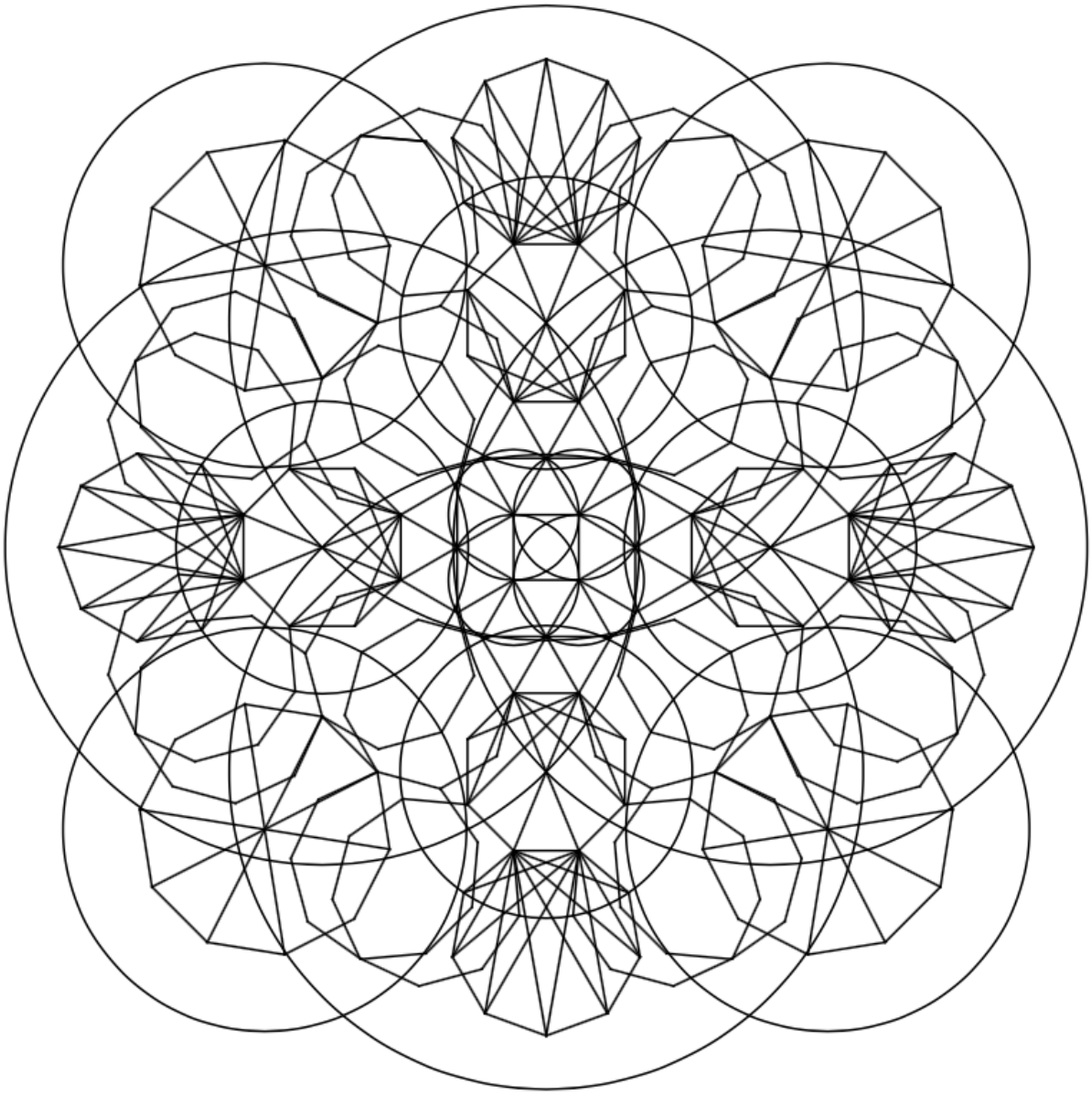
Odd [s]Paces

for String Quartet



Full Score

Pedro Laranjeira Finisterra

June 2021 / Revised: August 2023
Re-edited: July 2024

Odd [s]Paces (2021/2023)
for String Quartet

Full Score

Composition and Cover Illustration: Pedro Laranjeira Finisterra

Duration: ca. 6’

Concert Notes

Odd [s]Paces is a piece which explores the sensations of spending a day in a series of surrealistic scenarios. Starting from a morning in which most things look green(*ish*), running away from a black whole (*potentially, maybe… don’t quote me on that…*) to, perhaps, meeting a deity which will at some point send you into a rotating hypercube. After spending some time inside that weird polytope (*uh, fancy word! Is it perhaps a polychoron? – uuuhhh, another fancy word!*) and feeling dizzy from trying to perceive space turning on itself (when the hypercube is in fact just rotating in all its four or more spatial dimensions (*yes, four dimensions or more!*), you finally return to the place where you came from in time to see the sunset… but everything is now somehow made of plastic. Did you really return to the same place from this morning? Or did you end up in an alternative dimension? Well, who cares? It was just a dream after all (*Or was it?*) - and you wake up (*But do you, reeeaaally!?*).

The main materials used to bring to life these surrealistic scenes are a series of scales derived from alternative tuning systems which employ specific combinations of ‘microtones’: notes present in between the 12 notes of the western scale. Some polyrhythms and irregular time signatures are also used to help achieve these goals. While these materials may sound ‘dissonant’, ‘uncoordinated’ or ‘out of tune/tempo’ to some listeners, they may also present new expressive possibilities. Who knows, maybe some pretentious composer inspired by Adam Neely’s Youtube videos on these resources might want to make a surrealistic piece with them…

…Oh, wait a minute…

Performance Notes

Microtonality and Intonation

As a starting point, this piece conceptually explores scales derived from the equal division of the 3/2 “Just” perfect fifths of the violin and viola’s open strings into 3, 4, and 5 equally distant parts. Because of the way these scales are derived, they do not repeat at the octave, but at the perfect fifth. Through musical notation, these scales are then freely approximated into 12 (semitones), 24 (semitones and quarter tones) and 48 notes per octave (semitones, quarter and eighth tones).

The beginning of this piece (until bar 22) explores the scale known as 4 Equal Divisions of 3/2 (4ED3/2), notated in 48 notes per octave. This scale includes a variety of intervals, some corresponding to nearly just intervals (which some listeners may describe as 'ringing intervals') that can be found in the harmonic series, and other 'inharmonic' intervals (which some listeners may describe as 'beating intervals'). With few exceptions, in terms of pitch, this passage only explores pitches found in this scale and is notated by using chromatic notation with quarter tones and eighth tones (see next page for accidentals). This microtonal notation is also complemented by 'boxed' written notes containing guidelines for the performers to intonate in relation to each other and themselves, most of the time by describing the interval to perform above or bellow long notes that are being played by the other performers. In general, intervals corresponding to a ratio are/can be perceived as 'just/ ringing' intervals, and intervals not corresponding to a ratio are/can be perceived as 'inharmonic/beating' intervals. This second group of intervals can then be imagined as 'out of tune' versions of other 'just' intervals, either stretched or compressed, to sound purposely dissonant.

This same notational strategy is also used in two other passages (bars 70-75 and 84-87) to approximate subsets of the harmonic series.

From bar 22 onwards, the following microtonal explorations are as follows:

- bars 22 until 81: interchangeable approximations into 12 (closest semitones) and 24 notes per octave (closest semitone or quarter tone) of 4 Equal Divisions of 3/2
- bars 36-37 & 79-81: Violin 1 plays a descending quarter tone approximation of 6 Equal Divisions of 3/2 and Violin 2 plays a descending '7 Equal Divisions of 3/2' scale (which essentially equates to the 12 tone chromatic scale)
- bars 89-115: 5 Equal Divisions of 3/2 approximated into 24 notes per octave
- bar 116 until the end: 2 and 3 Equal Divisions of 3/2 interchangeably approximated into 12 and 24 notes per octave.

The sections above, given that they are not intended to sound close to just intonation, should be regarded by the performers within the framework of 'semitone/quarter tone music', and therefore their intonation is not as pre-determined as the mostly slow sections where eighth tones are used to represent just intonation intervals most of the time.

<u>Accidentals</u>

The score is notated with the following accidentals:

- Chromatic: ♭ ♮ ♯
- Quarter tones: 𝄳 𝄲 𝄰
- and Eighth tones: 

Eighth tone accidentals may be mixed with chromatic accidentals to notate intervals which may not be notated simply through these accidentals alone. For example, a pure 5/4 Major Third on top of a D is notated by a F# with a down arrow (see Violin 1 on bar 83).

Irrational Time Signatures

Bars 44 and 60 have irrational time signatures. These bars should be regarded as ‘tripleted 2/4 bars’ in which the last (bar 59, a 5/12 bar) or both (bar 44, a 2/6 bar) beats have been subtracted one triplet of an eighth tone. Both these bars include a ‘(3)’ above or bellow each beat to help identifying them visually in the score.

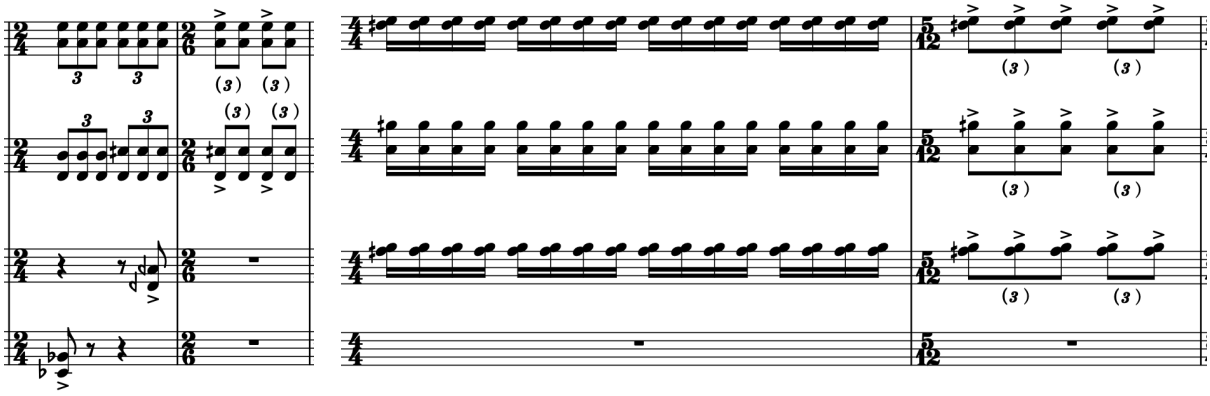


Figure 1. Bars 43-44 and 58-59.

