# QUARTET

from TOUCHED BY MACHINE?

for string quartet

Nigel Morgan

## About the piece

Between 1988 and 1991 Nigel Morgan created a sequence of four works, DUO (trombone/horn and percussion), TRIO (violin, clarinet and piano), QUARTET (string quartet) and EDGE (wind quartet). These pieces, forming a CD-length concert called TOUCHED BY MACHINE?[1], were part of a sustained project to explore computer-assisted composition using the tools of the MIDI studio.

QUARTET is the result of interaction with a suite of software tools. Such tools allow music to be assembled in a way that has similarities to the process engaged by some visual artists when creating a series of related images. Once the components of a ÔdesignÕ have been assembled a free application can begin using practiced and improvised gestures. So too in music composition: the composer can interact with simulated performance and experiment with different aspects, emphasis and structure before creating a notated score. In composing QUARTET the element of pre-composition lies in the preparation of data for the software applications to store, process and then call up on-cue during an improvisation.

In creating QUARTET the composer worked with Emile TobenfeldÕs Programmable Variations Generator in Movement 1, Fingers in the latter parts of Movement III and IV, and Tunesmith in Movement V. David ZicarelliÕs M software was used for Movements II and the first part of III. ZicarelliÕs software is one of the most successful attempts to create a device that enables multi-part composing through improvisation. It has now become part of the IRCAM co-development MAX-MSP.

Aside from the technical aspects of QUARTETÕs composition there is an important extra-musical element to consider. This originates from the composer's interest in the artist Bridget Riley, in particular her ability to

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[1] This title comes from an article by Stephen Travis Pope called Touched by Machine? Ð Composition and Performance in the Digital Age. This text presents responses from composers who were asked the following questions: How have new technologies changed the process of composition and performance? What new possibilities are aesthetically and artistically relevant? How do the new tools allow us to use musical material differently?

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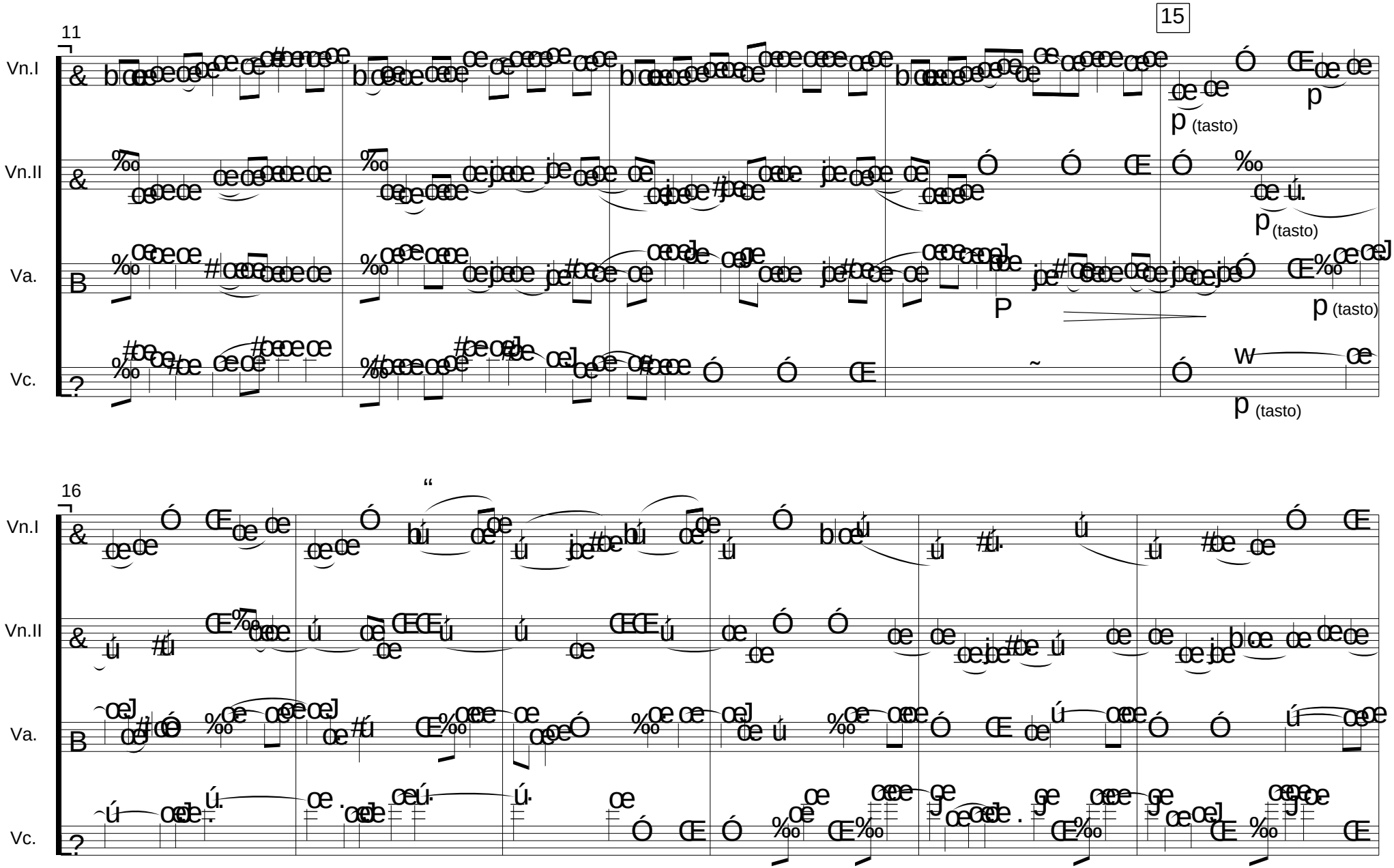
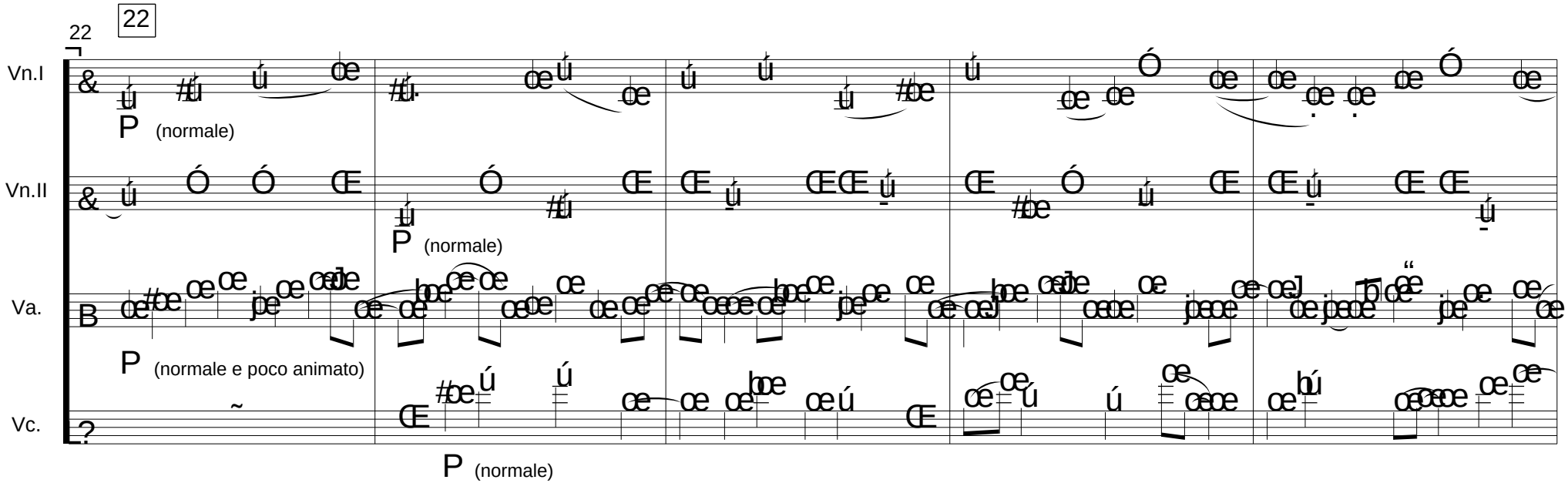
engage the viewer actively in her monochrome paintings and then later her work with colour stripes. In these paintings squares, circles and lines are woven together into an optical symmetry that allows the pictorial space to oscillate and ÔdanceÕ. Riley has described how the source of this approach came from her mother who was Ô. . . a great looker . . . who constantly described everything she could . . . the play of sunlight on a glass . . . the depth of texture in the sea and sky. . .Õ In RileyÕs work the abstract shape becomes a living and vibrating expression of the natural world. It is the viewer's position in, and movement across, the pictorial space that appears to make the image 'move' playfully. The music of all the pieces in the TOUCHED BY MACHINE? sequence attempts something of the same, only with sound and the ear rather than the image and the eye. The five movements of QUARTET take their titles from a group of RileyÕs paintings from the mid 1960s: Continuum, Shuttle, Fission, Late-Morning, Chant.

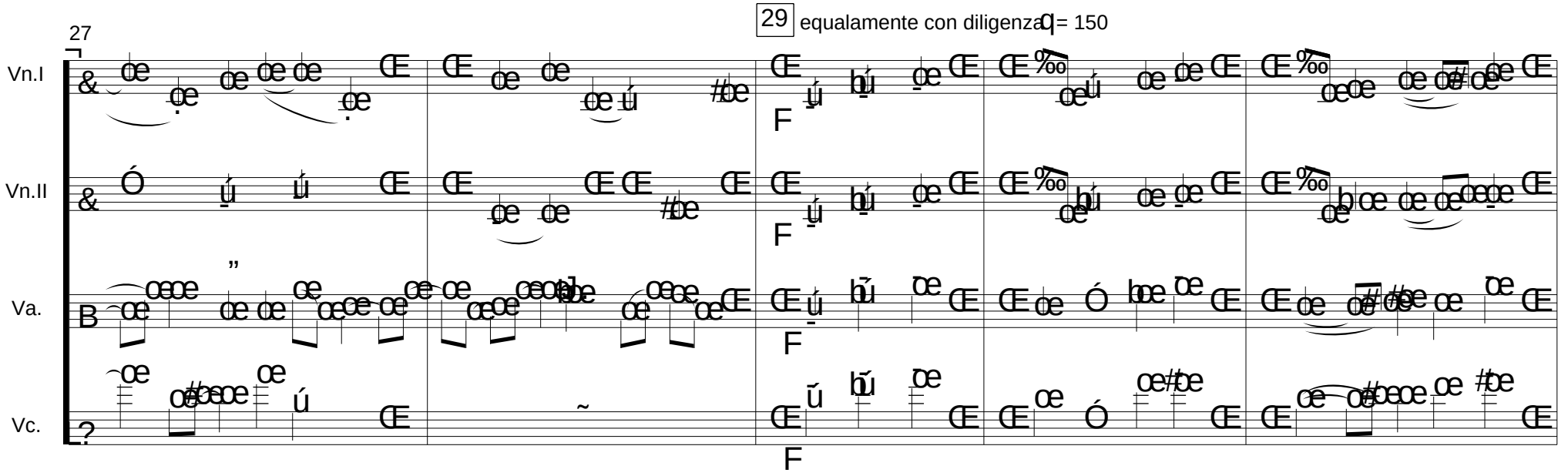
QUARTET was commissioned with funds from the Eastern Arts Association for Sarah Coleman and the Demos Quartet for performance at the Norwich and Norwich Triennial Festival in 1989. It is the third work of a series to focus on professional musicians working in North Norfolk where the composer lived from 1986 to 1990 as Eastern Arts Association Composer in the Community.

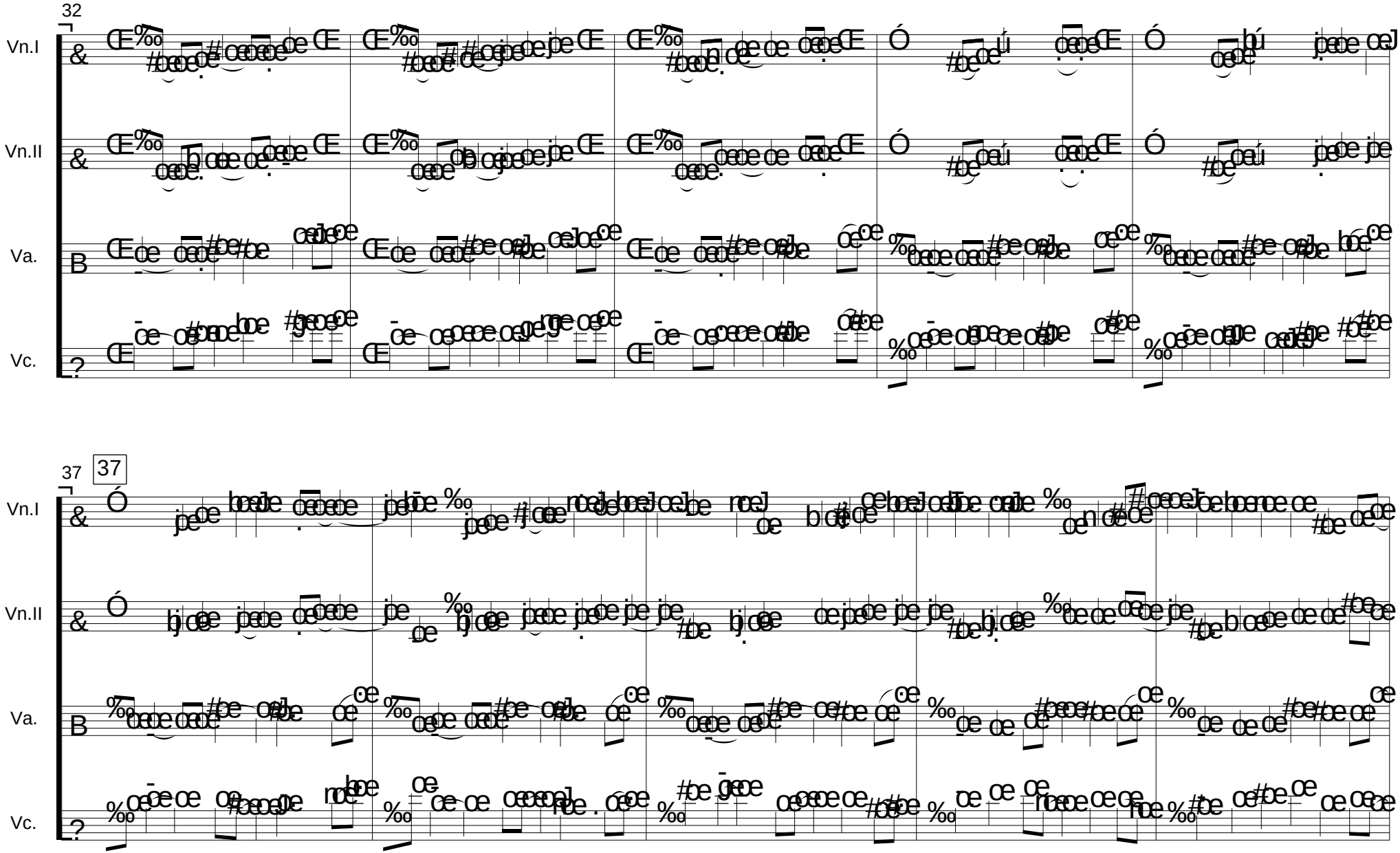
## Notes for Performance

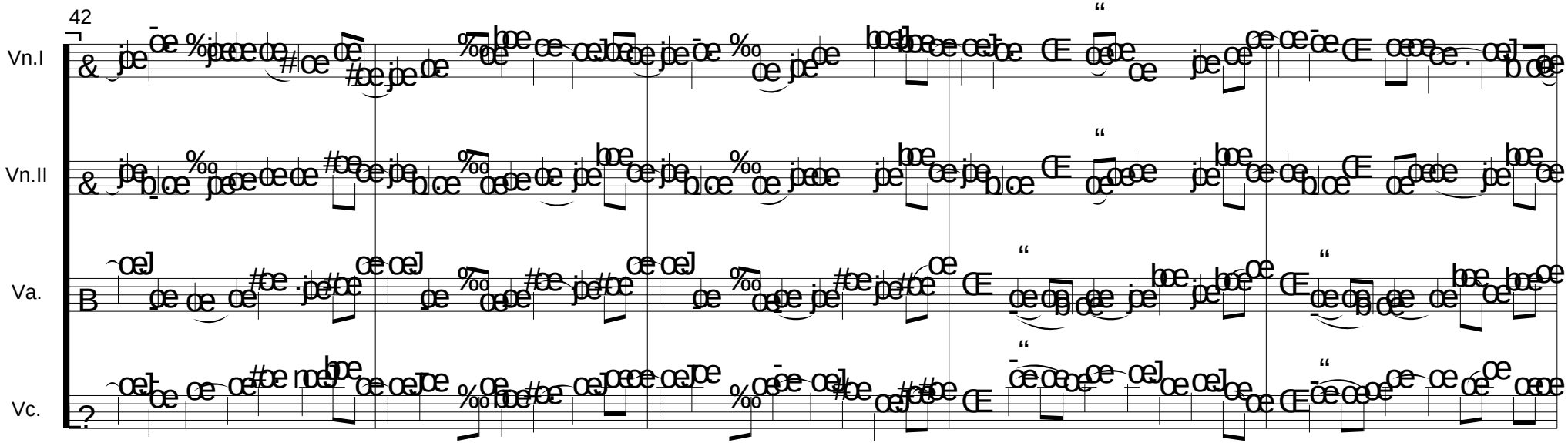
The nature of this music requires a very particular approach to performance technique and interpretation. This string quartet is viewed predominantly as a democratic community of musicians who work together to create a ÔplayÕ of musical elements for the listener to interact with and enjoy. In many parts of the score the music contains long sequences that required a sustained working through of a musical process Bar 29 to 62 of Continuum provides a clear example of such a process. Players are advised to treat such passages with clarity and simplicity of musical expression, focusing on the whole process rather than individual moments. Bowing, dynamics, articulation and expressive markings have been kept to a minimum to give more interpretative space than is usual in a late 20C composition. Such performance indications should be seen as a starting point for rehearsal, no more. That said, the overall sound envisaged for the work is one where lightness and deftness of bow on the string and a minimal use of vibrato common to Early and Baroque music is able to contrast with more expressive modes of playing found in late Classical and Romantic music.

