Finnegans Quarks Revival

2005-2006

(edited 2015)

for piano solo

Paul Frehner

Approximate Duration: 33 minutes

Finnegans Quarks Revival - Program Note

In the 1960's, American physicists Murray Gell-Mann and George Zweig developed a theory in which they proposed the existence of subatomic particles. Gell-Mann dubbed them 'quarks' after the passage 'Three quarks for Muster Mark' in James Joyce's *Finnegans Wake.* In the years after their hypothesis six quarks, or elementary particles, were gradually discovered, the most recent being the *top* quark in 1995. The names of the six quarks are *up, down, charm, strange, top* and *bottom.* Two quarks, *top* and *bottom*, had at first alternate names suggested for them. These were *truth* and *beauty*. Ultimately, these names were abandoned by the scientific community…but not by the composer!

Finnegans Quarks Revival is a work for solo piano that is almost but not entirely unlike certain fascinating tenets of quantum theory that I have freely interpreted for my musical purposes. For example, quarks have immensely varied sizes and weights – the top quark is more than 30 000 times more massive than the up quark. This notion is somewhat compressed here, to say the least, as the *truth-top* combination is only about 7 times the duration of *up*. Quarks also move and spin at different rates as they move in orbit about a nucleus. I've interpreted this by employing a wide range of tempi and numerous contrasting levels of rhythmic activity throughout the piece. Perhaps most interestingly, quantum mechanics has shown that there is a basic interconnectedness of all phenomena. Interpreted artistically, this idea about the nature of reality can allow for a certain amount of freedom in searching for ways to relate rather disparate musical ideas and allusions. The individual movements of the piece are entitled after the whimsical names of the quarks that inspired them.

Finnegans Quarks Revival is dedicated to Brigitte Poulin, who premiered the piece and recorded it on CD.

Performance Notes

Accidentals function in the traditional manner. However, cautionary accidentals are frequently used.

Use of the pedal is encouraged throughout the piece. Some general instructions for pedaling are included in the score as a guideline. There are places where use of the *sostenuto* pedal is necessary.

When performing the entire piece there should be a brief pause between movements, unless *attacca* is indicated.

Of course, it is possible to play less than the entire piece in performance. In such cases a selection of movements can be worked into a performance. Likewise, individual movements can be performed as standalone excerpts.

Duration: 33 minutes

Note on this 2015 edition of the score

While working toward a complete performance of *Finnegans Quarks Revival* in early 2015 pianist Andrew Aarons corresponded with me in great detail about many aspects of the piece. These valuable exchanges led to this new edition of the score.

Availability

The score is available for purchase from the Canadian Music Centre in hard copy or as a downloadable PDF: http://musiccentre.ca/

Finnegans Quarks Revival has been recorded by Brigitte Poulin on her CD *Edifices naturels,* ActuelleCD, CQB 0805, 2008

Finnegans Quarks Revival - Note de programme

C'était dans les années 1960 que les physiciens américains George Zweig et Murray Gell-Mann ont proposé l'idée des particules subatomiques. Ils ont appelé ces derniers 'quarks' à partir de la phrase 'Three quarks for Muster Mark' du roman *Finnegans Wake* de James Joyce. Dans les années suivant cette hypothèse les physiciens ont découvert six quarks, dont *top,* le plus récent, en 1995. Les noms des six quarks sont *up, down, charm, strange, top* and *bottom.* Deux d'entre eux, *top* et *bottom*, ont reçu des noms alternatifs, dont *truth* et *beauty,* respectivement. Ceux-ci ont été finalement abandonnés par les scientifiques… mais pas par le compositeur!

Finnegans Quarks Revival est une œuvre pour piano solo pas tout à fait invraisemblablement basée sur des concepts provenant de la théorie des quanta. Par exemple, *top* est plus que 30 000 fois plus immense que *up*. Cette proportion est hyper-modifiée dans mon œuvre, étant donné que la combinaision *truth-top* est seulement 7 fois plus longue que *up.* Aussi, les quarks se déplacent et tournent sur elles-mêmes à des vitesses différentes. J'ai interprété ceci en utilisant une grande variété de tempos et des niveaux d'activité rythmique contrastants.

La notion la plus intéressante, possiblement, est que la mécanique quantique nous a montré qu'il existe des liens entre tous les genres de phénomènes de l'univers.
Dans cette même veine, j'ai tenté dans mon œuvre d'établir des liens entre des idées musicales disparates. Les titres des mouvements individuels de *Finnegans Quarks Revival* sont basés sur les noms des quarks desquels ils puisent leur inspiration.

Finnegans Quarks Revival est dédiée à Brigitte Poulin, qui a créé la pièce et l'a enregistrée sur CD.

Notes d'éxécution

Les altérations accidentelles fonctionnent comme d'habitude. Cependant, des altérations supplémentaires sont fréquemment employées.

L'utilisation de la pédale est encouragée tout au long de la pièce. Certaines instructions générales pour celle-ci sont incluses dans la partition comme directives. Il y a des endroits où l'utilisation de la pédale de sostenuto est nécessaire.

Bien entendu, il est possible de présenter moins que toute la pièce en concert. Dans ce cas, une sélection de mouvements peut être jouée. De même, des mouvements peuvent être effectués individuellement.

Duration: 33 minutes

Note sur cette édition 2015 de la partition

Lors de sa préparation pour l'interprétation de cette oeuvre au début de 2015 le pianiste Andrew Aarons a correspondu avec moi en détail sur de nombreux détails de la pièce. Ces échanges fructueux ont mené a cette nouvelle edition.

Disponabilité

La partition est disponible pour achat au Centre de musique canadienne soit en musique en copie papier ou en format PDF téléchargeable: http://musiccentre.ca/

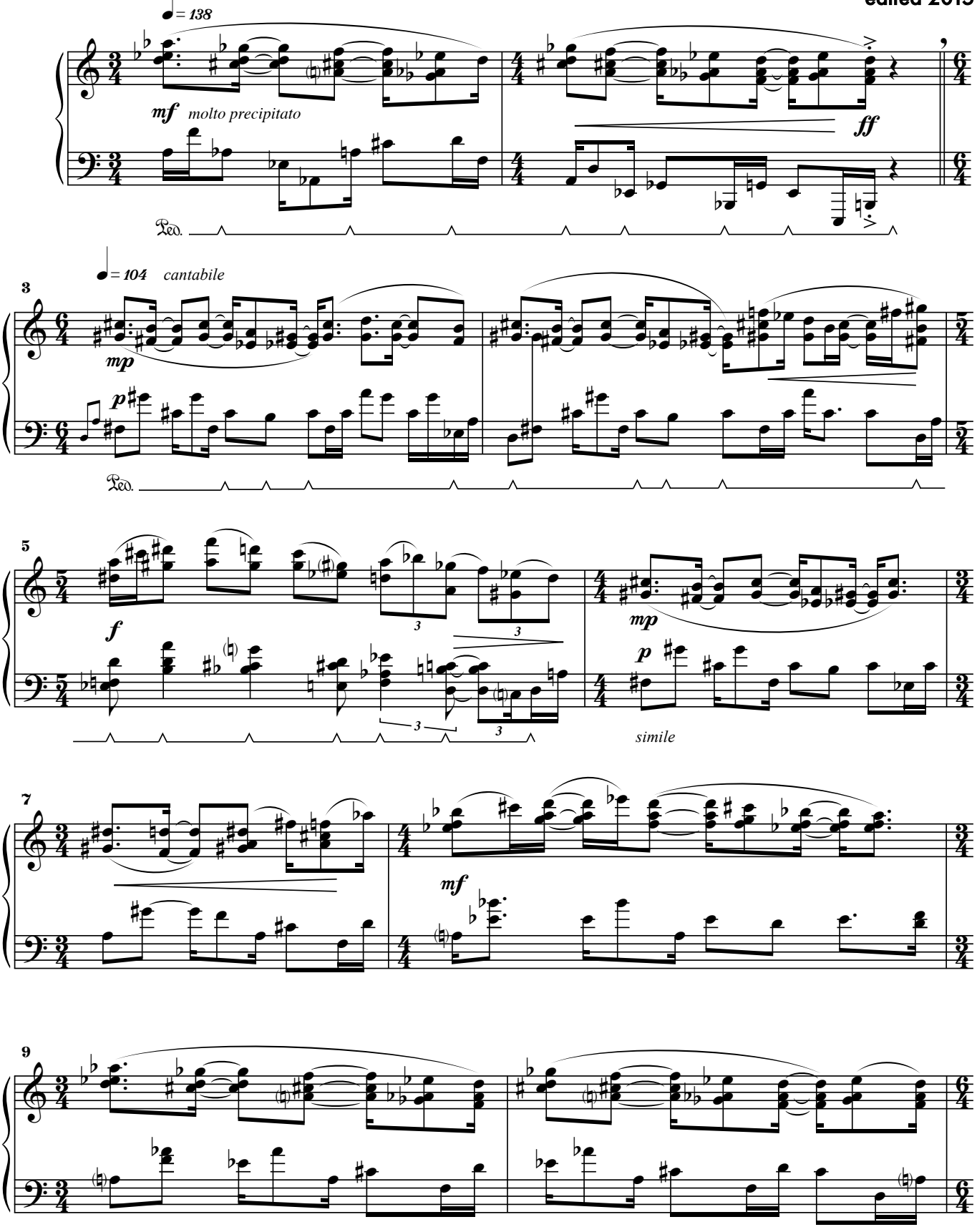
Finnegans Quarks Revival a été enregistrée par Brigitte Poulin sur son CD *Edifices naturels,* ActuelleCD, CQB 0805, 2008

