משושים

טריו לפסנתר, כינור וצ׳לו

גוסטב מהלר כתב פעם שמה שמופיע בתכניה יכול רק לשמש קווים מנחים למסע שעובר המאזין, אבל למחבר יש גם ניסיון שנובע מההתרחשות עצמה, דבר שלא ניתן לעטוף במילים. לכן אציג פה מספר תובנות שיכולות לשמש כלי להבנה טובה יותר של ההתרחשות ביצירה.

ההשראה לטריו באה מבריכת המשושים המצויה בשמורת יהודיה בצפון הארץ. נחל המשושים נשפך לתוכה, והיא מצויה בעמק קטן מוקף בעמודי בזלת בצורת משושים, תופעה גיאולוגית ייחודית שהותירה בי רושם עז.

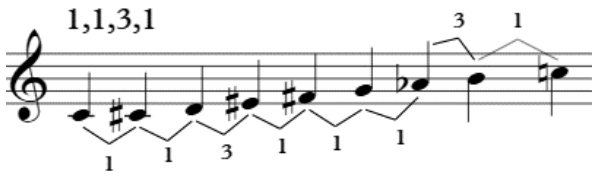
לכן, היצירה כולה עושה שימוש בספרה 6 בצורות ואופנים שונים.

ביצירה 6 פרקים, המתארים את המסע שעובר המטייל כשמגיע לבריכה.

- רעיון 1 – הציפייה וההתקרבות לאתר, עם נוסטלגיה ואינטימיות
- רעיון 2 – המשושים היורדים אל הבריכה. הפרק פלינדרומי – מהאמצע להתחלה ומהאמצע לסוף המוסיקה זהה, כמו השתקפות המשושים על פני המים. תפקיד הפסנתר מהודק וסימטרי בעל צורת משושה, כמו גם תפקיד הצ׳לו. תפקיד הכינור מגיע מהיגיון אחר
- רעיון 3 – קפיצה למים ותחושת התעלות
- רעיון 4 – אינטרמצו
- רעיון 5 – דמוי פוגטו, נוסטלגי מאוד, ערבוב של אינסוף מחשבות
- רעיון 6 – סיכום במבט אחורה

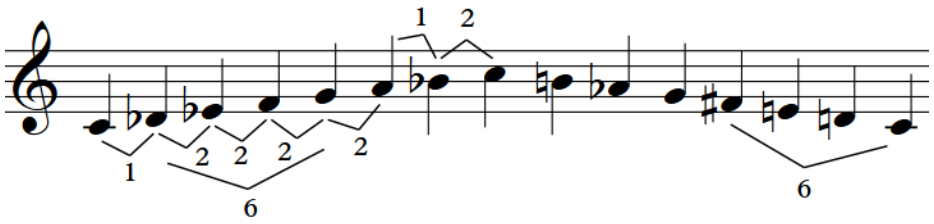
ביצירה יש שימוש במודוסים בטרנספוזיציה מוגבלת, בחלוקות שונות של 6.

דוגמה:

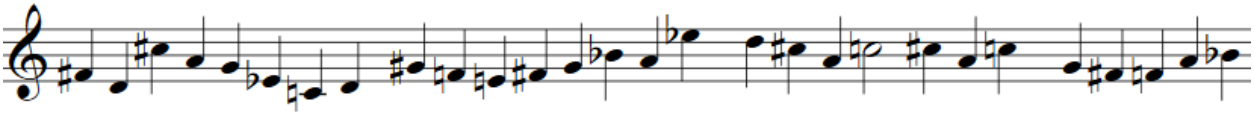


שימוש נוסף בחלוקות הפנימיות של 6 נמצא ברעיון 6 בחלק הקלסטרי המהיר, כאשר מספר החזרות בכל הקבוצה נקבע לפי אותן חלוקות: 3,1,2 ; 1,1,3,1 ; 2,1,2,1 וכד׳.

ביצירה שימוש במודוס פוליכרומטי שמכיל טריטונים (6 חצאי טונים). המודוס הזה עושה שימוש בחלוקות שונות בתוך הטריטון בעלייה, וגירסה קומפלמנטרית בירידה:



שילוב בין המודוסים נעשה גם בנושא רעיון 1, וגם בקו ה**אוסטינטו** שחוזר על עצמו בין היתר בבס ברעיון 1, בחלוקה של המודוסים בין הכינור והצ'לו ברעיון 4 כמו גם נושא הפסנתר, השראה לנושא רעיון 5 ופתיחת רעיון 6:



נעשה גם שימוש **נומרולוגי** במספרים. 6 הוא מספר אור, כלומר מספר טבעי חיובי שהממוצע ההרמוני של המחלקים שלו הוא מספר שלם. למשל 6:

$$\frac{4}{\frac{1}{1}+\frac{1}{2}+\frac{1}{3}+\frac{1}{6}}=2$$

מספרי האור הבאים אחרי 6 הם 28 ו-140, ונעשה בהם שימוש גם בהנחיות הטמפו לאורך היצירה; וגם במספר הצלילים בנושא רעיון 5 ובאוסטינטו לעיל (28).

בנוסף, נקודת **חתך הזהב** של היצירה היא למעשה הקולמינציה שלה, ברעיון 5, עמ' 3 בקצה ה-ff.

כל האמצעים להלן נועדו כדי לשרת את תחושת חוסר הזמן והעילאיות שהיצירה רוצה להעביר.

נקודות חשובות למבצעים

- סדר הפרקים המועדף נתון לפניכם, אבל ברשותכם אפשרות לשנות את סדר הפרקים. כדאי שהאינטרמצו יישאר באמצע.
- הברירה המועדפת לכל אורך היצירה היא senza misura, כדי לתת למבצעים חופשיות בביצוע, וכדי לשרת את המטרה של חוסר מחויבות לזמן ולתחושה יציבה וקונקרטית. לעומת זאת, בחלק מהפרקים יש משקל וקווי תיבות כדי להקל על הביצוע.
- רעיון 1: הרעיון הוא לתת תחושה מוקהית של זמן, לא של יציבות. חפשו את המקום המטושטש והמהדהד.
- רעיון 2: הפסנתרן לא חייב להסתכל על התפקיד. סימני ההיתק הלא-נוחים לכאורה נועדו למטרות גרפיות בלבד. התבנית המתוארת בהתחלה חוזרת על עצמה לכל אורך היצירה בירידה ואז בעלייה.

אור יששכר

חורף 2017

Hexagons

Trio for piano, violin and cello

Gustav Mahler once wrote that the program may only be used as initial guidelines for the journey that the listener undergoes, but the author also has experience derivative of the chain of events itself, something one cannot wrap with words. Therefore, I wish to present a few insights here that may be used as a tool for the better understanding of the chain of events in the piece.

Inspiration for the Trio came from the Hexagon Pool in the Yehudia nature reserve, in northern Israel. The Hexagon stream pours in it, and it lies in a small valley surrounded by hexagon-shaped basalt pillars, a unique geological phenomenon that greatly impressed me.

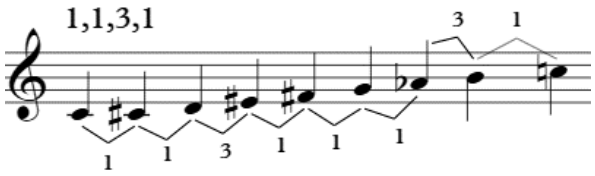
Therefore, the digit 6 is used throughout the piece in various shapes and forms.

The piece contains 6 movements, that describe the journey the traveler undergoes once they reach the pool.

- Idea 1 – the expectation and arrival to the site, with nostalgia and intimacy
- Idea 2 – the descending hexagons. This movement is palindromic – the music is identical from the middle to the beginning and to the end, just like the reflection of hexagons on the water. The piano part is intact, symmetrical and hexagon-shaped, much like the cello part. The violin part derives from different logic
- Idea 3 – the jump to the water and sense of sublimity
- Idea 4 – intermezzo
- Idea 5 – fugato-like, very nostalgic, a mixture of endless thoughts
- Idea 6 – conclusion, looking back

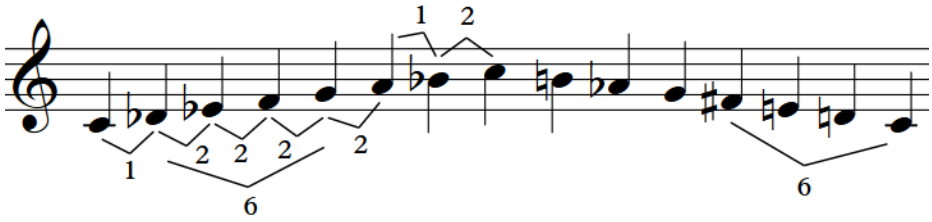
The piece uses modes of limited transposition, with different divisions of 6.

Example:

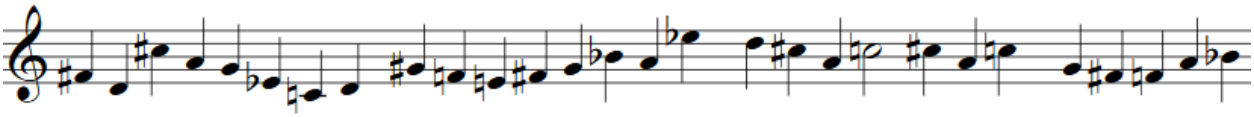


Another use in the inner divisions of 6 is in Idea 6 in the fast cluster-form part, where the number of repeats in each group is set by those divisions: 3,1,2; 1,1,3,1; 2,12,1; etc.

The piece uses a polychromatic mode that contains tritones (6 semi tones). This mode uses different divisions in the tritone while ascending, and a complementary version while descending:



A combination of the modes is also in Idea 1, as well as the **ostinato** line that keeps repeating, among others in the bass of Idea 1, in the division of the modes between violin and cello in Idea 4 as well as the piano theme, an inspiration to the theme of Idea 5 and the opening of Idea 6:



A **numerological** use in number is also included. 6 is an Ore Number, which means a positive integer whose divisors' harmonic mean is also an integer. For example, 6:

$$\frac{4}{\frac{1}{1}+\frac{1}{2}+\frac{1}{3}+\frac{1}{6}}=2$$

The following Ore numbers to 6 are 28 and 140, and they are also used throughout the piece in tempo instructions; as well as the number of notes in the theme of Idea 5 and in the ostinato line above (28).

In addition, the **golden ratio** point of the piece is in fact its culmination, in Idea 5, page 3 in the edge of the ff.

All of the means above are designated to serve the feeling of timeless infinity and sublimity the piece wishes to express.

Performance notes

- The preferable order of the movements is the one given, though you have the choice to change it. The Intermezzo should stay in the middle.
- The preferred choice along the piece is *senza misura*, to give performers the liberty and serve the goal of lack of commitment to time and to a stable, concrete feeling. However, some of the movements contain meter and bar lines to make it easier on the performers.
- Idea 1: the point is to give an unclear sense of time, not stability. Therefore, search the blurry and echoey.
- Idea 2: the pianist is not obligated to look at the score. The allegedly uncomfortable-to-read accidentals are for graphic purposes only. The initial pattern repeats all along the movement, descending then ascending.
- Note that the piece's golden ratio point is in its culmination, in Idea 5's page 3, ff point.

Or Yissachar

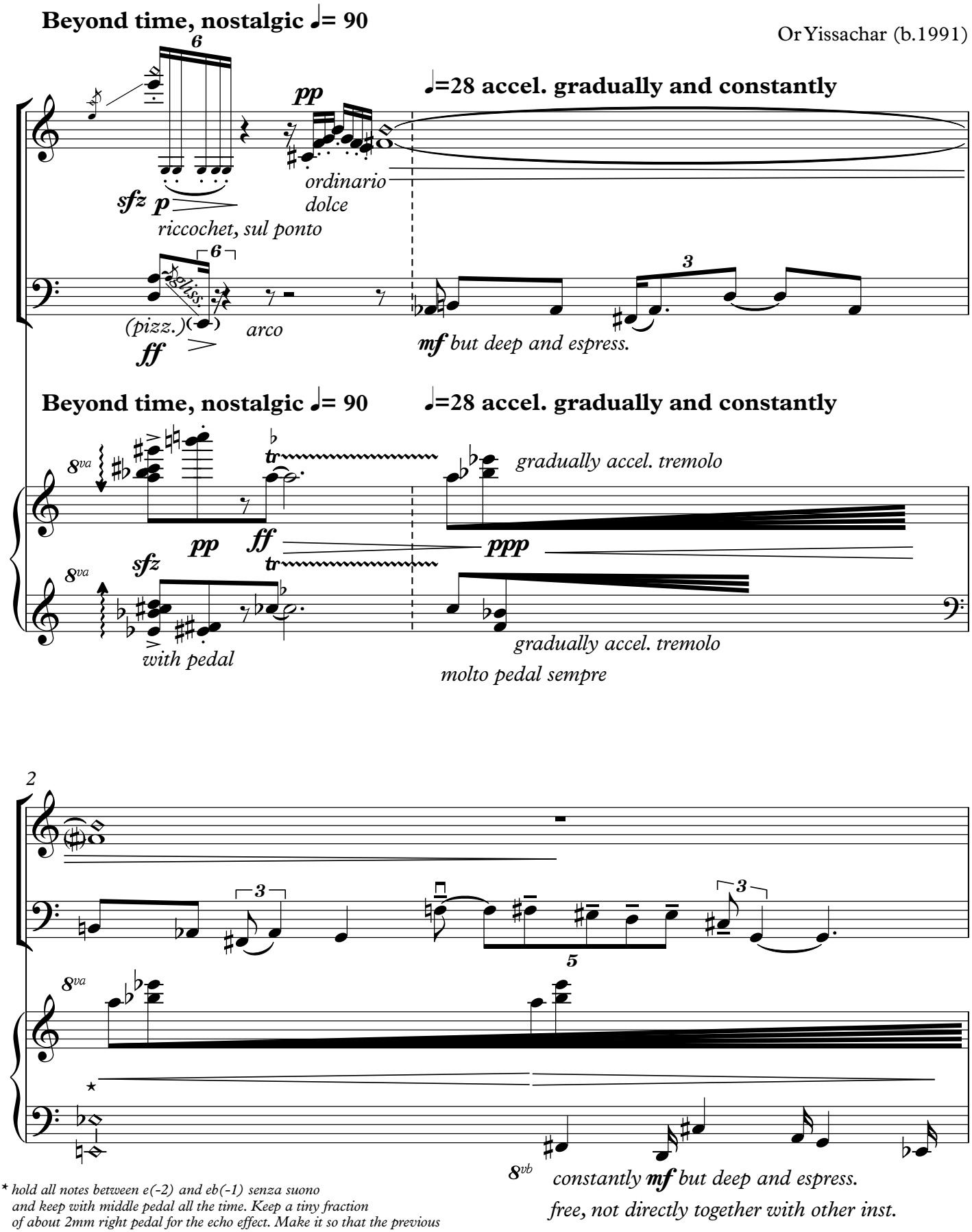
Winter 2017

Hexagons

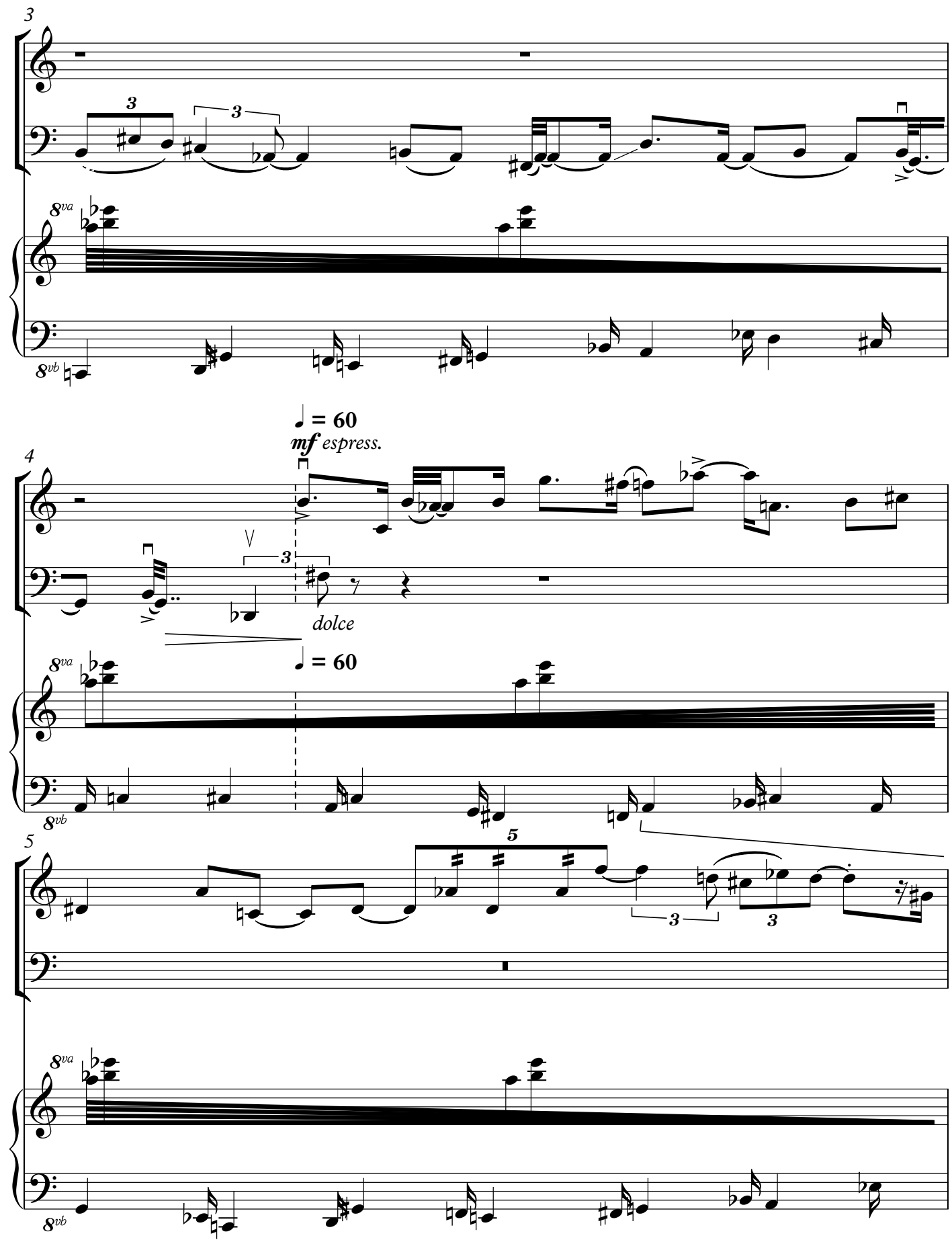
trio for violin, cello and piano

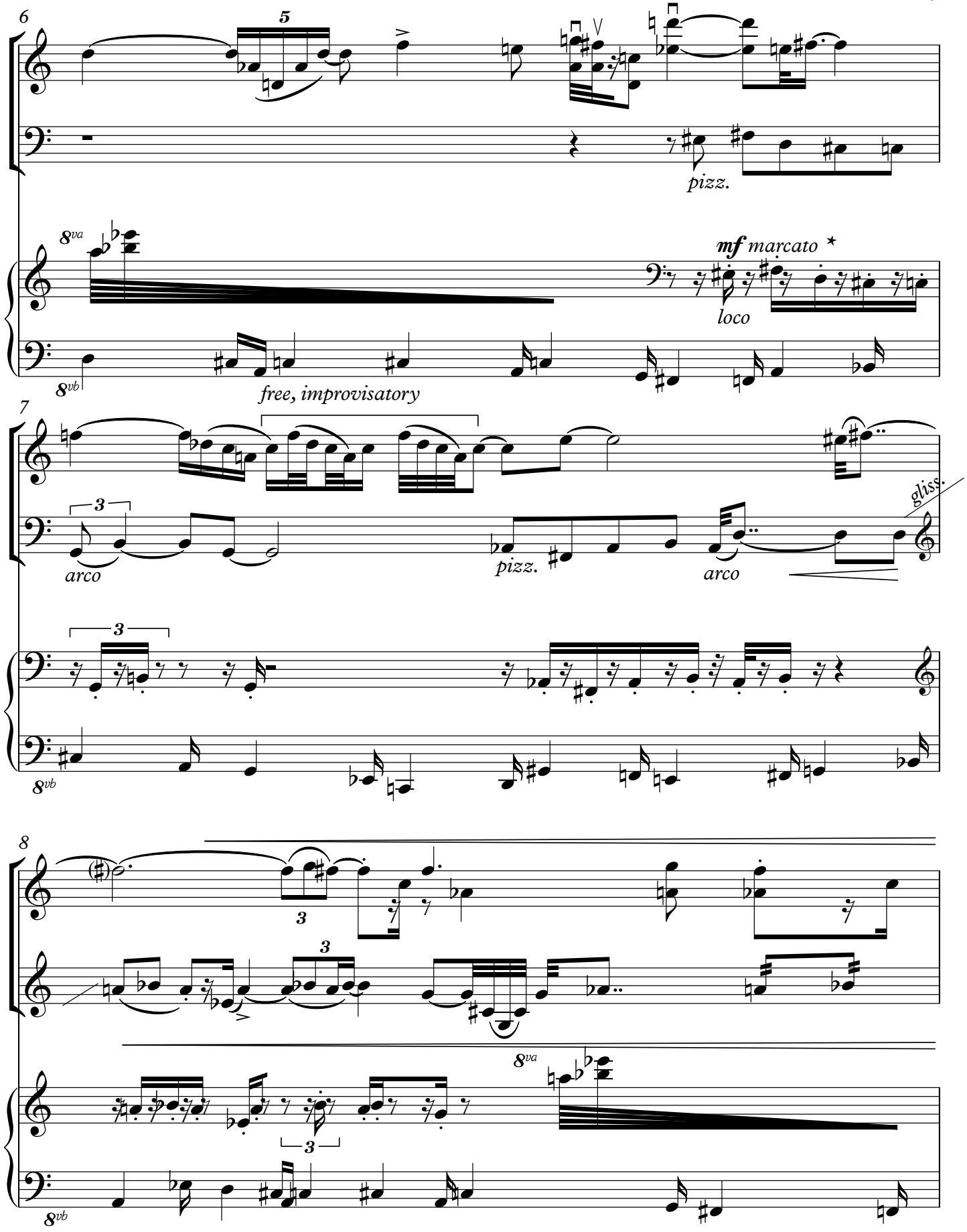
Idea 1

Or Yissachar (b.1991)

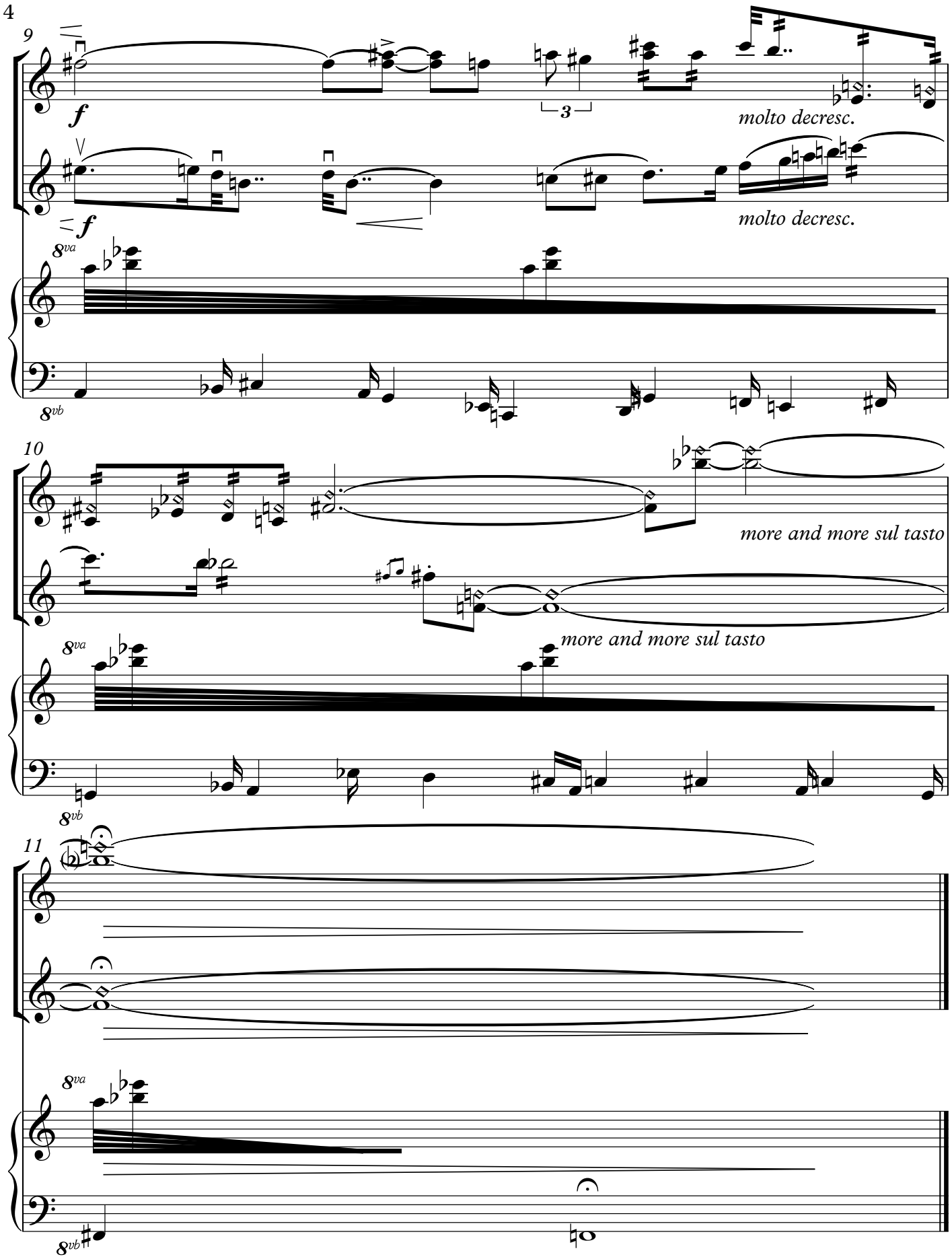


* *hold all notes between e(-2) and eb(-1) senza suono and keep with middle pedal all the time. Keep a tiny fraction of about 2mm right pedal for the echo effect. Make it so that the previous tremolo will be allowed to fade out gradually*

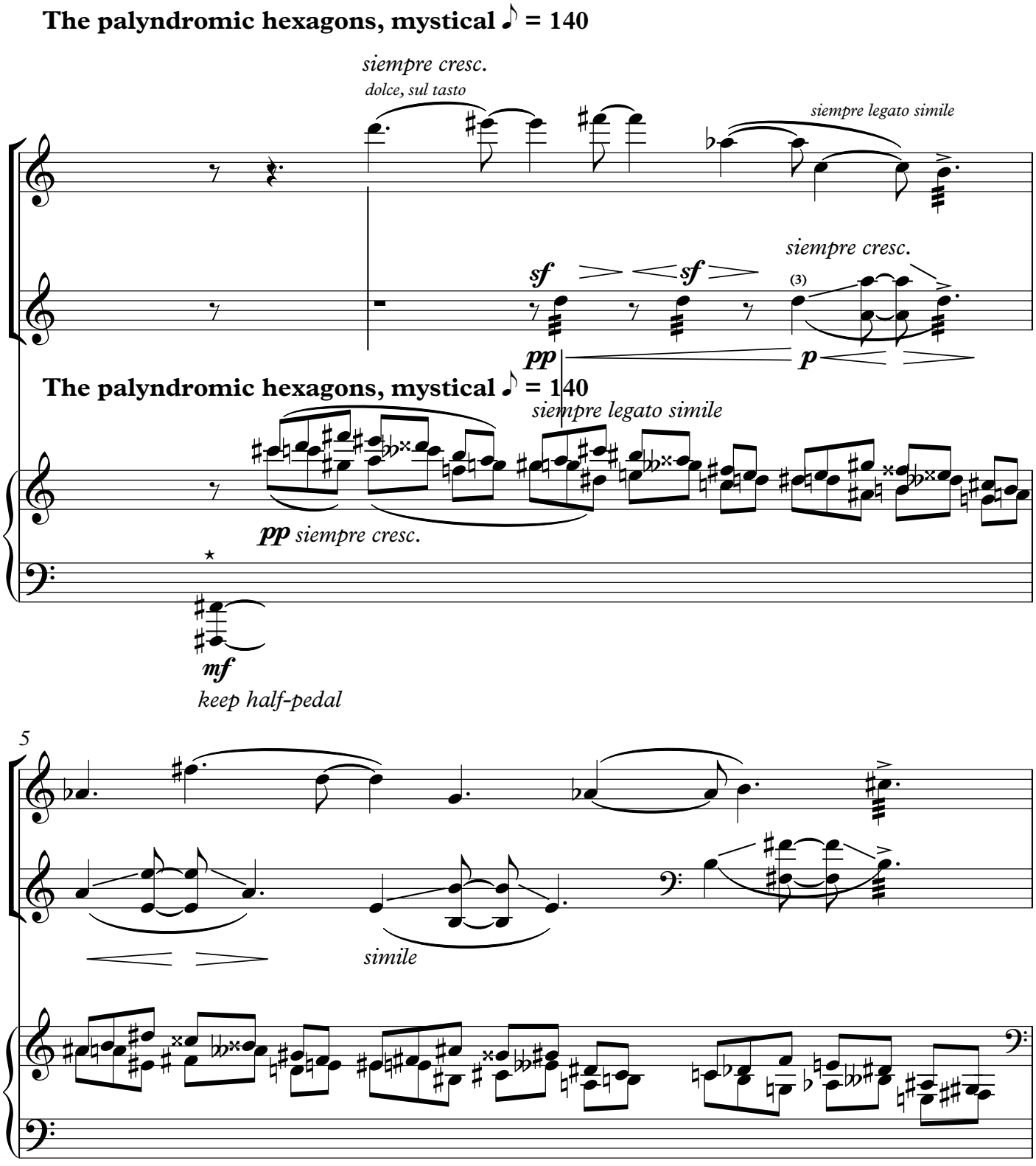

3
8va
8vb
4
♩ = 60
mf espress.
dolce
♩ = 60
8va
8vb
5
8va
8vb



* exactly /16 after cello
with middle pedal cluster held
like a far-away echo


9
f
molto decresc.
f
molto decresc.
8va
8vb
10
more and more sul tasto
more and more sul tasto
8va
8vb
11
8va
8vb

Idea 2



* *Hold all notes between F#(-3)-F#(-2) senza suono*
next hold them with the middle pedal, and take down the right pedal
at the same time you take up the middle one, to produce a Boom effect

8

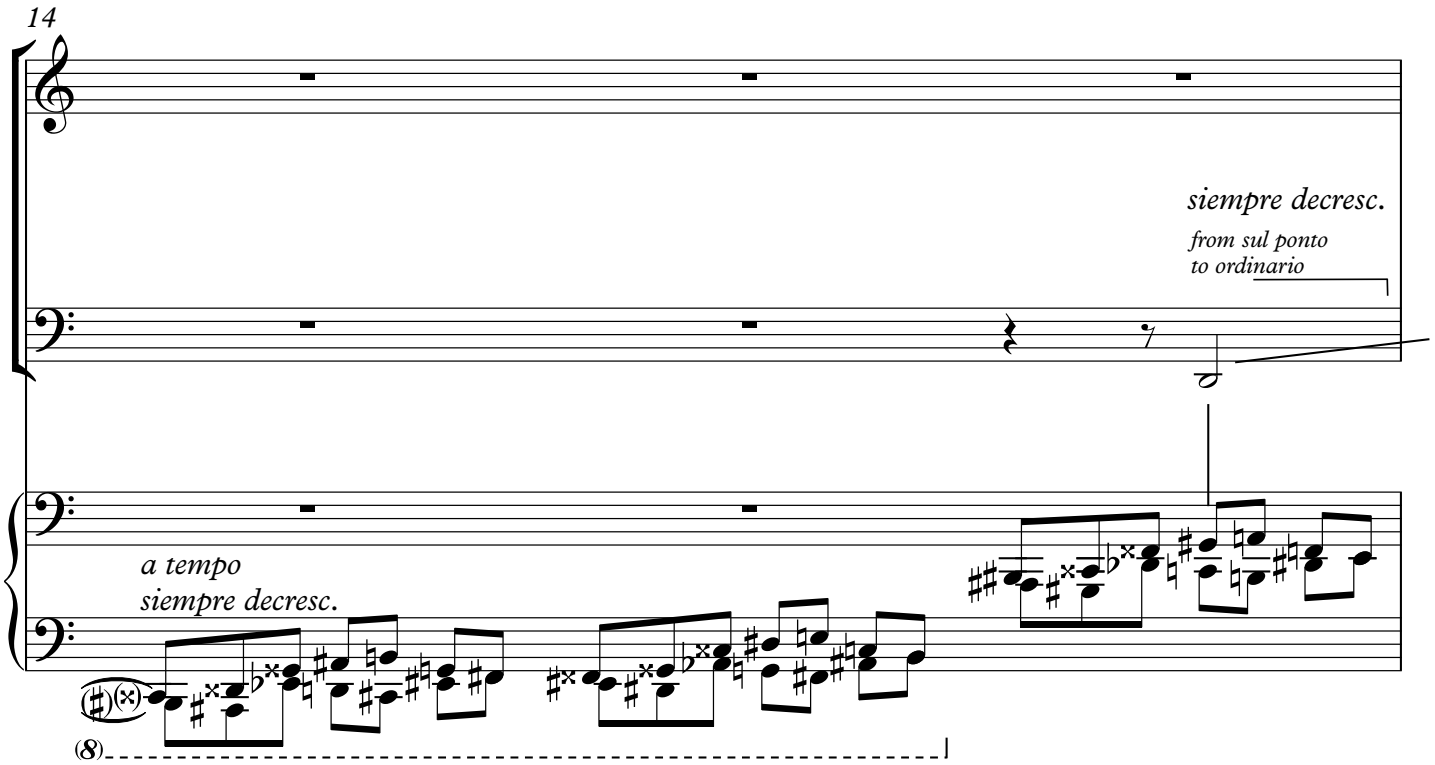
more and more sul ponto
until sul ponto

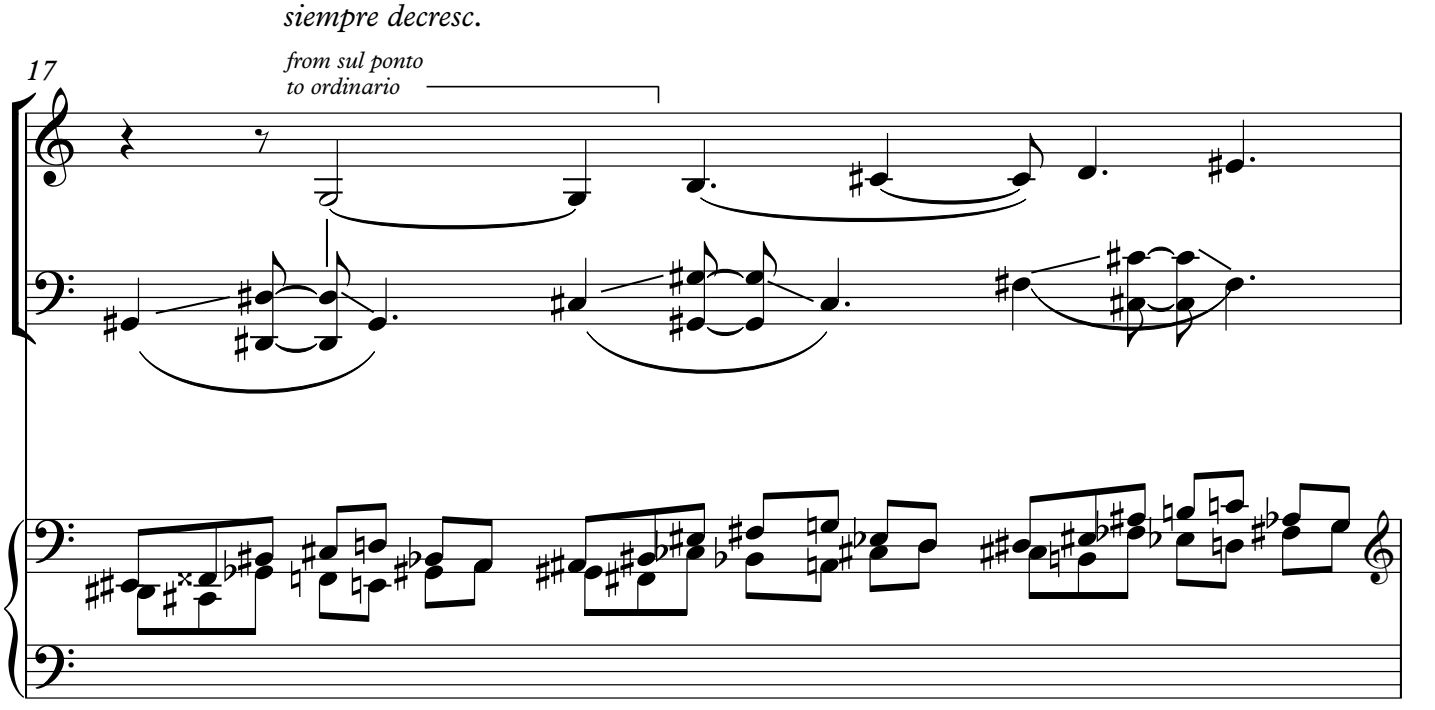
11

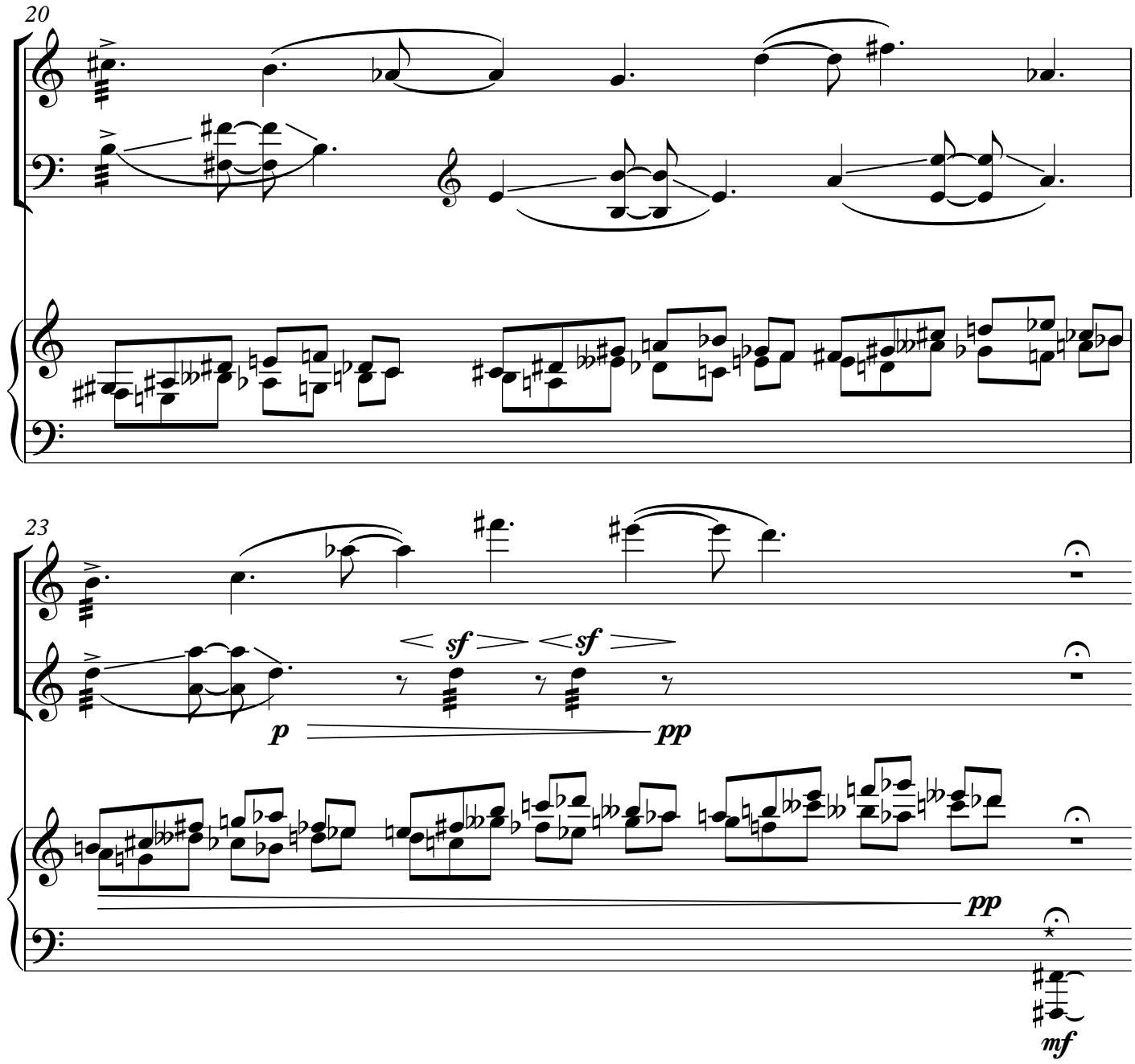
more and more sul ponto
until sul ponto

rall.