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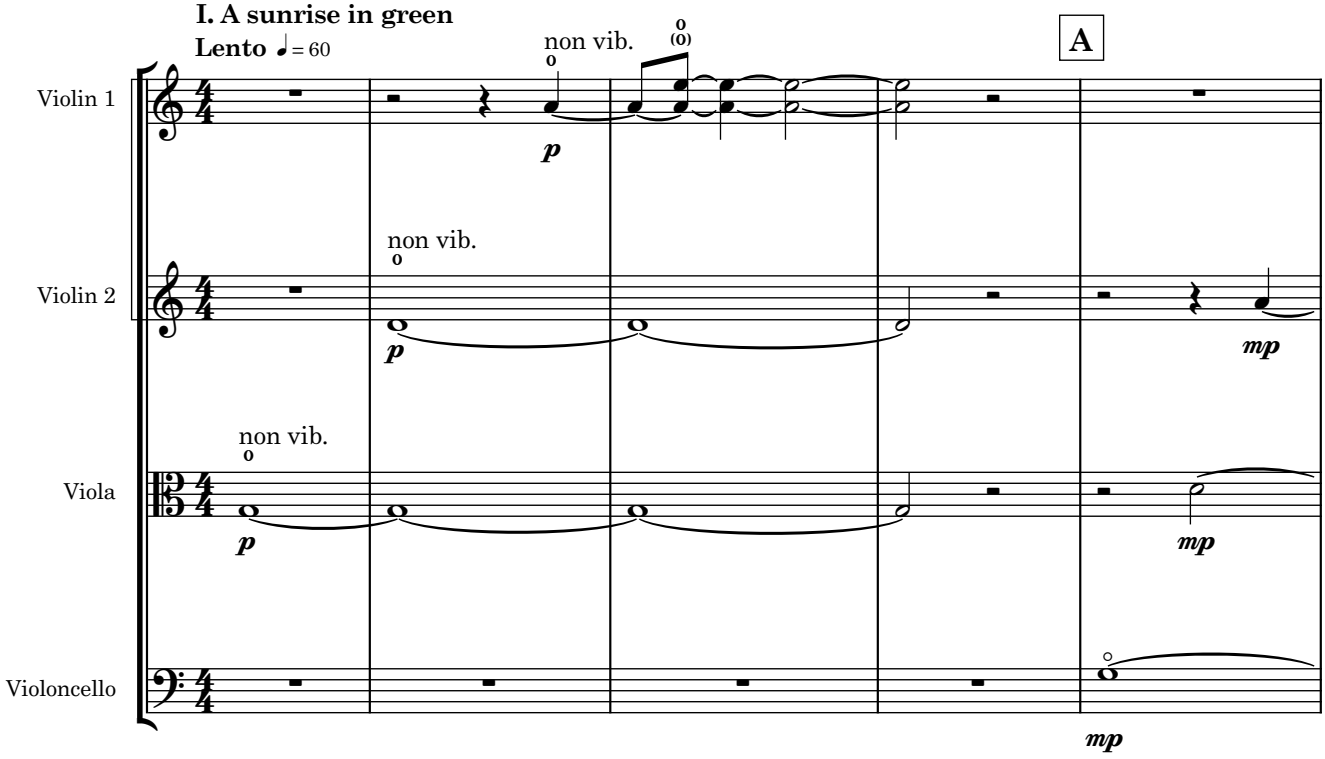
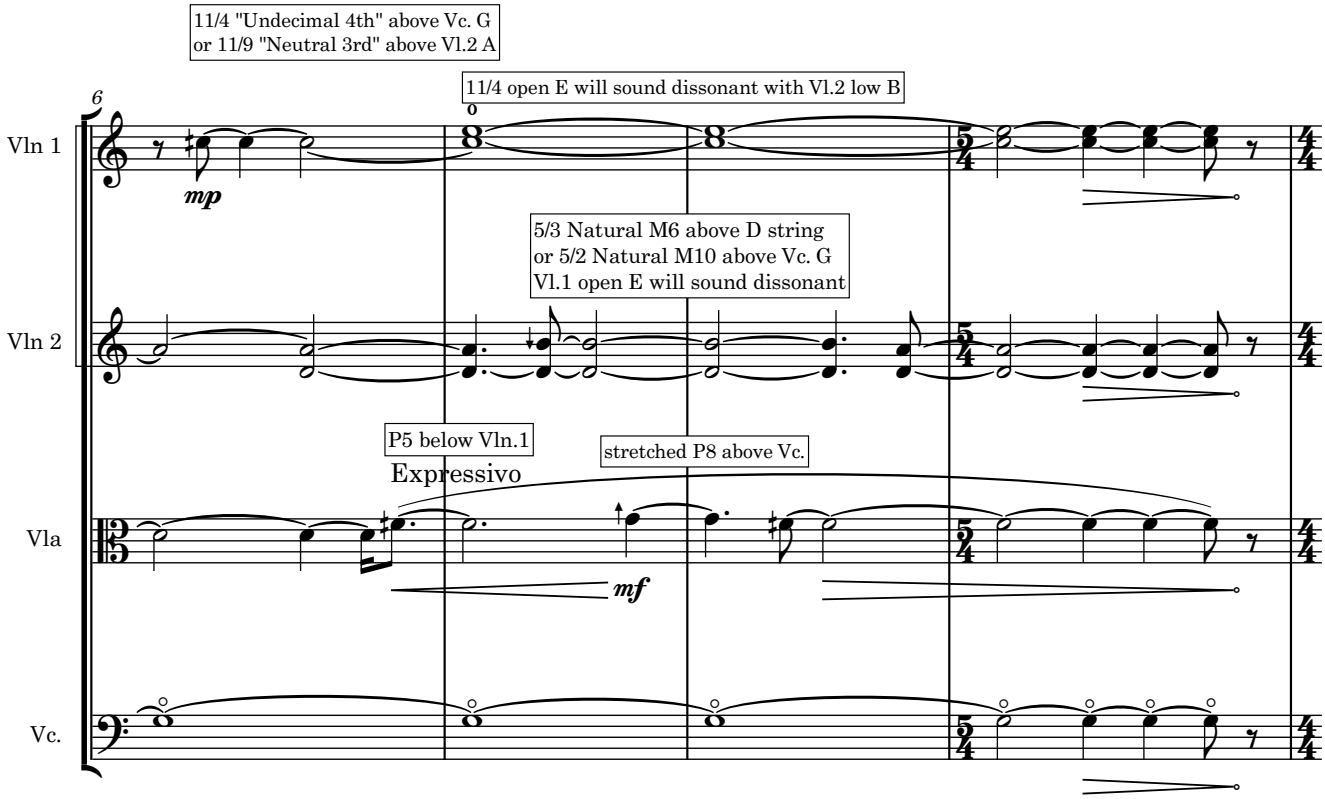
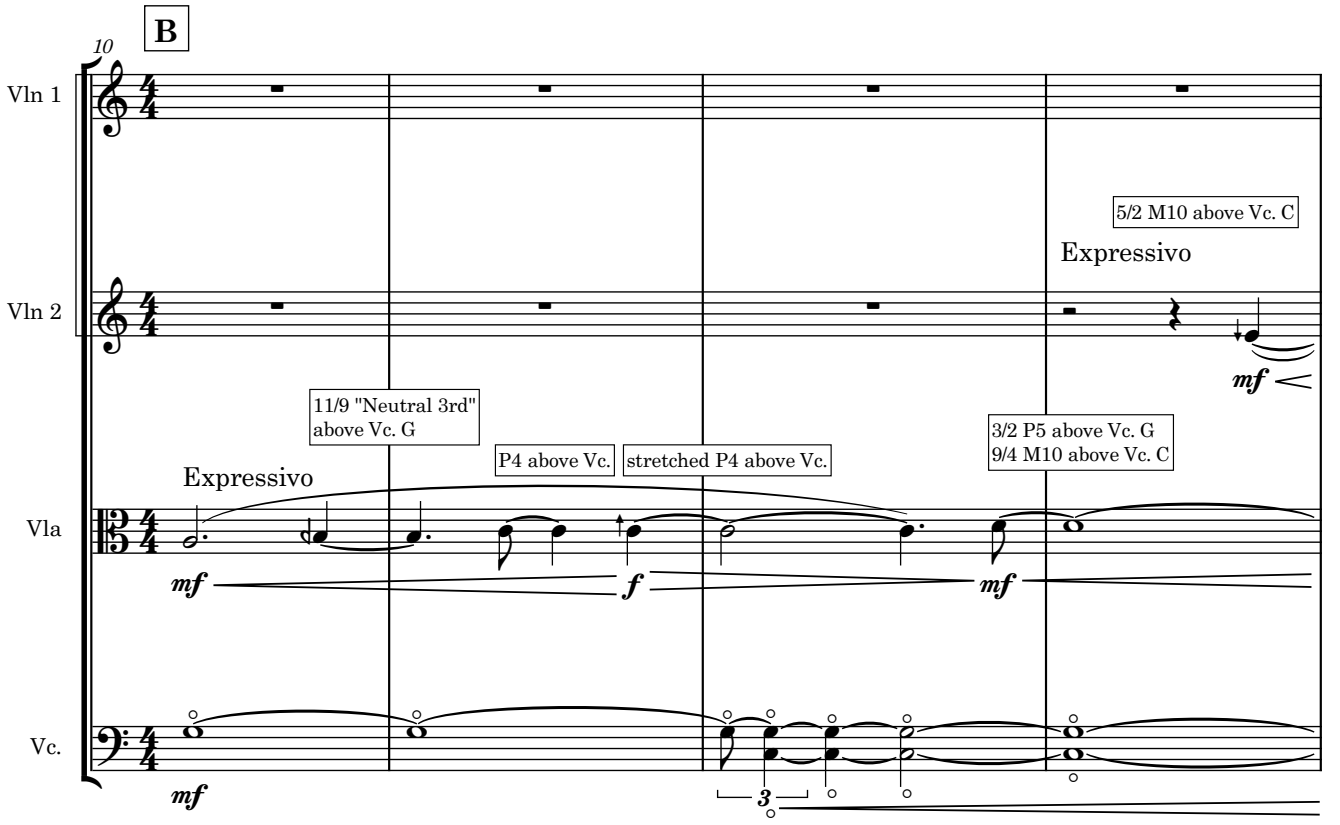
The piece should start immediately after the performers finish tuning. Desirably, it should be imperceptible to the audience when the tuning process ends and the piece starts.

