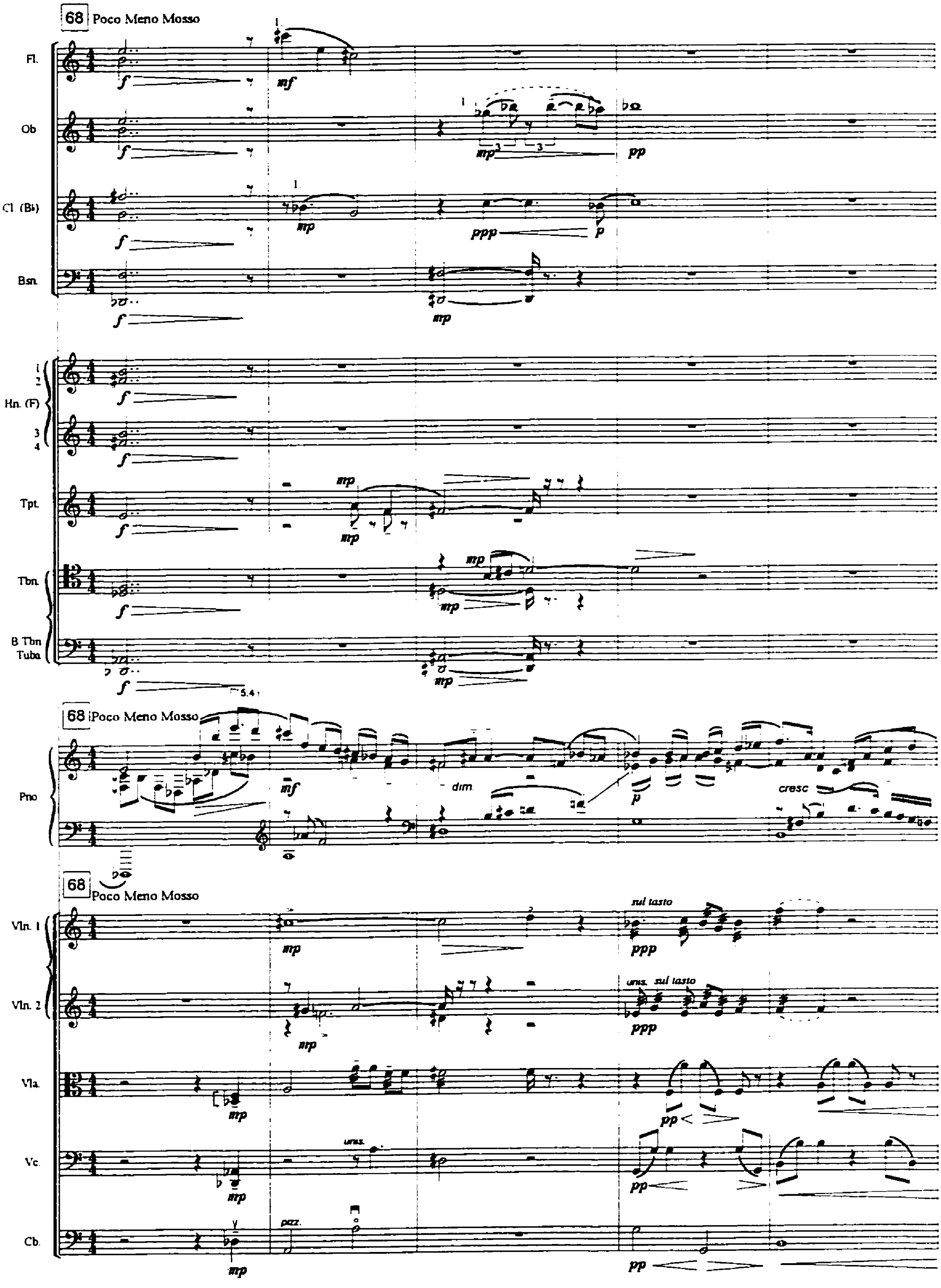

50
Picc.
Fl.
Ob.
Cl. (B♭)
Tpt.
Tuba
tuba
5
1
tr
(♮)
mp
mf
p
50
8va
apassionata
3
Pno
Vln. 1
Vln. 2
Vla.
unis.
Vc.
div a 2
Cb.
pizz.

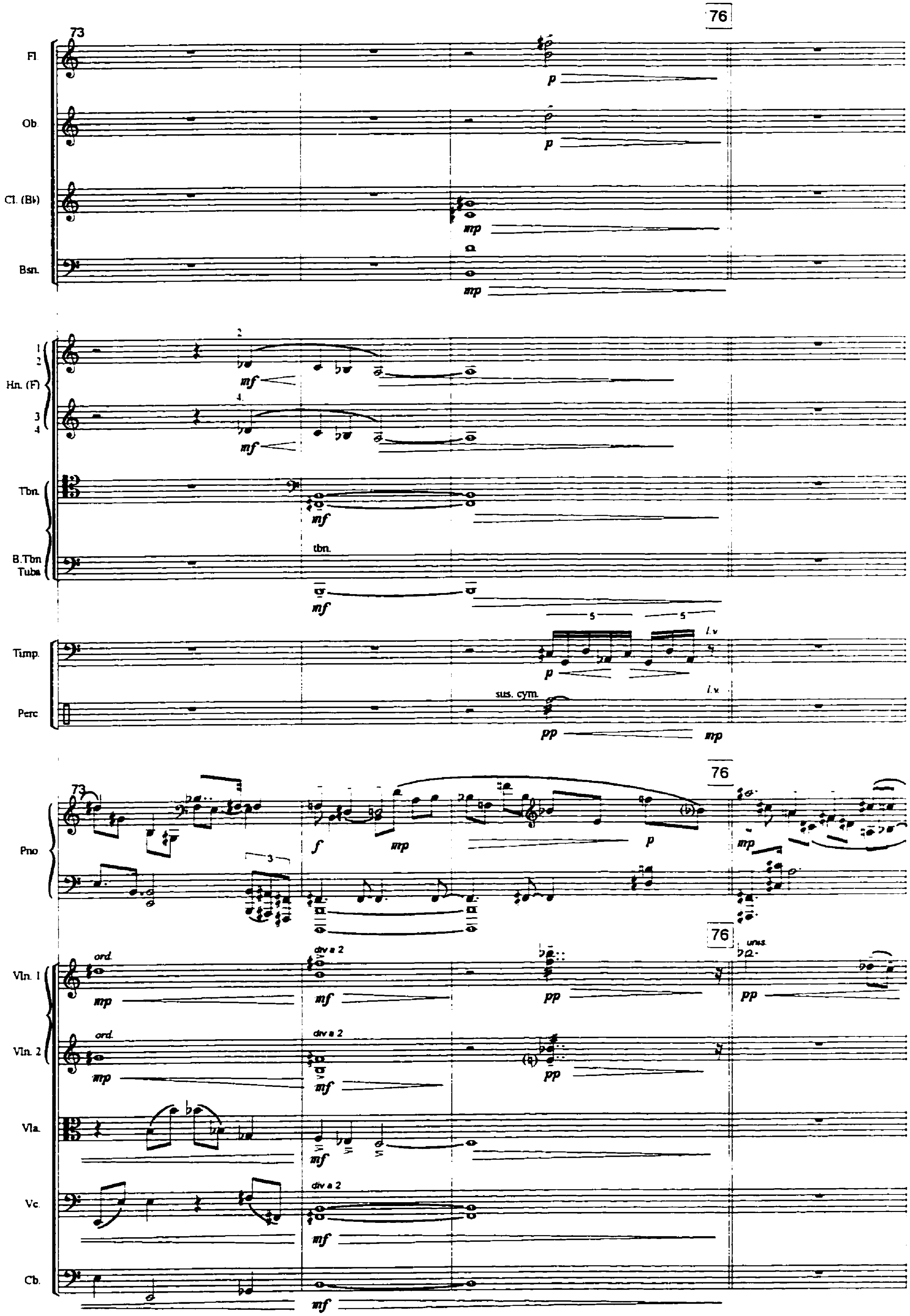

52
poco rit.
accel.
55 Piu Mosso
Fl.
Ob
Cl (B♭)
Hn. (F)
1
2
3
4
con sord.
senza sord.
Tpt.
Tbn.
B Tbn
Tuba
tbn
Pno
8va
loco
Vln. I
Vla.
Vc.
Cb.
sul tasto
div a2
pizz.
arco
mf
p
mp
f

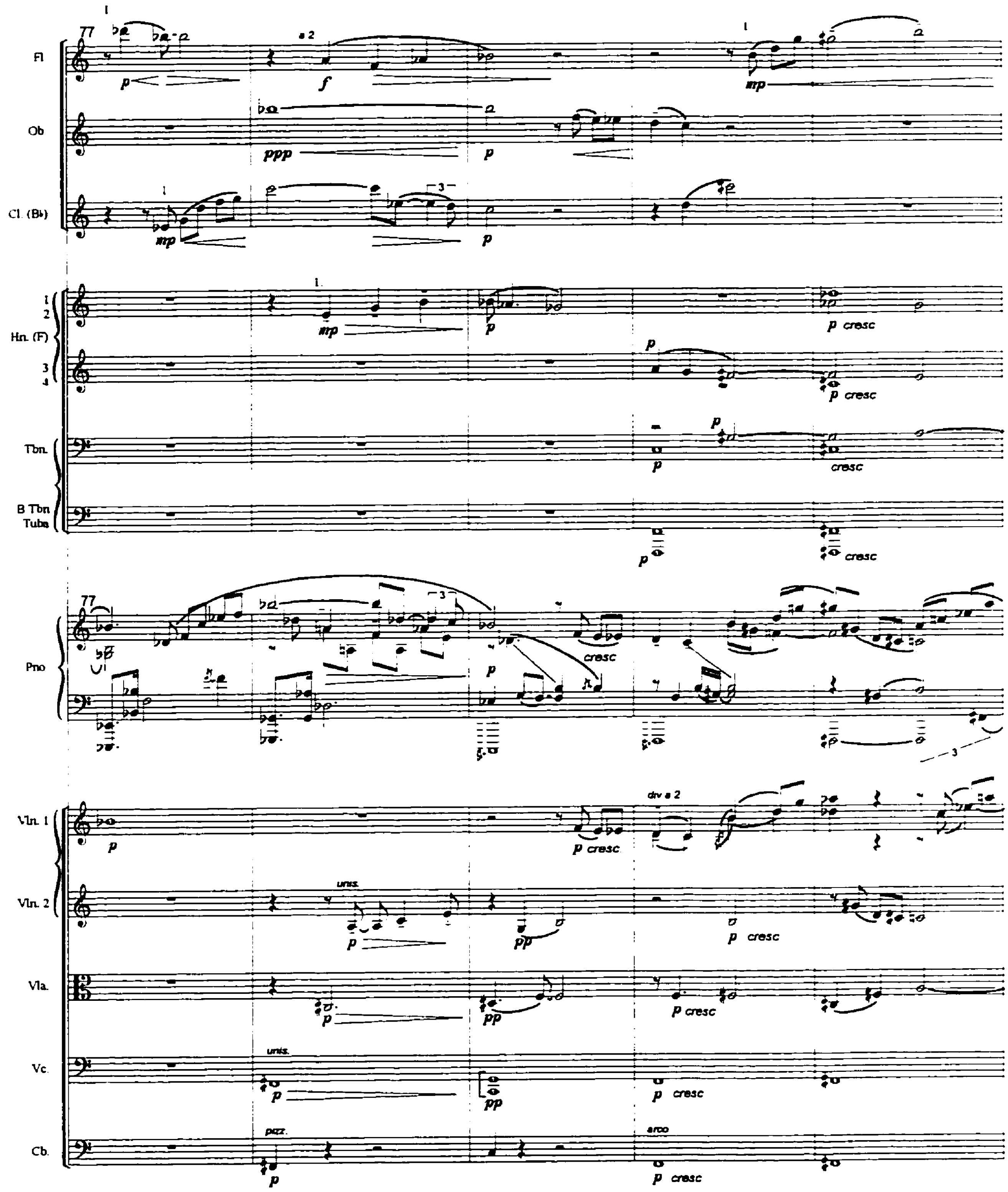

56
Fl.
Ob
Cl. (B♭)
Bsn.
Hn. (F)
1
2
3
4
Tpt.
Tbn.
B Tbn
Tuba
Pno
Vln. 1
Vln. 2
Vla.
Vc.
Cb.
mp
p
cresc.
mf
1.
ord.
unis.
pizz.
arco
div a 2
tr

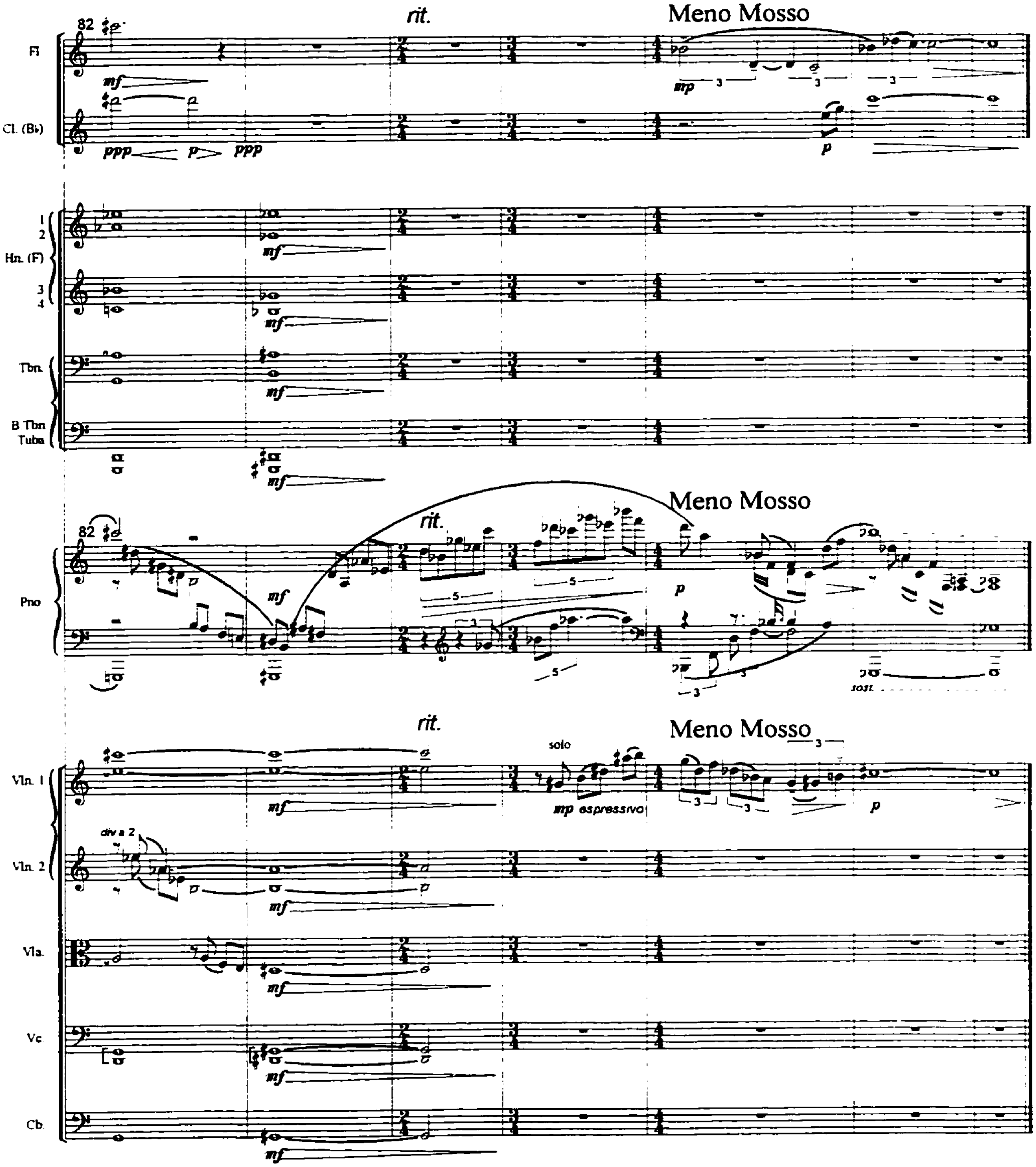

61
Fl.
Ob.
Cl. (B♭)
Bsn.
Hn. (F)
1
2
3
4
Tpt.
Tbn.
mf
espressivo
mp
61
appassionata
Pno.
61
Vln. 1
Vln. 2
Vla.
Vc.
Cb.
tr


stringendo
rit.
64
Fl.
Ob
Cl. (B♭)
Bsn.
Hn. 1 2
Tpt.
Tbn.
B Tbn Tuba
Pno
Vln. 1
Vln. 2
Vla.
Vc.
Cb.
mf
cresc.
ff
unis.
pizz.
5:4
5
3

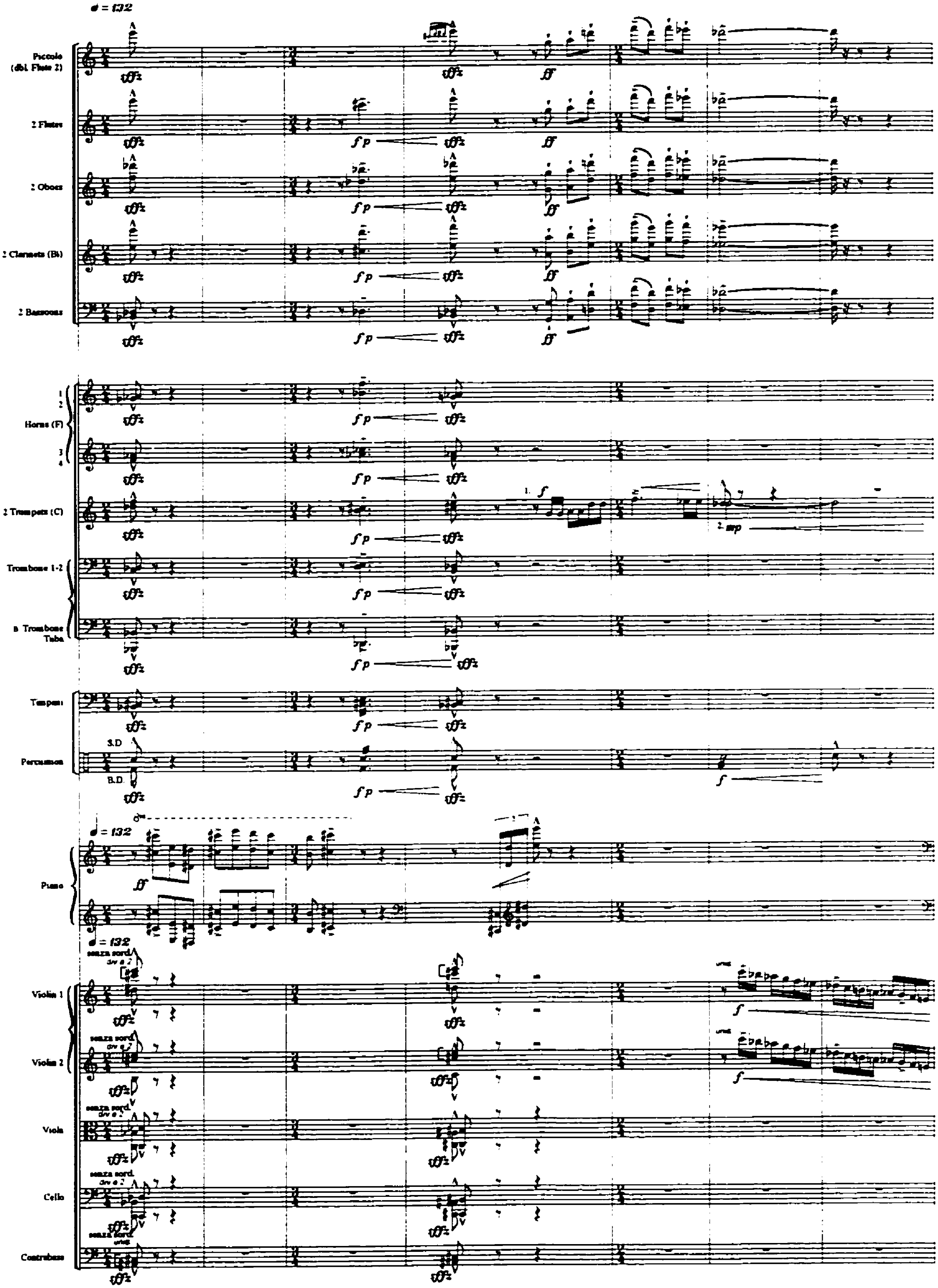

68
Poco Meno Mosso
Fl.
Ob
Cl. (B♭)
Bsn.
Hn. (F)
1
2
3
4
Tpt.
Tbn.
B Tbn
Tuba
Pno
Vln. 1
Vln. 2
Vla.
Vc.
Cb.
f
mf
mp
pp
ppp
p
dim.
cresc
sul tasto
unis.
pizz.
5.4


73
76
Fl.
Ob.
Cl. (B♭)
Bsn.
Hn. (F)
1
2
3
4
Tbn.
B.Tbn
Tuba
tbn.
Timp.
Perc
sus. cym.
l.v.
5
Pno
3
Vln. 1
Vln. 2
Vla.
Vc.
Cb.
ord.
div a 2
unis.
p
mp
mf
pp
f

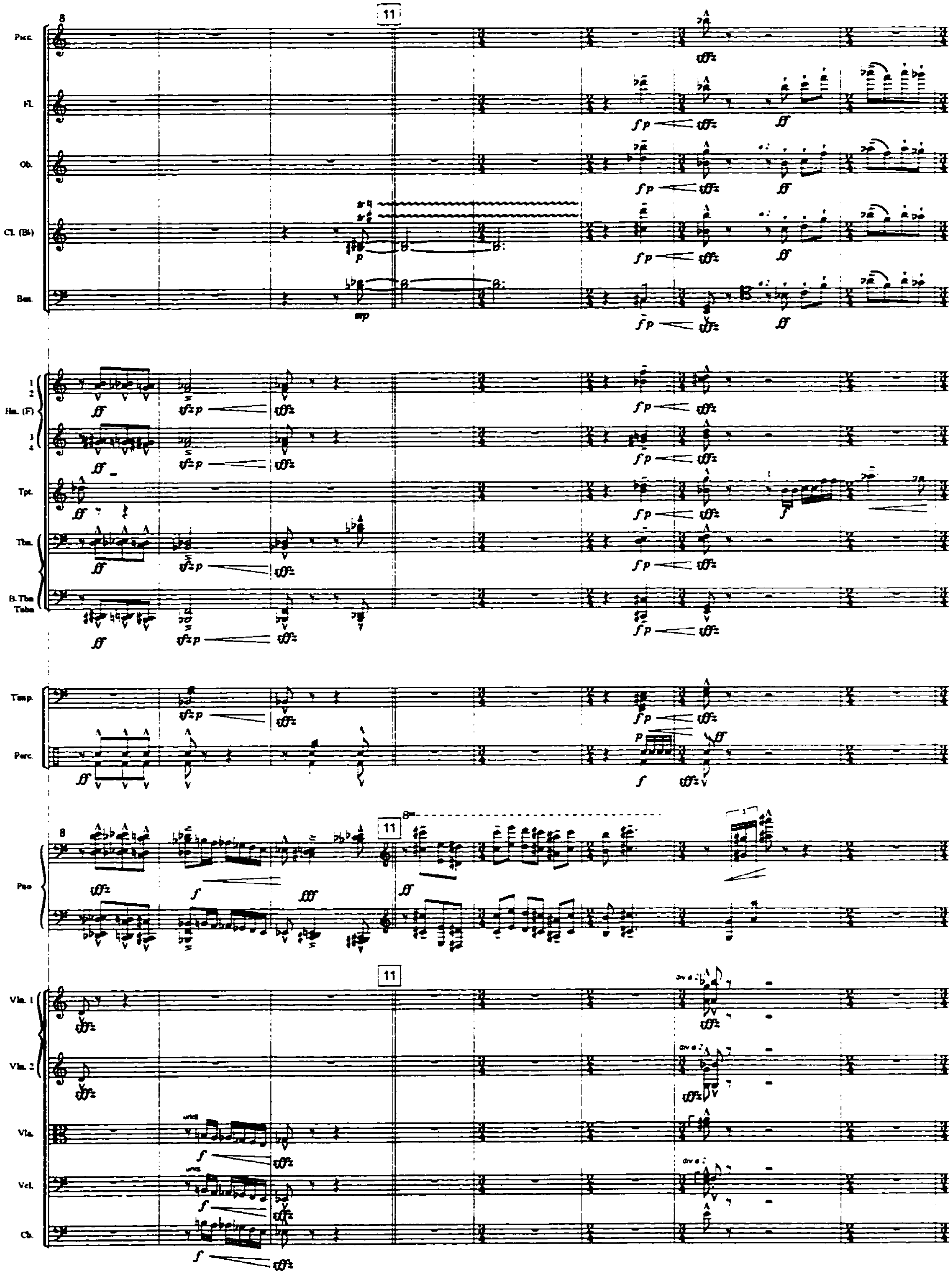

77
Fl
Ob
Cl. (B♭)
Hn. (F)
1
2
3
4
Tbn.
B Tbn
Tuba
Pno
Vln. 1
Vln. 2
Vla.
Vc.
Cb.
a 2
1.
3
div a 2
unis.
pizz.
arco
p
f
mp
ppp
pp
p cresc
cresc


rit.
Meno Mosso
82
Fl
mf
mp
3
Cl. (B♭)
ppp
p
ppp
p
1
2
Hn. (F)
3
4
mf
mf
Tbn.
mf
B Tbn
Tuba
mf
82
rit.
Meno Mosso
Pno
mf
5
5
3
5
p
3
3
sost.
rit.
Meno Mosso
solo
Vln. 1
mf
mp espressivo
3
3
p
div a 2
Vln. 2
mf
p
Vla.
mf
Vc
mf
Cb.
mf