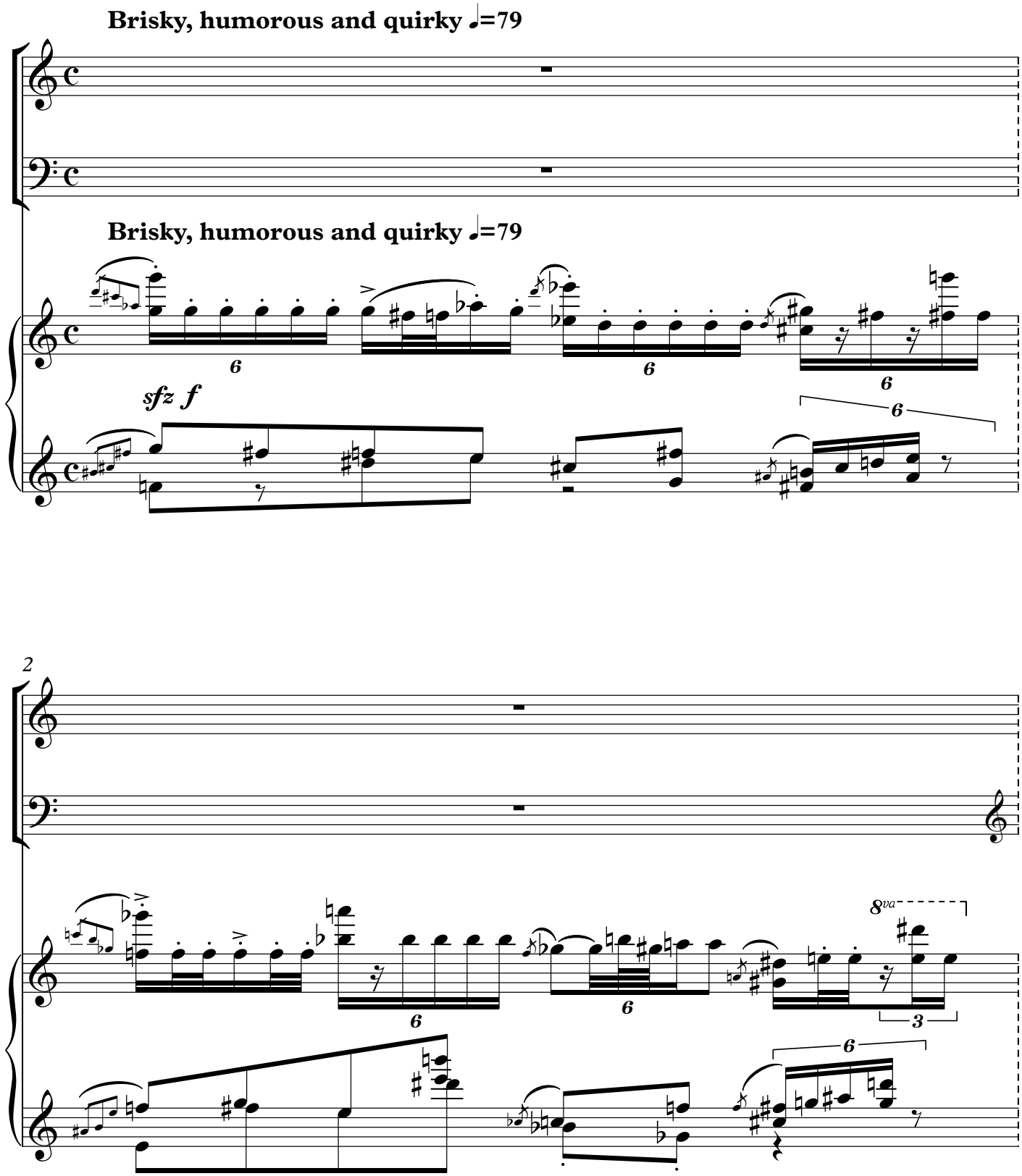
8vb

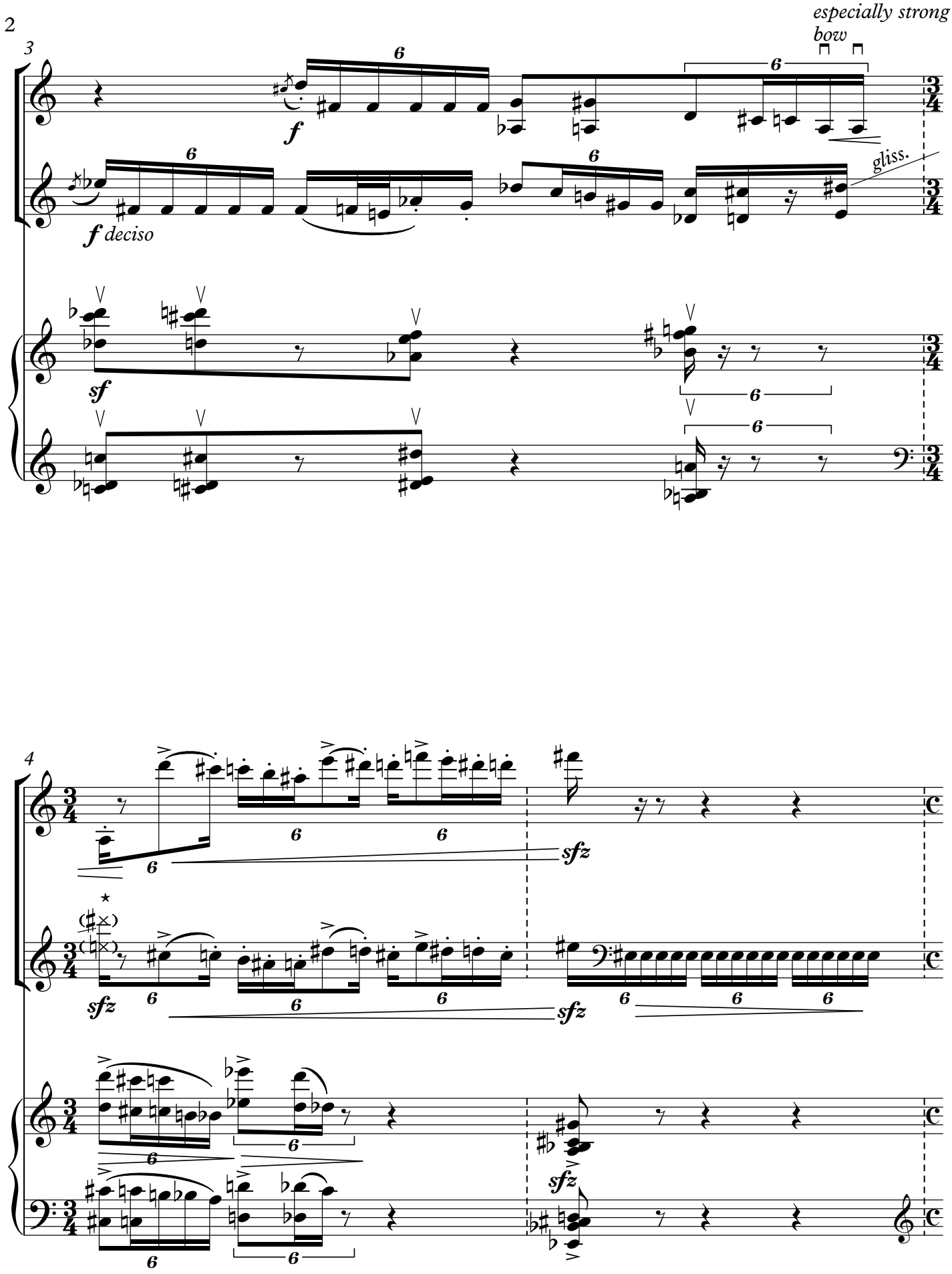

14
siempre decresc.
from sul ponto
to ordinario
a tempo
siempre decresc.
(8)


siempre decresc.
17
from sul ponto
to ordinario

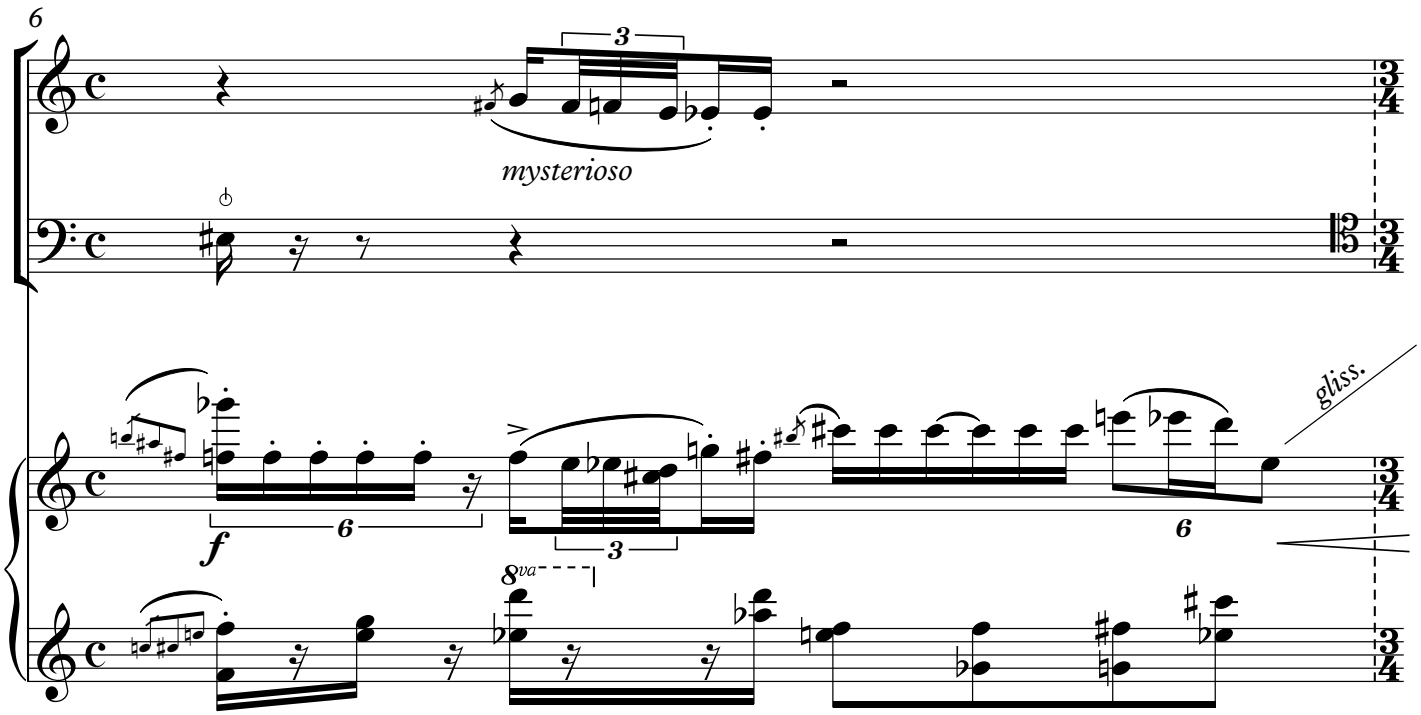

20
23
sf
sf
p
pp
pp
mf

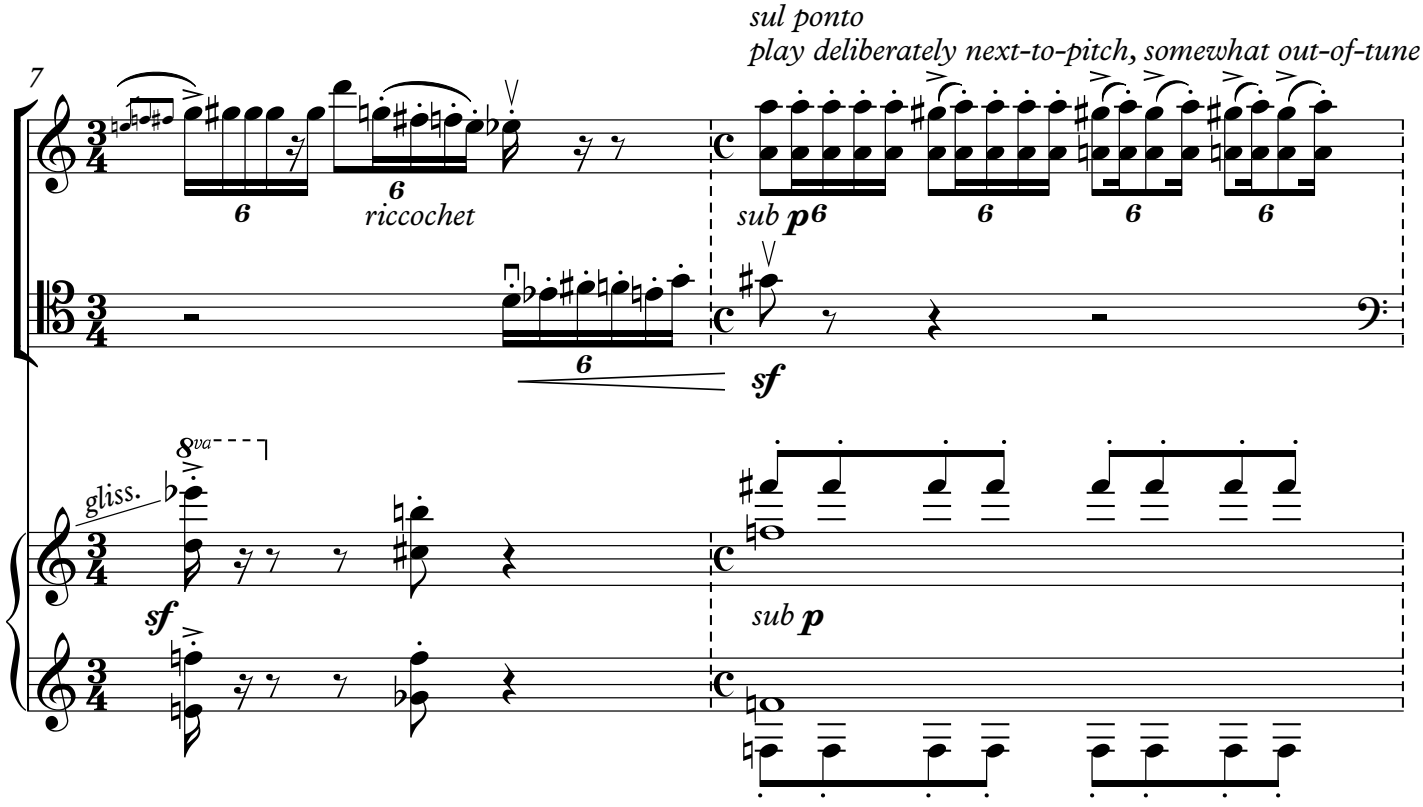
Idea 3

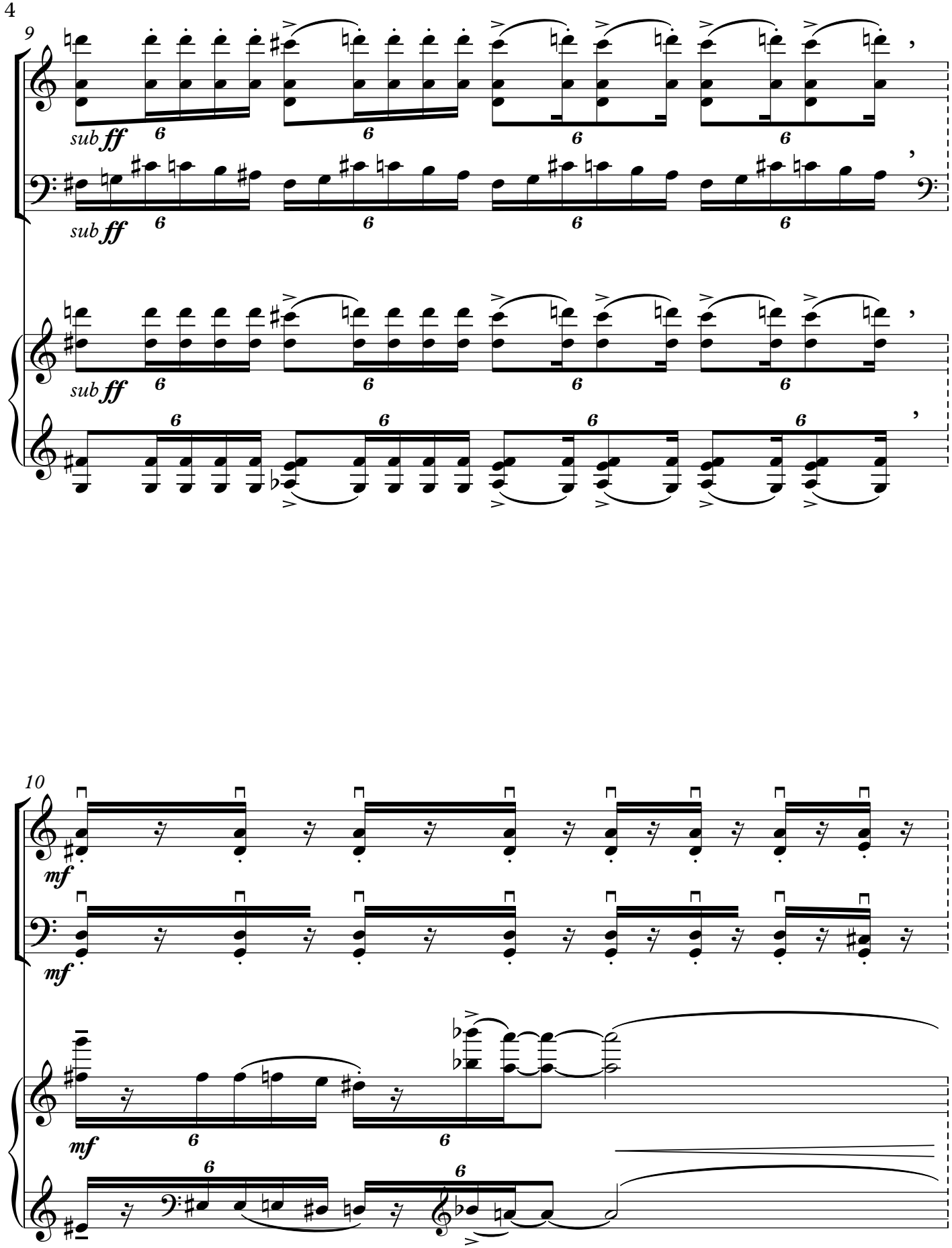

Brisky, humorous and quirky ♩=79
Brisky, humorous and quirky ♩=79
sfz f
2
8va

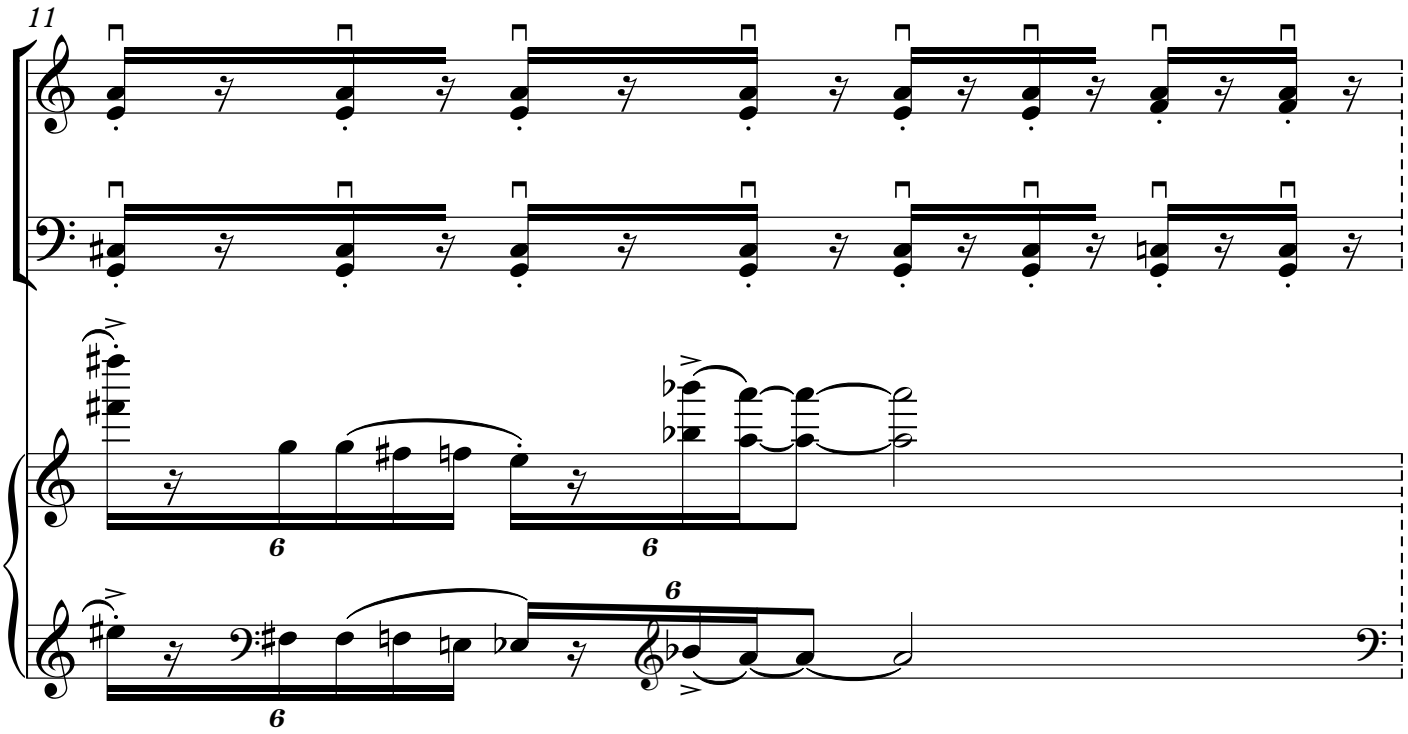


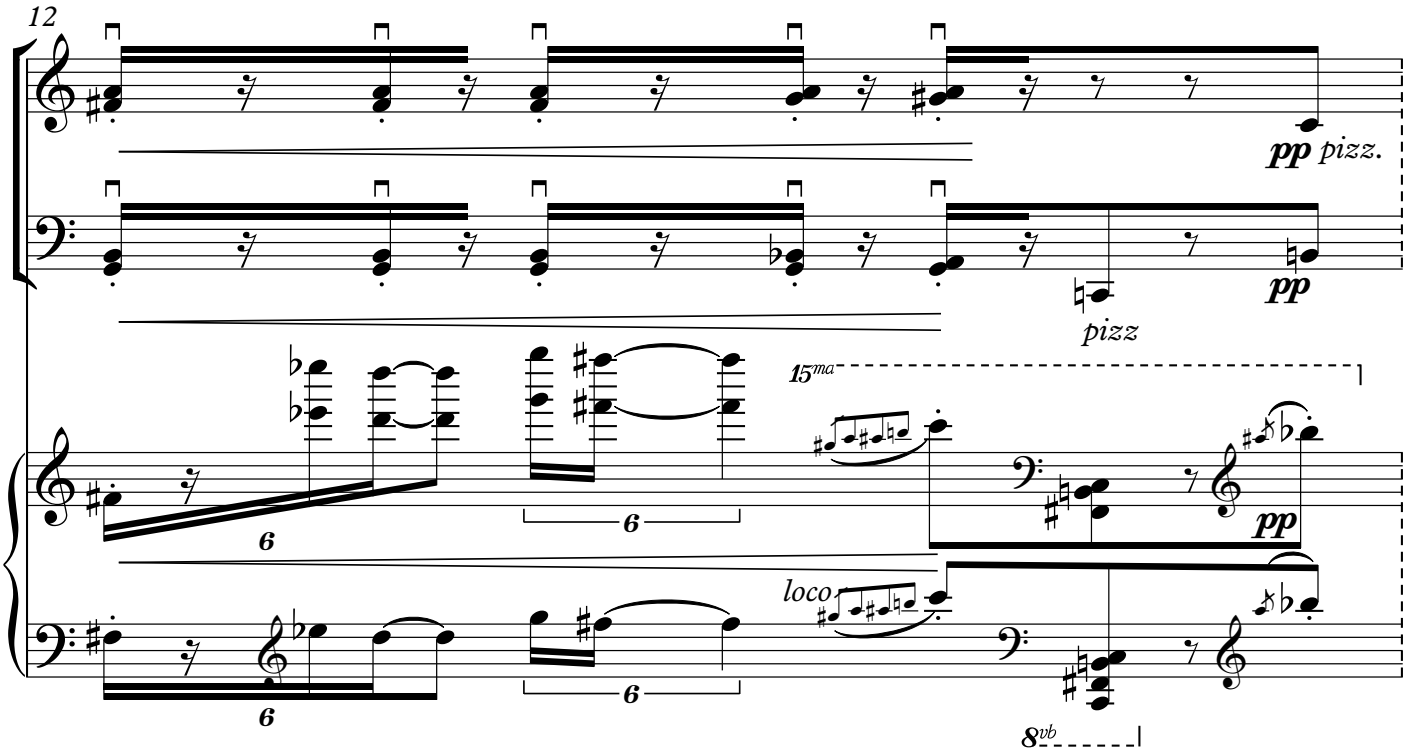
* The specific pitch doesn't matter, just throw your fingers to the highest you can reach within the tempo

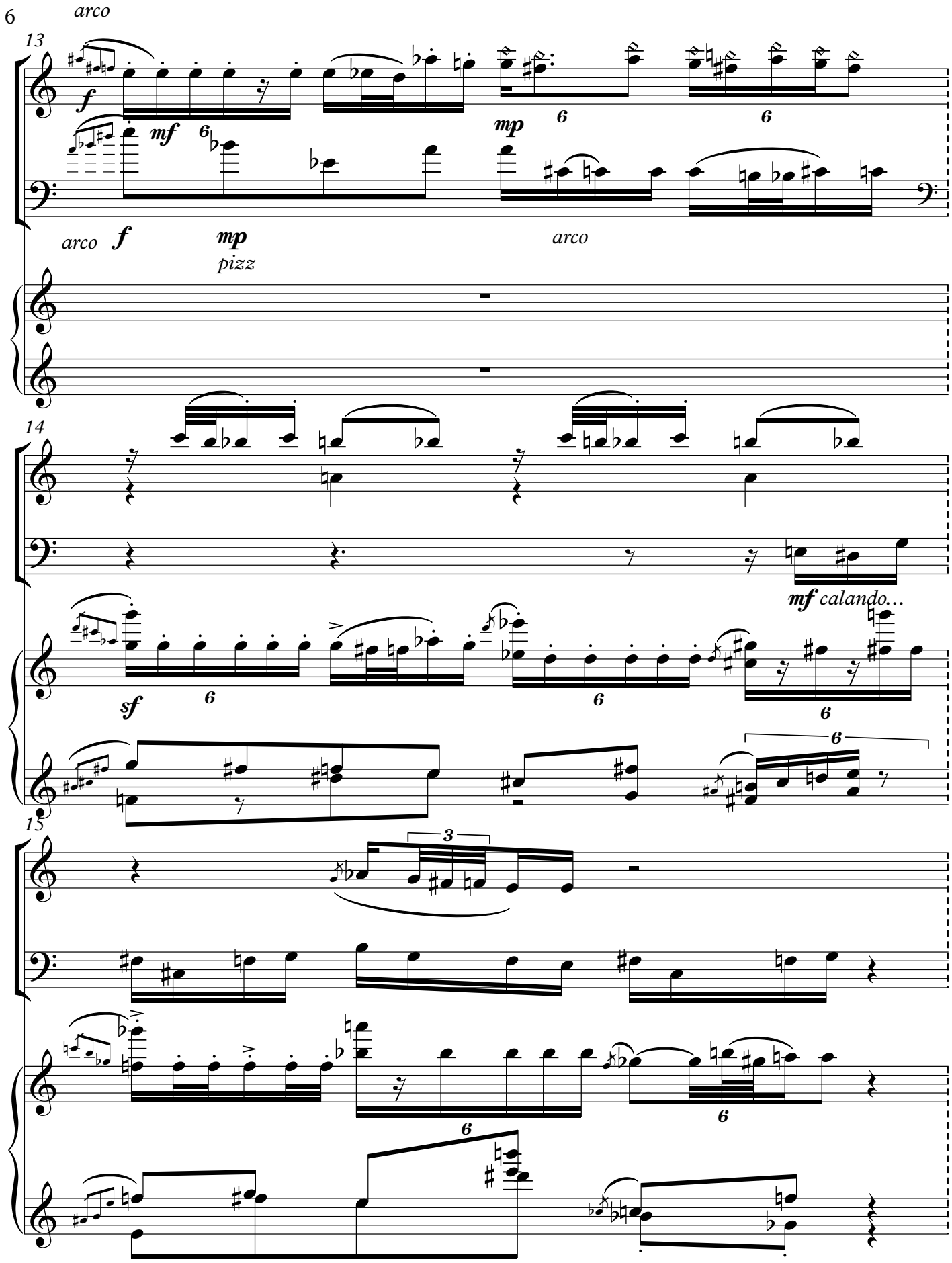

6
mysterioso
f
gliss.
8va

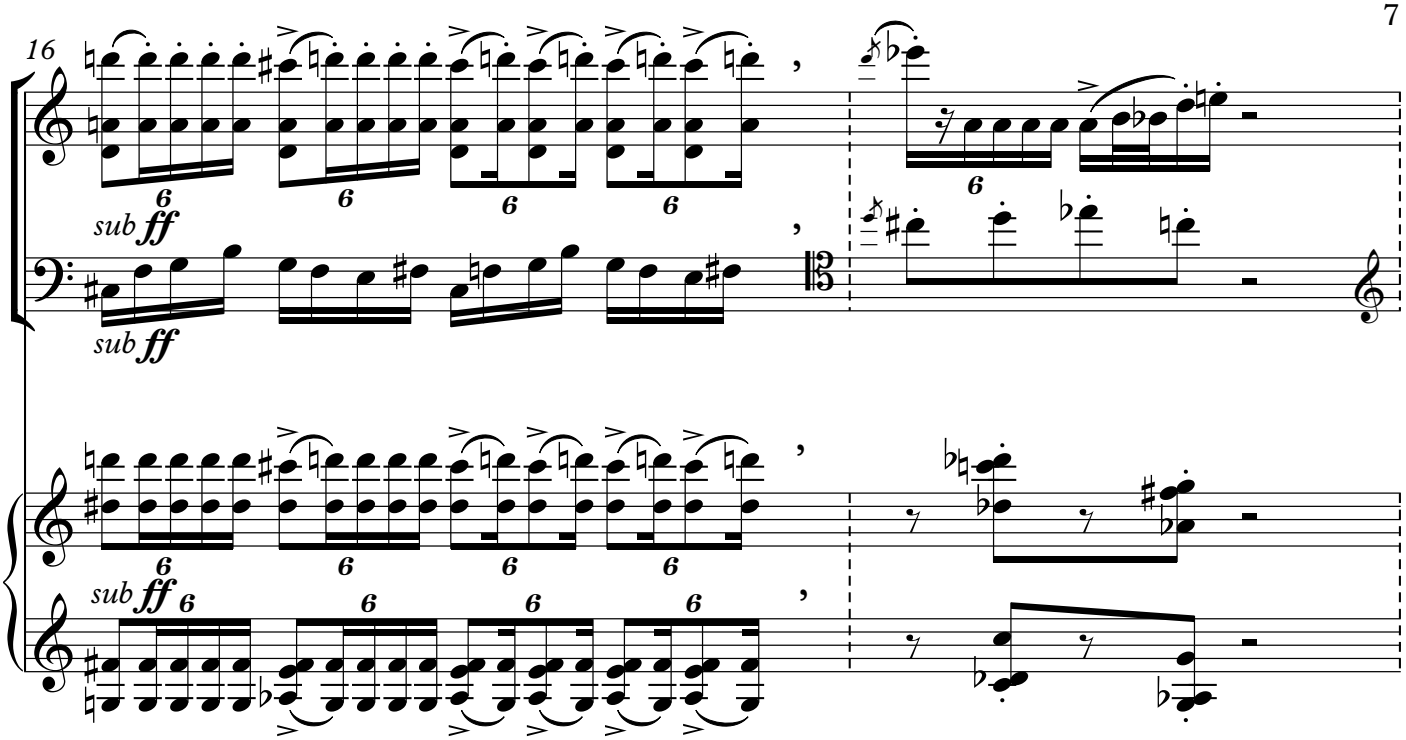

7
riccochet
sul ponto
play deliberately next-to-pitch, somewhat out-of-tune
sub p
sf
gliss.
8va
sub p

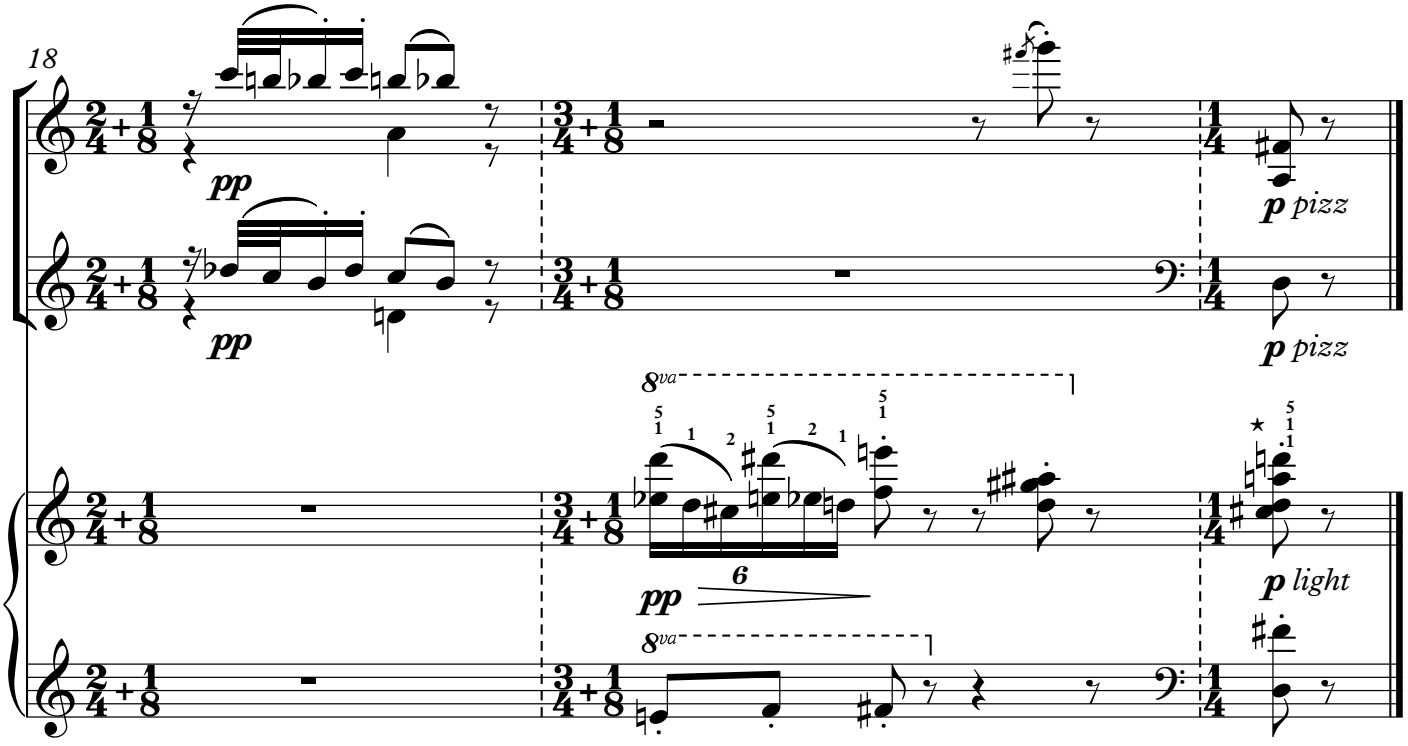

9
sub ff
sub ff
sub ff
10
mf
mf
mf


11
6
6
6
6


12
pp pizz.
pp
pizz
15ma
pp
loco
6
6
6
6
8vb

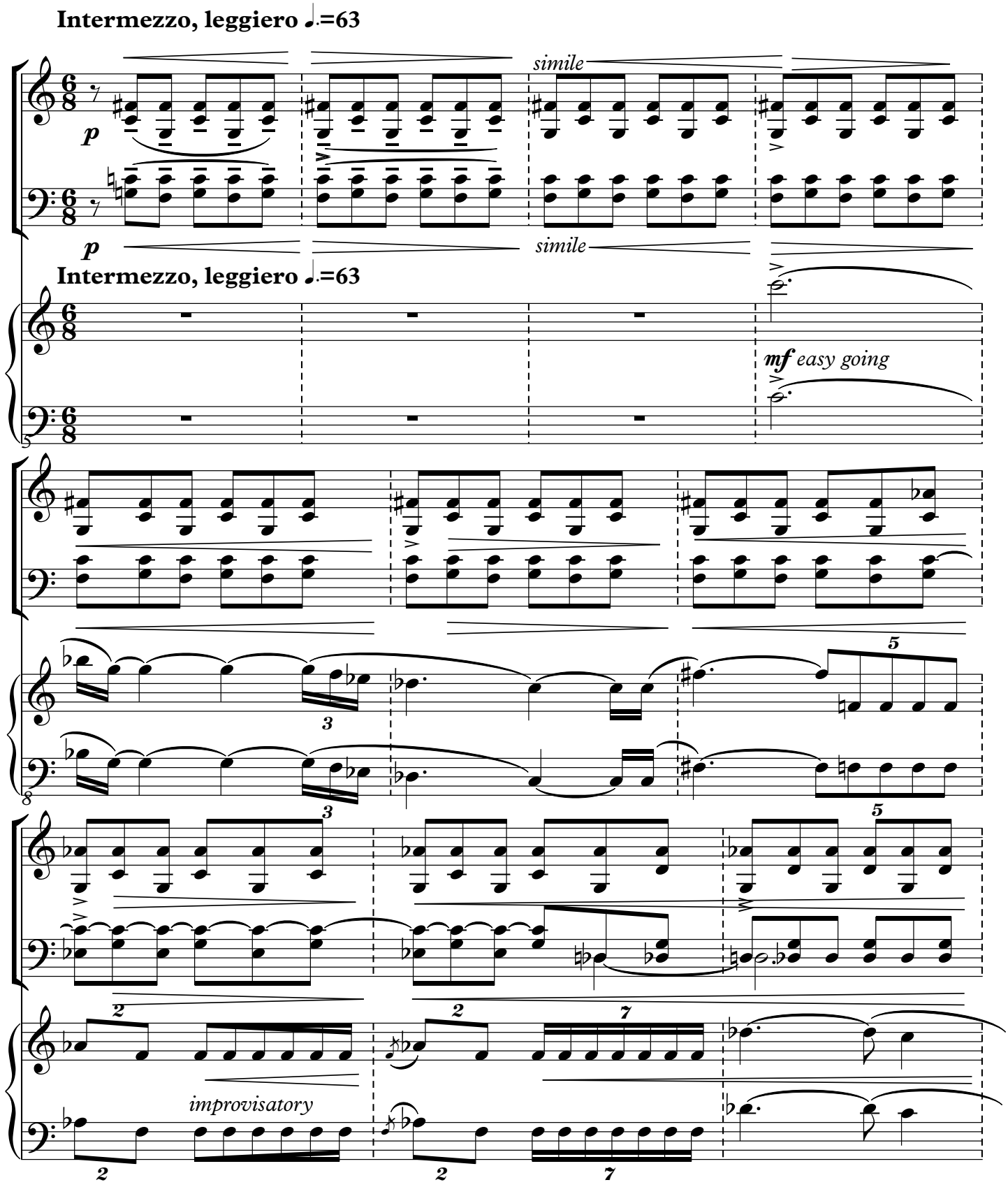

arco
13
f
mf
6
mp
6
6
arco
f
mp
pizz
arco
14
mf calando...
sf
6
6
6
6
15
3
6
6
6

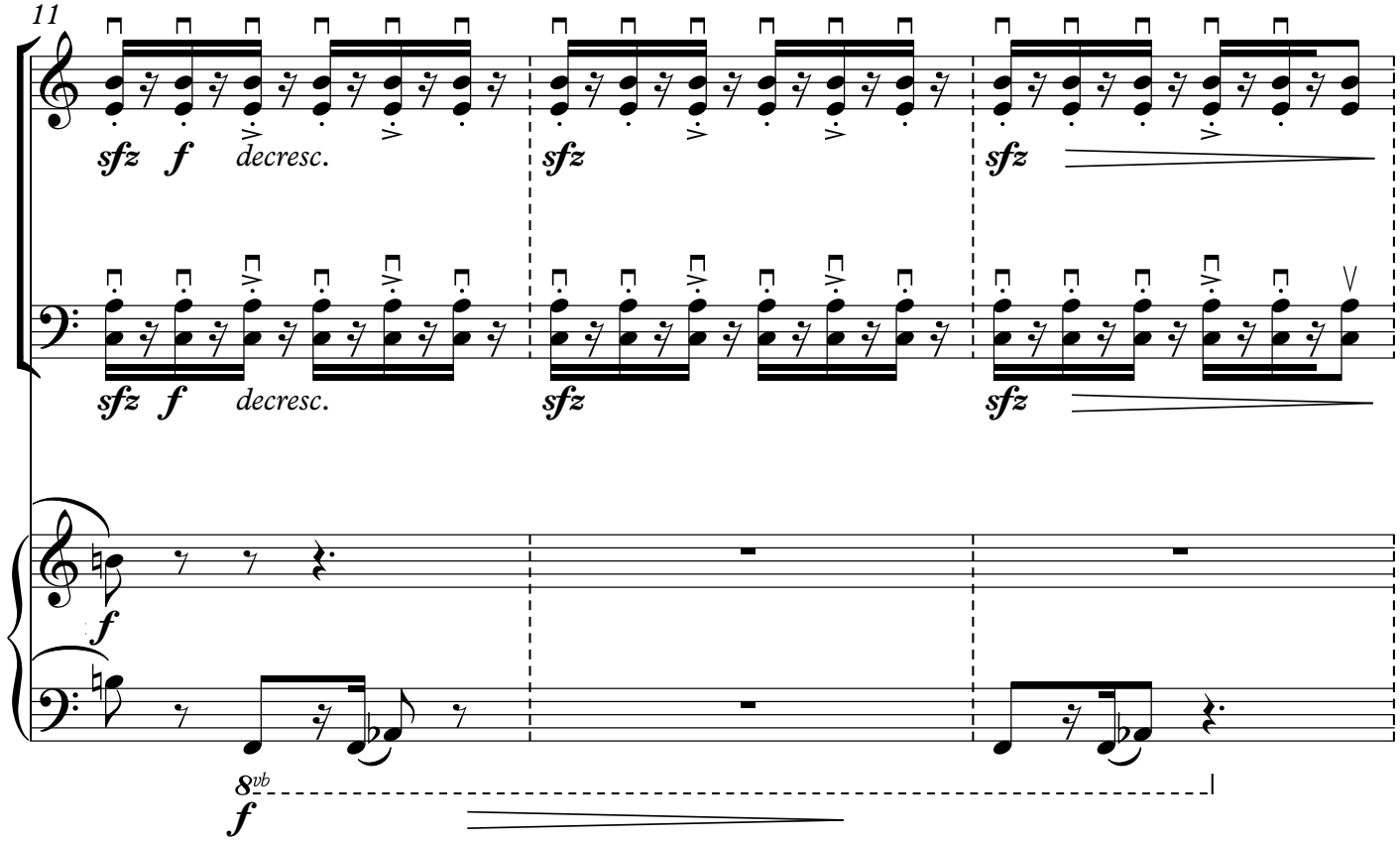


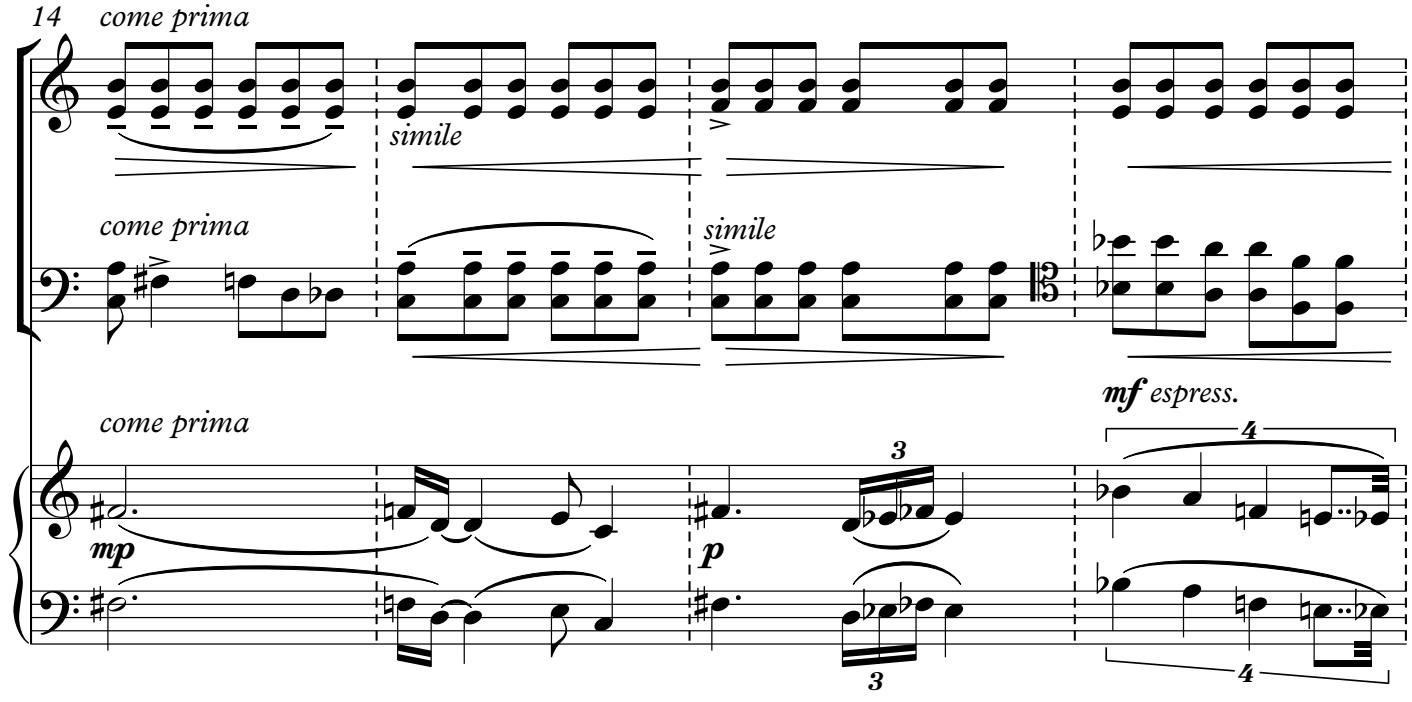


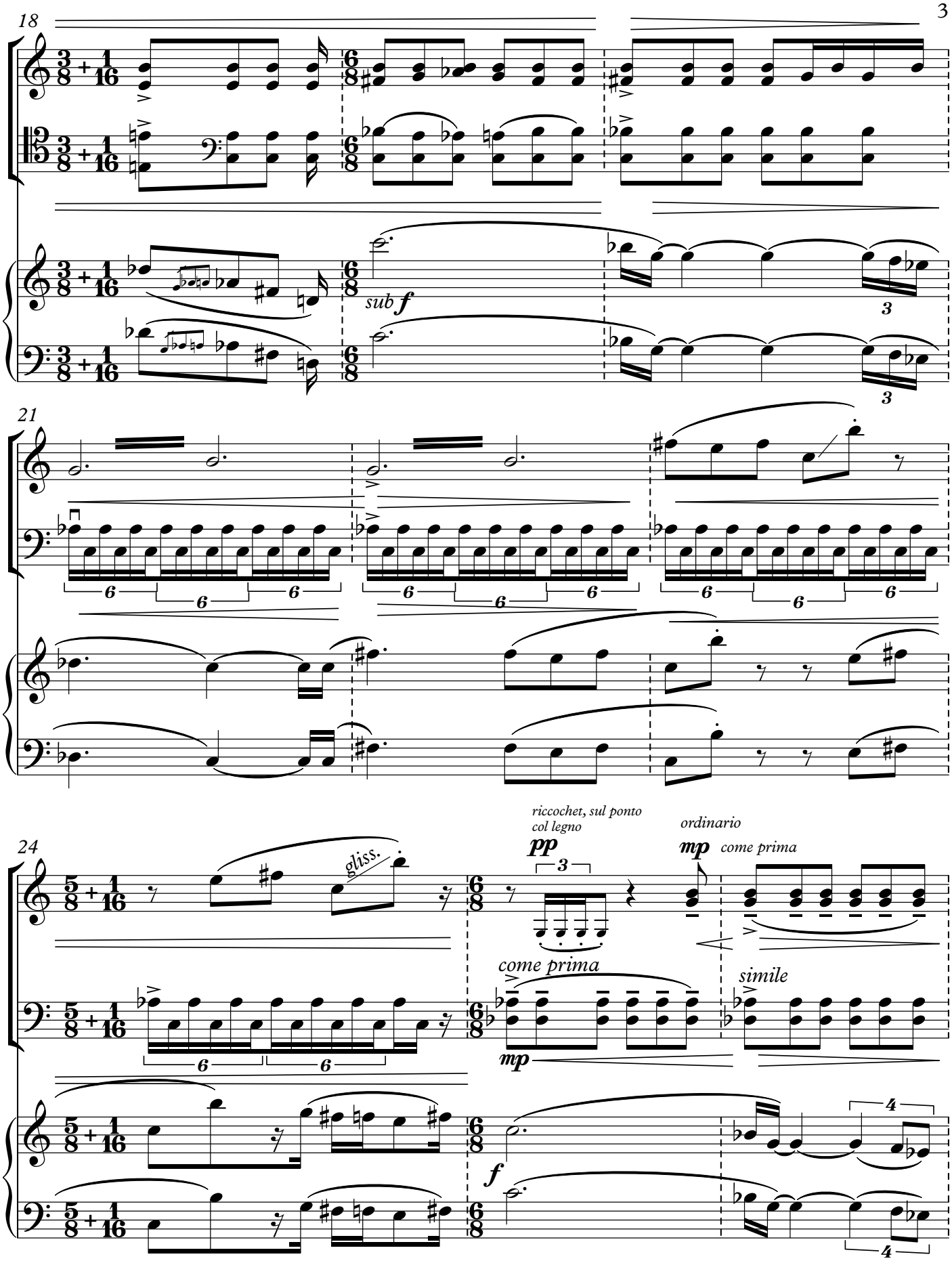
* *Hold D with the lower part of 1st finger annd C# with its upper part*

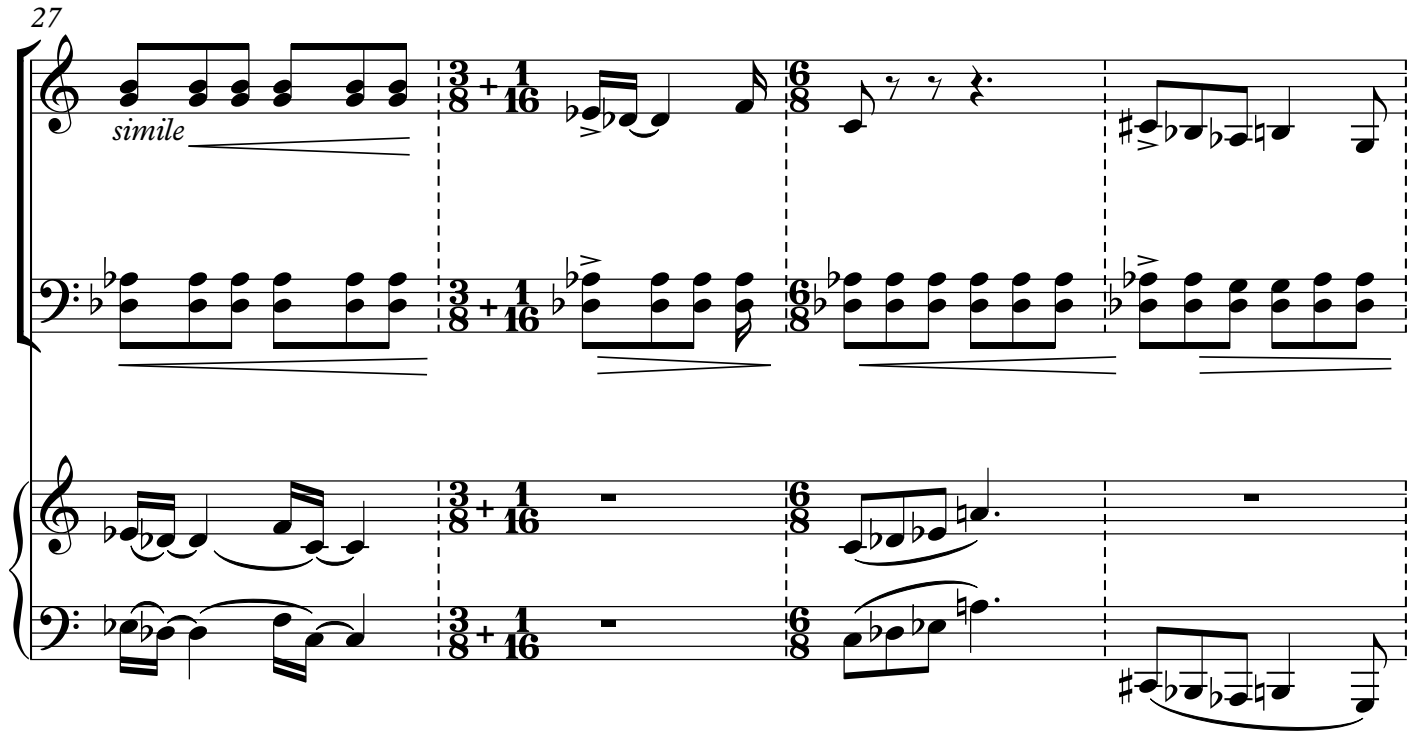
Idea 4

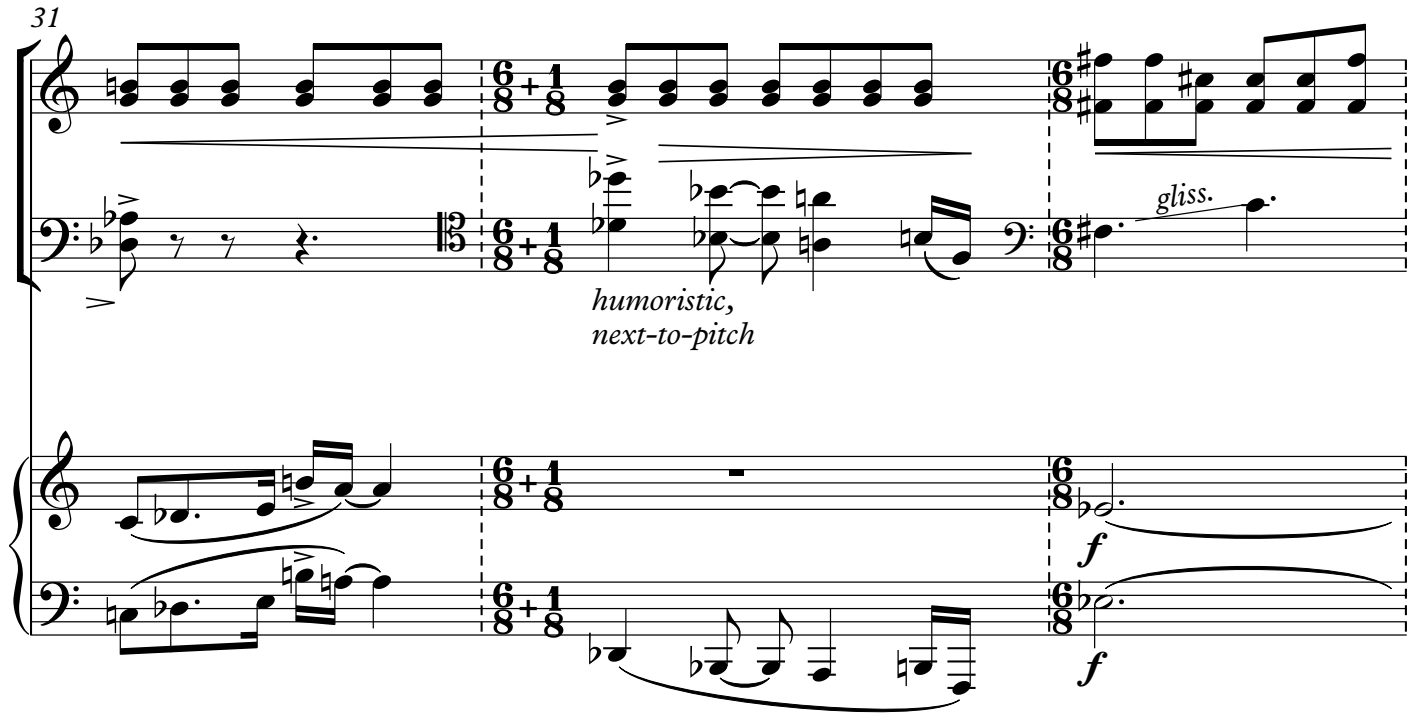

Intermezzo, leggiero ♩.=63
simile
p
simile
p
Intermezzo, leggiero ♩.=63
mf easy going
improvisatory

