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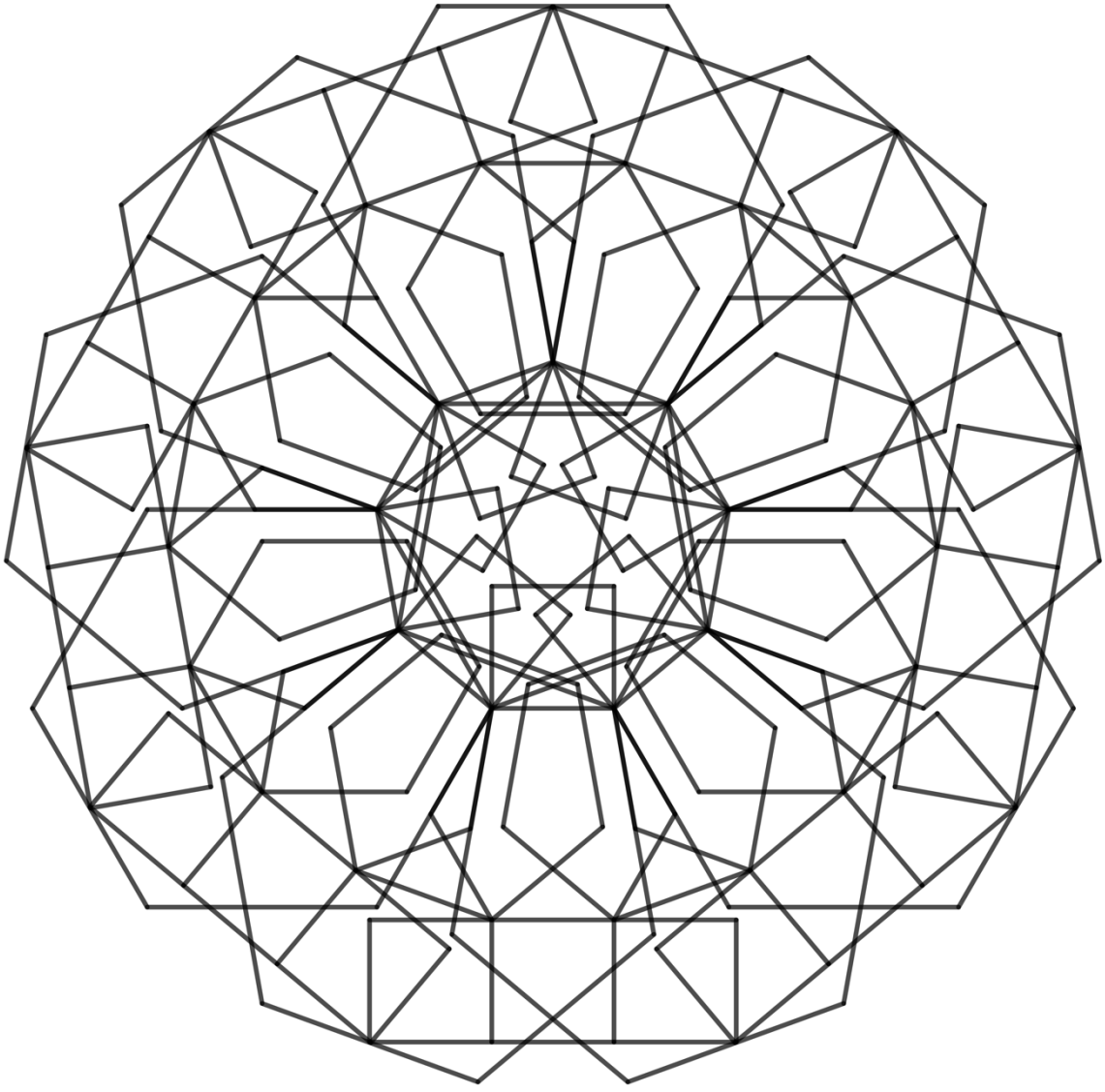
Convergence

for Sinfonietta



Full Score

Pedro Laranjeira Finisterra

February 2023 / Revised: August 2023
Re-edited: July 2024

Convergence (2023)
for Sinfonietta

Full Score in C

Duration: ca. 20'

Composition and Cover Illustration: Pedro Laranjeira Finisterra

List of Instruments:

-Flute (doubling Piccolo)
-Oboe (doubling Cor Anglais)
-Clarinet in Bb (retuned a quarter tone lower)
-Bassoon

-Horn in F
-Trumpet 1
-Trumpet 2
-Trombone
-Bass Trombone
-Tuba

-Percussion (1 Performer):
    Crotales
    Glockenspiel
    Vibraphone
    Tubular Bells
    (5) Woodblocks
    Snare Drum
    Kick Drum
    Bass Drum
    Tam-Tam

-Violin 1
-Violin 2
-Viola
-Violoncello
-Double Bass

List of Movements:

I. In the Day…

Interlude I

II. Apertures of the Skies

III. Running Away from Time
Interlude II
IV. Seeking Time

V. Fullness

Interlude III

Lullaby

VI. The Fall

Coda

(Movement III, Interlude II and Movement IV are played continuously without any break.)

Performance Notes and (literary) inspirations behind this piece

C*onvergence* is the last piece written for my doctoral studies at the Guildhall School of Music and Drama. It is the culmination of four years of research into finding creative strategies to simulate sonorities from equal tunings alternative to 12 Equal Divisions of the Octave (or 12EDO) in concert music instruments.

The titles of this piece and of some of its movements are based on titles and ideas found in books about Abrahamic religions. Books that I have been reading, as a hobby, in parallel to my research. The title *Convergence* alludes to Eileen Maddocks's book *1884: Convergence in Prophecy for Judaism, Christianity, Islam and the Baha'i Faith* and symbolises how all the microtonal strategies employed in this research and all these religious/theological/literary ideas converge into this piece.

As a starting point, this piece freely explores the concept of exploring a variety of scales found in alternative microtonal tuning systems based on the division of the octave, or another interval, into a number of equidistant steps alternative to 12. Sometimes, these scales correspond to a select number of pitches found in these tuning systems, but most times these scales encompass all pitches from those tunings.

Given that virtually almost none of these pitches are part of the modern concert music instrumental practice of 12 pitches per octave (nor do they, in many cases, relate to subdivisions of the semitone), they are then freely approximated into semitones, quarter tones, eighth tones (much less frequently) and, sometimes, into some more commonly used Just Intonation intervals found in the harmonic series (such as the 5^{th}, 7^{th} and 11^{th} partials) if they happen to be close to these intervals in relation to other pitches.

Even though it is not always found in these tunings, this piece is also full of perfect fifths, reflecting my growing interest in classifying and comparing the properties of different EDOs (Equal Divisions of the Octave) depending on the size of their fifths.

Although less frequently, given that these pitches are derived from numerical relations (dividing intervals, ratios of frequencies, etc.), sometimes these numerical relations are also explored rhythmically as a sort of 'musical pun'.

I. In the Day…

In the Day…, the first and longest movement of this piece, has the same title that Richard Elliot Friedman, in his book *The Hidden Book in the Bible*, gave to his reconstruction and translation of the passages attributed to the author of the biblical 'J' text. This title follows the literary Ancient Israelite convention of naming books with the first words of their texts. J is recognized by many scholars to be one of the oldest and longest narrative texts that was integrated into what became the Hebrew Bible (or Tanakh). This would have been achieved through a long process of editing (or redaction) by interweaving separate texts written by different authors from different historical periods and geographical locations. J would have been one of those source texts that was mixed with other texts. In Harold Bloom and David Rosenberg's *The Book of J* (another commented reconstruction of J) it is speculated that a princess from the court of the Judean King Rehoboam (son of King Solomon) would have been the author of J, a very ironic epic tale of the history of the Hebrews, spanning from the Creation and Garden of Eden stories to the death of Moses. Friedman, however, considers that J's story ends with the establishment of King Solomon's reign. The fascinating irony behind Bloom's commentary is that J originally would not have been a religious text, but a work of literature written by a brilliant woman, which was later appropriated by male Judean priests to serve as the basis for their sacred scriptures.

This movement explores 17 Equal Divisions of the Octave (17EDO). This is a 'Superpythagorean' tuning system, meaning that it includes recognizably diatonic scales but with larger whole tones and narrower semitones than those of 12EDO (making them sound distinctively 'bright' in comparison) and a perfect fifth wider than the 3/2 ratio. 17EDO also contains pentatonic scales, minor, major and 'neutral' chords, amongst other features. It could be conceptualized as being an expanded chromatic scale with 7 naturals, 5 sharps and 5 flats (with sharps and flats not being enharmonic). In practice, these sonorities are approximated using diatonic and pentatonic scales the way they are usually performed by modern musicians, and quarter tones (which, coincidently, some pitches of 17EDO are themselves very close to quarter tones).

Interlude I

This interlude briefly explores 19EDO, which is a Meantone tuning system. This means that it includes recognizably diatonic scales, but with narrower whole tones and larger semitones than those of 12EDO, leading to its thirds and sixths to be closer to Just Intonation, by compressing the size of their major versions and widening their minor versions (which is the opposite of what happens in a Superpythagorean tuning system) and a perfect fifth narrower than the 3/2 ratio.

The clarinet (which is itself retuned a quarter tone lower) plays some of the 'quarter sharp' notes that can be found when 19EDO (starting on C) is 'rounded' to 24EDO (the quarter tone scale).

The E of 19EDO, which is flat in comparison to 12EDO (making it closer to a 5th harmonic on C) is represented as such in the Cello, while the Double Bass, the 2nd Violin, the Viola and the Glockenspiel play its rounding into 12/24 notes per octave (corresponding to a natural E), creating a slight dissonant beating against the Cello. (The 1st Violin's E quarter flat is only ornamental.)

The clarinet line combined with the Double Bass pedal then give rise to a sound world of vertical stretched octaves and fourths and neutral sevenths, while, horizontally, the clarinet is only 'in tune' with itself, playing an incomplete diatonic line.

II. Apertures of the Skies

Friedman, in *Commentary on the Torah* and *The Bible with Sources Revealed*, also visually alludes to the more cosmic Creation story of the author of the 'P' source, particularly to the 'Apertures of the Skies' (the title of the second movement). These are a body of water suspended above the sky which, in P's version of the Flood story, fall onto the Earth. I find Friedman's visual depiction to be particularly striking. The author of P is theorized by him to have been a Levite priest descended from Aaron and a contemporary of King Hezekiah. This priest would have written an alternative story to the then known combined text comprised of the 'J' and 'E' portions in the Pentateuch.

This somewhat static movement mostly explores a simple Just Intonation harmony in F where the trombone is alternating between a 15/8 'Natural Major Seventh' and a 7/4 'Narrow Minor Seventh'. The flute and the trumpets play different approximations of 5EDO (starting on different notes) following different strategies (the flute playing 5EDO on C rounded to 24EDO, and the trumpets playing an approximation of 5EDO on G into 48EDO, not systematically followed). Rhythmically, a mixture of slow polyrhythms in the strings alongside a variety of somewhat fast crescendi and decrescendi in the brass, help create a certain fluid quality to the movement. In rehearsal mark D, materials from *In the Day*… are reiterated.

III. Running Away from Time / Interlude II / IV. Seeking Time

The combined third movement (*Running Away from Time*), second interlude and fourth movement (*Seeking Time*), freely represent passages from the books of Genesis and 1 Enoch, spanning from before the Flood story to after it, but not necessarily in chronological order.

III. Running Away from Time

This fast movement mostly for strings explores a musical equivalency between pitch and rhythm in which a semitone is equivalent to a 16th note/semiquaver. In it, the melodic ascent of the 12EDO chromatic scale by semitones (16th notes/semiquavers) is mixed with 9EDO - also generated by the division of the major third (quarter note/crotchet) into three equal parts (triplets) – and 8EDO – also generated by the division of the minor third (dotted 8th note/quaver) into two equal parts (two dotted 16th notes/semiquavers).

The perfect fifth (seven 16th notes/semiquavers) is also prevalent in this movement (both harmonically, melodically, and in modulations), despite the fact that 8EDO and 9EDO (respectively, 'Supersharp' and 'Superflat' tuning systems) do not have perfect fifths (or do, but one is so sharp and the other is so flat to the point where they may just not be considered fifths at all – leading to tuning/scales in which no recognizable diatonic sonority is possible or viable).

Most time signatures reflect to a certain extent the prevalence of these intervals and scales at given moments of the movement through this pitch/rhythm relationship.

In rehearsal mark G, the 9EDO subdivision of the major third in three (triplets) gradually turns into the 6EDO subdivision of the same interval in two (two 8th notes/quavers), only to culminate into an 8EDO-to-6EDO cadence. 6EDO is considered a 'Trivial' tuning system – because it is contained within 12EDO – which can also be considered both a Supersharp and Superflat tuning system (its 'functional fifth' could be both the diminished fifth – Superflat – or the augmented fifth – Supersharp), and therefore no recognizable diatonic scale is contained in it.

Interlude II

This interlude mixes a bassoon solo consisting of some of the pitches of the rounding of 19EDO into 24EDO that do not correspond to quarter tones (almost like an antithesis of the clarinet part in Interlude I) against a variety of materials from previous movements and other movements following it.

IV. Seeking Time

This movement can be divided into two sections. The first one, only for brass instruments, consists essentially of two melodic voices playing cycles of fifths and fourths (and their inversions, which are also fourths and fifths, creating a 'conceptual symmetry') with some held pedal notes played by the Tuba.

Rhythmically, the two main voices tend to follow the pitch/duration equivalency also present in *Running Away from Time*, by having fifths (seven semitones) associated with seven 16th notes/semiquavers and fourths (five semitones) associated with five 16th notes/semiquavers.

These materials serve as a prelude to the pitch explorations in the second section of this movement. In it, 3EDO (the augmented chord), 4EDO (the diminished seventh chord) and 6EDO (the whole tone scale) – all Trivial tuning systems –, alongside 12, 9 and 8EDO are mixed together in rehearsal mark Q alongside 2 Equal Divisions of the Perfect Fourth of 12EDO (or 2ED5\12EDO) and 2 Equal Divisions of the Perfect Fifth of 12EDO (or 2ED7\12EDO). Two bars before rehearsal mark S, 5EDO and 7EDO rounded to 12EDO (respectively corresponding to the second mode of the pentatonic scale and the Dorian mode) are also played in the oboe and bassoon.

The rhythmical material of the second part also reflects the pitch structures, most of the time, with most tempo changes being derived by the speed of subdivisions of units of time related to prevalent intervals.

The last two rehearsal marks of this movement are just orchestrations of the ascending 2ED5\12EDO and 2ED7\12EDO scales.

V. Fullness

Fullness (a translation of the Greek word *Pleroma*) refers to the structure of 'aeons' described by the resurrected Jesus to the apostle John in the Valentinian Gnostic text *The Secret Apocryphon of John*. I find striking the resemblance between these aeons and J. R. R. Tolkien's pantheon in *The Silmarilion*. The 'Monad', the Pleroma's first and unknowable divine entity, would be equivalent to Tolkien's Eru/Ilúvatar. The remaining aeons, who are emanations of the Monad, could be associated with the Ainur gods, emanations of Eru/Ilúvatar.

This movement for brass and percussion starts by reintroducing the material from the beginning of *Apertures of the Skies*, but transposed (except in the trumpets). The following sections explore (in different transpositions) an approximation of 5EDO. 5EDO is an 'Equal Pentatonic' tuning system. This means that its fifth is so much wider than the 3/2 ratio and the fifths of Superpythagorean tunings to the point where its major seconds are large enough to make its minor seconds shrink into becoming unisons (and therefore, not having a recognizably diatonic scale, but instead an equally distanced pentatonic scale). In practice, 5EDO is rounded to 24EDO (making the fourth and the fifth ironically the size of the 12EDO ones). Some Just Intonation chords (including approximations of the harmonic series) are also featured in the homophonic passages of this movement.

The tubular bells serve as timbral ornamentation, and its pitches do not follow any particular system.

Interlude III

This interlude, after reiterating material from *Interlude I*, mixes ascending prime numbered EDOs (5, 7, 11, 13, 17, 19 and 23), rounded to 24EDO, in the cor anglais and clarinet parts, on top of a percussion part which mostly features rounded polyrhythms based on some of these prime numbers. These prime numbered EDOs are interwoven with some Trivial EDOs in the Piccolo, Bassoon and string parts (2, 3 and 4 and 6EDO). All transpositions are also derived by intervals found in 3 and 4EDO (major and minor thirds).

Lullaby

Lullaby (which could also be a love song), could both symbolise the dream-like nature of the Garden of Eden, as well as the innocent love between Adam and Eve (and perhaps less innocently between Adam and Lilith). This dream-like nature of Eden is also explored in David Rosenberg's *The Lost Book of Paradise*, a reconstruction of a fictional book expanding on the Garden of Eden story, imagined to have been written centuries before J. I always seem to return to the Garden of Eden story (as well as to lullabies).

This non-numbered movement, being a development of the materials from Interlude I (but also found in Interludes II and III), is the only overtly tonal movement in this piece (in E major). The

clarinet part, despite being a quarter tone away from the rest of the ensemble, is playing the 19EDO Lydian mode's fourth and seventh degrees in E when rounded to 24EDO (B quarter flat and E quarter flat) and the rounding into 24EDO of the same degrees of the same scale in 17EDO in the same transpositions (A quarter sharp and D quarter sharp). Symbolically, the clarinet is representing how diatonicism is a phenomenon which can be 'sized and re-sized'.

VI. The Fall

The Fall can both be linked to the expulsion of Adam and Eve from Eden, as well as to the 'Fall of Sophia', one of the aeons from *The Secret Apocryphon of John*, who created the Demiurge, who in turn created the corrupted material world.

The last numbered movement of this piece consists of essentially three musical sections that have been split and interwoven between themselves. The first section starts from where *Running Away from Time* ended, exploring a 2nd violin solo (later picked up by the cello in rehearsal mark E) and slow harmonies derived from 9 and 8EDO (dividing the major third in three parts and the minor third in two). The music then quickly moves away from these materials in rehearsal mark A, while still maintaining the musical character introduced by them. The fast section in rehearsal mark B freezes two of the harmonies from the previous section and plays then at a fast pace. The third section serves as what could be a coda (with some materials vaguely resembling *Apertures of the Skies*), but ends up not being one, because of its splitting and interweaving with the other sections.

Coda

The coda of *Convergence* reintroduces materials from *Seeking Time*. It gradually focuses more on cycles of perfect fifths (the overarching musical idea of this piece) first by mixing them with cycles of fourths and minor thirds, then by equally dividing the fifth in two in the cello. Finally, it culminates in a wind and brass parallel choral harmonically and melodically mostly based on fifths (or their inversion, fourths).

Microtonality per Instrument

The Piccolo, Oboe (and Cor Anglais), Bassoon, Tuba and Percussion do not have any microtones.

The Clarinet in Bb is retuned a quarter tone lower and does not include any alternative fingerings (its transposing part is written as a major second + a quarter tone transposing instrument).

The Flute and Bass Trombone only have a few quarter tones.

The Horn and Trombone feature both quarter tones and Just Intonation intervals.

Both Trumpets feature some quarter tones and eighth tones, and Just Intonation intervals.

The strings have, in general, quarter tones, major thirds split in three parts, and some Just Intonation intervals.

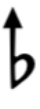
Accidentals

This piece employs traditional looking semitone and quarter tone accidentals. For eighth tones, arrowed accidentals are used.

All Just Intonation is notated either with semitone or quarter tone accidentals, and written boxed text notes are always included, offering more information on how to intonate those intervals.

The pitches derived by dividing the major third in three equal parts (making the 9EDO scale) are notated with quarter tone accidentals for convenience (alongside boxed text notes identifying this alternative division of the major third).

The following is a list of all accidentals that appear in this piece, presented from left to right in ascending order in terms of pitch modification:

Semitones											
Quarter tones												
Eighth tones												

Dashed Ties

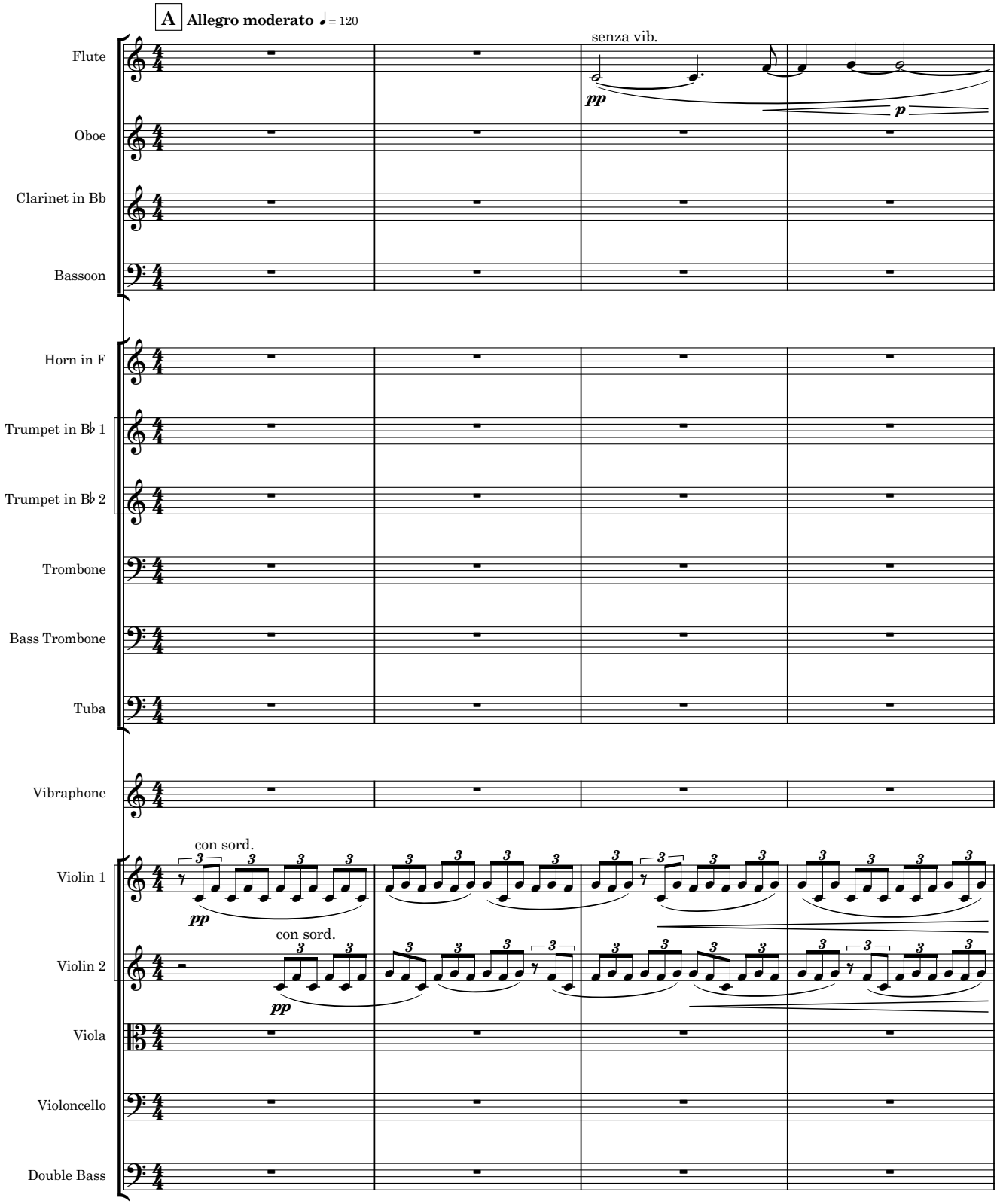
In the string instruments, particularly long notes are written with dashed ties. This means that the performer is free to change bowings discretely, giving the impression that such notes are being held throughout the entirety of their written duration.

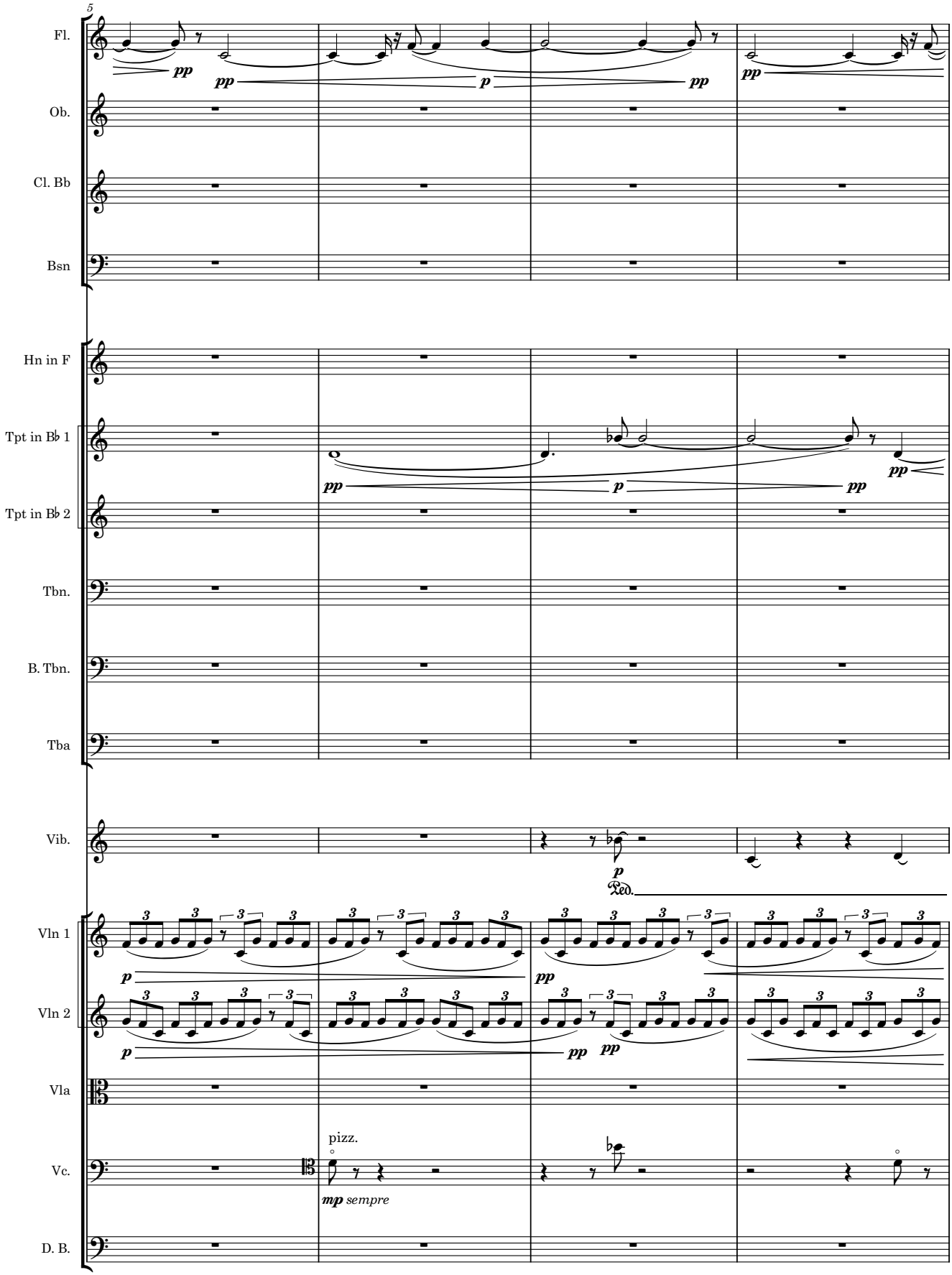
Convergence

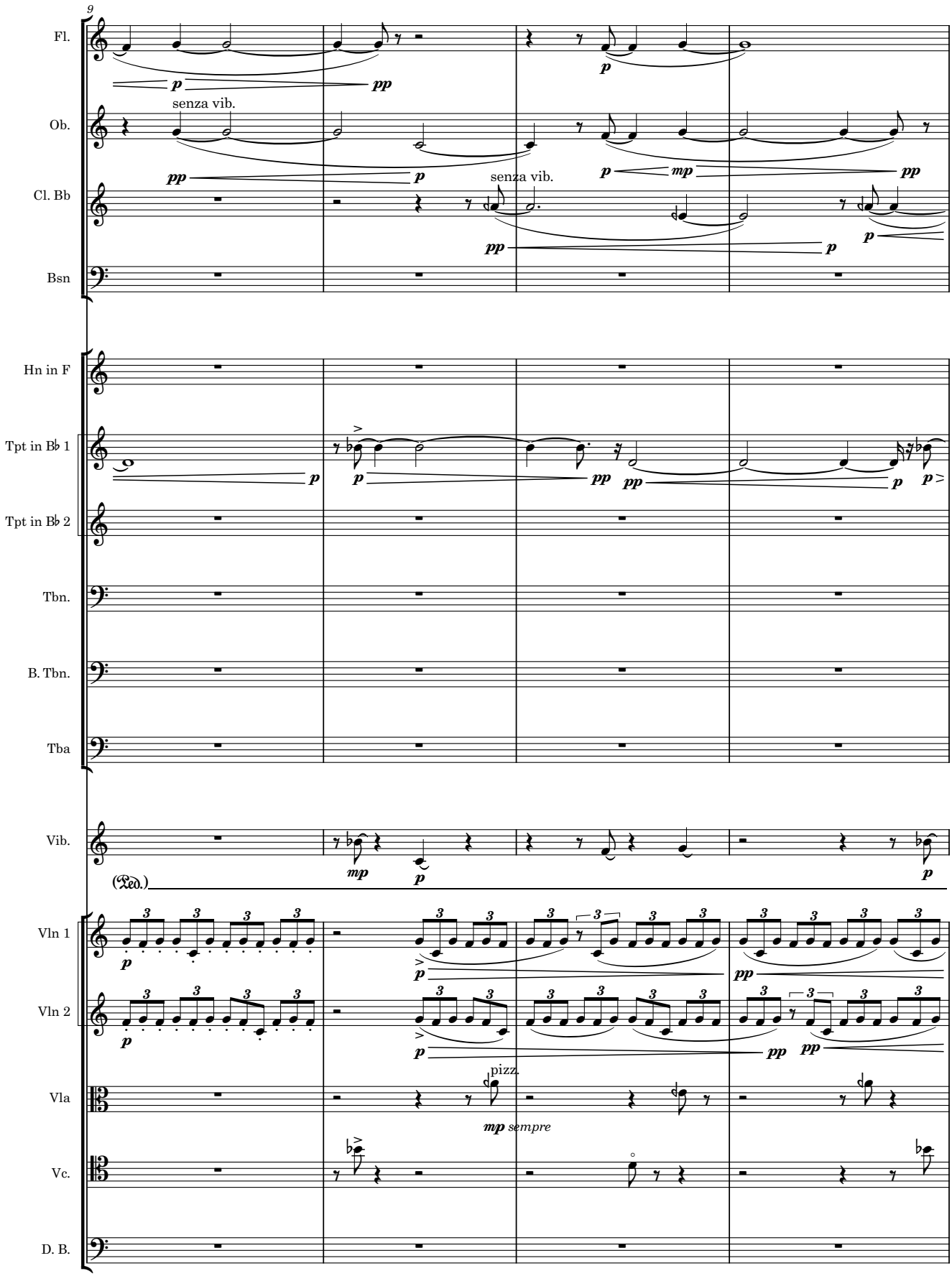
Score in C

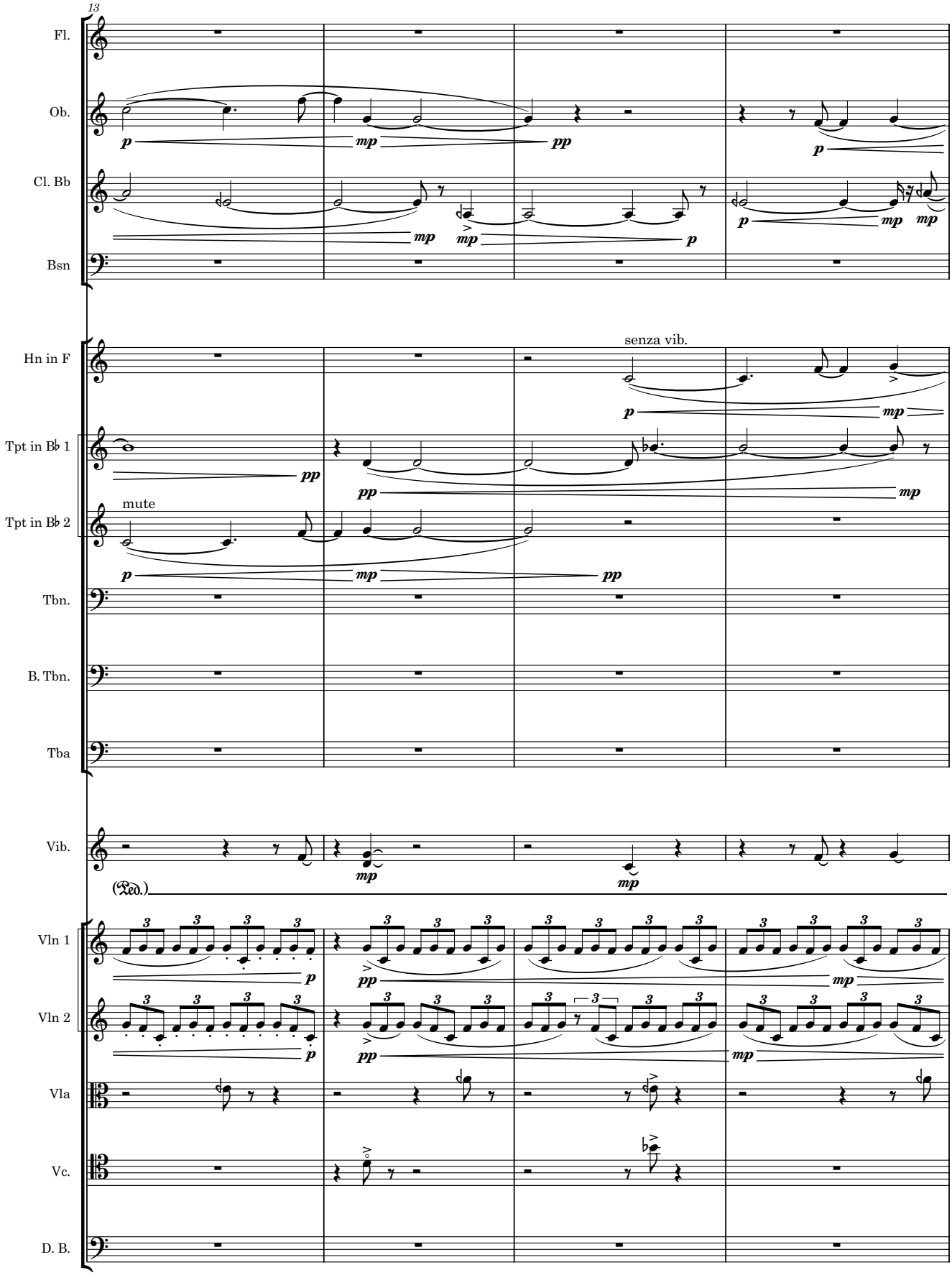
Pedro Laranjeira Finisterra

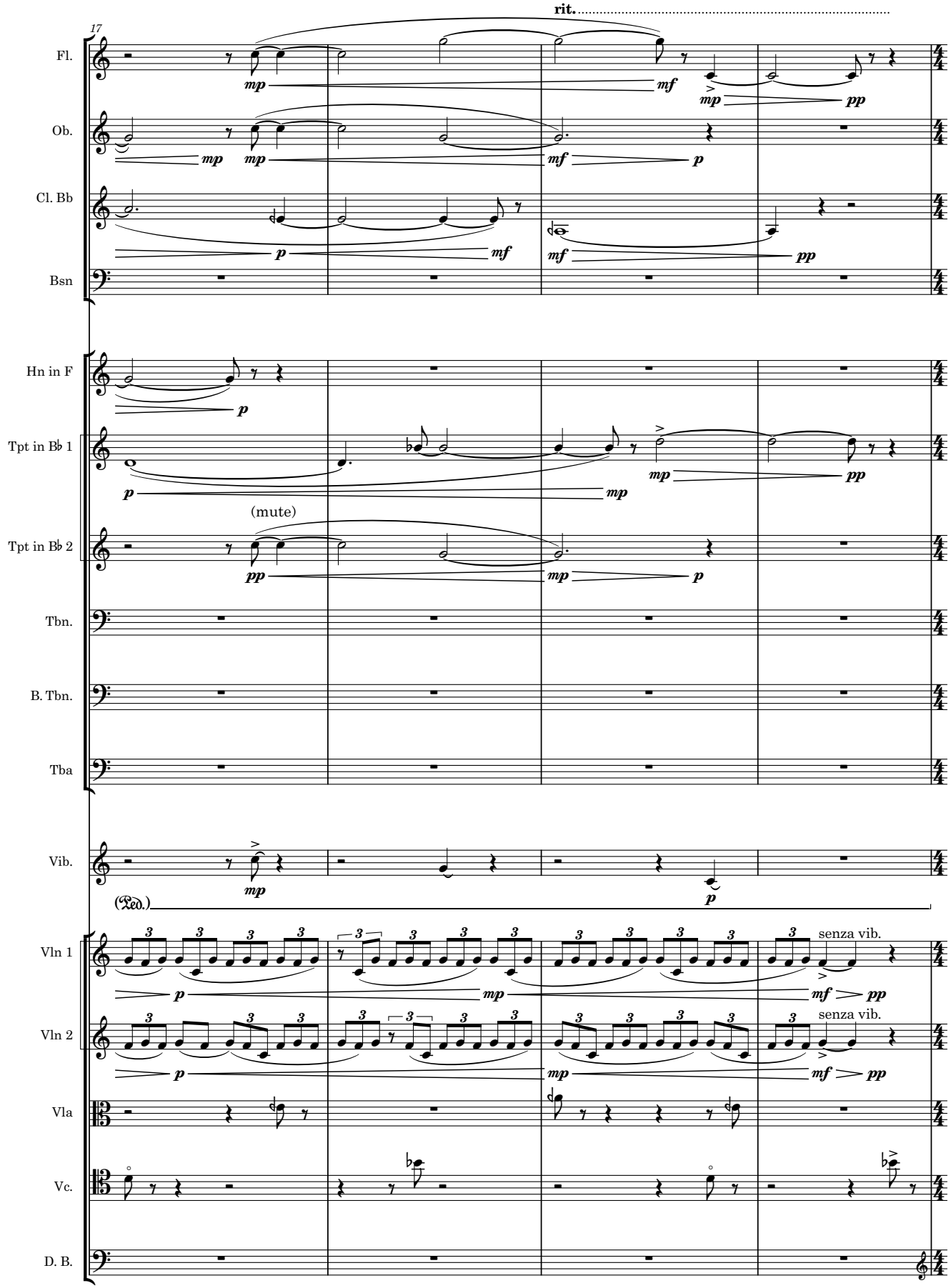
I. In the Day...

