Joseph Klein

Occam's Razor

seven studies for ten players

(1994-99)

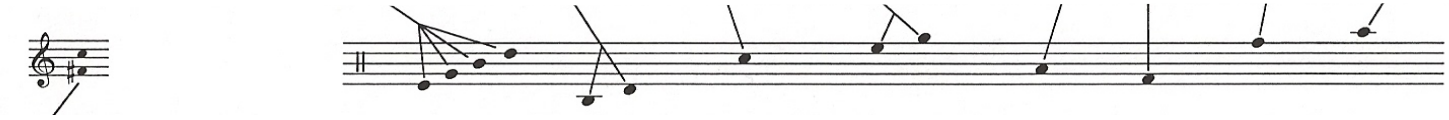
supported by a Composer Fellowship from the National Endowment for the Arts, a federal agency,
and by a Faculty Research Grant from the University of North Texas

duration: c. 22'

INSTRUMENTATION

- flute / alto flute / piccolo
- English horn
- clarinet in A & B♭ / bass clarinet in B♭
- trumpet in C & B♭
- horn in F
- harp
- harpsichord
- viola
- contrabass
- percussion (1 player):

marimba, vibraphone, glockenspiel, chimes, 4 tom-toms, 2 tam-tams, China cymbal, 2 suspended cymbals, ratchet, vibraslap, wood block, brake drum



2 tuned bell plates*, wood chimes, glass chimes (suspended from dome of China cymbal), alarm clock (w/ bell), metal shaker

* if these pitches are not available, any two bell plates a tritone apart (and in the same general register) may be substituted.

* * *

- Flute requires B foot (out-of-range passages may be played on alto flute if such an instrument is unavailable).

- Bass clarinet should extend to a low written C (out-of-range pitches may be played an octave higher if such an instrument is unavailable).

- Horn requires a standard mute, and optional stopping mute; recommended instrument is a double descant (B-flat/high F) horn with A+ stopping valve (movement III, m. 9 is easier to play transposed with the A valve depressed).

- Trumpet requires straight, cup, harmon, bucket, felt hat, and plunger mutes.

- Percussionist requires the following striking implements: yarn mallets (2 soft, 2 medium, 4 hard), rubber mallets (2 medium, 2 hard), 2 hard plastic, 2 chime hammers, tam-tam beater. The vibraphone is to be prepared in movement VI (mm. 56-64) by taping quarters near the nodes of the specified bars; the resulting effect should be a sustained buzzing when the bars are struck. The small tam-tam is to be prepared by clamping a large metal coil to the lip, resulting in a metallic rattling sound when struck (movement VII). The China cymbal is to be prepared by suspending the glass chimes from the dome and allowing them to hang over the edge (movement V). The small suspended cymbal is to be prepared with a light gauge chain ("sizzle") attached at the dome (movement VII).

- Harpsichord must be tuned in equal temperament at A=440, and requires two manuals: the lower manual (I) requires 8', 4', and lute stops; the upper manual (II) requires an 8' stop that can be coupled with the lower manual. Subtle amplification may be used only if absolutely necessary.

- Contrabass requires C extension (out-of-range pitches may be played an octave higher if such an instrument is unavailable).

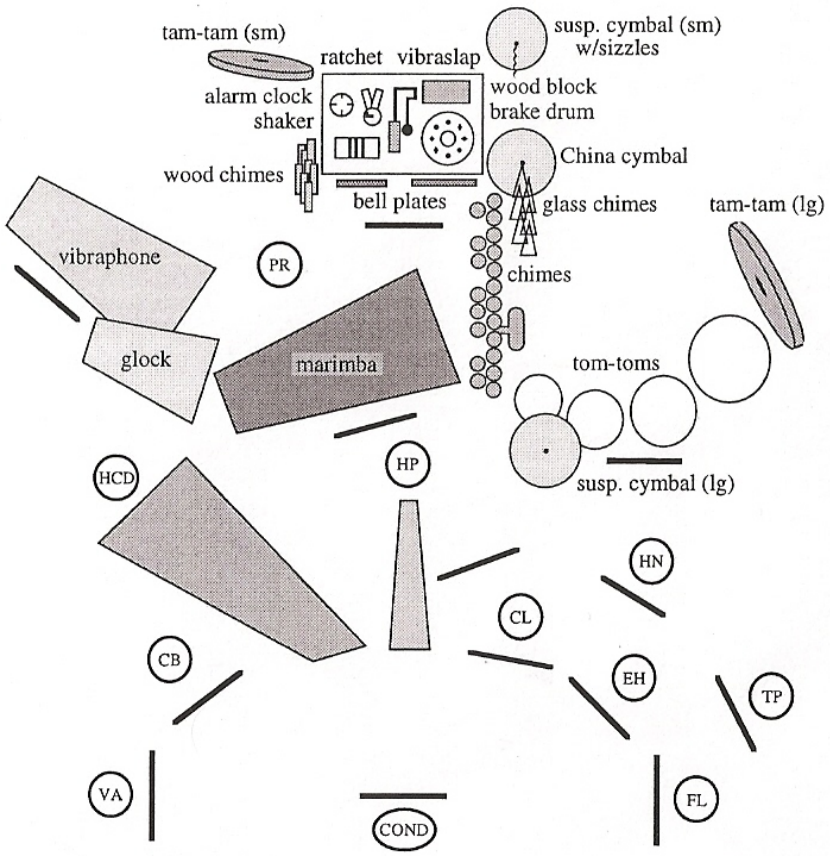
NOTES

- Score is notated in concert pitch; all instruments sound as written with the following exceptions:
  - piccolo sounds one octave higher than written
  - glockenspiel sounds two octaves higher than written
  - harp harmonics sound one octave higher than written
  - harpsichord on 4' stop sounds one octave higher than written

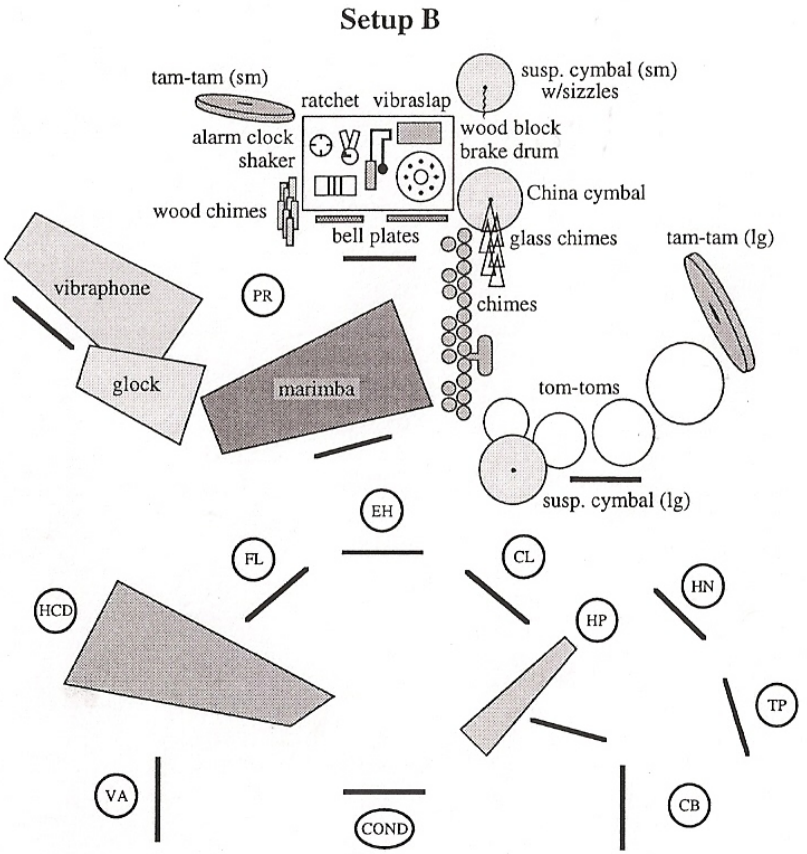
- Accidentals apply only to the notes they immediately precede, with the exception of repeated pitches.

- The ensemble may be set up in one of two configurations:

Setup A



Setup B



NOTES (cont.)

Movement I — Dynamics and phrasing must remain consistent throughout, with only a slight crescendo in measures 88-89. In the coda (measures 90-96), the marimba and harpsichord should be perceived as echoes of the clarinet.

Movement II — The harp should be prominent in measures 1-26 and measures 47-52; all other instruments should be equally balanced. Interrupting sections should be quite distinct, set off by the forceful *sforzando* attacks.

Movement III — In ten of the thirteen brief variations, one instrument should be prominent: viola (m. 1), horn (m. 5), harp (m. 7), piccolo (m. 11), trumpet (m. 13), clarinet (m. 15), contrabass (m. 19), marimba (m. 21), harpsichord (m. 23), and English horn (m. 25). In measures 3, 9, and 17, instruments should be equally balanced. During the silences, players should remain as still as possible and the conductor's gestures should be restricted to a minimum.

Movement IV — The harp and harpsichord are prominent from the beginning of the movement, and should be perceived as a single, continuous entity. Though the trumpet and horn are also linked throughout this movement, the remaining instruments are to maintain some degree of independence and individuality until the texture becomes saturated. Beginning around measure 55 through the end of the movement, group accents must be clearly defined. The pause between movements IV and V must be substantial — significantly longer than those between any of the other movements (see note on page 63 of the score).

Movement V — Beginning in measure 7, the effect should be one of disintegration, with the harp and harpsichord gradually emerging from the texture. In measures 6-13, the chime-glissandi grace notes into the China cymbal (prepared with the glass chimes, as indicated above) should be executed as a single rapid gesture, with the right-hand mallet striking the China cymbal (thus activating the glass chimes as well) as it comes off of the chime tubes. Beamed flourishes in the harp and harpsichord should be executed as rapidly as possible (though it is not necessary for them to be rhythmically even) and allowed to resonate indefinitely; this is particularly critical in measures 21-48, where no other instruments are playing. The harp pedal changes should be executed as discreetly as possible—although to some extent, the extraneous sound produced by the harp pedals and the harpsichord action are important by-products of the music throughout this section.

Movement VI — The *ritornelli* (measures 1-4, 19-24, 77-84, and 93-103) should be distinct at each occurrence. The section in measures 25-41 consists of two accompanied solos — piccolo with harpsichord and contrabass with vibraphone; attacks in the accompanying instruments always initiate phrases in the respective solo instrument, and must therefore be precisely coordinated. This is also the case in measures 65-76, where the bass clarinet and trumpet are accompanied by the harp and viola, respectively. Measures 55-64 are intended as a parody of measures 42-55, where the piccolo, horn, vibraphone, harpsichord, and contrabass present a caricature of the bass clarinet, English horn, harp, trumpet, and viola, respectively.

Movement VII — The harp, harpsichord, viola, and contrabass should be equally balanced and each should maintain its independence in measures 1-40. The percussion entrances must be clearly heard, but should seem somewhat more remote than the other instruments through measure 37. Beginning around measure 25, the four stringed instruments become increasingly active, but should not necessarily increase in volume. This process continues (later joined by percussion) through the end of the movement, becoming more chaotic and building momentum throughout. The percussion part in particular should seem increasingly frantic, as the player attempts to activate all the instruments as indicated (though the bell plate attacks must remain relatively calm throughout). Mobile events in the viola, contrabass, and harp (beginning in measure 50) should become increasingly dense, particularly beginning in measure 56, as the percussion continues *ad libitum*. The wind drones beginning in measure 46 should be clearly audible, but must remain in the background.

SYMBOLS

clean, distinct release/break in sound

attack/release unnoticeably

gradual change from one mode of play to another

rapid change from one mode of play to another

continue as indicated

rapidly re-articulate the given pitch as indicated by the small beamed grouping

play beamed group as rapidly as possible

accelerando

ritardando

play material within repeat brackets in the order indicated for the duration of the solid line

play material within brackets (*ad libitum*) for the duration of the wavy line

senza tempo

smooth, even portamento/glissando

special timbral effect (as described in score, movement VII, mm.46-62)

chromatic cluster (indeterminate pitch)

chromatic cluster (within specified range)

"white key" cluster (indeterminate pitch)

knock on resonant part of instrument's body

flt. winds: fluttertongue

winds: sing pitch (diamond-shaped notehead) while playing ordinary tone (oval notehead)

\+ brass: closed (mute); horn: stopped

○ brass: open

1 2 2 3 3 brass: fingerings

Ped. percussion: depress pedal for the duration of the line

chimes: beginning with arms crossed, rapidly glissando upward across the sharp tubes and downward across the natural tubes

pdlt harp: play near the soundboard

G♯ → ♮ harp: pedal glissando

harp: short, rapid glissando ("gushing chord")

harp: thunder effect (violently glissando downward from note indicated, allowing strings to rattle)

harp: half-pedal (string buzz)

harp: scrape along wound string

o.p. strings: overpressure (bow with such force as to create scratching sound)

strings: snap pizzicato

strings: play between bridge and tailpiece

pizz. strings: muffle strings with left hand while playing pizzicato (resulting in a dry, percussive sound)

PROGRAM NOTES

Composed between May of 1994 and February of 1999, *Occam's Razor* is a collection of seven brief studies for ten players intended as an exploration of a variety of musical procedures, structural devices, and interdisciplinary references. Numerical sequences serve as the basic organizing element, from the micro-level rhythmic and pitch cells, to movement durations (resulting in a proportional ratio of 7:8:5:11:6:10:9), to the instrumentation itself (one percussion, two brass, three woodwinds, four strings). Moreover, the work is constructed as a dynamic unfolding of "sub-ensembles" within the whole; thus, the work comprises ten solo sections, nine duos, eight trios, etc., with only a single section that includes the entire complement of ten players. The work's title refers to a principle devised by the English philosopher William of Occam (c.1285 - c.1349) which states that where more than one theory exists, the simplest one should be applied; also known as the law of parsimony, "Occam's Razor" implies a degree of complexity beyond that which is manifest.

The first study of the set, *estuary* (*chaotic fugato quasi toccata*), takes as its metaphorical model a geological formation—specifically, the point where a river is met by the tides at an inlet of the sea. The movement is loosely fugal, though the character is reminiscent of a toccata (a rapid, florid, introductory movement); in this instance, the structure is derived from chaos theory, whereby erratic oscillations create bifurcations within the texture (musically represented by the splitting of a single line, first into two parts, then four, then seven). The point at which a river meets the sea displays a similar type of turbulent behavior.

The second study, *au seuil de la ruine* (*notturno interrotto*), is in two equal parts, the first of which consists of a cluster derived from two octatonic collections (pivoting around a central E-flat) which undergoes a gradual registral expansion and rhythmic compression. This opening section is interrupted by three brief, unrelated episodes, the first of which returns prior to a highly condensed recapitulation of the opening section in retrograde. The movement's title ("on the threshold of decay") refers to a painting by surrealist artist René Magritte, *Au Seuil de la Liberté* (*On the Threshold of Liberty*, 1929), as considered through the deconstructionist prism of Jacques Derrida.

The third study, *one of many circles* (*hyperfractal variants*), consists simply of thirteen brief statements of a motive in various guises. The distilled, self-similar quality of these variants reflects the influence of fractal geometry—a term coined by Belgian mathematician Benoit Mandelbrot to classify those fragmented and irregular structures that are not represented in classic Euclidean geometry. The title is from a line in Wallace Stevens' poem "Thirteen Ways of Looking at a Blackbird" (1917), which also served as a model for this study.

The fourth study, *maßenkristalle* (*loxodromic chaconne*), is modeled after the Baroque *chaconne*, or continuous variation process. The *chaconne* subject consists of an eleven-note row which gradually spirals upward in pitch while simultaneously descending in register through a series of octave displacements; thus, it is similar in design to a loxodrome—an imaginary line on the surface of a sphere which is oblique to the equator, crossing all meridians at the same angle in a spiral path toward the pole. The title is from Elias Canetti's book *Maße und Macht* (*Crowds and Power*, 1960) and refers to the loss of individual identity experienced during the formation of a crowd, initiated by what Canetti refers to as Maßenkristalle or "crowd crystals."

The fifth study, *the myth of eternal return* (*entropic ostinato*), consists of a disintegrating ostinato texture that is followed by a brief coda reminiscent of the second movement notturno. The title comes from the opening ruminations of Milan Kundera's novel *The Unbearable Lightness of Being* (1984), in which the author reflects upon (and ultimately rejects) Friedrich Nietzsche's concept of eternal return. Kundera's contemplation of an existence that recurs ad infinitum—becoming "a solid mass, permanently protuberant"—and the inherent weight of such a burden is the basic premise of the novel, and the conceptual germ of this movement.

The sixth study, *crown knots & cascades* (*meta-rondo in chiasmus*), consists of two intertwined processes: the first process is associated with a core unit of three instruments—bass clarinet, trumpet, and viola—and is characterized by a decrease in tempo (from MM 180 to MM 90) and unit size (from seven to three instruments) throughout; the second process is associated with a core unit of three different instruments—piccolo, harpsichord, and contrabass—and is characterized by an increase in tempo (from MM 60 to MM 120) and unit size (from three to seven). These two processes are presented in alternation, resulting in a palindrome that crosses at brief overlapping solos in the trumpet and harpsichord. The title is drawn from a line in Alice Fulton's poem "Volunteers" (from *Sensual Math*, 1995), part of a sequence that draws upon genetic crossover as a significant aspect of its trope and subject.

The seventh study, *time's maw* (*moto perpetuo*), deals with the perception of time and its passage. The title is borrowed from a line in John Ashbery's poem "All and Some" (from the collection *Self-Portrait in a Convex Mirror*, 1974), and the musical model is that of a *moto perpetuo* (a short piece built upon repetitive patterns). The pitch material is derived from "The Westminster Chimes" melody, which is subjected to various temporal and pitch distortions, and a kinetic intensification that ultimately leads to a complete textural saturation.

Occam's Razor was supported in part by a Composer Fellowship from the National Endowment for the Arts and a Faculty Research Grant from the University of North Texas. The complete work was premiered on 8 March 1999 at the University of North Texas by the UNT Faculty Chamber Ensemble, conducted by the composer.

I. estuary (*chaotic fugato quasi toccata*)

II. au seuil de la ruine (*notturno interrotto*)

III. one of many circles (*hyperfractal variants*)

IV. maßenkristalle (*loxodromic chaconne*)

V. the myth of eternal return (*entropic ostinato*)

VI. crown knots & cascades (*meta-rondo in chiasmus*)

VII. time's maw (*moto perpetuo*)

Concert Score

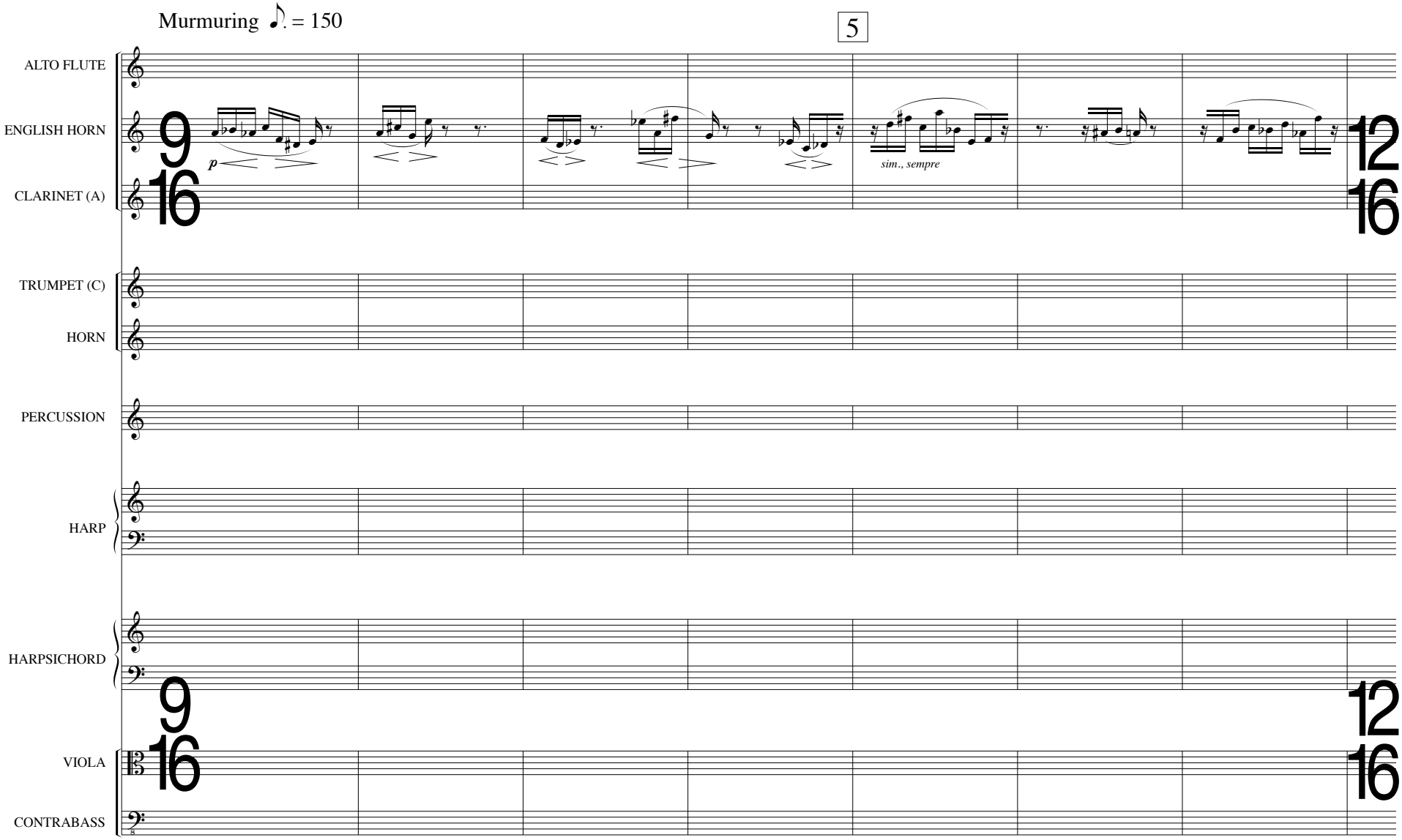
Occam's Razor

seven studies for ten players

Joseph Klein
(1994-99)

I. estuary

(chaotic fugato quasi toccata)



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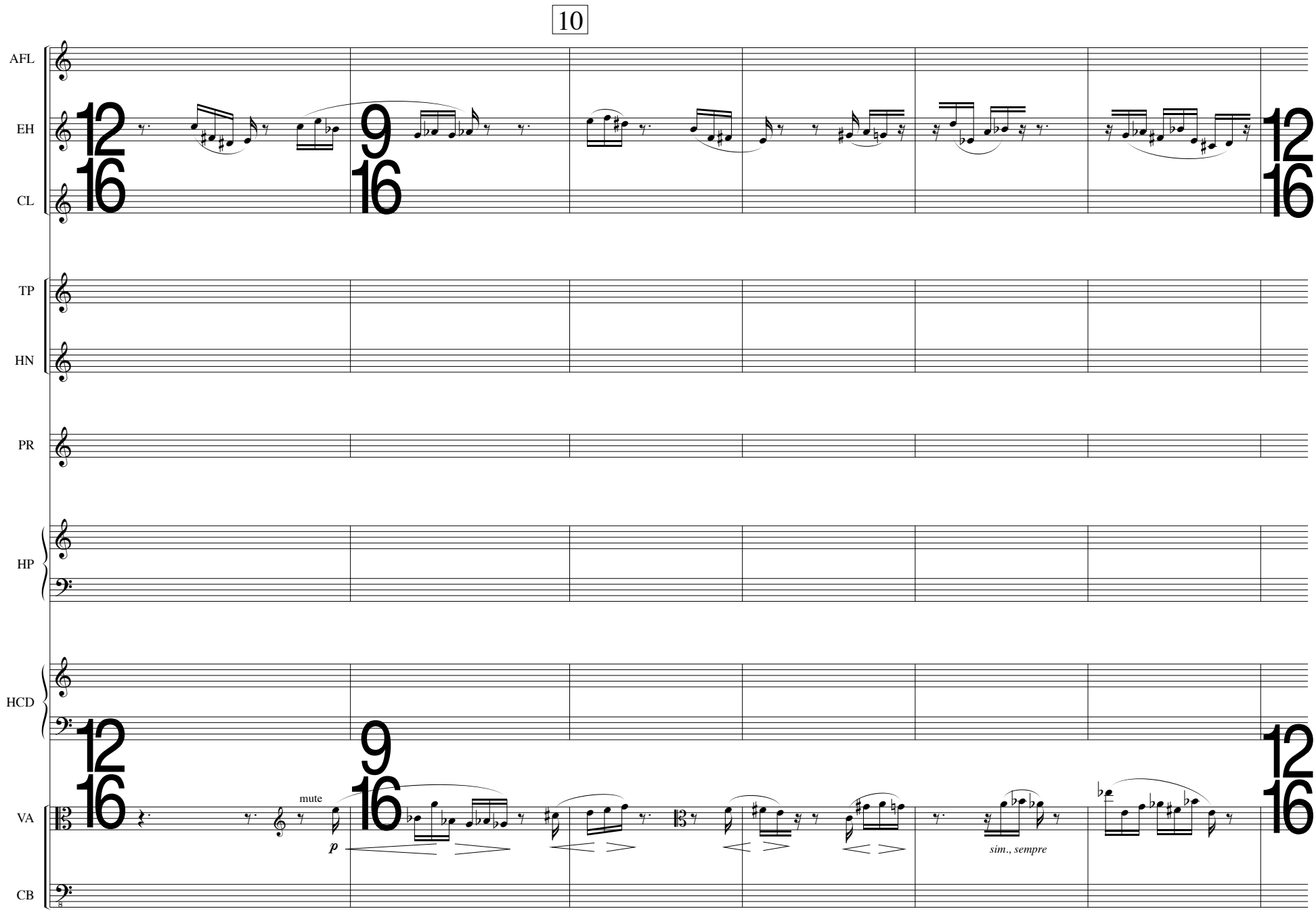
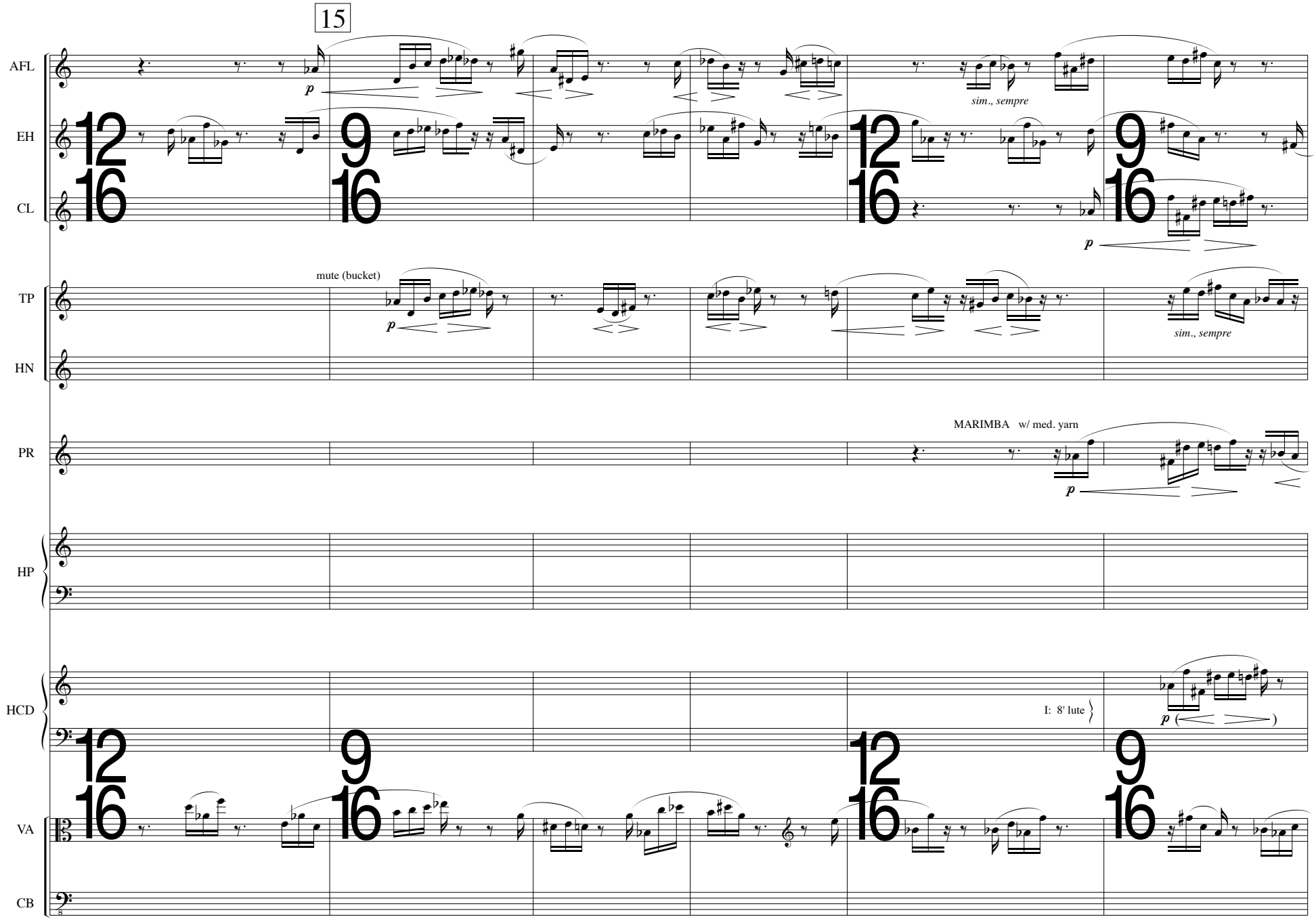
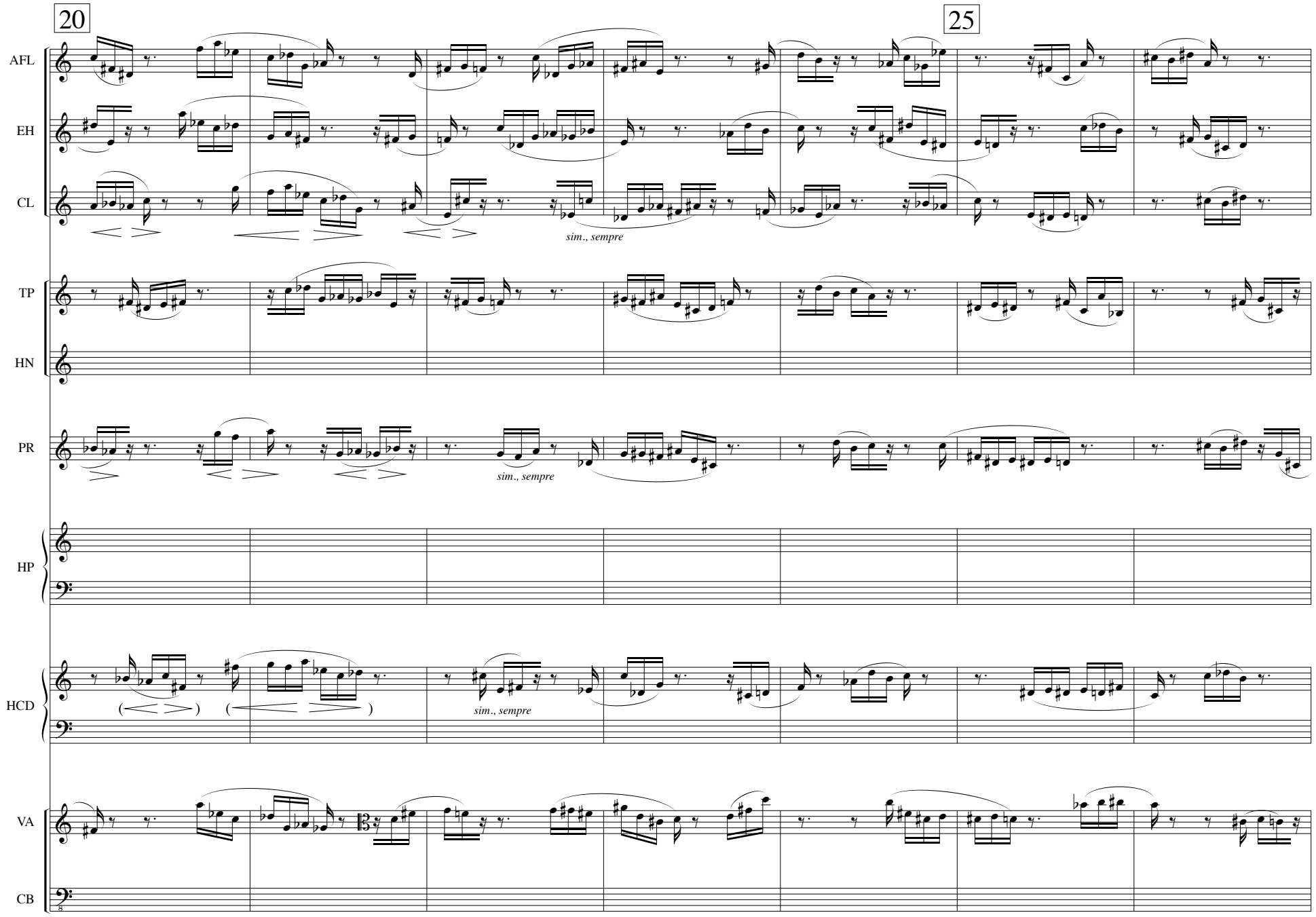
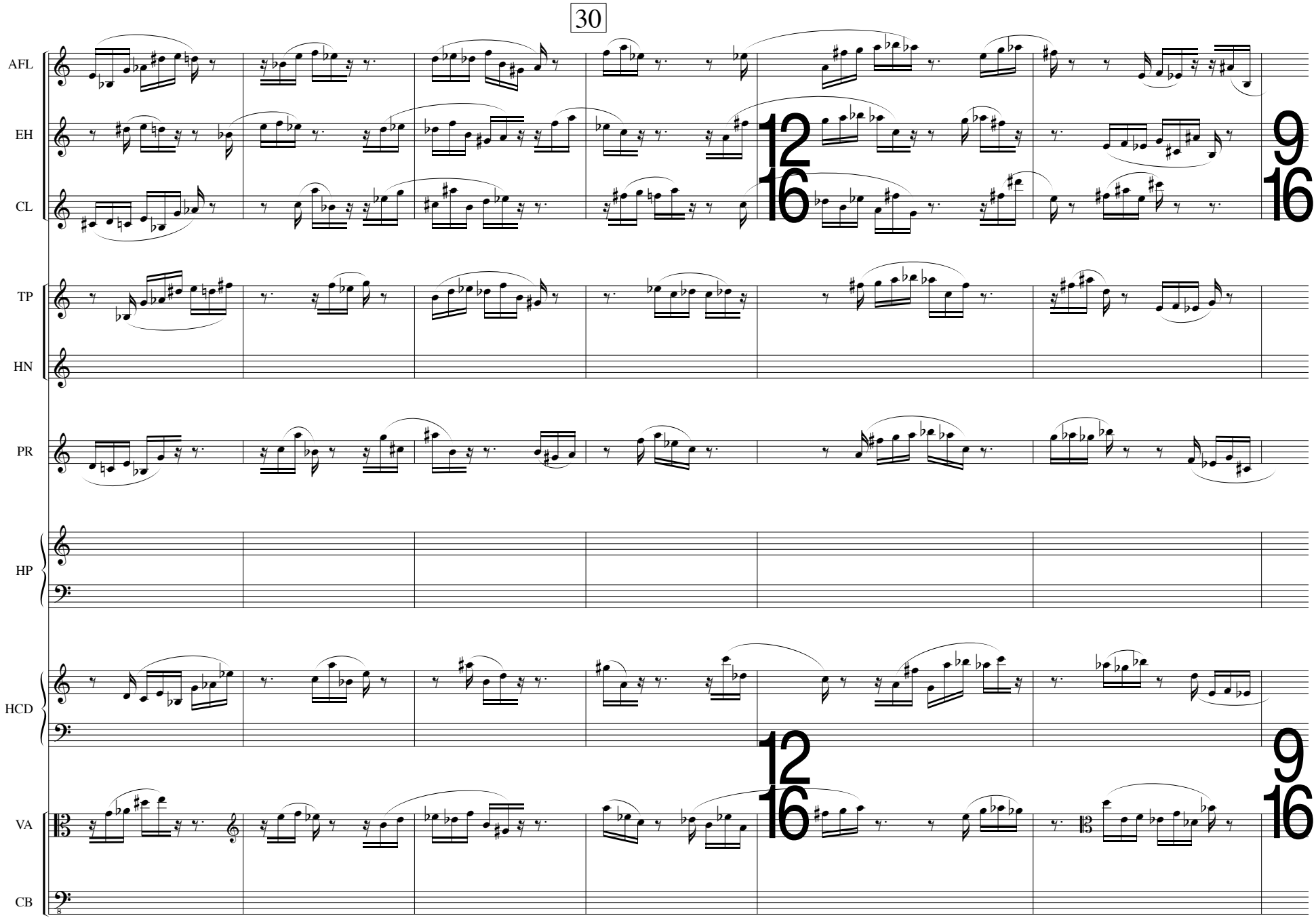