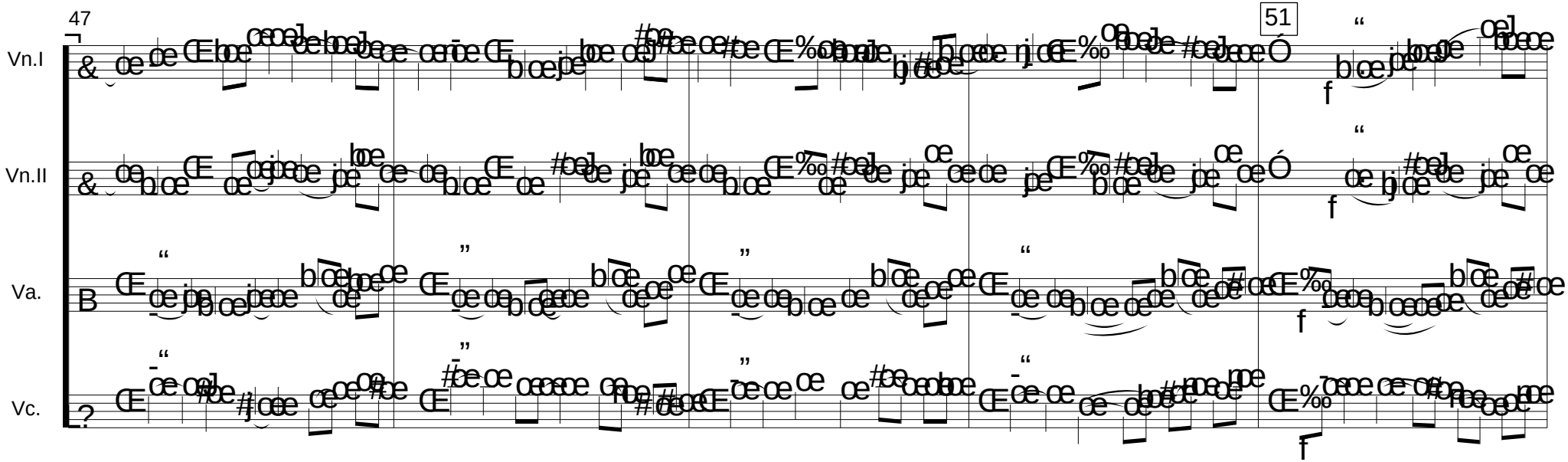

11
15
Vn.I
Vn.II
Va.
Vc.
p (tasto)
p (tasto)
P
p (tasto)
p (tasto)
16

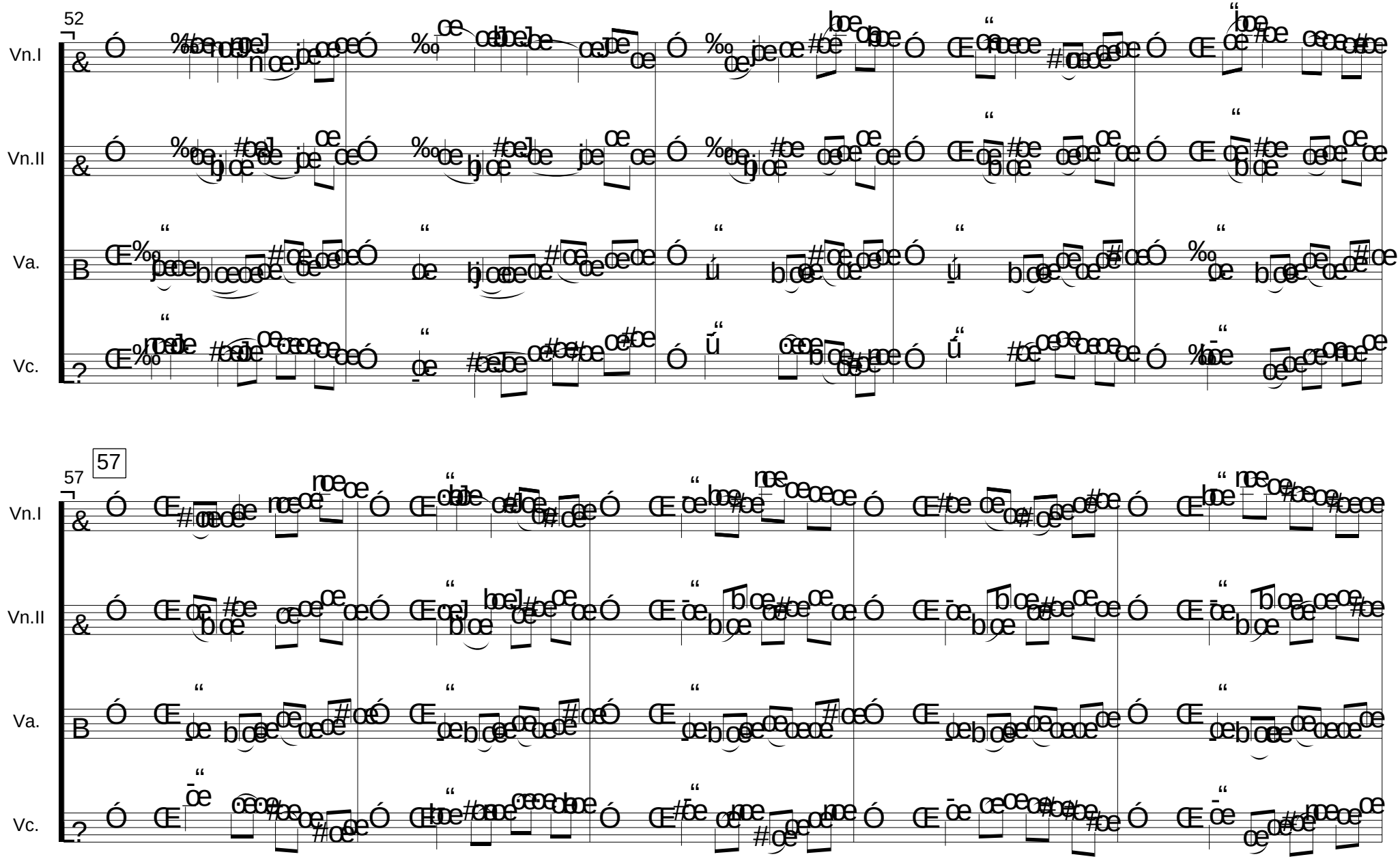

22
22
Vn.I
Vn.II
Va.
Vc.
P (normale)
P (normale)
P (normale e poco animato)
P (normale)