Finnegans Quarks Revival

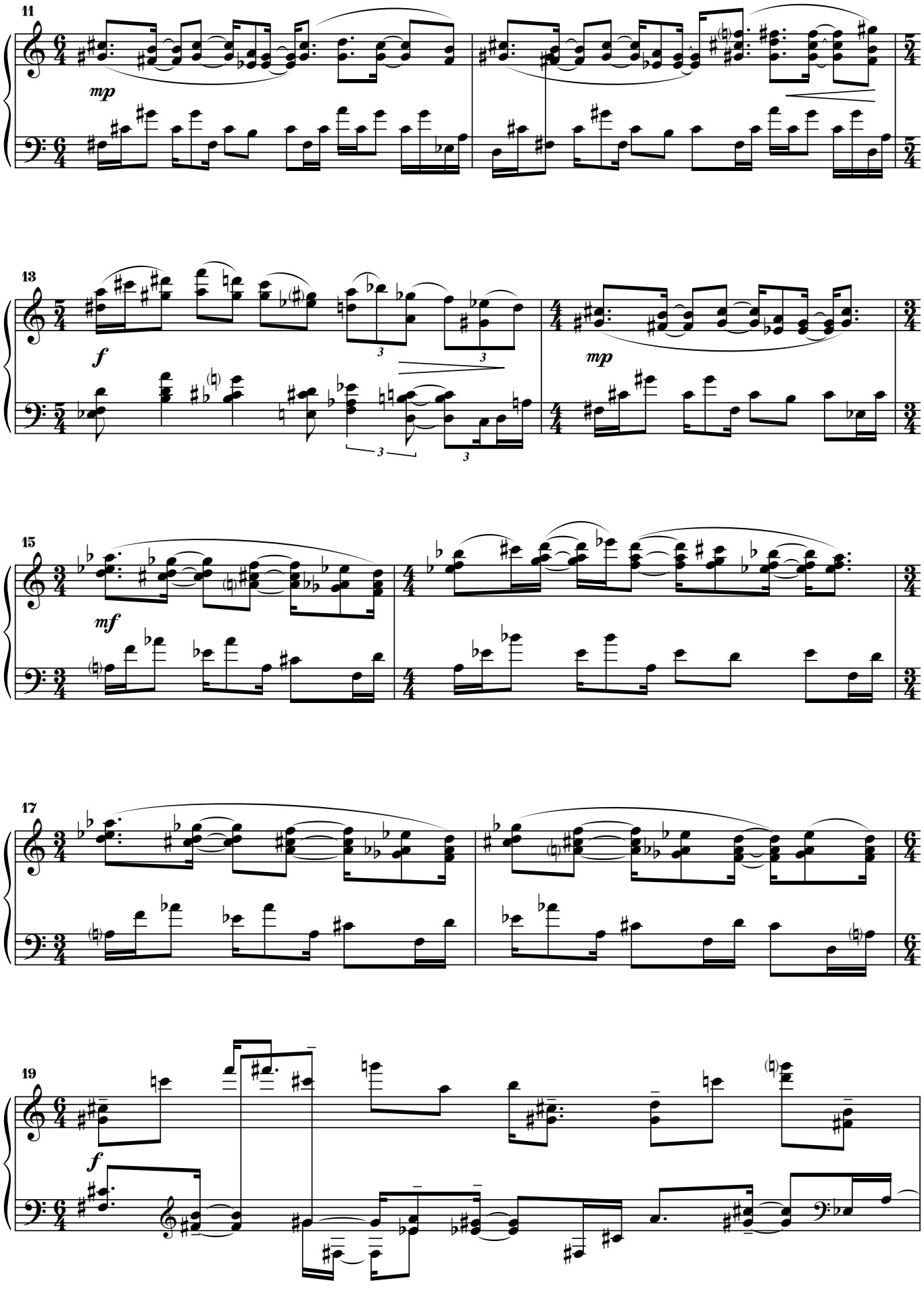
For Brigitte Poulin

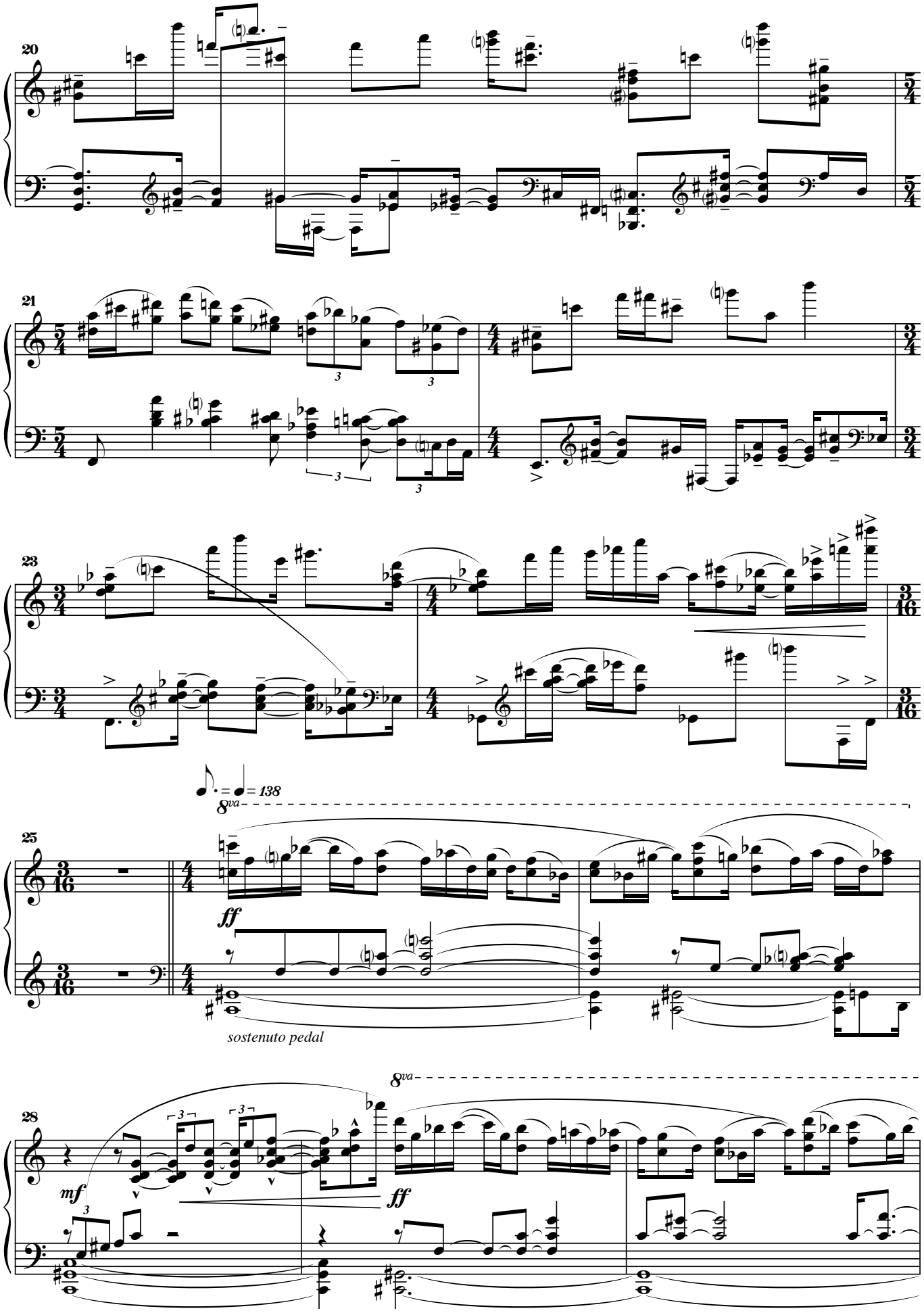
1. Down

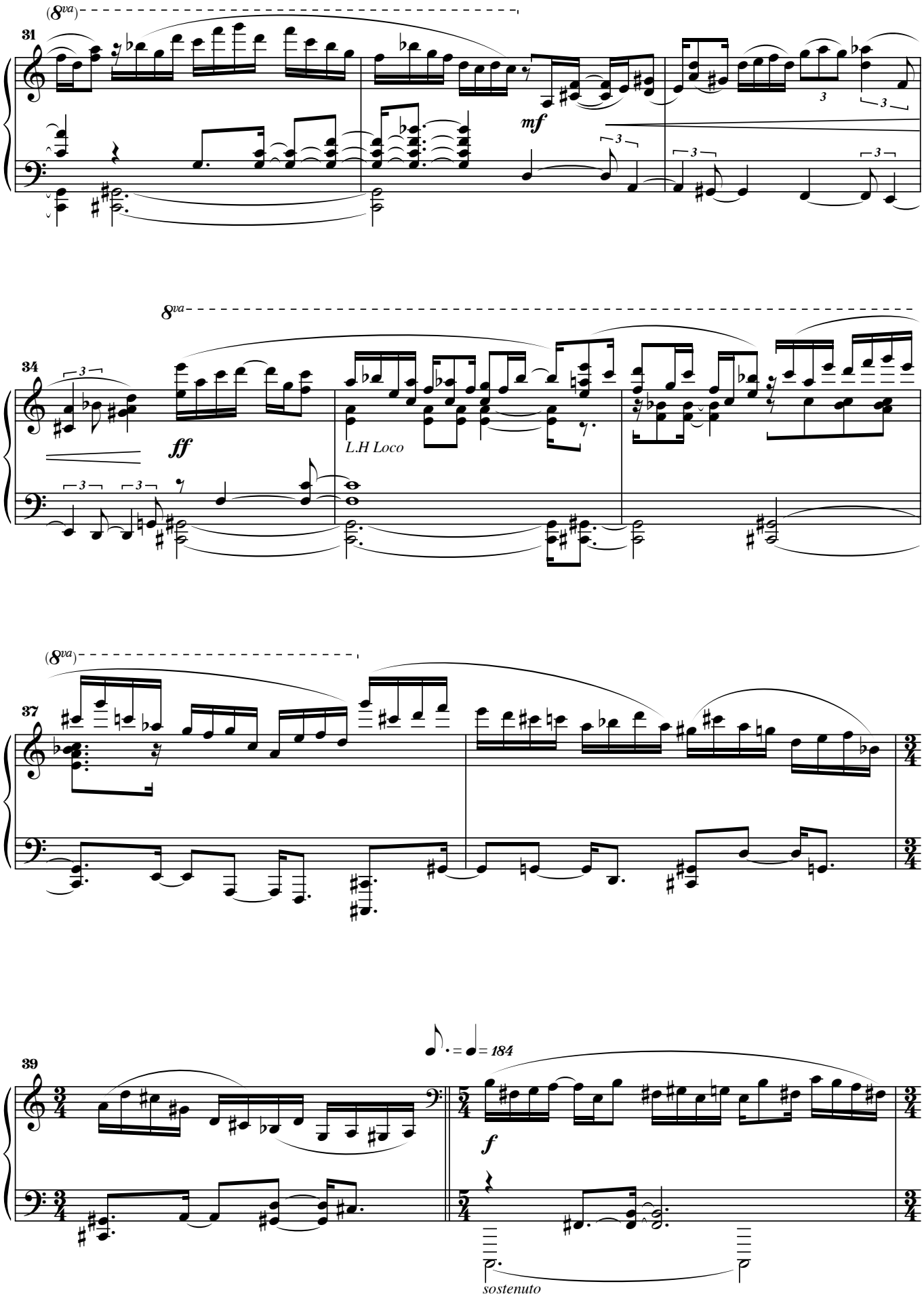
Paul Frehner, 2005-2006
edited 2015

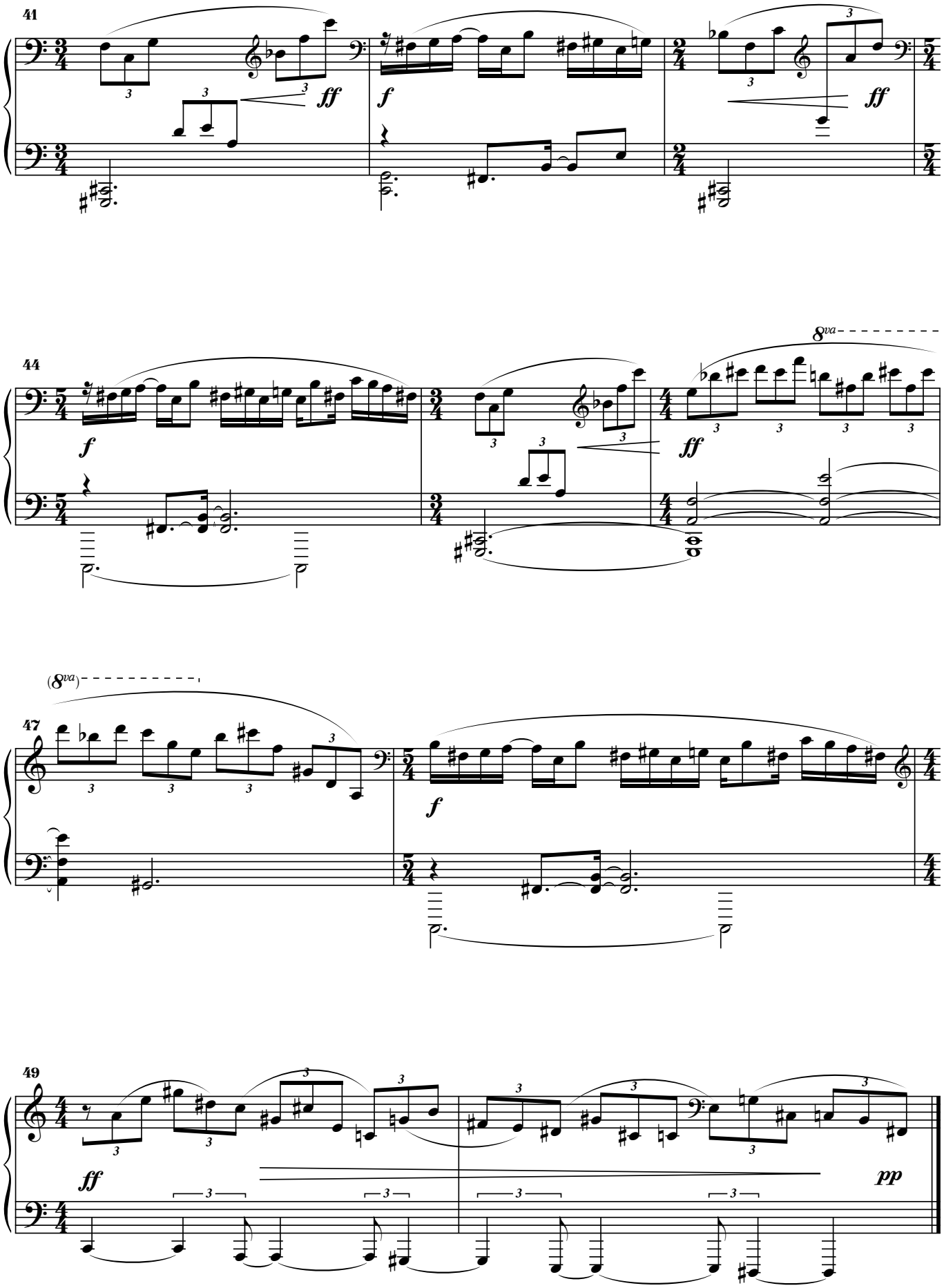


©Paul Frehner, 2006, 2015

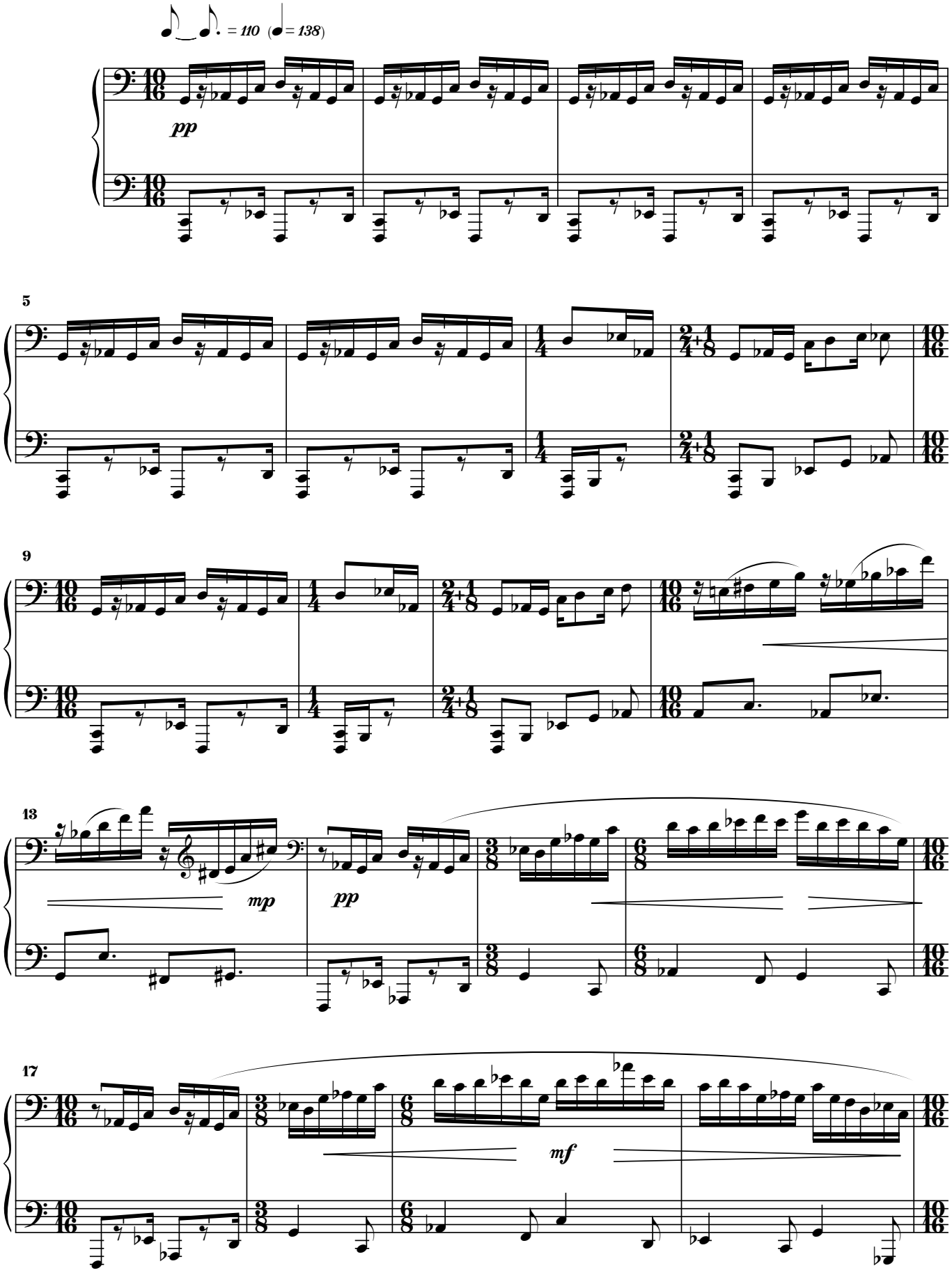

11
mp
13
f
mp
15
mf
17
19
f

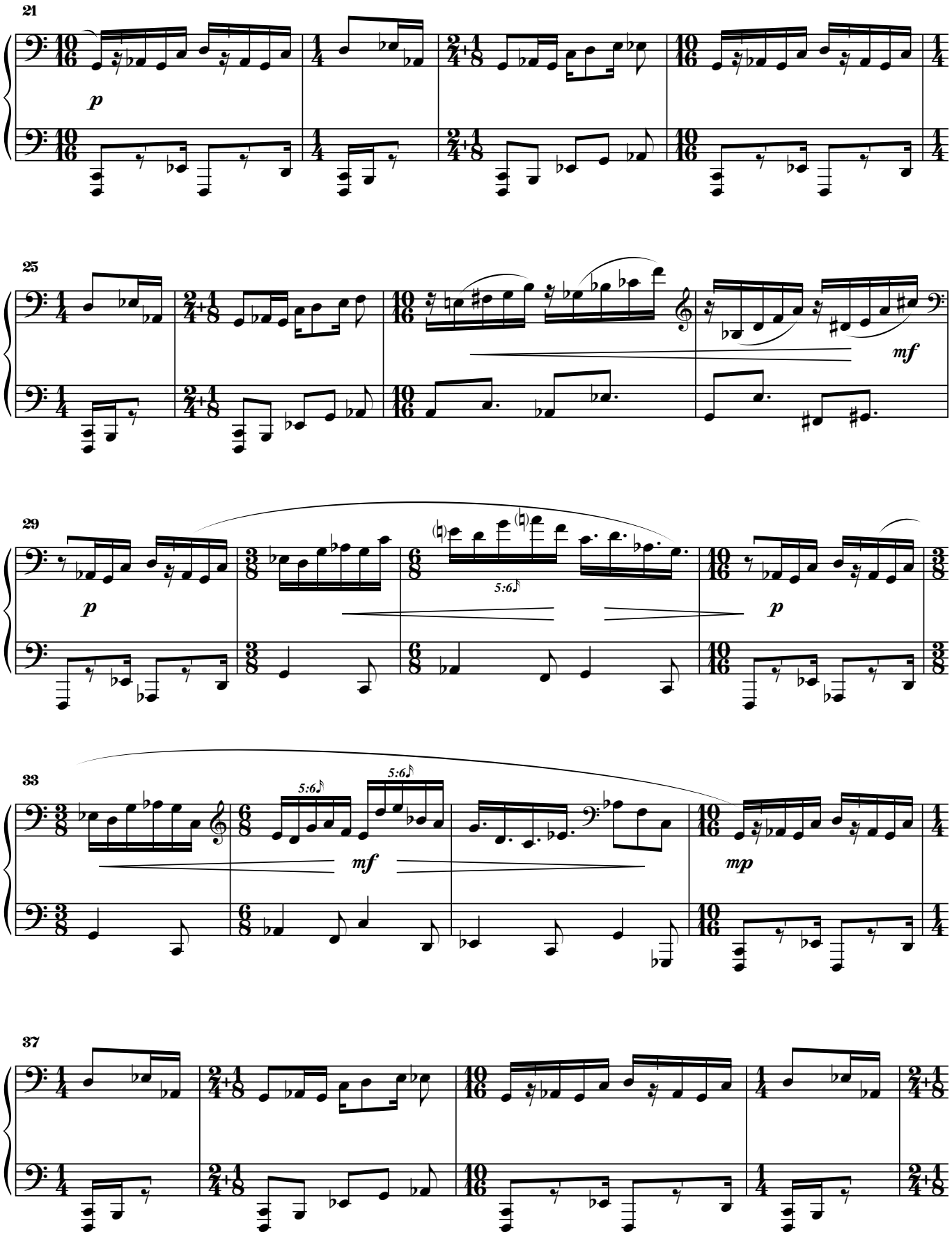

20
21
23
♩. = ♩ = 138
8va
25
ff
sostenuto pedal
8va
28
mf
ff

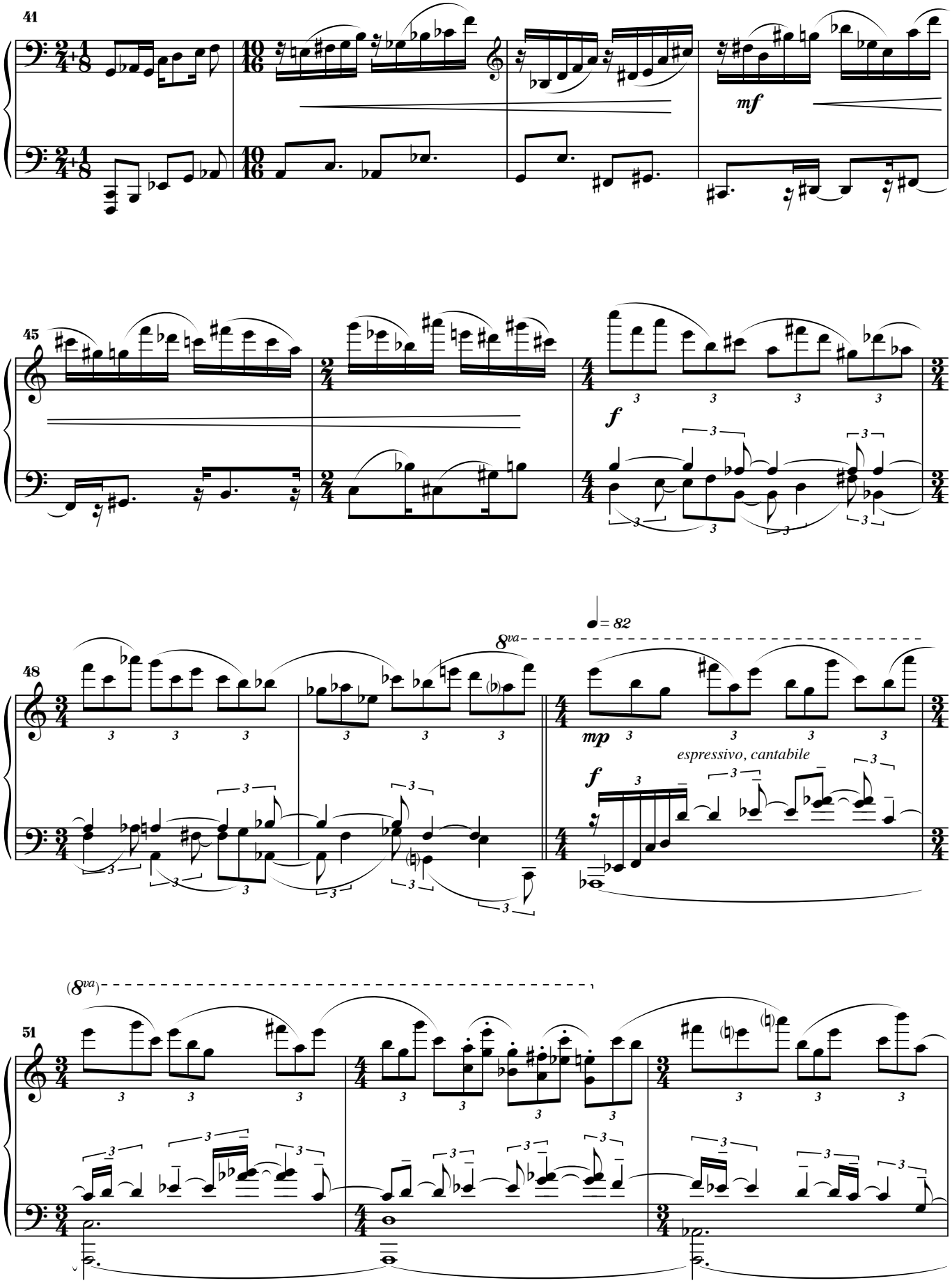

(8va)
31
mf
8va
34
ff
L.H Loco
(8va)
37
39
♩. = ♩ = 184
f
sostenuto

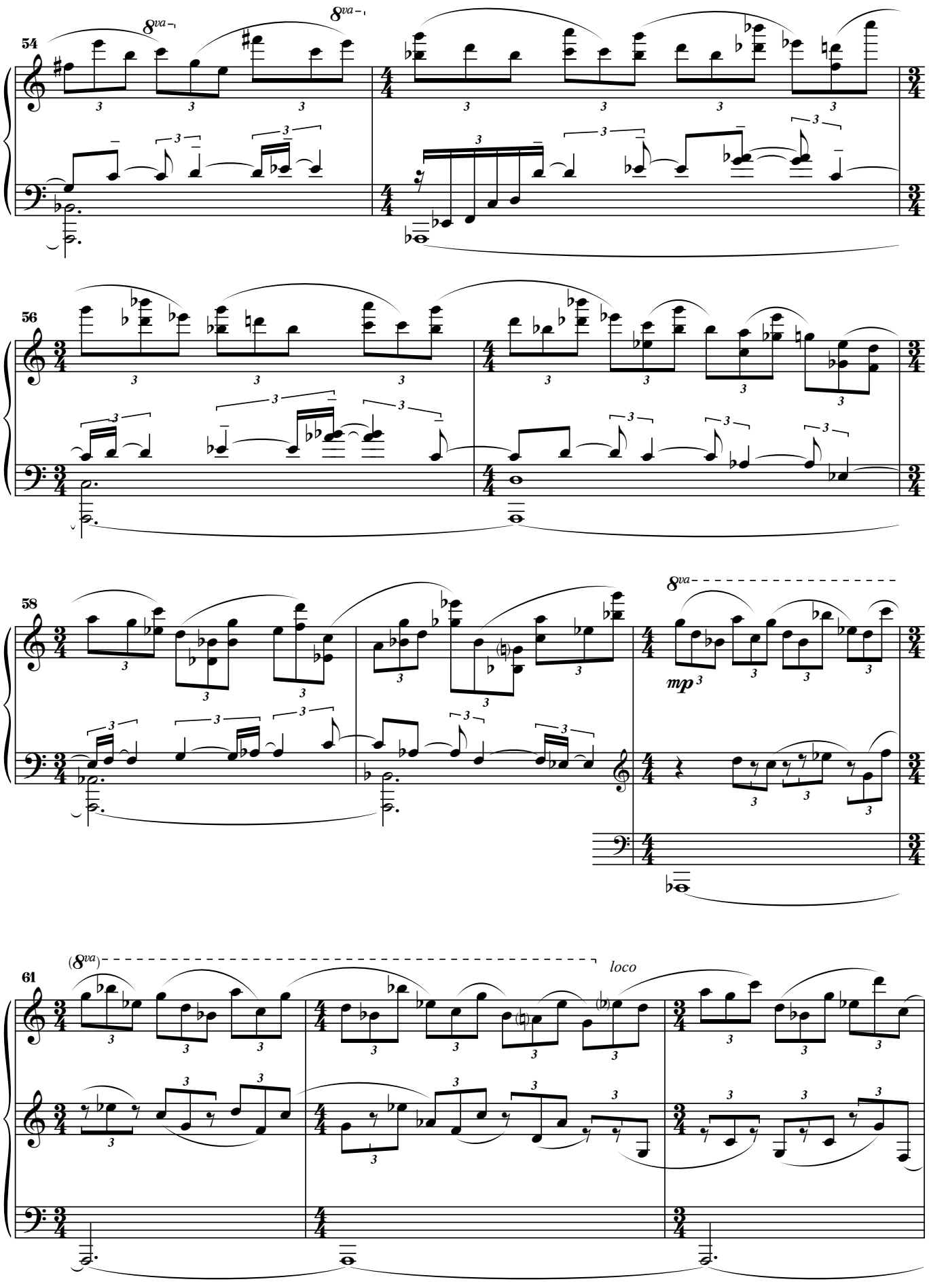

41
ff
f
ff
44
f
ff
8va
(8va)
47
f
49
ff
pp

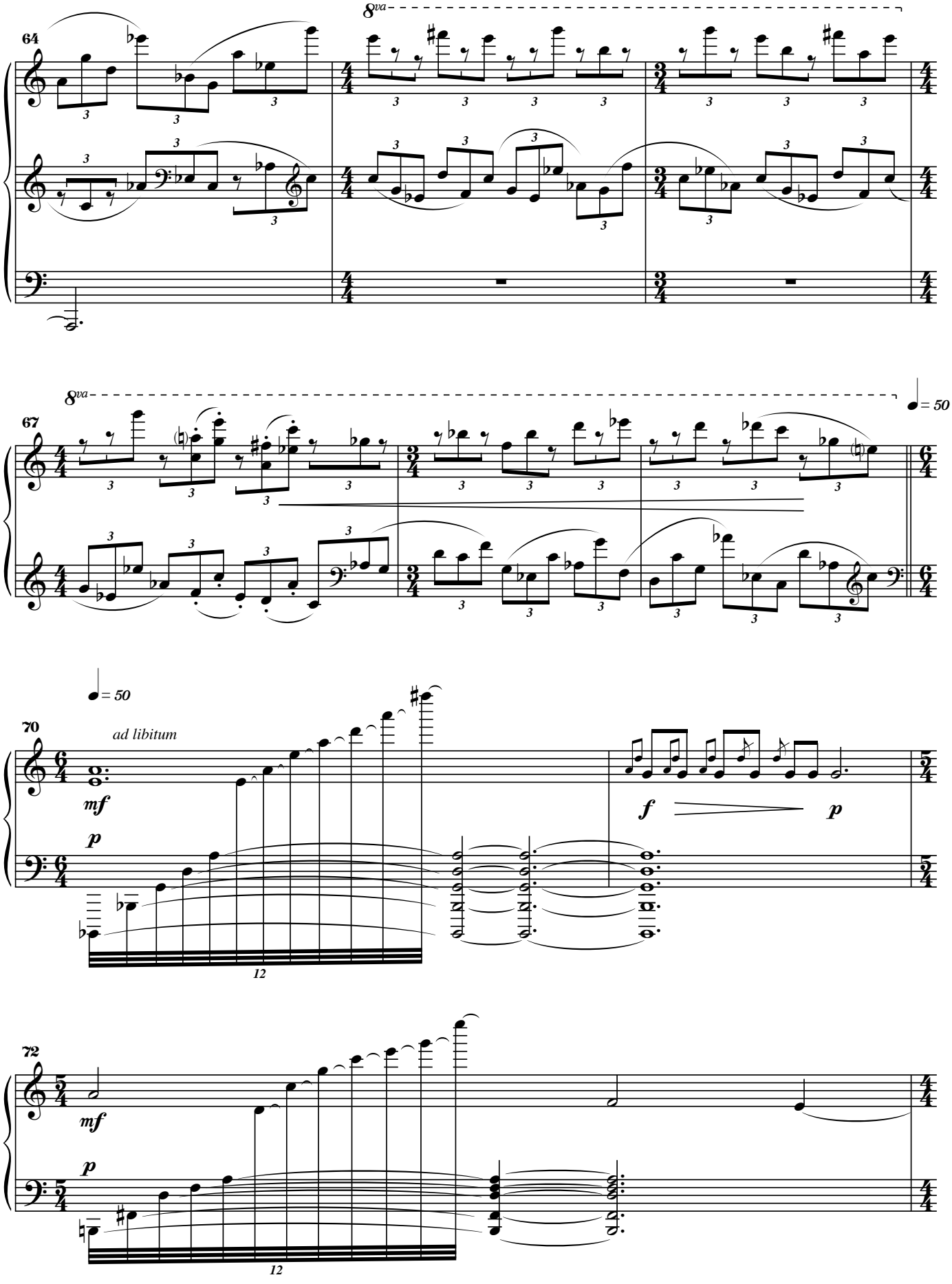
2. Bottom

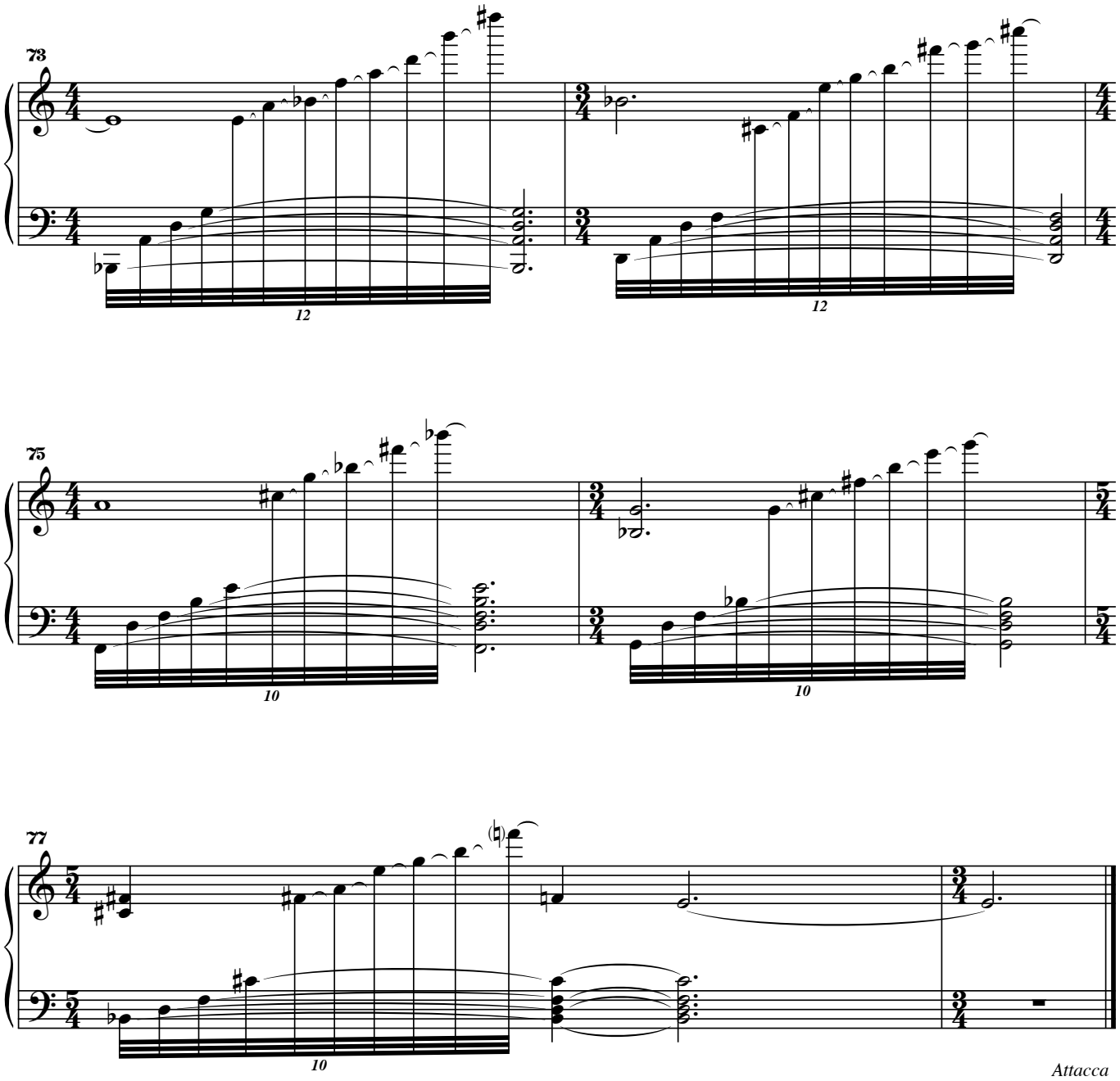



21
p
25
mf
29
p
5:6
p
33
5:6
5:6
mf
mp
37

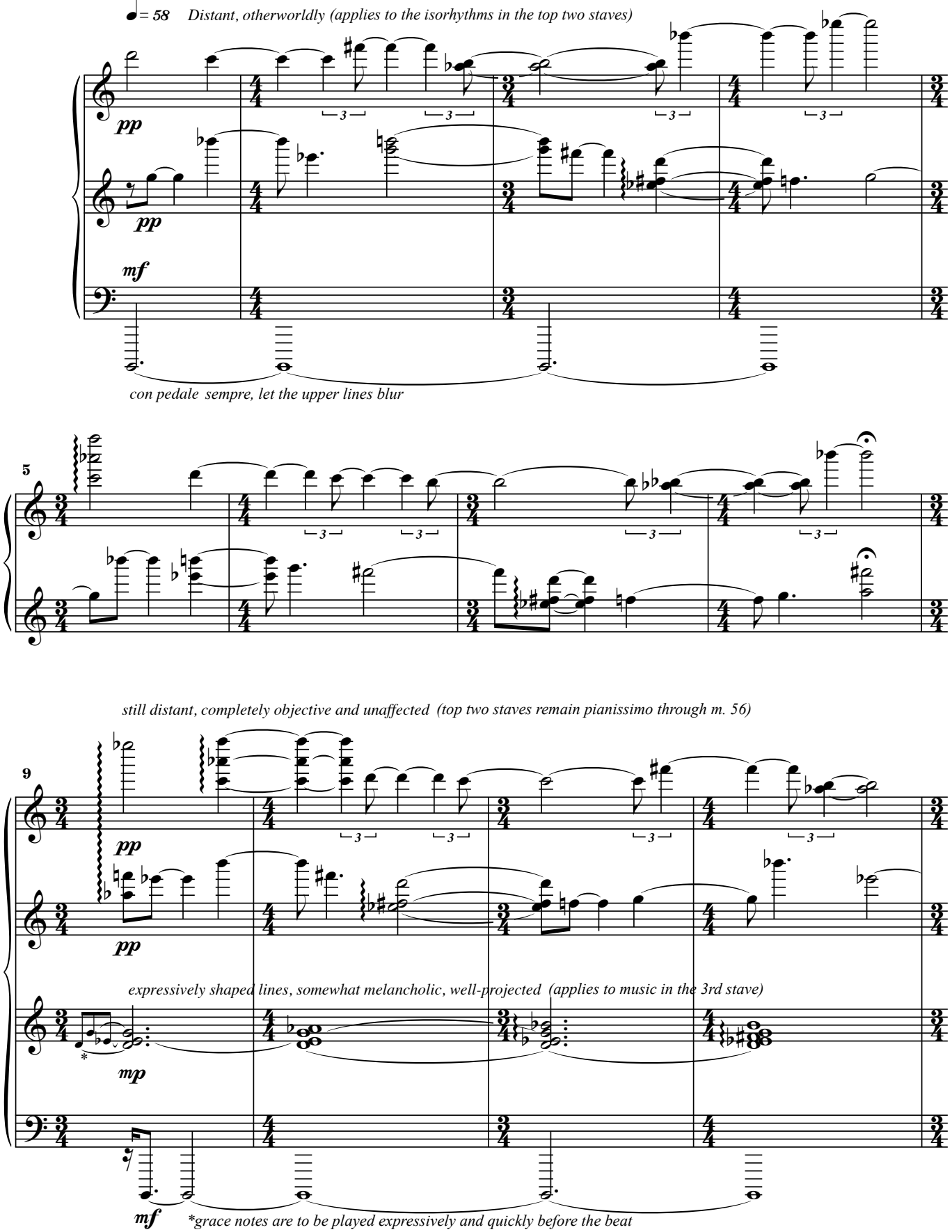

41
mf
45
f
48
8va
♩= 82
mp
espressivo, cantabile
f
(8va)
51