10
AFL
EH
CL
TP
HN
PR
HP
HCD
VA
CB
mute
p
sim., sempre


15
AFL
EH
CL
TP
HN
PR
HP
HCD
VA
CB
p
sim., sempre
mute (bucket)
MARIMBA w/ med. yarn
I: 8' lute


20
25
AFL
EH
CL
sim., sempre
TP
HN
PR
sim., sempre
HP
HCD
sim., sempre
VA
CB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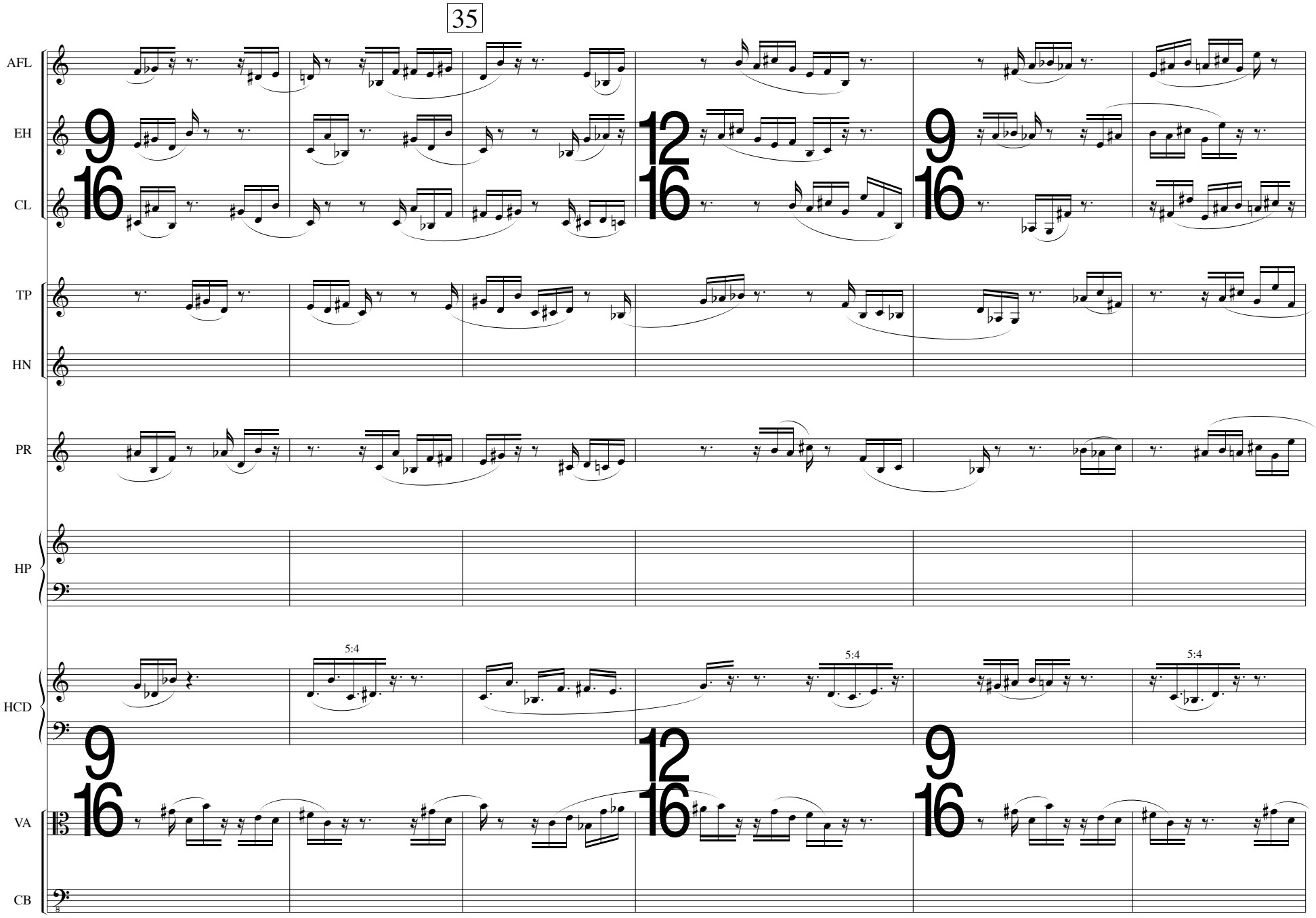
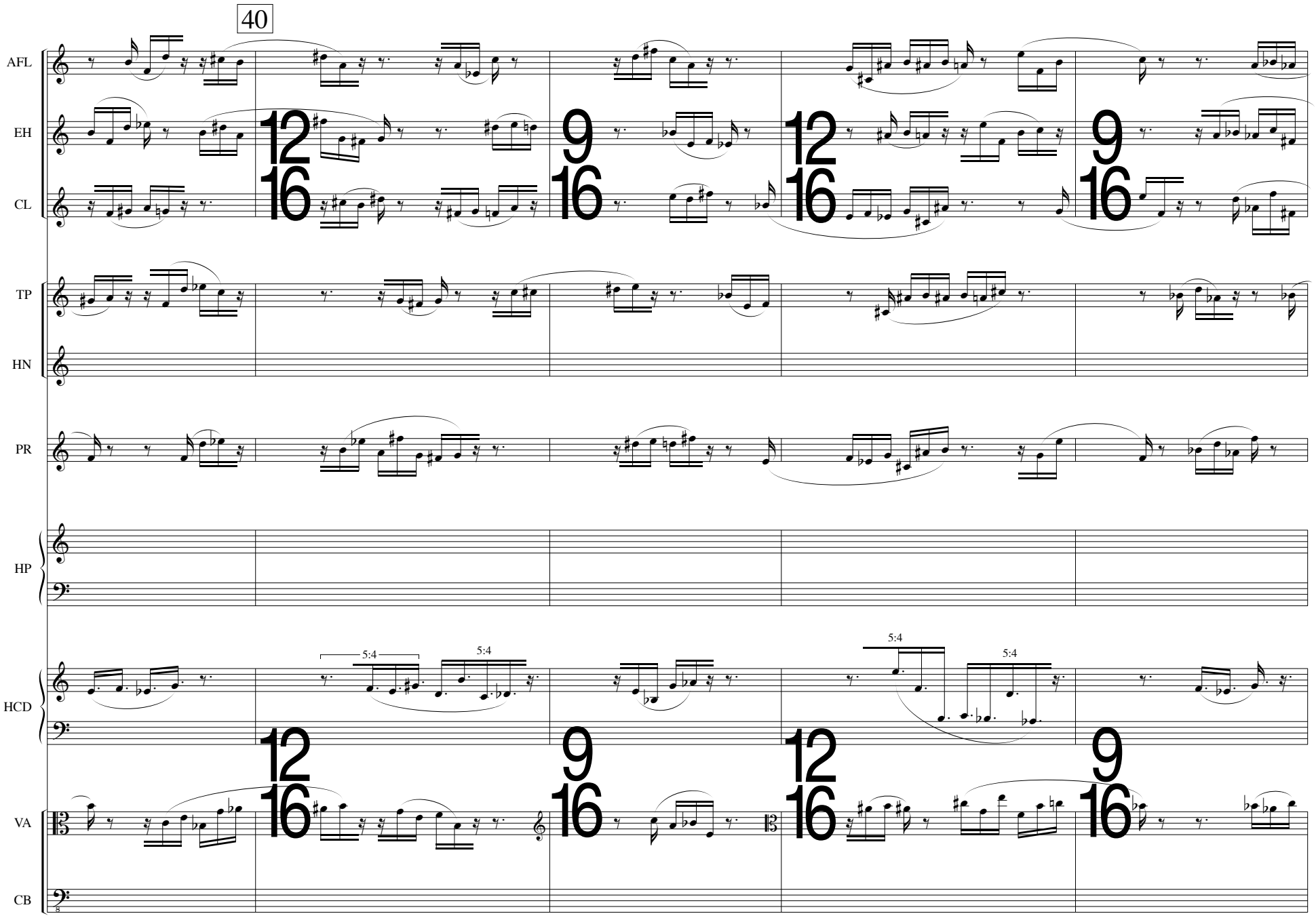
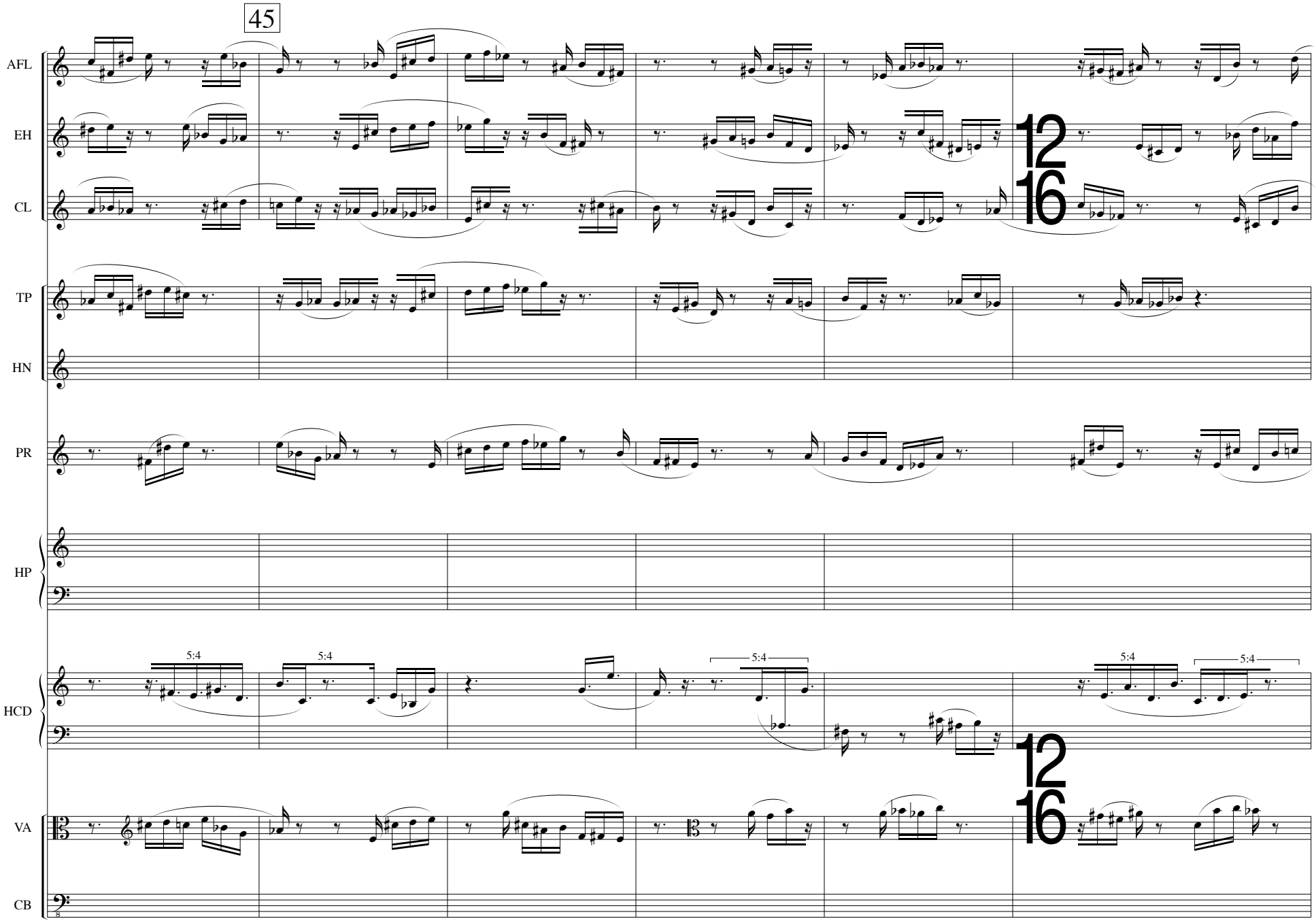
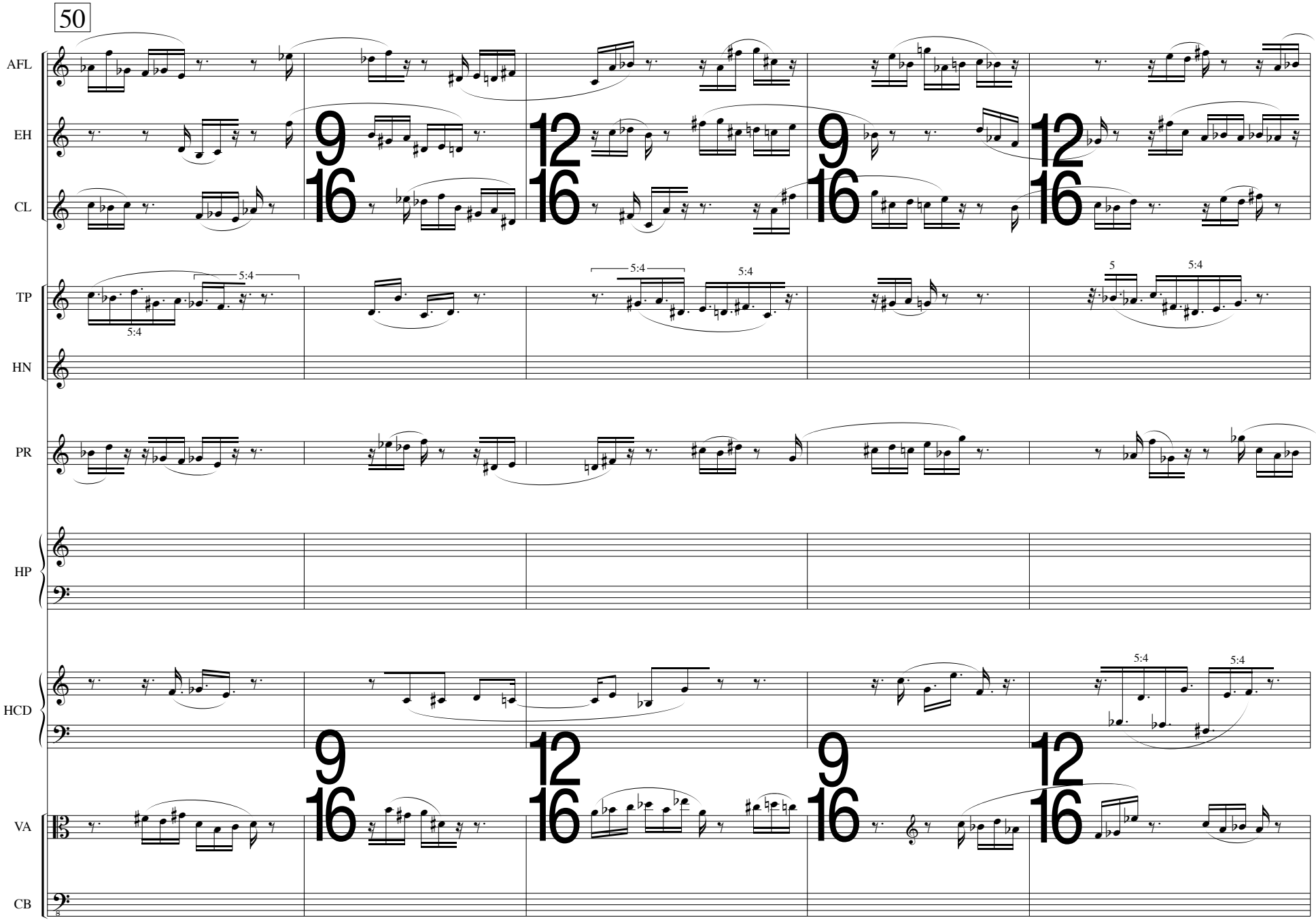
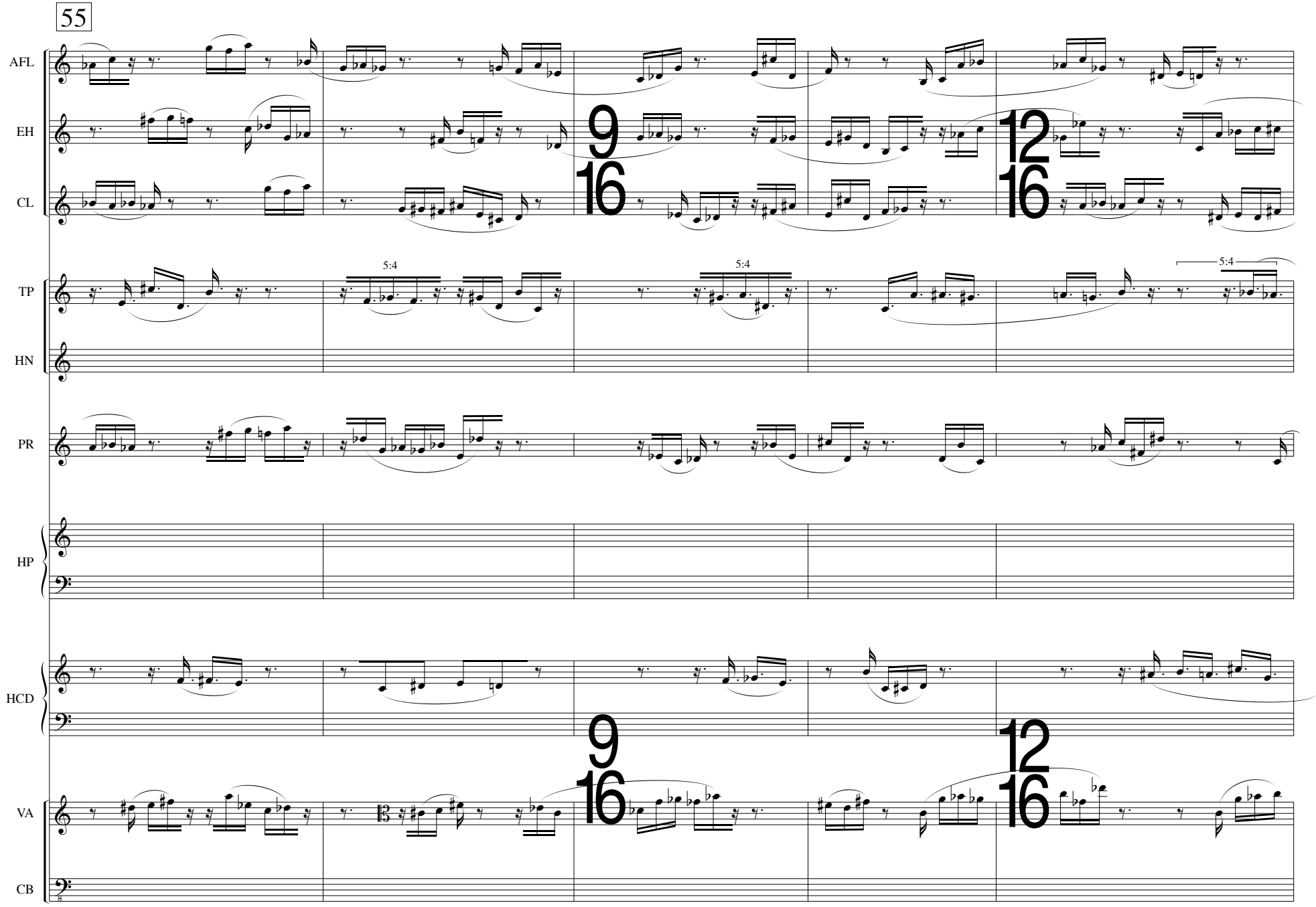
CL
TP
HN
PR
HP
HCD
VA
CB
12
16
9
16


35
AFL
EH
CL
TP
HN
PR
HP
HCD
VA
CB
9/16
12/16
9/16
5:4
5:4
5:4


40
AFL
EH
CL
TP
HN
PR
HP
HCD
VA
CB
12/16
9/16
12/16
9/16
5:4
5:4
5:4
5:4


45
AFL
EH
CL
TP
HN
PR
HP
HCD
VA
CB
5:4
5:4
5:4
5:4
12
16
12
16


50
AFL
EH
CL
TP
HN
PR
HP
HCD
VA
CB
9/16
12/16
9/16
12/16
5:4
5:4
5:4
5:4
5
5:4
5:4
5:4


55
AFL
EH
CL
TP
HN
PR
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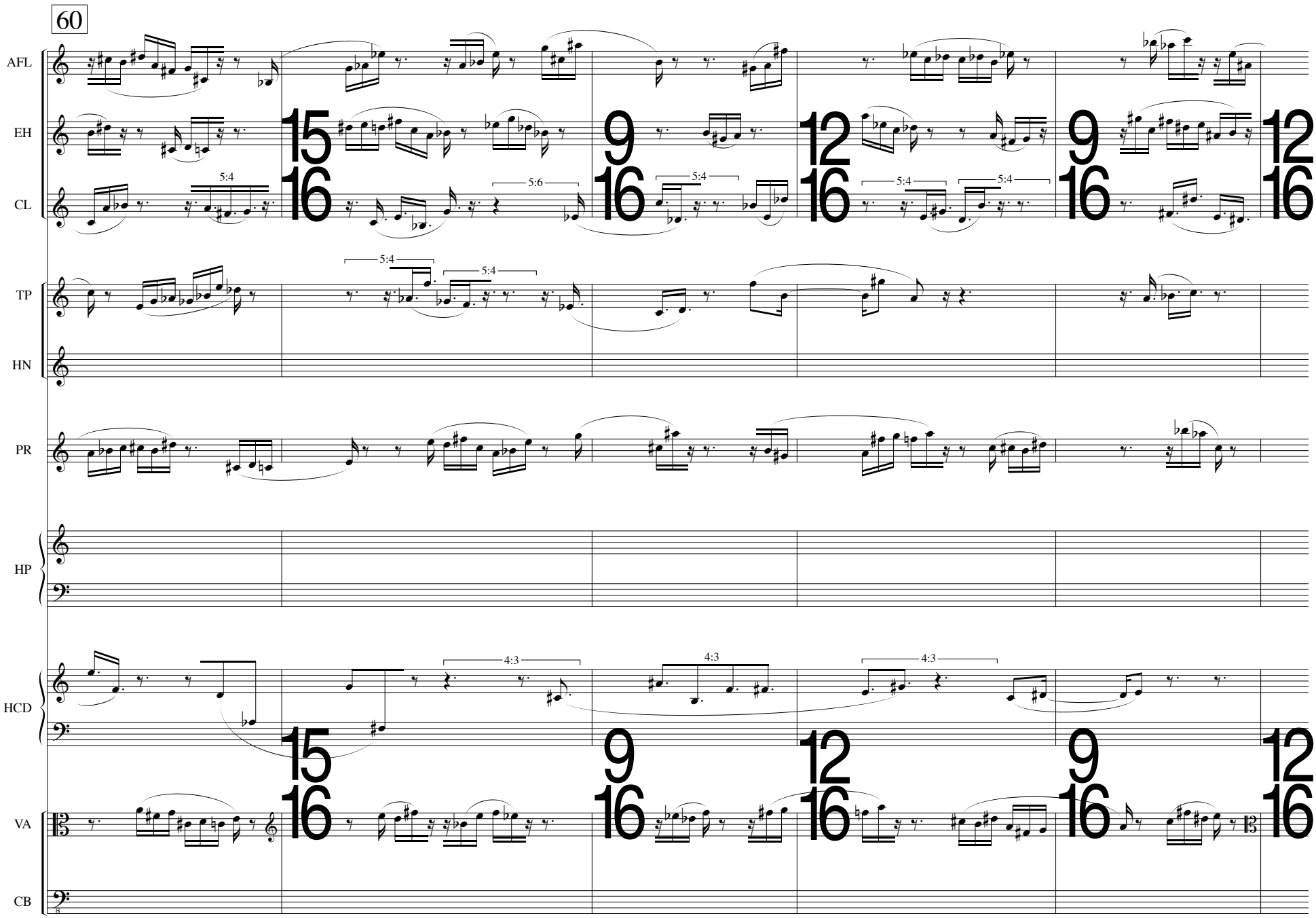
HCD
VA
CB
9
16
12
16
5:4
5:4
5:4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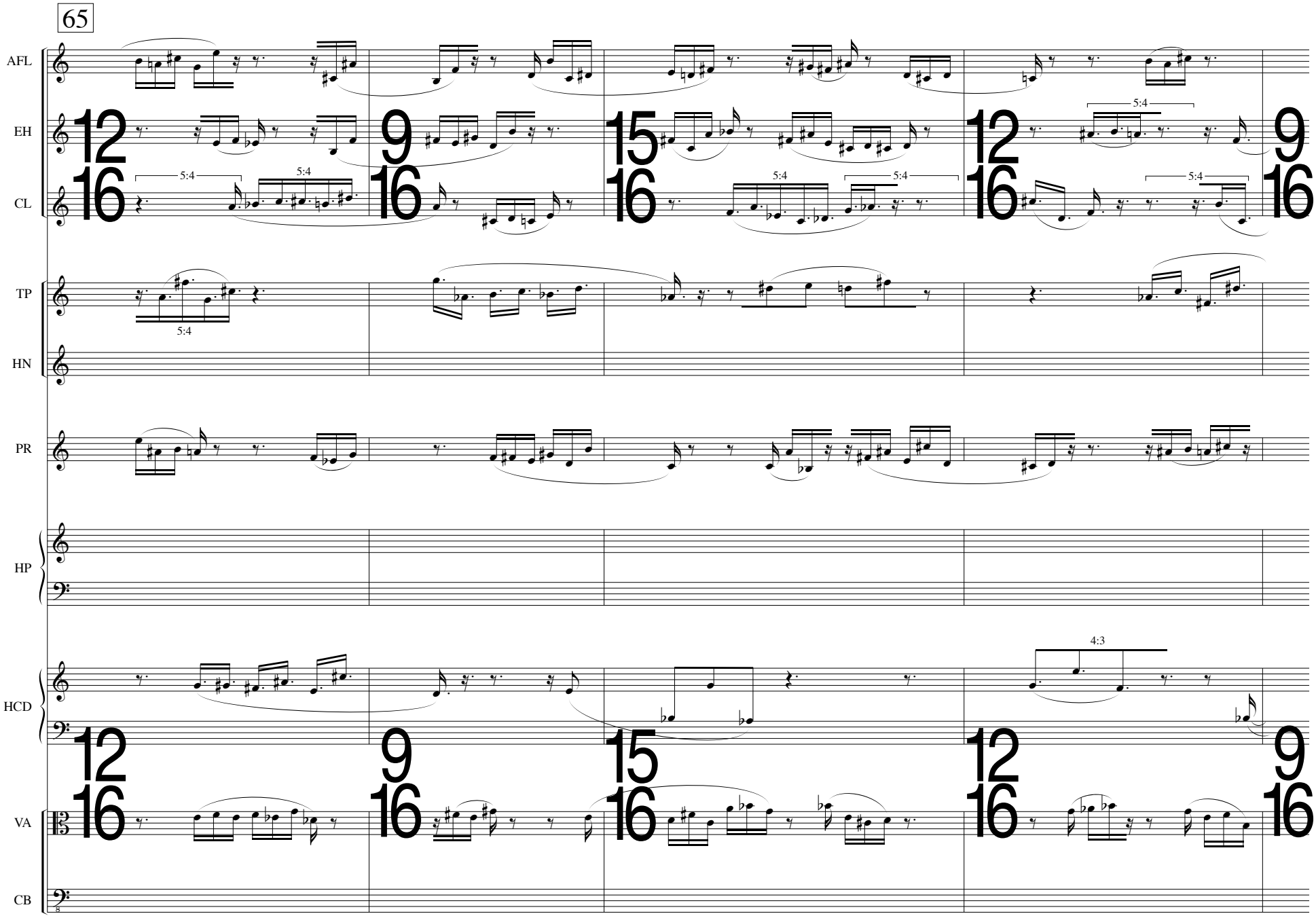
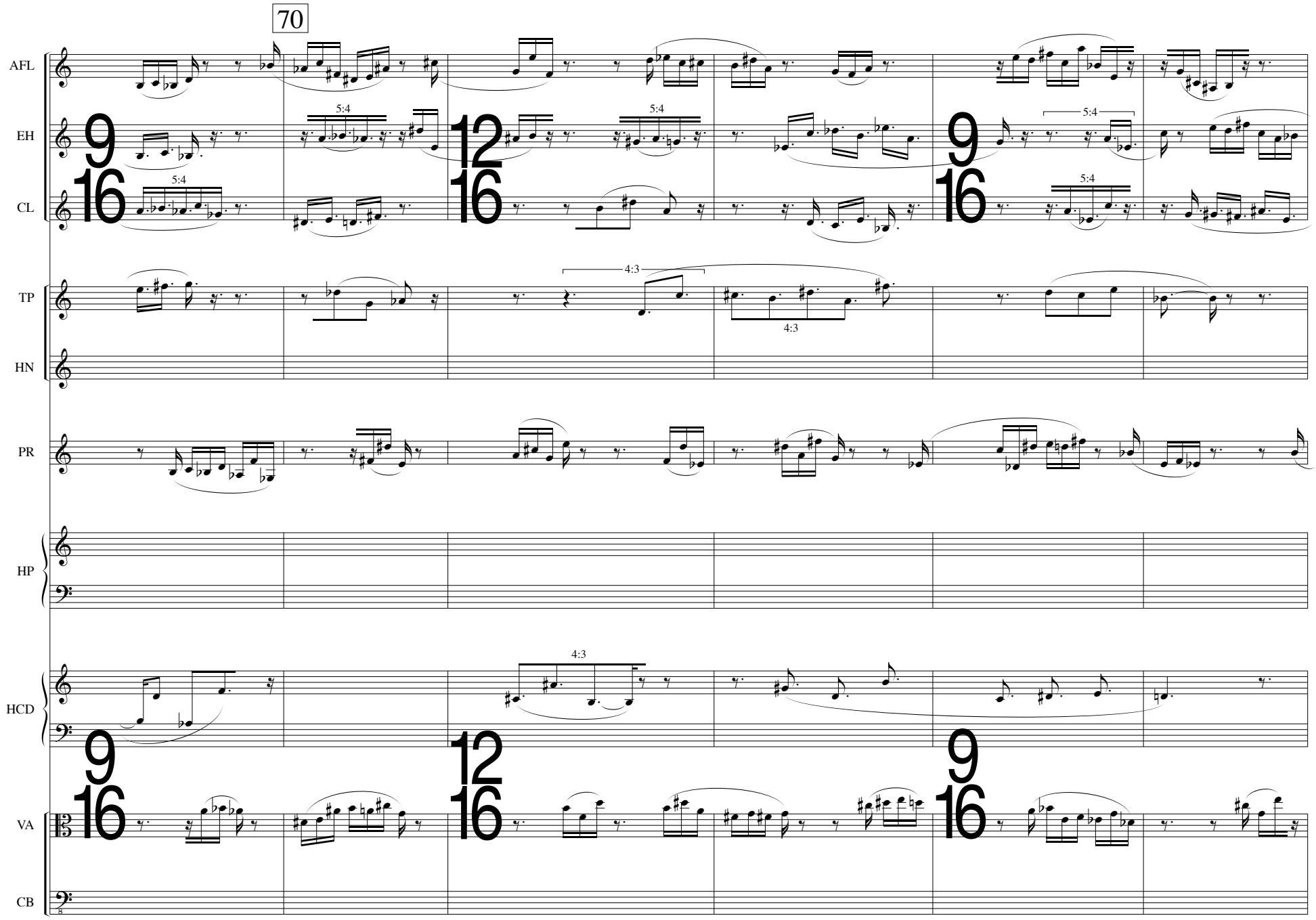
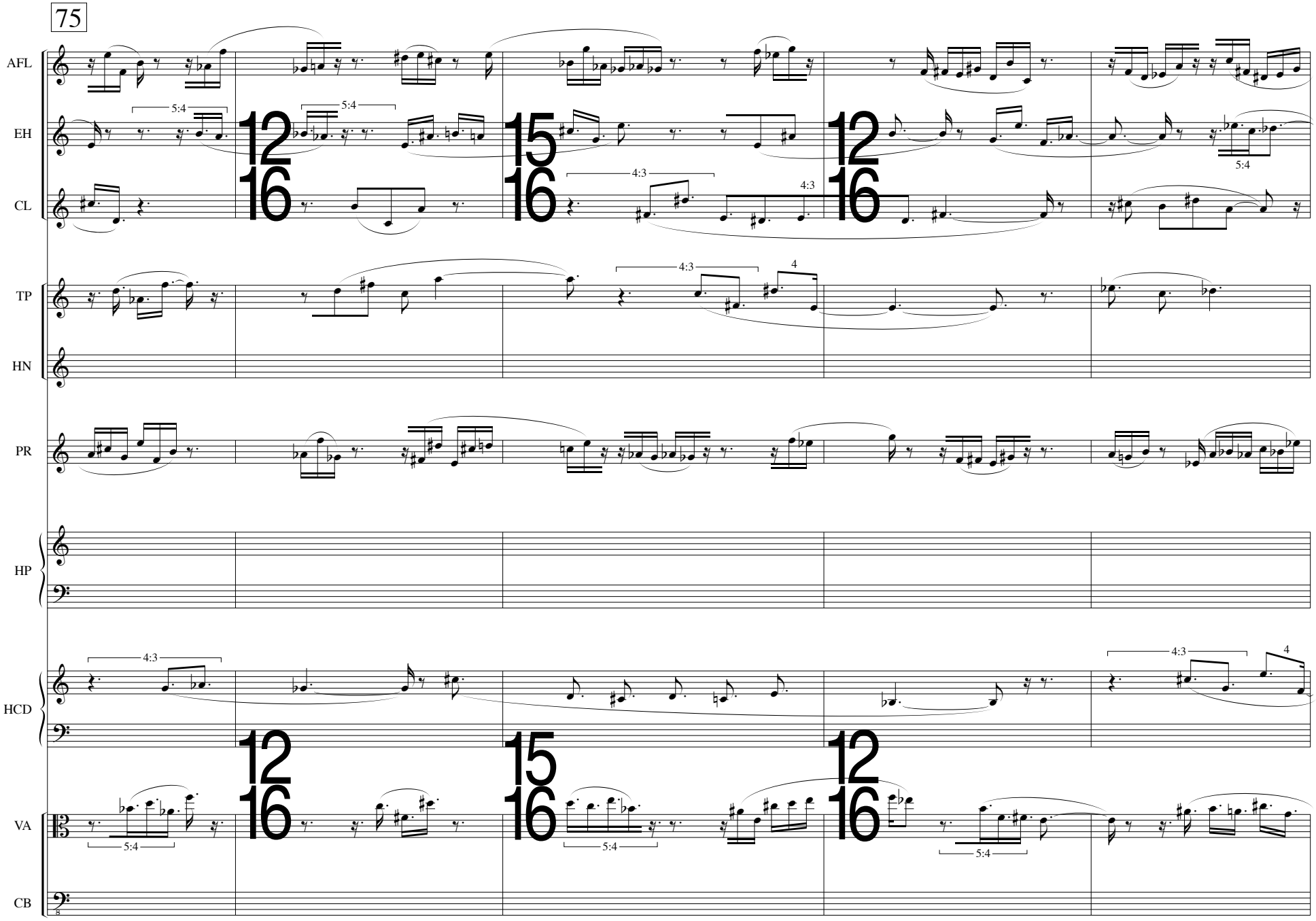
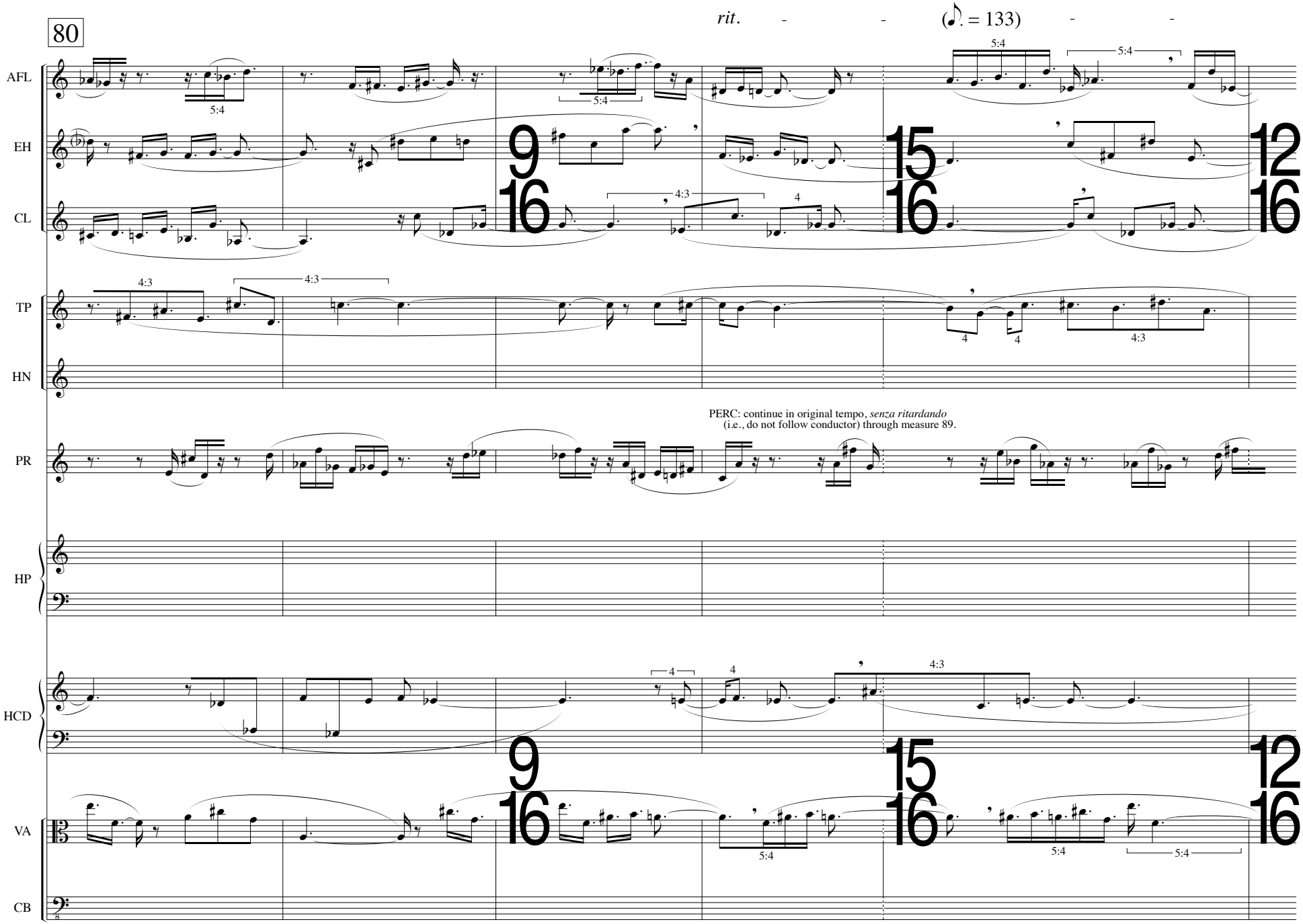
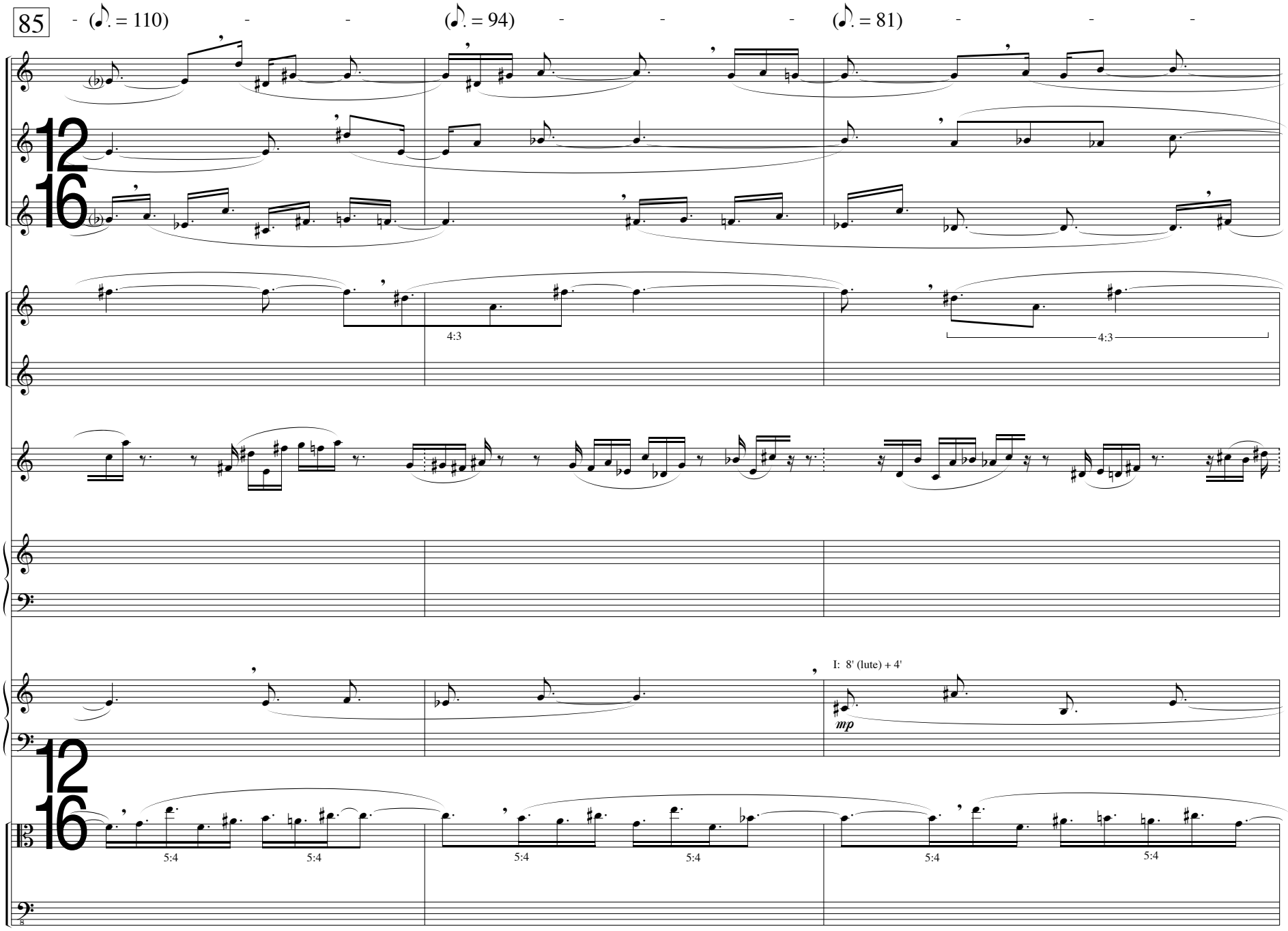
AFL
EH
CL
TP
HN
PR
HP
HCD
VA
CB
15/16
9/16
12/16
9/16
12/16
5:4
5:6
4:3