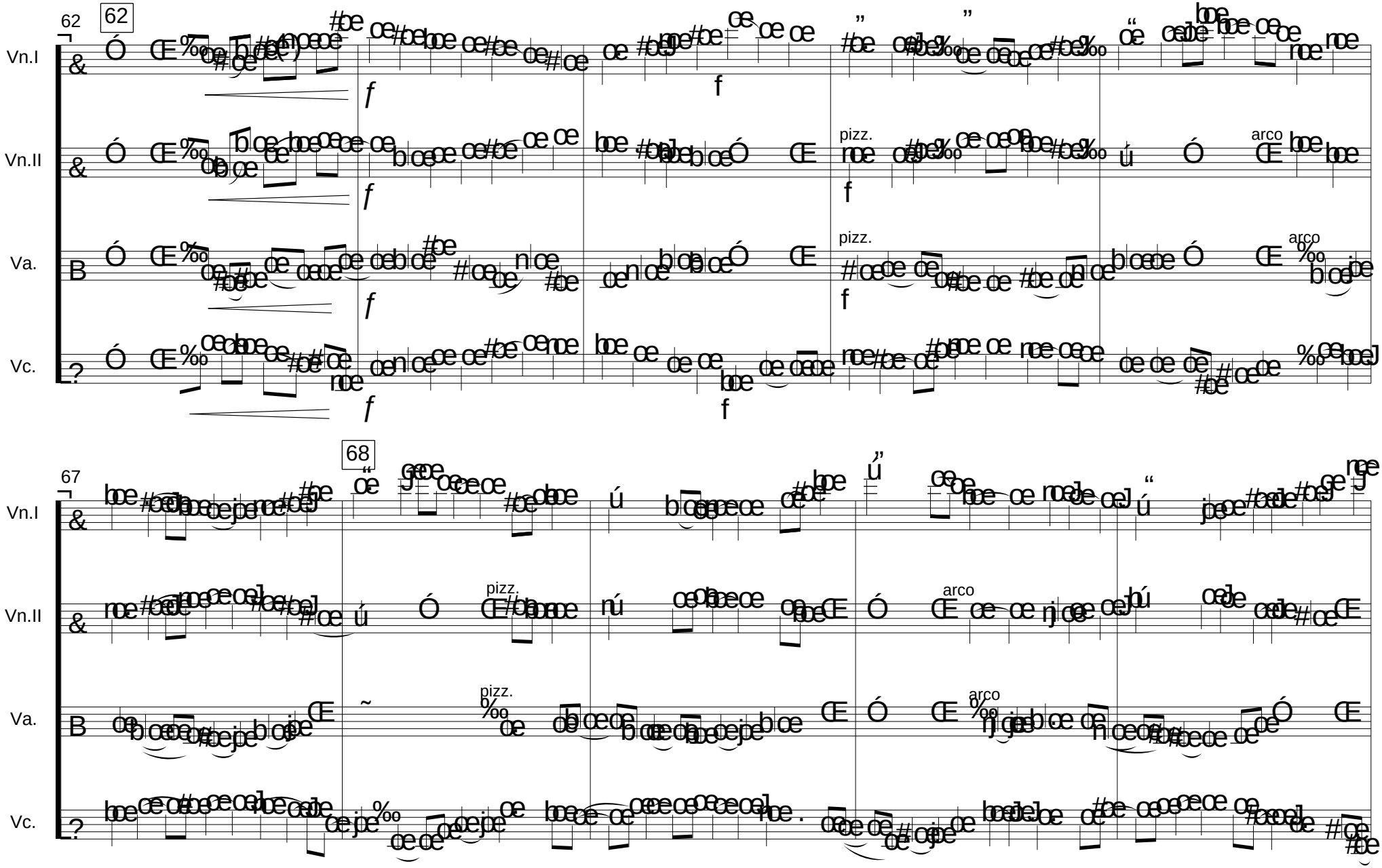

27
29 equalamente con diligenza
= 150
Vn.I
Vn.II
Va.
Vc.
F
F
F
F

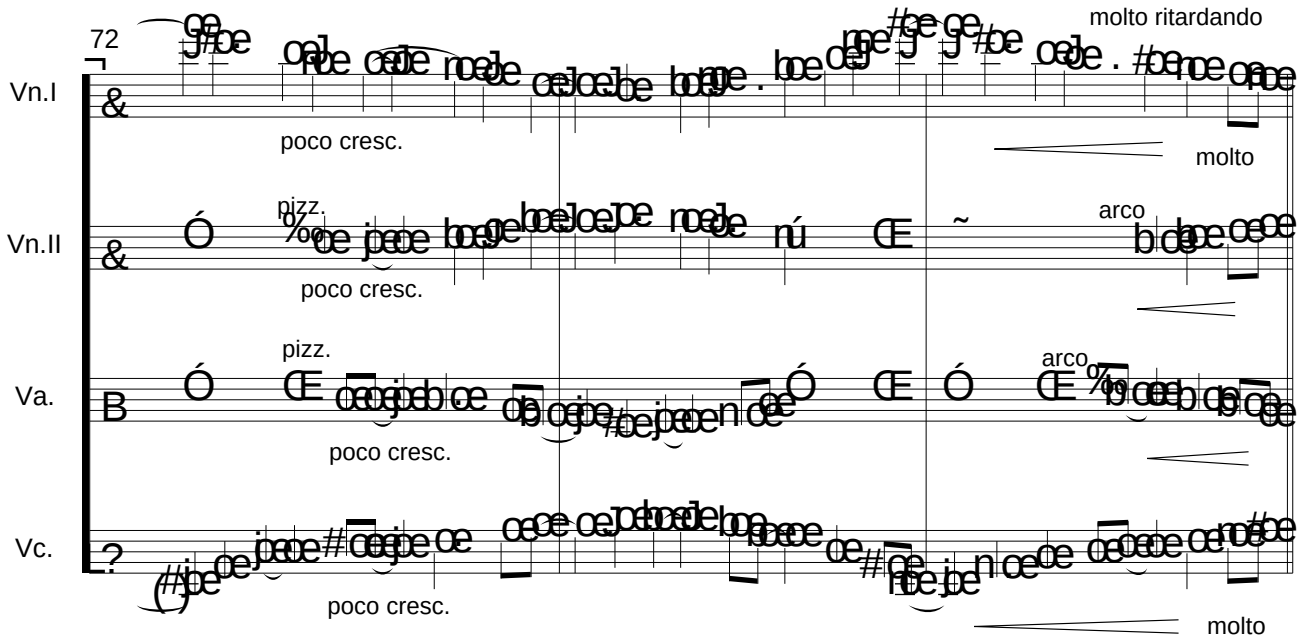

32
Vn.I
Vn.II
Va.
Vc.
37
37
Vn.I
Vn.II
Va.
Vc.

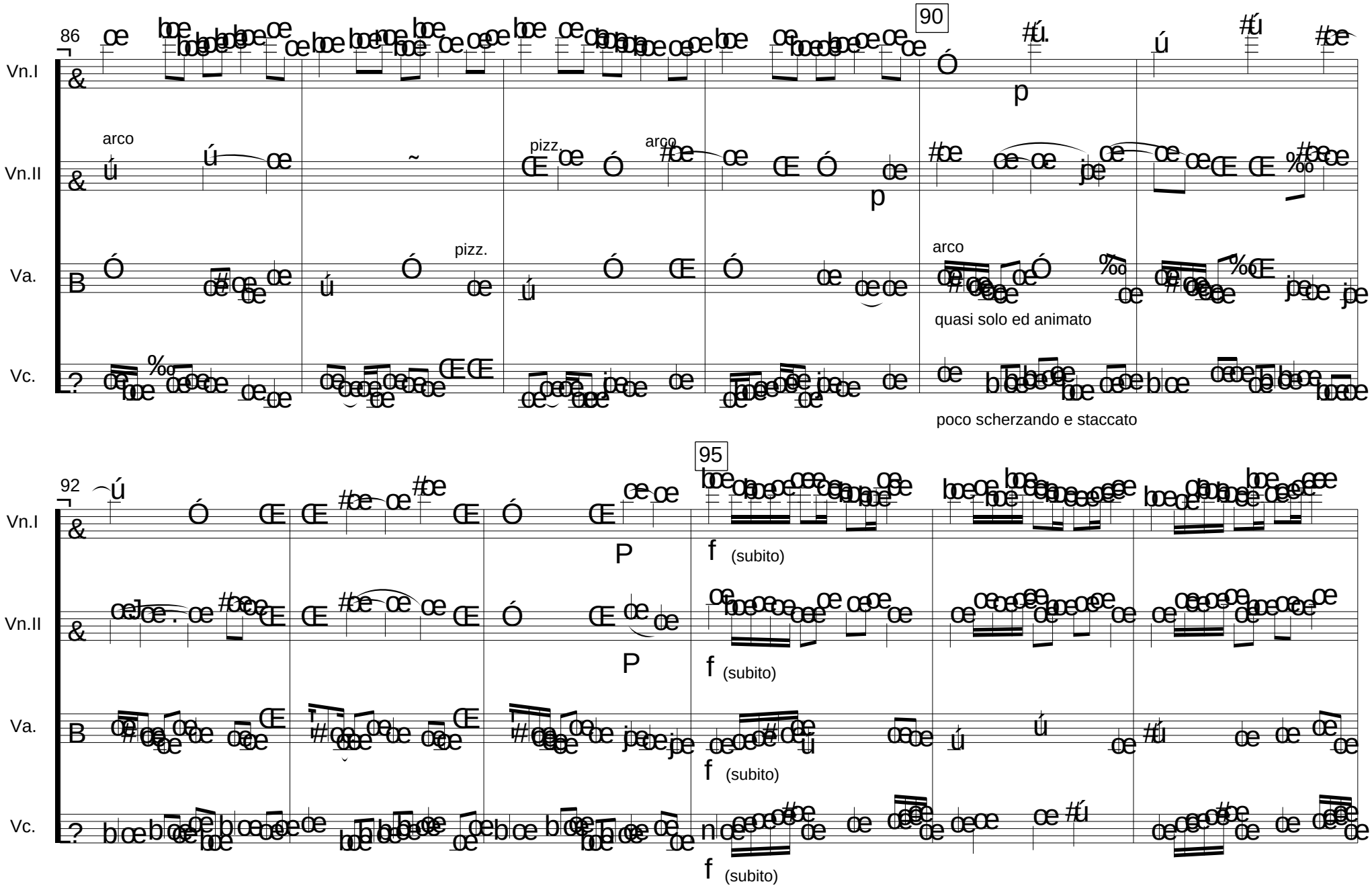

42
Vn.I
Vn.II
Va.
Vc.

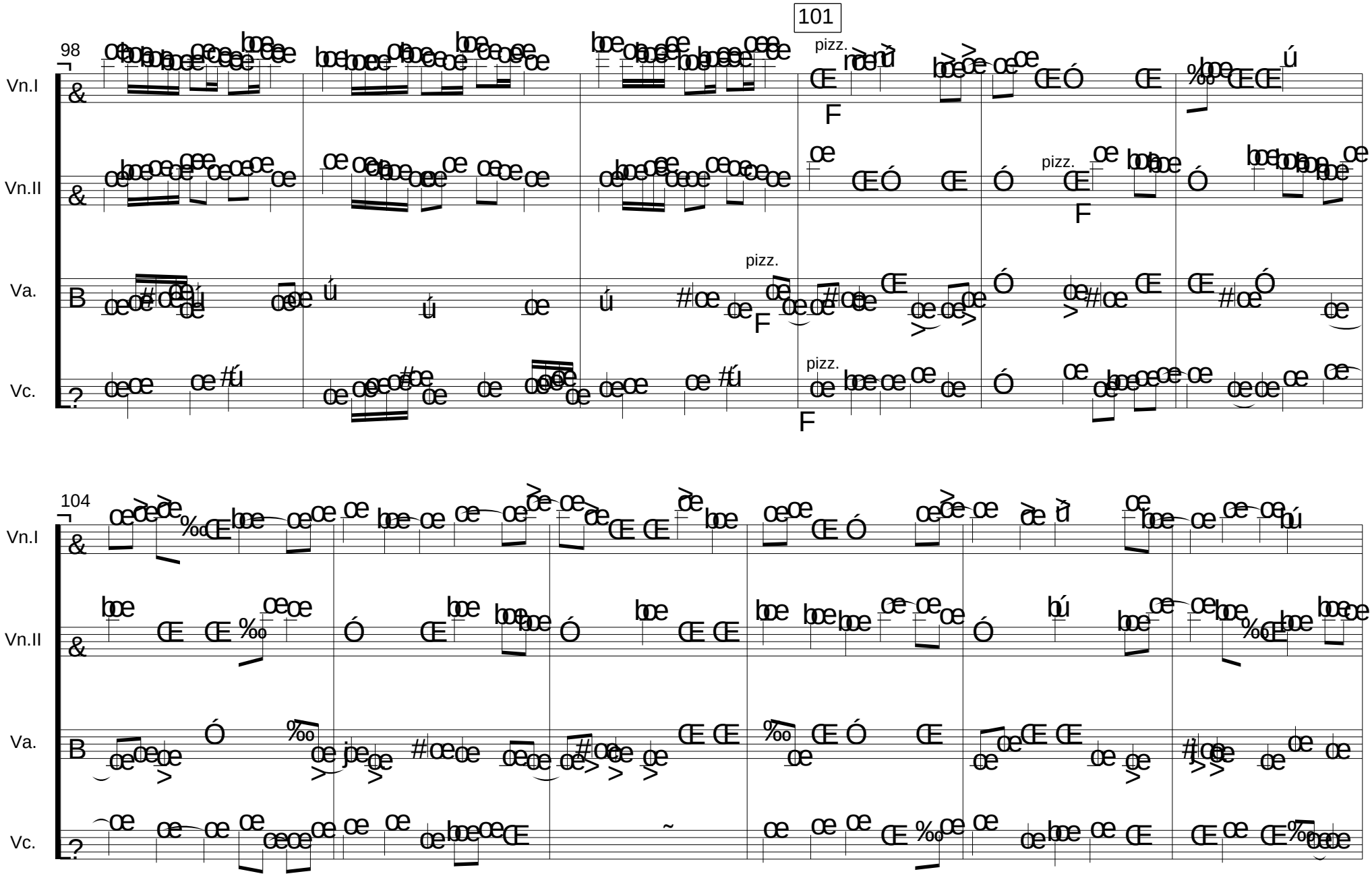

47
51
Vn.I
Vn.II
Va.
Vc.
f
f
f

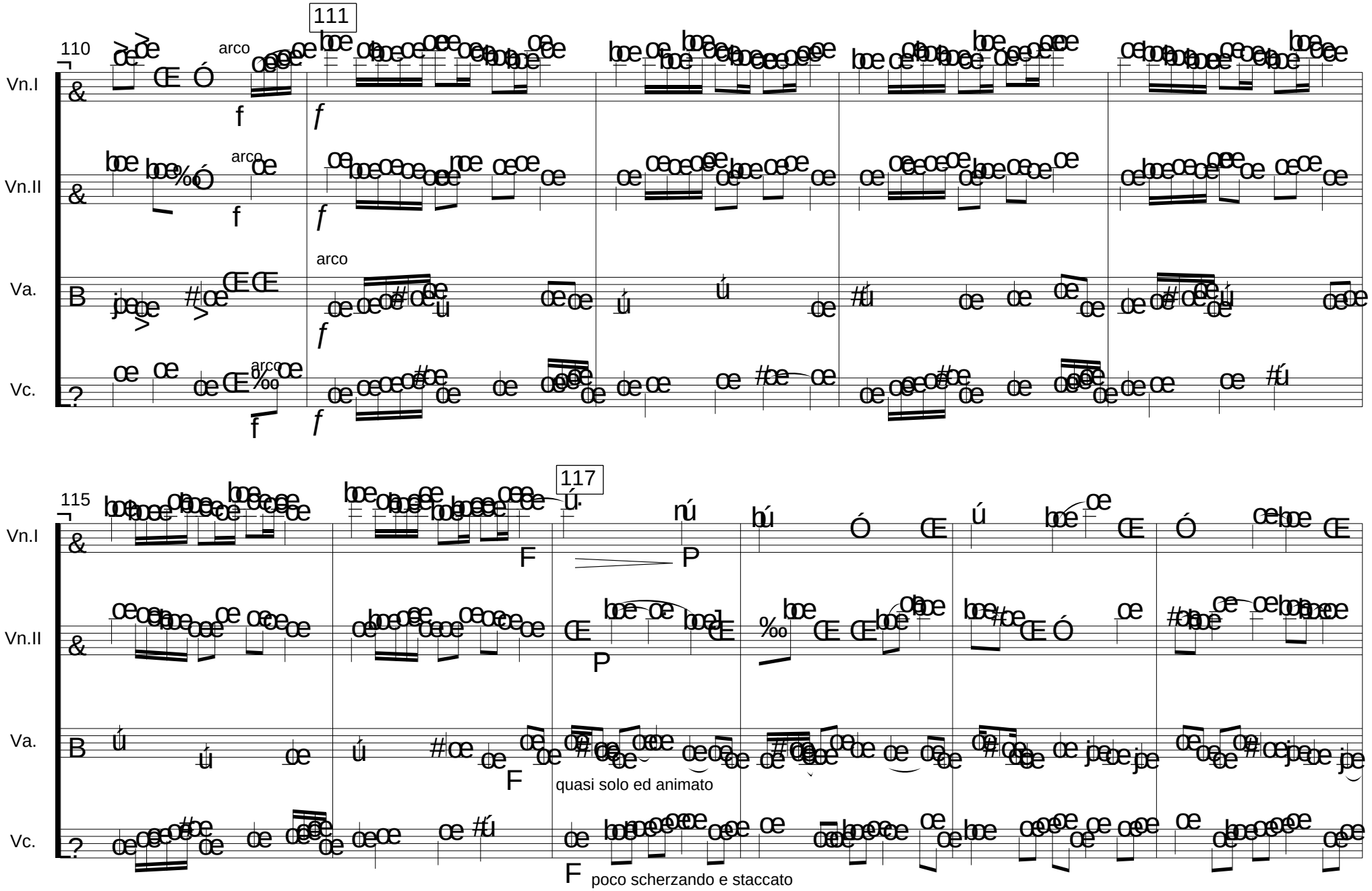

52
Vn.I
Vn.II
Va.
Vc.
57
57
Vn.I
Vn.II
Va.
Vc.

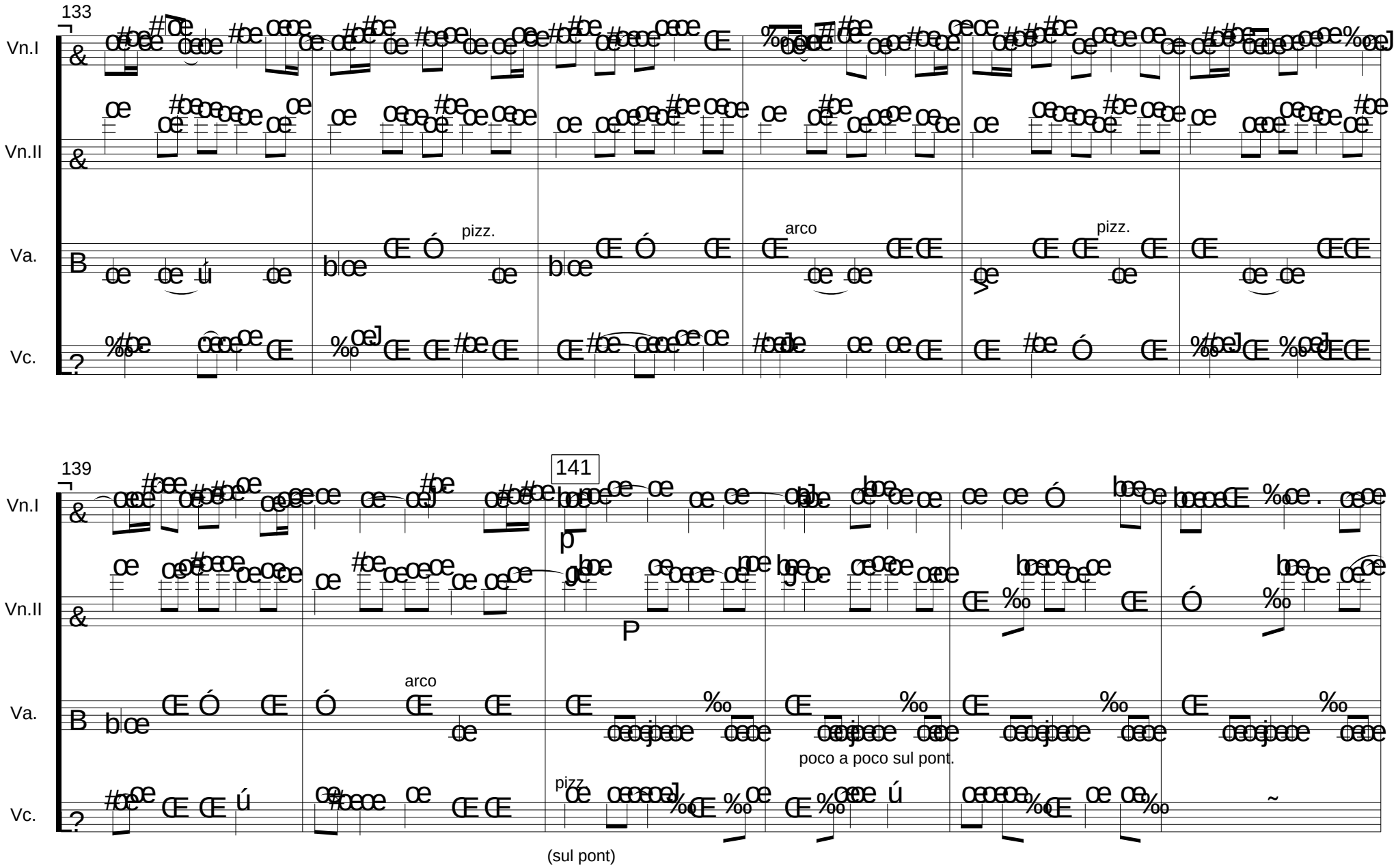

62
62
Vn.I
Vn.II
Va.
Vc.
f
pizz.
arco
67
68

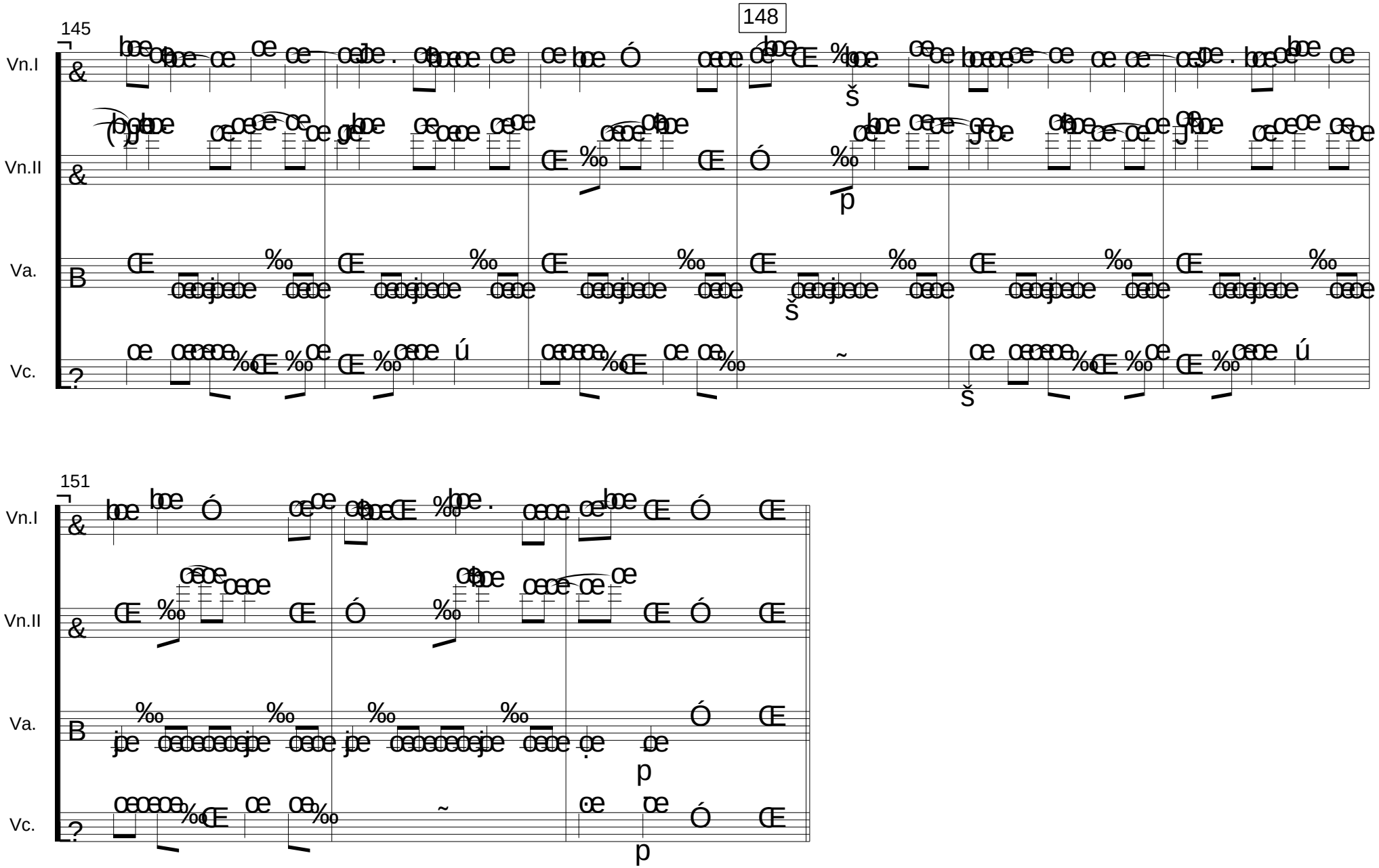

72
molto ritardando
Vn.I
poco cresc.
molto
pizz.
Vn.II
poco cresc.
arco
pizz.
Va.
poco cresc.
arco
Vc.
poco cresc.
molto