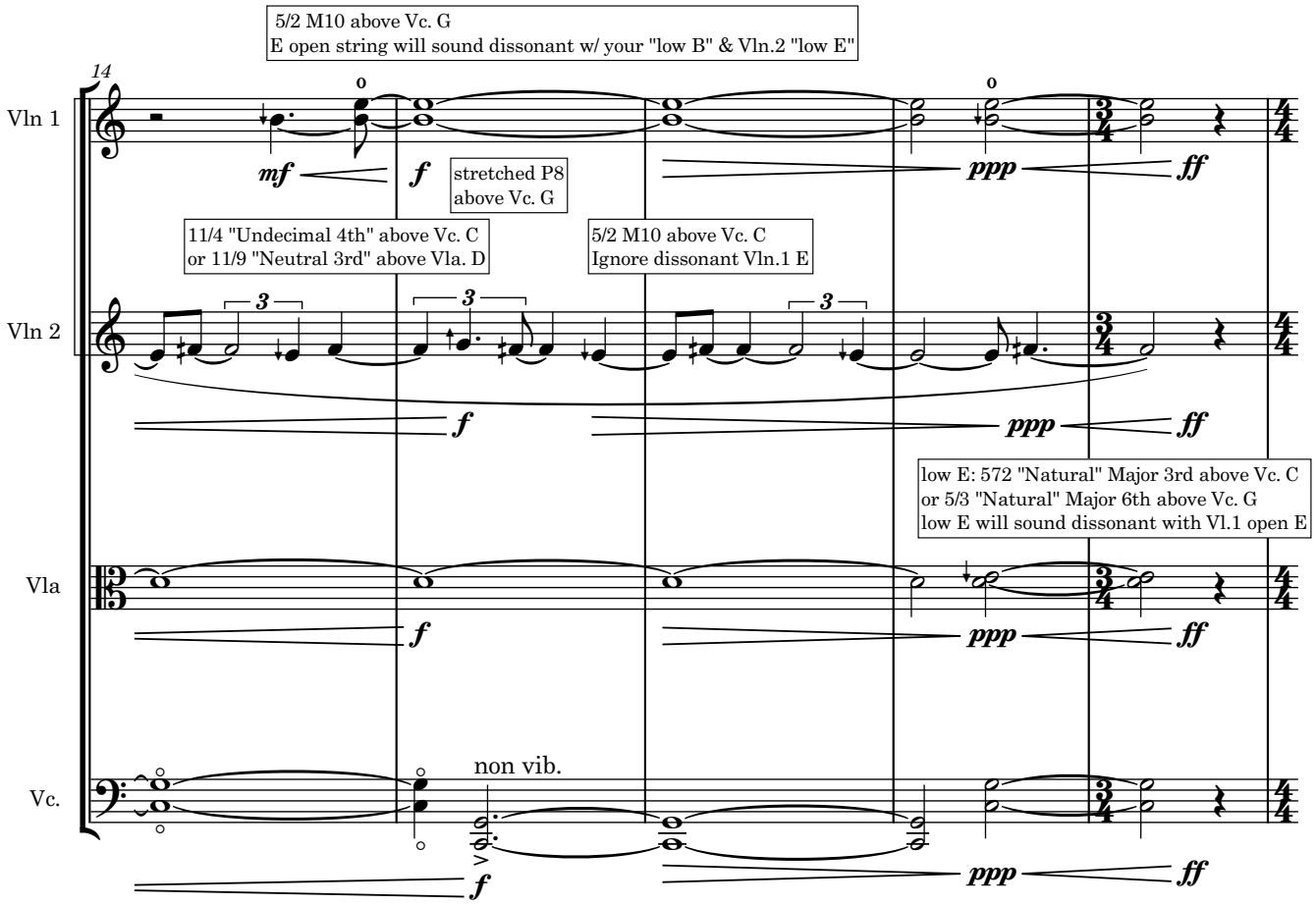
I. A sunrise in green

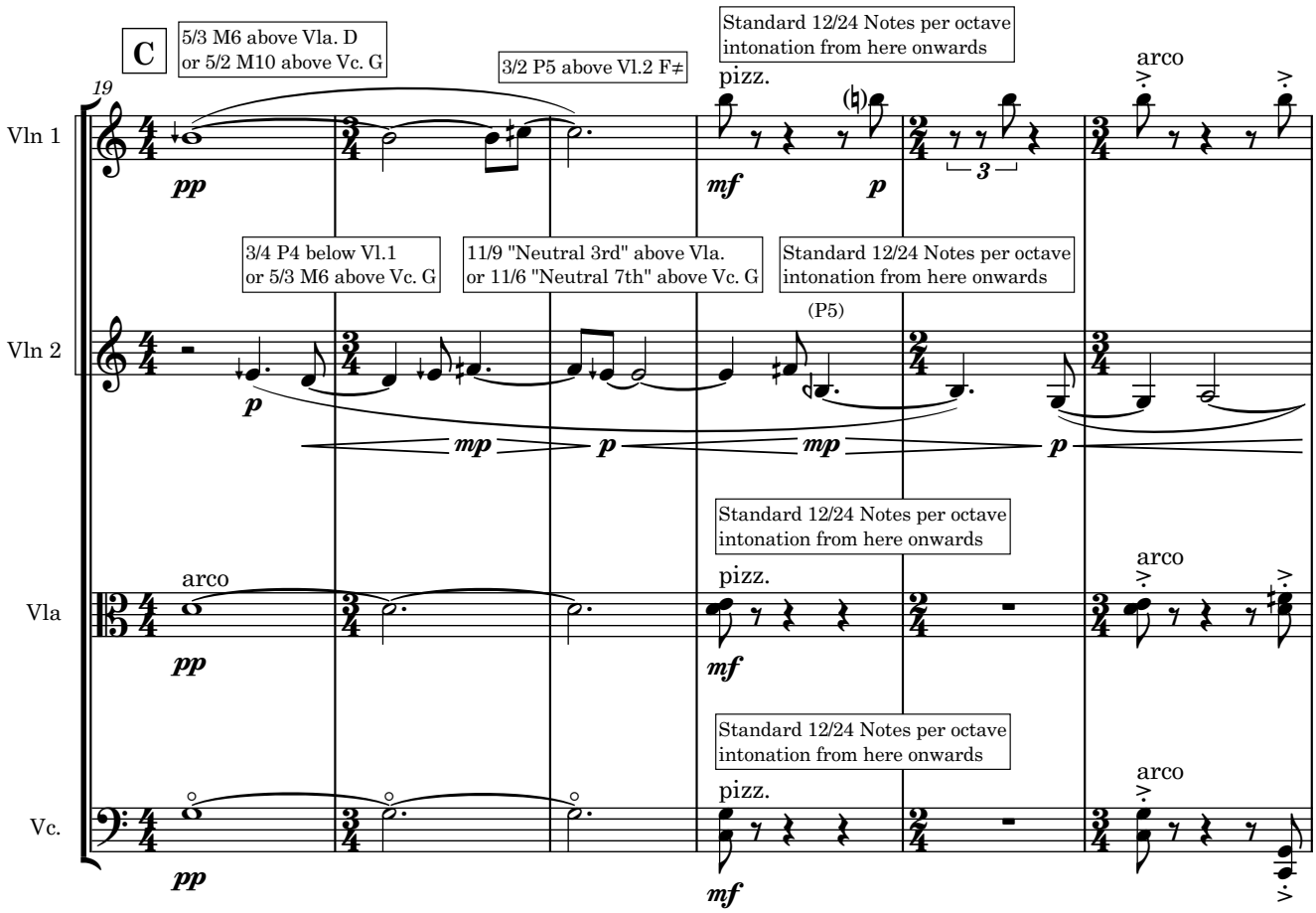
Lento ♩ = 60

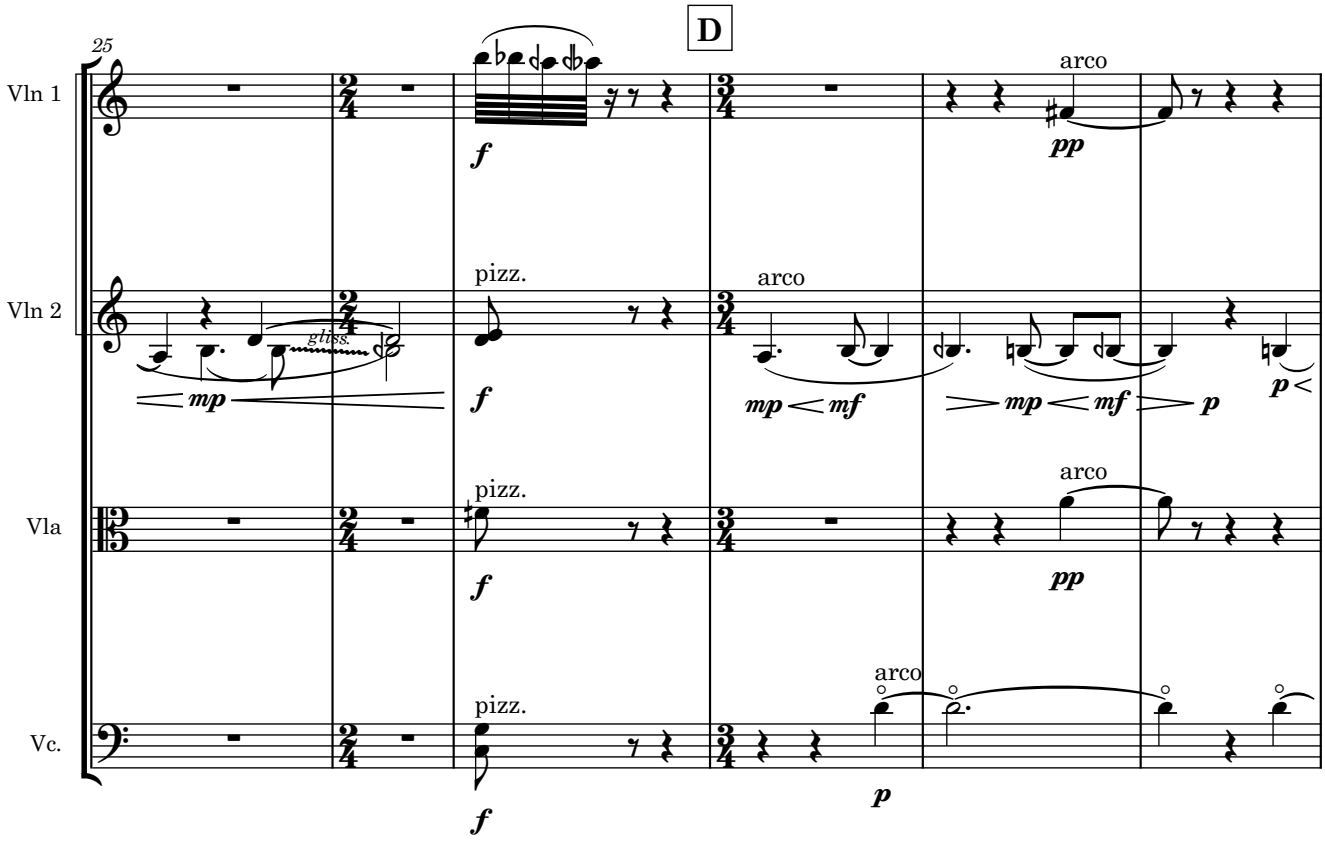


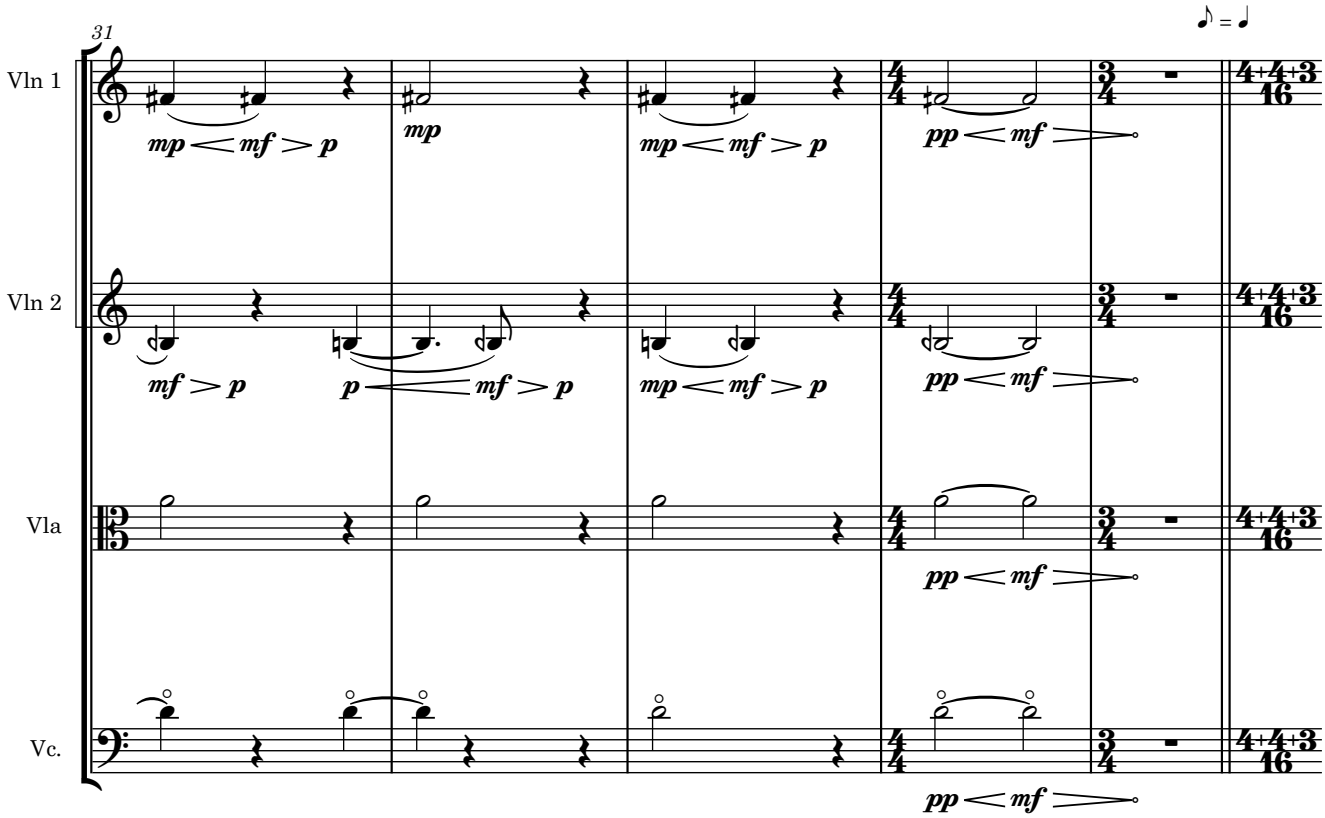



B
10
Vln 1
Vln 2
Vla
Vc.
5/2 M10 above Vc. C
Expressivo
mf
11/9 "Neutral 3rd"
above Vc. G
P4 above Vc.
stretched P4 above Vc.
3/2 P5 above Vc. G
9/4 M10 above Vc. C
Expressivo
mf
f
mf
mf
3


5/2 M10 above Vc. G
E open string will sound dissonant w/ your "low B" & Vln.2 "low E"
14
Vln 1
Vln 2
Vla
Vc.
mf
f
stretched P8
above Vc. G
ppp
ff
11/4 "Undecimal 4th" above Vc. C