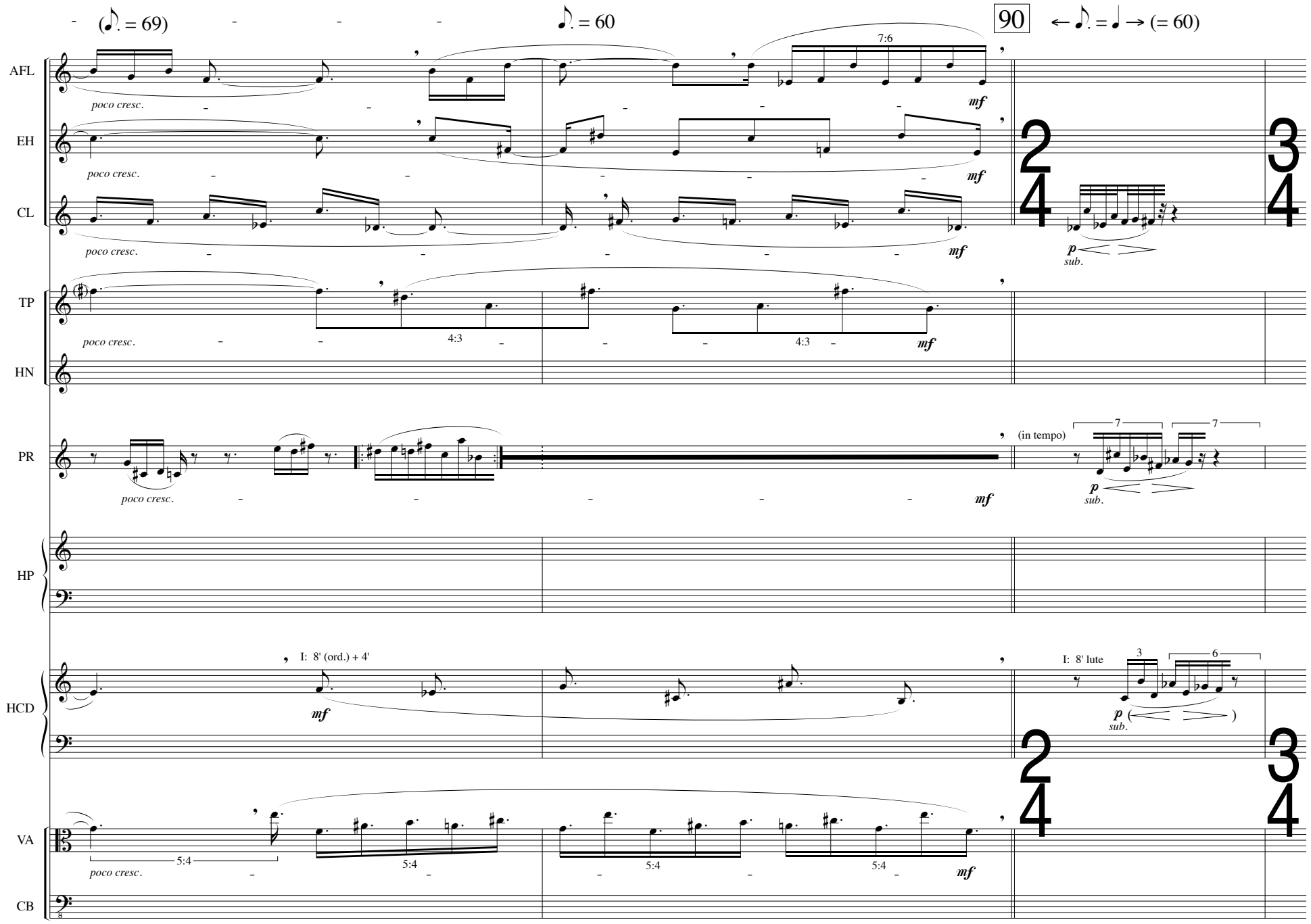

65
AFL
EH
CL
TP
HN
PR
HP
HCD
VA
CB
5:4
4:3

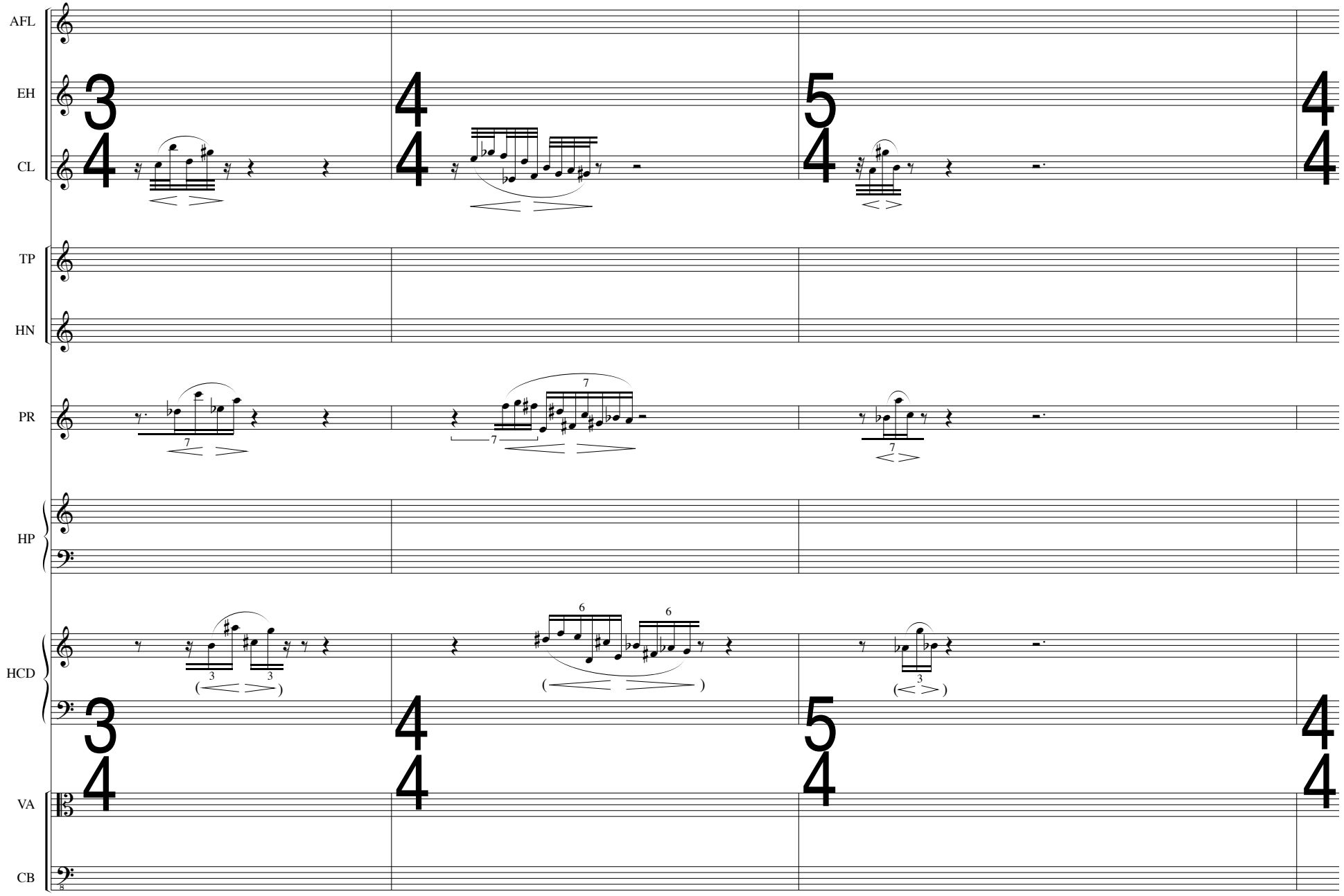

70
AFL
EH
CL
TP
HN
PR
HP
HCD
VA
CB
9/16
12/16
9/16
5:4
4:3

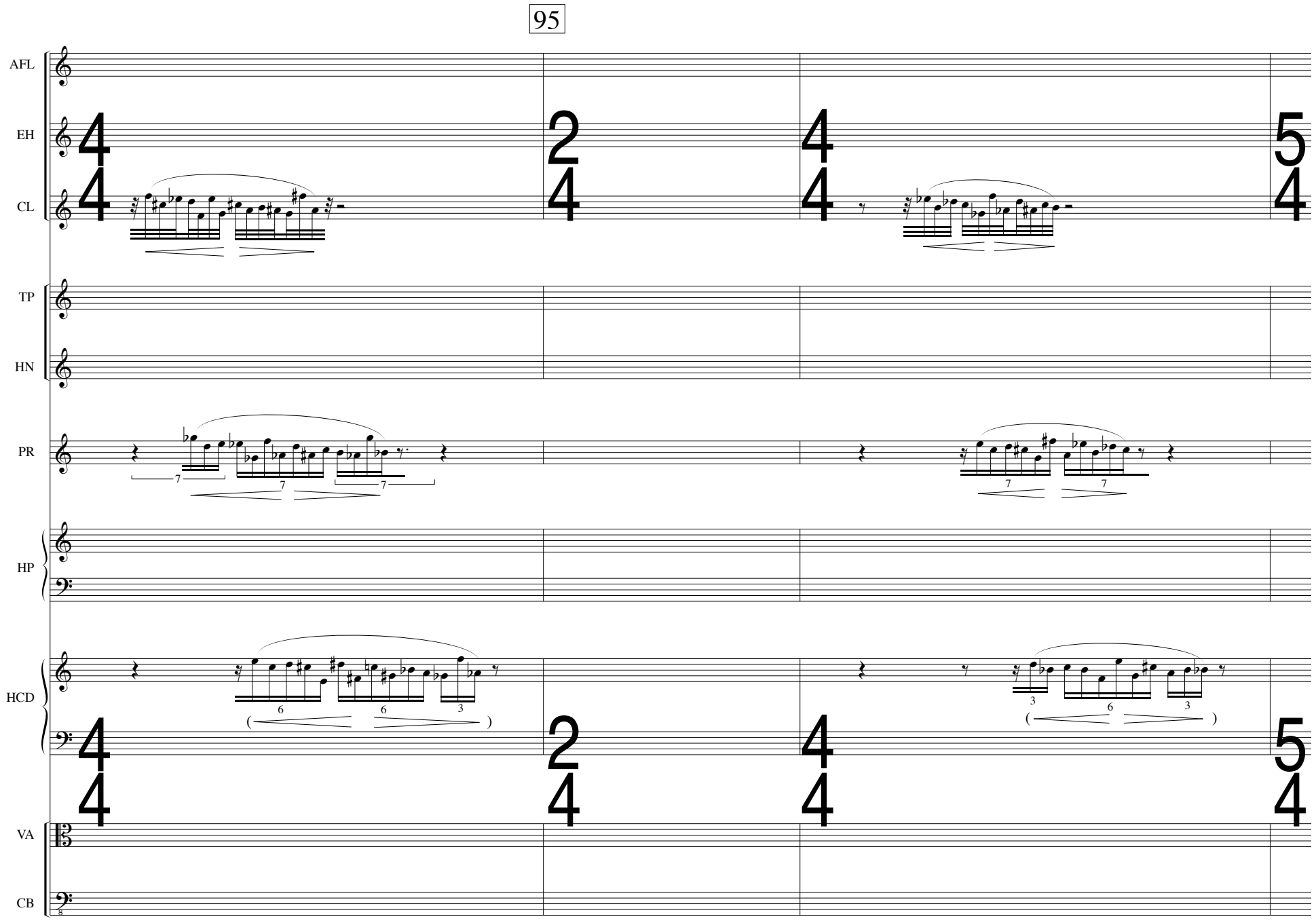

75
AFL
EH
CL
TP
HN
PR
HP
HCD
VA
CB
5:4
4:3
4
12/16
15/16


80
rit.
(♪. = 133)
AFL
EH
CL
TP
HN
PR
HP
HCD
VA
CB
PERC: continue in original tempo, senza ritardando
(i.e., do not follow conductor) through measure 89.

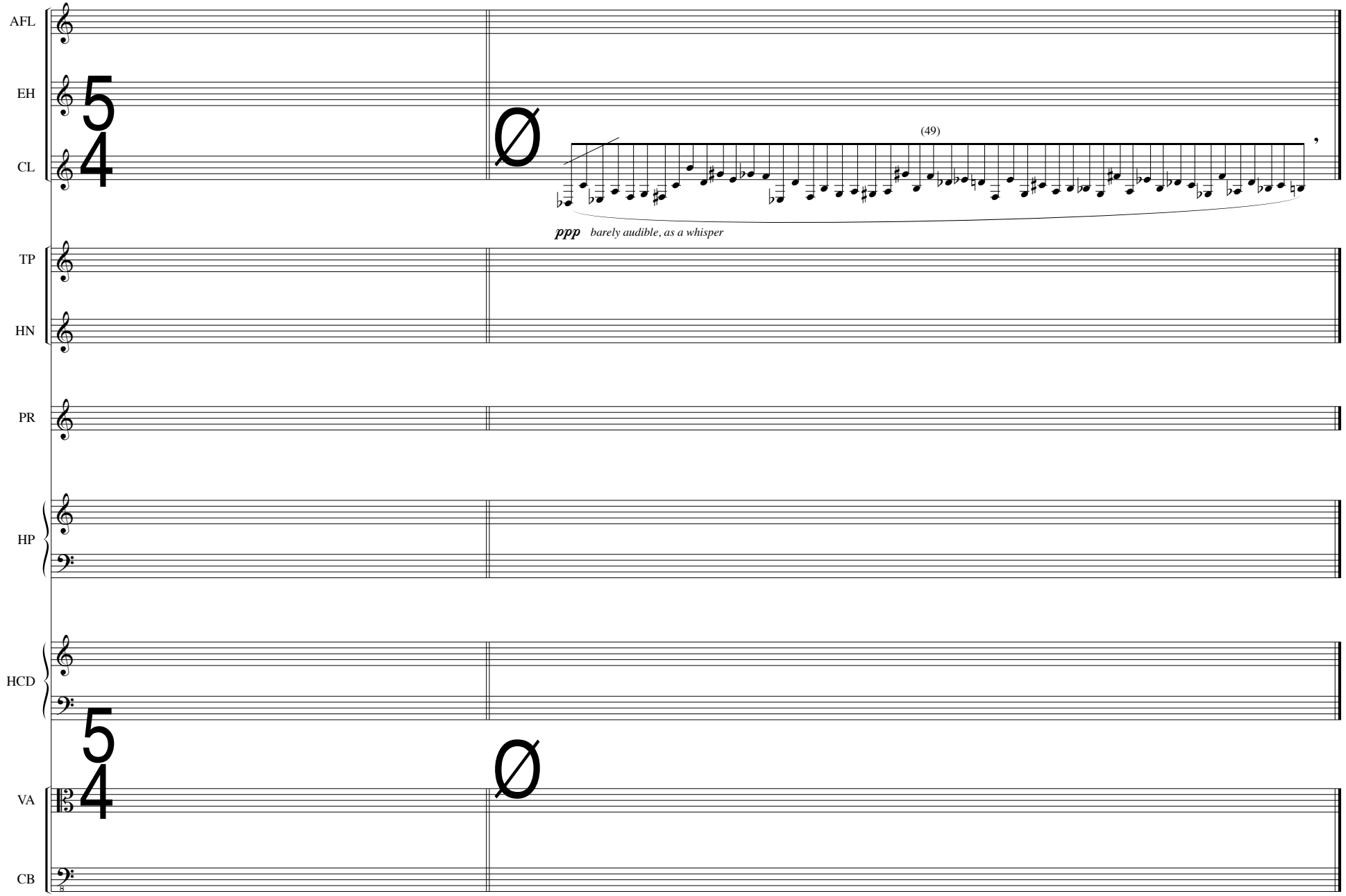

85
(♪. = 110)
(♪. = 94)
(♪. = 81)
AFL
EH
CL
TP
HN
PR
HP
HCD
VA
CB
12
16
4:3
4:3
I: 8' (lute) + 4'
mp
5:4
5:4
5:4
5:4
5:4
5:4


(♪. = 69)
♪. = 60
90
← ♪. = ♩ → (= 60)
AFL
EH
CL
TP
HN
PR
HP
HCD
VA
CB
poco cresc.
mf
7:6
4:3
5:4
p
sub.
(in tempo)
I: 8' (ord.) + 4'
I: 8' lute
2
4
3
4


AFL
EH
CL
TP
HN
PR
HP
HCD
VA
CB

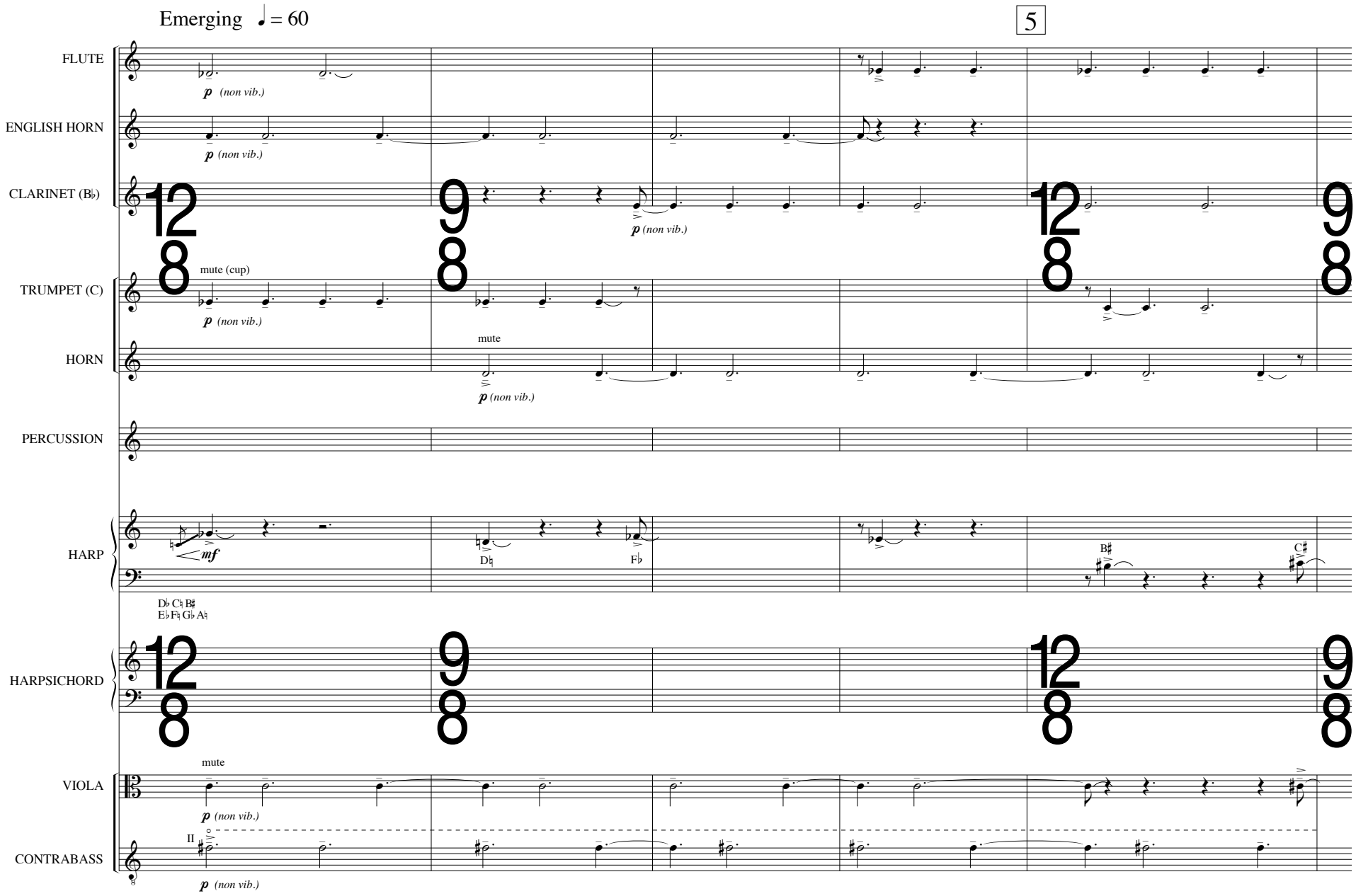

95
AFL
EH
CL
TP
HN
PR
HP
HCD
VA
CB

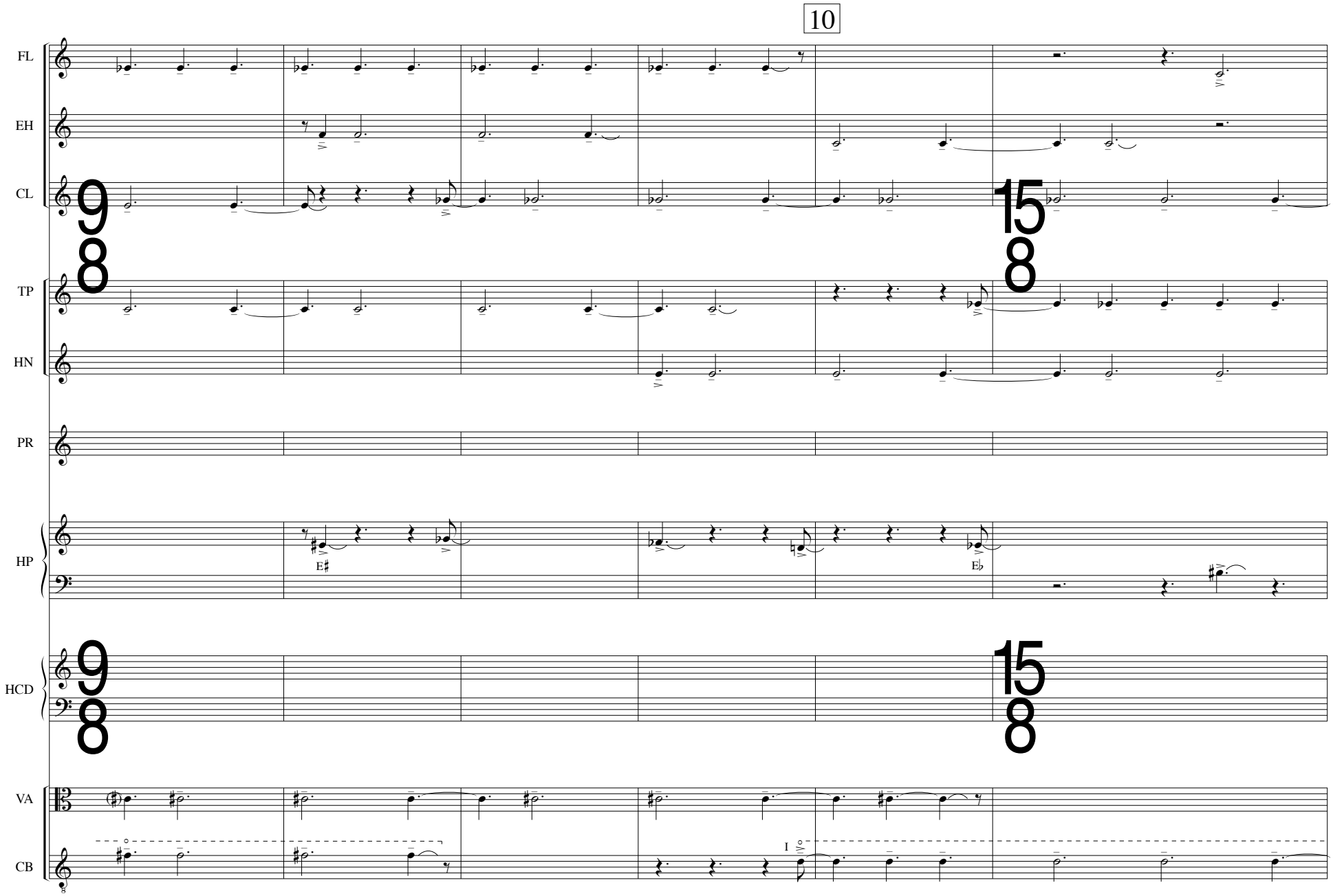
Fleeting (*senza tempo*)