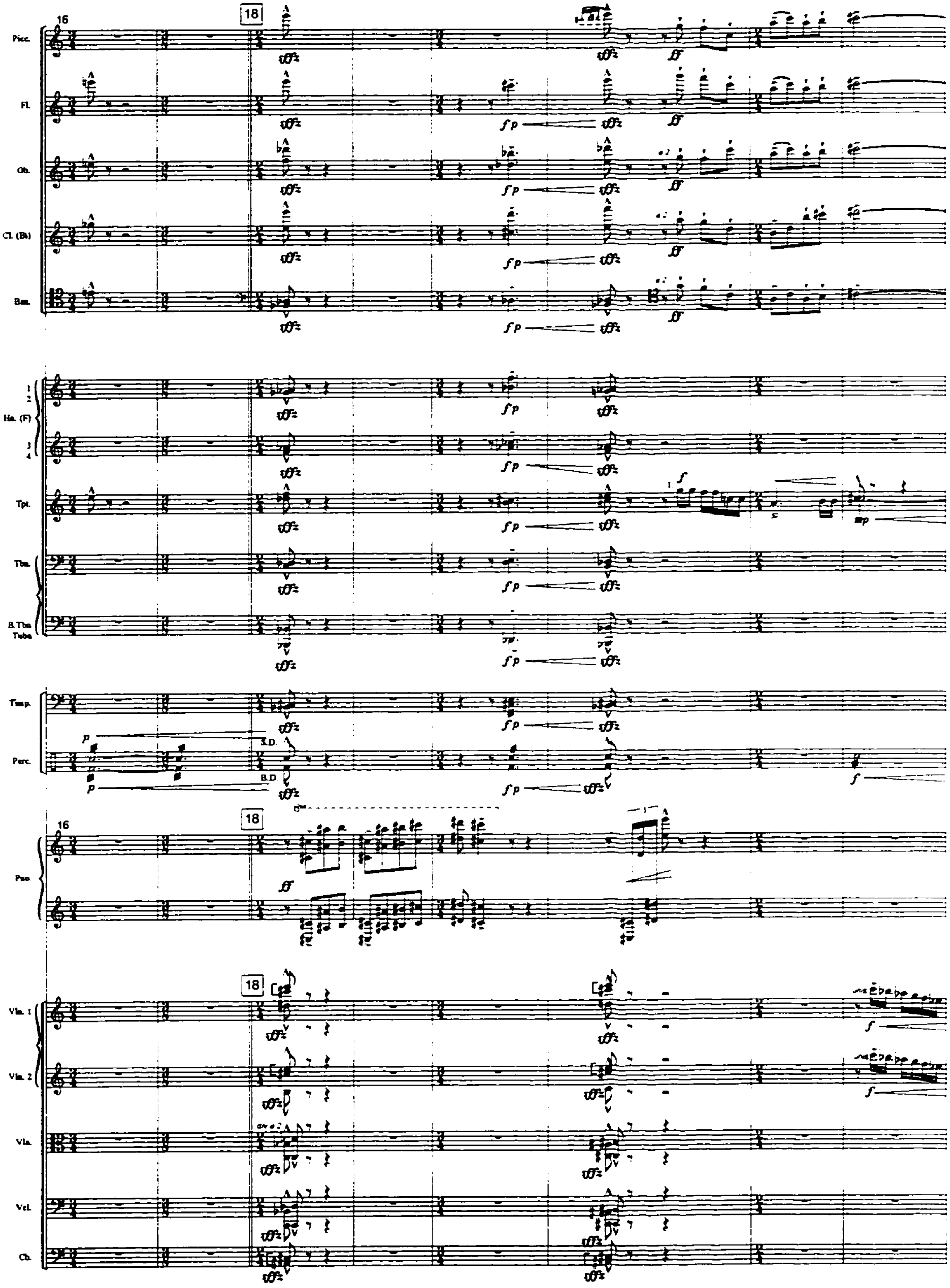
iii. Rondo

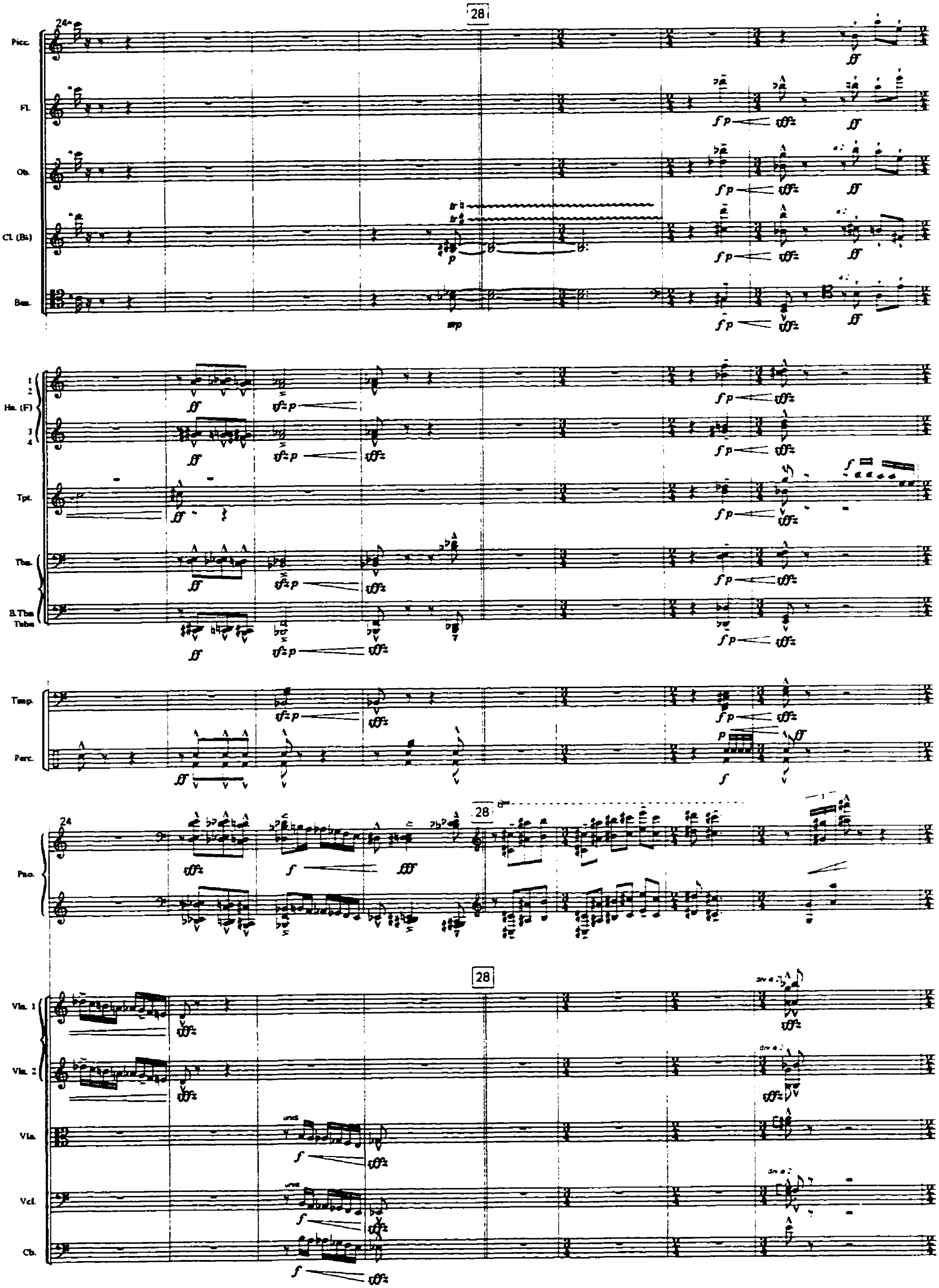


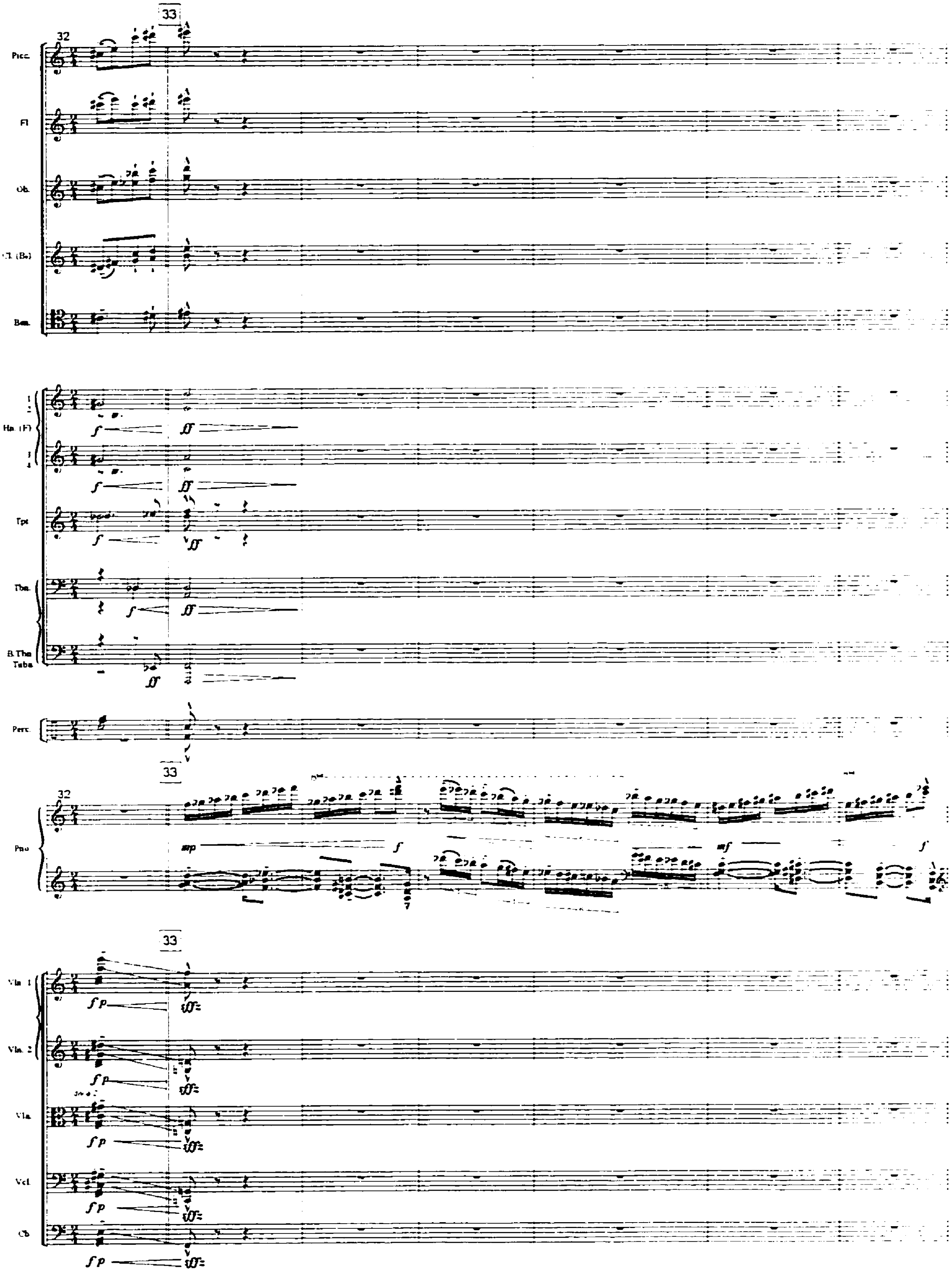
♩ = 132
Piccolo (dbl. Flute 2)
2 Flutes
2 Oboes
2 Clarinets (B♭)
2 Bassoons
Horns (F) 1 2 3 4
2 Trumpets (C)
Trombone 1-2
B. Trombone Tuba
Timpani
Percussion
S.D.
B.D.
Piano
Violin 1
Violin 2
Viola
Cello
Contrabass
senza sord.
div a 2
unis.
sffz
ff
fp
f
mp
1.
2.
8va

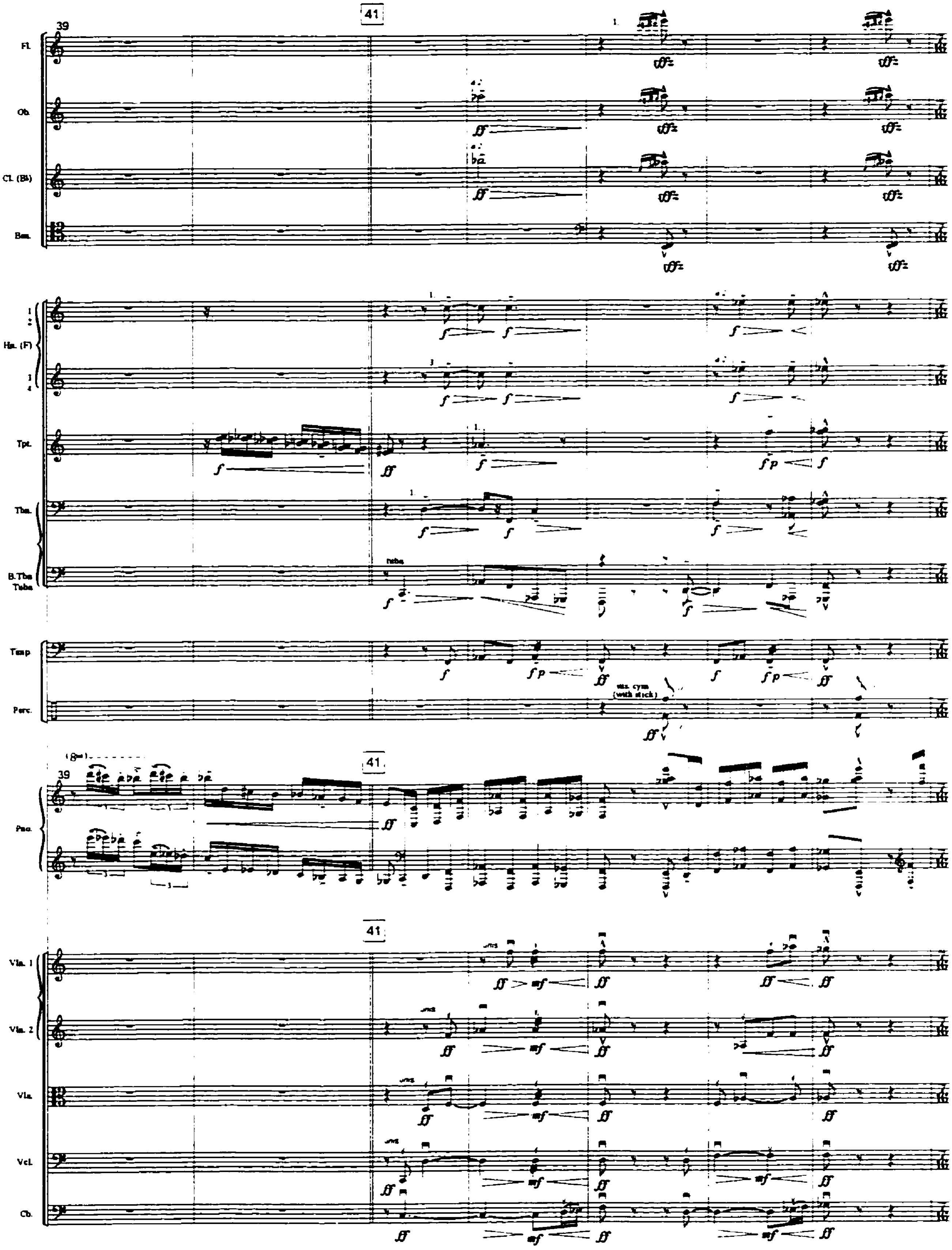


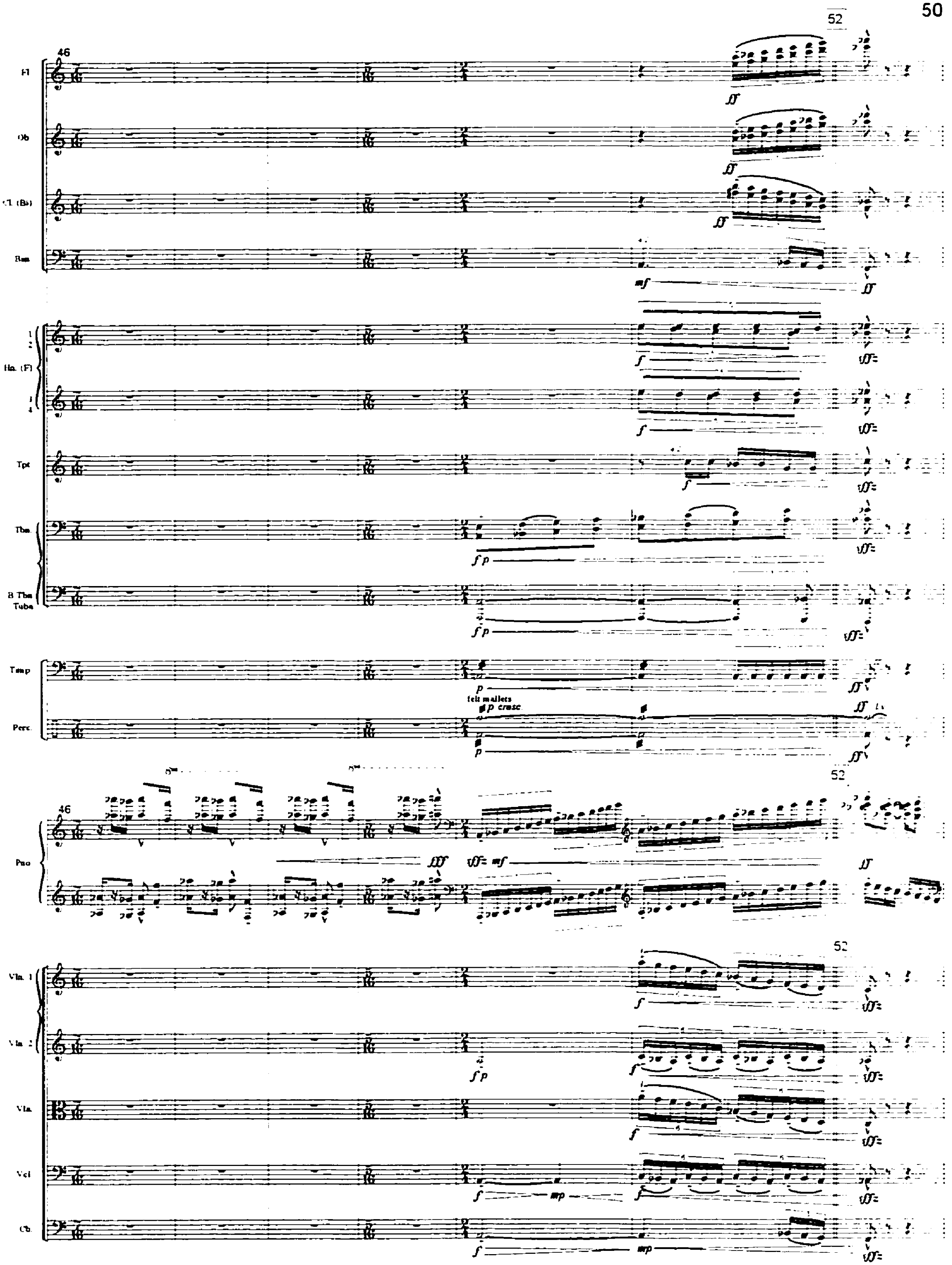
8
11
Picc.
Fl.
Ob.
Cl. (B♭)
Bsn.
Hn. (F)
1
2
3
4
Tpt.
Tbn.
B. Tbn
Tuba
Timp.
Perc.
Pno
Vln. 1
Vln. 2
Vla.
Vcl.
Cb.
ff
fp
fff
sffz
sfz p
p
mp
f
div a 2
unis.
tr

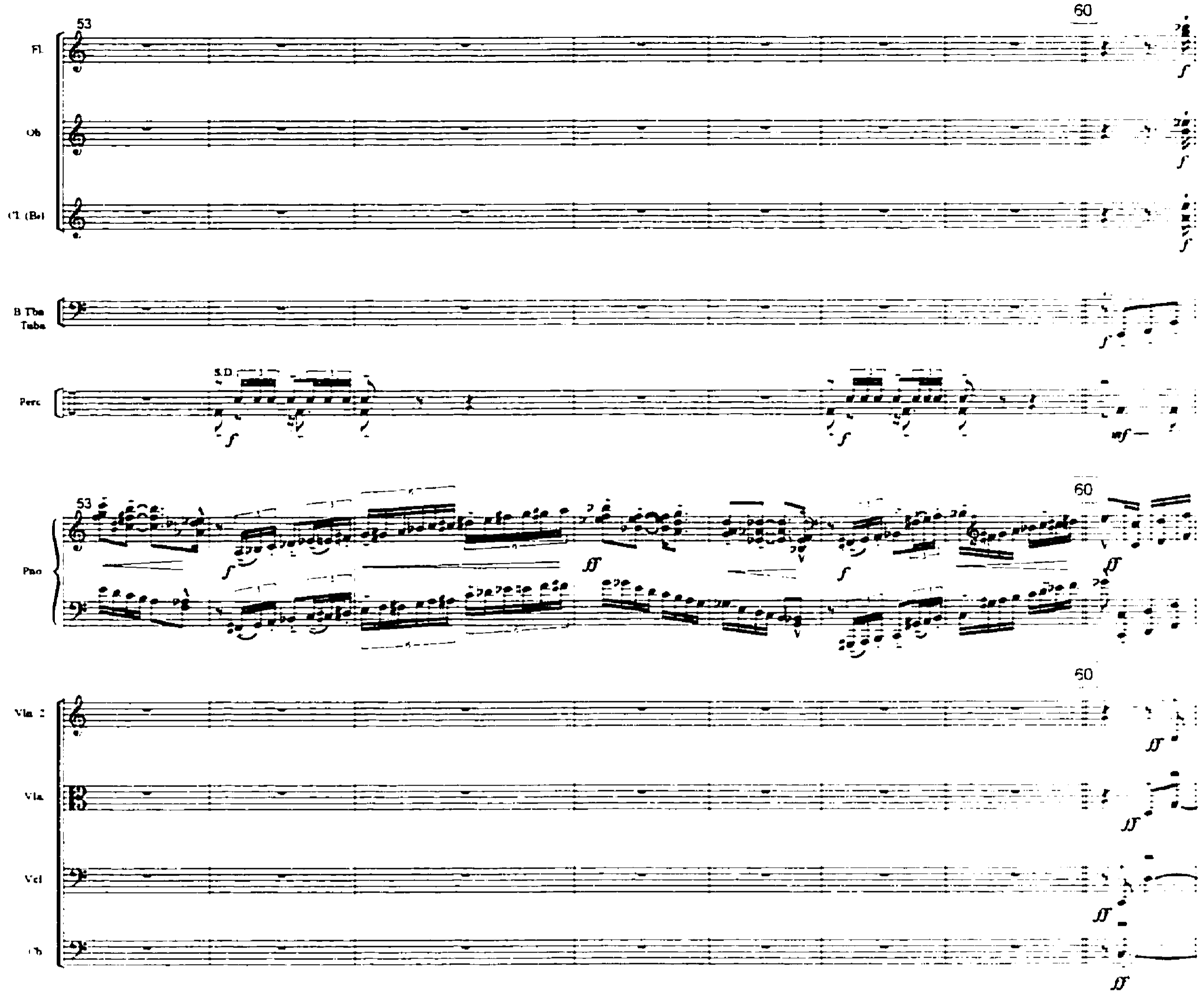

16
18
Picc.
Fl.
Ob.
Cl. (B♭)
Bsn.
Hn. (F) 1 2 3 4
Tpt.
Tbn.
B.Tbn. Tuba
Timp.
Perc.
S.D.
B.D.
Pno
Vln. 1
Vln. 2
Vla.
Vcl.
Cb.
sffz
fp
ff
f
p
mp

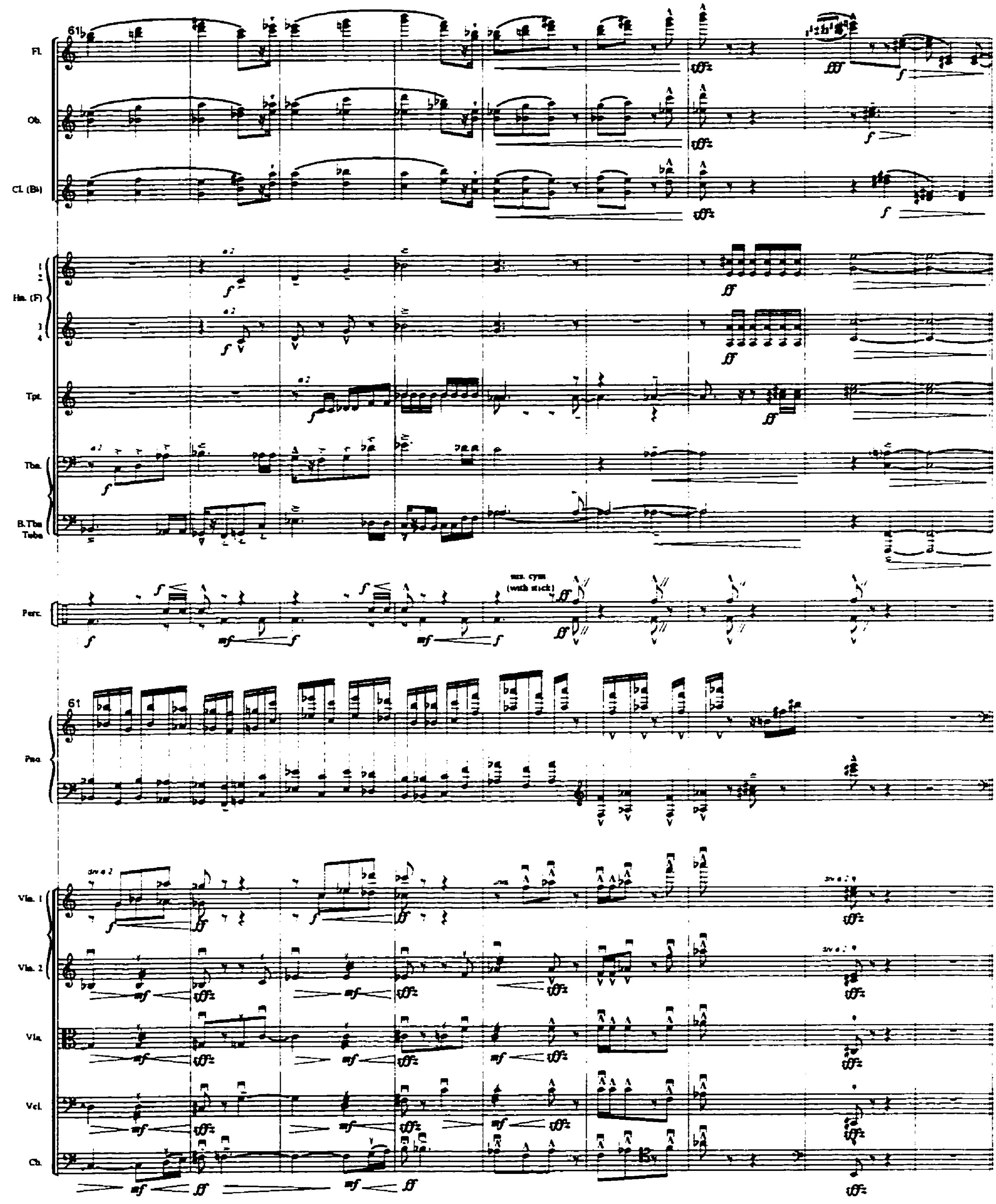

28
Picc.
Fl.
Ob.
Cl. (B♭)
Bsn.
Hn. (F)
1
2
3
4
Tpt.
Tbn.
B.Tbn
Tuba
Timp.
Perc.
Pno.
24
Vln. 1
Vln. 2
Vla.
Vcl.
Cb.
unis.
div a 2
ff
fp
sffz
mp
p
f
fff
sfz p
tr

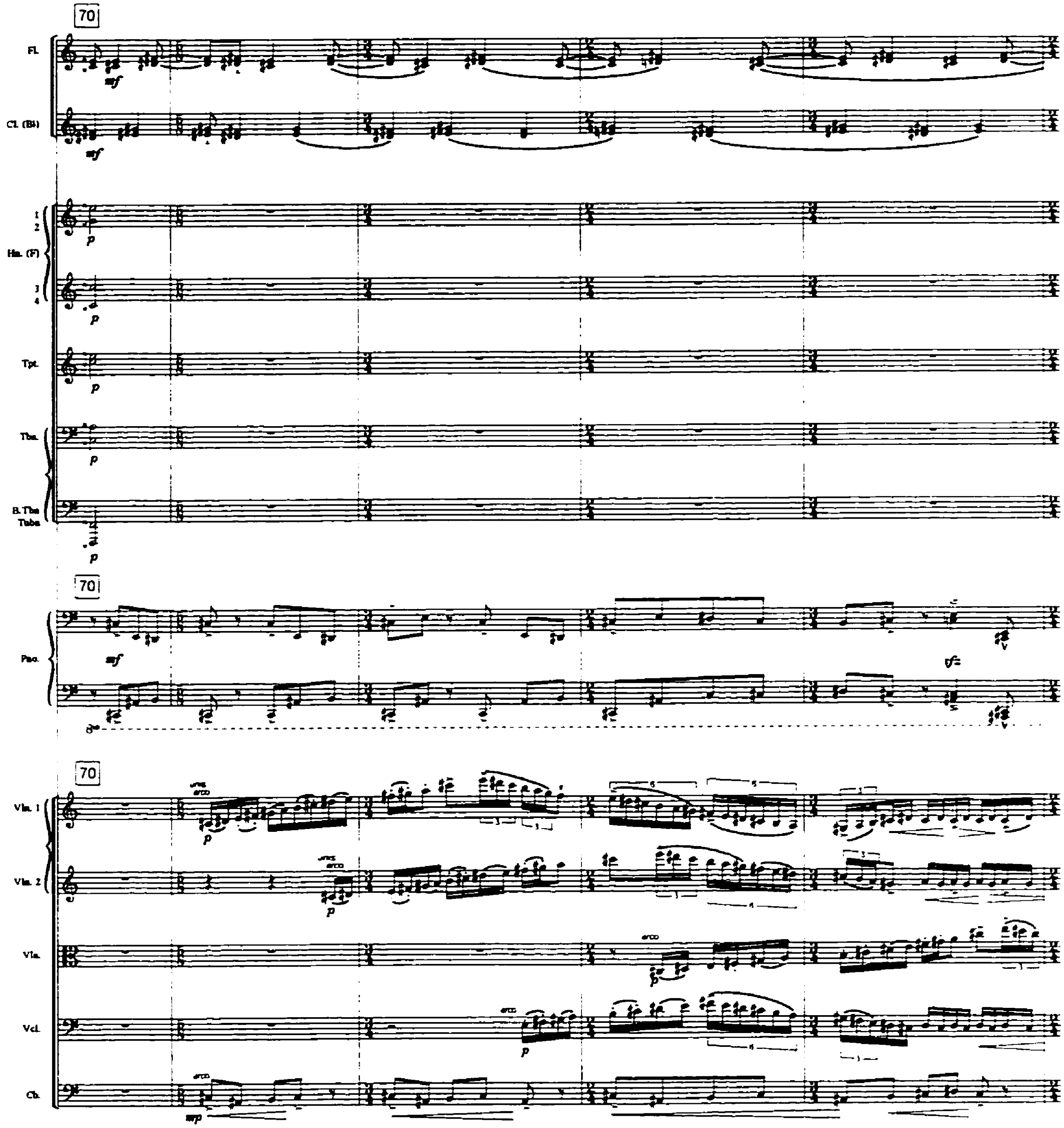

32
33
Picc.
Fl.
Ob.
Cl. (B♭)
Bsn.
1
2
Hn. (F)
3
4
Tpt.
Tbn.
B.Tbn.
Tuba
Perc.
Pno.
Vln. 1
Vln. 2
Vla.
Vcl.
Cb.
f
ff
fp
sff
mp
mf

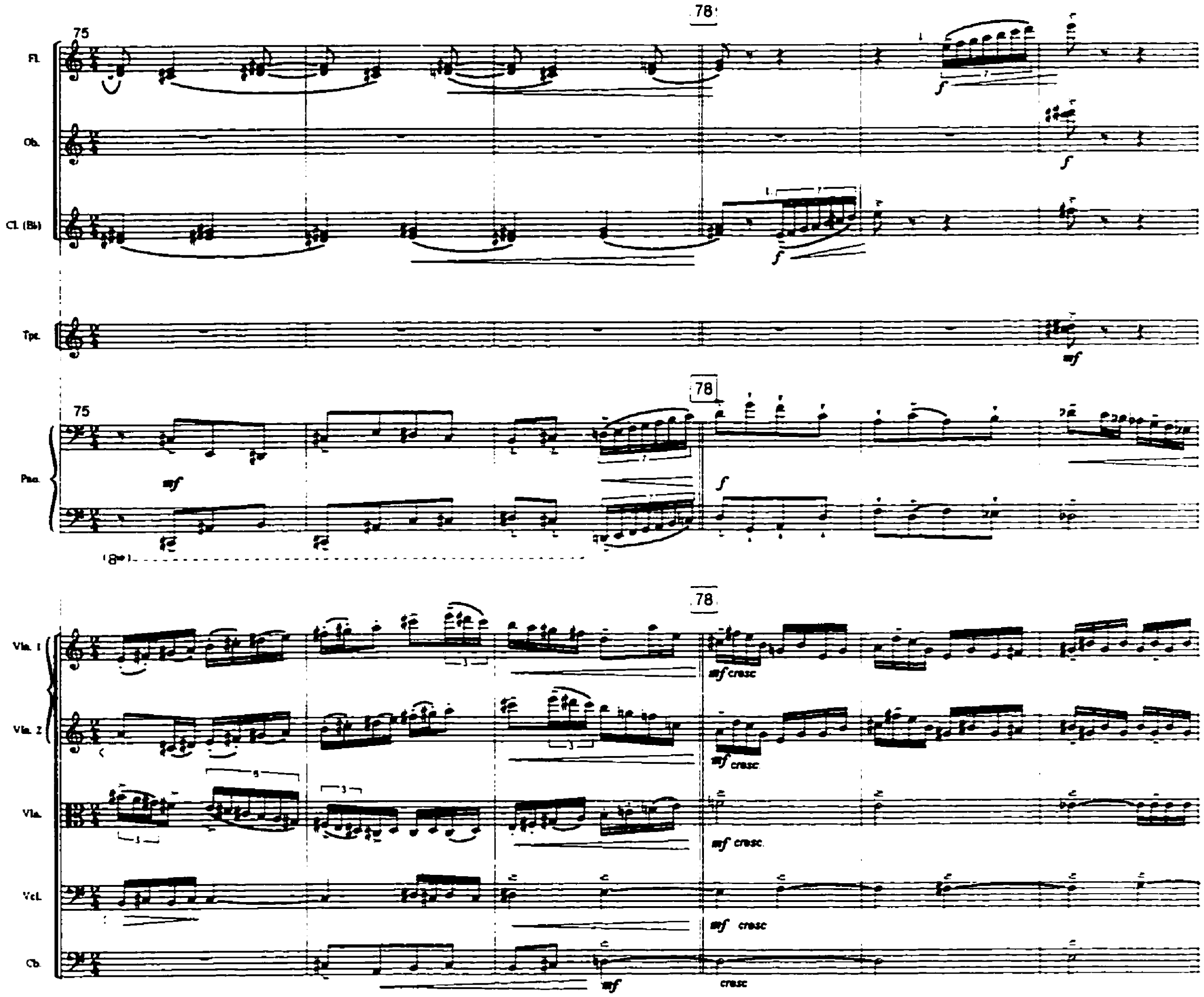

39
41
Fl.
Ob.
Cl. (B♭)
Bsn.
Hn. (F)
Tpt.
Tbn.
B.Tbn
Tuba
Timp.
Perc.
sus. cym. (with stick)
Pno.
(8va)
Vln. 1
Vln. 2
Vla.
Vcl.
Cb.
sffz
ff
f
fp
mf