or 11/9 "Neutral 3rd" above Vla. D
5/2 M10 above Vc. C
Ignore dissonant Vln.1 E
3
3
3
f
ppp
ff
low E: 572 "Natural" Major 3rd above Vc. C
or 5/3 "Natural" Major 6th above Vc. G
low E will sound dissonant with Vl.1 open E
f
ppp
ff
non vib.
f
ppp
ff

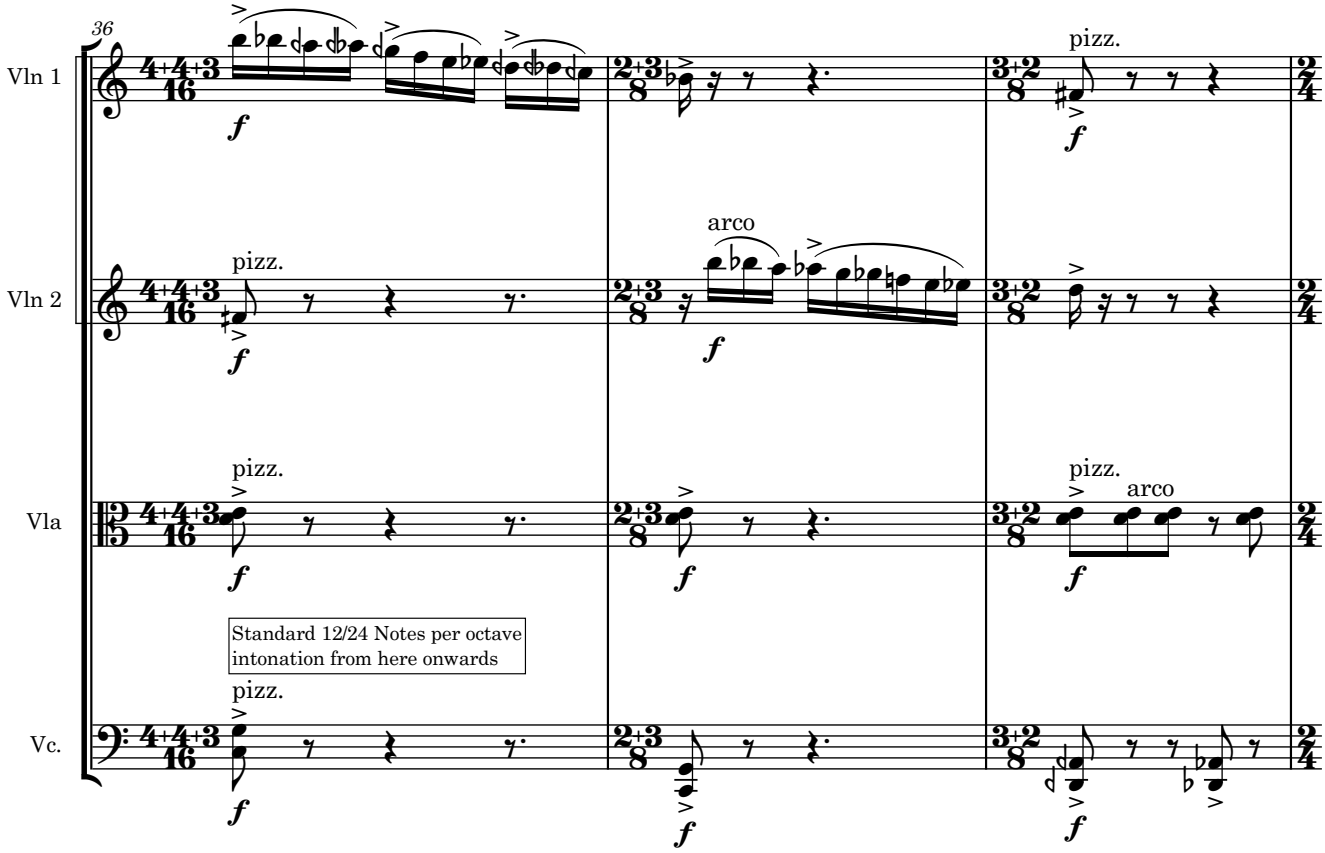

C
5/3 M6 above Vla. D
or 5/2 M10 above Vc. G
3/2 P5 above Vl.2 F≠
Standard 12/24 Notes per octave
intonation from here onwards
19
Vln 1
Vln 2
Vla
Vc.
pp
mf
p
arco
pizz.
3/4 P4 below Vl.1
or 5/3 M6 above Vc. G
11/9 "Neutral 3rd" above Vla.
or 11/6 "Neutral 7th" above Vc. G
(P5)
mp