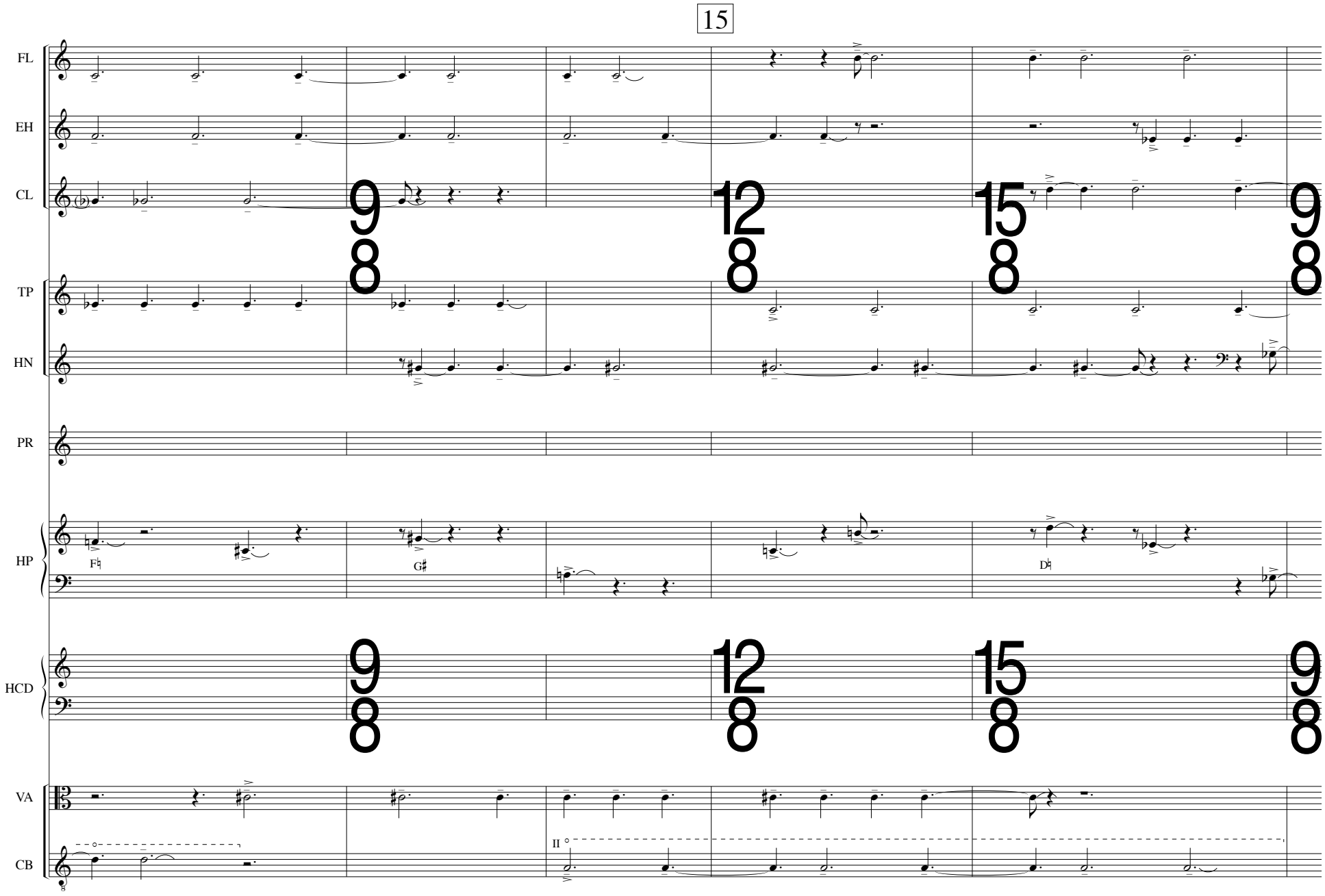


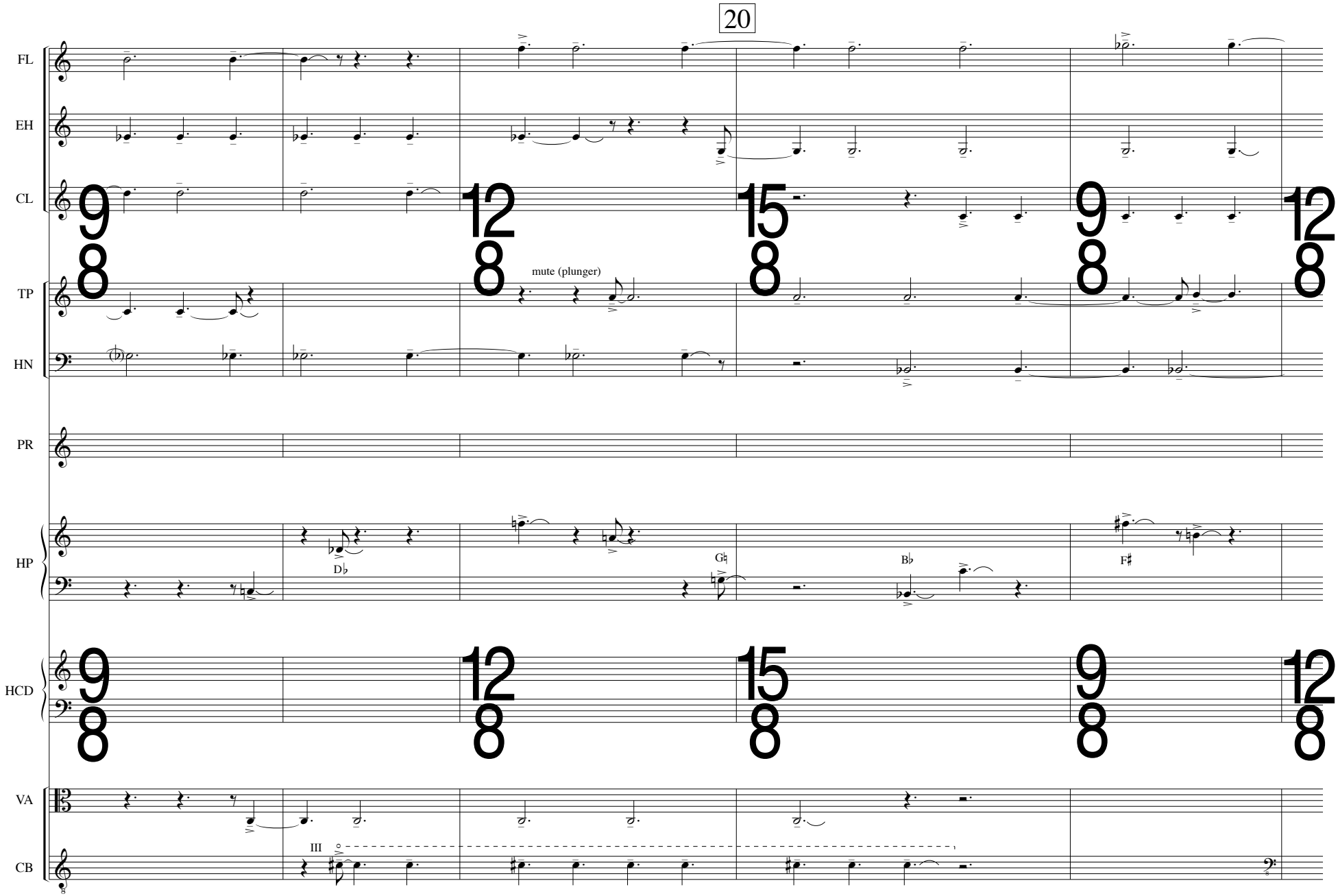
II. au seuil de ruine

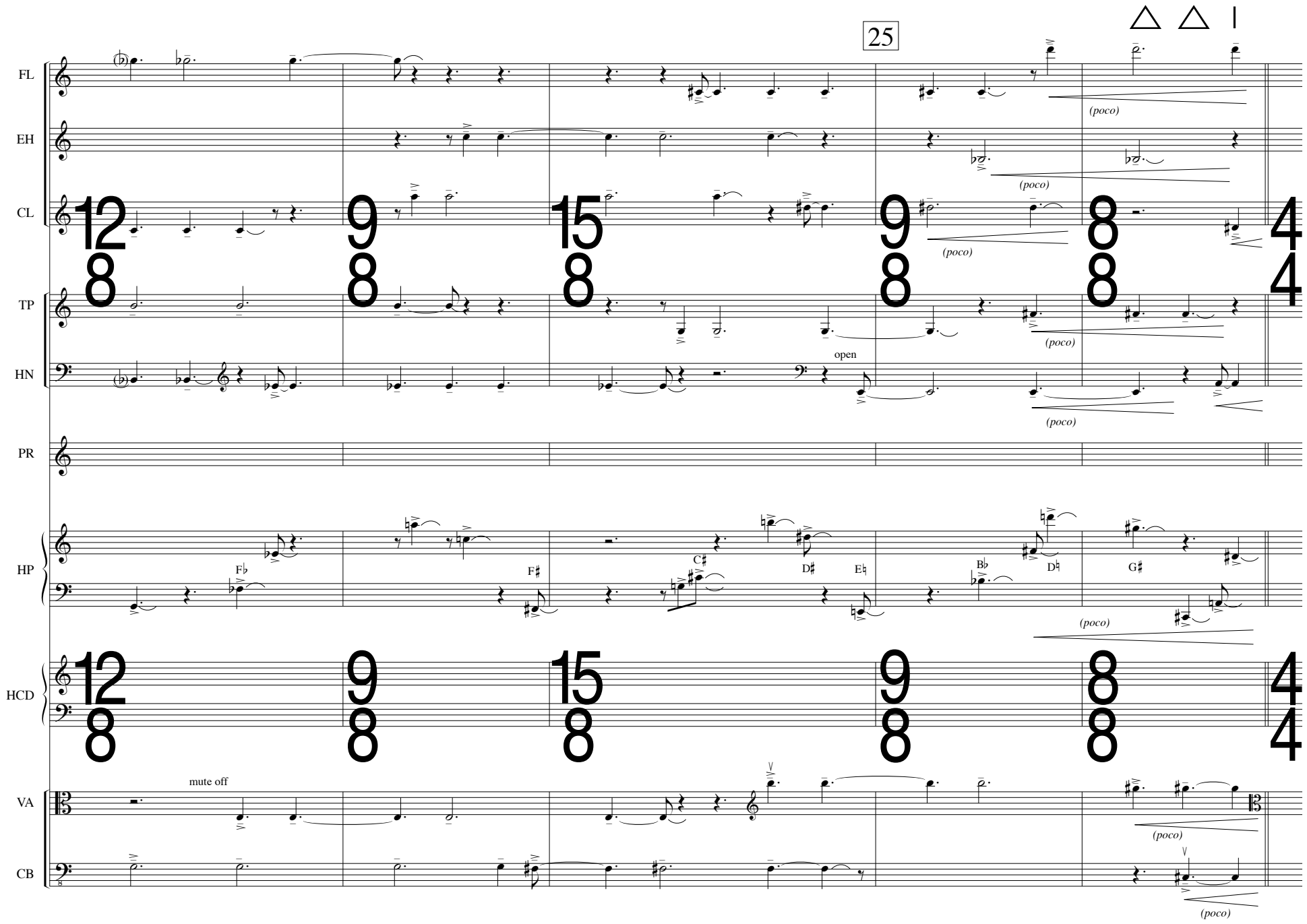
(notturno interrotto)

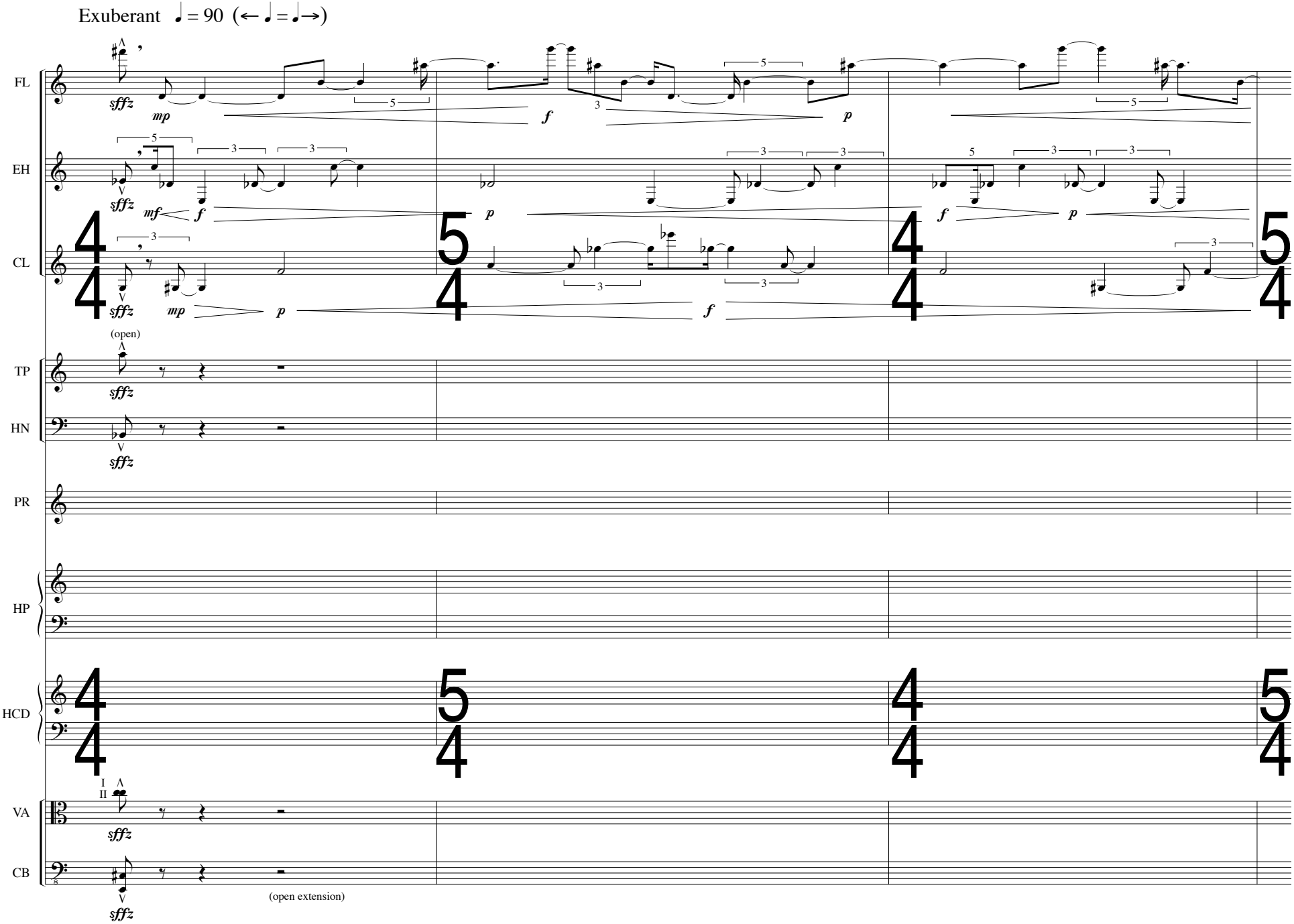


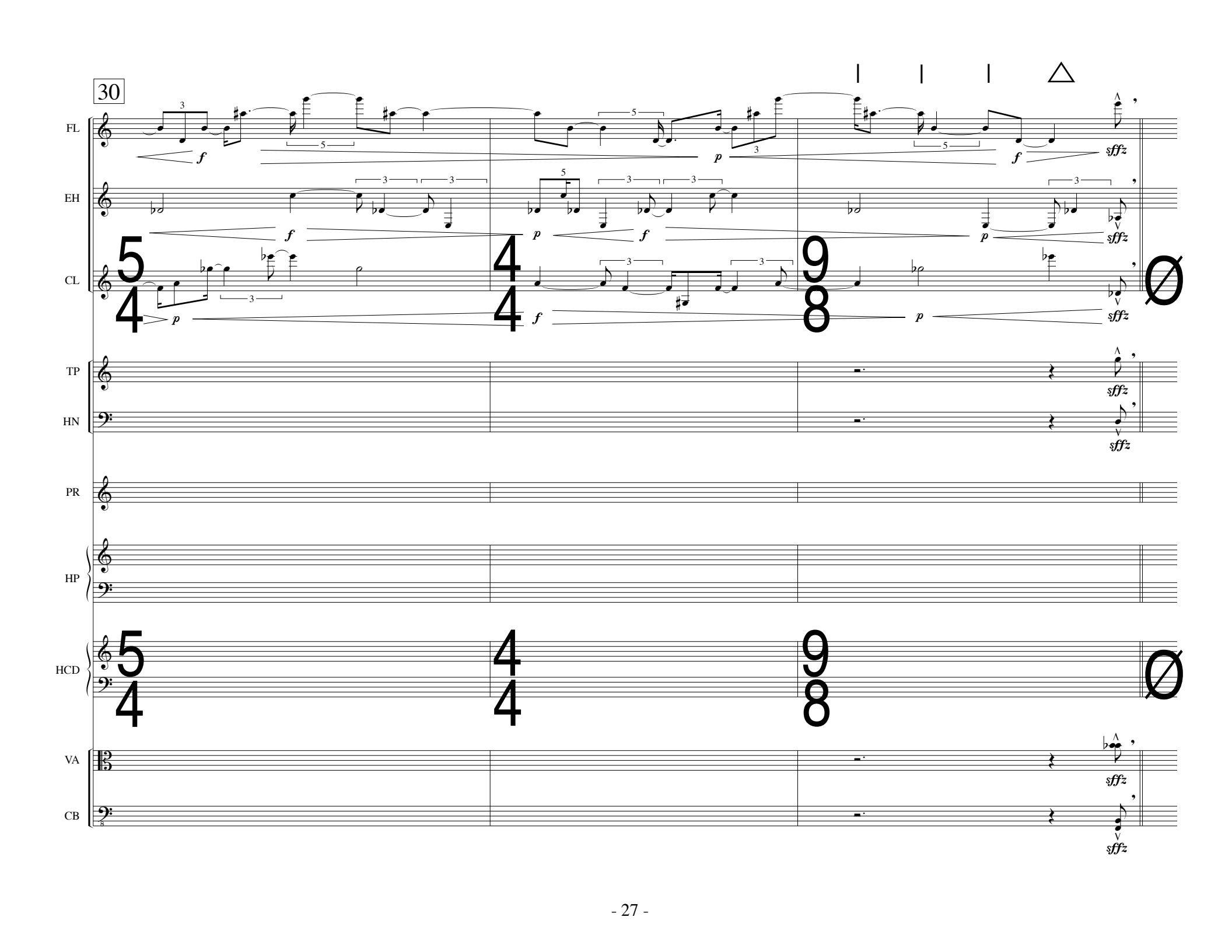

10
FL
EH
CL
TP
HN
PR
HP
HCD
VA
CB
E♯
E♭
I

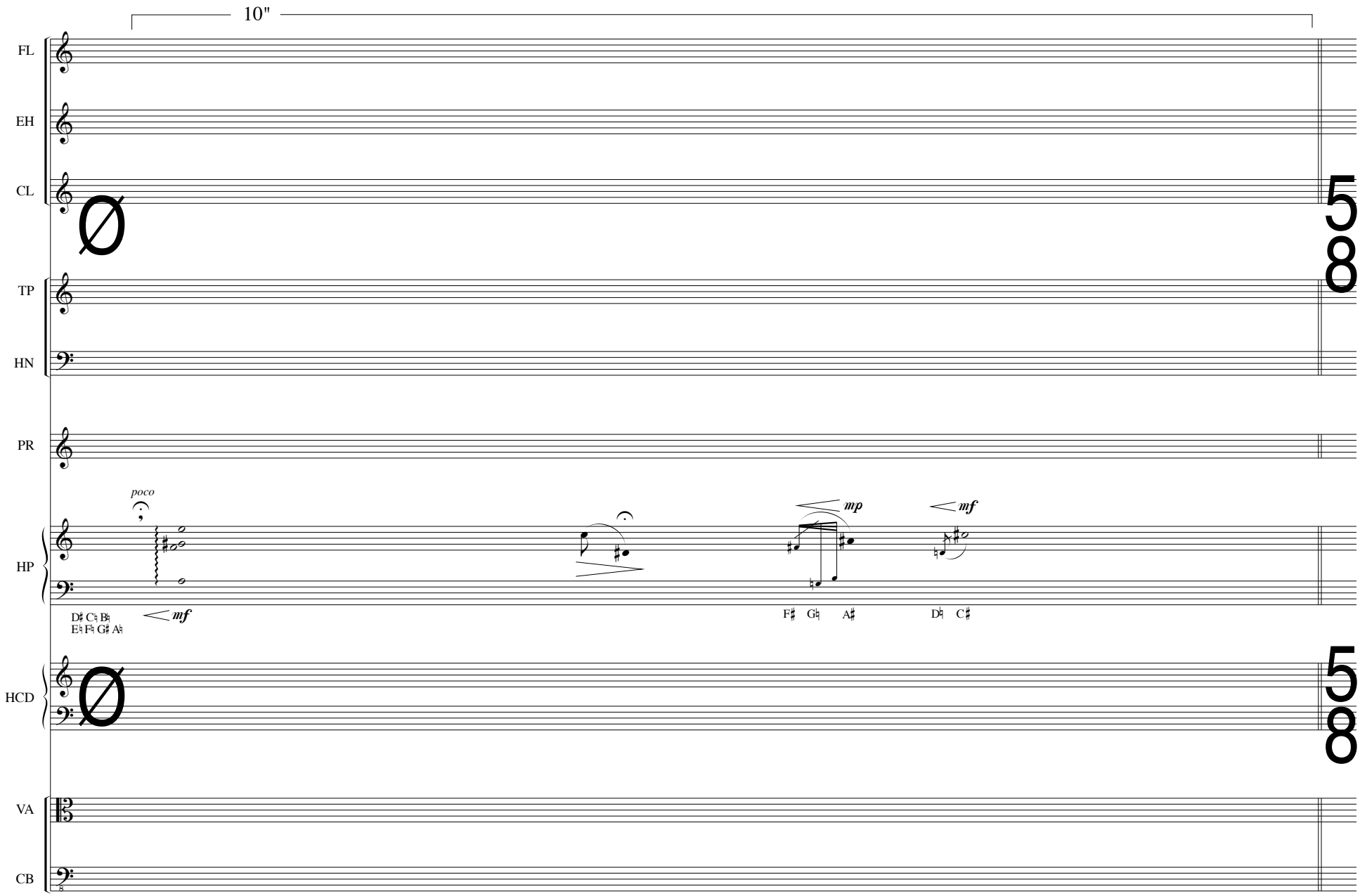

15
FL
EH
CL
TP
HN
PR
HP
HCD
VA
CB
F♮
G♯
D♮
II °

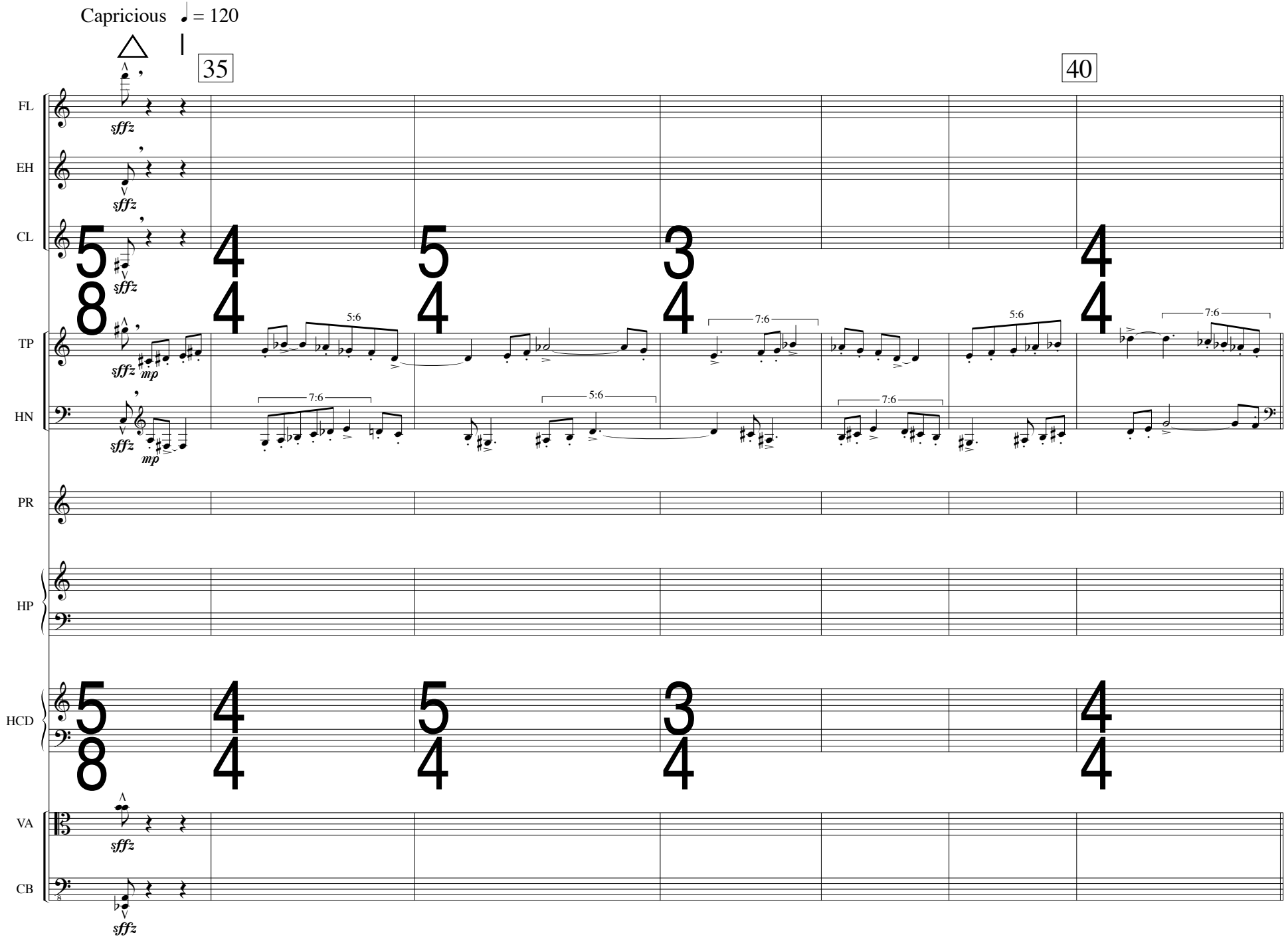

20
FL
EH
CL
TP
HN
PR
HP
HCD
VA
CB
mute (plunger)
D♭
G♮
B♭
F♯
III

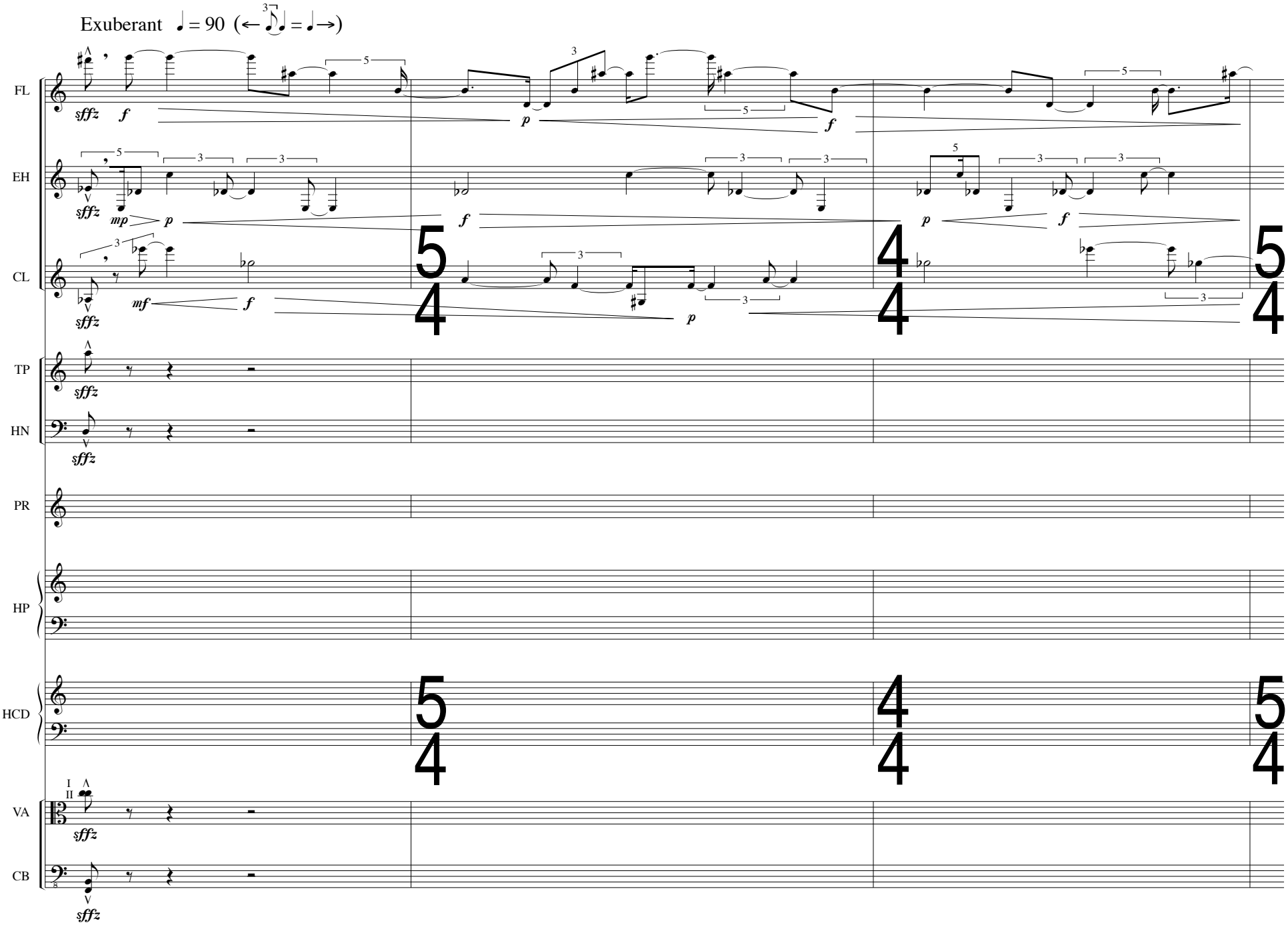

25
FL
EH
CL
TP
HN
PR
HP
HCD
VA
CB
(poco)
open
mute off
F♭
F♯
C♯
D♯
E♮
B♭
D♮
G♯

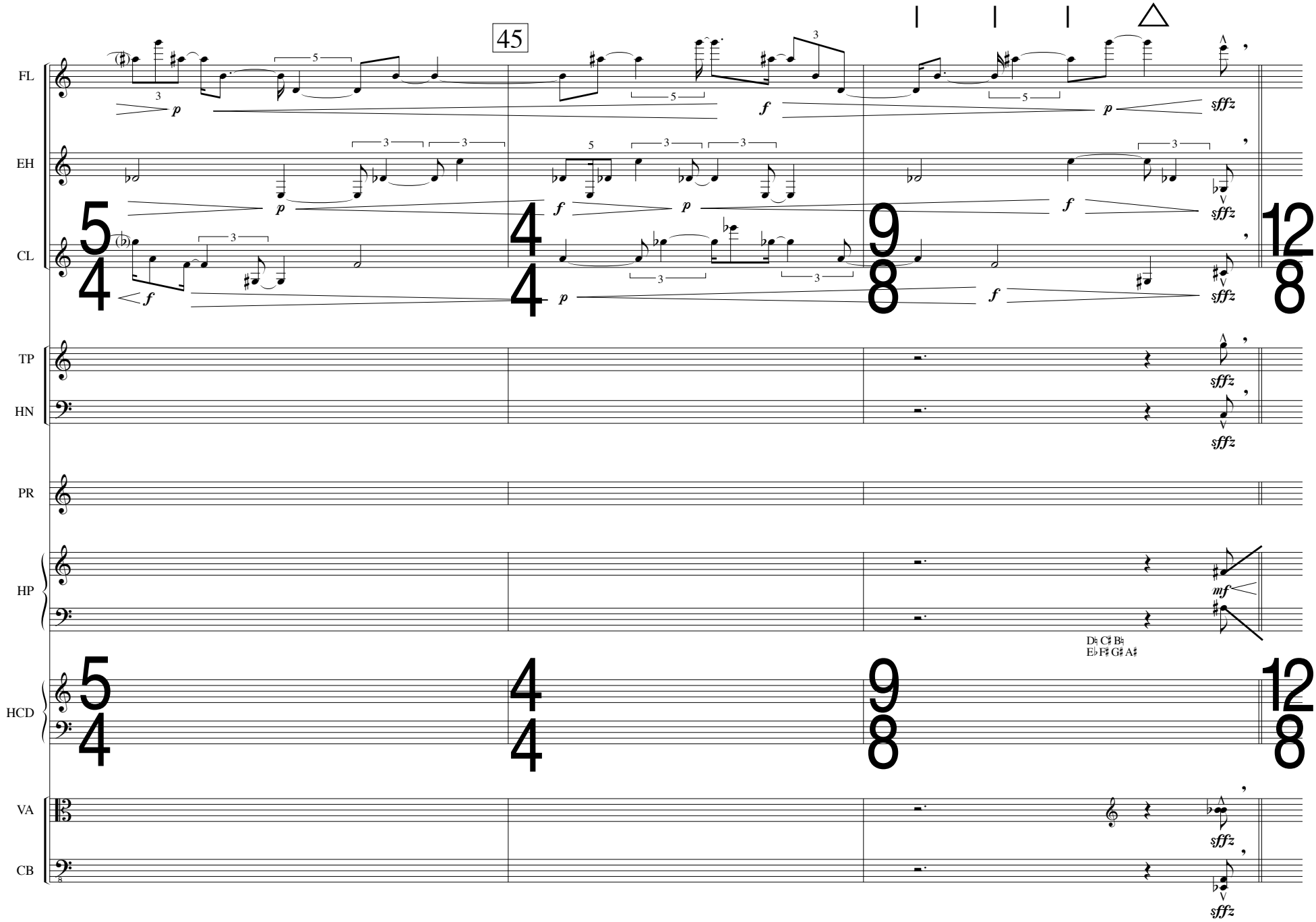

Exuberant ♩ = 90 (← ♩ = ♩ →)
FL
EH
CL
TP
HN
PR
HP
HCD
VA
CB
sffz
mp
mf
f
p
(open)
(open extension)