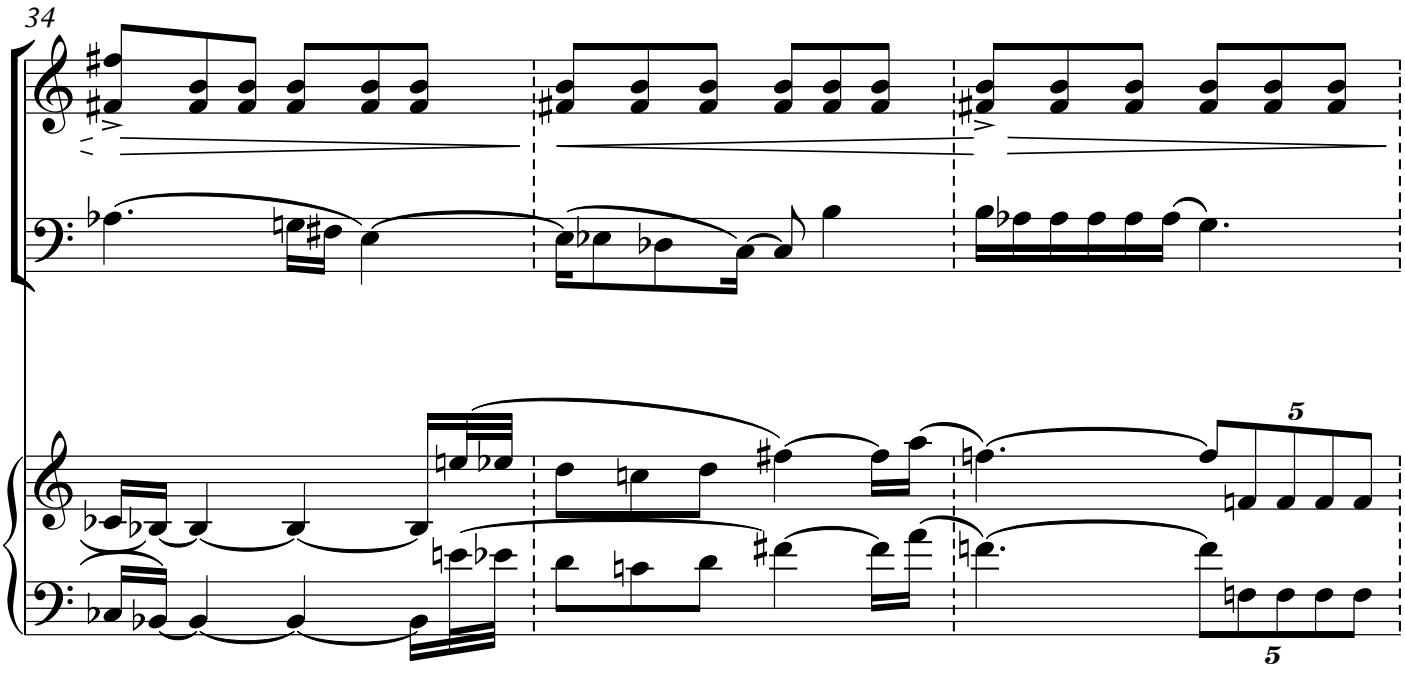

11
sfz f decresc.
sfz
sfz
sfz f decresc.
sfz
sfz
f
8vb
f

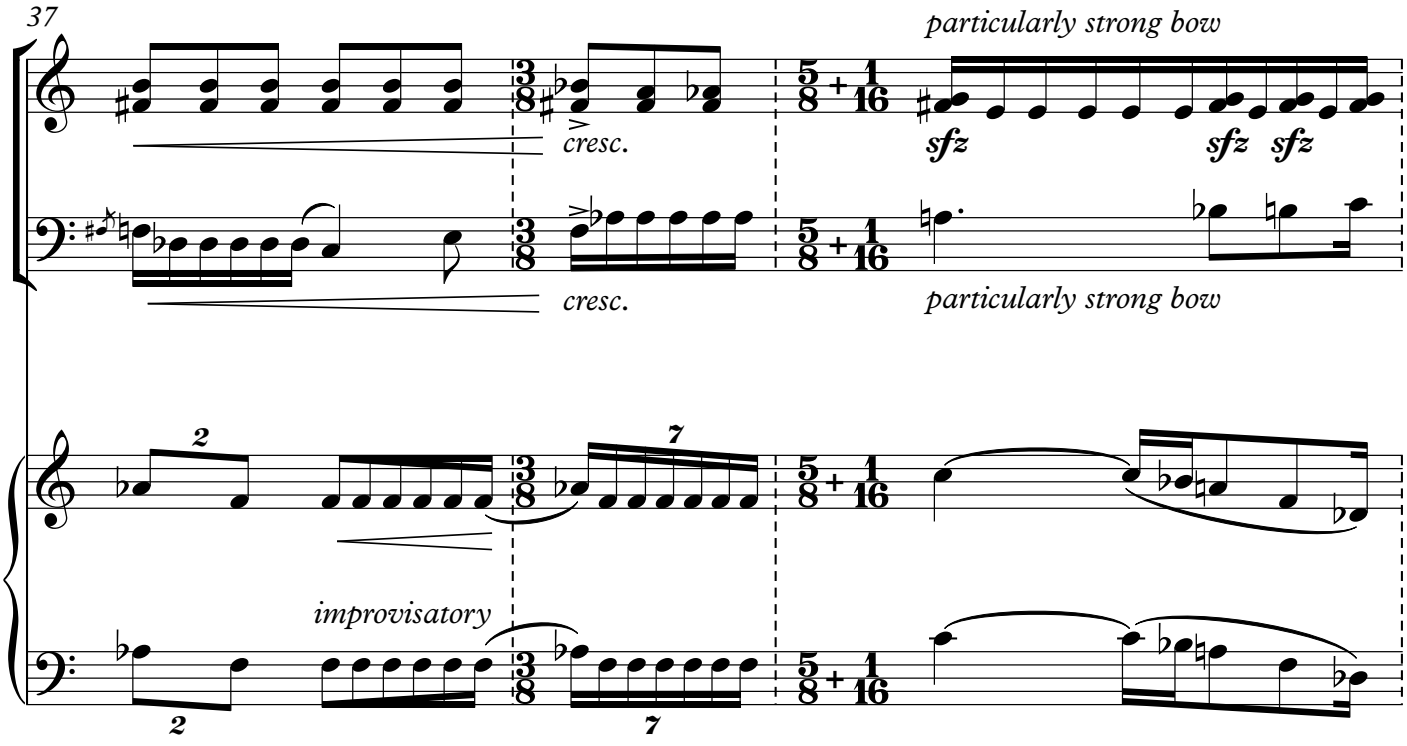

14 come prima
simile
come prima
simile
come prima
mf espress.
mp
p
3
3
4
4

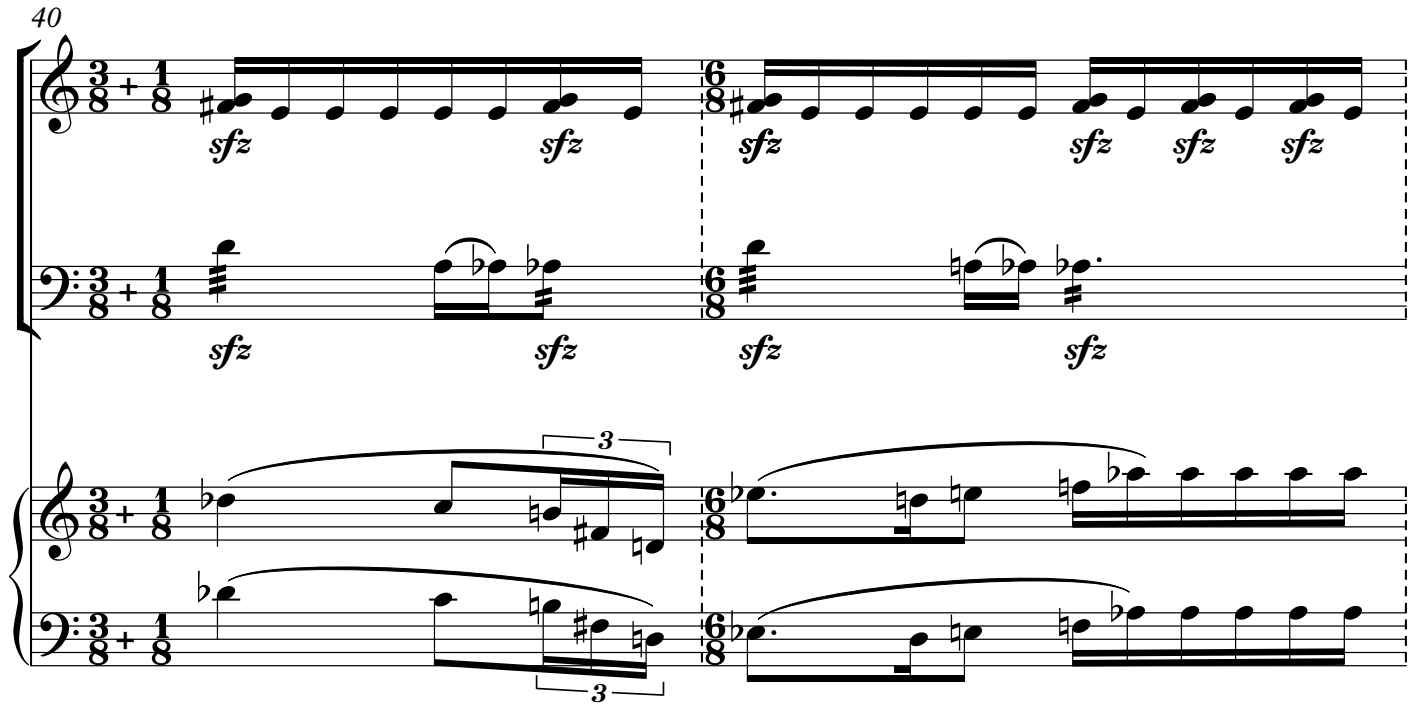

18
sub f
21
24
gliss.
riccochet, sul ponto
col legno
pp
ordinario
mp
come prima
come prima
mp
simile
f

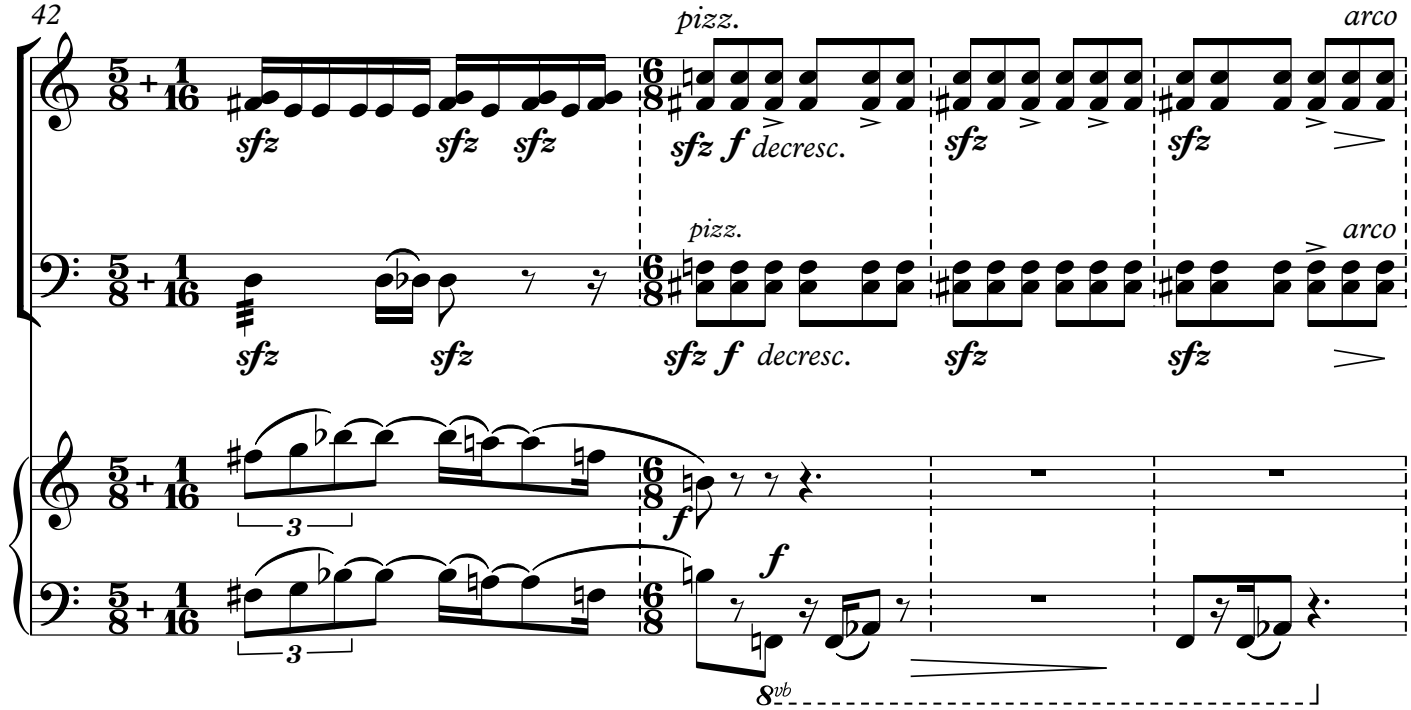

27
simile

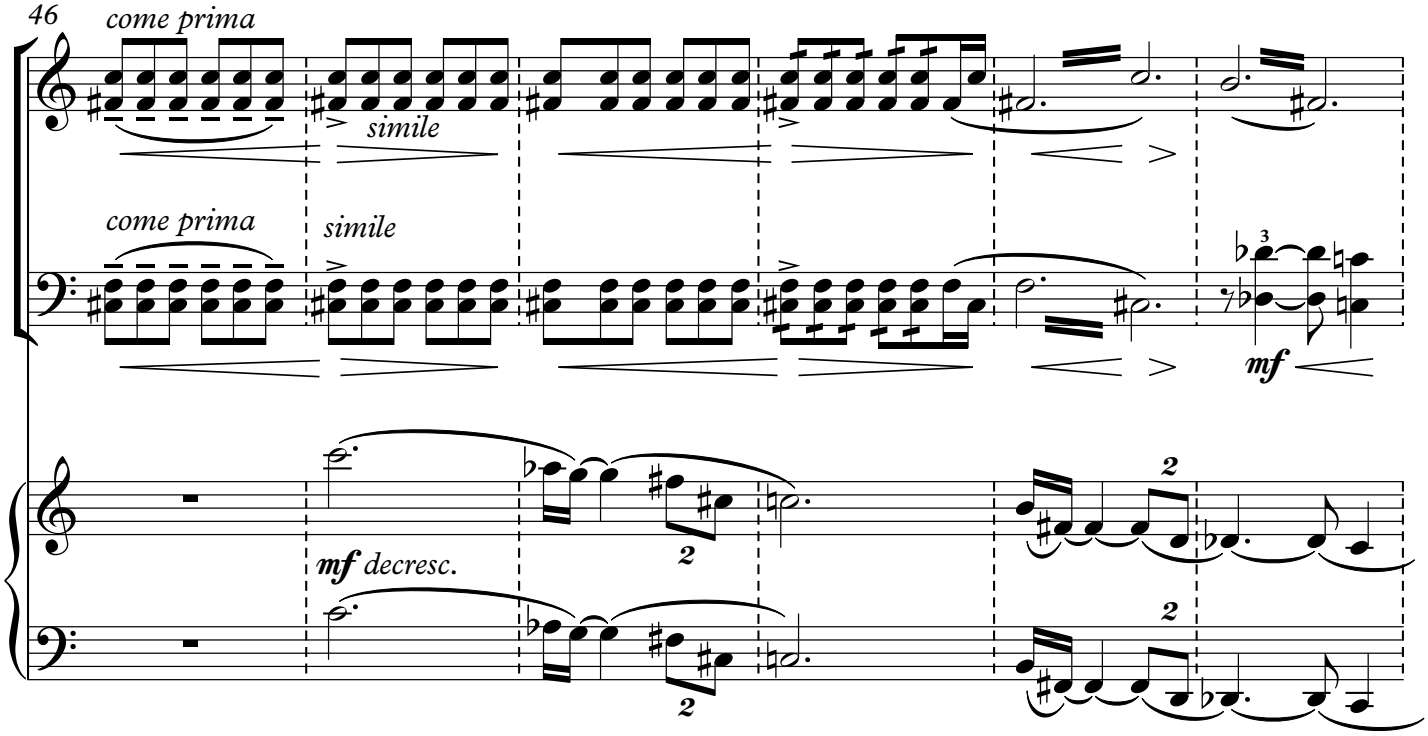

31
humoristic,
next-to-pitch
gliss.
f
f

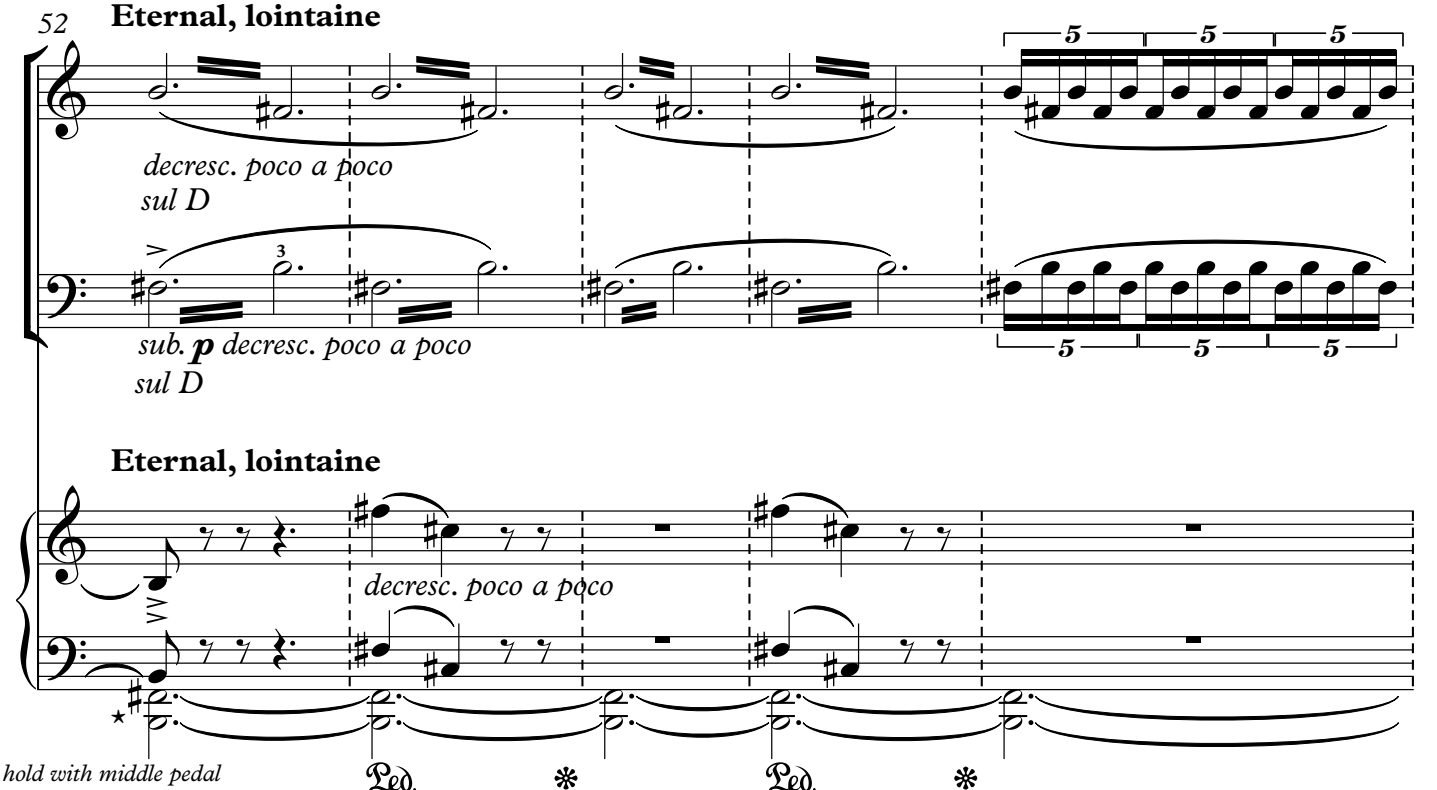

34
5
5

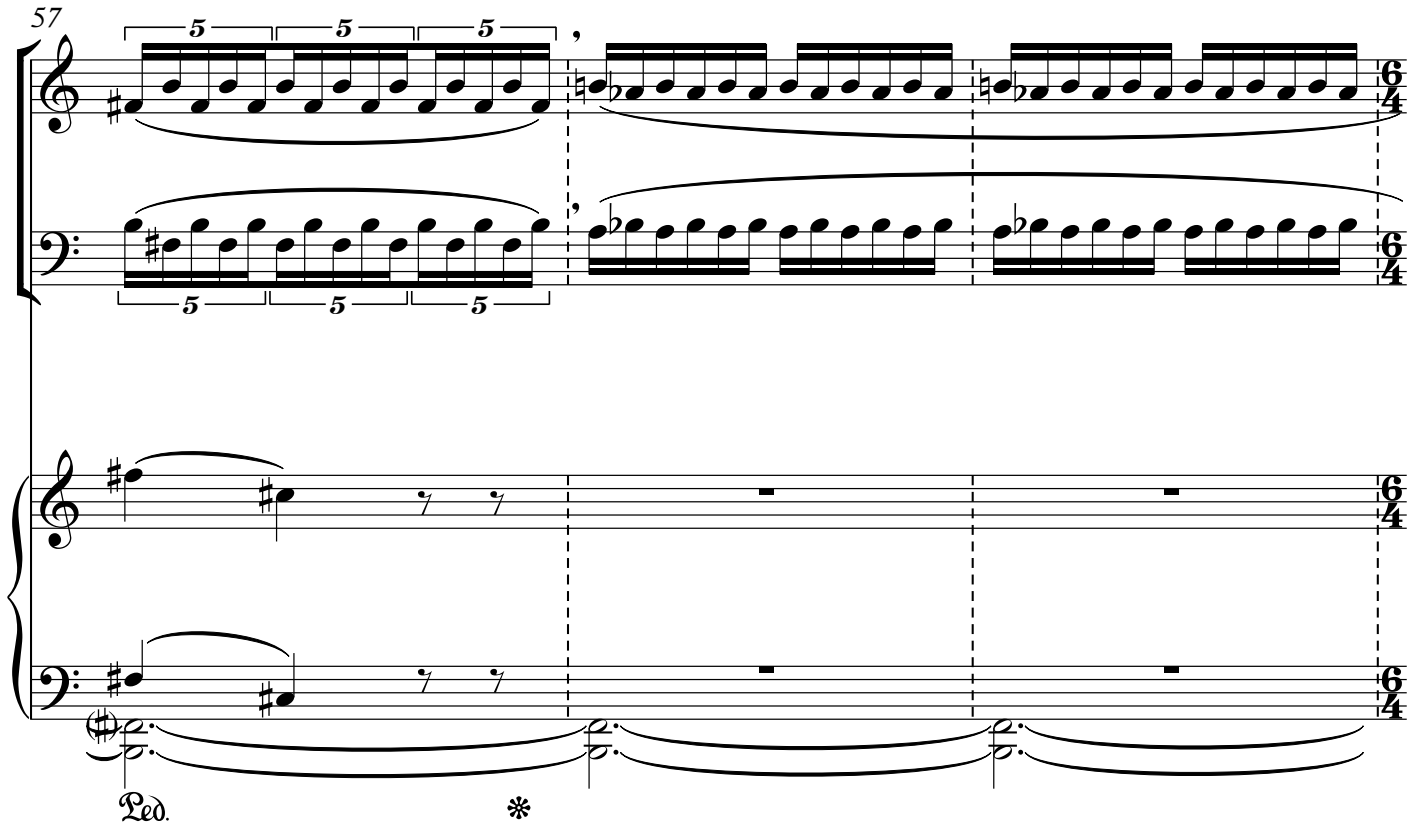

37
particularly strong bow
cresc.
sfz
sfz
sfz
cresc.
particularly strong bow
2
7
improvisatory
2
7

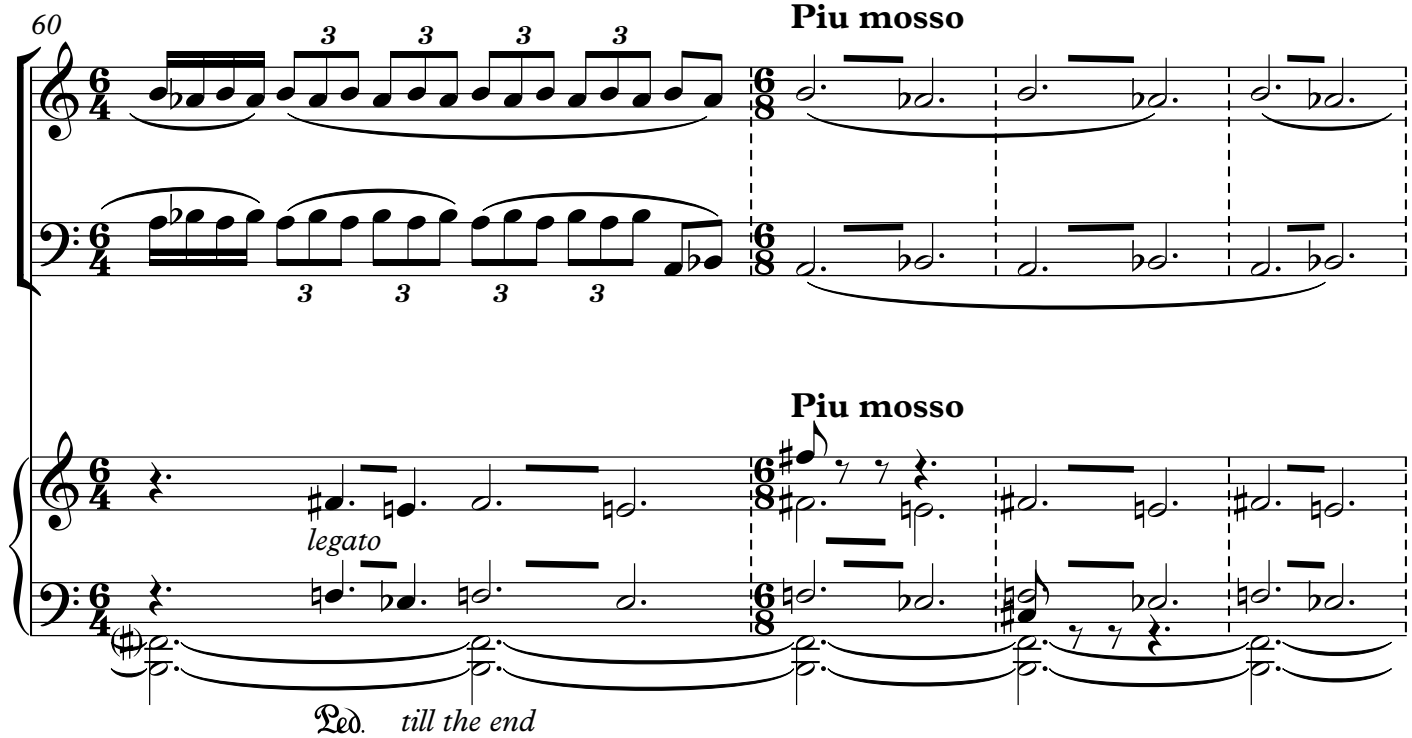

40
sfz
3


42
pizz.
arco
sfz f decresc.
sfz
3
8vb


46
come prima
simile
come prima
simile
mf
mf decresc.


52
Eternal, lointaine
decresc. poco a poco
sul D
sub. p decresc. poco a poco
sul D
Eternal, lointaine
decresc. poco a poco
* hold with middle pedal
then leave to sustain it
Ped.
Ped.


57
Ped.


60
Piu mosso
Piu mosso
legato
Ped.
till the end

64

Calando poco a poco

Calando poco a poco

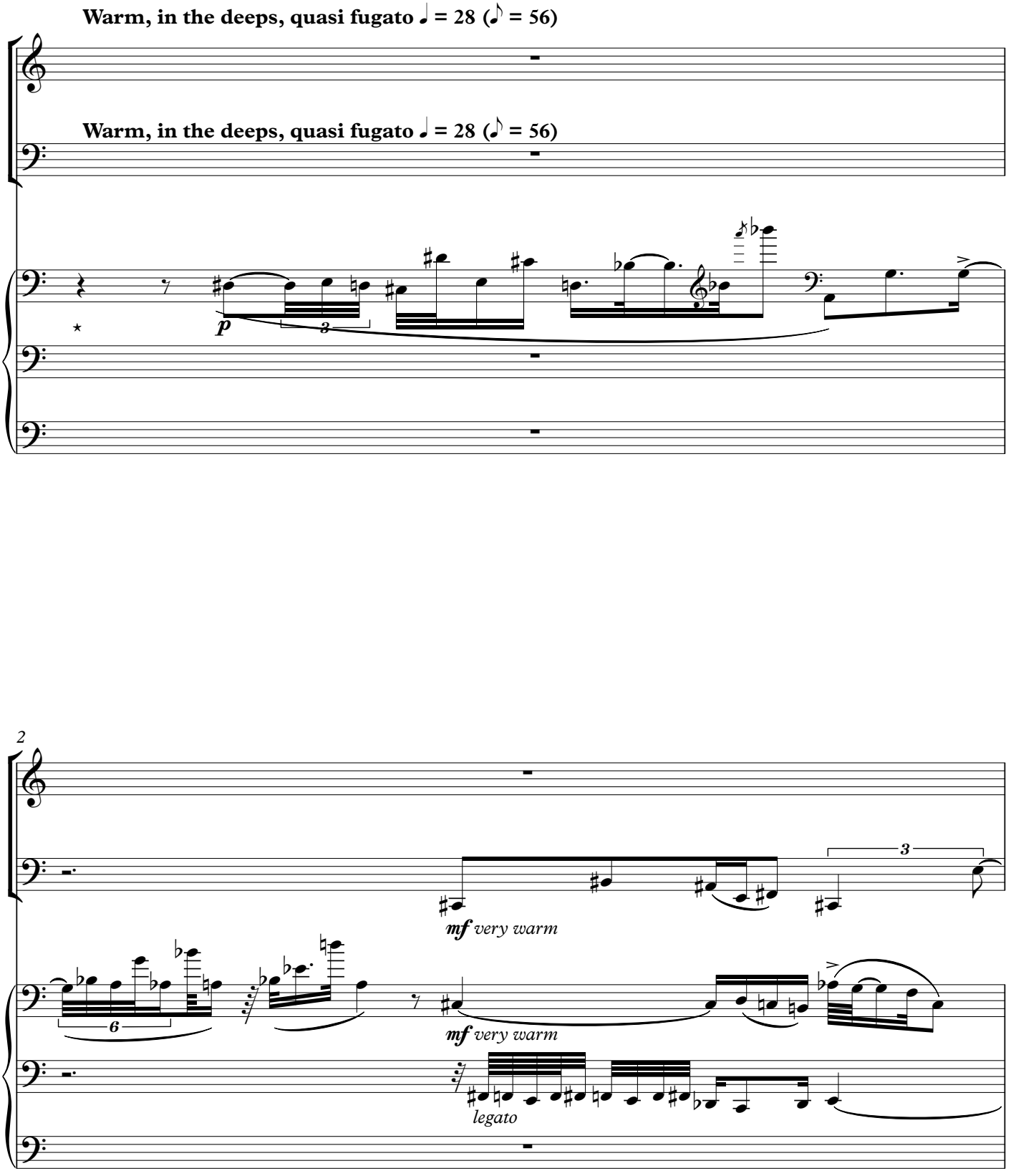
69

ppp

ppp

ppp

Idea 5



* **The middle staff:** Place 2 long glasses (shot glasses) horz. on the piano strings to match exactly the middle bass voice, between a(-3)-g(-2). Place them on the most lower register, on the right corner of the last steel-frame square, in line with the dampers.
Now we can hear two instruments on one piano, with a harpsichord-like effect.

start breaking before the beat

2

3

dolce ma molto espress.

3

8vb

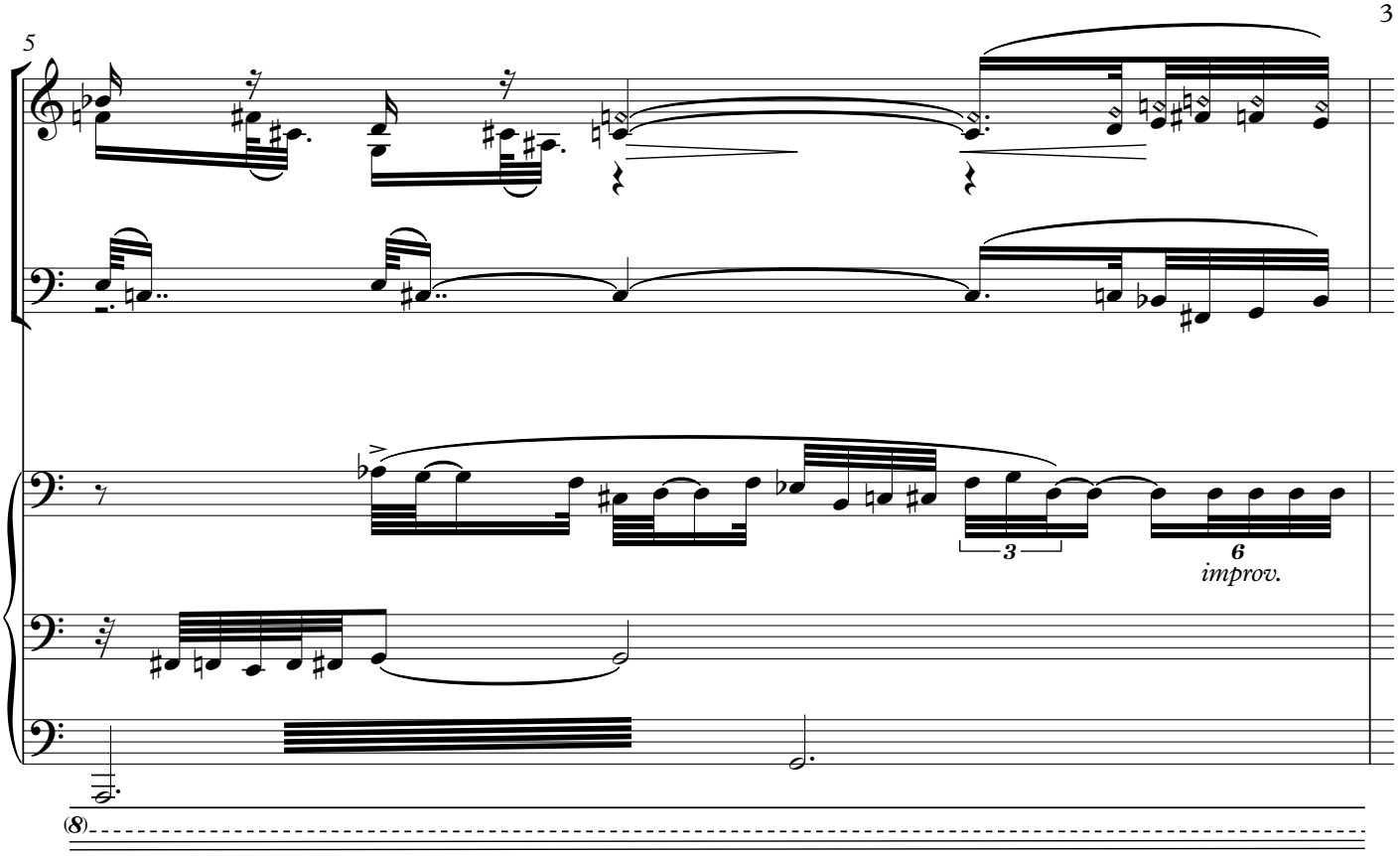
p *mysterioso poco a poco cresc.*
legato unless otherwise instructed

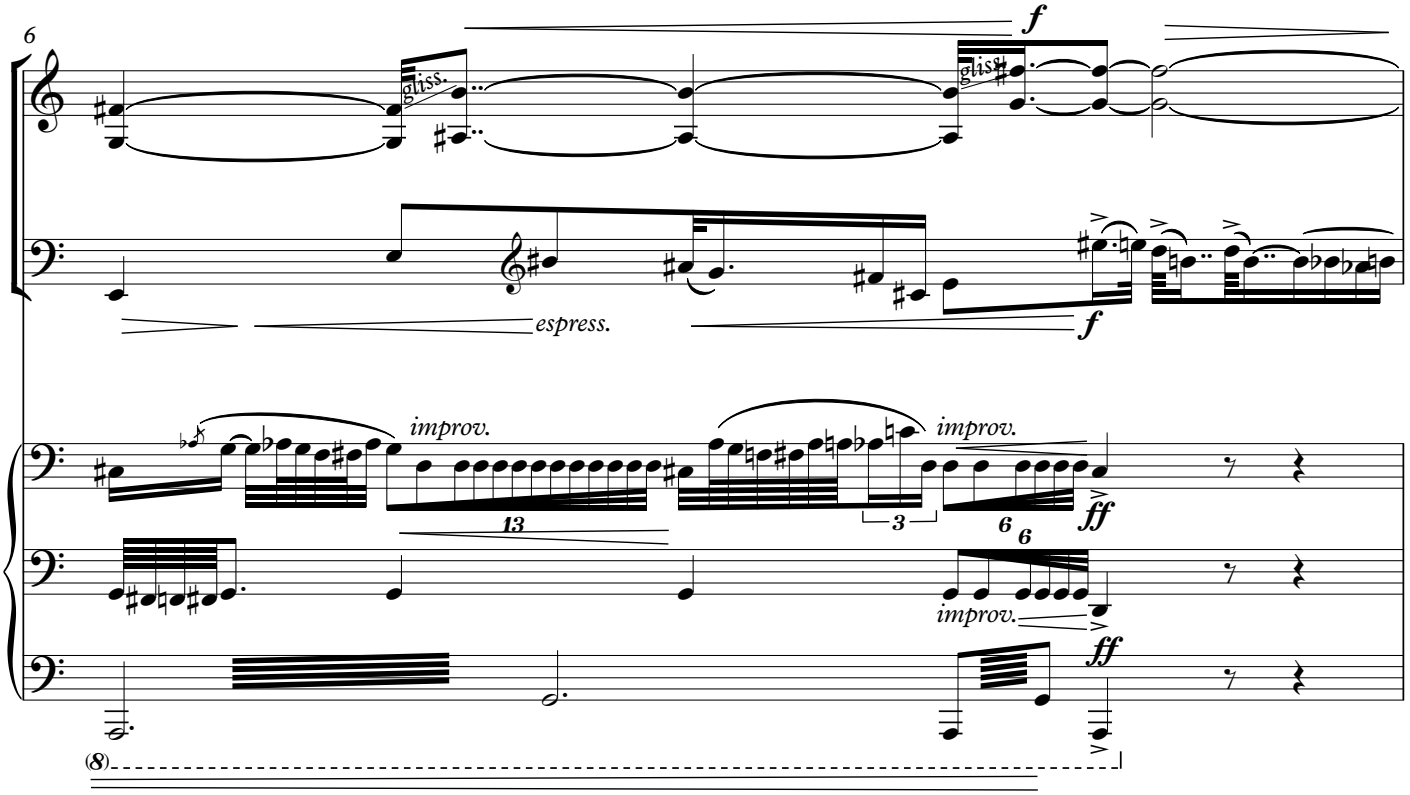
Ped.