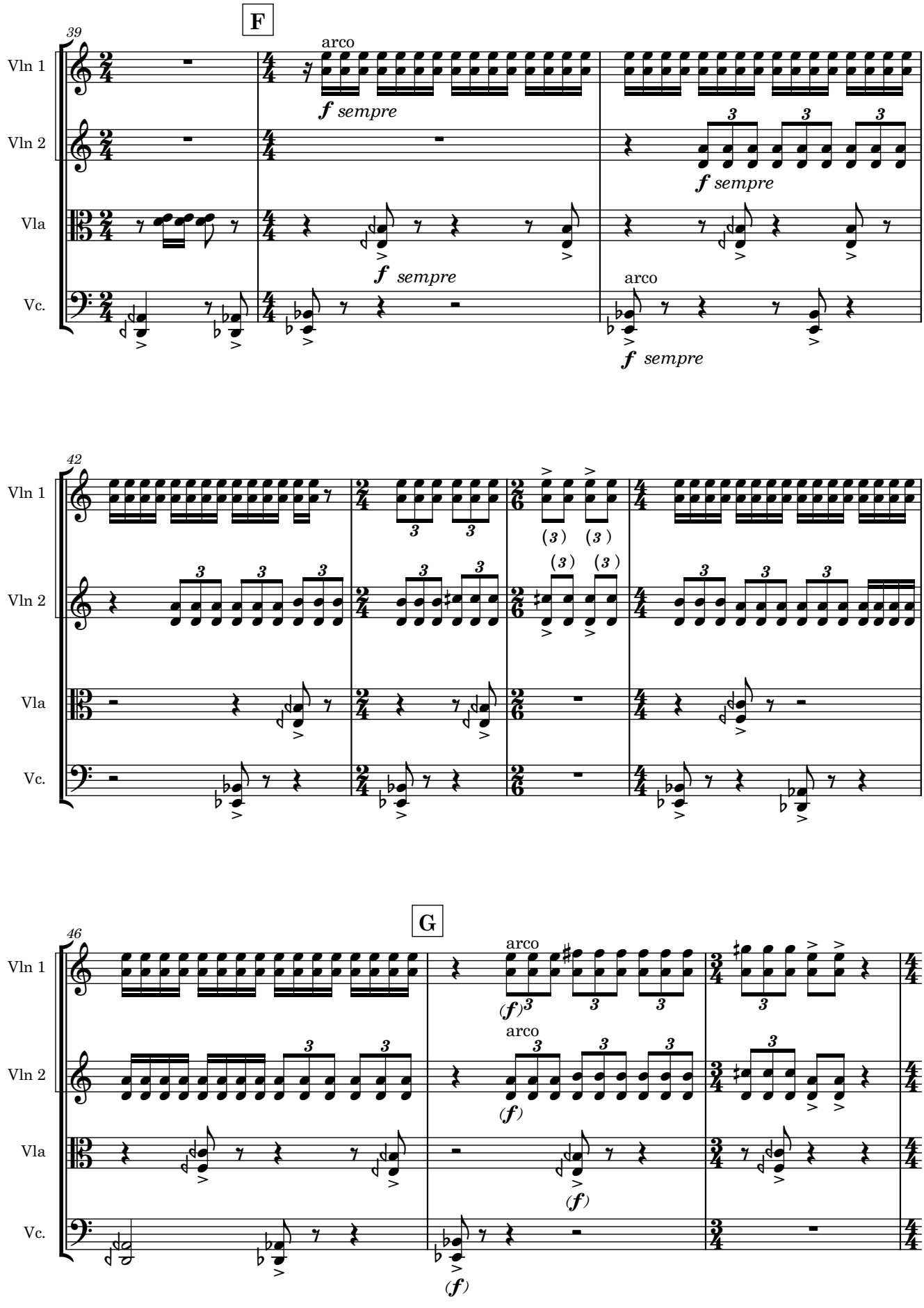

D
25
Vln 1
Vln 2
Vla
Vc.
f
pp
p
arco
pizz.
gliss.
mp
mf

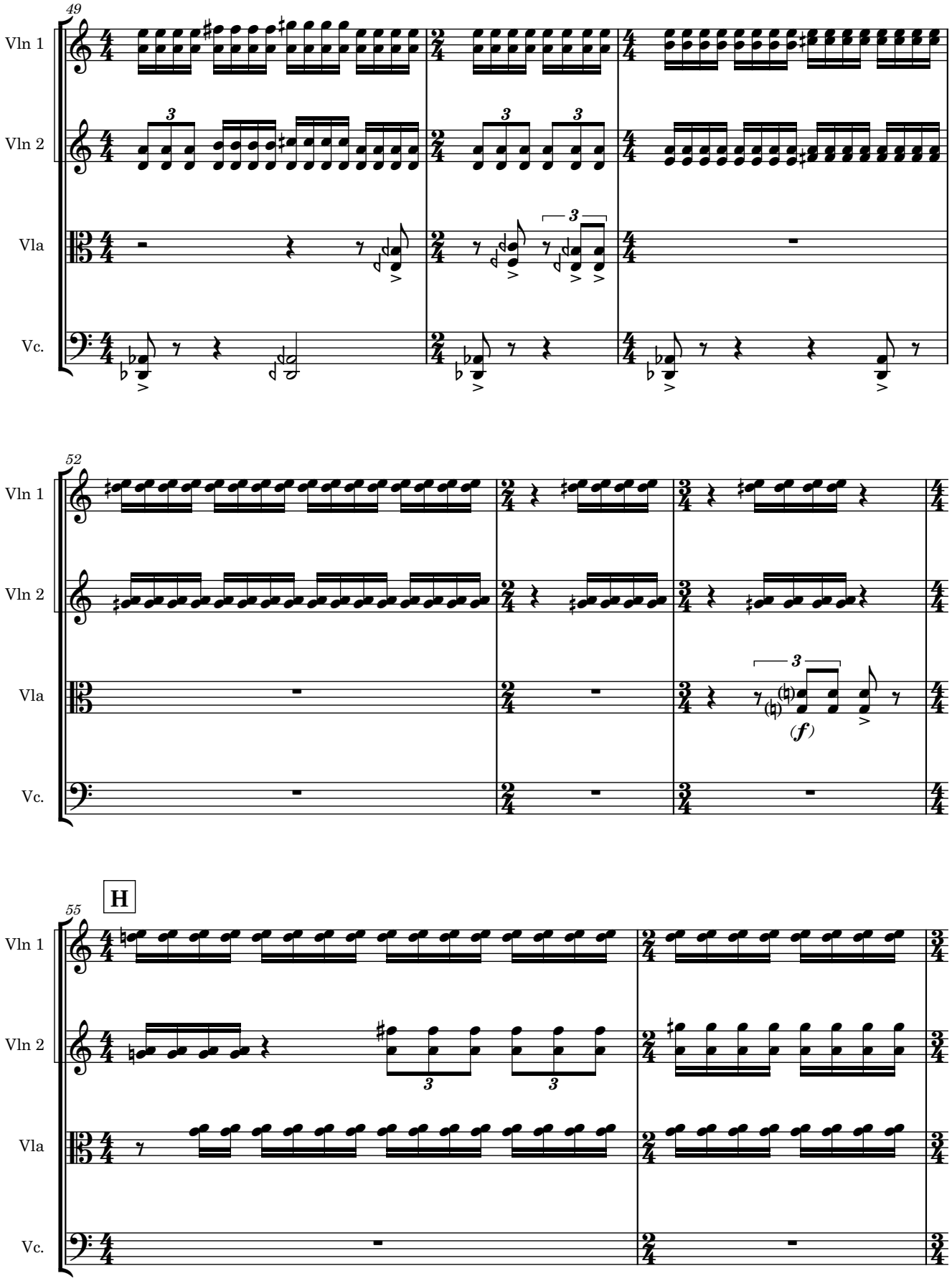


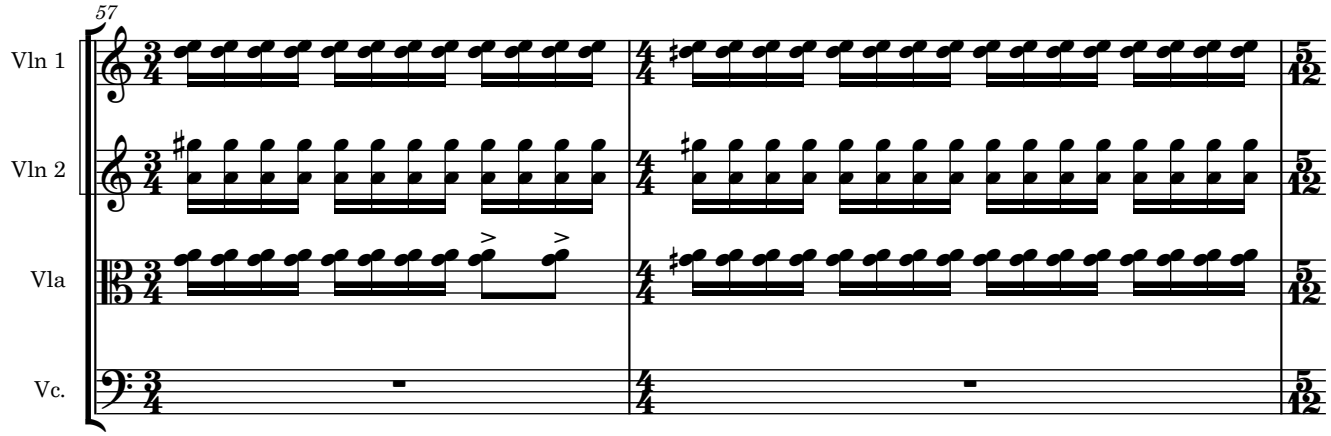
E **II. (Not) A Blackhole? (...Depends on whose perspective...)**