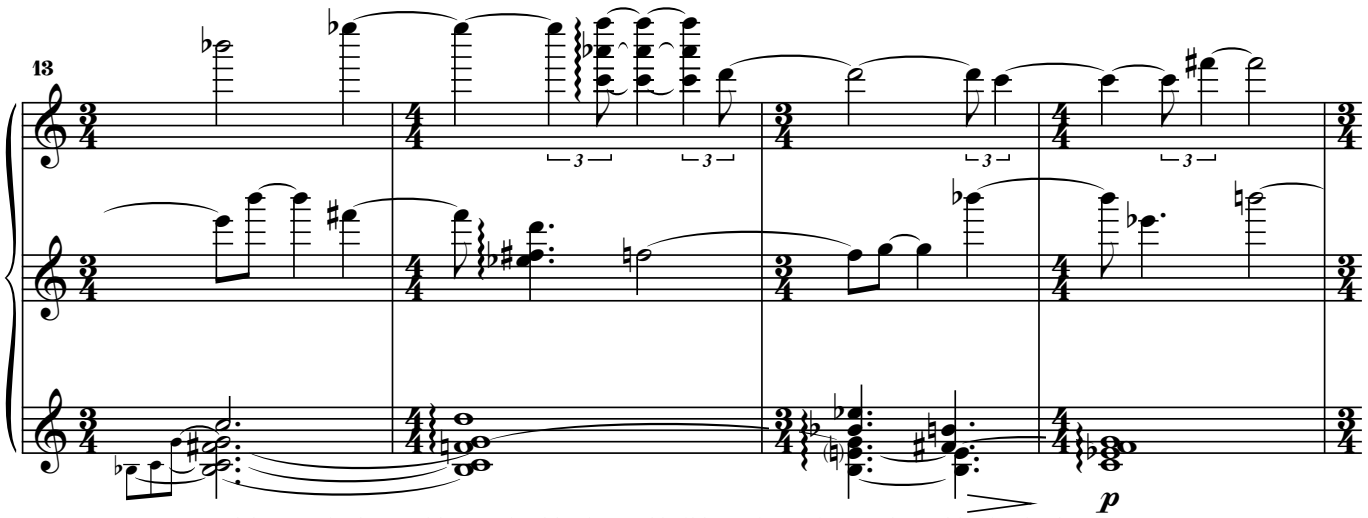

54
8va
8va
56
58
8va
mp
61
(8va)
loco


64
8va
67
8va
♩ = 50
70
♩ = 50
ad libitum
mf
p
f
p
12
72
mf
p
12

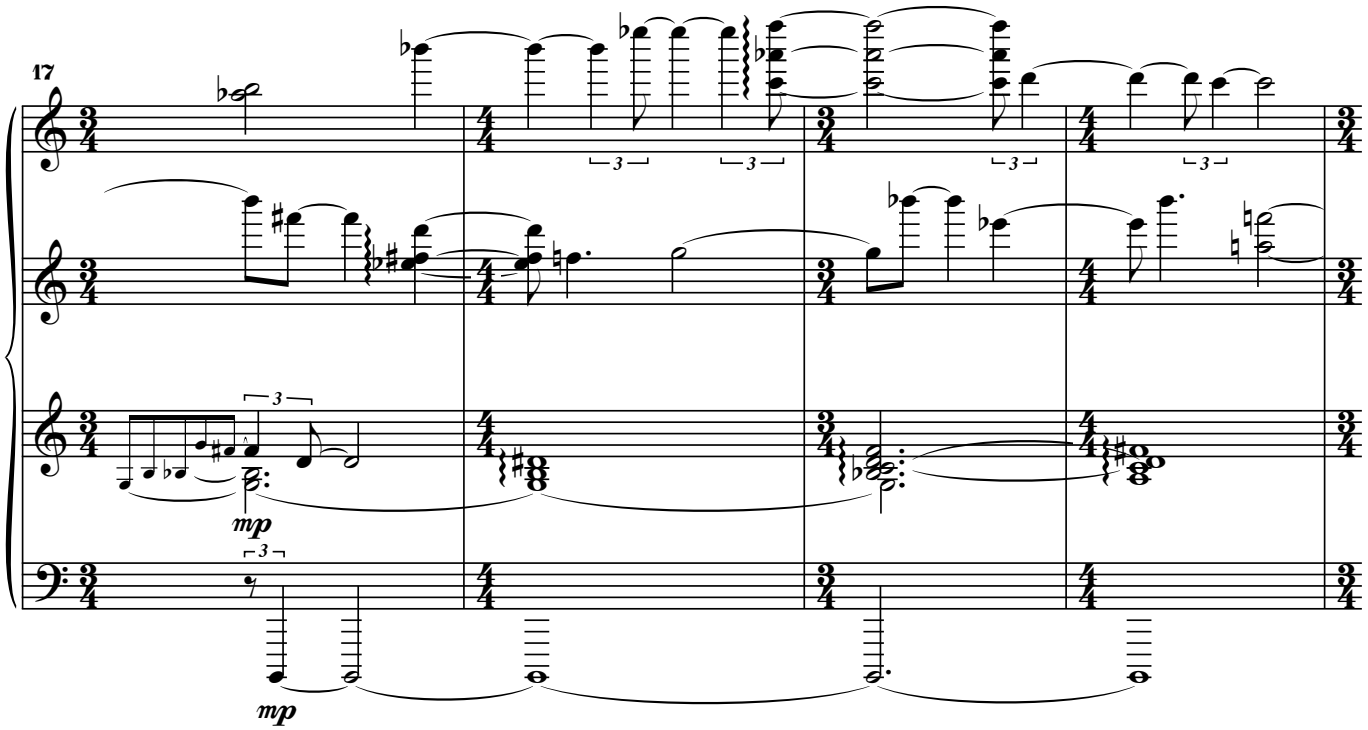

73
12
12
75
10
10
77
10
Attacca

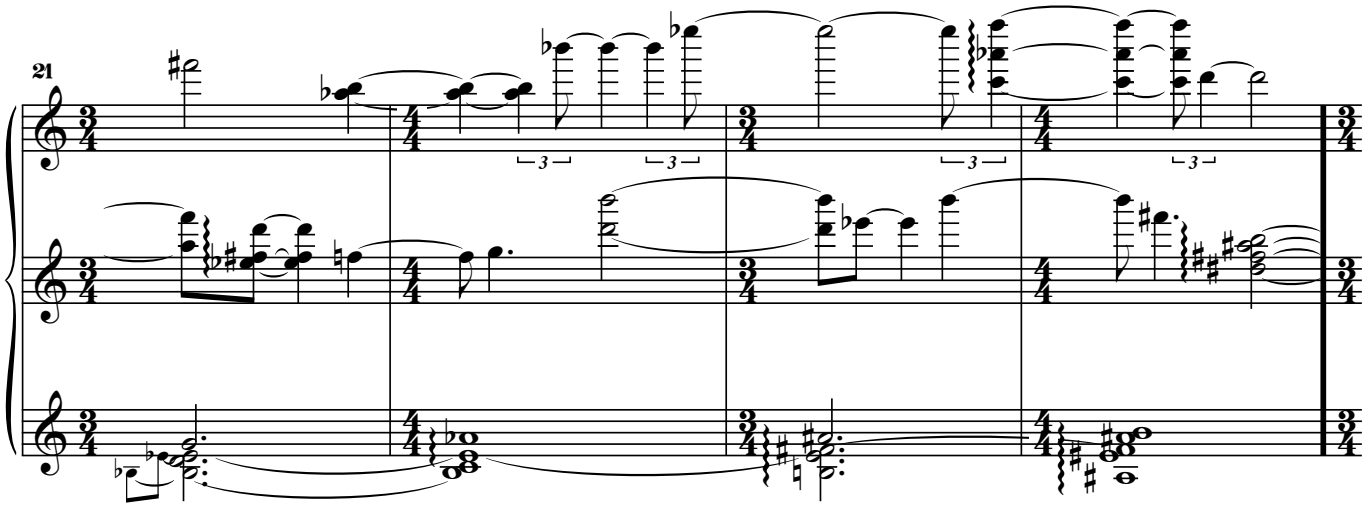
3. Beauty

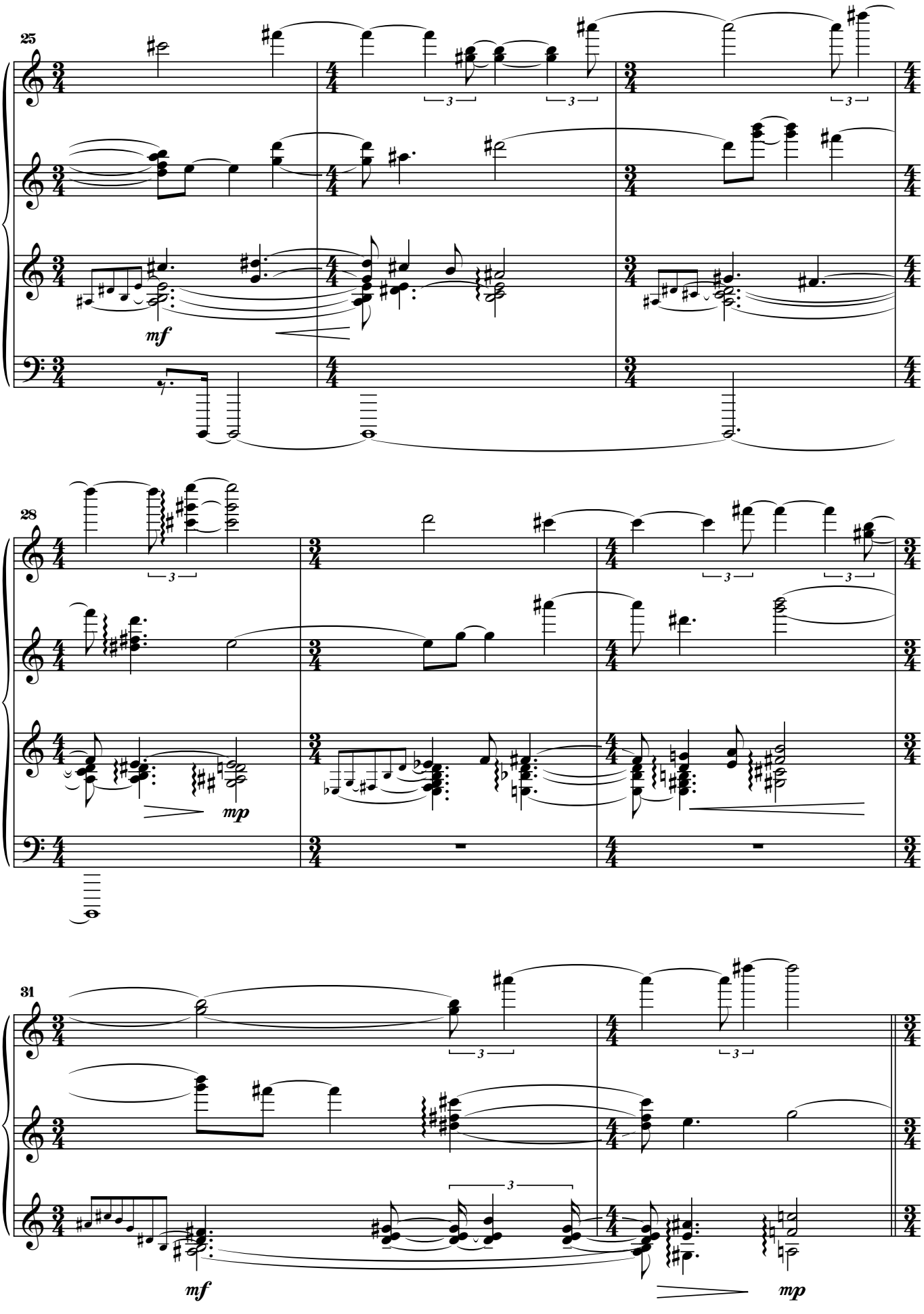

♩= 58 Distant, otherworldly (applies to the isorhythms in the top two staves)
pp
pp
mf
con pedale sempre, let the upper lines blur
5
still distant, completely objective and unaffected (top two staves remain pianissimo through m. 56)
9
pp
pp
expressively shaped lines, somewhat melancholic, well-projected (applies to music in the 3rd stave)
mp
mf
*grace notes are to be played expressively and quickly before the beat

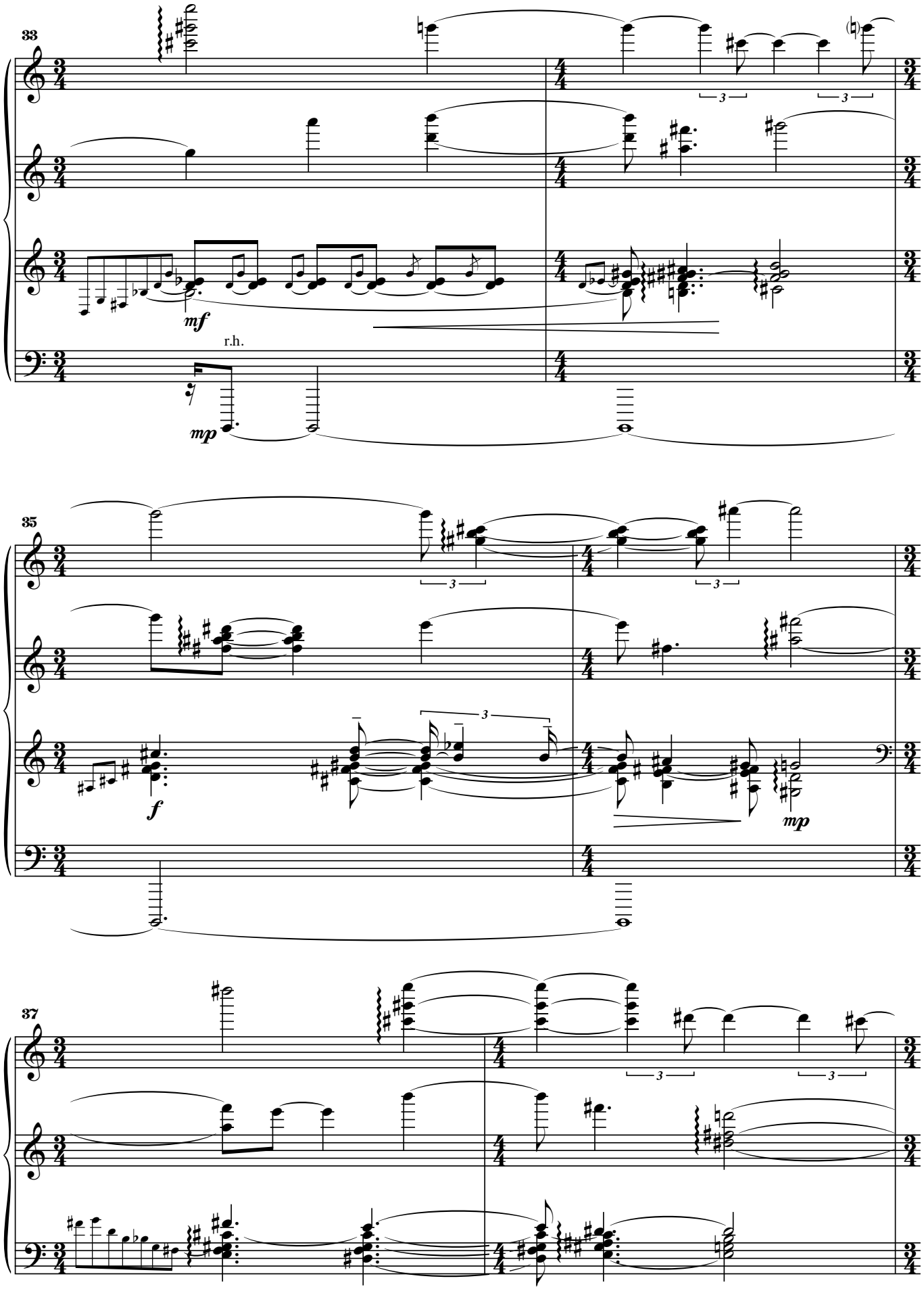


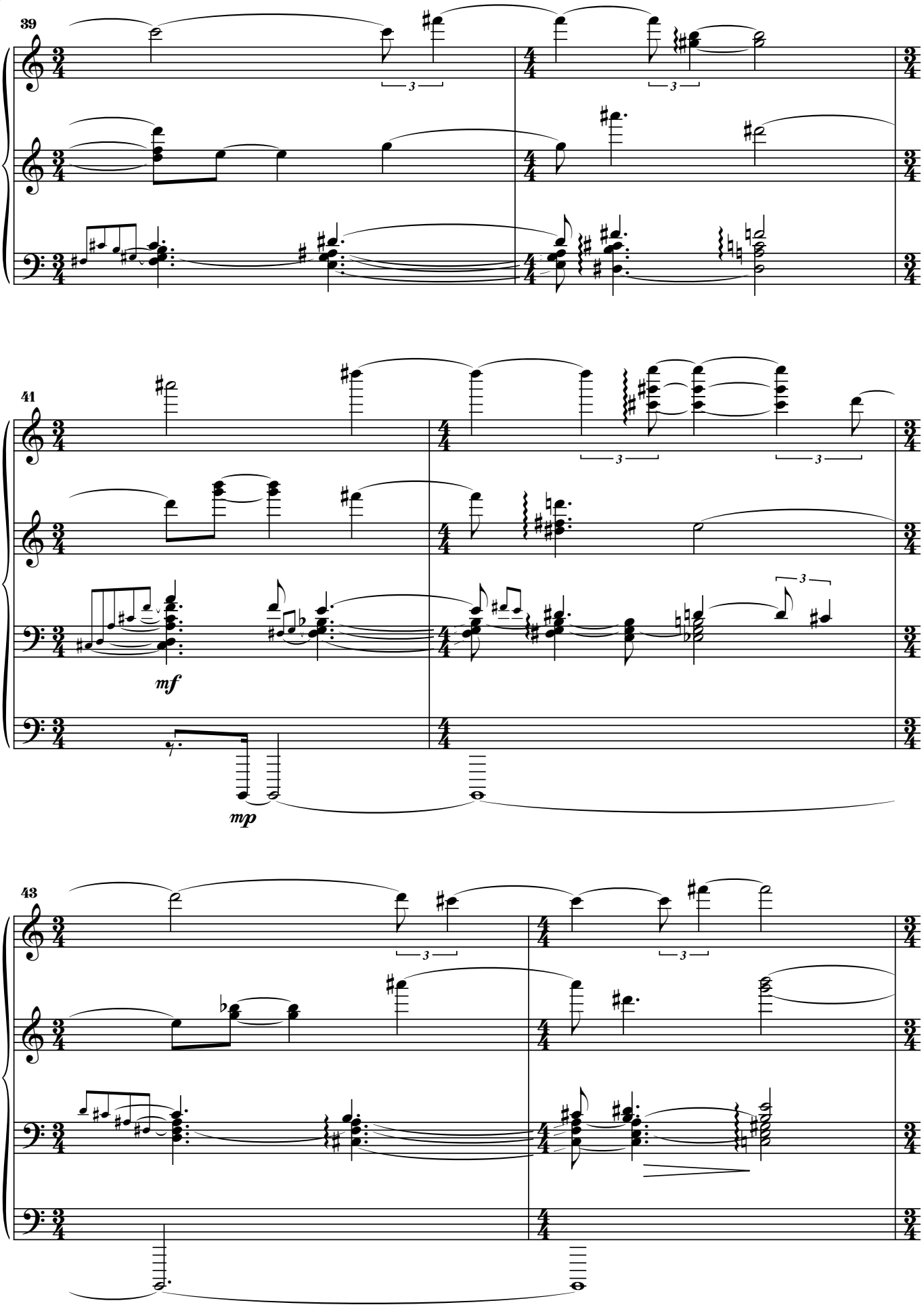
pedal as required to avoid excessive blurring and build up of sonority (moderate blurring is ok)