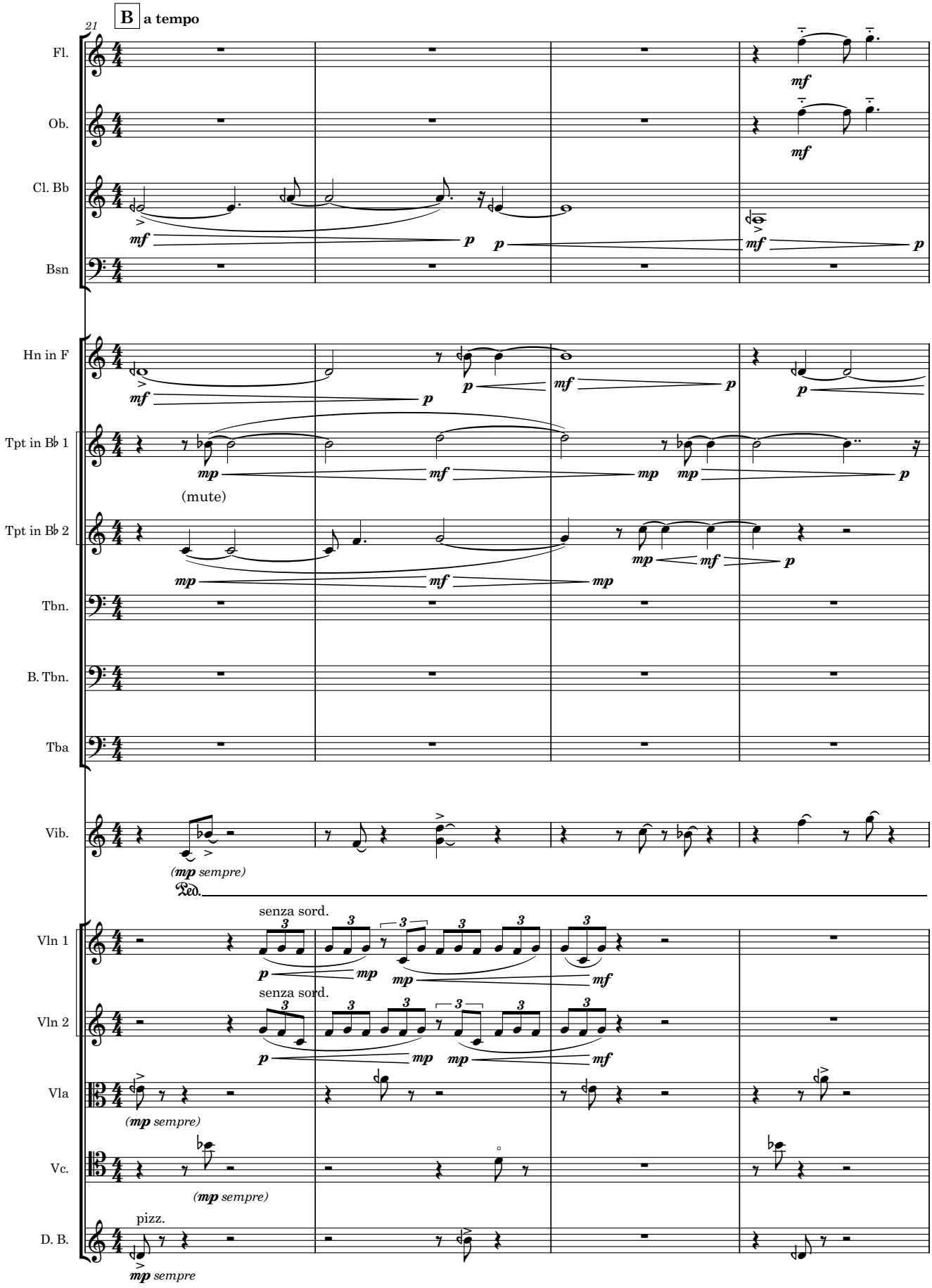


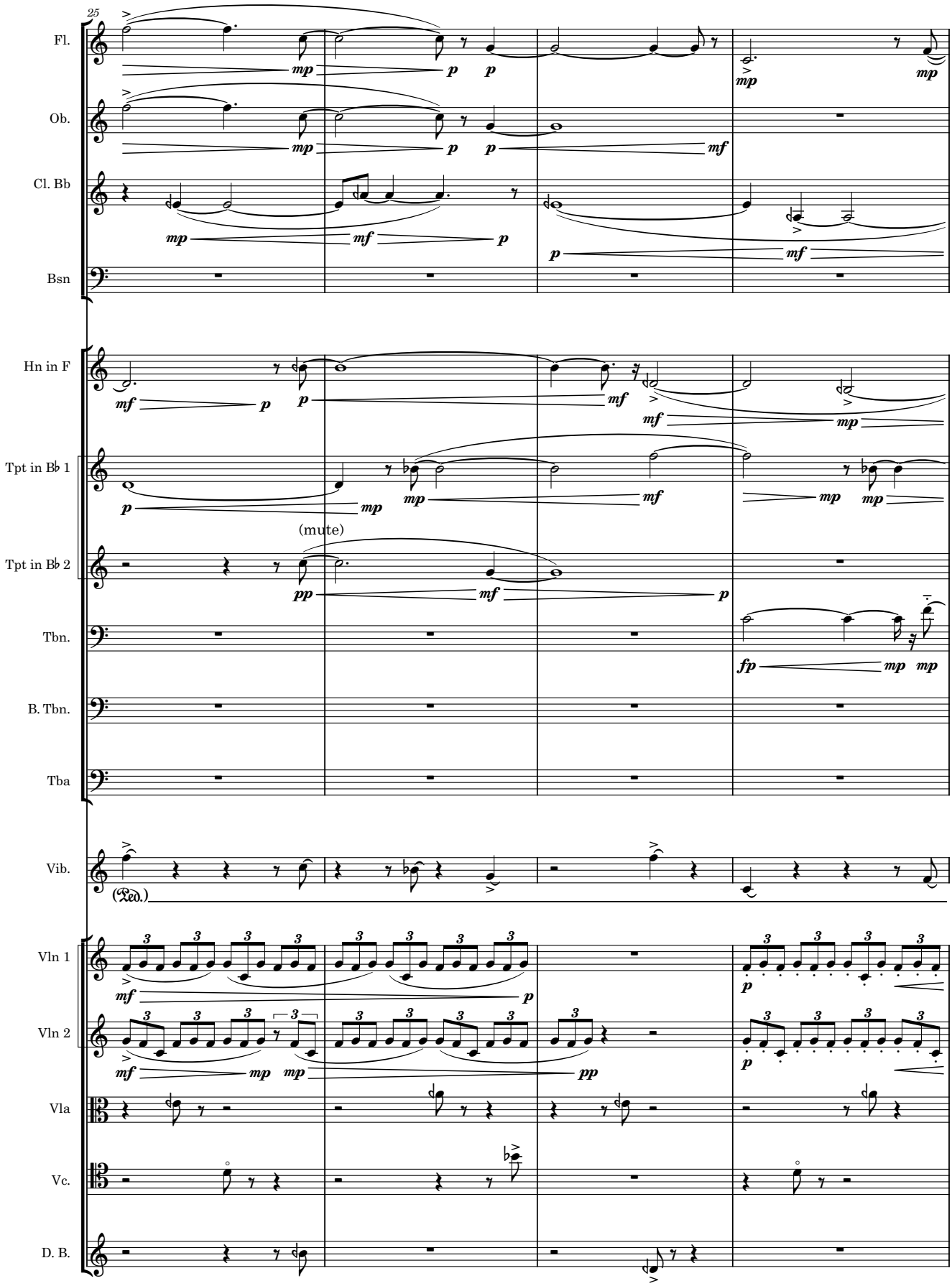

5
Fl.
Ob.
Cl. Bb
Bsn
Hn in F
Tpt in B♭ 1
Tpt in B♭ 2
Tbn.
B. Tbn.
Tba
Vib.
Ped.
Vln 1
Vln 2
Vla
Vc.
D. B.
pizz.
mp sempre

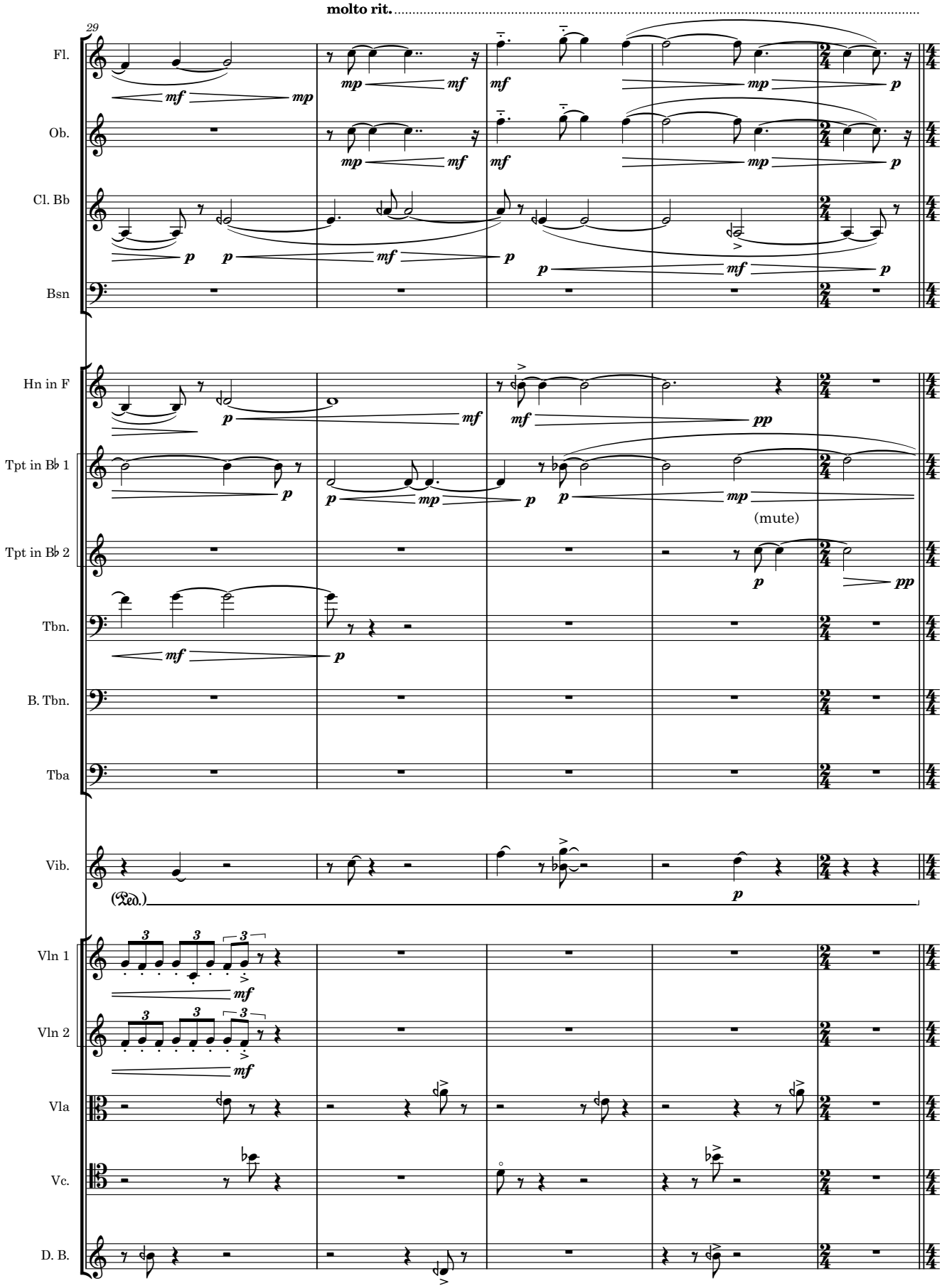

9
Fl.
Ob.
Cl. Bb
Bsn
Hn in F
Tpt in B♭ 1
Tpt in B♭ 2
Tbn.
B. Tbn.
Tba
Vib.
Vln 1
Vln 2
Vla
Vc.
D. B.
senza vib.
senza vib.
pizz.
mp sempre

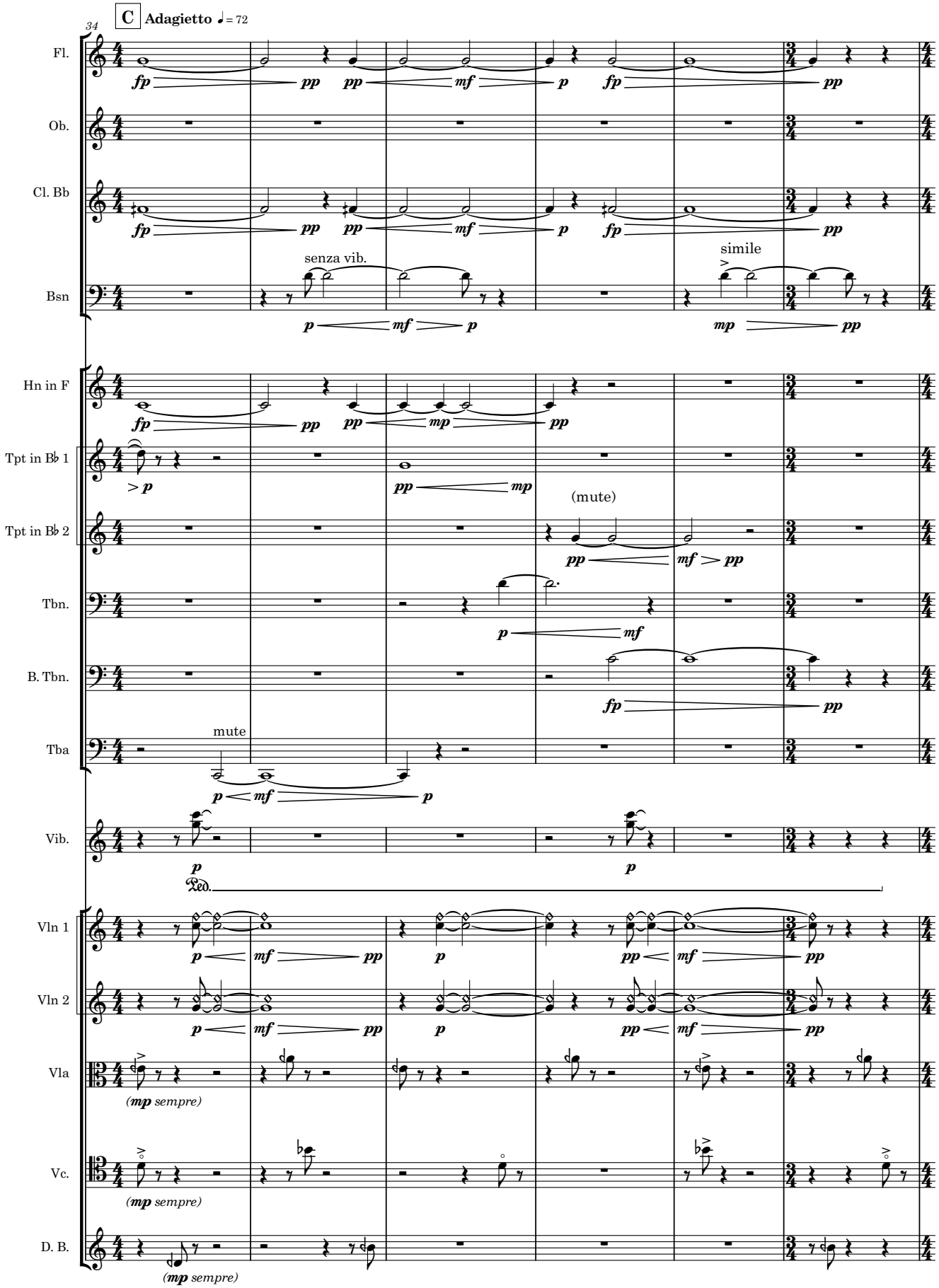

13
Fl.
Ob.
Cl. Bb
Bsn
Hn in F
Tpt in B♭ 1
Tpt in B♭ 2
Tbn.
B. Tbn.
Tba
Vib.
Vln 1
Vln 2
Vla
Vc.
D. B.
senza vib.
mute
(Ped.)

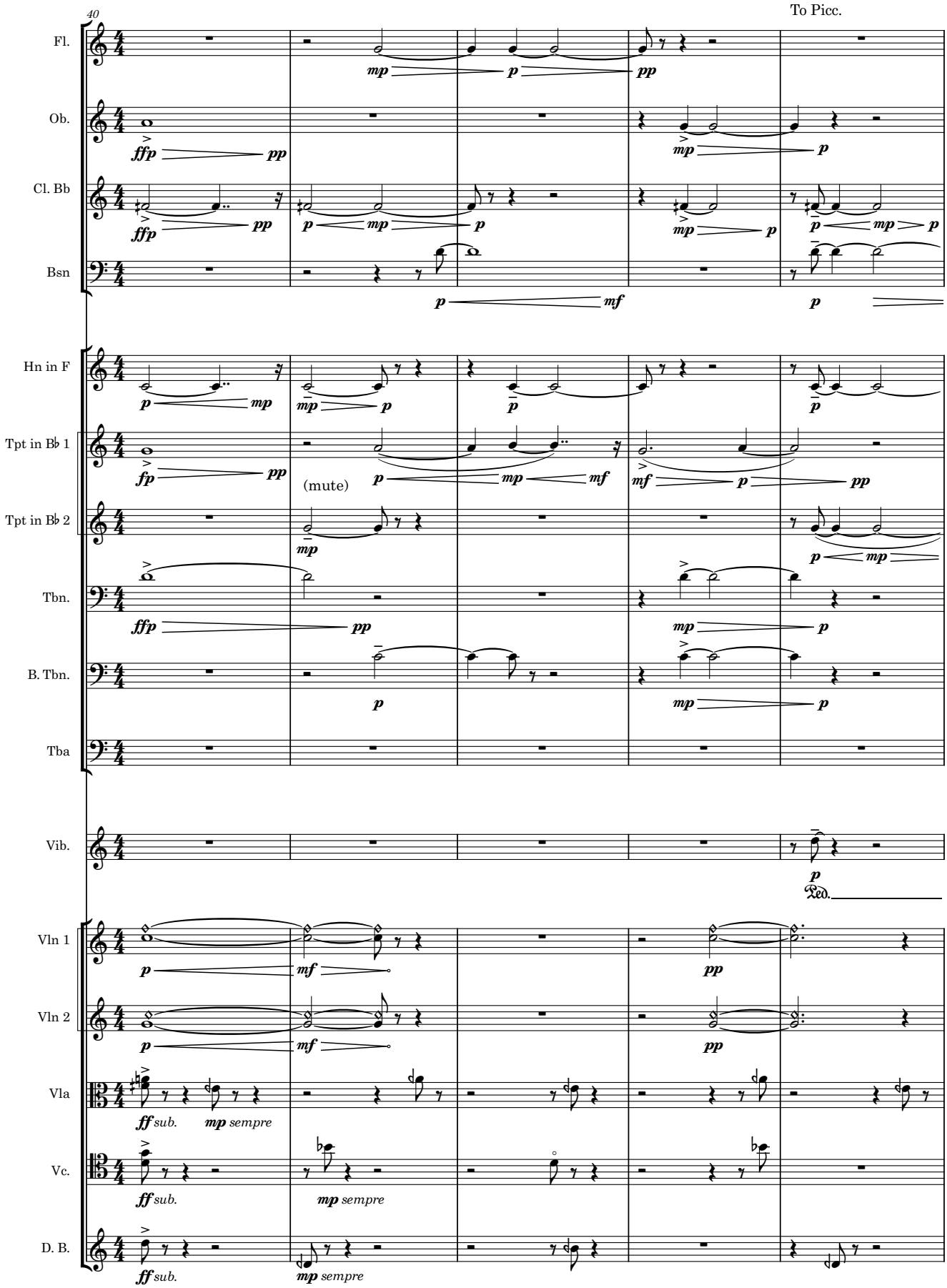

17
rit.
Fl.
Ob.
Cl. Bb
Bsn
Hn in F
Tpt in B♭ 1
(mute)
Tpt in B♭ 2
Tbn.
B. Tbn.
Tba
Vib.
(Ped.)
Vln 1
senza vib.
Vln 2
senza vib.
Vla
Vc.
D. B.

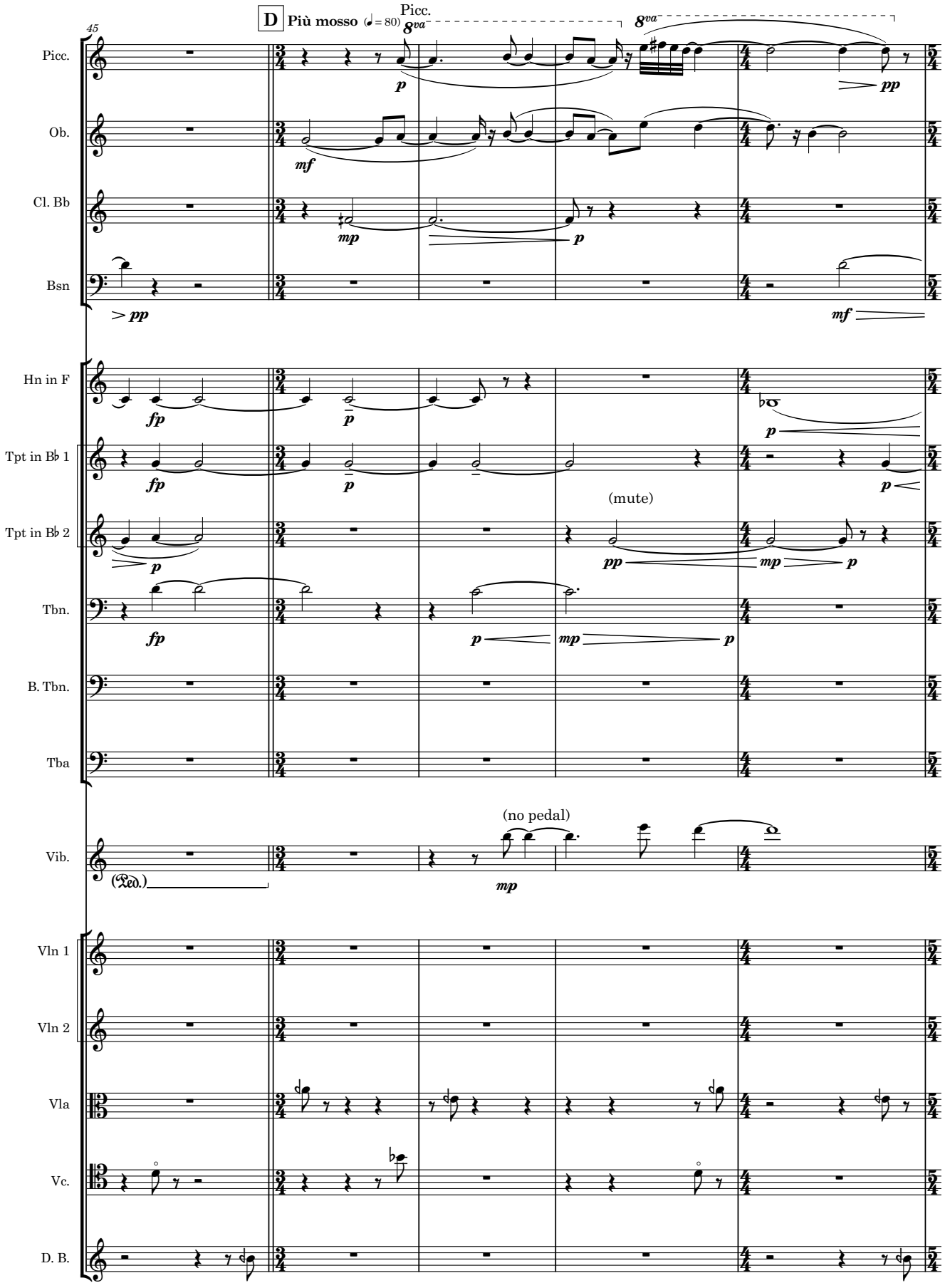

B a tempo
21
Fl.
Ob.
Cl. Bb
Bsn
Hn in F
Tpt in B♭ 1
(mute)
Tpt in B♭ 2
Tbn.
B. Tbn.
Tba
Vib.
(mp sempre)
senza sord.
Vln 1
senza sord.
Vln 2
Vla
(mp sempre)
Vc.
(mp sempre)
pizz.
D. B.
mp sempre

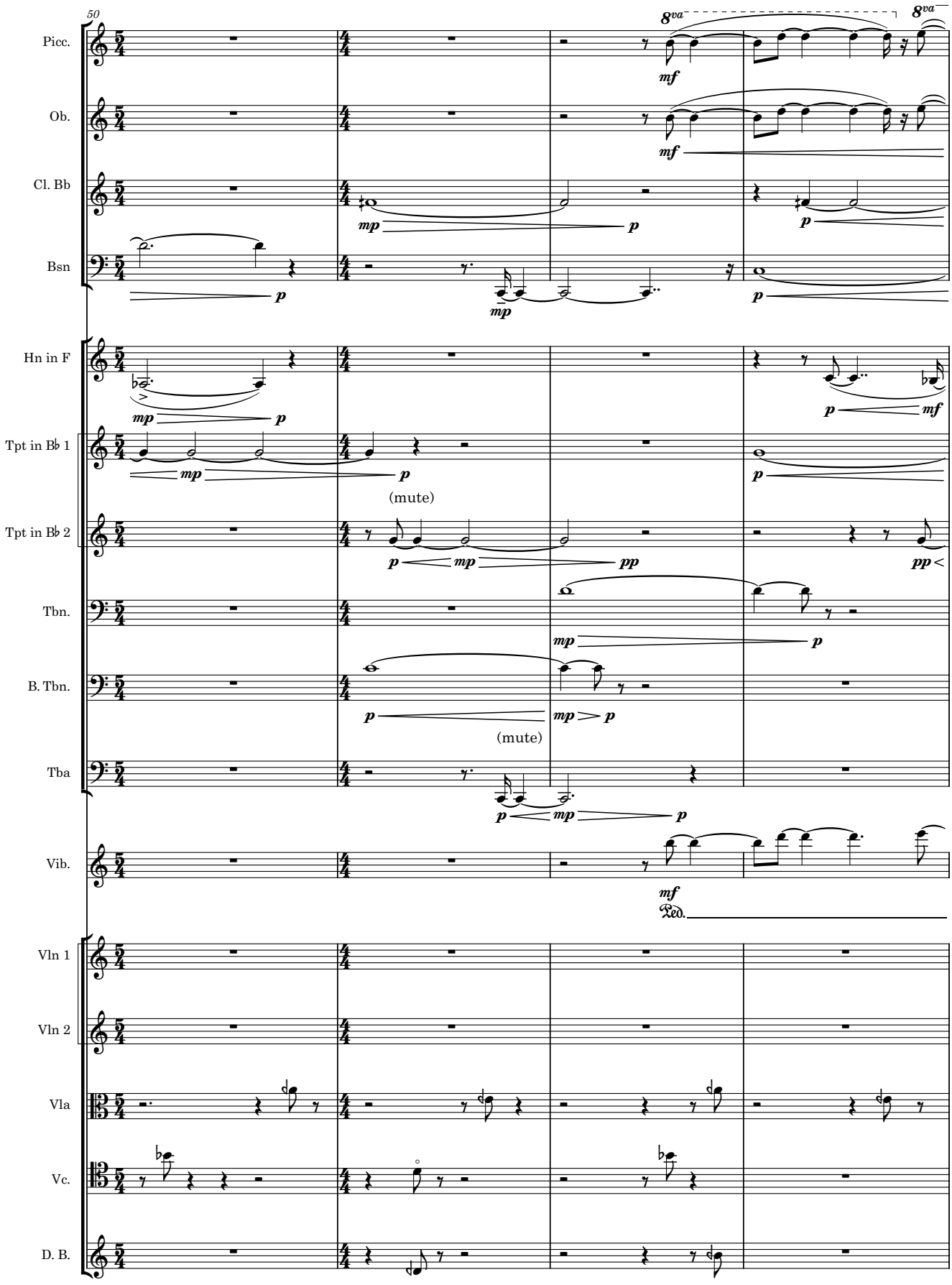

25
Fl.
Ob.
Cl. Bb
Bsn
Hn in F
Tpt in B♭ 1
Tpt in B♭ 2
(mute)
Tbn.
B. Tbn.
Tba
Vib.
(Ped.)
Vln 1
Vln 2
Vla
Vc.
D. B.

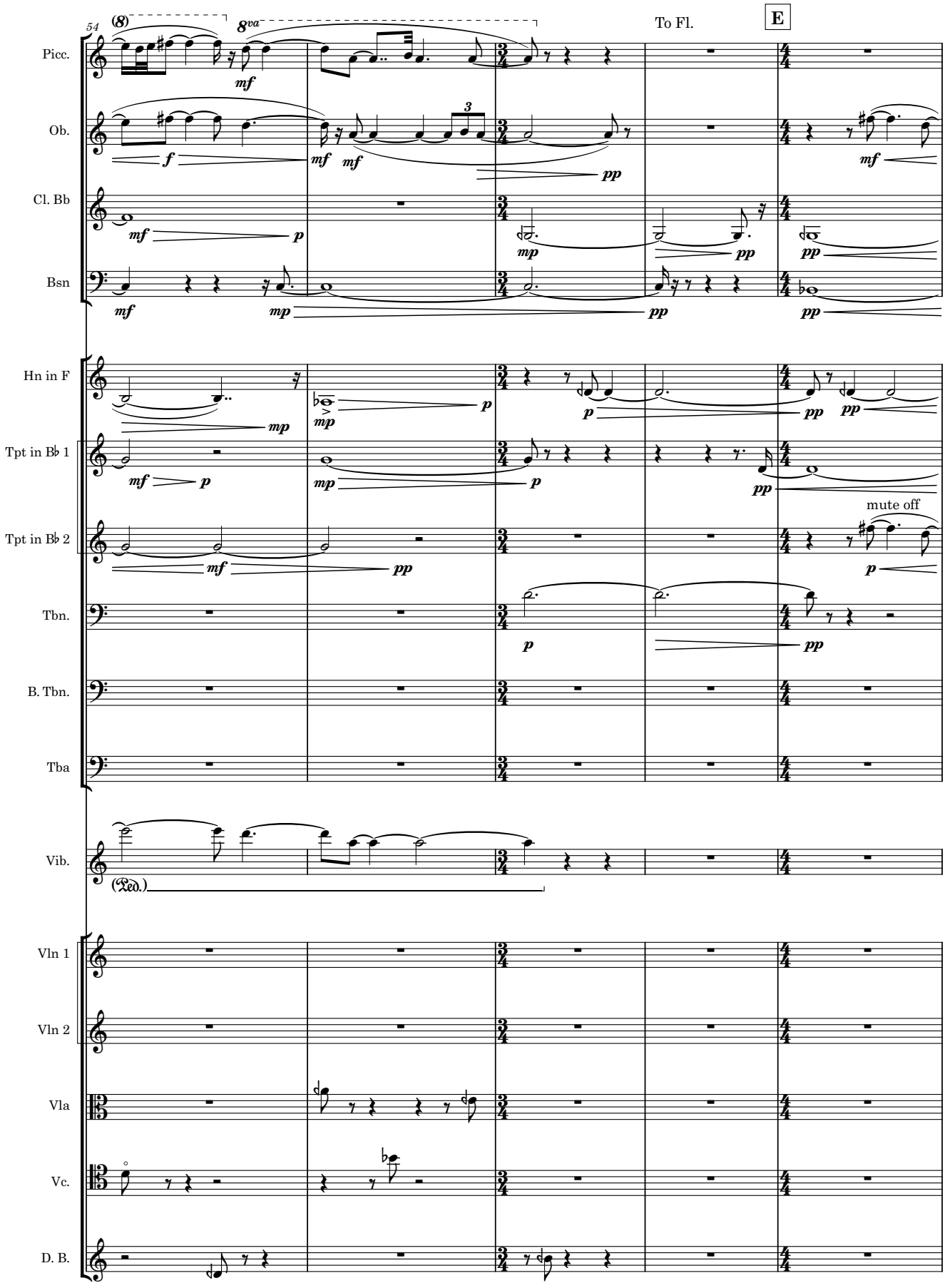

molto rit.
29
Fl.
Ob.
Cl. Bb
Bsn
Hn in F
Tpt in B♭ 1
Tpt in B♭ 2
Tbn.
B. Tbn.
Tba
Vib.
(Ped.)
Vln 1
Vln 2
Vla
Vc.
D. B.
(mute)

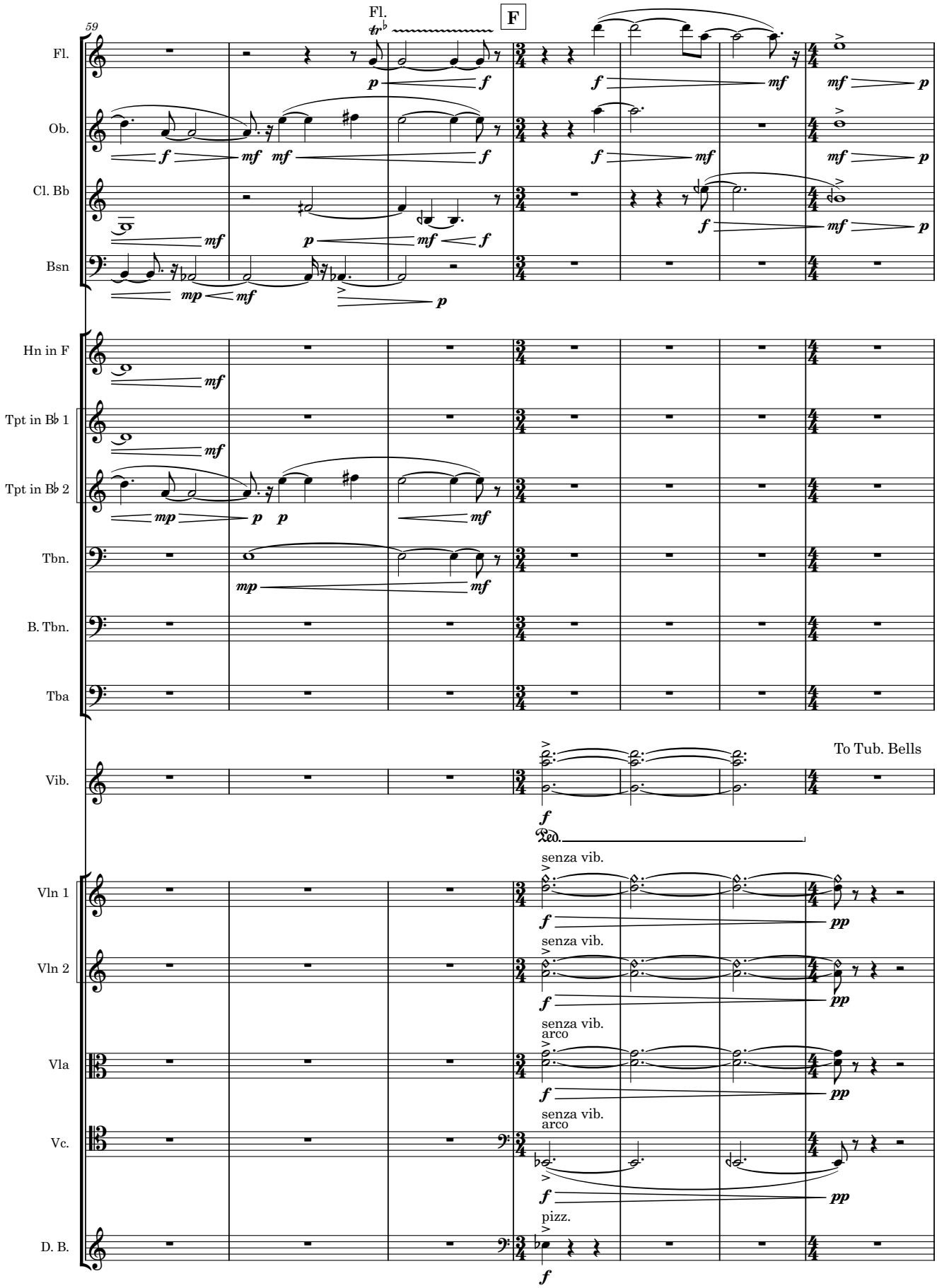

34
C
Adagietto ♩= 72
Fl.
Ob.
Cl. Bb
Bsn
senza vib.
simile
Hn in F
Tpt in B♭ 1
Tpt in B♭ 2
(mute)
Tbn.
B. Tbn.
Tba
mute
Vib.
Vln 1
Vln 2
Vla
(mp sempre)
Vc.
(mp sempre)
D. B.
(mp sempre)

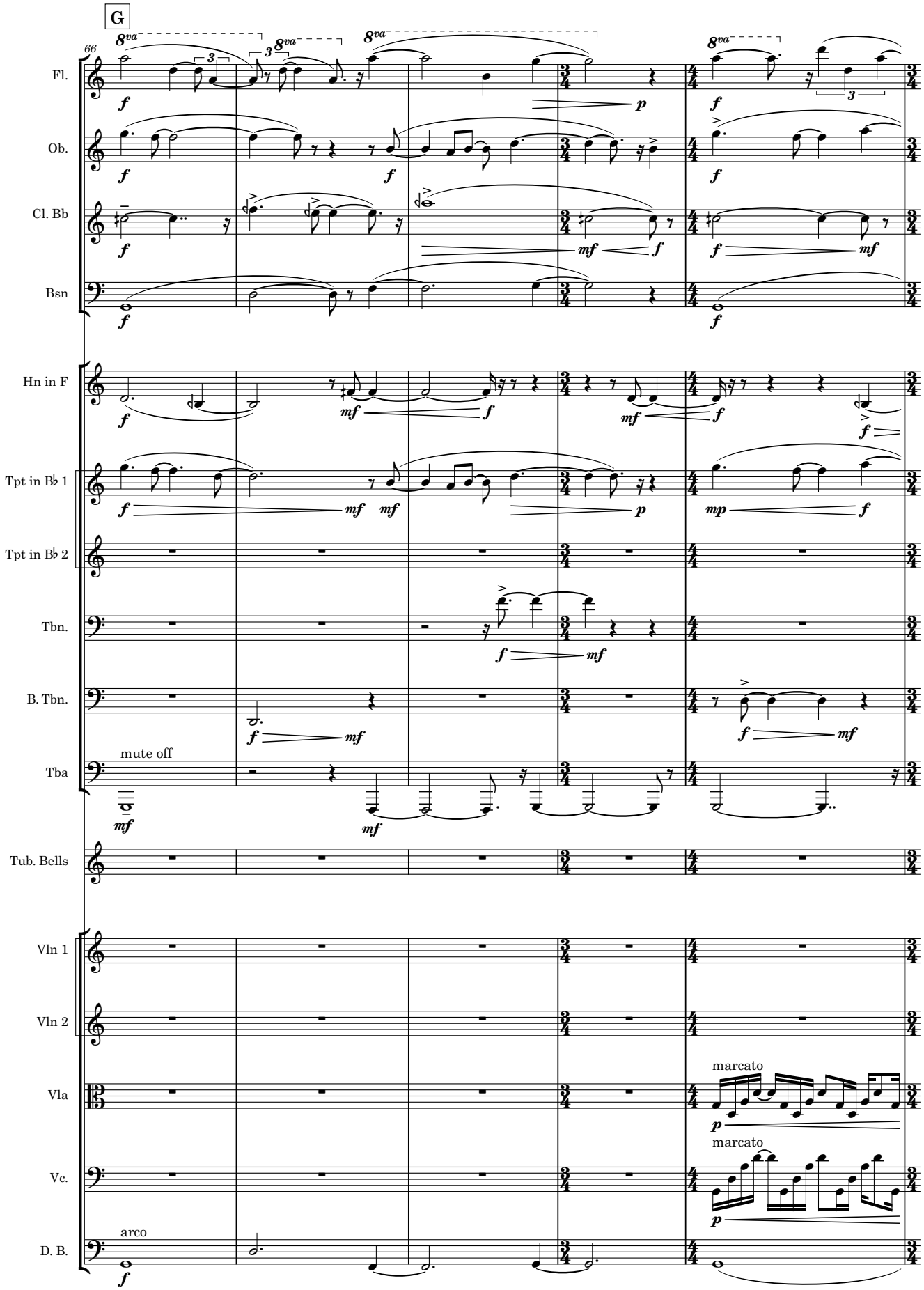

40
To Picc.
Fl.
Ob.
Cl. Bb
Bsn
Hn in F
Tpt in B♭ 1
Tpt in B♭ 2
Tbn.
B. Tbn.
Tba
Vib.
Vln 1
Vln 2
Vla
Vc.
D. B.
(mute)
ffp
pp
mp
p
mf
fp
ff sub.
mp sempre
Ped.

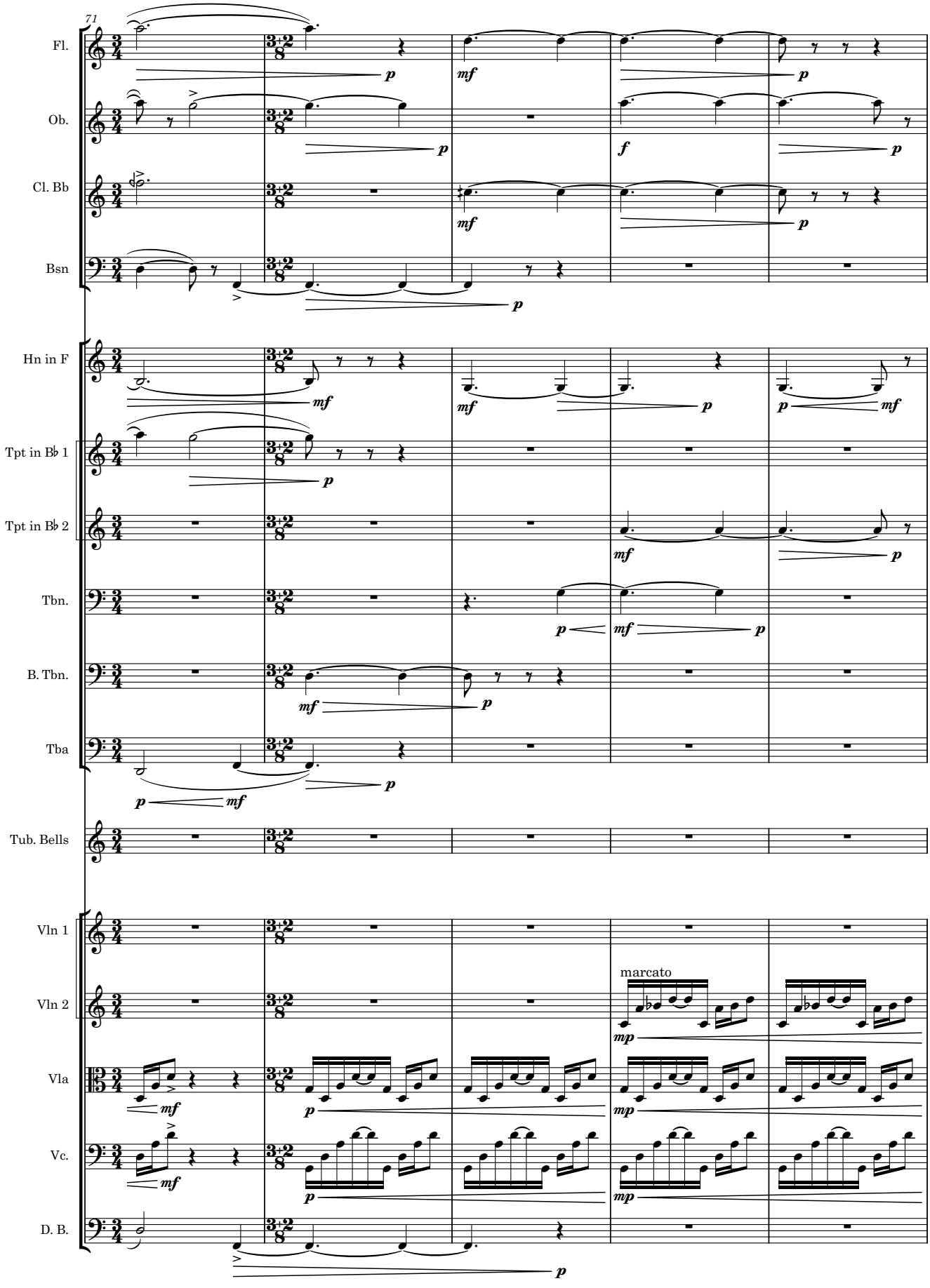

45
D Più mosso (♩ = 80)
Picc.
8va
Picc.
Ob.
Cl. Bb
Bsn
Hn in F
Tpt in B♭ 1
Tpt in B♭ 2
(mute)
Tbn.
B. Tbn.
Tba
(no pedal)
Vib.
(Ped.)
Vln 1
Vln 2
Vla
Vc.
D. B.

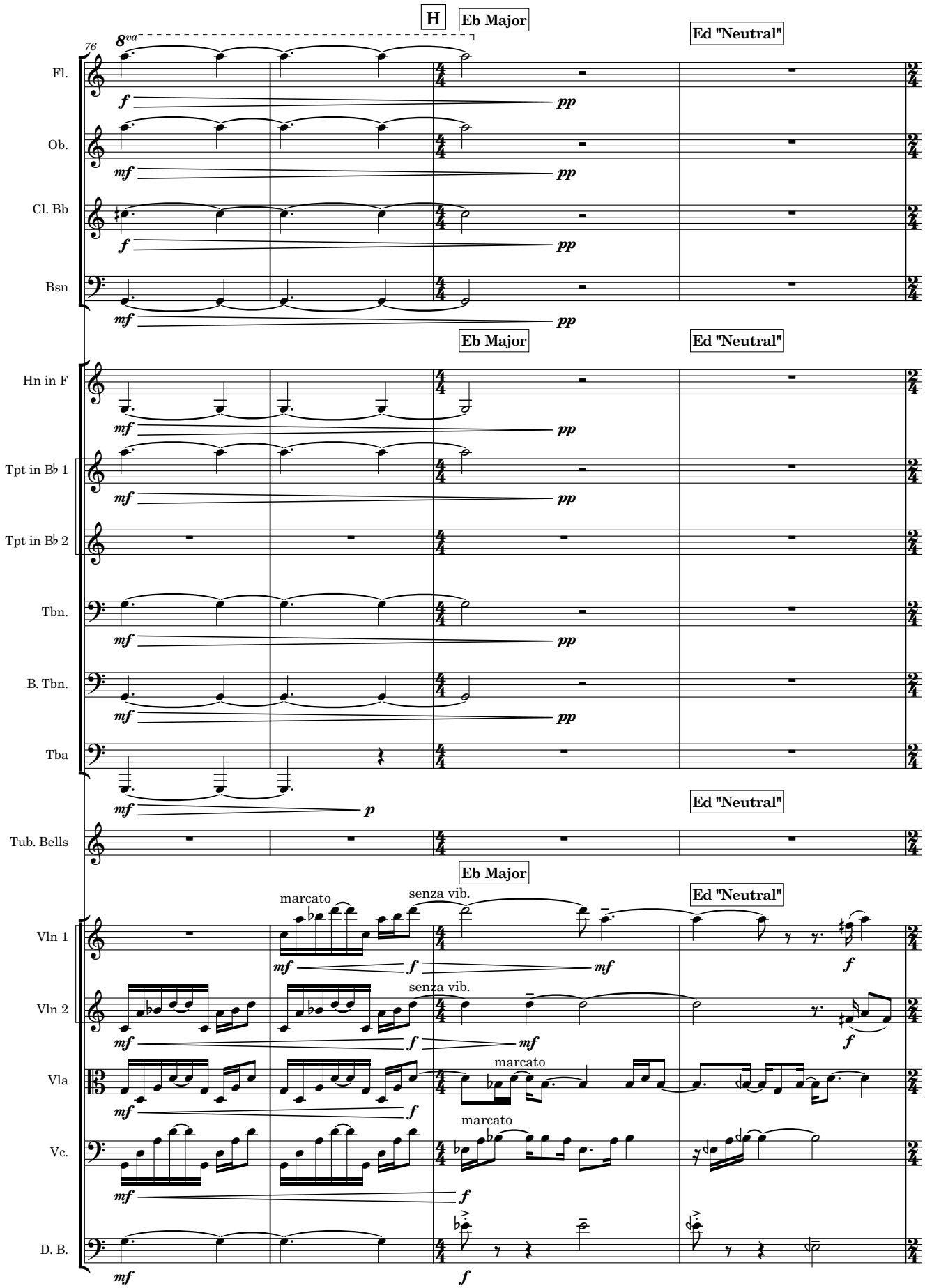

50
Picc.
Ob.
Cl. Bb
Bsn
Hn in F
Tpt in B♭ 1
Tpt in B♭ 2
Tbn.
B. Tbn.
Tba
Vib.
Vln 1
Vln 2
Vla
Vc.
D. B.
8va
8va
mf
mp
p
pp
(mute)
Ped.