86
90
Vn.I
Vn.II
Va.
Vc.
arco
pizz
arco
pizz.
arco
p
quasi solo ed animato
poco scherzando e staccato
92
95
P
f (subito)

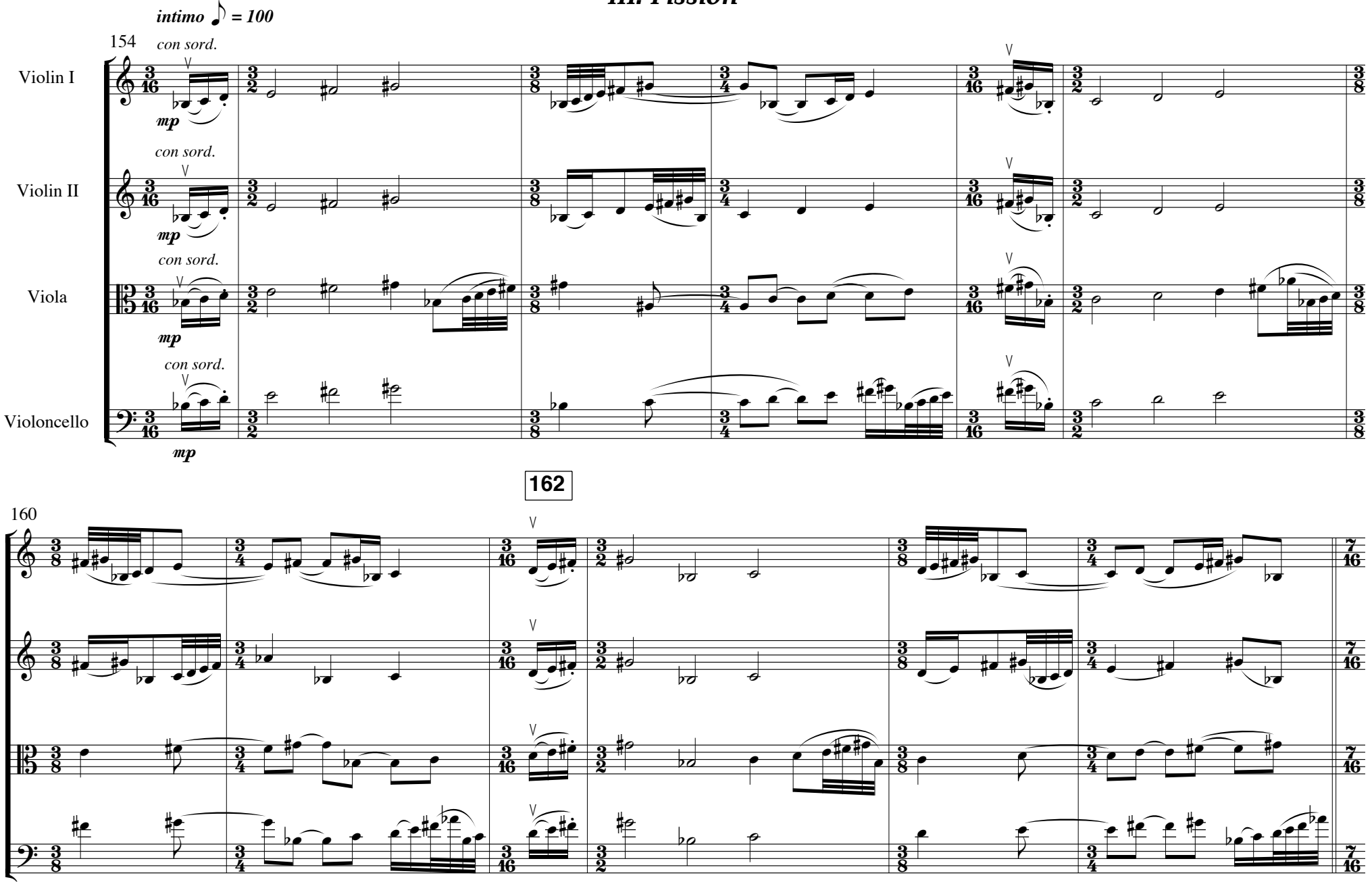

98
101
Vn.I
Vn.II
Va.
Vc.
pizz.
F
104

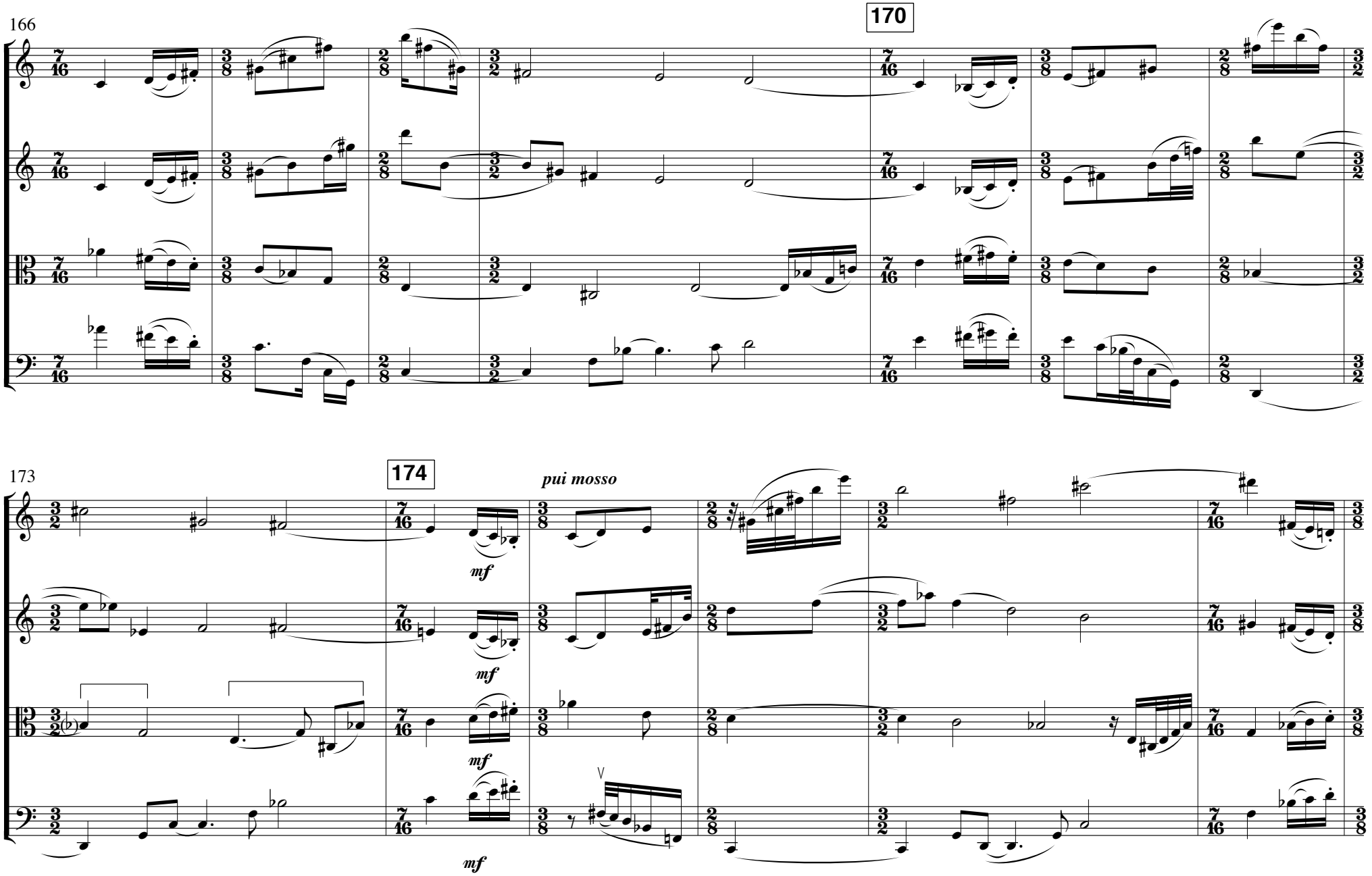

110
111
115
117
Vn.I
Vn.II
Va.
Vc.
arco
f
F
P
quasi solo ed animato
poco scherzando e staccato