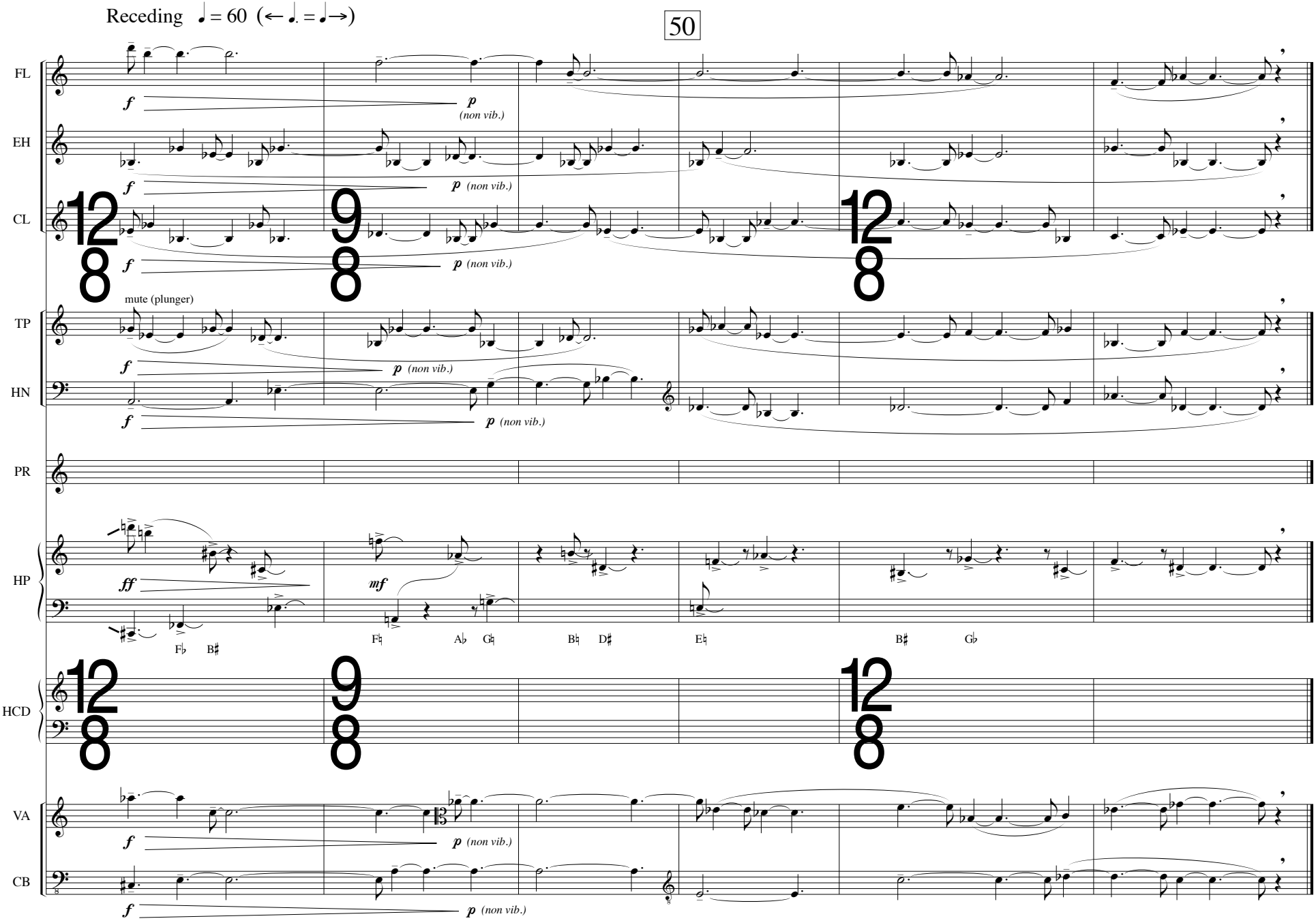

30
FL
EH
CL
TP
HN
PR
HP
HCD
VA
CB
f
p
sffz


Calm (*senza tempo*)
10"
FL
EH
CL
TP
HN
PR
HP
HCD
VA
CB
poco
mf
mp
mf
D♯ C♮ B♮
E♮ F♮ G♯ A♮
F♯ G♮ A♯
D♮ C♯
5/8
5/8


Capricious ♩= 120
35
40
FL
EH
CL
TP
HN
PR
HP
HCD
VA
CB
sffz
mp
5:6
7:6

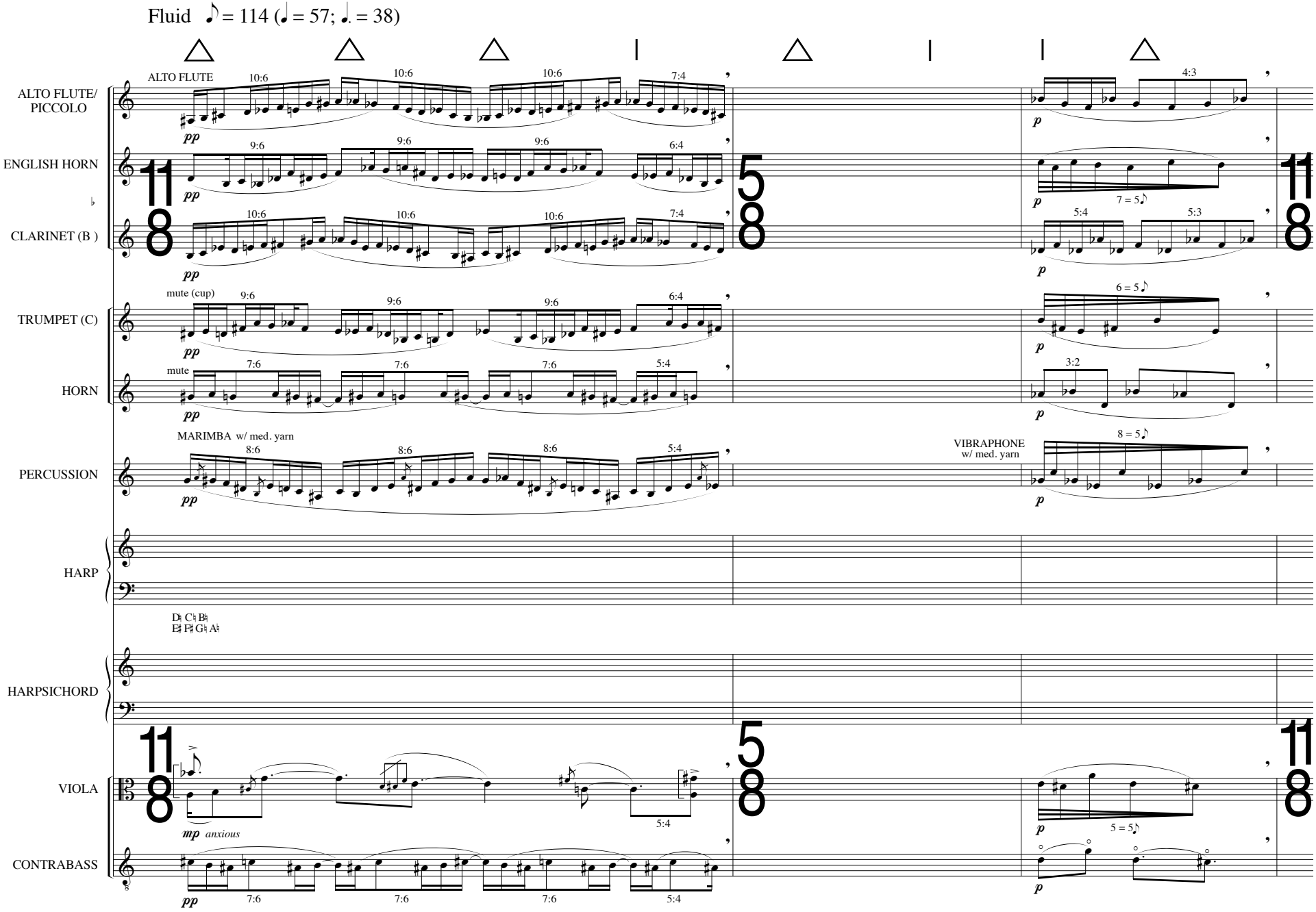

Exuberant ♩ = 90 (← 3 ♪ ♩ = ♩ →)
FL
EH
CL
TP
HN
PR
HP
HCD
VA
CB
sffz
f
p
mp
mf
5
4

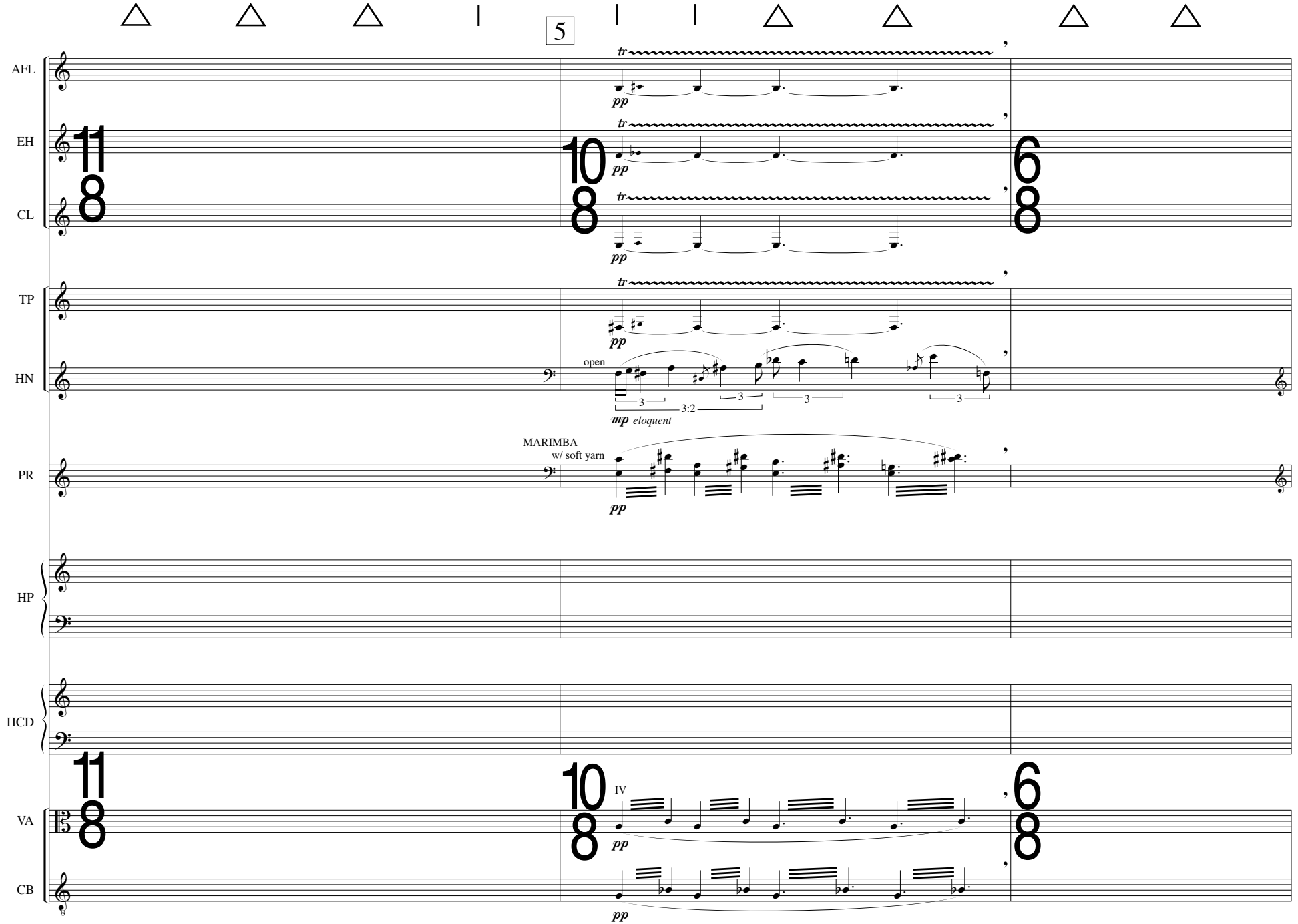

45
FL
EH
CL
TP
HN
PR
HP
HCD
VA
CB
5/4
4/4
9/8
12/8
p
f
sffz
mf
D♭ C♯ B♭
E♭ F♯ G♯ A♯

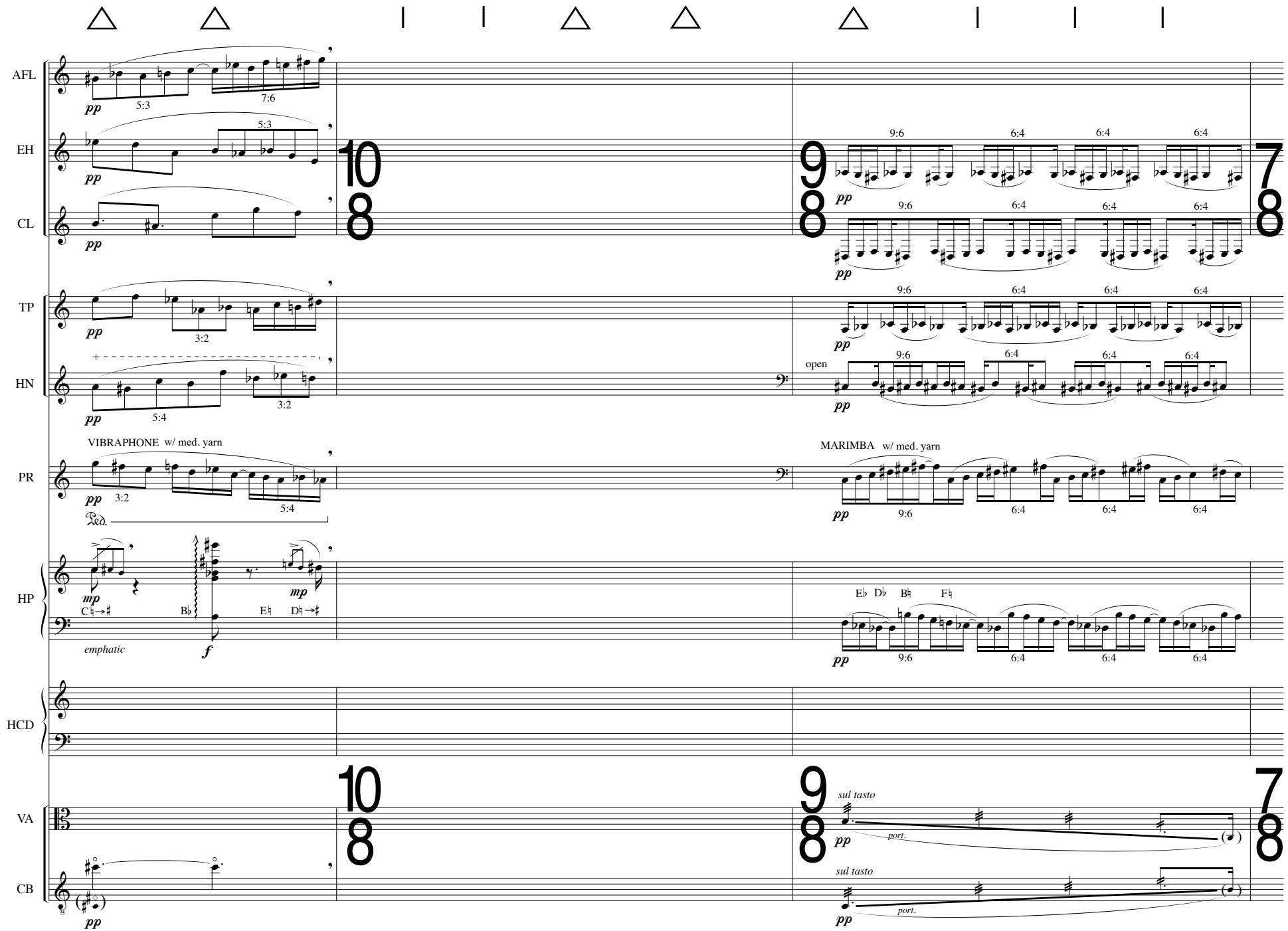

Receding ♩ = 60 (← ♩. = ♩→)
50
FL
EH
CL
TP
HN
PR
HP
HCD
VA
CB
mute (plunger)
f
p (non vib.)
ff
mf
F♭ B♯
F♮ A♭ G♮ B♮ D♯ E♮ B♯ G♭

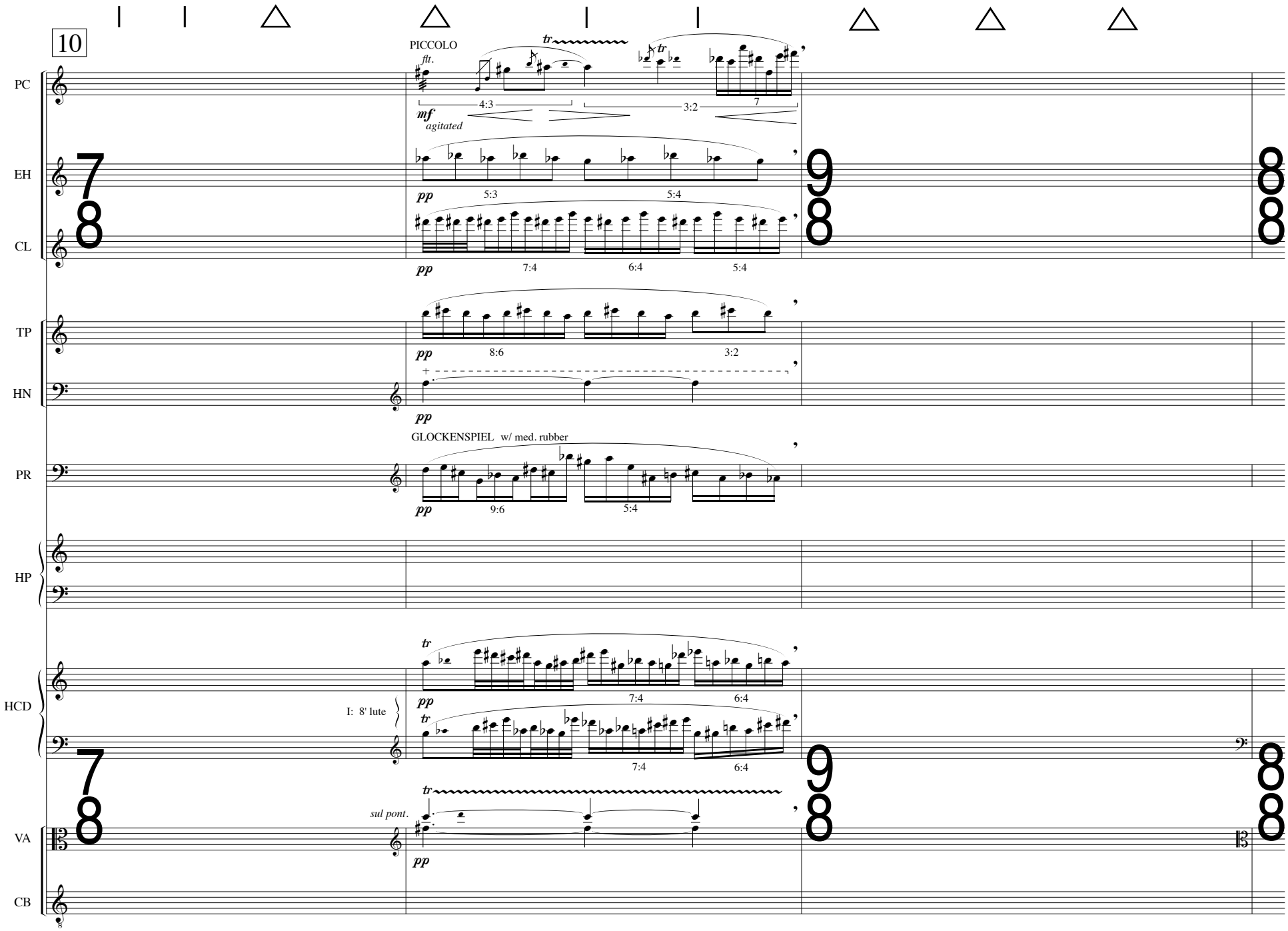
III. one of many circles

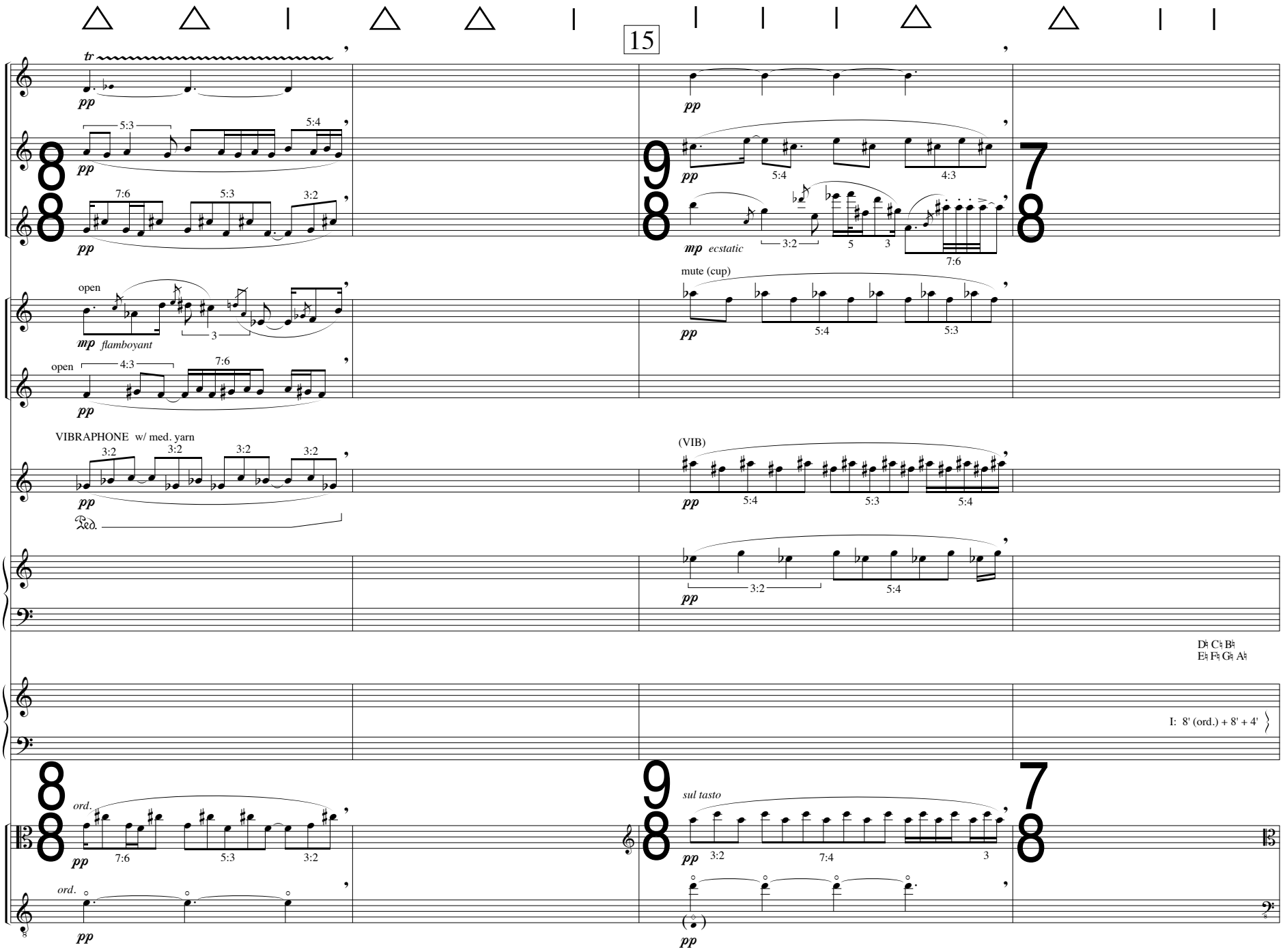
(hyperfractal variants)

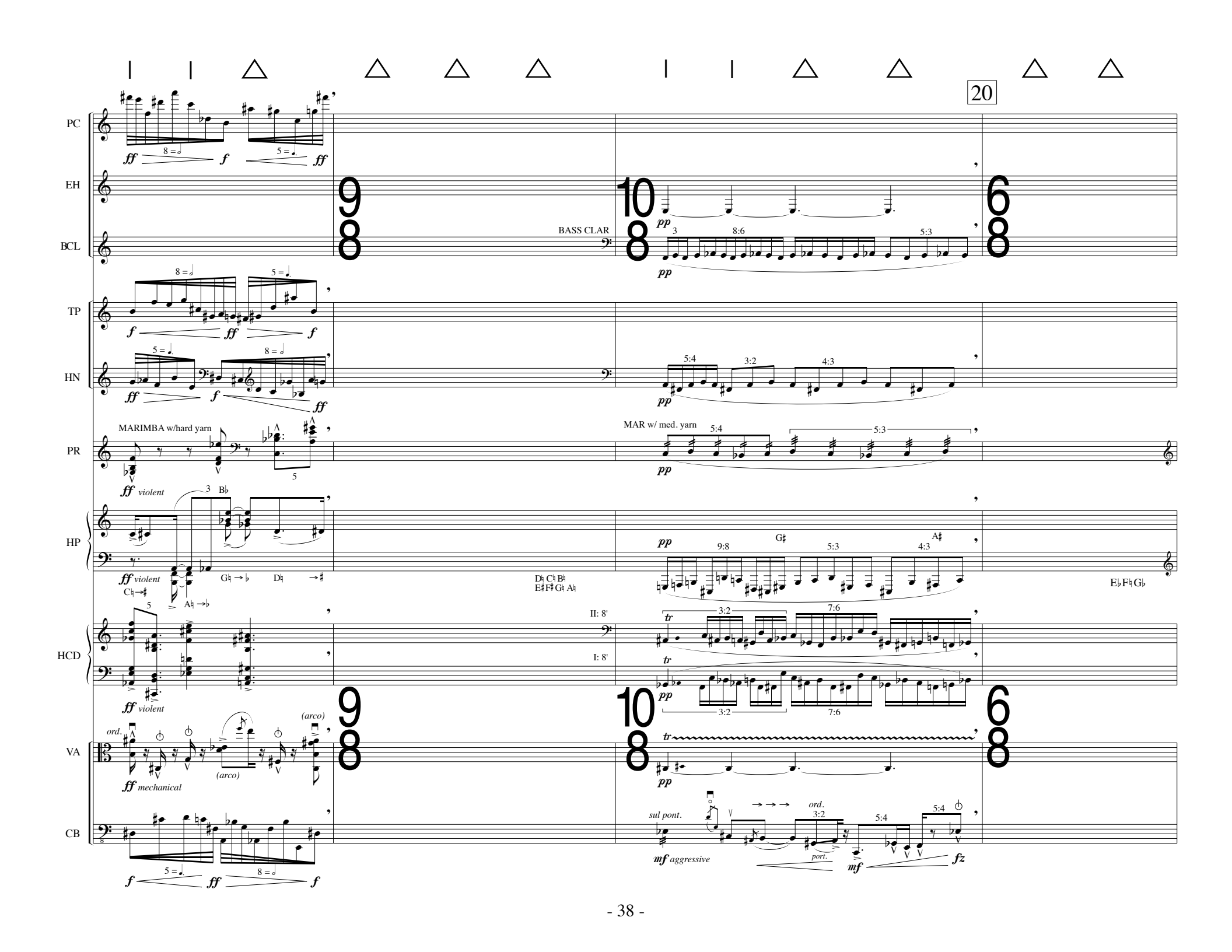


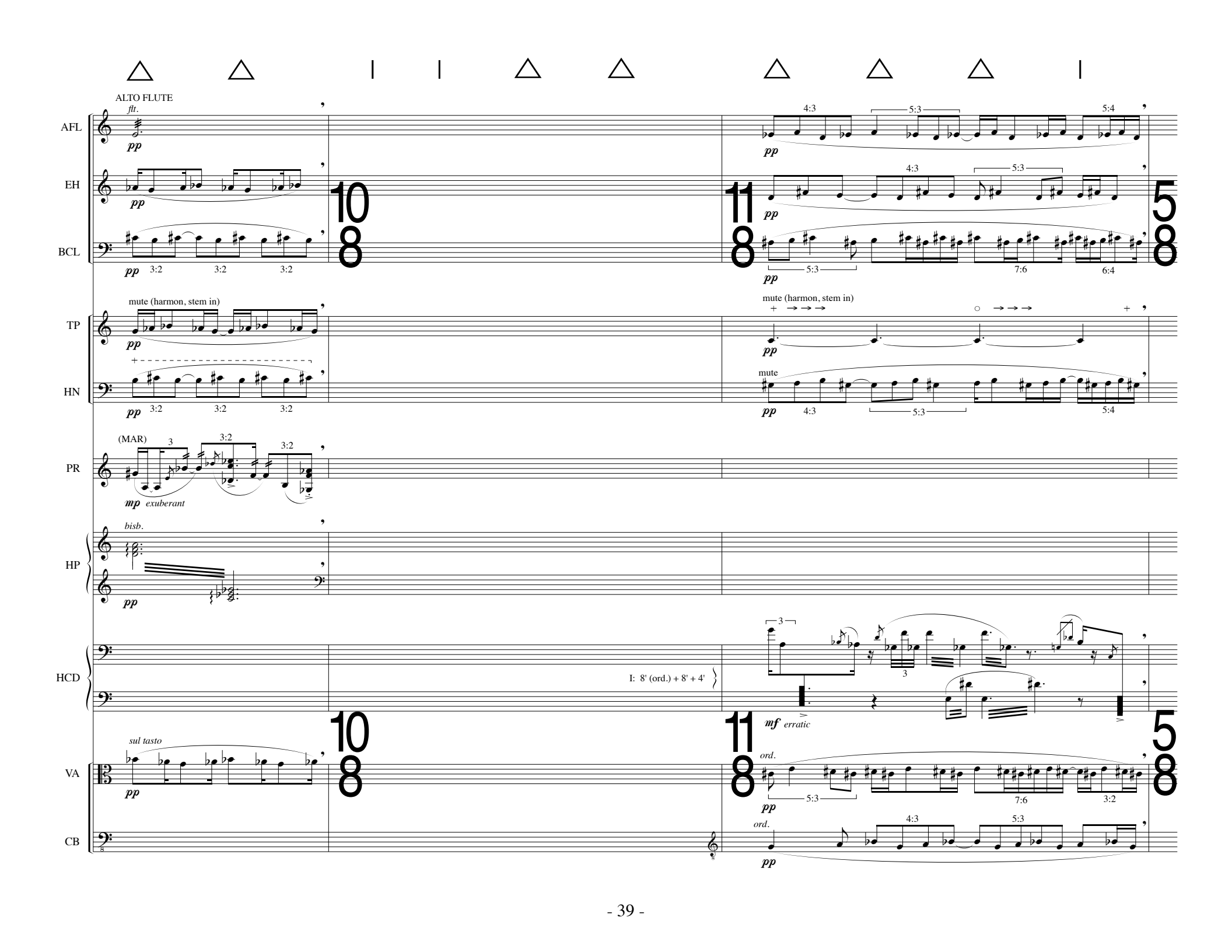

5
AFL
EH
CL
TP
HN
PR
HP
HCD
VA
CB
tr
pp
open
3
3:2
mp eloquent
MARIMBA
w/ soft yarn
IV

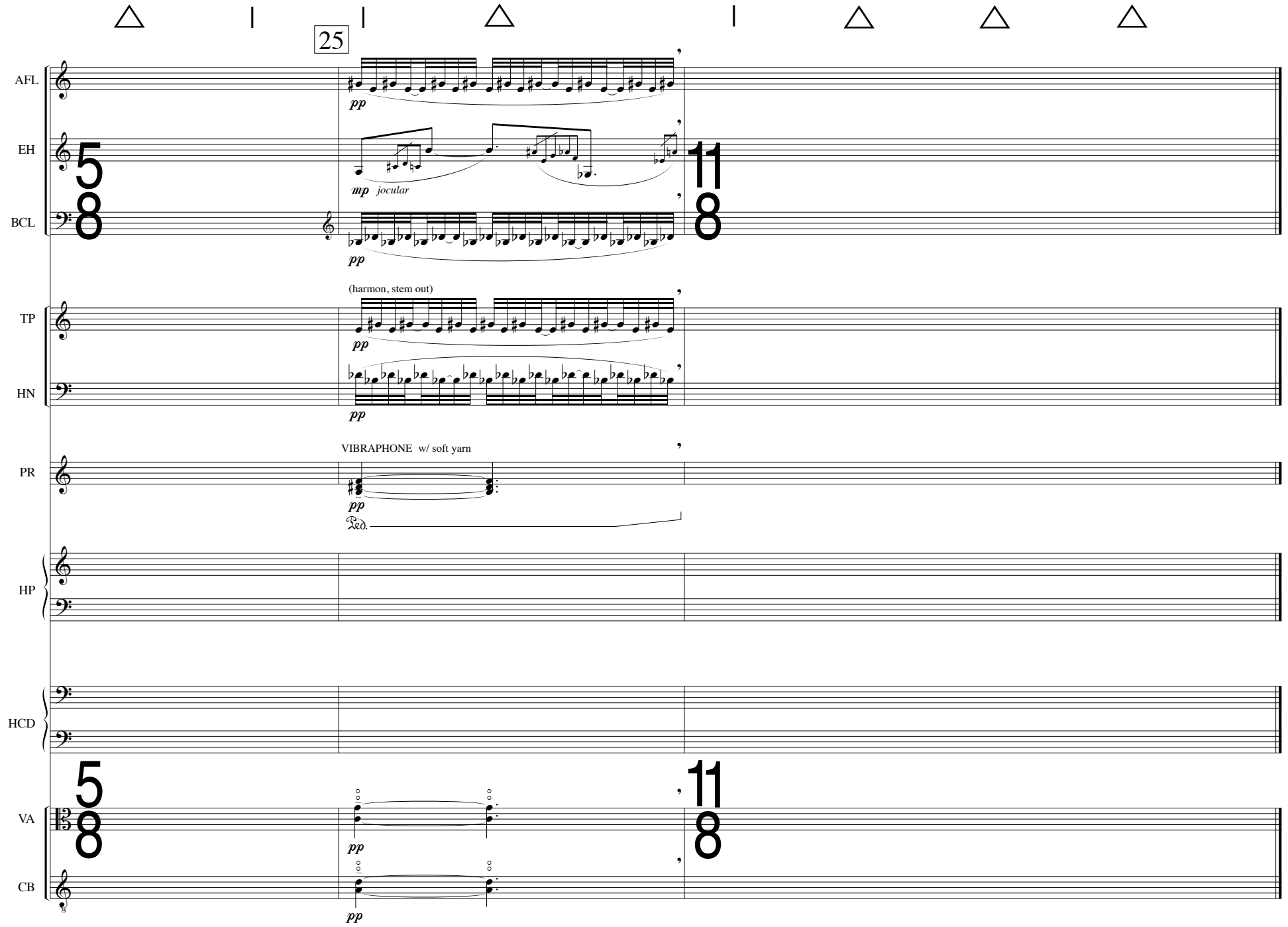

AFL
EH
CL
TP
HN
PR
HP
HCD
VA
CB
10
8
9
8
7
8
pp
mp
f
5:3
7:6
3:2
5:4
9:6
6:4
open
VIBRAPHONE w/ med. yarn
MARIMBA w/ med. yarn
Ped.
emphatic
sul tasto
port.