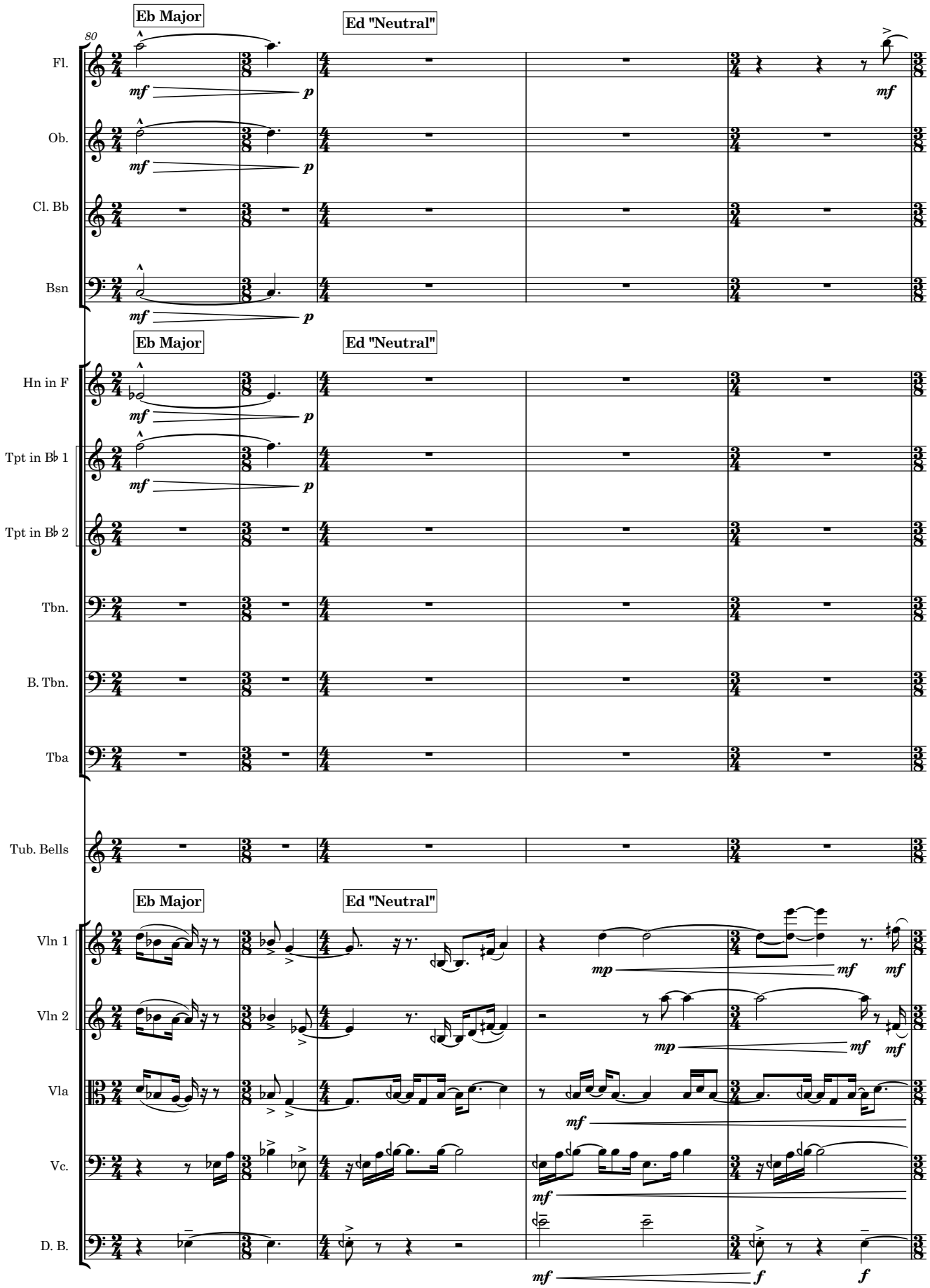

54
Picc.
Ob.
Cl. Bb
Bsn
Hn in F
Tpt in B♭ 1
Tpt in B♭ 2
Tbn.
B. Tbn.
Tba
Vib.
Vln 1
Vln 2
Vla
Vc.
D. B.
To Fl.
E
mute off

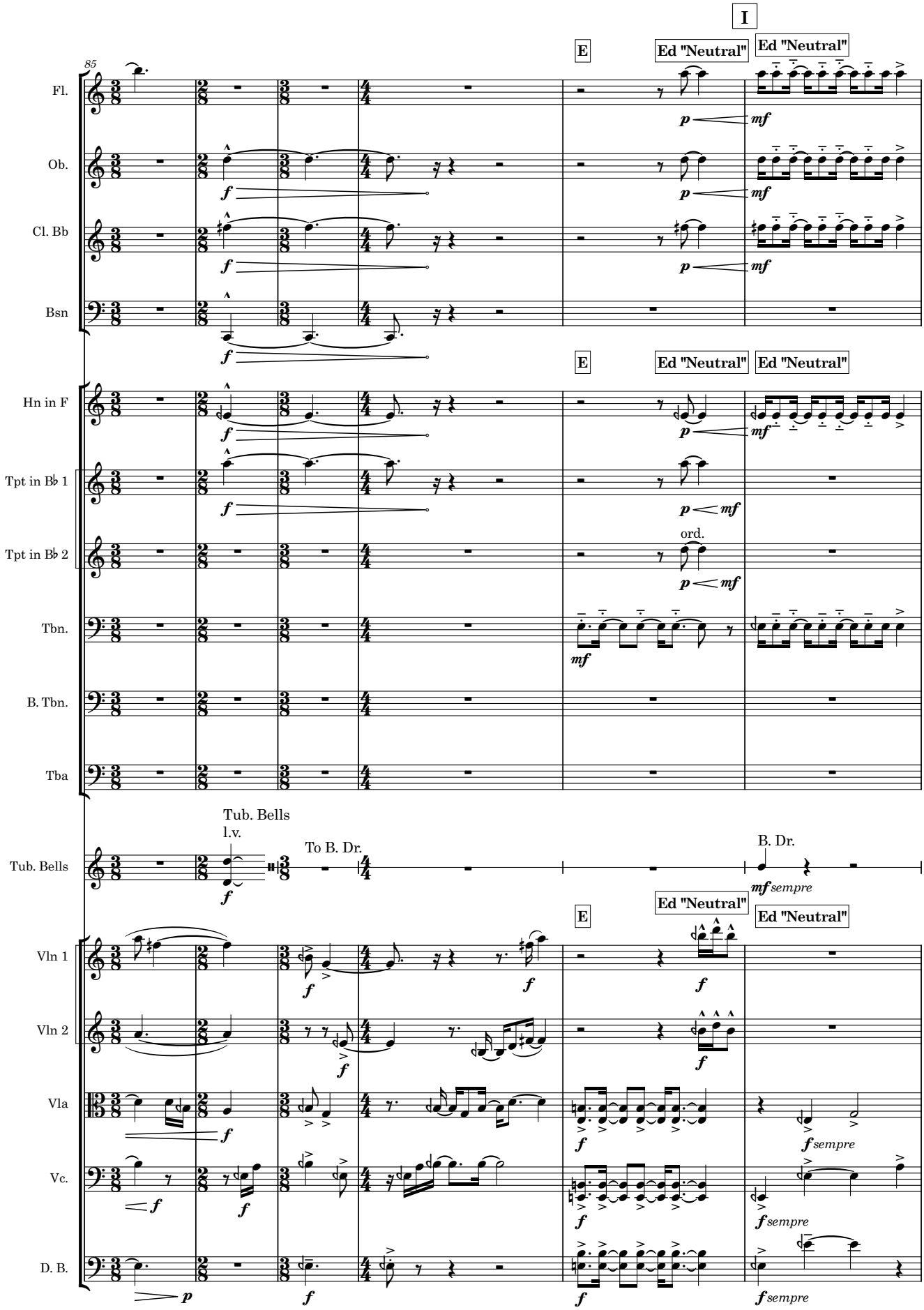

59
Fl.
F
Fl.
Ob.
Cl. Bb
Bsn
Hn in F
Tpt in B♭ 1
Tpt in B♭ 2
Tbn.
B. Tbn.
Tba
Vib.
To Tub. Bells
Ped.
Vln 1
Vln 2
Vla
Vc.
D. B.
senza vib.
arco
pizz.

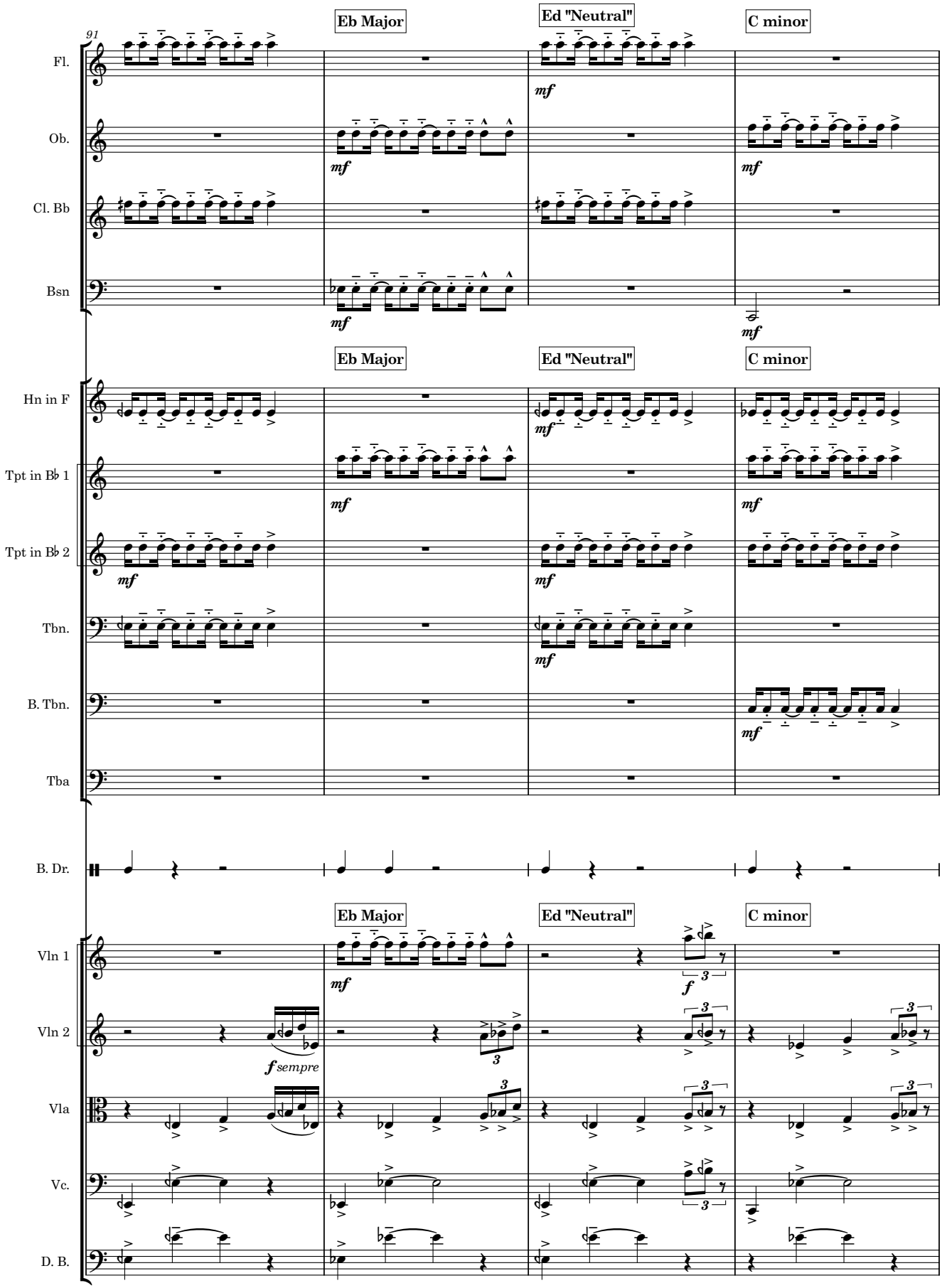

G
66
Fl.
Ob.
Cl. Bb
Bsn
Hn in F
Tpt in B♭ 1
Tpt in B♭ 2
Tbn.
B. Tbn.
Tba
mute off
Tub. Bells
Vln 1
Vln 2
Vla
Vc.
D. B.
arco
marcato
marcato

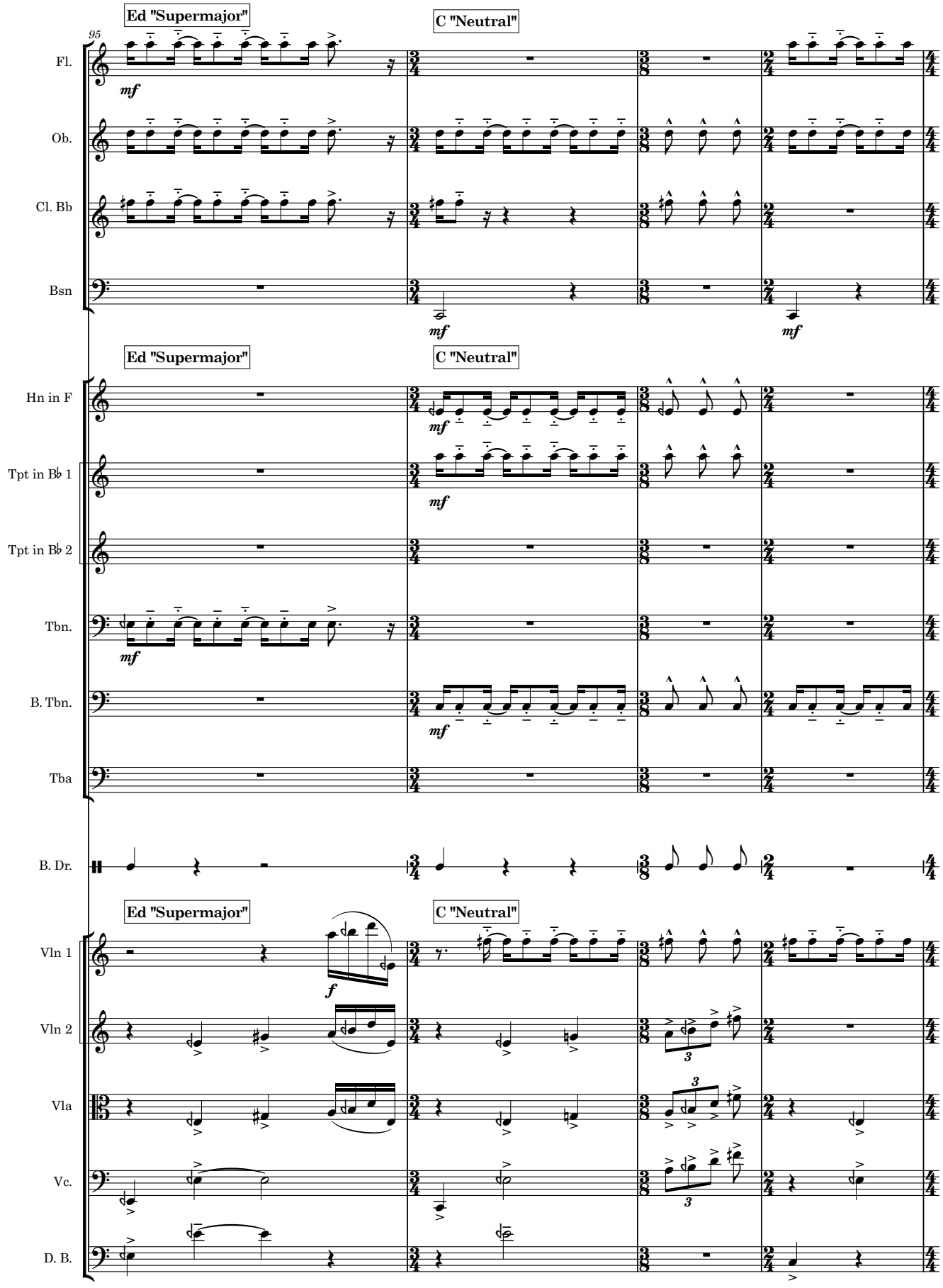

71
Fl.
Ob.
Cl. Bb
Bsn
Hn in F
Tpt in B♭ 1
Tpt in B♭ 2
Tbn.
B. Tbn.
Tba
Tub. Bells
Vln 1
Vln 2
Vla
Vc.
D. B.
marcato

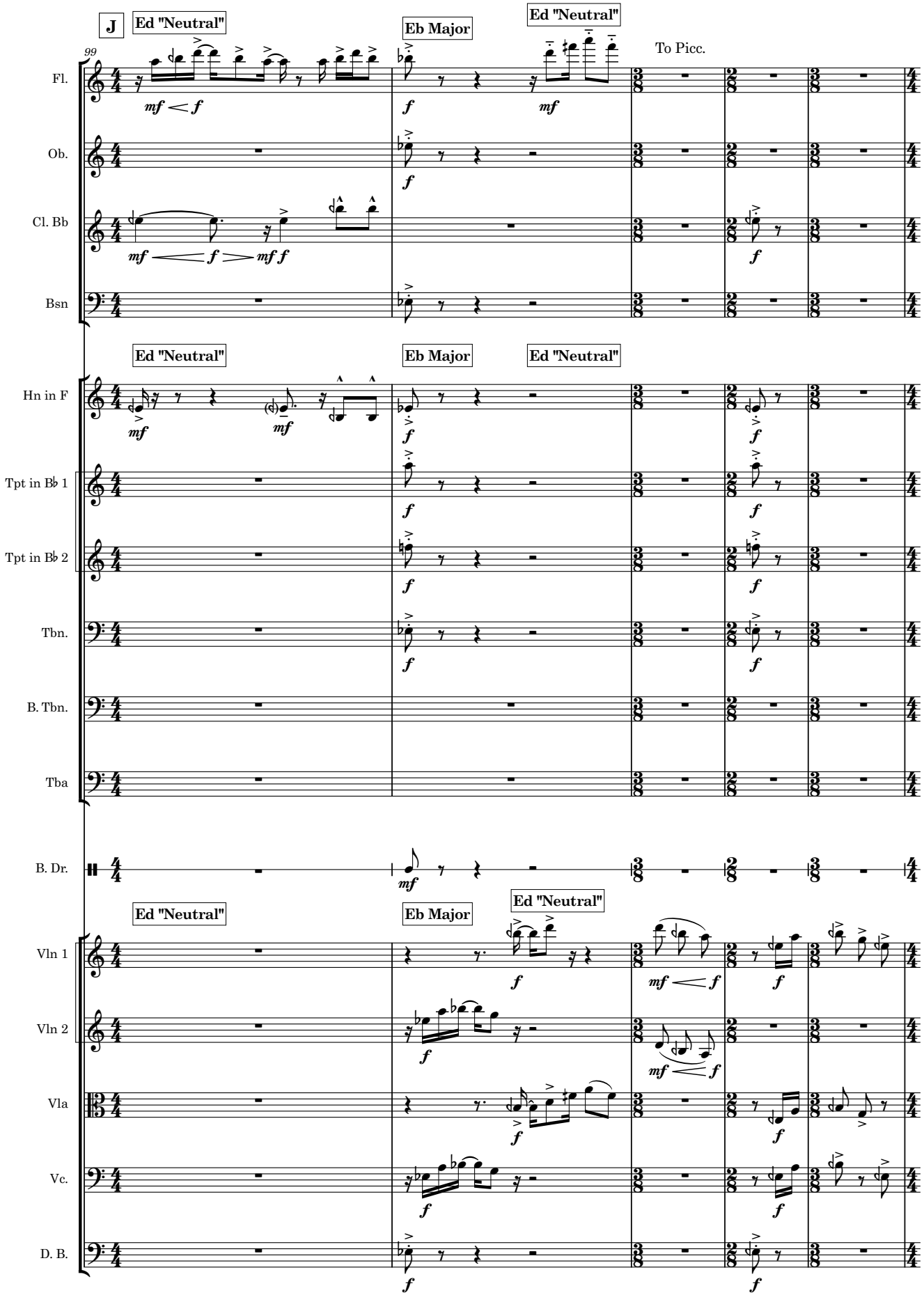

H
Eb Major
Ed "Neutral"
76
8va
Fl.
Ob.
Cl. Bb
Bsn
Hn in F
Tpt in B♭ 1
Tpt in B♭ 2
Tbn.
B. Tbn.
Tba
Tub. Bells
Vln 1
Vln 2
Vla
Vc.
D. B.
marcato
senza vib.

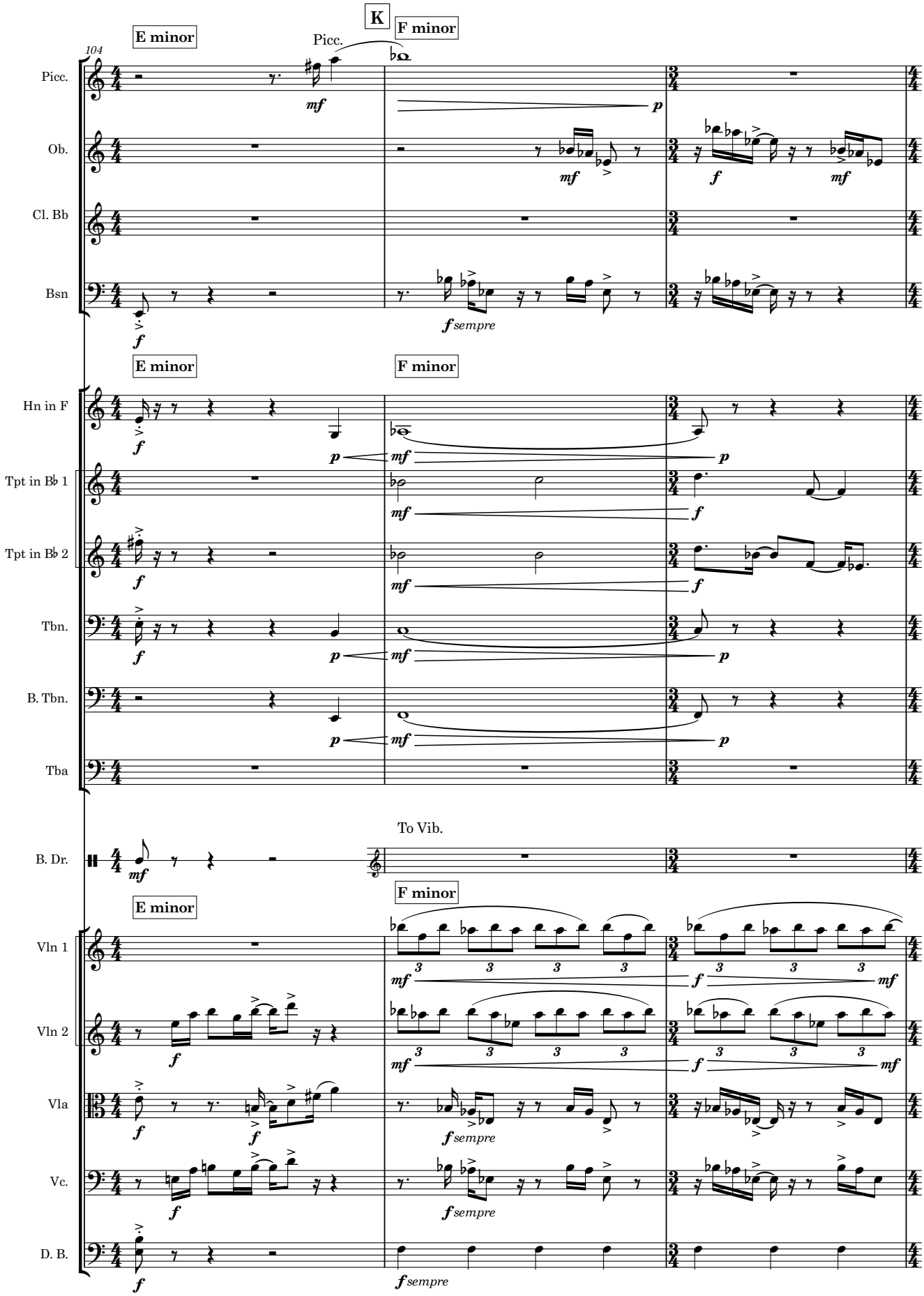

80
Eb Major
Ed "Neutral"
Fl.
Ob.
Cl. Bb
Bsn
Hn in F
Tpt in B♭ 1
Tpt in B♭ 2
Tbn.
B. Tbn.
Tba
Tub. Bells
Vln 1
Vln 2
Vla
Vc.
D. B.
mf
p
mp
f

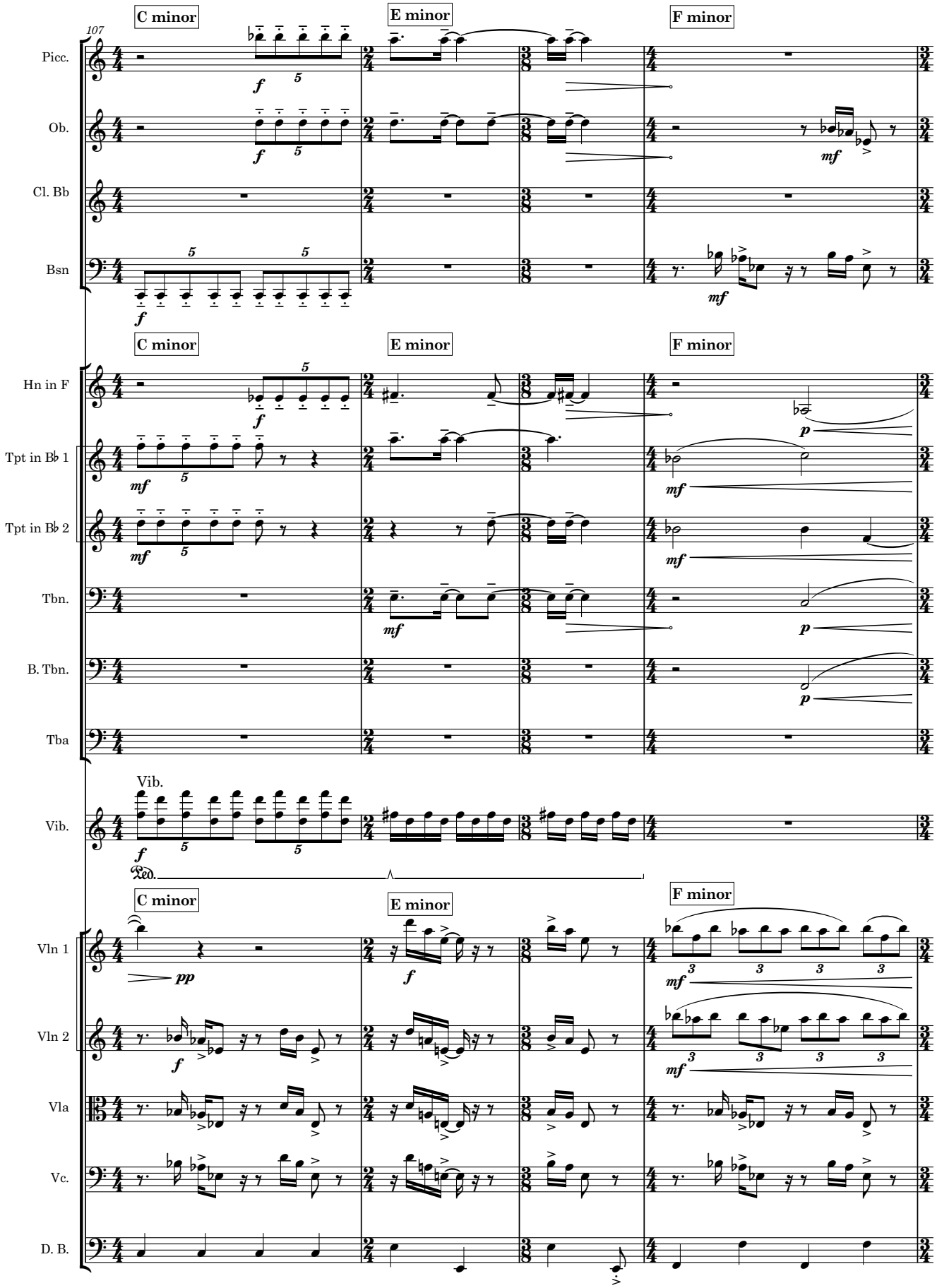

I
E
Ed "Neutral"
Ed "Neutral"
85
Fl.
Ob.
Cl. Bb
Bsn
Hn in F
Tpt in B♭ 1
Tpt in B♭ 2
ord.
Tbn.
B. Tbn.
Tba
Tub. Bells
l.v.
To B. Dr.
B. Dr.
sempre
Vln 1
Vln 2
Vla
Vc.
D. B.

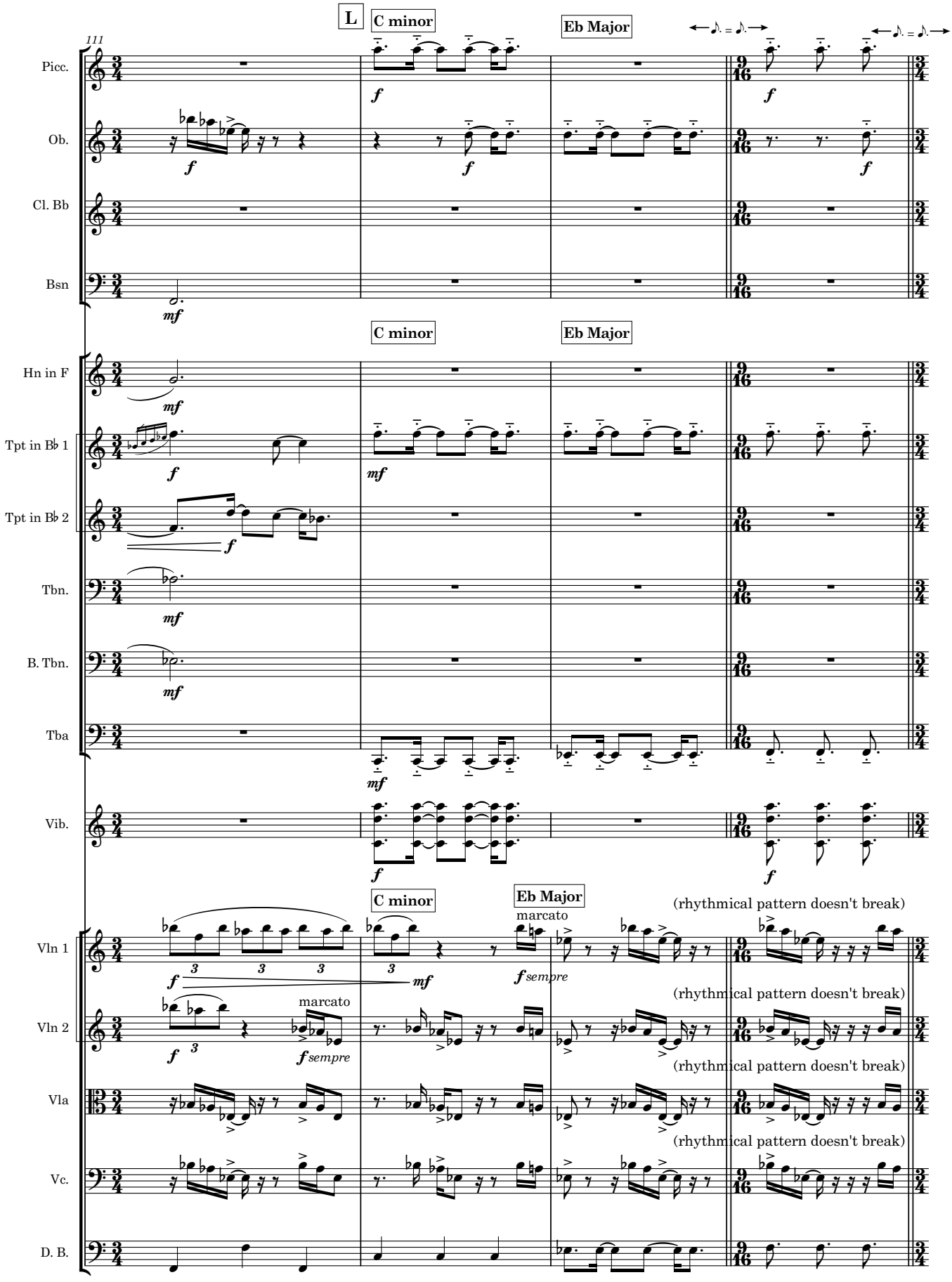

91
Eb Major
Ed "Neutral"
C minor
Fl.
Ob.
Cl. Bb
Bsn
Hn in F
Tpt in B♭ 1
Tpt in B♭ 2
Tbn.
B. Tbn.
Tba
B. Dr.
Vln 1
Vln 2
Vla
Vc.
D. B.
mf
f
f sempre
3

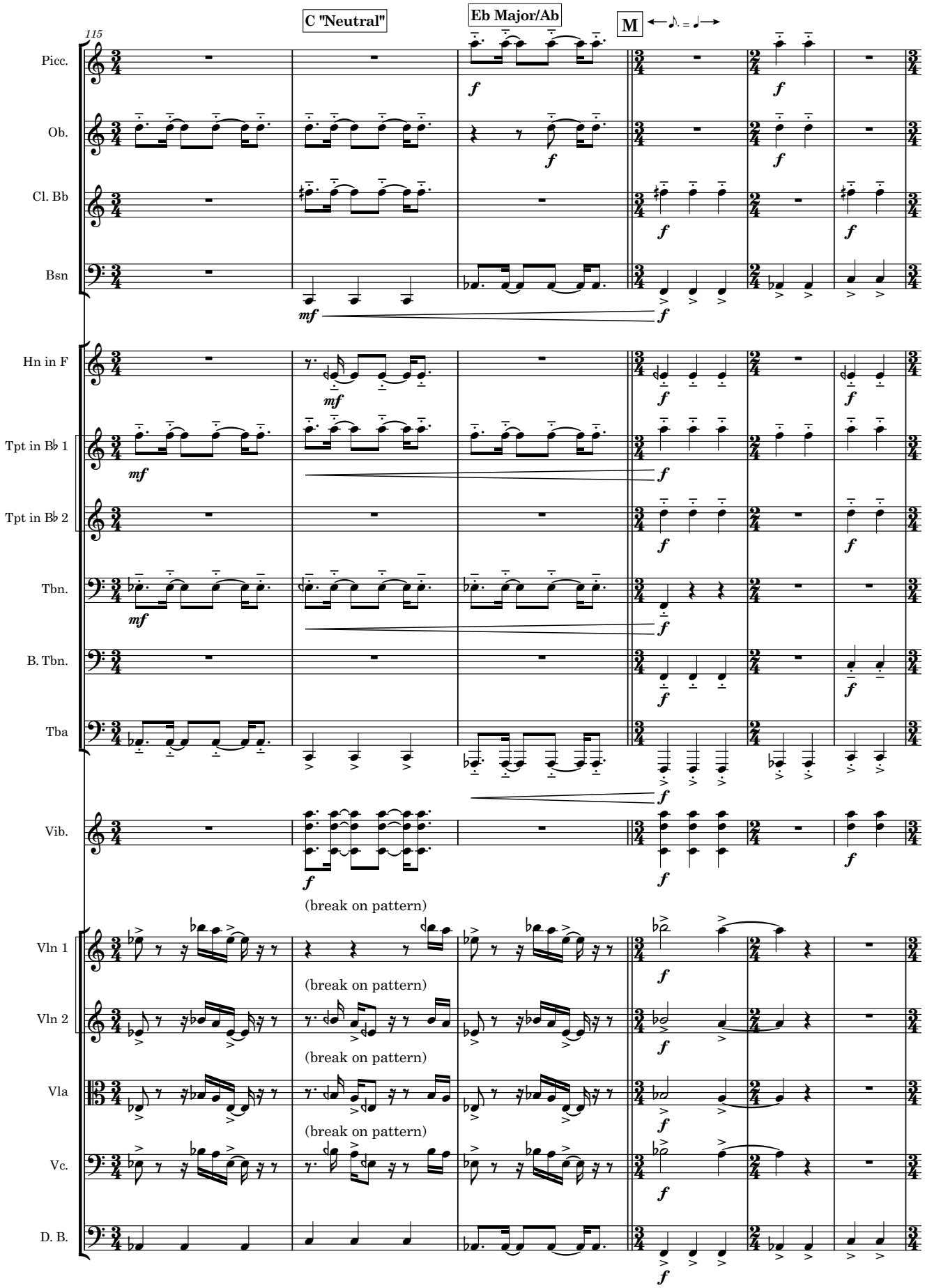

95
Ed "Supermajor"
C "Neutral"
Fl.
Ob.
Cl. Bb
Bsn
Hn in F
Tpt in B♭ 1
Tpt in B♭ 2
Tbn.
B. Tbn.
Tba
B. Dr.
Vln 1
Vln 2
Vla
Vc.
D. B.
mf
f

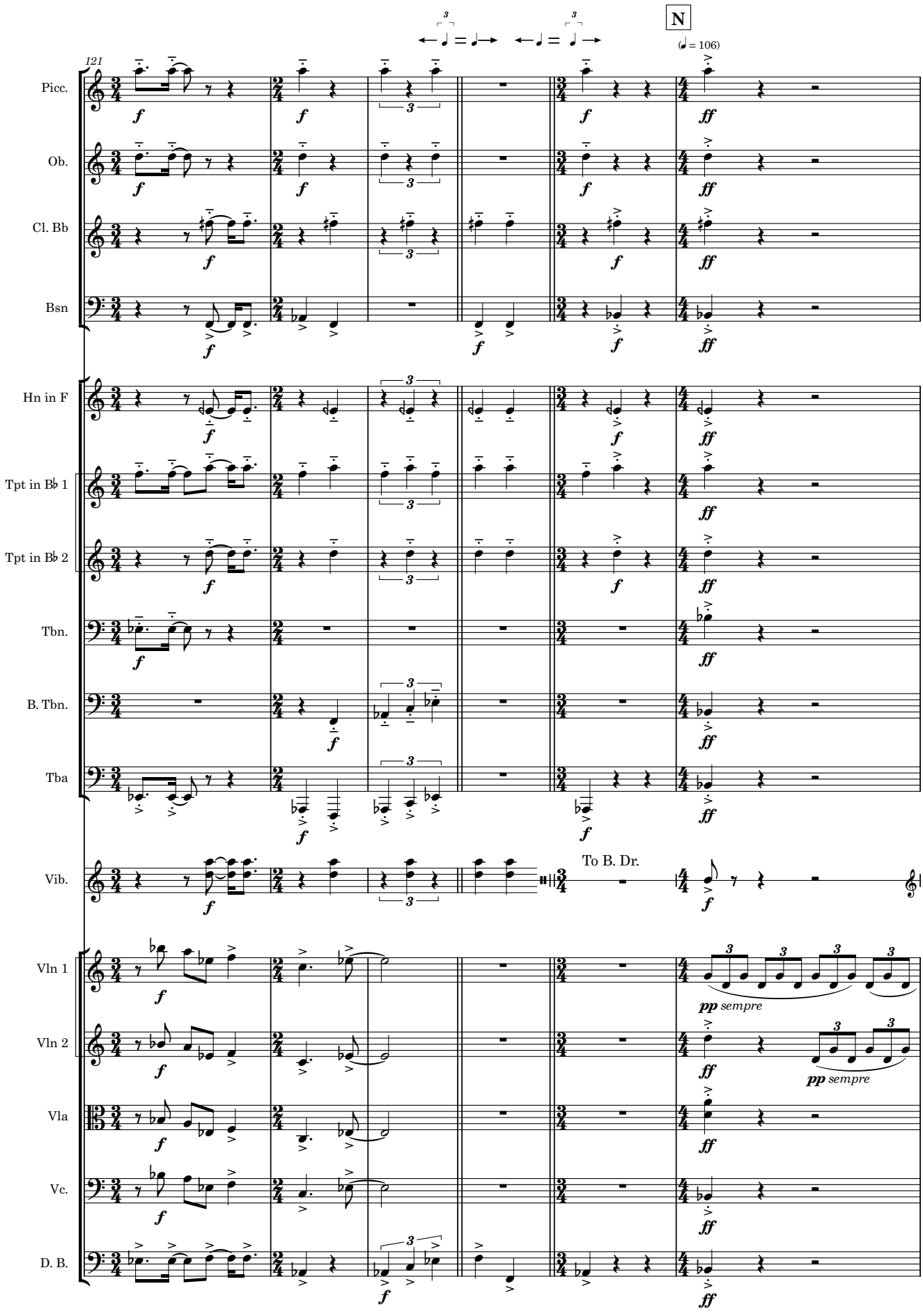

J
Ed "Neutral"
Eb Major
Ed "Neutral"
99
To Picc.
Fl.
Ob.
Cl. Bb
Bsn
Hn in F
Tpt in B♭ 1
Tpt in B♭ 2
Tbn.
B. Tbn.
Tba
B. Dr.
Vln 1
Vln 2
Vla
Vc.
D. B.

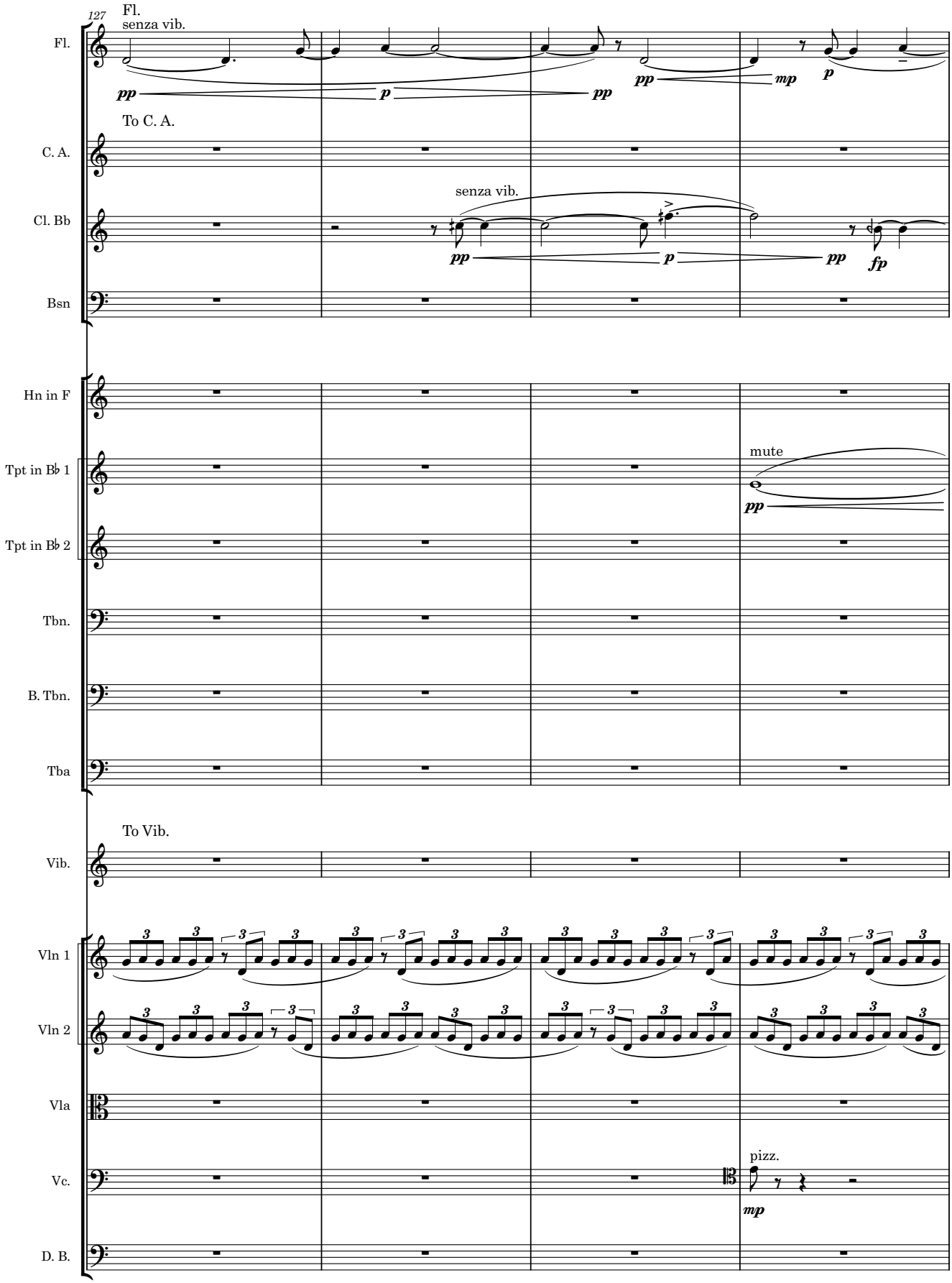

104
K
E minor
F minor
Picc.
Ob.
Cl. Bb
Bsn
Hn in F
Tpt in B♭ 1
Tpt in B♭ 2
Tbn.
B. Tbn.
Tba
To Vib.
B. Dr.
Vln 1
Vln 2
Vla
Vc.
D. B.
mf
p
f
sempre

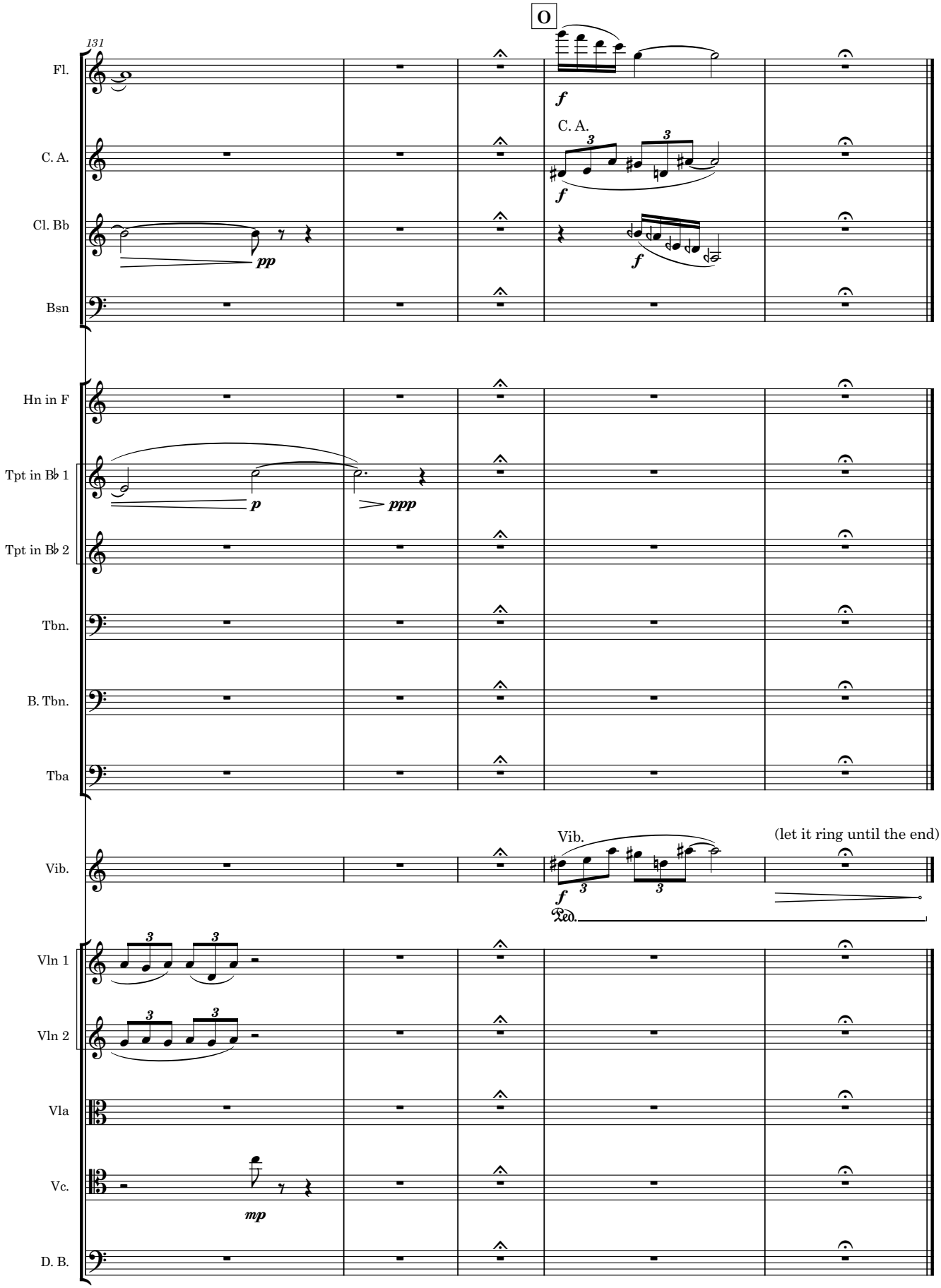

107
C minor
E minor
F minor
Picc.
Ob.
Cl. Bb
Bsn
Hn in F
Tpt in B♭ 1
Tpt in B♭ 2
Tbn.
B. Tbn.
Tba
Vib.
Ped.
Vln 1
Vln 2
Vla
Vc.
D. B.