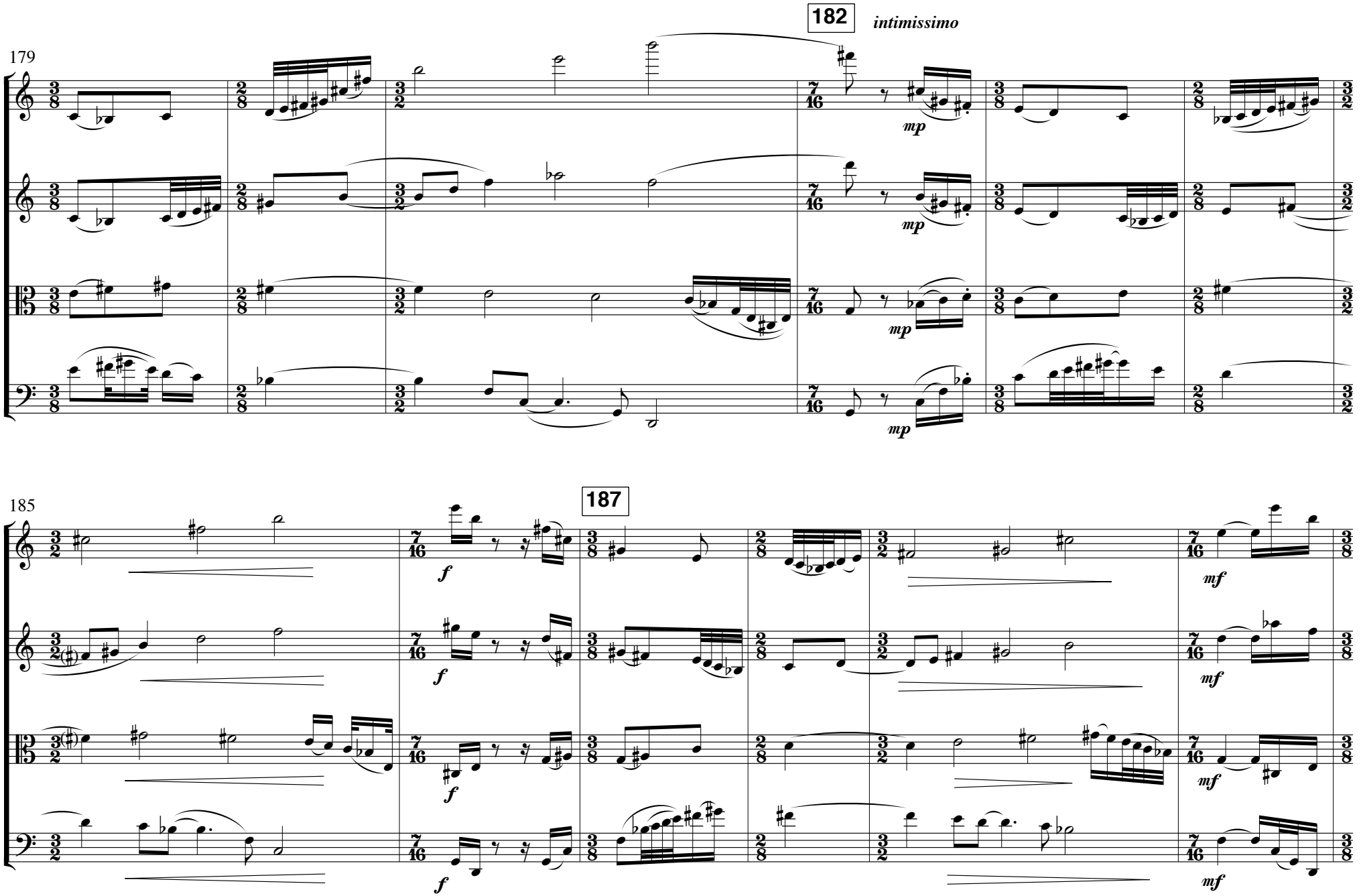

133
Vn.I
Vn.II
Va.
Vc.
pizz.
arco
pizz.
139
141
p
P
arco
poco a poco sul pont.
pizz.
(sul pont)

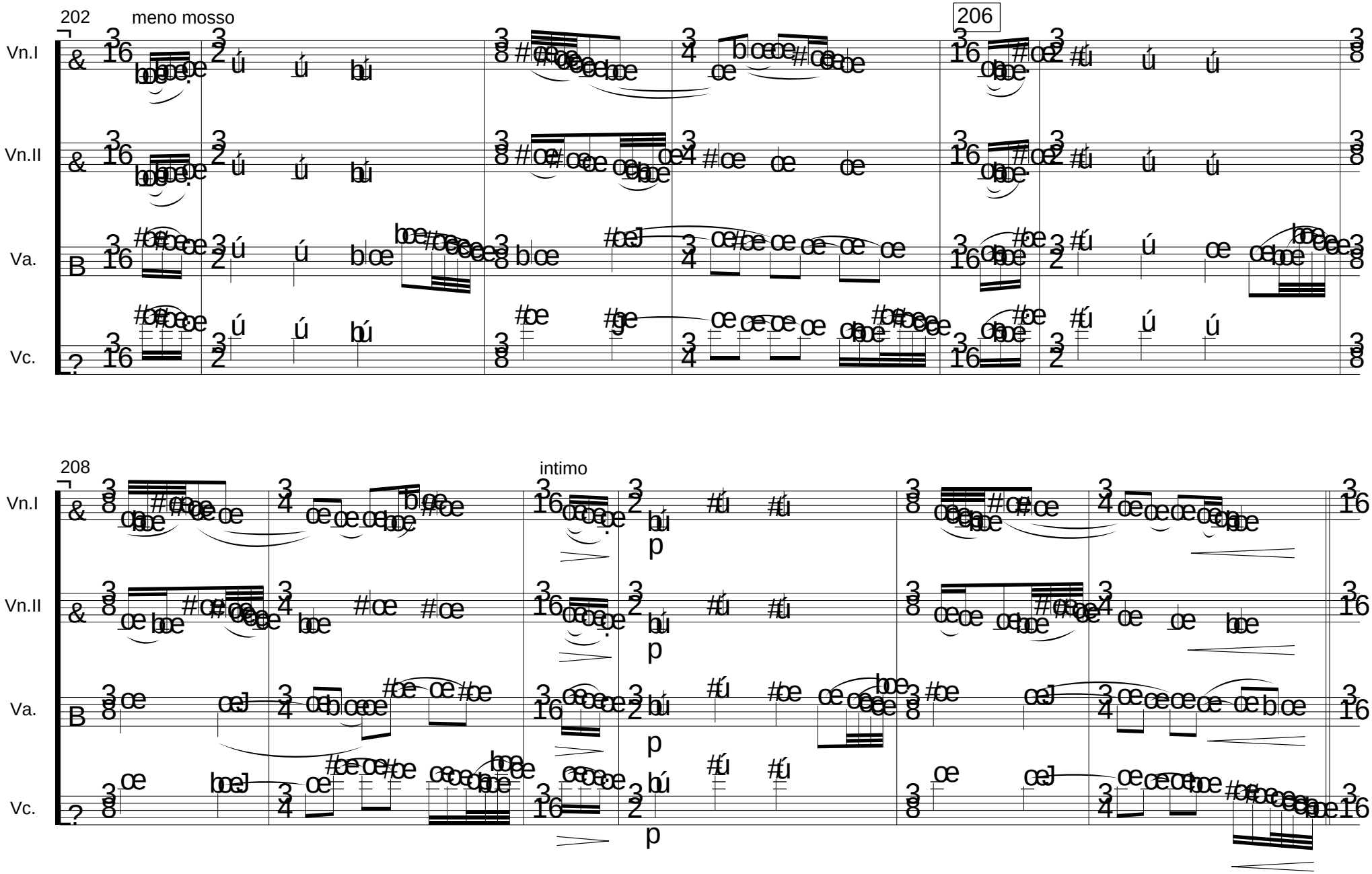

145
148
151
Vn.I
Vn.II
Va.
Vc.
p
p

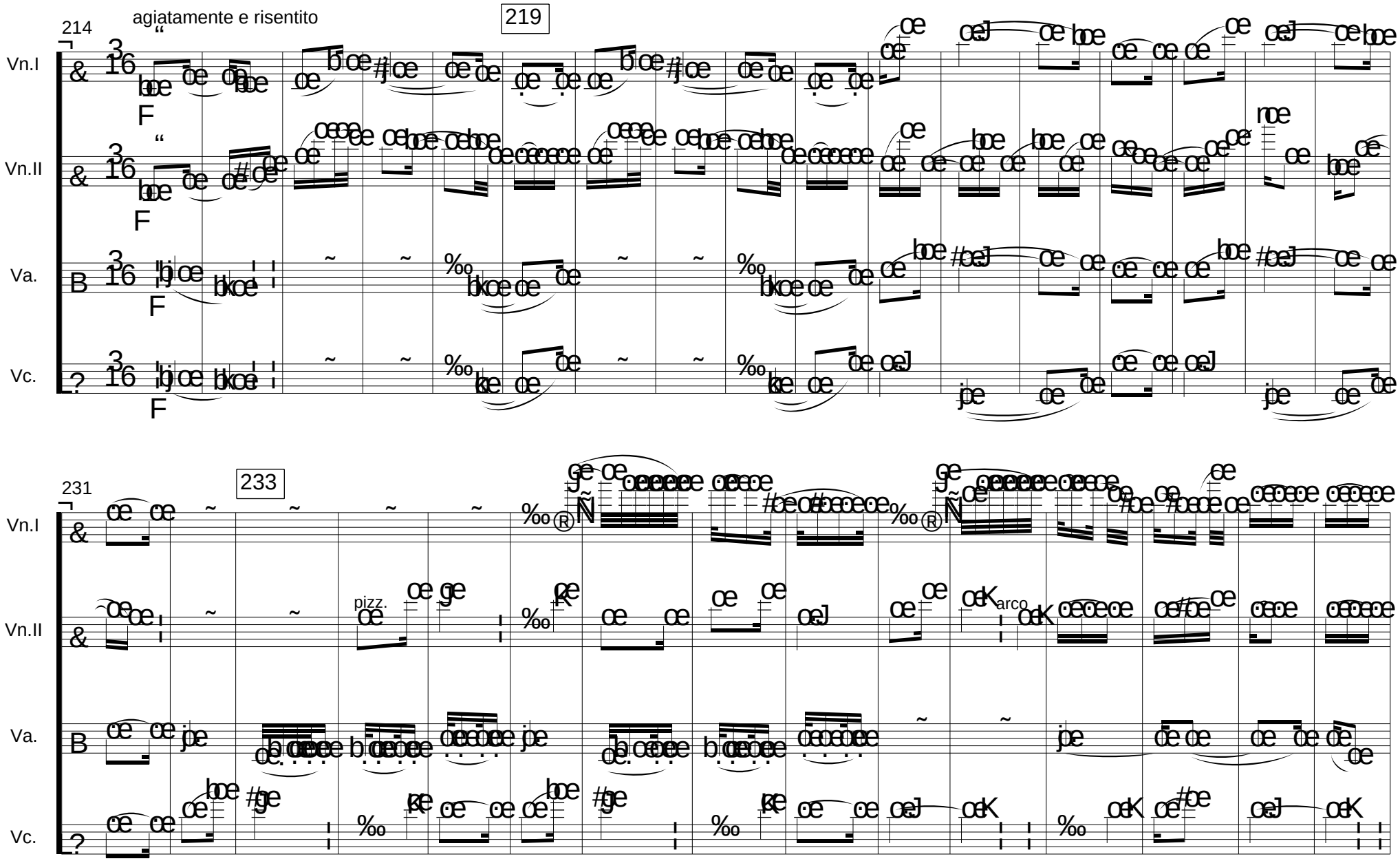
# III. Fission

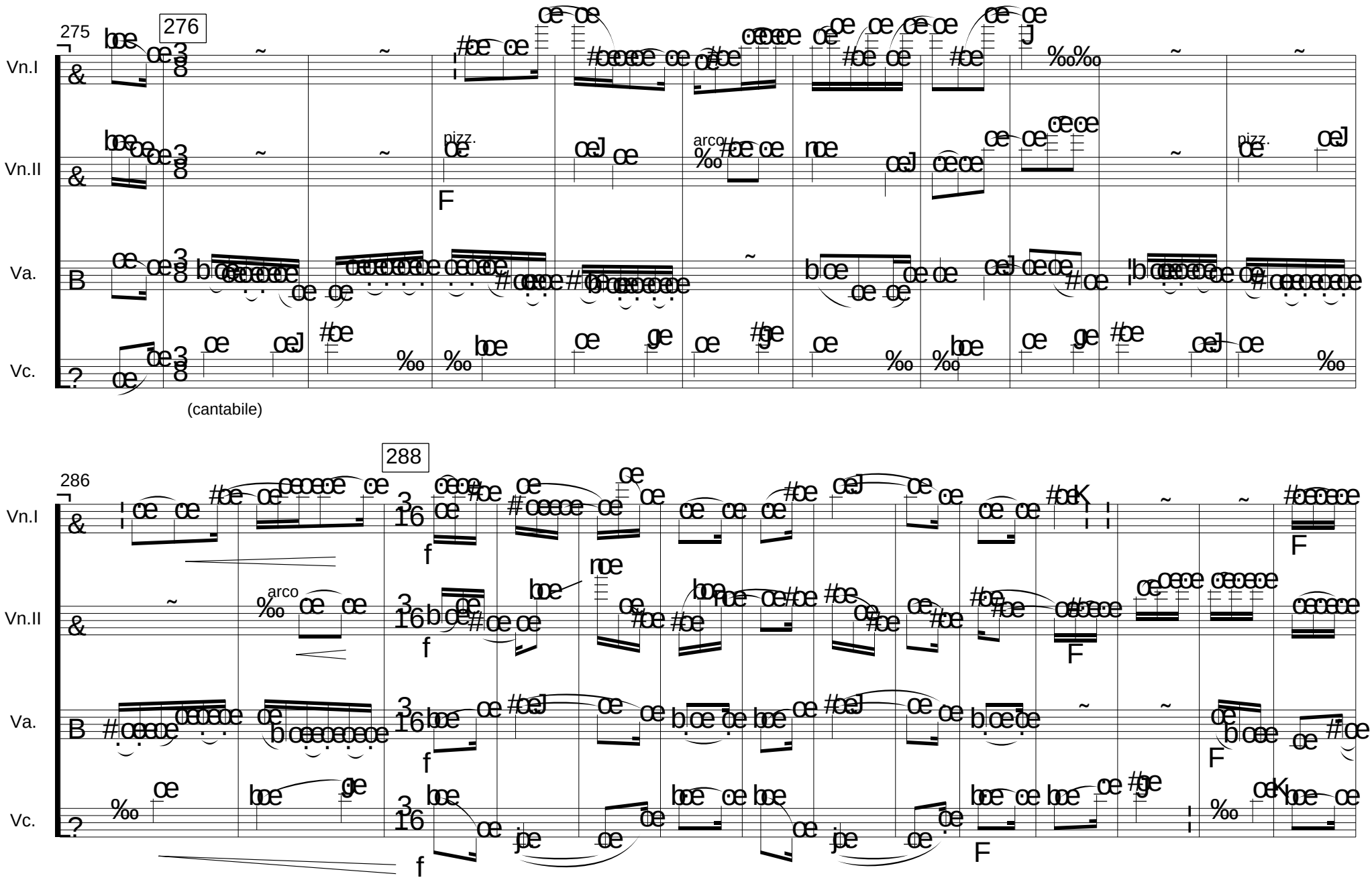

intimo ♪ = 100
154
con sord.
Violin I
mp
con sord.
Violin II
mp
con sord.
Viola
mp
con sord.
Violoncello
mp
162
160