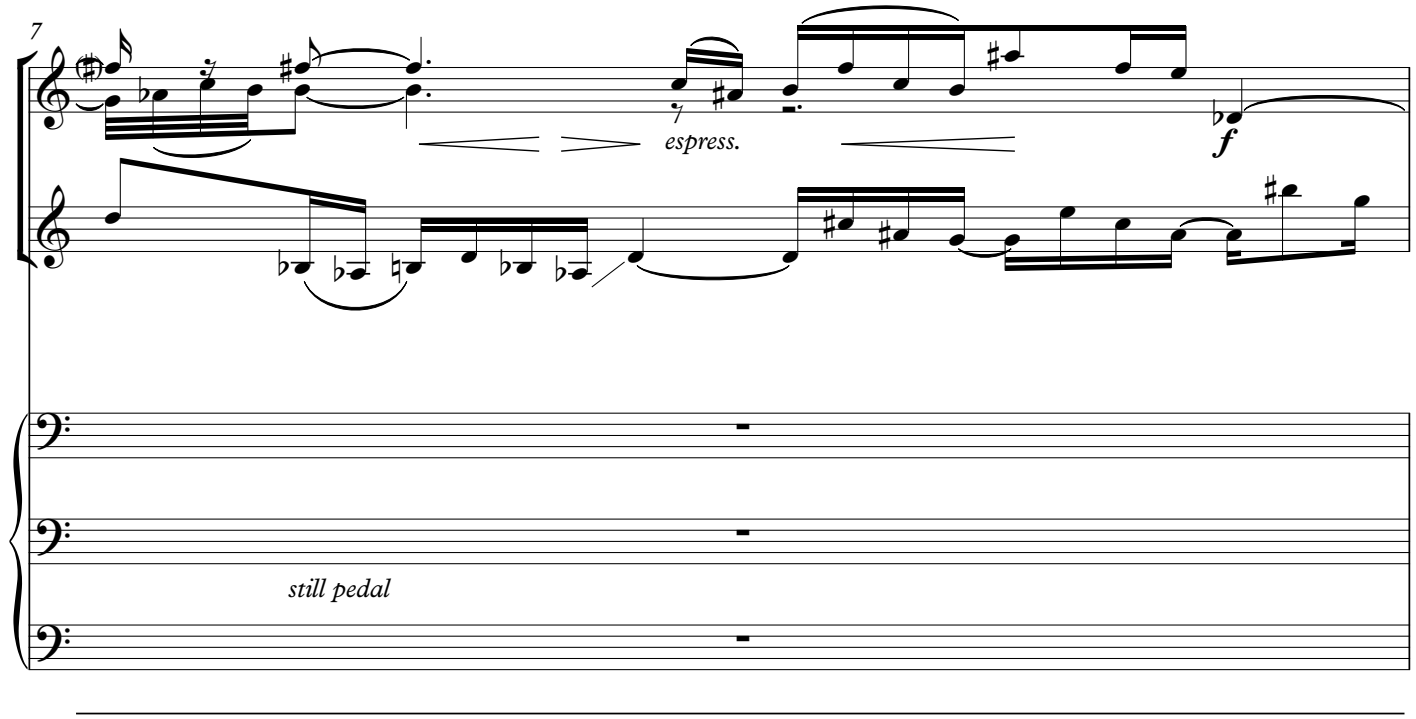
4

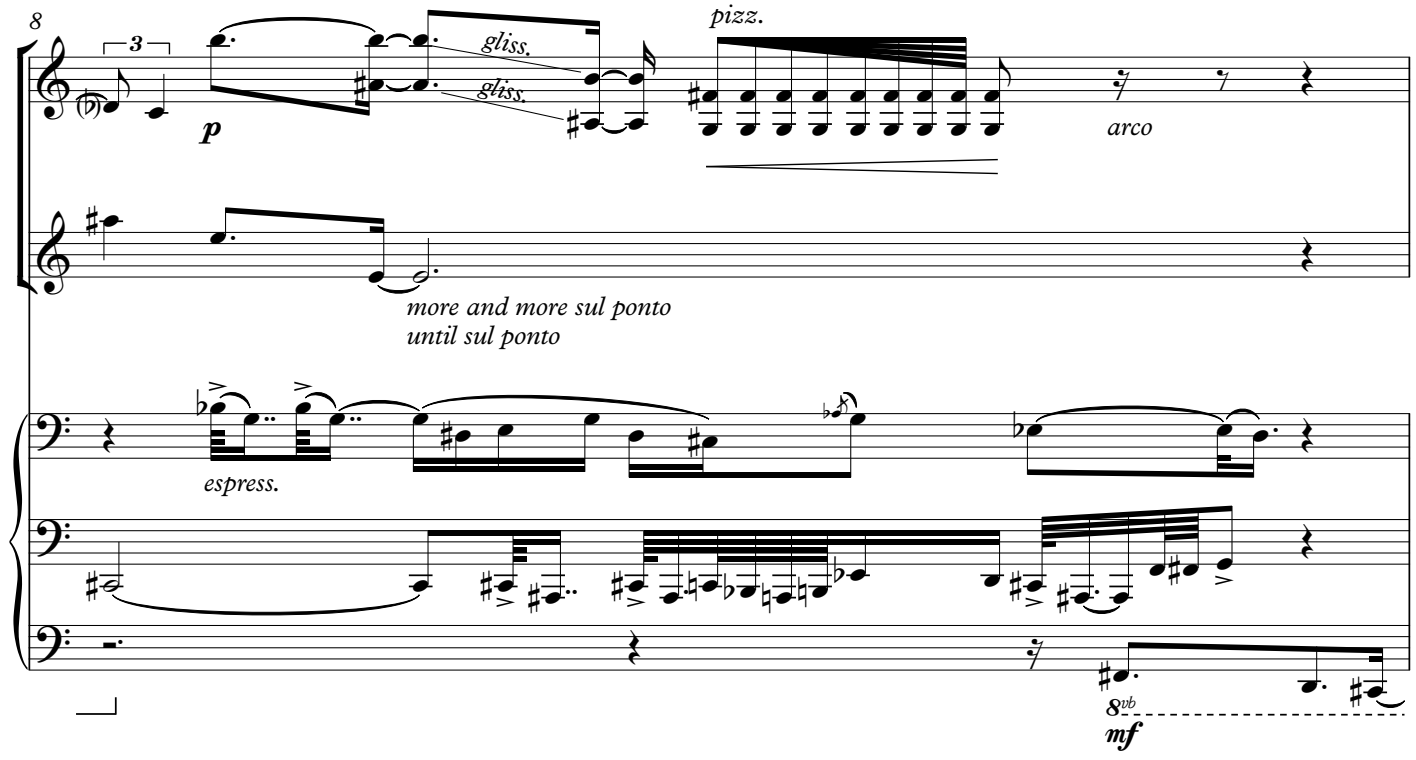
trem. accel.
quasi timpani

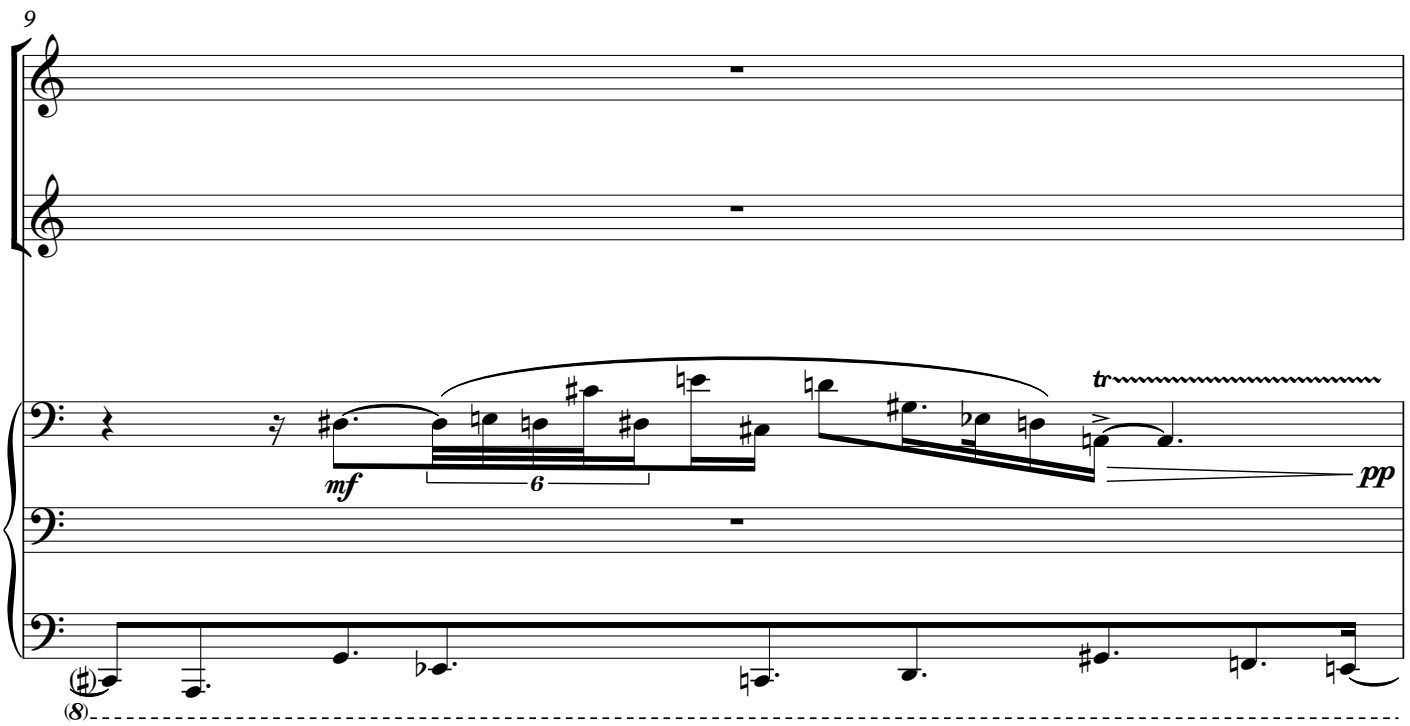
8

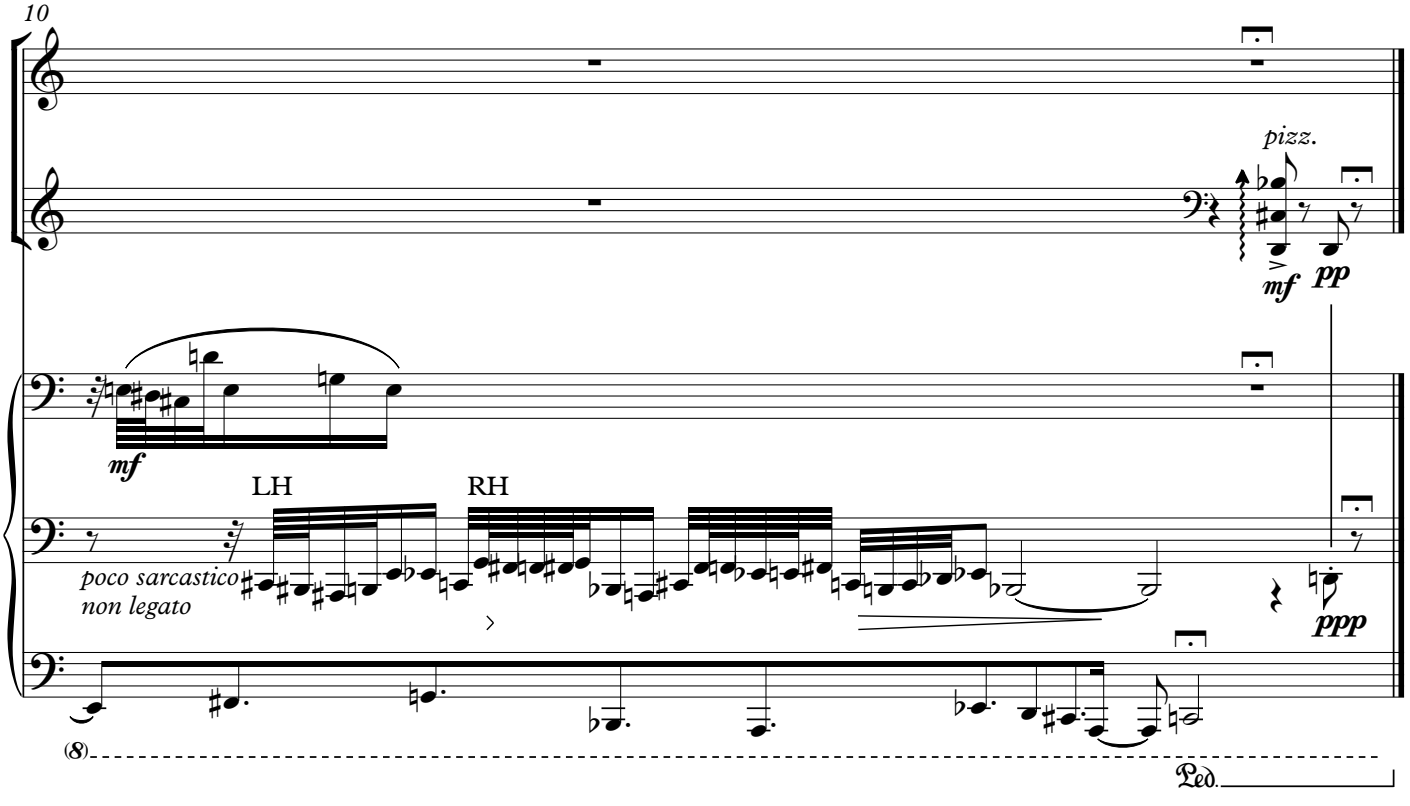

5
3
6
improv.
(8)


6
f
gliss.
gliss.
espress.
f
improv.
13
improv.
3
6
6
ff
improv.
ff
(8)


7
espress.
f
still pedal


8
3
p
gliss.
gliss.
pizz.
arco
more and more sul ponto
until sul ponto
espress.
8vb
mf

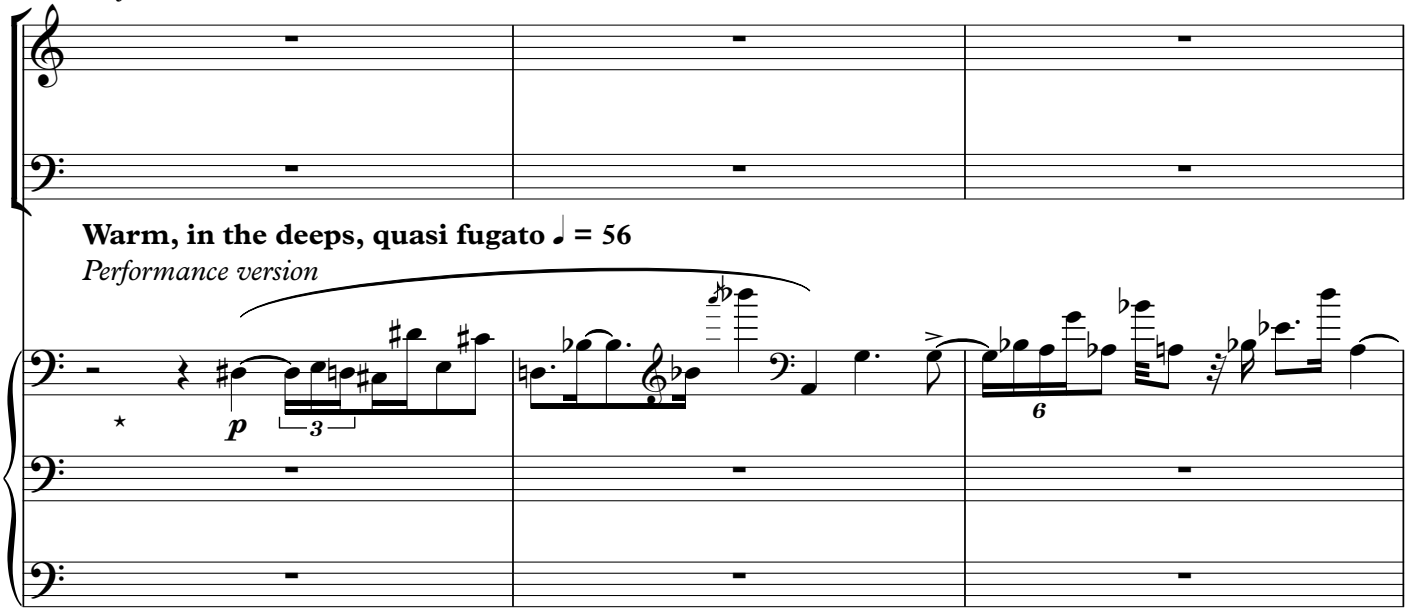

9
mf
6
tr
pp
8


10
pizz.
mf
pp
mf
LH
RH
poco sarcastico
non legato
ppp
8
Ped.

Idea 5

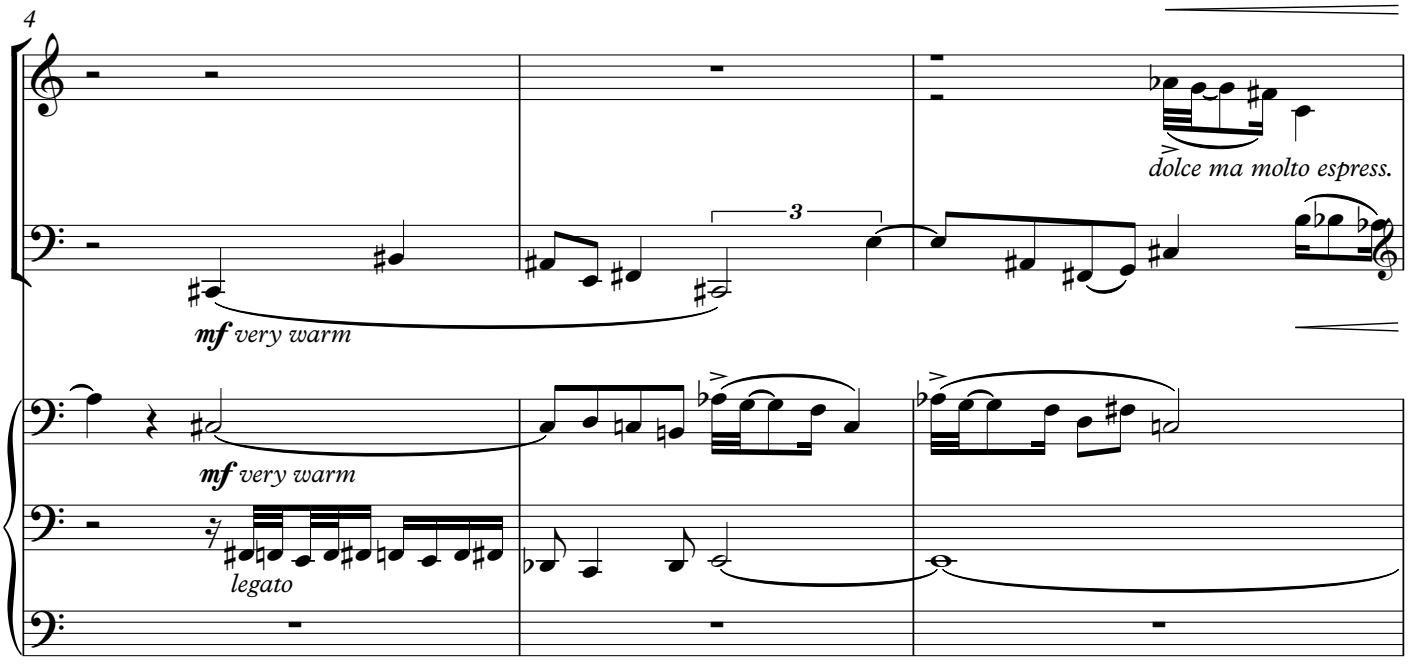
Warm, in the deeps, quasi fugato ♩ = 56

Performance version



Warm, in the deeps, quasi fugato ♩ = 56

Performance version



* **The middle staff:** Place 2 long glasses (shot glasses) horz. on the piano strings to match exactly the middle bass voice, between a(-3)-g(-2). Place them on the most lower register, on the right corner of the last steel-frame square, in line with the dampers.
Now we can hear two instruments on one piano, with a harpsichord-like effect.

7

start breaking before the beat

3

8vb

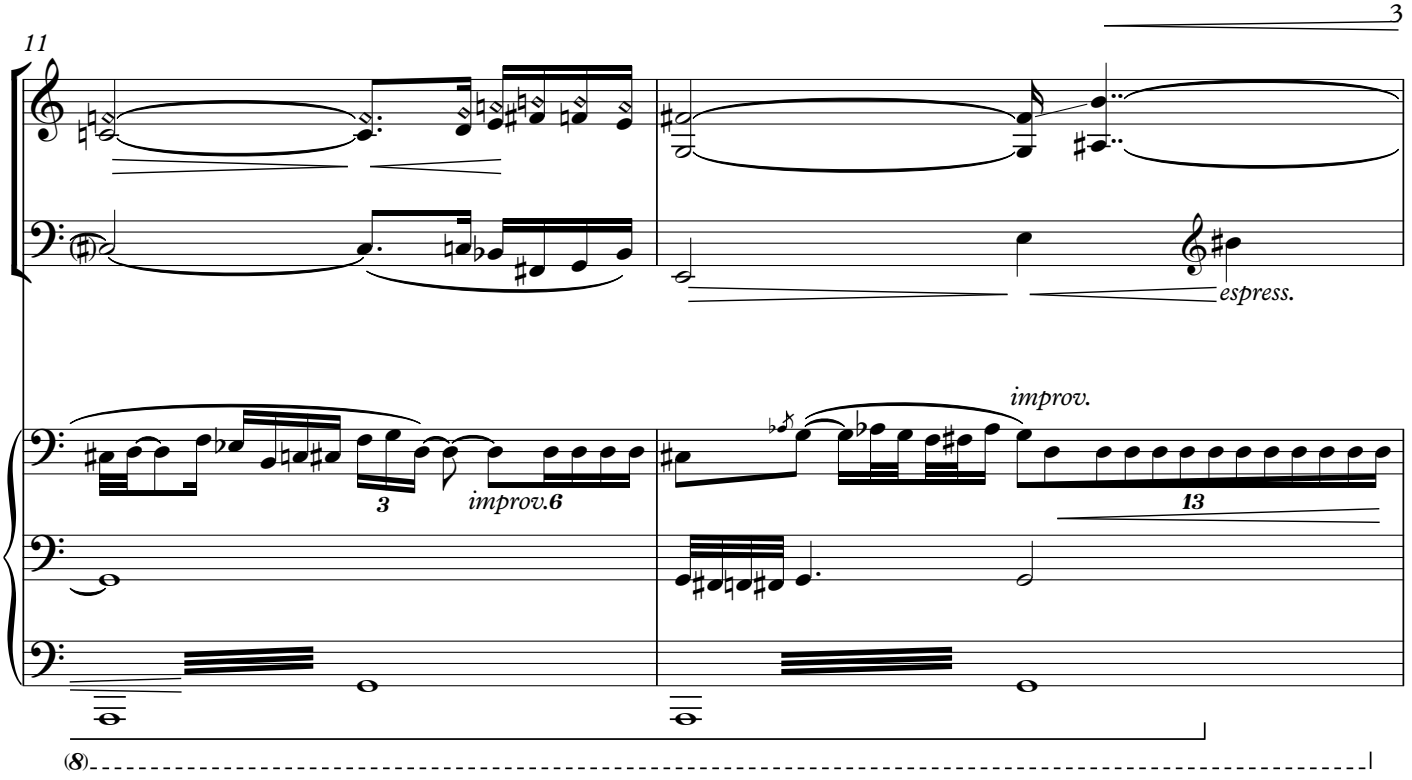
p *mysterioso poco a poco cresc.*
legato unless otherwise instructed

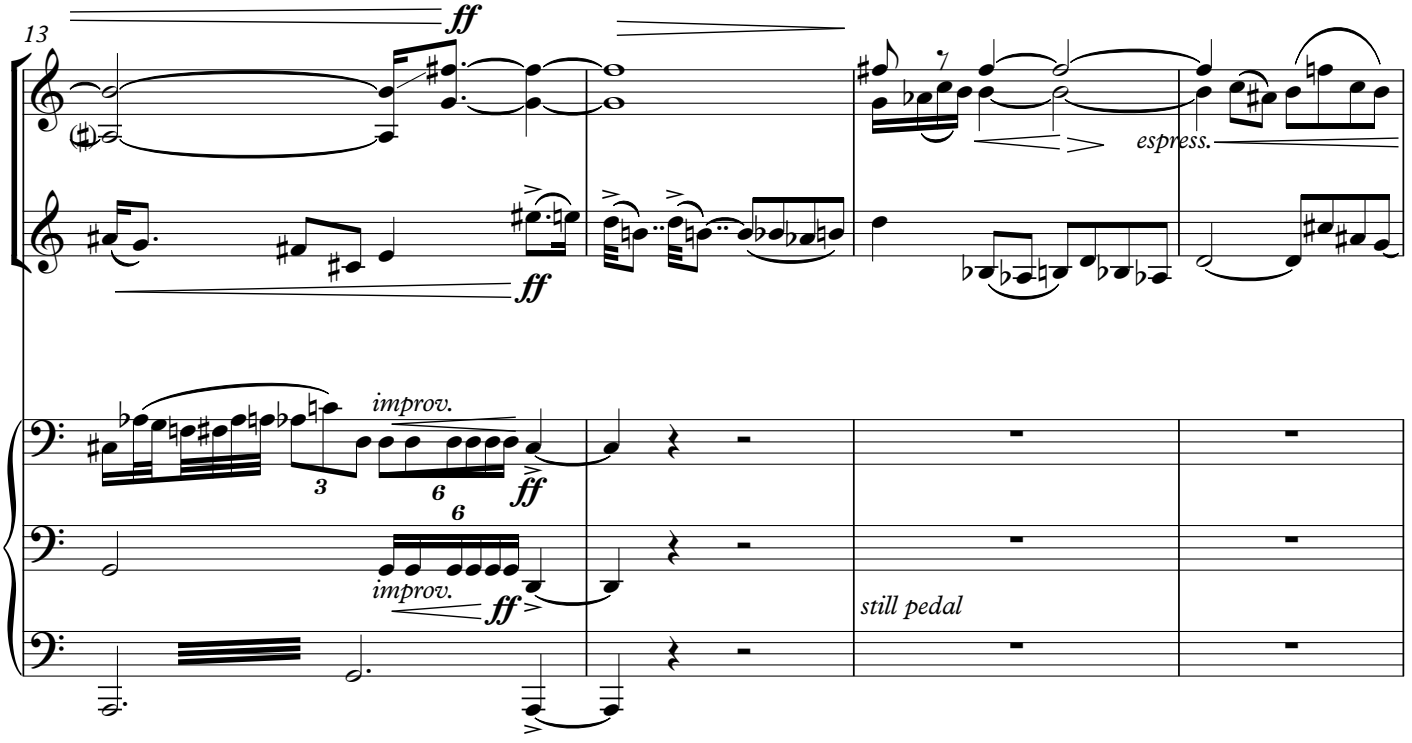
trem. accel.
quasi timpani

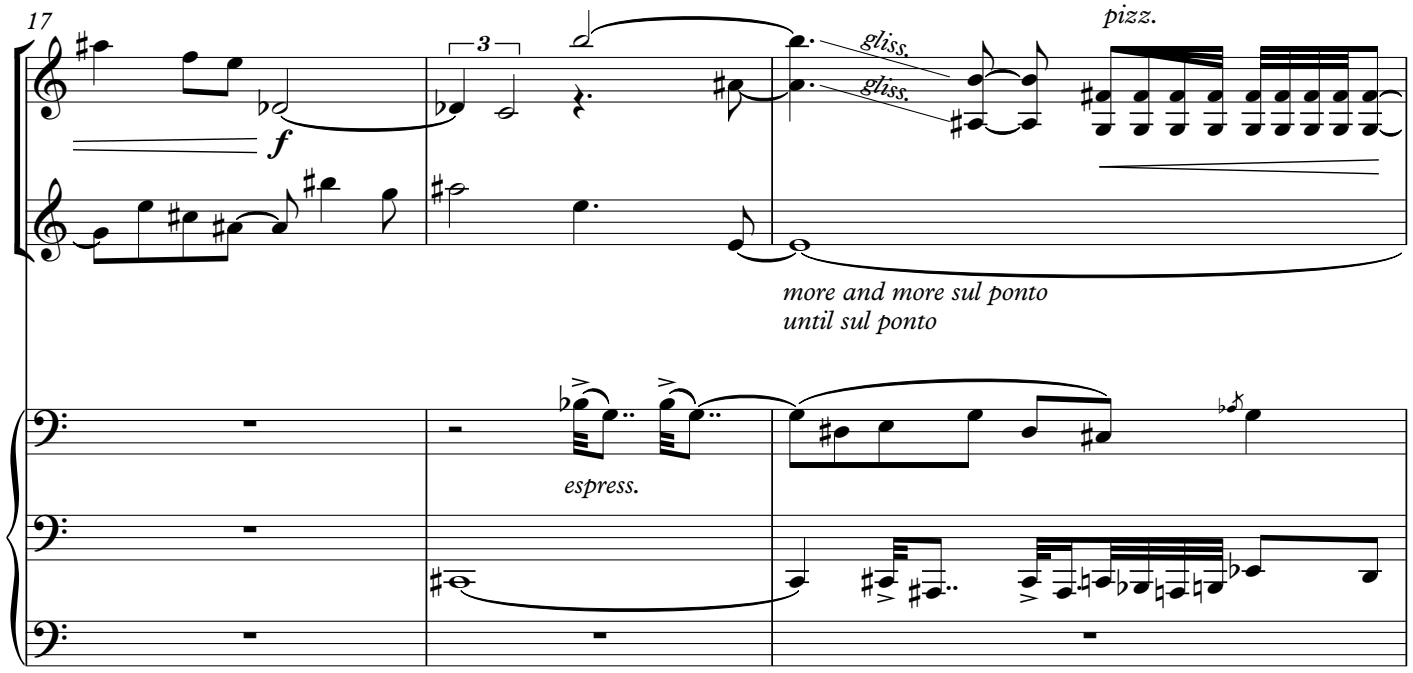
Ped.

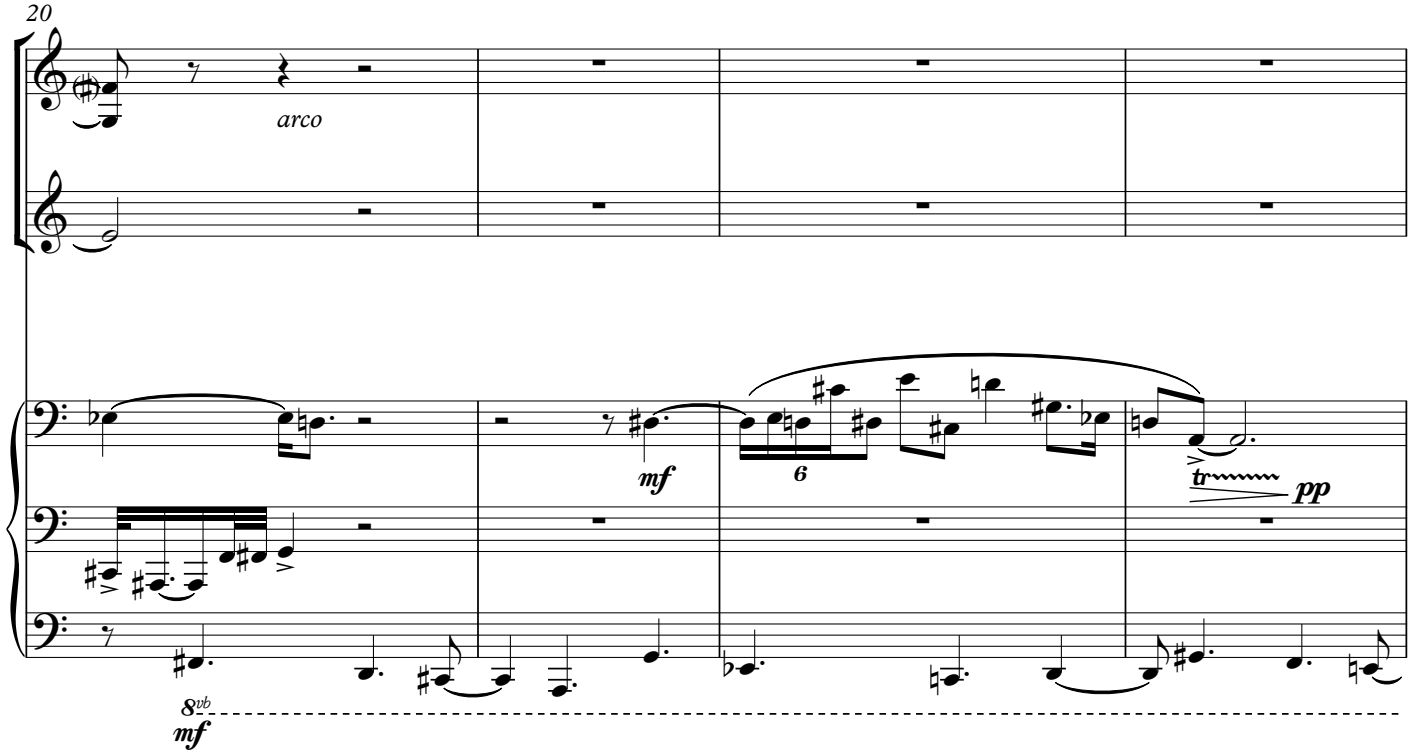
9

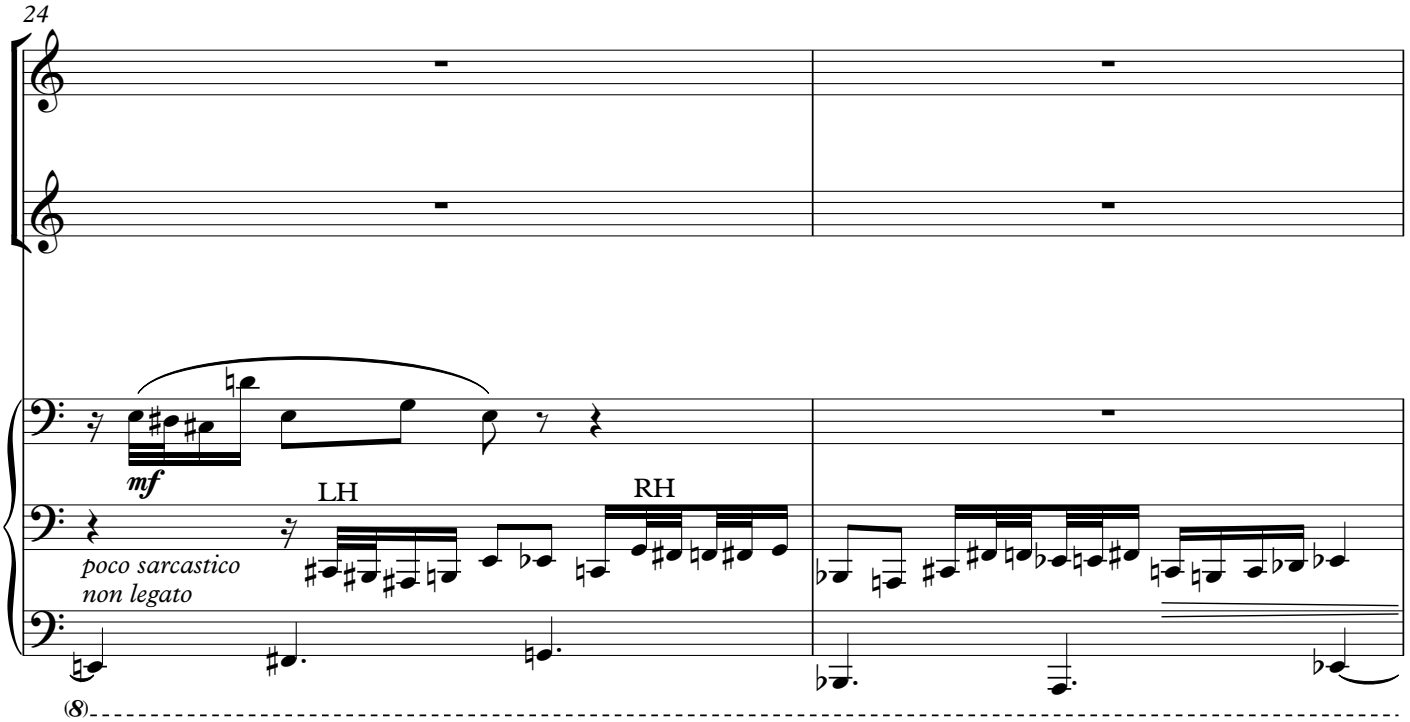
(8)

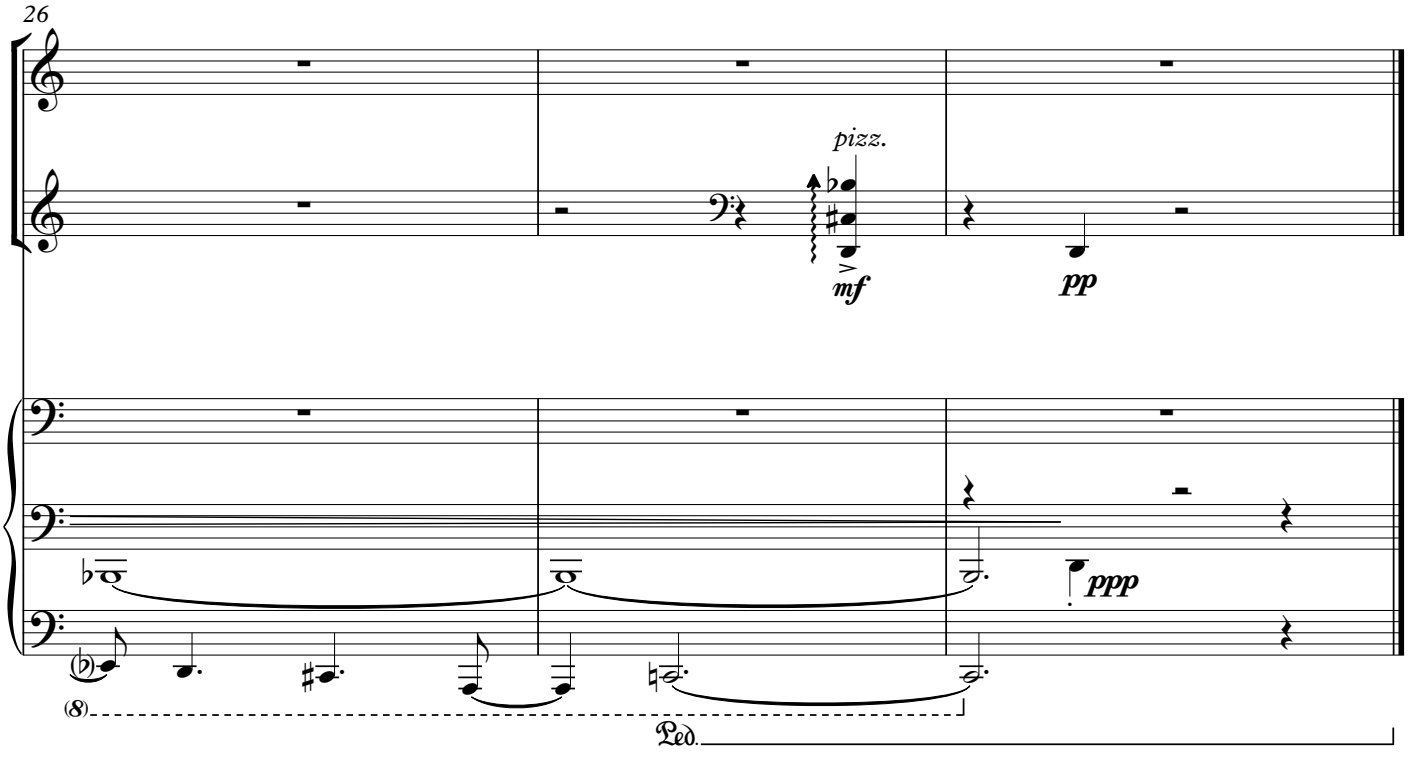

11
espress.
improv.
improv.6
3
13
(8)


13
ff
ff
espress.
improv.
3
6
6
ff
improv.
ff
still pedal

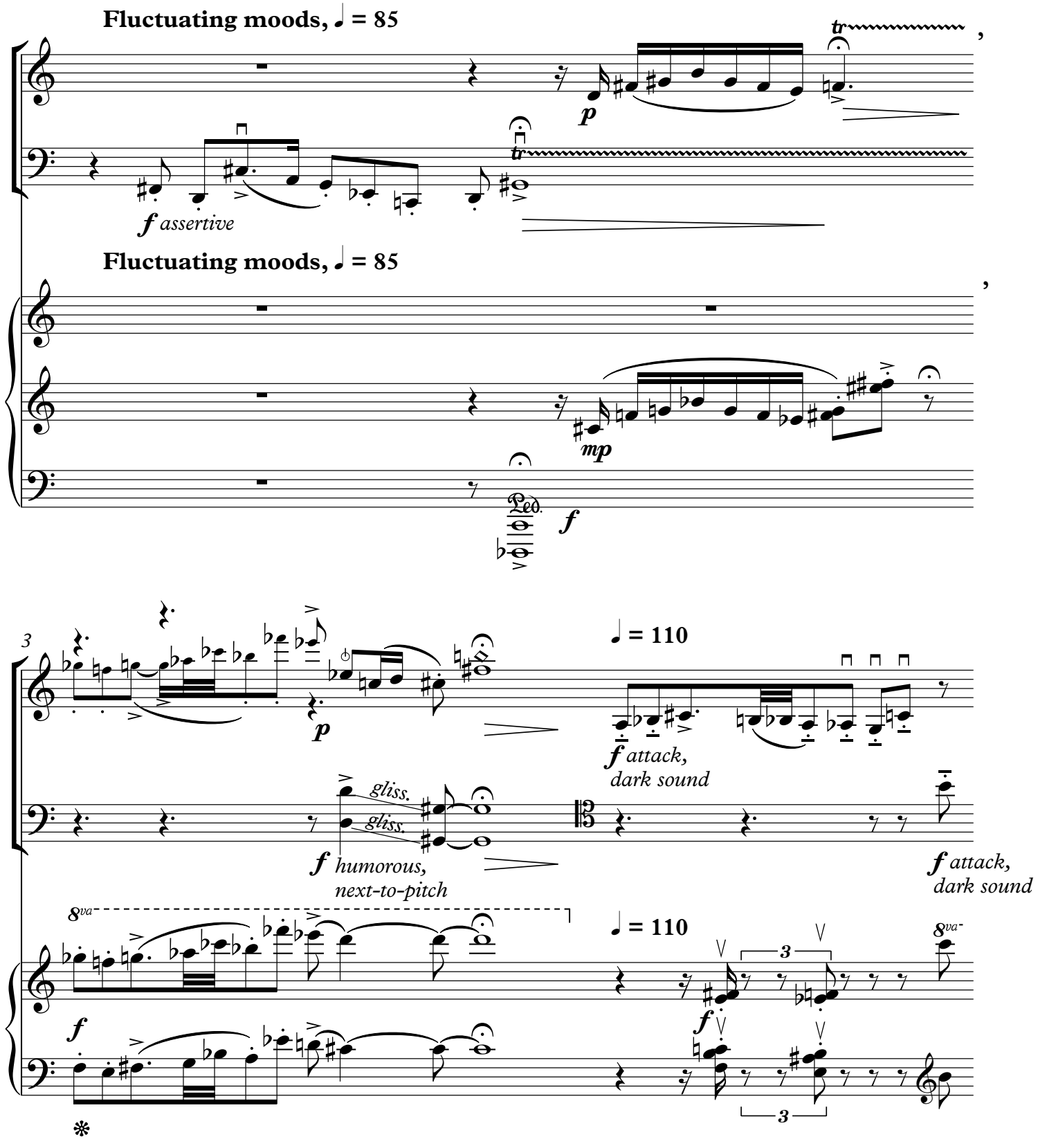

17
f
3
gliss.
gliss.
pizz.
more and more sul ponto
until sul ponto
espress.

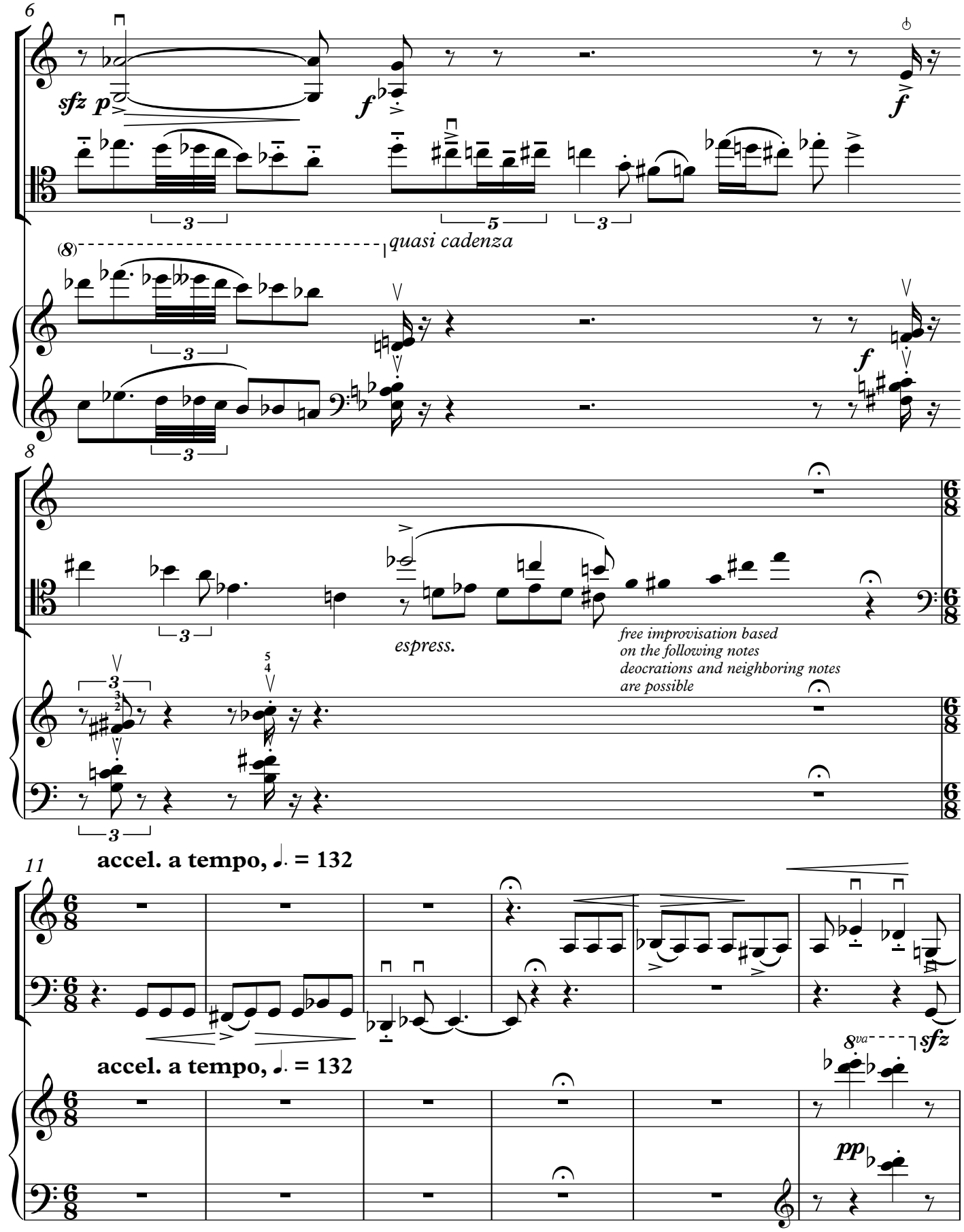

20
arco
mf
6
tr
pp
8vb
mf

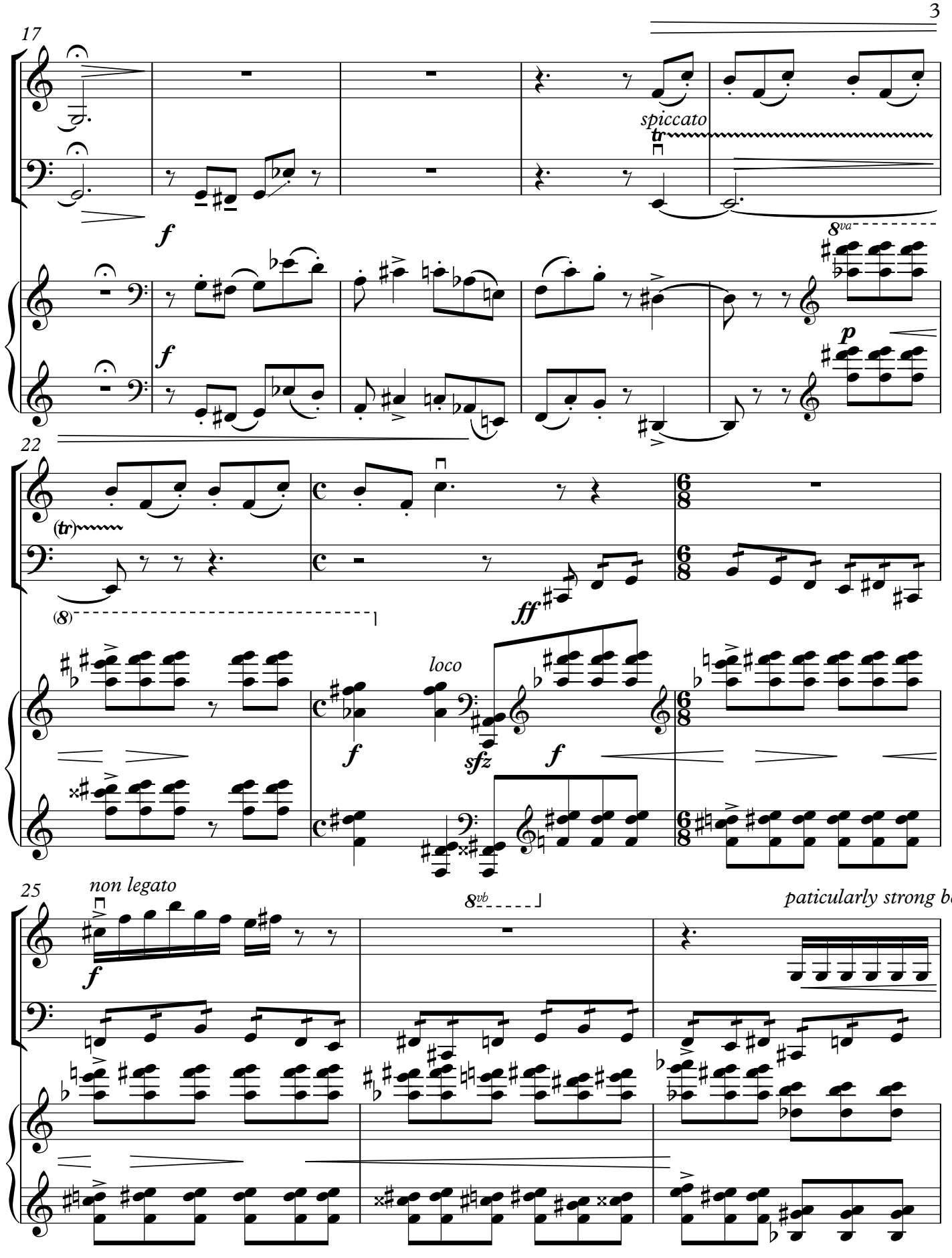

24
mf
LH
RH
poco sarcastico
non legato
8

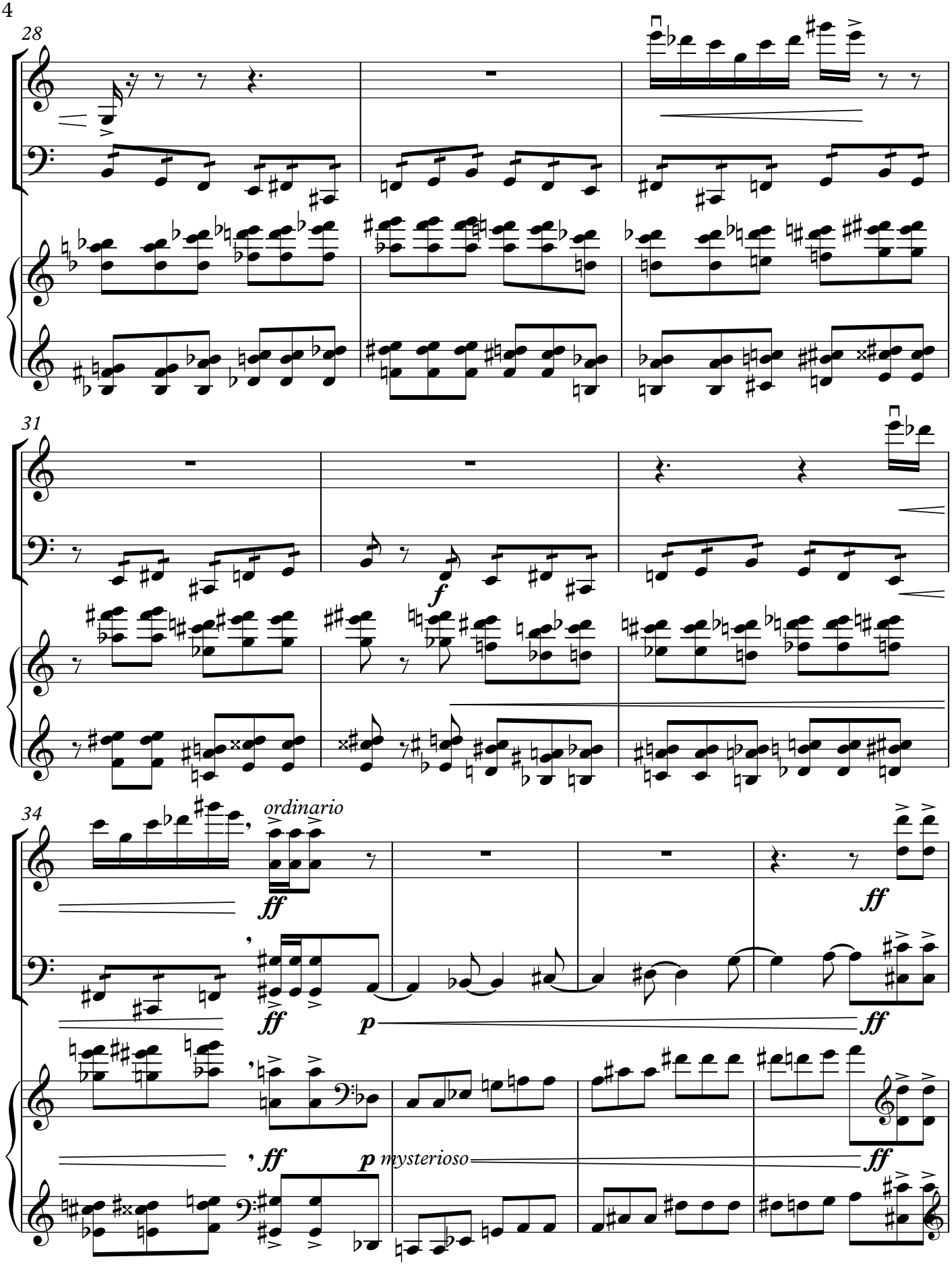

26
pizz.
mf
pp
ppp
8
Ped.