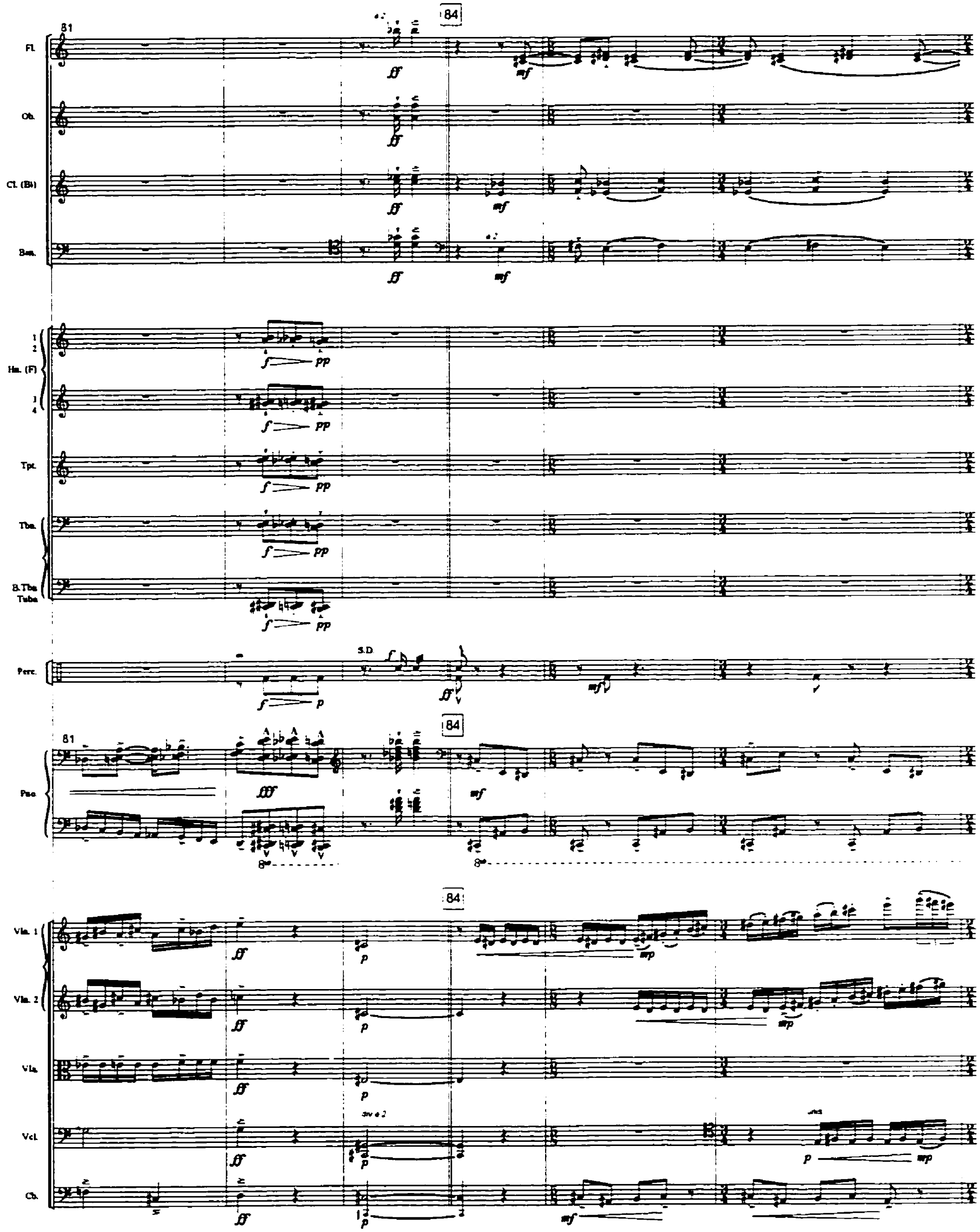

46
52
Fl
Ob
Cl. (B♭)
Bsn
Hn. (F)
1
2
3
4
Tpt
Tbn.
B.Tbn.
Tuba
Timp
Perc.
Pno
Vln. 1
Vln. 2
Vla.
Vcl
Cb.
ff
mf
f
sff
fp
p
felt mallets
p cresc.
fff
mp

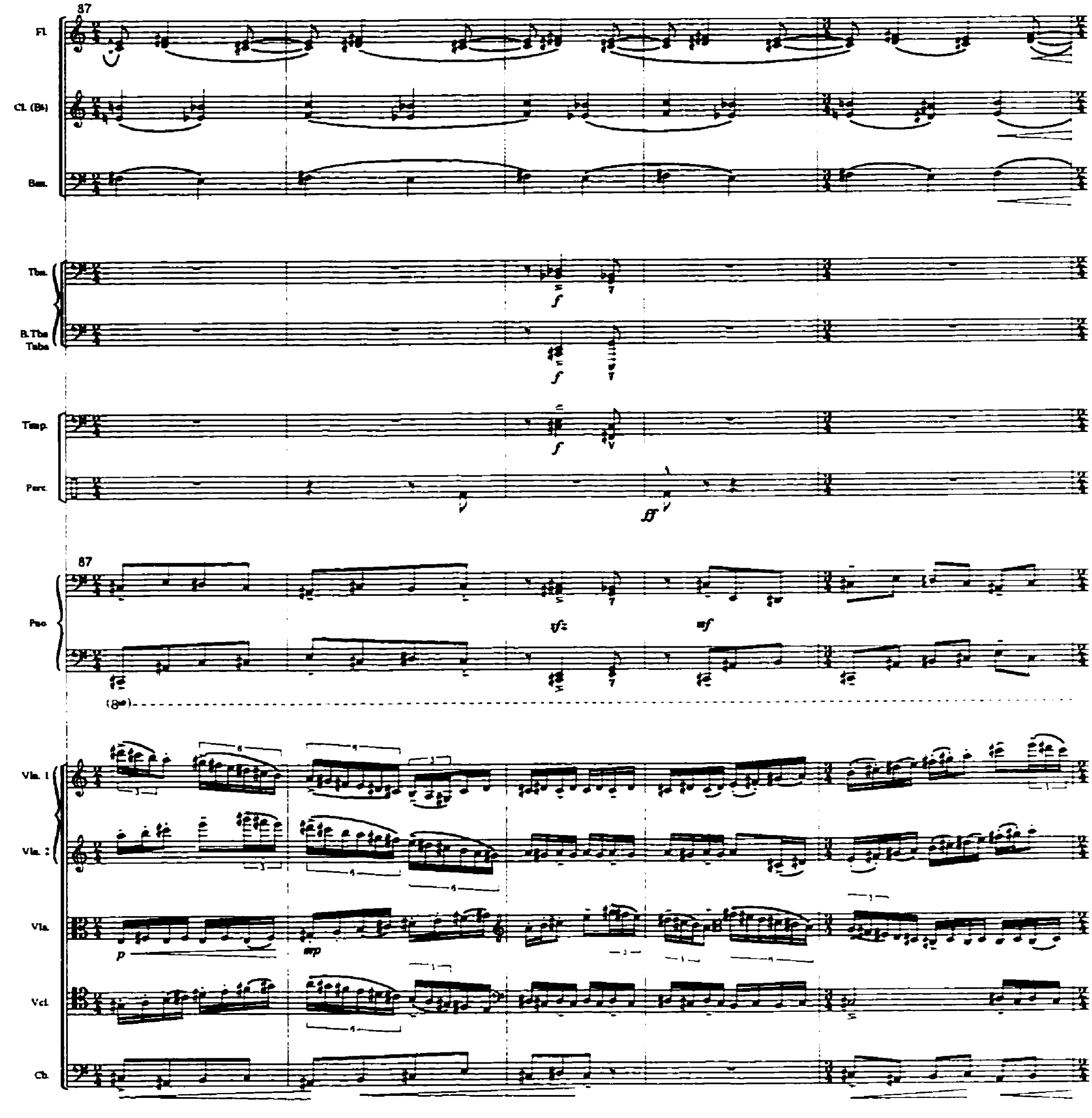

53
60
Fl.
Ob.
Cl. (Bb)
B.Tbn.
Tuba
Perc.
S.D.
Pno
Vln. 2
Vla.
Vcl.
Cb.
f
mf
ff

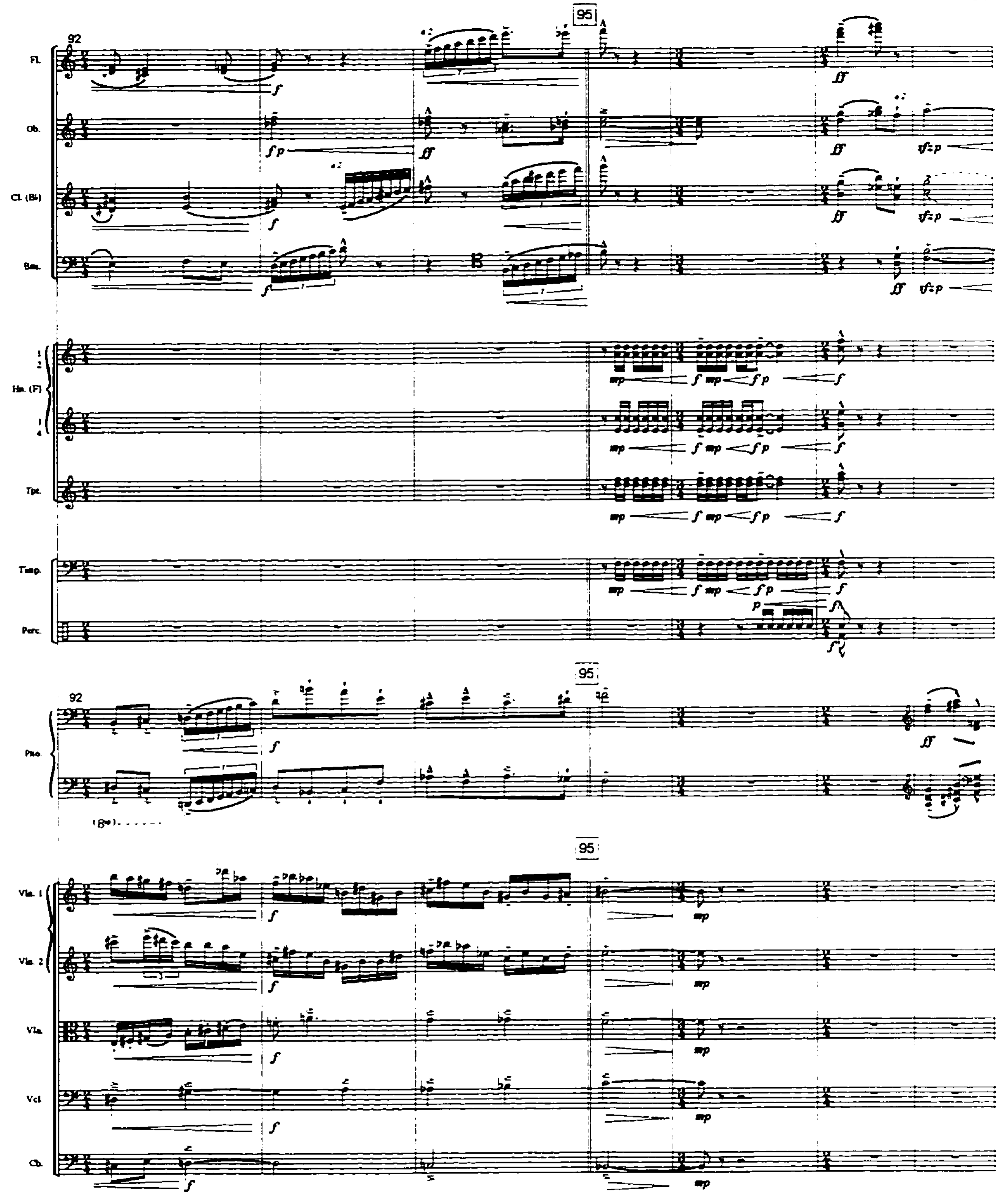

61
Fl.
Ob.
Cl. (B♭)
1
2
Hn. (F)
3
4
a 2
Tpt.
Tbn.
B.Tbn
Tuba
sus. cym
(with stick)
Perc.
61
Pno.
8va a 2
Vln. 1
Vln. 2
Vla.
Vcl.
Cb.
f
mf
ff
fff
sffz

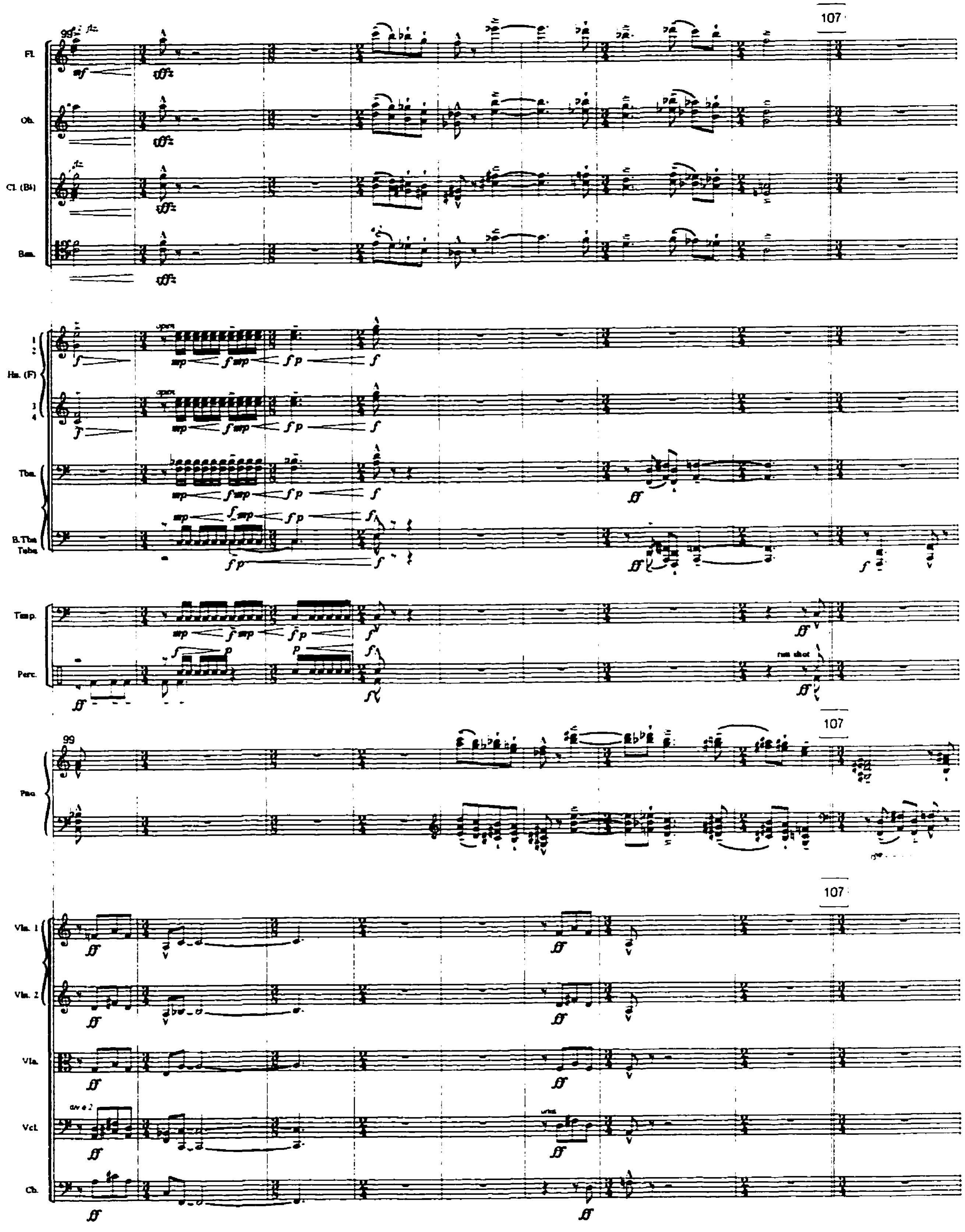

70
Fl.
mf
Cl. (B♭)
mf
1
2
Hn. (F)
3
4
p
p
Tpt.
p
Tbn.
p
B. Tbn
Tuba
p
70
Pno.
mf
sf
70
Vln. 1
unis.
arco
p
Vln. 2
unis.
arco
p
Vla.
arco
p
Vcl.
arco
p
Cb.
arco
mp

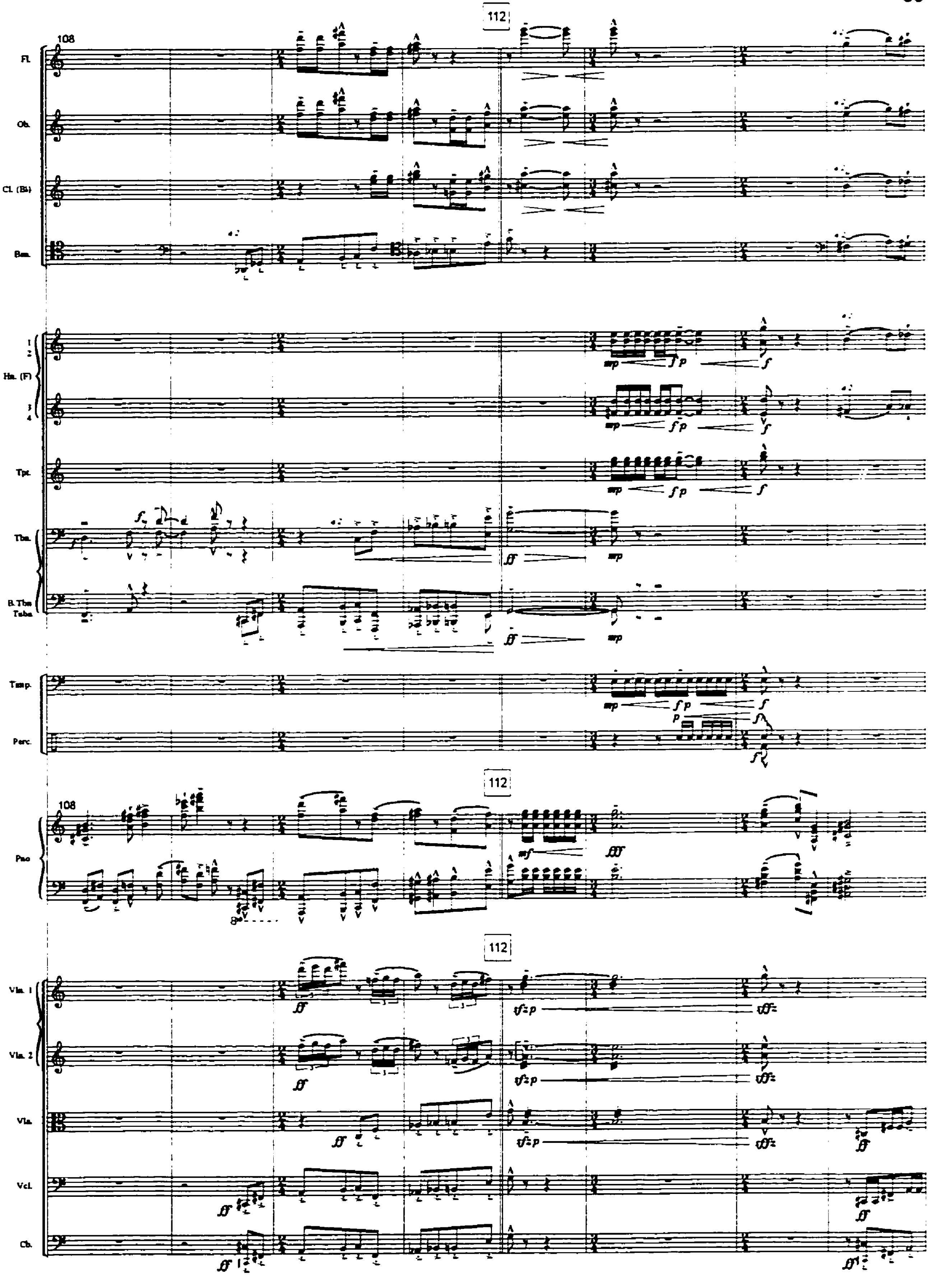

78
75
Fl.
Ob.
Cl. (B♭)
Tpt.
75
78
Pno.
78
Vln. 1
Vln. 2
Vla.
Vcl.
Cb.
f
f
f
mf
mf
f
mf cresc
mf cresc
mf cresc.
mf cresc
mf
cresc

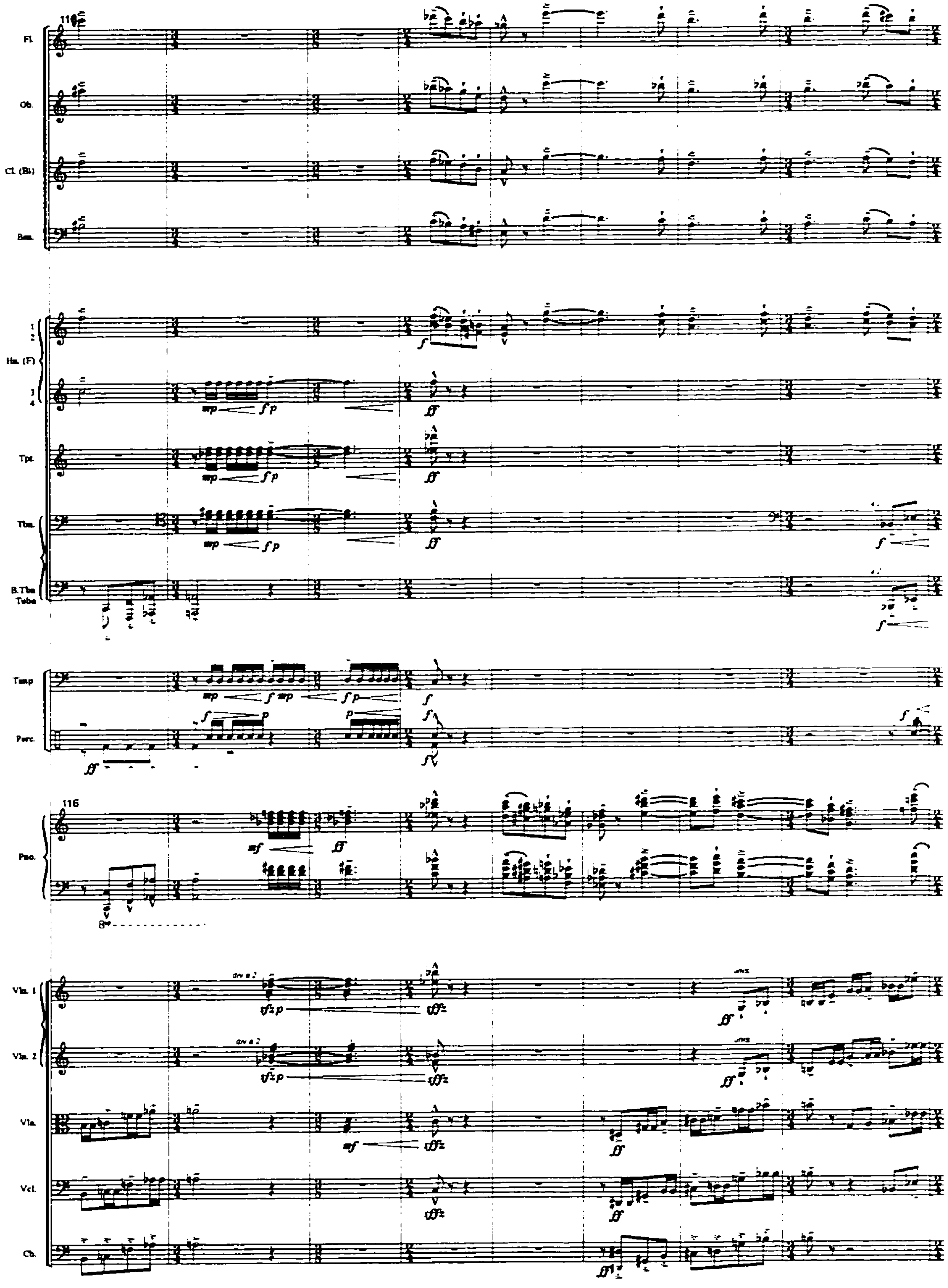

81
84
Fl.
Ob.
Cl. (B♭)
Bsn.
Hn. (F)
1
2
3
4
Tpt.
Tbn.
B.Tbn
Tuba
Perc.
S.D
Pno
Vln. 1
Vln. 2
Vla.
Vcl.
Cb.
ff
mf
f
pp
p
fff
mp
div a 2
8va

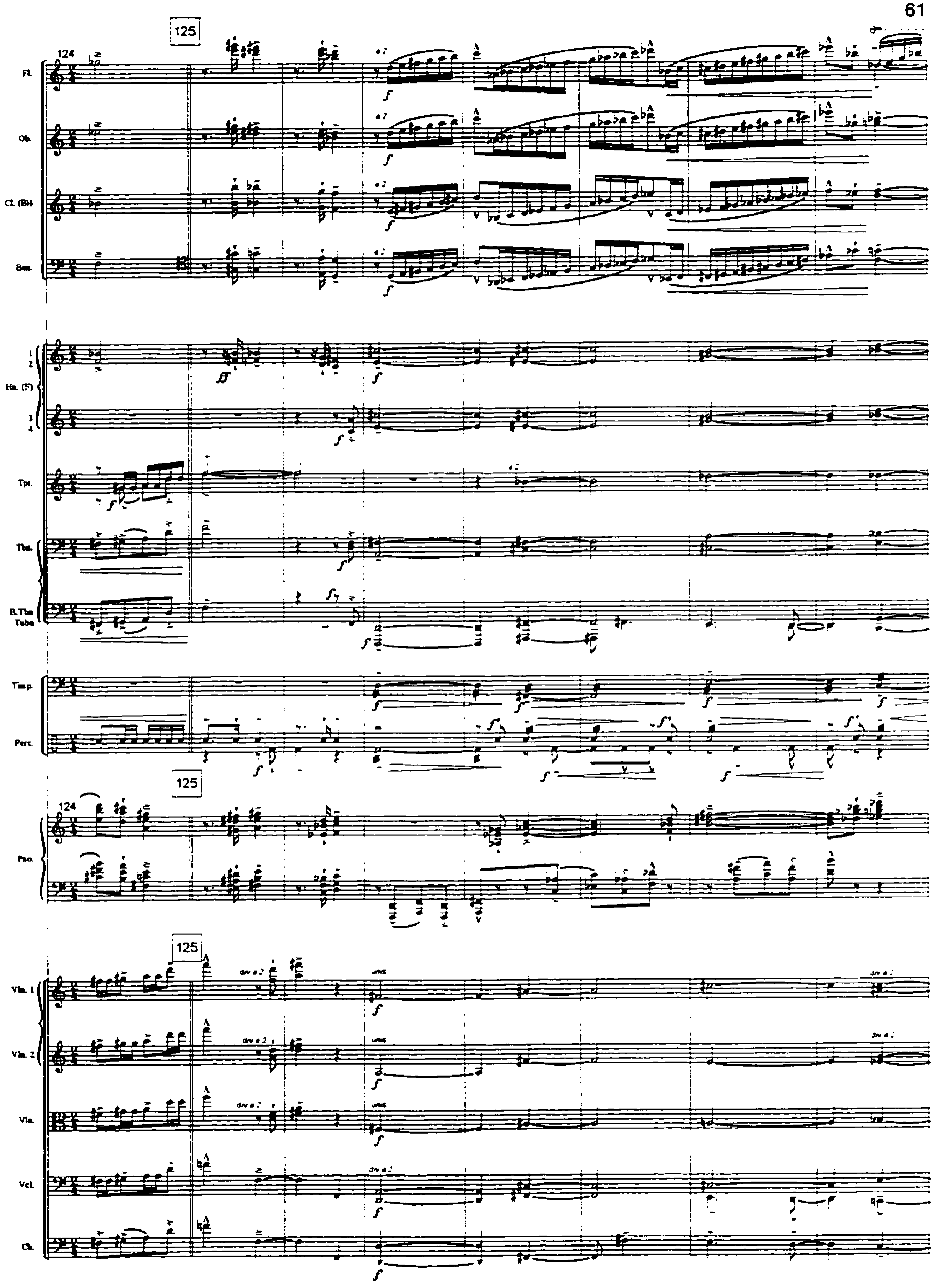

87
Fl.
Cl. (B♭)
Bsn.
Tbn.
B.Tbn Tuba
Timp.
Perc.
87
Pno.
Vln. 1
Vln. 2
Vla.
Vcl.
Cb.
f
f
f
ff
sfz
mf
(8va)
p
mp
6
3

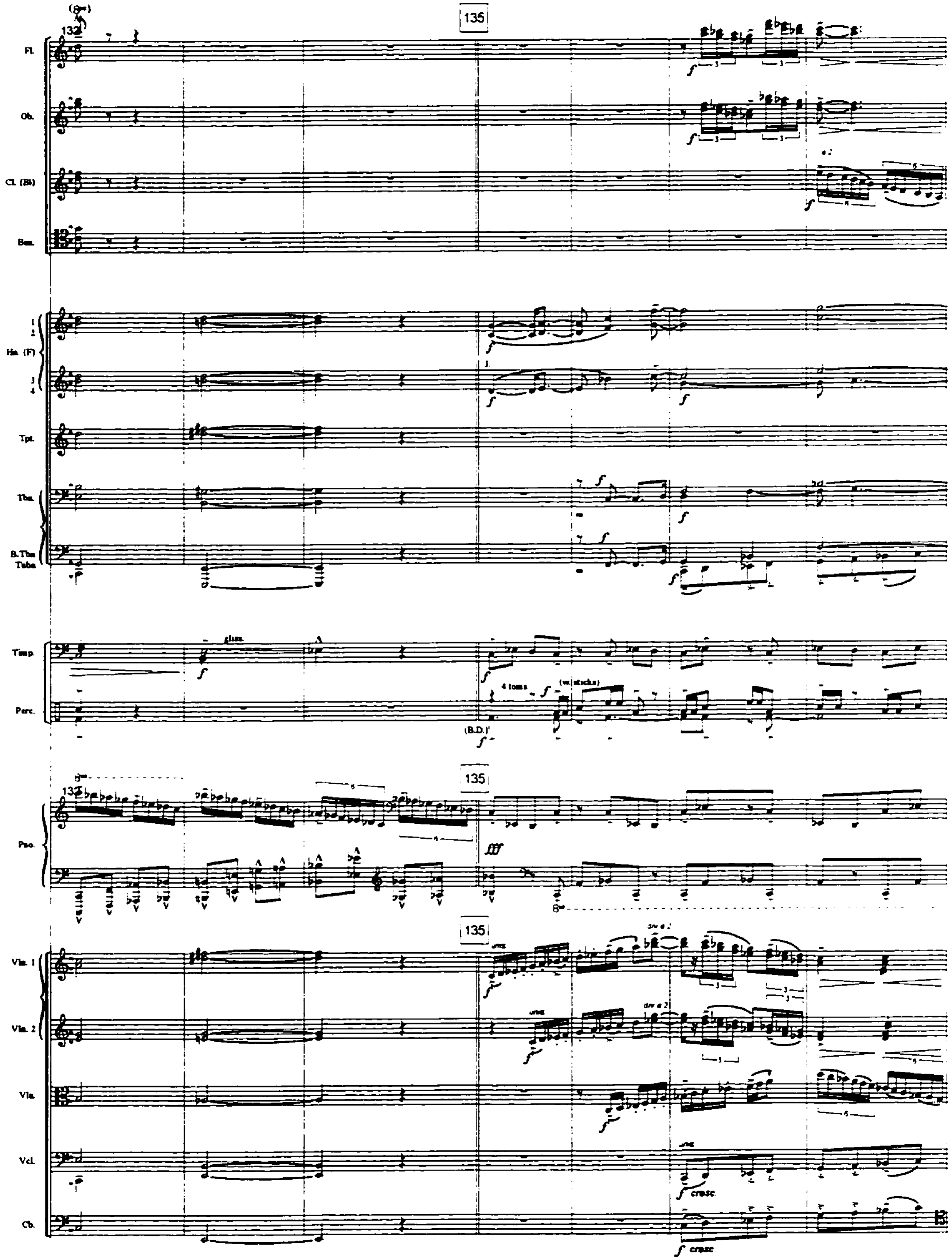

92
95
Fl.
Ob.
Cl. (B♭)
Bsn.
Hn. (F)
1
2
3
4
Tpt.
Timp.
Perc.
Pno.
(8va)
Vln. 1
Vln. 2
Vla.
Vcl.
Cb.
f
fp
ff
sf=p
mp
p