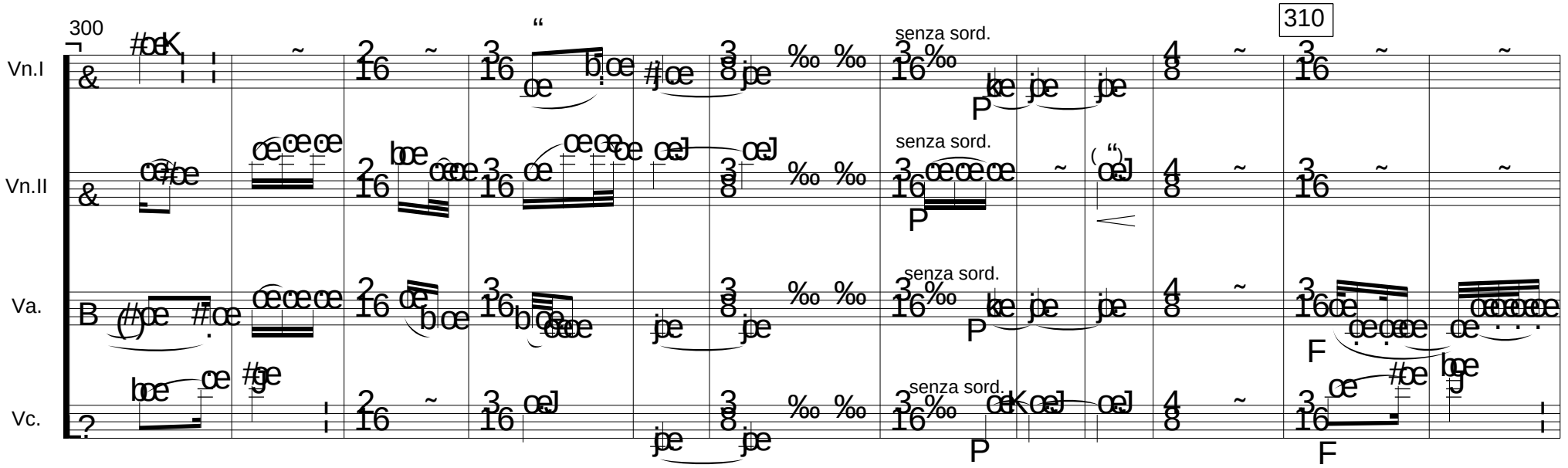

166
170
173
174
pui mosso
mf
mf
mf
mf

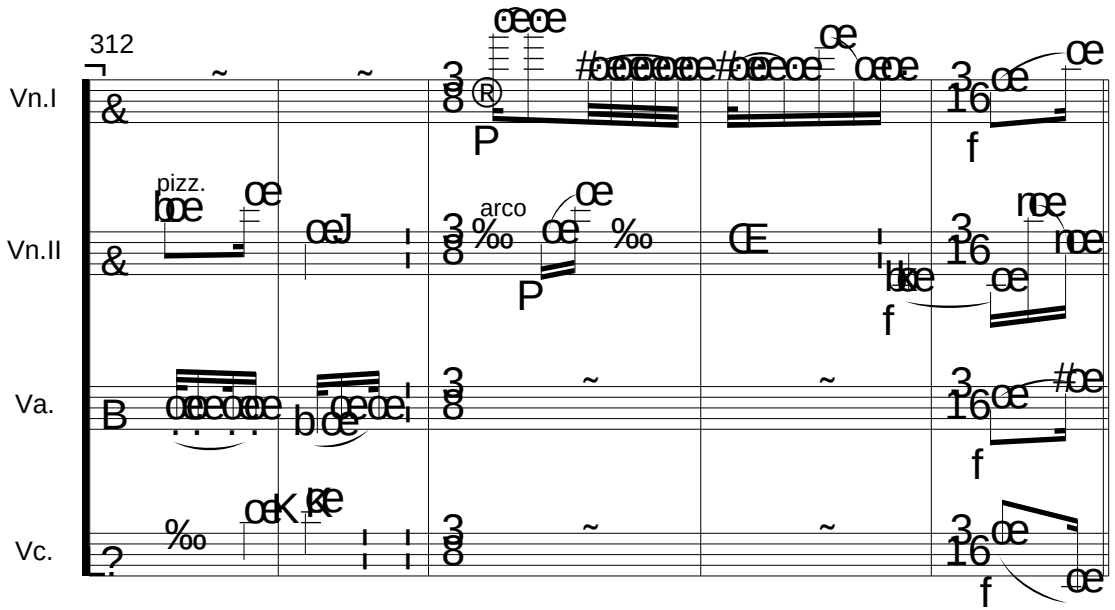

182
intimissimo
179
mp
mp
mp
mp
185
187
f
f
f
f
mf
mf
mf
mf


202
meno mosso
206
Vn.I
Vn.II
Va.
Vc.
208
intimo
p

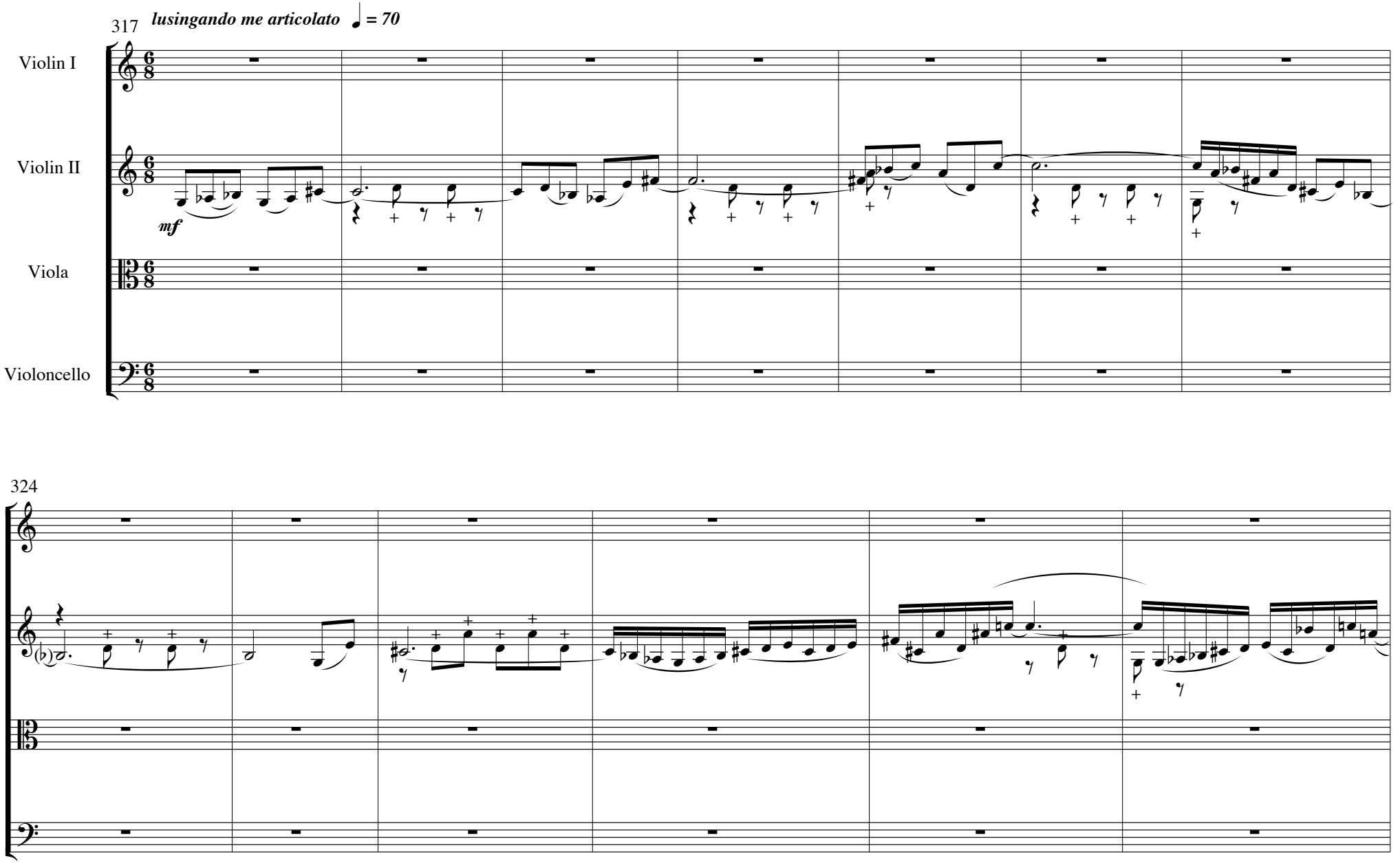

214
agiatamente e risentito
219
Vn.I
Vn.II
Va.
Vc.
F
231
233
pizz.
arco

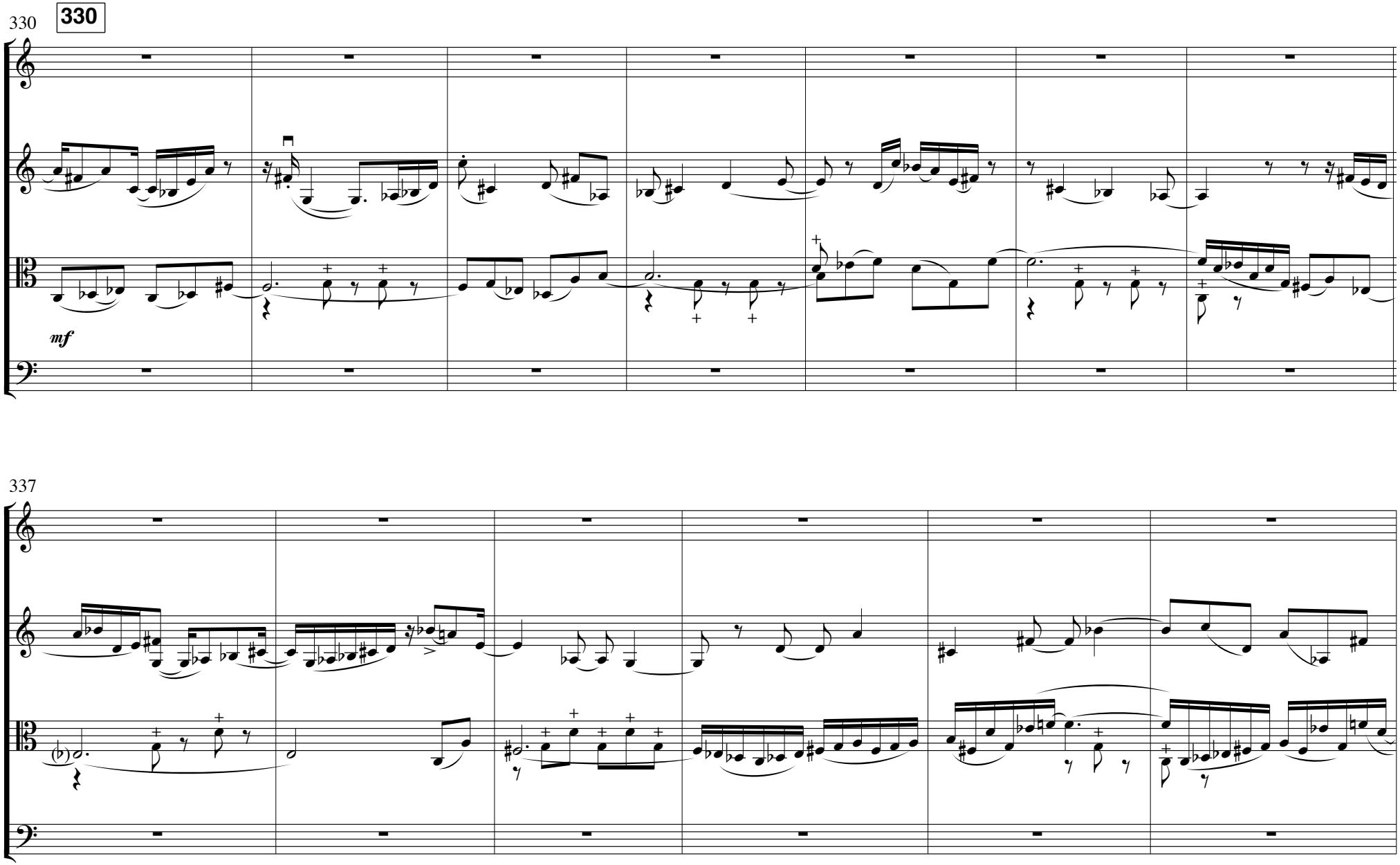

275
276
Vn.I
Vn.II
Va.
Vc.
pizz.
arco
pizz.
F
(cantabile)
286
288
arco
f
F

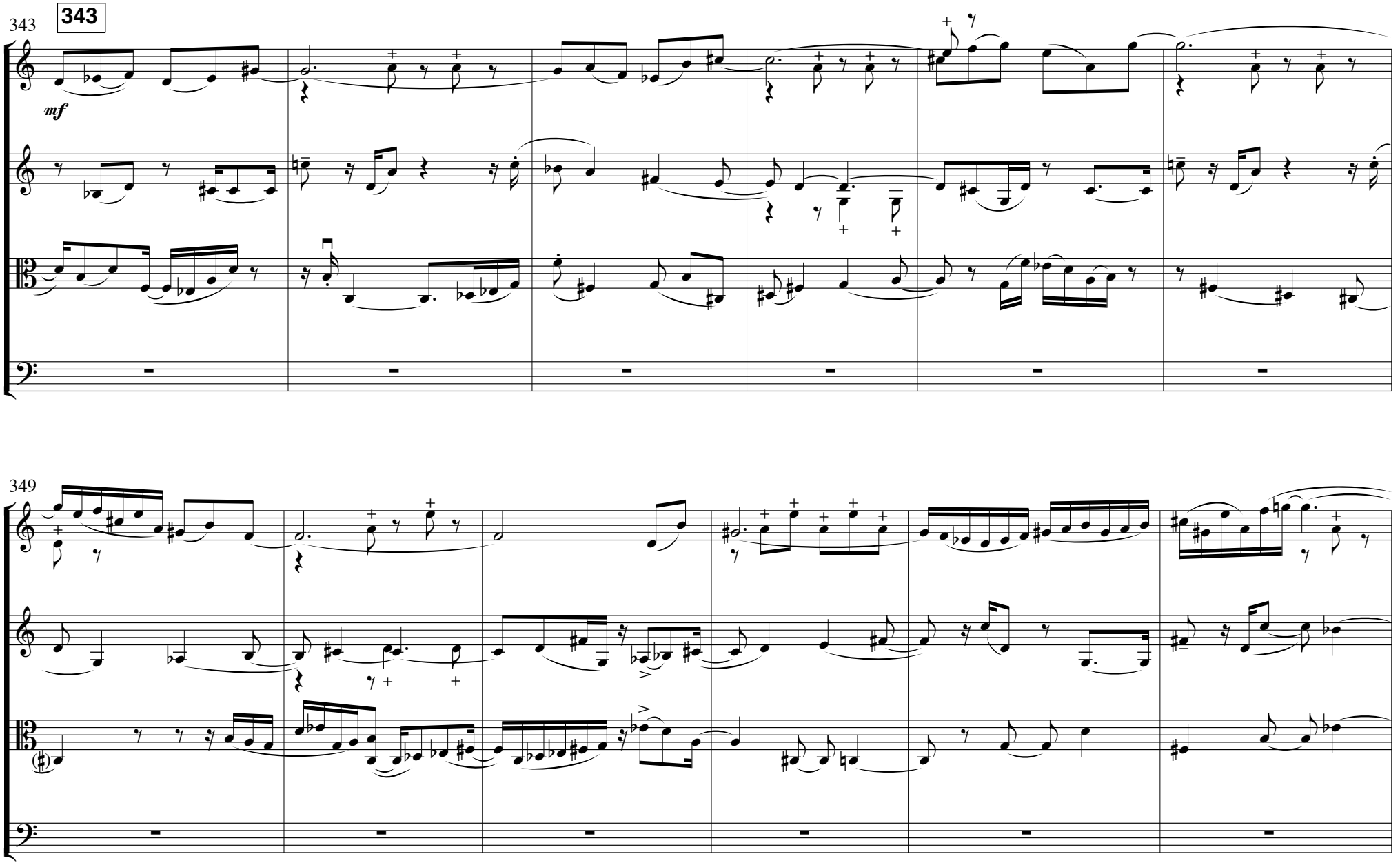

300
310