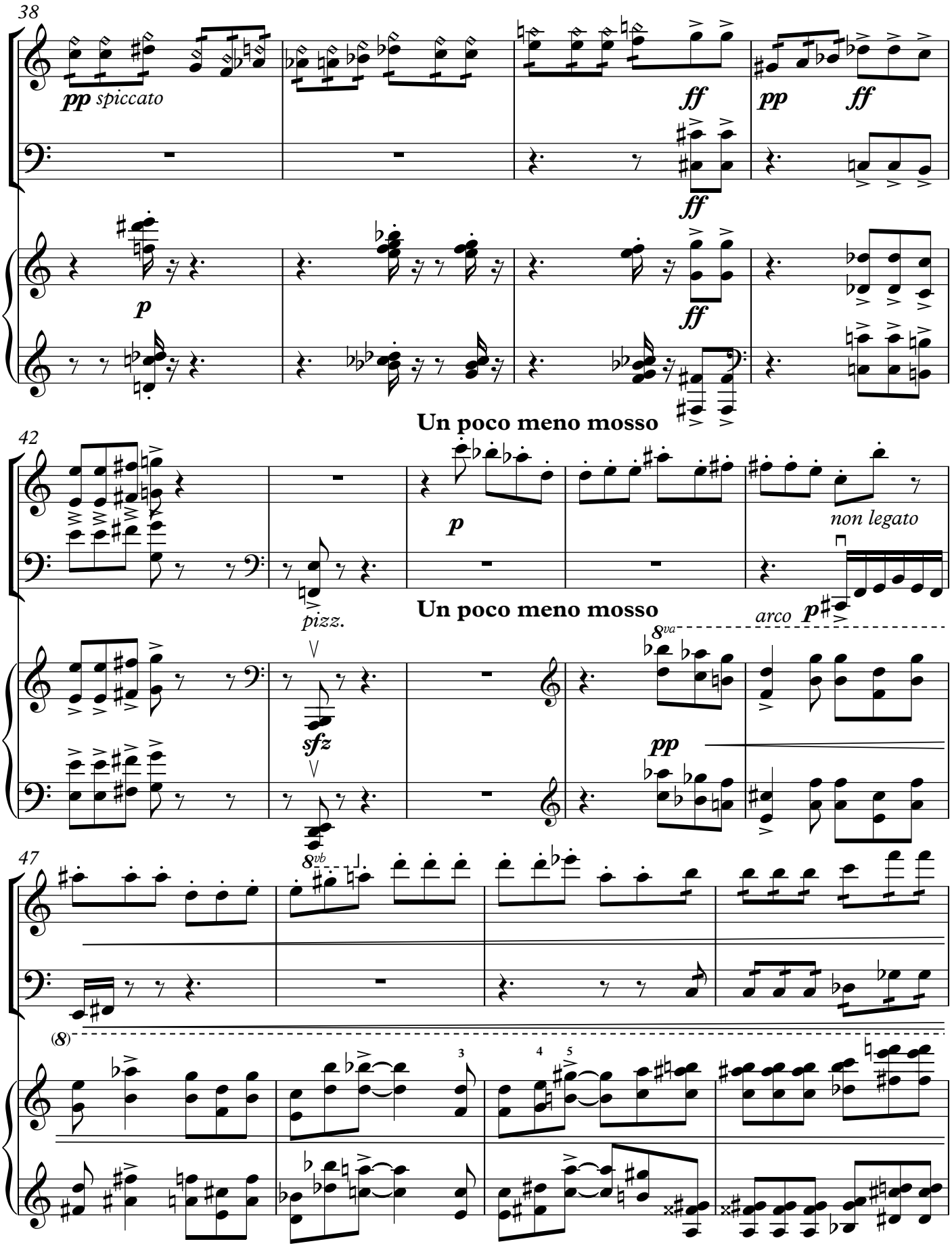
Idea 6

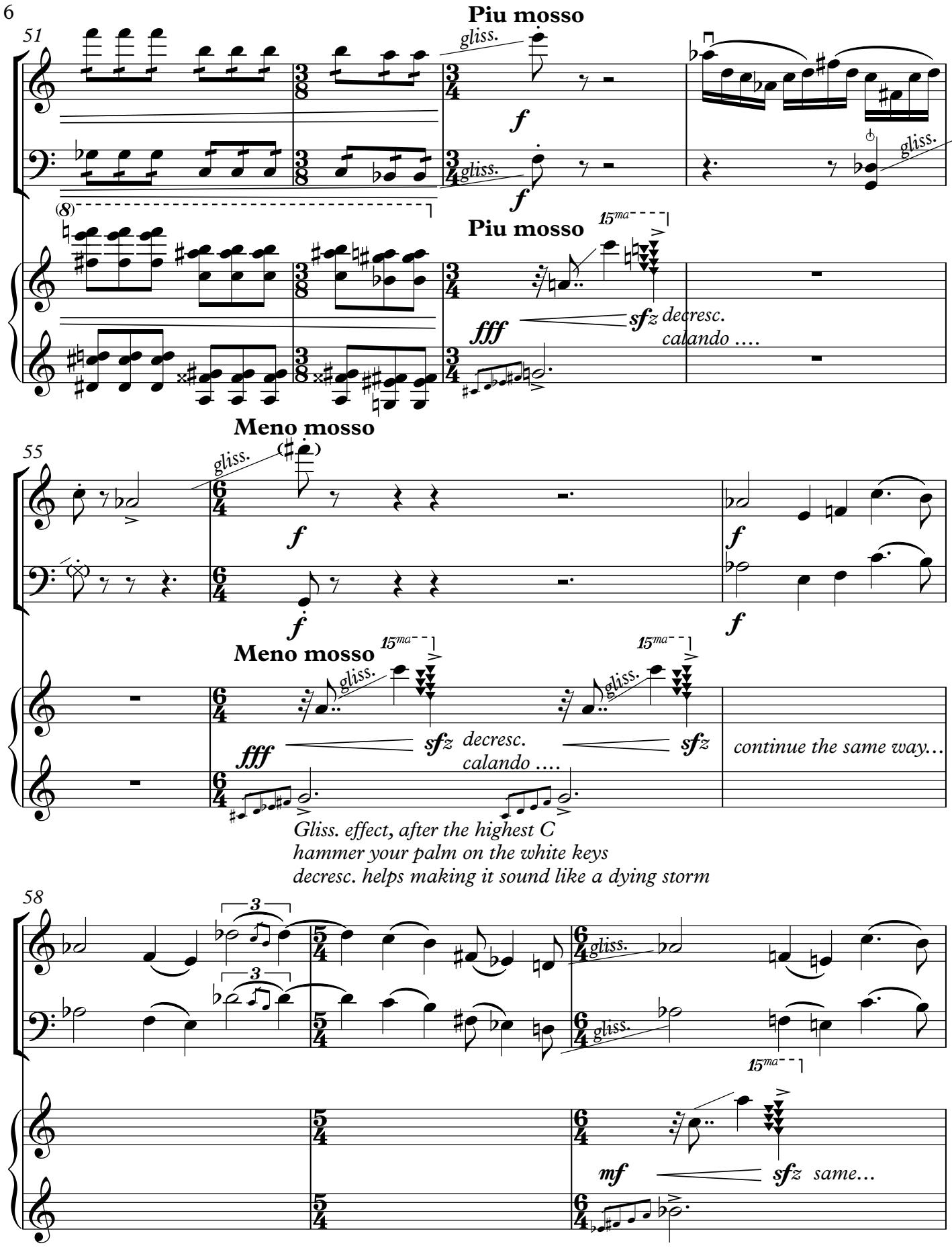

Fluctuating moods, ♩ = 85
tr
p
f assertive
tr
Fluctuating moods, ♩ = 85
mp
Ped.
f
3
p
♩ = 110
f attack, dark sound
gliss.
gliss.
f humorous, next-to-pitch
f attack, dark sound
8va
f
♩ = 110
3
f
8va
3
*

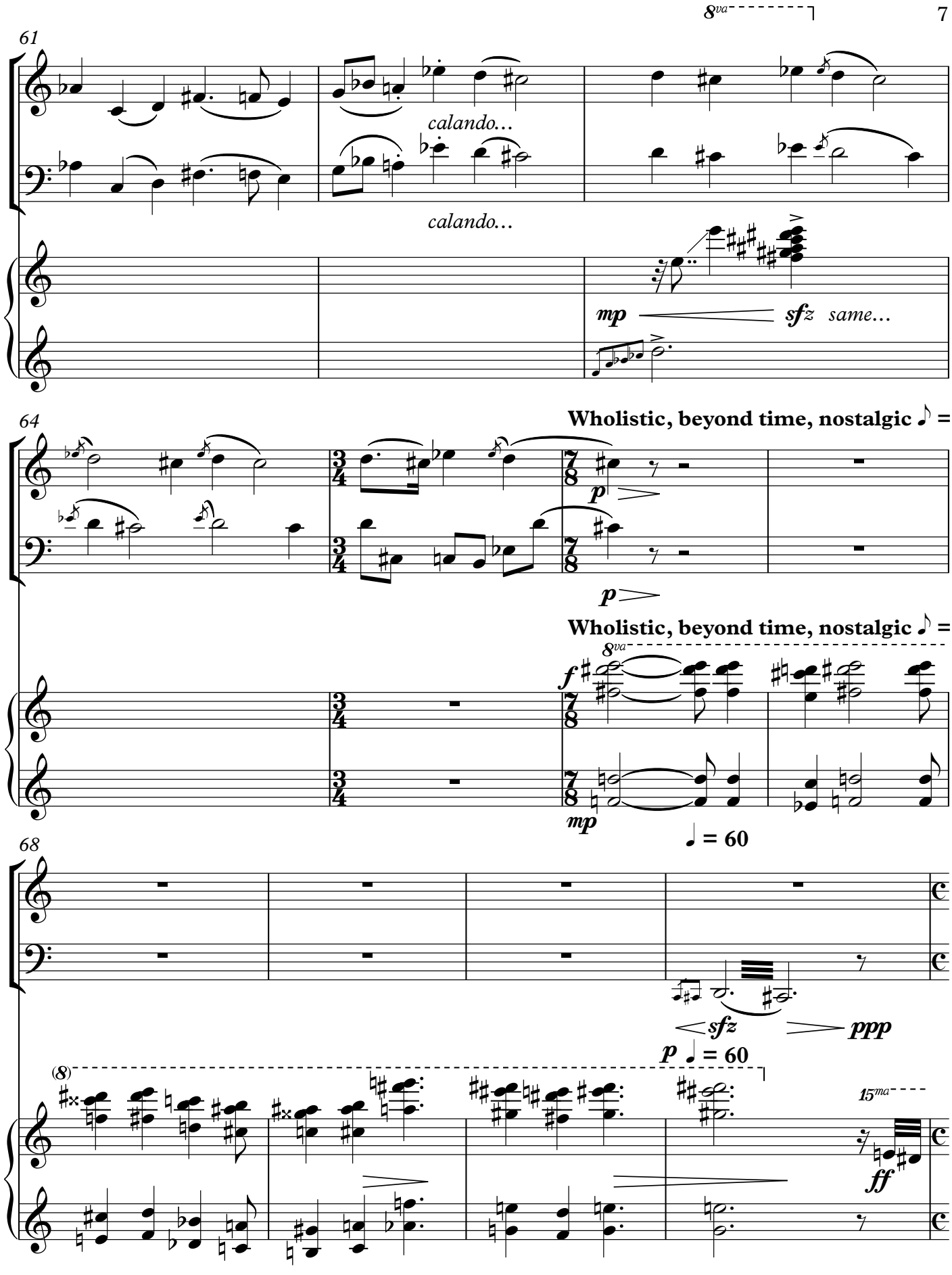

6
sfz p
f
f
(8)
quasi cadenza
8
espress.
free improvisation based
on the following notes
deocrations and neighboring notes
are possible
11
accel. a tempo, ♩. = 132
accel. a tempo, ♩. = 132
8va
sfz
pp

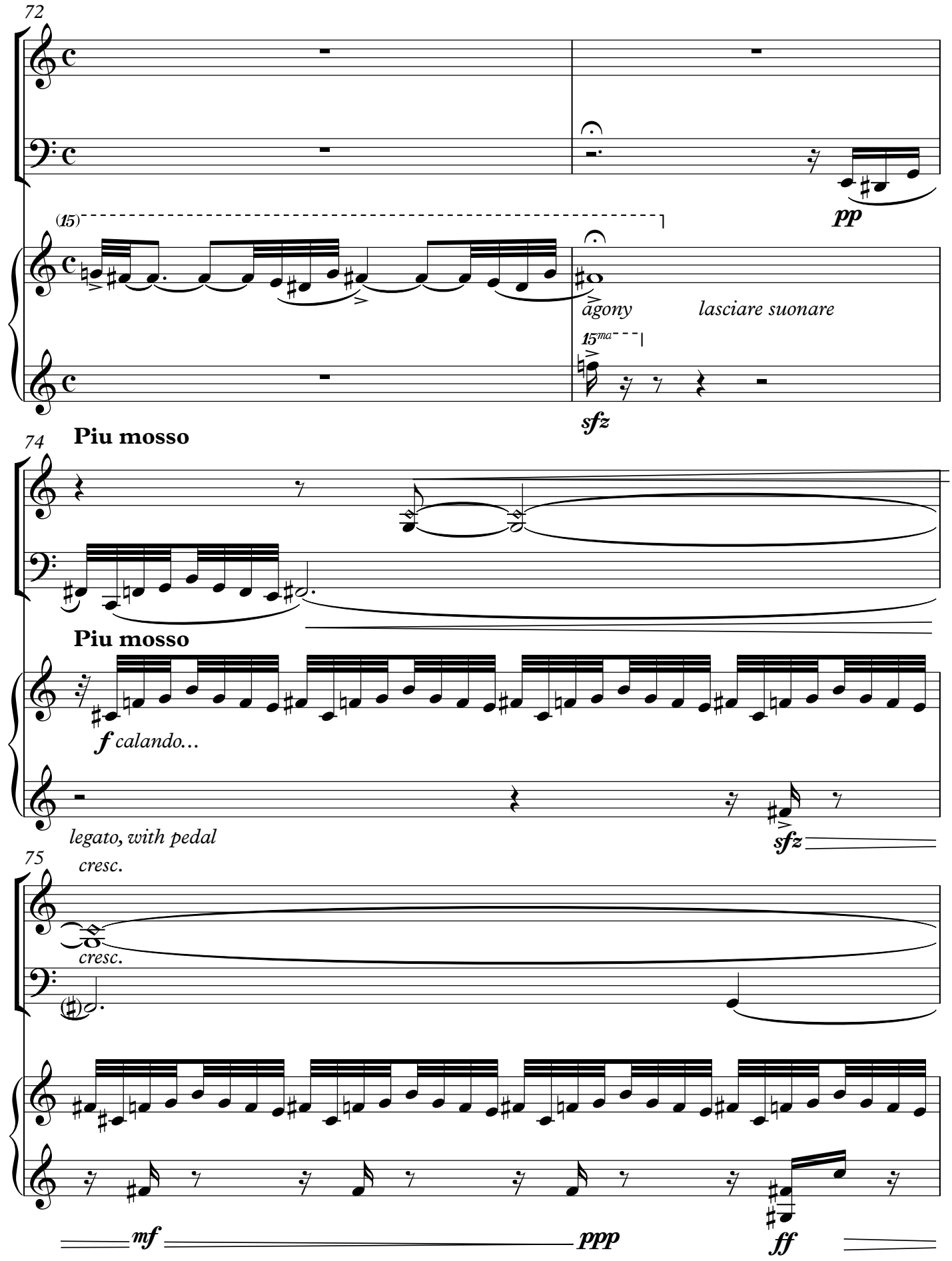

17
spiccato
tr
f
8va
p
22
(tr)
(8)
ff
loco
f
sfz
f
25
non legato
f
8vb
paticularly strong bow

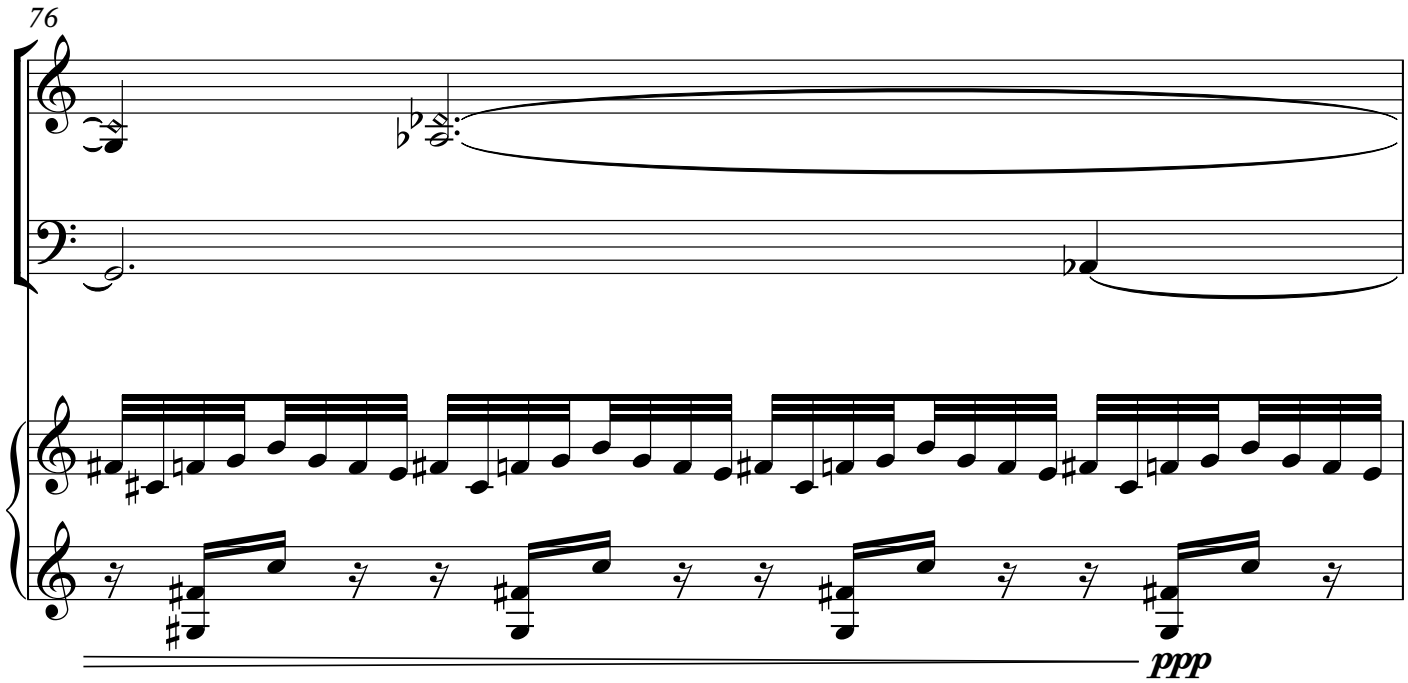

28
31
34
ordinario
ff
f
p
mysterioso

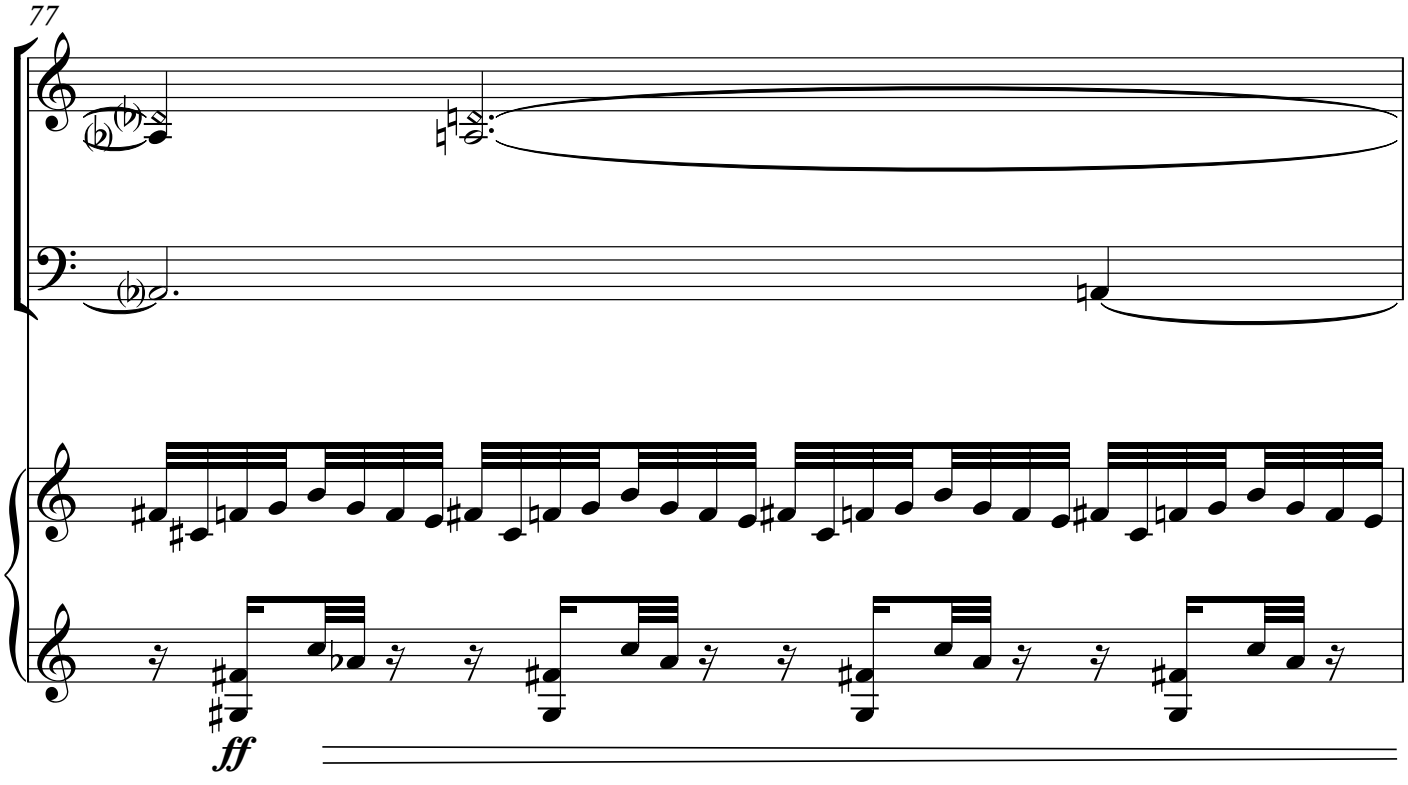

38
pp spiccato
ff
pp
ff
p
ff
Un poco meno mosso
42
p
non legato
pizz.
Un poco meno mosso
arco
8va
sfz
pp
47
8vb
(8)


Piu mosso
51
gliss.
f
gliss.
f
gliss.
(8)
Piu mosso
15ma
fff
sfz decresc.
calando ....
Meno mosso
55
gliss.
f
f
f
f
Meno mosso
15ma
gliss.
15ma
gliss.
fff
sfz decresc.
calando ....
sfz
continue the same way...
Gliss. effect, after the highest C
hammer your palm on the white keys
decresc. helps making it sound like a dying storm
58
3
3
gliss.
gliss.
15ma
mf
sfz same...


8va
61
calando...
calando...
mp
sfz
same...
64
Wholistic, beyond time, nostalgic ♪ = 140
p
p
Wholistic, beyond time, nostalgic ♪ = 140
8va
f
mp
♩ = 60
68
sfz
ppp
p ♩ = 60
(8)
15ma
ff


72
(15)
pp
ágony
lasciare suonare
15ma
sfz
74
Piu mosso
Piu mosso
f calando…
legato, with pedal
sfz
75
cresc.
cresc.
mf
ppp
ff


76
ppp


77
ff

78

15ma

f cresc.

mf molto decresc.

ppp

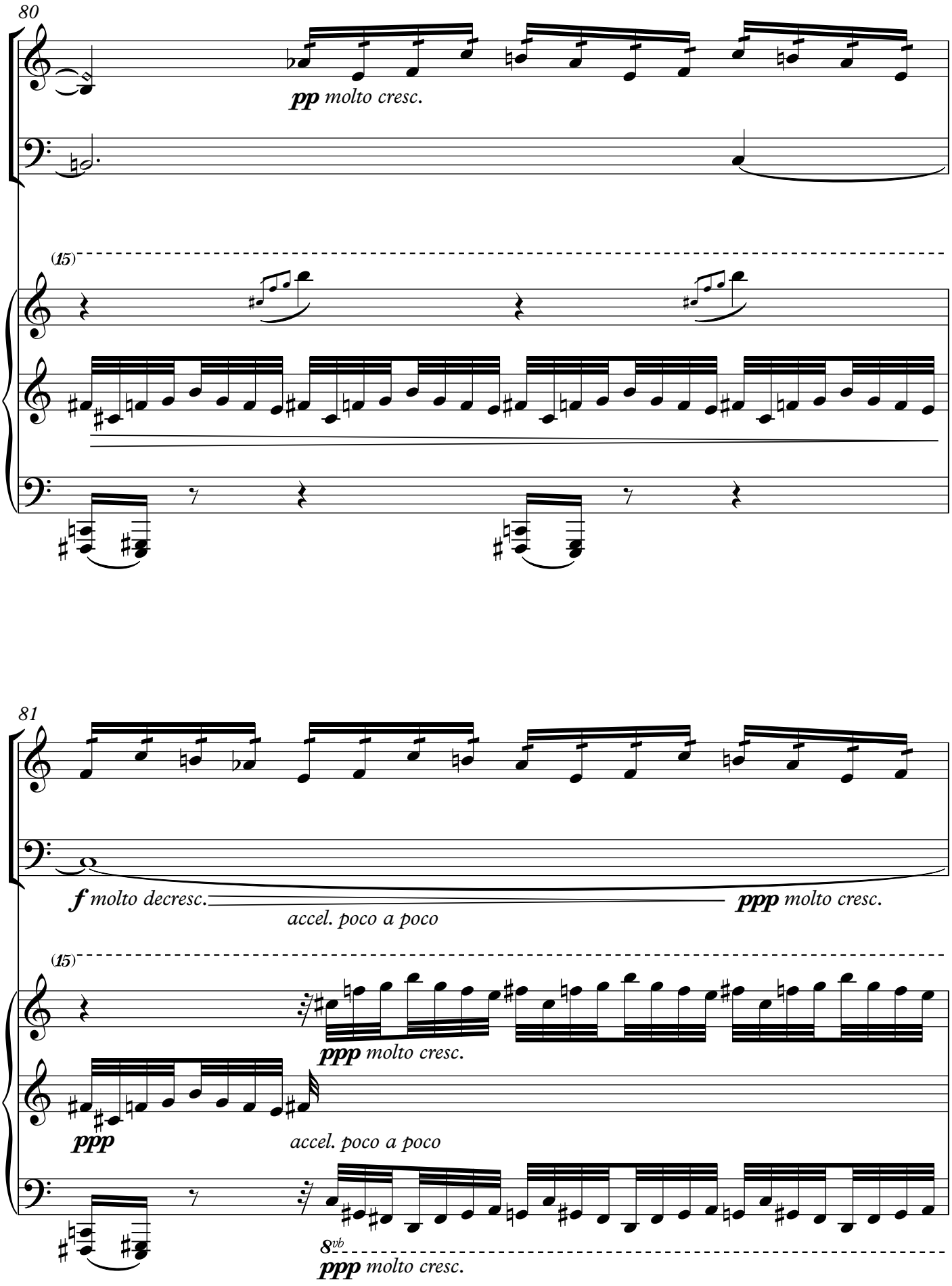
f cresc.

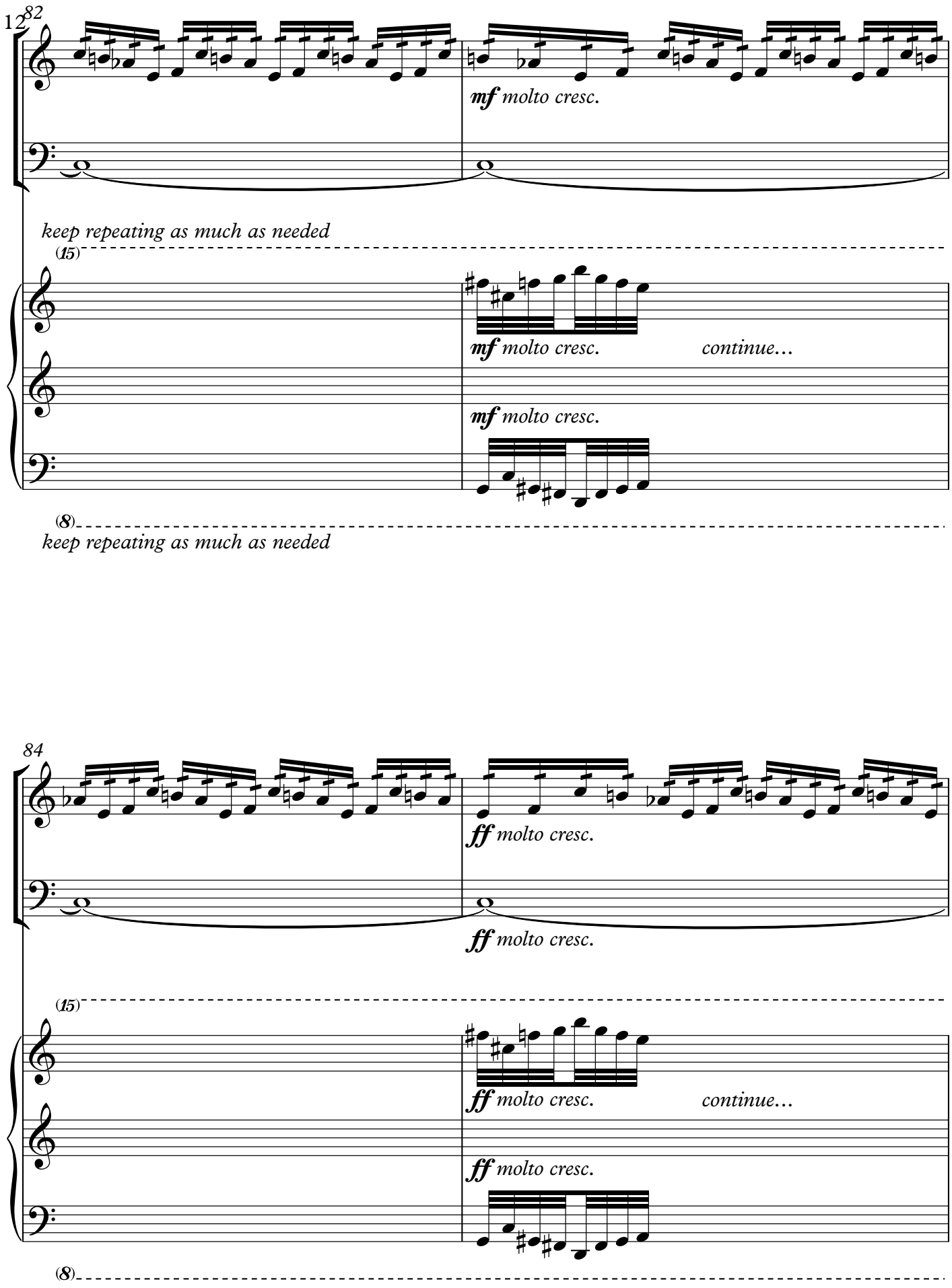
lean from side to side, feel inside the waves by perfectioning your constant movement up-down in a circular manner, enjoy the gesture

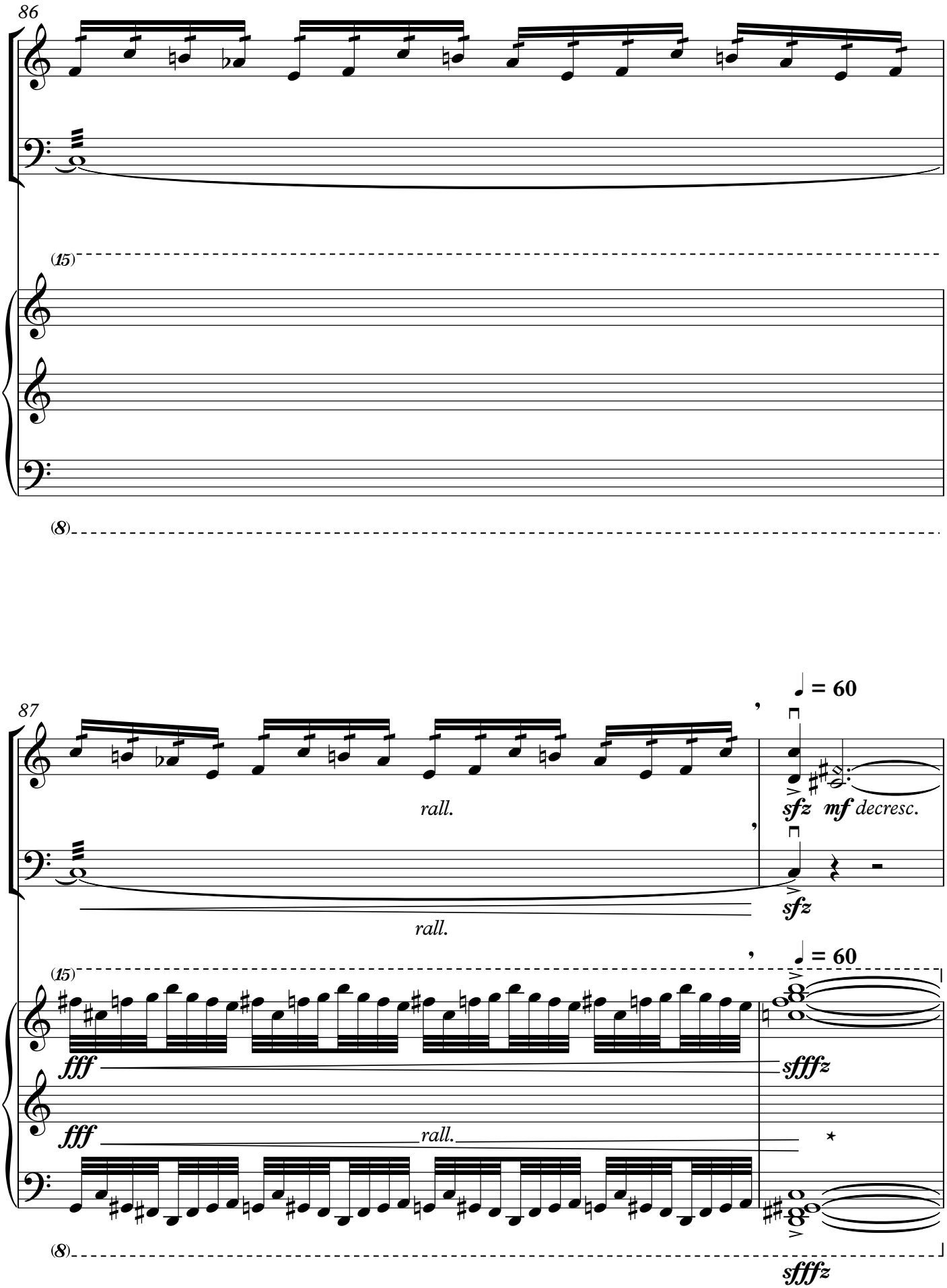
79

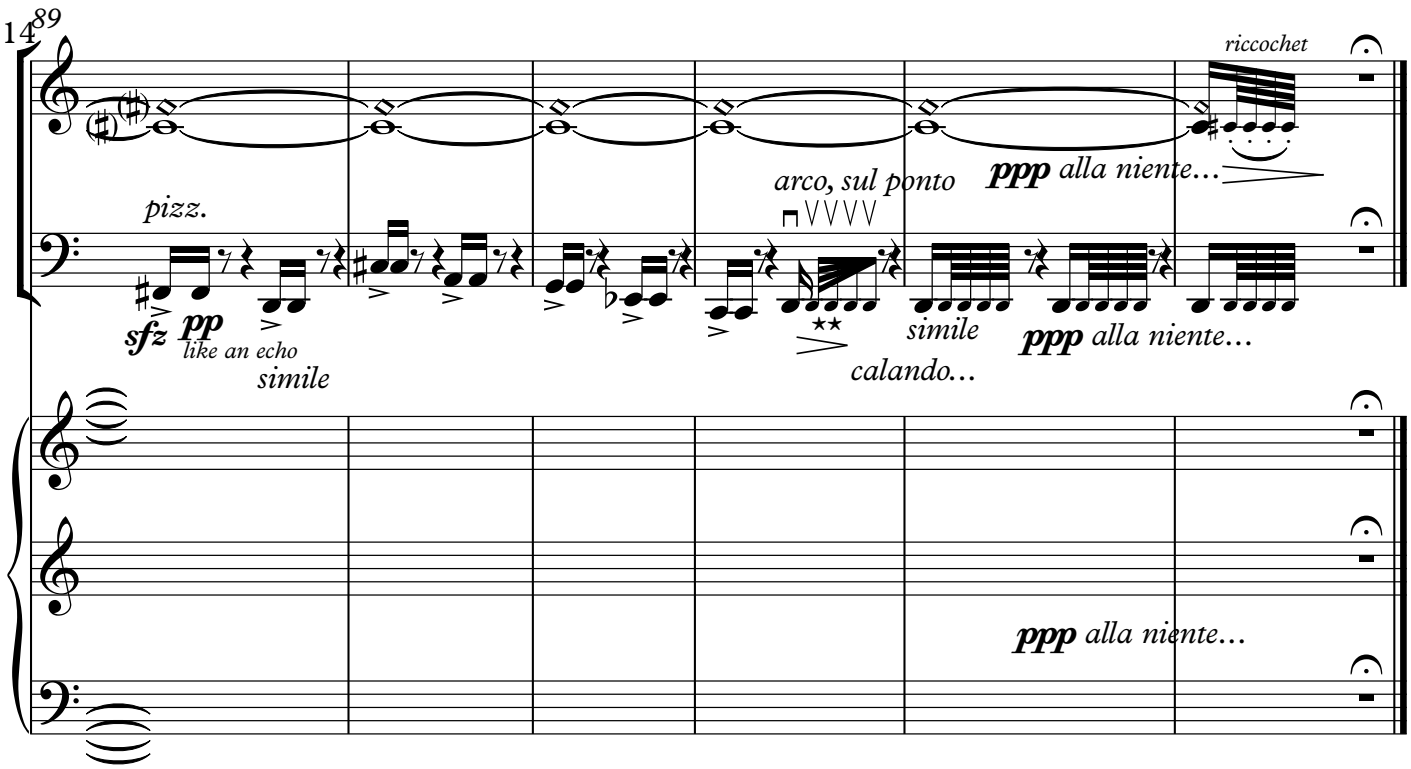
molto descresc.

(15)


80
pp molto cresc.
(15)
81
f molto decresc.
ppp molto cresc.
accel. poco a poco
(15)
ppp molto cresc.
ppp
accel. poco a poco
8vb
ppp molto cresc.