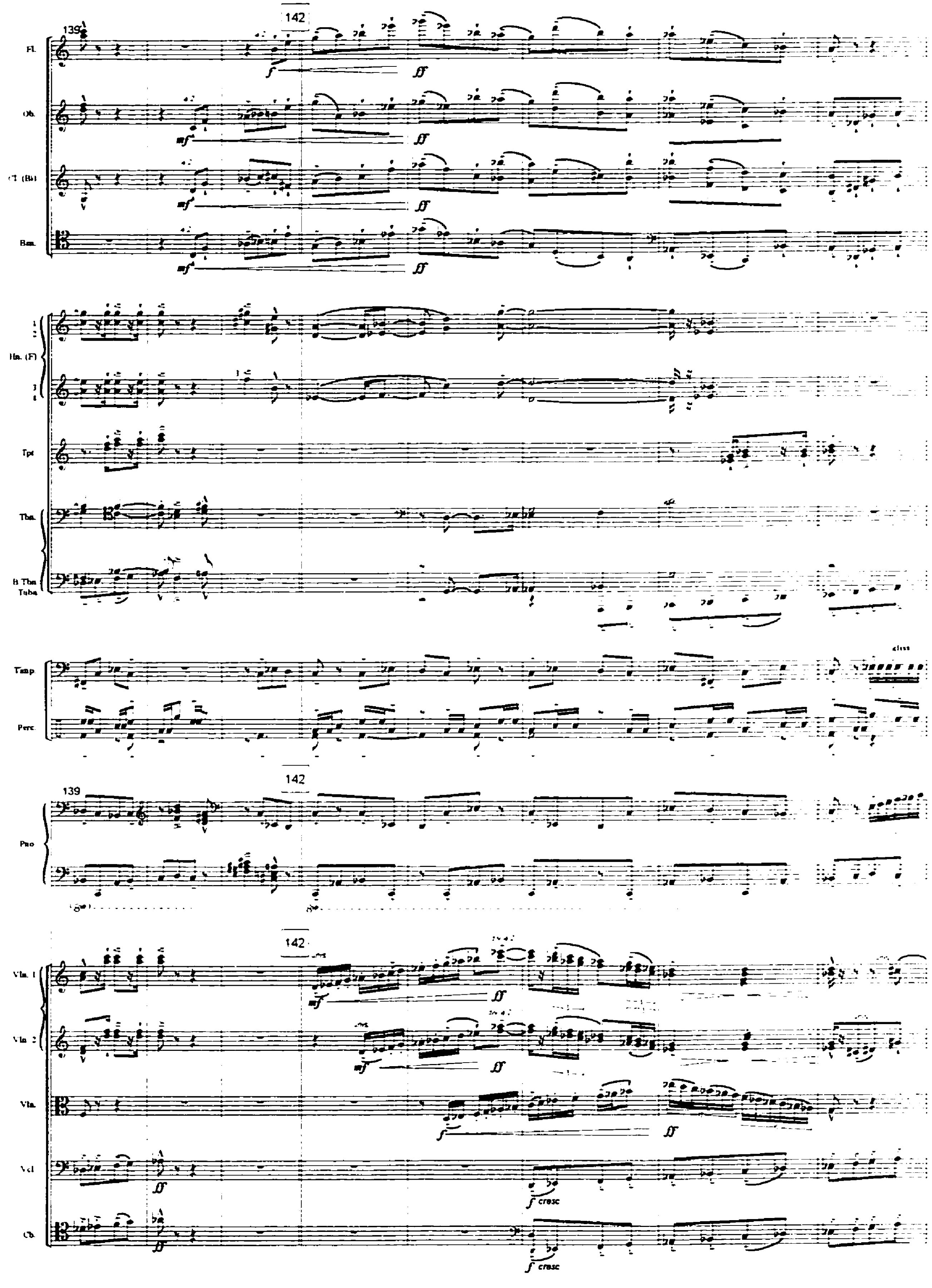

99
107
Fl.
Ob.
Cl. (B♭)
Bsn.
Hn. (F)
1
2
3
4
open
Tbn.
B.Tbn.
Tuba
Timp.
Perc.
rim shot
Pno.
Vln. 1
Vln. 2
Vla.
Vcl.
div a 2
unis.
Cb.
mf
fff
f
mp
fp
p
ff

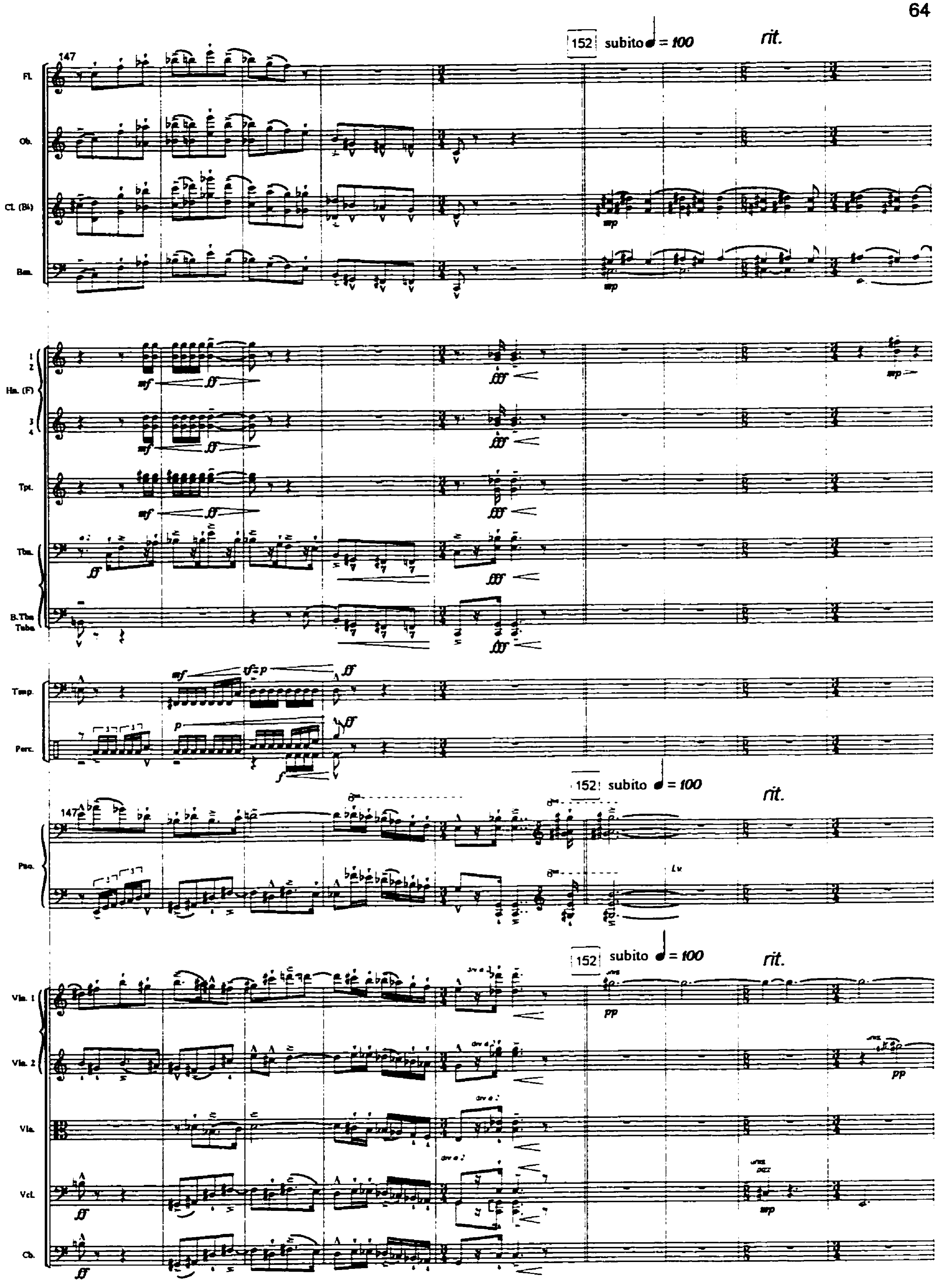

108
112
Fl.
Ob.
Cl. (B♭)
Bsn.
1
2
Hn. (F)
3
4
Tpt.
Tbn.
B. Tbn
Tuba
Timp.
Perc.
Pno
Vln. 1
Vln. 2
Vla.
Vcl.
Cb.
f
ff
mp
f p
mf
fff
sf=p
sff=
8

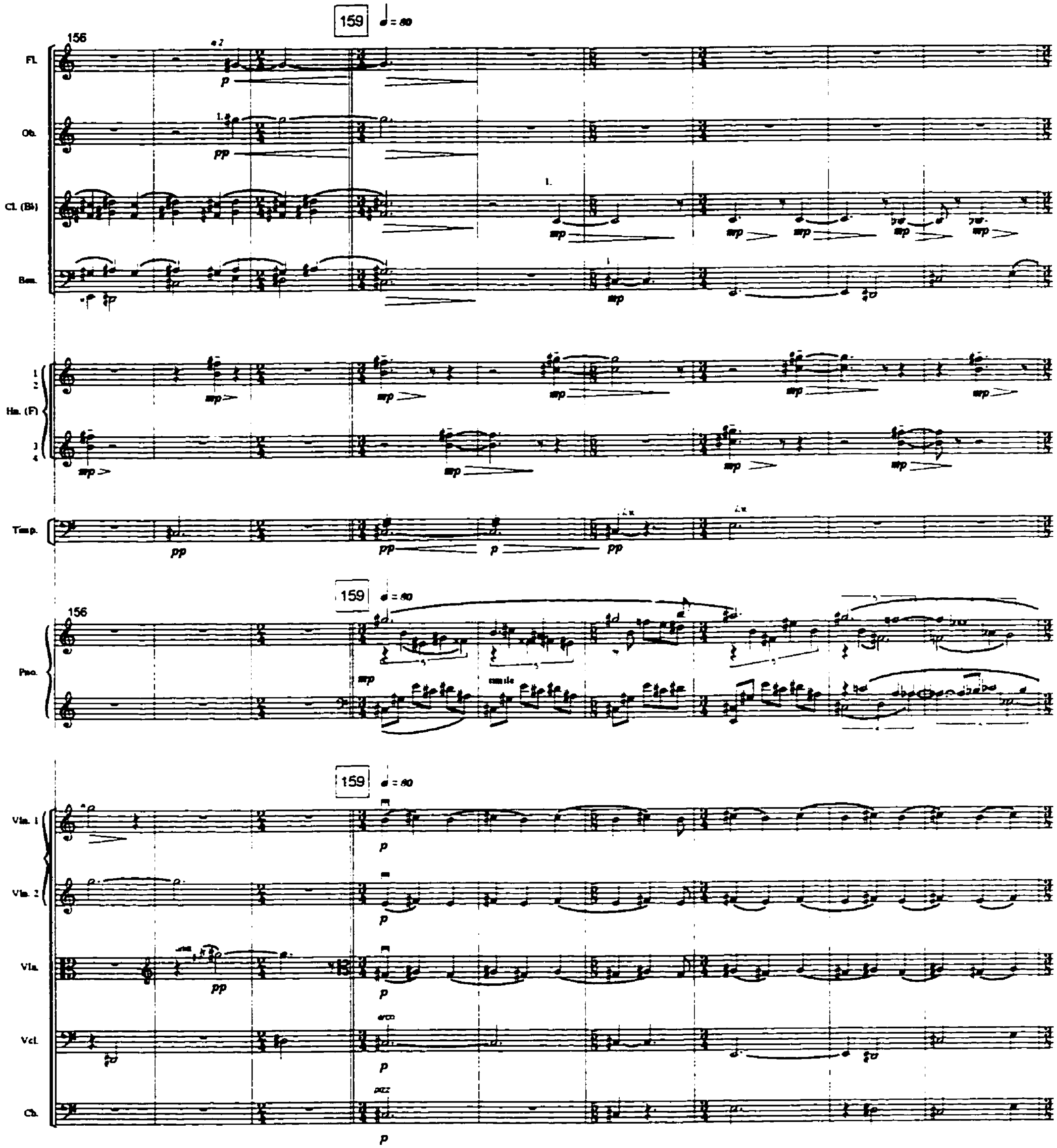

116
Fl.
Ob.
Cl. (B♭)
Bsn.
1
2
Hn. (F)
3
4
Tpt.
Tbn.
B.Tbn
Tuba
Timp
Perc.
Pno.
Vln. 1
Vln. 2
Vla.
Vcl.
Cb.
f
mp
fp
ff
f
p
mf
sfz p
sffz
div a 2
unis
8va

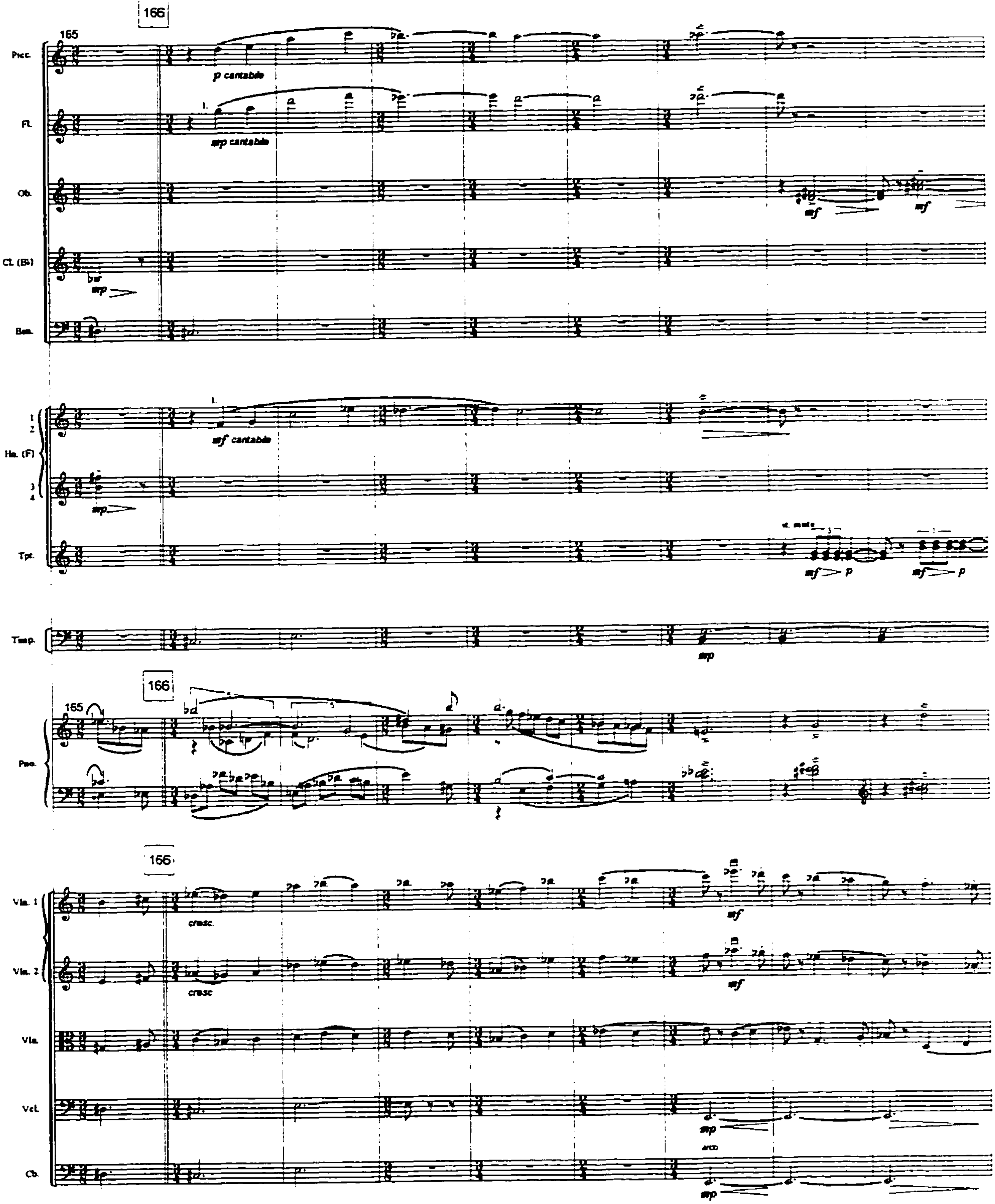

125
124
Fl.
Ob.
Cl. (B♭)
Bsn.
Hn. (F) 1 2
3 4
Tpt.
Tbn.
B.Tbn. Tuba
Timp.
Perc.
Pno.
Vln. 1
Vln. 2
Vla.
Vcl.
Cb.
ff
f
a 2
div a 2
unis.

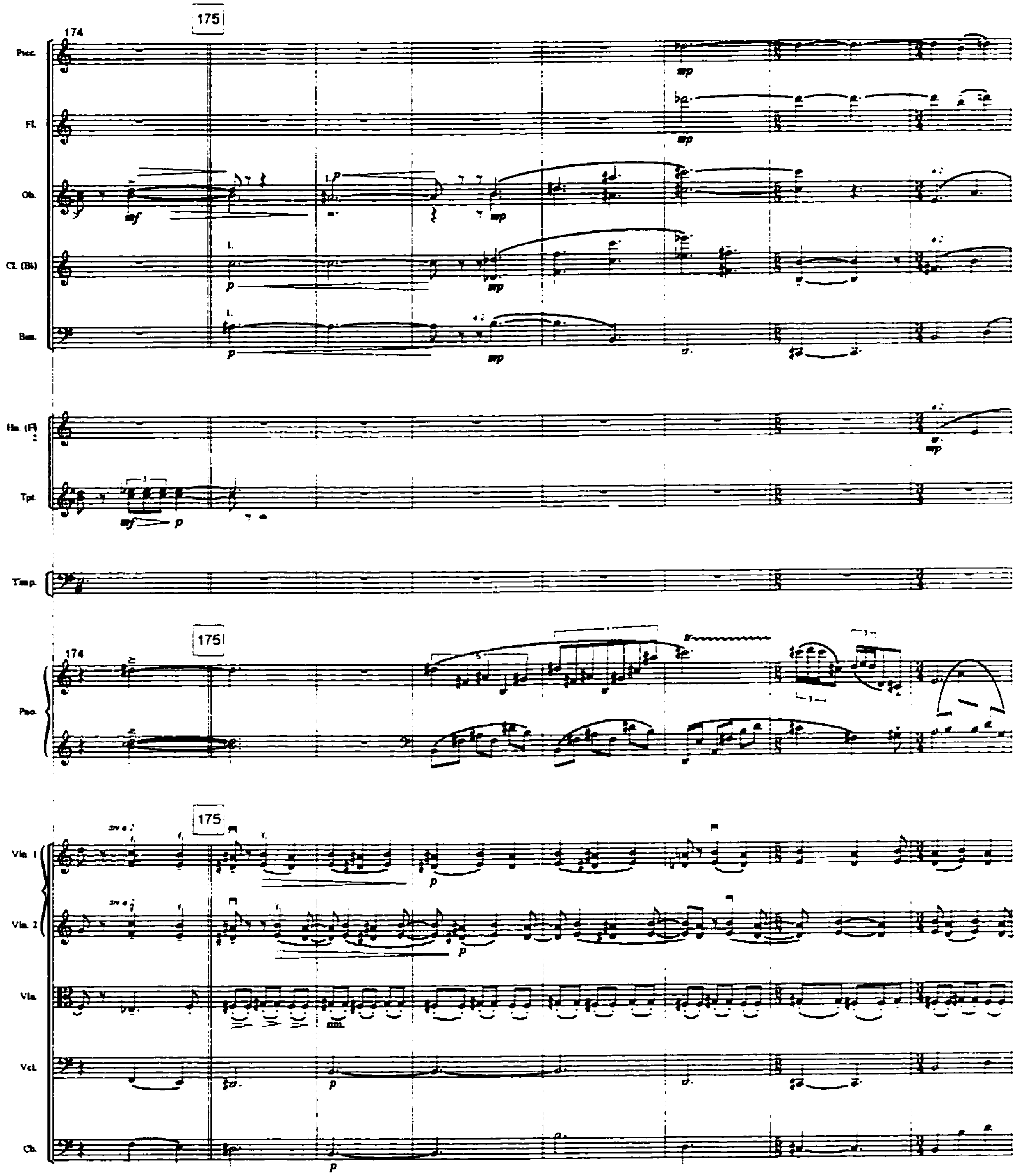

(8va)
132
135
Fl.
Ob.
Cl. (B♭)
Bsn.
Hn. (F) 1 2 3 4
Tpt.
Tbn.
B.Tbn. Tuba
Timp.
gliss.
Perc.
4 toms
(w/ sticks)
(B.D.)
Pno.
8va
fff
Vln. 1
Vln. 2
Vla.
Vcl.
Cb.
unis.
div. a 2
a 2
f
f cresc.


139
142
Fl.
Ob.
Cl. (B♭)
Bsn.
Hn. (F)
1
2
3
4
Tpt
Tbn.
B Tbn
Tuba
Timp.
Perc.
Pno
Vln. 1
Vln. 2
Vla.
Vcl
Cb.
f
ff
mf
f cresc
8va

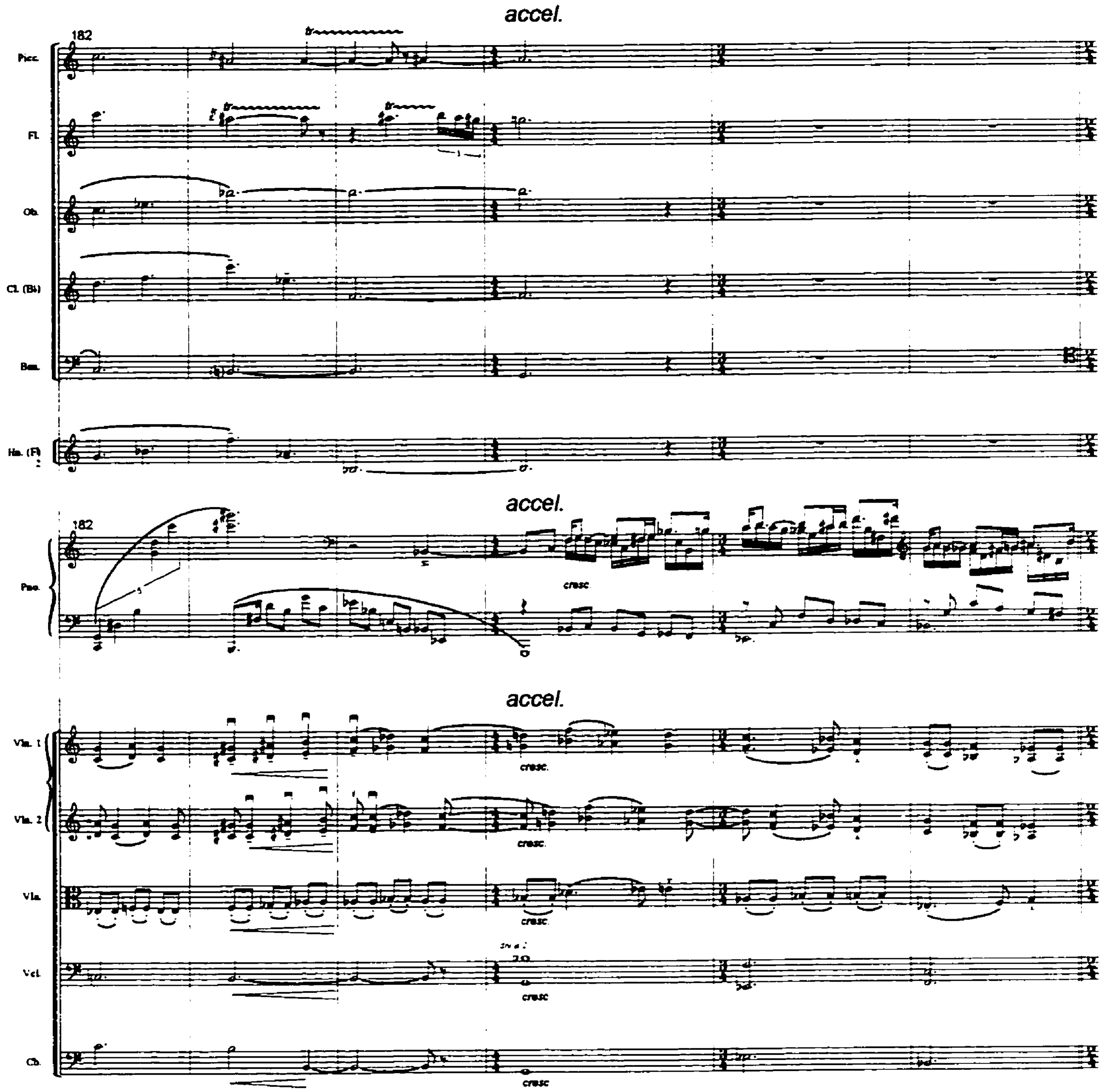

147
152
subito ♩ = 100
rit.
Fl.
Ob.
Cl. (B♭)
Bsn.
1
2
Hn. (F)
3
4
Tpt.
Tbn.
B.Tbn
Tuba
Timp.
Perc.
Pno.
Vln. 1
Vln. 2
Vla.
Vcl.
Cb.
mp
mf
ff
fff
sf=p
p
f
l.v.
pp
div a 2
unis
pizz.