111
L
C minor
Eb Major
Picc.
Ob.
Cl. Bb
Bsn
Hn in F
Tpt in B♭ 1
Tpt in B♭ 2
Tbn.
B. Tbn.
Tba
Vib.
Vln 1
Vln 2
Vla
Vc.
D. B.
marcato
sempre
(rhythmical pattern doesn't break)

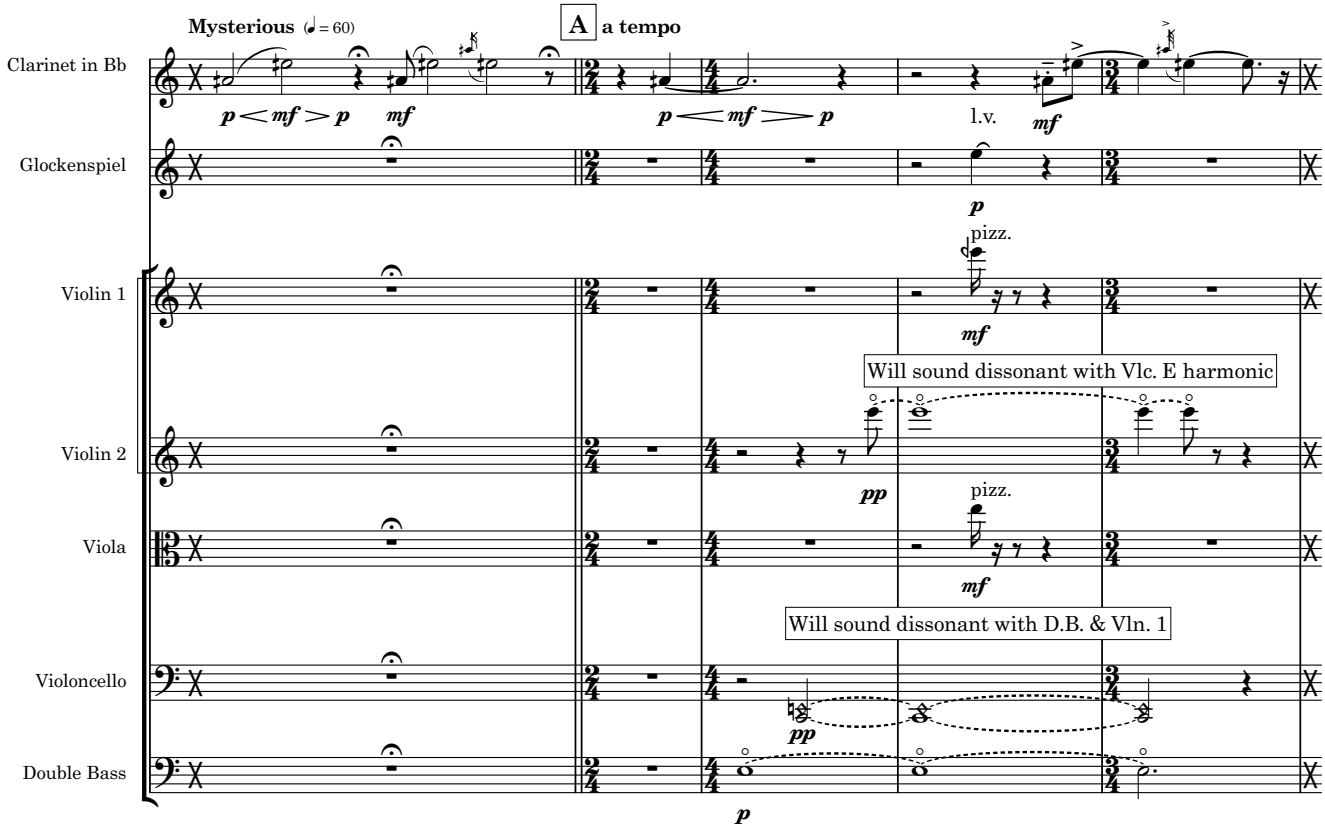

115
C "Neutral"
Eb Major/Ab
M
Picc.
Ob.
Cl. Bb
Bsn
Hn in F
Tpt in B♭ 1
Tpt in B♭ 2
Tbn.
B. Tbn.
Tba
Vib.
(break on pattern)
Vln 1
Vln 2
Vla
Vc.
D. B.

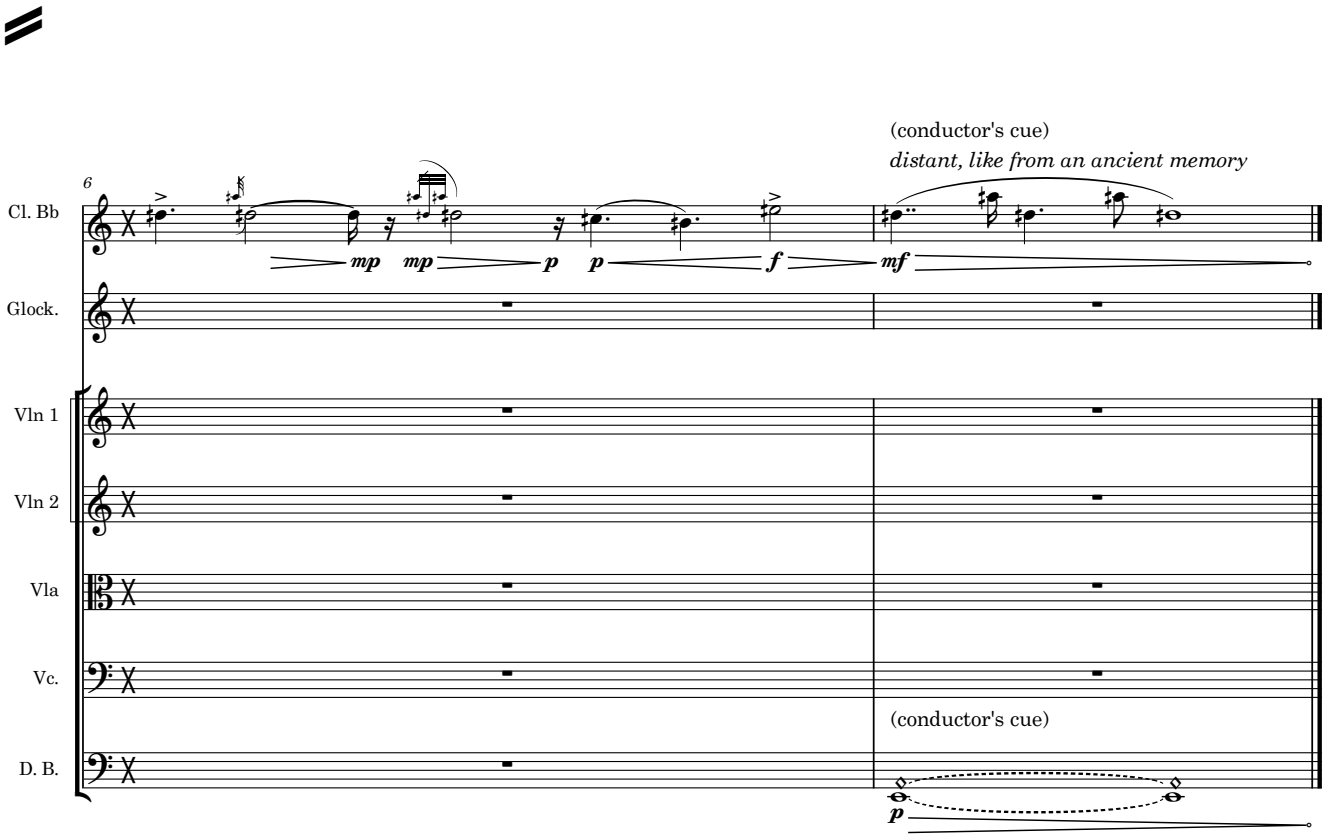

N
(♩= 106)
121
Picc.
Ob.
Cl. Bb
Bsn
Hn in F
Tpt in B♭ 1
Tpt in B♭ 2
Tbn.
B. Tbn.
Tba
Vib.
To B. Dr.
Vln 1
Vln 2
Vla
Vc.
D. B.
pp sempre
pp sempre


127
Fl.
senza vib.
Fl.
pp
p
pp
pp
mp
p
To C. A.
C. A.
senza vib.
Cl. Bb
pp
p
pp
fp
Bsn
Hn in F
Tpt in B♭ 1
mute
pp
Tpt in B♭ 2
Tbn.
B. Tbn.
Tba
To Vib.
Vib.
Vln 1
Vln 2
Vla
pizz.
Vc.
mp
D. B.

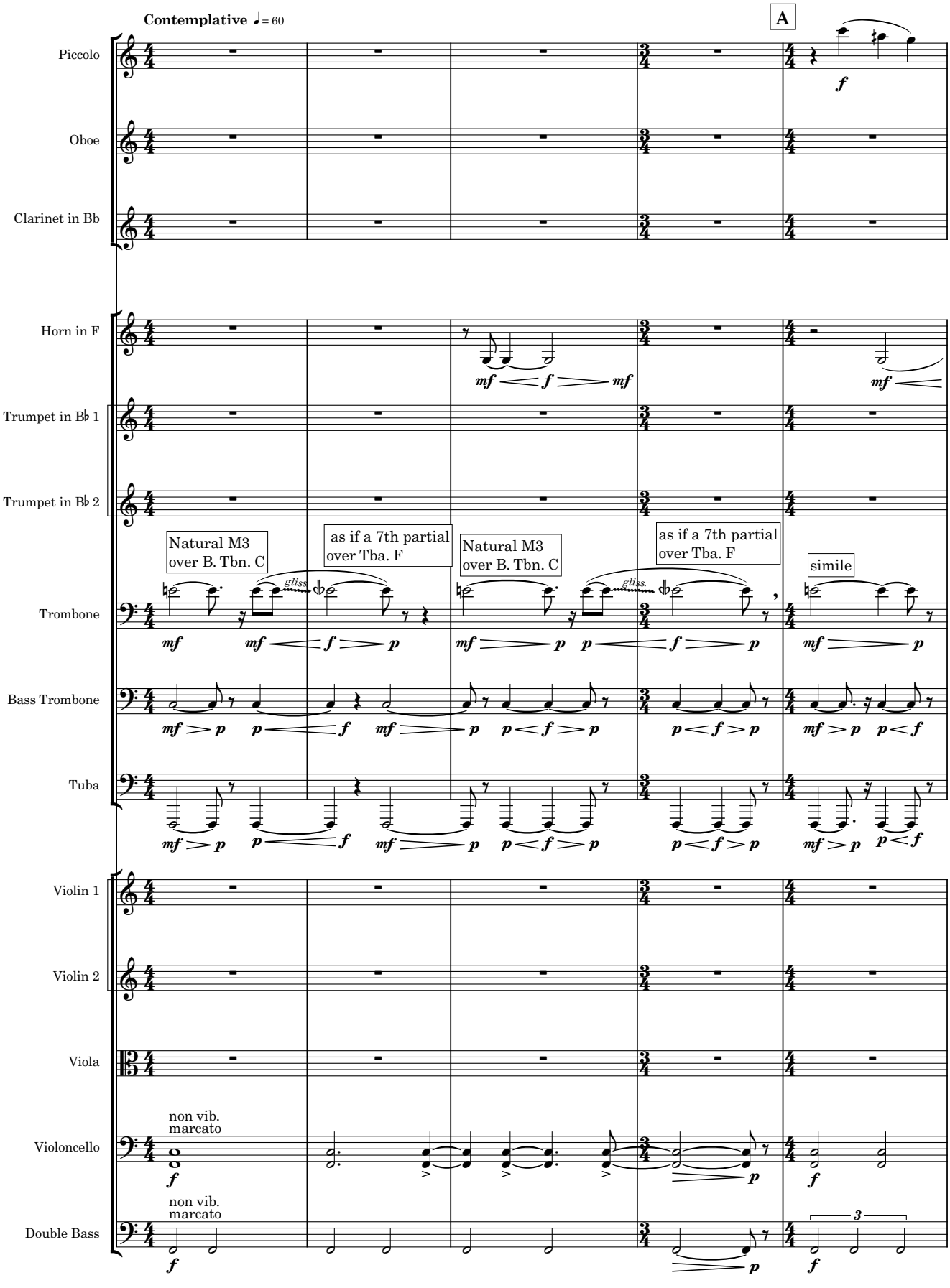

O
131
Fl.
C. A.
Cl. Bb
Bsn
Hn in F
Tpt in B♭ 1
Tpt in B♭ 2
Tbn.
B. Tbn.
Tba
Vib.
Vln 1
Vln 2
Vla
Vc.
D. B.
C. A.
Vib.
(let it ring until the end)
pp
f
p
ppp
mp

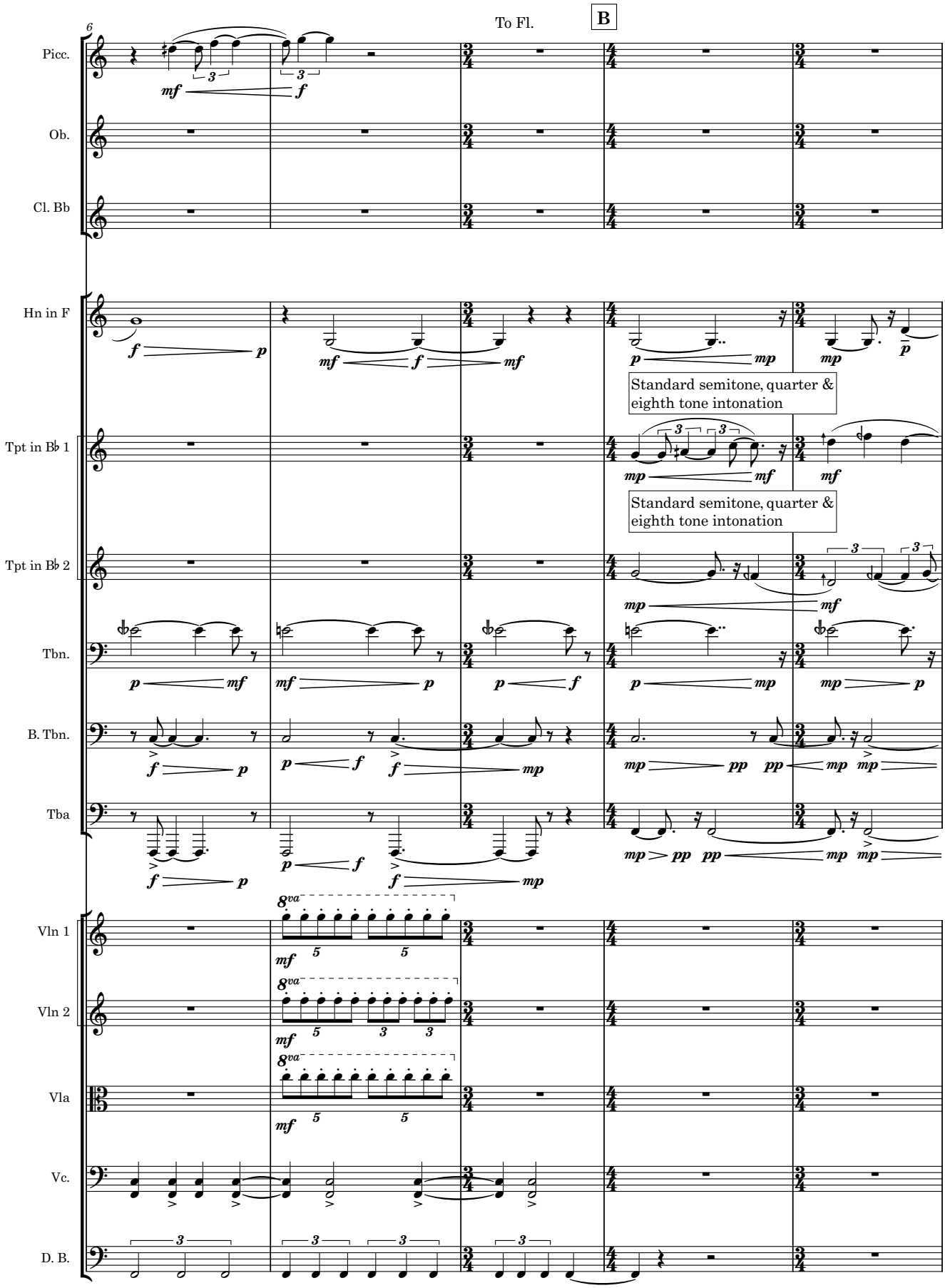
Interlude I

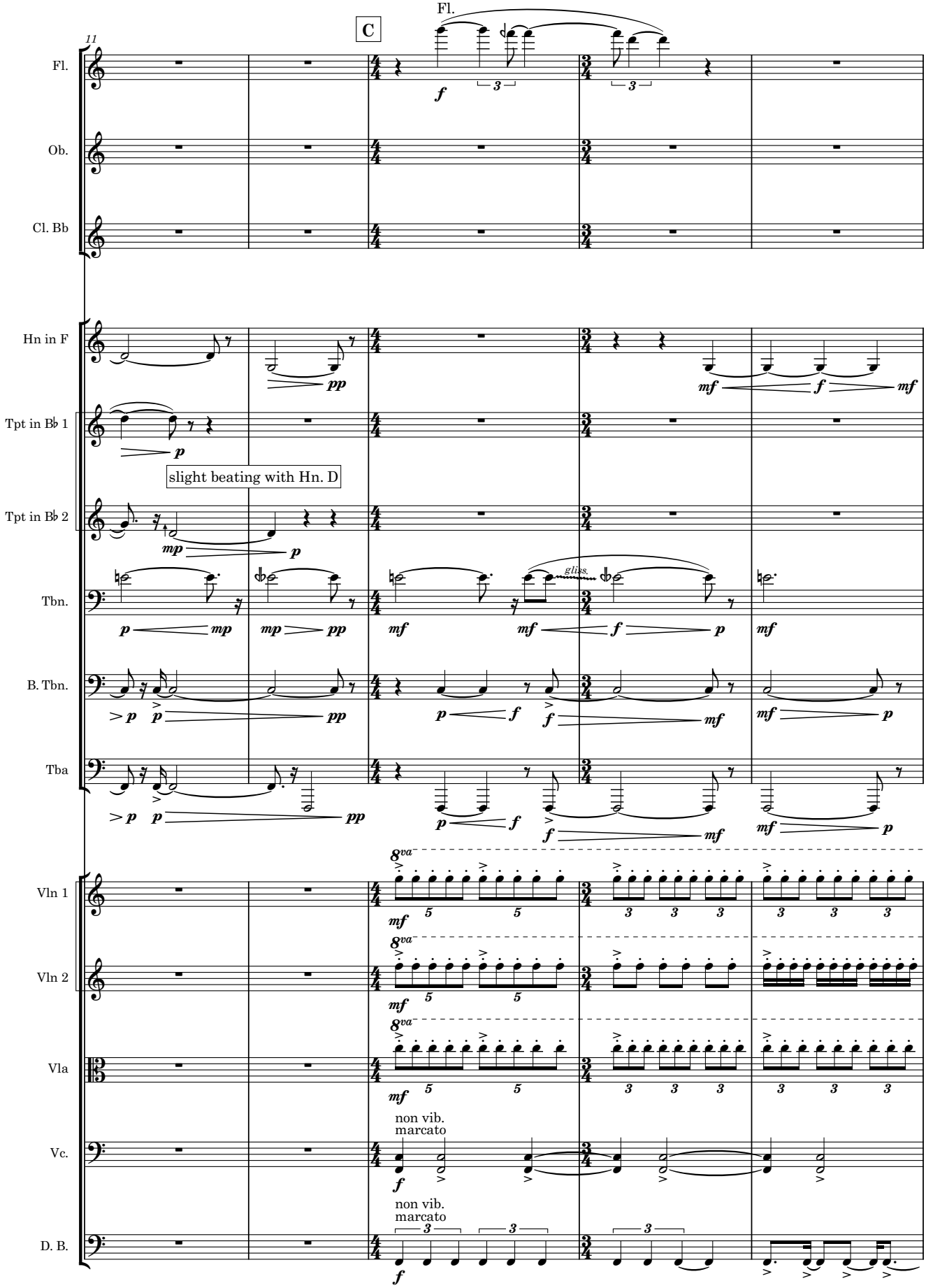

Mysterious (♩= 60)
A a tempo
Clarinet in Bb
Glockenspiel
Violin 1
Violin 2
Viola
Violoncello
Double Bass
p < mf > p
mf
p < mf > p
l.v.
mf
p
pizz.
mf
Will sound dissonant with Vlc. E harmonic
pp
pizz.
mf
Will sound dissonant with D.B. & Vln. 1
pp
p

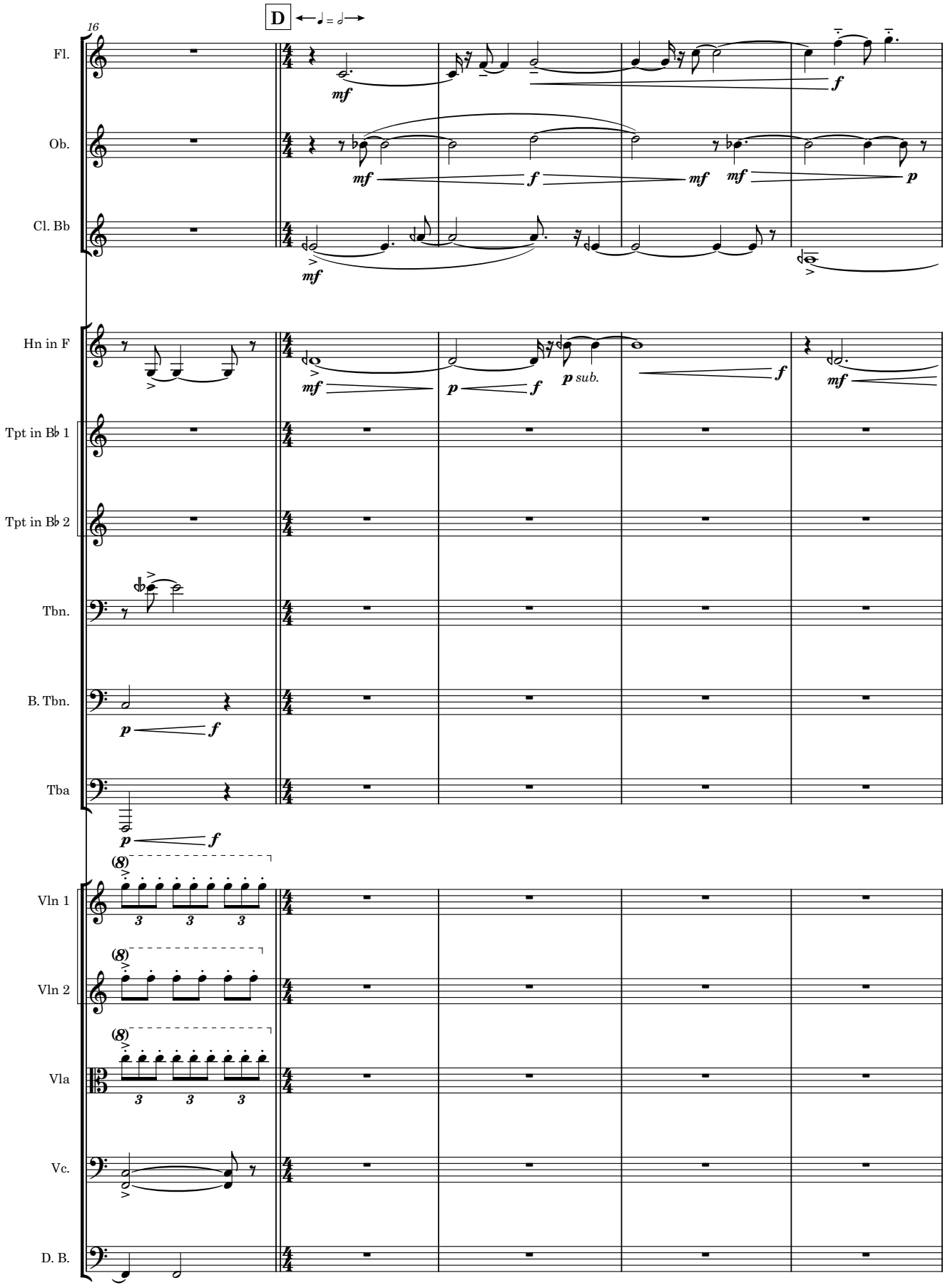

6
(conductor's cue)
distant, like from an ancient memory
Cl. Bb
Glock.
Vln 1
Vln 2
Vla
Vc.
D. B.
mp mp p p f mf
(conductor's cue)
p

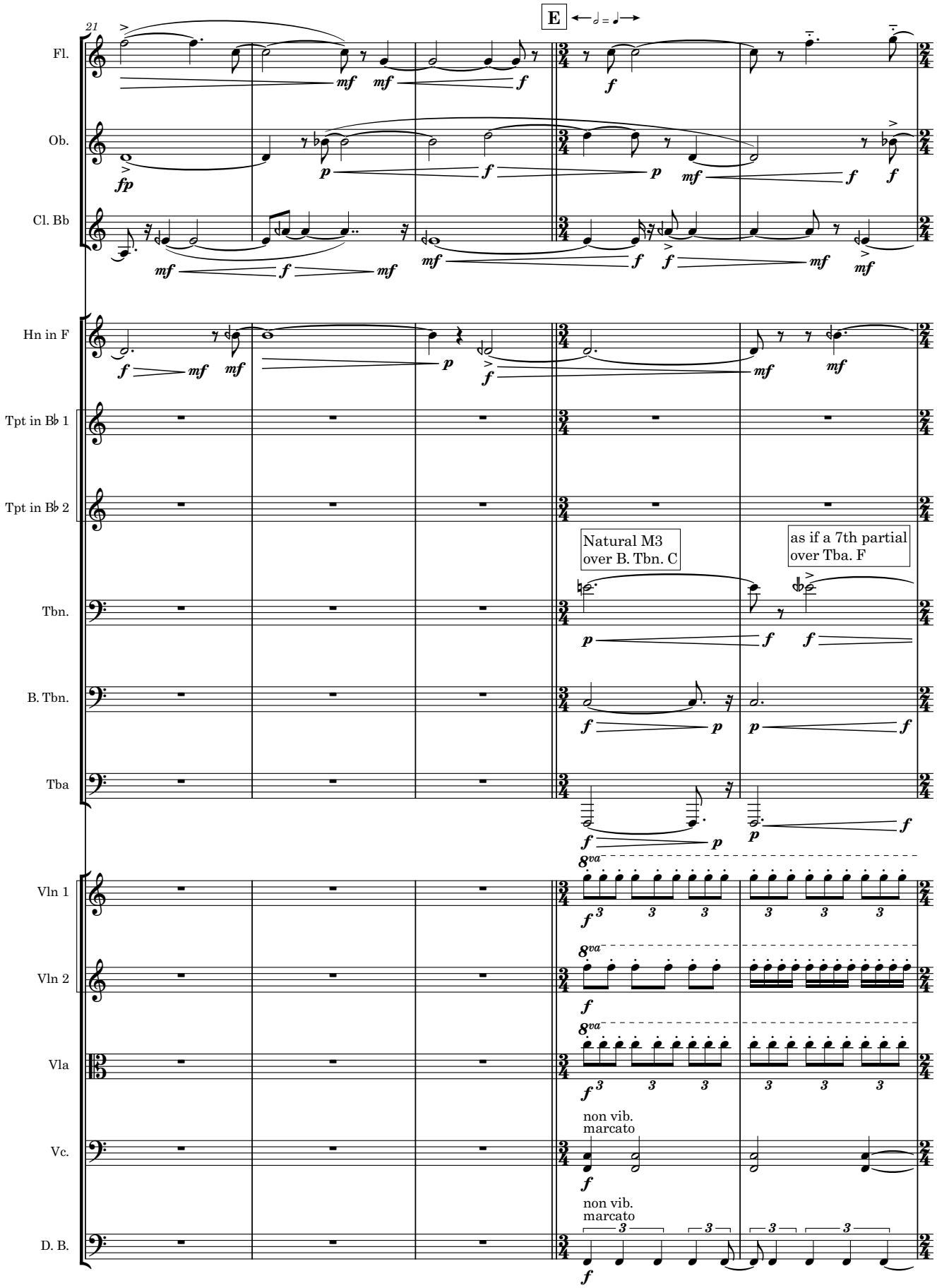
II. Apertures of the Skies

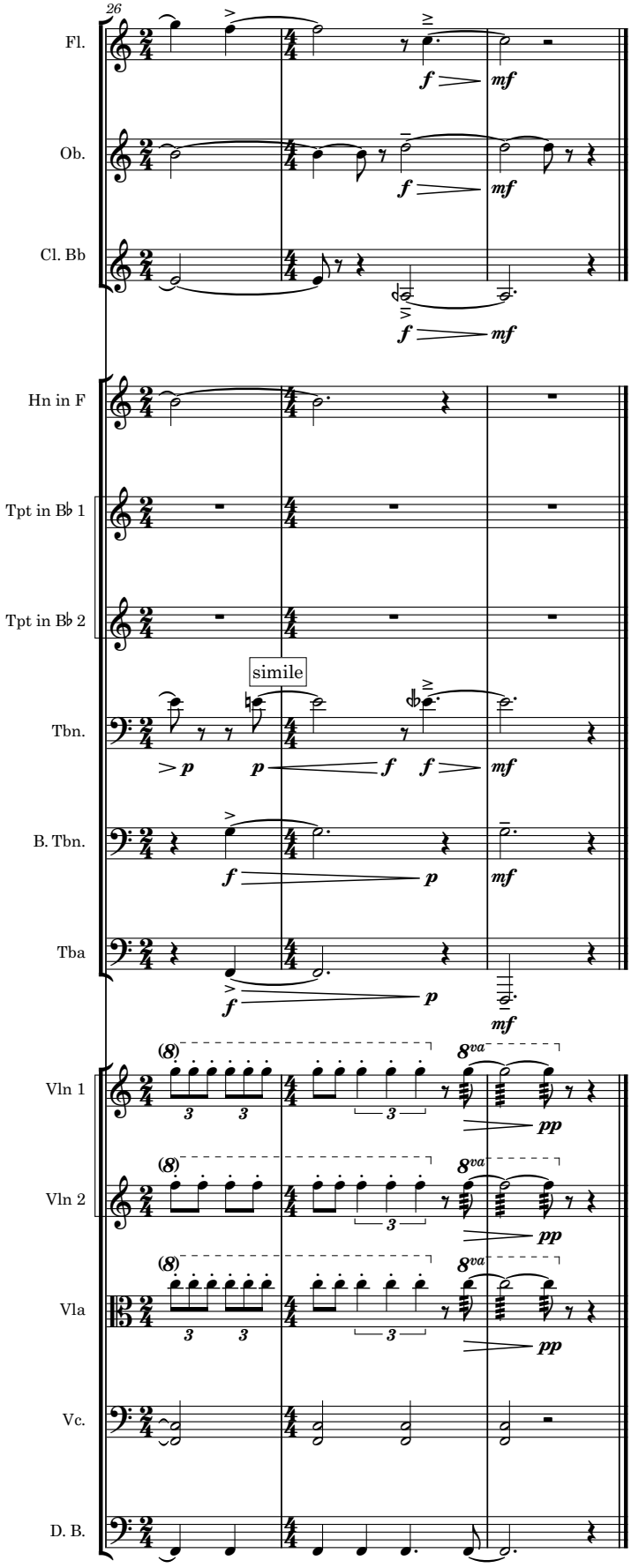



6
To Fl.
B
Picc.
Ob.
Cl. Bb
Hn in F
Standard semitone, quarter & eighth tone intonation
Tpt in B♭ 1
Standard semitone, quarter & eighth tone intonation
Tpt in B♭ 2
Tbn.
B. Tbn.
Tba
Vln 1
Vln 2
Vla
Vc.
D. B.

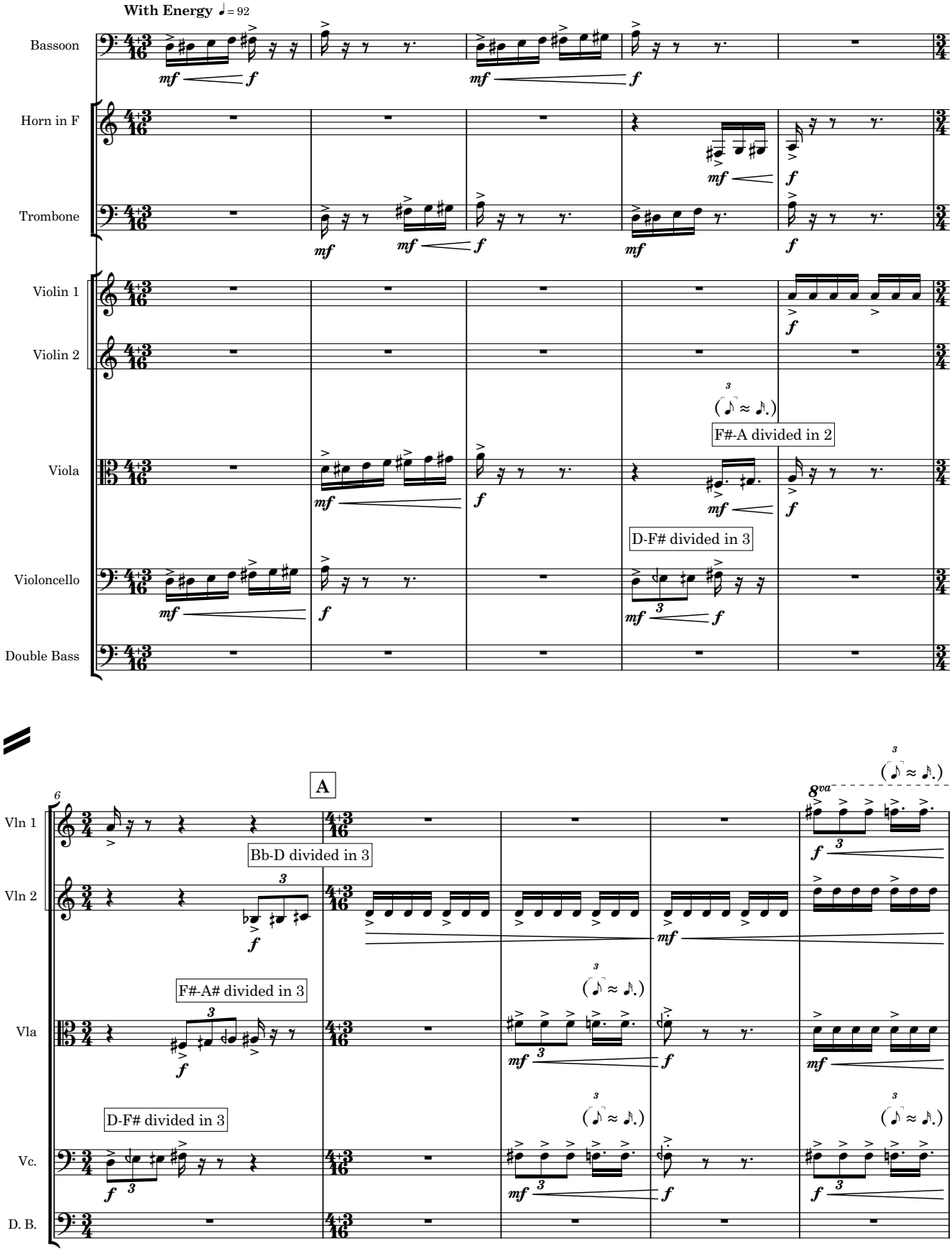

C
Fl.
11
Fl.
Ob.
Cl. Bb
Hn in F
Tpt in B♭ 1
Tpt in B♭ 2
Tbn.
B. Tbn.
Tba
slight beating with Hn. D
gliss.
Vln 1
Vln 2
Vla
Vc.
D. B.
non vib.
marcato
non vib.
marcato

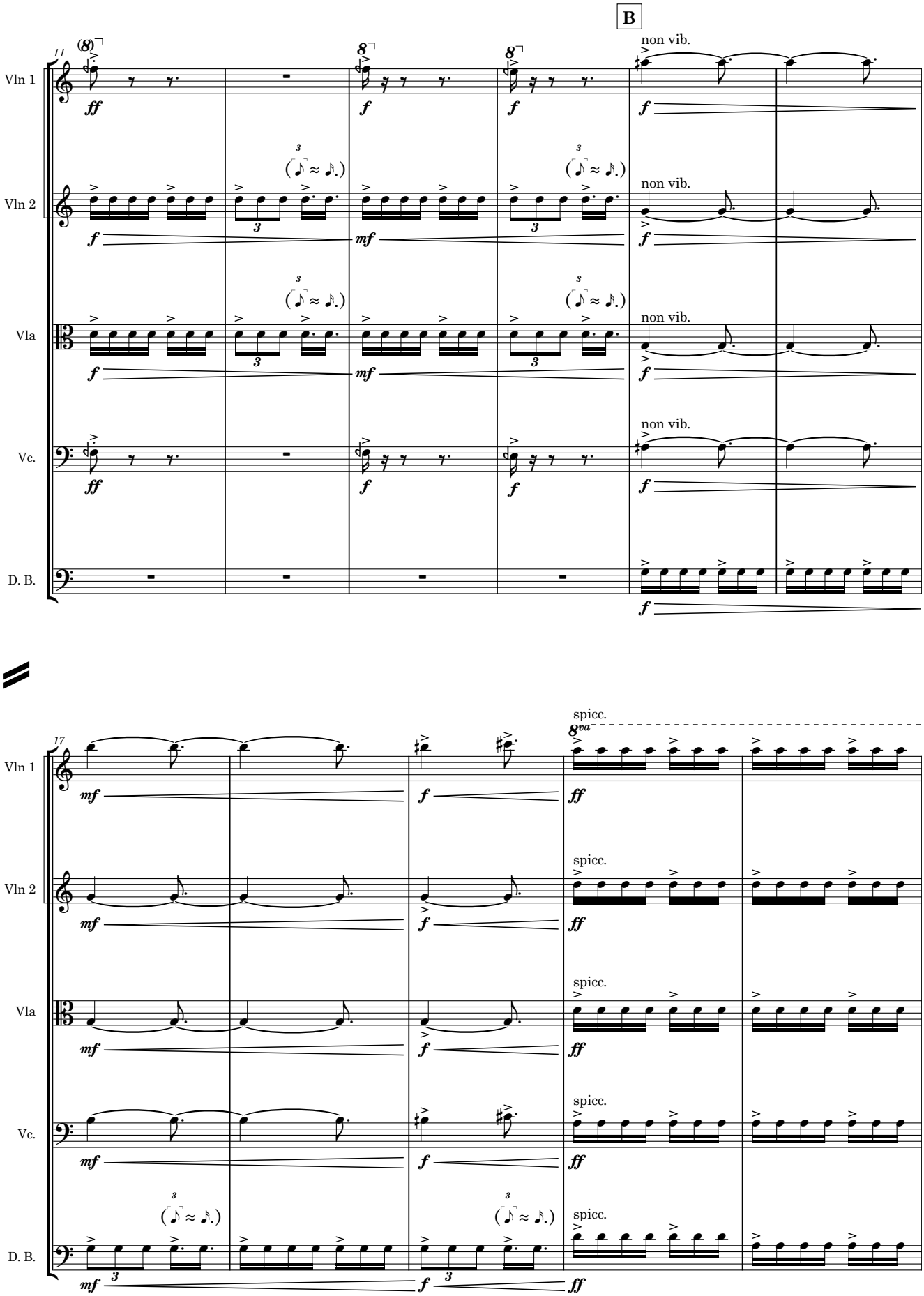

16
D
Fl.
Ob.
Cl. Bb
Hn in F
Tpt in B♭ 1
Tpt in B♭ 2
Tbn.
B. Tbn.
Tba
Vln 1
Vln 2
Vla
Vc.
D. B.
mf
f
p
sub.

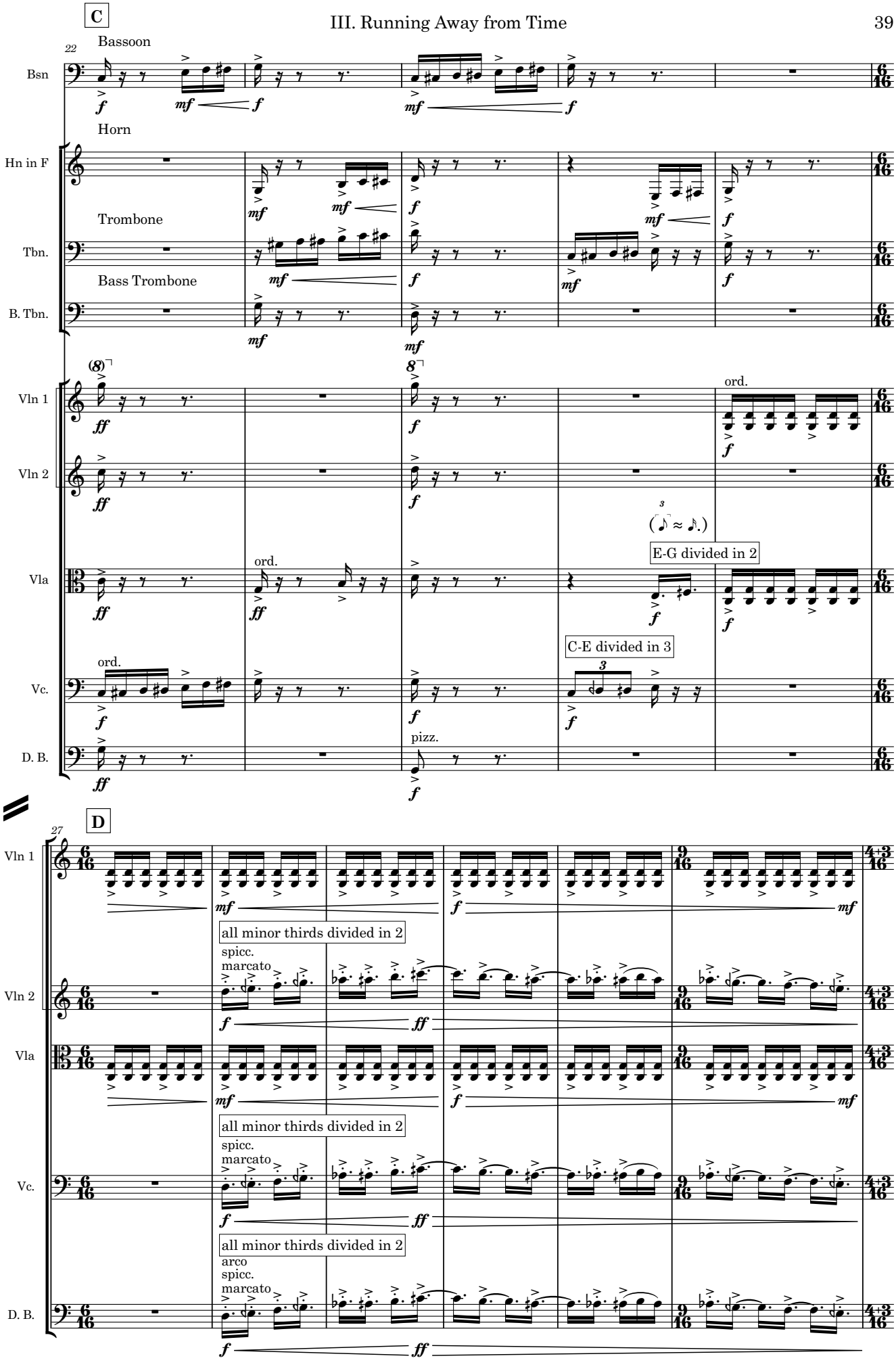

21
E
Fl.
Ob.
Cl. Bb
Hn in F
Tpt in B♭ 1
Tpt in B♭ 2
Natural M3
over B. Tbn. C
as if a 7th partial
over Tba. F
Tbn.
B. Tbn.
Tba
Vln 1
Vln 2
Vla
non vib.
marcato
Vc.
non vib.
marcato
D. B.