12 82
mf molto cresc.
keep repeating as much as needed
(15)
mf molto cresc.
continue…
mf molto cresc.
(8)
keep repeating as much as needed
84
ff molto cresc.
ff molto cresc.
(15)
ff molto cresc.
continue…
ff molto cresc.
(8)


86
(15)
(8)
87
rall.
sfz mf decresc.
sfz
rall.
= 60
(15)
fff
sffz
fff
rall.
(8)
sffz



* Strike then immediately leave in a boom effect, don't leave your hands on the keys. Let it fade out while keeping pedal till the end

** The first is the principal one, then the following are like offshoots, consquence; bow moves out, last one barely touching the string; like a yell and its echo

timing: 11'

Violin

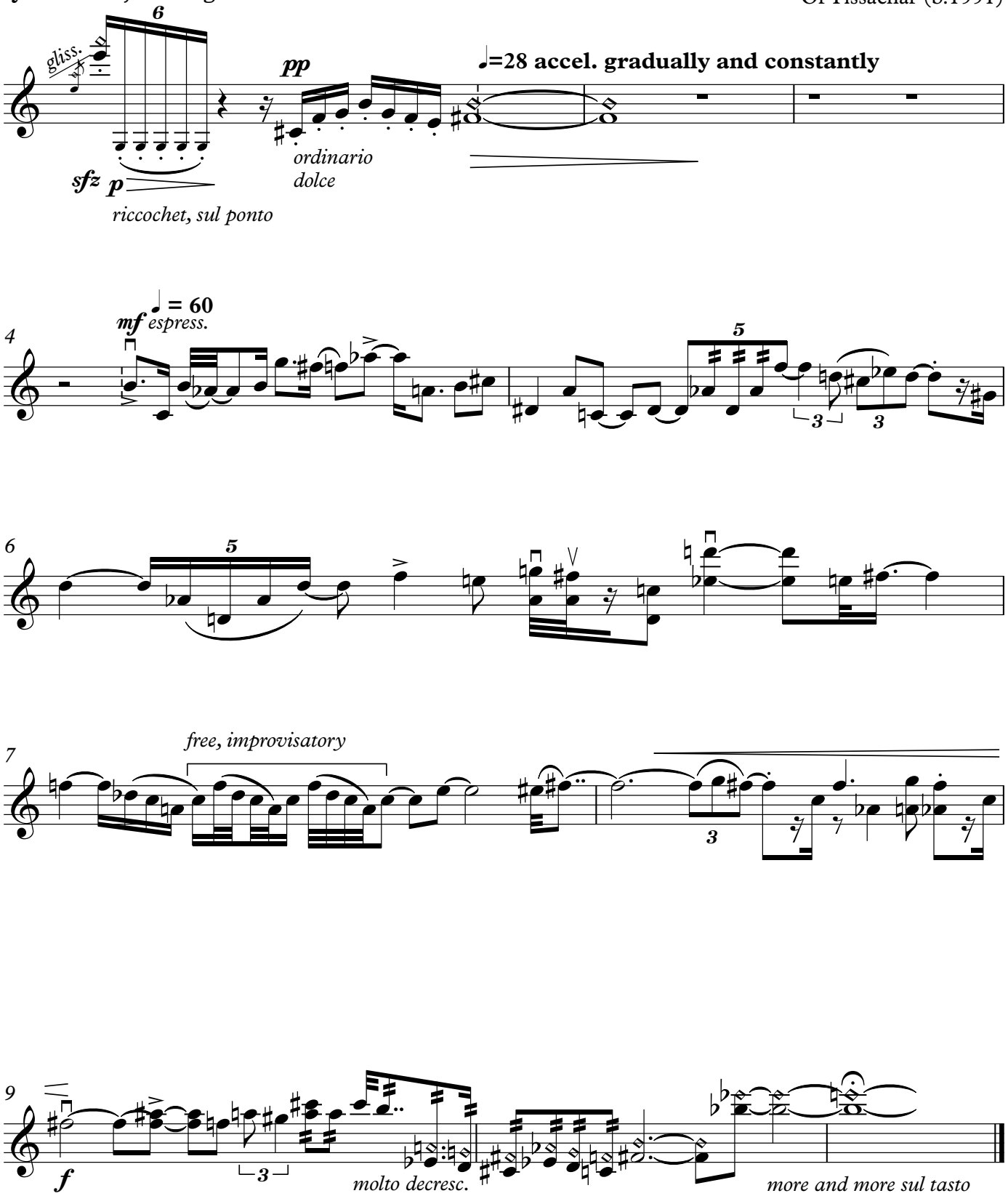
Hexagons

trio for violin, cello and piano

Idea 1

Beyond time, nostalgic ♩= 90

Or Yissachar (b.1991)

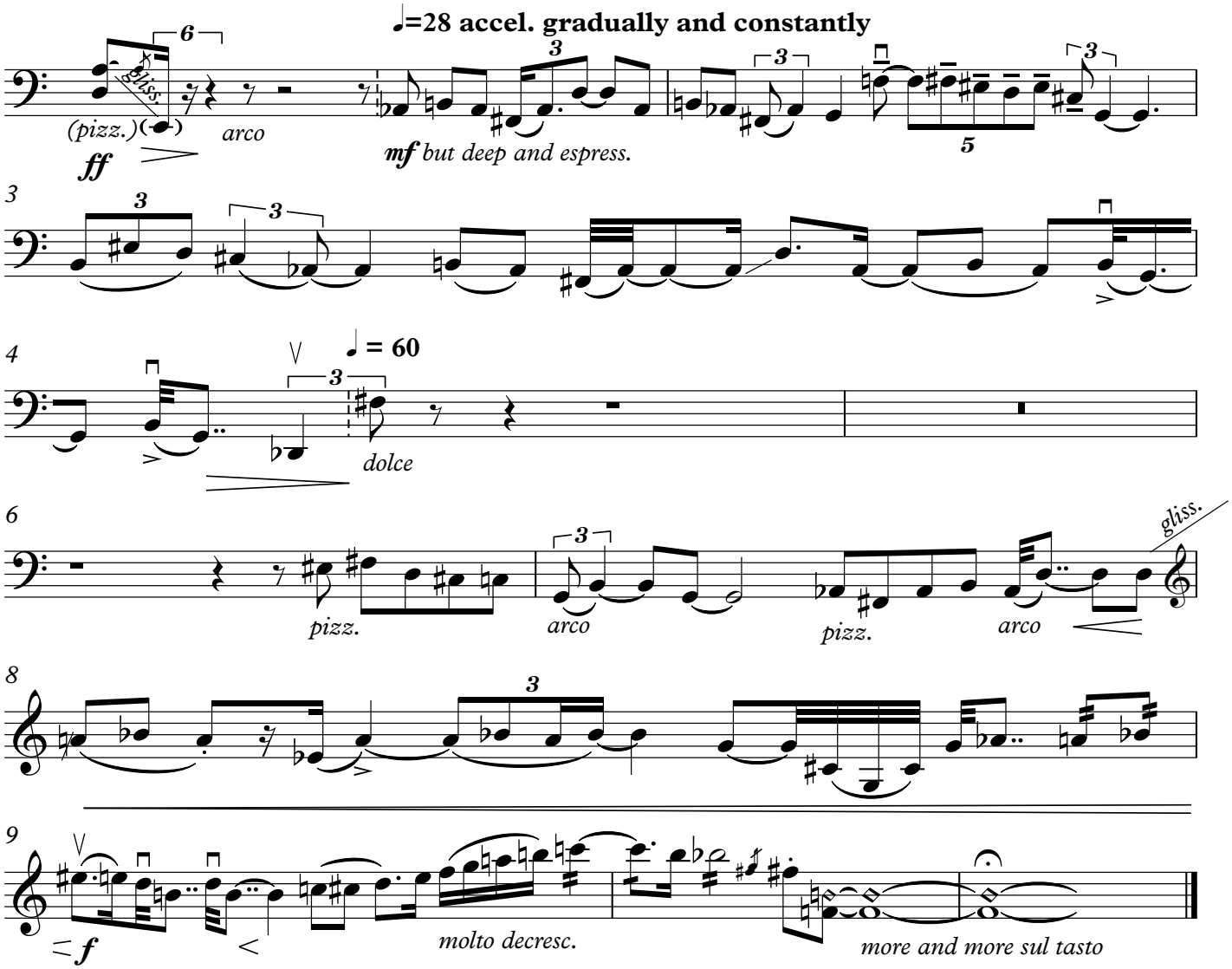


Hexagons

trio for violin, cello and piano

Violoncello

Beyond time, nostalgic ♩= 90 Idea 1 Or Yissachar (b.1991)



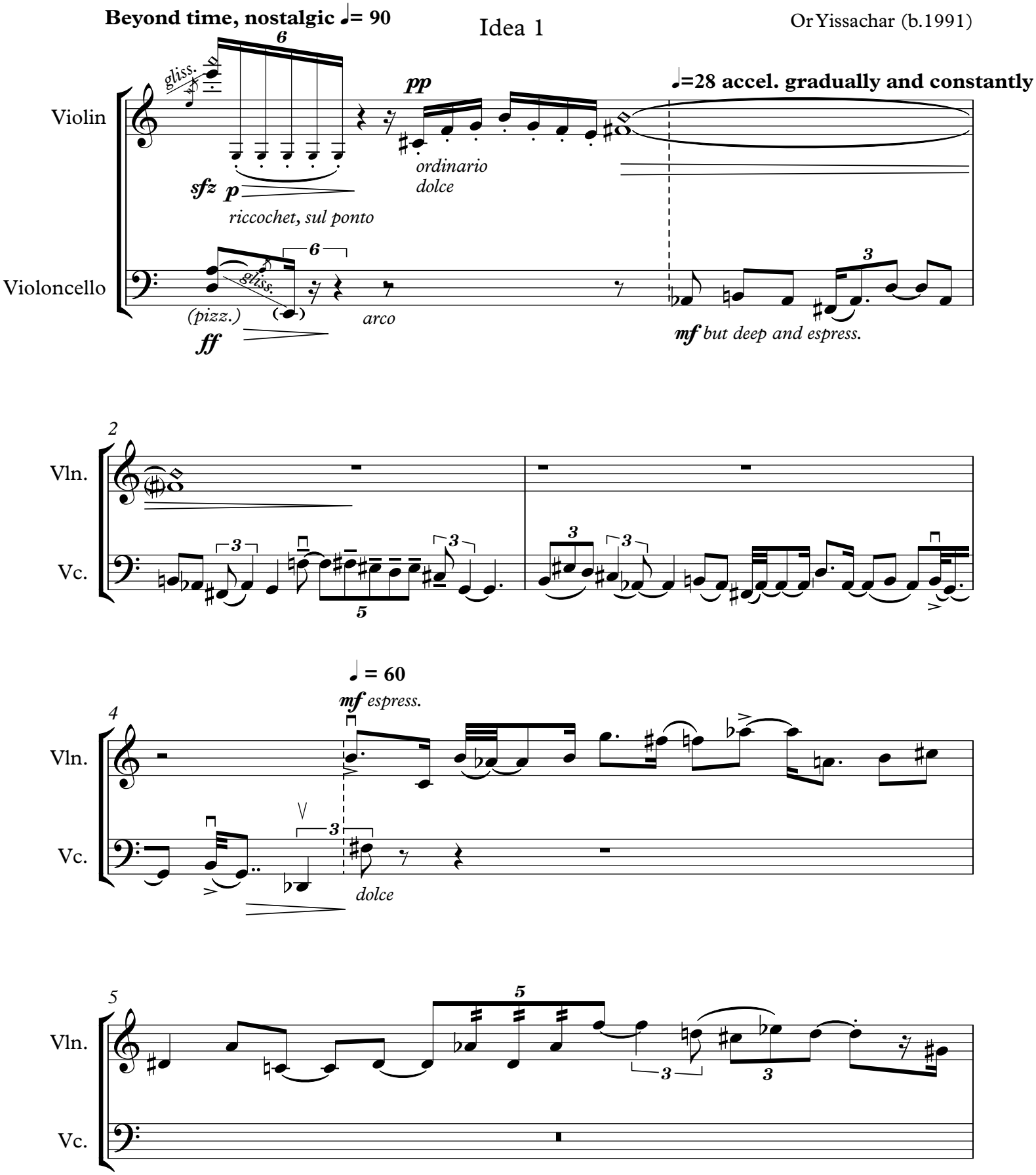
Hexagons

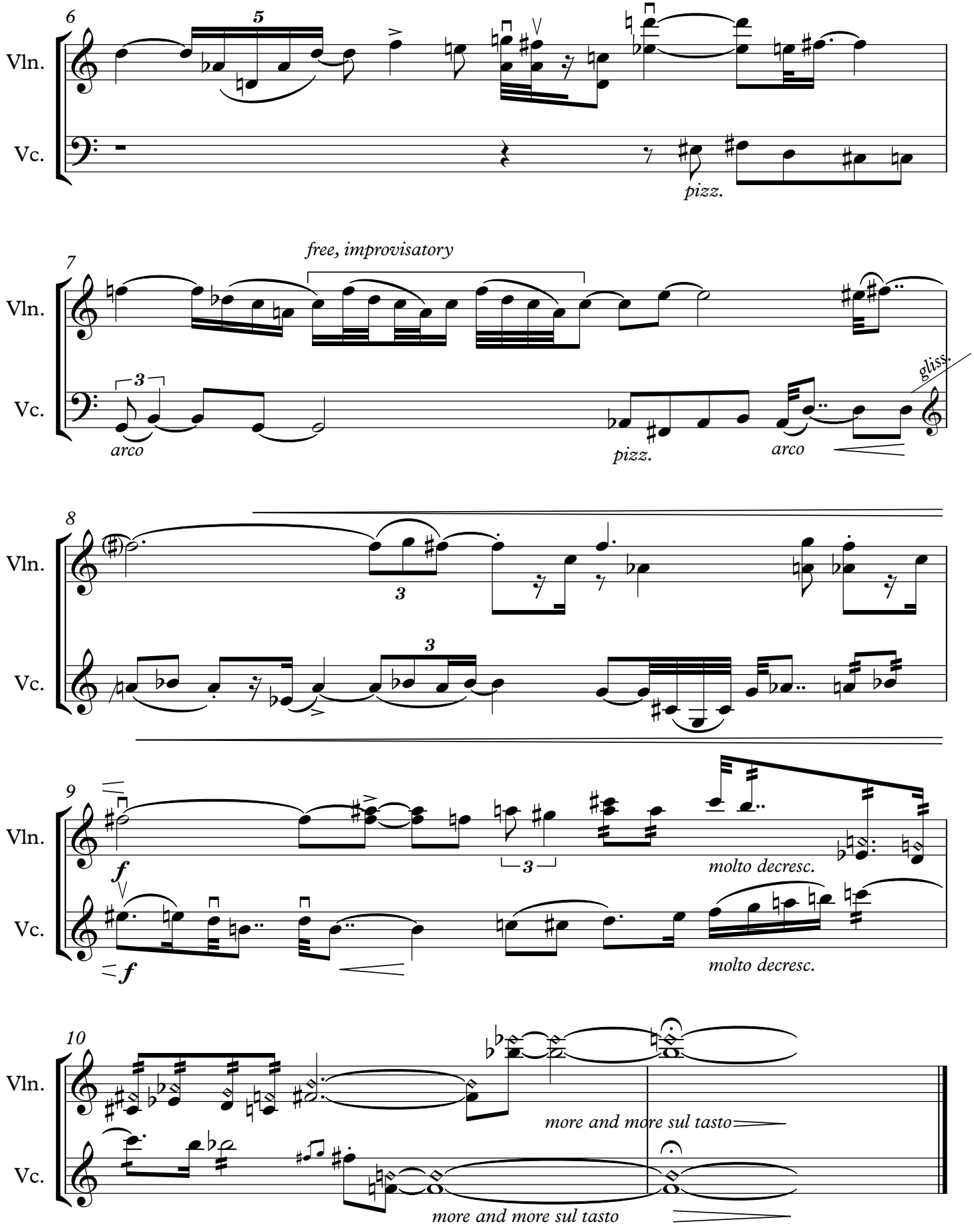
trio for violin, cello and piano

Violin
Violoncello

Idea 1

Or Yissachar (b.1991)




6
Vln.
Vc.
5
pizz.
7
free, improvisatory
Vln.
Vc.
3
arco
pizz.
arco
gliss.
8
Vln.
Vc.
3
3
9
Vln.
Vc.
f
f
3
molto decresc.
molto decresc.
10
Vln.
Vc.
more and more sul tasto
more and more sul tasto

Violin

Idea 2

The palyndromic hexagons, mystical ♪ = 140

siempre cresc.

dolce, sul tasto

siempre legato simile

5

8

more and more sul ponto
until sul ponto

11

2

siempre decresc.

17

from sul ponto
to ordinario

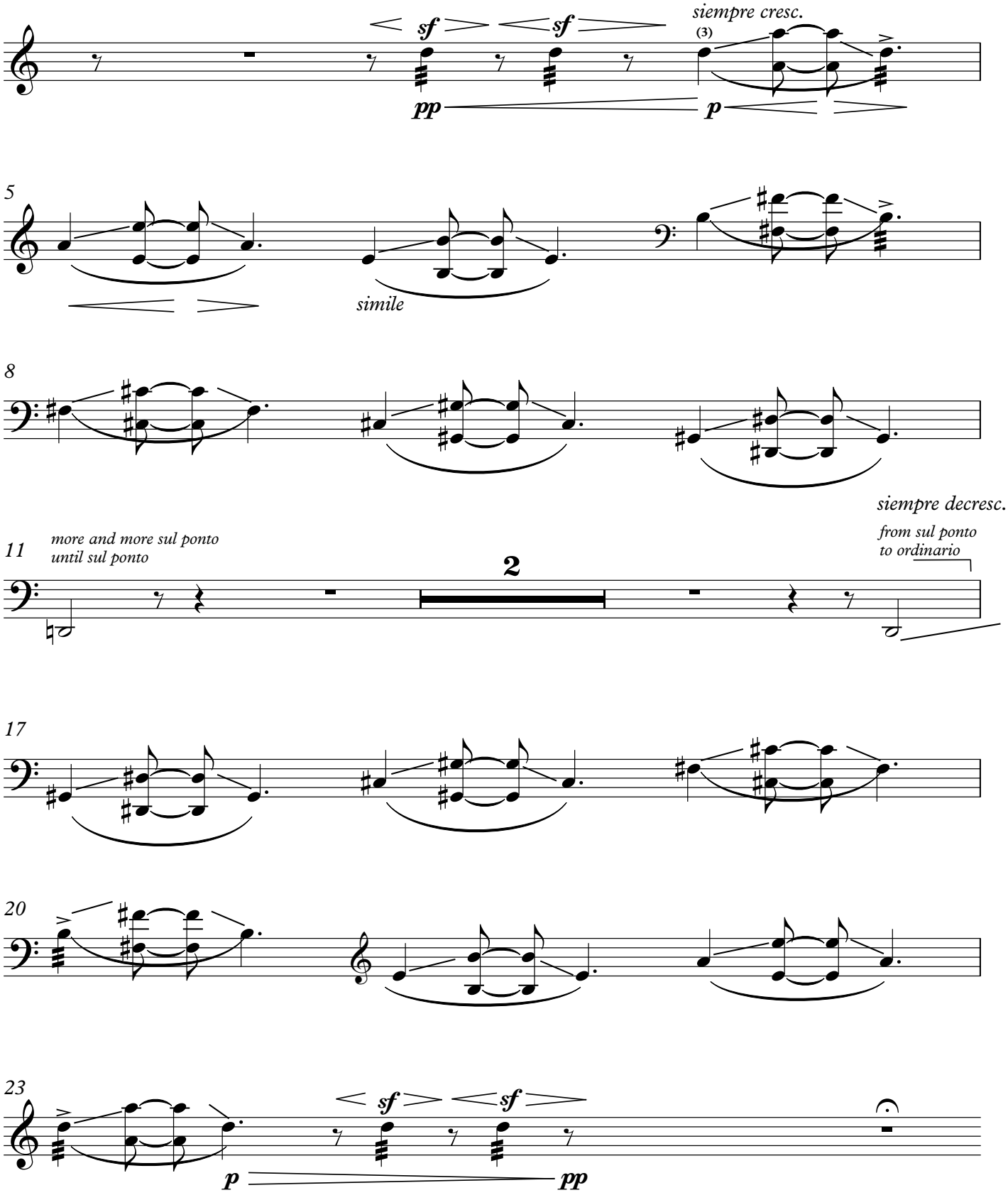
20

23

Violoncello

Idea 2

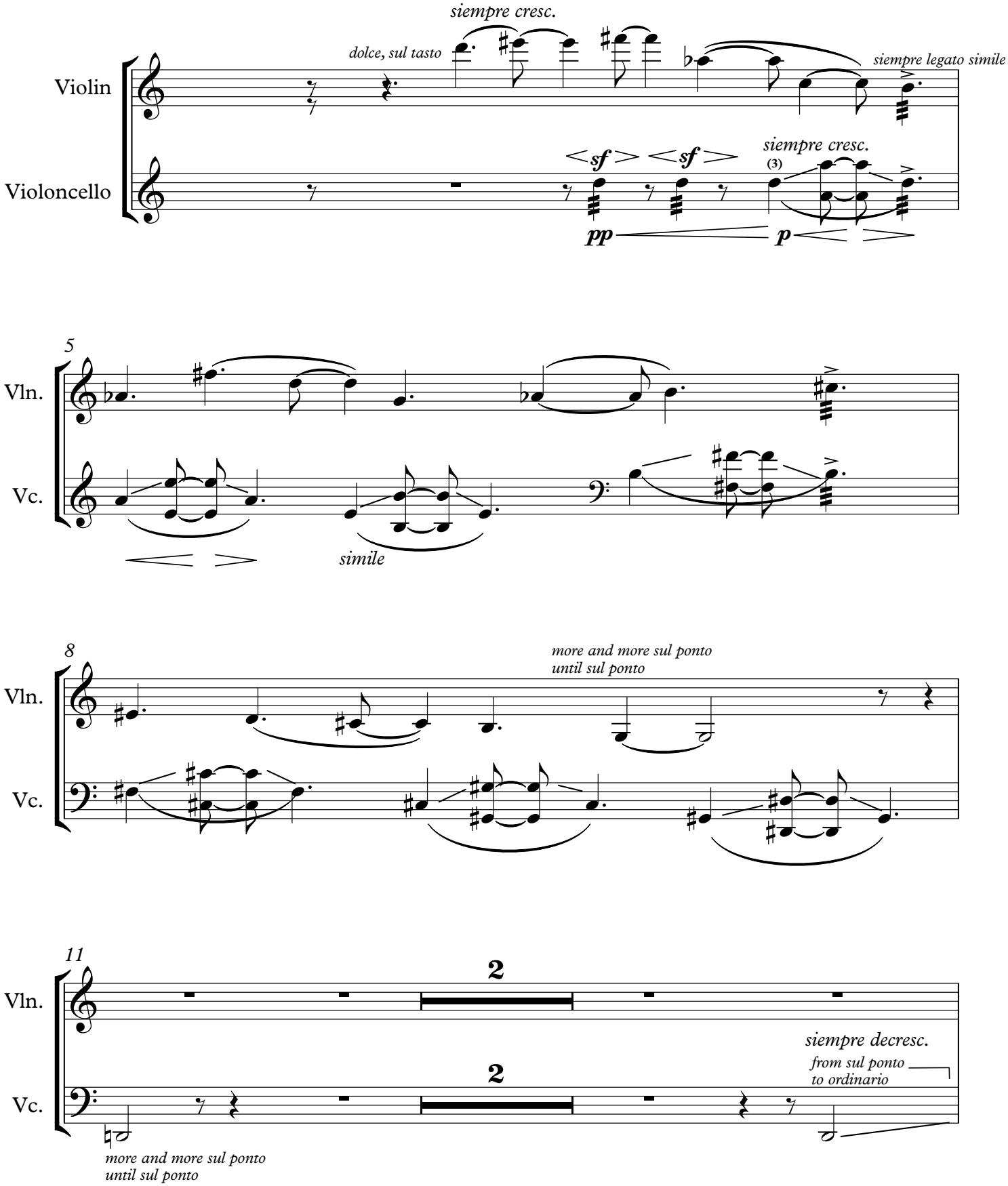
The palyndromic hexagons, mystical ♪ = 140

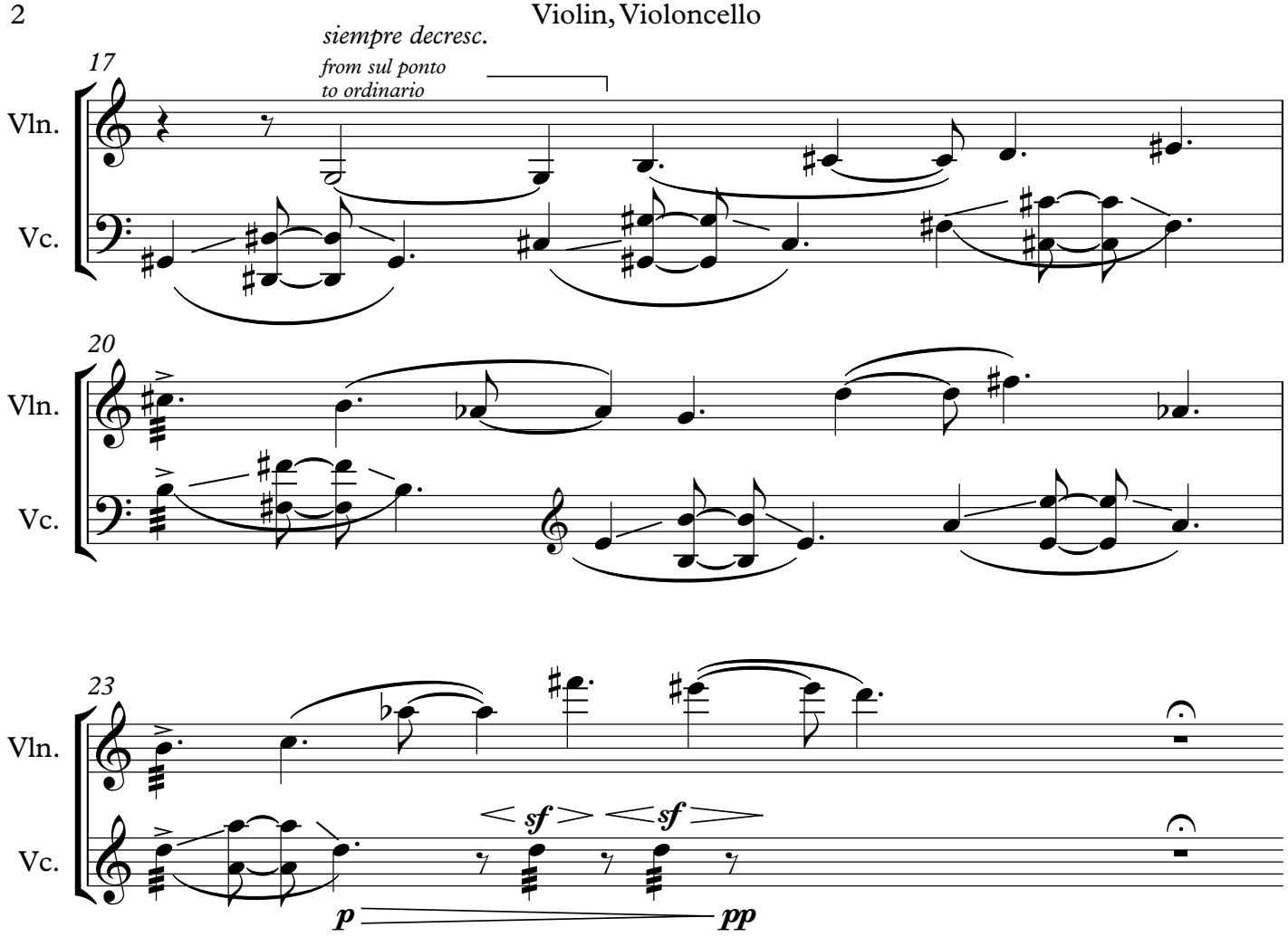


Violin
Violoncello

Idea 2

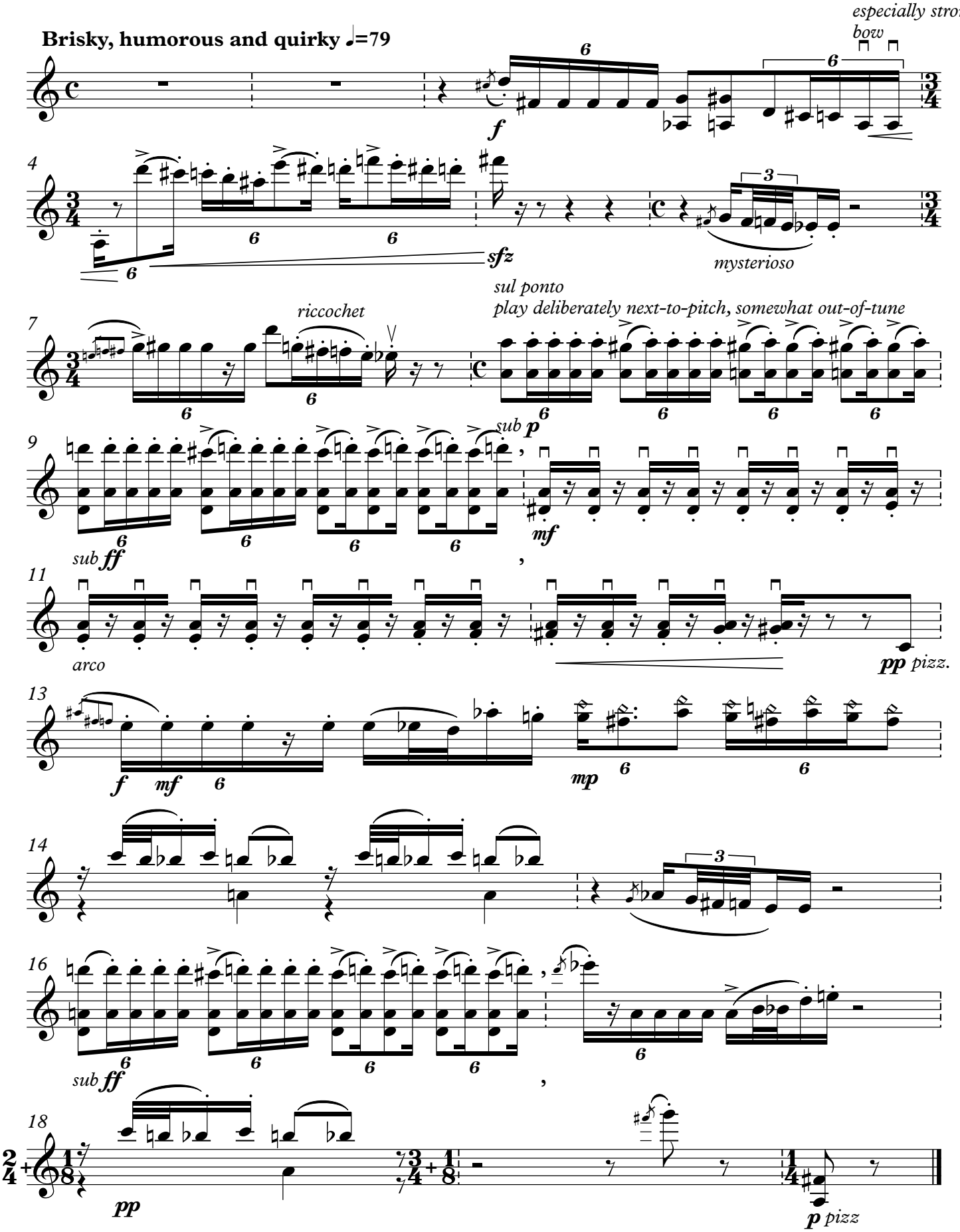
The palyndromic hexagons, mystical ♪ = 140




17
siempre decresc.
from sul ponto
to ordinario
Vln.
Vc.
20
Vln.
Vc.
23
Vln.
Vc.
sf
sf
p
pp

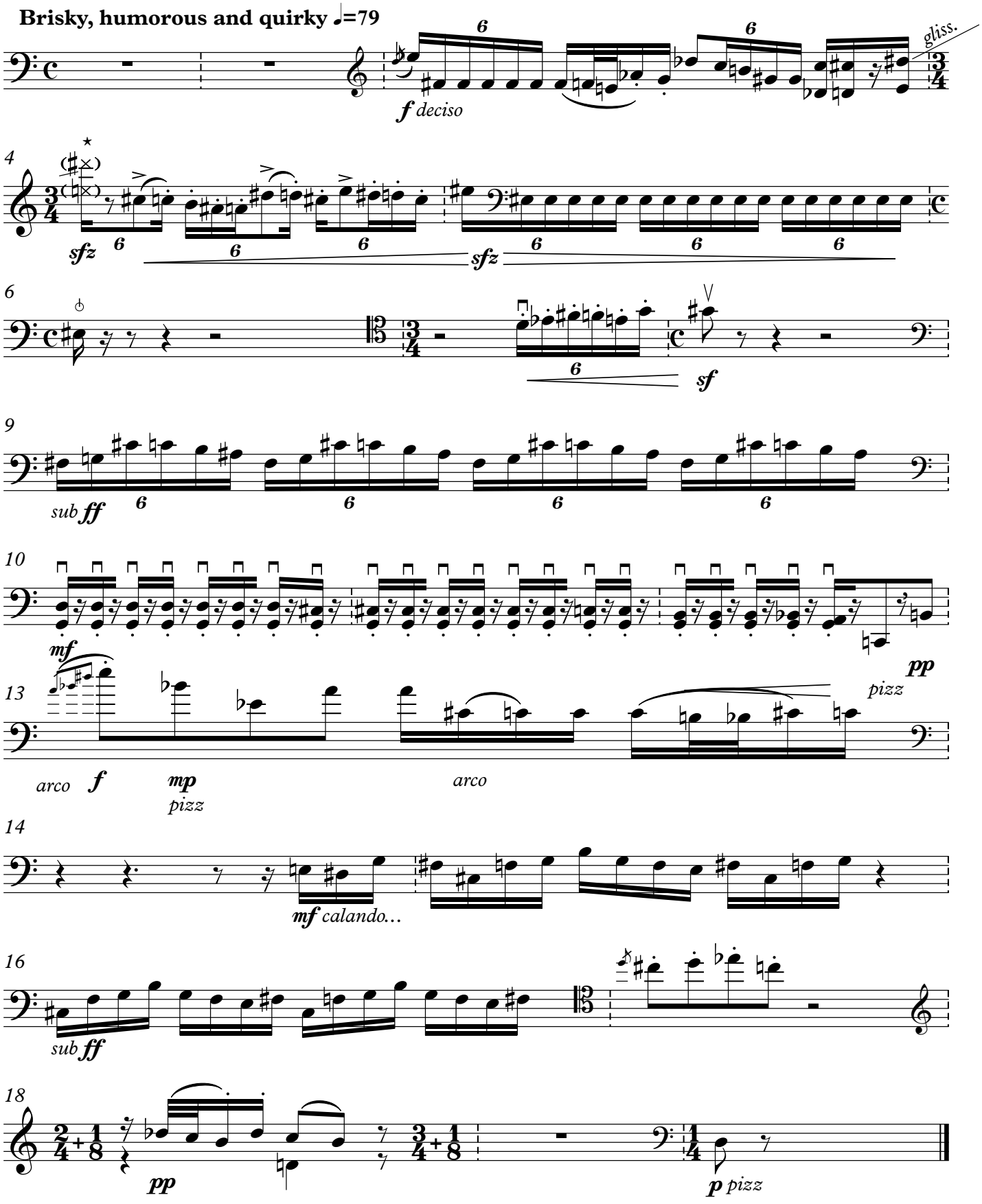
Idea 3

Violin



Violoncello

Idea 3



Violin
Violoncello

Idea 3

Brisky, humorous and quirky ♩=79

especially strong bow

f

f deciso

gliss.

4

sfz

sfz

sfz

6

mysterioso

riccochet

sul ponto
play deliberately next-to-pitch, somewhat out-of-tune

8

sub ***p***

sf

9

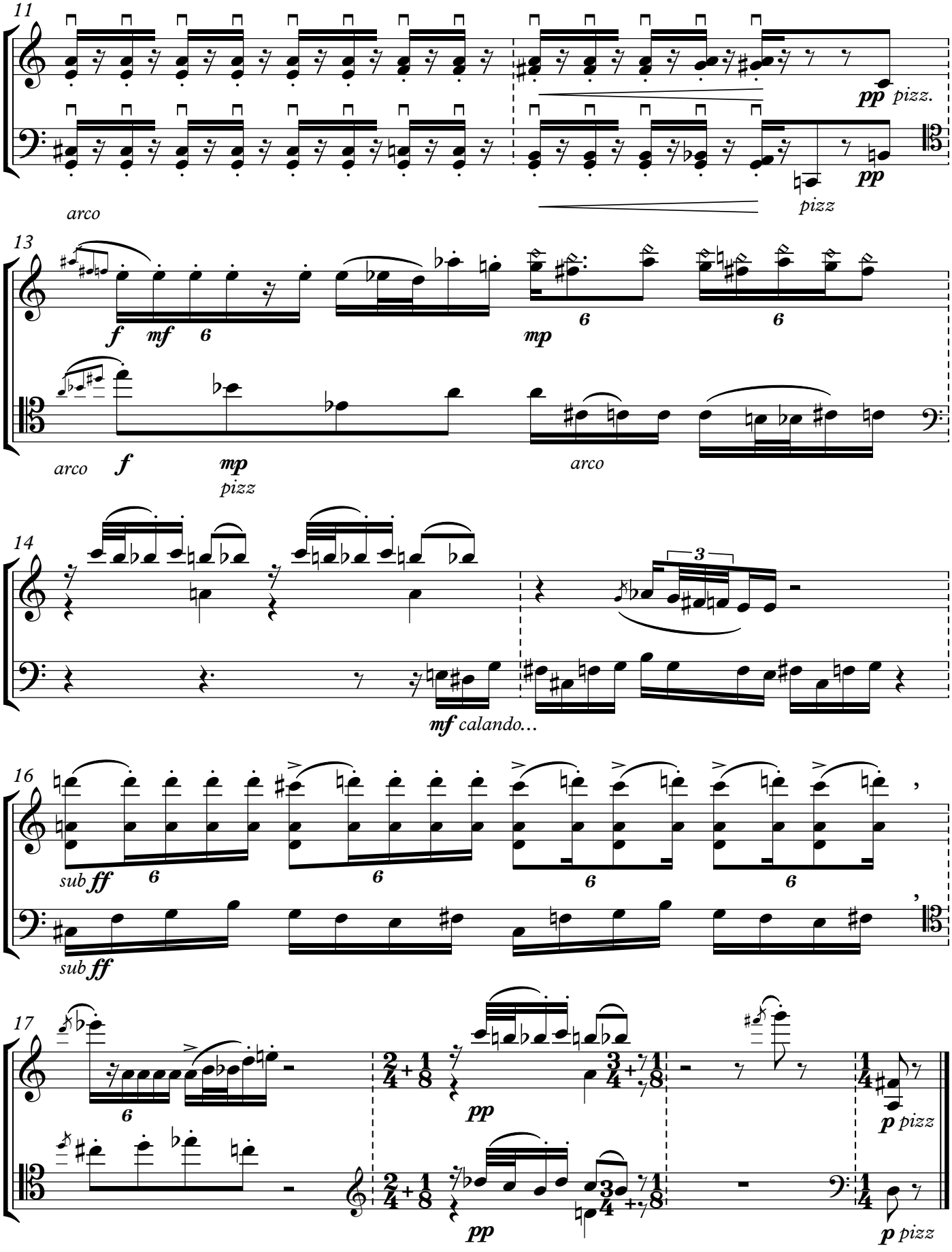
sub ***ff***

sub ***ff***

mf

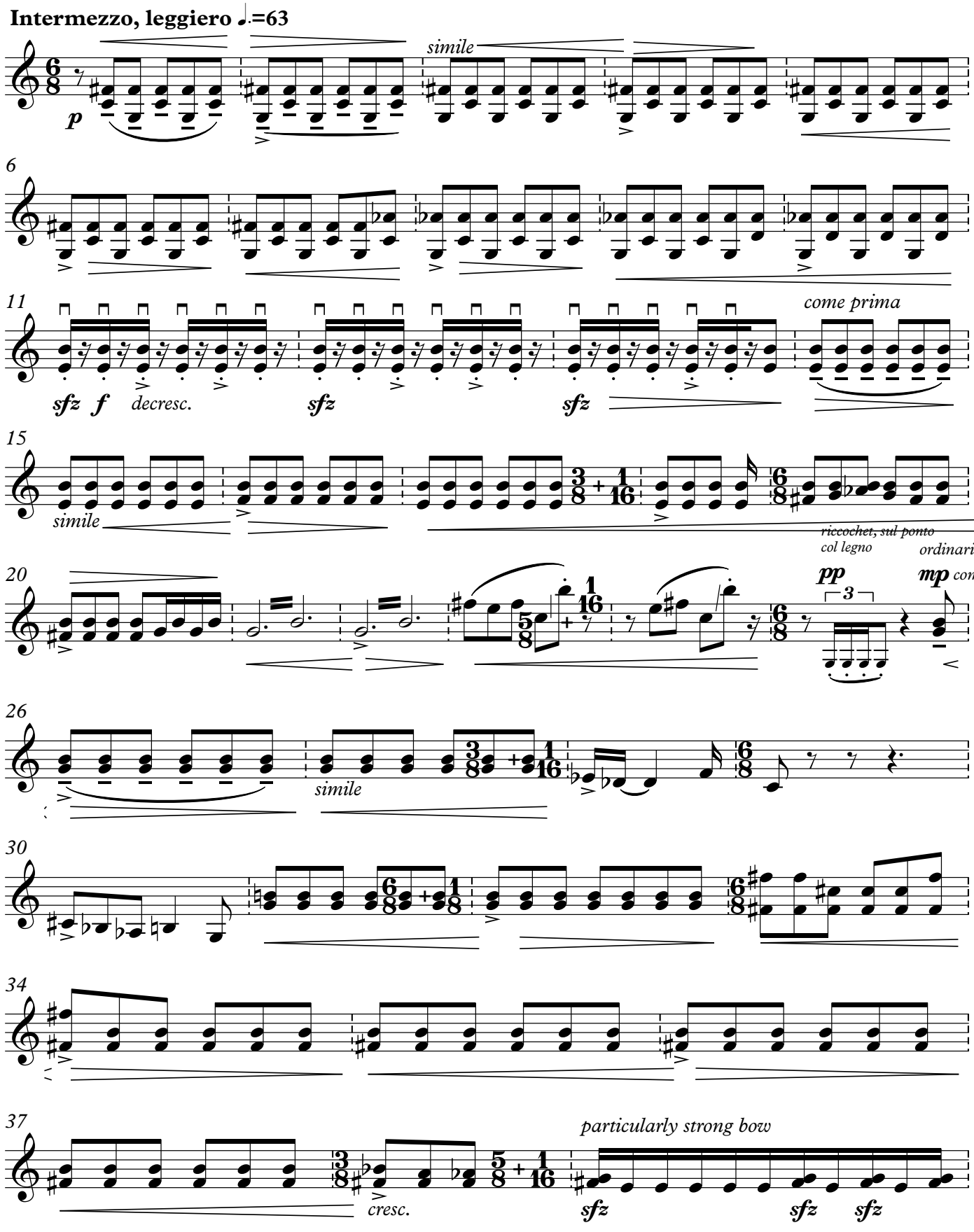
mf

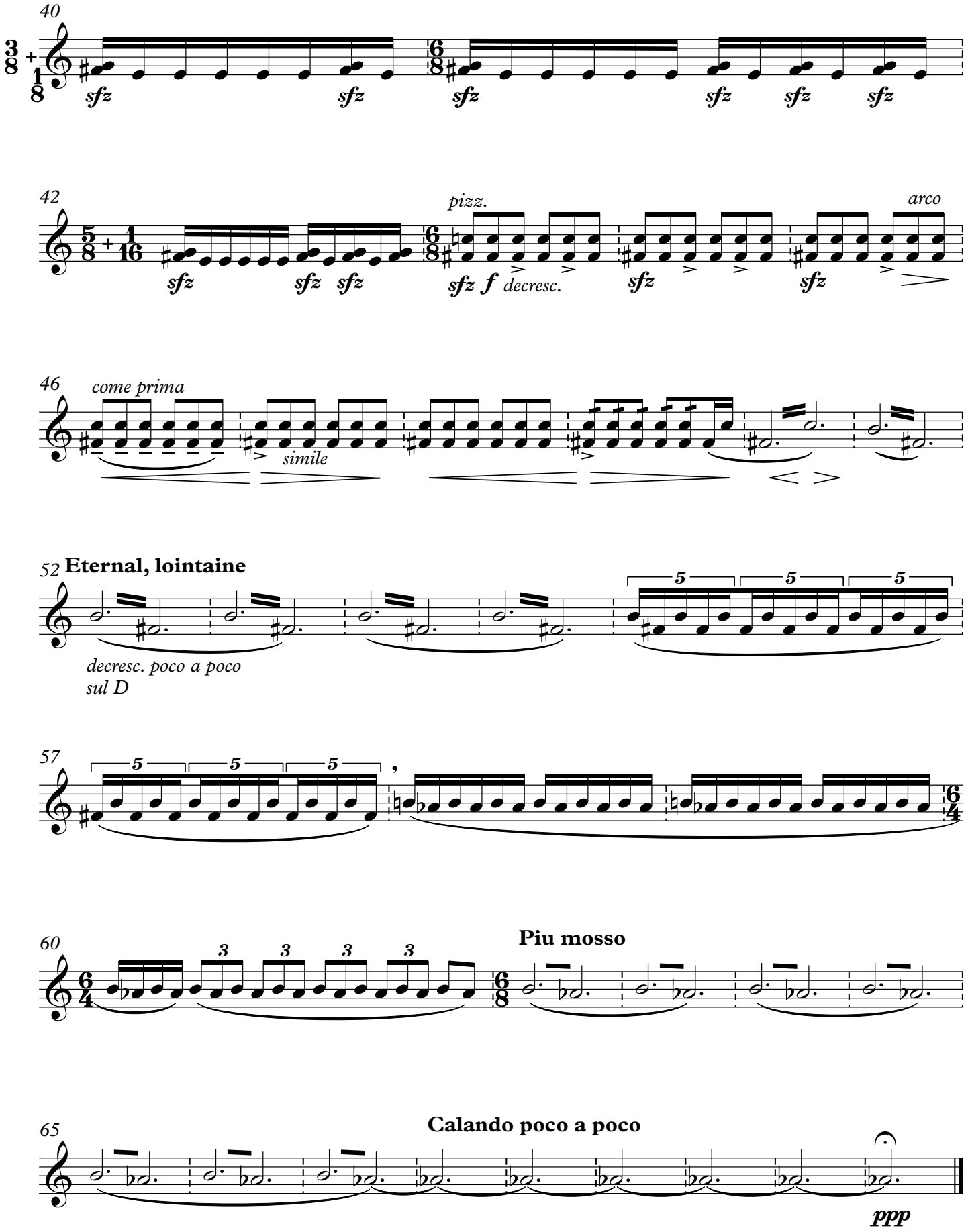
V.S.