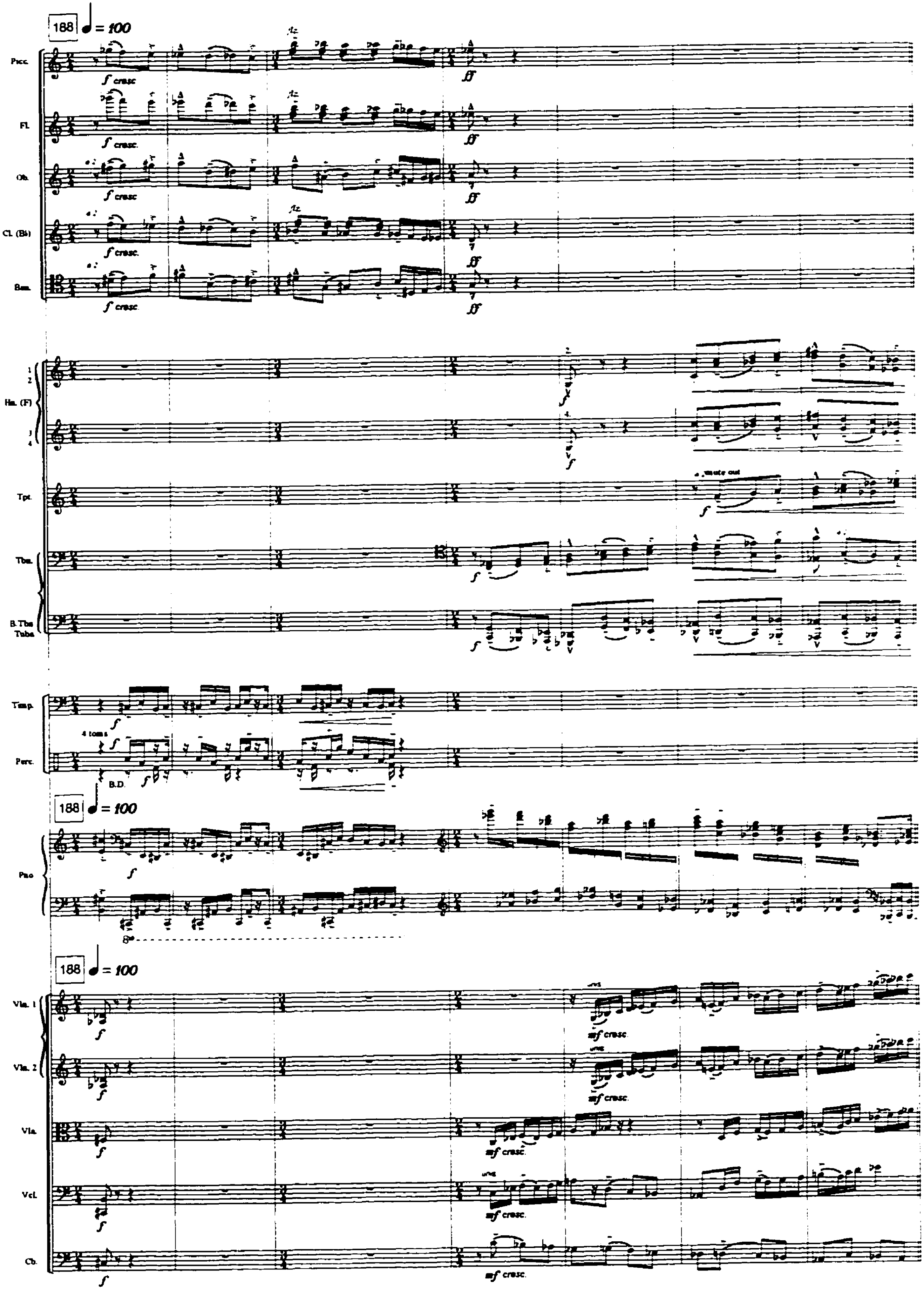

156
159
♩= 80
Fl.
Ob.
Cl. (B♭)
Bsn.
Hn. (F)
Timp.
Pno.
Vln. 1
Vln. 2
Vla.
Vcl.
Cb.
a 2
1.
p
pp
mp
simile
arco
pizz

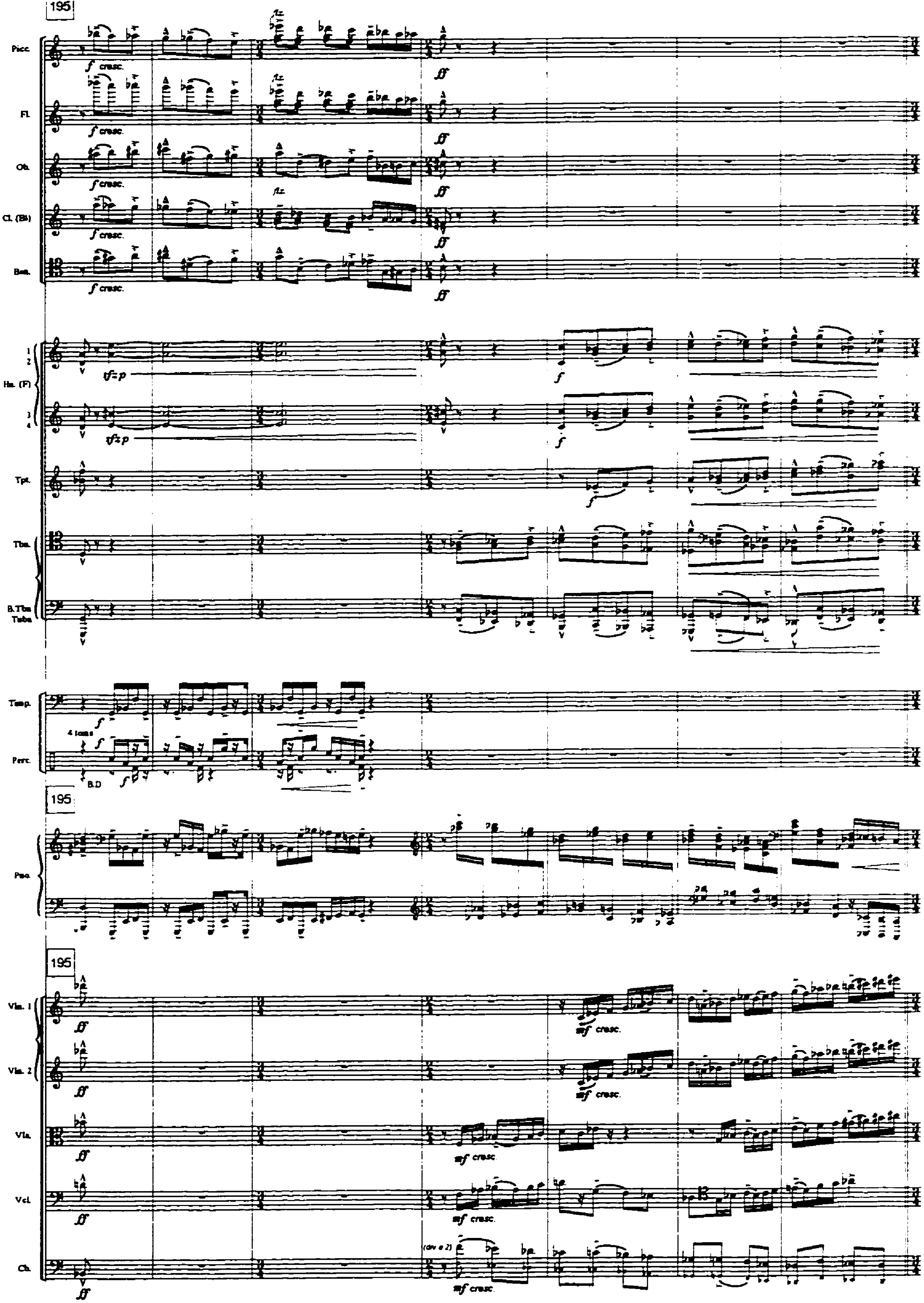

166
165
Picc.
p cantabile
Fl.
1.
mp cantabile
Ob.
mf
mf
Cl. (B♭)
mp
Bsn.
1
2
Hn. (F)
3
4
1.
mf cantabile
mp
Tpt.
st. mute
mf p
mf p
Timp.
mp
165
166
Pno.
166
Vln. 1
cresc.
mf
Vln. 2
cresc
mf
Vla.
Vcl.
mp
Cb.
arco
mp

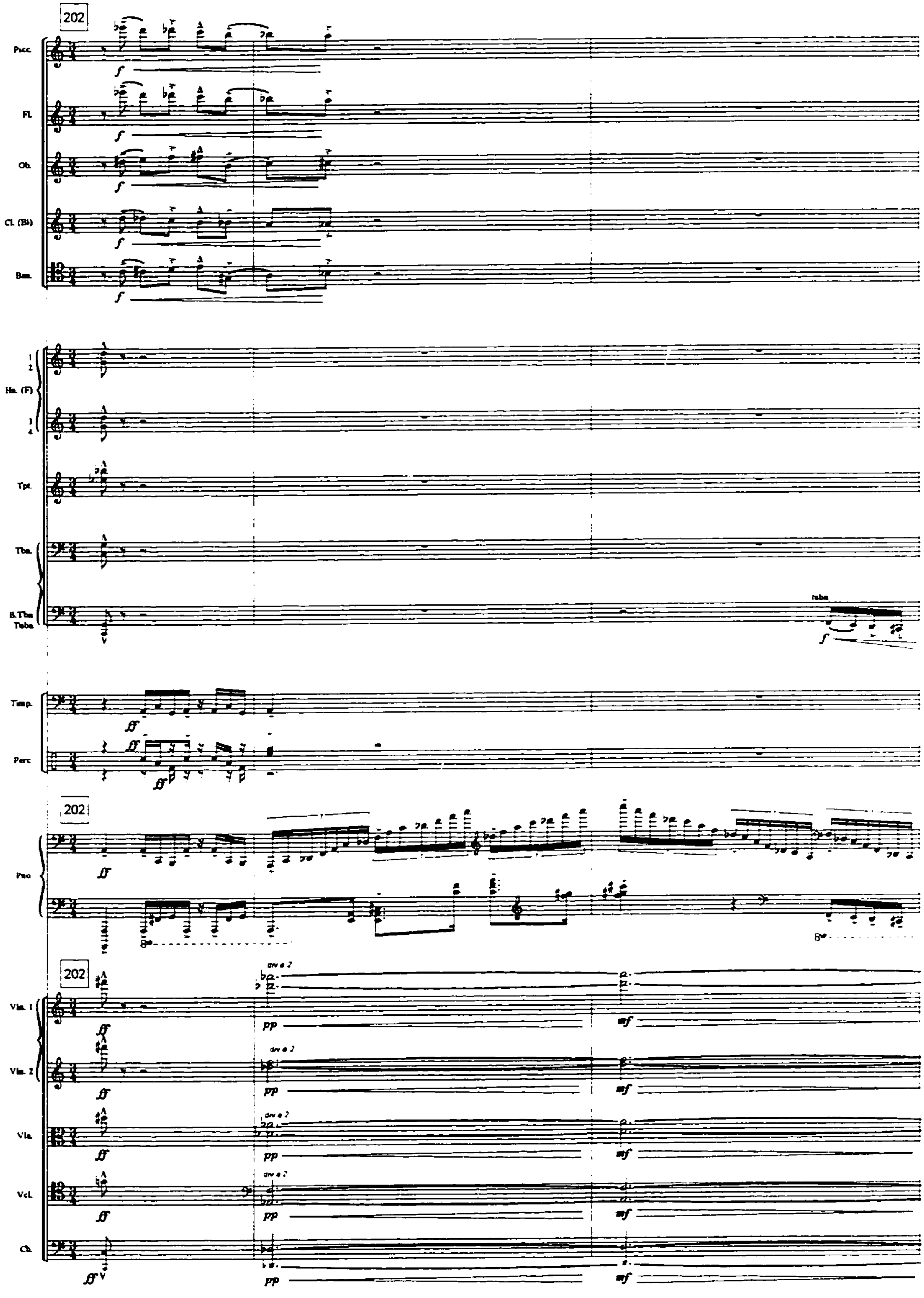


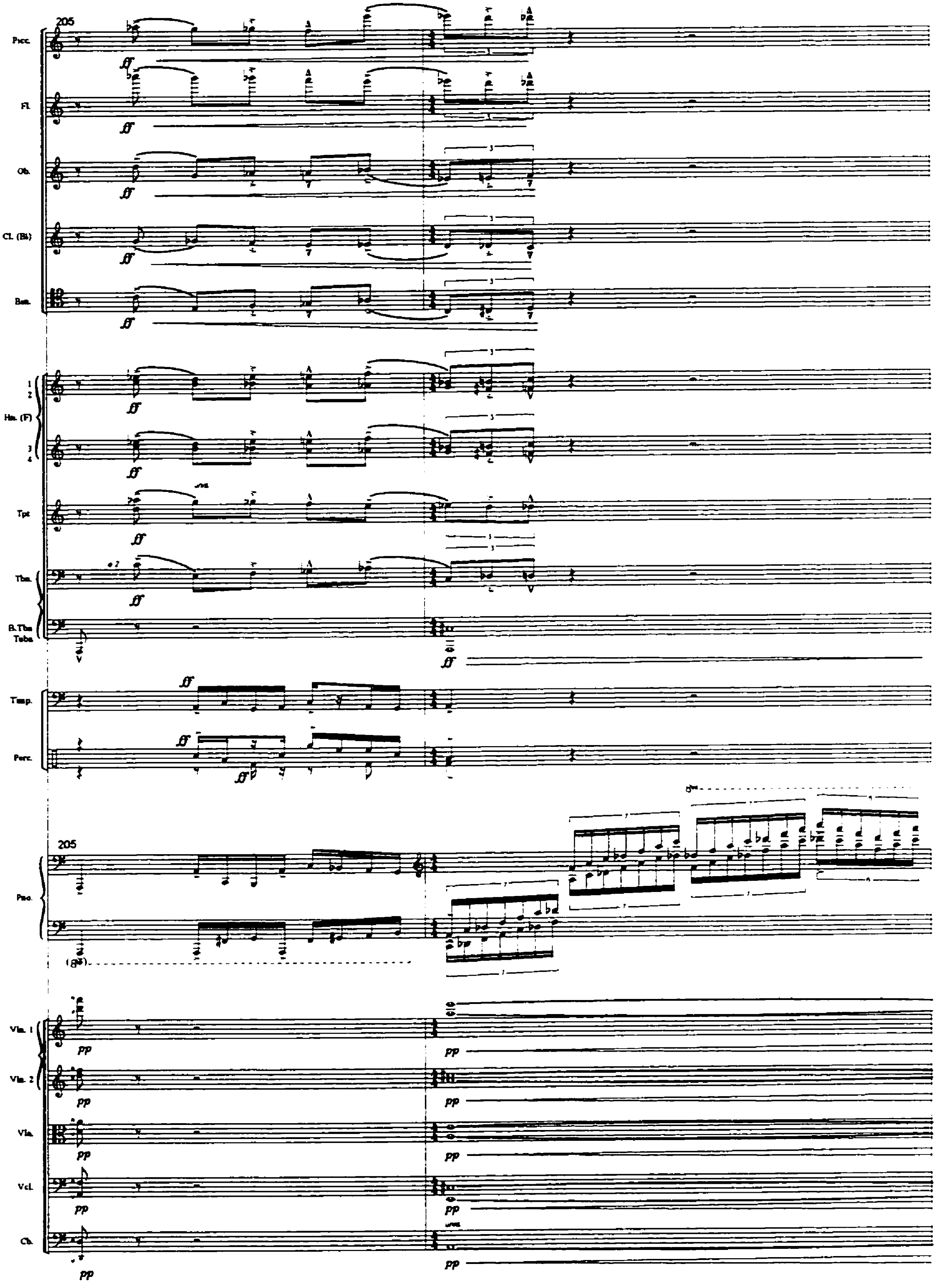
174
175
Picc.
Fl.
Ob.
Cl. (B♭)
Bsn.
Hn. (F) 2
Tpt.
Timp.
Pno.
Vln. 1
Vln. 2
Vla.
Vcl.
Cb.
mp
mf
p

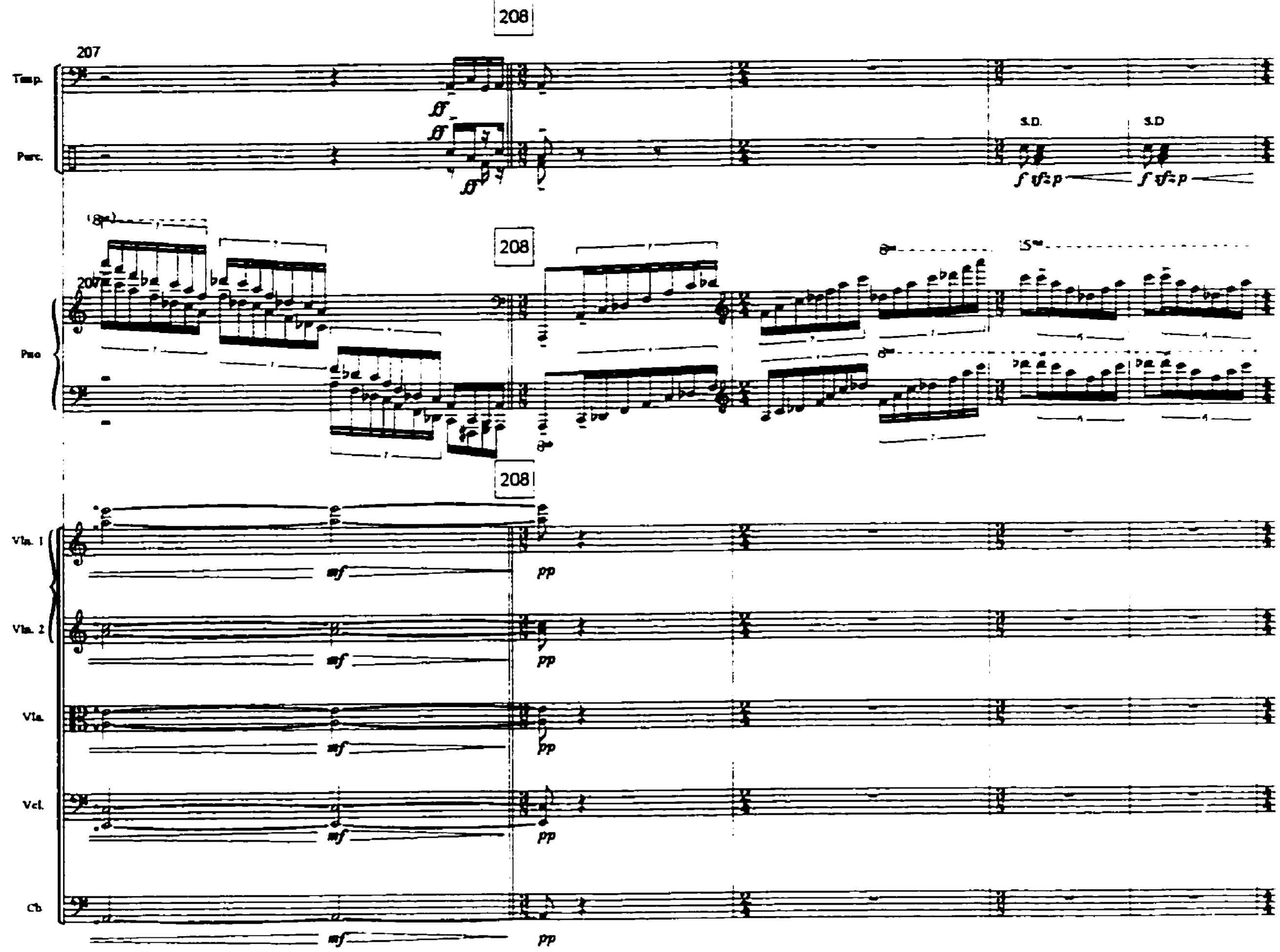

accel.
182
Picc.
Fl.
Ob.
Cl. (B♭)
Bsn.
Hn. (F)
accel.
182
Pno.
cresc
accel.
Vln. 1
Vln. 2
Vla.
Vcl.
Cb.
cresc.
cresc.
cresc
cresc
cresc

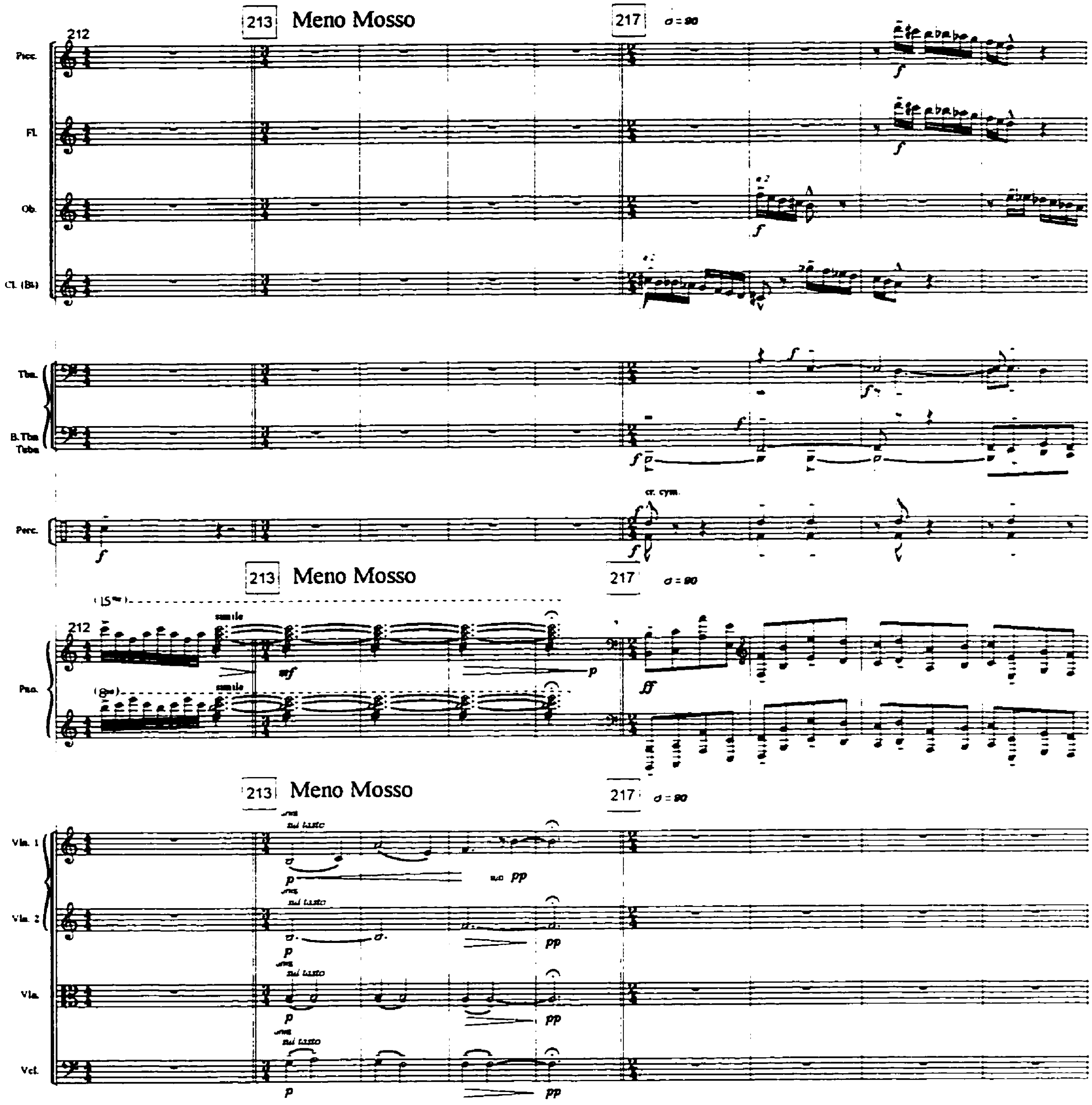

188
♩= 100
Picc.
Fl.
Ob.
Cl. (B♭)
Bsn.
f cresc.
fz
ff
1
2
Hn. (F)
3
4
Tpt.
mute out
Tbn.
B.Tbn.
Tuba
f
Timp.
Perc.
4 toms
B.D.
188
♩= 100
Pno
8va
188
♩= 100
Vln. 1
Vln. 2
Vla.
Vcl.
Cb.
unis.
mf cresc.

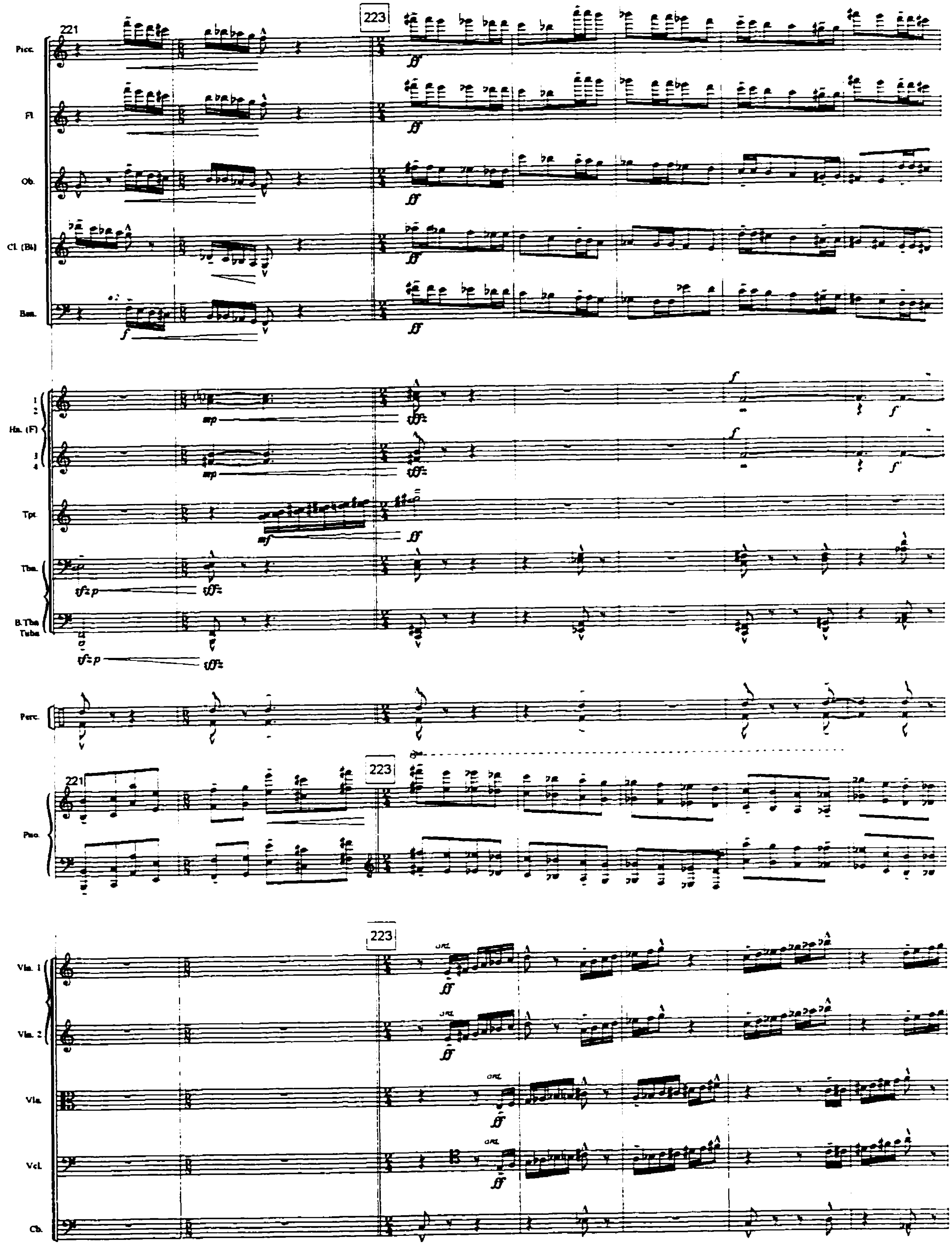

195
Picc.
f cresc.
ffz
ff
Fl.
f cresc.
ffz
ff
Ob.
f cresc.
ffz
ff
Cl. (B♭)
f cresc.
ff
Bsn.
f cresc.
ff
1
2
Hn. (F)
3
4
sfz p
f
Tpt.
f
Tbn.
B.Tbn
Tuba
Timp.
f
4 toms
f
Perc.
B.D
f
195
Pno.
195
Vln. 1
ff
mf cresc.
Vln. 2
ff
mf cresc.
Vla.
ff
mf cresc.
Vcl.
ff
mf cresc.
Cb.
ff
(div a 2)
mf cresc.