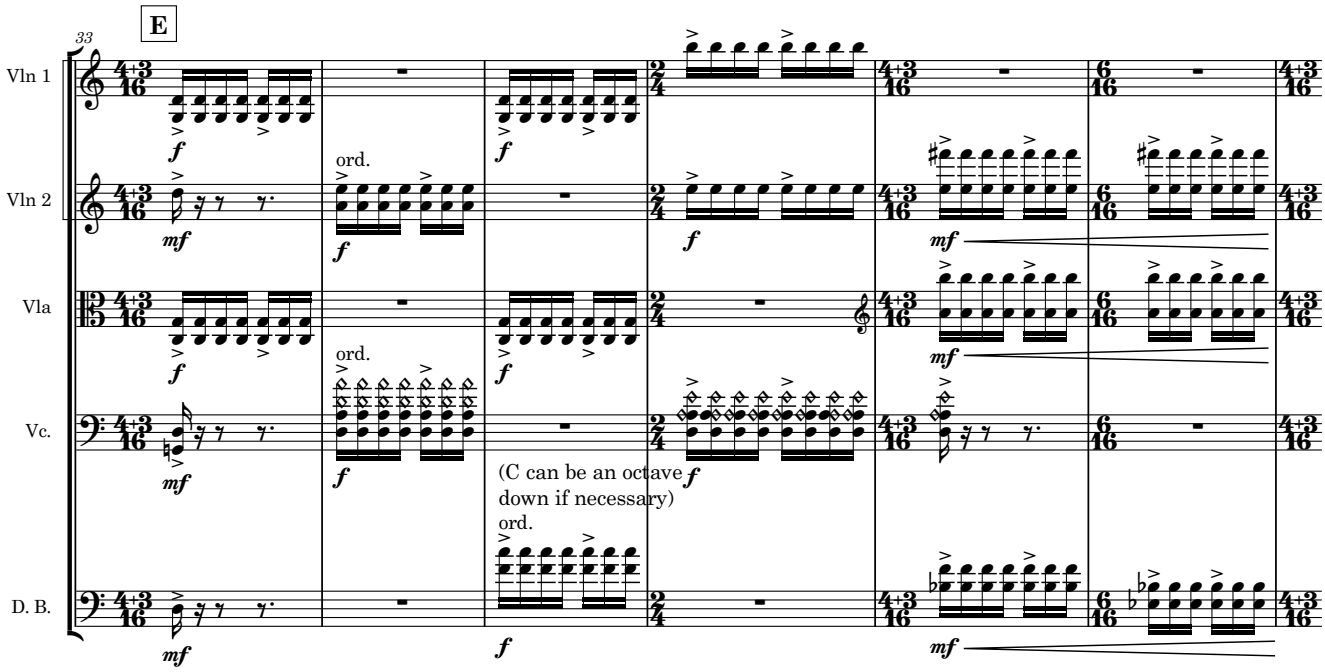

26
Fl.
Ob.
Cl. Bb
Hn in F
Tpt in B♭ 1
Tpt in B♭ 2
simile
Tbn.
B. Tbn.
Tba
Vln 1
Vln 2
Vla
Vc.
D. B.

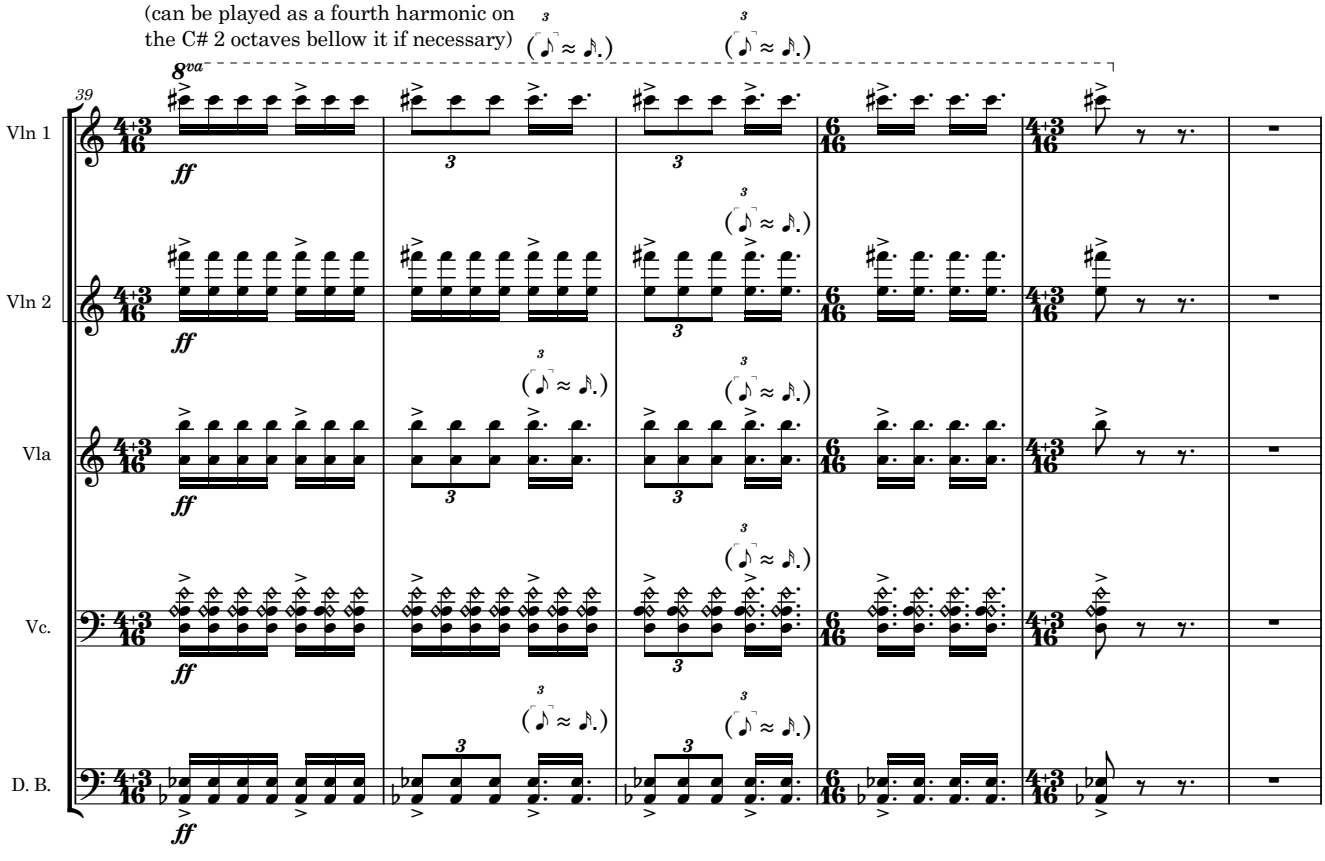
III. Running Away from Time

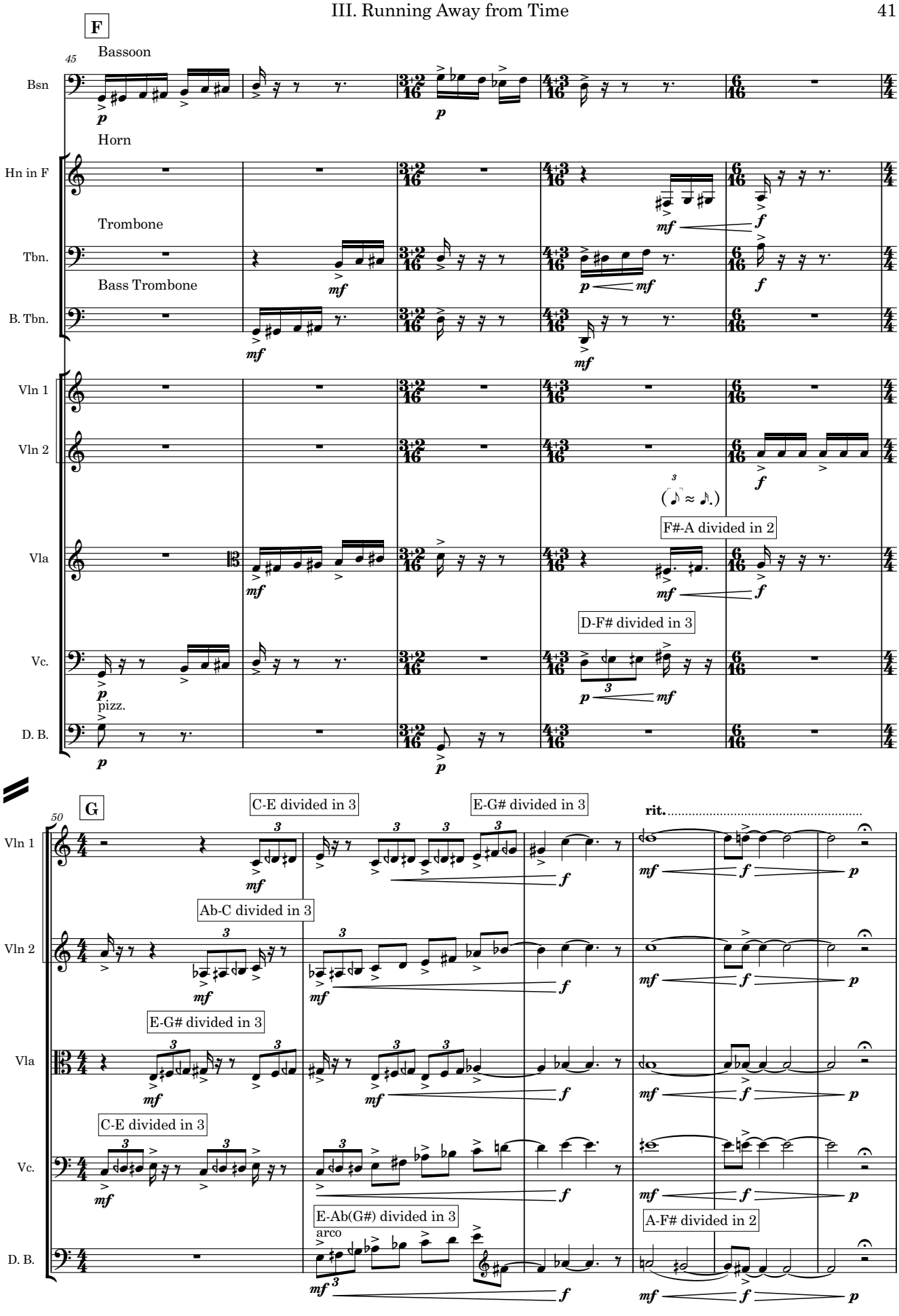


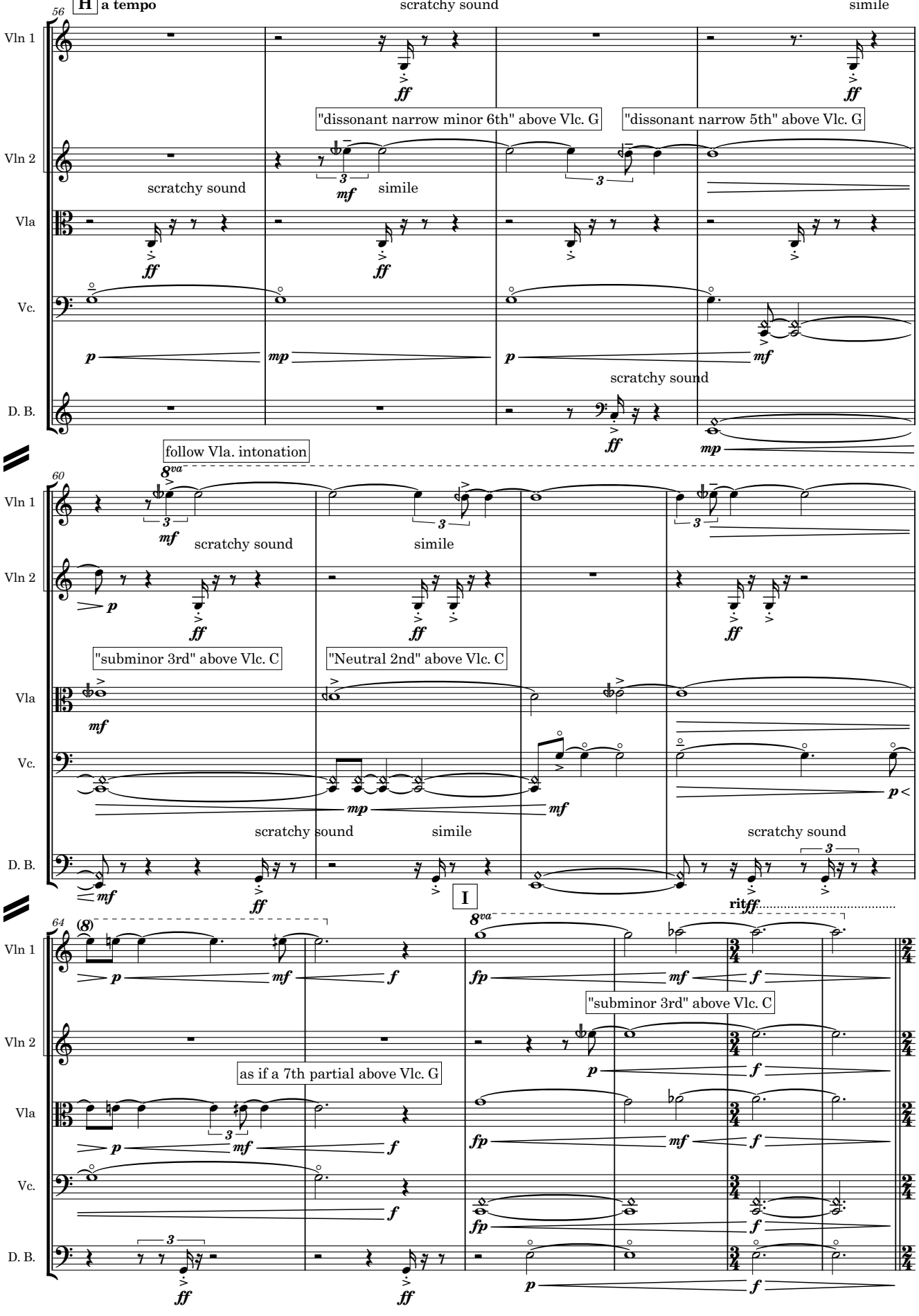

B
11
Vln 1
Vln 2
Vla
Vc.
D. B.
non vib.
spicc.
17
8va


C
22
Bassoon
Bsn
Horn
Hn in F
Trombone
Tbn.
Bass Trombone
B. Tbn.
Vln 1
Vln 2
Vla
Vc.
D. B.
ord.
pizz.
E-G divided in 2
C-E divided in 3
D
27
all minor thirds divided in 2
spicc.
marcato
arco

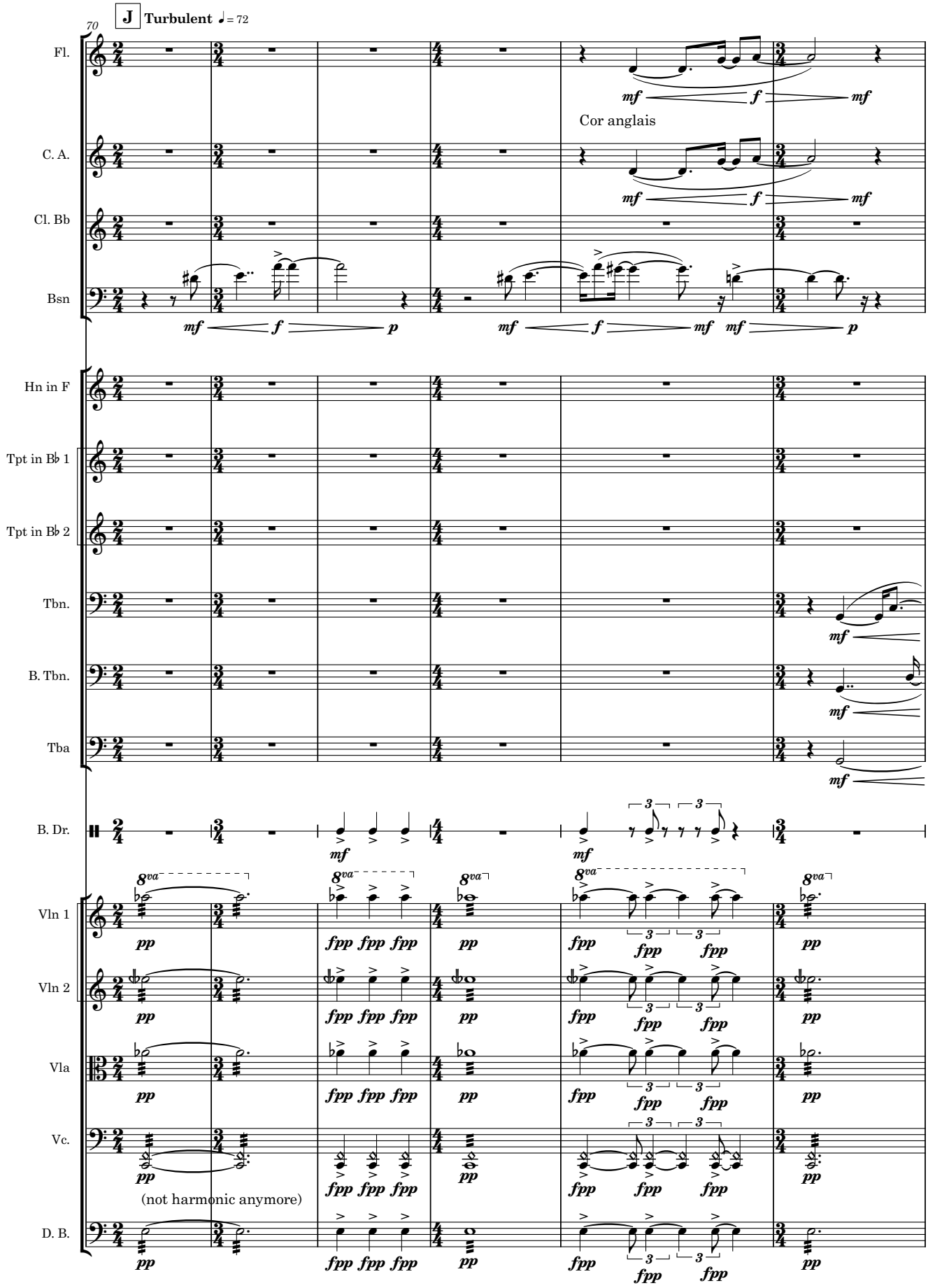

E
33
Vln 1
Vln 2
Vla
Vc.
D. B.
ord.
(C can be an octave down if necessary)
ord.

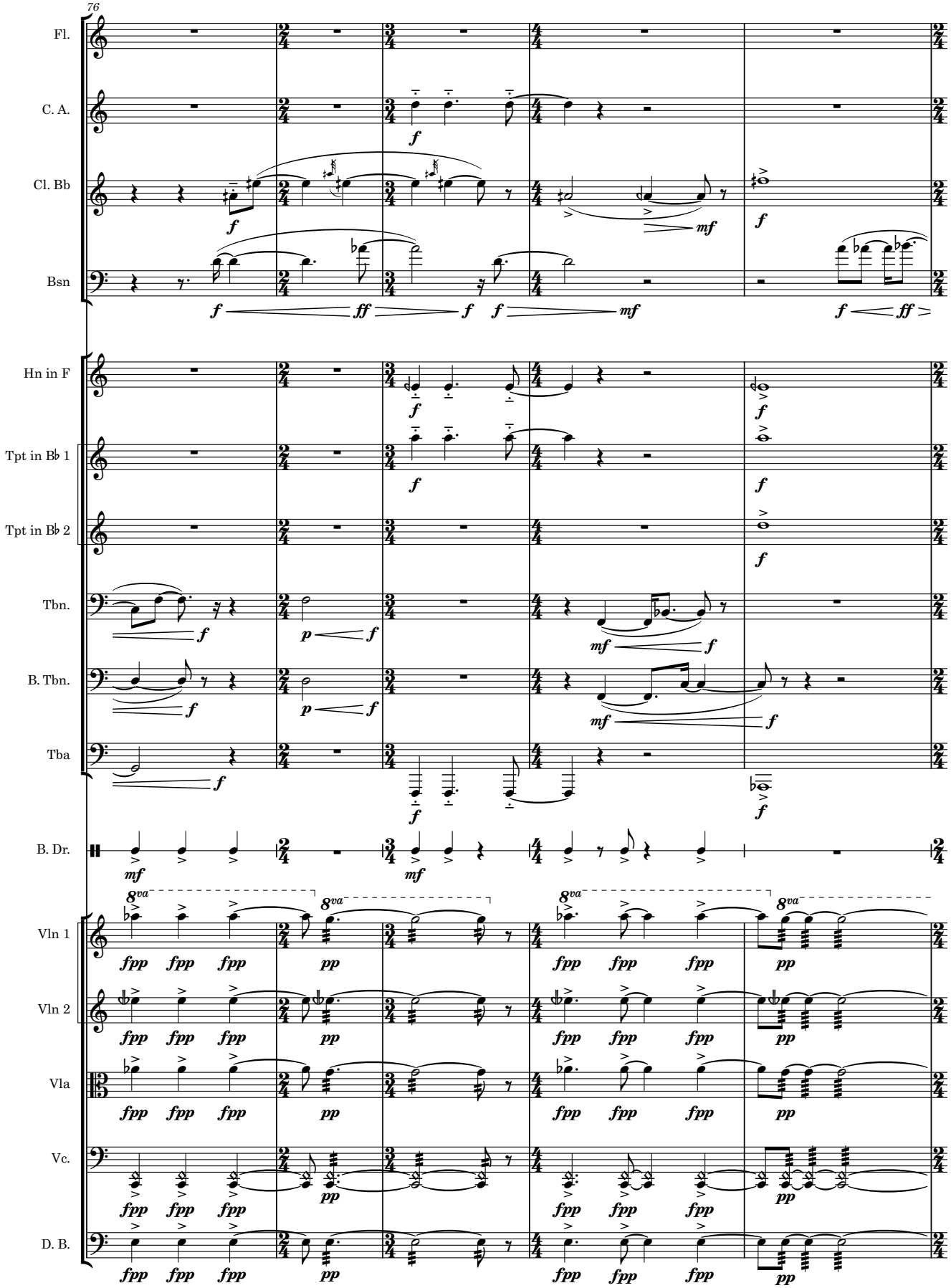

(can be played as a fourth harmonic on the C# 2 octaves bellow it if necessary)
8va
39
Vln 1
Vln 2
Vla
Vc.
D. B.

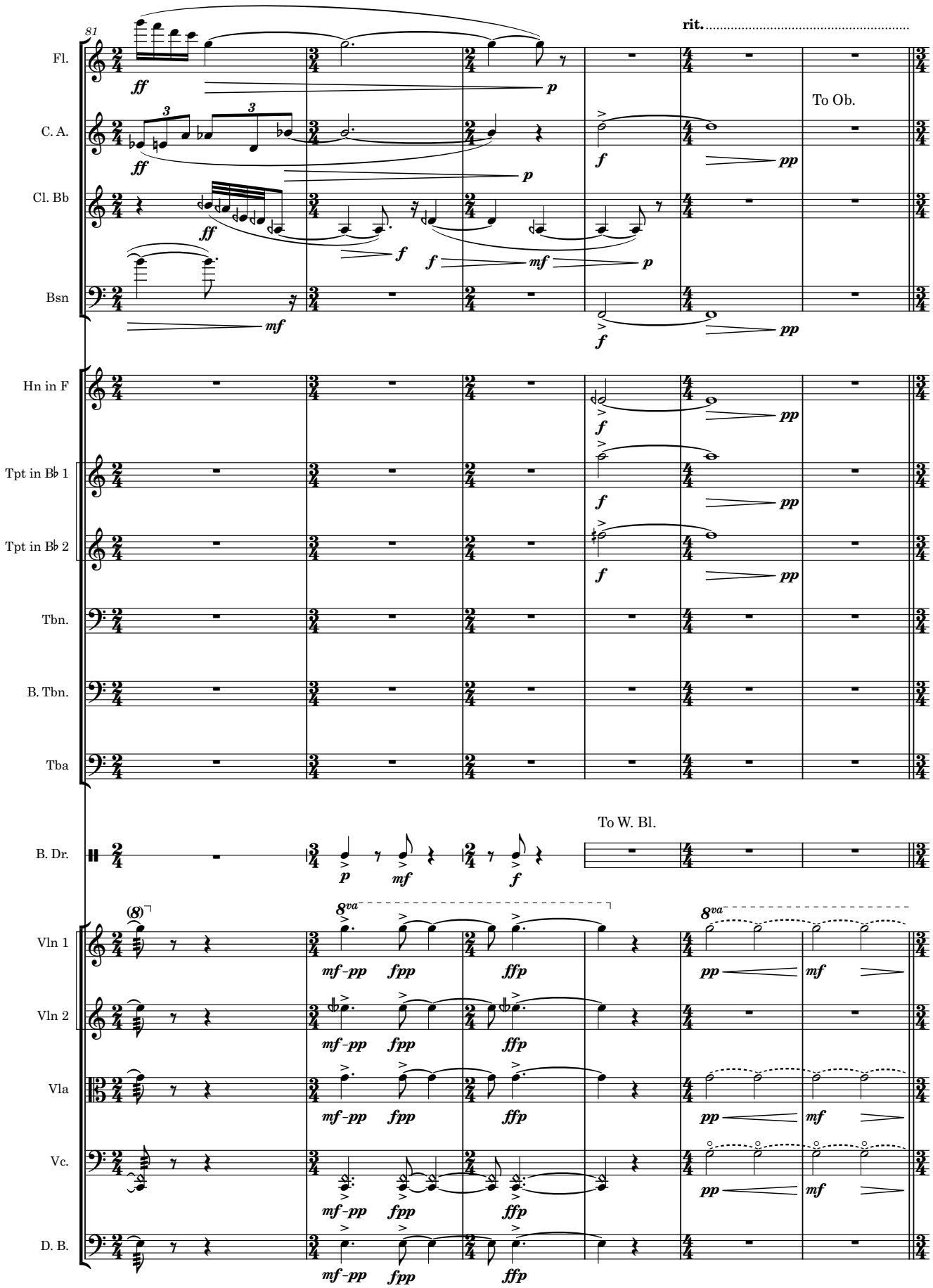

F
Bassoon
45
Bsn
Horn
Hn in F
Trombone
Tbn.
Bass Trombone
B. Tbn.
Vln 1
Vln 2
Vla
Vc.
pizz.
D. B.
F#-A divided in 2
D-F# divided in 3
G
50
C-E divided in 3
E-G# divided in 3
Ab-C divided in 3
E-G# divided in 3
C-E divided in 3
E-Ab(G#) divided in 3
arco
A-F# divided in 2
rit.


H a tempo
scratchy sound
simile
56
Vln 1
Vln 2
Vla
Vc.
D. B.
"dissonant narrow minor 6th" above Vlc. G
"dissonant narrow 5th" above Vlc. G
scratchy sound
simile
follow Vla. intonation
60
"subminor 3rd" above Vlc. C
"Neutral 2nd" above Vlc. C
I
64
as if a 7th partial above Vlc. G
rit.

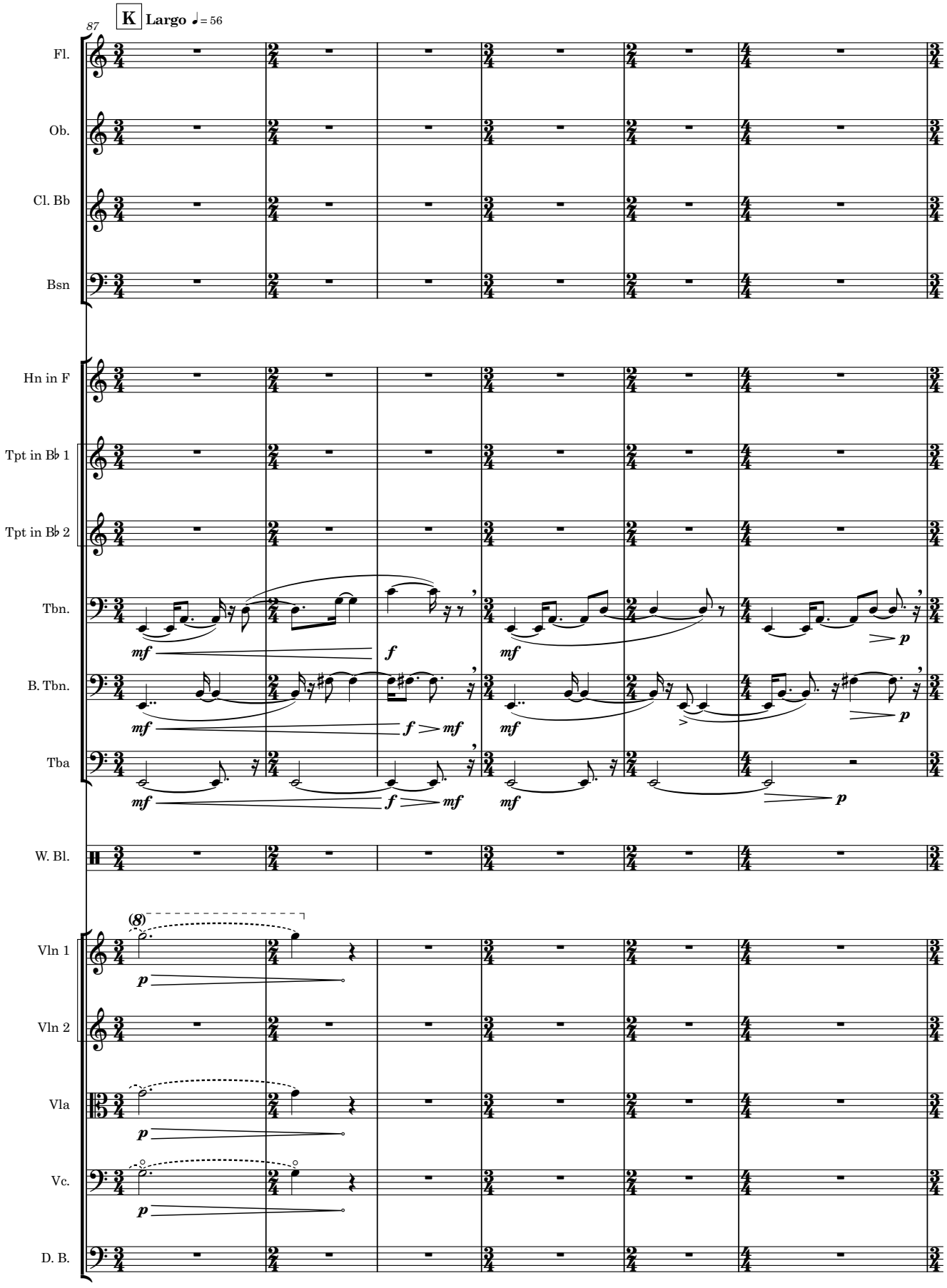
Interlude II

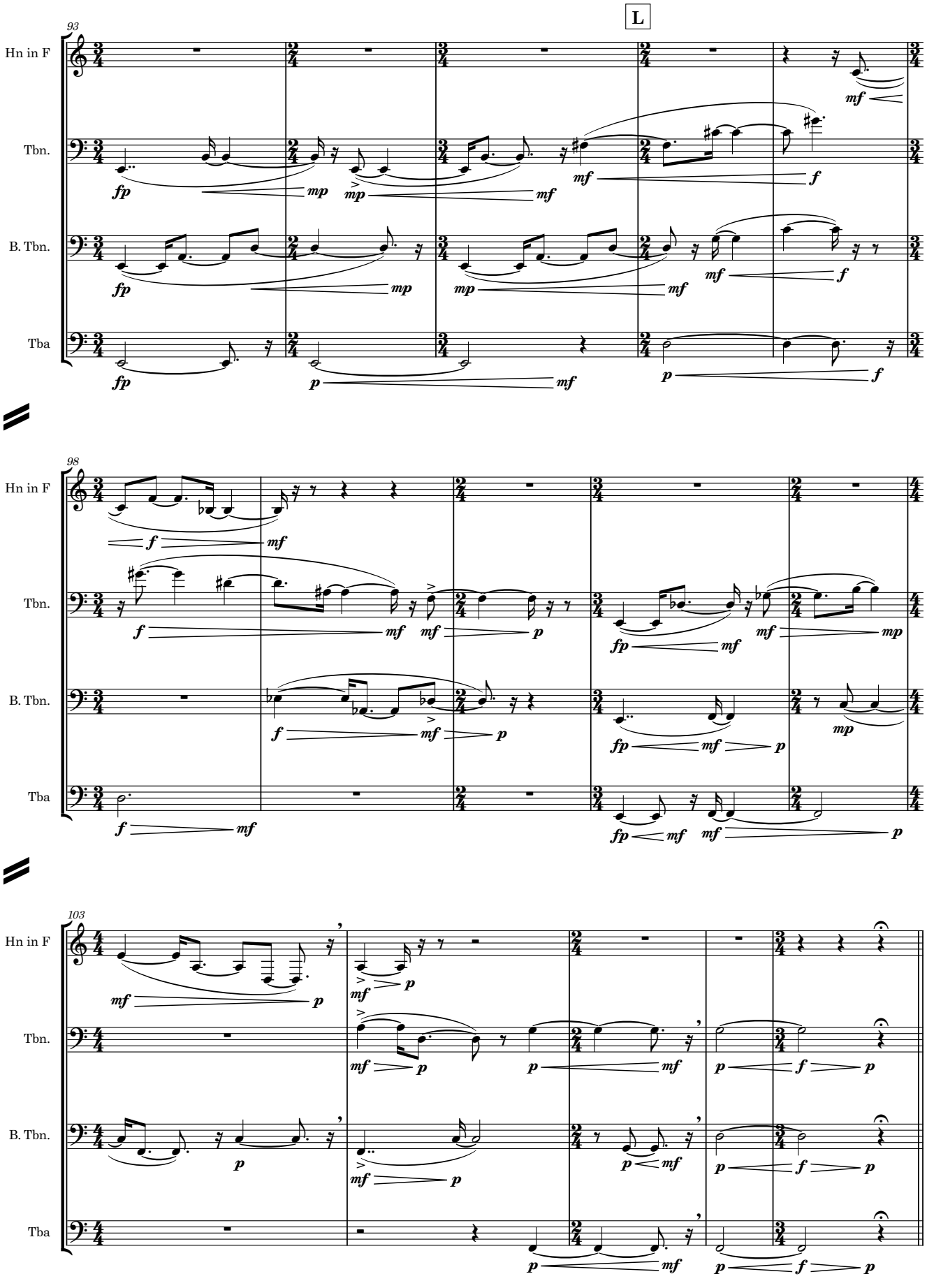


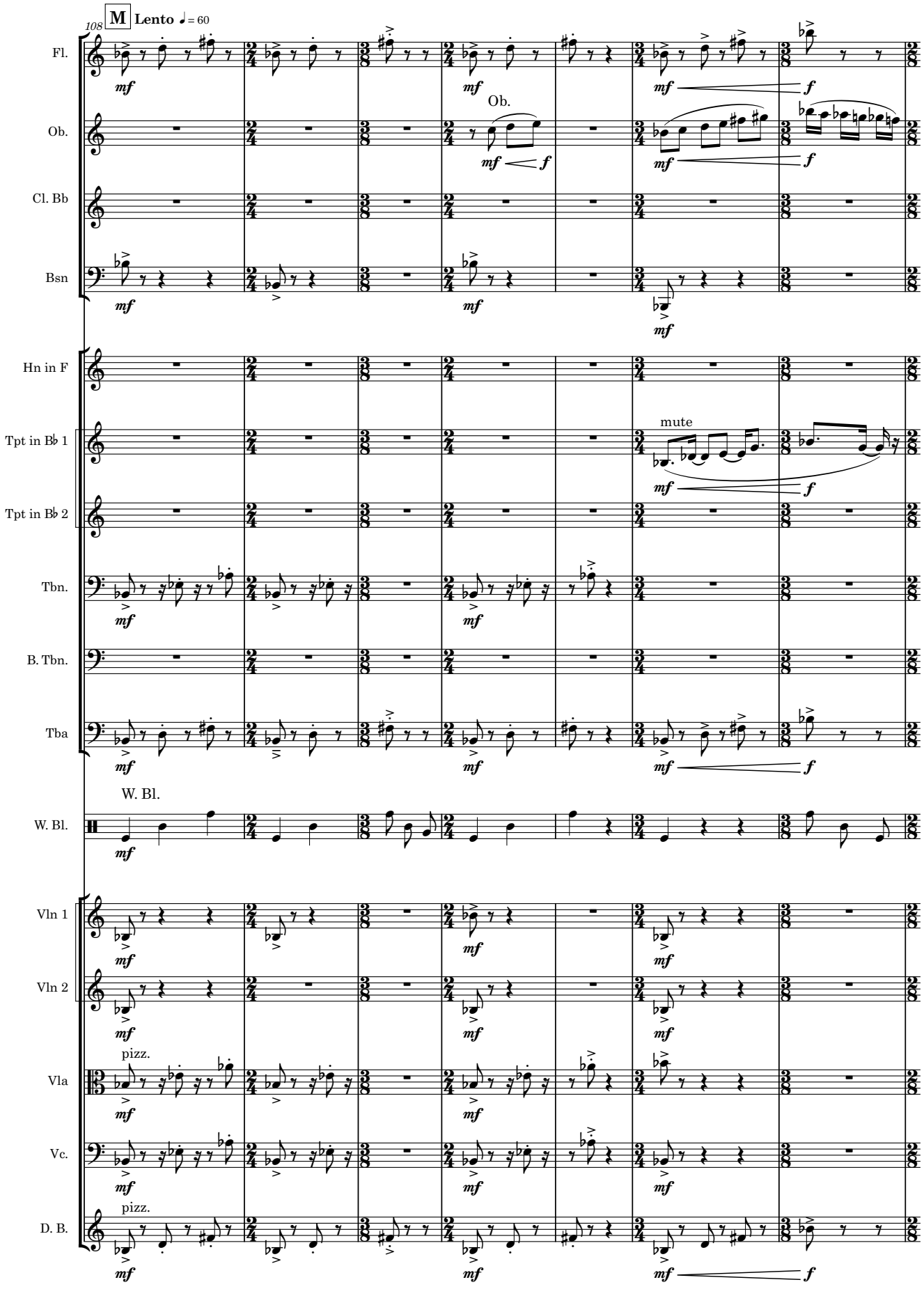

76
Fl.
C. A.
Cl. Bb
Bsn
Hn in F
Tpt in B♭ 1
Tpt in B♭ 2
Tbn.
B. Tbn.
Tba
B. Dr.
Vln 1
Vln 2
Vla
Vc.
D. B.
8va

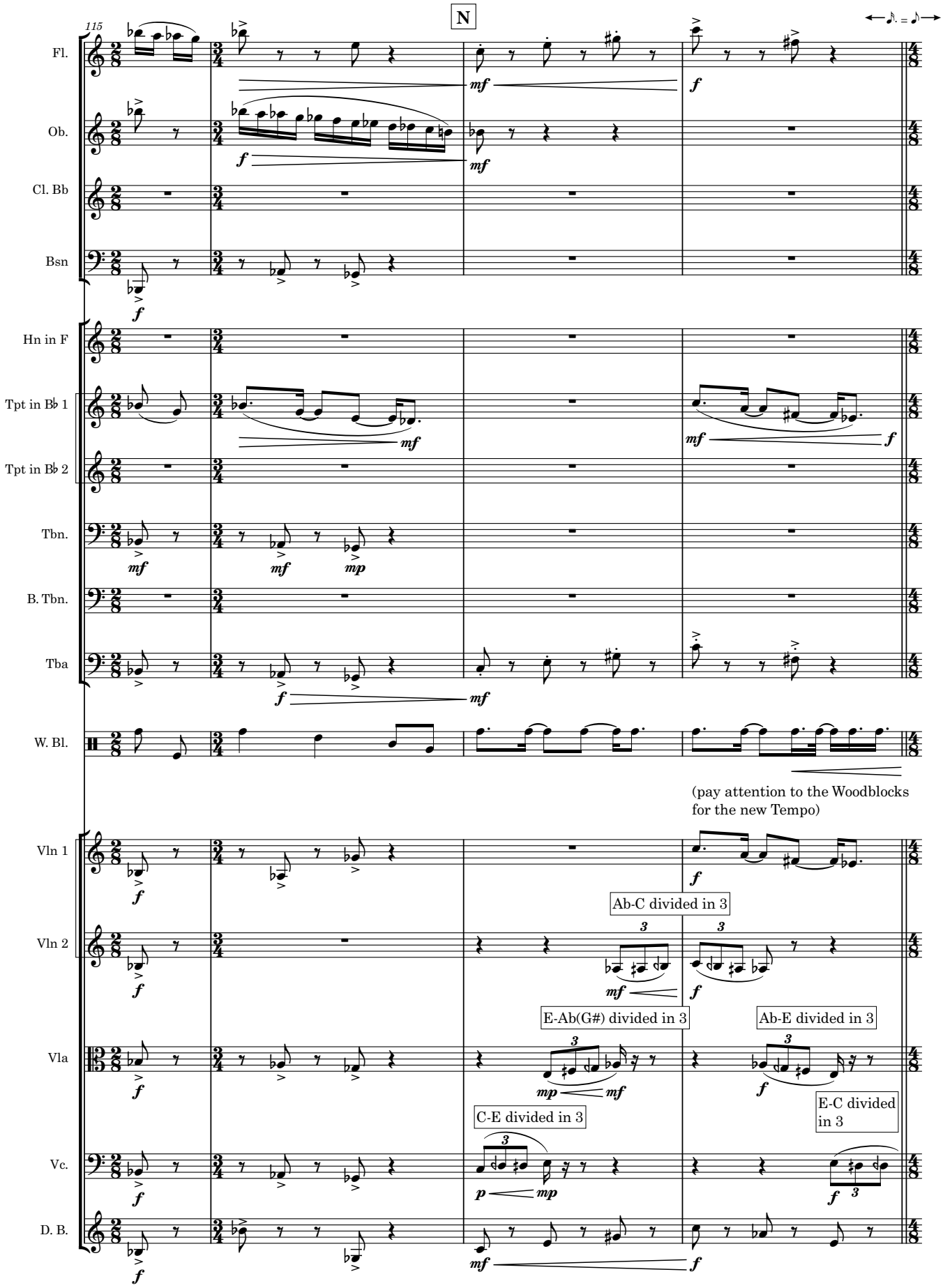

81
rit.
Fl.
C. A.
Cl. Bb
Bsn
To Ob.
Hn in F
Tpt in B♭ 1
Tpt in B♭ 2
Tbn.
B. Tbn.
Tba
To W. Bl.
B. Dr.
Vln 1
Vln 2
Vla
Vc.
D. B.
8va
mf-pp
fpp
ffp