10
PICCOLO
flt.
tr
4:3
3:2
7
mf
agitated
PC
EH
CL
TP
HN
PR
HP
HCD
VA
CB
pp
5:3
5:4
7:4
6:4
5:4
8:6
3:2
GLOCKENSPIEL w/ med. rubber
9:6
5:4
I: 8' lute
sul pont.


15
PC
EH
CL
TP
HN
PR
HP
HCD
VA
CB
tr
pp
5:3
5:4
7:6
3:2
mp ecstatic
4:3
open
mp flamboyant
mute (cup)
VIBRAPHONE w/ med. yarn
(VIB)
Ped.
D♮ C♮ B♮
E♮ F♮ G♮ A♮
I: 8' (ord.) + 8' + 4'
ord.
sul tasto


20
PC
EH
BCL
TP
HN
PR
HP
HCD
VA
CB
BASS CLAR
MARIMBA w/hard yarn
MAR w/ med. yarn
ff violent
pp
ff mechanical
mf aggressive
fz
sul pont.
ord.
(arco)
port.
II: 8'
I: 8'
D♮ C♮ B♮
E♯ F♯ G♯ A♮
E♭ F♮ G♭


ALTO FLUTE
flt.
AFL
EH
BCL
TP
HN
PR
HP
HCD
VA
CB
mute (harmon, stem in)
mute
(MAR)
exuberant
bisb.
I: 8' (ord.) + 8' + 4'
sul tasto
ord.
erratic
10/8
11/8
5/8

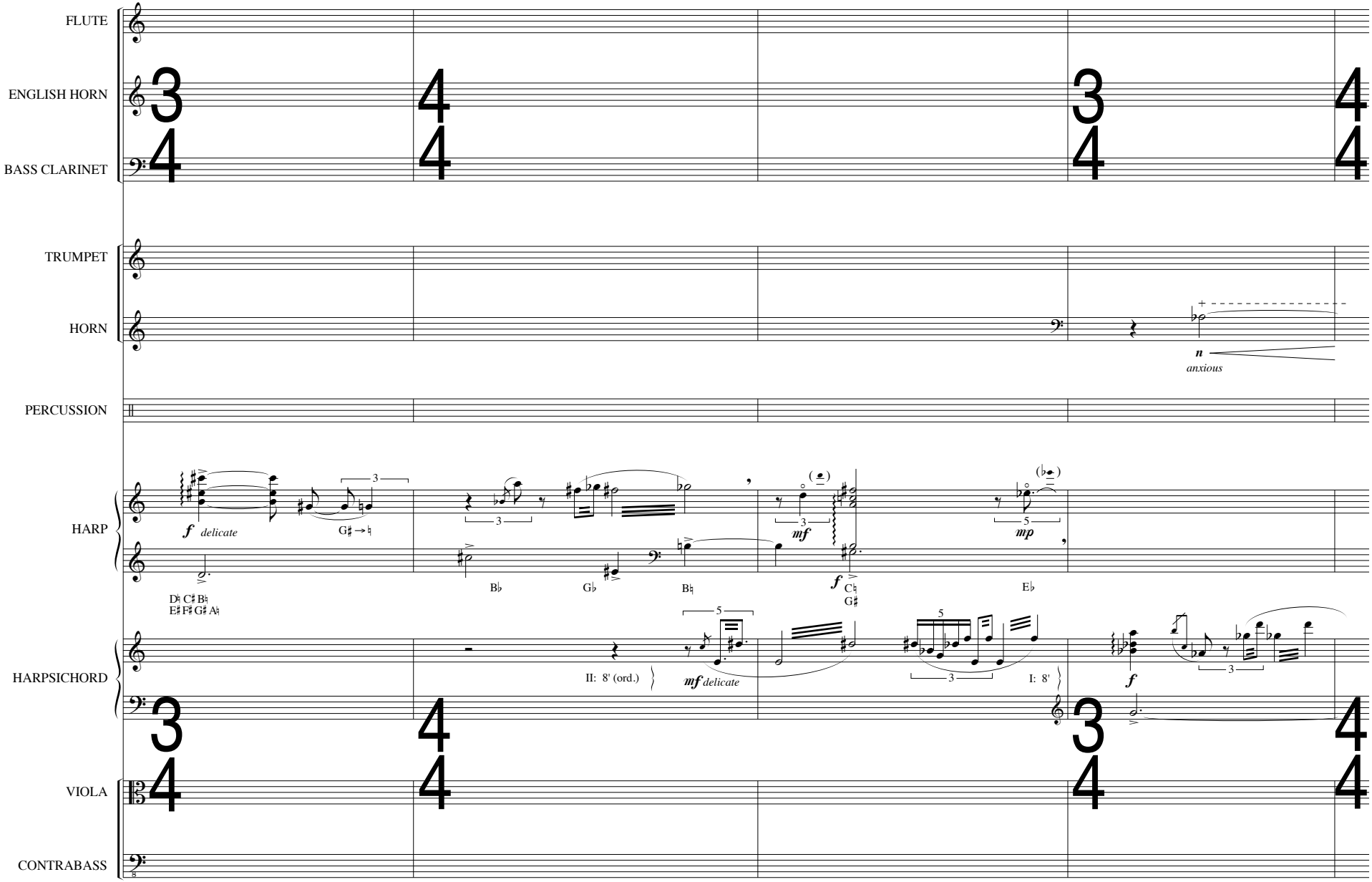

25
AFL
EH
BCL
TP
HN
PR
HP
HCD
VA
CB
pp
mp jocular
(harmon, stem out)
VIBRAPHONE w/ soft yarn
Ped.
5/8
11/8

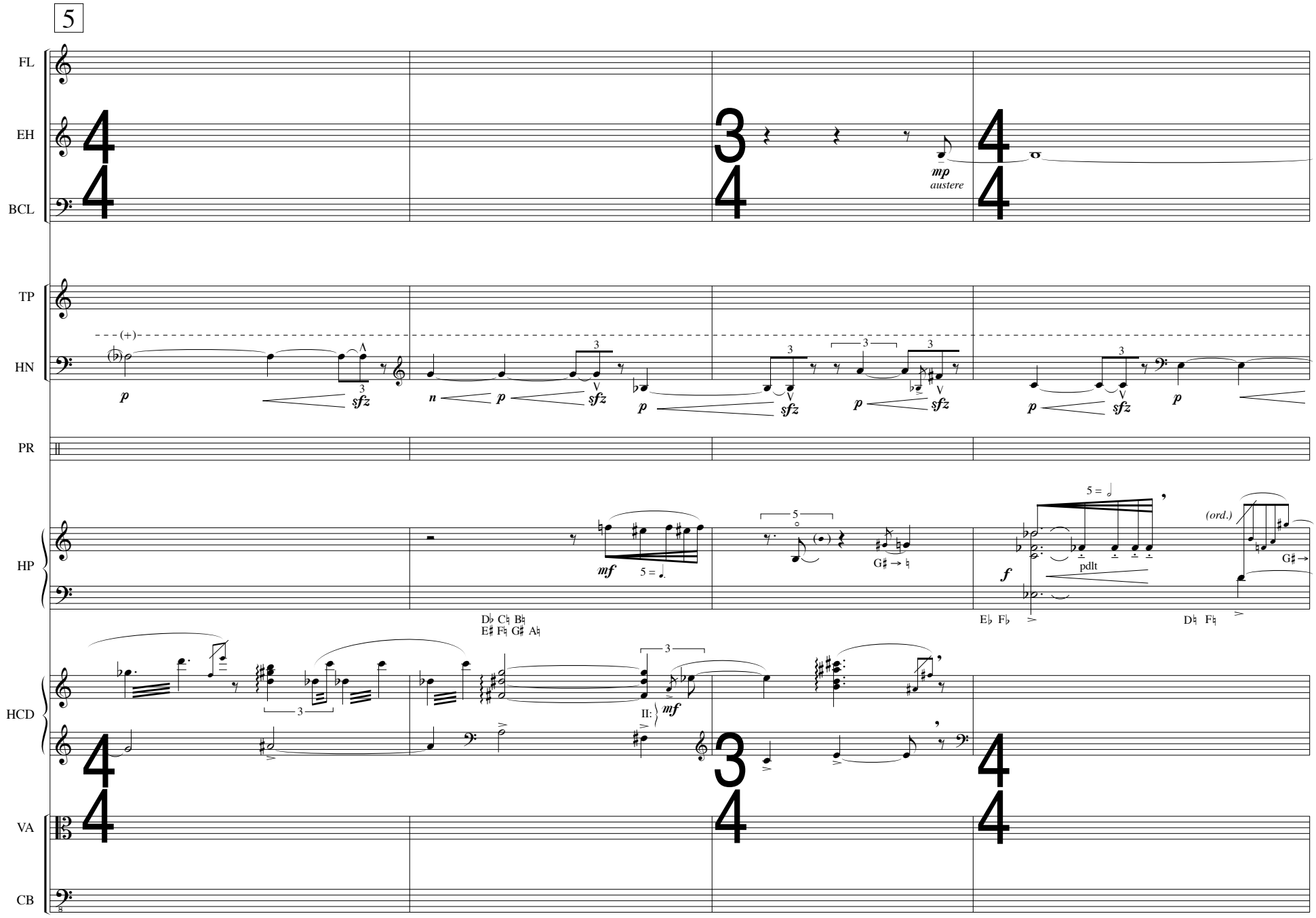
attacca

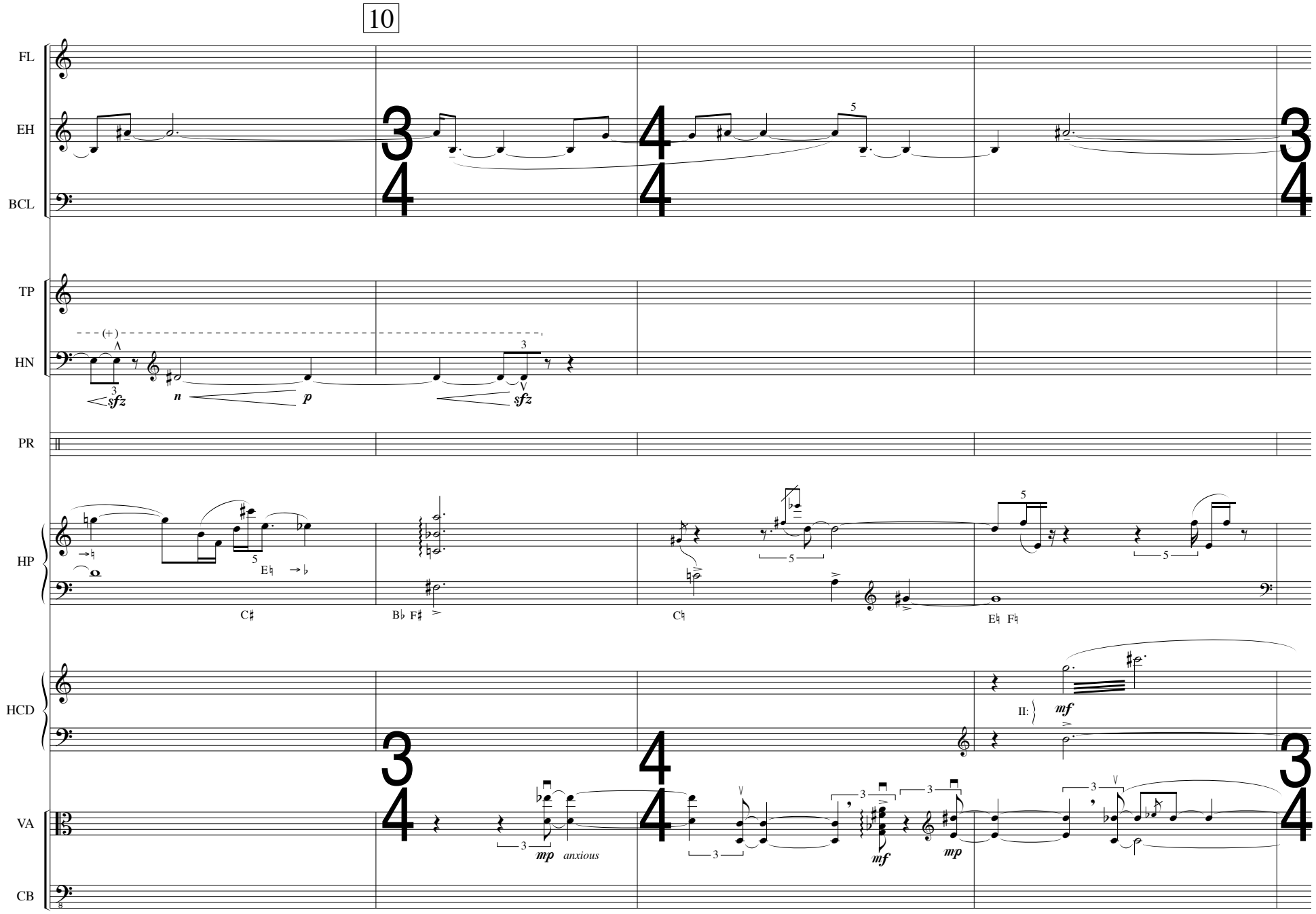
IV. maßenkristalle

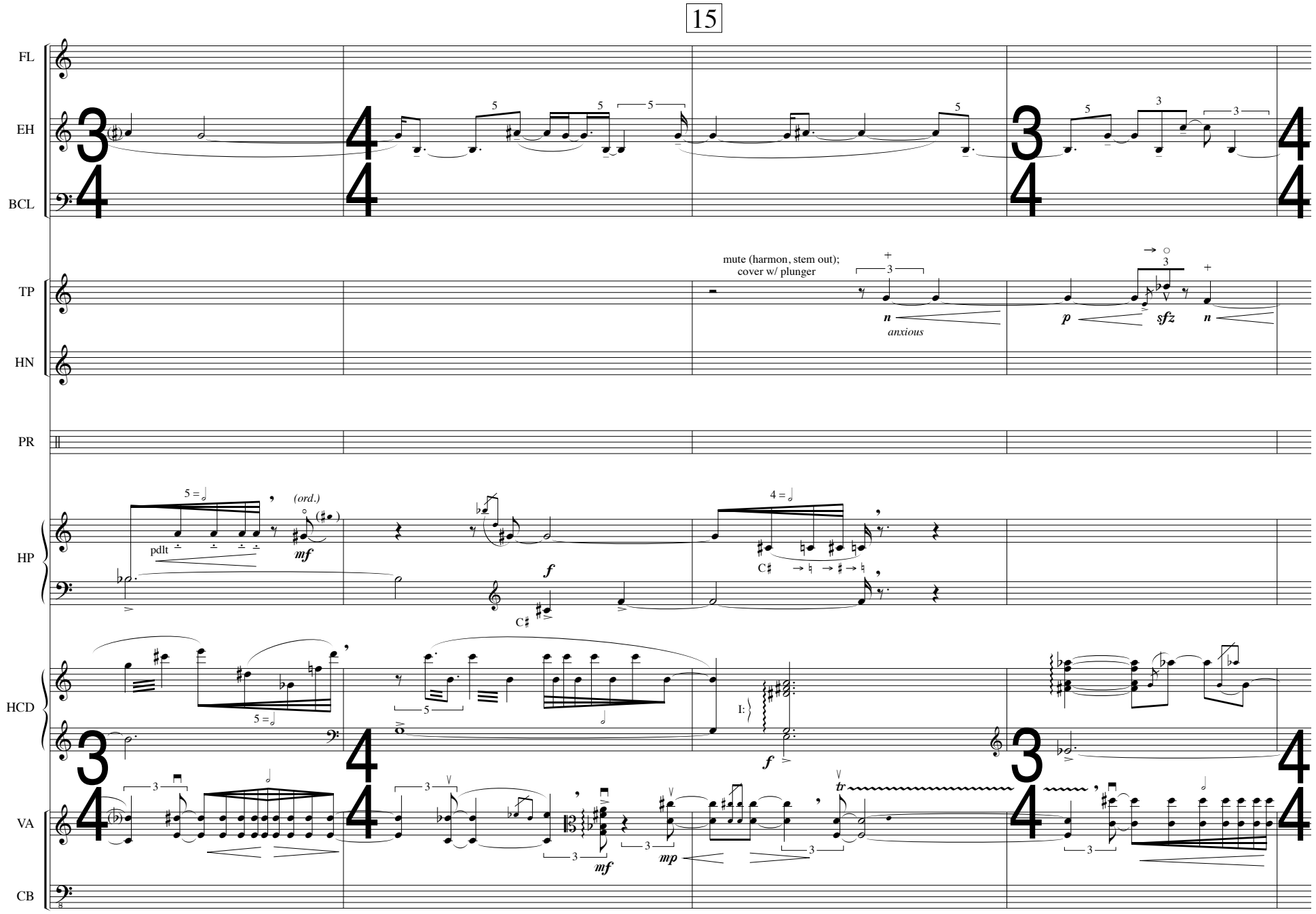
(loxodromic chaconne)

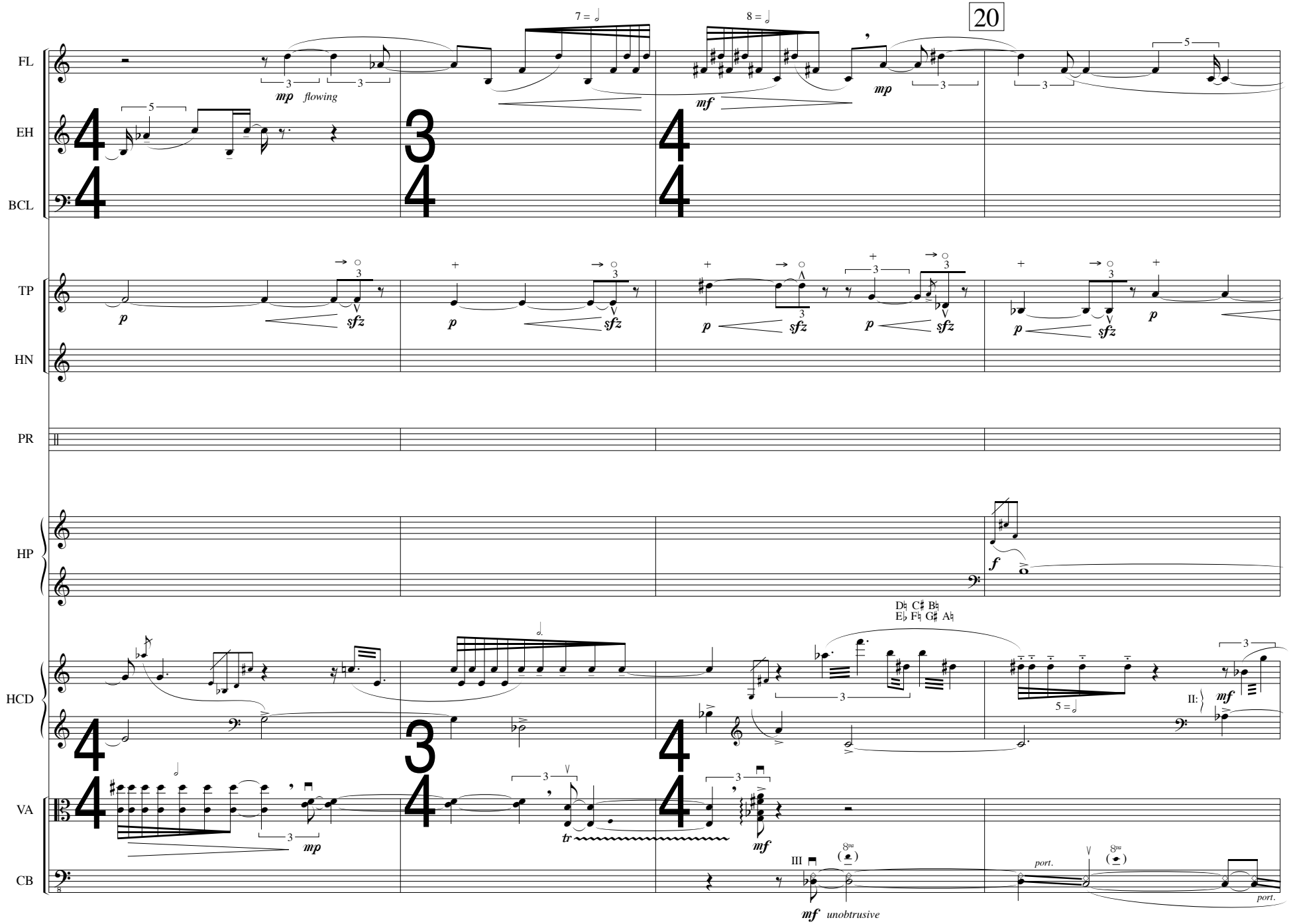
Impending ♩ = 76 (← ♪. = ♩→)