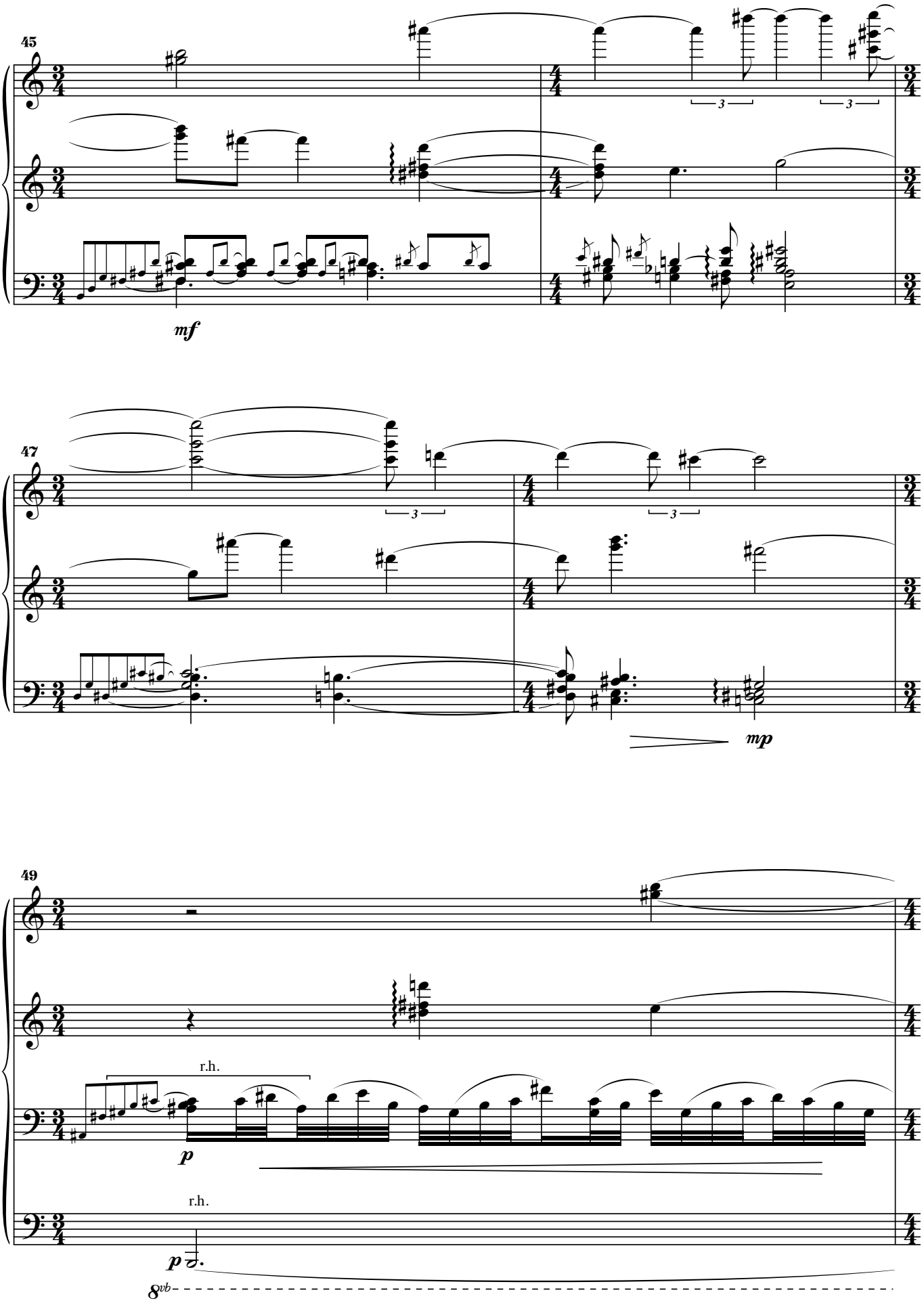


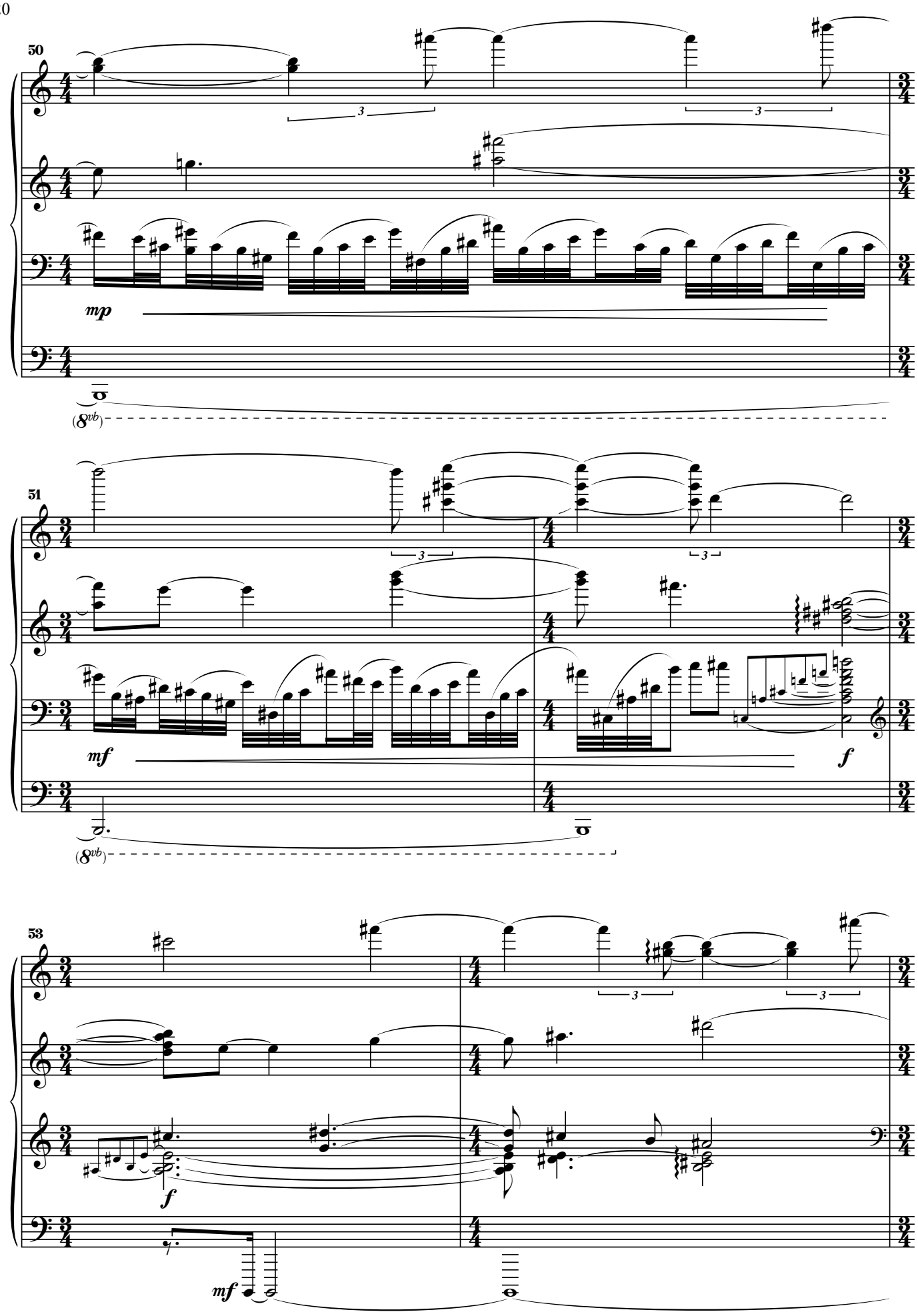


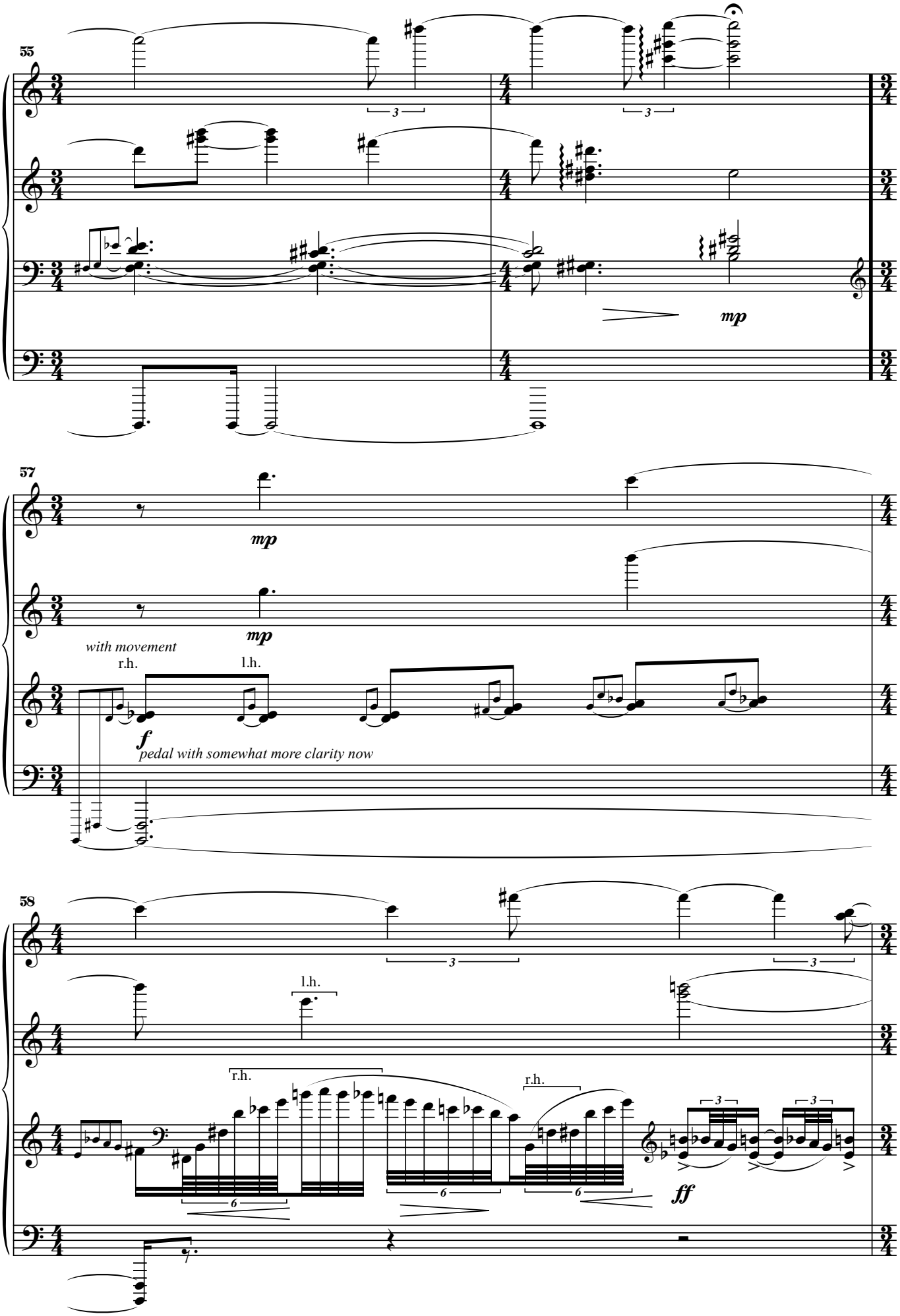

25
mf
28
mp
31
mf
mp

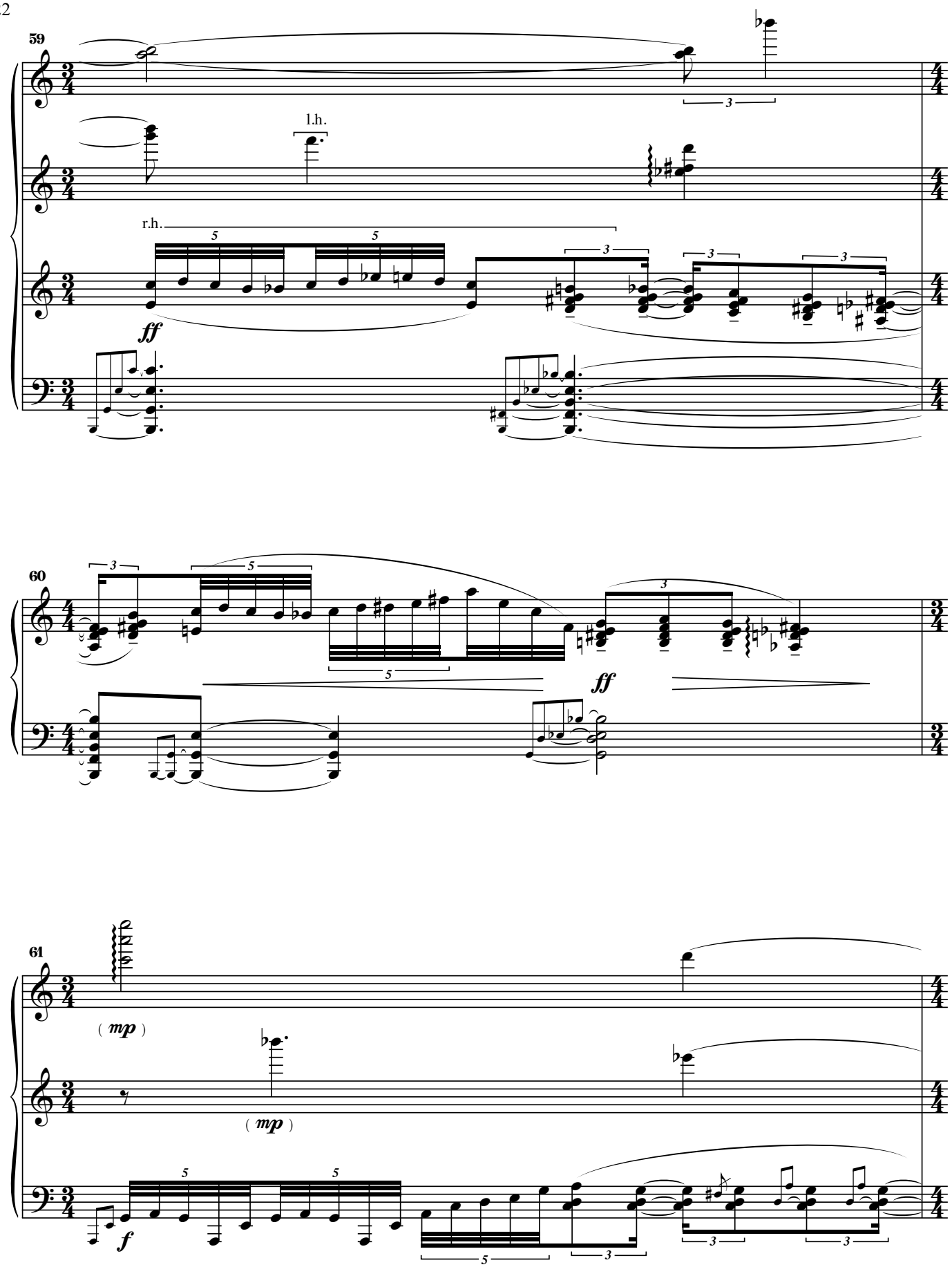

33
mf
r.h.
mp
35
f
mp
37

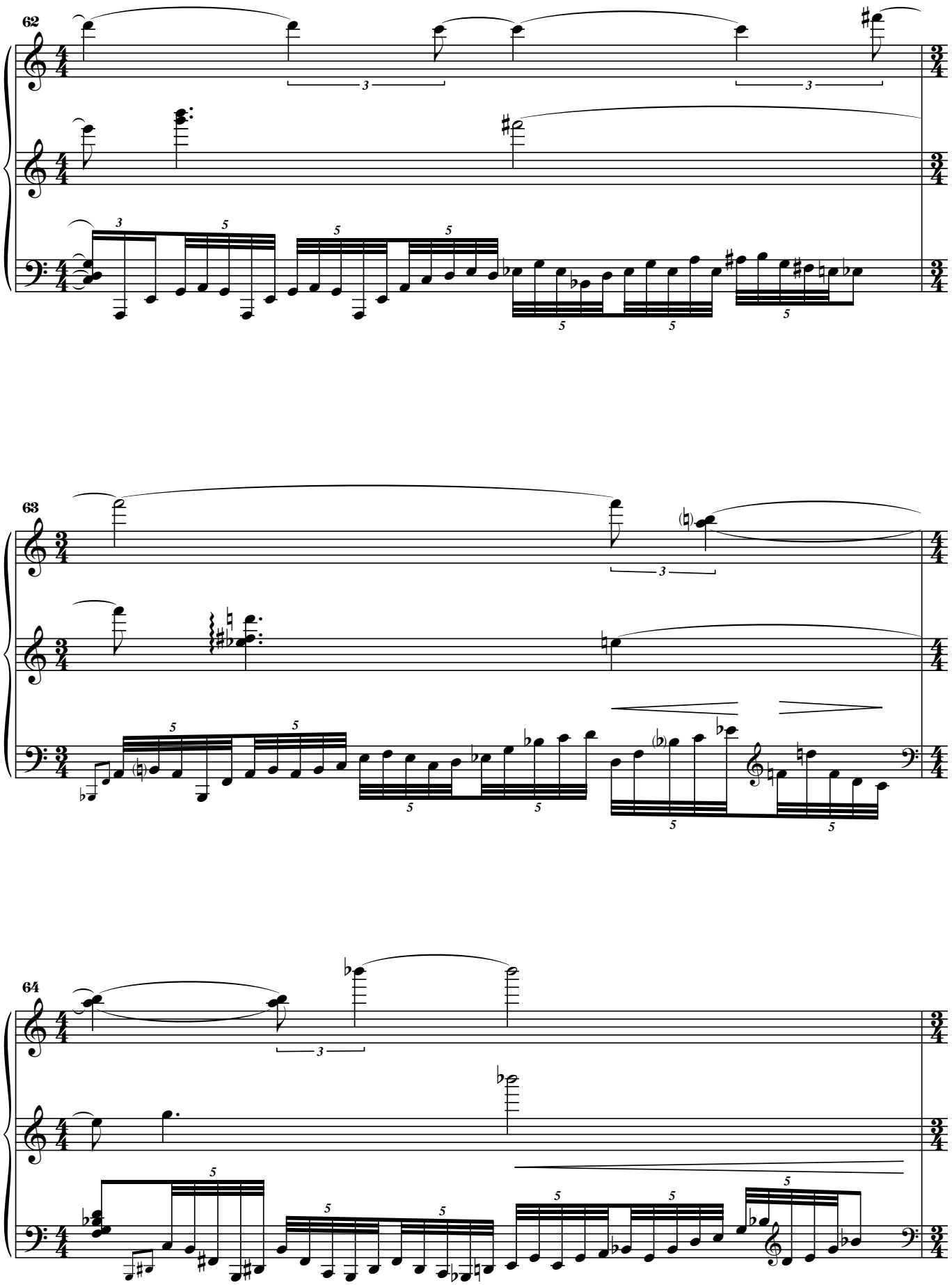

39
41
mf
mp
43

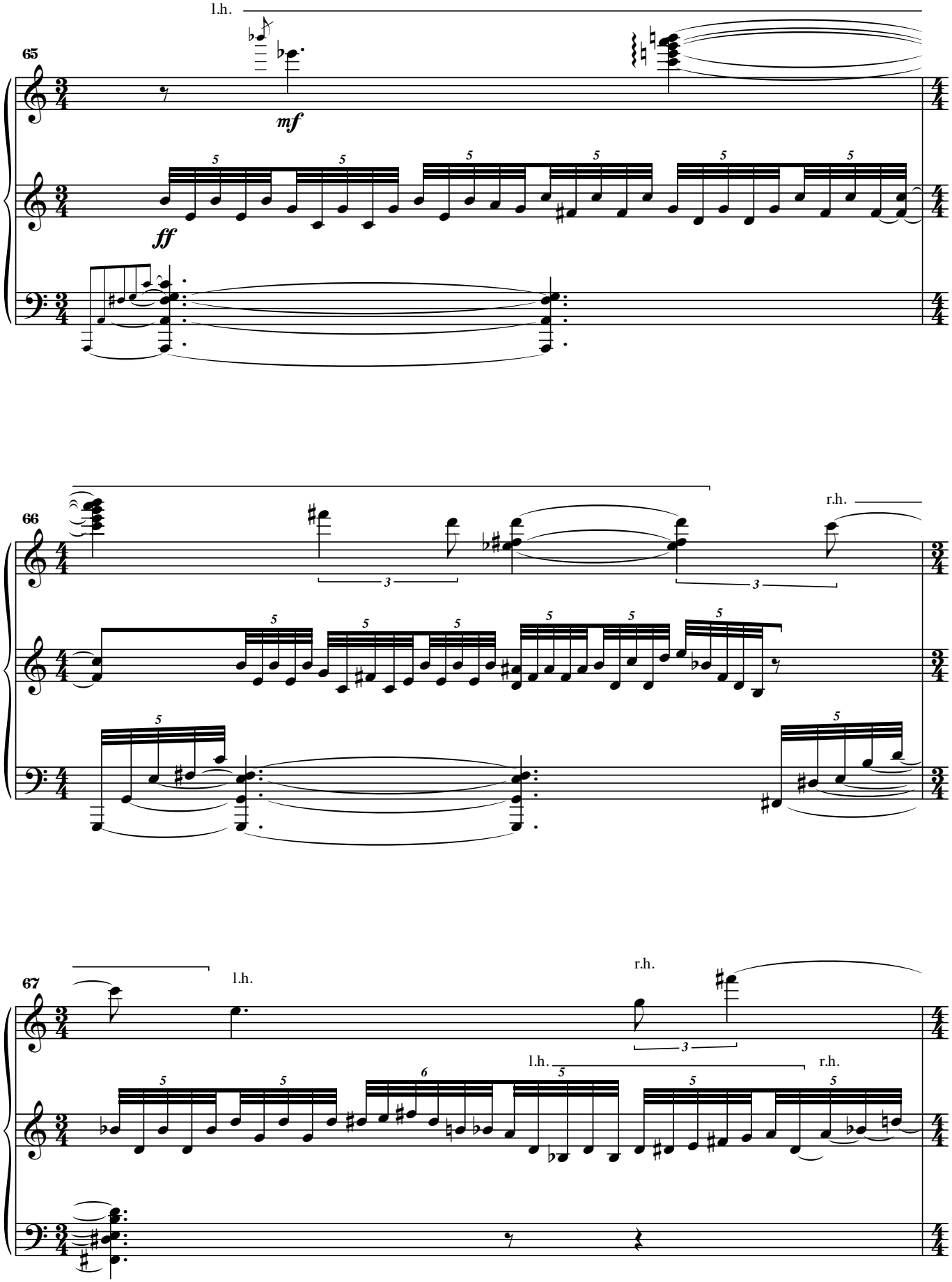

45
mf
47
mp
49
r.h.
p
r.h.
p
8vb

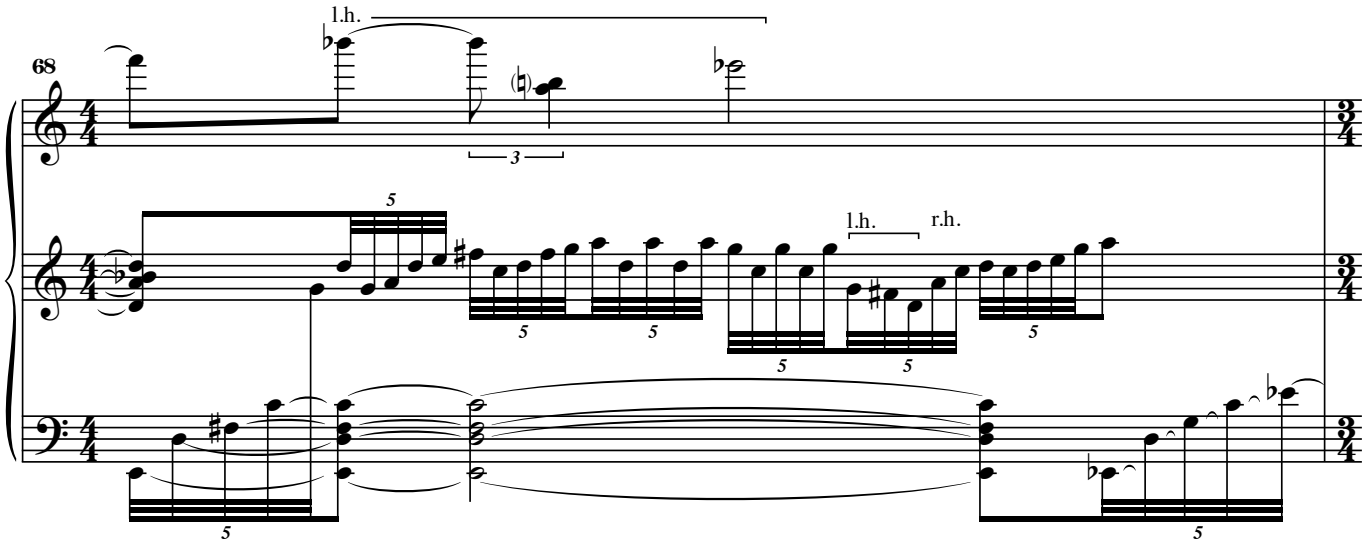

50
mp
(8vb)
51
mf
f
(8vb)
53
f
mf

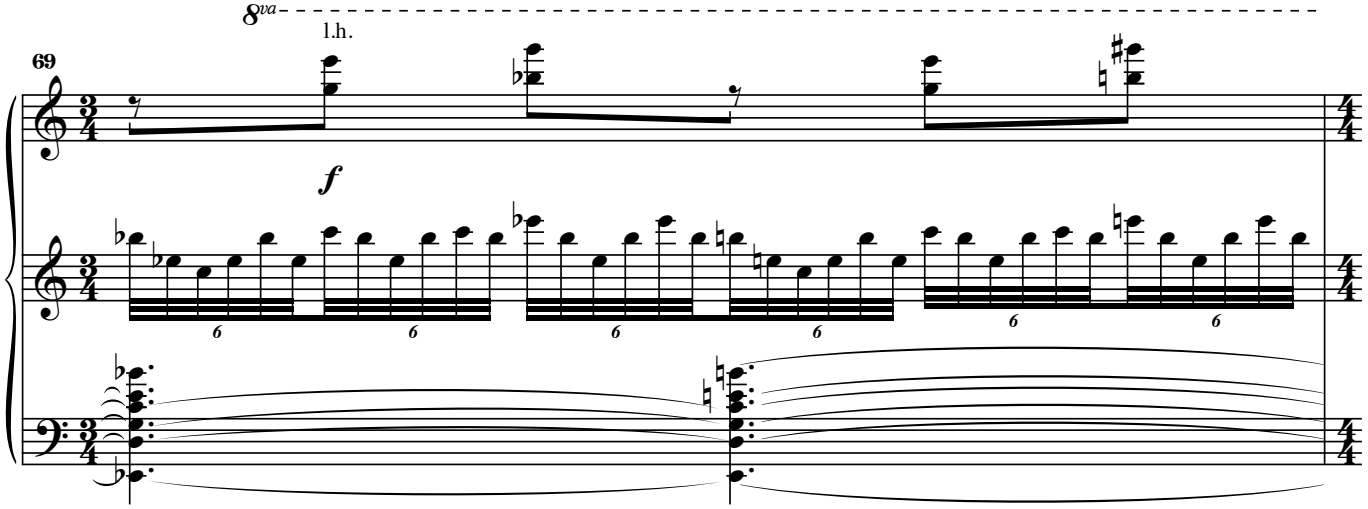

55
mp
57
mp
mp
with movement
r.h.
l.h.
f
pedal with somewhat more clarity now
58
l.h.
r.h.
r.h.
ff

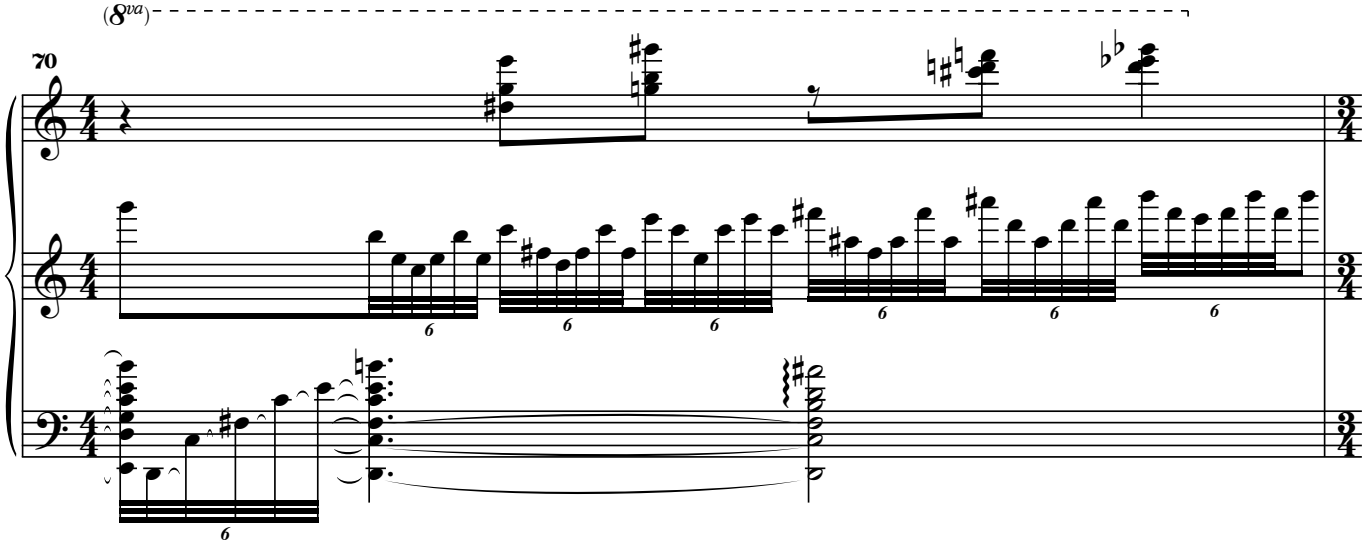

59
l.h.
r.h.
ff
60
ff
61
(mp)
(mp)
f

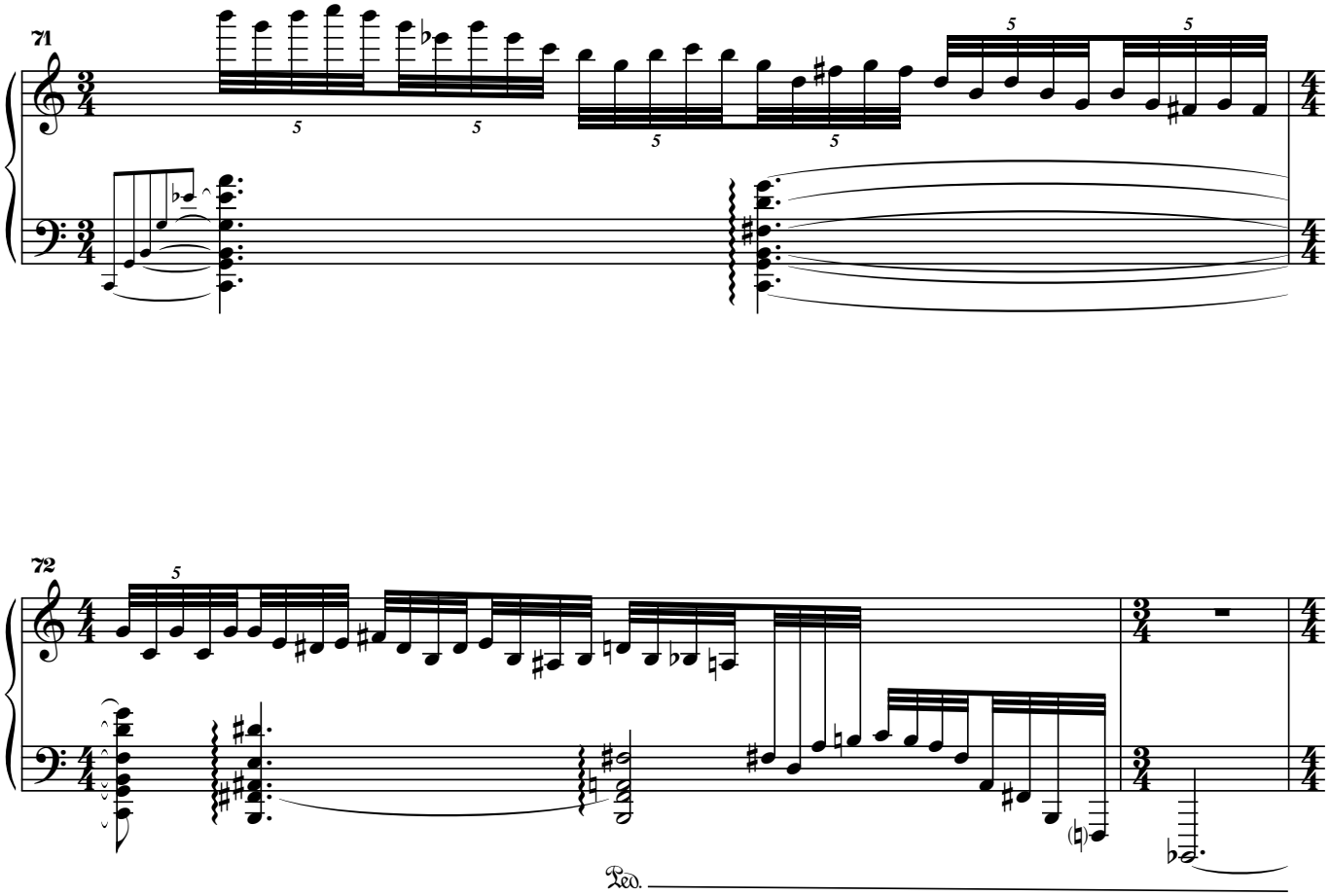

62
63
64

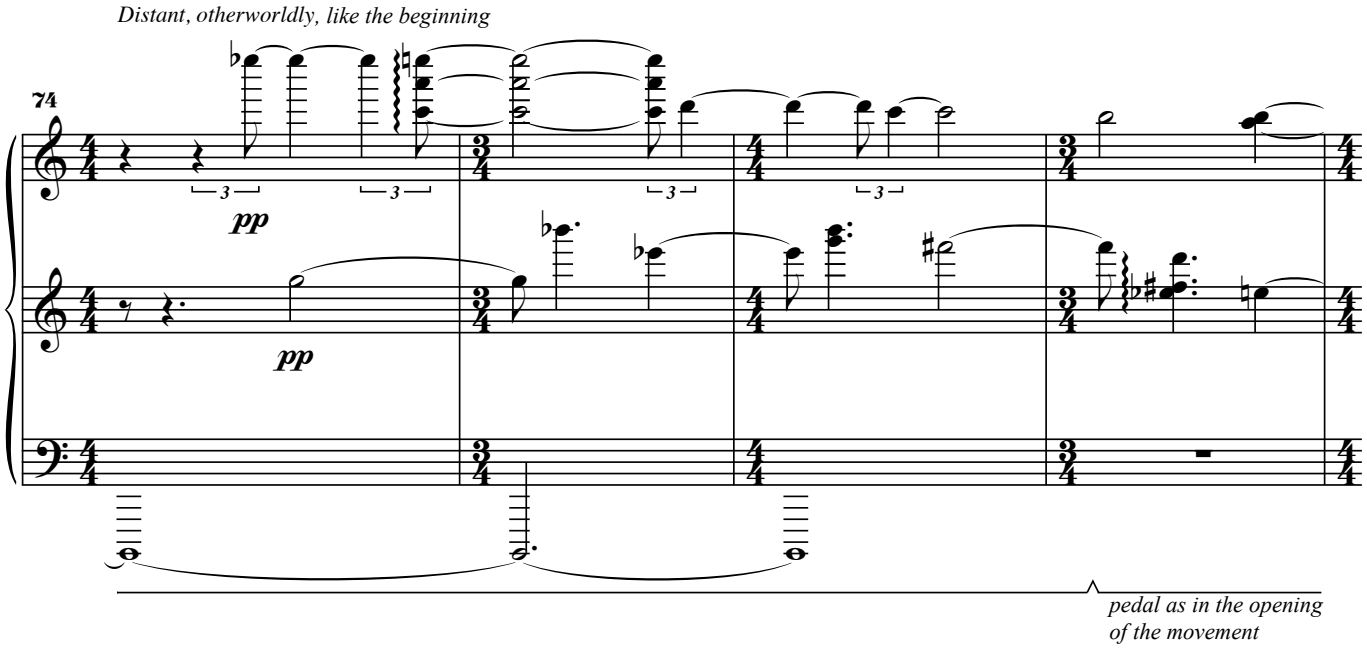

l.h.
65
mf
ff
66
r.h.
67
l.h.
r.h.
l.h.
r.h.

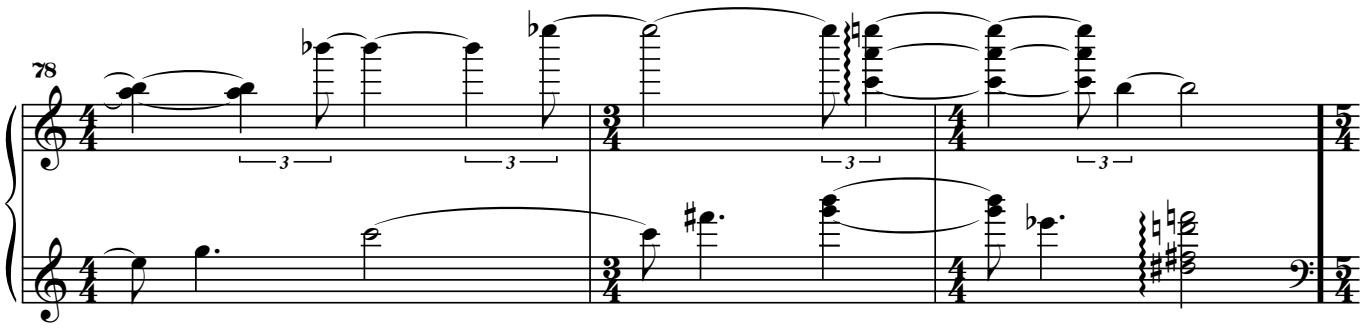

68
l.h.
3
5
l.h.
r.h.
5
5
5
5
5
5

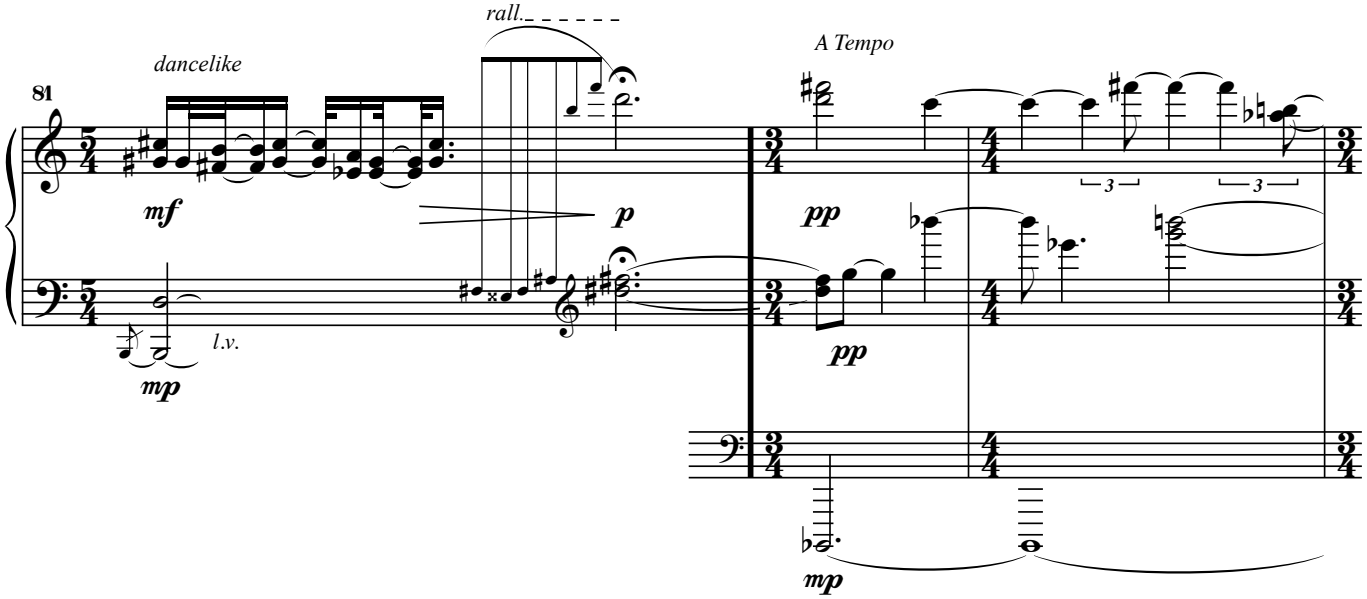

8va
69
l.h.
f
6
6
6
6
6
6

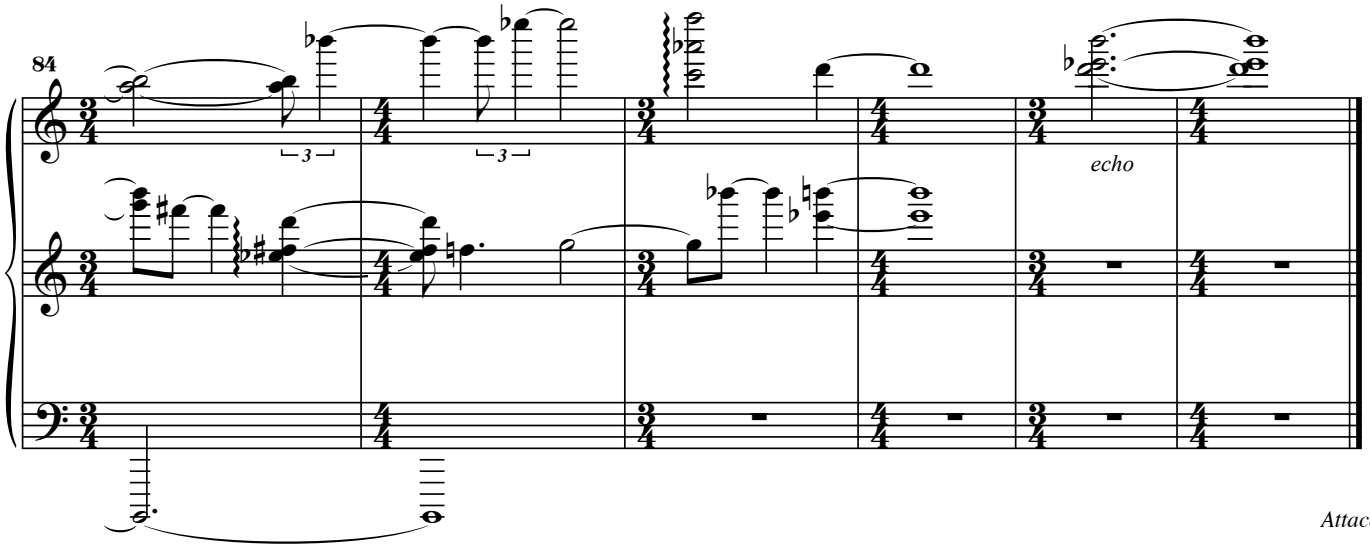

(8va)
70
6
6
6
6
6
6


71
72
Ped.