Vn.I
Vn.II
Va.
Vc.
senza sord.
P
F

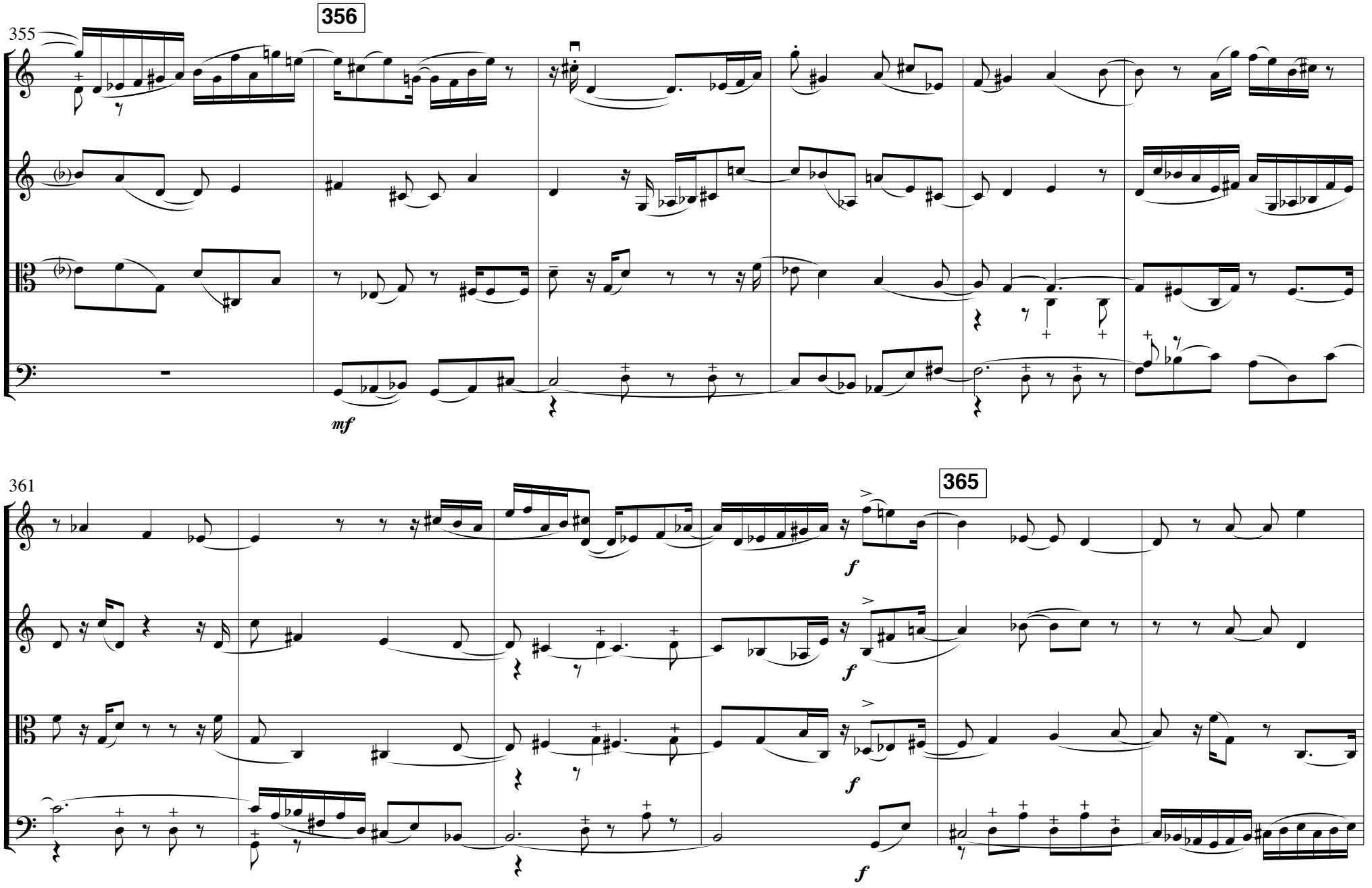

312
Vn.I
Vn.II
Va.
Vc.
pizz.
arco
P
f

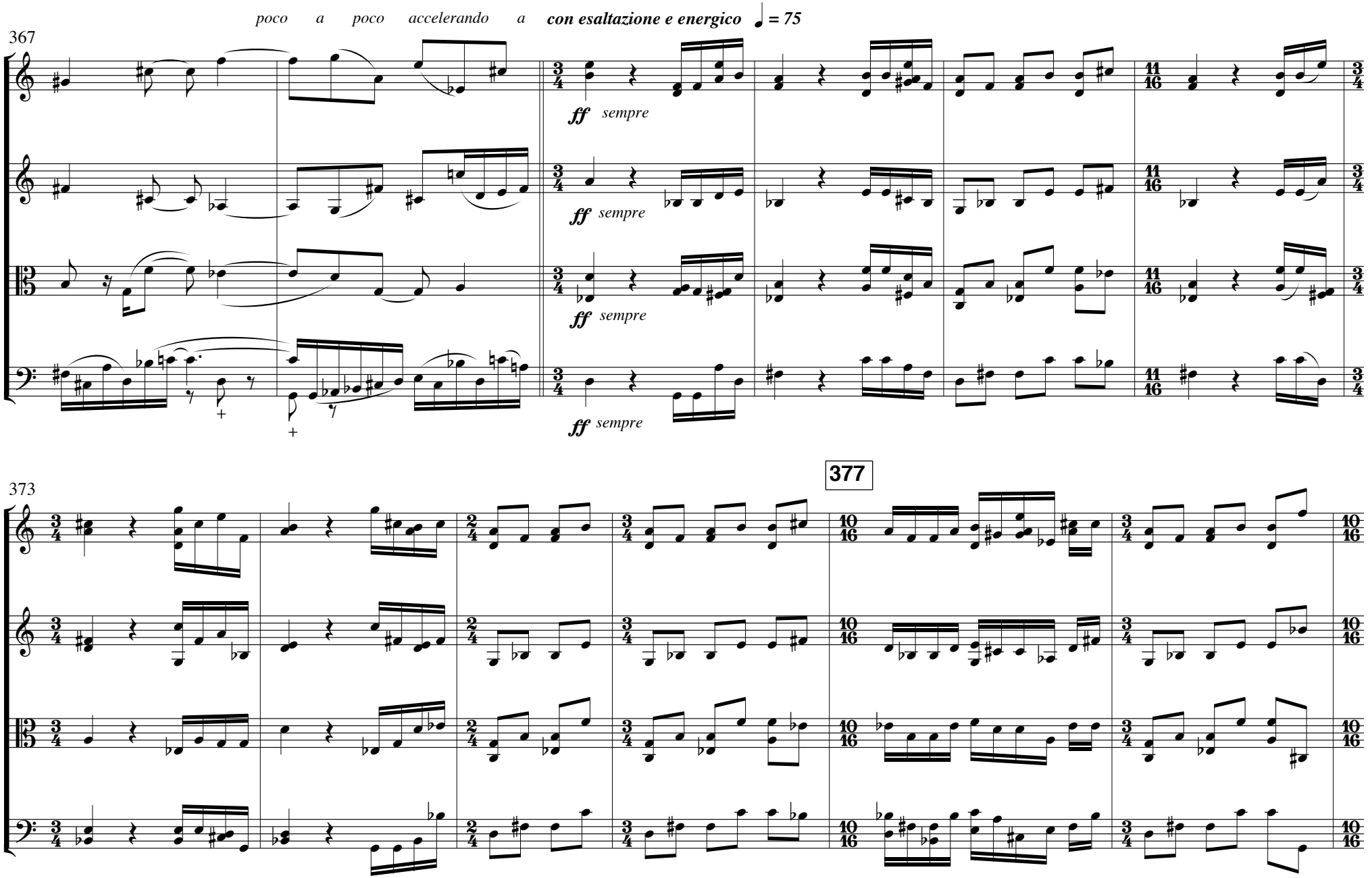
# *IV. Late Morning*

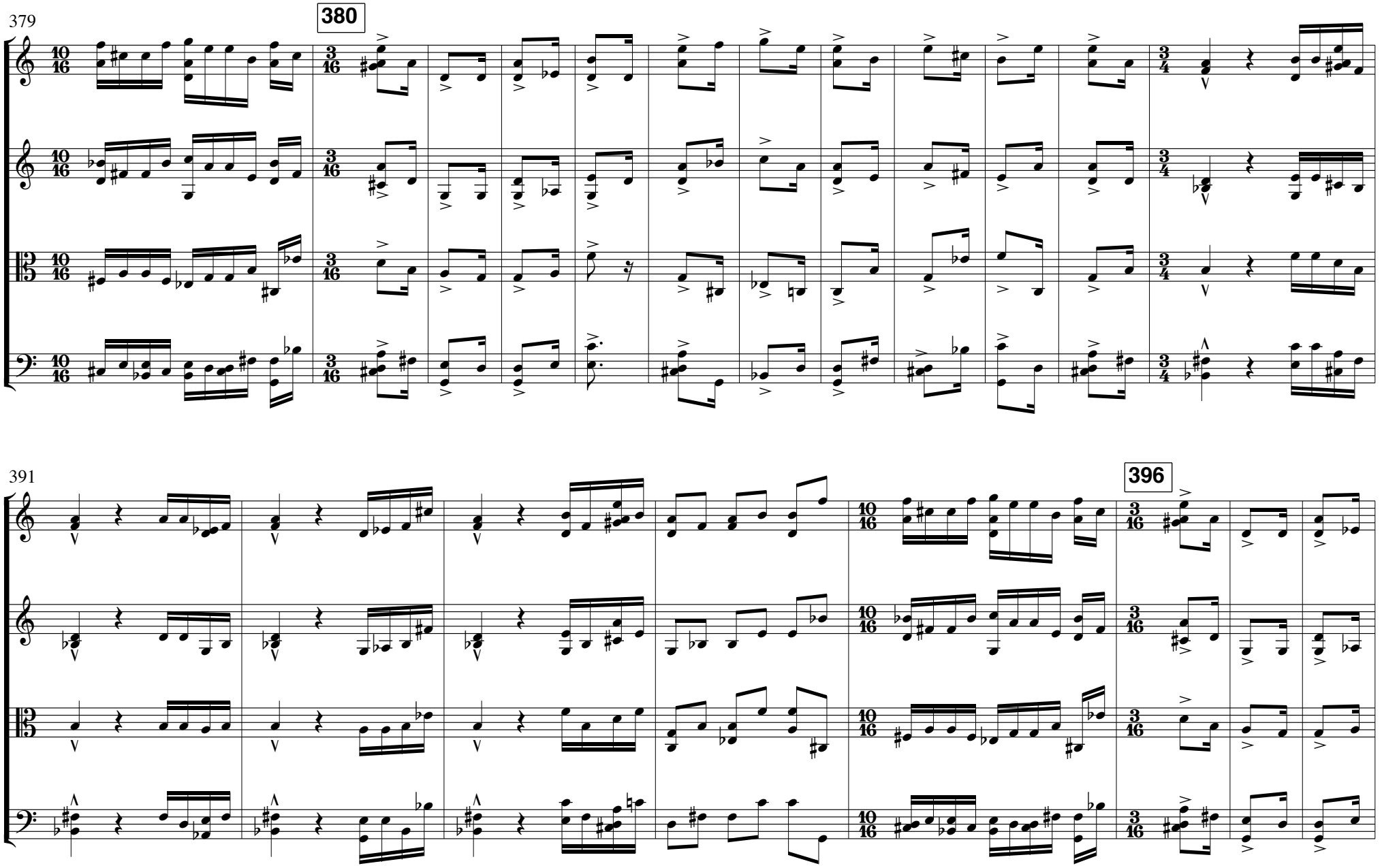


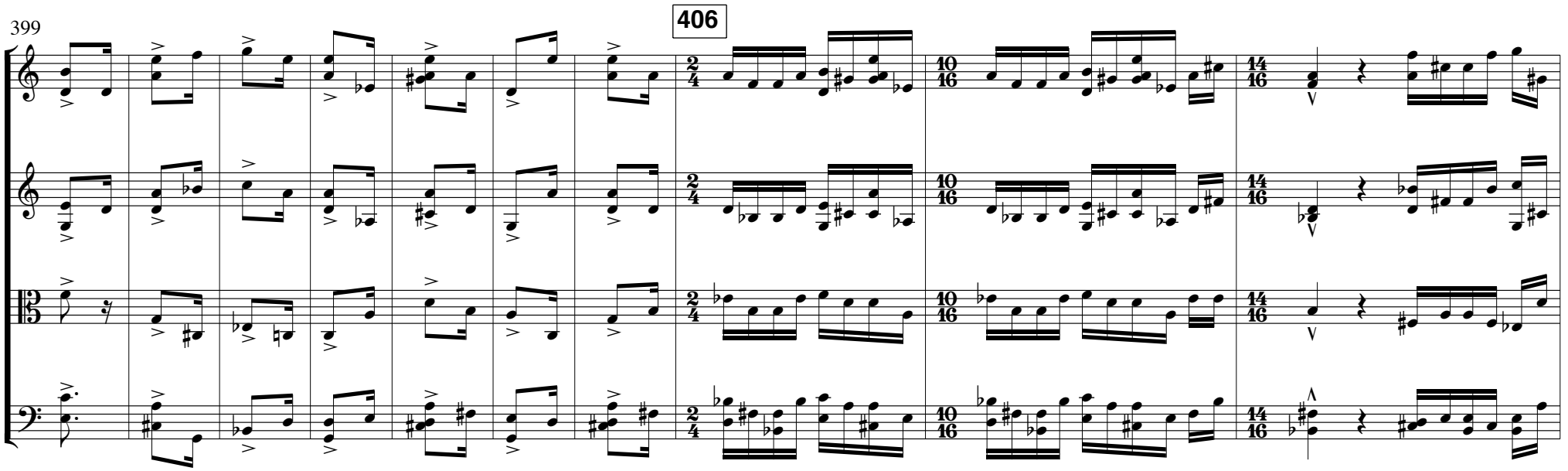

330
330
mf
337

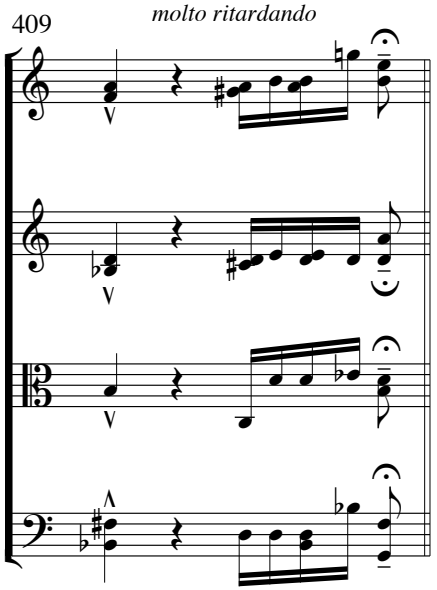

343
343
mf
349


355
356
mf
361
365
f
f
f
f

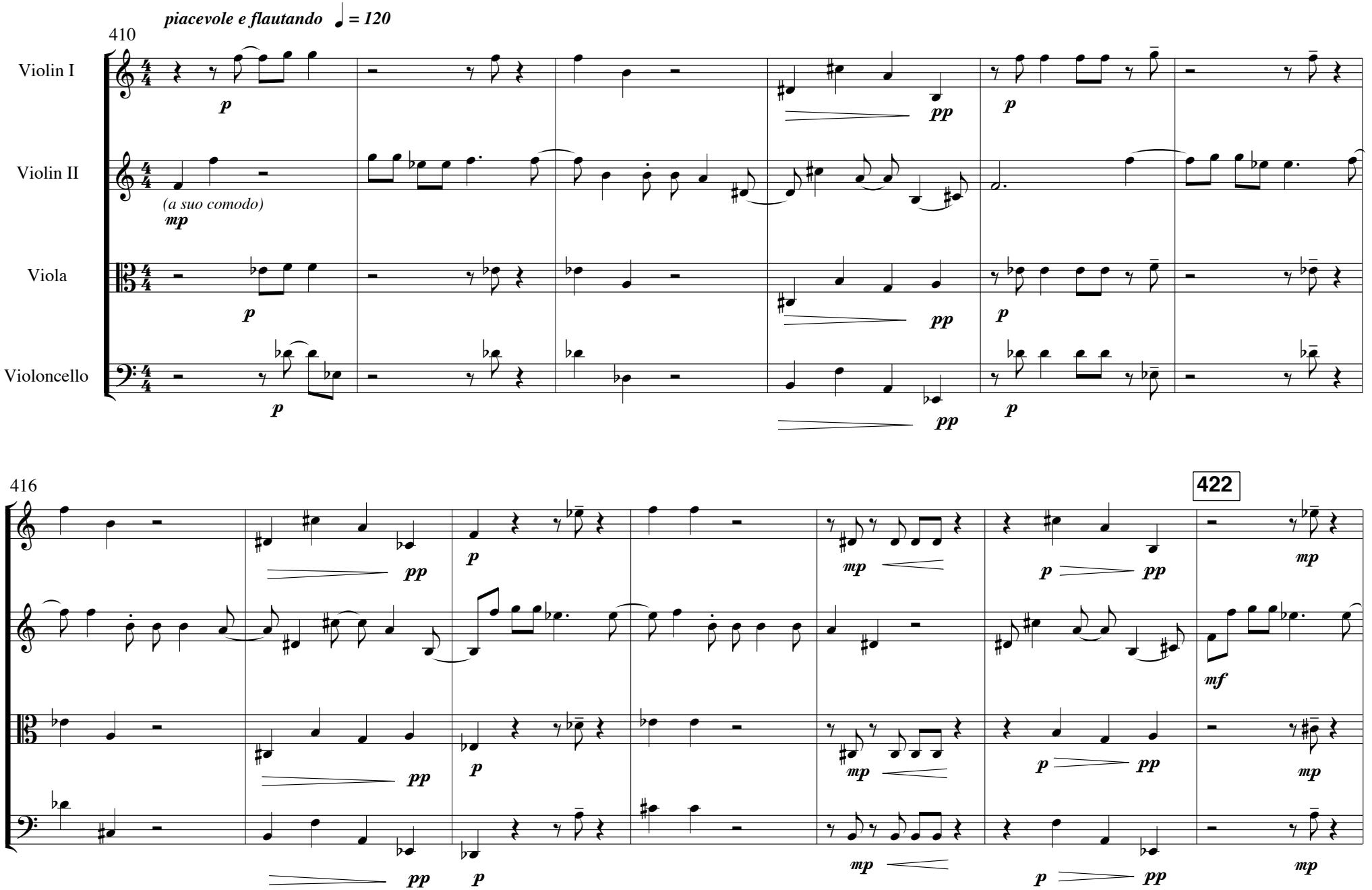

poco a poco accelerando a
con esaltazione e energico
= 75
367
ff sempre
ff sempre
ff sempre
ff sempre
377
373