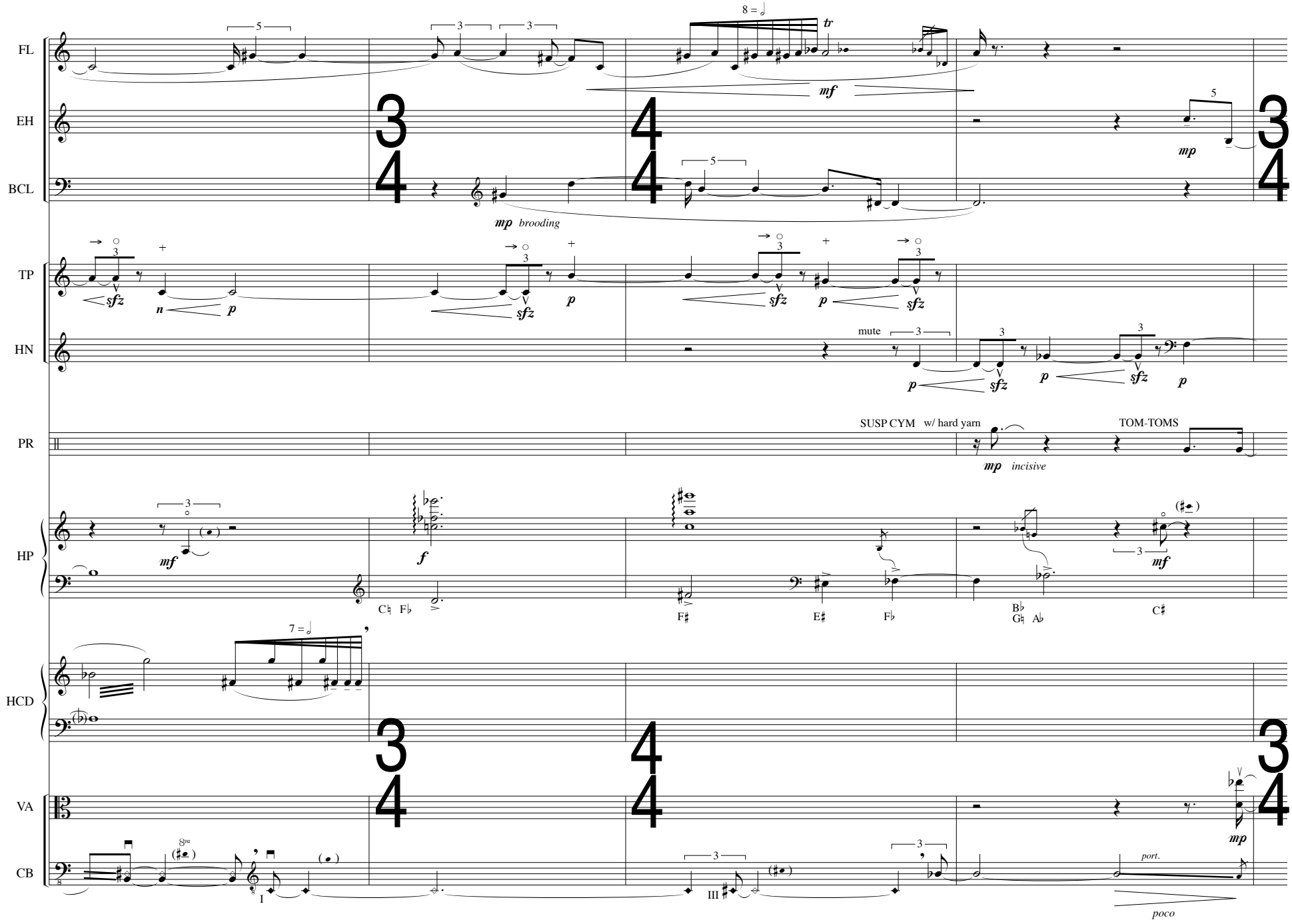


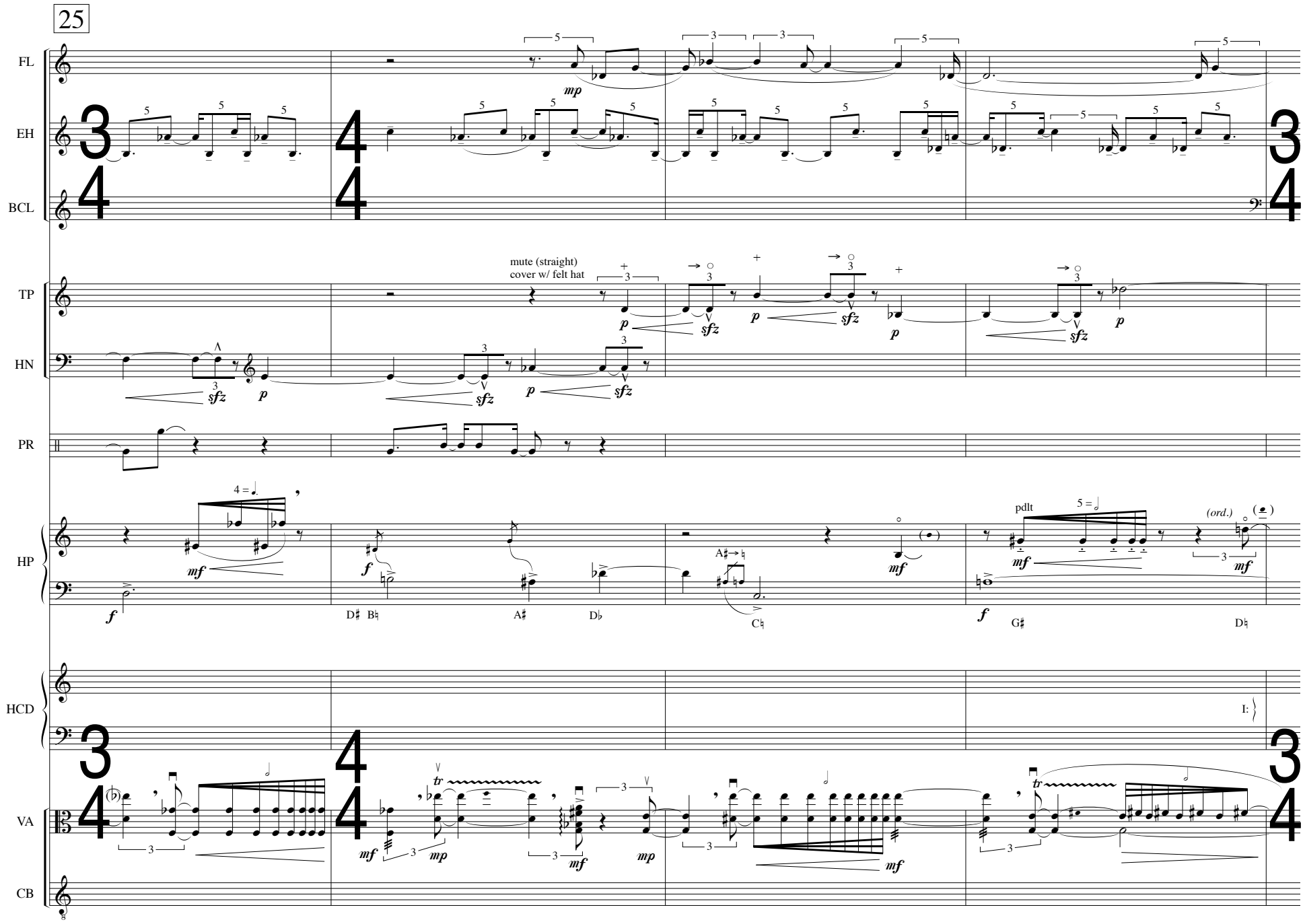

5
FL
EH
BCL
TP
HN
PR
HP
HCD
VA
CB
mp
austere
p
sfz
n
mf
5 =
G♯ → ♮
f
pdlt
(ord.)
D♭ C♮ B♮
E♯ F♮ G♯ A♮
E♭ F♭
D♮ F♮
II:

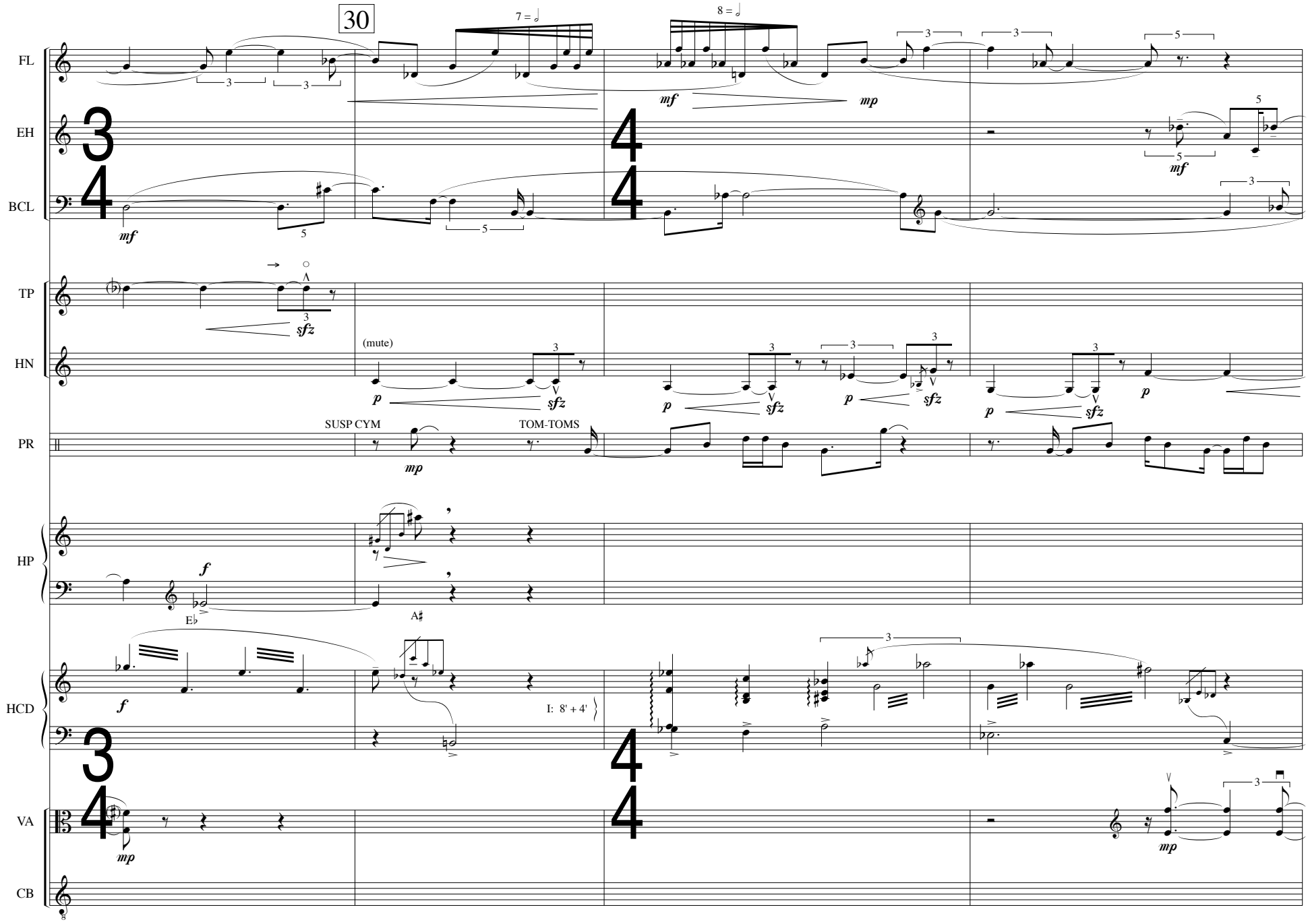

10
FL
EH
BCL
TP
HN
PR
HP
HCD
VA
CB
sfz
p
sfz
mp
anxious
mf
mp
II:
mf

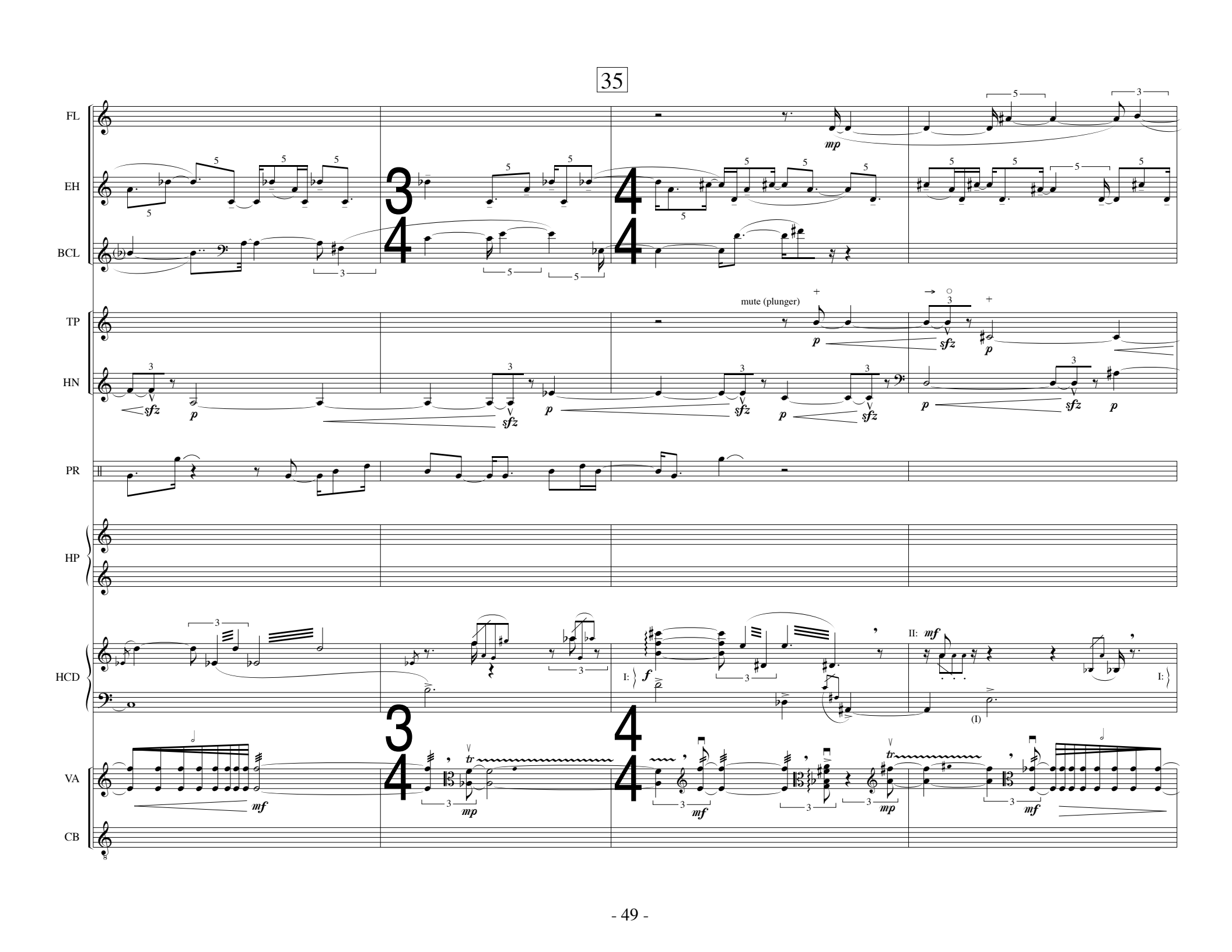

15
FL
EH
BCL
TP
HN
PR
HP
HCD
VA
CB
mute (harmon, stem out);
cover w/ plunger
anxious
pdlt
(ord.)
mf
f
C♯
mp
sfz
tr
I:

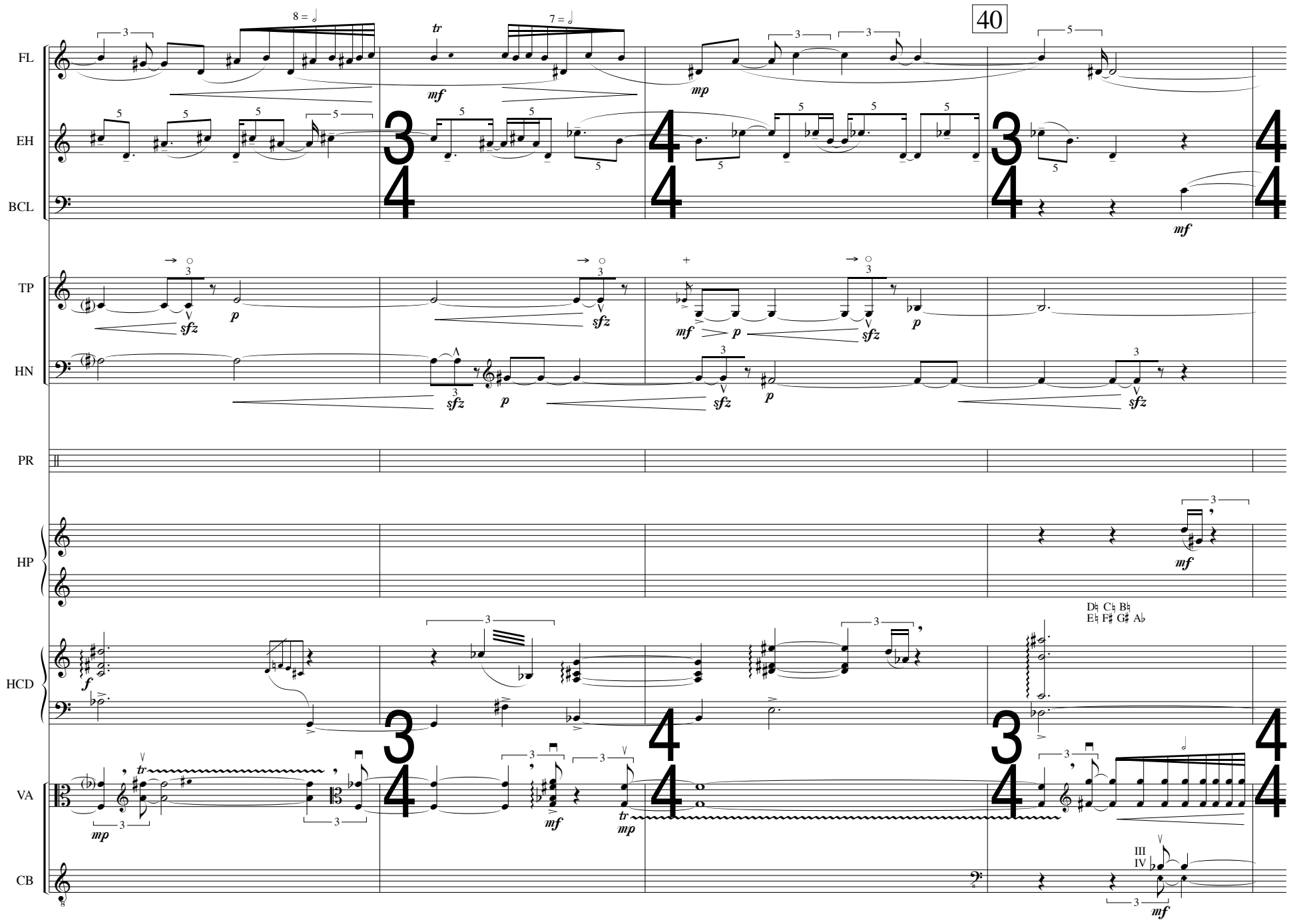

20
FL
EH
BCL
TP
HN
PR
HP
HCD
VA
CB
mp flowing
mf
mp
p
sfz
f
mf
mp
tr
mf unobtrusive
port.
port.
II:
III
D♮ C♯ B♮
E♭ F♮ G♯ A♮

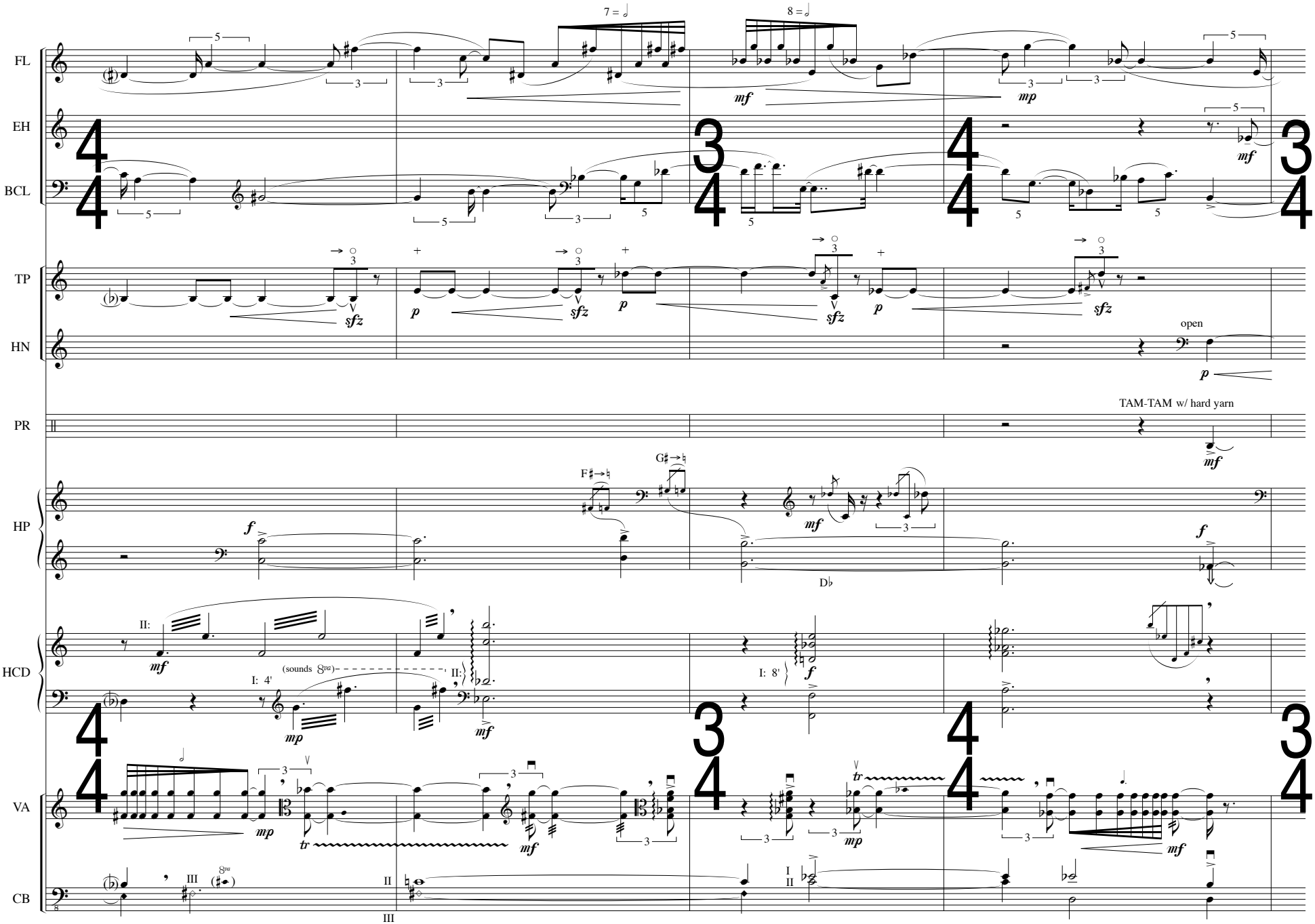

FL
EH
BCL
TP
HN
PR
HP
HCD
VA
CB
mp brooding
mf
mp
sfz
p
mute
SUSP CYM w/ hard yarn
TOM-TOMS
mp incisive
f
mf
port.
poco

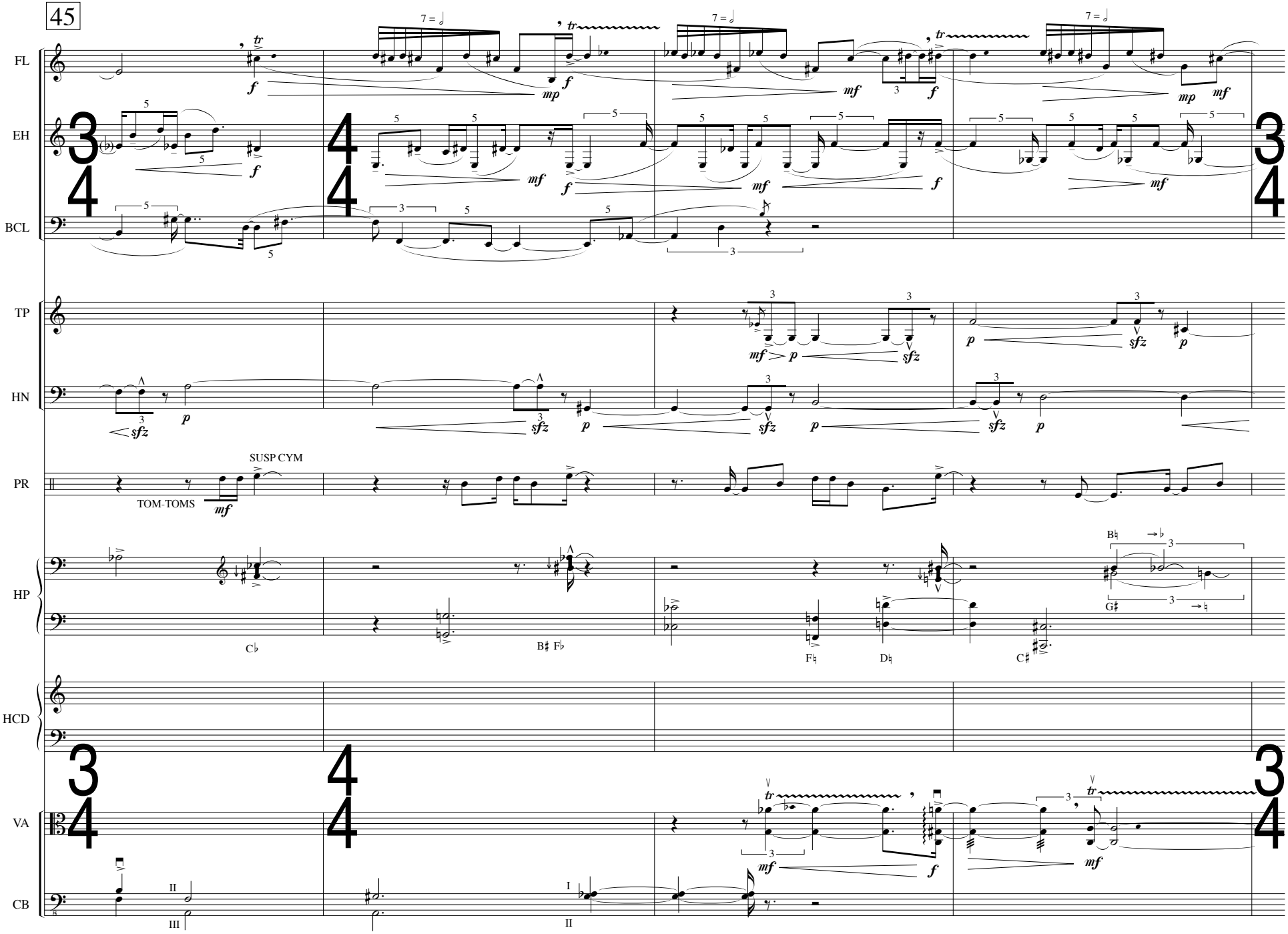

25
FL
EH
BCL
TP
HN
PR
HP
HCD
VA
CB
mute (straight)
cover w/ felt hat
pdlt
(ord.)
I:

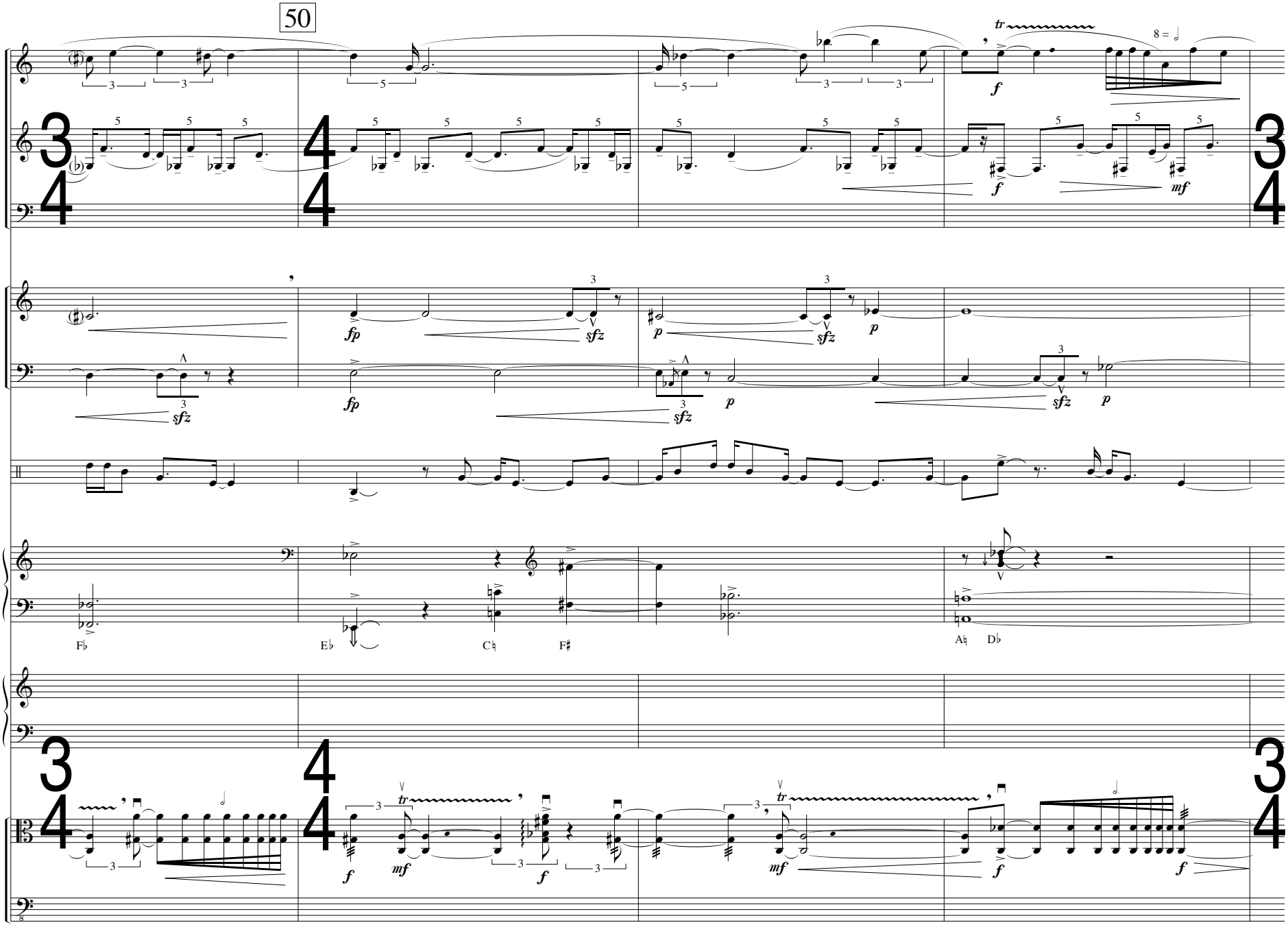

30
FL
EH
BCL
TP
HN
PR
HP
HCD
VA
CB
mf
mp
sfz
p
f
(mute)
SUSP CYM
TOM-TOMS
I: 8' + 4'

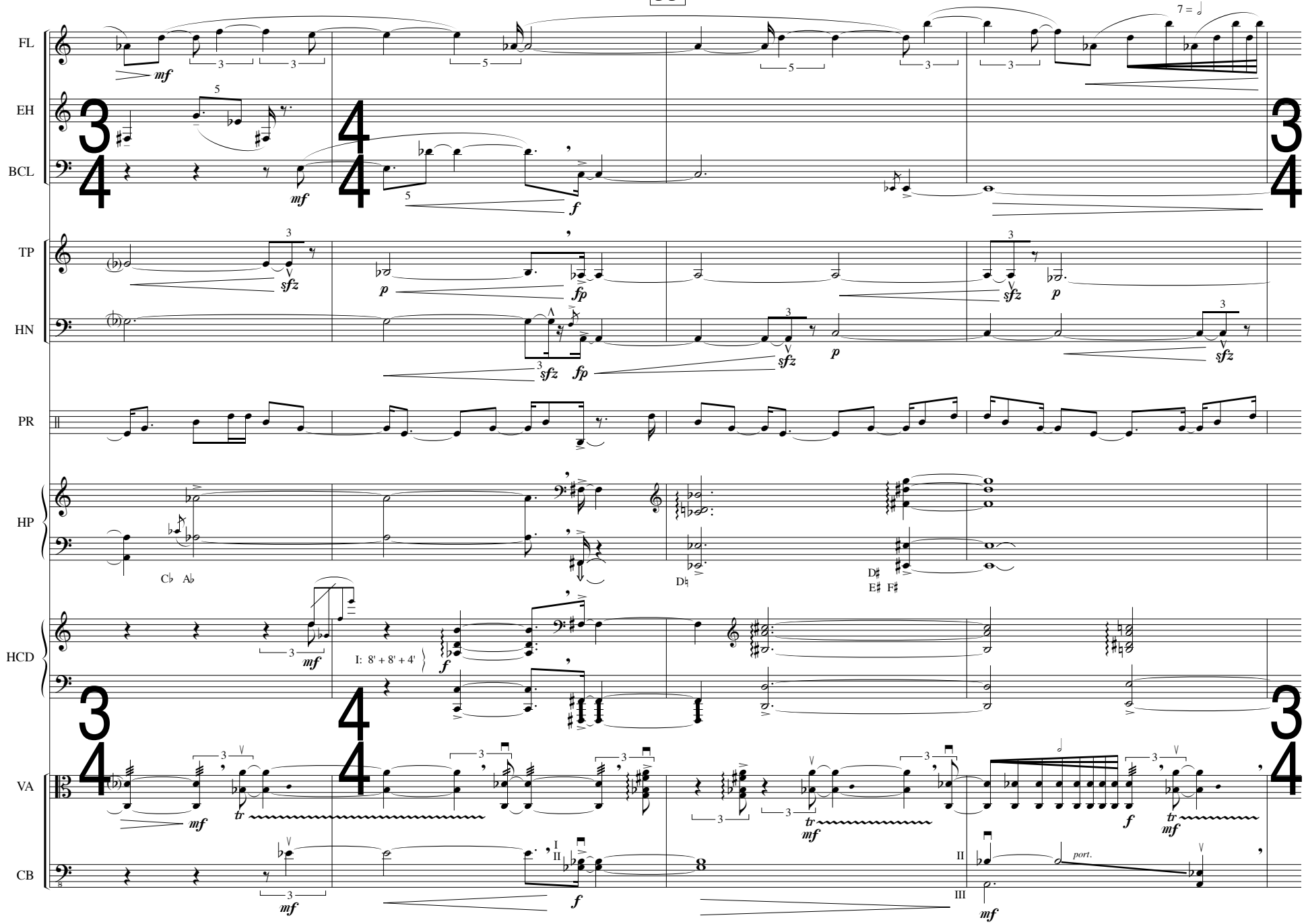

35
FL
EH
BCL
TP
HN
PR
HP
HCD
VA
CB
mute (plunger)
mp
sfz
p
mf
f
tr
I:
II:
(I)

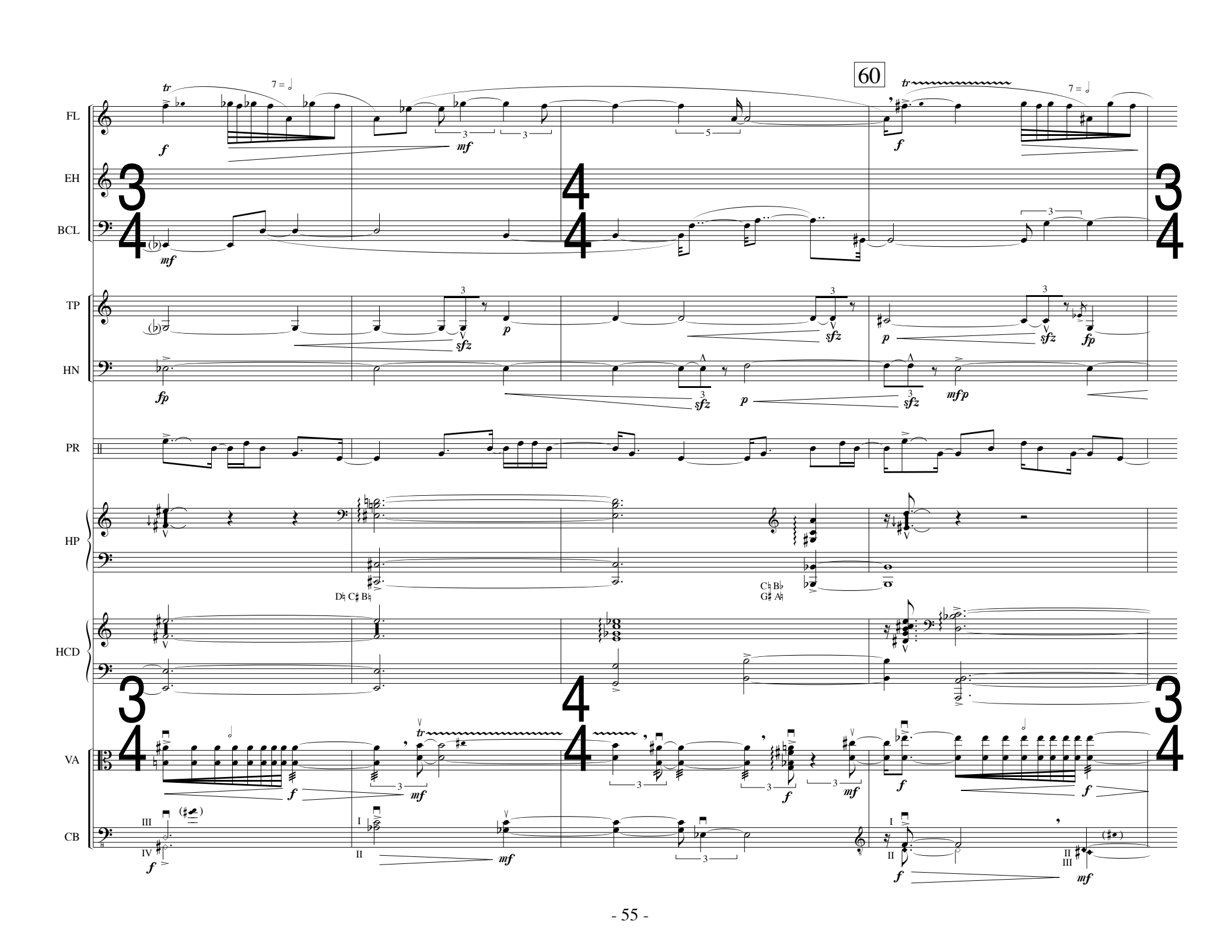

40
FL
EH
BCL
TP
HN
PR
HP
HCD
VA
CB
8 = 𝅗𝅥
7 = 𝅗𝅥
tr
mf
mp
sfz
p
f
D♮ C♮ B♮
E♮ F♯ G♯ A♭
III
IV

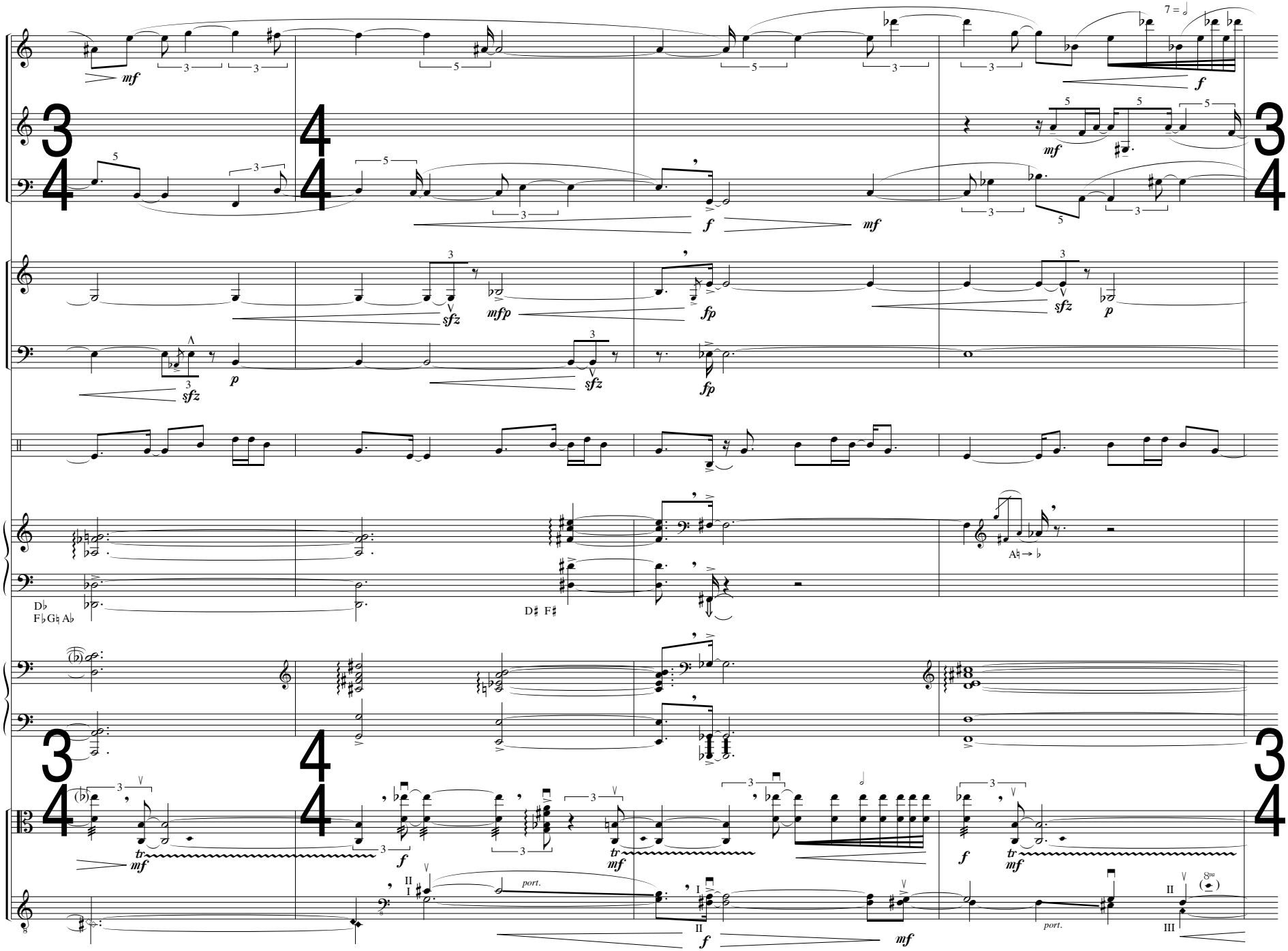

FL
EH
BCL
TP
HN
PR
HP
HCD
VA
CB
7 = 𝅗𝅥
8 = 𝅗𝅥
mf
mp
sfz
p
open
TAM-TAM w/ hard yarn
f
F♯→♮
G♯→♮
D♭
II:
I: 4'
(sounds 8va)
I: 8'
III
(8va)
I
II