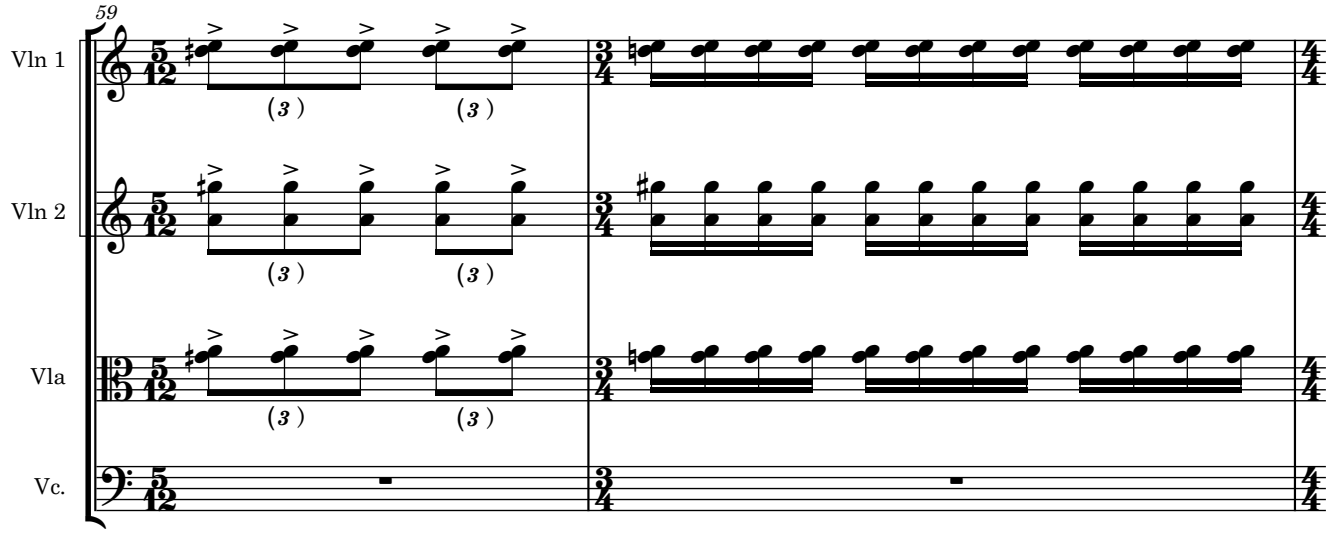
♩ = 120

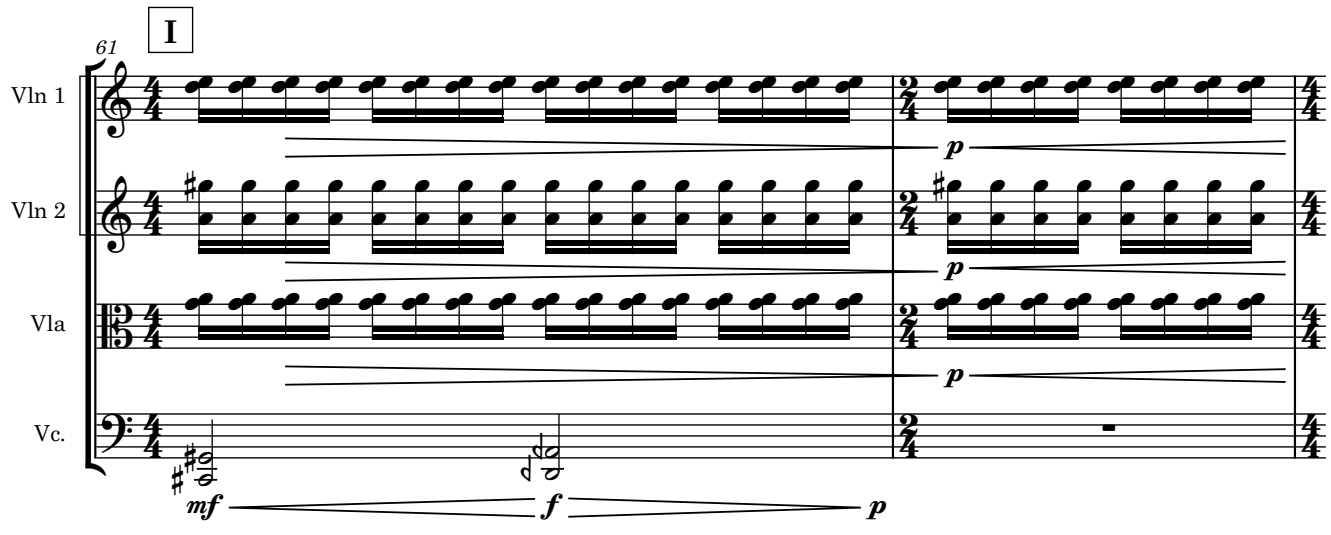


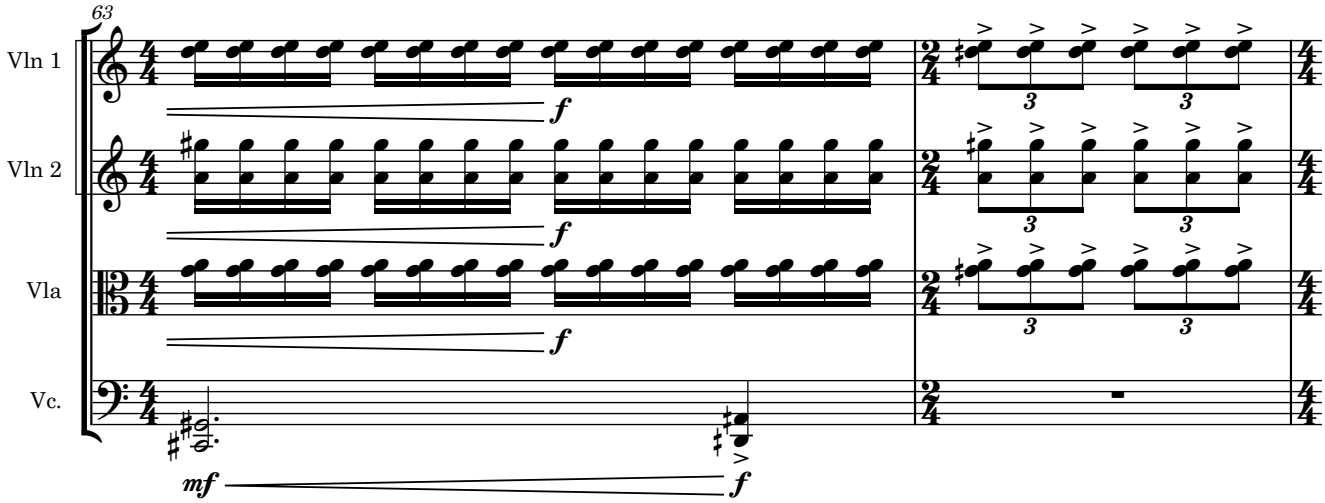

F
39
Vln 1
Vln 2
Vla
Vc.
arco
f sempre
42
46
G
(f)