Distant, otherworldly, like the beginning
74
pp
pp
pedal as in the opening
of the movement

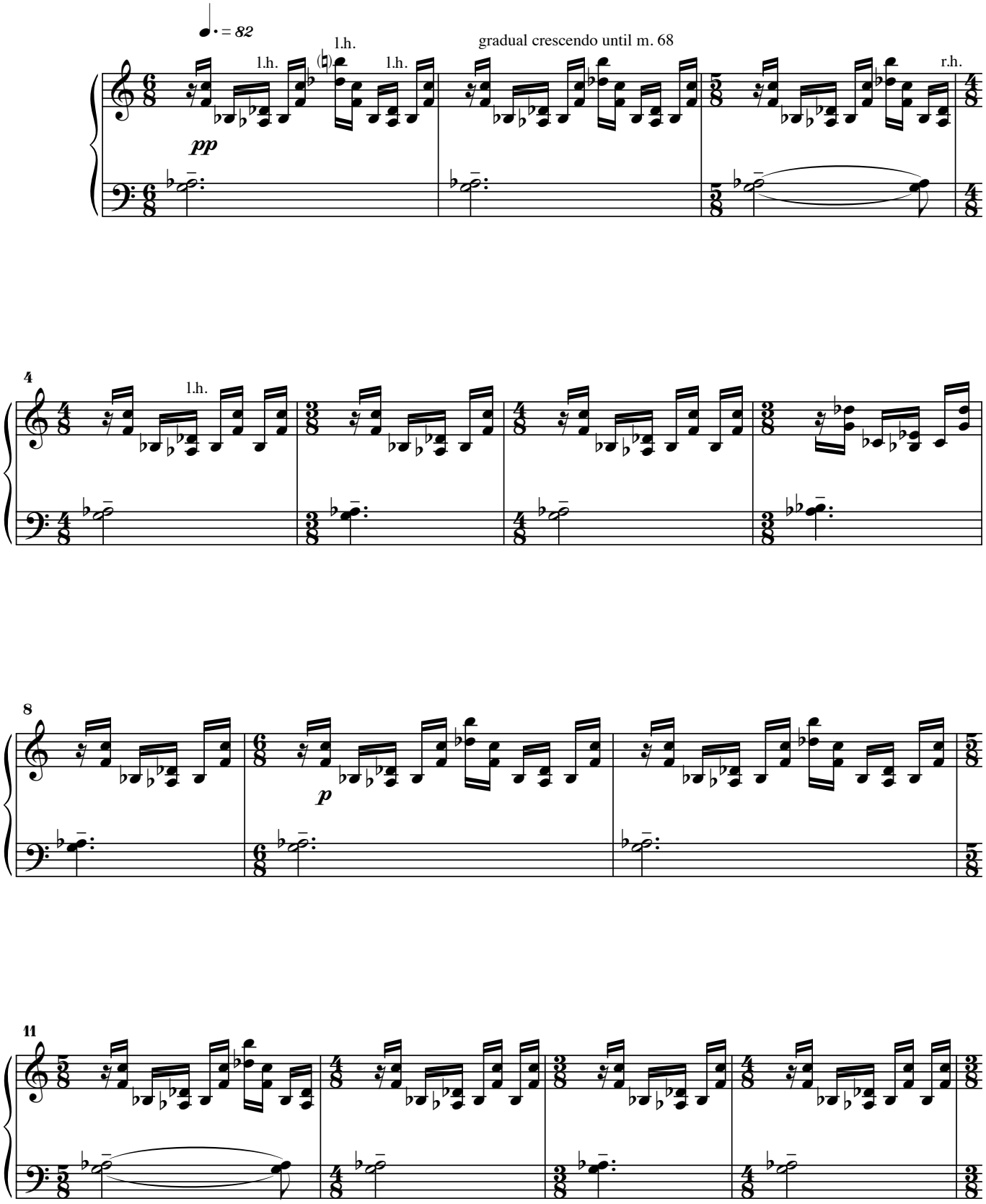


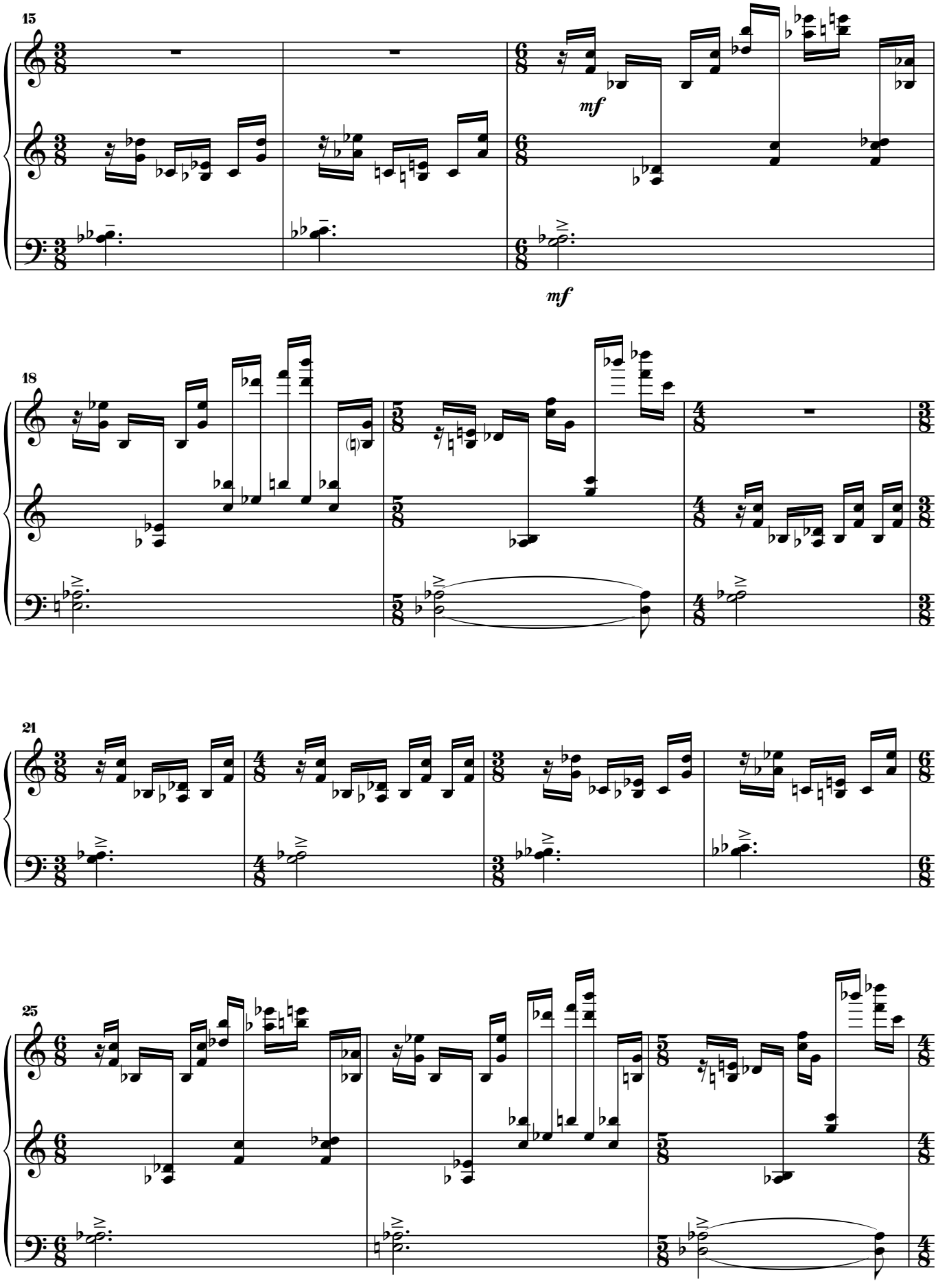


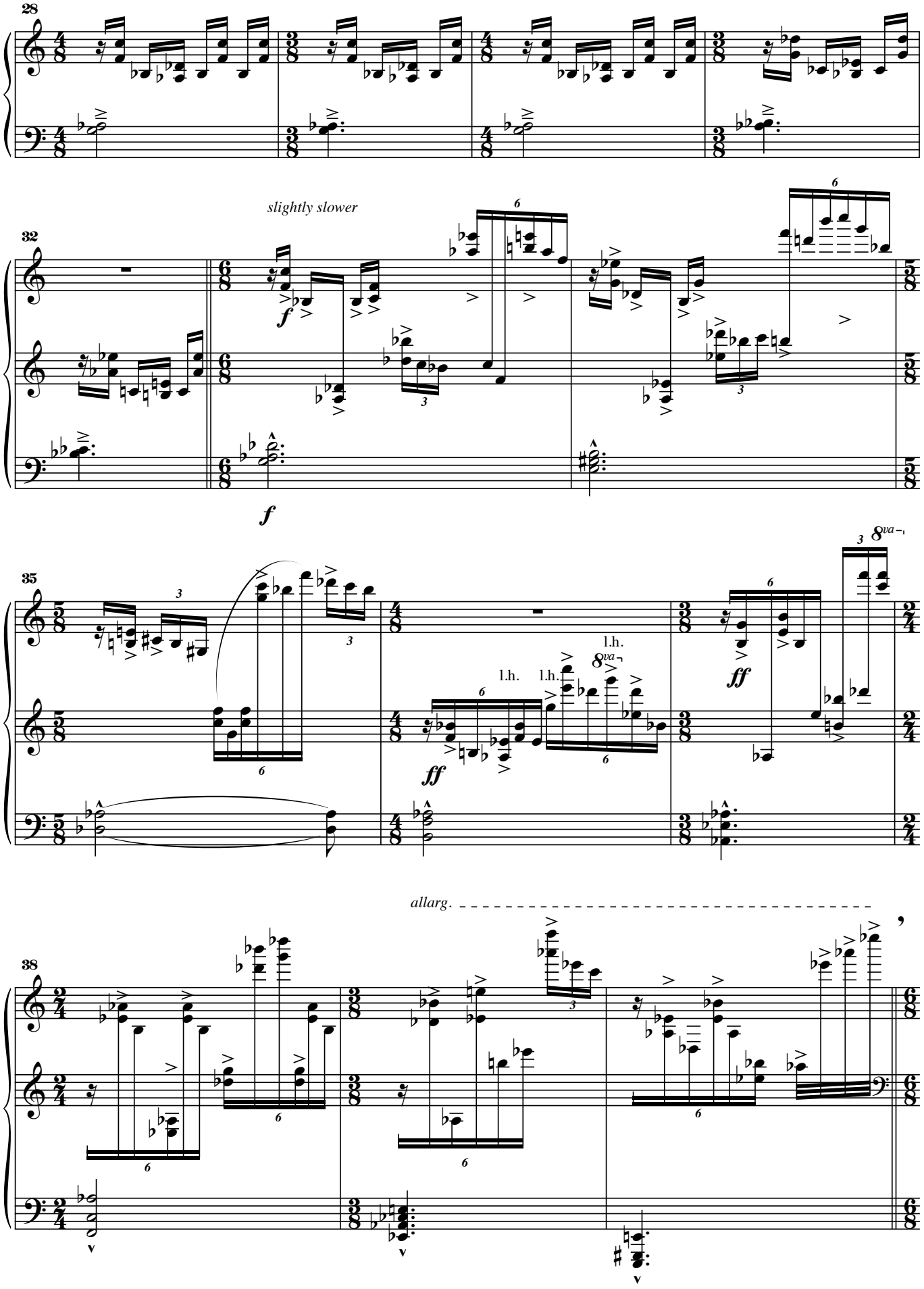


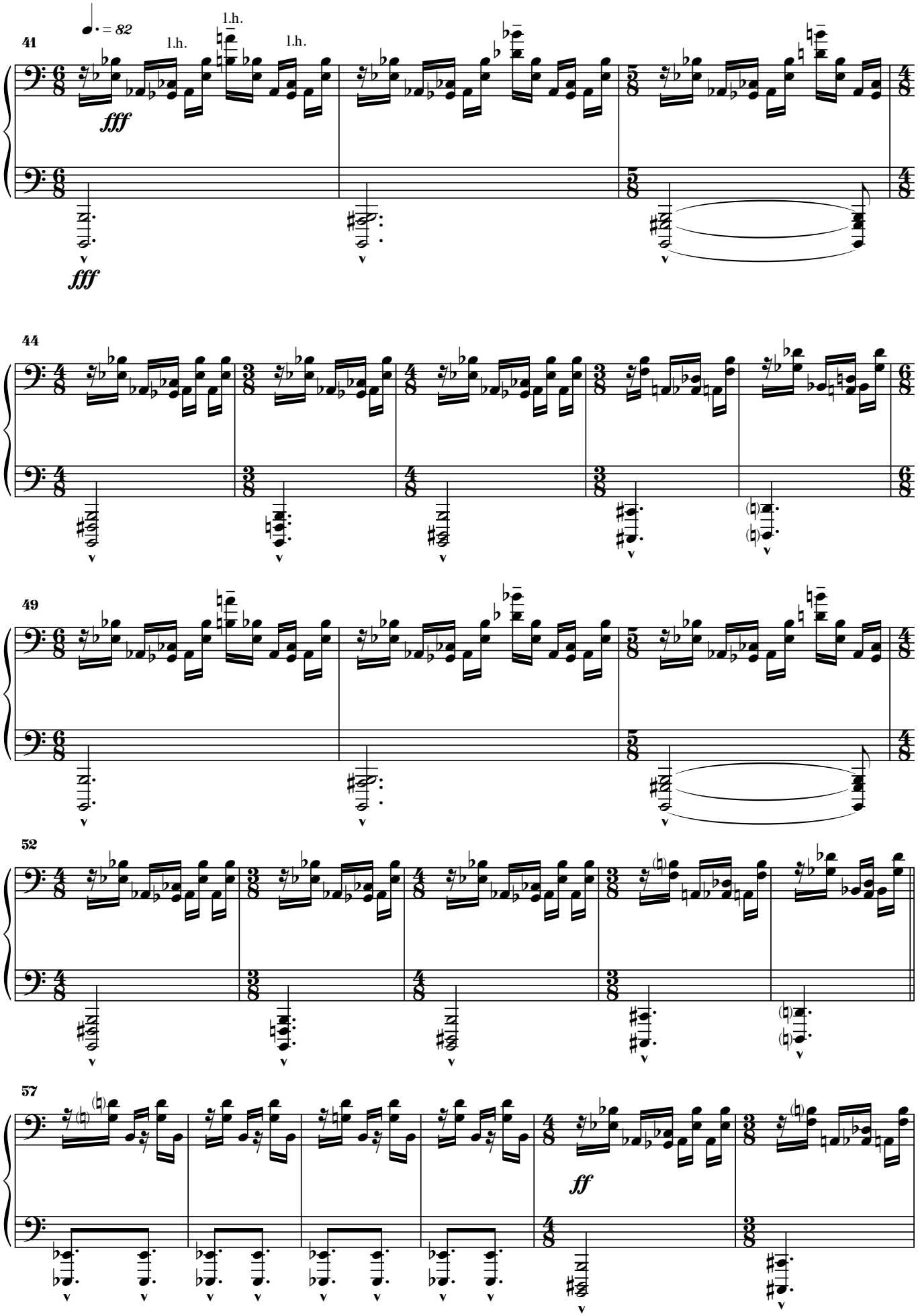
Attacca

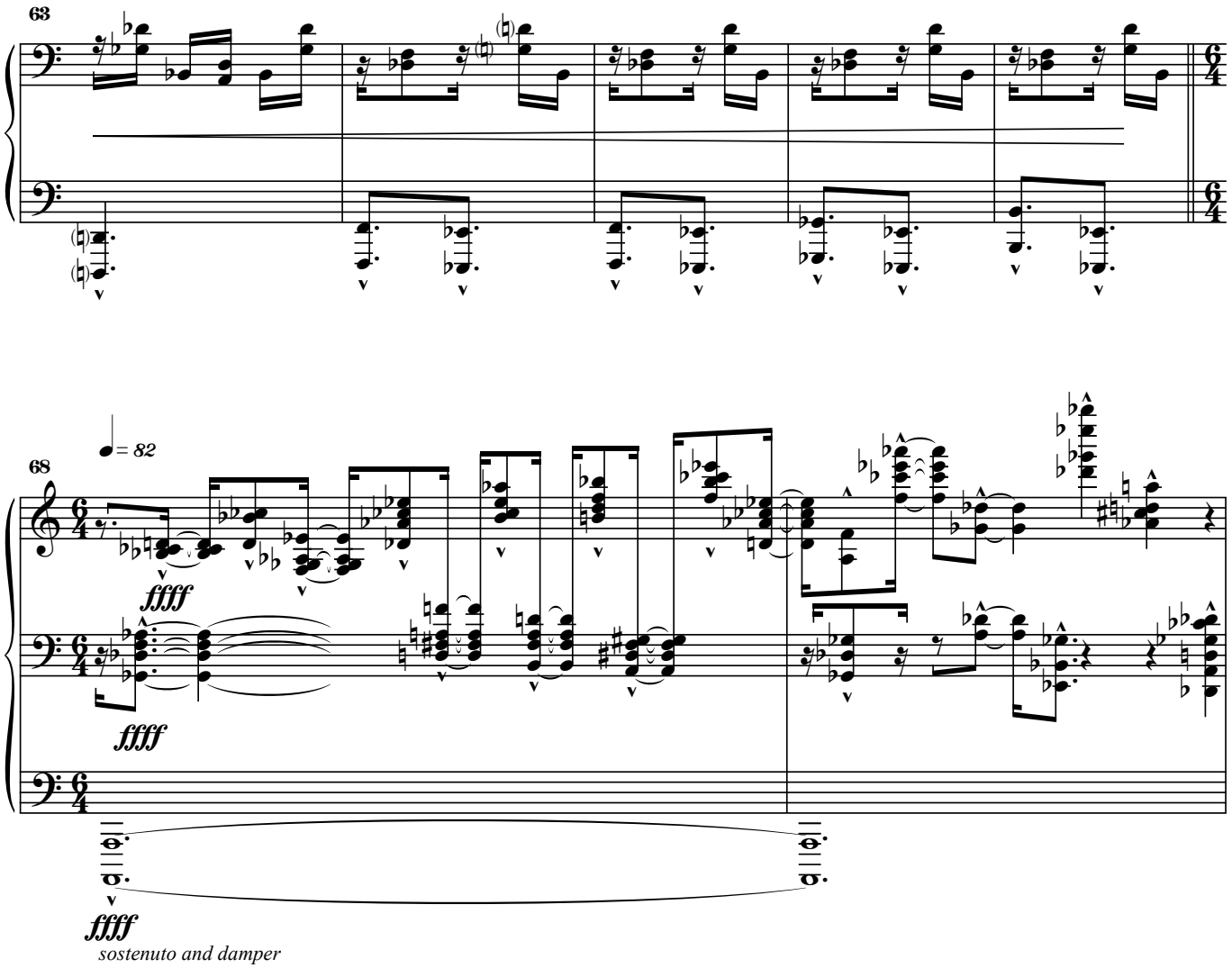
4. Strange

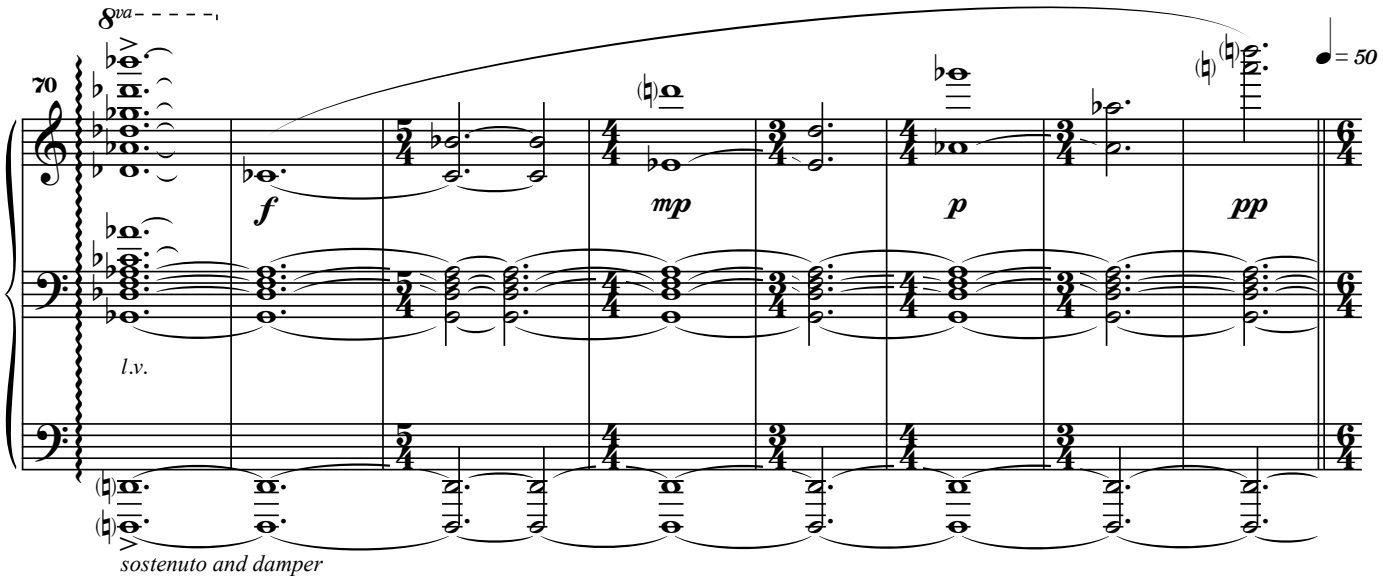


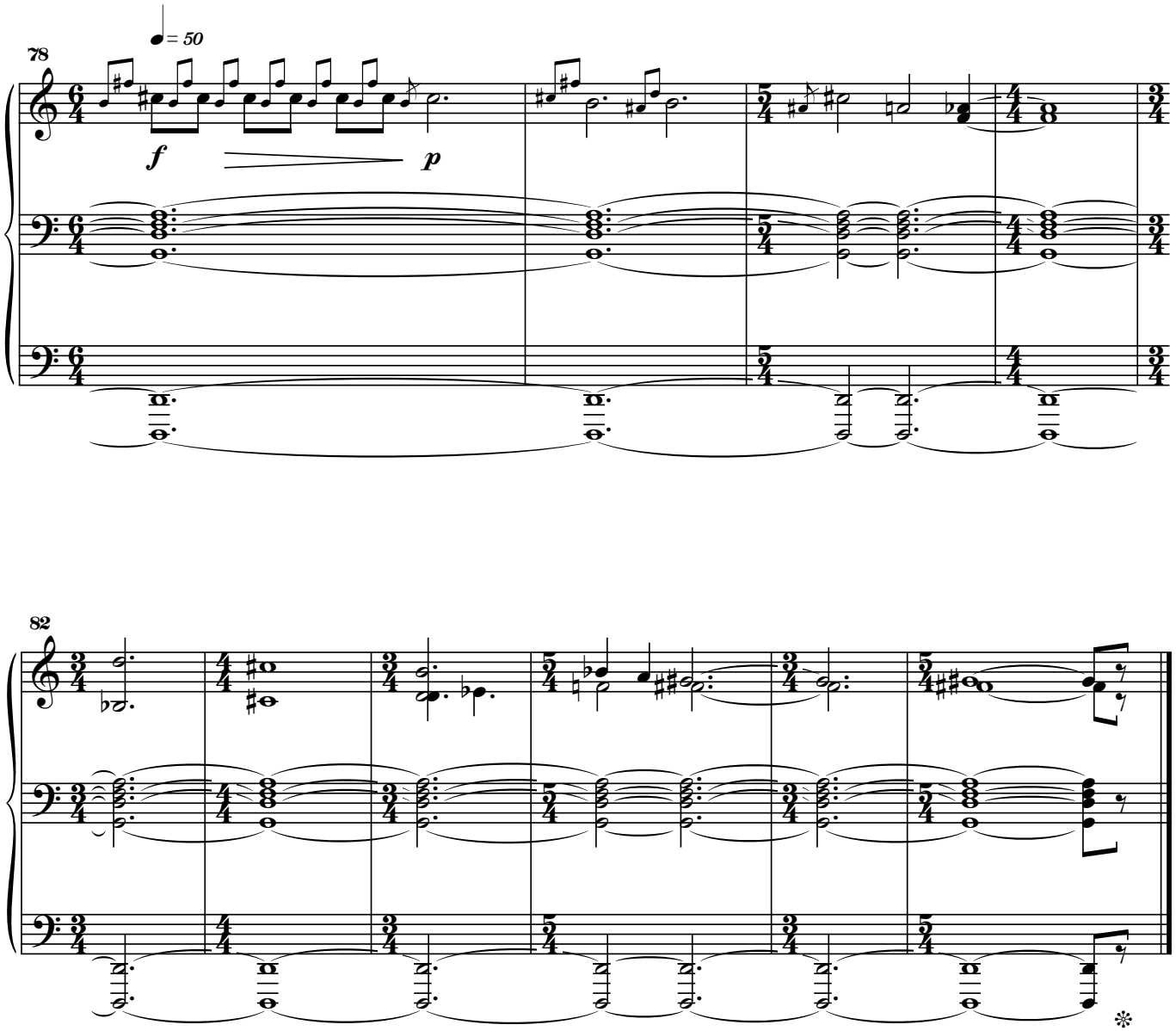

15
mf
mf
18
21
25


28
slightly slower
32
f
35
ff
8va
l.h.
allarg.
38


41
♩. = 82
l.h.
l.h.
l.h.
fff
fff
44
49
52
57
ff

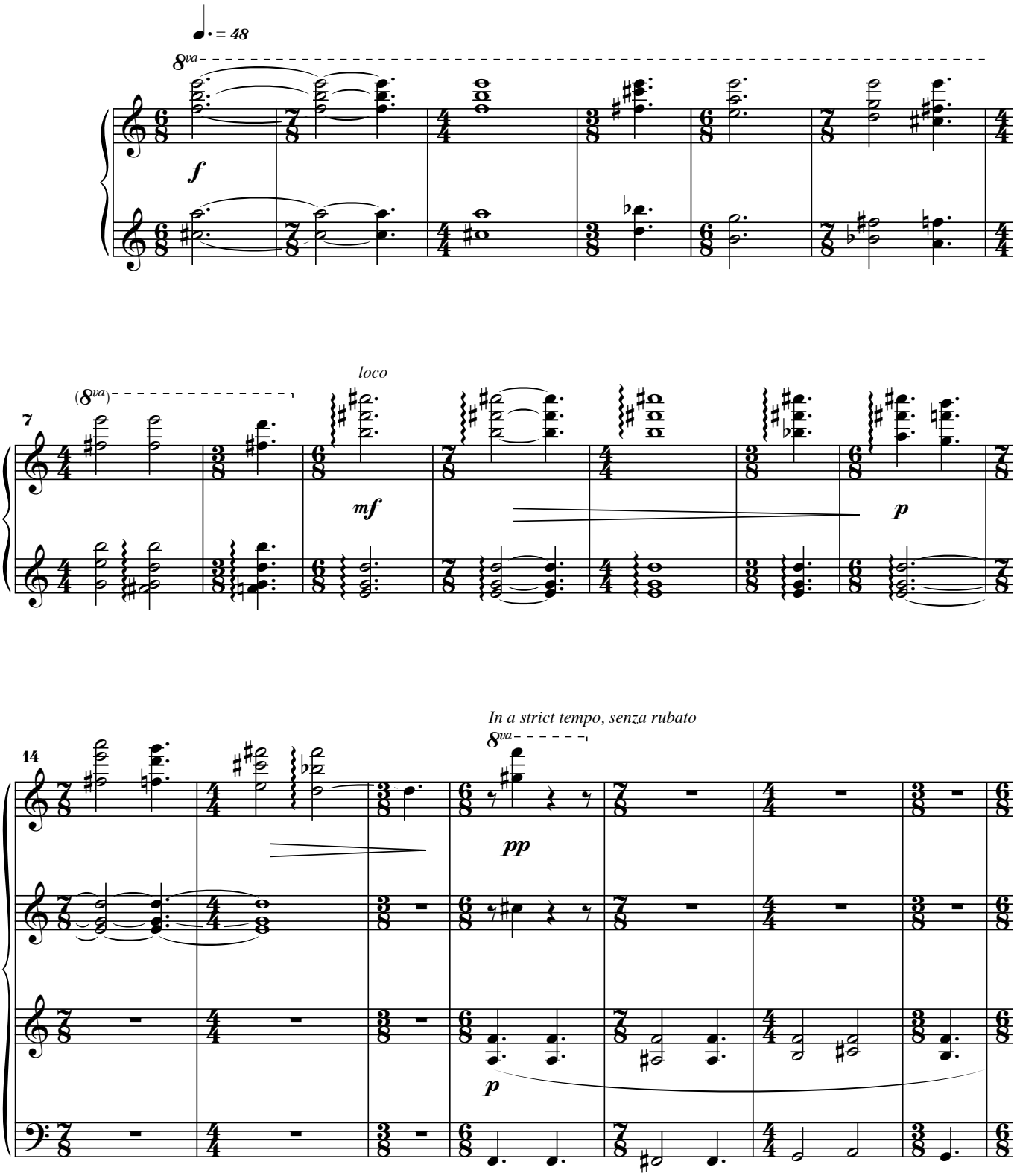

63
68
♩ = 82
ffff
ffff
ffff
sostenuto and damper

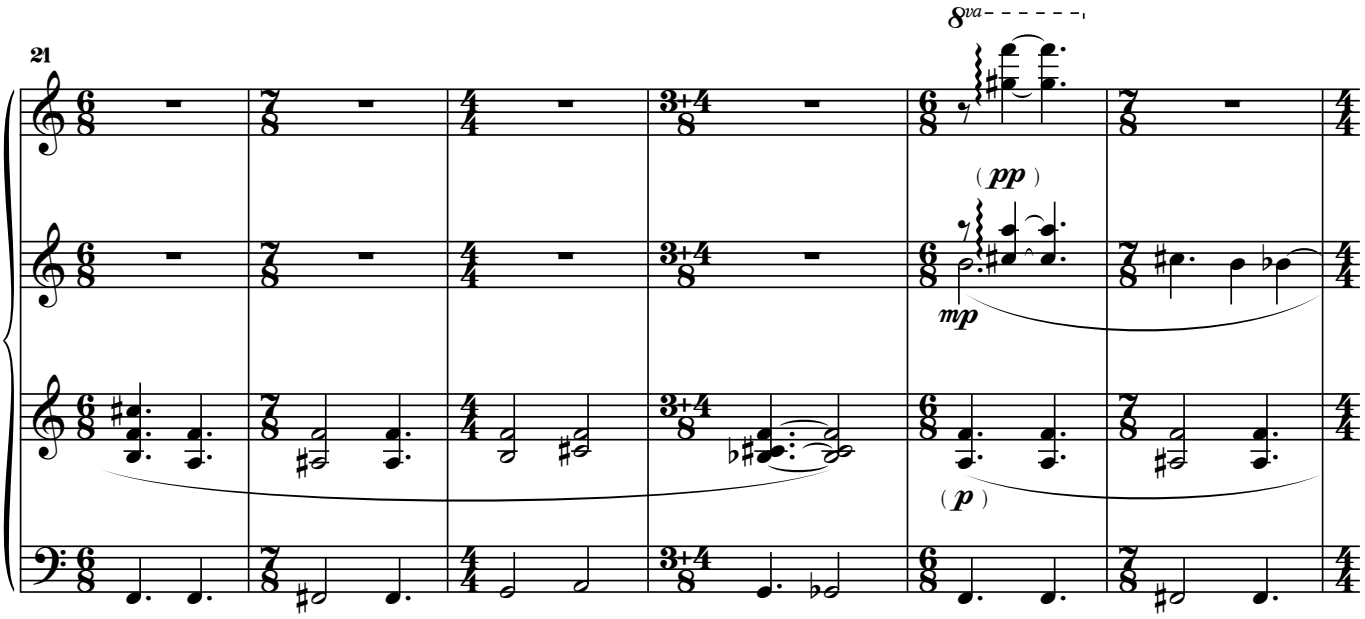

8va
70
f
mp
p
pp
♩ = 50
l.v.
sostenuto and damper

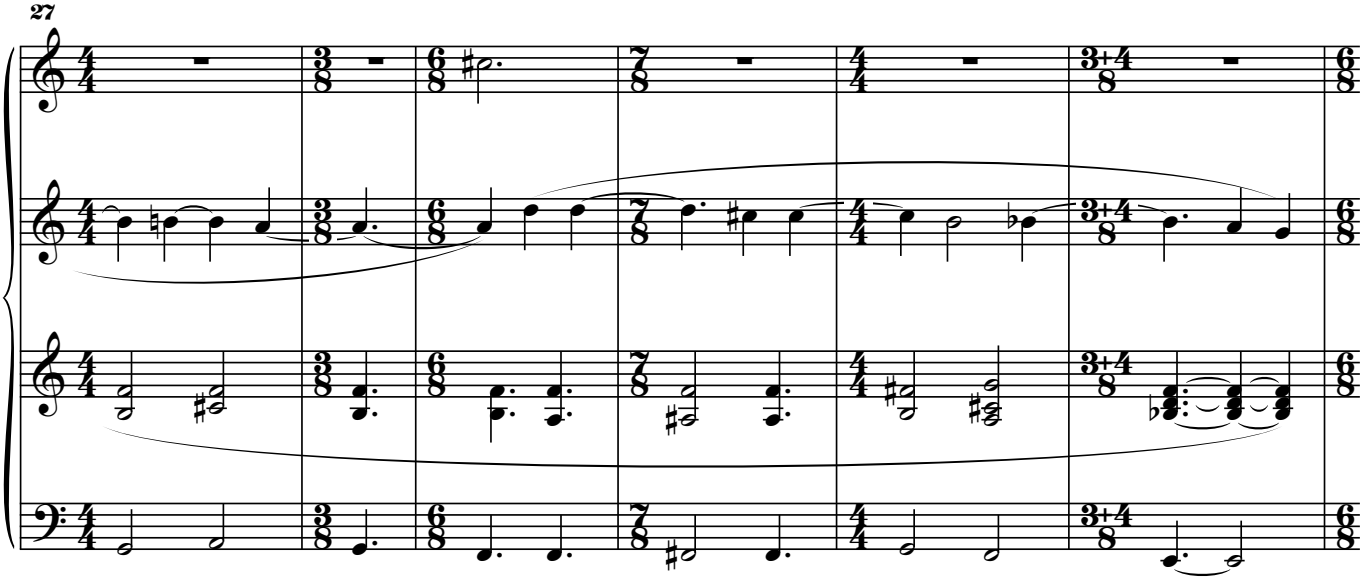


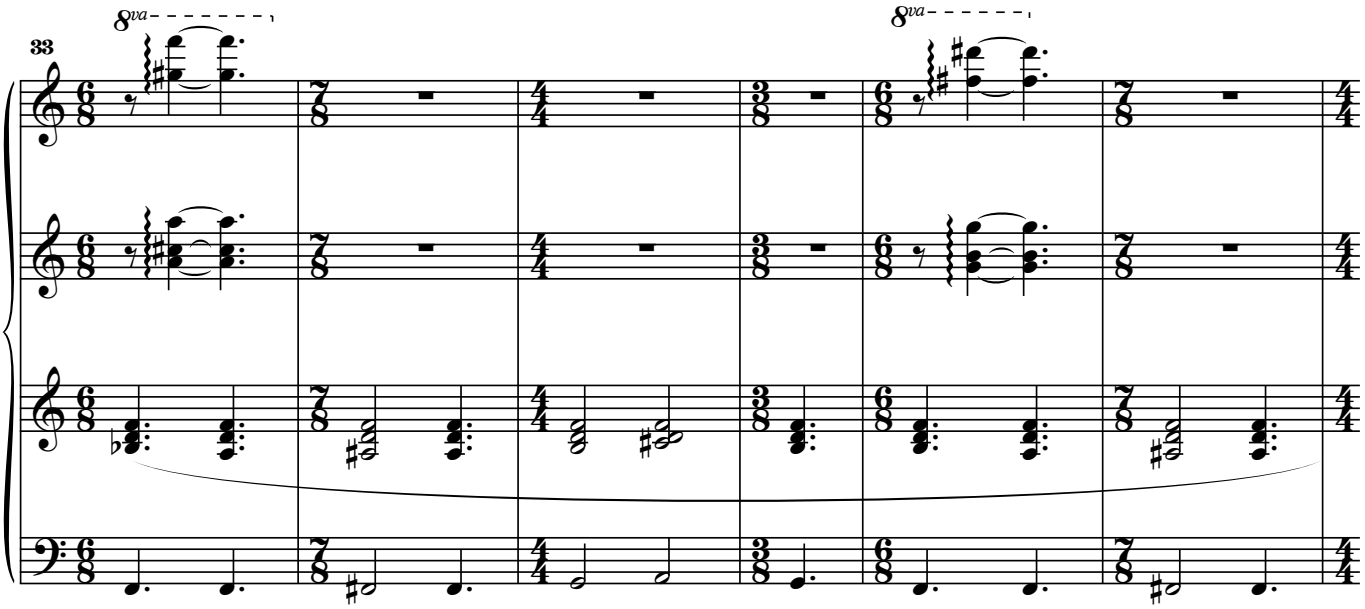
attacca

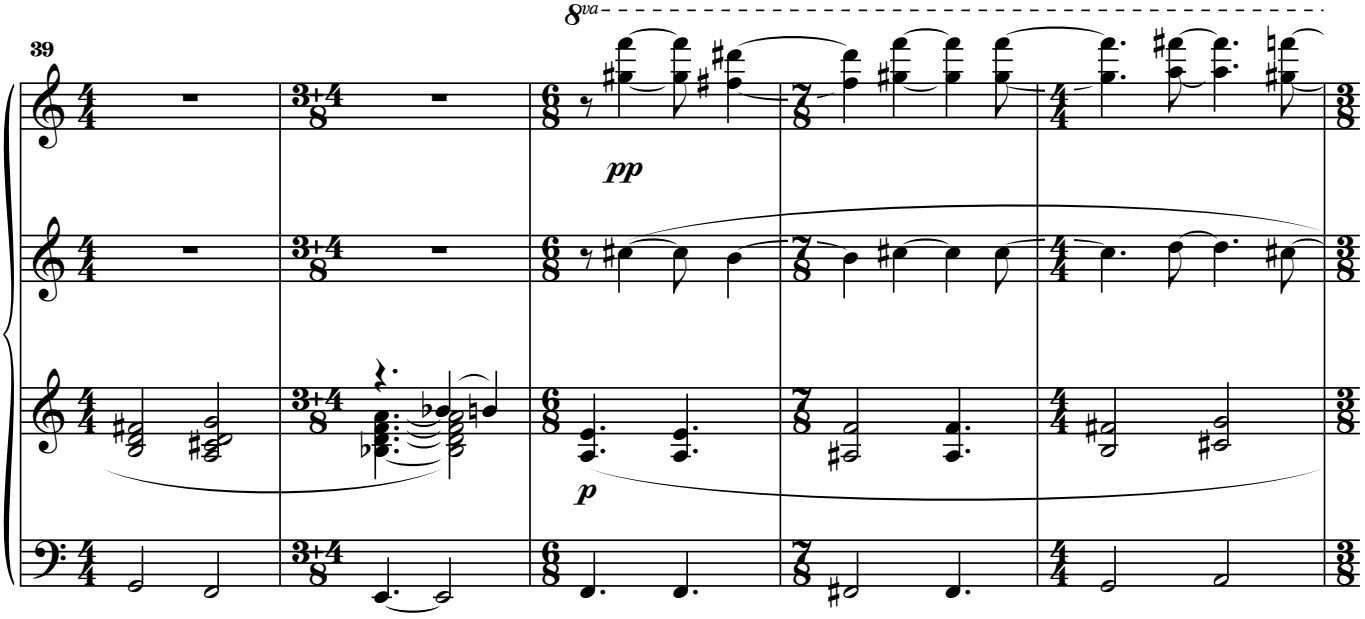
5. Charm

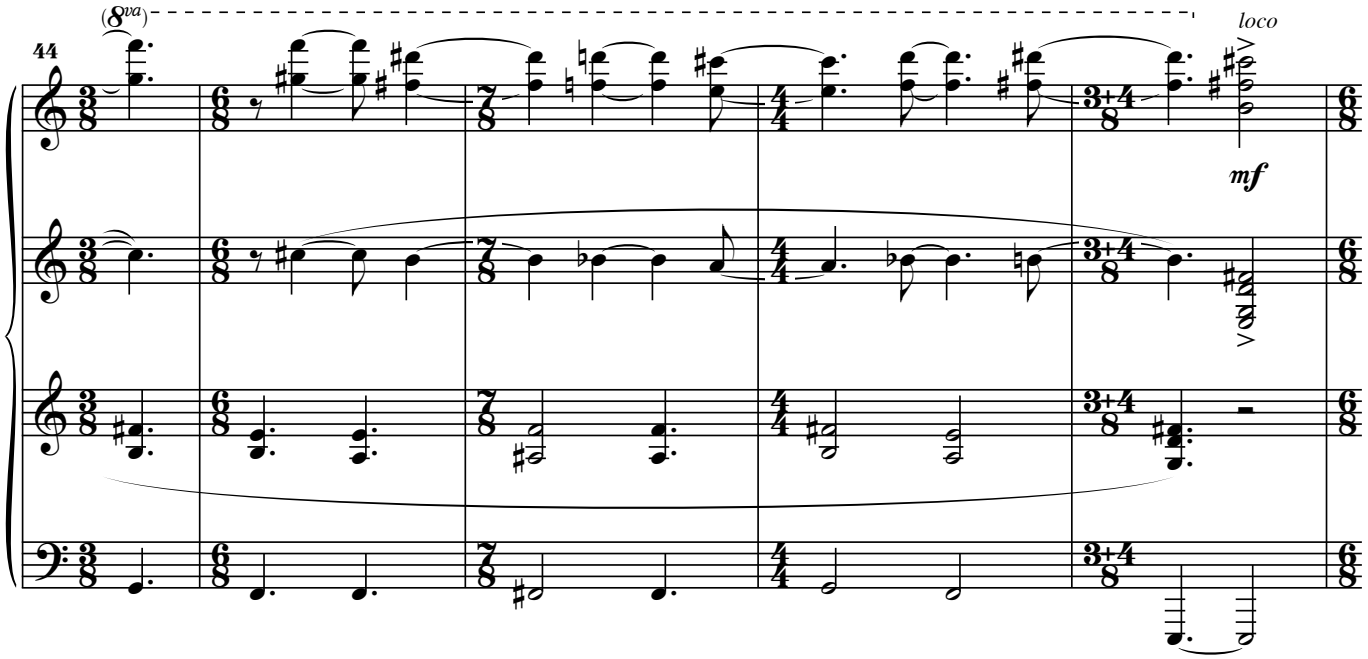

♩. = 48
8va
f
7
(8va)
loco
mf
p
14
In a strict tempo, senza rubato
8va
pp
p

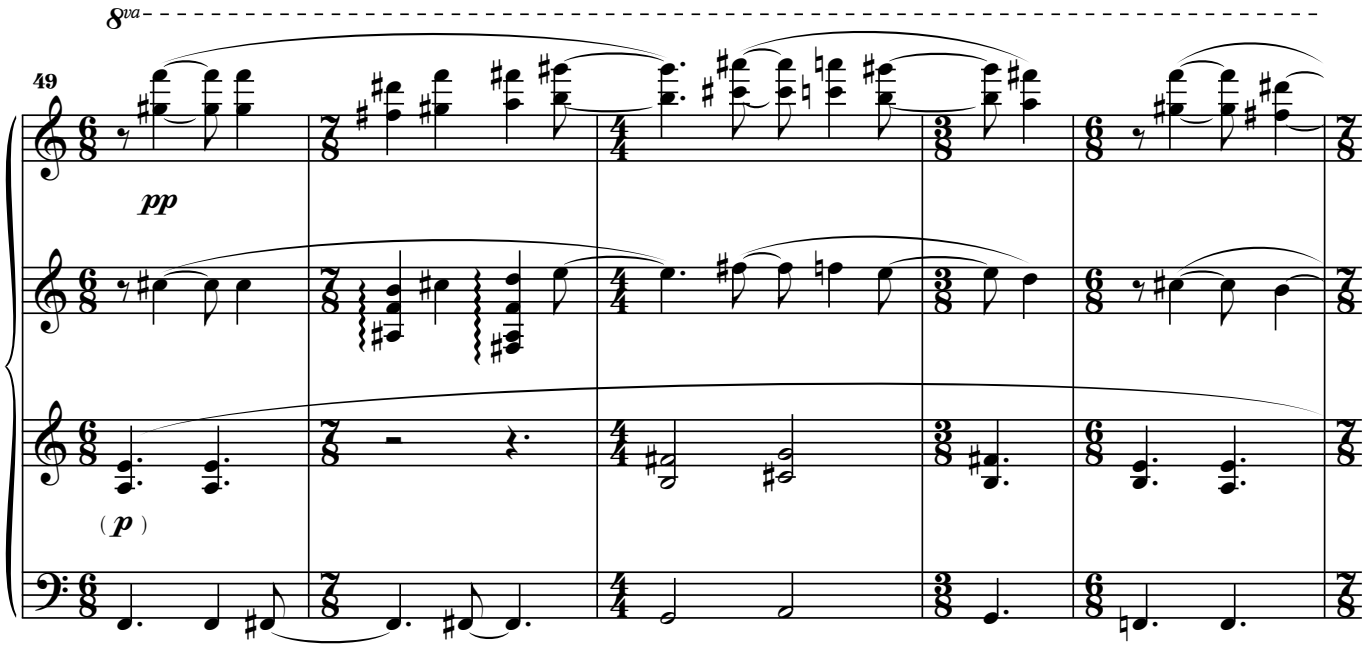

21
8va
(pp)
mp
(p)

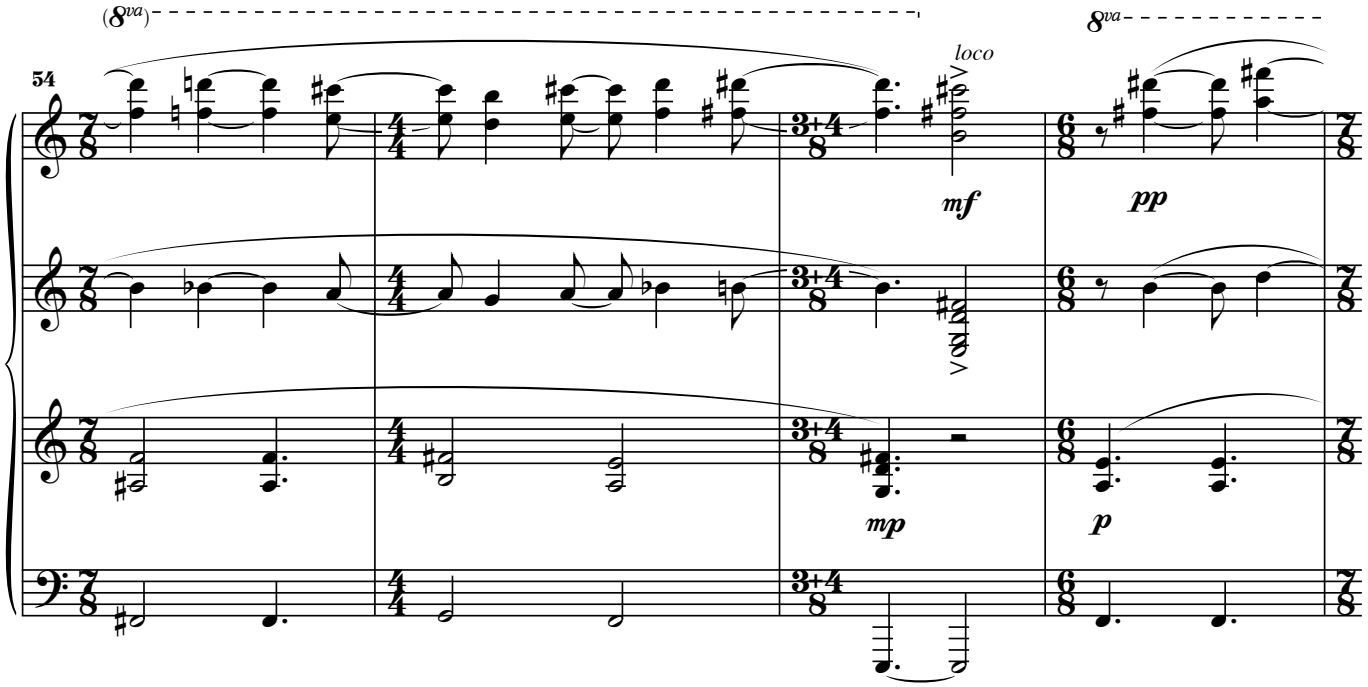

27

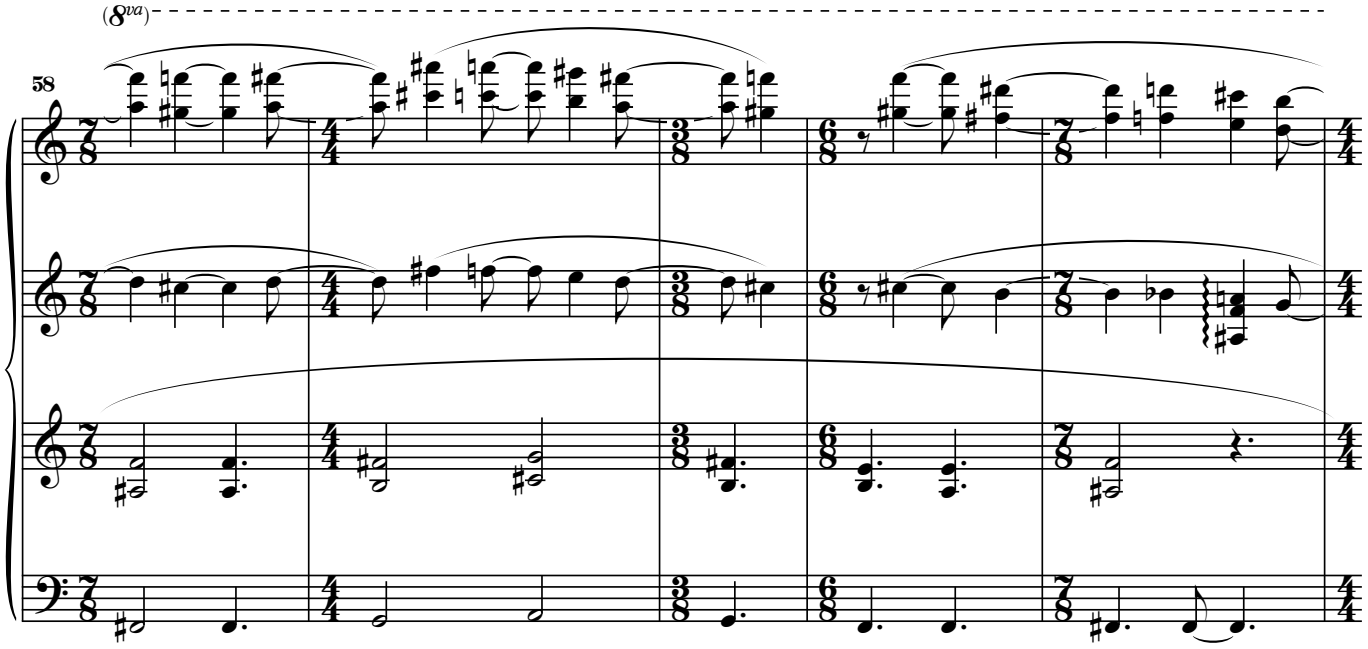

33
8va
8va

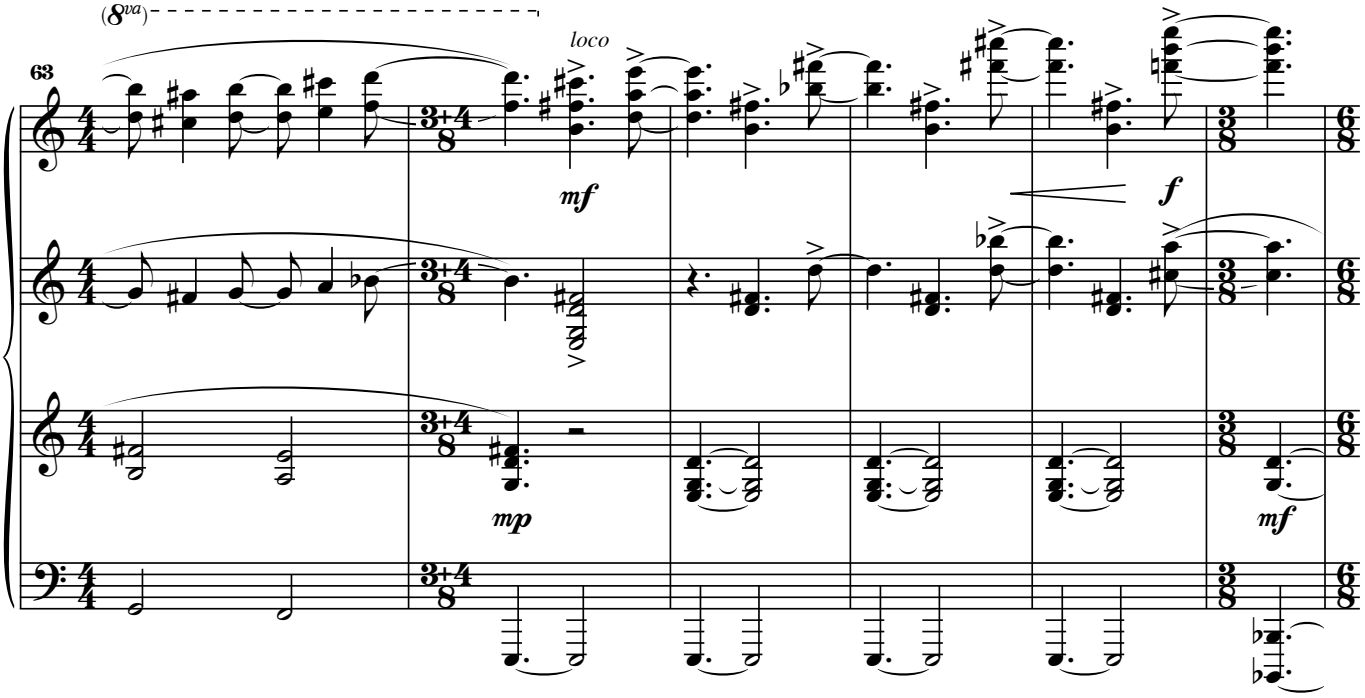

39
8va
pp
p

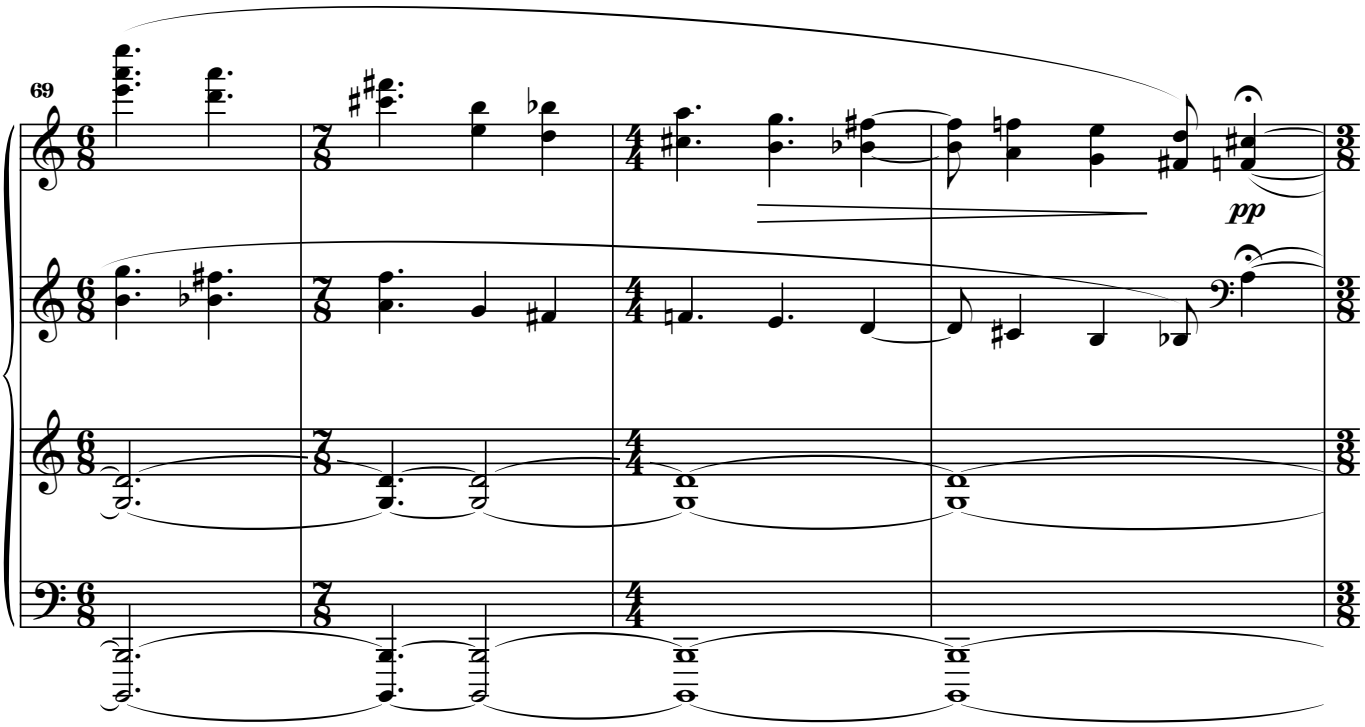

(8va)
44
loco
mf

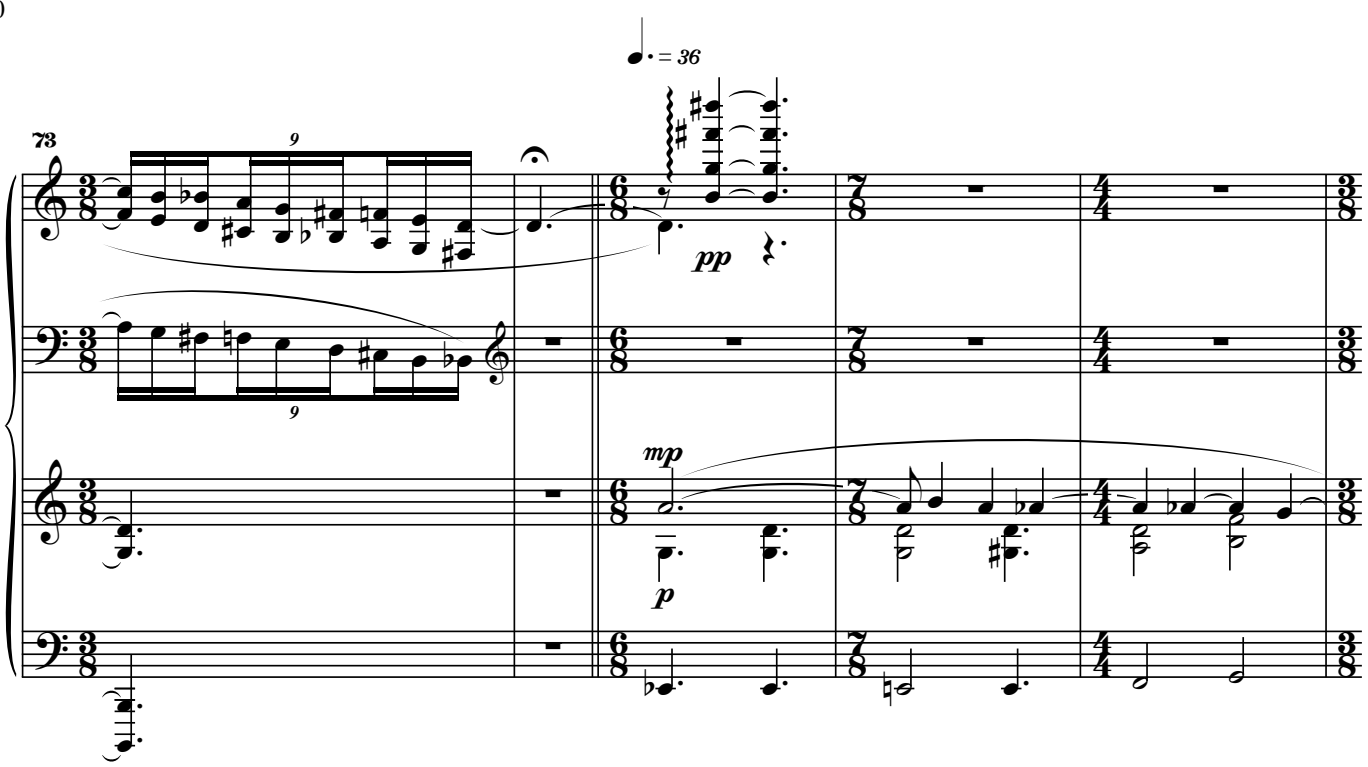

8va
49
pp
(p)