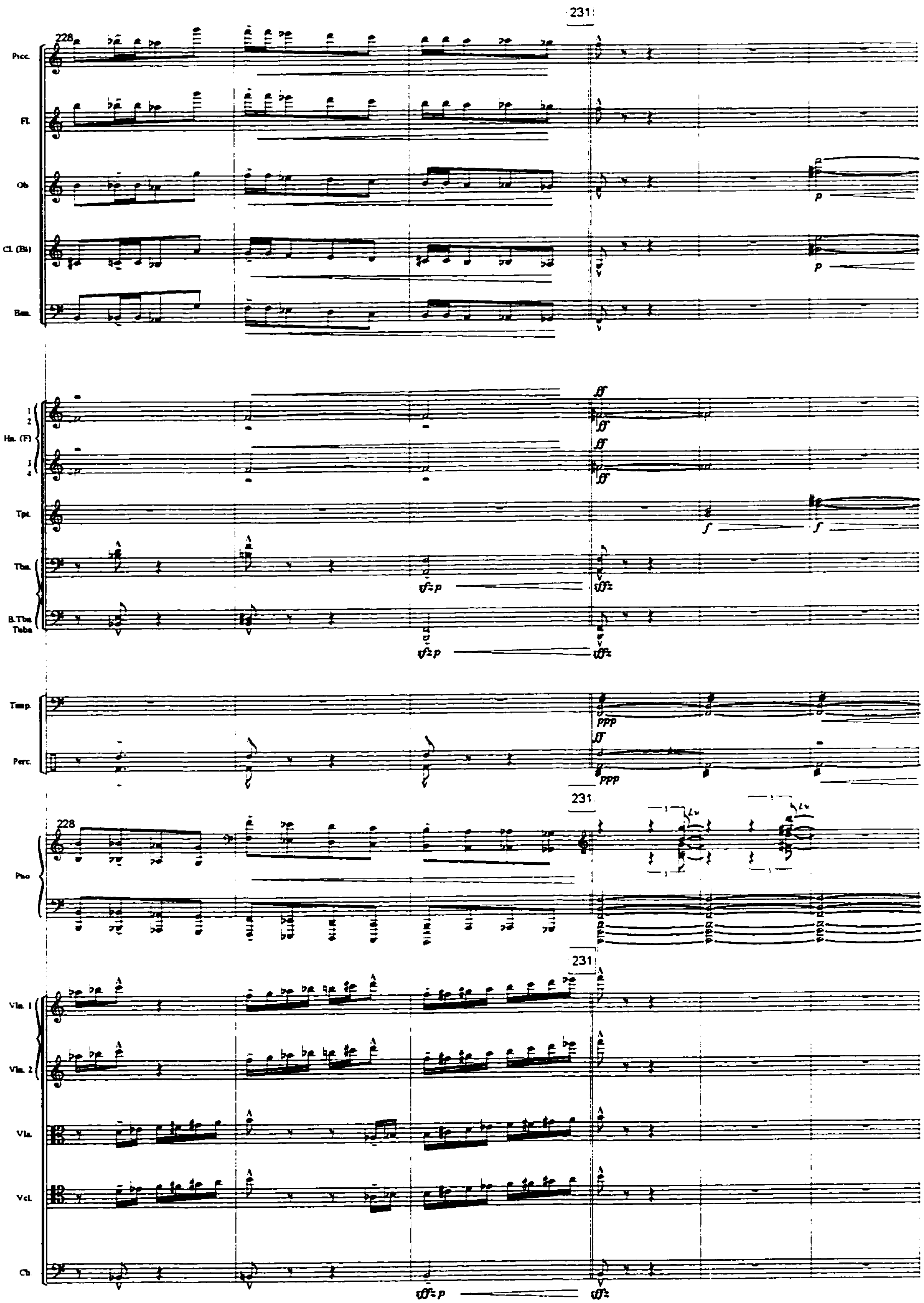

202
Picc.
Fl.
Ob.
Cl. (B♭)
Bsn.
Hn. (F)
1
2
3
4
Tpt.
Tbn.
B.Tbn
Tuba
tuba
Timp.
Perc
202
Pno
8va
8va
202
Vln. 1
Vln. 2
Vla.
Vcl.
Cb.
div a 2
f
ff
pp
mf

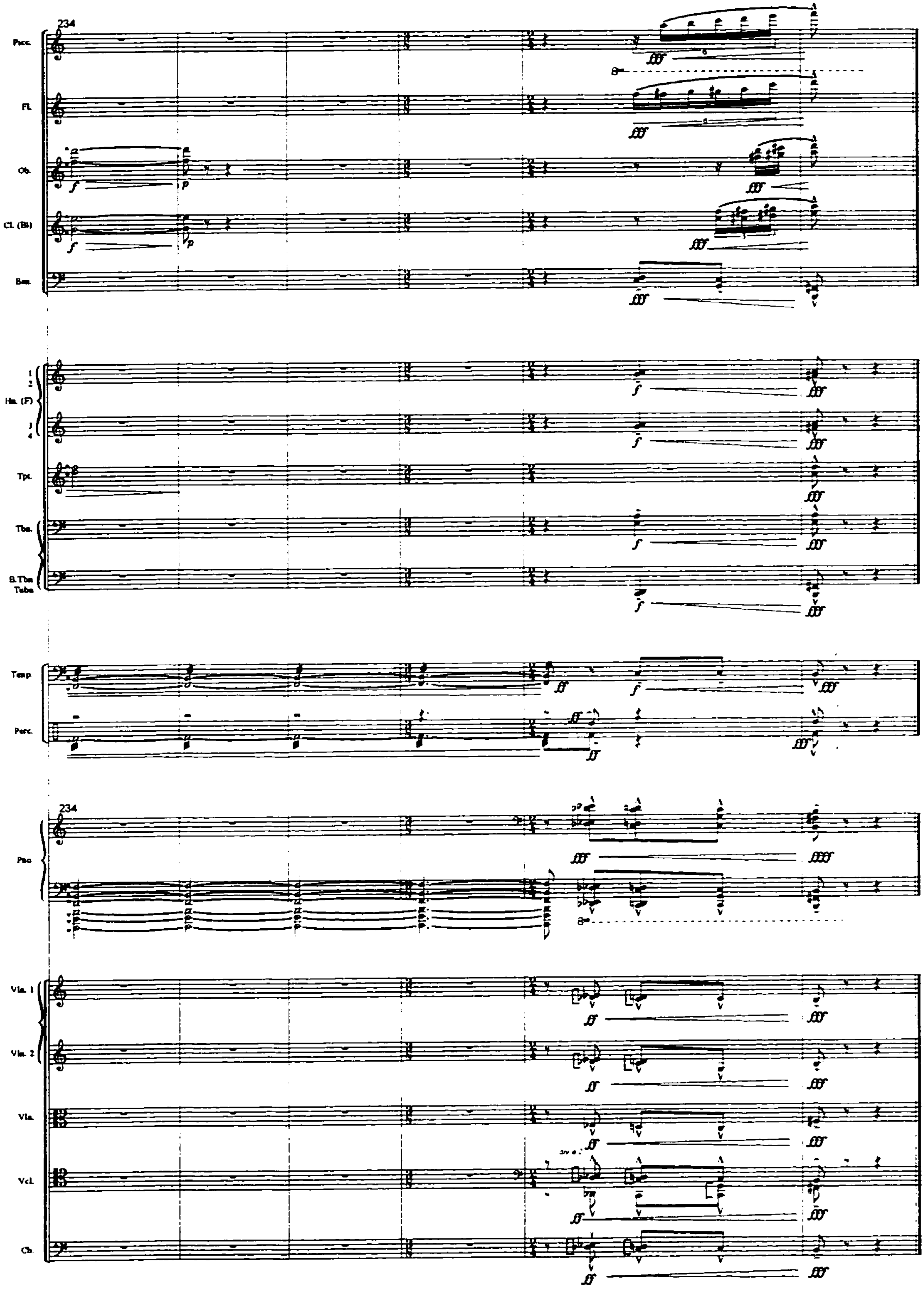

205
Picc.
Fl.
Ob.
Cl. (B♭)
Bsn.
Hn. (F)
1
2
3
4
Tpt.
Tbn.
B.Tbn.
Tuba
Timp.
Perc.
Pno.
Vln. 1
Vln. 2
Vla.
Vcl.
Cb.
ff
pp
3
7
8va


207
208
Timp.
Perc.
ff
S.D.
f sfz p
Pno
8va
15ma
Vln. 1
Vln. 2
Vla.
Vcl.
Cb
mf
pp


212
213 Meno Mosso
217 𝅗𝅥 = 90
Picc.
Fl.
Ob.
Cl. (B♭)
Tbn.
B.Tbn
Tuba
Perc.
Pno.
Vln. 1
Vln. 2
Vla.
Vcl.
f
a 2
cr. cym.
15ma
simile
mf
p
ff
sul tasto
pp


221
223
Picc.
Fl.
Ob.
Cl. (B♭)
Bsn.
Hn. (F)
1
2
3
4
Tpt.
Tbn.
B.Tbn
Tuba
Perc.
Pno.
Vln. 1
Vln. 2
Vla.
Vcl.
Cb.
ff
f
mp
mf
sfz p
sffz
arc.


231
228
Picc.
Fl.
Ob.
Cl. (B♭)
Bsn.
Hn. (F)
1
2
3
4
Tpt.
Tbn.
B.Tbn. Tuba
Timp.
Perc.
Pno
Vln. 1
Vln. 2
Vla.
Vcl.
Cb.
ff
p
f
sffz p
sffz
ppp
Lv

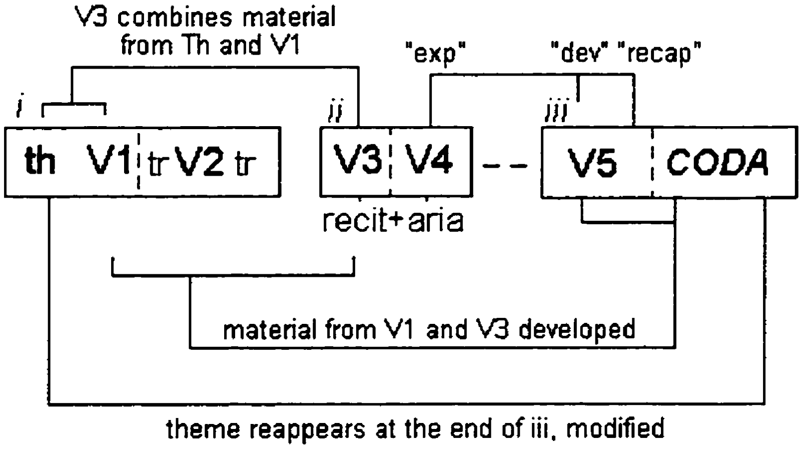

234
Picc.
Fl.
Ob.
Cl. (B♭)
Bsn.
Hn. (F)
1
2
3
4
Tpt.
Tbn.
B.Tbn
Tuba
Timp
Perc.
234
Pno
Vln. 1
Vln. 2
Vla.
Vcl.
Cb.
fff
f
p
ff
ffff
8va
6
3

Analysis and Commentary

A. Formal Concept

The impetus for the formal design of the Concerto was the desire to merge the expectations of a tripartite traditional form with a set of continuous variations. The variations are grouped in such a way as to form three "movements" (see fig. 1), each sharing thematic material with the others because of the variation relationship, but differing in texture and other surface aspects. The levels of contrast give rise to the impression of a traditional tripartite form (i. Moderato, ii. Adagio, iii. Rondo) in which the first movement is perceived as a stand-alone *Theme and Variations*. In fact, what appear to be second and third movements are actually further variations of larger scope. When considered together, the Variations form a symmetrical group around V_4. In general, the farther along in the form, the less literal the statements of the Theme become, due, in part, to the process of continuous variation in which the development of ideas is compounded.

Figure 1. Links and Symmetries in the Overall Form


V3 combines material from Th and V1
"exp"
"dev" "recap"
i
ii
iii
th
V1
tr
V2
tr
V3
V4
- -
V5
CODA
recit+aria
material from V1 and V3 developed
theme reappears at the end of iii, modified

Another significant aspect of the Concerto is the tension between the carefully controlled structural form and the quasi-improvisational gestures of the surface. The first music of the Concerto produced was, in fact, an improvisation that generated the Aria (the main part of the second movement), subsequently transcribed and *polished*. Once complete, reverse development of the improvisation produced the Theme from which spring the larger set of Variations. The developmental links amongst the various sections of the work bear a resemblance to the linear developmental procedures of improvising musicians, owing particular inspiration to the epic solo improvisations of Keith Jarrett.[1] What is missing from the Concerto, however, is a true cadenza, although a quasi-cadential passage occurs at the opening of ***ii*** (Recitative, mm. 1-31). This decision was made partly due to the constant presence of the piano throughout the work.

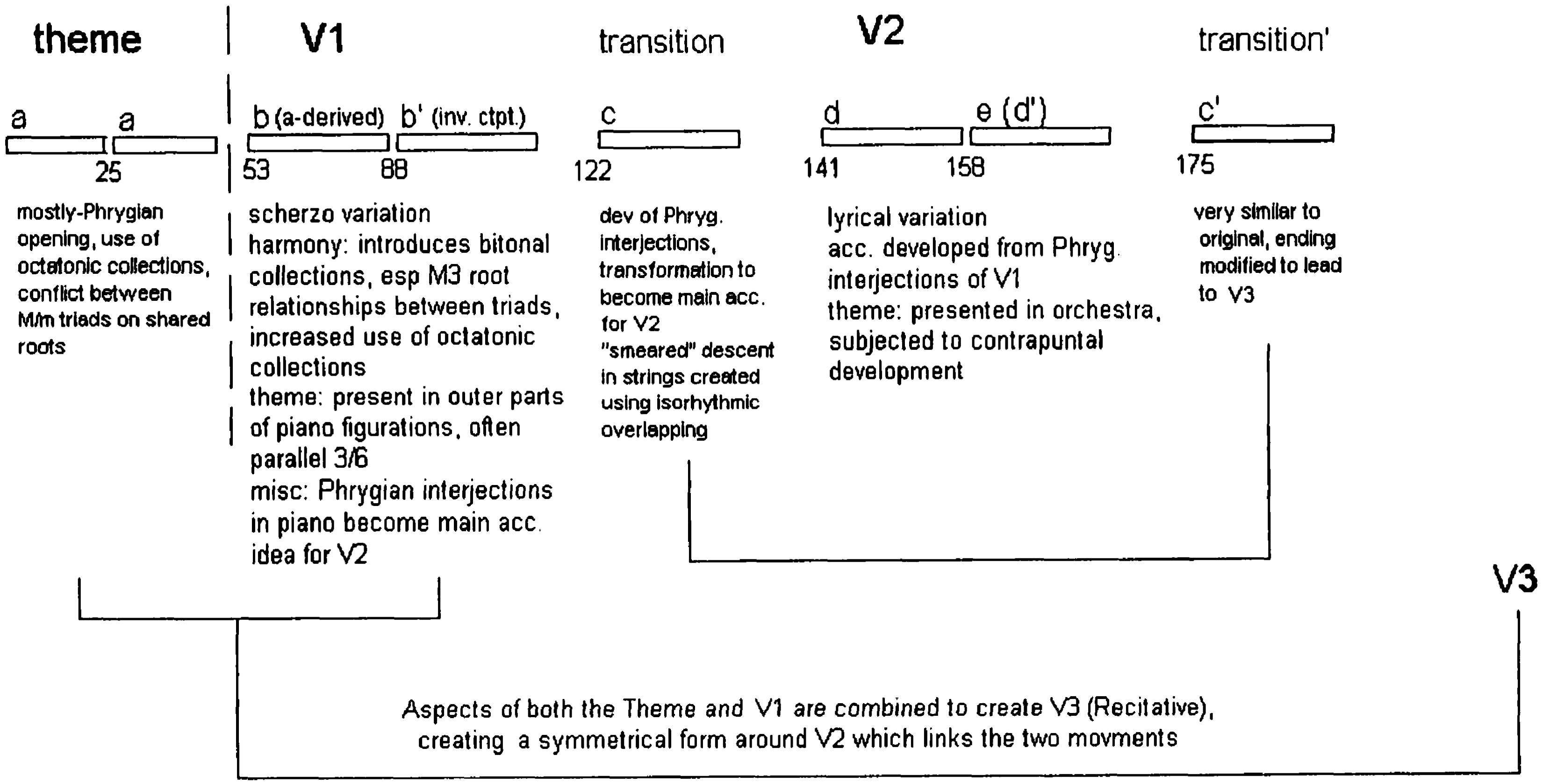
B. General Form of the Movements and their Inter-relationships

B1. First Movement (Theme and Variations) — see fig. 2

The first movement of the Concerto may be divided into three main sections, labeled Theme, V_1, and V_2 on fig.2. The Theme is essentially a binary construction, the second half (mm. 25-50) being an orchestrated and slightly augmented version of the opening piano solo (mm. 1-24). V_1 reflects this binary design but the second segment (b') is more vigorously developed than in the Theme. V_2 displays a symmetrical formal design with a central binary section (141-174) surrounded by related transition sections (c, c'). The binary section of V_2 is fairly explicit in its orchestral references to the Theme, but the piano is freed from literal statements of thematic material, relying more on gestures drawn from V_1 as a foundation for development. V_1 and V_2 function as a large-level pair, reflective of the binary structure of the Theme itself in which the second formal unit is developed from the first. Of course, V_1 and V_2 do not display the level of surface similarities that exist between all of the smaller-level binary forms indicated (a, a'; b, b'; d, d', even c, c'). The end of the movement is deliberately inconclusive, leading the listener to the opening of the next movement. When the large-scale form of the piece is considered, the Recitative section of the second movement (ii: 1-31) functions as a counterpart to the combination of the Theme and V_1 of the first movement (see fig. 1). The result is a symmetrical structure which overlaps the space between the first and second movements.

B2. Second Movement (Recitative and Aria) — see fig. 3

In keeping with the overall variation form of the work, the Recitative is actually the third variation (V_3) and the Aria is the fourth (V_4). However, as a self-contained movement, these two variations function as a pair, with dramatic posturing similar to the



mostly-Phrygian opening, use of octatonic collections, conflict between M/m triads on shared roots

scherzo variation
harmony: introduces bitonal collections, esp M3 root relationships between triads, increased use of octatonic collections
theme: present in outer parts of piano figurations, often parallel 3/6
misc: Phrygian interjections in piano become main acc. idea for V2

dev of Phryg. interjections, transformation to become main acc. for V2
"smeared" descent in strings created using isorhythmic overlapping

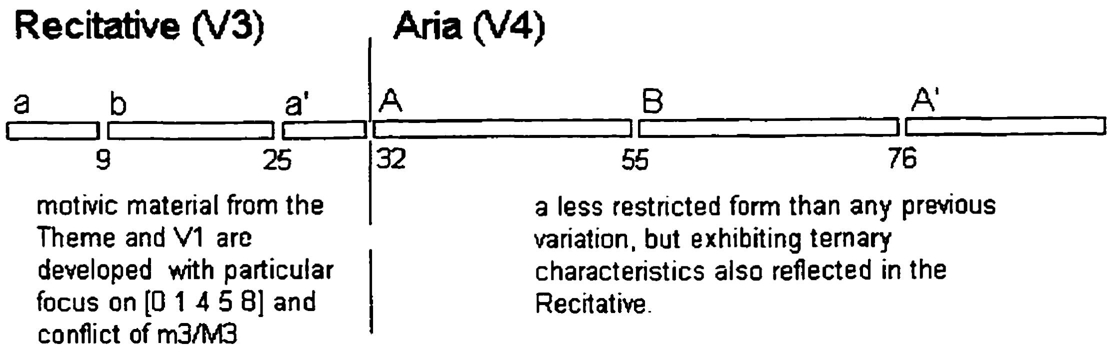
lyrical variation
acc. developed from Phryg. interjections of V1
theme: presented in orchestra, subjected to contrapuntal development

very similar to original, ending modified to lead to V3

Aspects of both the Theme and V1 are combined to create V3 (Recitative), creating a symmetrical form around V2 which links the two movments

Figure 2. Overview of the First Movement

Figure 3. Overview of the Second Movement



motivic material from the Theme and V1 are developed with particular focus on [0 1 4 5 8] and conflict of m3/M3

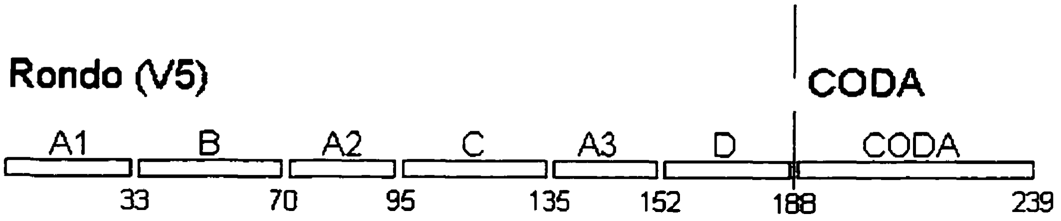
a less restricted form than any previous variation, but exhibiting ternary characteristics also reflected in the Recitative.

operatic pair after which they are named. Both the Recitative and the Aria reflect the move toward tripartite organization which first appeared in V_2, in each case presenting a "recapitulation" which consists of a compression of preceding material. (Note that this idea of compressed recapitulation has already been suggested by the inclusion of the Recitative as part of a symmetrical structure incorporating all of the first movement.) In the Recitative, mm. 25-31 consist of a recombination of the main ideas presented in mm. 1-24. Similarly, mm. 76-88 of the Aria can be seen as a compression of materials presented between mm. 32-75. In general, the surface of the Aria does not yield itself to division as easily as the preceding variations do, giving it a more spontaneous effect. Upon closer inspection, however, some very logical divisions appear which were not consciously applied during the process of improvisation which created this music.

B3. Third Movement (Rondo) — see fig. 4

The third movement is cast in a fairly traditional *rondo* form based on materials from all the preceding variations, especially V_3 and V_4. V_4 appears in a modified

Figure 4. Overview of the Third Movement



Elements of each formal segment are developed by subsequent segments, giving a sense of linear development as well are repetition. The Rondo presents an aggressive development of many of the main ideas of the Concerto

"D" presents a modified recapitulation of V3

The Theme reappears in modified form towards the end of the CODA, therefore providing a symmetrical counterpart to the opening of the work

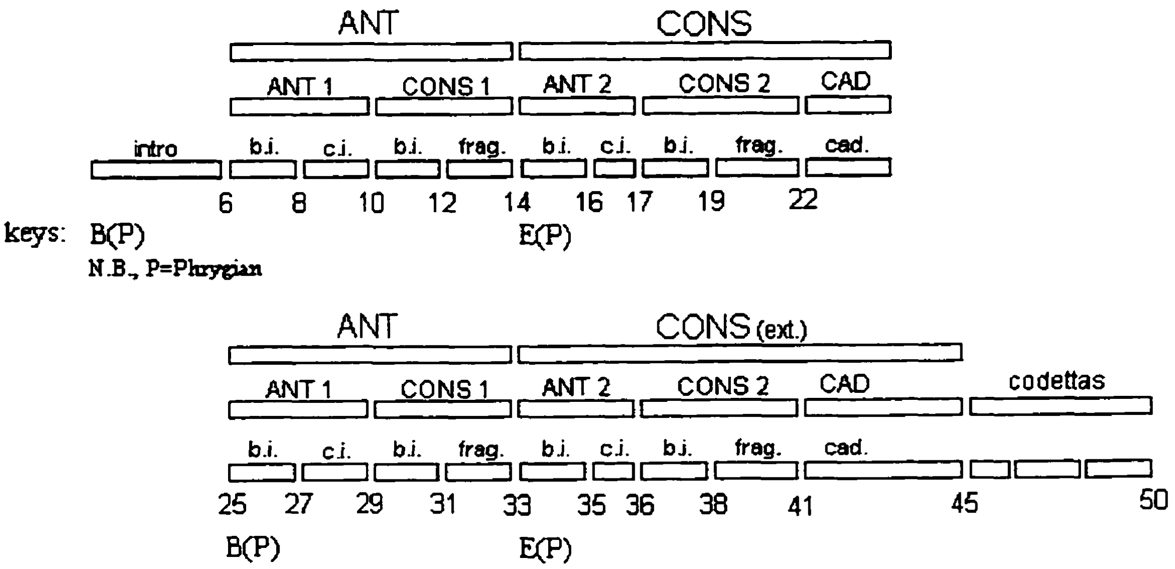
recapitulation at mm. 159-188, hinting at a tripartite form linking the second and third movements. In light of this, it is possible to conceive of an underlying quasi-sonata form in which the second movement is the exposition, iii:1-158 is development, iii:159-188 is the recapitulation, and 189-239 is a coda. In general, the third movement represents the highest level of development for all of the main ideas of the work, some explicitly presented, some used in structural roles to manipulate surface events. The recapitulatory nature of the second half of the movement is evident in the almost literal return of V_4 (as mentioned above) as well as an exposed fragment of the Theme (mm. 213-216). In contrast to the other movements, the Rondo is the only one consisting of a single variation, indicative of the trend towards longer variations as the work progresses.

C. Detailed Analysis

C1. First Movement (Theme and Variations)

C1.1 Theme — i:1-50 — see fig. 5

Figure 5. Phrase Structure of the Theme (i:1-49)


ANT
CONS
ANT 1
CONS 1
ANT 2
CONS 2
CAD
intro
b.i.
c.i.
b.i.
frag.
b.i.
c.i.
b.i.
frag.
cad.
6
8
10
12
14
16
17
19
22
keys:
B(P)
E(P)
N.B., P=Phrygian
ANT
CONS (ext.)
ANT 1
CONS 1
ANT 2
CONS 2
CAD
codettas
b.i.
c.i.
b.i.
frag.
b.i.
c.i.
b.i.
frag.
cad.
25
27
29
31
33
35
36
38
41
45
50
B(P)
E(P)

The Theme is a binary (a, a') unit, the second half being an orchestrated version of the first, harmonically expanded and slightly extended in length (mm. 41-2). A careful examination of mm. 6-24 reveals a large period consisting of a closely related antecedent (mm. 6-13) and consequent (mm. 14-24) outlining the keys of B Phrygian and E Phrygian, respectively. The consequent presents a slightly modified version of the antecedent, compressing the material from mm. 8-9 into a single measure at m. 16 and expanding the material of mm. 12-13 into four measures at mm. 19-22. In addition, the consequent concludes with a brief "cadential" gesture in mm. 23-24, providing a return to B Phrygian and a restatement of the large period.

At a lower level, measures tend to form smaller phrase units that reflect the larger period. For example, beginning at measure 6, a two-measure "basic idea" is presented, followed by a two-measure "contrasting idea" (=four-measure antecedent).

At measure 10, the basic idea returns in a slightly modified form, followed by a new two measure group derived from the development of scalar motives from the basic idea. The combination of these two phrases then creates a period whose consequent features modest development of the initial material, a feature shared with the large-scale period discussed above. This "sharing" of phrase structure is an important feature of the variation technique employed in this work and will be seen again in the course of analysis.

Aside from fragments of melody which will return in more or less recognizable statements in the piece (e.g., 1:133-136, clarinet; i:144ff, orchestra; iii:213-216), there are other features of the Theme which are essential to the creation of subsequent variations:

1. the use of alternating complete octatonic scales or tetrachord subsets ([0 1 3 4] and [0 2 3 5]) based on the same "tonic", taken from mm. 12-13, 19-22; related juxtaposition of [0 1 3] and its inversion (mm. 23-25, piano)

2. [0 1 4 5 8] (the juxtaposition of two triads whose roots are a major third apart; see m. 45-50) and its subset [0 3 4 7] (a major triad with added minor third; e.g., mm. 41-42, strings)

3. extensive use of fourths and fifths in the creation of melody and harmony (both local and structural)

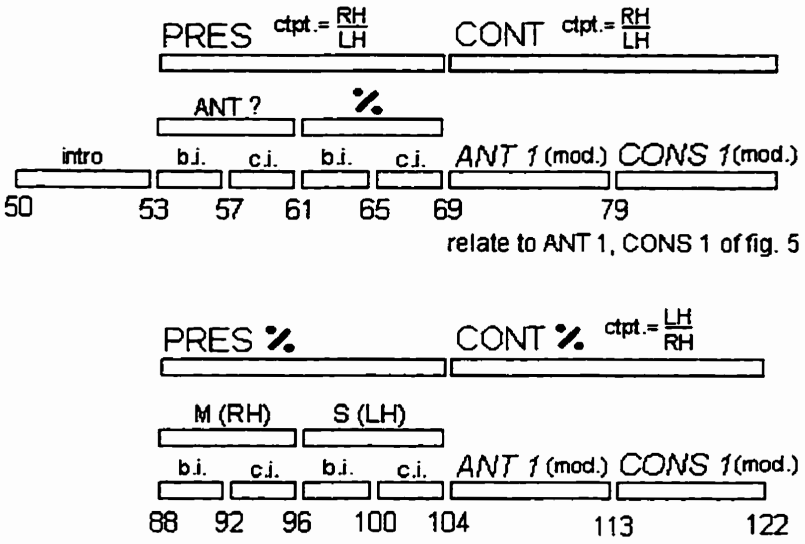
4. general melodic contours (i.e., wide intervals, relatively wide range)

C1.2 Variation 1 (V_1) — i:50-121 *— see fig. 6*

The first variation is elided with the end of the Theme and presents a contrapuntal development of the thematic materials. The minor sixth diad F/A from mm. 49-52 is maintained as the governing interval for the parallel writing in this variation. The characteristic harmonic device which results is the combination of triadic structures whose roots are a major third apart. For most of the variation, tonalities based on D and

F# are presented in this bitonal competition, at first simultaneously (mm. 53-68) and later separately (D: mm. 88-95, F#: mm. 96-103).

Figure 6. Phrase Structure of V_1 (i:50-121)

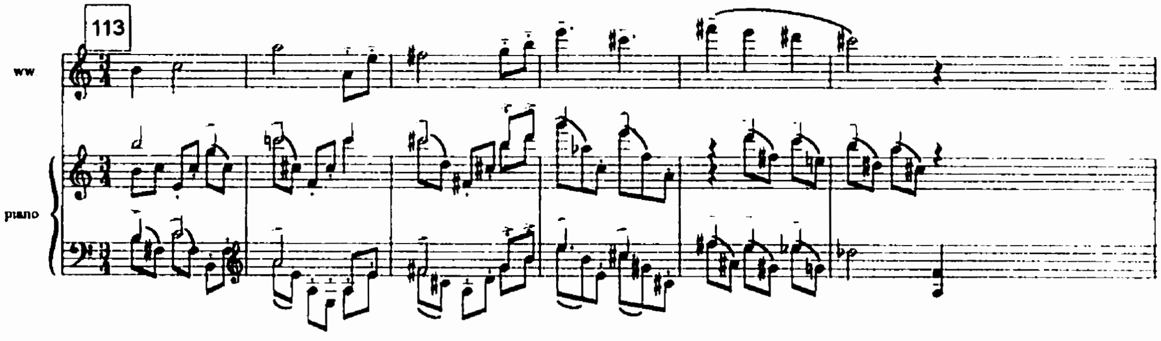

PRES ctpt.= RH/LH
CONT ctpt.= RH/LH
ANT ?
%
intro
b.i.
c.i.
b.i.
c.i.
ANT 1 (mod.)
CONS 1 (mod.)
50
53
57
61
65
69
79
relate to ANT 1, CONS 1 of fig. 5
PRES %
CONT % ctpt.= LH/RH
M (RH)
S (LH)
b.i.
c.i.
b.i.
c.i.
ANT 1 (mod.)
CONS 1 (mod.)
88
92
96
100
104
113
122

The formal structural of this variation is related to that of the Theme. Essentially, V_1 consists of two large formal units (mm. 53-87, mm. 88-121) which are virtually the same, the second of which provides a limited development of the first. As shown in figure 6, these two units can be seen in an antecedent-consequent relationship, each part of which is analyzed as a *sentence* (in the Theme, these were periods). The developmental features of the consequent can be seen in the new contrapuntal distribution of materials from equivalent places in the antecedent. The presentation phrase in mm. 53-68 is comprised of an 8-measure unit (mm. 53-60) which is repeated with expanded orchestration and the piano part transposed up an octave. With the exception of mm. 55-56, and 63-64, the piano plays material in parallel minor sixths with tonalities loosely centered on D (RH) and F# (LH). When the presentation phrase is repeated in mm. 88-103, this simultaneous bitonality is removed and the "D-material" and "F#-material" are presented independently in the piano in mm. 88-95 and 96-103, respectively. In addition, the piano music of the first continuation phrase (mm. 69-87) is subjected to inverted counterpoint when it returns in mm. 104-121. As a final formal detail, these continuation phrases can be broken into periods with approximately equivalent component parts.

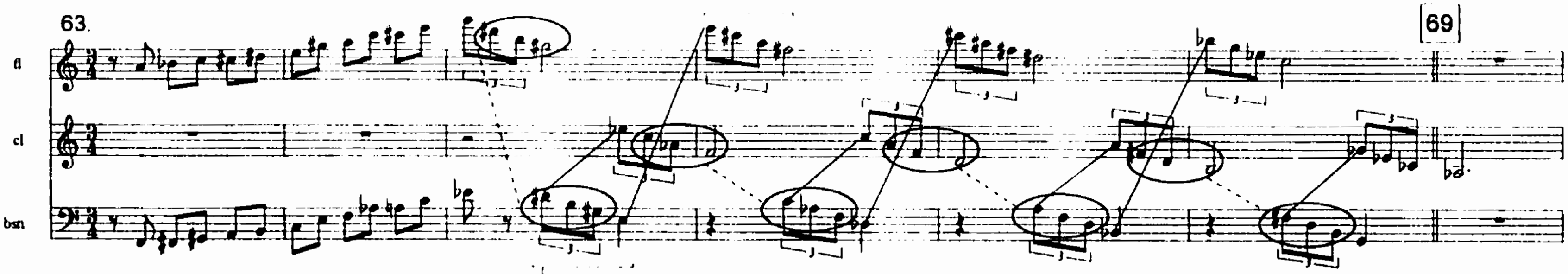
Between mm. 69-88 and again at mm. 104-121, recognizable segments of the Theme melody appear, first in the piano only, later doubled by the woodwinds (see ex. 1). The "interjections" which appear at mm. 76-78, 85-87, 110-112 and 119-121 are built from the music of mm. 23-24 and 43-44 of the Theme and will be developed as a feature of V_2.