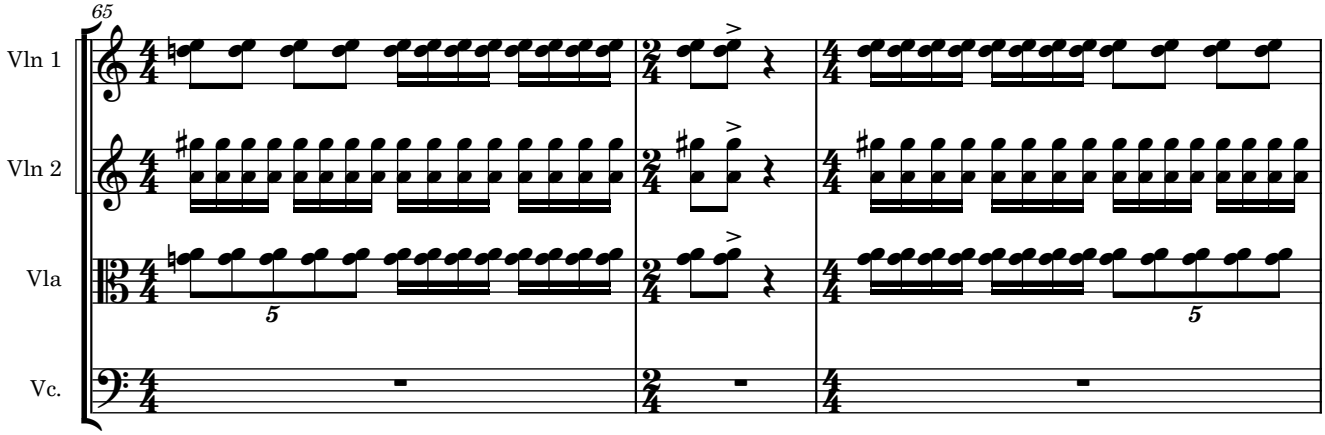

49
Vln 1
Vln 2
Vla
Vc.
52
Vln 1
Vln 2
Vla
Vc.
(f)
55
H
Vln 1
Vln 2
Vla
Vc.


57
Vln 1
Vln 2
Vla
Vc.


59
Vln 1
Vln 2
Vla
Vc.

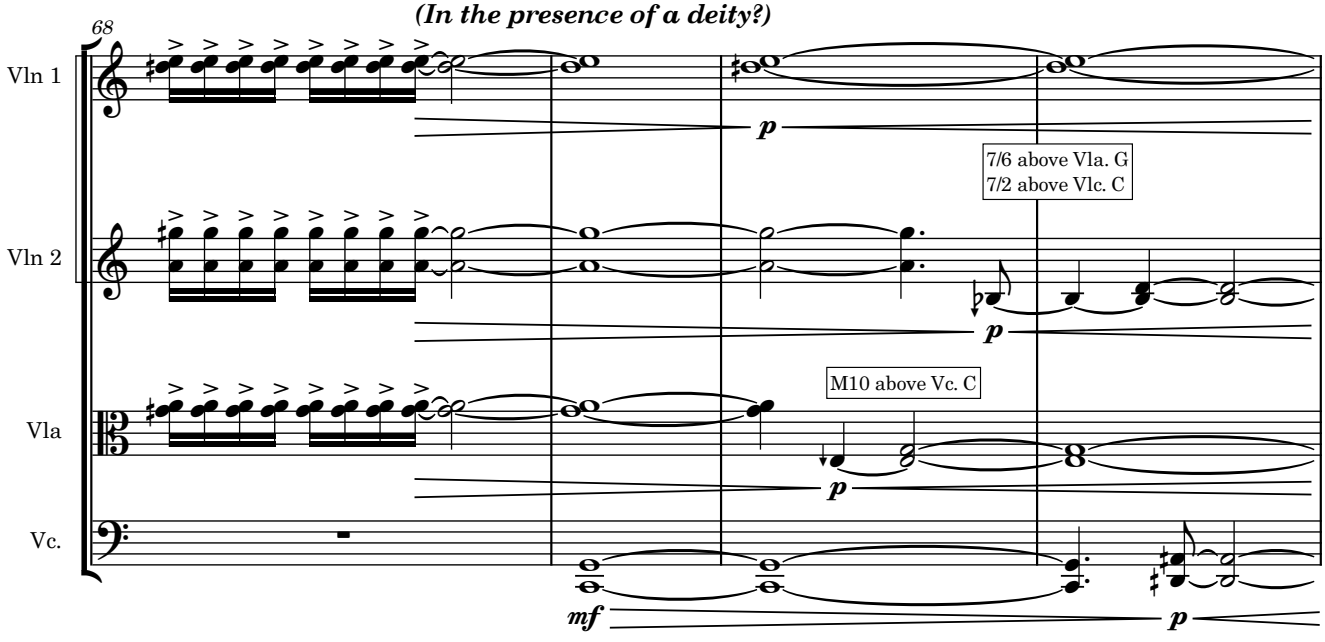

I
61
Vln 1
Vln 2
Vla
Vc.
mf
f
p

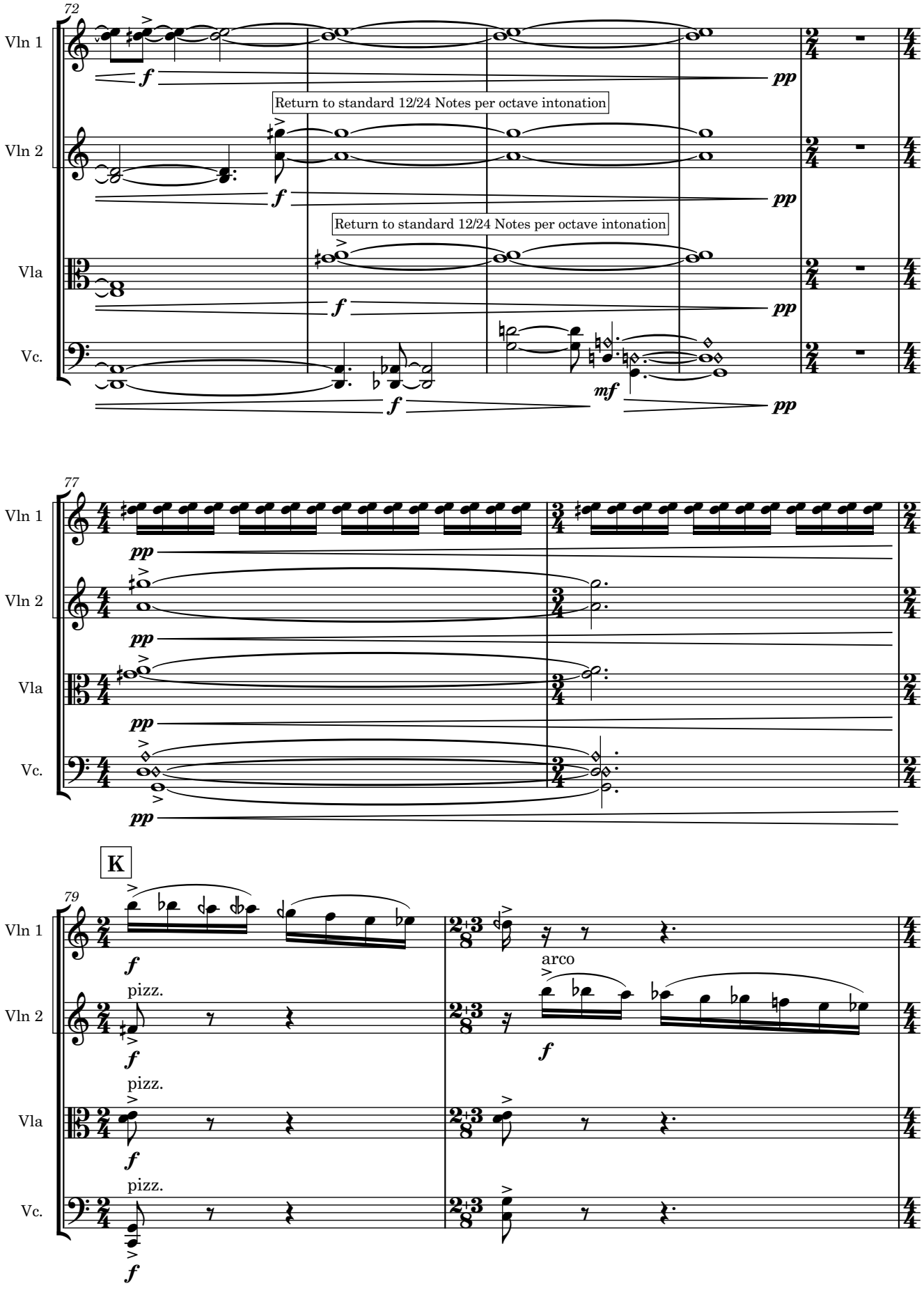


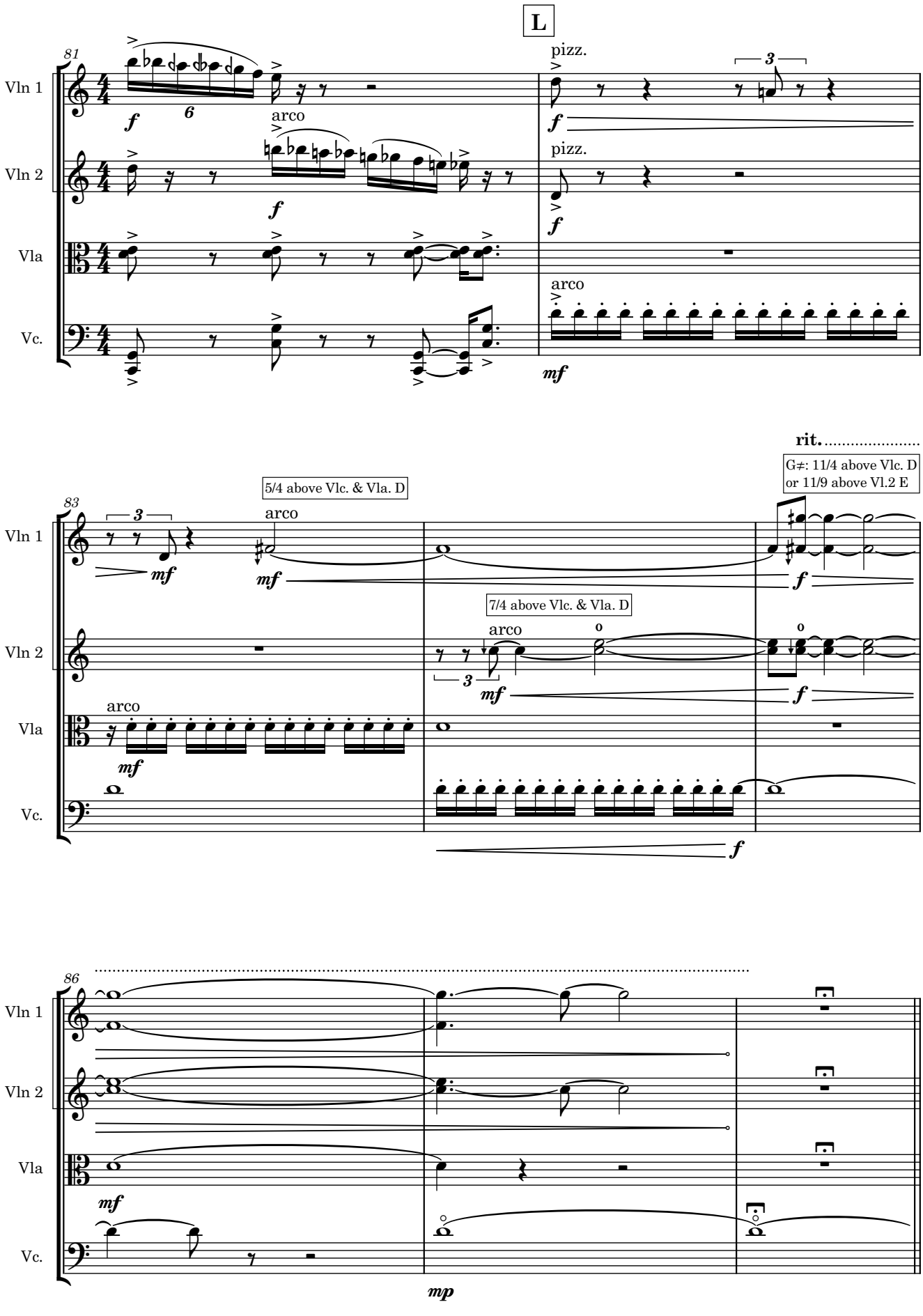


J

(In the presence of a deity?)