11
pp pizz.
arco
pp
pizz
13
f mf 6
mp
6
6
arco f
mp
pizz
arco
14
3
mf calando...
16
sub ff
6
6
6
6
sub ff
17
6
pp
p pizz
pp
p pizz

Violin

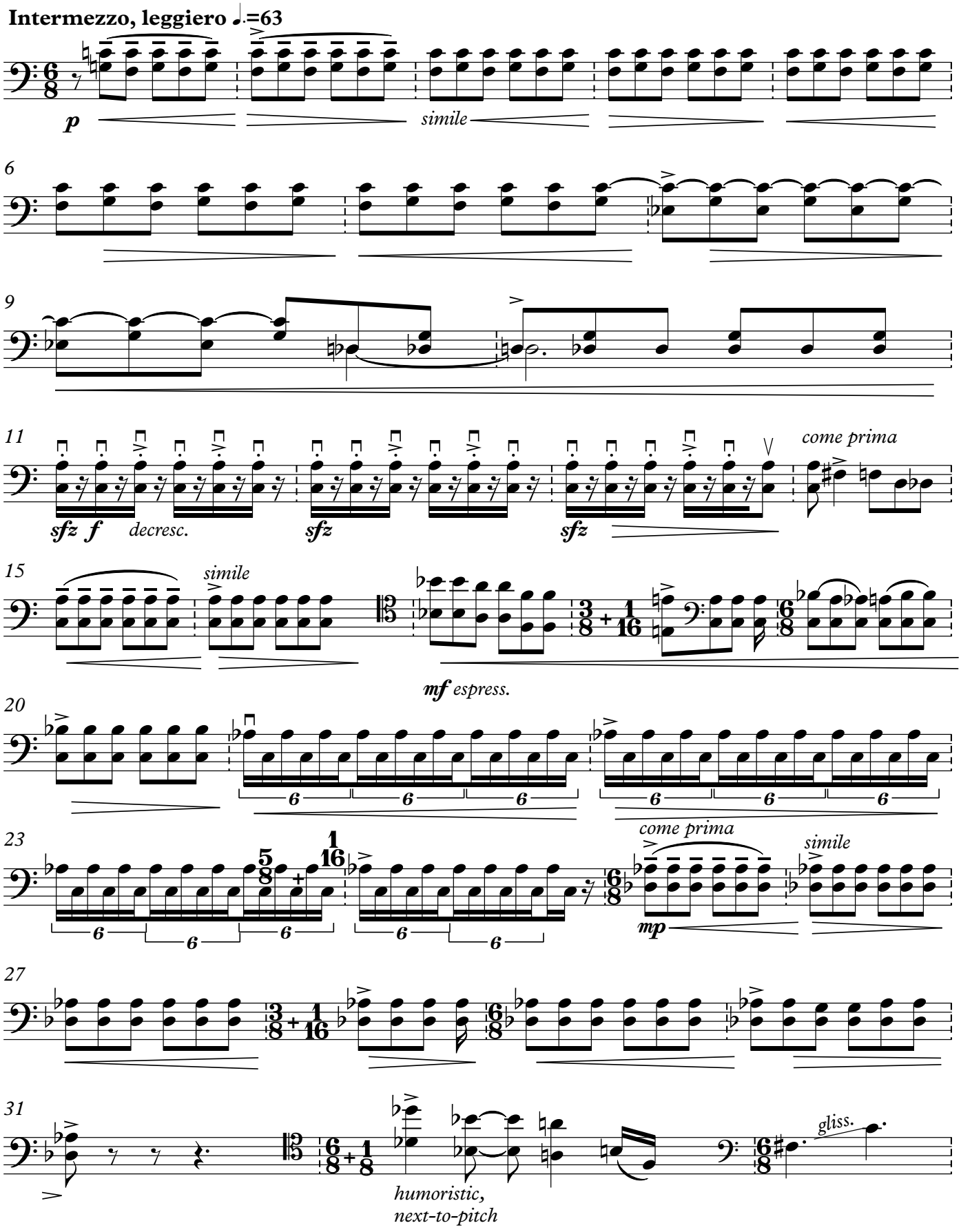
Idea 4

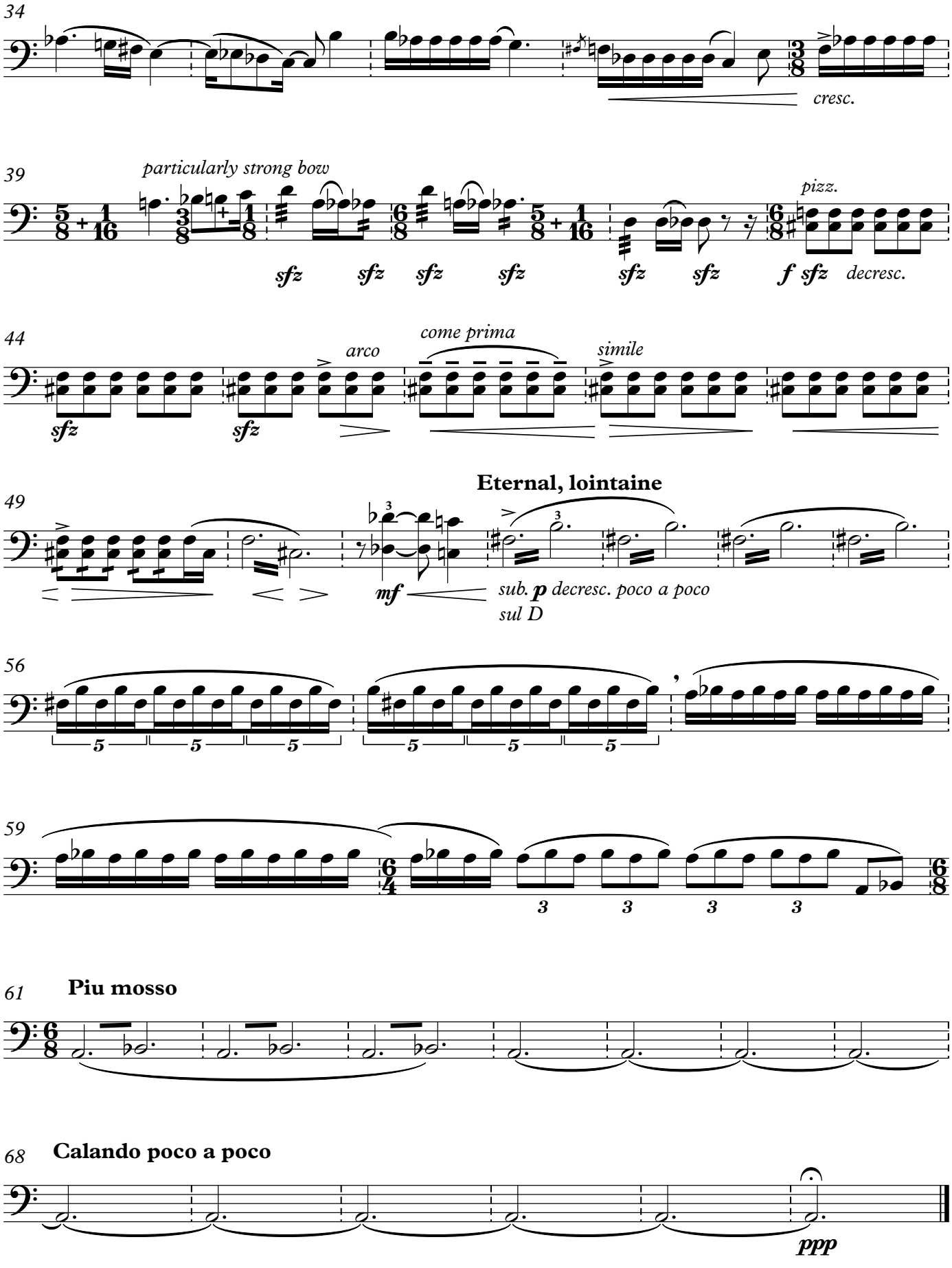



40
sfz
sfz
sfz
sfz
sfz
sfz
42
pizz.
arco
sfz
sfz
sfz
sfz
f
decresc.
sfz
sfz
46
come prima
simile
52
Eternal, lointaine
decresc. poco a poco
sul D
5
5
5
57
5
5
5
60
Piu mosso
3
3
3
3
65
Calando poco a poco
ppp

Violoncello

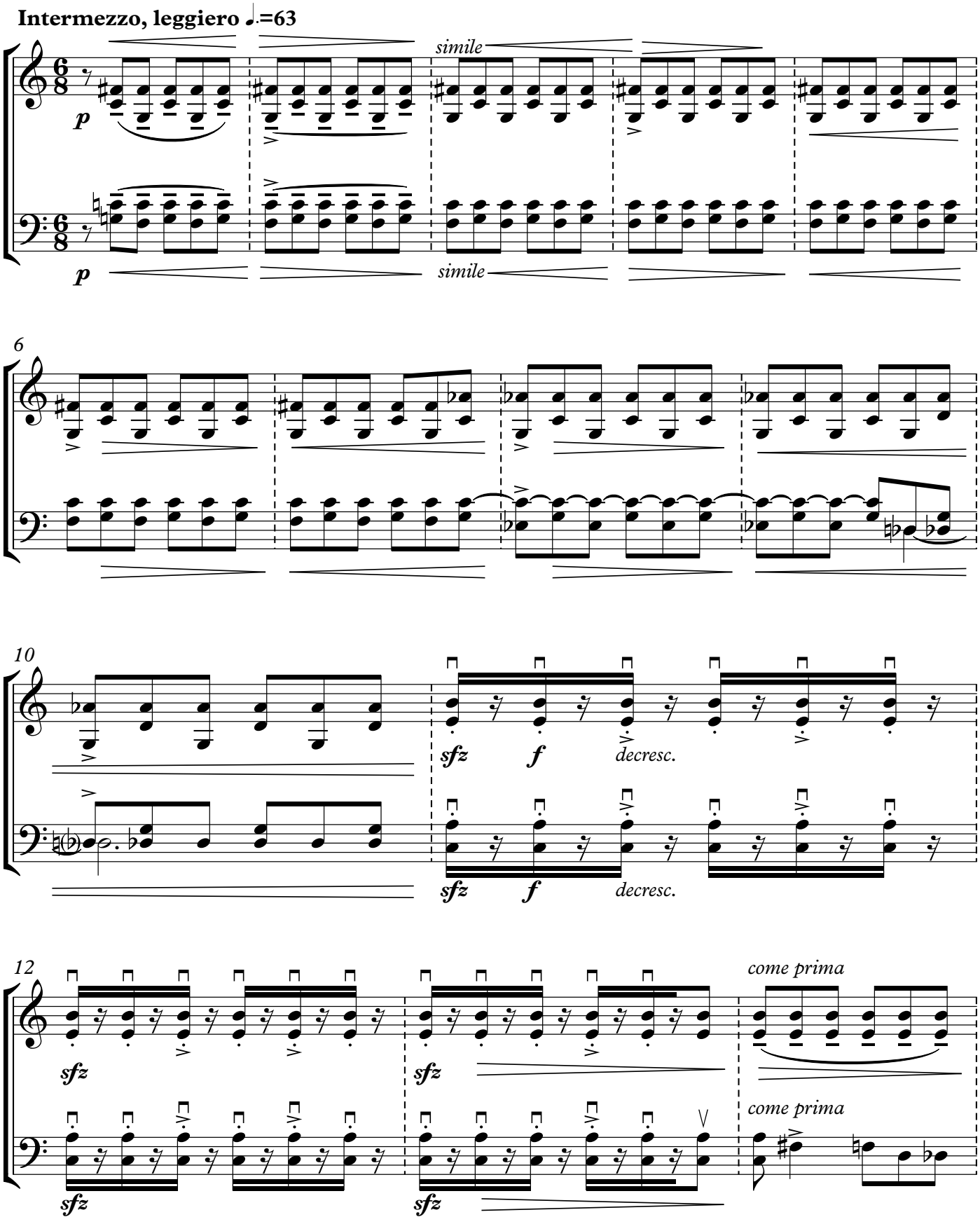
Idea 4

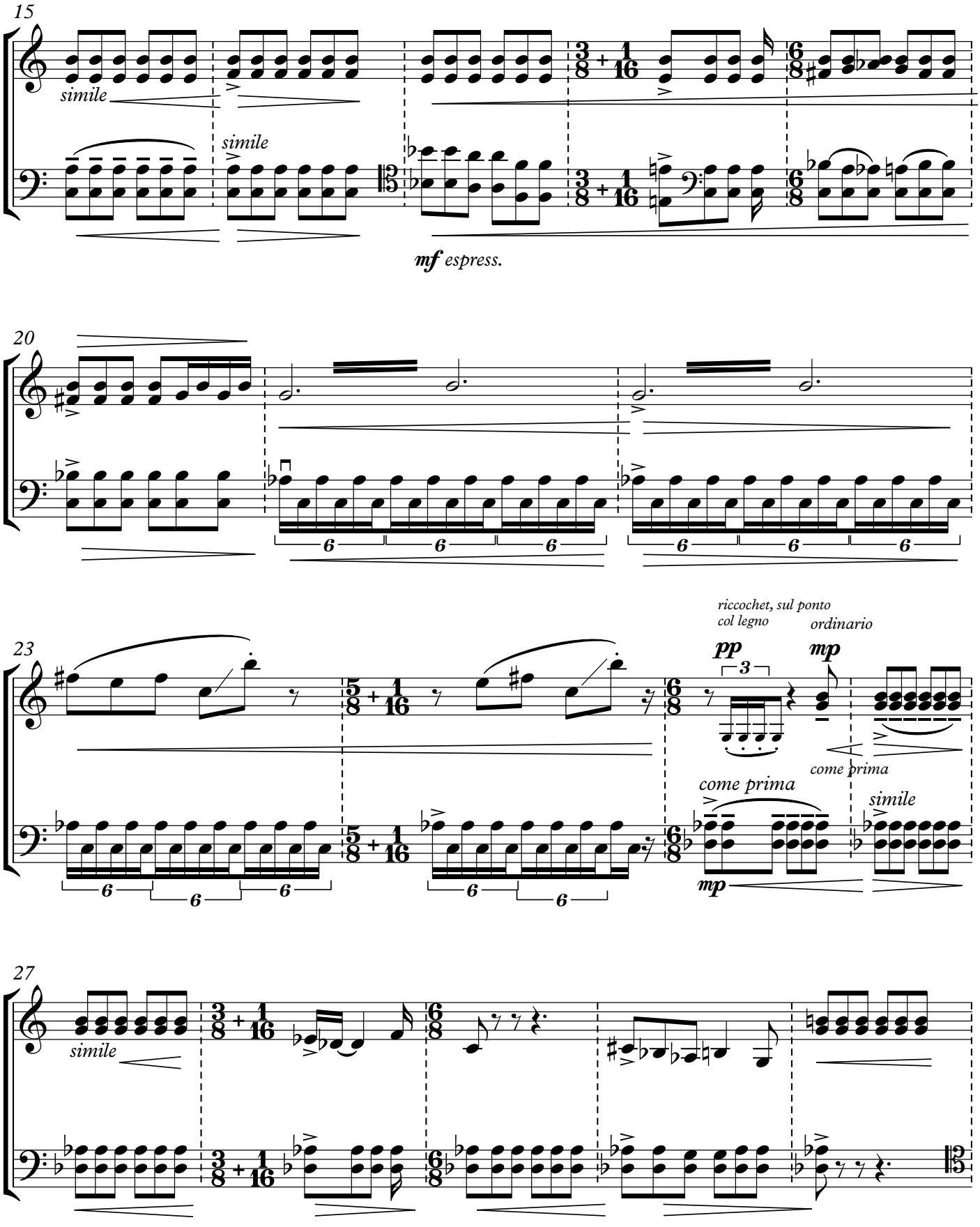


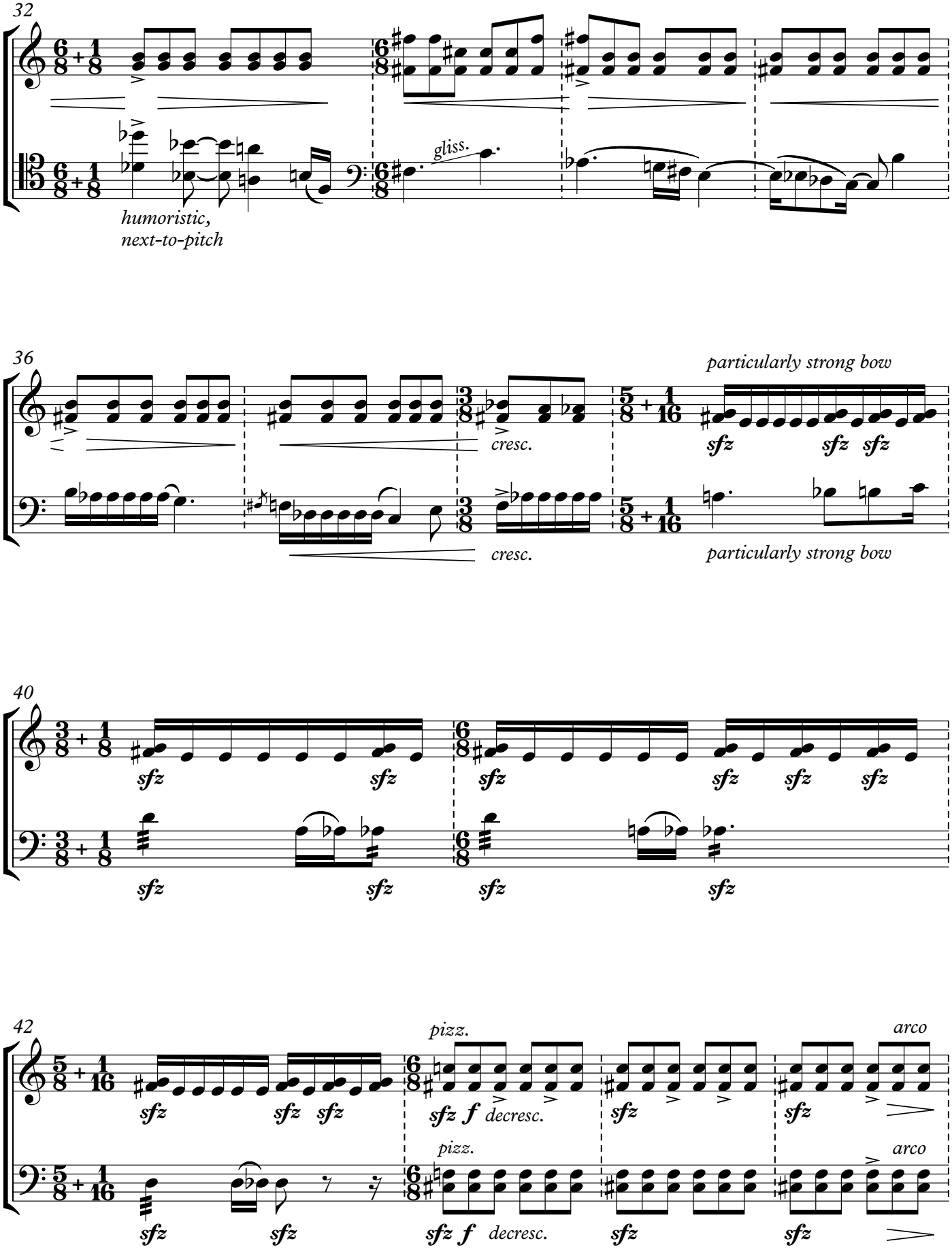

34
cresc.
39
particularly strong bow
sfz sfz sfz sfz sfz sfz
pizz.
f sfz decresc.
44
arco
come prima
simile
sfz sfz
Eternal, lointaine
49
mf
sub. p decresc. poco a poco
sul D
56
59
61
Piu mosso
68
Calando poco a poco
ppp

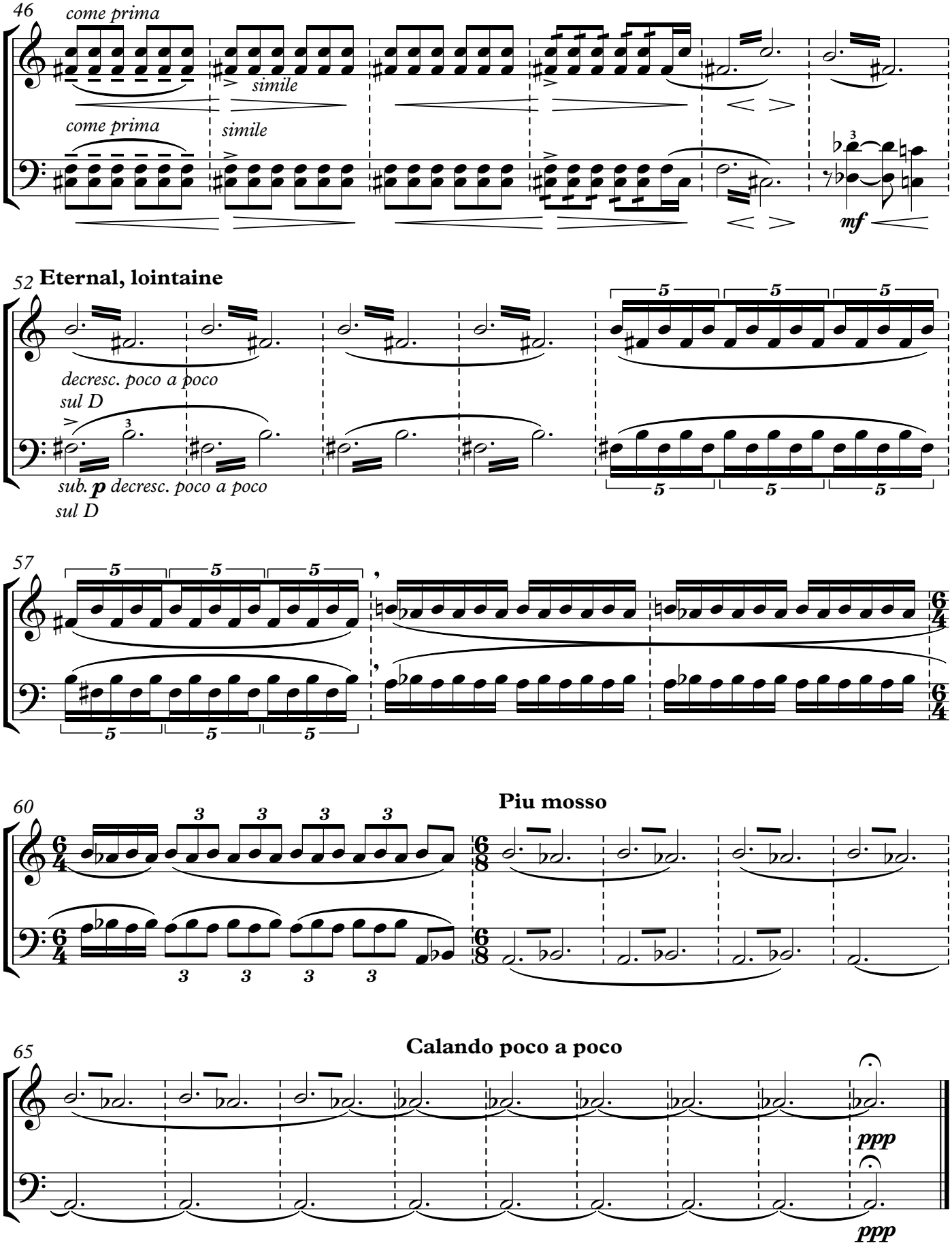
Violin
Violoncello

Idea 4




15
simile
simile
mf espress.
20
23
riccochet, sul ponto
col legno
ordinario
pp
mp
come prima
come prima
simile
mp
27
simile


32
humoristic,
next-to-pitch
gliss.
36
particularly strong bow
cresc.
cresc.
particularly strong bow
40
sfz
42
pizz.
arco
sfz f
decresc.

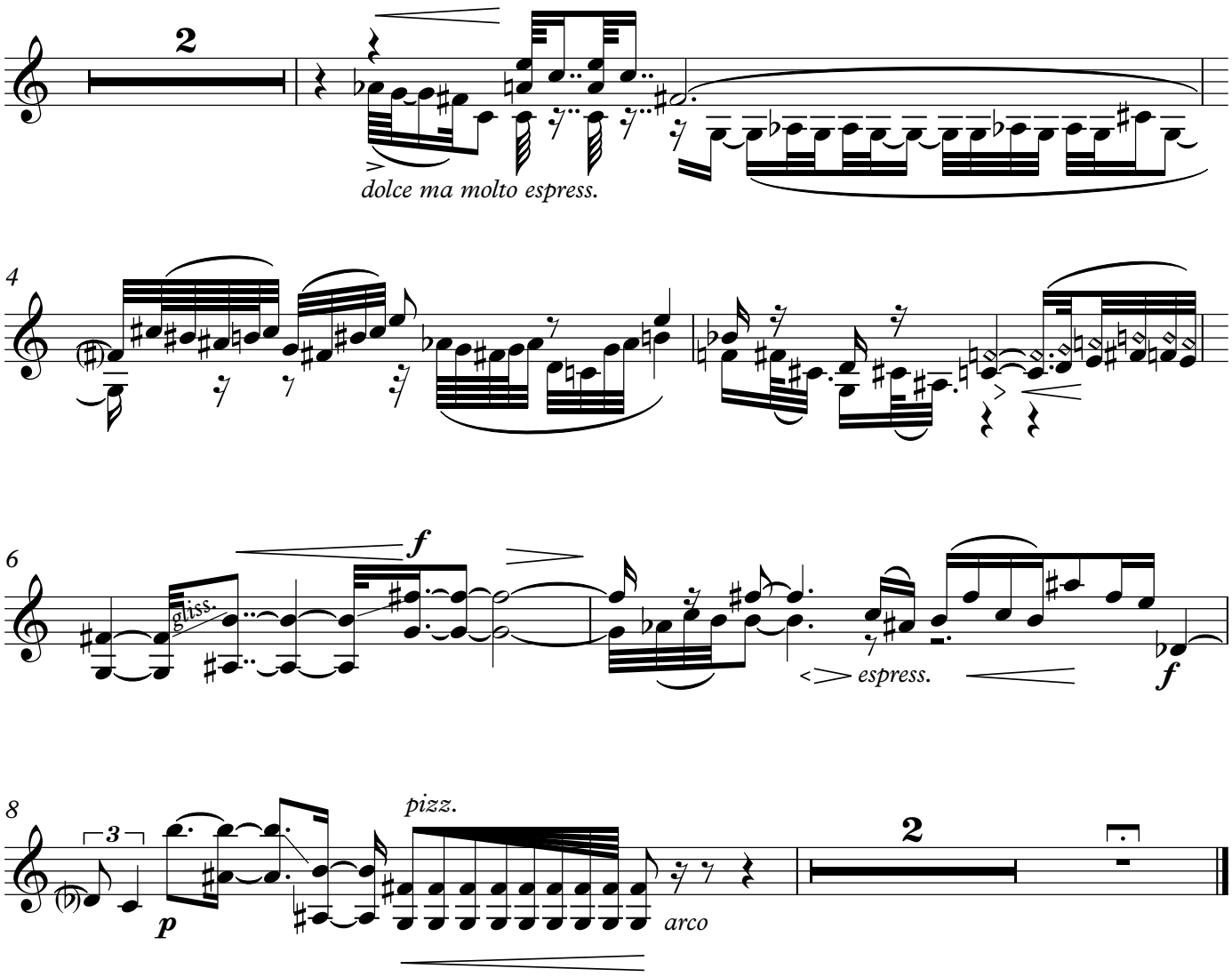

46
come prima
simile
come prima
simile
mf
52
Eternal, lointaine
decresc. poco a poco
sul D
sub. p decresc. poco a poco
sul D
57
60
Piu mosso
65
Calando poco a poco
ppp
ppp

Violin

Idea 5

Warm, in the deeps, quasi fugato ♩ = 28 (♪ = 56)

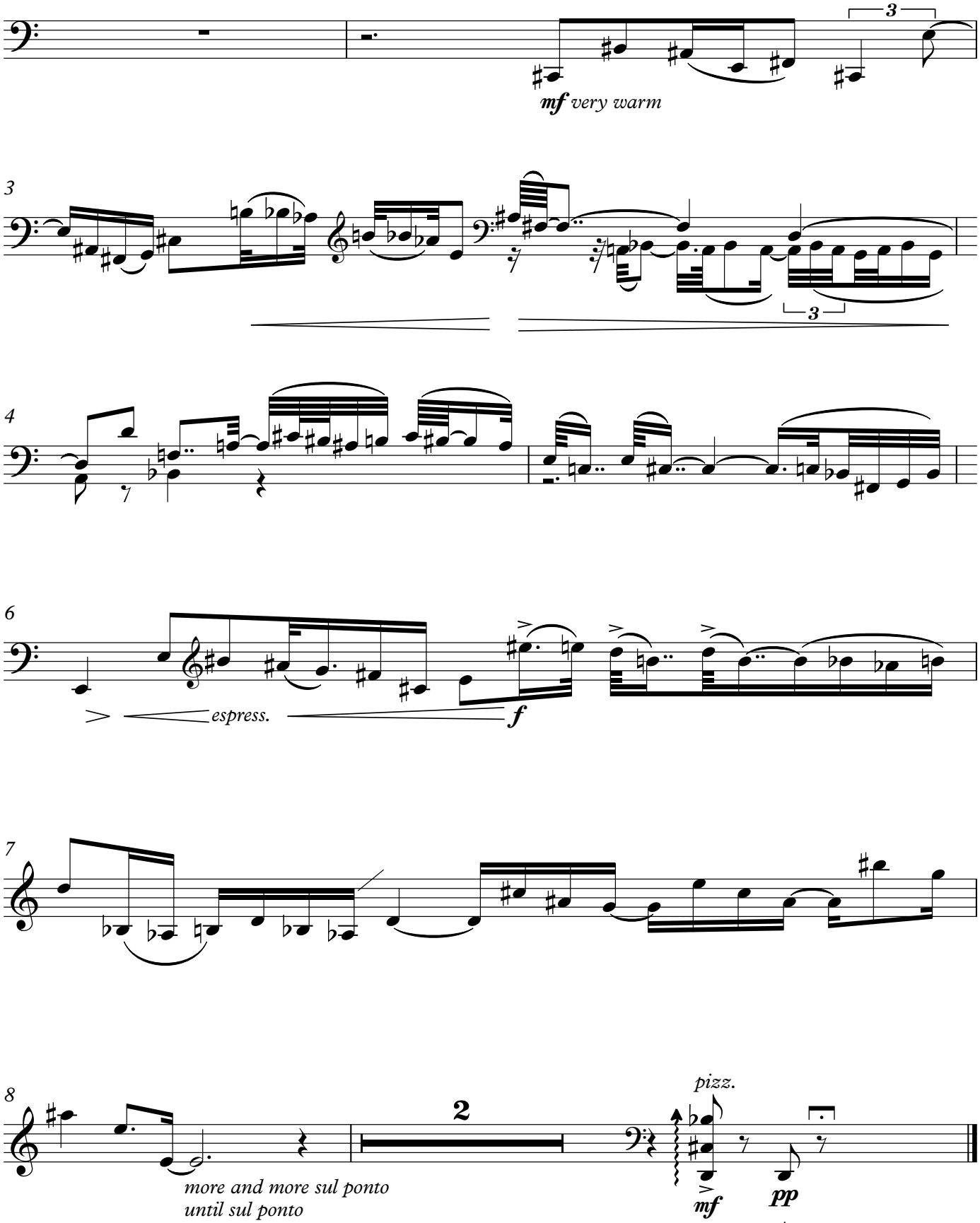
start breaking before the beat



Violoncello

Idea 5

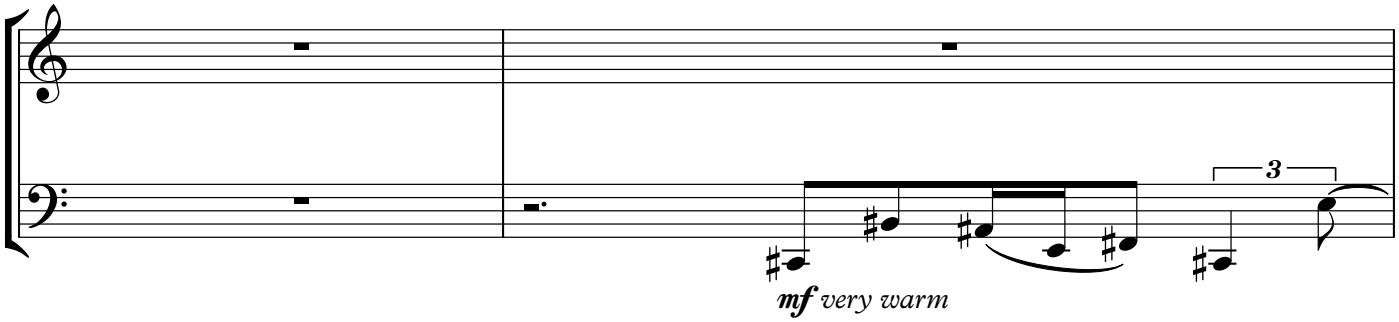
Warm, in the deeps, quasi fugato ♩ = 28 (♪ = 56)



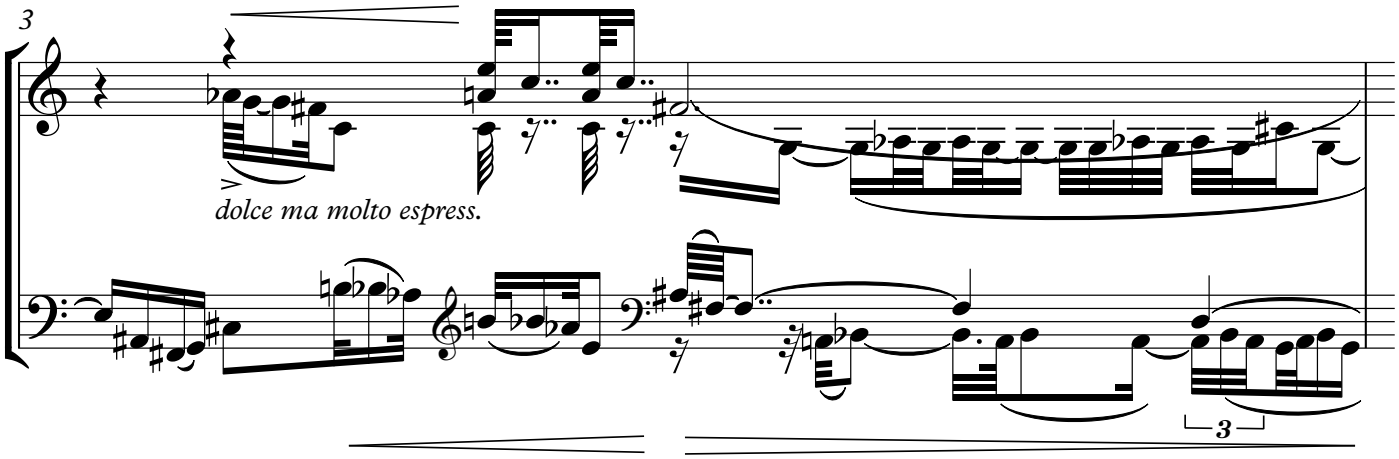
Violin
Violoncello

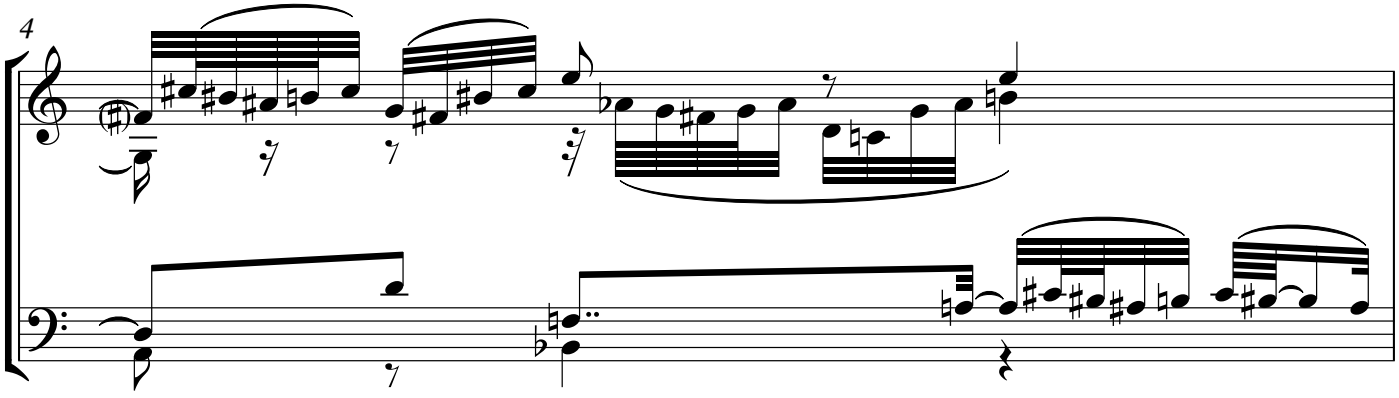
Idea 5

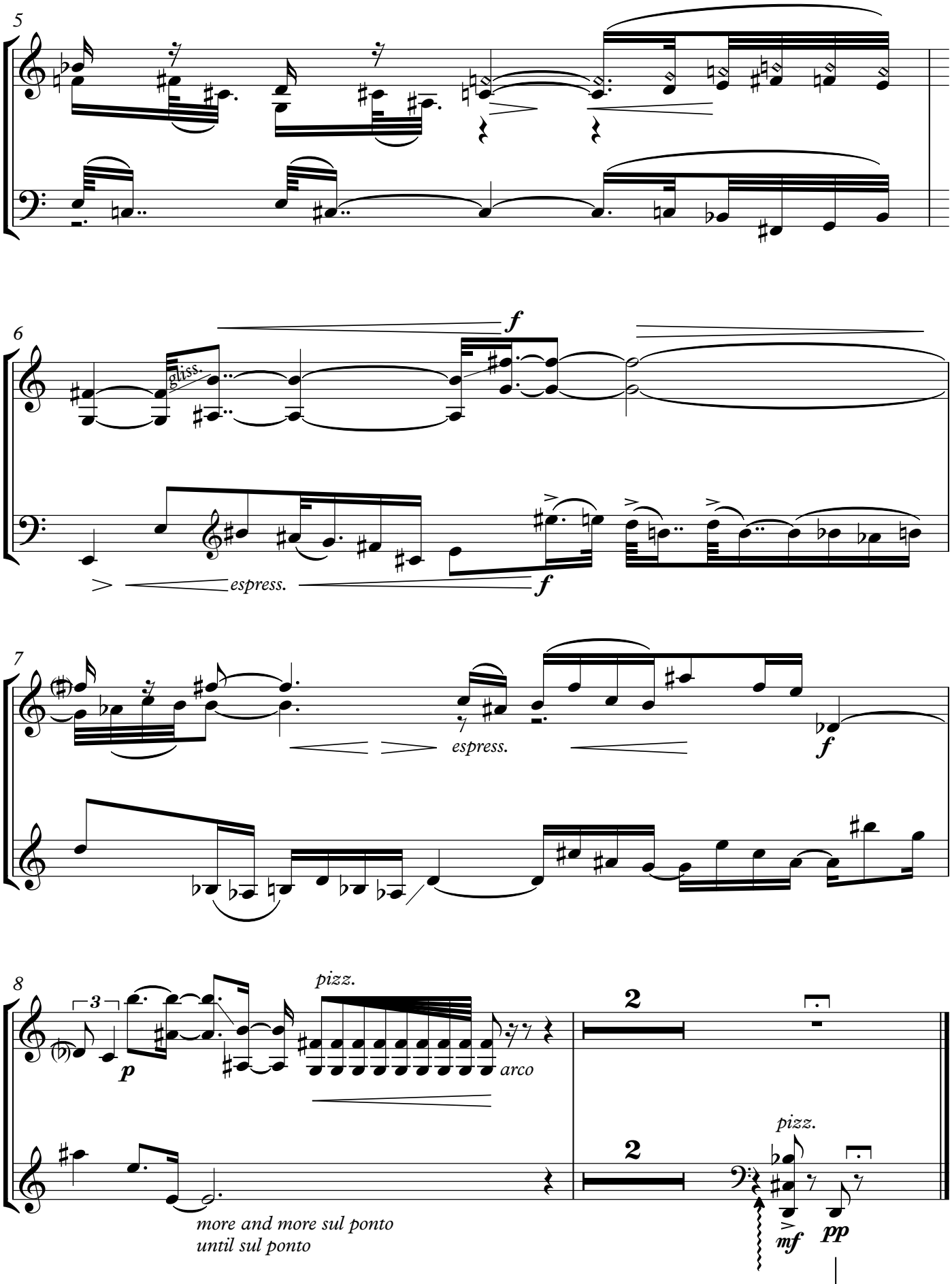
Warm, in the deeps, quasi fugato ♩ = 28 (♪ = 56)



start breaking before the beat





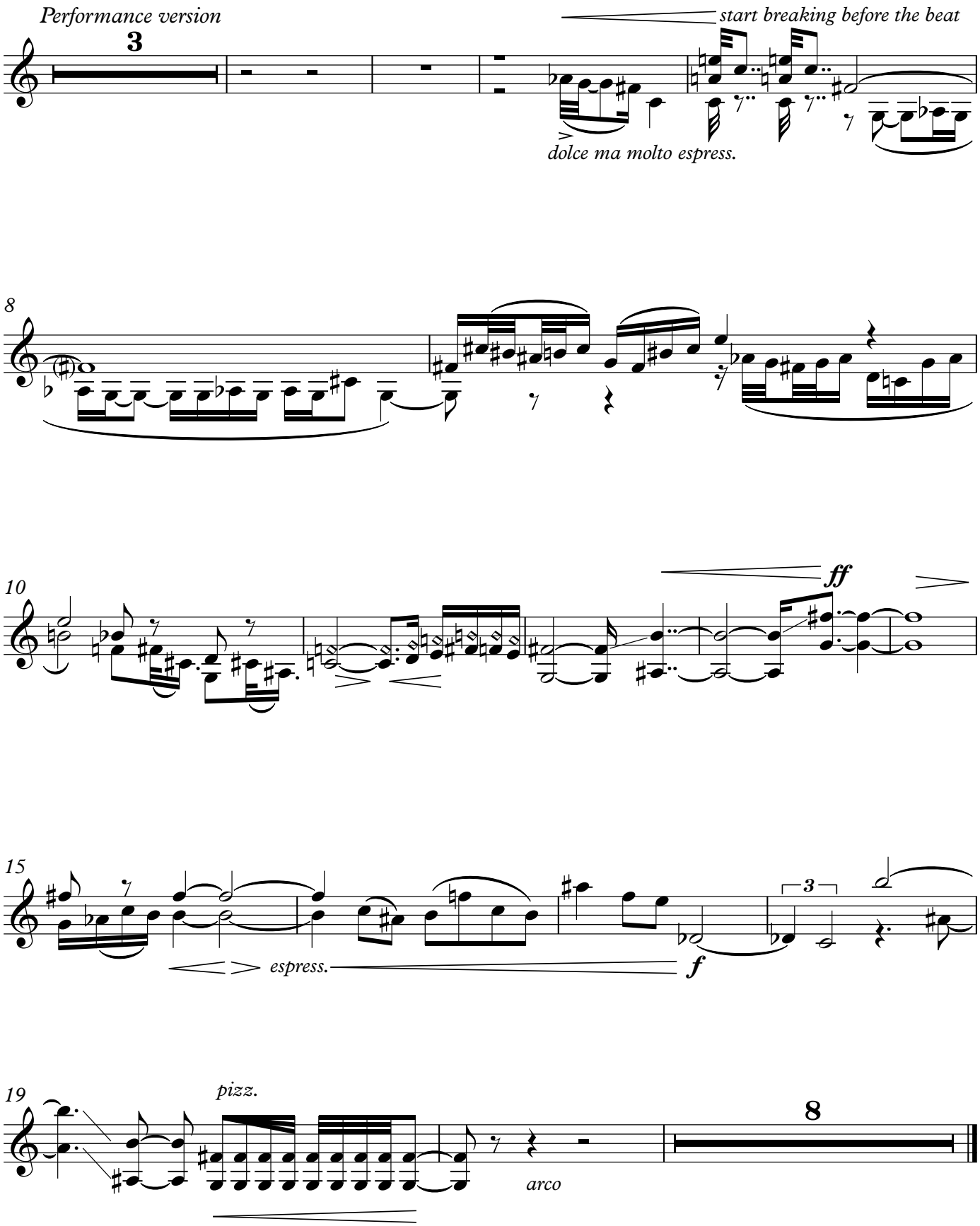

5
6
gliss.
f
espress.
f
7
espress.
f
8
3
p
pizz.
arco
2
2
pizz.
more and more sul ponto
until sul ponto
mf
pp