Some of the interesting features of the orchestral component of V_1 include the interplay of major and minor thirds, especially in the creation of common tone seventh chords (see ex. 2). In addition, the octatonic fragments introduced in the Theme frequently become part of the accompaniment (e.g., m. 55, cl.; m. 63, bsn., fl., picc., tpt.; m. 91ff, vln. I, tpt.). The configurational concept of alternating two distinct intervals also serves to create new non-octatonic gestures (e.g., m. 56, cl.; m. 64, tuba: alternating m3/m2; mm. 88-89, vc., vla.: alternating M3/M2; m. 89, vln. I: alternating m3/M2), a technique that will return as the work progresses. [2] The quasi-chorale brass writing at mm. 69-87 and mm. 104-122 serves to provide a foundation for the contrapuntal writing while reinforcing Lydian sonorities (added #11), #9 chords (+/- conflict over common root) and quintal/quartal harmonies featured in the Theme. As shown in example 3, the roots of the chords which begin and end the two segments of this progression reflect the tonalities of D and F# already discussed with the introduction of the "conflicting" minor third (F: m. 85) as well as the lower minor third to D, (B: m. 104). While the first segment of the progression (mm. 69-87) is essentially the harmonization of an ascending melodic line, the second (mm. 104-122) begins with a

Example 1. Thematic References in i: 113-118

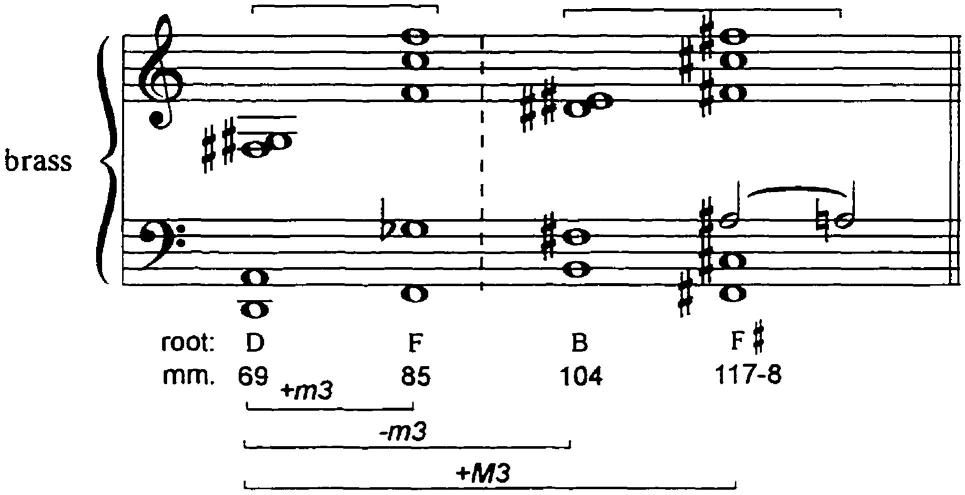

113
ww
piano

Example 2. Intervallic relationships in i: 63-69. woodwinds


63.
69
fl
cl
bsn

beginning here, bsn. and fl. tetrachords interlock using the pattern M3/m3/M3/m3/M3/m3

Example 3. root relationships between initial and final chords in brass progression, i: 69-118

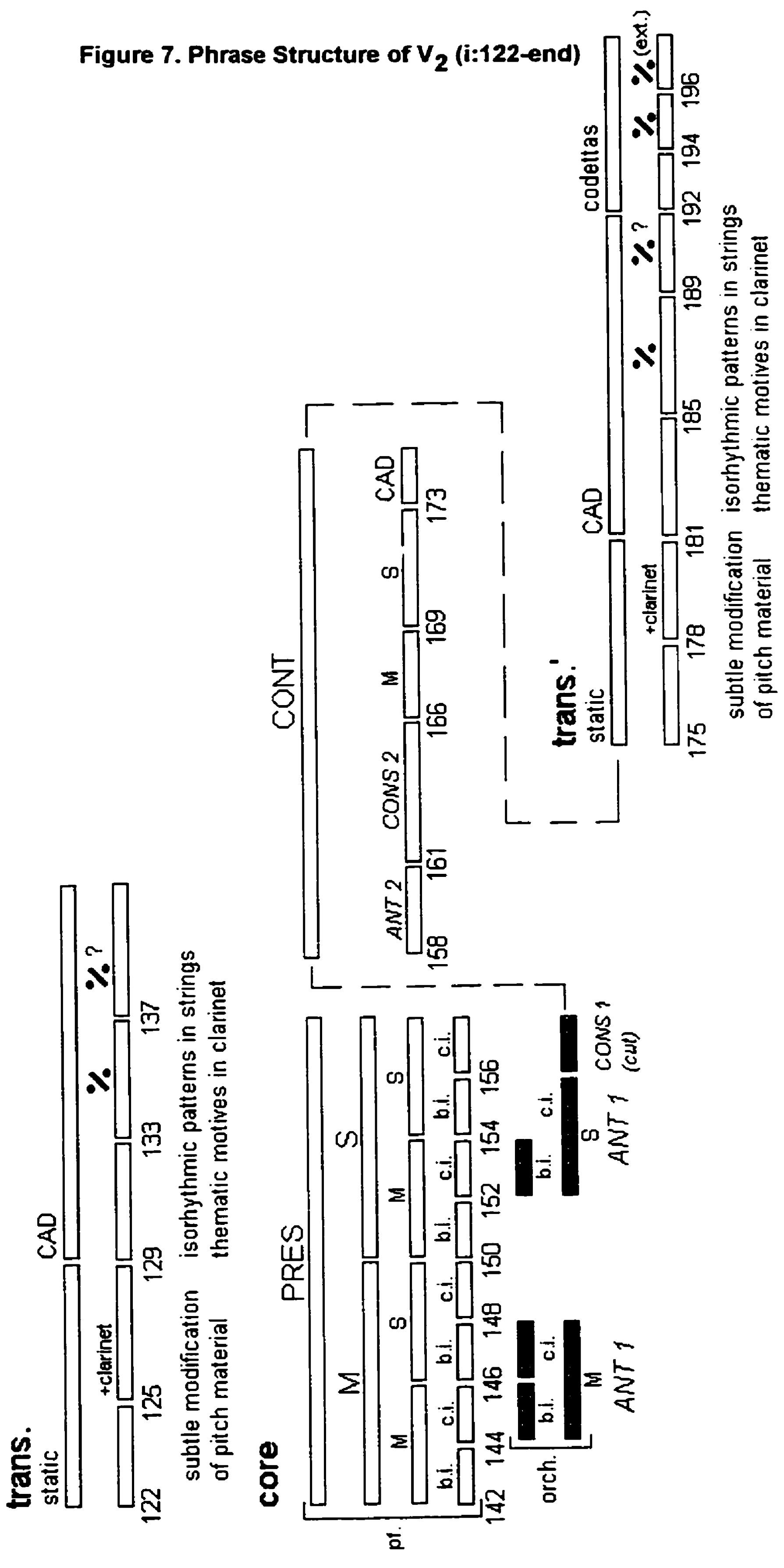


modified version of the main melody of the Theme. The final chord of the progression (F#MM^7: m.118) eventually shifts to become f#mM7 in keeping with the major/minor conflict of the harmonic writing, then is liquidated in the strings to the A/F diad (m. 120ff) with which the variation began. In measures 119ff, however, the piano continues to play G-flat as a neighbor tone against this diad, maintaining the m3/M3 conflict below the common tone A. An examination of the piano writing at 120-122 reveals F as the center of a symmetrical pitch structure based on reflections of the set [0 1 3], relating it back to mm. 23 of the Theme.

C1.3 Variation 2 (V_2) — i:122-198 — see fig. 7

The second variation, V_2, is the first part of the work which can be clearly divided as a tripartite (i.e., ABA) structure. The transitional material from mm. 122-141 returns in abbreviated form in mm. 175-191 while the central section (mm. 142-174) is the developmental *core* of the variation. The outer transitions are primarily based on the "interjection" material of V_1 (i.e., mm. 76-78 and similar), developing it and transforming it into the main gesture of the *core*. V_2 consists of a looser-knit formal structure than in either the Theme or V_1. In addition to the clear large tripartite structure of the entire variation, there is a weaker tripartite form from mm. 142-174, suggested by the modified recapitulation of material beginning in m. 166. Given this, an argument could be made for the existence of a five-part symmetrical organization of V_2 in which mm. 158-165 is the center.

Figure 7. Phrase Structure of V_2 (i:122-end)


trans.
static
CAD
+clarinet
%
% ?
122
125
129
133
137
subtle modification of pitch material
isorhythmic patterns in strings thematic motives in clarinet
core
PRES
M
S
b.i.
c.i.
pf.
142
144
146
148
150
152
154
156
orch.
ANT 1
CONS 1 (cut)
CONT
ANT 2
CONS 2
CAD
158
161
166
169
173
trans.'
static
CAD
codettas
+clarinet
% ?
% (ext.)
175
178
181
185
189
192
194
196
subtle modification of pitch material
isorhythmic patterns in strings thematic motives in clarinet

C1.3.1 V_2 "Transitions" (mm. 122-141, 175-198)

With the exception of some modifications to the end of the second "transition" which ends the movement, these two segments are virtually the same. The string orchestra writing in each is composed of a group of simultaneous scalar descents each characterized by a distinct pulse speed. Above this, the relatively static piano part undergoes gradual pitch alterations (mm. 122-128, 175-180) before adding its own set of scalar descents (mm. 129-136, mm. 181-188).[3] The second part of each transition is at first strongly cadential (B-flat Aeolian in each case) before moving evasively into E Lydian (m. 141 and 191). The clarinet obbligato line present in each transition, although freely conceived in an improvisatory manner, presents fragments of the Theme in mm. 132-142 and again at mm. 184-195. The codettas in mm. 192-198 are reminiscent of m. 141-143 and serve to give the end of the movement a feeling of unresolved tension rather than a strong sense of closure.

The final sound of the movement is another combination of triadic sonorities separated by a major third, this time E/G# (E-G#-(B missing) + G#-B#-D#); the missing "B" is the original tonic of the movement and would yield the complete set [(0) 1 4 5 9]. A second incomplete [0 1 4 5 8] set is also created through the combination of the diad E/G# which is exposed at the end of the movement and the prominent F/A diad from V_1: this time creating the [0 1 4 5] subset. The missing pitch C# is not exposed in any prominent way as either a surface element or tonal center in the first movement, but figures prominently in the third.

C1.3.2 V_2 "Core" (mm. 142-174)

The core of V_2 offers perhaps the most complex phrase design of the work up to this point: small model/sequence groups combine to form larger-level structures which themselves are subject to model/sequence operations. While the piano music initially suggests one formal structure, the orchestra presents an opposing phrase organization which eventually overtakes that of the piano (by measure 158). When viewed from the largest perspective, the core consists of a 32 measure sentence: a presentation phrase (mm. 142-157) and a continuation phrase (mm. 158-174) which could alternately be seen as a continuation⇒cadential.[4] As mentioned above, the music of measure 166ff suggests a momentary recapitulation of the presentation phrase, but modified significantly as the core comes to a close (mm. 169-174).

Throughout the core, the orchestra presents clearly recognizable material from the Theme (labeled in italics on figure 7 with labels that correspond to those in figure 5; i.e., *ANT 1* on figure 7 is related to ANT 1 on figure 5). Rather than simply being repeated, the thematic material is subjected to modest development. For example, in measures 158-162, the celli and basses present an inverted form of the Theme, corresponding to the lowest voice of measures 14-19. In measures 166-175, the original material is augmented slightly through the integrated repetition of small motivic elements. The "cadential" chords of measures 173-175 in the strings correspond to those of measures 45-50.

As mentioned above, the piano tends to dominate the early part of the presentation phrase, but the phrase organization is eventually overtaken by the orchestra and the piano plays more of an obligato role as the variation progresses. Considering the piano part alone in measures 142-157, the phrase structure divides neatly into a large model (mm. 142-149)/sequence (mm. 150-157) pair, each of which also consists of a lower level model/sequence pair. The large model begins in E Lydian[5], while the sequence repeats the material at the tritone: B-flat Lydian. This binary division with subtle development of the second part (provided by the orchestra) corresponds with the formal division of the Theme. The orchestral material, on the other hand, overlaps the divisions between model/sequence pairs and begins to form truncated yet competing phrase segments. These segments are carried on the transpositional wave of the large model/sequence in the piano material, resulting in a repetition of material at the tritone. Specifically, there is an isolated four-measure antecedent phrase beginning in the trumpet and violin at measure 144, seeming to progress out of F Aeolian towards A Phrygian. This phrase repeats as part of the model/sequence at measure 152 but this time is extended with an abbreviated reference to measure 10ff. From measure 158-174, Thematic material is presented in a more aggressive fashion by the orchestra and the sense of phrase organization which it presents becomes perceptually dominant.

The section from 158-174 is less strictly controlled by formal convention than measures 142-157. It has elements of model (mm. 166-168)/sequence (169-172), but also of expansion as motivic cells from the Theme are developed (e.g., 168ff). In addition, measures 158-165 form an independent segment based on the second half of the Theme, a segment which is not repeated as seen in the presentation phrase. In general, the whole region from 158-174 is less stable, both in terms of the loose-knit phrase structure and high state of tonal flux. All of these characteristics are consistent with the traditional "continuation" phrase, especially when combined with the elements of closure which end the segment. The only key center with any degree of stability is that of A Lydian (mm. 158-161) which, when combined with the initial tonality of E Lydian (m. 142) reflects the perfect fourth transpositional relationship between phrases demonstrated in the Theme (B Phrygian-E Phrygian). The two component phrases of the sentential core of V_2 stand in a classic exposition-development relationship. This is particularly true of the piano writing where elements from the presentation phrase reappear in fragmentary fashion in the continuation.

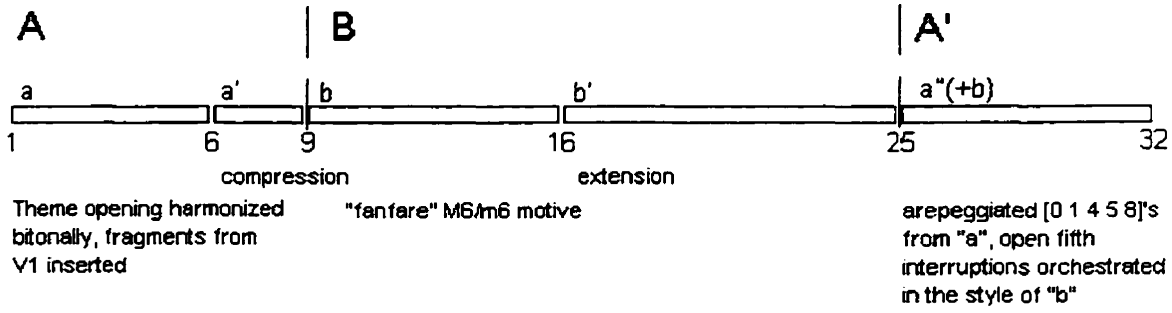
In contrast to V_1, this variation exploits a local rhythmic tension between the piano writing and its orchestral counterpart. This is apparent in the polyrhythmic construction of several measures (e.g., 144-145, 152-153, etc.) as well as tension between phrase boundaries as discussed above. Despite the increasing organic growth of the form, the listener is still able to freely trace melodic/harmonic components of the Theme through to the end of the first movement. In addition, recognizable elements of

V_1 were carried over and developed in V_2 — a procedure that will function throughout the remainder of the work.

C2. Second Movement (Recitative and Aria)

C2.1 Recitative — ii:1-31 — see fig. 8

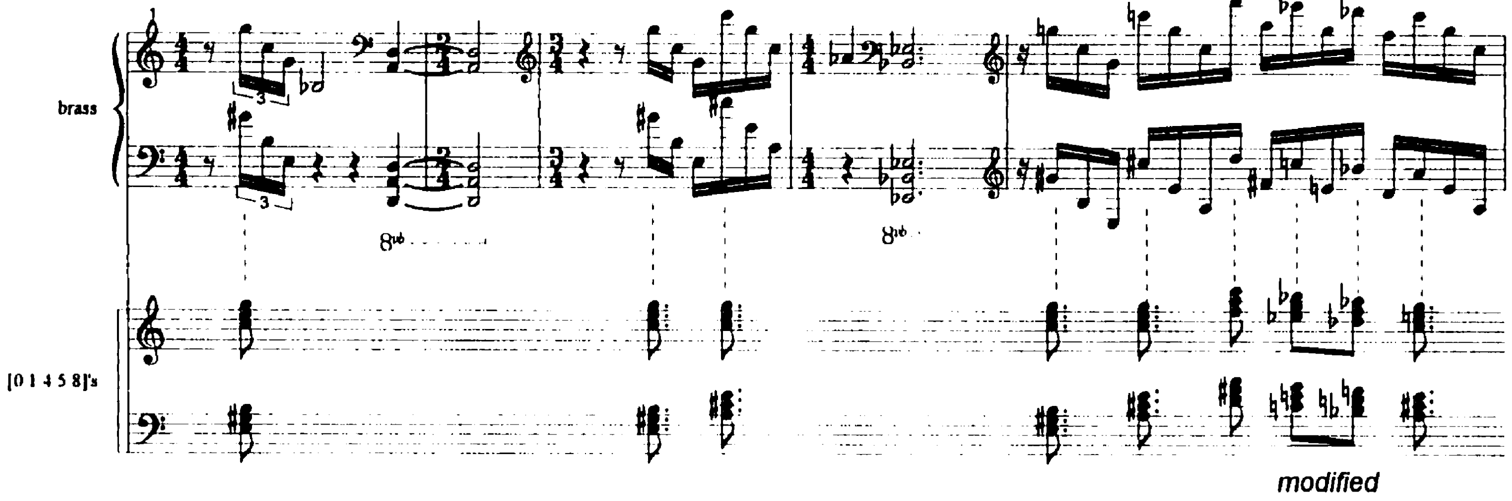
Figure 8. Phrase Structure of the Recitative (ii:1-31)


A
B
A'
a
a'
b
b'
a"(+b)
1
6
9
16
25
32
compression
extension
Theme opening harmonized bitonally, fragments from V1 inserted
"fanfare" M6/m6 motive
arepeggiated [0 1 4 5 8]'s from "a", open fifth interruptions orchestrated in the style of "b"

To call an instrumental movement a recitative is to set up certain expectations concerning its texture, gesture and drama. In this Recitative, the listener's attention is drawn to the piano soloist who is supported by relatively sparse events in the orchestra. In all cases, the orchestration grows directly out of doublings of the piano material, providing dynamic and textural shaping of sustained sonorities. The piano music itself is declamatory and impulsive, characterized by a flexibility of rhythm supplied by both the composer and the performer. It punctures the calm left by the end of the first movement and creates a contrasting ground for the introspection of the aria which follows.

As shown in figure 8, the Recitative is essentially cast in a tripartite (ABA') form with both A and B consisting of further two-part division (aa' and bb', respectively). In A, the first a consists of a bitonal (i.e., [0 1 4 5 8]) statement of the Theme (mm. 1-2) combined with a fragment from V_1 (m. 4). The Theme melody returns with the same bitonal characteristic in a' (mm. 6-8), followed by a scalar flourish into B. In measures 9-10, alternating M6/m6 with common tones are used (resulting in [0 1 4] sets), followed by a fanfare-like series of sixths descending by M3/m3 steps. Measure 14 is adapted from i:75 *et al* and leads through a brief ascending flourish to an extended repetition of b in 16-24. In A', the sixteenth-note material in the piano is developed from V_1 (i:71-73) and features an arpeggiated continuation of the [0 1 4 5 8] pitch organization seen in A. (see ex. 4) The final E-Major sonority in mm. 30-31 recalls the end of the first movement and points forward to the Aria. Because of the emphasis on development of material from the Theme and V_1, the Recitative could be considered part of a five part symmetrical form encompassing the entire first movement (see. figure 1.)

Example 4. Use of [0 1 4 5 8] in ii:25-29


brass
8vb
8vb
[0 1 4 5 8]'s
modified

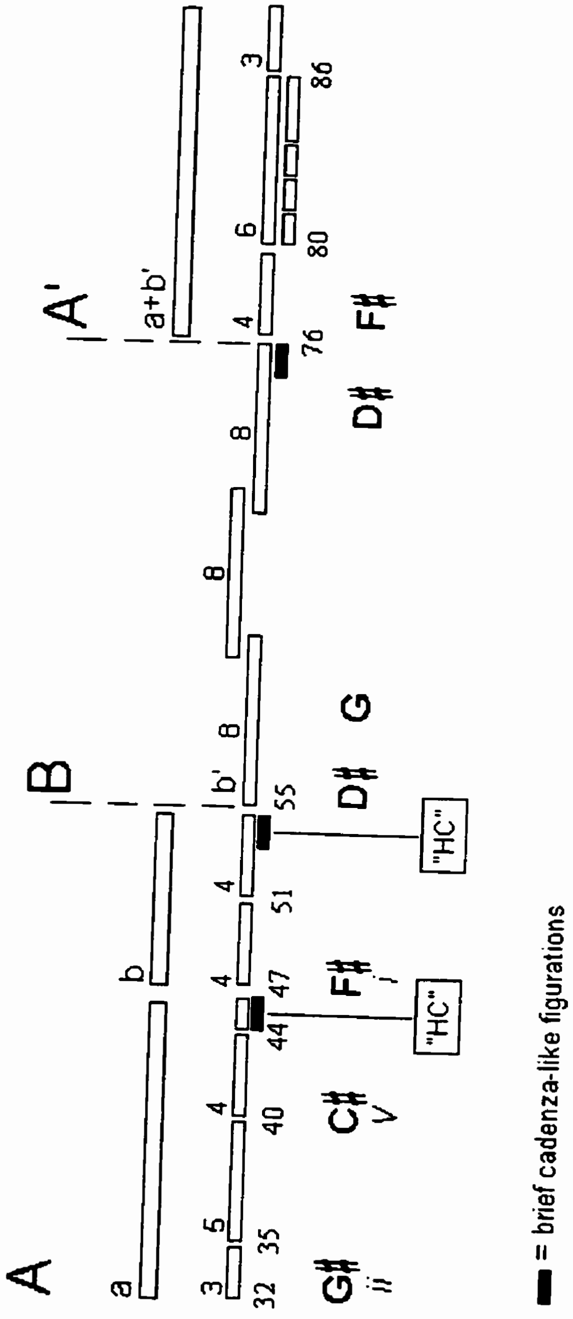
***C2.2 Aria (V_4) — ii: 32-88** — see fig. 9*

As mentioned above, the piano music in this section of the Concerto was improvised by the composer, subsequently transcribed and orchestrated. Initially, this was an experiment to examine subconscious processes in the act of improvisation. What analysis uncovers is an organically unfolding set of connected phrases supporting one long melody and moving through a logical progression of keys as shown in figure 9.

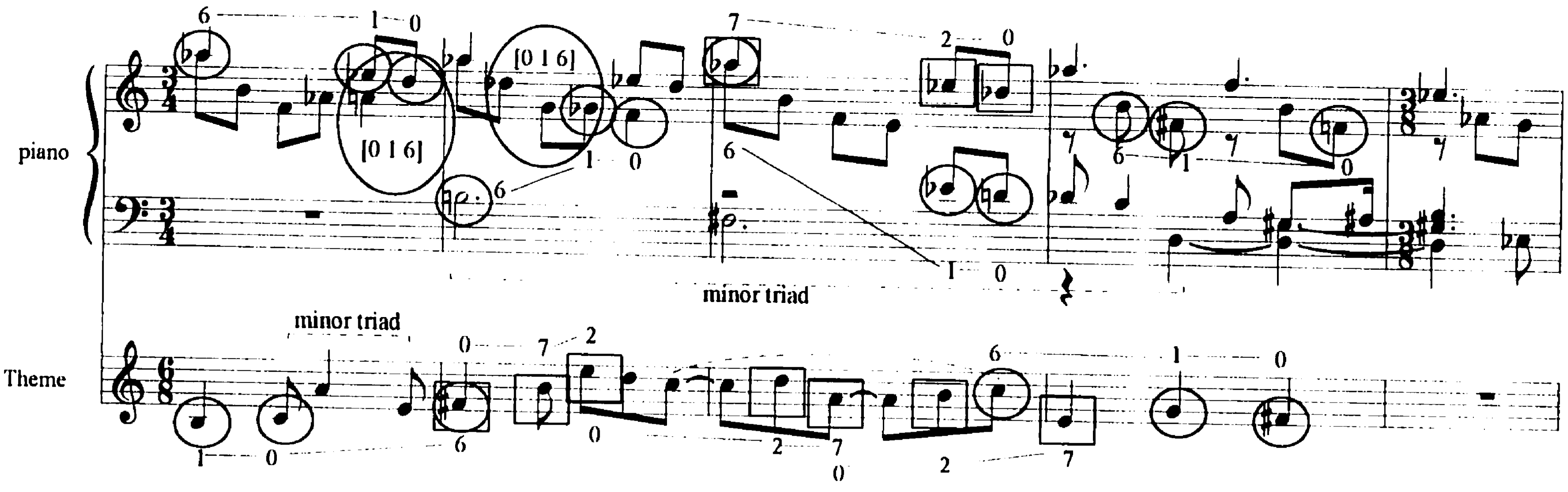
The three main sections of the Aria relate closely with one another except for the fact that the main melody from a (mm. 35-39) is withheld during the B-section, returning in mm. 76-79 (modified). Another structural feature is the use of brief pauses in the harmonic rhythm (m. 46, 54, 74-75) at the ends of formal segments, all of which have a quasi-"half cadence" effect (although only mm. 44-46 presents a real **V** in the governing key context). Whereas two distinct ideas are presented in A, B consists of three overlapping 8-measure phrases: that is, the phrases appear to be elided together, one taking off while the previous is ending (e.g., m. 62, m. 68). In A', elements of the original a and b are presented simultaneously rather than in separate phrases, although a true recapitulation is difficult to hear due to the ongoing modification of material.

Following a brief introduction in the strings based on [0 1 3] (mm. 32-34), the piano enters with music reminiscent of the figurations of V_1 and melodically related to the Theme through the permeation of shared sets (see ex. 5). The general approach to melody in the Aria is cellular — small melodic cells are gradually modified and expanded through repetition. As a result, certain intervallic contours and accompanimental gestures are maintained as the melody progresses, but ultimately the continued transformations blur any strong sense of phrasing. Phrase boundaries are generally defined by the appearance of nodes of decreased activity following which the melody continues to evolve.

Figure 9. Phrase Structure of the Aria (ii:32-end)


A
a
3
32
5
35
4
40
44
4
47
4
51
b
"HC"
"HC"
B
b'
55
8
8
8
A'
a+b'
4
76
6
80
3
86
G# ii
C# V
F# i
D#
G
D#
F#
▮ = brief cadenza-like figurations

Example 5. Melodic set relations bewteen the Aria (mm. 35-39)_ and the Theme (mm. 6-9)

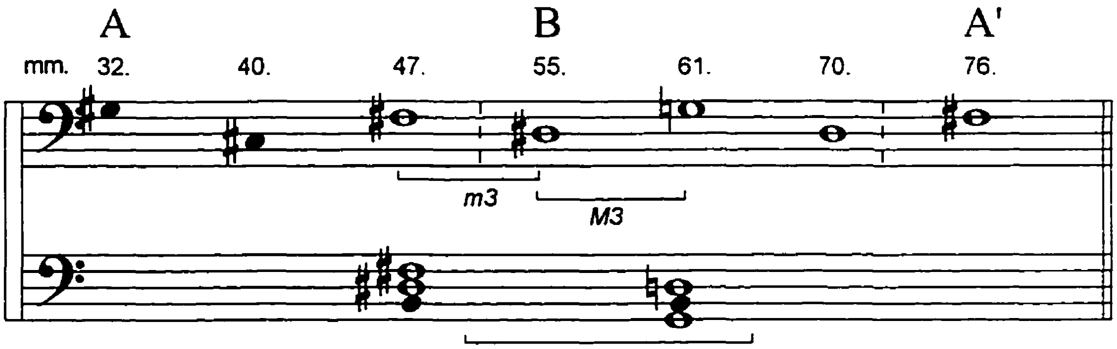

piano
Theme
[0 1 6]
[0 1 6]
minor triad
minor triad
6
1
0
7
2
0
6
1
0
6
1
0
6
1
0
1
0
0
7
2
6
0
2
7
0
2
7
6
1
0

sets [0 1 6] and [0 2 7] permeate both the Theme and the opening measures of the Aria

The harmonic implications of m.35 (piano) are familiar: major and minor thirds are presented above a common pitch — A-flat and A against F; D and E-flat against B. This major/minor conflict is an important feature of the harmony in this variation with prominent examples (frequently voiced as #9 chords) at m. 41ff (strings), m. 49 (piano), m. 53 (strings), m. 68 (piano), mm. 74-76 (tutti), mm. 87-88 (piano). This sound relates directly back to the Theme where the same harmony was given prominence in mm. 39-43. More recognizable references to the Theme occasionally appear, such as in mm. 45-46 (tuba), mm. 50-51 (tuba) and mm. 86-88 (flute), all of which quote i:23. For the most part, however, the relationship to the Theme remains ambiguous save for some harmonic references as discussed above and the general gestures of the melody.

The important key regions shown on figure 9 reveal an important symmetrical pattern (see ex. 6). The first stable key region (F#) is approached using a segment of the circle of fifths (i.e., **ii-V**). The B section features D# - G -D# as pitch centers before F# returns at the end of the Aria. When considered together, these keys display the M3/m3 conflict [0 1 4] which has been a surface feature of the work since the beginning. Taking into consideration the tonal center of B which opens and closes the entire work, another significant pattern of keys appears: D# and G are upper and lower M3's to B. This pattern would tend to strengthen the earlier suggestion that this variation lies at the center of a symmetrical formal scheme encompassing the whole Concerto. In addition, the pattern (g# - c#) - F# - D# - G - D# - F# is continued into the third movement where the initial pervasive pitch center is C#.