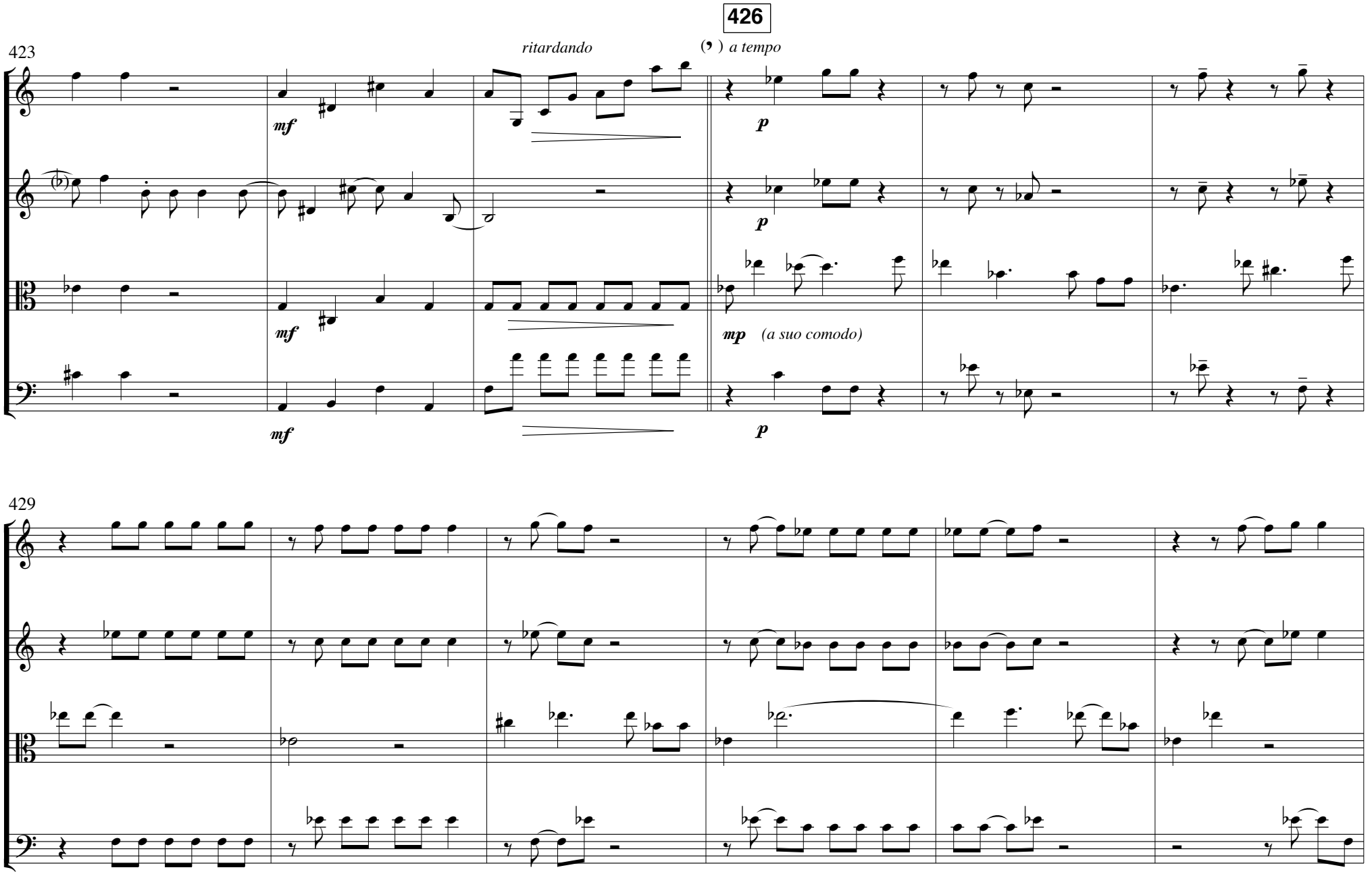

379
380
391
396

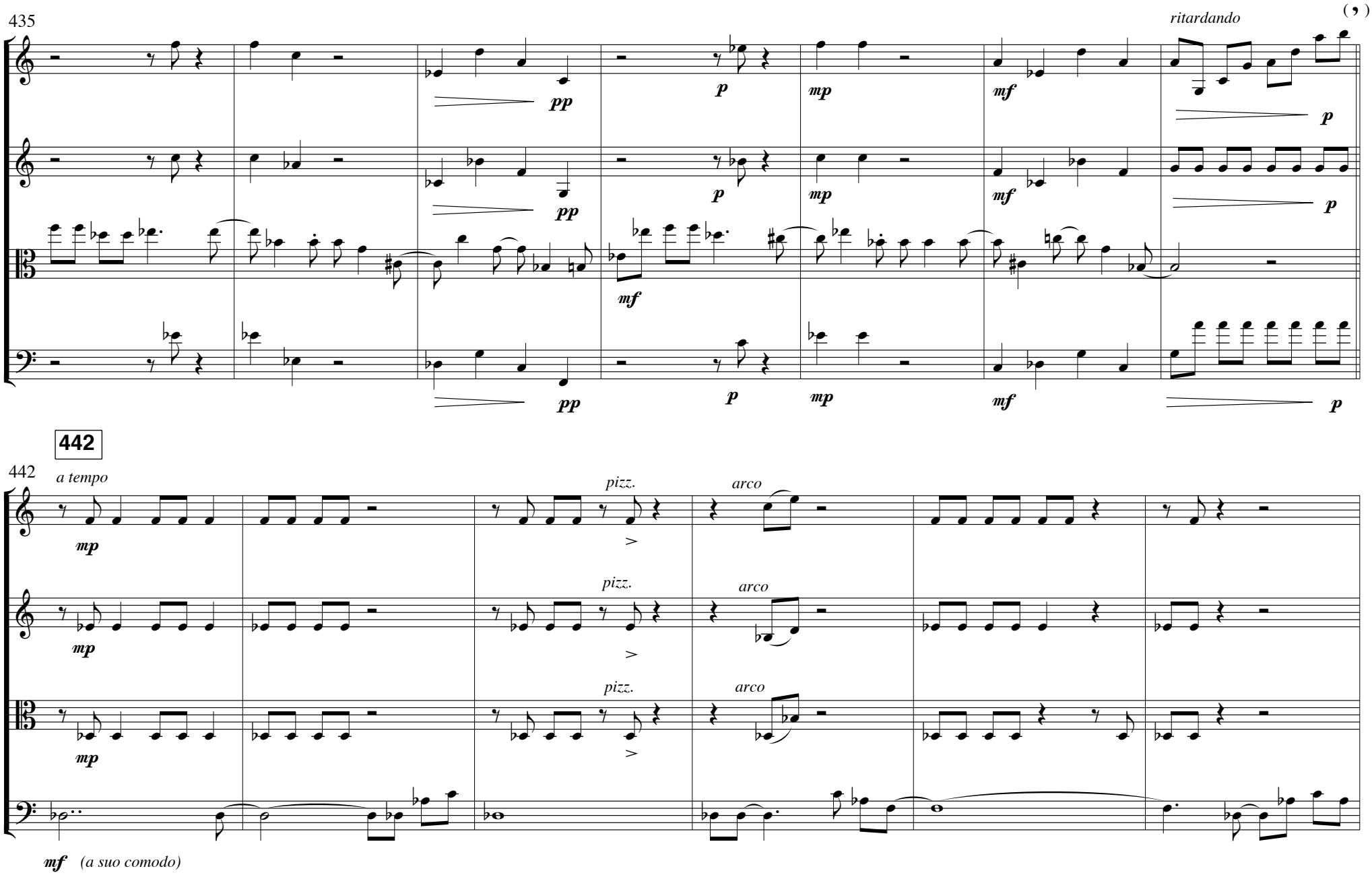

399
406

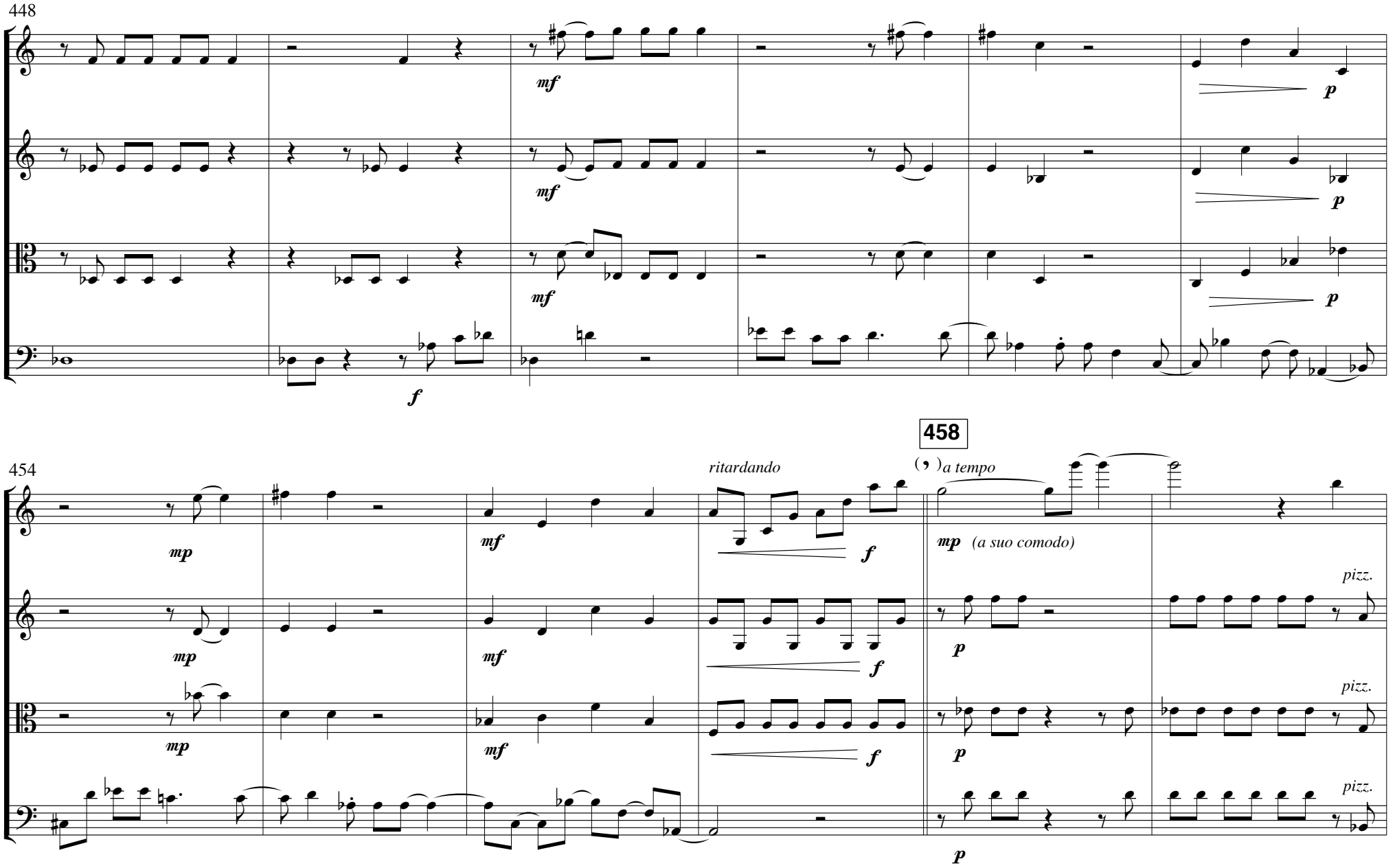

409
molto ritardando

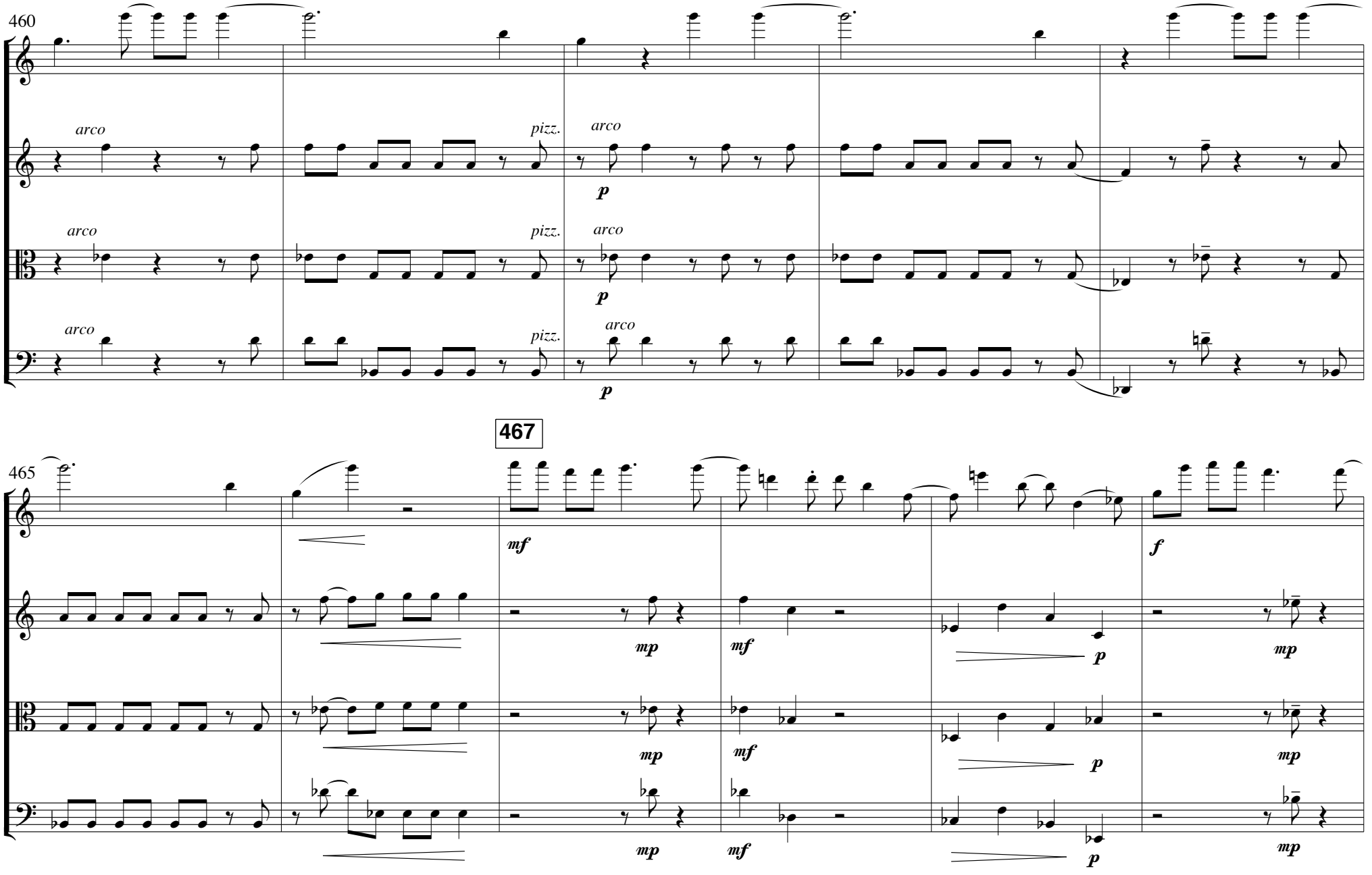
# V. Chant

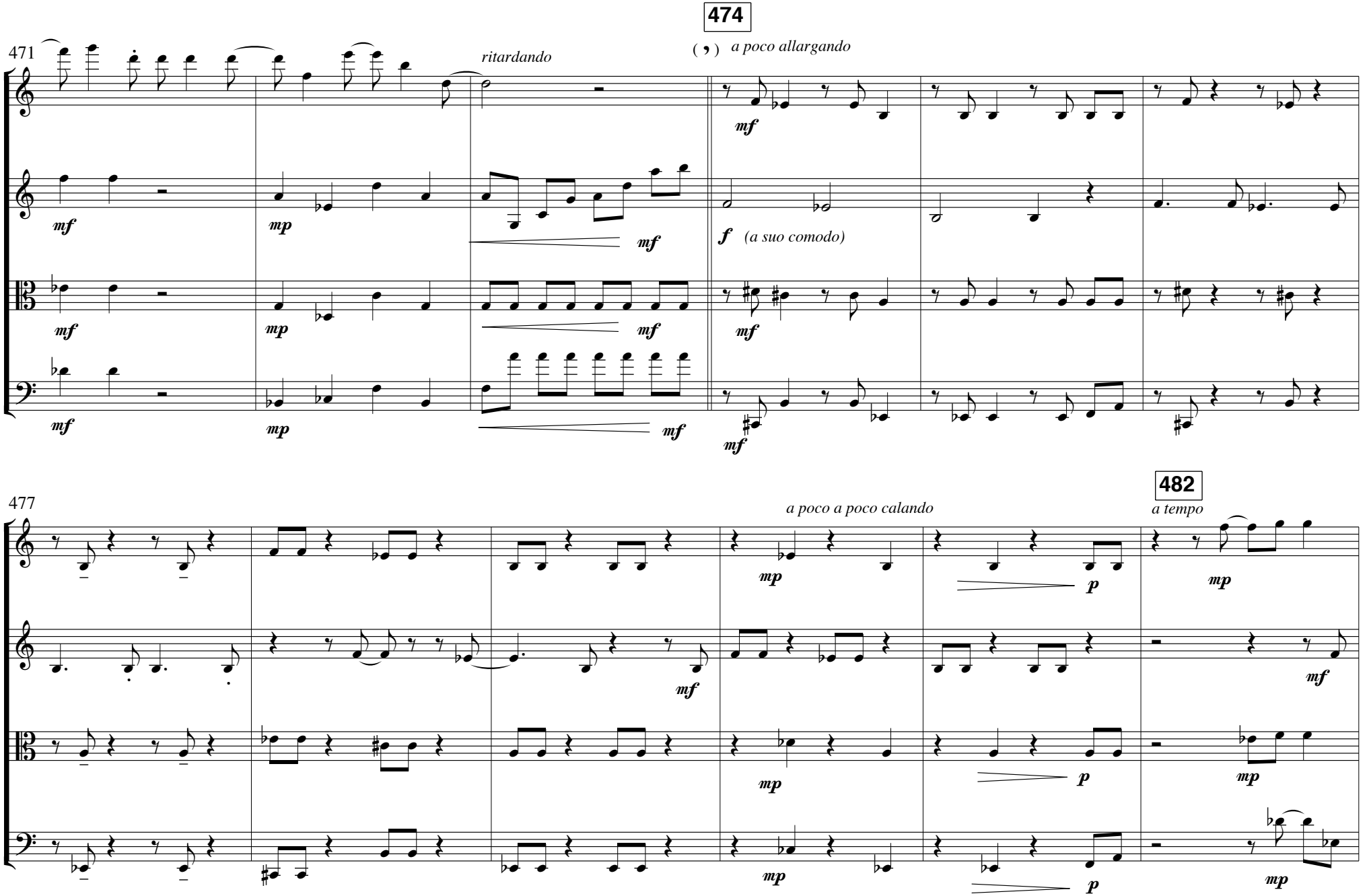

piacevole e flautando ♩ = 120
410
Violin I
Violin II
(a suo comodo)
Viola
Violoncello
416
422

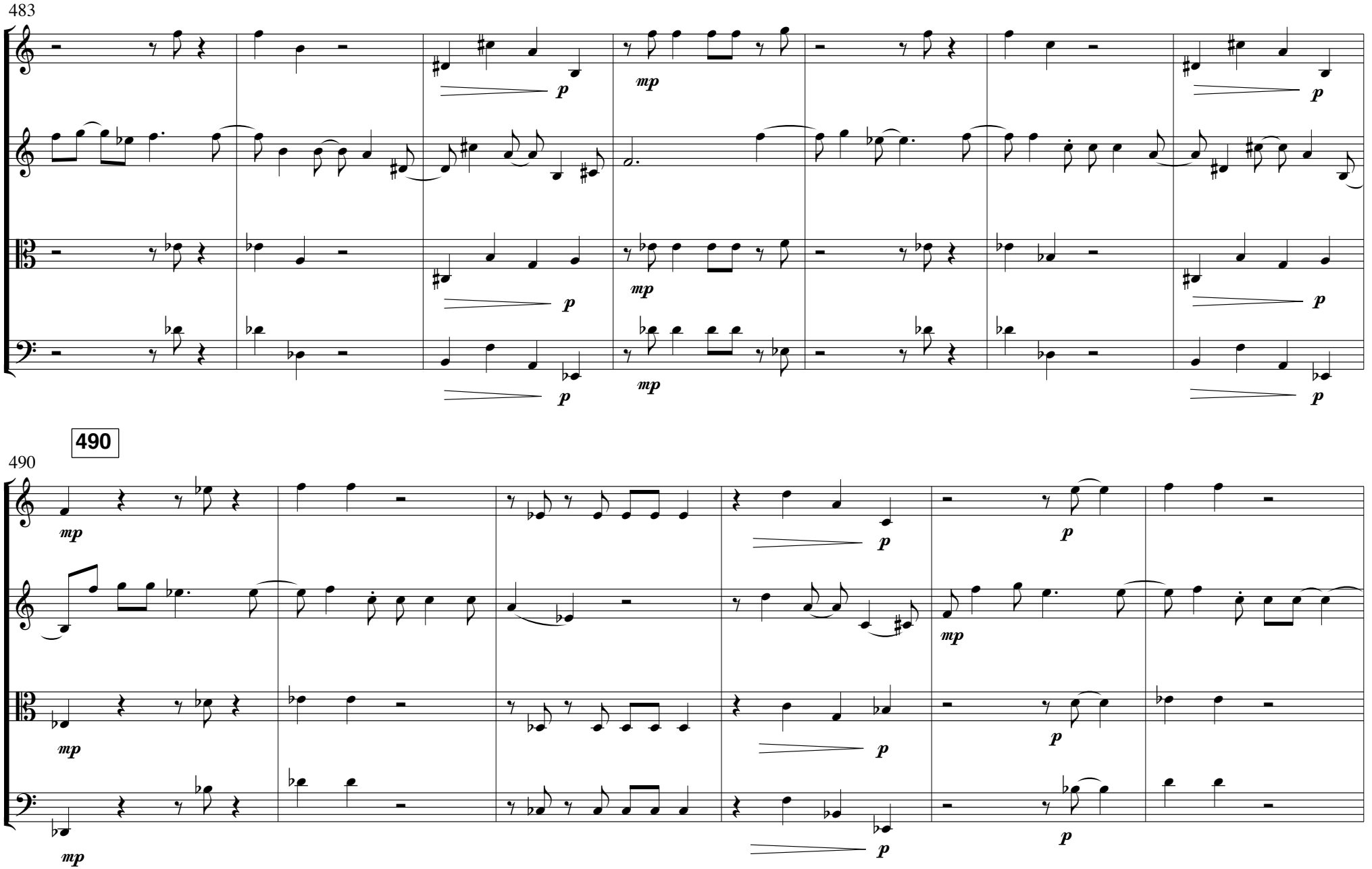

426
423
ritardando
a tempo
mf
p
mp
(a suo comodo)
429

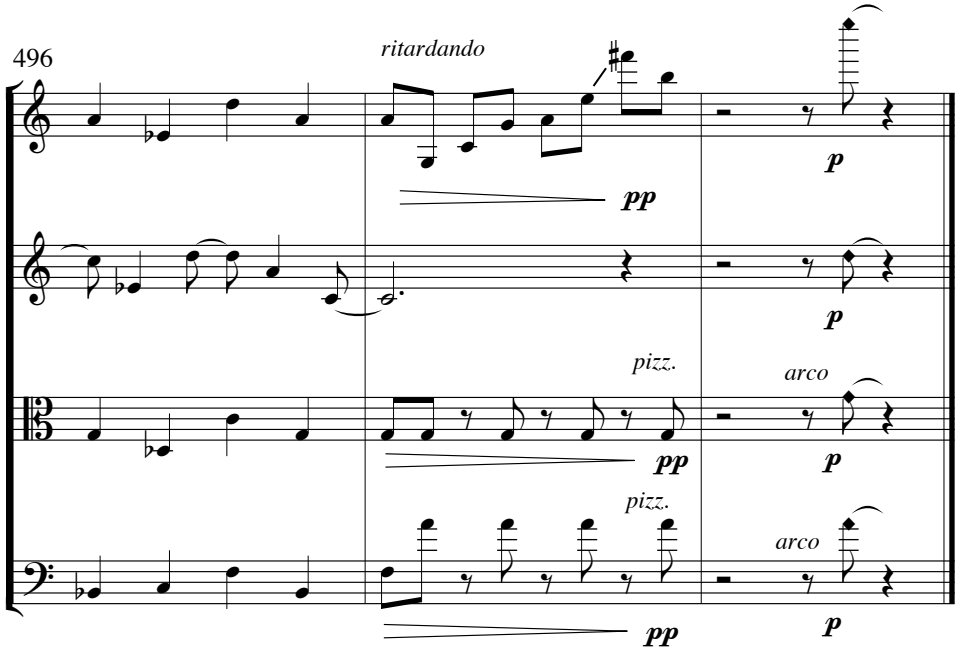

435
ritardando
pp
p
mp
mf
442
a tempo
pizz.
arco
mf (a suo comodo)


448
mf
p
f
454
458
ritardando
a tempo
mp
(a suo comodo)
pizz.


460
arco
pizz.
arco
p
arco
pizz.
arco
p
arco
pizz.
arco
p
467
465
mf
mp
mf
p
f
mp
mp
mf
p
mp
mp
mf
p
mp


474
471
ritardando
( , ) a poco allargando
mf
mp
f (a suo comodo)
477
a poco a poco calando
482
a tempo
p


483
p
mp
490
mp
p


496
ritardando
pp
p
p
pizz.
arco
pp
p
pizz.
arco
pp
p