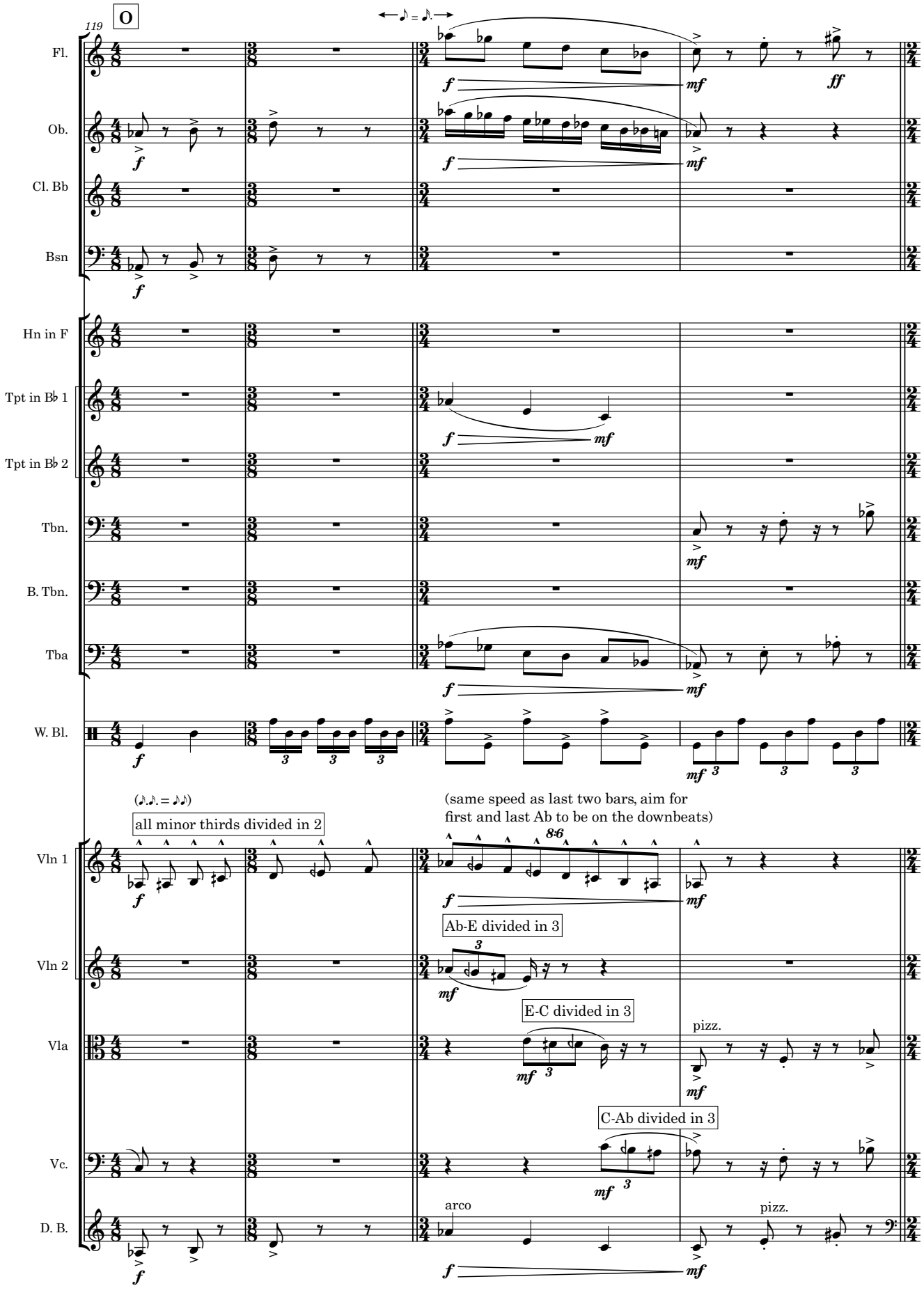
IV. Seeking Time

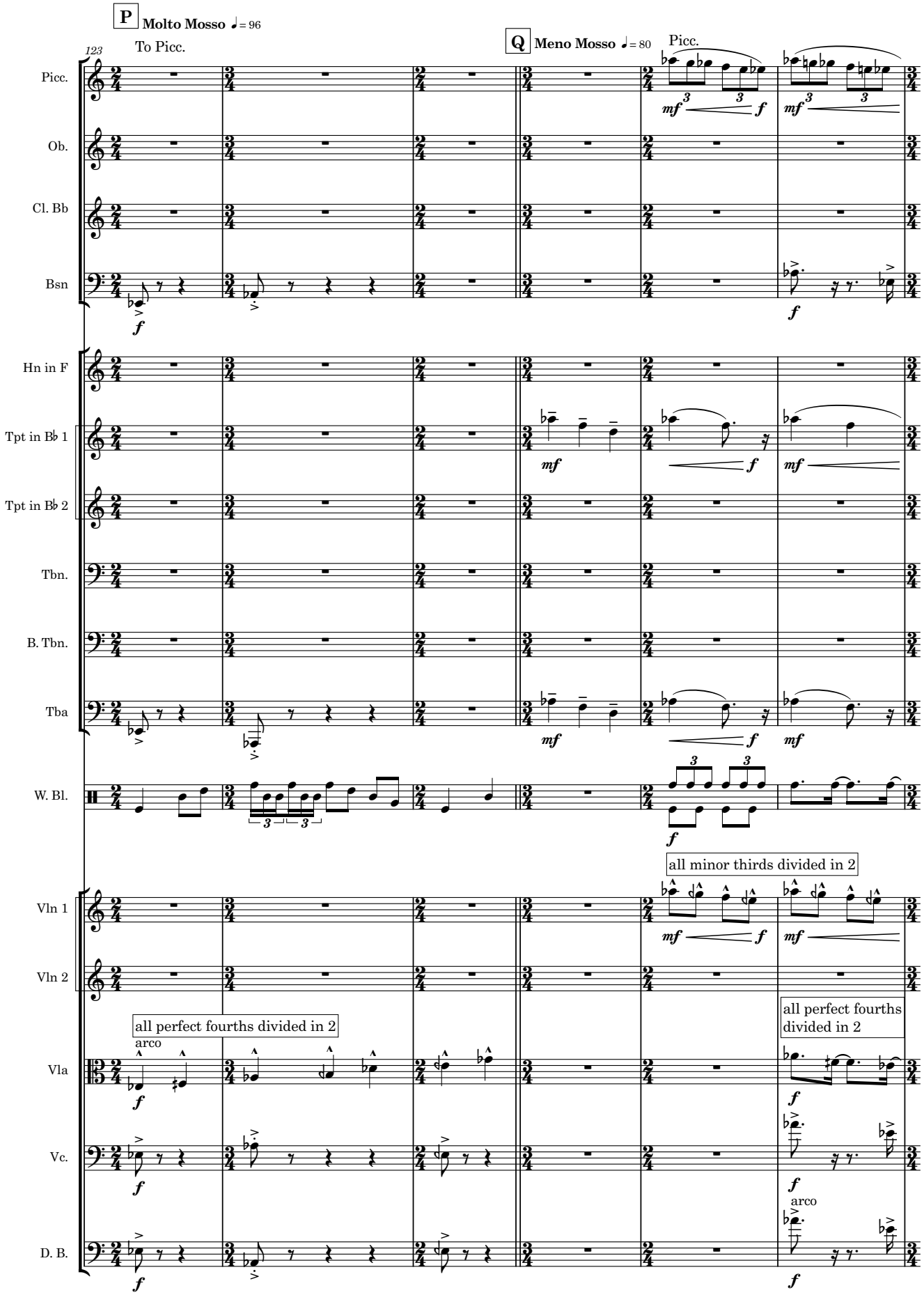


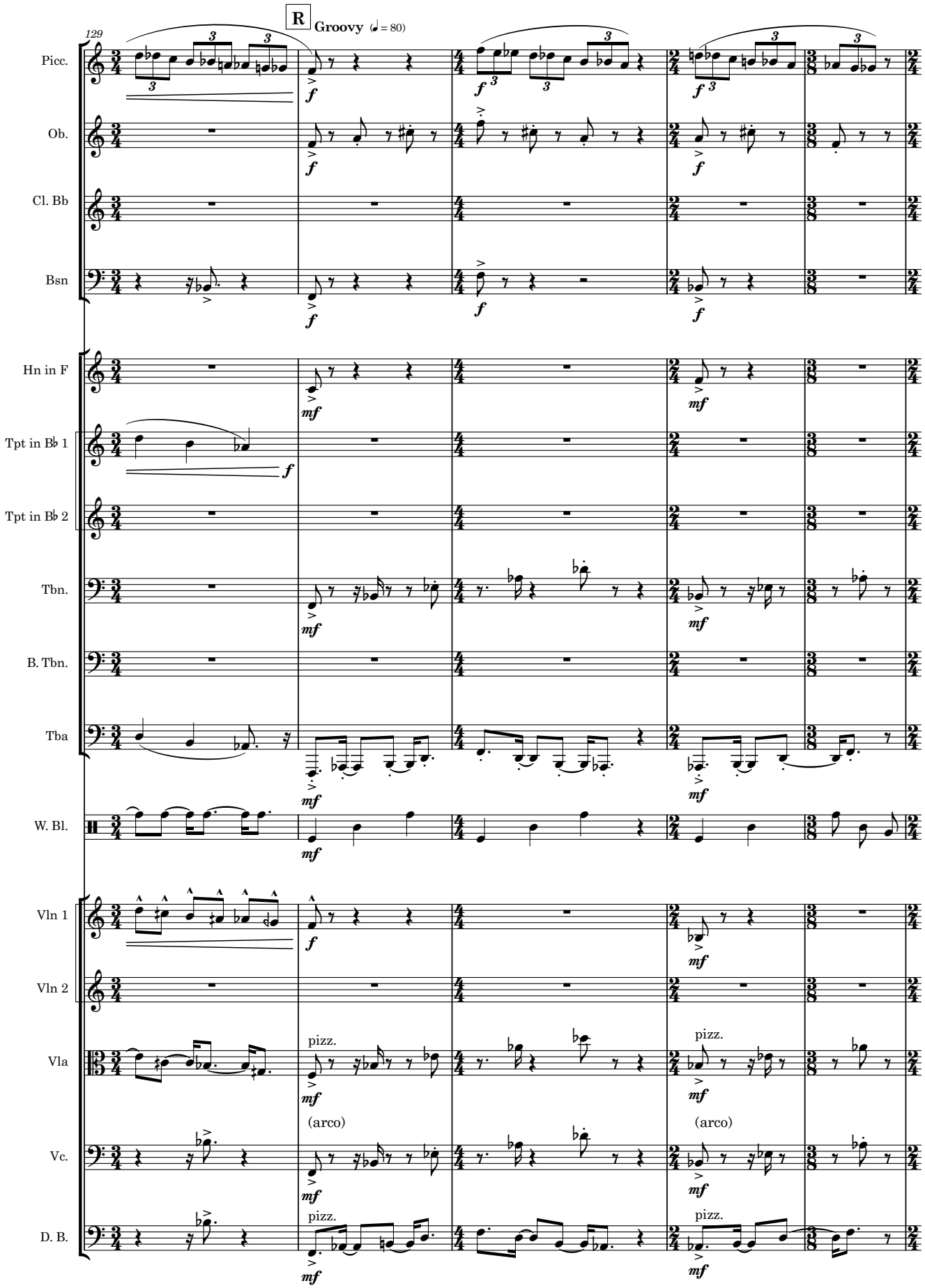

L
93
Hn in F
Tbn.
B. Tbn.
Tba
98
103

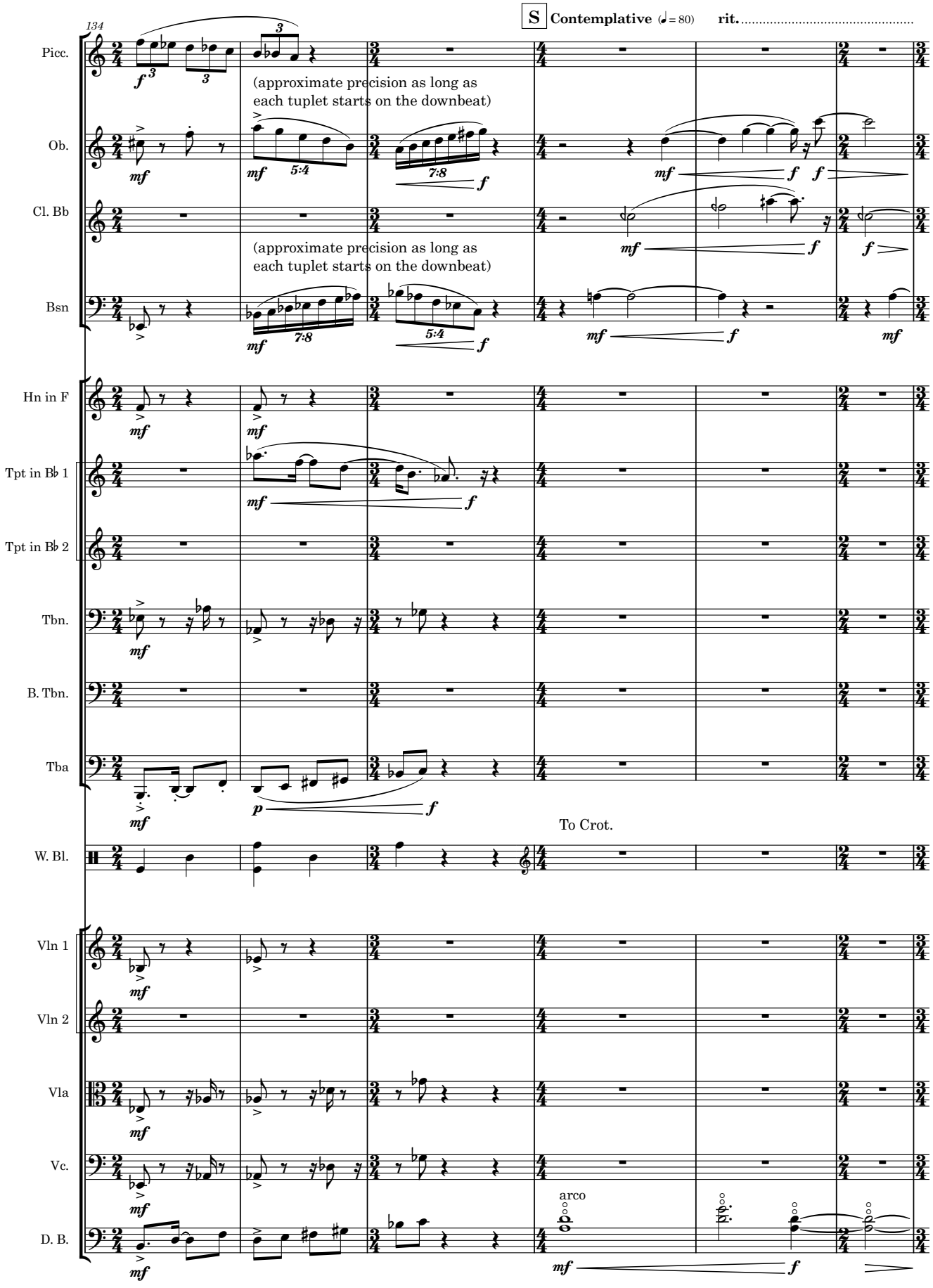

108
M
Lento ♩= 60
Fl.
Ob.
Cl. Bb
Bsn
Hn in F
Tpt in B♭ 1
Tpt in B♭ 2
Tbn.
B. Tbn.
Tba
W. Bl.
Vln 1
Vln 2
Vla
Vc.
D. B.
mf
f
Ob.
mute
pizz.
W. Bl.

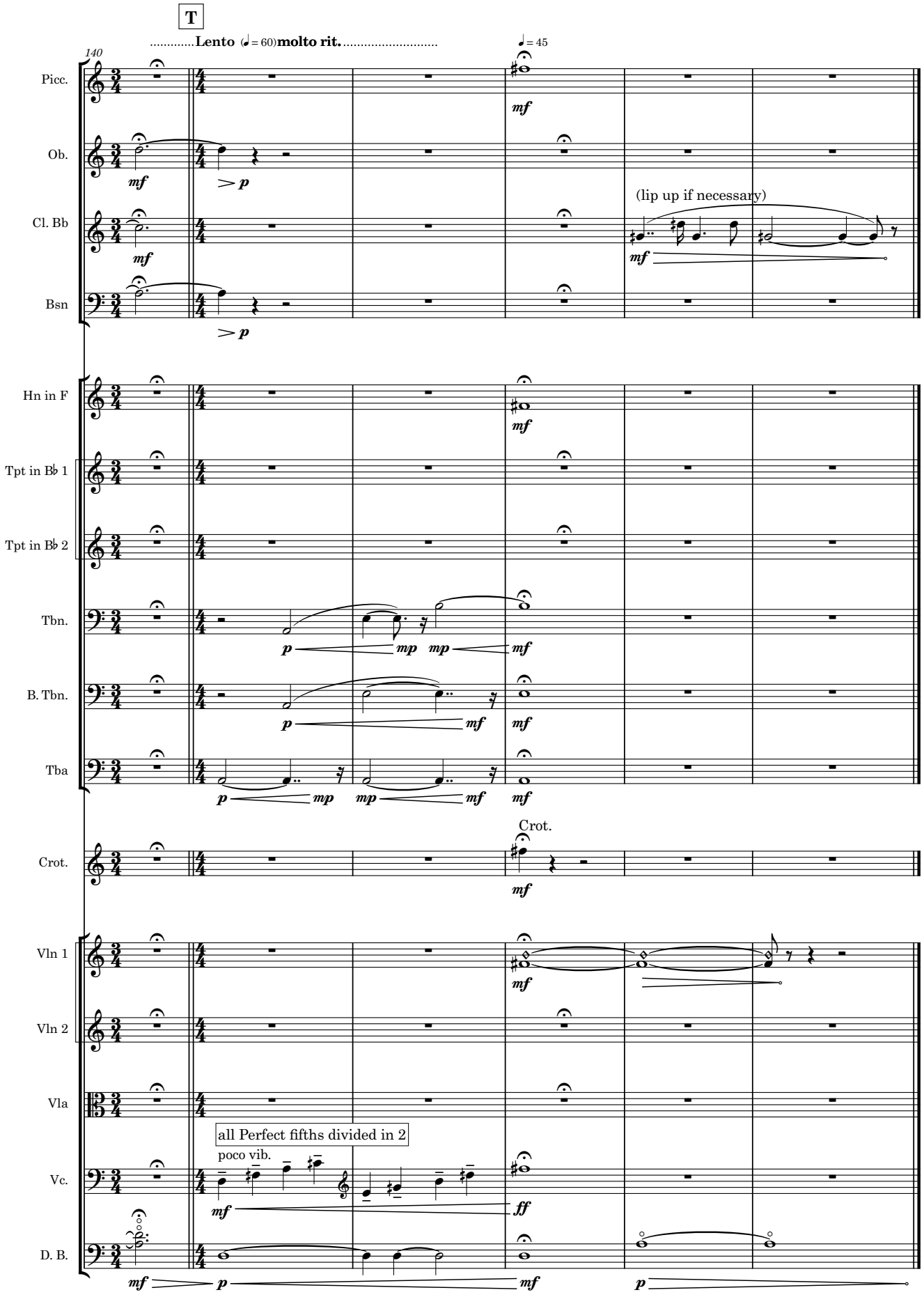

115
N
Fl.
Ob.
Cl. Bb
Bsn
Hn in F
Tpt in B♭ 1
Tpt in B♭ 2
Tbn.
B. Tbn.
Tba
W. Bl.
(pay attention to the Woodblocks for the new Tempo)
Vln 1
Vln 2
Vla
Vc.
D. B.
Ab-C divided in 3
E-Ab(G#) divided in 3
Ab-E divided in 3
C-E divided in 3
E-C divided in 3


119
O
Fl.
Ob.
Cl. Bb
Bsn
Hn in F
Tpt in B♭ 1
Tpt in B♭ 2
Tbn.
B. Tbn.
Tba
W. Bl.
(♪.♪. = ♪♪)
all minor thirds divided in 2
(same speed as last two bars, aim for
first and last Ab to be on the downbeats)
Vln 1
Vln 2
Vla
Vc.
D. B.
Ab-E divided in 3
E-C divided in 3
C-Ab divided in 3
pizz.
arco
pizz.

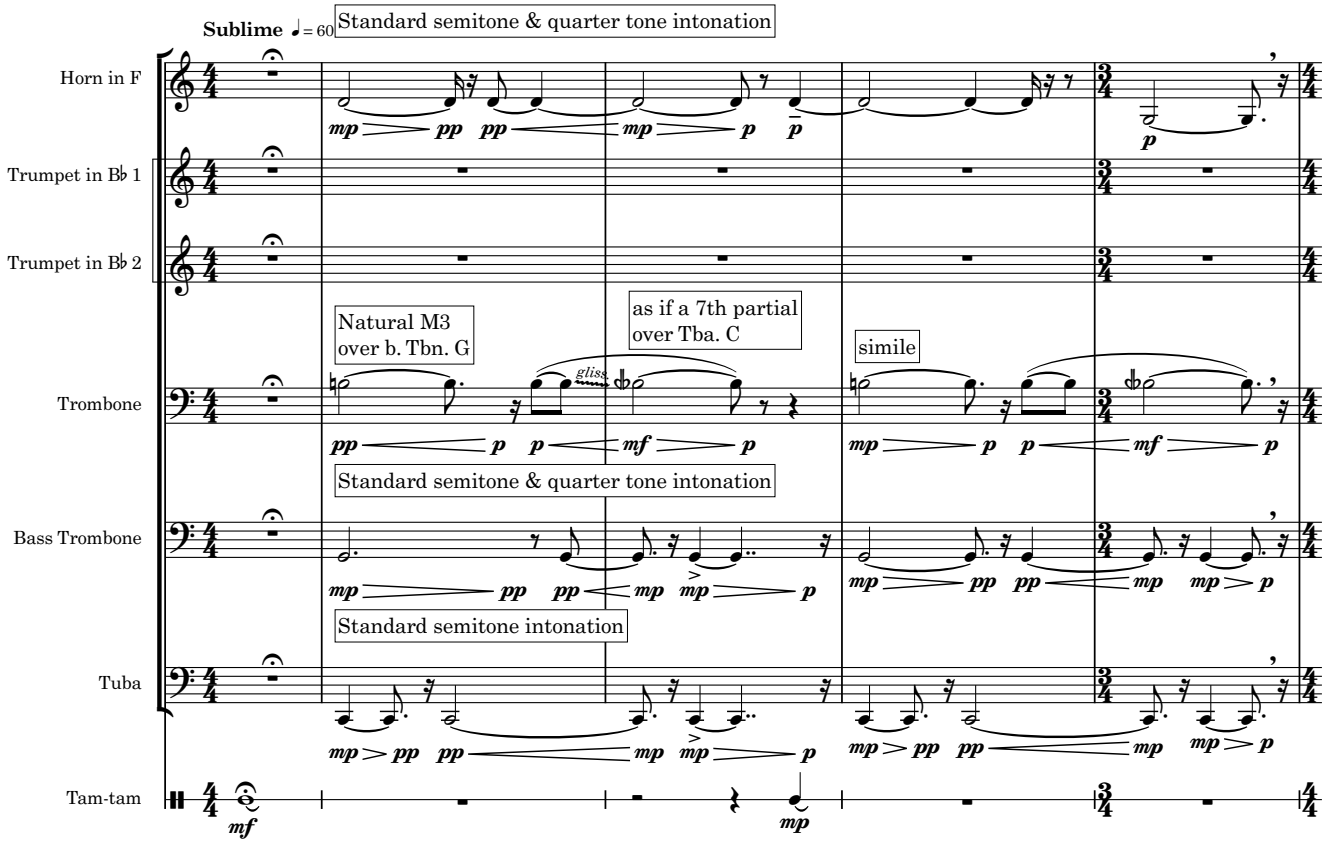

P
Molto Mosso ♩= 96
123
To Picc.
Q
Meno Mosso ♩= 80
Picc.
Picc.
Ob.
Cl. Bb
Bsn
Hn in F
Tpt in B♭ 1
Tpt in B♭ 2
Tbn.
B. Tbn.
Tba
W. Bl.
all minor thirds divided in 2
Vln 1
Vln 2
all perfect fourths divided in 2
arco
Vla
all perfect fourths divided in 2
Vc.
arco
D. B.

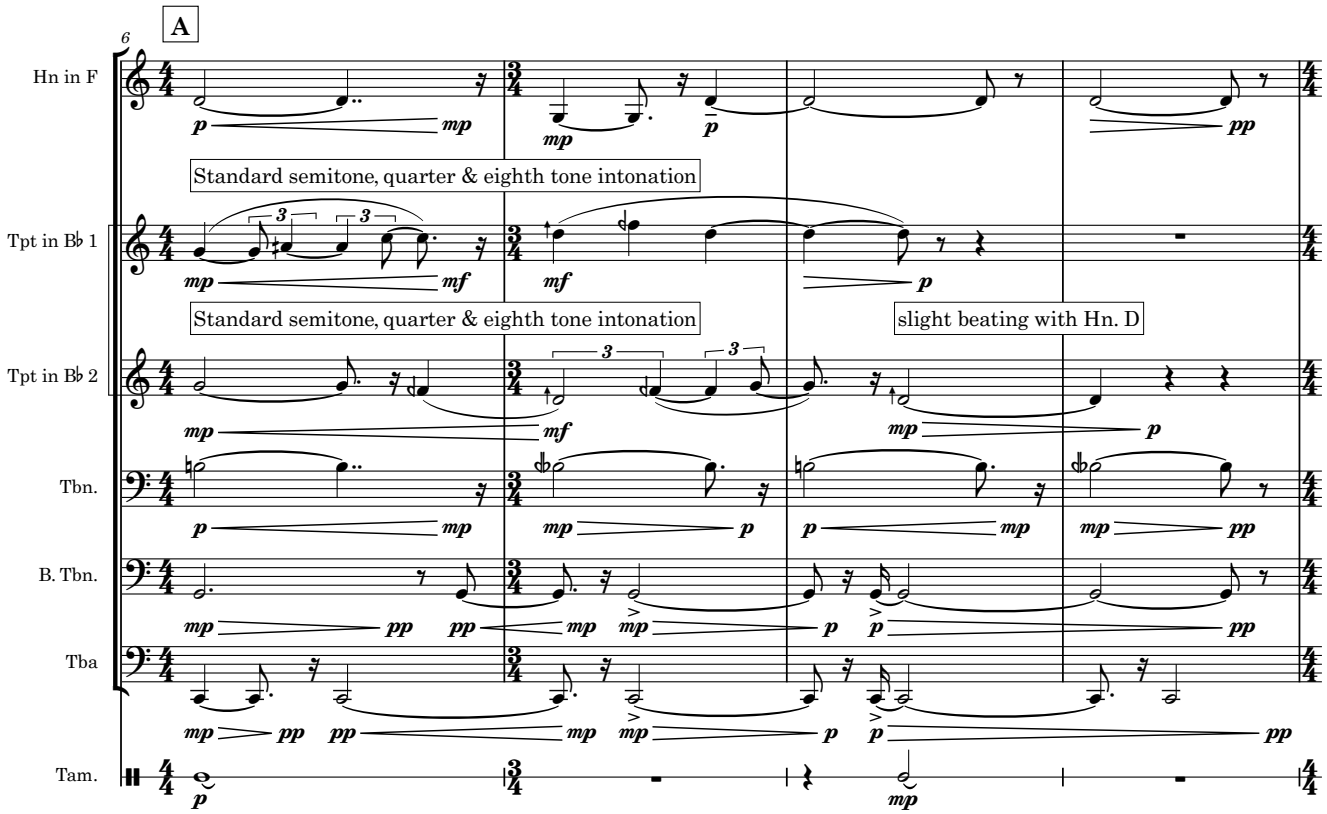

129
R
Groovy (♩ = 80)
Picc.
Ob.
Cl. Bb
Bsn
Hn in F
Tpt in B♭ 1
Tpt in B♭ 2
Tbn.
B. Tbn.
Tba
W. Bl.
Vln 1
Vln 2
Vla
Vc.
D. B.
pizz.
(arco)

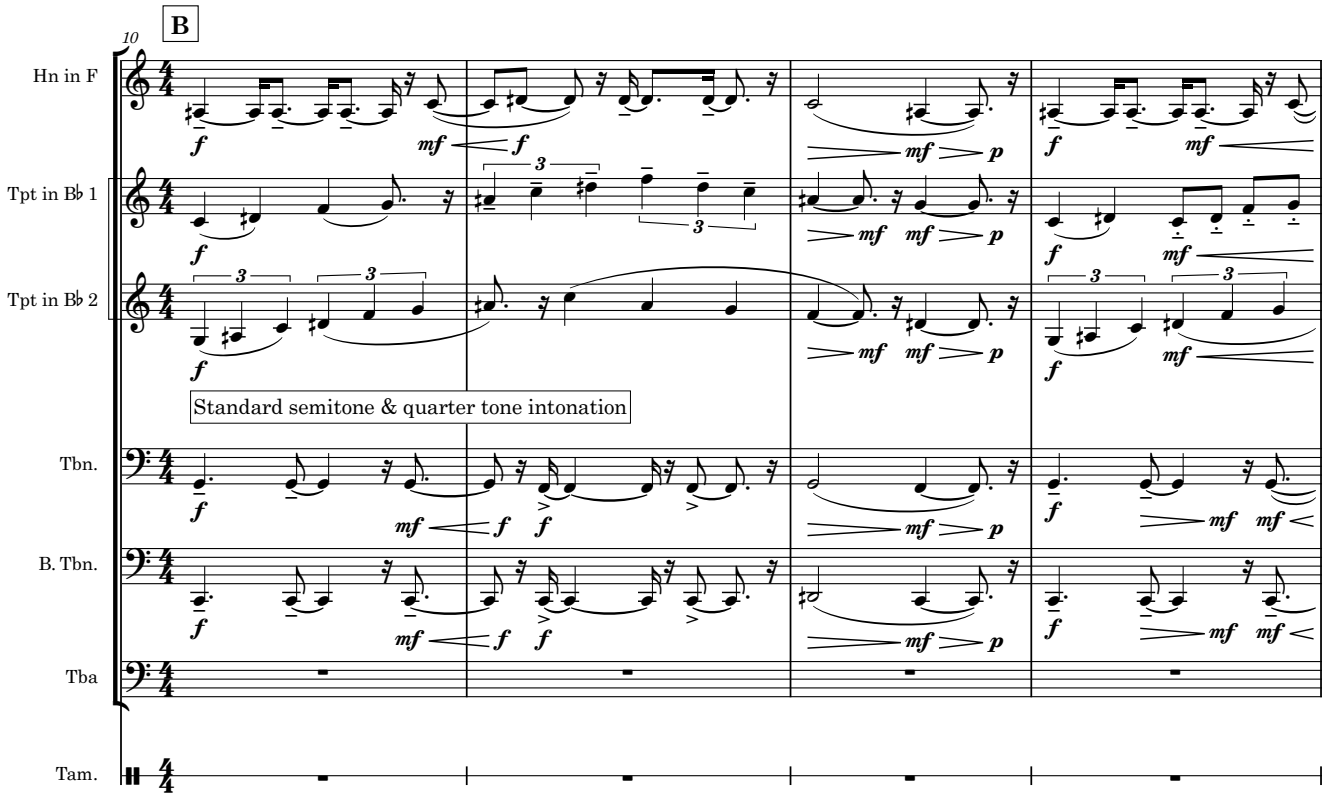

134
S Contemplative (♩= 80) rit.
Picc.
Ob.
Cl. Bb
Bsn
(approximate precision as long as each tuplet starts on the downbeat)
(approximate precision as long as each tuplet starts on the downbeat)
Hn in F
Tpt in B♭ 1
Tpt in B♭ 2
Tbn.
B. Tbn.
Tba
To Crot.
W. Bl.
Vln 1
Vln 2
Vla
Vc.
D. B.
arco

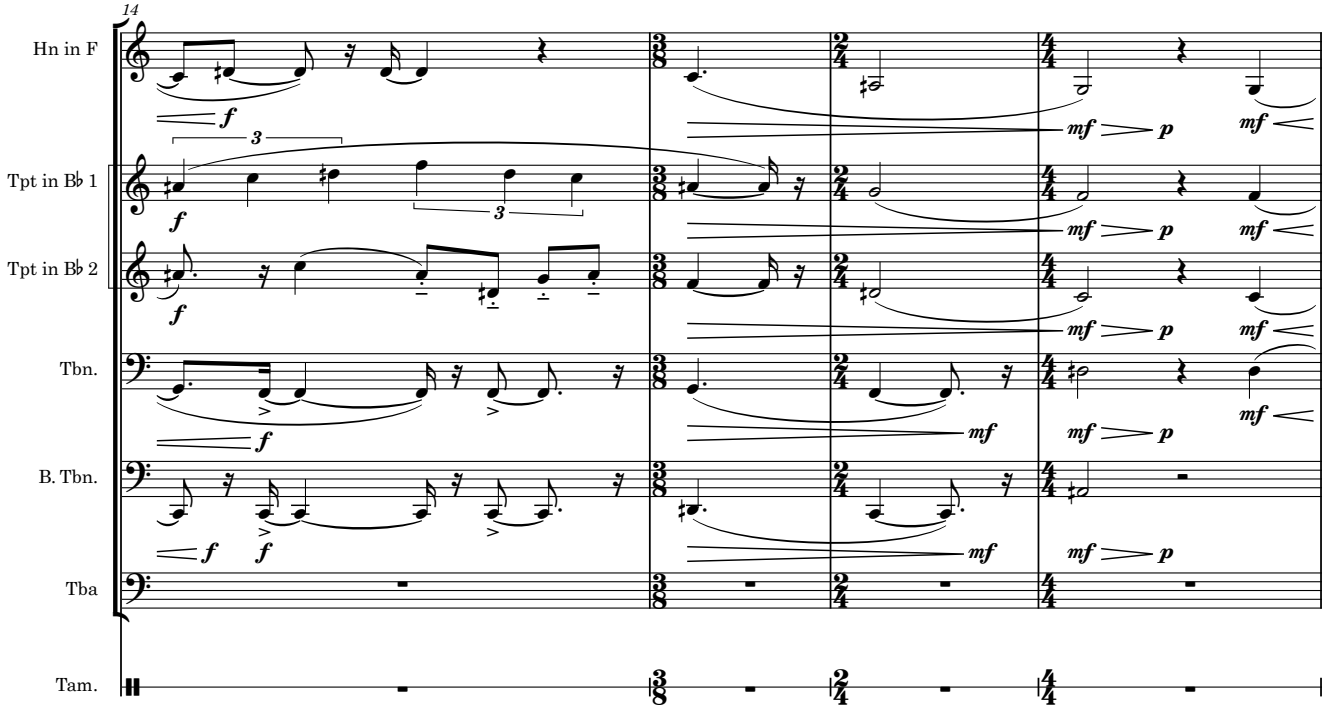

T
Lento (♩= 60) molto rit.
♩= 45
140
Picc.
Ob.
Cl. Bb
Bsn
(lip up if necessary)
Hn in F
Tpt in B♭ 1
Tpt in B♭ 2
Tbn.
B. Tbn.
Tba
Crot.
Crot.
Vln 1
Vln 2
Vla
Vc.
D. B.
all Perfect fifths divided in 2
poco vib.

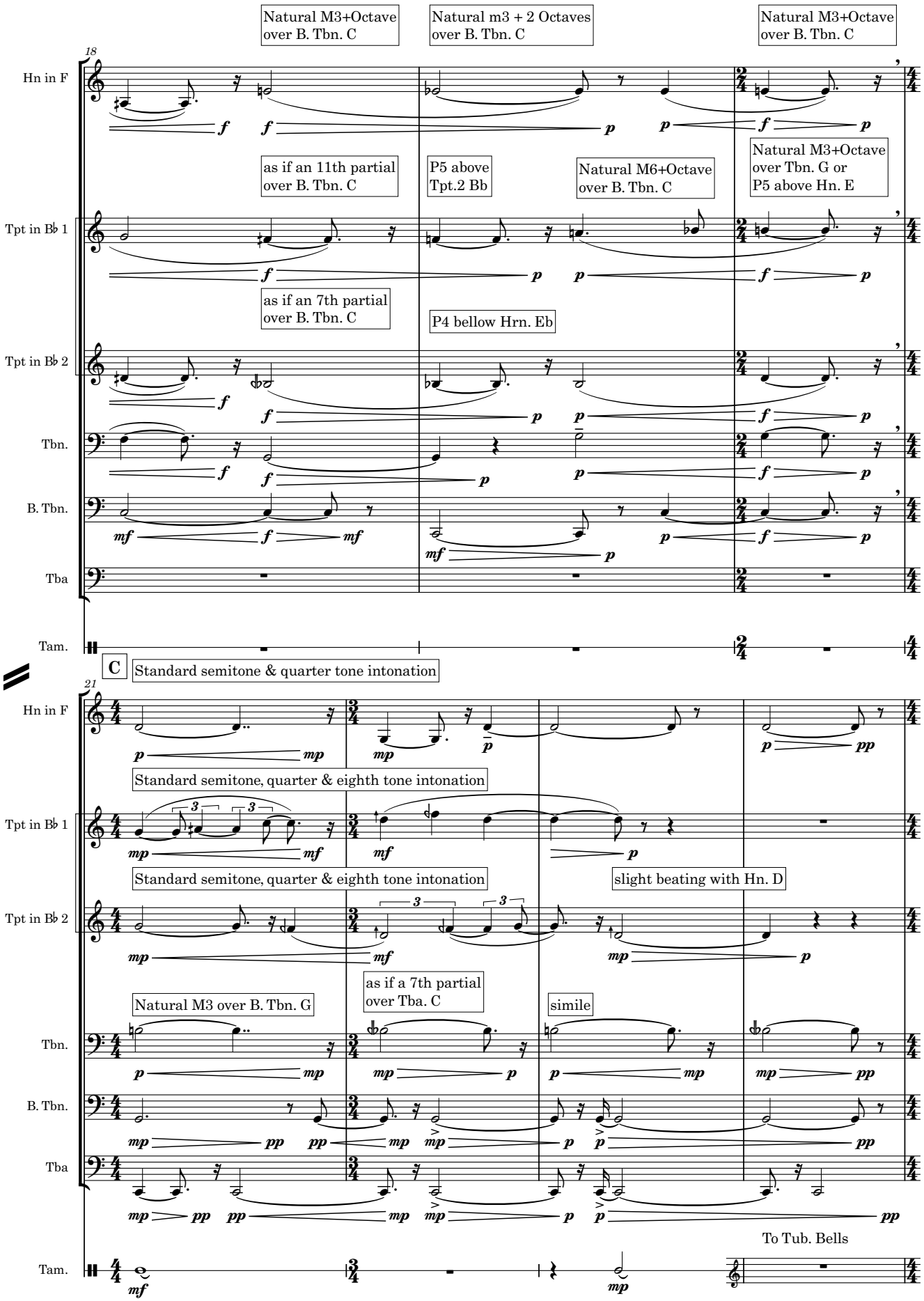
V. Fullness

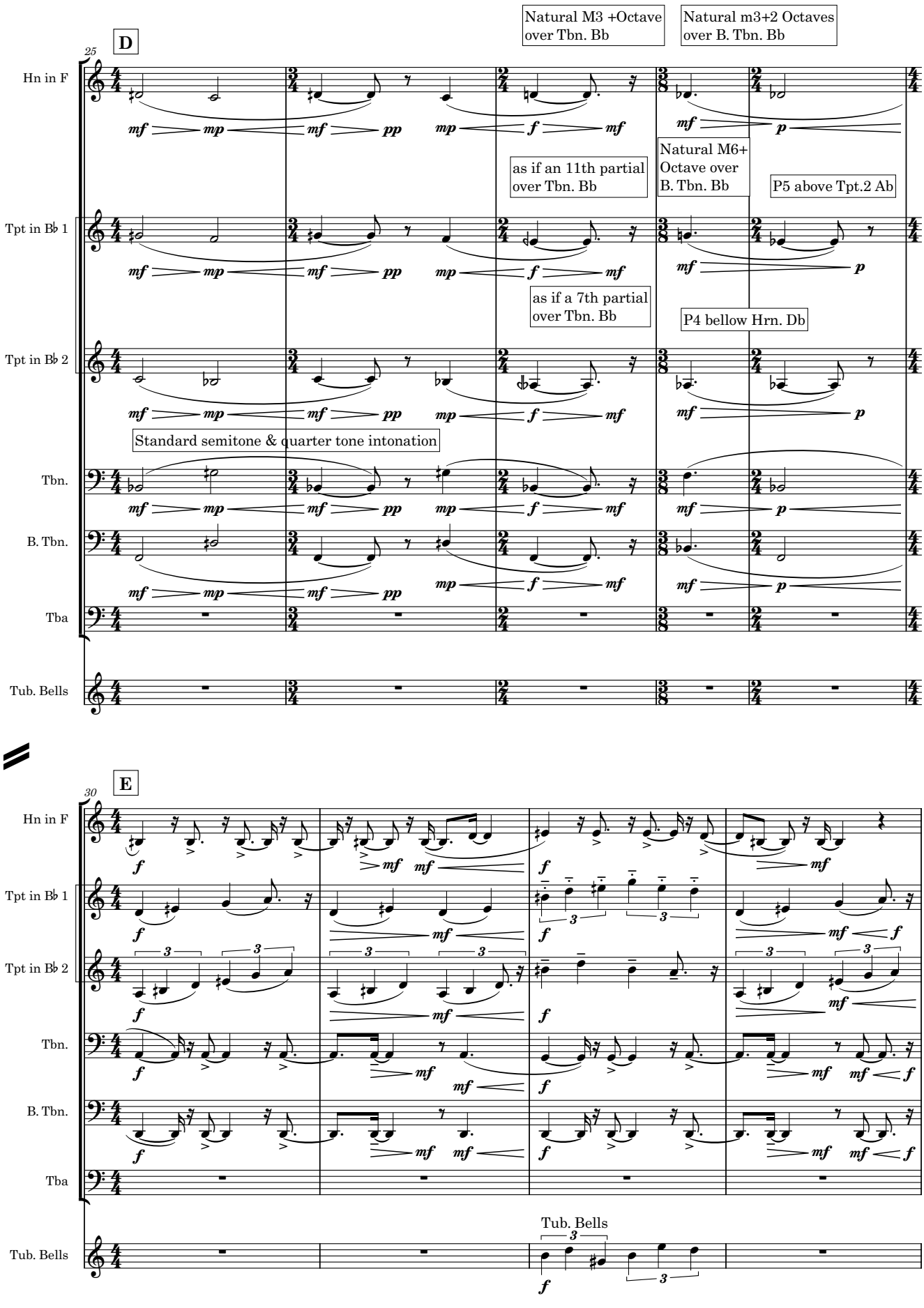

Sublime ♩= 60
Standard semitone & quarter tone intonation
Horn in F
Trumpet in B♭ 1
Trumpet in B♭ 2
Natural M3
over b. Tbn. G
as if a 7th partial
over Tba. C
simile
Trombone
gliss.
Standard semitone & quarter tone intonation
Bass Trombone
Standard semitone intonation
Tuba
Tam-tam

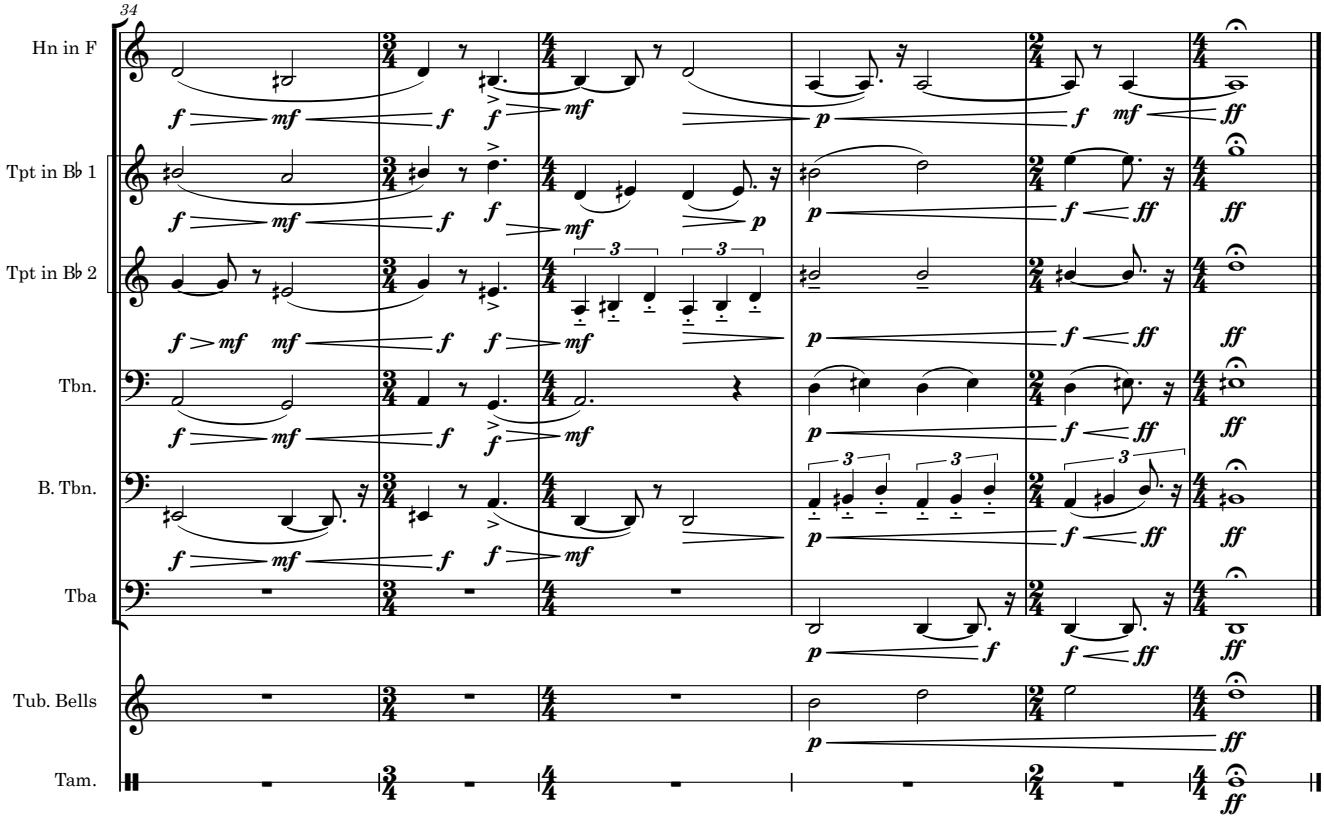

A
Hn in F
Standard semitone, quarter & eighth tone intonation
Tpt in B♭ 1
Standard semitone, quarter & eighth tone intonation
slight beating with Hn. D
Tpt in B♭ 2
Tbn.
B. Tbn.
Tba
Tam.