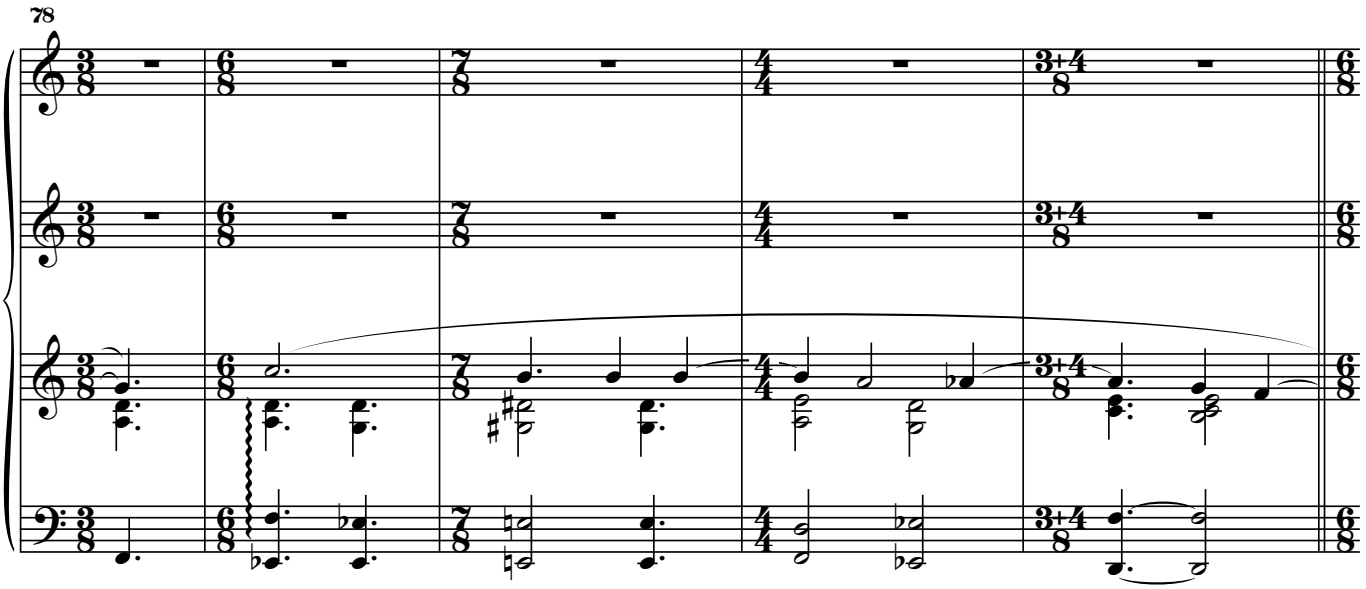

(8va)
8va
54
loco
mf
pp
mp
p

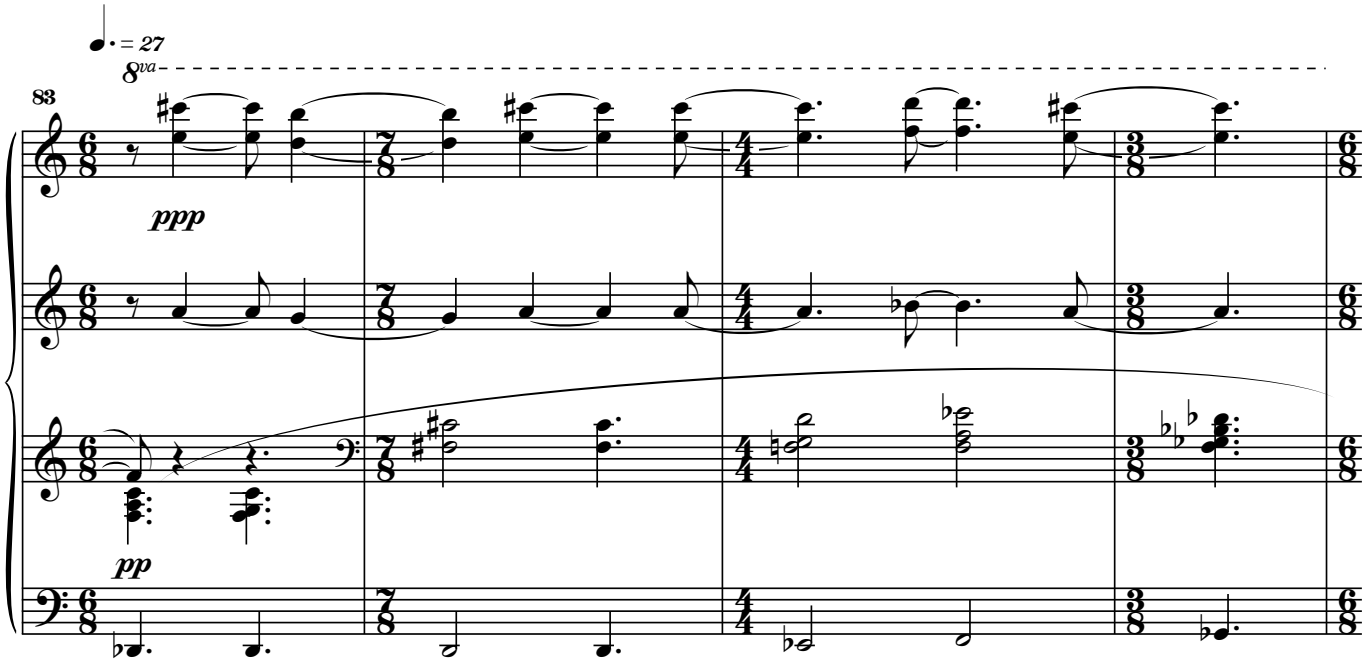

(8va)
58

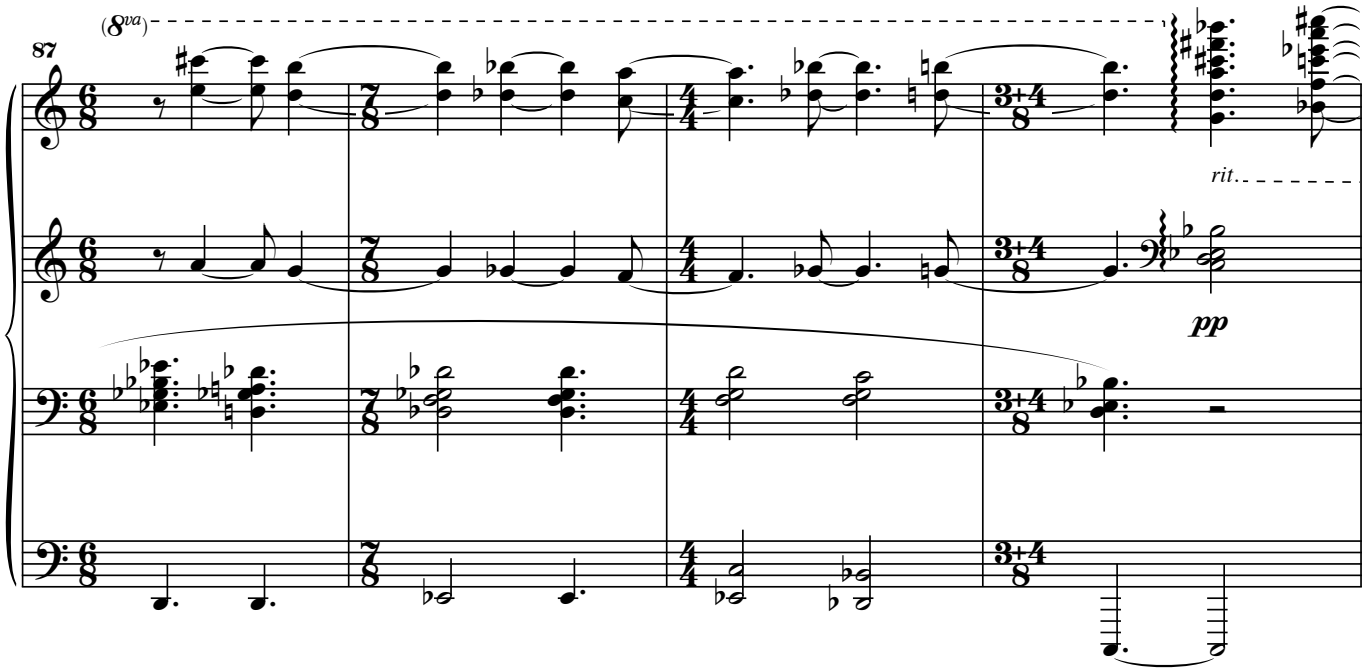

(8va)
loco
63
mf
mp
f
mf

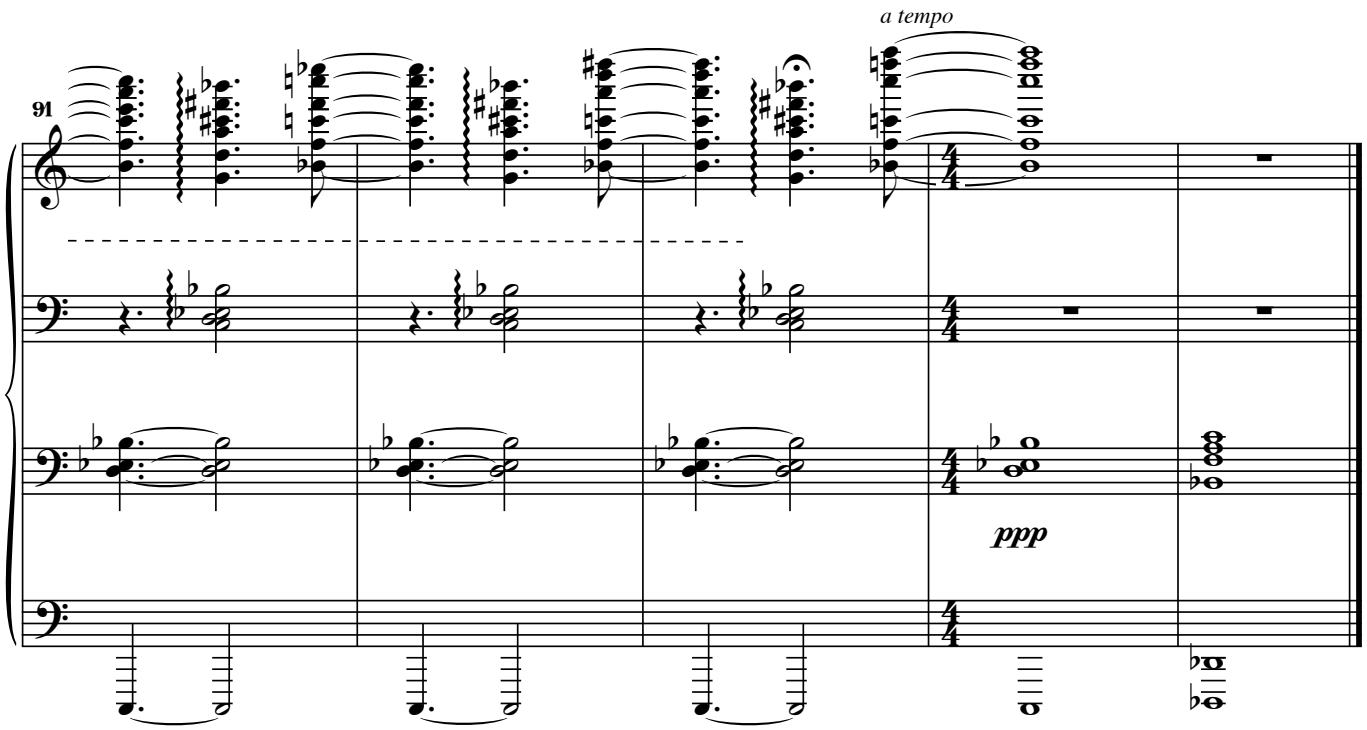

69
pp


73
♩. = 36
9
9
pp
mp
p

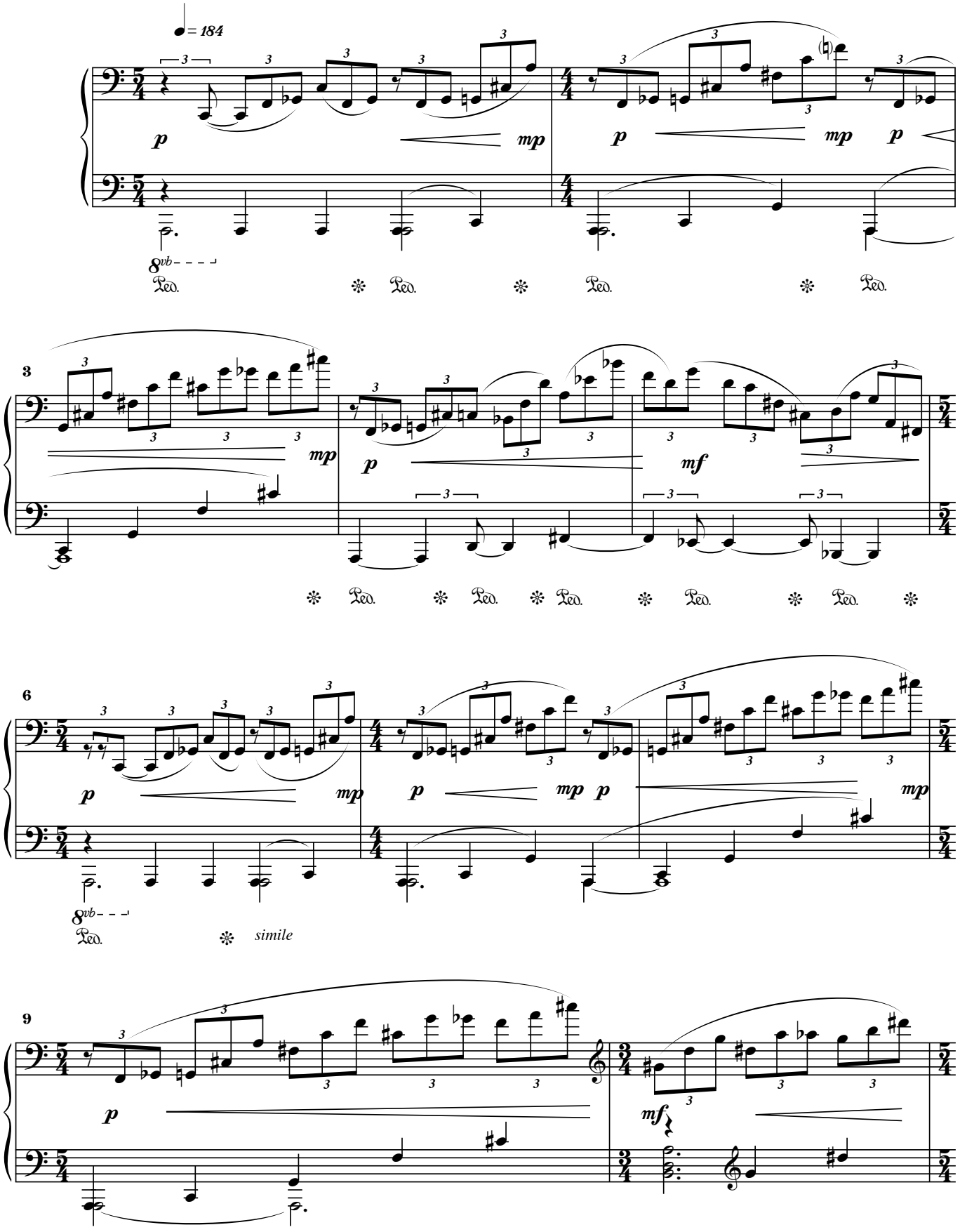

78

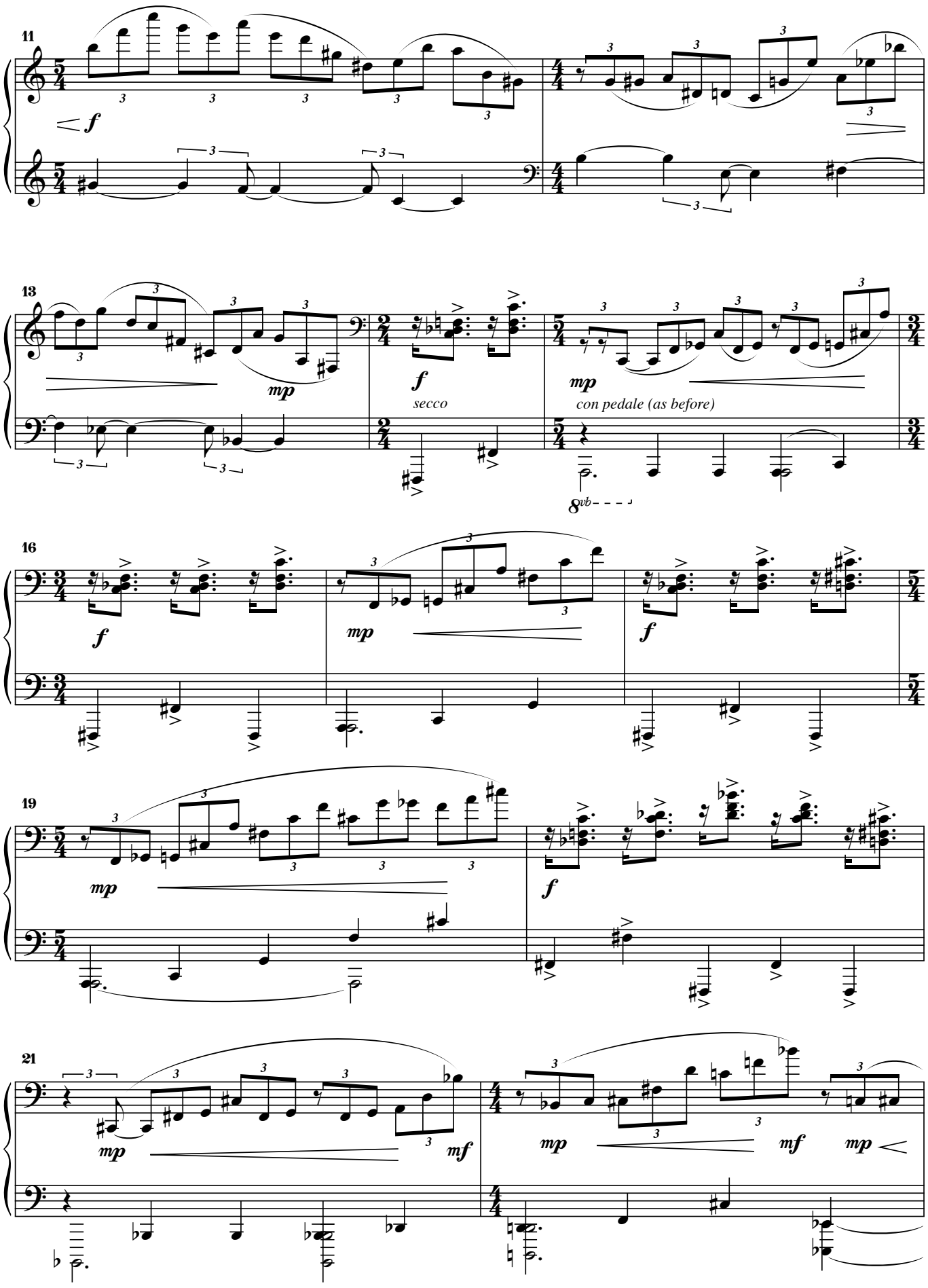

♩. = 27
8va
83
ppp
pp

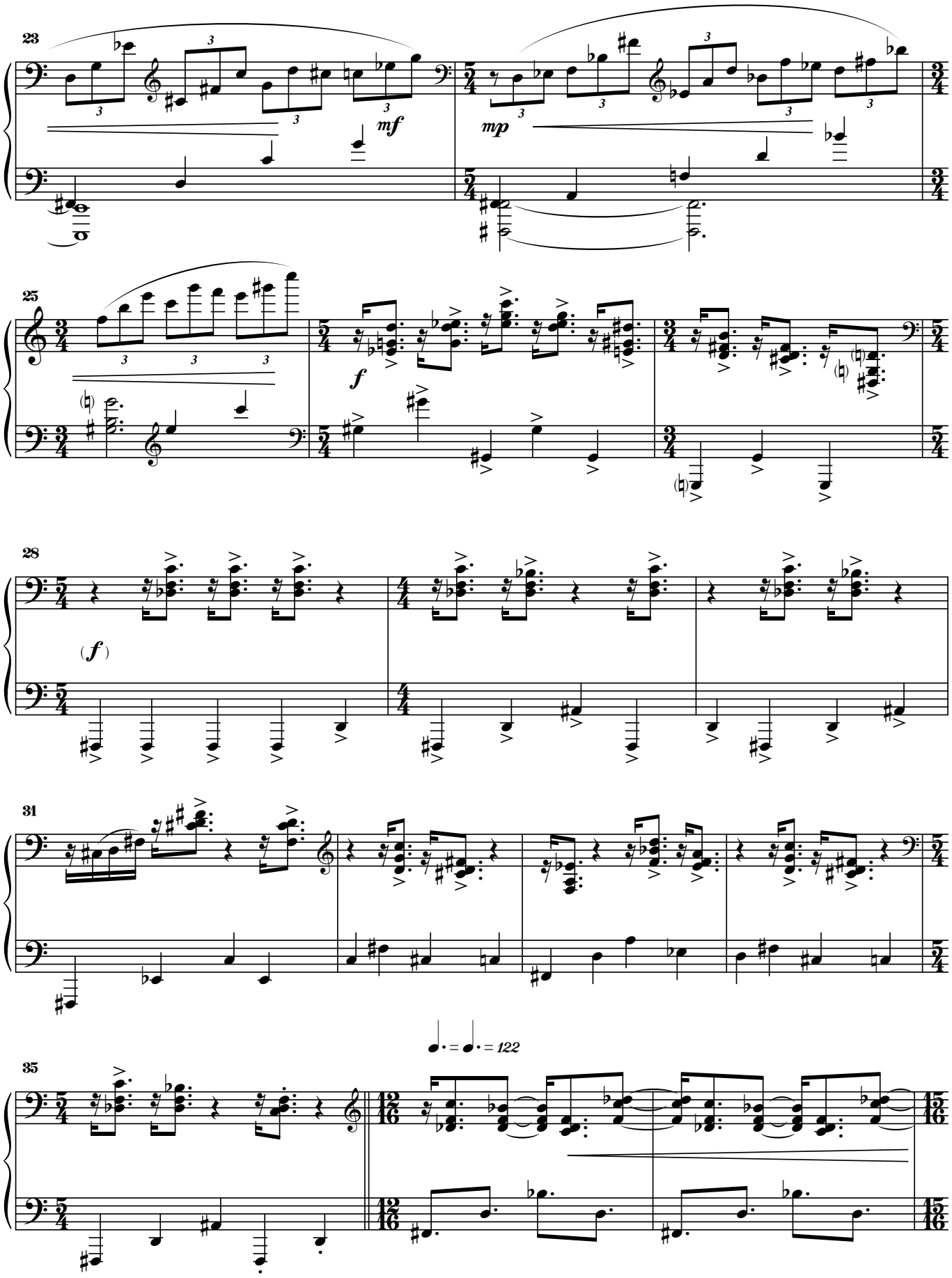

(8va)
87
rit.
pp

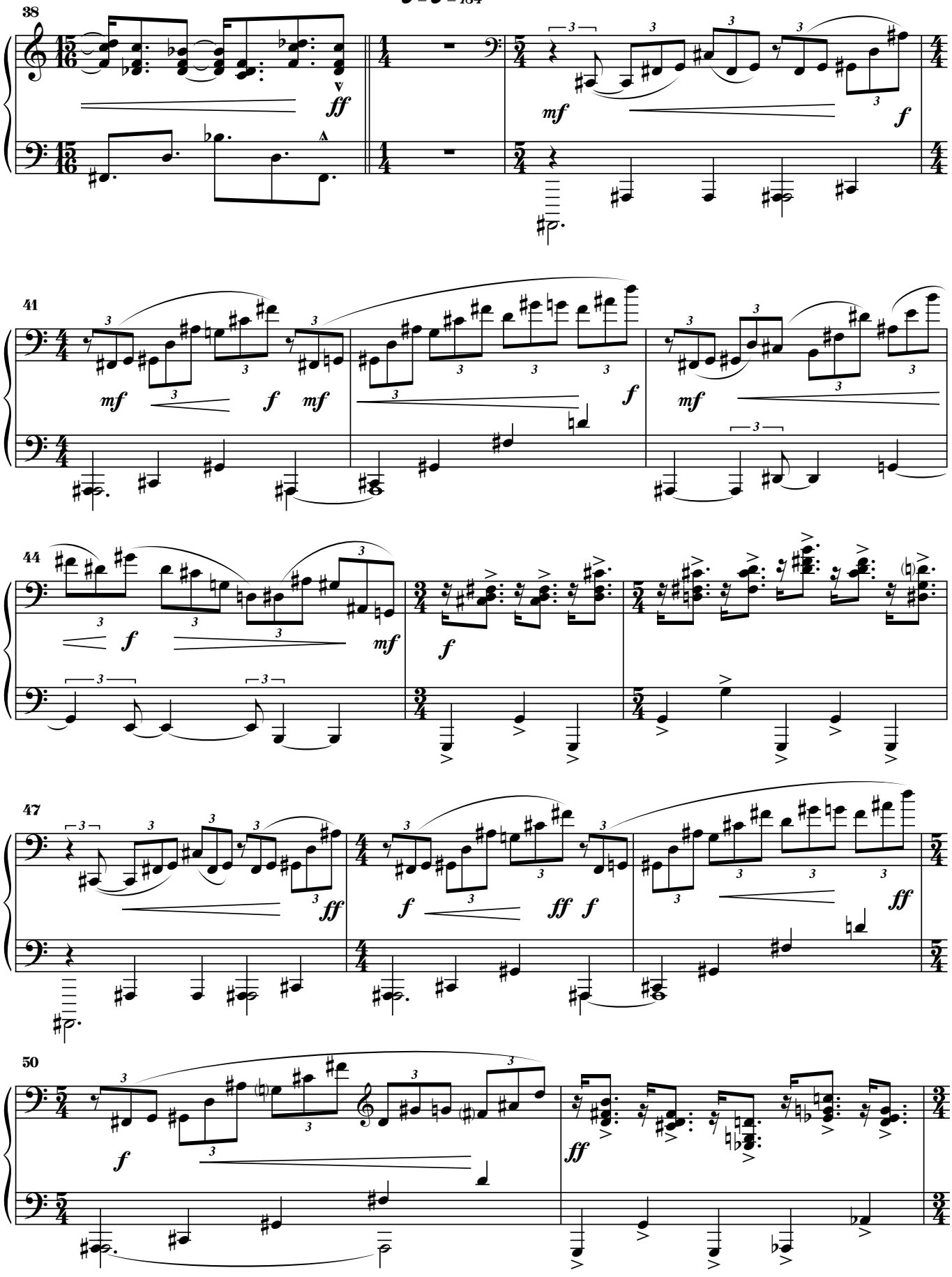

91
a tempo
ppp

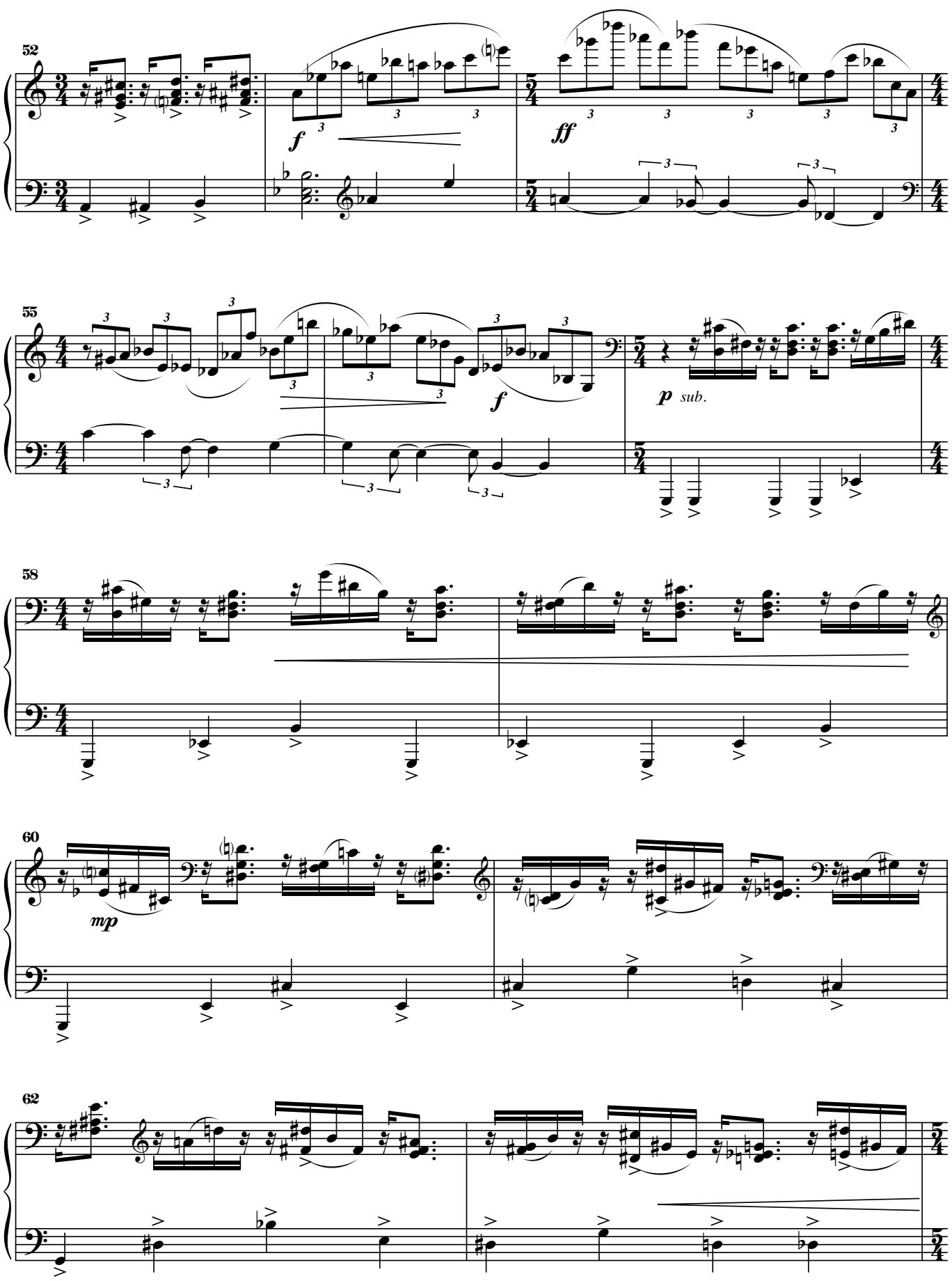
6. Up

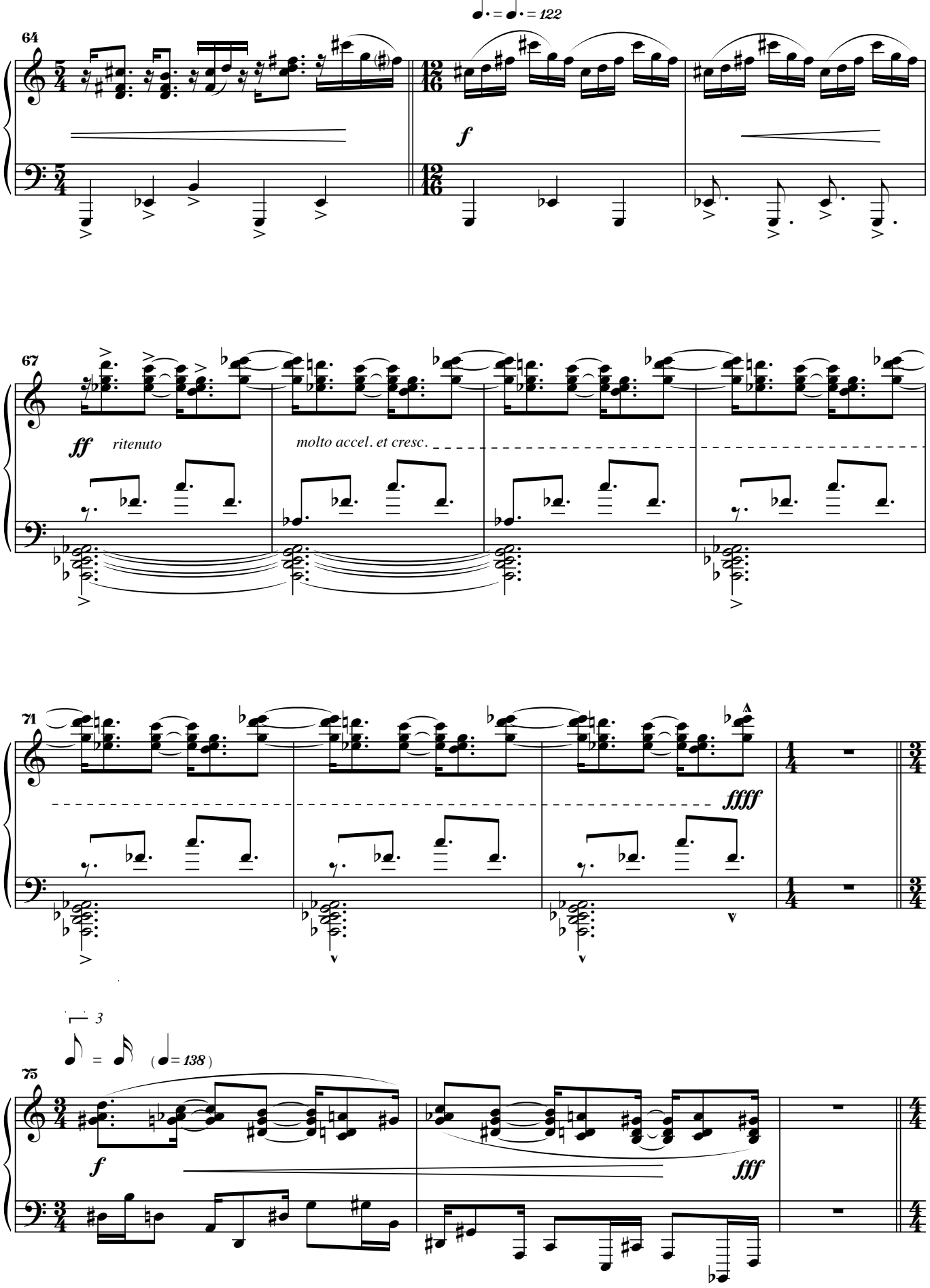


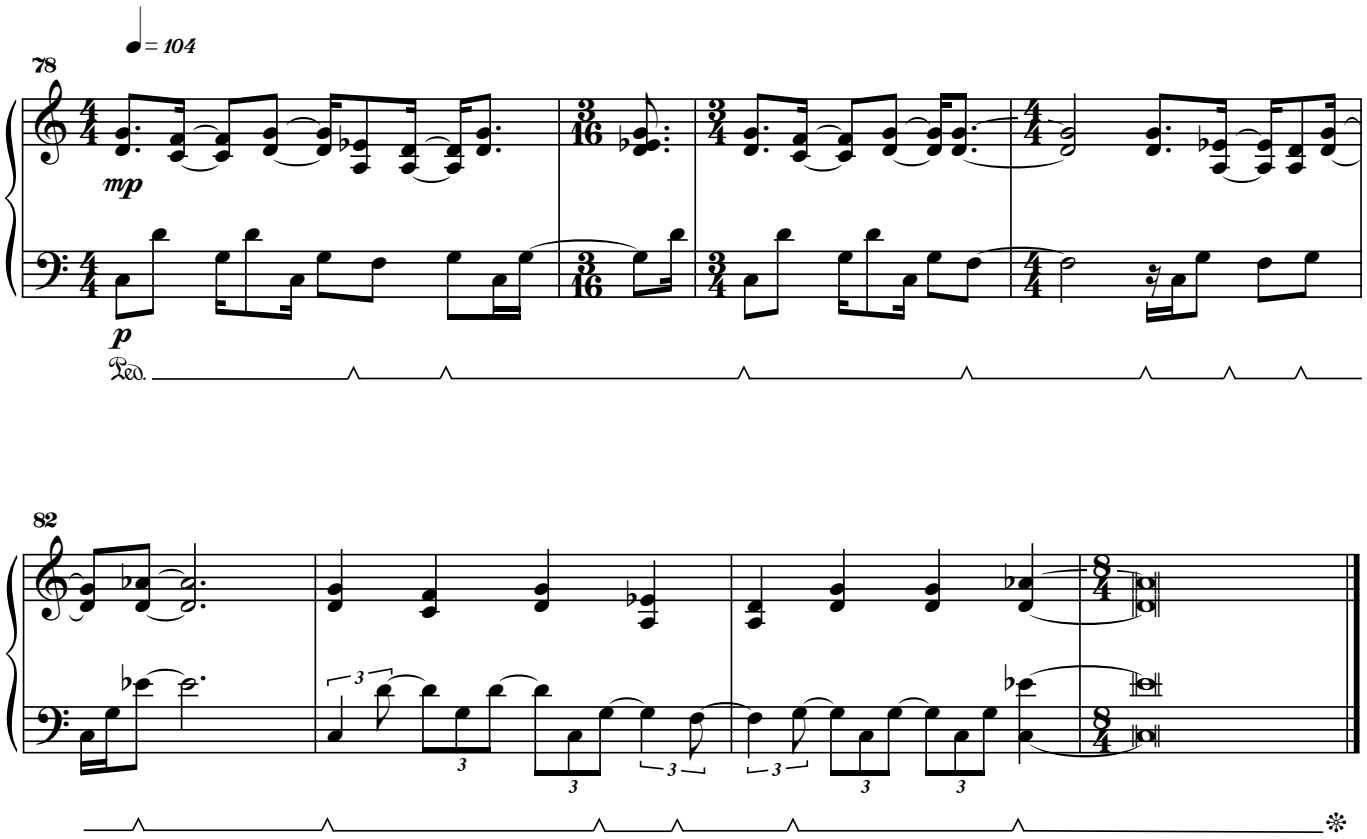

11
f
13
mp
f
secco
mp
con pedale (as before)
8vb
16
f
mp
f
19
mp
f
21
mp
mf
mp
mf
mp


23
mf
mp
25
f
28
(f)
31
35
♩. = ♩. = 122

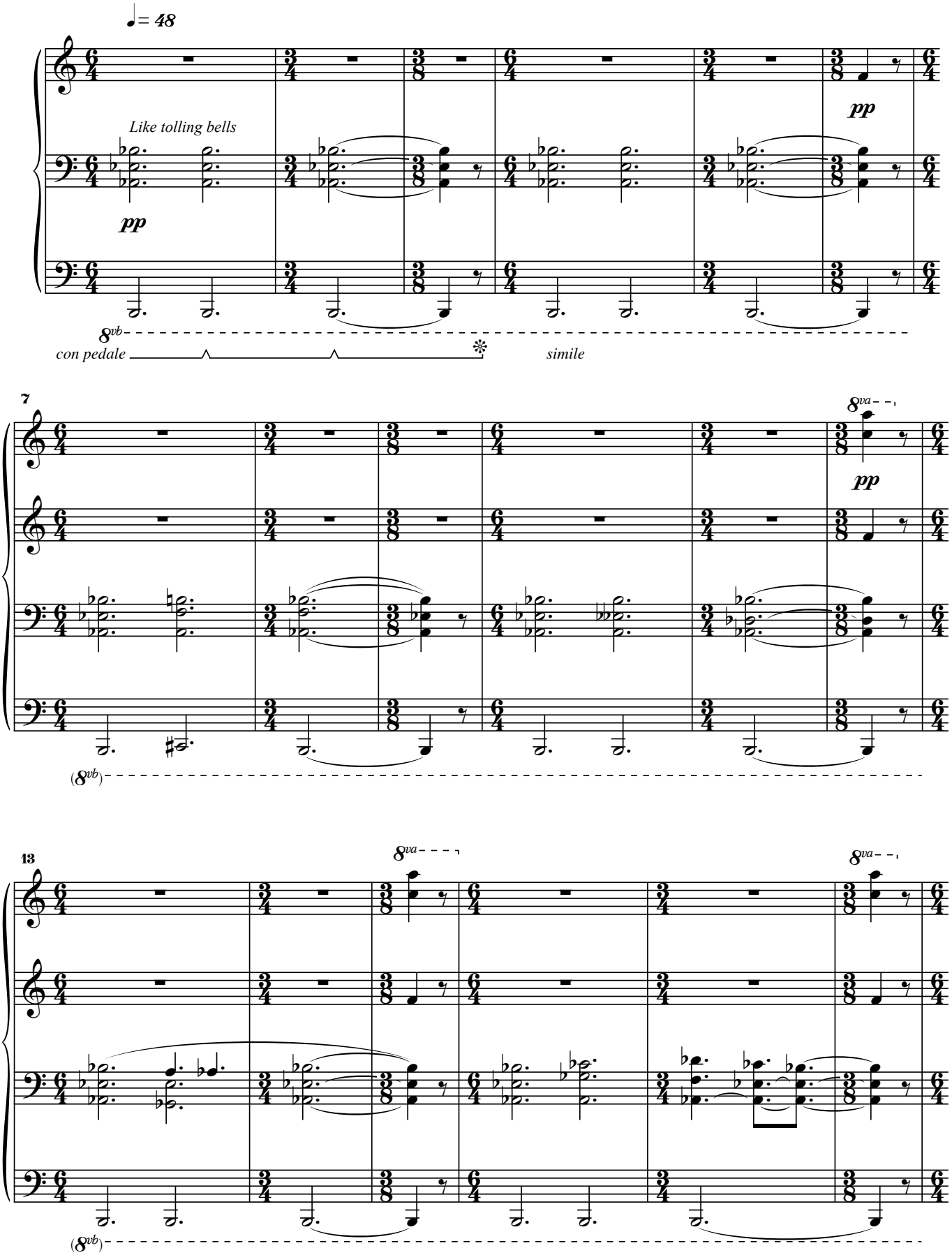

38
41
44
47
50
ff
mf
f

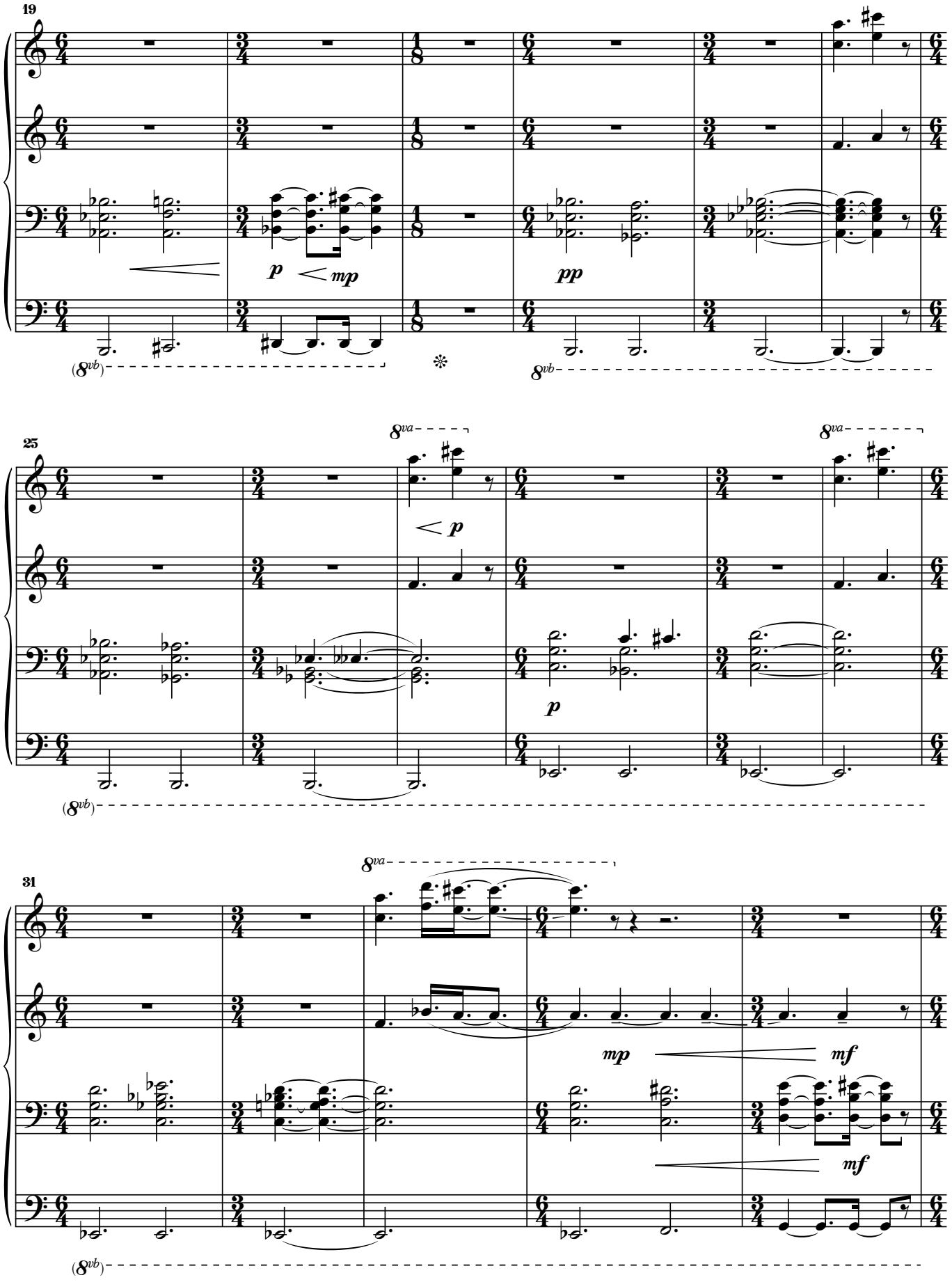

52
f
ff
55
f
p sub.
58
60
mp
62

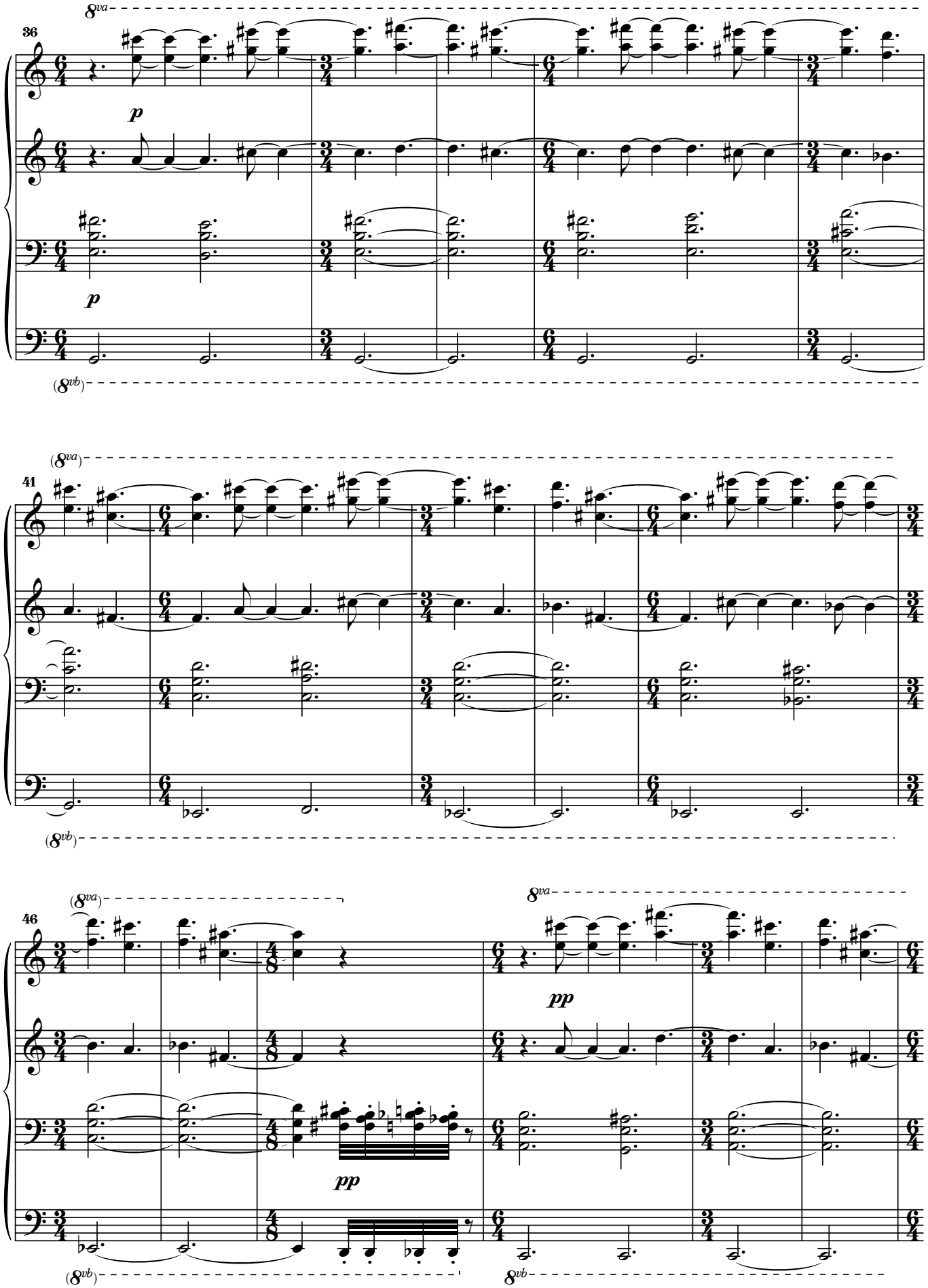

64
67
71
75
f
ff
ritenuto
molto accel. et cresc.
ffff
fff
(♩= 138)