Violin

Idea 5

Warm, in the deeps, quasi fugato ♩ = 56

Performance version

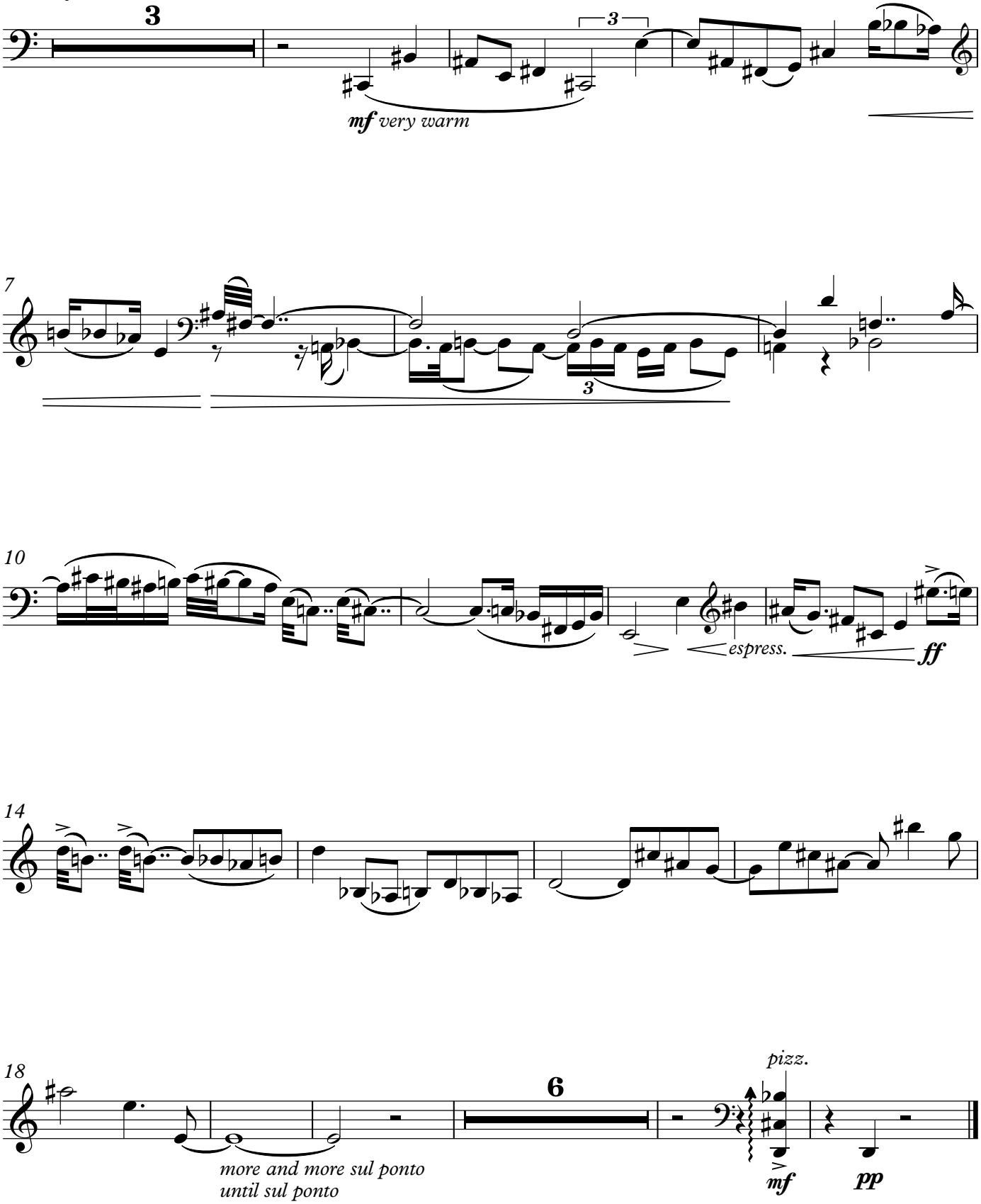


Violoncello

Idea 5

Warm, in the deeps, quasi fugato ♩ = 56

Performance version

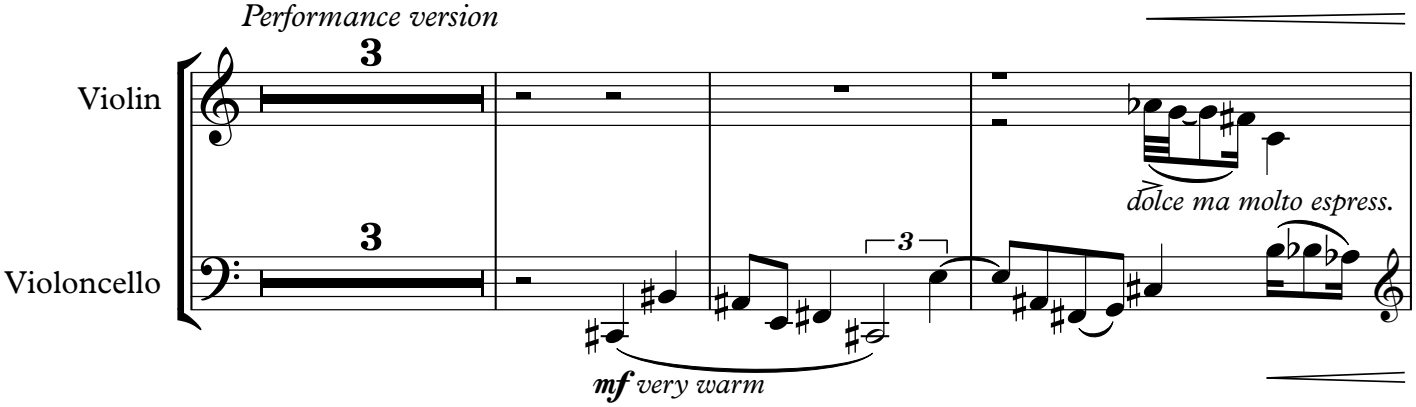


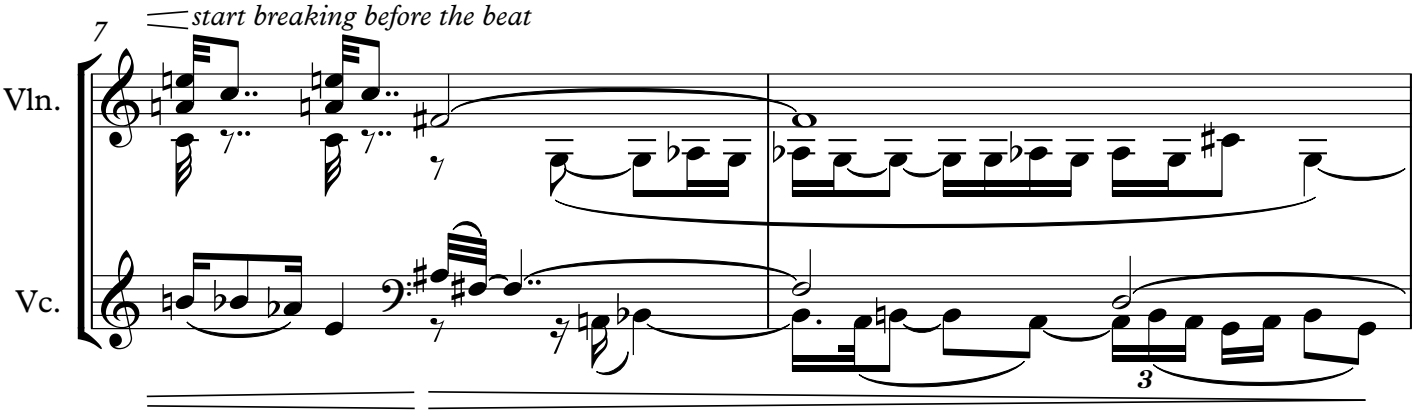
Violin
Violoncello

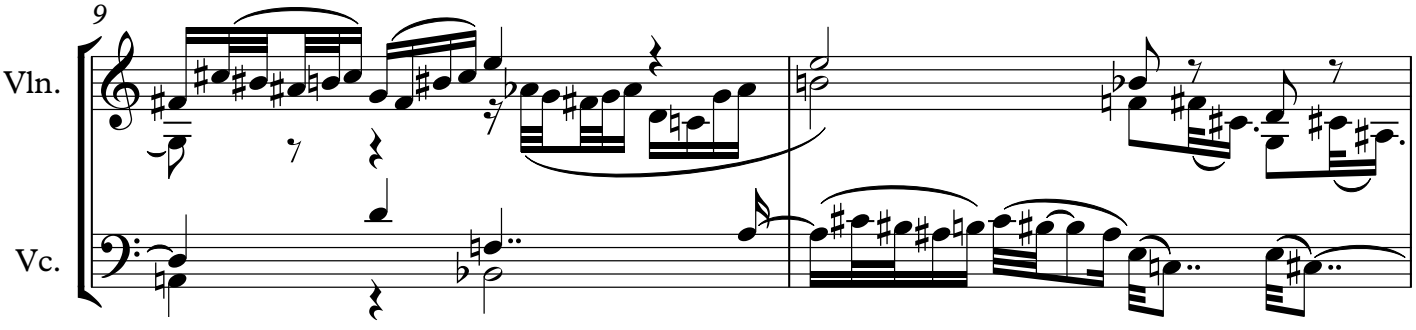
Idea 5

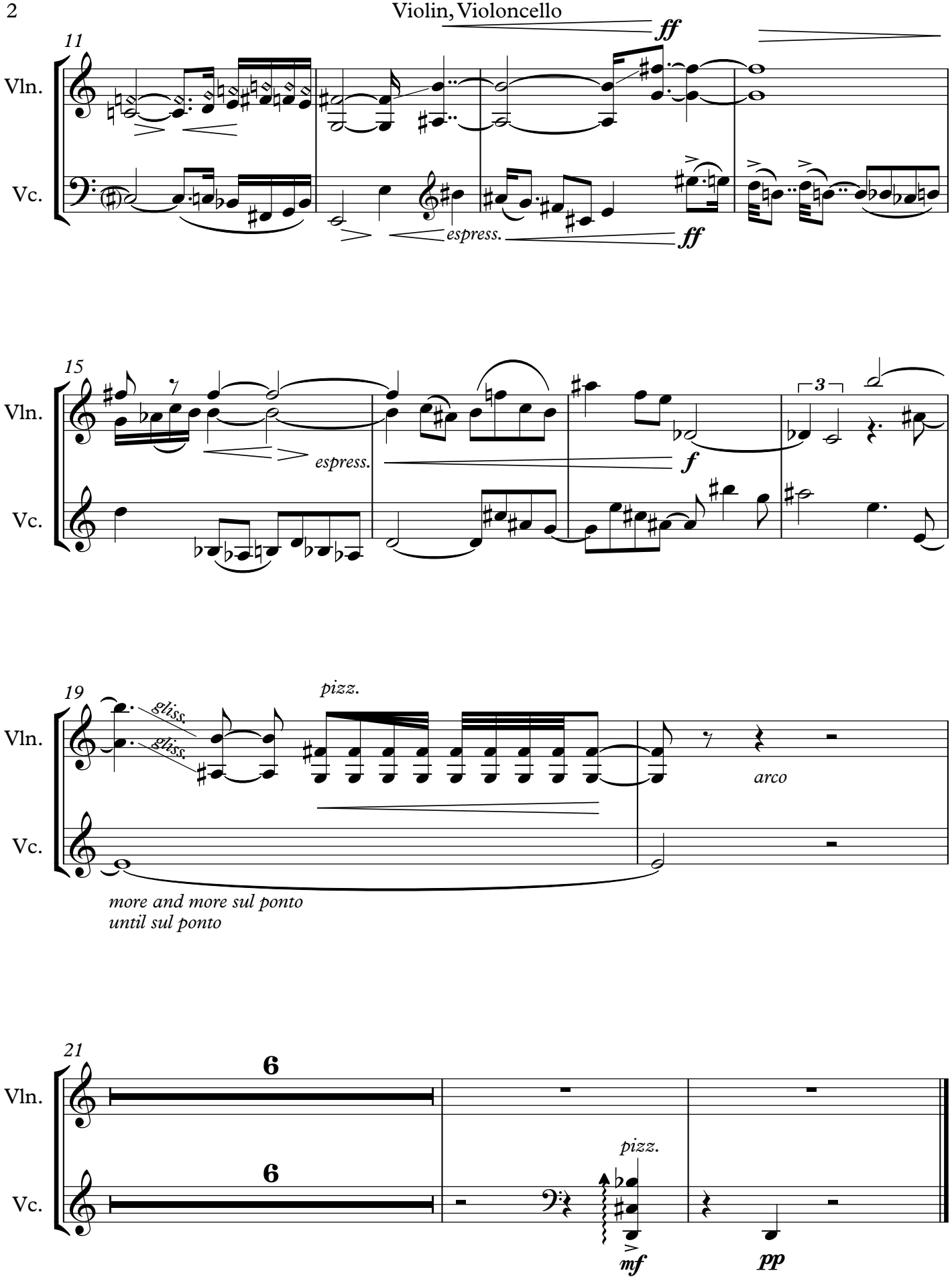
Warm, in the deeps, quasi fugato ♩ = 56

Performance version



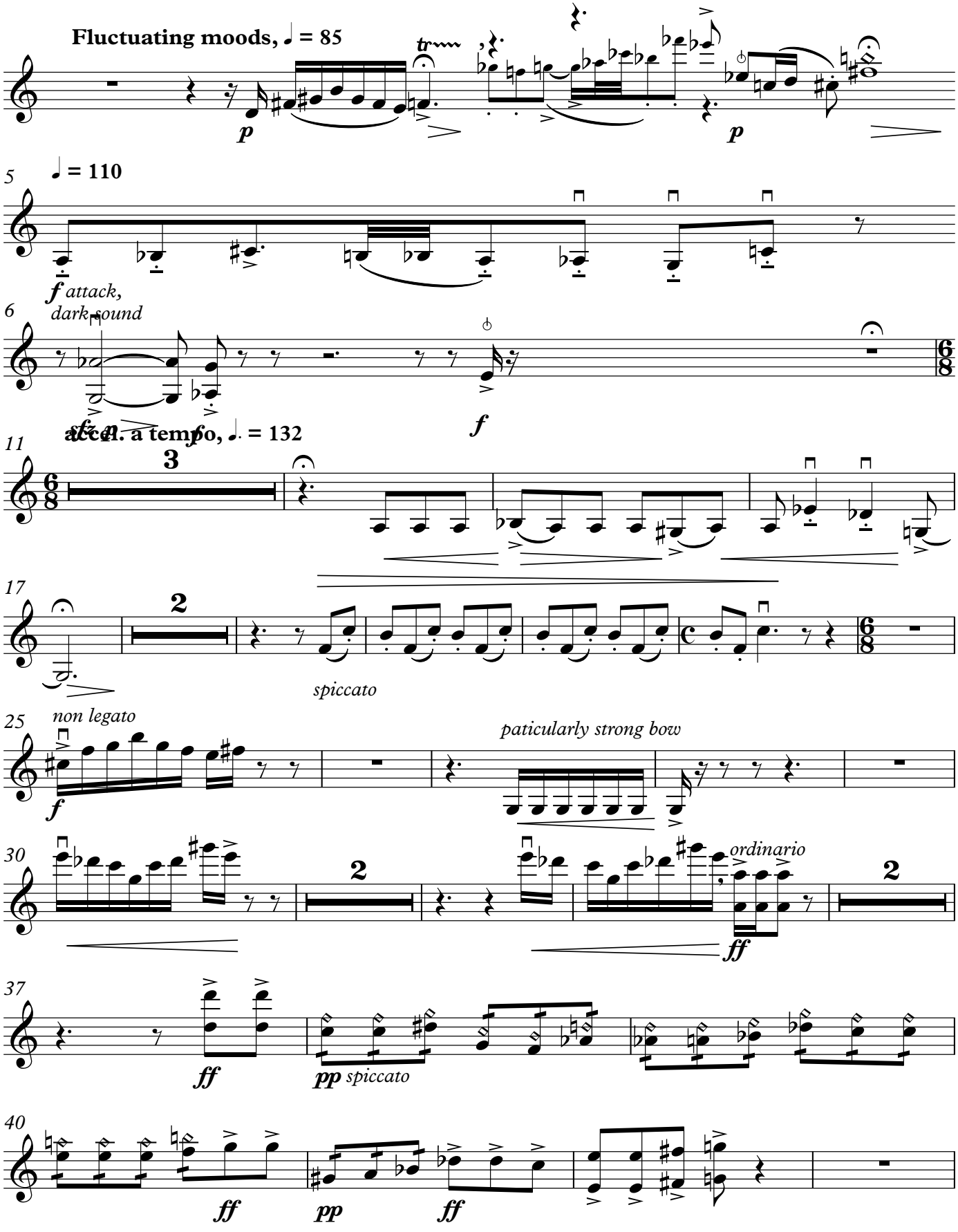


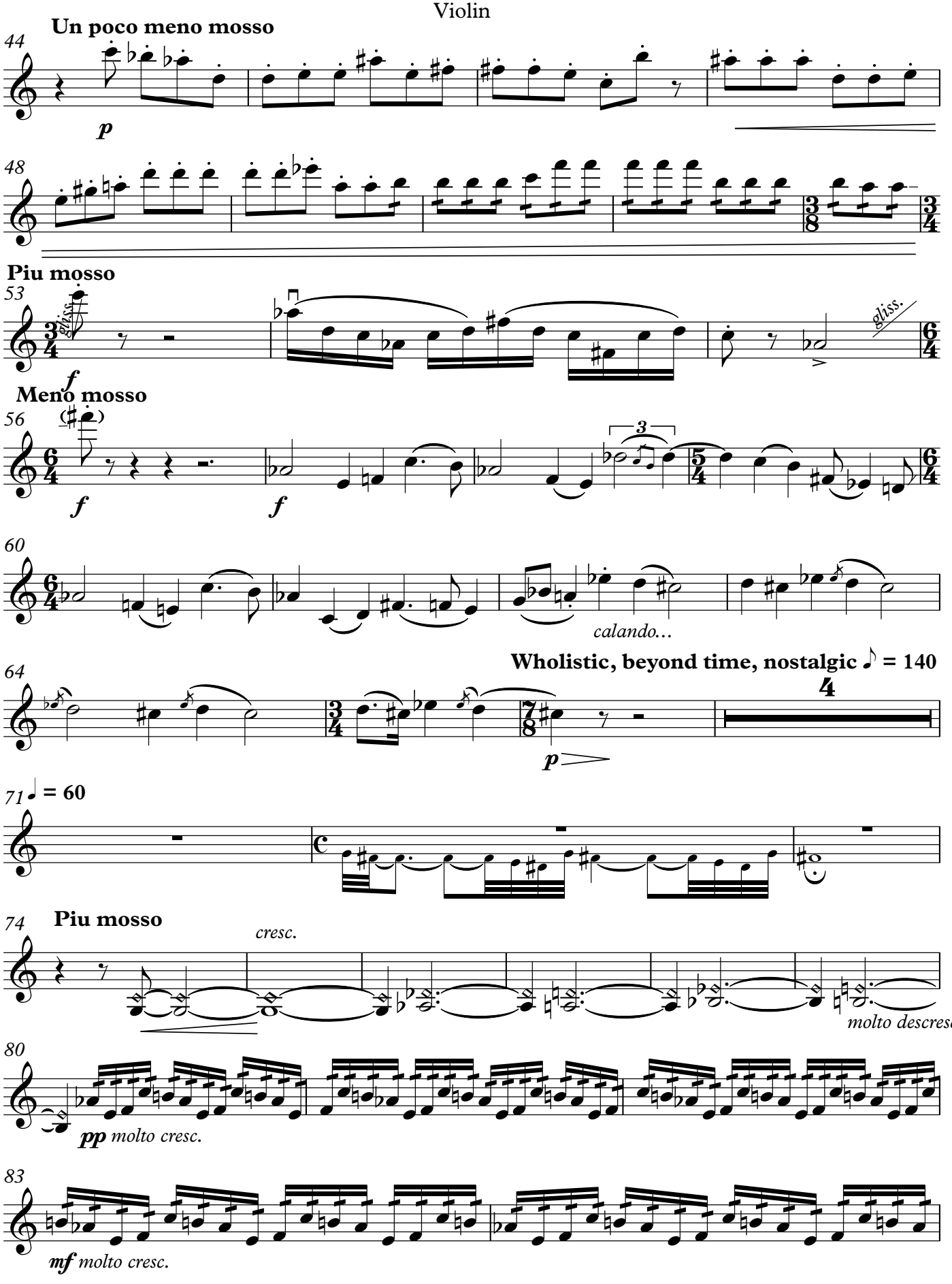


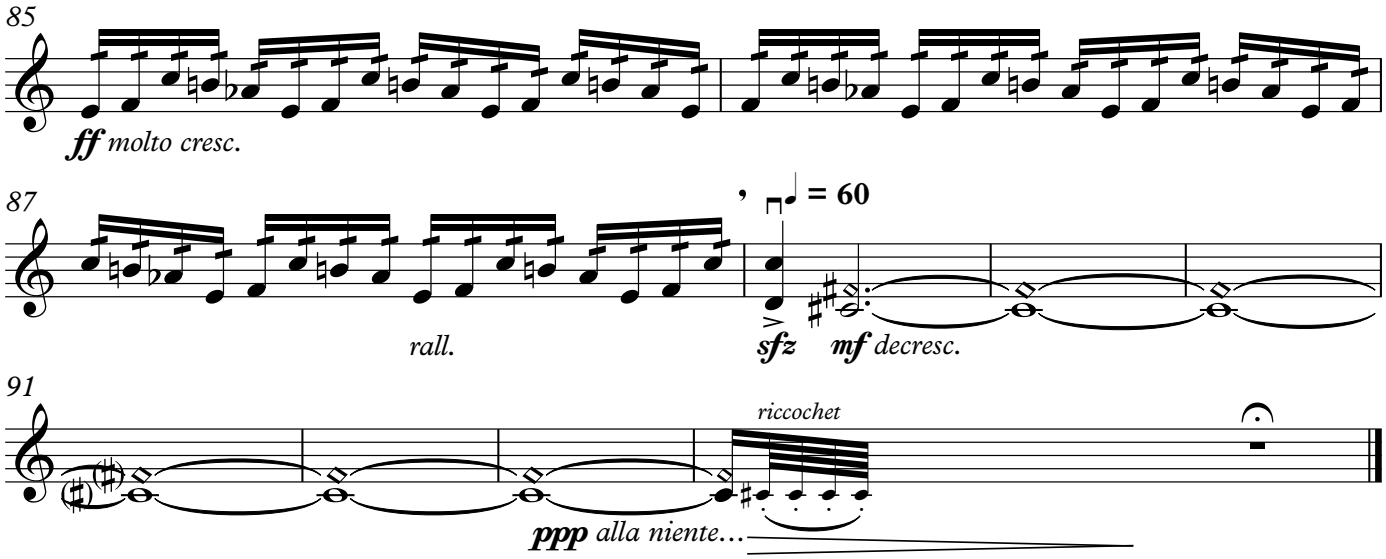

11
Vln.
Vc.
ff
espress.
ff
15
Vln.
Vc.
espress.
f
3
19
Vln.
Vc.
gliss.
gliss.
pizz.
arco
more and more sul ponto
until sul ponto
21
Vln.
Vc.
6
6
pizz.
mf
pp

Violin

Idea 6

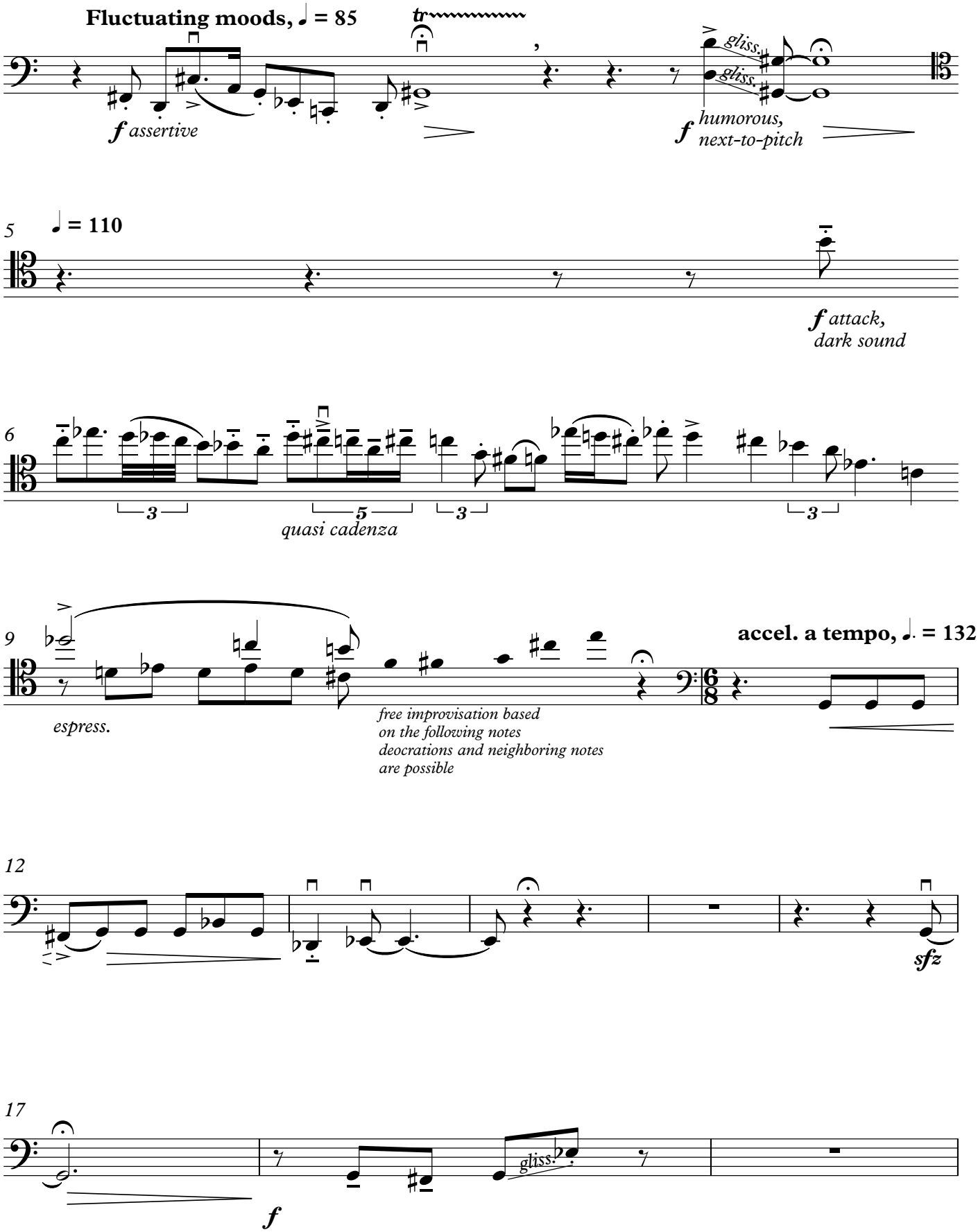


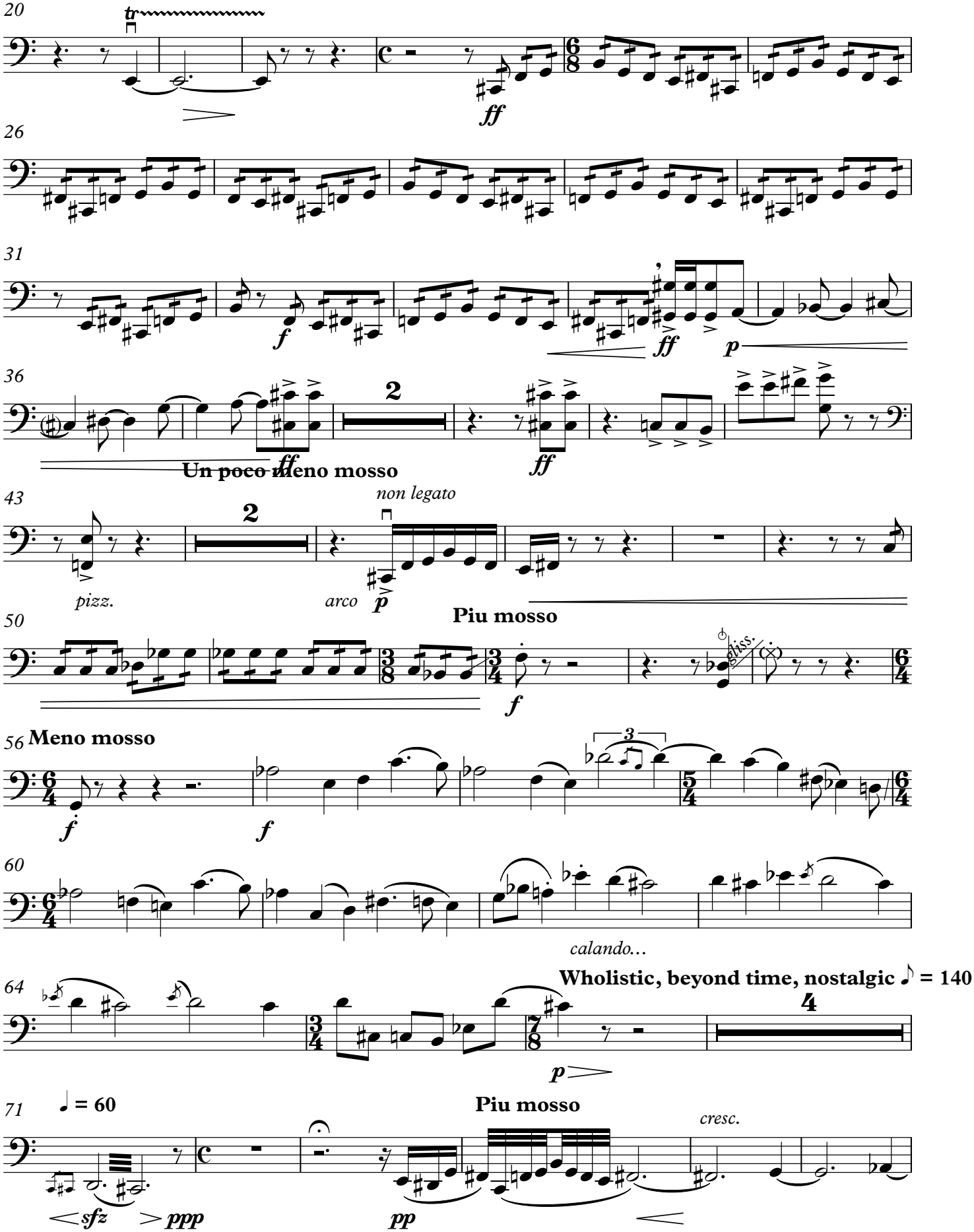

Un poco meno mosso
44
p
48
Piu mosso
53
gliss.
f
gliss.
Meno mosso
56
f
f
3
60
calando...
64
Wholistic, beyond time, nostalgic ♪ = 140
4
p
71
♩ = 60
74
Piu mosso
cresc.
molto descresc.
80
pp molto cresc.
83
mf molto cresc.

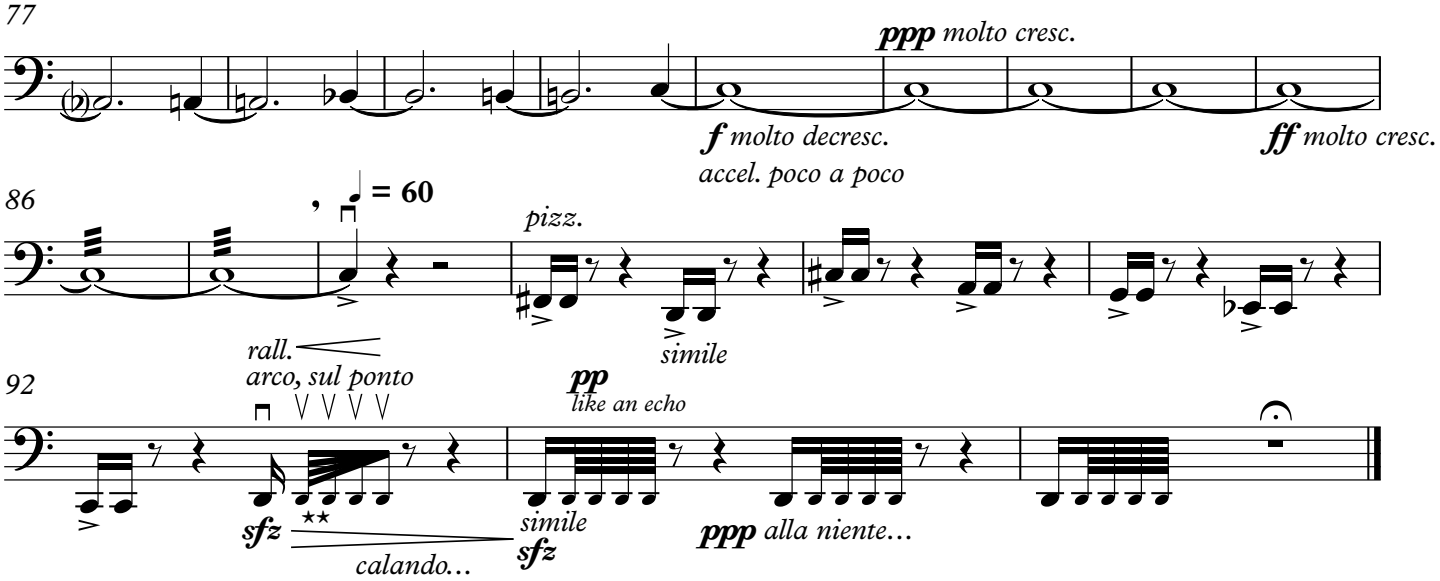

85
ff molto cresc.
87
rall.
= 60
sfz
mf decresc.
91
riccochet
ppp alla niente…

Violoncello

Idea 6

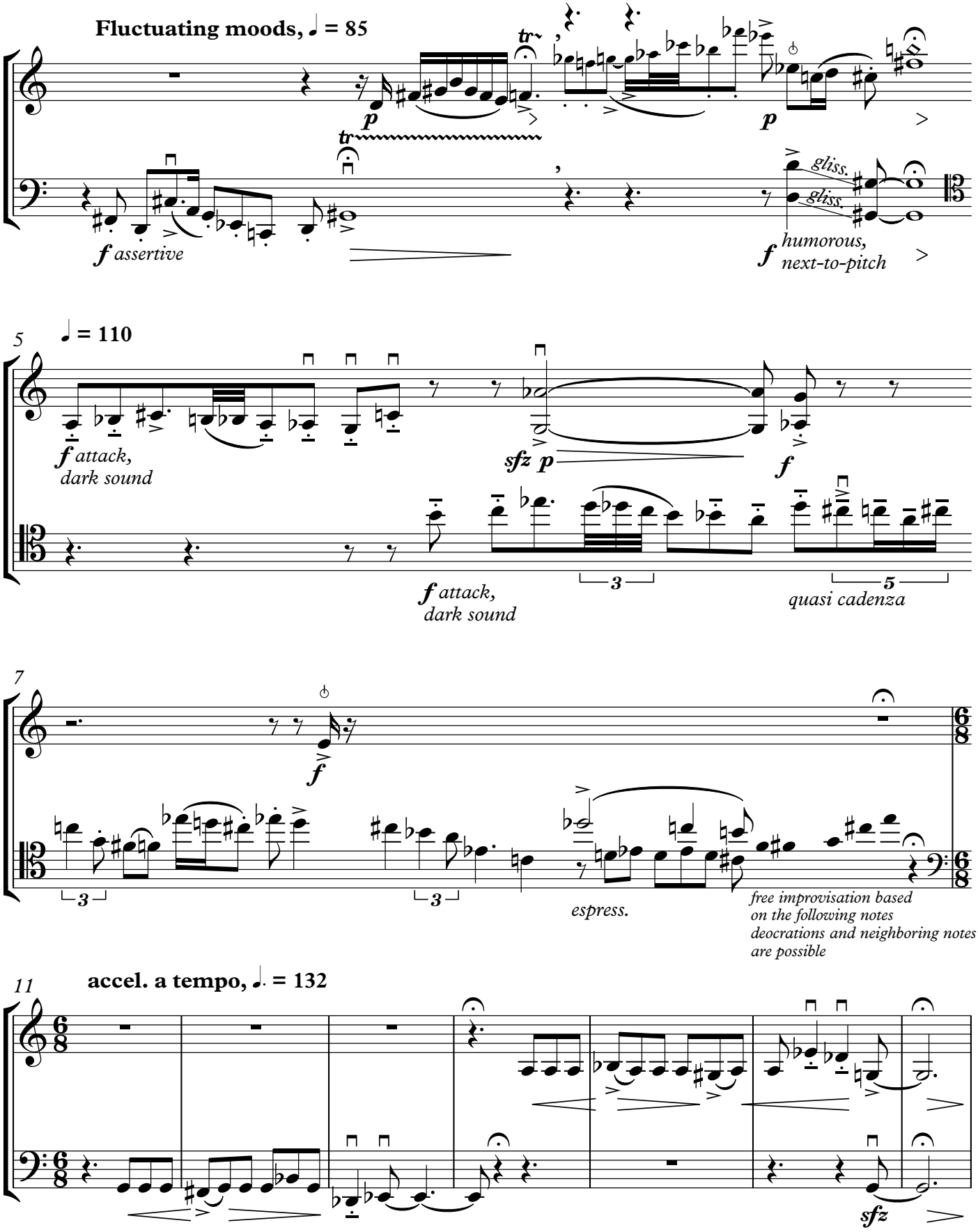


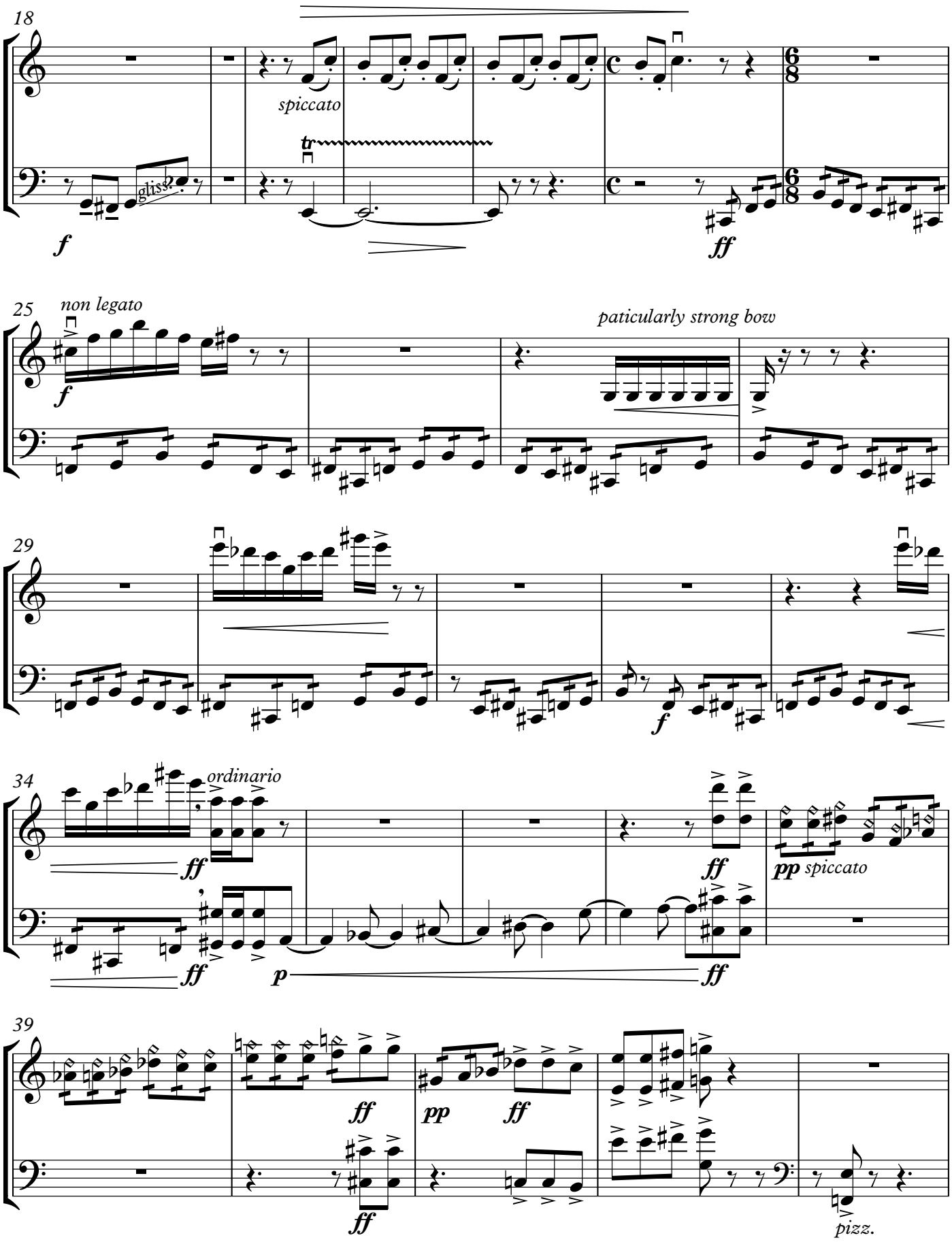

20
tr
ff
26
31
f
ff
p
36
2
ff
ff
Un poco meno mosso
43
2
non legato
pizz.
arco
p
Piu mosso
50
f
Meno mosso
56
f
f
3
60
calando...
64
Wholistic, beyond time, nostalgic ♪ = 140
4
p
71
♩ = 60
sfz
ppp
pp
Piu mosso
cresc.

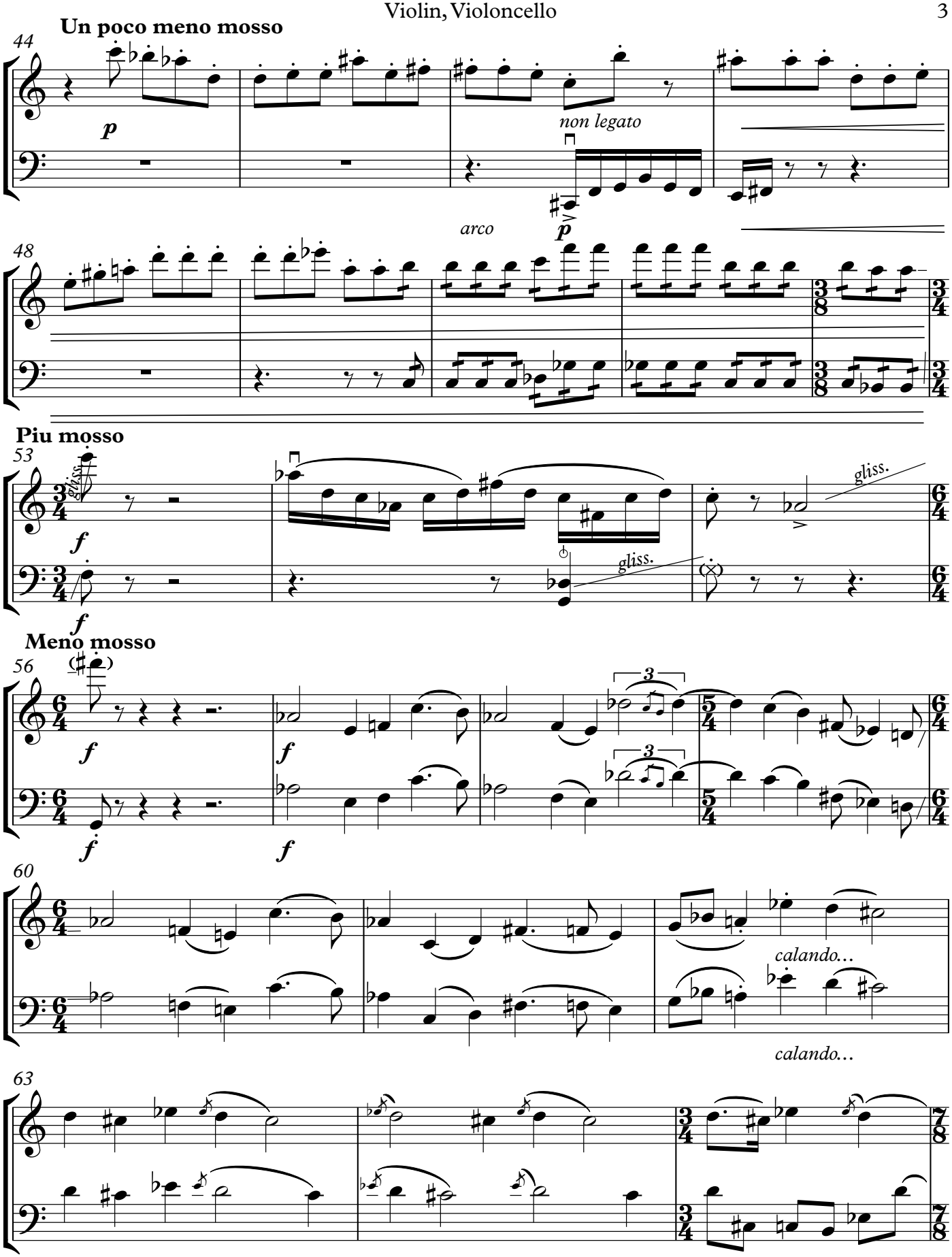

77
ppp molto cresc.
f molto decresc.
accel. poco a poco
ff molto cresc.
86
= 60
pizz.
simile
rall.
arco, sul ponto
92
pp
like an echo
sfz
calandando…
simile
sfz
ppp alla niente…

Violin
Violoncello

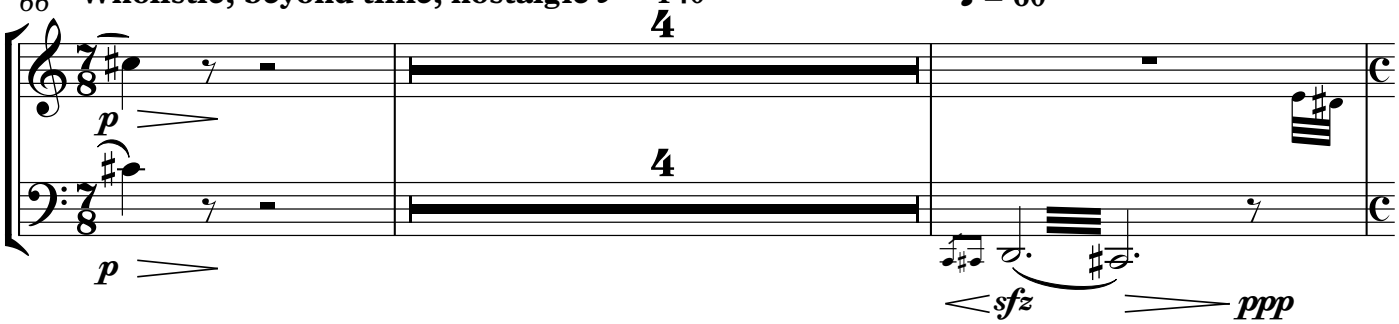
Idea 6



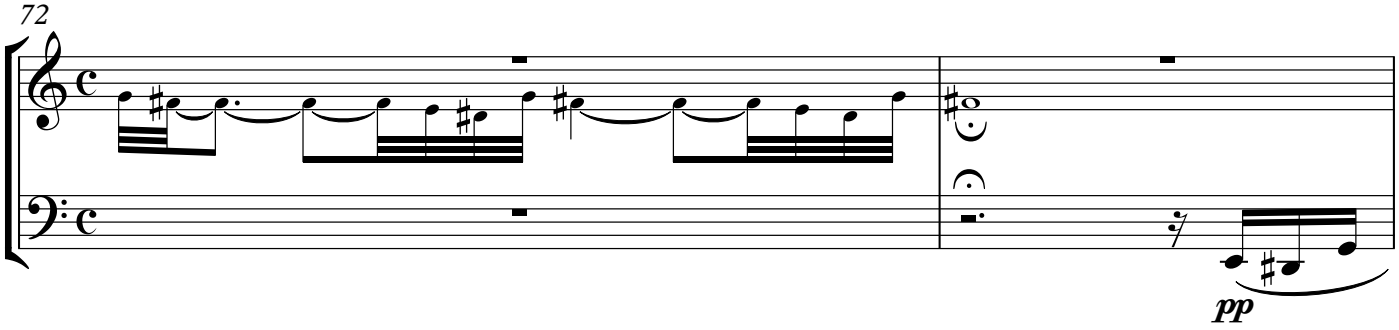

18
spiccato
gliss.
f
ff
25
non legato
f
paticularly strong bow
29
f
34
ordinario
ff
ff
p
ff
ff
pp spiccato
39
ff
pp
ff
ff
pizz.


Un poco meno mosso
44
p
non legato
arco
48
Piu mosso
53
f
gliss.
Meno mosso
56
60
calando...
63

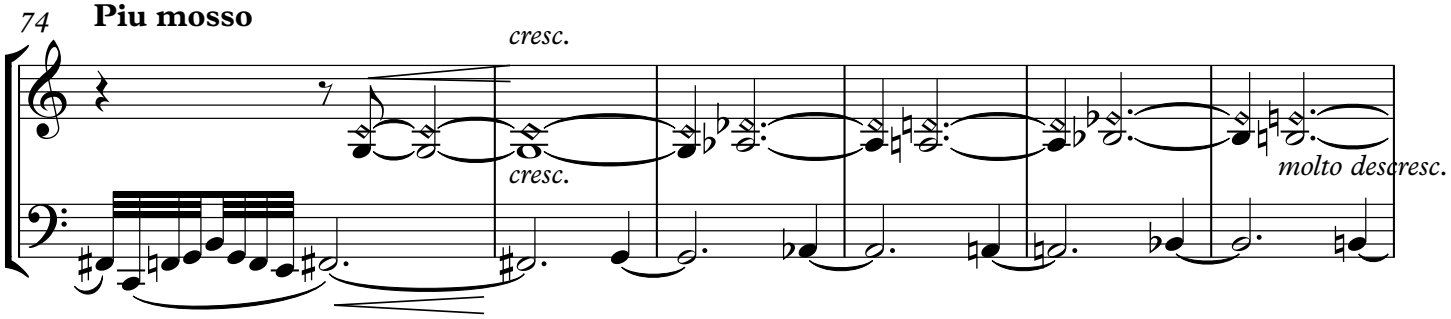
66 **Wholistic, beyond time, nostalgic** ♪ = 140 ♩ = 60



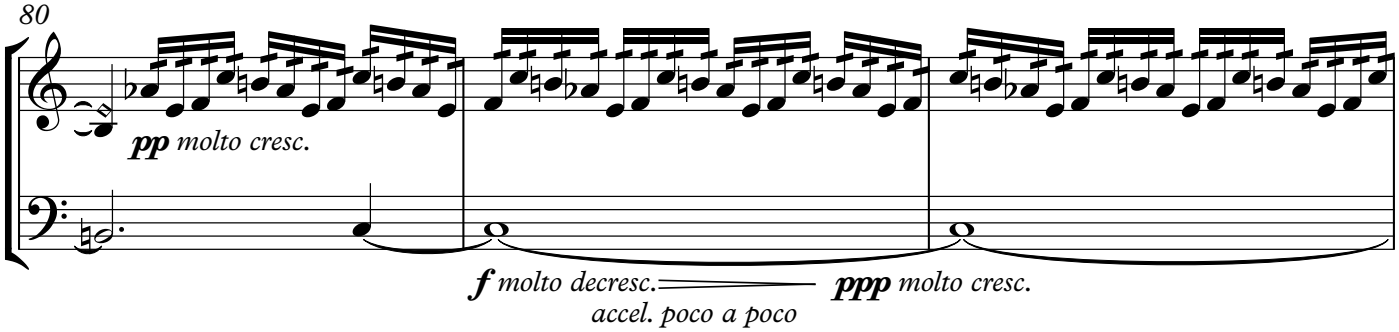
72



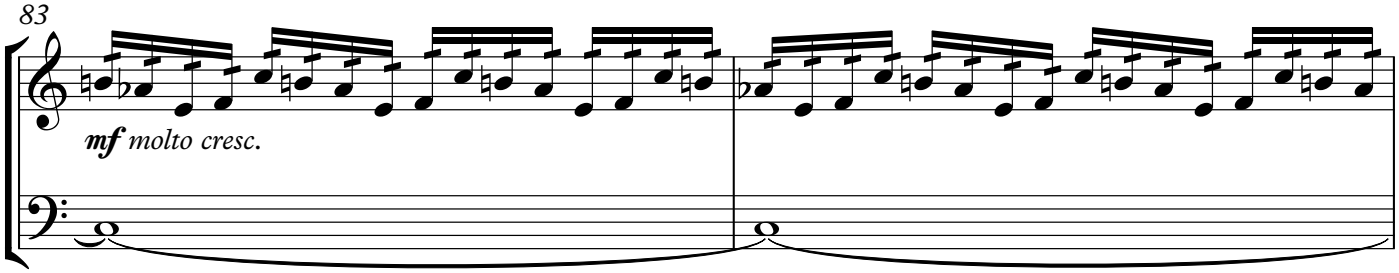
74 **Piu mosso**

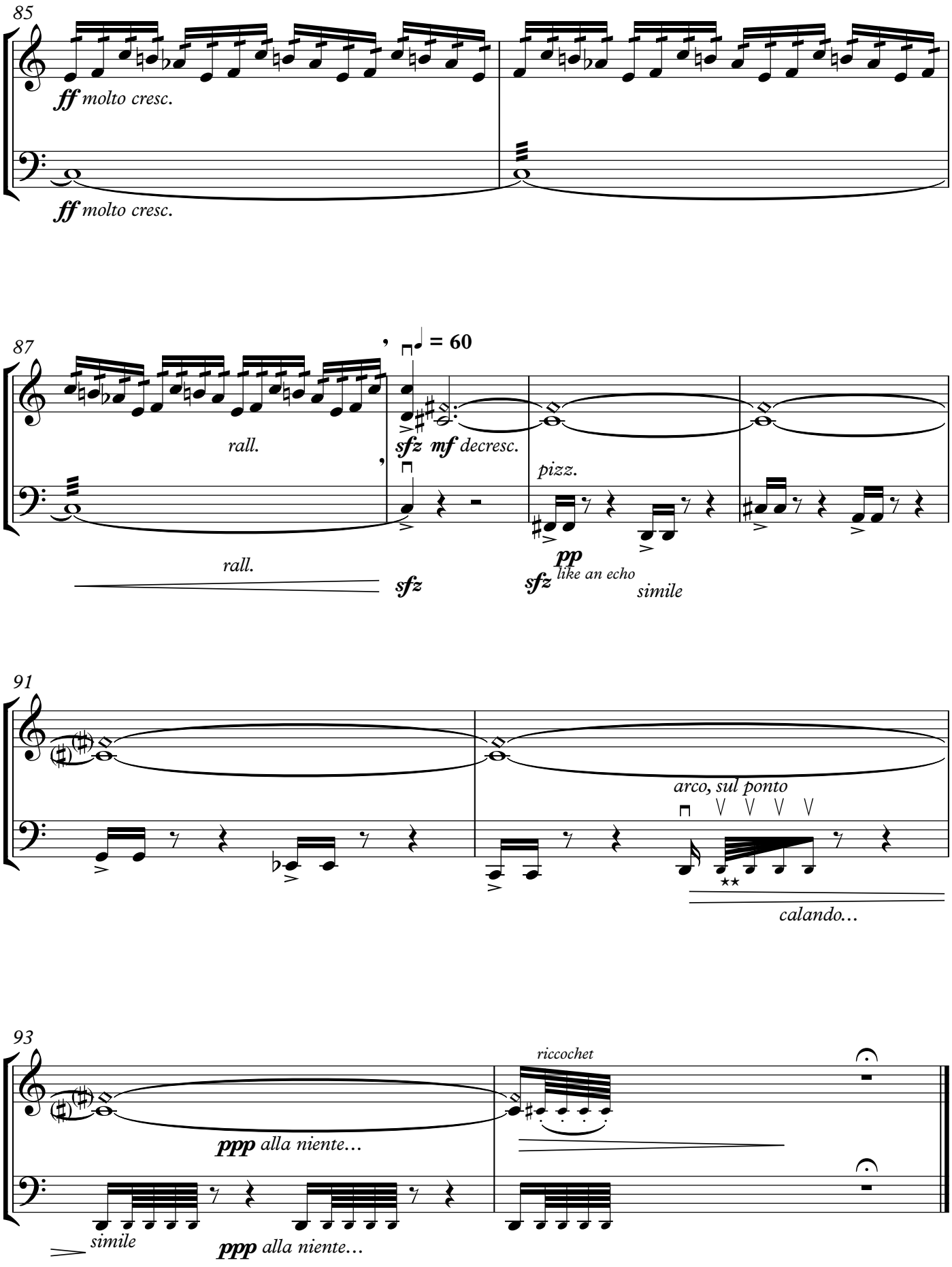


80



83




85
ff molto cresc.
ff molto cresc.
87
= 60
rall.
sfz mf decresc.
pizz.
rall.
sfz
pp
like an echo
sfz
simile
91
arco, sul ponto
calandoâ€¦
93
riccochet
ppp alla nienteâ€¦
simile
ppp alla nienteâ€¦