10
B
Hn in F
Tpt in B♭ 1
Tpt in B♭ 2
Standard semitone & quarter tone intonation
Tbn.
B. Tbn.
Tba
Tam.

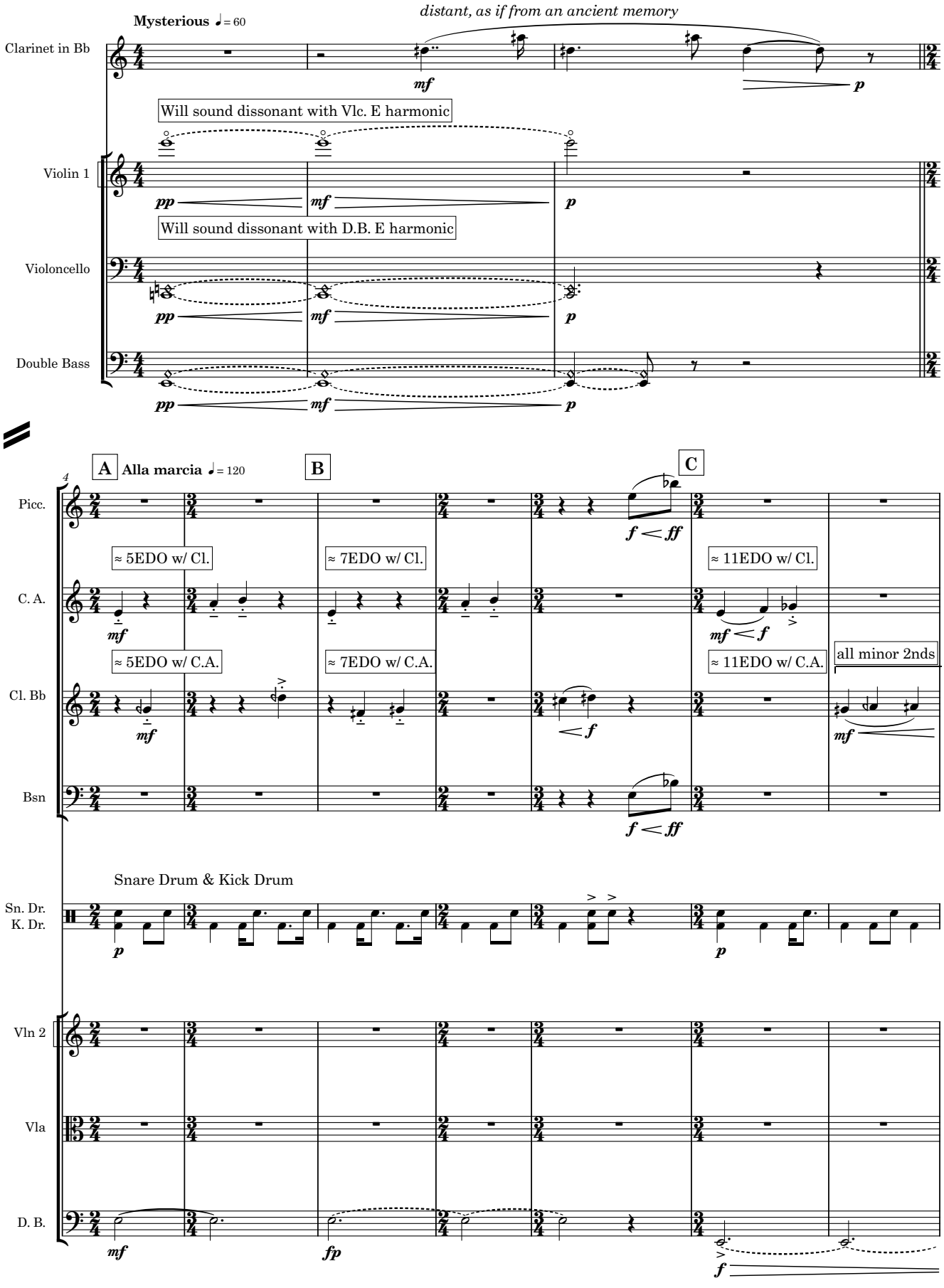

14
Hn in F
Tpt in B♭ 1
Tpt in B♭ 2
Tbn.
B. Tbn.
Tba
Tam.

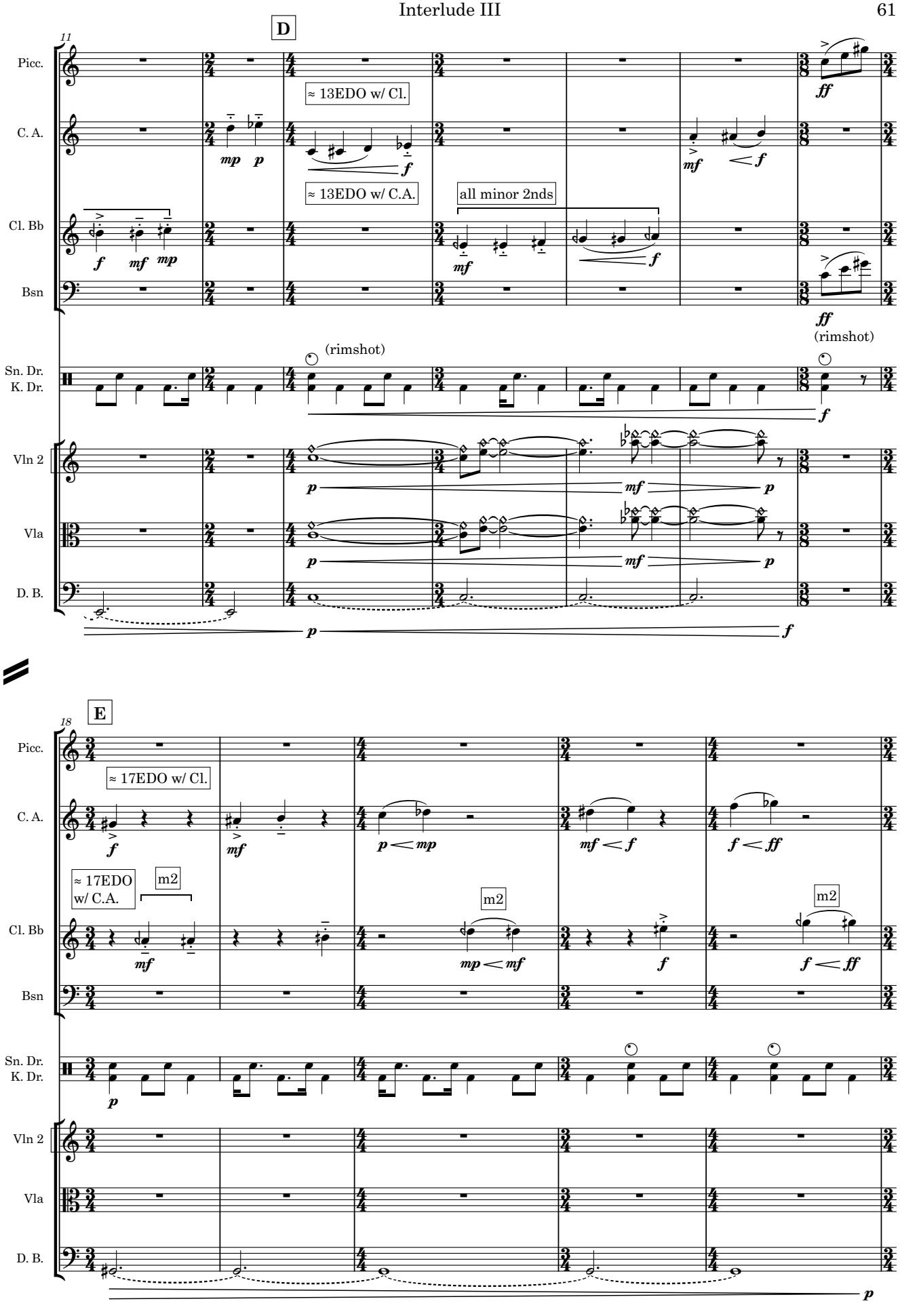

18
Natural M3+Octave over B. Tbn. C
Natural m3 + 2 Octaves over B. Tbn. C
Natural M3+Octave over B. Tbn. C
Hn in F
as if an 11th partial over B. Tbn. C
P5 above Tpt.2 Bb
Natural M6+Octave over B. Tbn. C
Natural M3+Octave over Tbn. G or P5 above Hn. E
Tpt in B♭ 1
as if an 7th partial over B. Tbn. C
P4 bellow Hrn. Eb
Tpt in B♭ 2
Tbn.
B. Tbn.
Tba
Tam.
C
Standard semitone & quarter tone intonation
21
Hn in F
Standard semitone, quarter & eighth tone intonation
Tpt in B♭ 1
Standard semitone, quarter & eighth tone intonation
slight beating with Hn. D
Tpt in B♭ 2
as if a 7th partial over Tba. C
Natural M3 over B. Tbn. G
simile
Tbn.
B. Tbn.
Tba
To Tub. Bells
Tam.

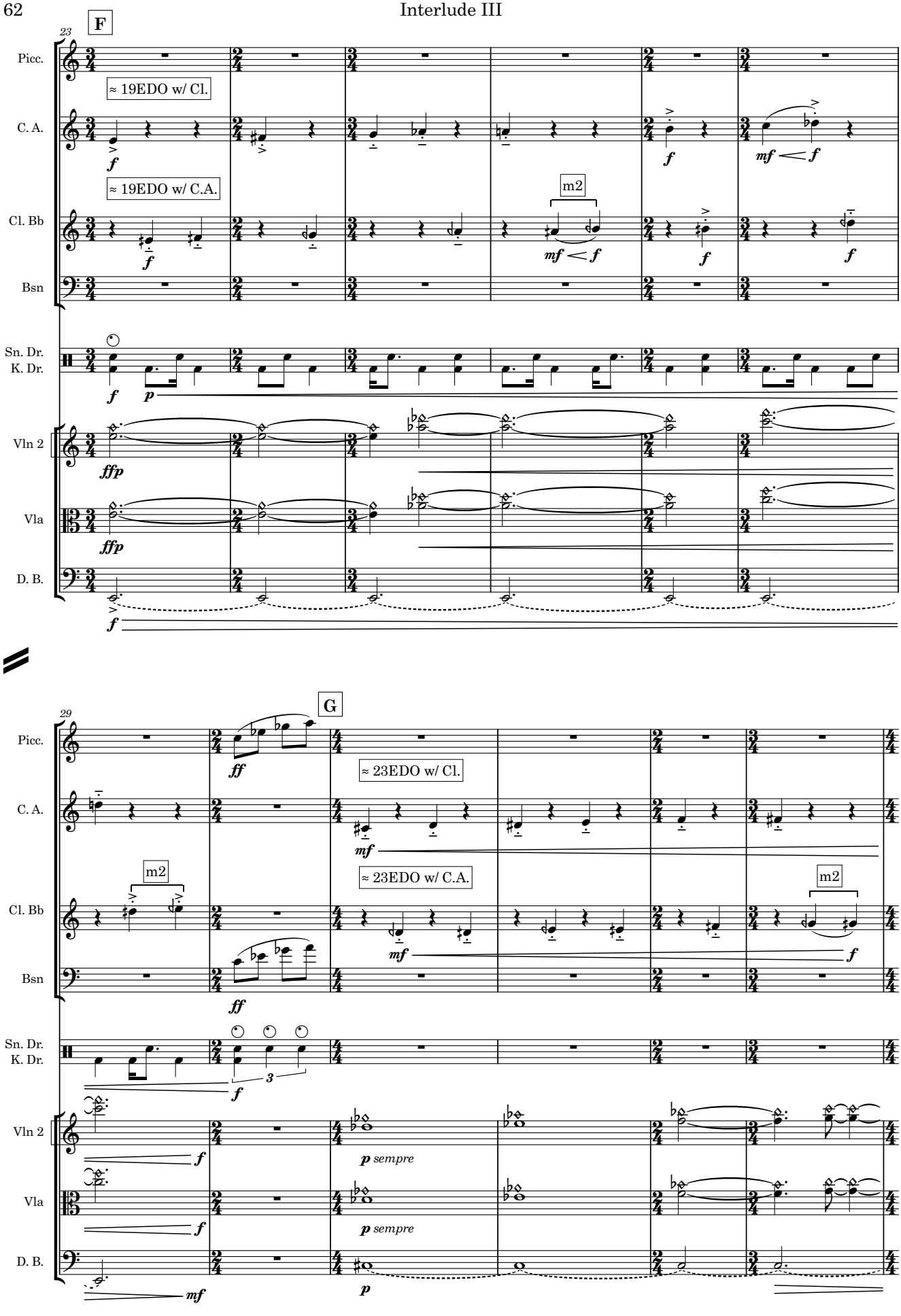

D
25
Natural M3 +Octave over Tbn. Bb
Natural m3+2 Octaves over B. Tbn. Bb
Natural M6+ Octave over B. Tbn. Bb
P5 above Tpt.2 Ab
as if an 11th partial over Tbn. Bb
as if a 7th partial over Tbn. Bb
P4 bellow Hrn. Db
Standard semitone & quarter tone intonation
Hn in F
Tpt in B♭ 1
Tpt in B♭ 2
Tbn.
B. Tbn.
Tba
Tub. Bells
E
30
Tub. Bells

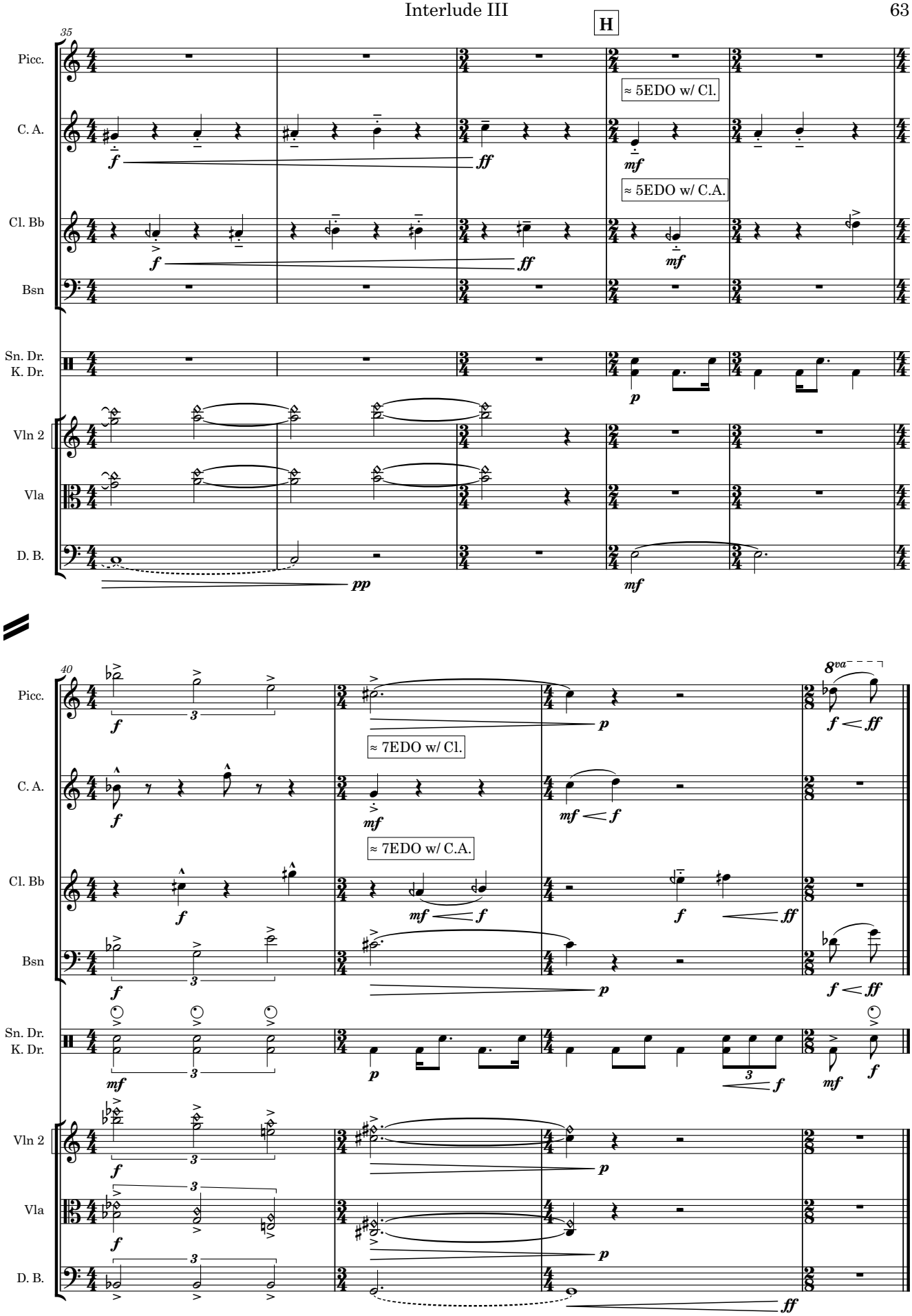

34
Hn in F
Tpt in B♭ 1
Tpt in B♭ 2
Tbn.
B. Tbn.
Tba
Tub. Bells
Tam.

Interlude III

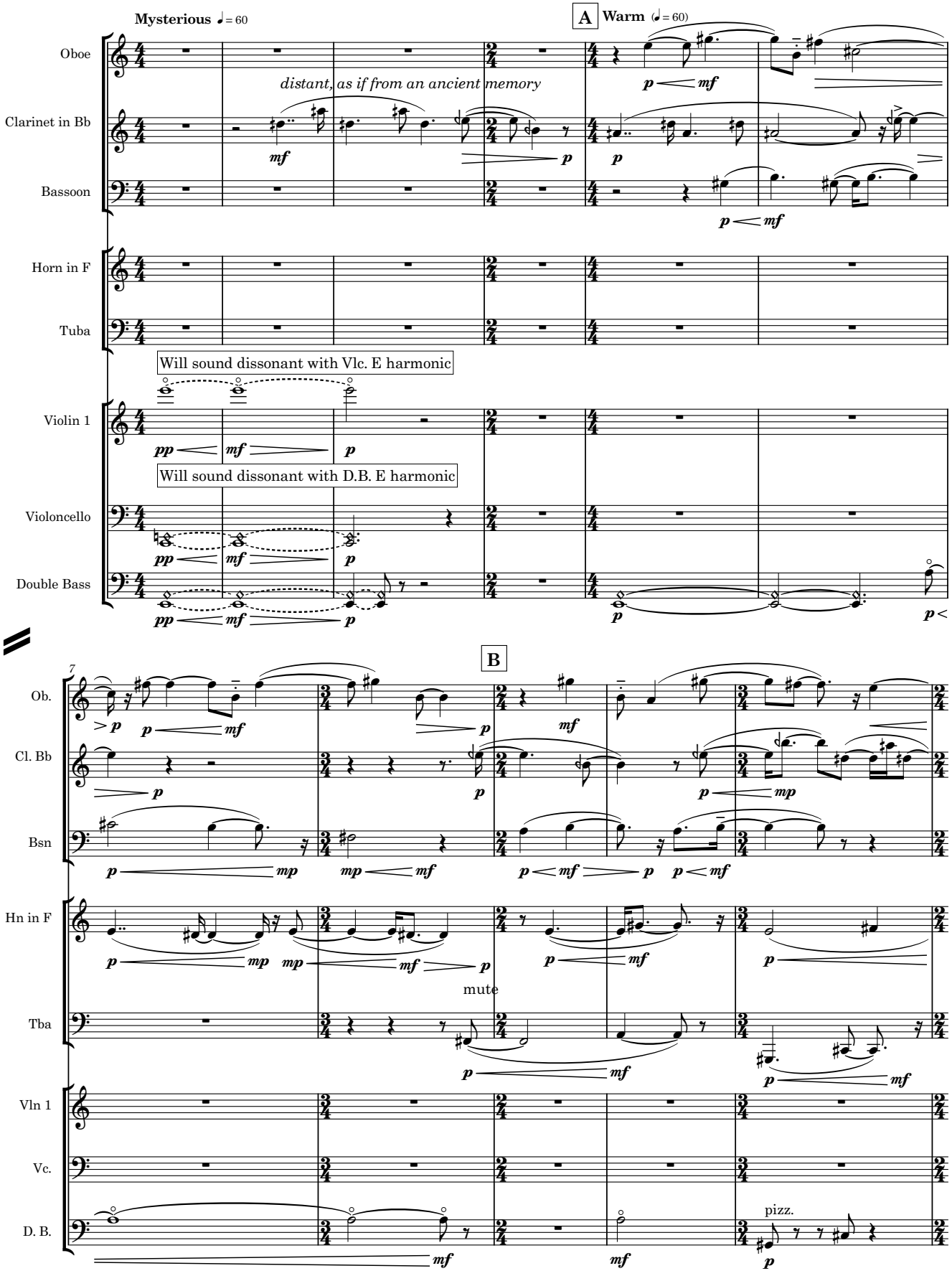


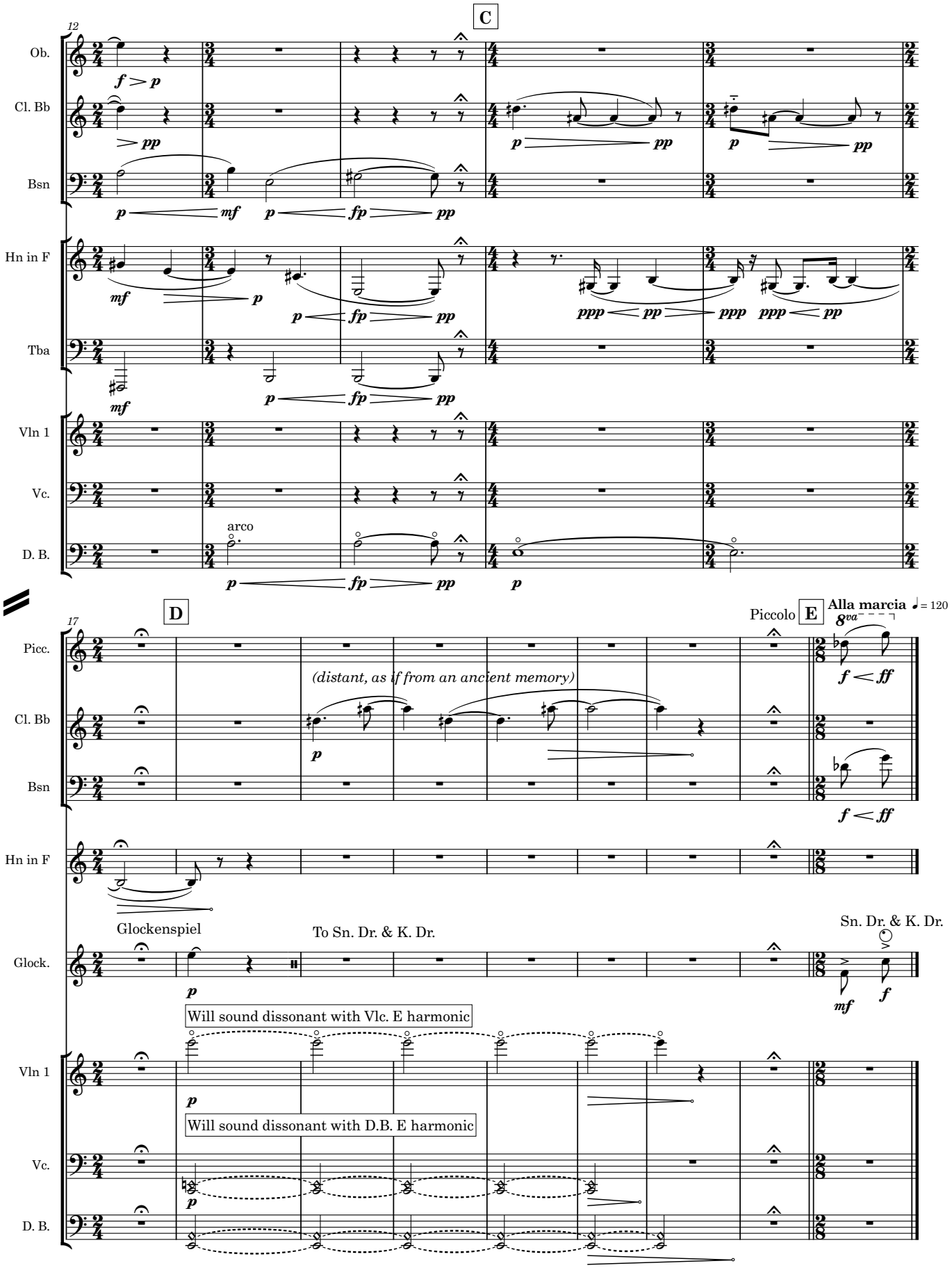

D
11
Picc.
C. A.
Cl. Bb
Bsn
Sn. Dr.
K. Dr.
Vln 2
Vla
D. B.
≈ 13EDO w/ Cl.
≈ 13EDO w/ C.A.
all minor 2nds
(rimshot)
(rimshot)
E
18
≈ 17EDO w/ Cl.
≈ 17EDO w/ C.A.
m2
m2
m2


F
23
Picc.
≈ 19EDO w/ Cl.
C. A.
≈ 19EDO w/ C.A.
m2
Cl. Bb
Bsn
Sn. Dr.
K. Dr.
Vln 2
Vla
D. B.
G
29
≈ 23EDO w/ Cl.
≈ 23EDO w/ C.A.
m2
p sempre

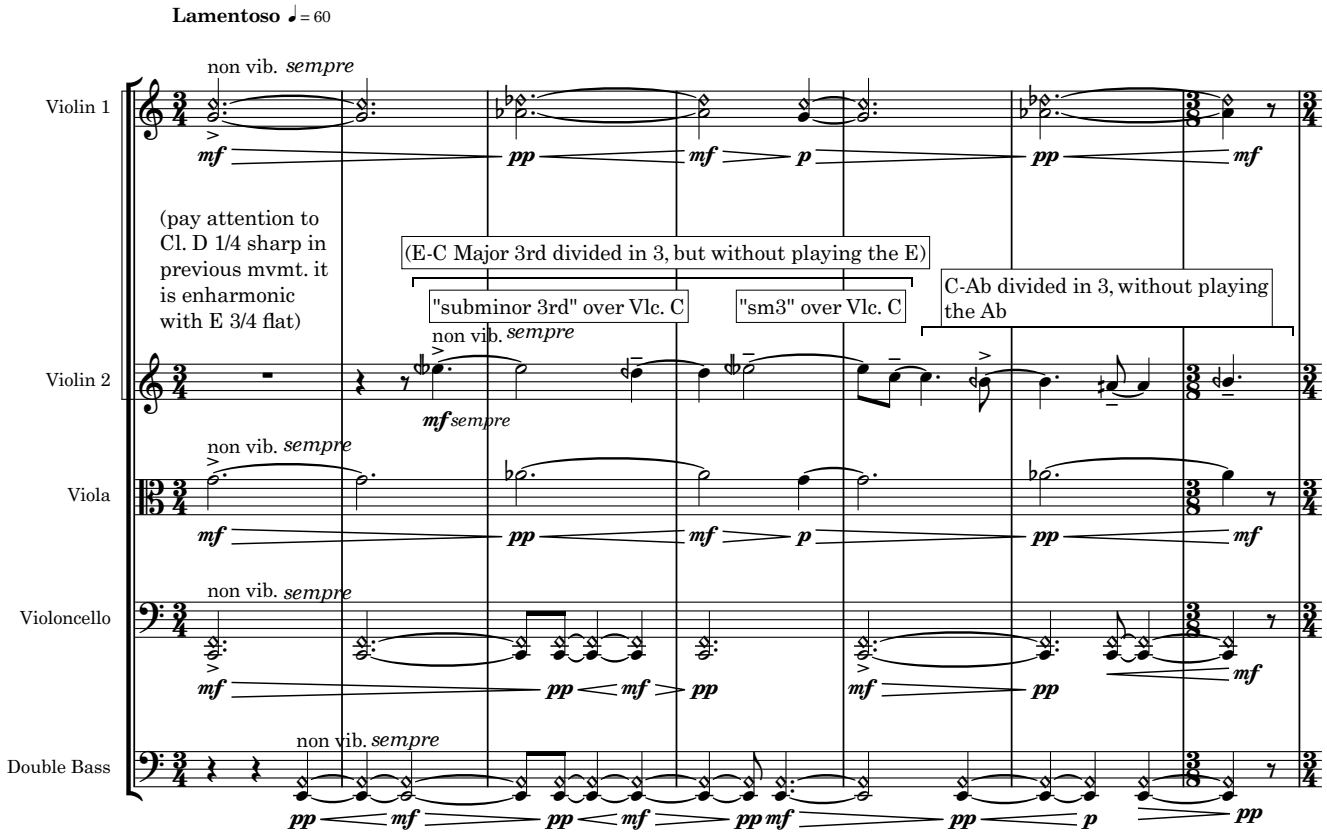

H
35
Picc.
C. A.
Cl. Bb
Bsn
Sn. Dr.
K. Dr.
Vln 2
Vla
D. B.
≈ 5EDO w/ Cl.
≈ 5EDO w/ C.A.
40
≈ 7EDO w/ Cl.
≈ 7EDO w/ C.A.
8va

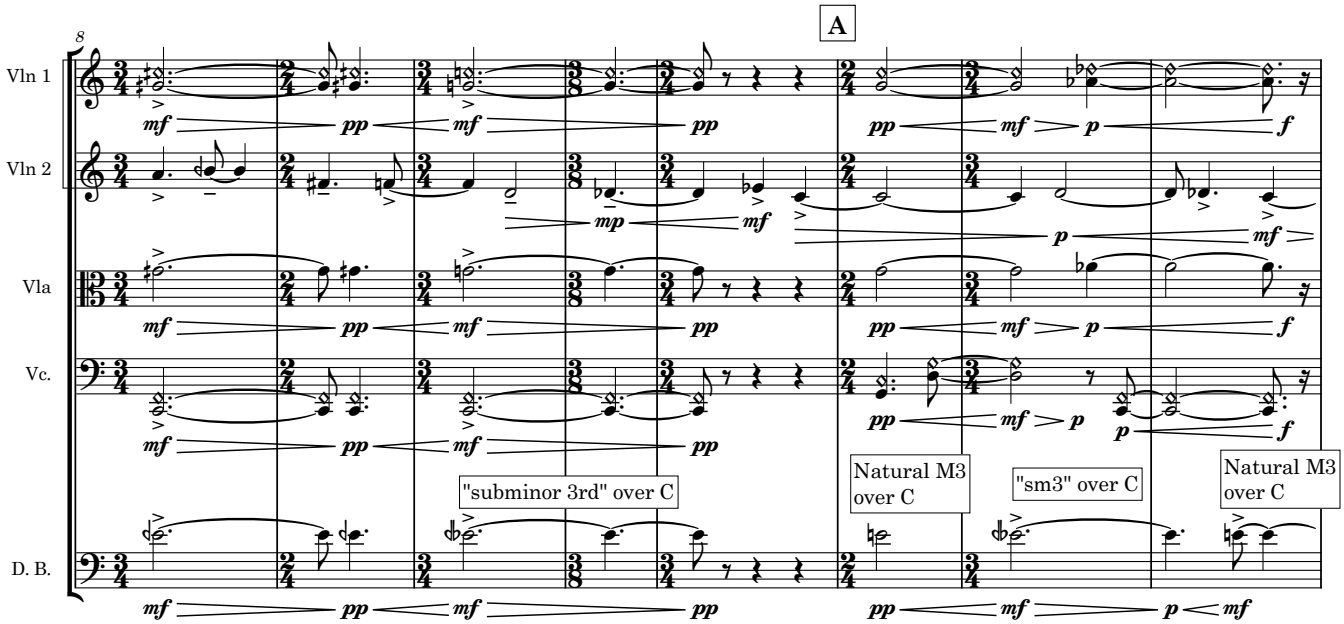
Lullaby

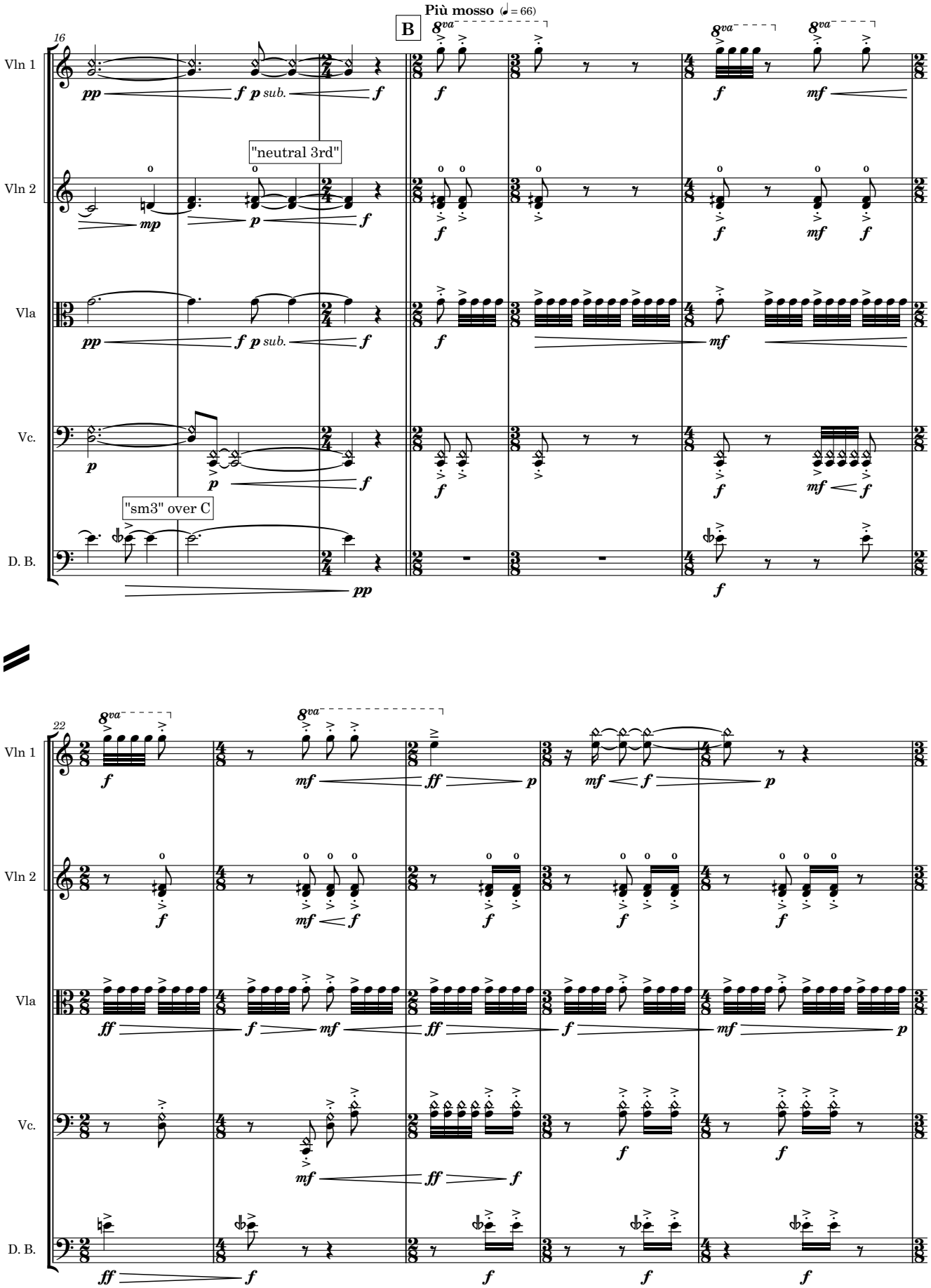

Mysterious ♩= 60
A
Warm (𝅗𝅥= 60)
Oboe
Clarinet in Bb
Bassoon
Horn in F
Tuba
Violin 1
Violoncello
Double Bass
distant, as if from an ancient memory
Will sound dissonant with Vlc. E harmonic
Will sound dissonant with D.B. E harmonic
B
Ob.
Cl. Bb
Bsn
Hn in F
Tba
Vln 1
Vc.
D. B.
mute
pizz.

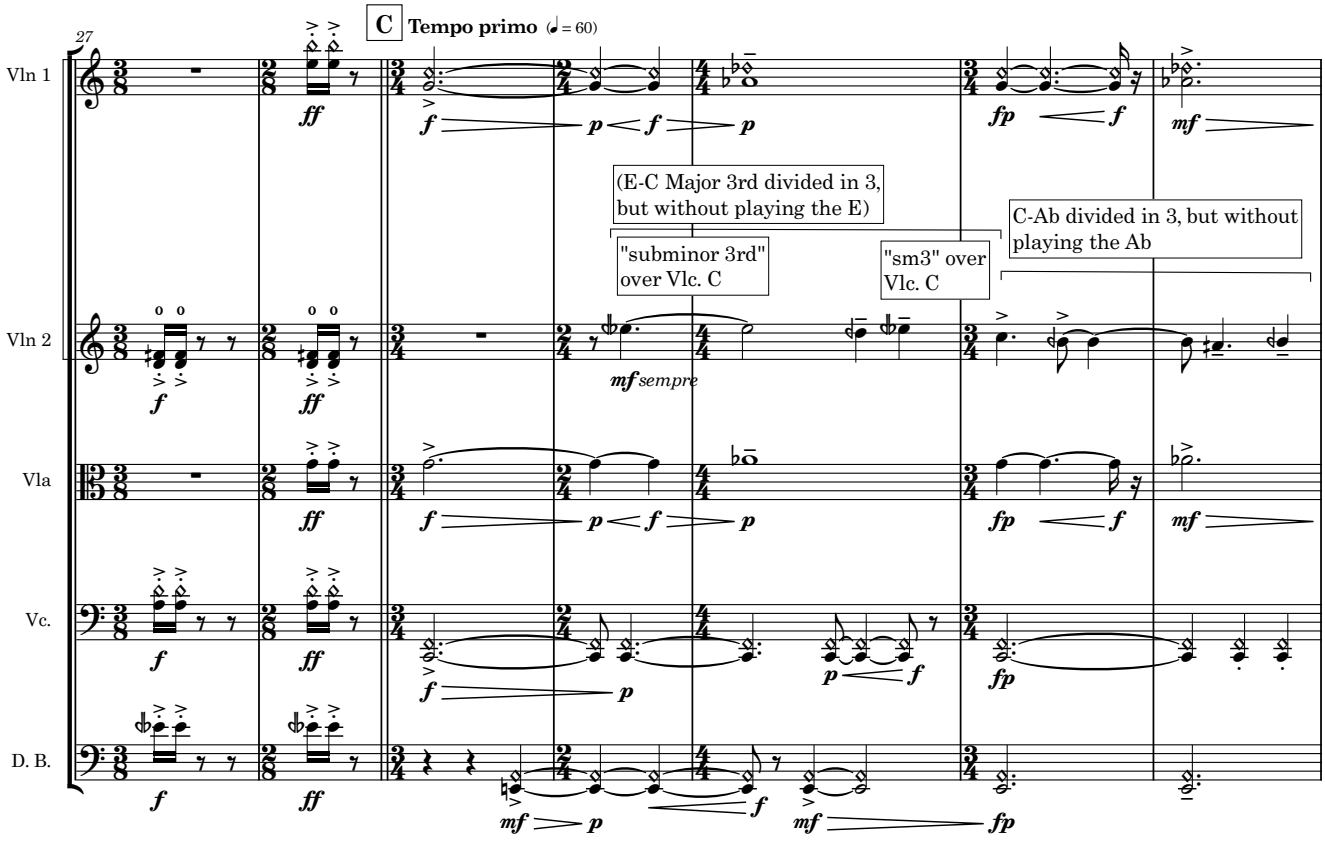

C
12
Ob.
Cl. Bb
Bsn
Hn in F
Tba
Vln 1
Vc.
D. B.
arco
D
17
Piccolo
E
Alla marcia
8va
Picc.
(distant, as if from an ancient memory)
Glockenspiel
To Sn. Dr. & K. Dr.
Sn. Dr. & K. Dr.
Glock.
Will sound dissonant with Vlc. E harmonic
Will sound dissonant with D.B. E harmonic

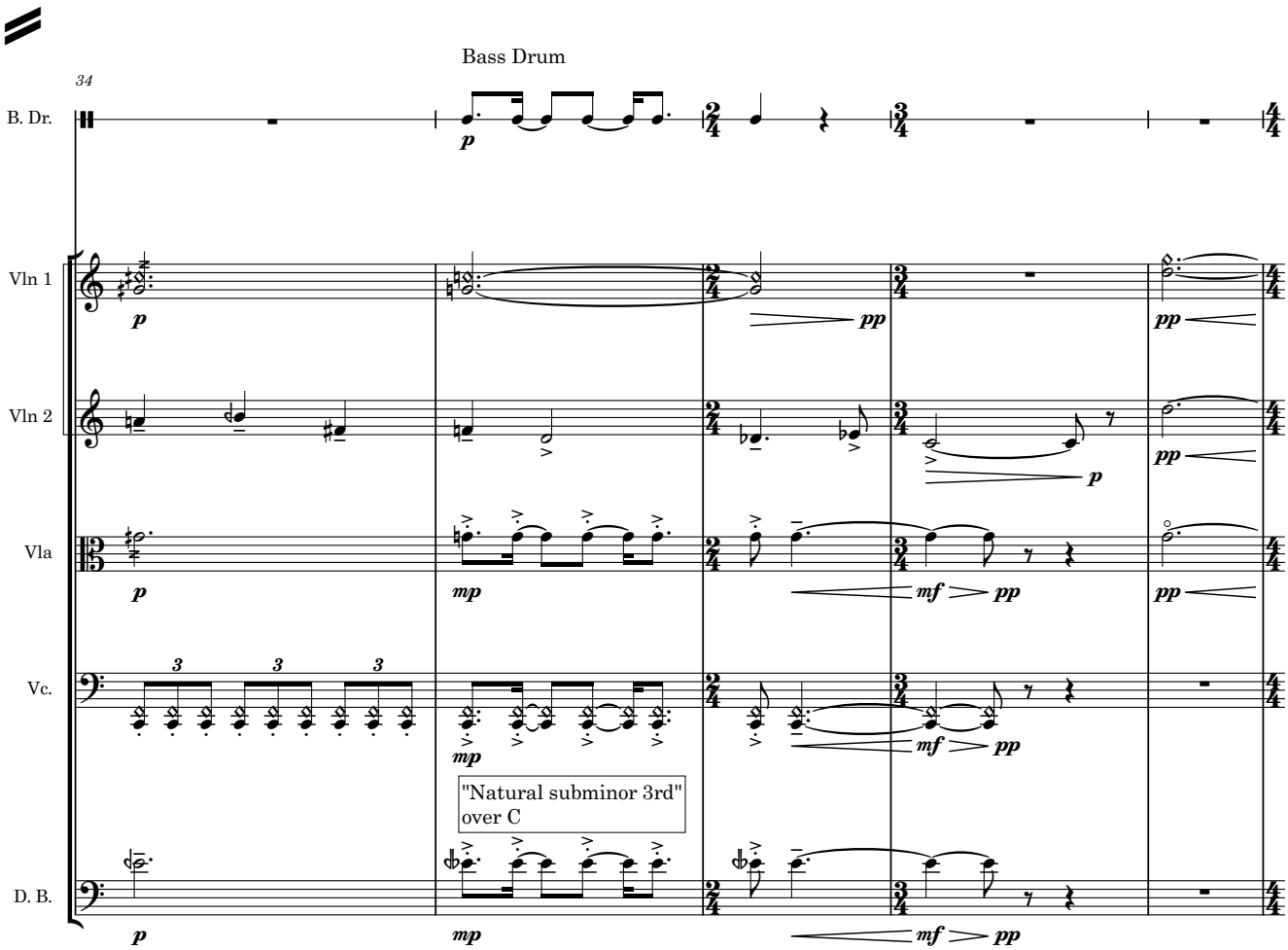
VI. The Fall

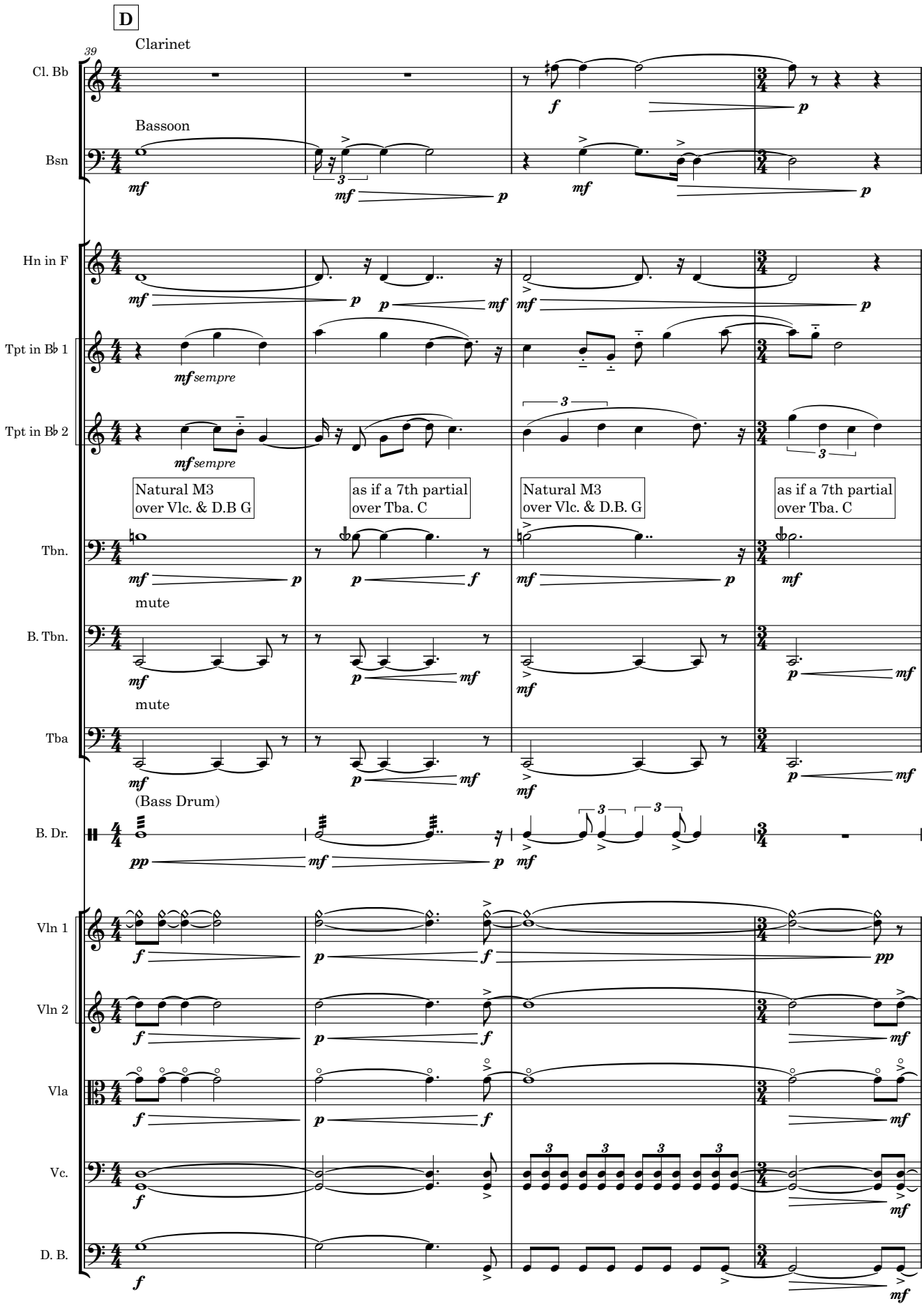

Lamentoso ♩= 60
Violin 1
Violin 2
Viola
Violoncello
Double Bass
non vib. sempre
(pay attention to Cl. D 1/4 sharp in previous mvmt. it is enharmonic with E 3/4 flat)
(E-C Major 3rd divided in 3, but without playing the E)
"subminor 3rd" over Vlc. C
"sm3" over Vlc. C
C-Ab divided in 3, without playing the Ab