72
Vln 1
Vln 2
Vla
Vc.
Return to standard 12/24 Notes per octave intonation
Return to standard 12/24 Notes per octave intonation
f
pp
mf
77
pp
K
79
pizz.
arco


L
81
Vln 1
Vln 2
Vla
Vc.
f
6
arco
pizz.
3
mf
83
5/4 above Vlc. & Vla. D
7/4 above Vlc. & Vla. D
G≠: 11/4 above Vlc. D
or 11/9 above Vl.2 E
rit.
86
mp

III. (A strange) Interlude: Inside a hypercube...

M

Lamentoso ♩ = 60

89

Return to standard 12/24 Notes per octave intonation

Vln 1 non vib. *mf*

Return to standard 12/24 Notes per octave intonation

Vln 2 non vib. *mf*

Vla

Vc. *mp*

94

Vln 1 non vib. *mf*

Vln 2

Vla non vib. *pp* *mf*

Vc.

N

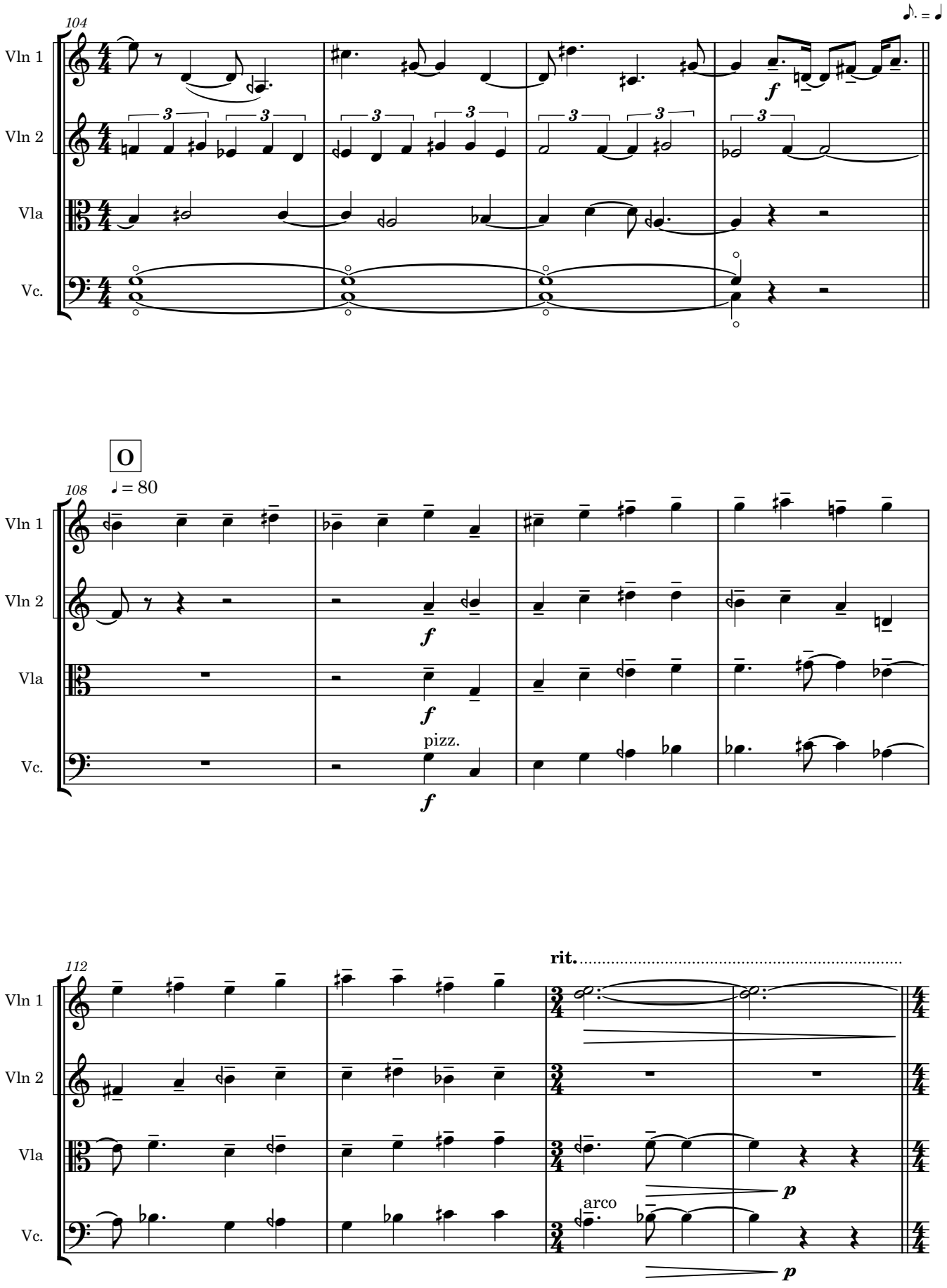
99

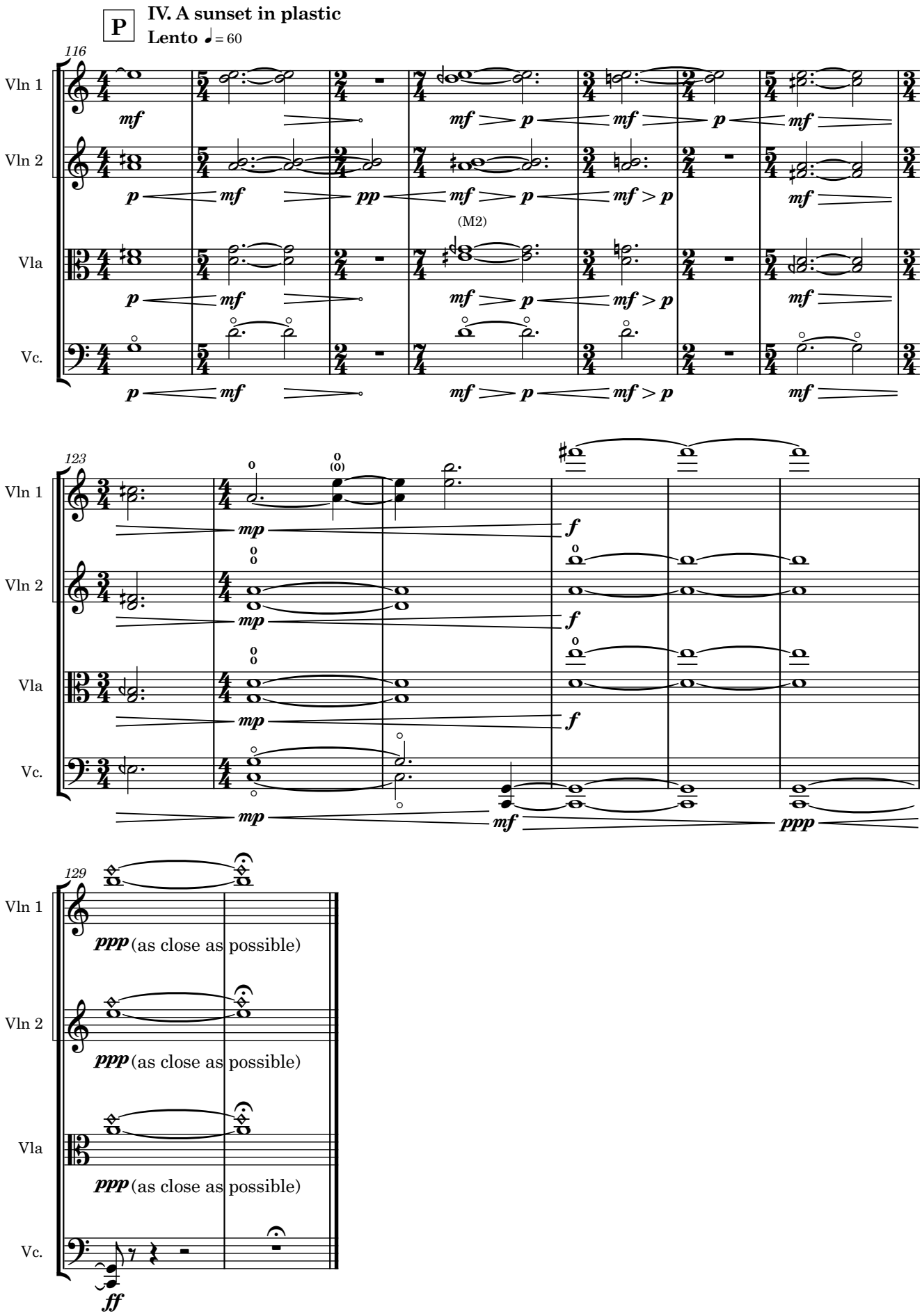
Vln 1 legato *f*

Vln 2 non vib. legato *f*

Vla non vib. arco legato *f*

Vc. *f*


104
Vln 1
Vln 2
Vla
Vc.
f
O
108
♩ = 80
pizz.
112
rit.
arco
p


P
IV. A sunset in plastic
Lento ♩= 60
116
Vln 1
Vln 2
Vla
Vc.
(M2)
123
129
(as close as possible)
(as close as possible)
(as close as possible)