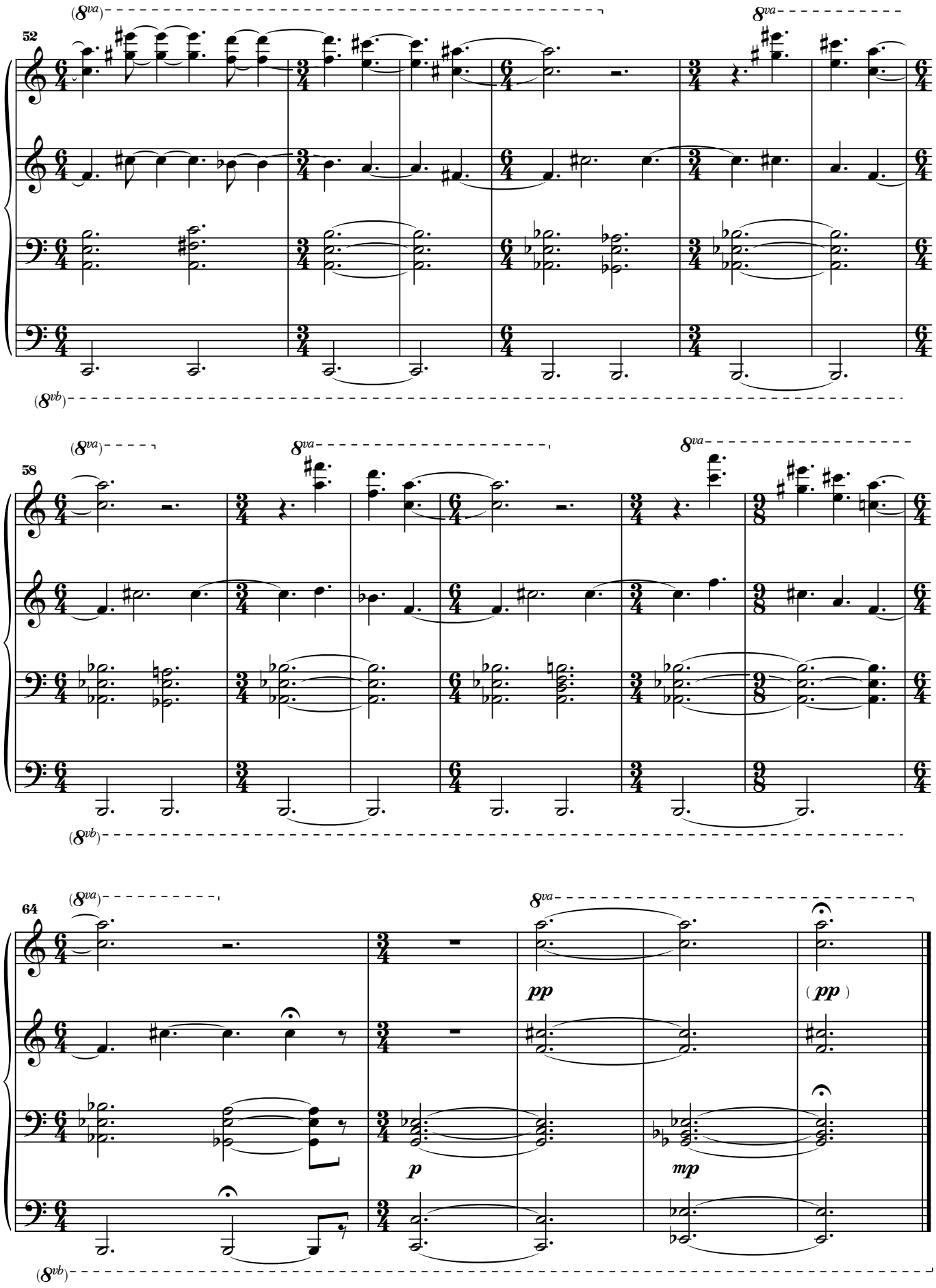

78
♩ = 104
mp
p
Ped.
82

7. Truth

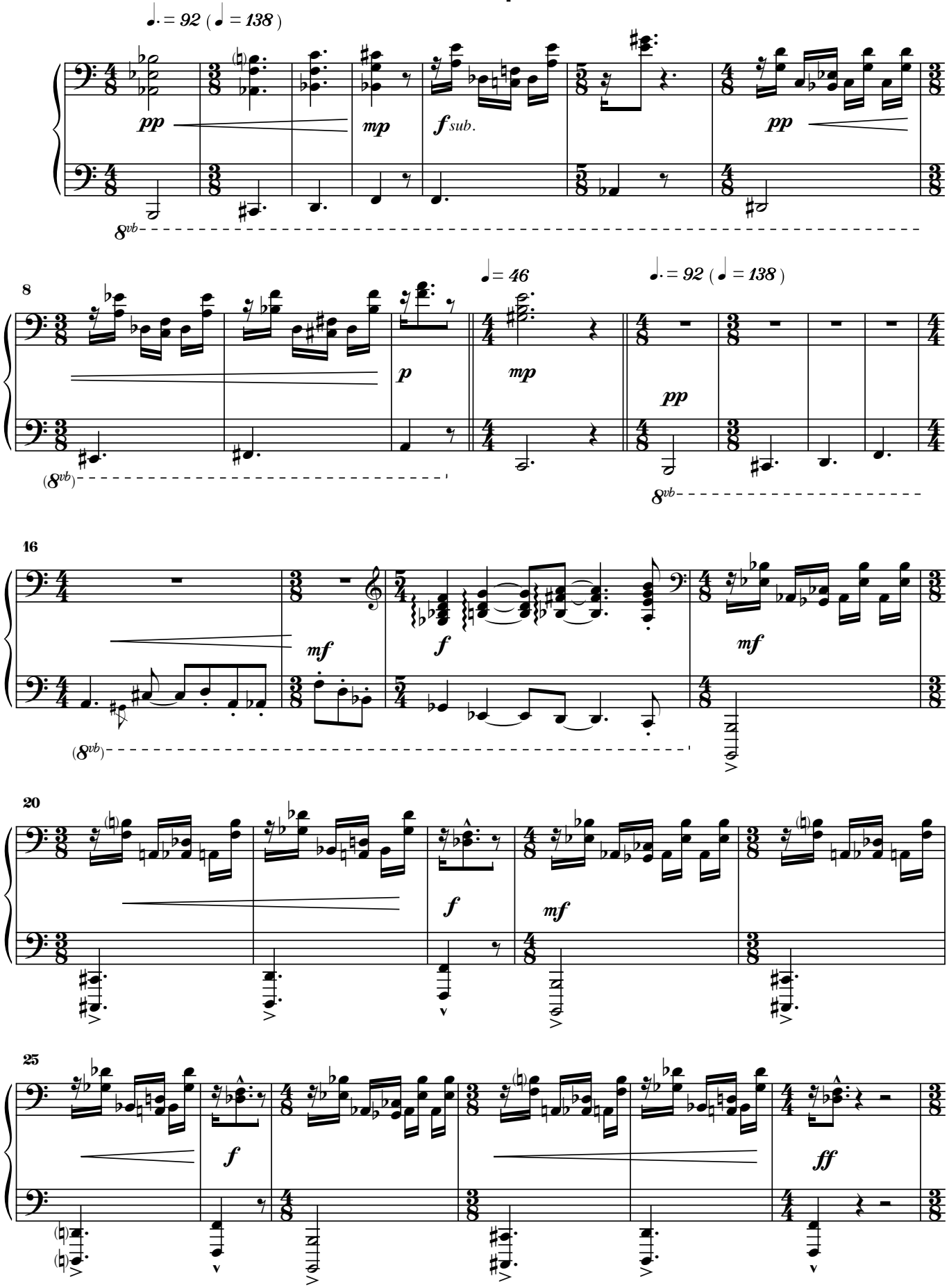

♩= 48
Like tolling bells
pp
pp
8vb
con pedale
simile
7
8va
pp
(8vb)
13
8va
8va
(8vb)

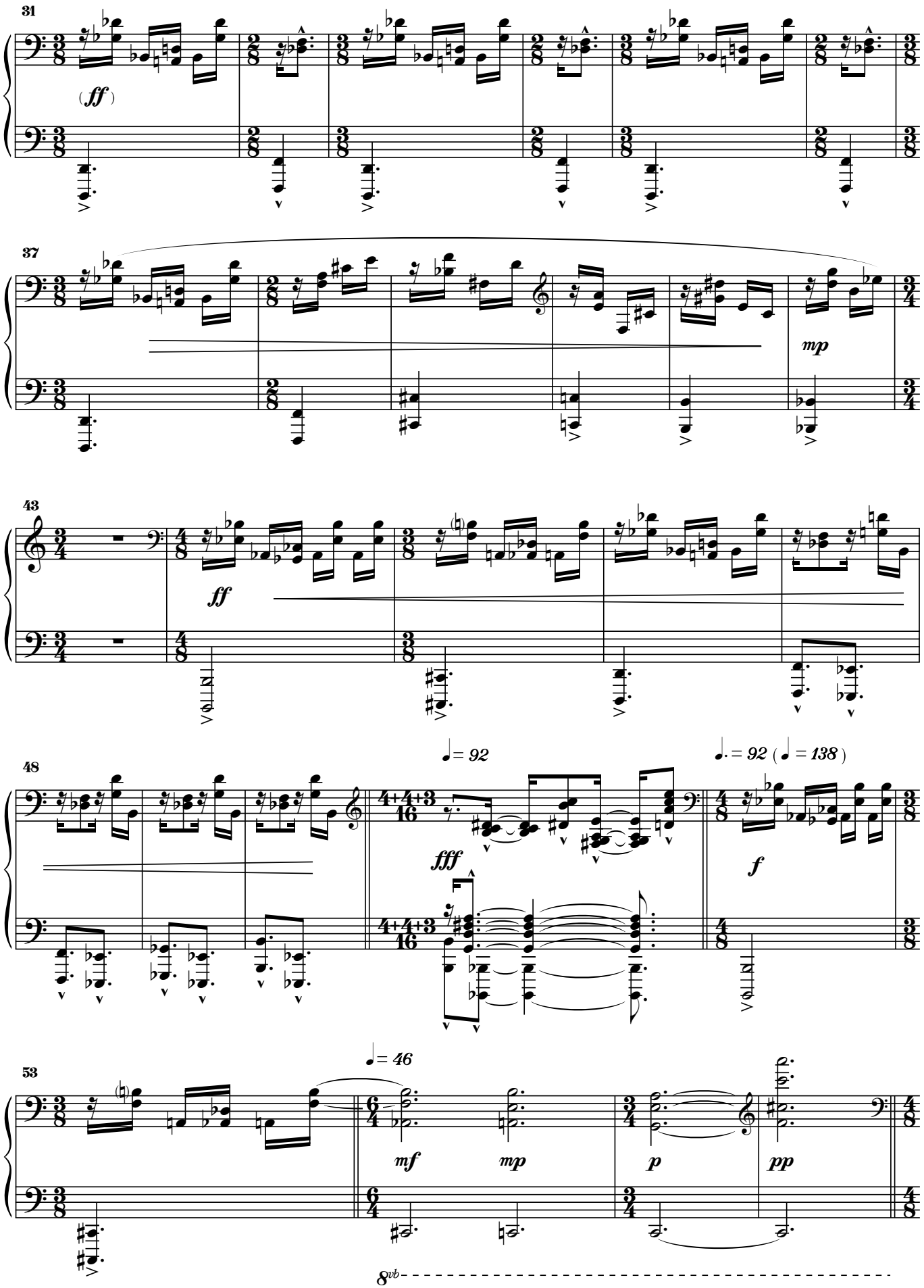

19
p
mp
pp
8va
8vb
25
p
p
8va
8vb
31
mp
mf
mf
8va
8vb

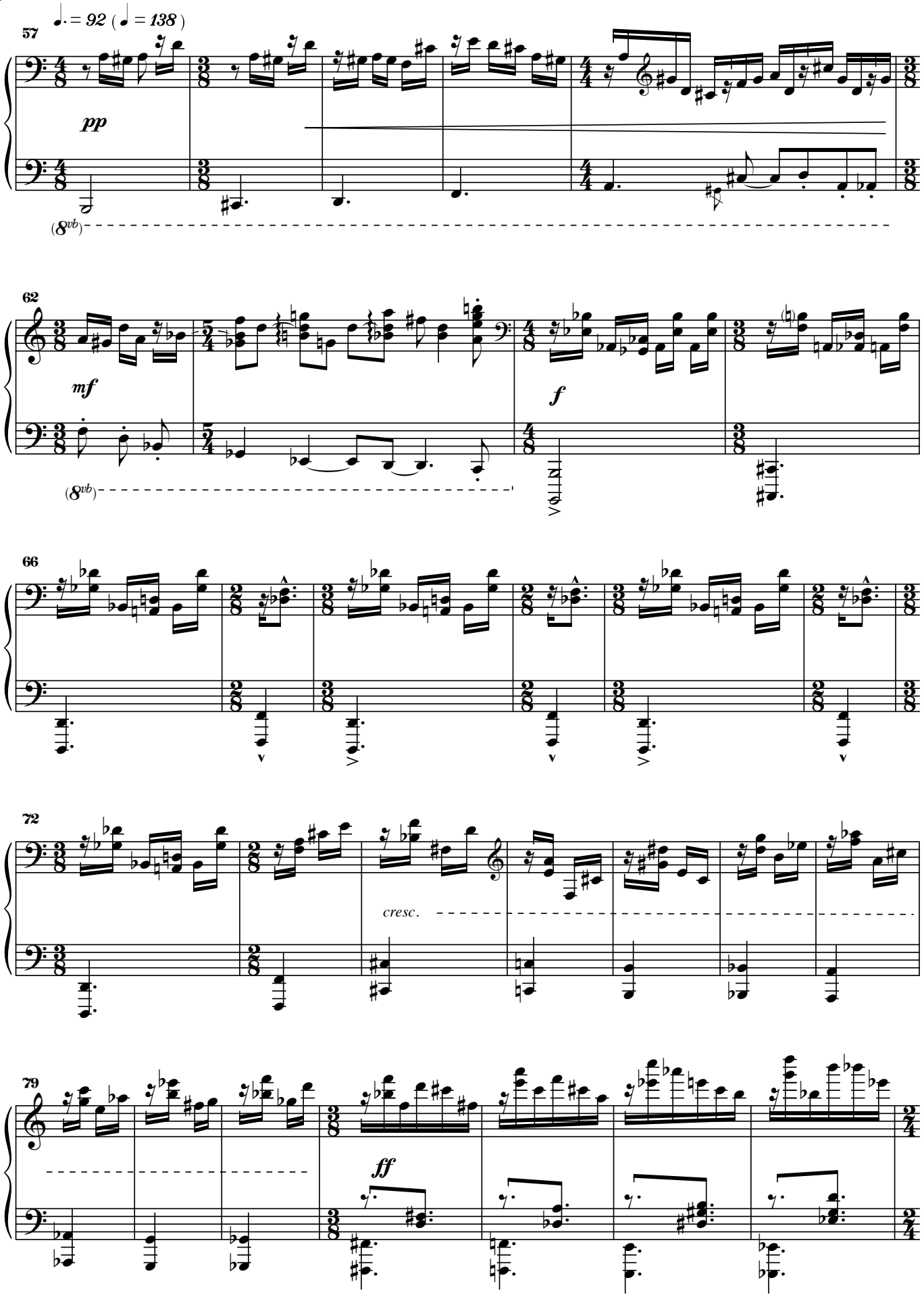

36
8va
p
p
(8vb)
41
(8va)
(8vb)
46
(8va)
pp
pp
8va
(8vb)
8vb

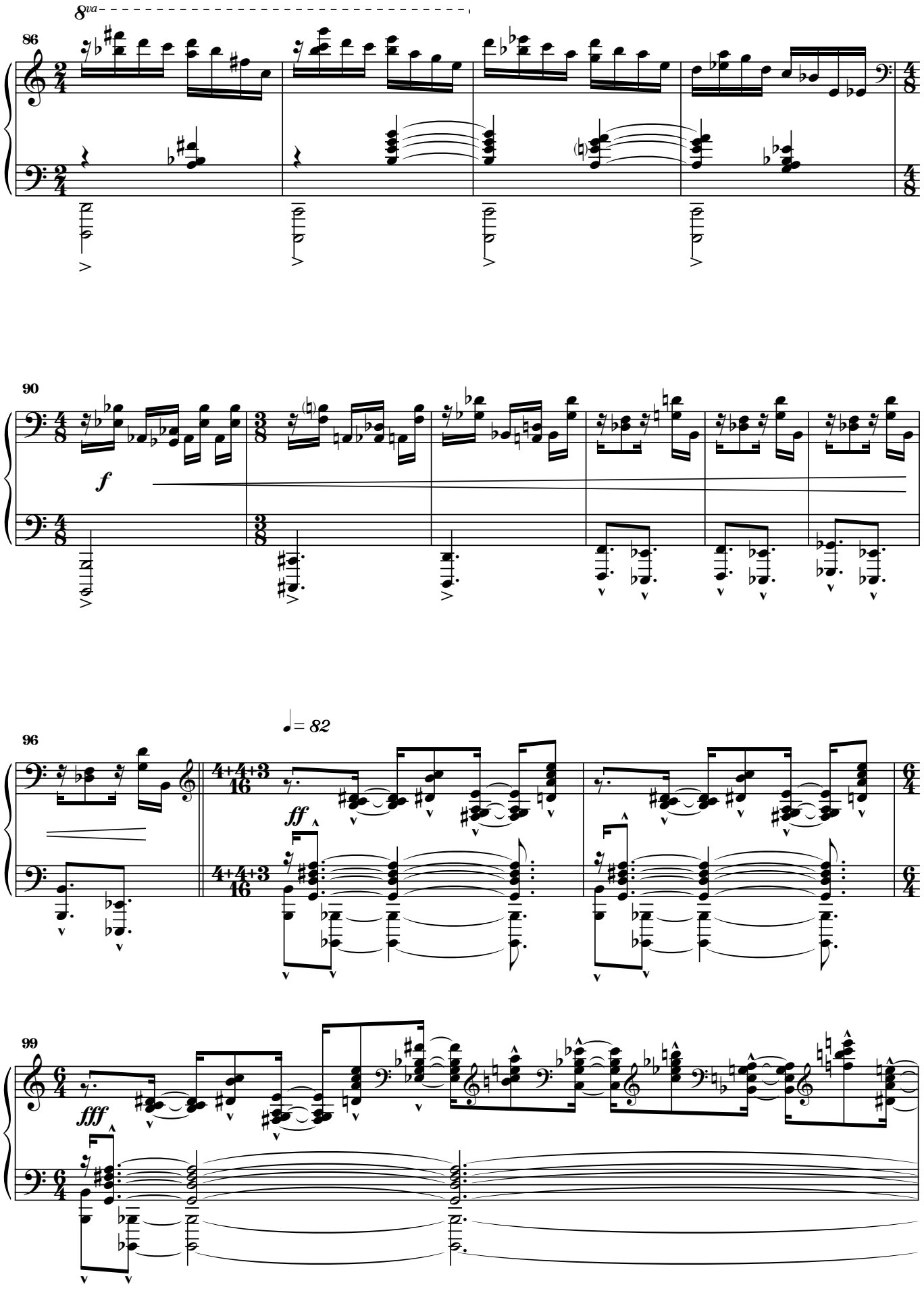

52
58
64
8va
8vb
pp
(pp)
p
mp

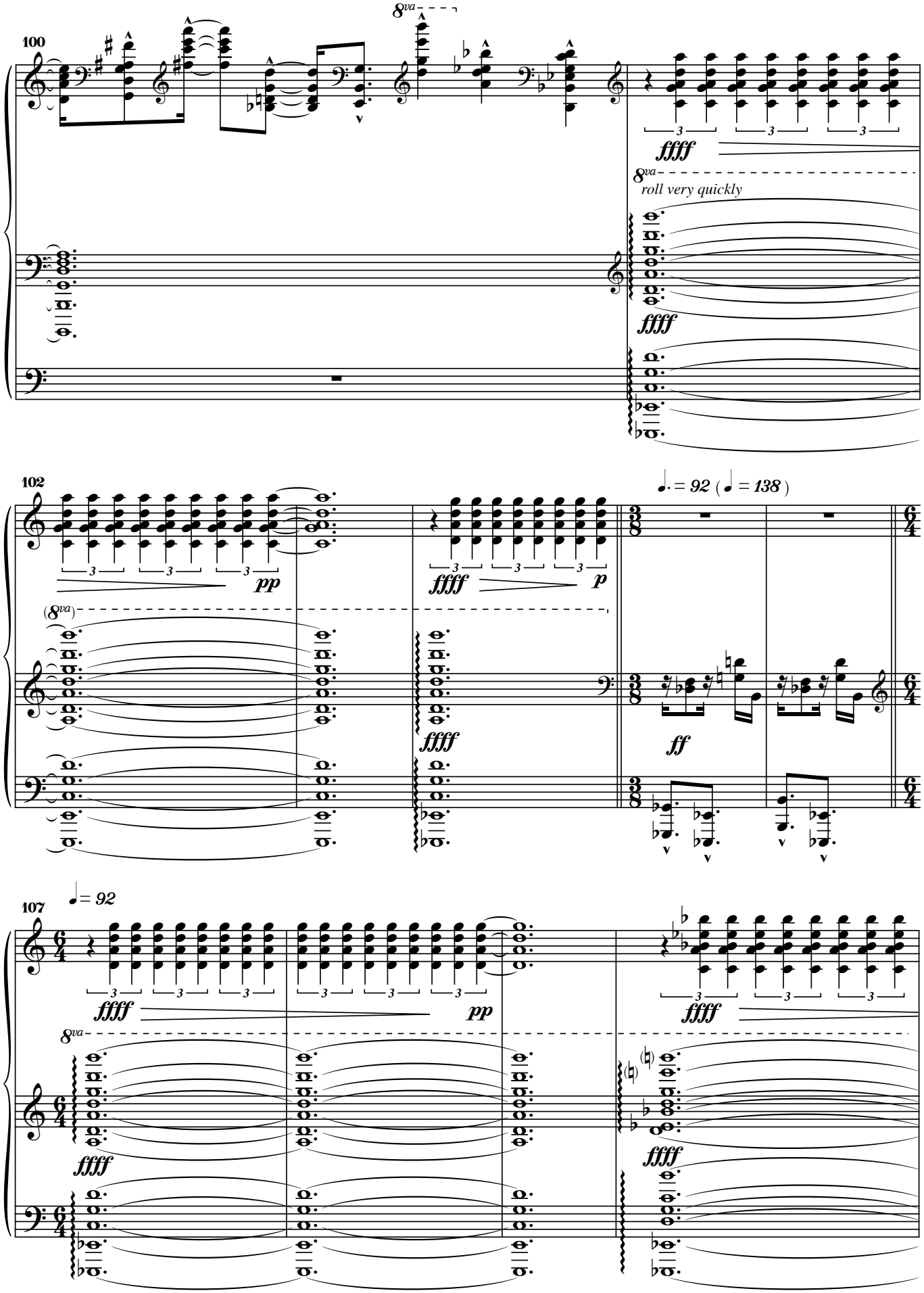
8. Top

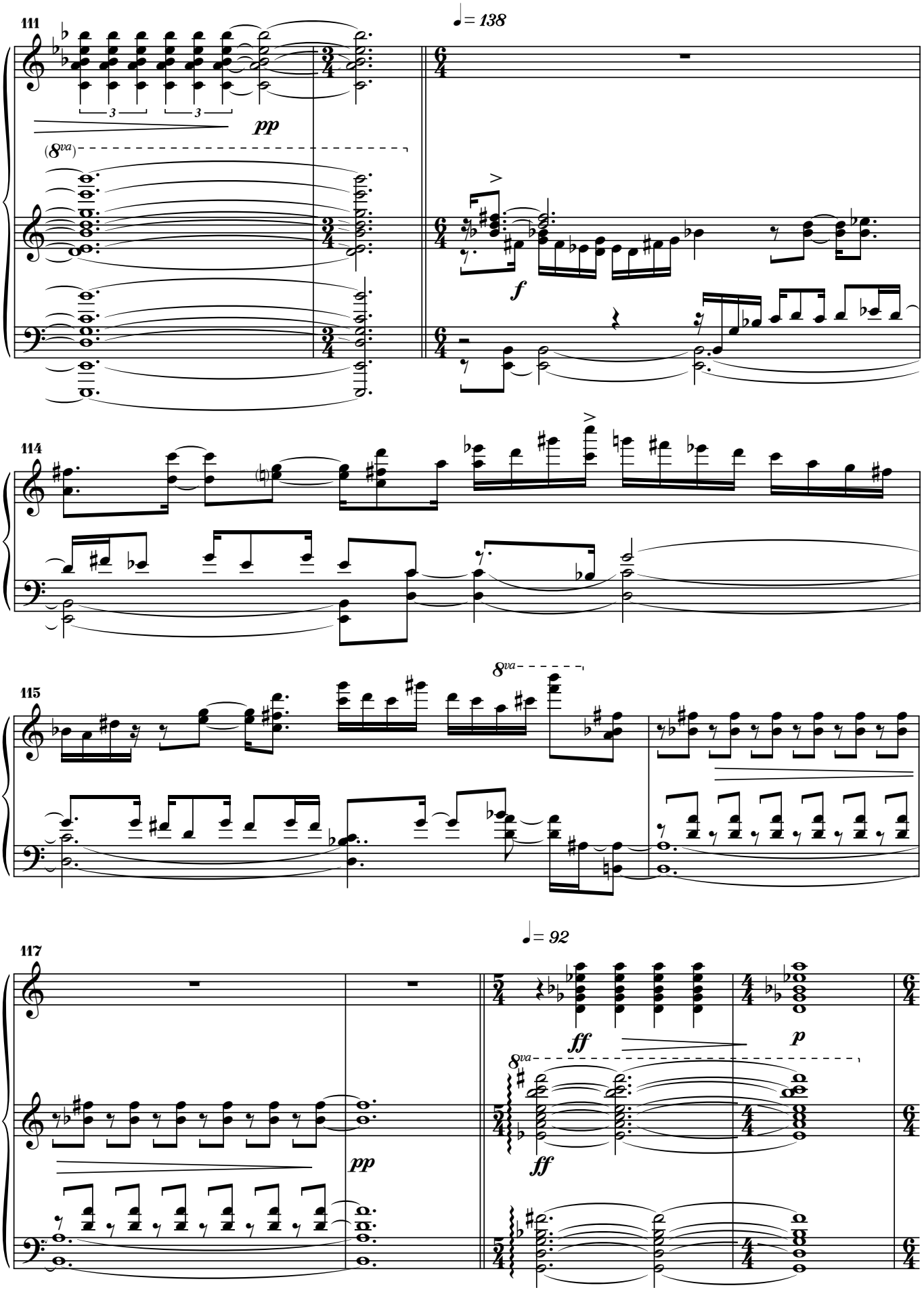

♩. = 92 (♩ = 138)
pp
mp
f sub.
pp
8vb
8
♩ = 46
♩. = 92 (♩ = 138)
p
mp
pp
(8vb)
8vb
16
mf
f
mf
(8vb)
20
f
mf
25
f
ff

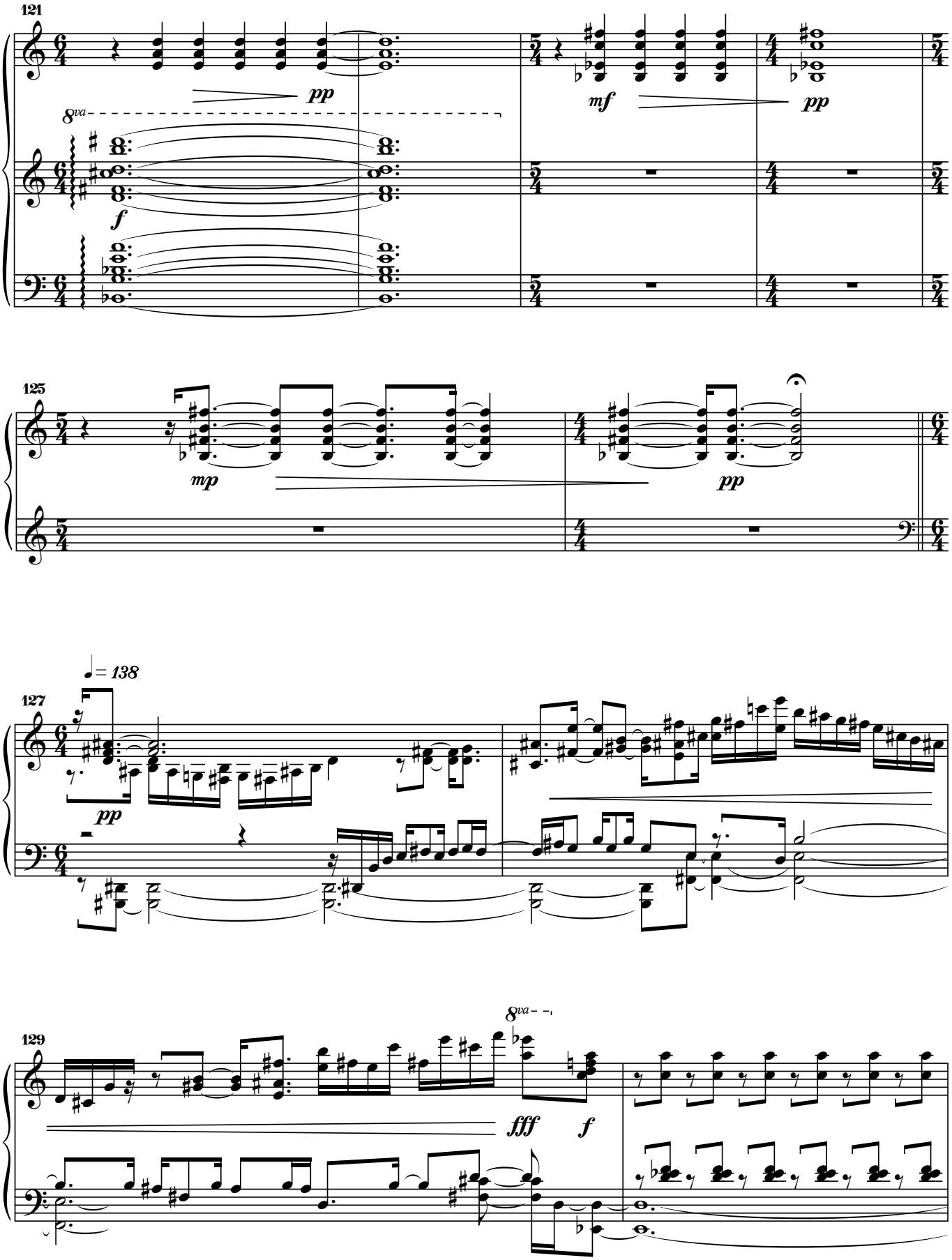

31
(ff)
37
mp
43
ff
48
♩= 92
fff
♩. = 92 (♩ = 138)
f
53
♩= 46
mf
mp
p
pp
8vb

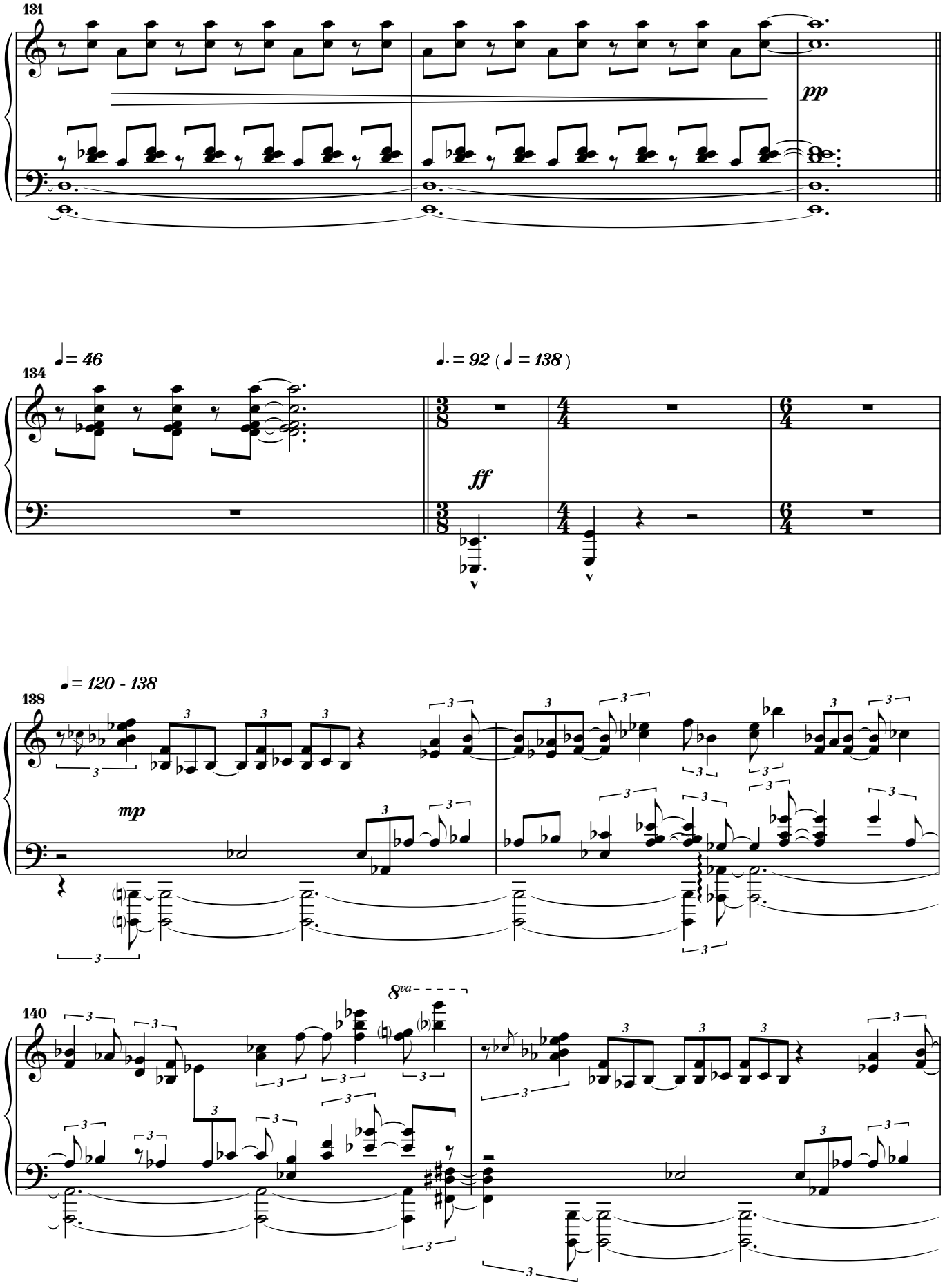

57
♩. = 92 (♩ = 138)
pp
(8vb)
62
mf
f
(8vb)
66
72
cresc.
79
ff

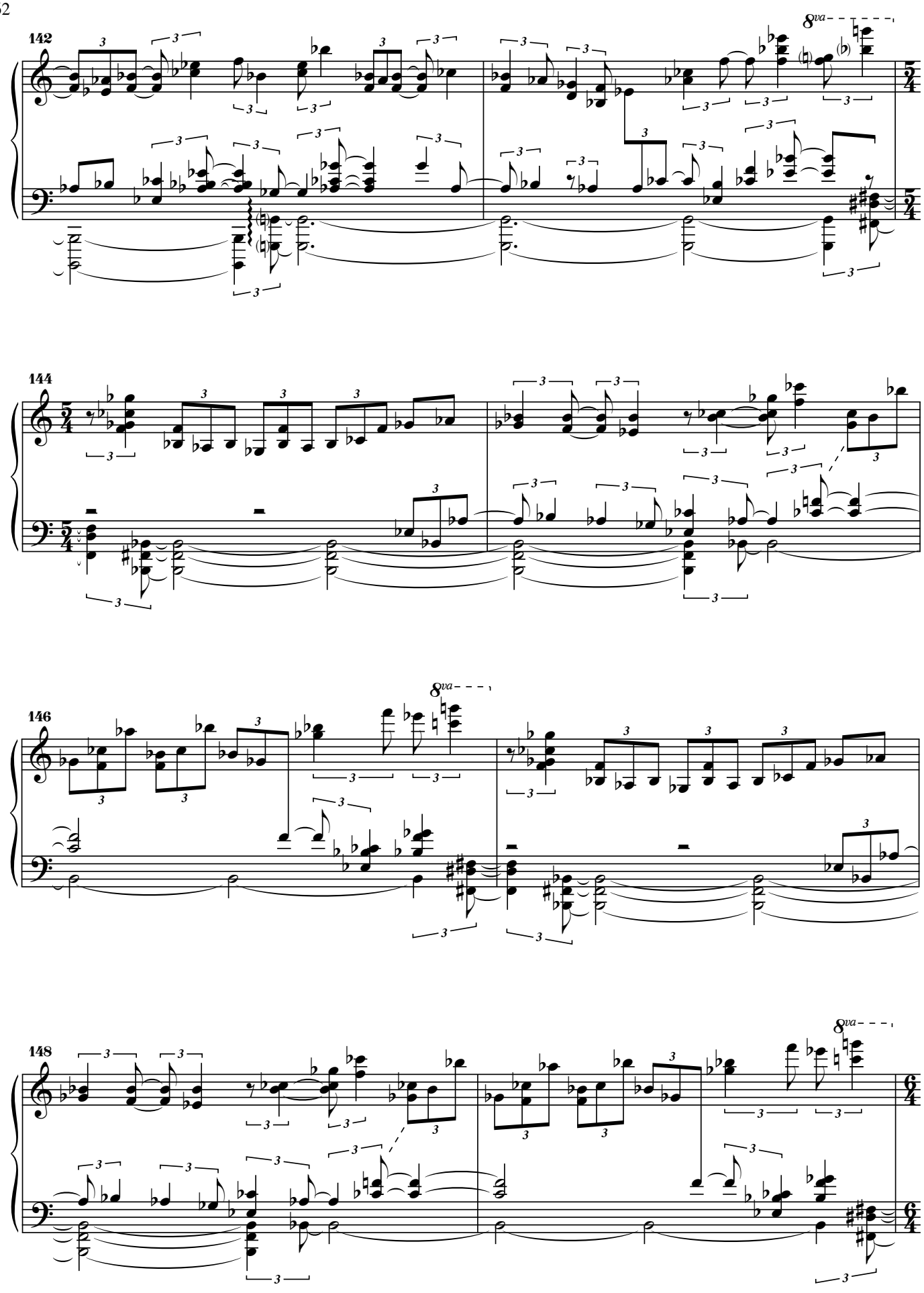

8va
86
90
f
96
♩= 82
ff
99
fff

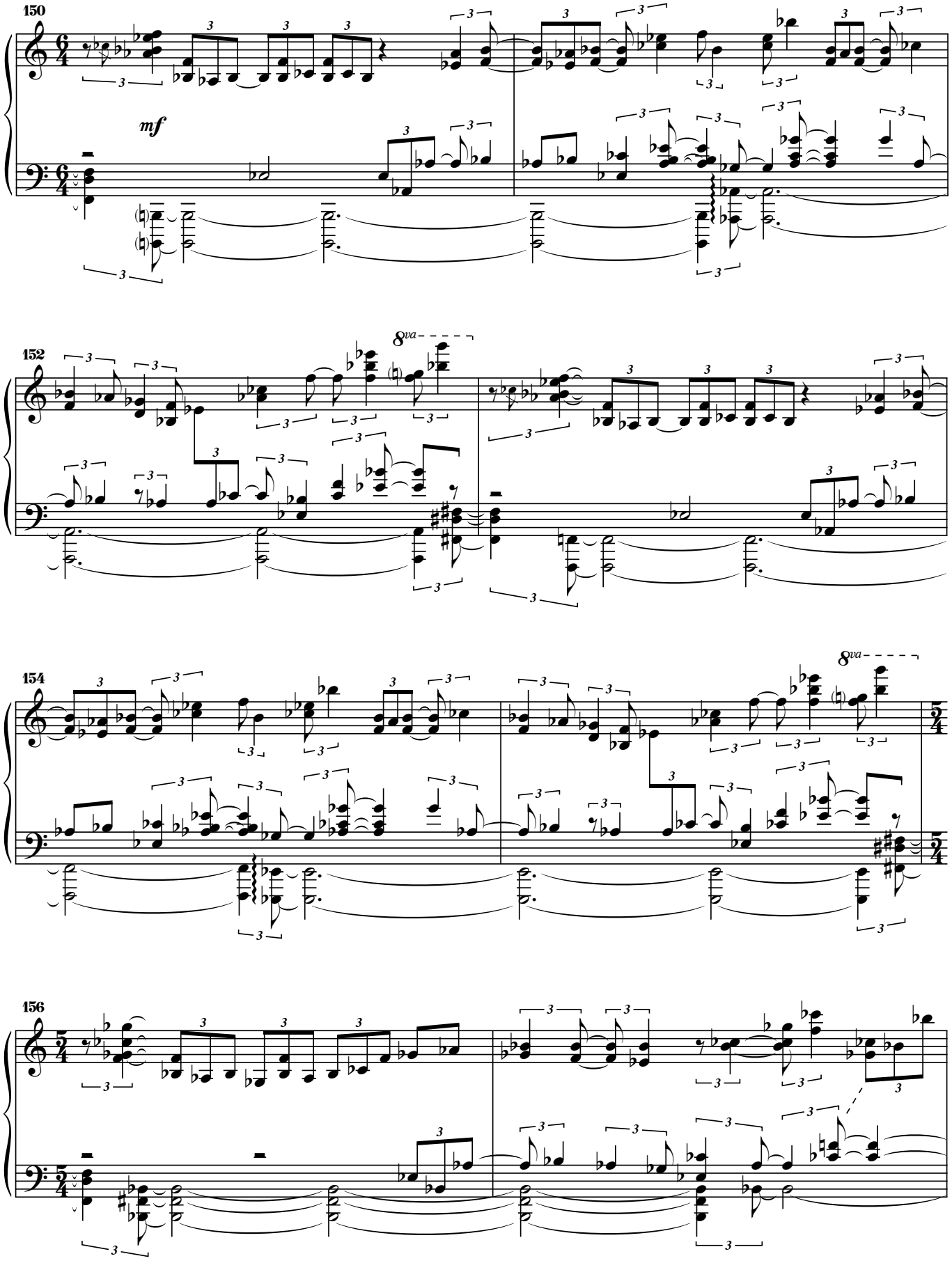

100
8va
ffff
8va
roll very quickly
ffff
102
pp
ffff
p
(8va)
ffff
♩. = 92 (♩ = 138)
ff
107
♩ = 92
ffff
pp
8va
ffff
ffff
ffff