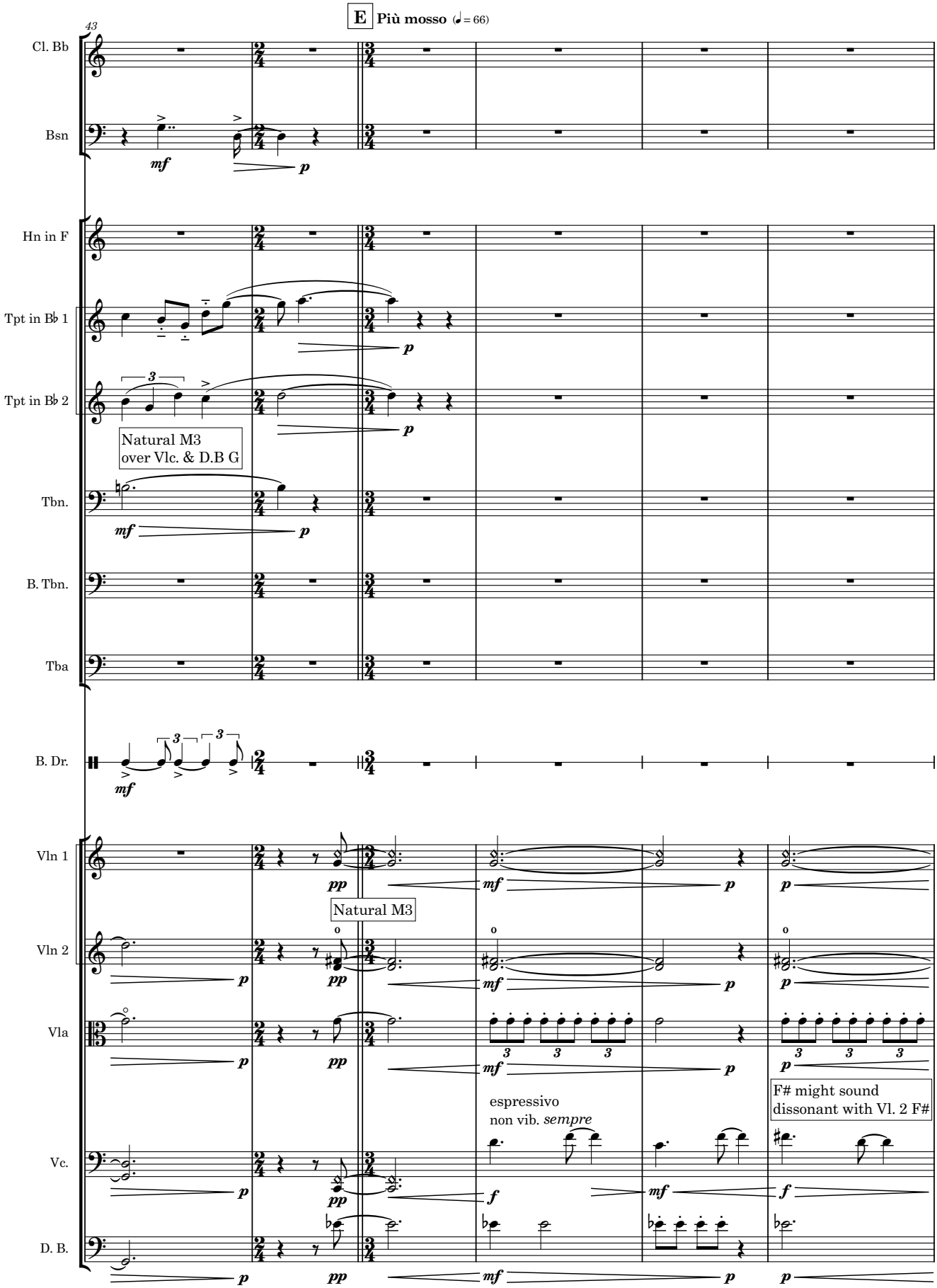

A
Vln 1
Vln 2
Vla
Vc.
D. B.
"subminor 3rd" over C
Natural M3 over C
"sm3" over C
Natural M3 over C

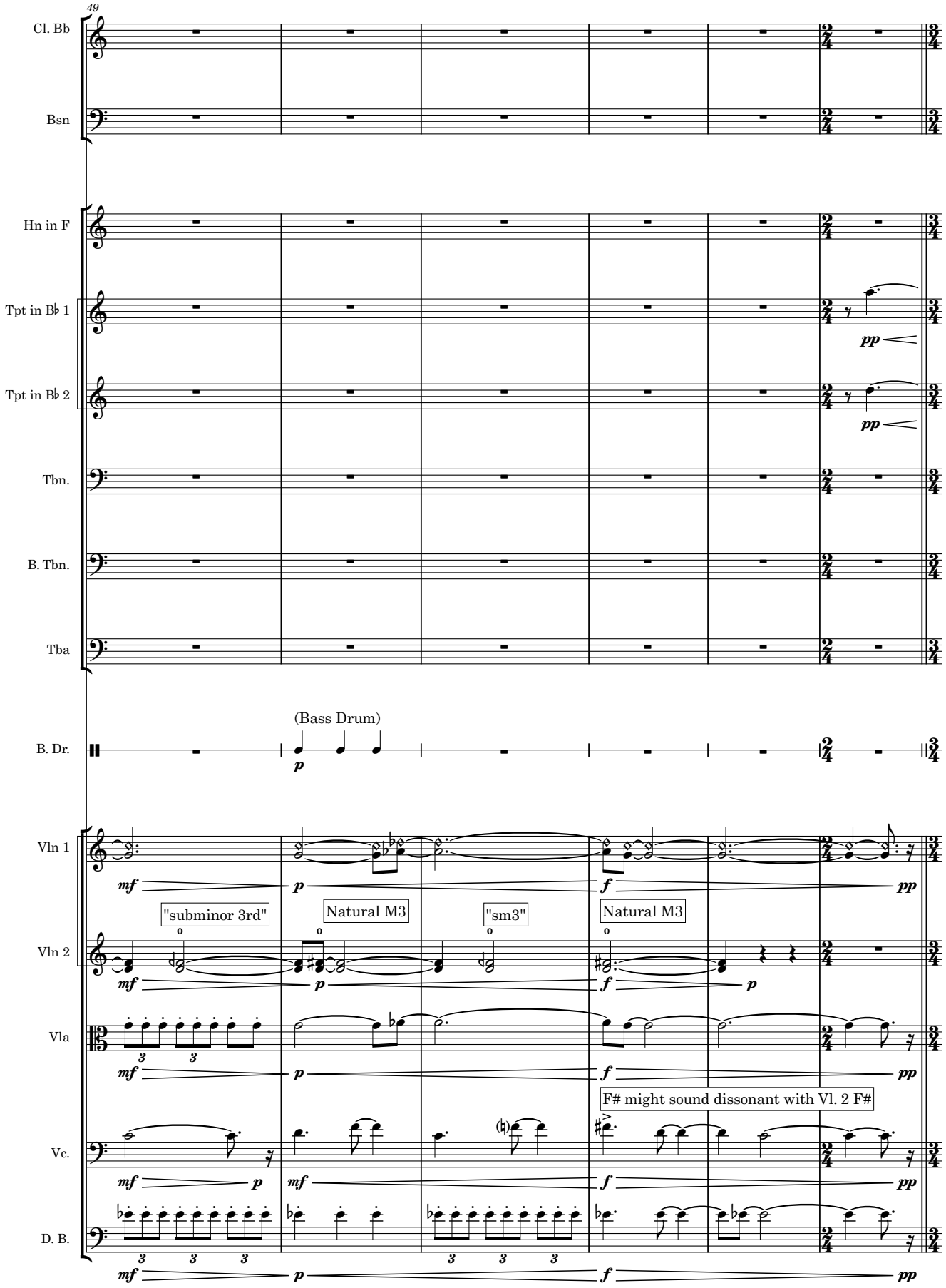

Più mosso (♩ = 66)
B
16
Vln 1
Vln 2
Vla
Vc.
D. B.
"neutral 3rd"
"sm3" over C
22

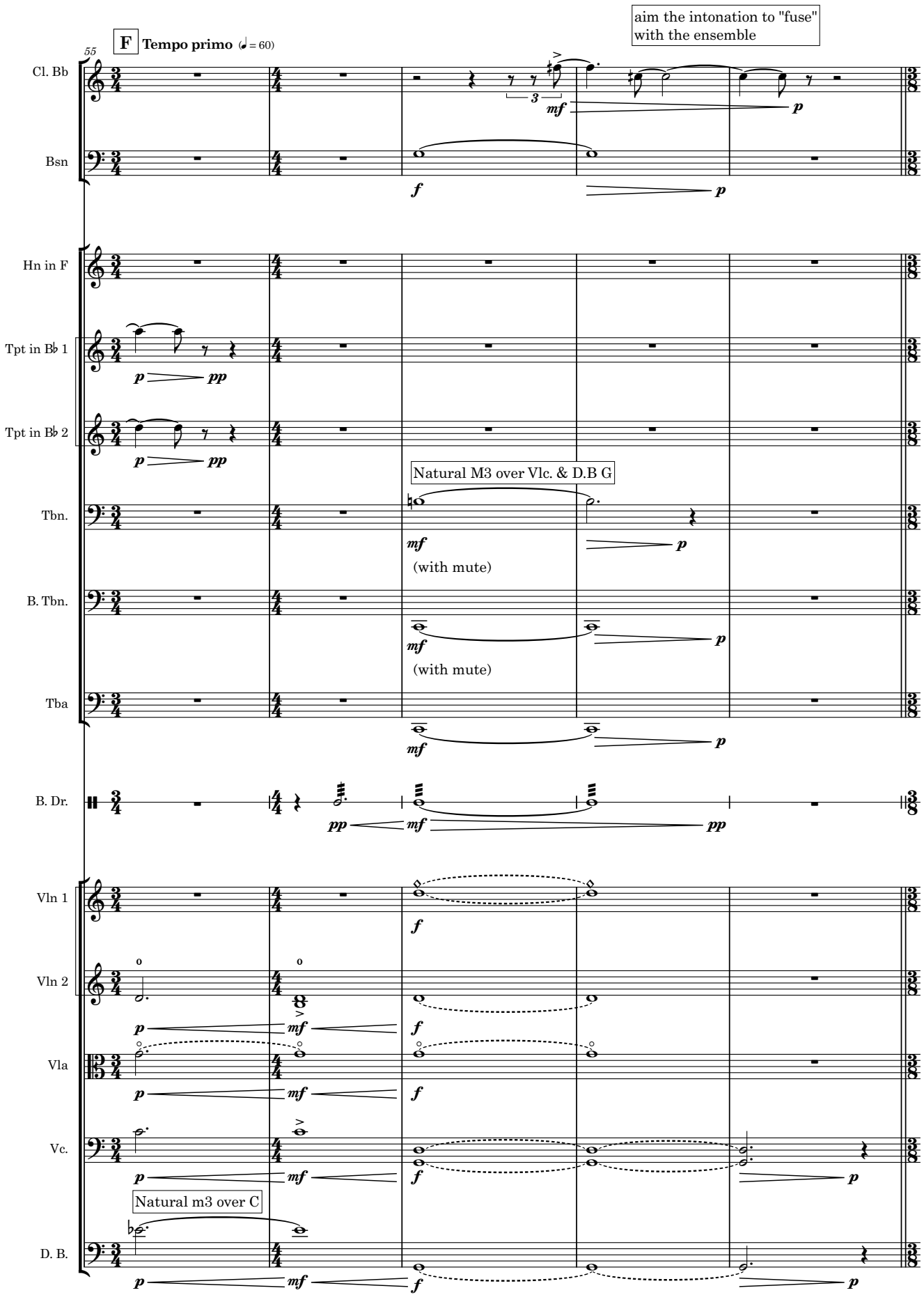

27
C
Tempo primo ♩= 60)
Vln 1
Vln 2
Vla
Vc.
D. B.
(E-C Major 3rd divided in 3, but without playing the E)
"subminor 3rd" over Vlc. C
"sm3" over Vlc. C
C-Ab divided in 3, but without playing the Ab
mf sempre

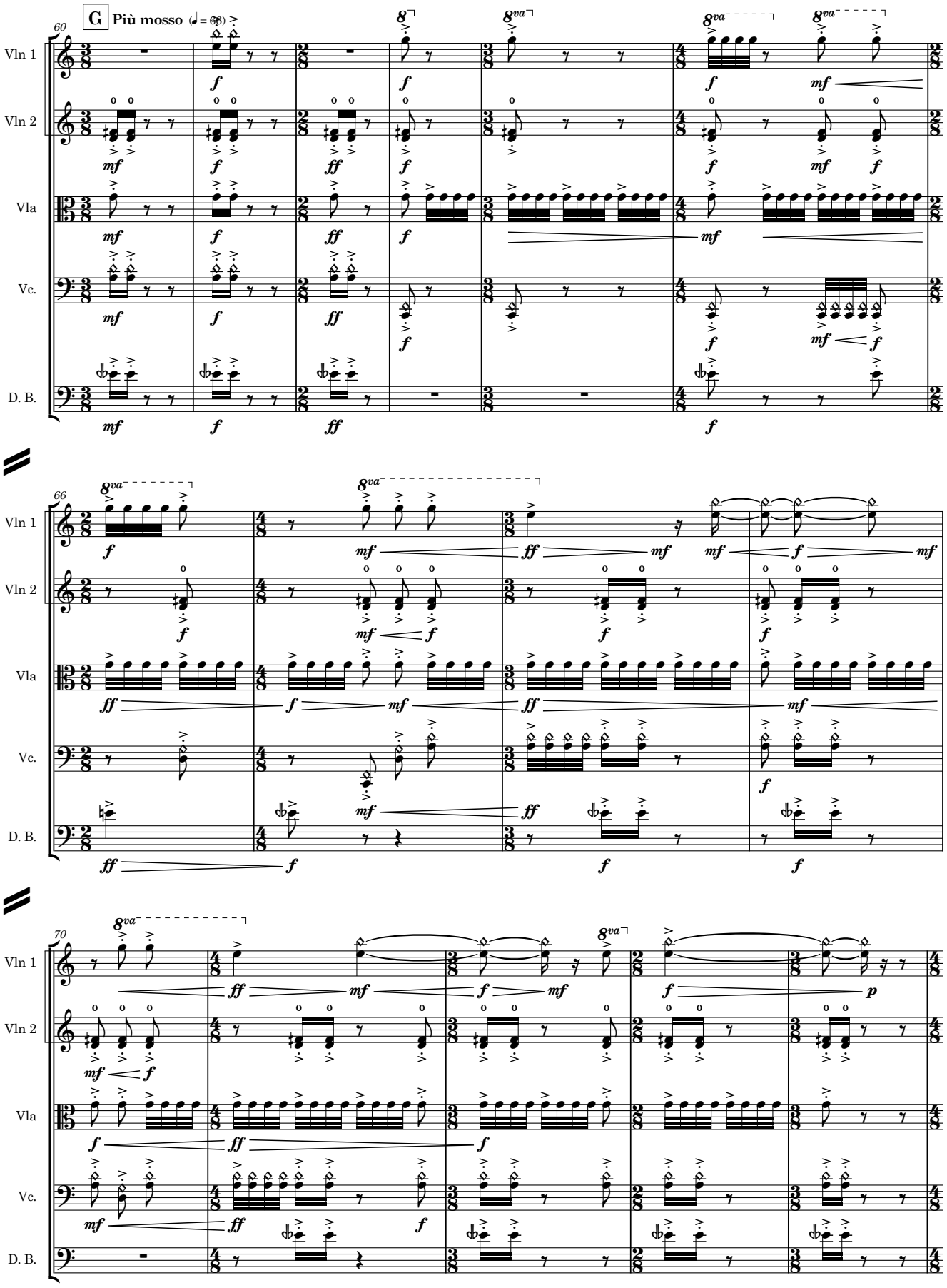

Bass Drum
34
B. Dr.
Vln 1
Vln 2
Vla
Vc.
D. B.
"Natural subminor 3rd" over C

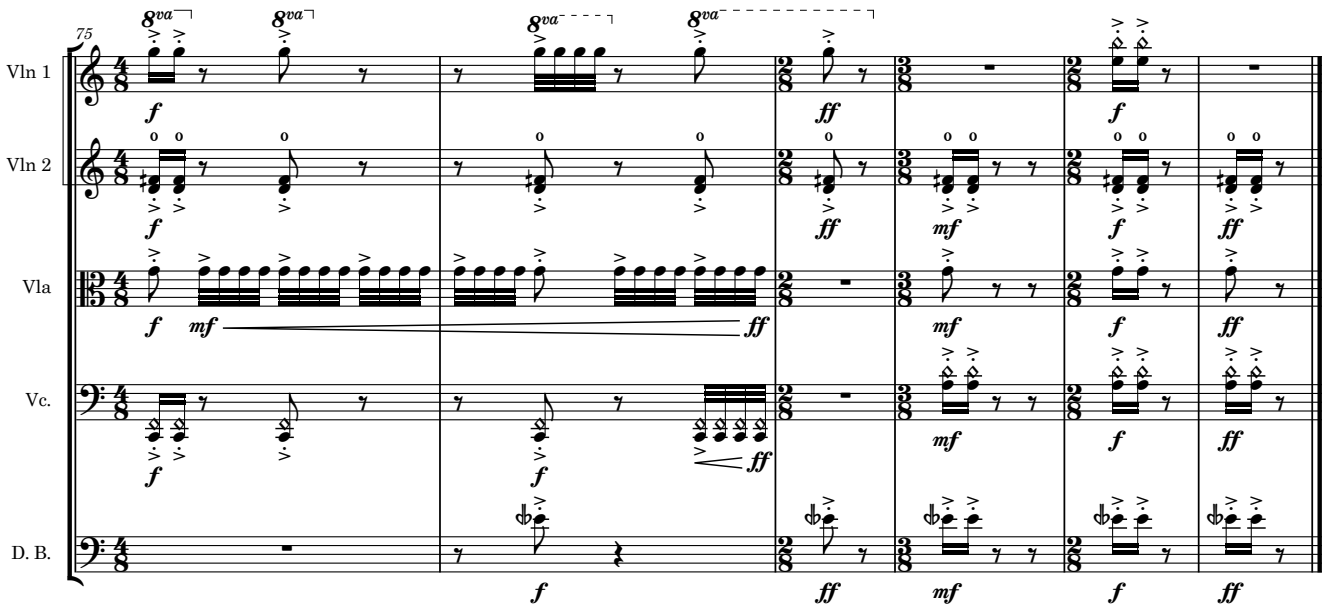

D
Clarinet
39
Cl. Bb
Bassoon
Bsn
Hn in F
Tpt in B♭ 1
Tpt in B♭ 2
mf sempre
Natural M3
over Vlc. & D.B G
as if a 7th partial
over Tba. C
Natural M3
over Vlc. & D.B. G
as if a 7th partial
over Tba. C
Tbn.
mute
B. Tbn.
mute
Tba
(Bass Drum)
B. Dr.
Vln 1
Vln 2
Vla
Vc.
D. B.


43
E Più mosso (♩= 66)
Cl. Bb
Bsn
Hn in F
Tpt in B♭ 1
Tpt in B♭ 2
Natural M3
over Vlc. & D.B G
Tbn.
B. Tbn.
Tba
B. Dr.
Vln 1
Natural M3
Vln 2
Vla
espressivo
non vib. sempre
F# might sound
dissonant with Vl. 2 F#
Vc.
D. B.

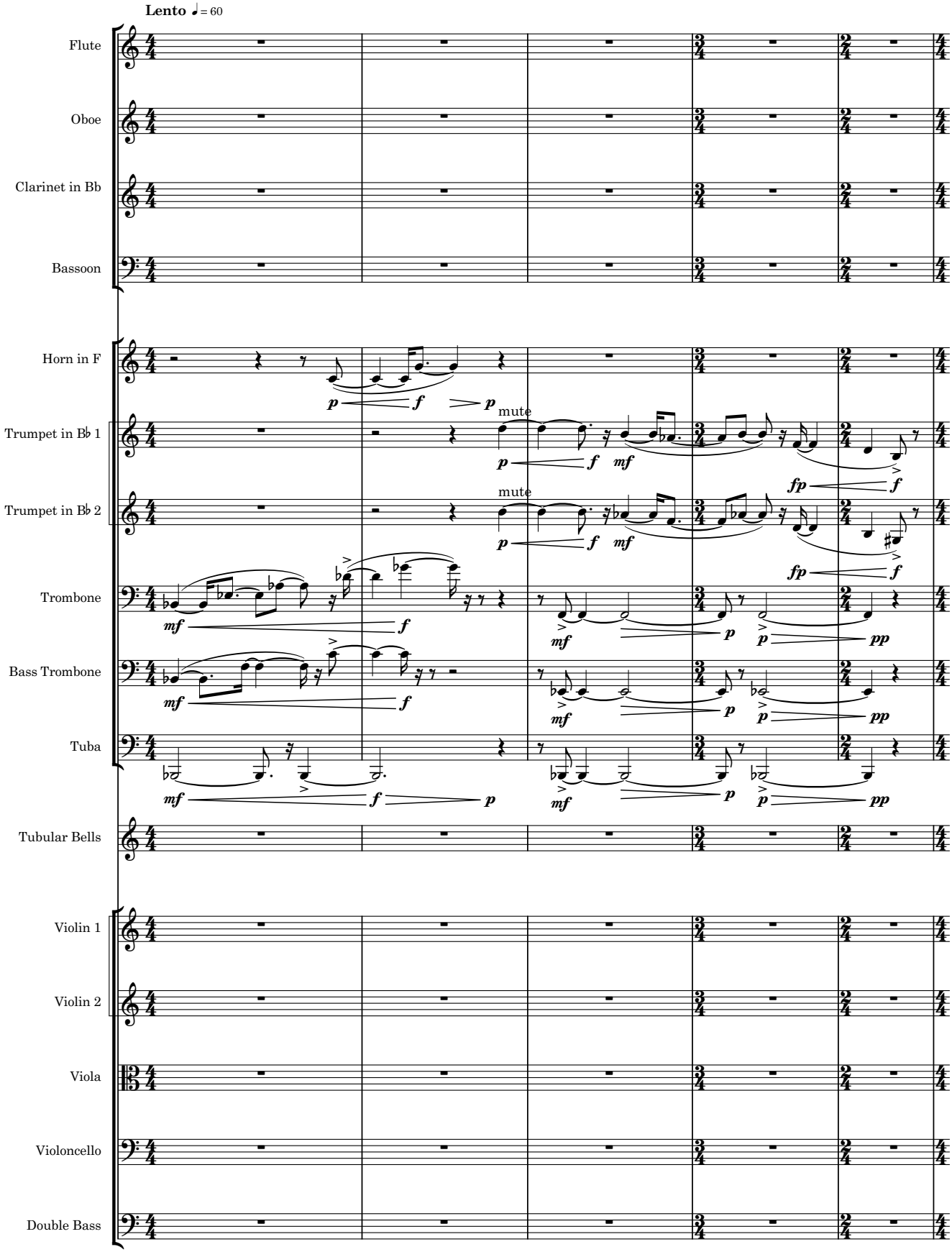

49
Cl. Bb
Bsn
Hn in F
Tpt in B♭ 1
Tpt in B♭ 2
Tbn.
B. Tbn.
Tba
B. Dr.
(Bass Drum)
Vln 1
Vln 2
Vla
Vc.
D. B.
"subminor 3rd"
Natural M3
"sm3"
Natural M3
F# might sound dissonant with Vl. 2 F#

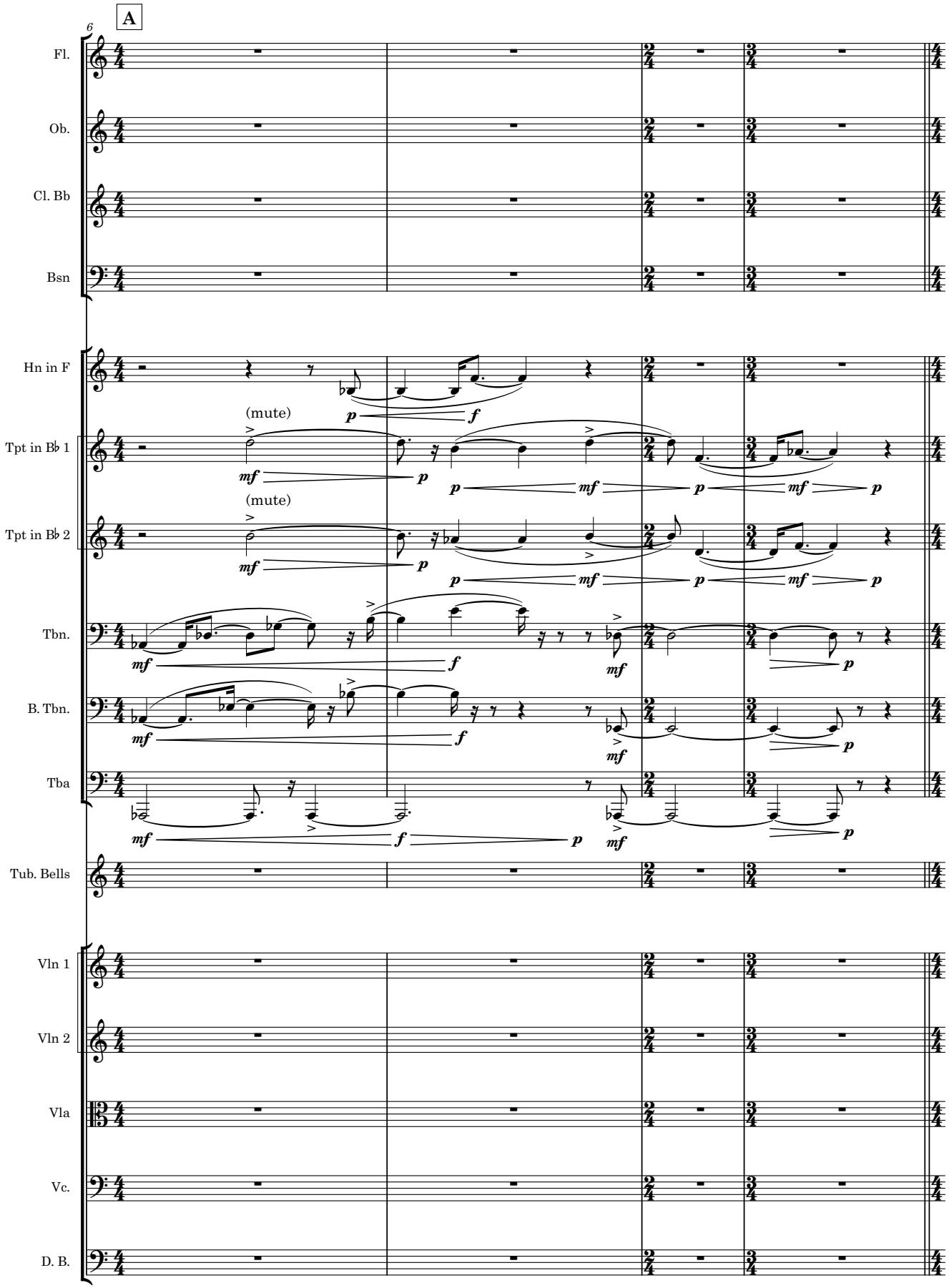

55
F Tempo primo (♩= 60)
aim the intonation to "fuse" with the ensemble
Cl. Bb
Bsn
Hn in F
Tpt in B♭ 1
Tpt in B♭ 2
Natural M3 over Vlc. & D.B G
Tbn.
(with mute)
B. Tbn.
(with mute)
Tba
B. Dr.
Vln 1
Vln 2
Vla
Vc.
Natural m3 over C
D. B.

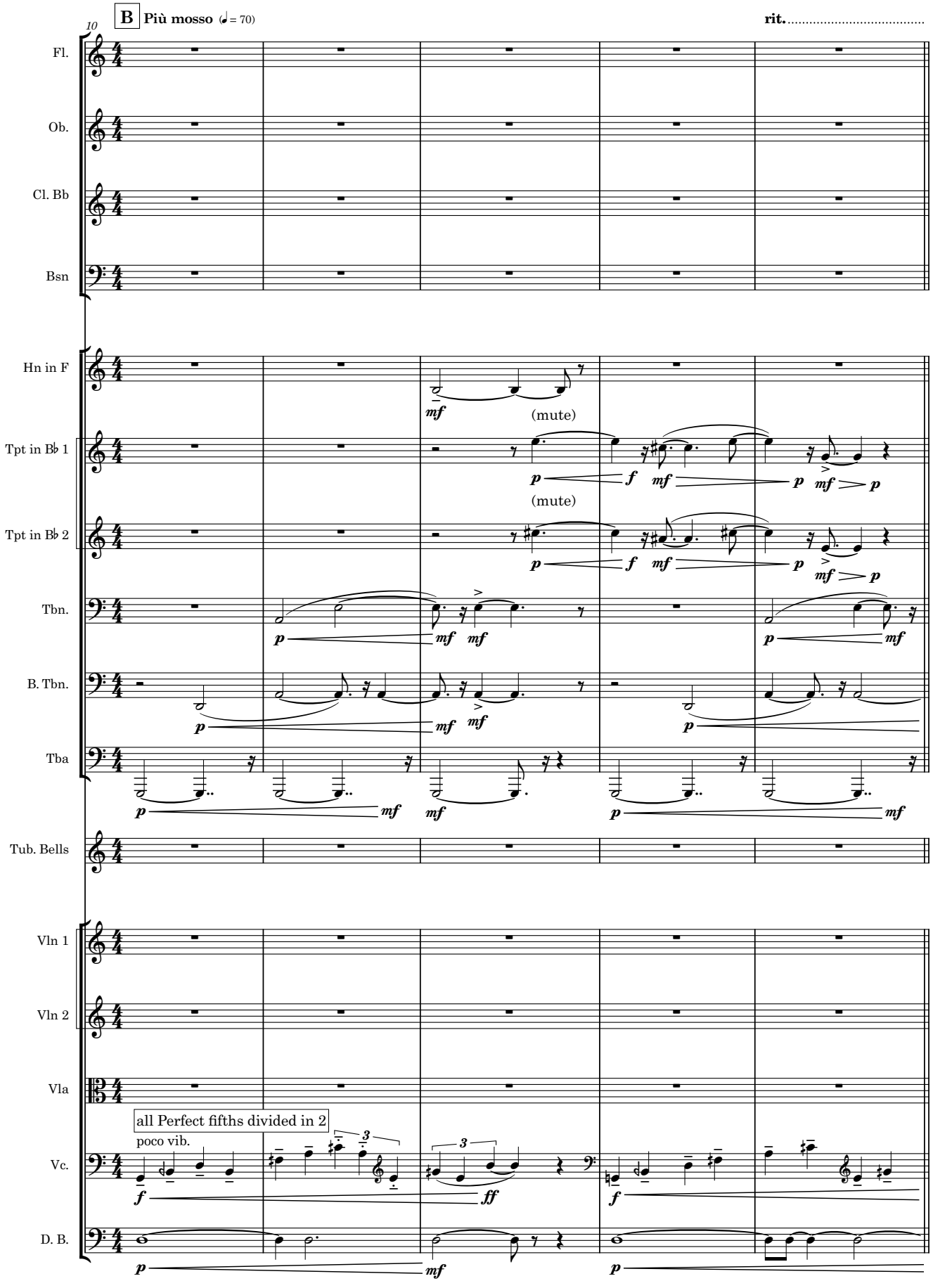

G
Più mosso
60
66
70
Vln 1
Vln 2
Vla
Vc.
D. B.

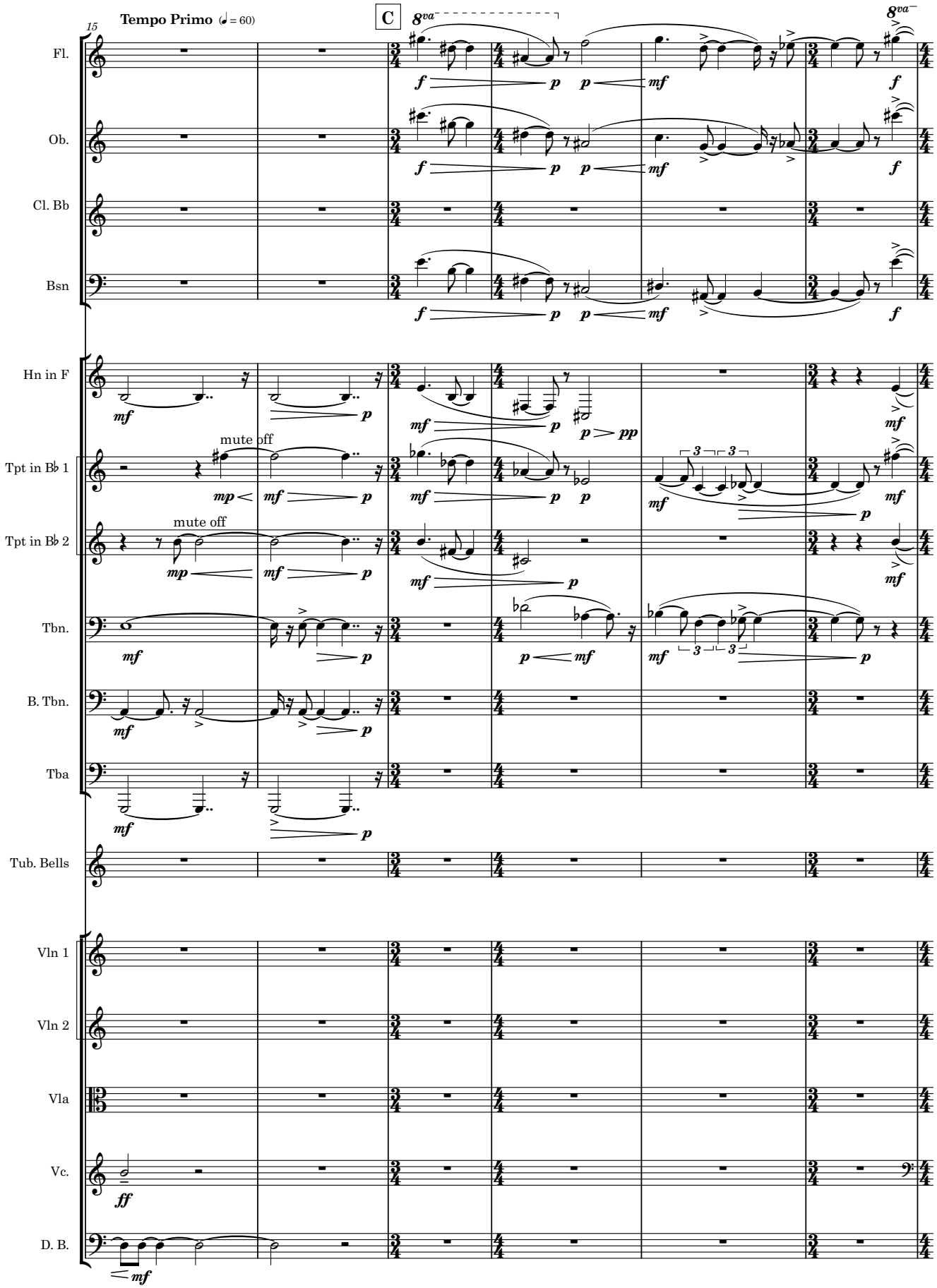

75
Vln 1
Vln 2
Vla
Vc.
D. B.
8va
f
mf
ff

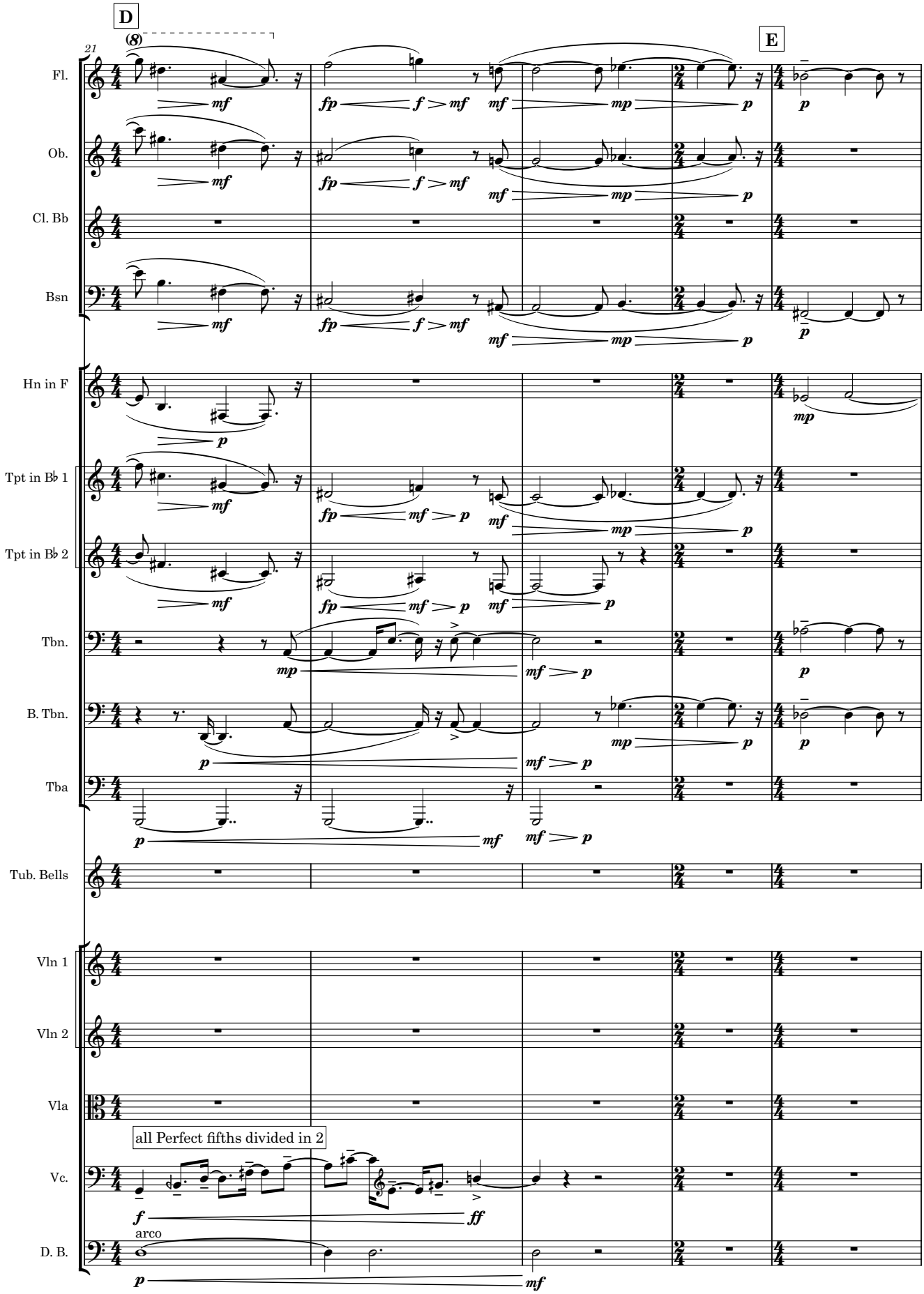
Coda

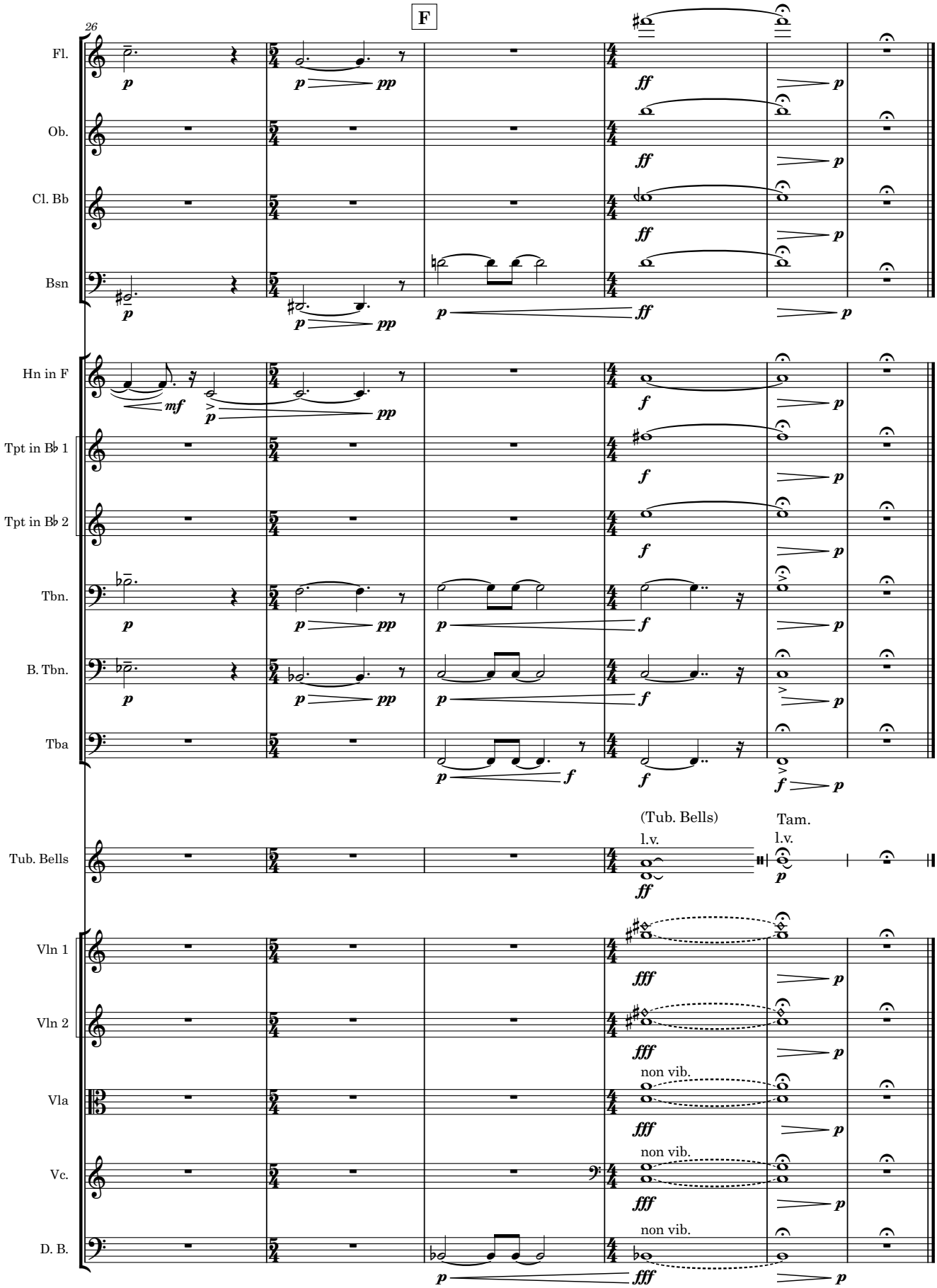

Lento ♩= 60
Flute
Oboe
Clarinet in Bb
Bassoon
Horn in F
Trumpet in B♭ 1
Trumpet in B♭ 2
Trombone
Bass Trombone
Tuba
Tubular Bells
Violin 1
Violin 2
Viola
Violoncello
Double Bass
mute
mute


A
6
Fl.
Ob.
Cl. Bb
Bsn
Hn in F
Tpt in B♭ 1
Tpt in B♭ 2
Tbn.
B. Tbn.
Tba
Tub. Bells
Vln 1
Vln 2
Vla
Vc.
D. B.
(mute)
(mute)


10
B Più mosso (♩= 70)
rit.
Fl.
Ob.
Cl. Bb
Bsn
Hn in F
Tpt in B♭ 1
Tpt in B♭ 2
Tbn.
B. Tbn.
Tba
Tub. Bells
Vln 1
Vln 2
Vla
Vc.
D. B.
(mute)
(mute)
all Perfect fifths divided in 2
poco vib.


15
Tempo Primo (♩= 60)
C
8va
Fl.
Ob.
Cl. Bb
Bsn
Hn in F
mute off
Tpt in B♭ 1
mute off
Tpt in B♭ 2
Tbn.
B. Tbn.
Tba
Tub. Bells
Vln 1
Vln 2
Vla
Vc.
D. B.


D
E
21
(8)
Fl.
Ob.
Cl. Bb
Bsn
Hn in F
Tpt in B♭ 1
Tpt in B♭ 2
Tbn.
B. Tbn.
Tba
Tub. Bells
Vln 1
Vln 2
Vla
all Perfect fifths divided in 2
Vc.
arco
D. B.


26
F
Fl.
Ob.
Cl. Bb
Bsn
Hn in F
Tpt in B♭ 1
Tpt in B♭ 2
Tbn.
B. Tbn.
Tba
Tub. Bells
(Tub. Bells)
l.v.
Tam.
l.v.
Vln 1
Vln 2
Vla
Vc.
D. B.
non vib.
non vib.
non vib.