Example 6: Pitch centers of the Aria and their relationships



pitch centers form [0 1 4 5 8] set when combined with overall B-tonality of the work

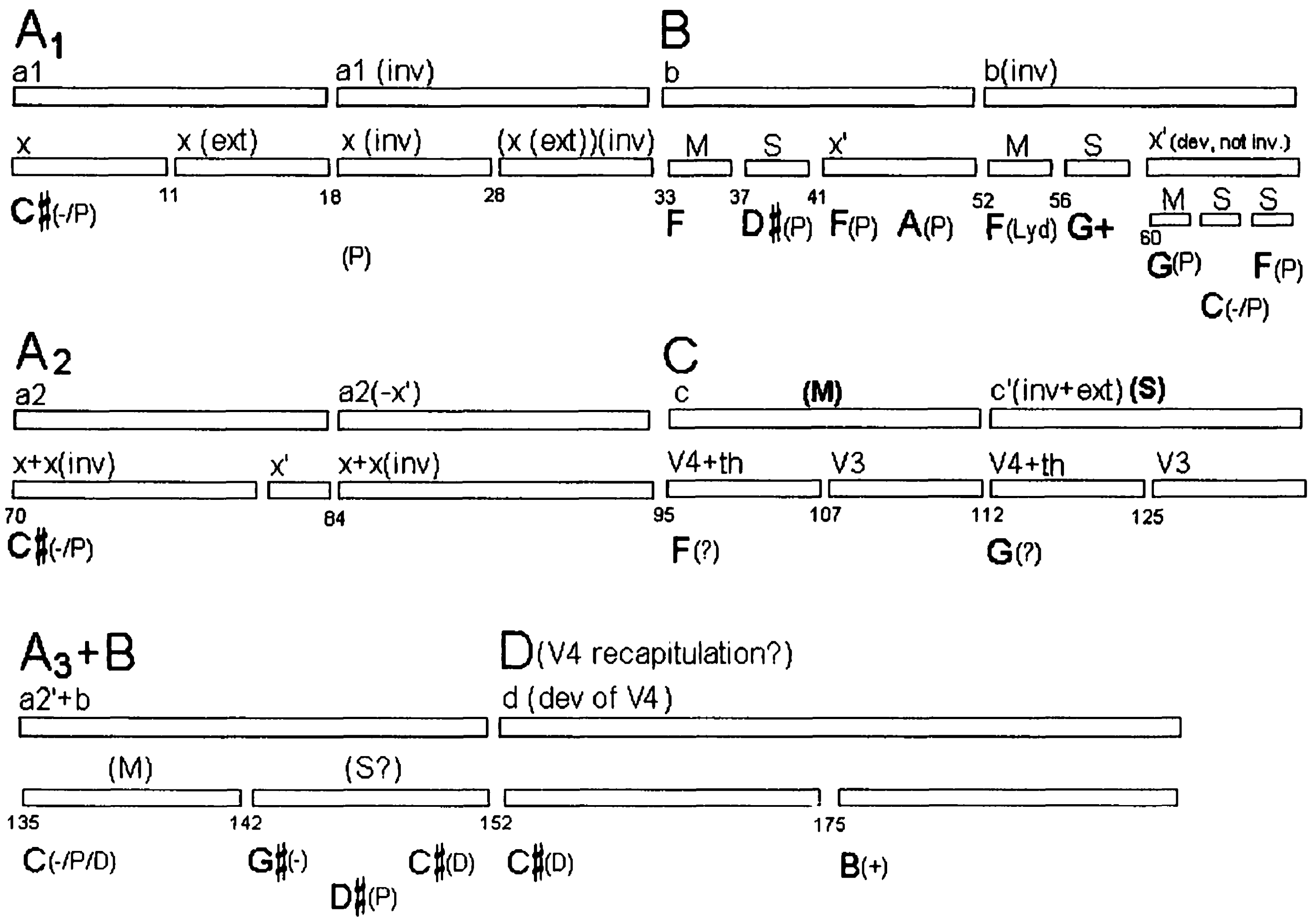
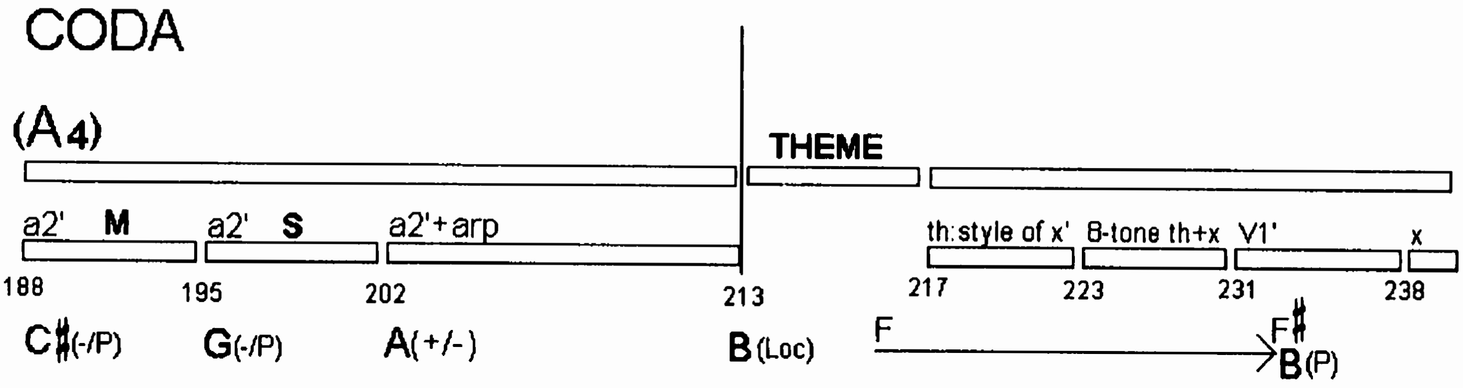

A1
a1
a1 (inv)
x
x (ext)
x (inv)
(x (ext))(inv)
11
18
28
C♯(-/P)
(P)
B
b
b(inv)
M
S
x'
M
S
X'(dev, not inv.)
33
37
41
52
56
M
S
S
60
F
D♯(P)
F(P)
A(P)
F(Lyd)
G+
G(P)
F(P)
C(-/P)
A2
a2
a2(-x')
x+x(inv)
x'
x+x(inv)
70
84
C♯(-/P)
C
c
(M)
c'(inv+ext) (S)
V4+th
V3
V4+th
V3
95
107
112
125
F(?)
G(?)
A3+B
a2'+b
(M)
(S?)
135
142
152
C(-/P/D)
G♯(-)
D♯(P)
C♯(D)
D(V4 recapitulation?)
d (dev of V4)
175
C♯(D)
B(+)

Figure 10. Phrase Structure of the Rondo (ii)

Figure 10. *(continued)*

Fig. 10 (cont'd)

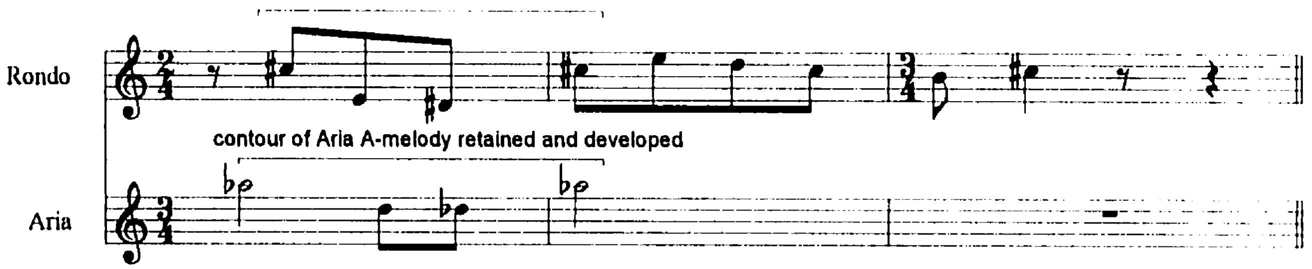

CODA
(A4)
THEME
a2' M
a2' S
a2'+arp
th:style of x'
8-tone th+x
V1'
x
188
195
202
213
217
223
231
238
C♯(-/P)
G(-/P)
A(+/-)
B(Loc)
F
F♯
B(P)

modes are shown in parentheses following tonic name:
+ = major (ionian), d=dorian, p = phrygian, lyd = lydian, mix = mixolydian, - = aeolian, loc = locrian, ? = unclear
in the case of polymodality, modes are separated by a slash

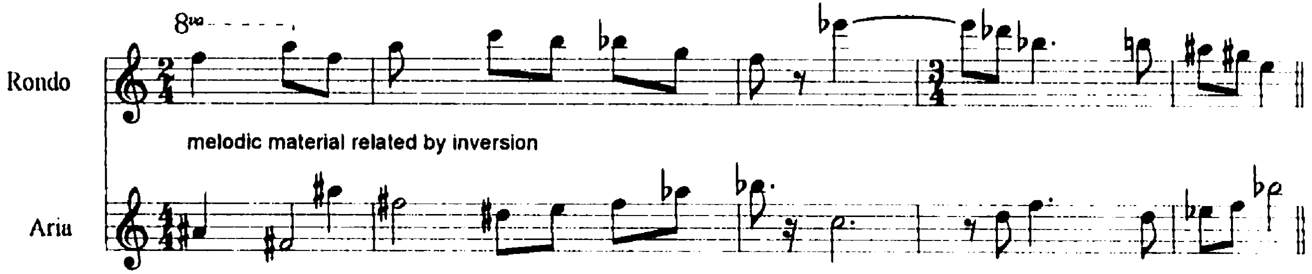
V labels refer to source material used in local development

Example 7. Melodic relationships between the Aria and Rondo

Ex. 7a. Rondo (mm. 1-3), piano) vs. Aria (m. 35ff, piano)


Rondo
contour of Aria A-melody retained and developed
Aria

Ex. 7b Rondo (mm. 98-9, 103-106, piano) vs. Aria (mm. 55-59, piano)


8va
Rondo
melodic material related by inversion
Aria

C3. Third Movement — (Rondo) — see fig. 10

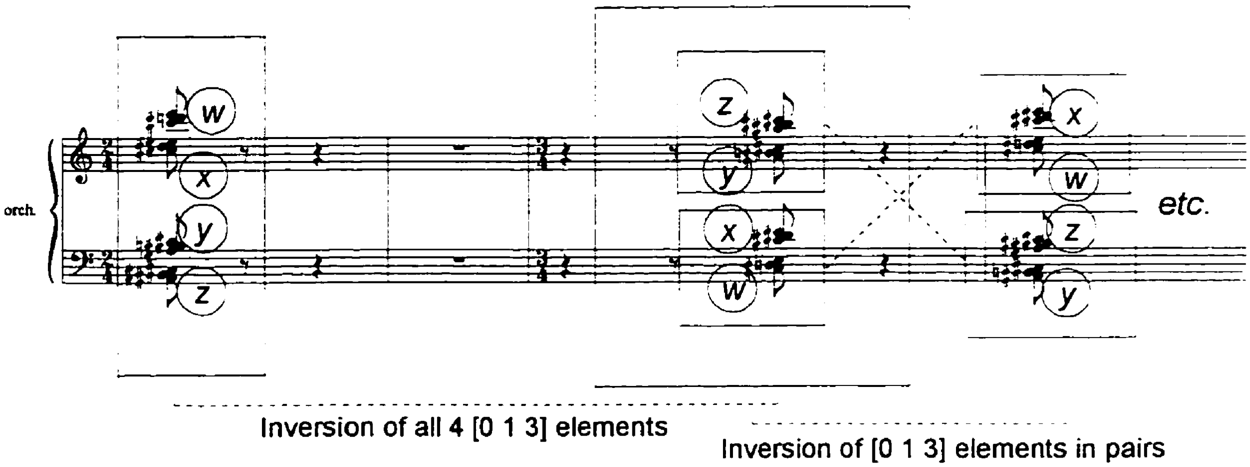
C3.1 Overview

The majority of the third movement (V_5) unfolds as a Rondo whose material is based most recognizably on motives from the Aria (V_4) (see ex. 7), but also includes development of other main features of the work. As the ritornello sections (A) return, they are persistently developed: aside from motivic and contrapuntal development, A material is sometimes compressed (as in mm. 70-95) or combined with episodic material (as in mm. 135-151). As features are introduced in the formal progression, some are maintained and transplanted into subsequent segments of the form (e.g., the reappearance of the material in mm. 4-6 (winds) in various transformations: mm. 41-49, 60-67, 191-201, etc.) The forward movement of the Rondo is temporarily cut short by episode D (mm. 152-187) which is comprised of a developed recapitulation of a large segment of the Aria (V_4). The final A contains primitive assertions of the ritornello material (mm. 188-208) and is interrupted by an almost literal fragment of the Theme (mm. 213-216, modified to B Locrian from B Phrygian). Measures 217 to the end form a CODA that fuses a rapid octave statement of the Theme with octatonic passage-work in the winds and strings. Following a brief suspension of momentum (mm. 231-237), a two-measure fragment from A pounds the movement to a close.

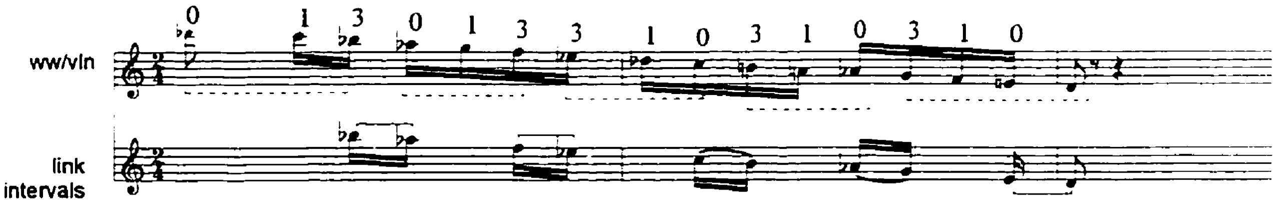
C3.2 Formal Details

The initial phrase organization of the Rondo is relatively tight-knit, loosening considerably as the movement progresses (a feature also noted in the first movement). The first A is comprised of two inversionally related phrases (mm. 1-17, 18-32), each of which also contains two equivalent phrases, the second an extended version of the first. Except for the inversional relationship, this general phrase organization compares directly with that of the Theme. Melodically, the piano and winds develop material derived from the end of the Aria (ii:76-79, piano, top voice; ii: 86-88, flute) through repetition and extension. The orchestral "shots" (e.g., m. 1, 4, etc.) are [0 1 3]-based and are constructed using inversional processes (see ex. 8). The [0 1 3] set also plays a role in the composition of much of the scalar passage-work as demonstrated in example 9: [0 1 3] groups are chained together using [0 1 3] to control the interval of linkage between groups. One other feature worth noting is the relationship between the chromatic octave passage in m. 4 (piano) and the clusters of m. 8. The collection of melodic patterns into chordal events features prominently in the construction of material in C and elsewhere and will be discussed below.

Example 8. Inverted counterpoint involving [0 1 3] sets in the Rondo (mm. 1-4)


orch.
w
x
y
z
z
y
x
w
x
w
z
y
etc.
Inversion of all 4 [0 1 3] elements
Inversion of [0 1 3] elements in pairs

Example 9. Use of [0 1 3] sets to form scalar material (Rondo: mm. 6-8)

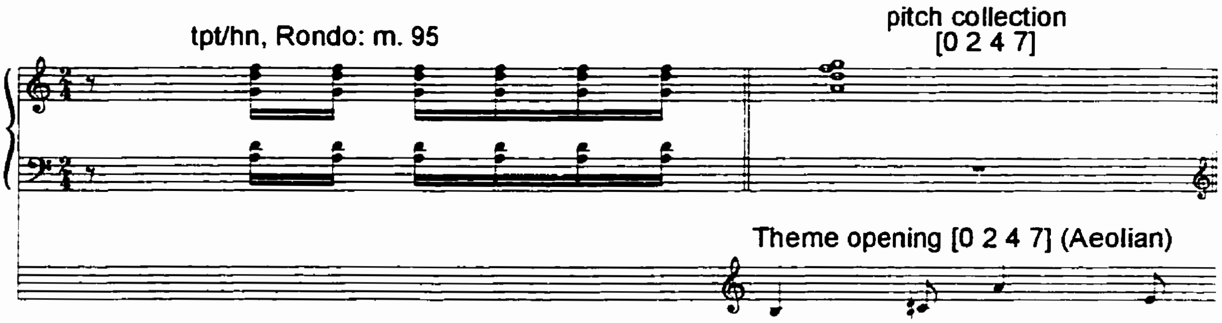

ww/vln
link intervals
0
1
3
0
1
3
3
1
0
3
1
0
3
1
0

The interval vector of [0 1 3] (i.e., semitone+tone+tone) is used to link together a chain of [0 1 3] sets

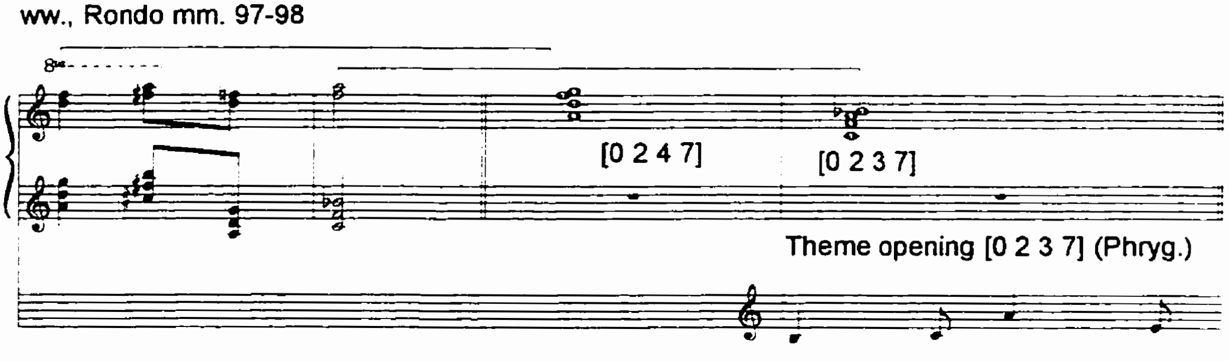
The B section consists of a similar pair of phrases, the second inversionally related to the first. Unlike A_1, model/sequence technique controls the repetition of phrase segments, giving the episode a developmental profile. In m. 33-4, the piano has an F Phrygian ascent in the RH accompanied by quartal trichords descending by major third root movement. The parallel m3 descent in the next two measures is a hybrid octatonic/chromatic scale leading to a repetition of the initial phrase transposed down a M2. The second part of this phrase (mm. 39-40) has been modified, however, to contain strict octatonic collections in each hand, this time in parallel M2's. As discussed above, the passage from 41-49 borrows m. 4-6 from A_1, and liquidates it in the course of repetition. Between mm. 52-69, the first large phrase of B (i.e., b) is repeated in a slightly modified fashion. Measures 52-59 present an inverted form of mm. 33-39 including inversion of the counterpoint (with alteration of the quartal accompaniment in mm. 52-3, 56-7). In contrast with A_1, the material from 60-67 does not invert the corresponding material from mm. 41-49, but rather develops it through model sequence repetition at the perfect fourth (mm. 60-65) and eventually liquidation (mm. 66-7). As further development, woodwind parts are added between mm. 60-67 based upon transpositions of the familiar bitonal collection [0 1 4 5 8] which are also subject to model/sequence and liquidation. The [0 1 4 5 8] sound is passed to the brass in mm. 67-70, resulting in the F+/A+ combination so important in V_1.

A_2 uses the same motivic material in the piano as A_1, but this time, inversions of the main A melody are presented simultaneously rather than in independent phrases, coupled with canonic imitation in the basses. Canons are also present between the flutes and clarinets (composed with residual material from B) as well as in the string writing between mm. 71-77 and 84-92. These two latter string passages present a development of material found in B (compare mm. 33ff (piano)), indicative of the pervasiveness of musical ideas across formal boundaries seen throughout the work. At measures 78-82, the violins presented a rhythmically diminished of material presented simultaneously in the piano, stated in parallel M3's. At measure 83, there is a brief reference to the "fanfare" figures of the Recitative built on the bitonal combination of triads separated by a M3. Measures 84-95 present a repetition of the preceding phrase (70-83) in which the piano and basses remain at the former pitch level, but the upper strings are restated at various levels of transposition (e.g., vln 1: +m3 in mm. 84-88; unis. in mm. 89-92; and +M3 in mm. 93-94). A new triadic accompanimental figure has also been added in the clarinets and bassoons, beginning in measure 84.

Example 10a. Brass chord (Rondo m. 95) derived from Theme


tpt/hn, Rondo: m. 95
pitch collection
[0 2 4 7]
Theme opening [0 2 4 7] (Aeolian)

Example 10b. Harmonization of Aria melody using Theme-derived aggregates


ww., Rondo mm. 97-98
8va
[0 2 4 7]
[0 2 3 7]
Theme opening [0 2 3 7] (Phryg.)

Section C is also composed of a pair of phrases (mm. 95-111, 112-134), the second of which is a slightly developed version of the first. The repeated pitch sixteenth-note gesture in the brass (mm. 95-96) which calls attention to this section of the form was alluded to in the previous episode (B), measures 67-68, but is exchanged between the brass, percussion and piano in C. The pitches of this initial sixteenth-note gesture are drawn from the Theme as shown in example 10a and initiate an antiphonal restatement of melodic material from the Aria (see. ex. 7b). This melody is harmonized by parallel aggregates which are also created from the first four notes of the Theme (see ex. 10b). In measures 107-111, direct reference is made to the material of the Recitative (compare mm. ii: 8-12, for example), merged with the new chordal formations of the first part of C. In the second large phrase of C (mm. 112-134), the same musical components are maintained, but the texture is augmented with more aggressive development in the strings of the new thematic aggregates.

The densest amalgamation of pre-existing materials occurs in A_3 (mm. 135-151) where many elements of the Rondo are fused together in a small space, details of which are listed below:

1. The "ritornello" material is presented in the piano in simultaneous inversion (as in A_2), but also with a canon between hands (in A_2, the canon was divided between the piano and basses). For the first time, this piano material is accompanied by the percussion— a partnership that will reappear towards the end of the movement.

2. The strings play a canonic version of material from B (seen also in A_2) with woodwind doublings, supported by the horns which play the quartal counterpart to this material (compare mm. 33-34, piano LH, inverted).

3. The woodwinds (mm. 141-151) continue to state arpeggiated forms of the Thematic aggregate introduced in C.

4. Dotted-note "fanfare" gestures accent the texture in mm. 139, 145-6, 147-151. reminiscent of C and, by extension, the Recitative.

5. The reiterated 16th-note brass gesture from C is used in mm. 147-149, built upon the bitonal [0 1 4 5 8] collection.

After all of this accumulation of musical ideas, the next episode (mm. 152-187) provides a moment of relief while revisiting material from the Aria. The triadic accompanimental material (mm. 152-159, cl., bsn.; mm. 159-187, vlns., vla.) was introduced in A_2 (m. 84ff, ww.), but is further developed in D. When the piano re-enters in measure 159, it does so with a degree of rhythmic independence related to V_2, although its music is a restatement of parts of the Aria. Compare:

1. the top voice of iii: 159-162 with the flute in ii: 86-88
2. iii: 163-170 (piano) with ii: 38-43 (piano, fl., cl.)
3. also, iii: 177-187 (ww., piano) with ii: 47-50 (piano, cl.)

In the accompanimental texture of D, elements of A are also maintained, although given less profile. For example:

1. 152-167, bsn., vc., cb: melodic fragment of A as cantus firmus (compare mm. 1-2, piano)
2. 166-171, picc., fl., hn: modification of A melody (compare mm. 4-6, ww.)
3. 171-175, piano *et al*: semitonal clusters ([0 1 3] + I[0 1 3]) from orchestral "shots", mm. 1ff.

Finally, fragmentary reference to the Theme is made in the ascending and descending [0 1 3] trichords of mm. 171-174 in the viola and violins, respectively (compare i:12-13, for example).

Beginning in measure 188, the aggressive piano/percussion partnership of A_3 returns (mm. 188-190) coupled with antiphonal block writing for woodwind, brass and string choirs. Measures 191-194 relate directly to mm. 21-23 (ww), written in the *martellato* style of mm. 41ff. Taken as a model, measures 188-194 are sequenced up to become mm. 195-201. What begins as a second sequence at measure 202 is interrupted by the arpeggios of 203-204 (note the LH fanfare borrowed from V_3) and again at mm. 206ff and eventually gives way to a four measure Theme reference beginning in measure 213.

The final drive of the movement begins in measure 217, a passage which presents an octave version of the Theme followed by an octatonic descent (mm. 217-231, piano), all accompanied by octatonic runs in the winds and strings. An allusion to the sixth-interval fanfare material (cf. V_3, Rondo: C, etc.) in 231-232 suspends the motion momentarily until the work comes to a close with a cluster fragment from A_1.

D. Conclusions

Although the musical language of the Concerto is fairly conservative, it represents a careful and creative application of essential musical techniques: counterpoint, harmony, melody, rhythm, motivic development, manipulation of texture. orchestration and form. It is perhaps in the last of these applications — form — that the Concerto makes its greatest contribution. The partitioning of a set of continuous variations into three contrasting groups allows the work to fulfill a three-movement expectation of traditional form while providing continuity and linear development at the structural level. As the analysis has shown, other inter-variation links suggest the superimposition of alternate forms, helping to overlap the spaces between "movements". Through the progress of the work, the Theme is pushed farther and farther into the distance, but it still affects the outcome by virtue of the fact that its "offspring" have acted as new ideas for development. When it is brought back in recognizable form at the end, it too has been changed, reflective of the stresses under which it has been placed in the course of development.

The point of the form is not that of a traditional set of variations either. It is unlikely that the listener will make conscious references backwards to the Theme at all times, but they *will* sense an organic growth of material — the constant transformation of locally introduced material — and be engaged in the journey away from the Theme. In a sense, this is how the work began as an improvisatory *seed* — the Aria. In the process of improvisation, small ideas are introduced, repeated and transformed into new ideas. The logic of such a process can be uncovered in analysis, or composed onto the page as a series of conscious decisions. This Concerto represents both approaches.

Endnotes

1. Although most of Jarrett's "Solo Concerts" demonstrate this type of development, three particularly good examples are Kyoto (ECM 1100), Lausanne (ECM 1037) and La Scala (ECM 1640).

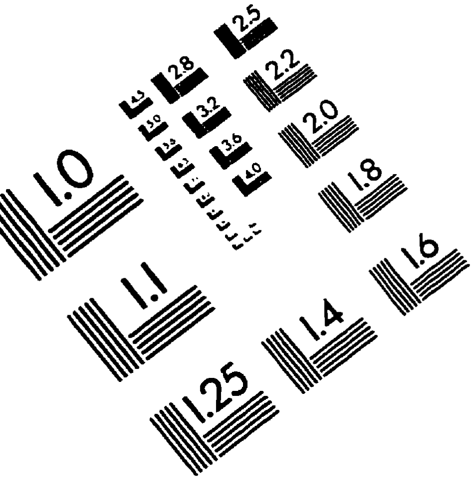
2. The alternation of two distinct intervals used to create a set of pitches is also a feature of the pervasive major/minor triad conflict based on a common root (i.e., m3-m2-m3). Another example can be found in the Aria, m. 54 (piano): a p5-m2 cycle.

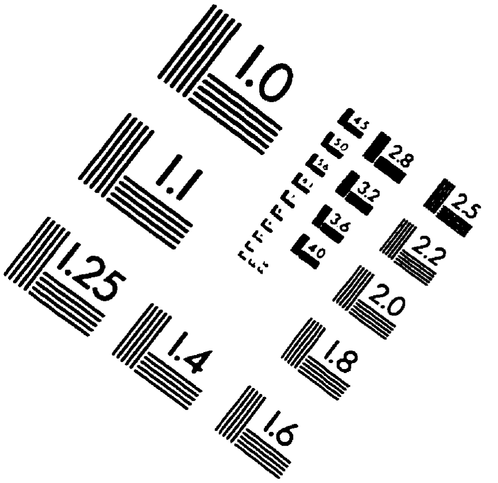
3. The second "Transition" is not an exact repetition of the first. Aside from the modification of the overall phrase structure, the primary melodic descent in the piano material of mm. 181-188 is accelerated to cover a larger range, for example.

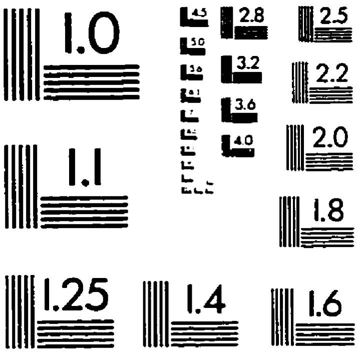
4. The concept of continuation⇒cadential is defined by William Caplin as a phrase in which cadential function "vies for equality of expression with, or even predominance over, continuation function". (Caplin, William E. *Theory of Formal Function*, unpublished. p. 3.22)

5. Although certain regions are based on localized pitch centers, this variation exhibits considerable harmonic flux, mostly due to the extensive use of model/sequence technique. This instability coupled with ongoing fragmentation and repetition of material gives this variation a "developmental" feel, hence the term *core* which Caplin uses to define large developmental segments of sonata form.

IMAGE EVALUATION
TEST TARGET (QA-3)



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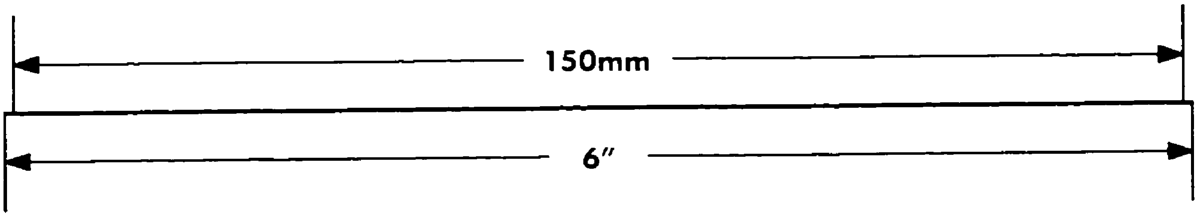

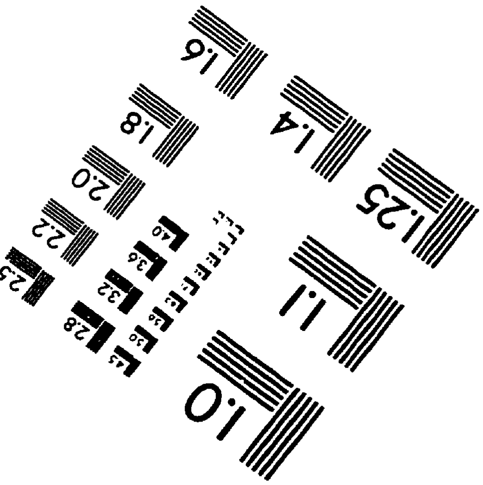

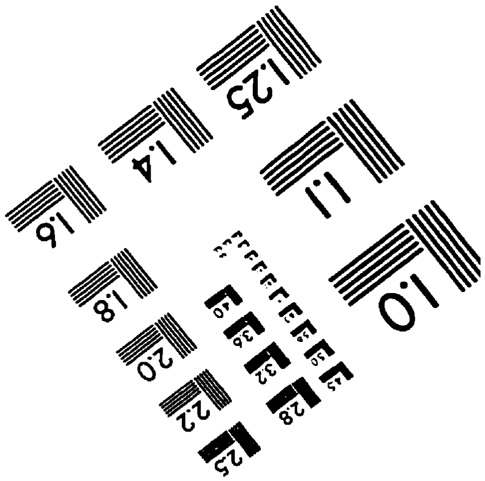

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