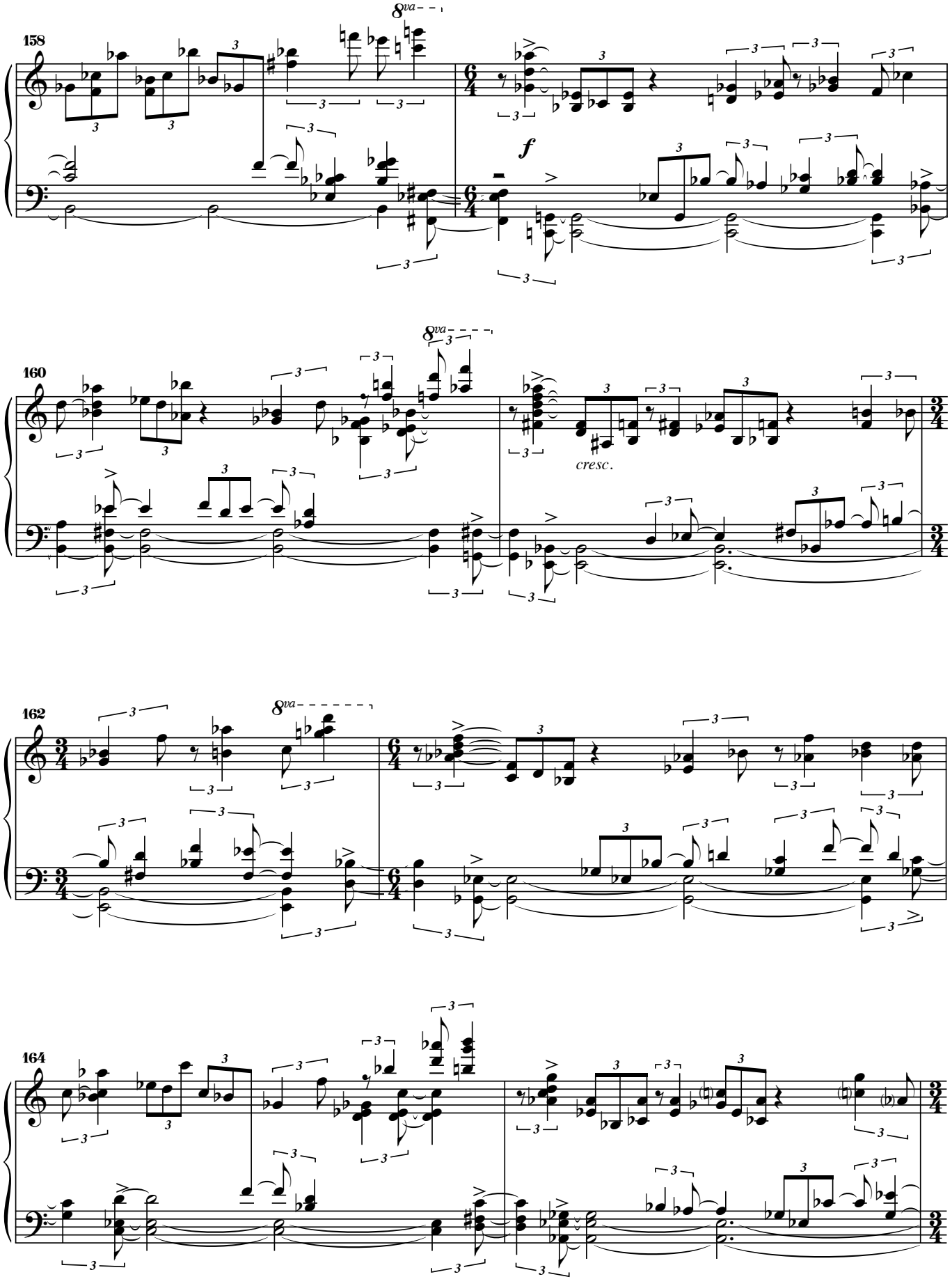

111
♩= 138
pp
(8va)
f
114
115
8va
117
♩= 92
ff
p
pp
8va
ff

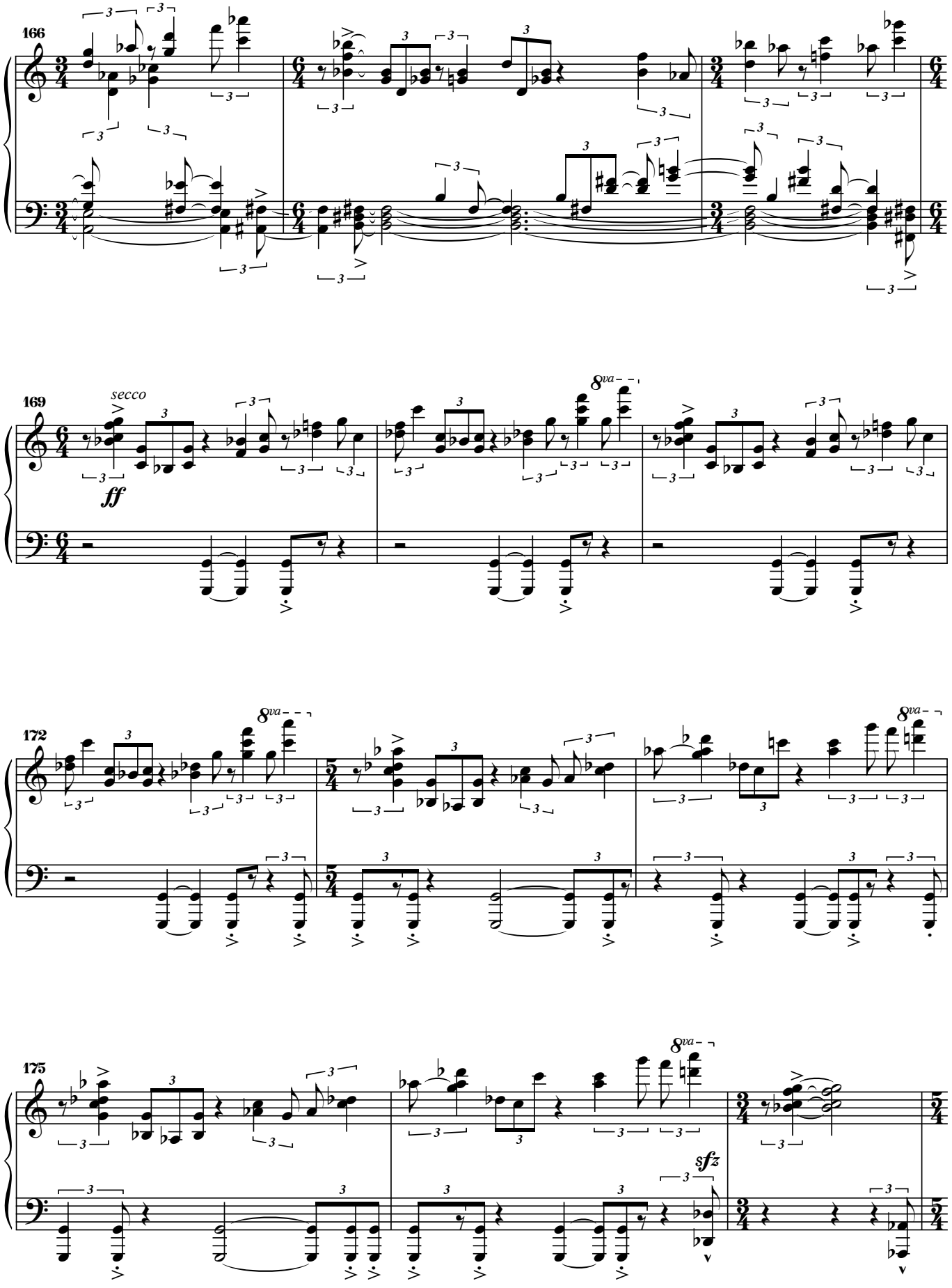

121
pp
mf
pp
8va
f
125
mp
pp
127
♩= 138
pp
129
8va
fff
f

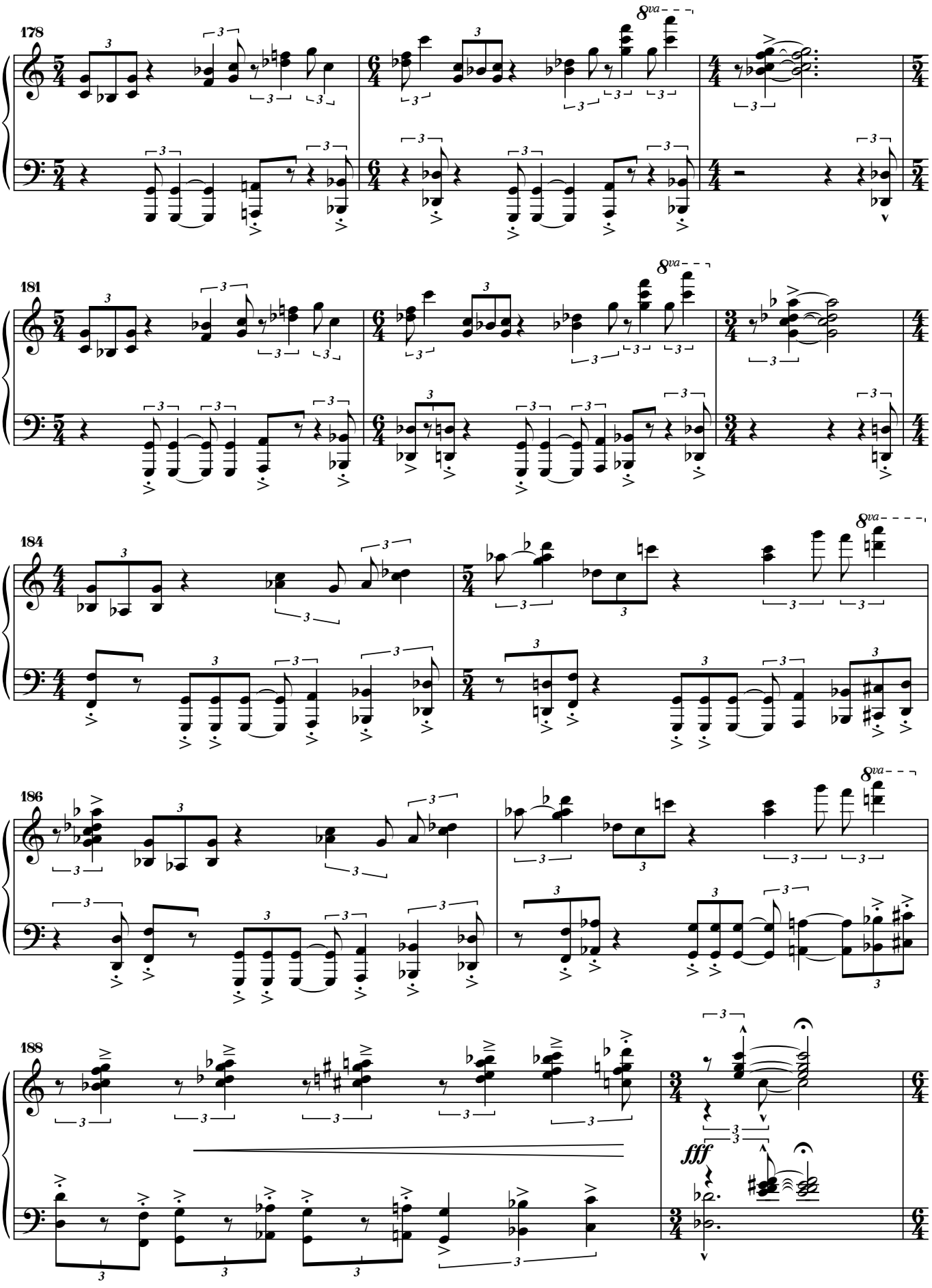

131
pp
♩ = 46
134
♩. = 92 (♩ = 138)
ff
♩ = 120 - 138
138
mp
8va
140

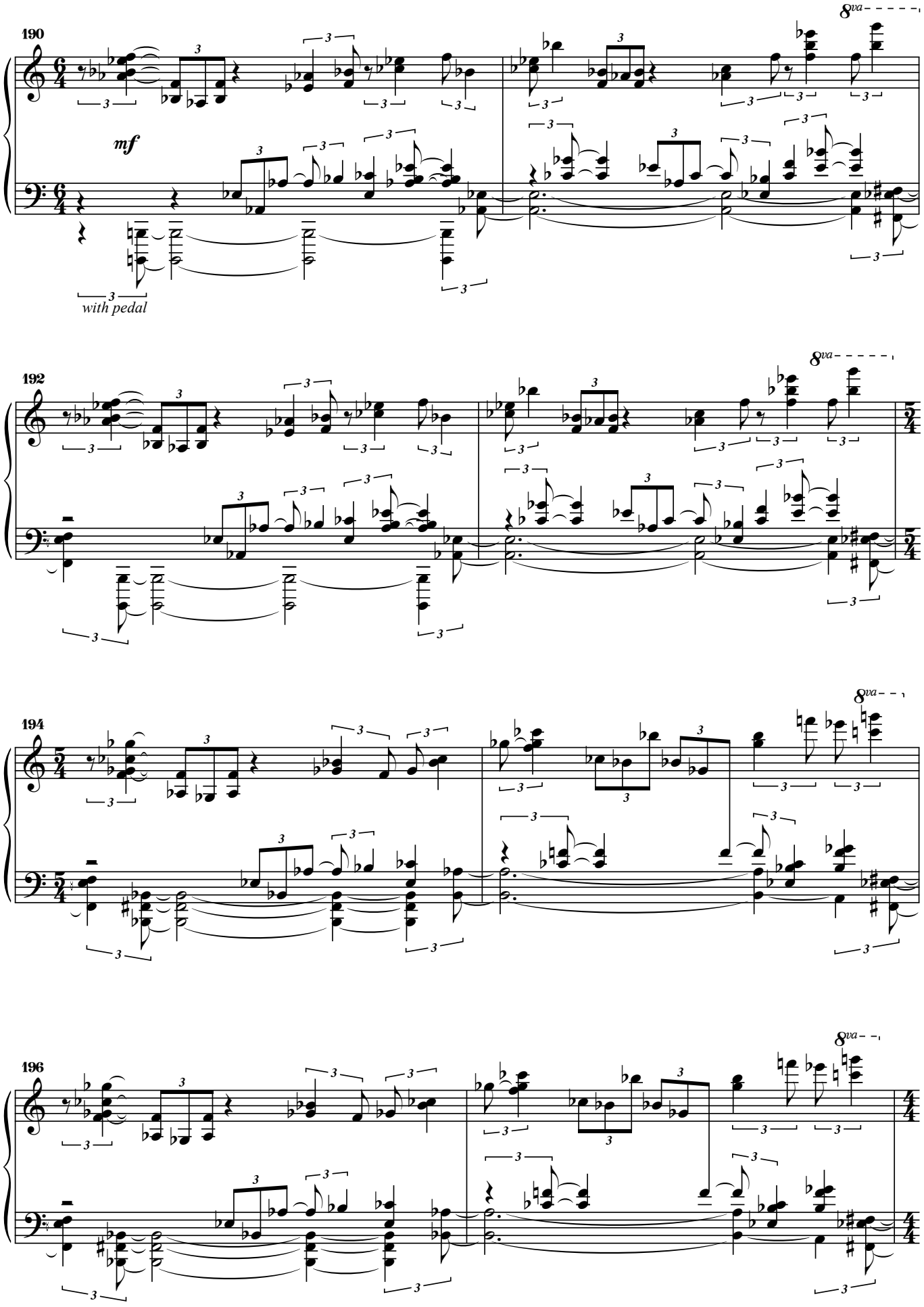

142
8va
144
146
8va
148
8va

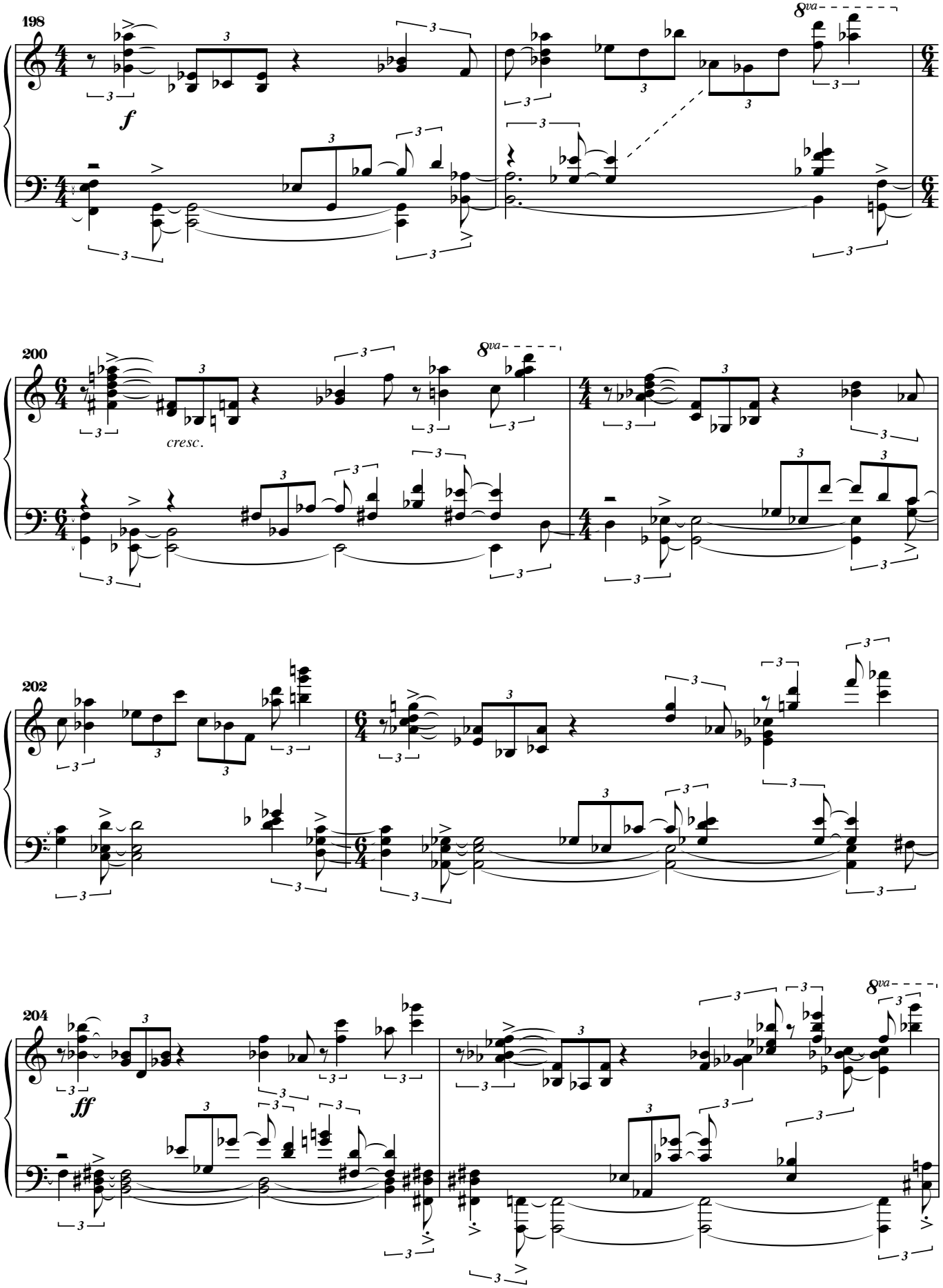

150
mf
152
8va
154
8va
156

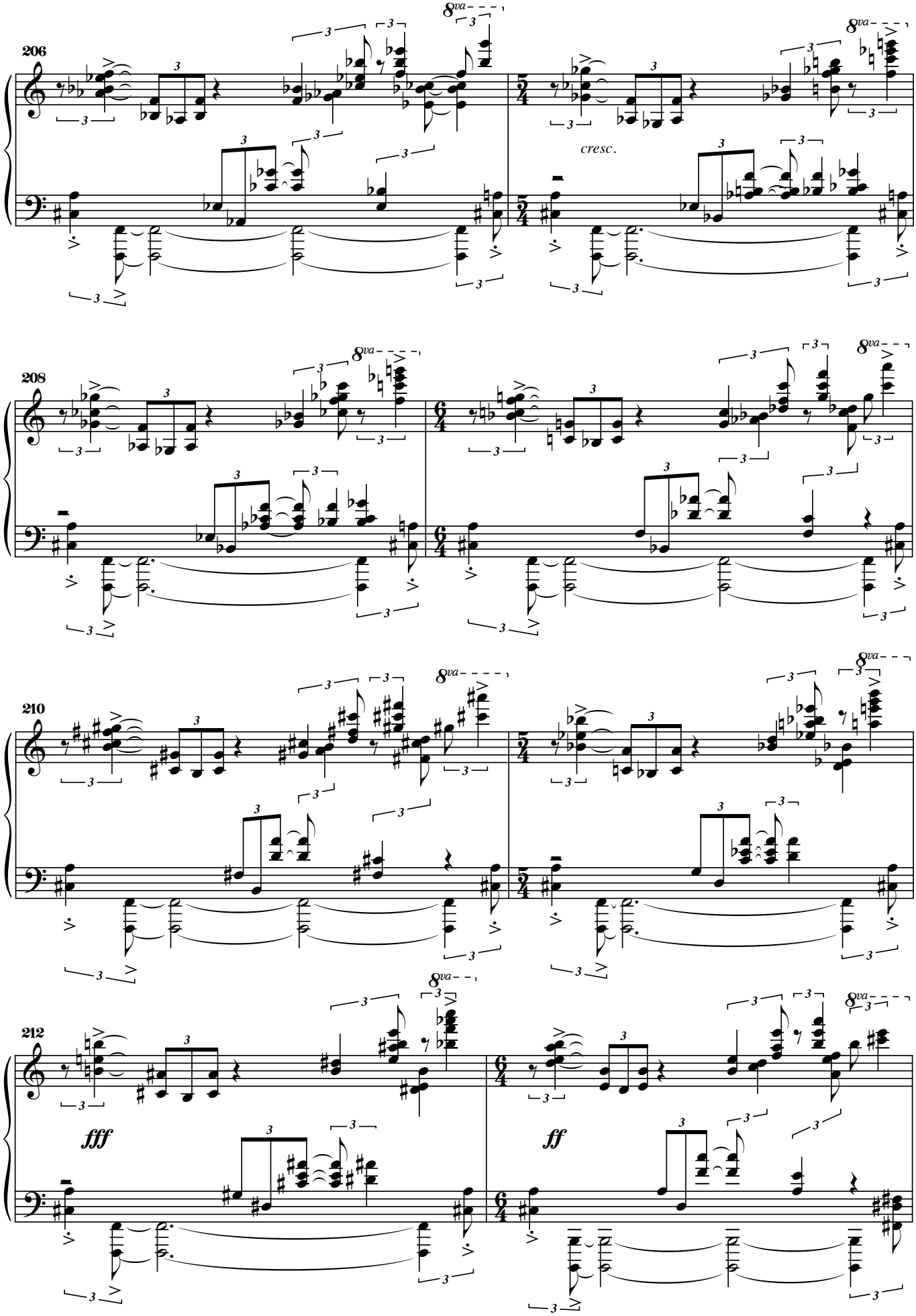

158
8va
f
160
8va
cresc.
162
8va
164

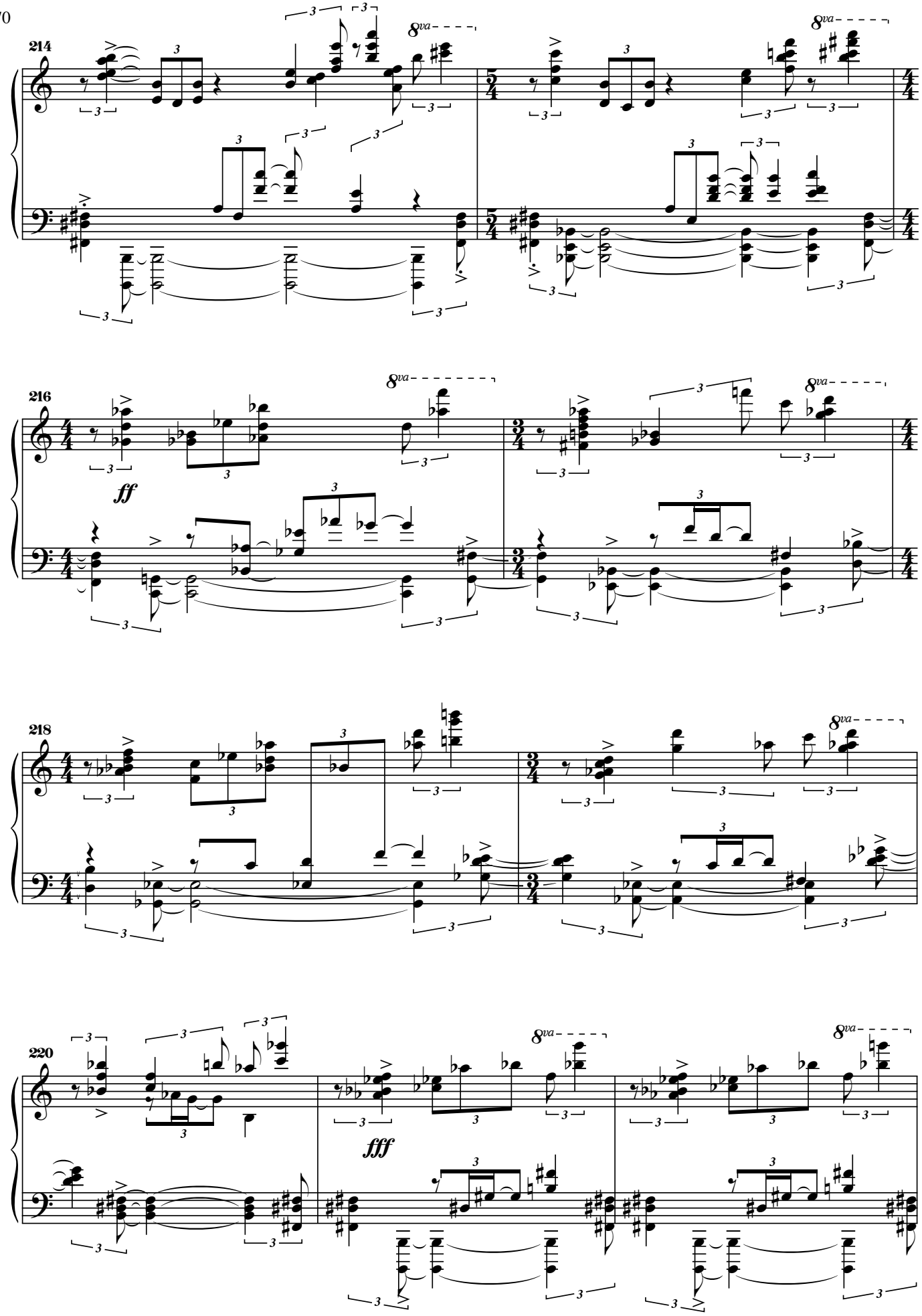

166
169
secco
ff
8va
172
175
sfz

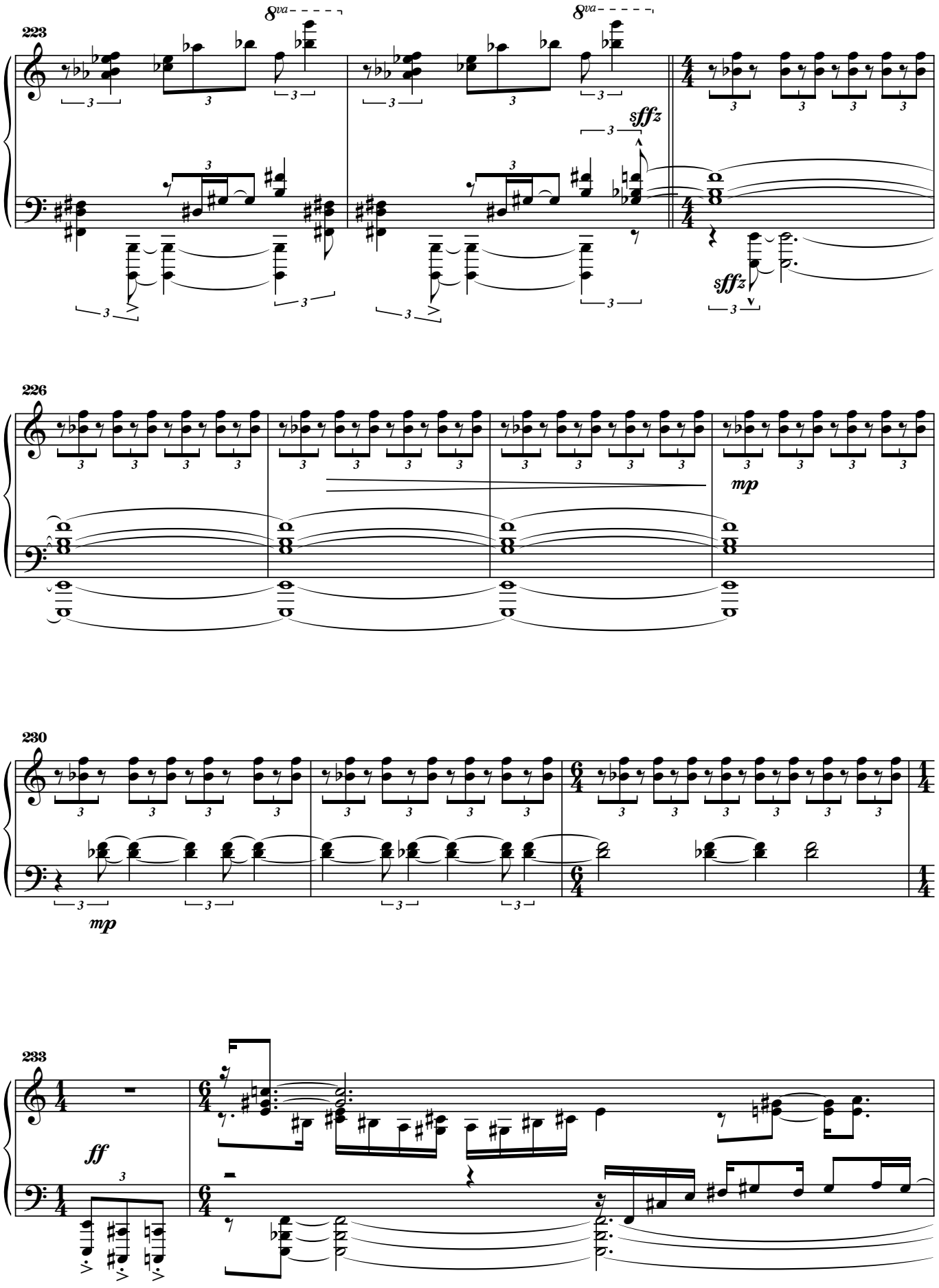

178
8va
181
8va
184
8va
186
8va
188
fff

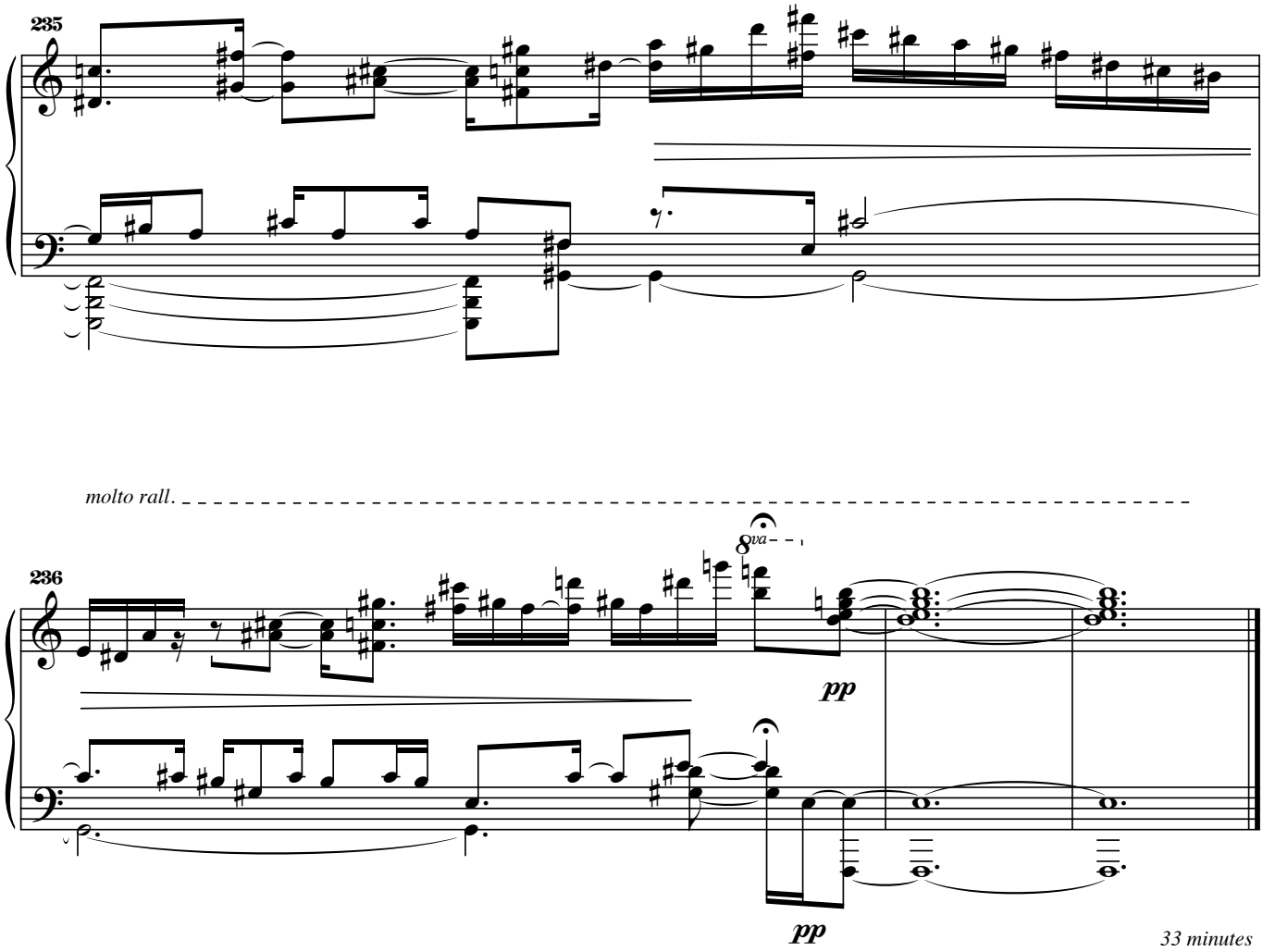

190
8va
mf
with pedal
192
8va
194
8va
196
8va


198
8va
f
200
8va
cresc.
202
204
8va
ff


206
8va
cresc.
208
8va
210
8va
212
8va
fff
ff


214
8va
216
ff
218
220
fff


223
8va
8va
sffz
sffz
226
mp
230
mp
233
ff


235
molto rall.
236
8va
pp
pp
33 minutes