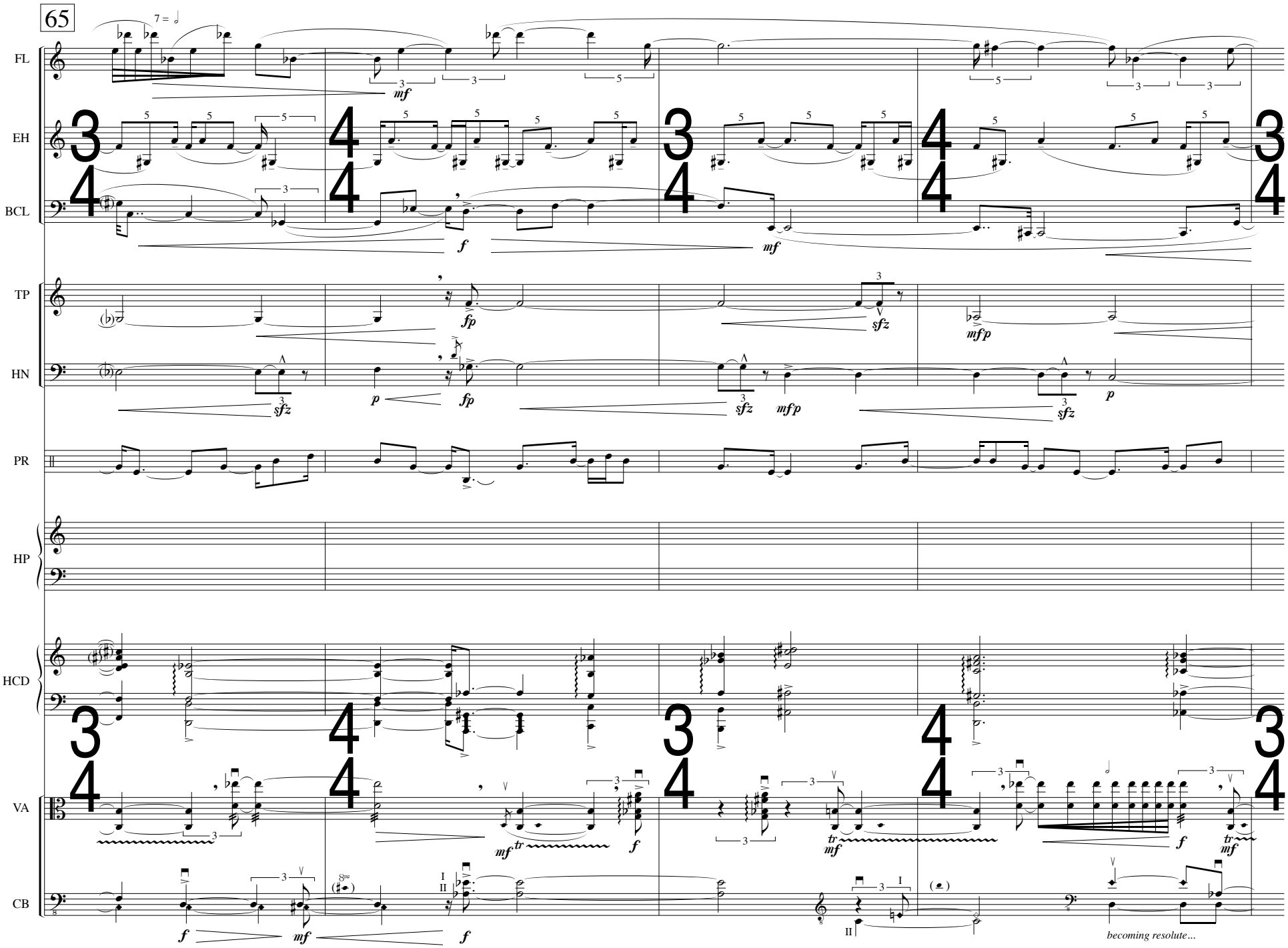

45
FL
EH
BCL
TP
HN
PR
HP
HCD
VA
CB
SUSP CYM
TOM-TOMS
C♭
B♯ F♭
F♮
D♮
C♯
B♮
G♯

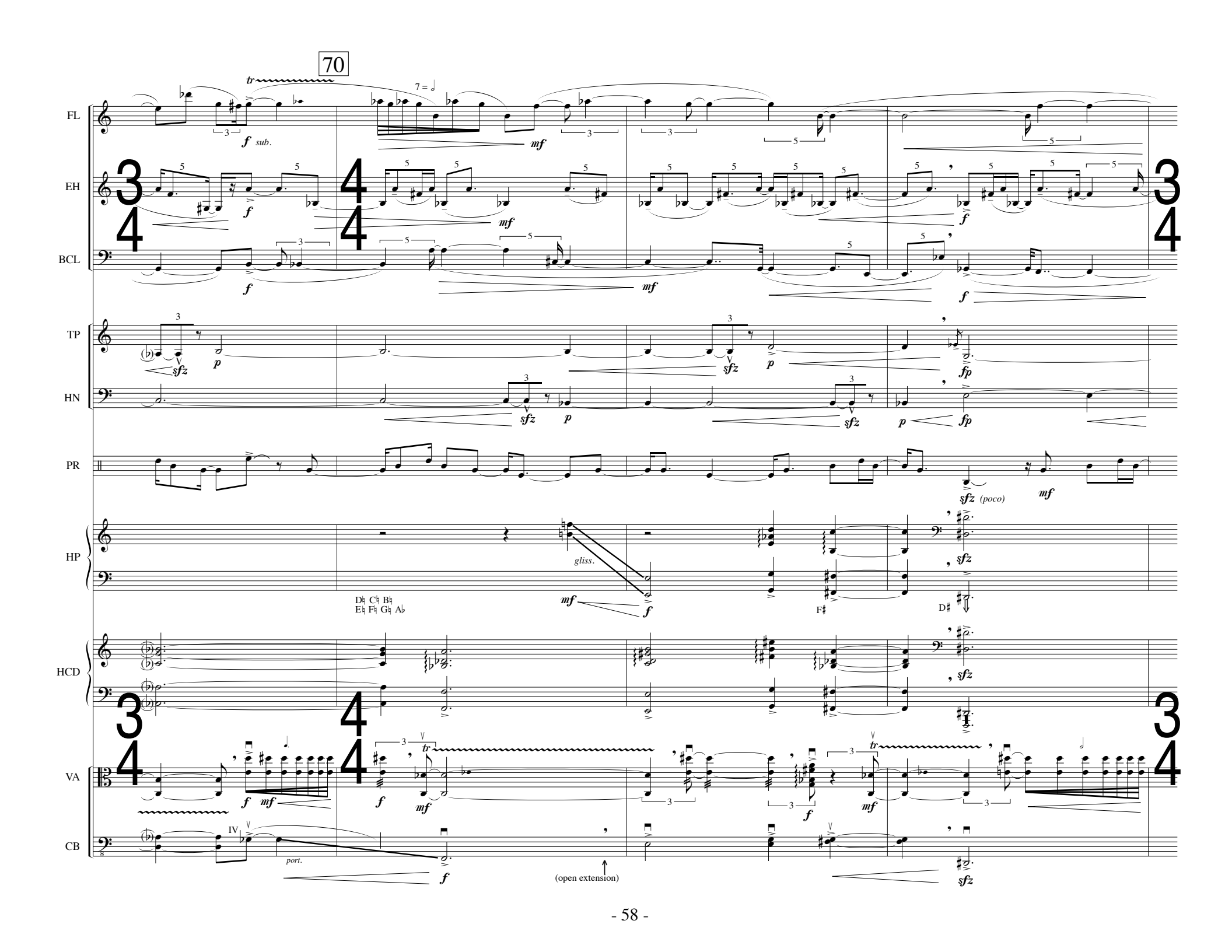

50
FL
EH
BCL
TP
HN
PR
HP
HCD
VA
CB
F♭
E♭
C♮
F♯
A♮
D♭

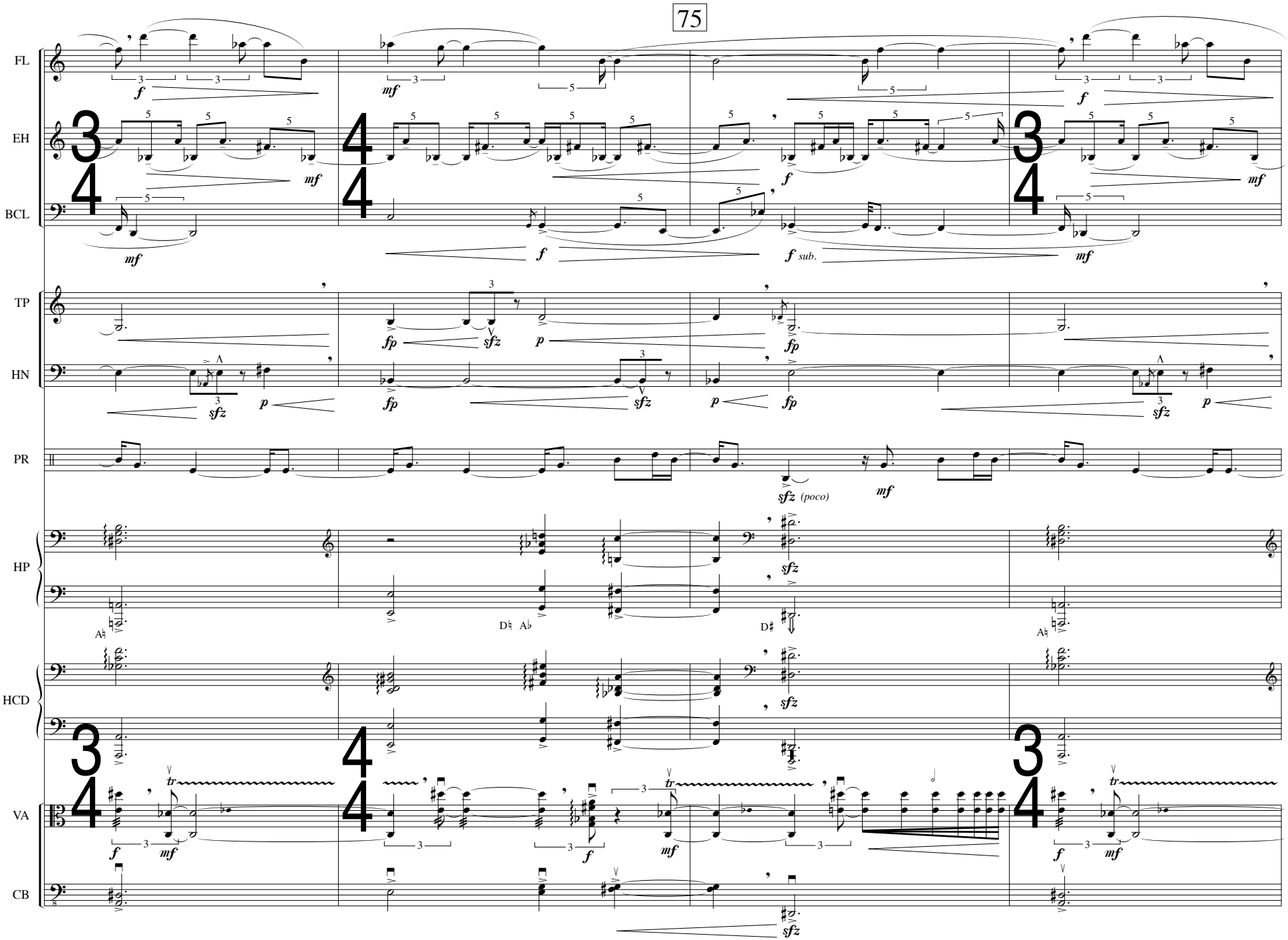

FL
EH
BCL
TP
HN
PR
HP
HCD
VA
CB
mf
f
fp
sfz
p
port.
I: 8' + 8' + 4'
7 =

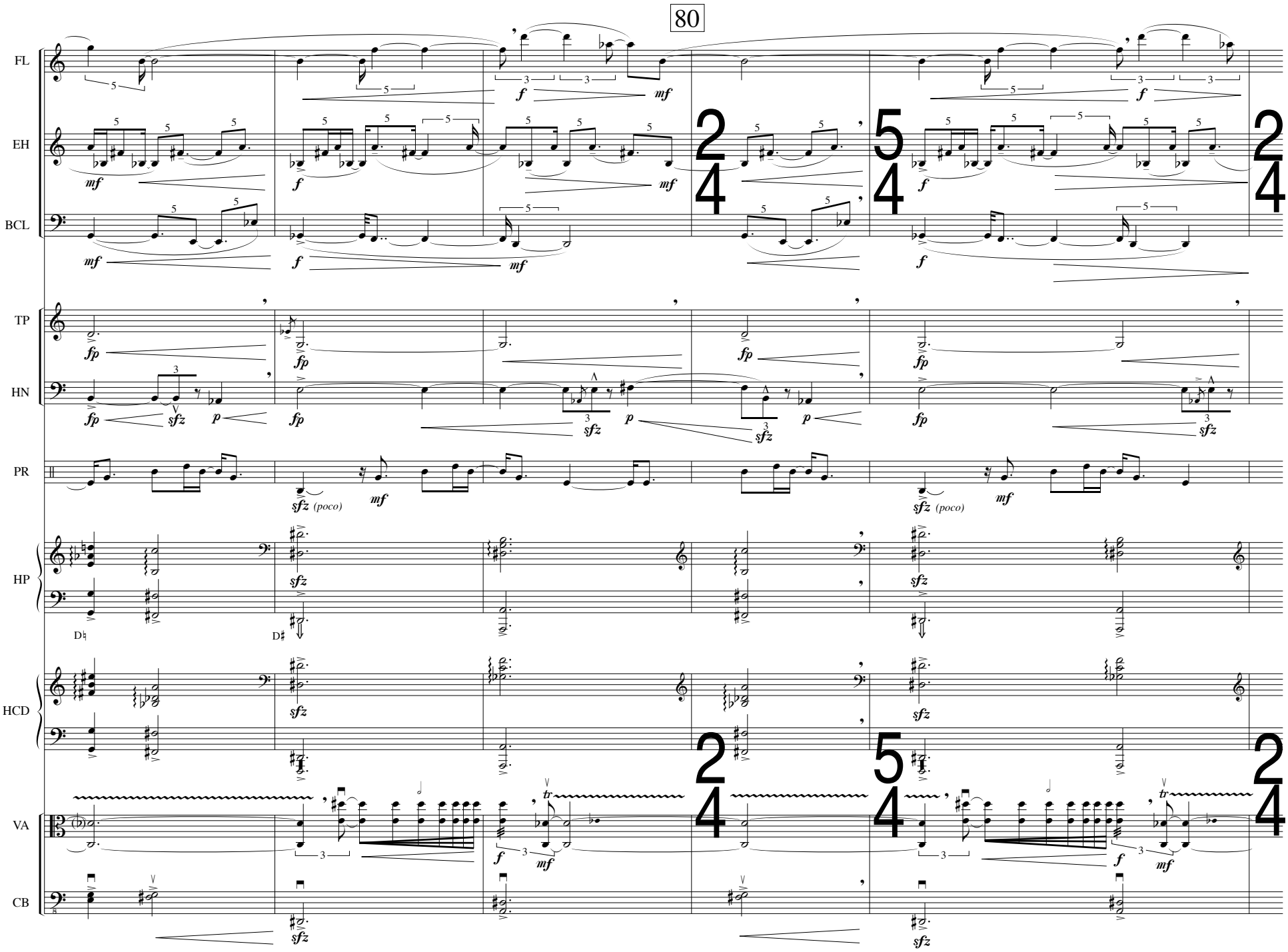

60
FL
EH
BCL
TP
HN
PR
HP
HCD
VA
CB

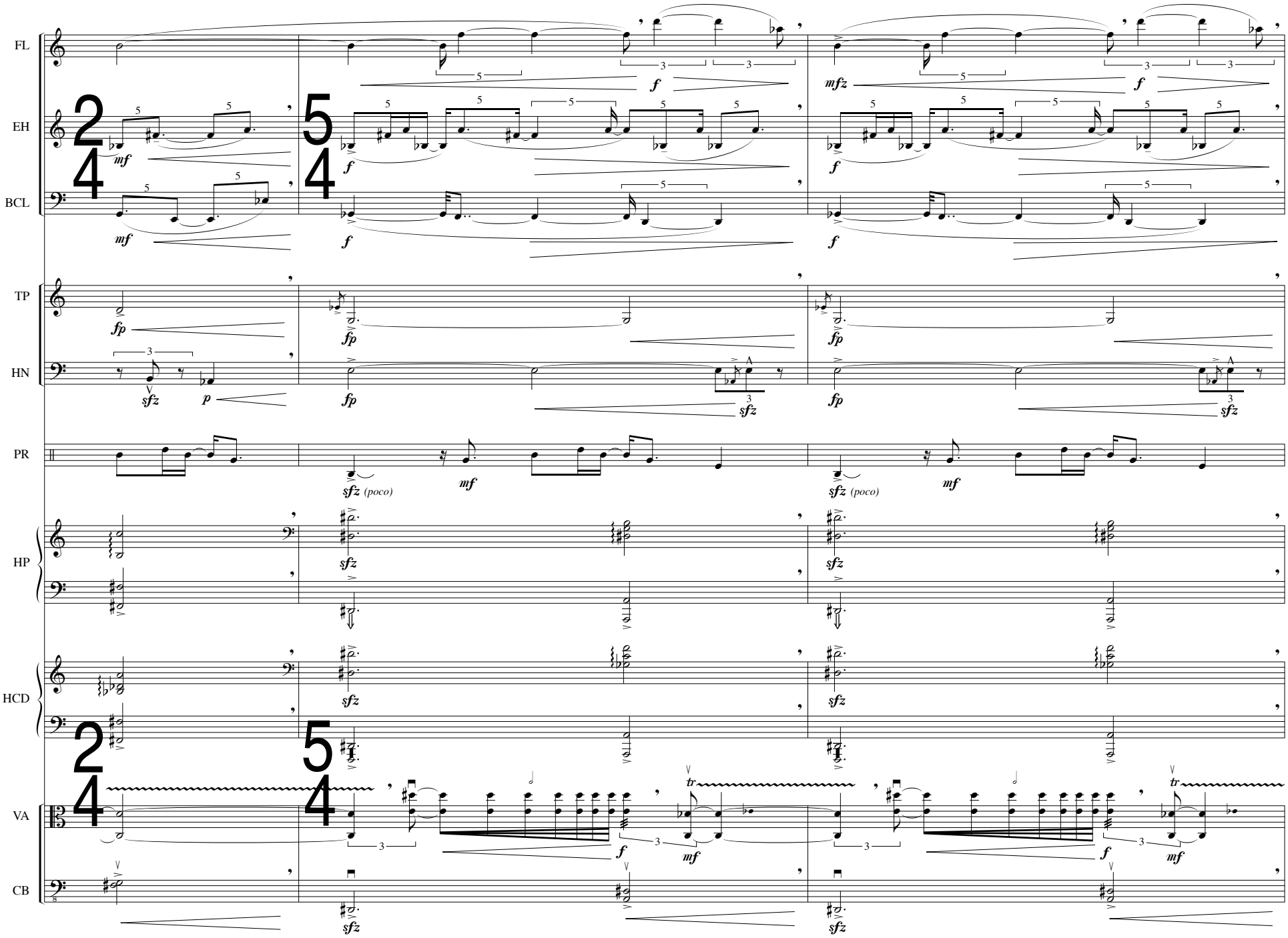

FL
EH
BCL
TP
HN
PR
HP
HCD
VA
CB
mf
f
mfp
fp
sfz
p
port.
tr

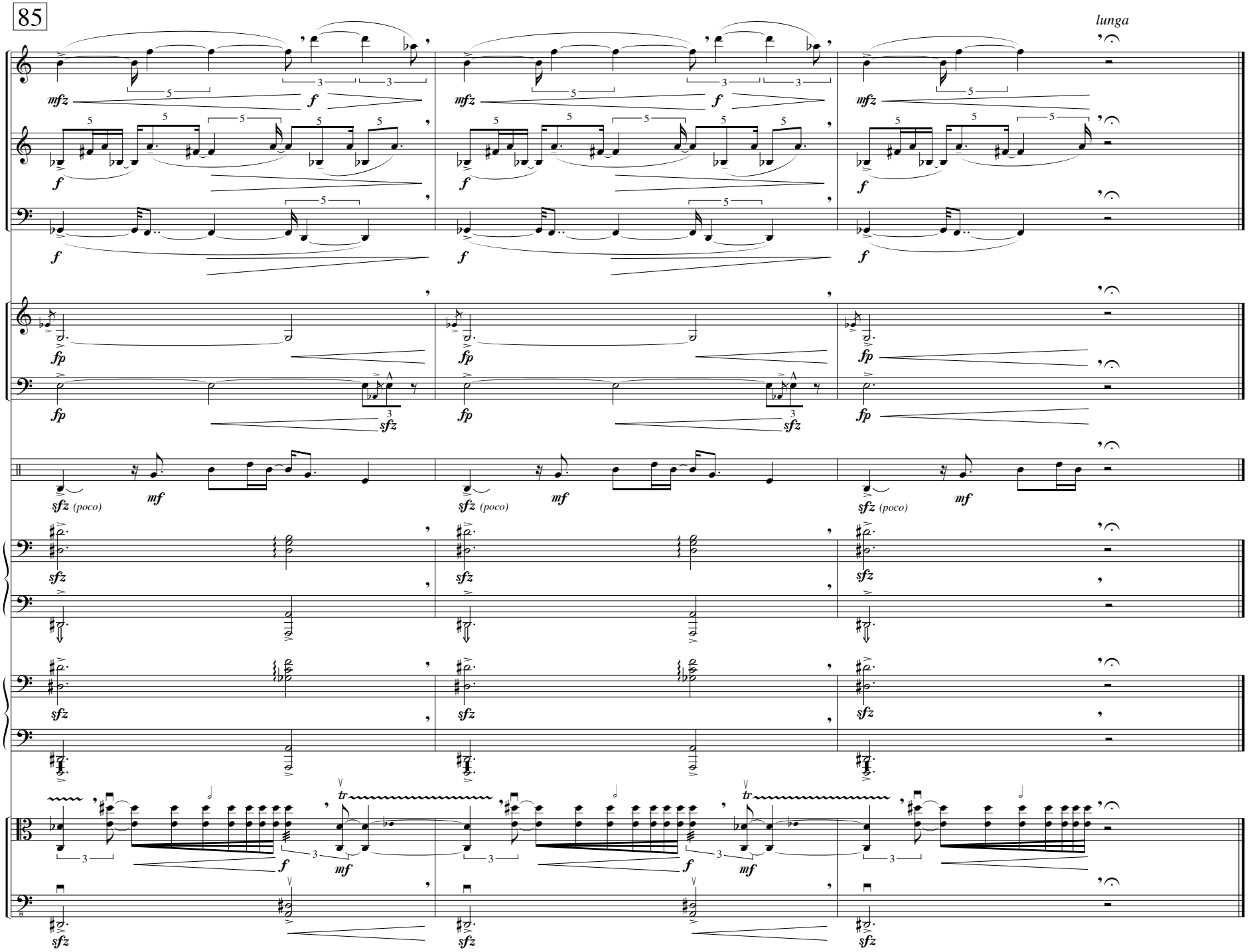

65
7 = 𝅗𝅥
FL
EH
BCL
TP
HN
PR
HP
HCD
VA
CB
mf
f
mf
fp
sfz
mfp
p
fp
sfz
mfp
sfz
p
mf
tr
f
tr
mf
f
tr
mf
f
mf
f
becoming resolute...


70
FL
EH
BCL
TP
HN
PR
HP
HCD
VA
CB
sub.
gliss.
(poco)
port.
(open extension)


75
FL
EH
BCL
TP
HN
PR
HP
HCD
VA
CB
f
mf
fp
sfz
p
f sub.
sfz (poco)
tr


80
FL
EH
BCL
TP
HN
PR
HP
HCD
VA
CB
2/4
5/4
2/4
mf
f
fp
sfz
p
(poco)
tr

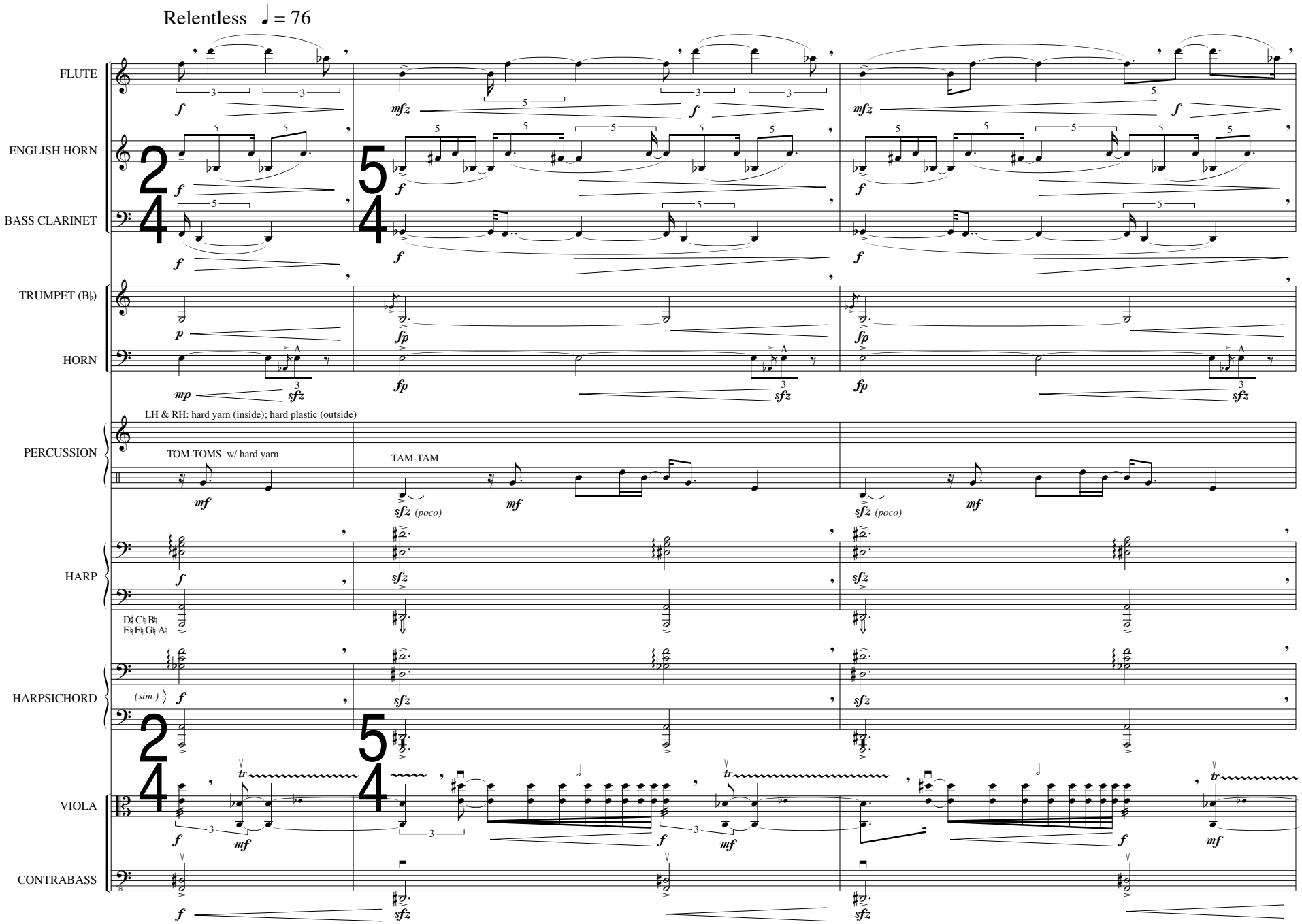

FL
EH
BCL
TP
HN
PR
HP
HCD
VA
CB

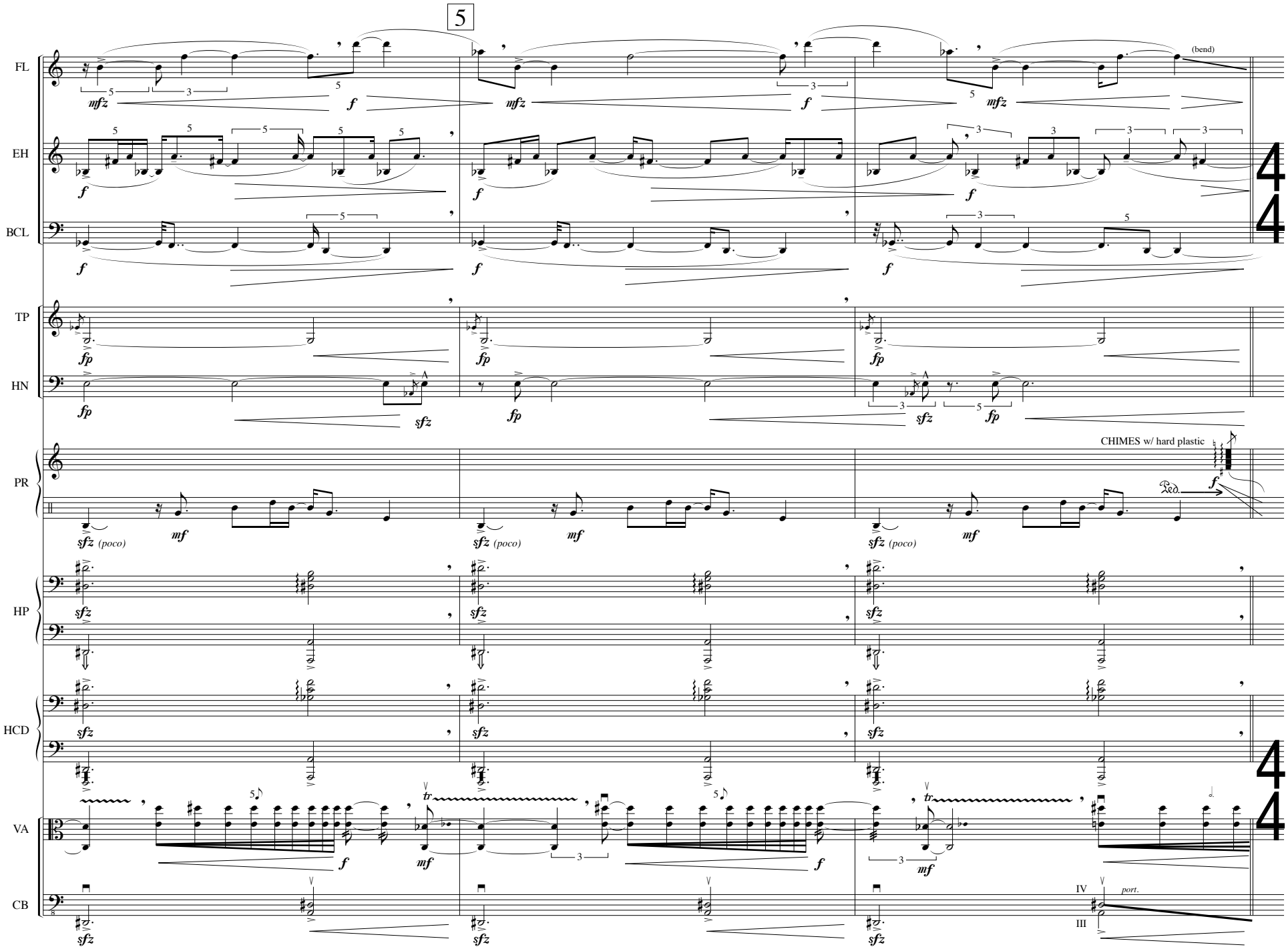

85
lunga
FL
EH
BCL
TP
HN
PR
HP
HCD
VA
CB

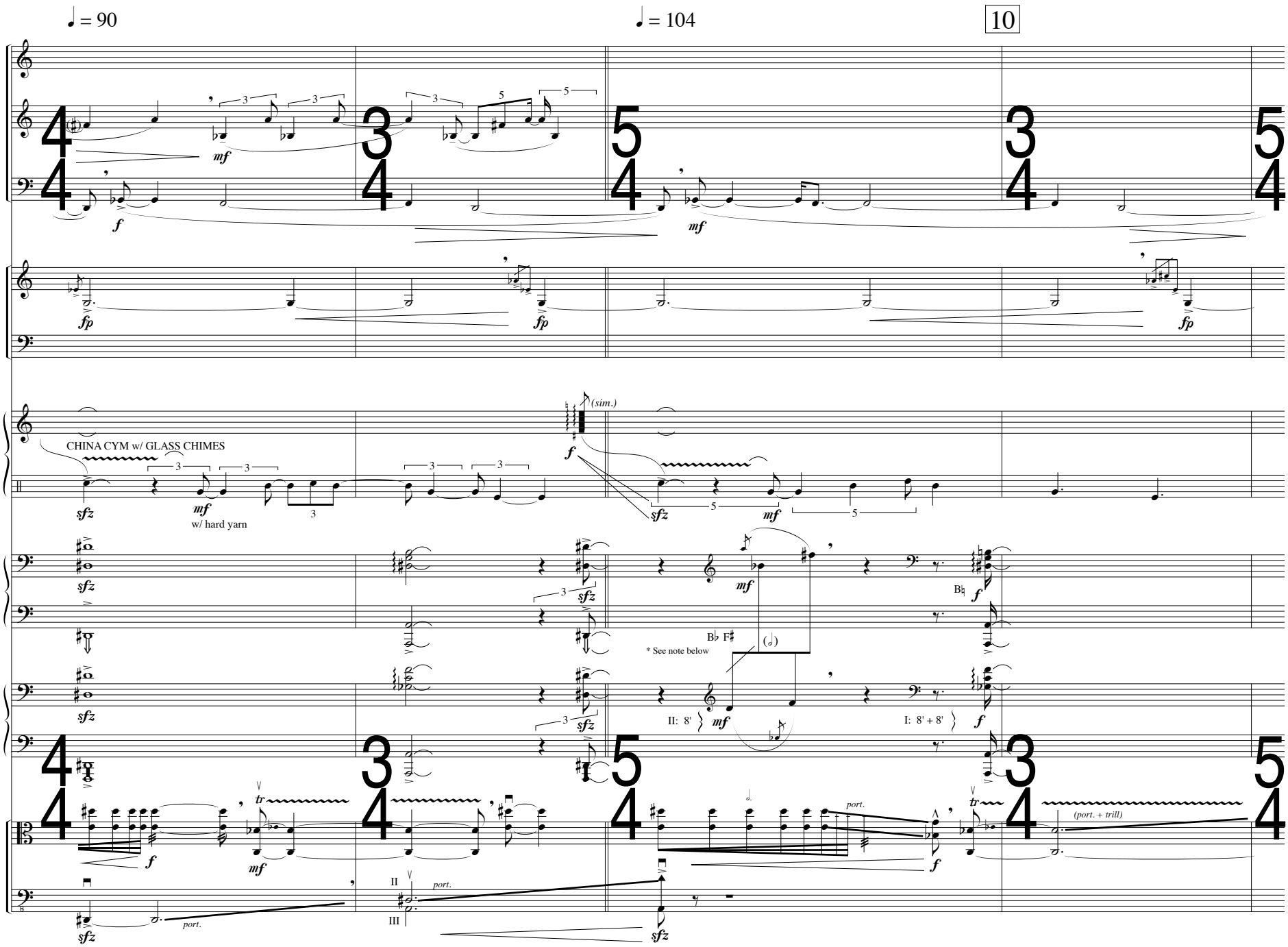
NOTE: In order for the opening of movement V to be most effective, the pause between movements IV and V should be substantial and deliberate (at least one minute), but must not seem unnatural. During this pause, the conductor may mop his/her brow with a handkerchief, the wind players should empty/clean out their instruments, the percussionist may adjust his setup, etc. If any tuning takes place at this time, it should be brief and subtle, and restricted to individual players (i.e., a general *tutti* tuning — as at the beginning — must *not* occur).

V. the myth of eternal return

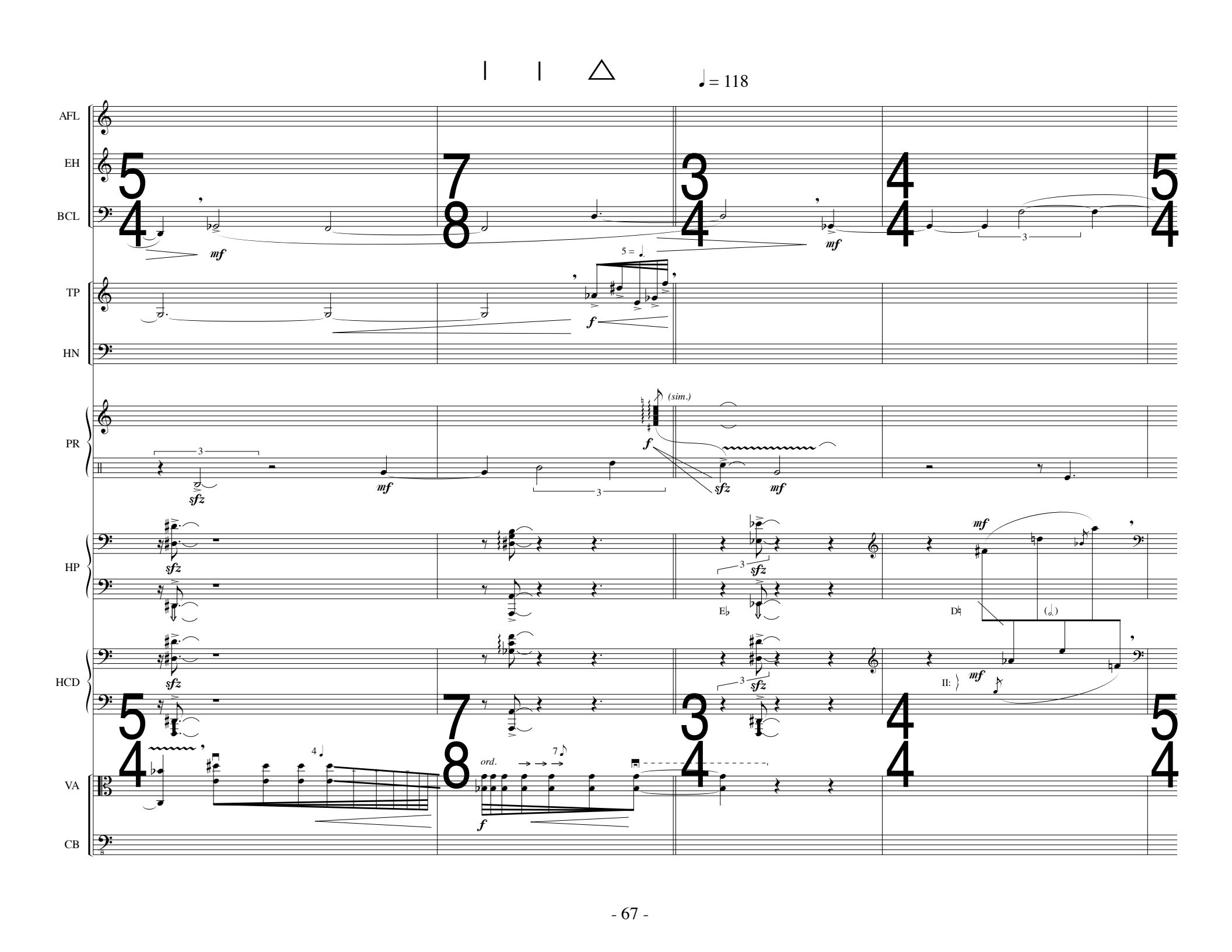
(entropic ostinato)

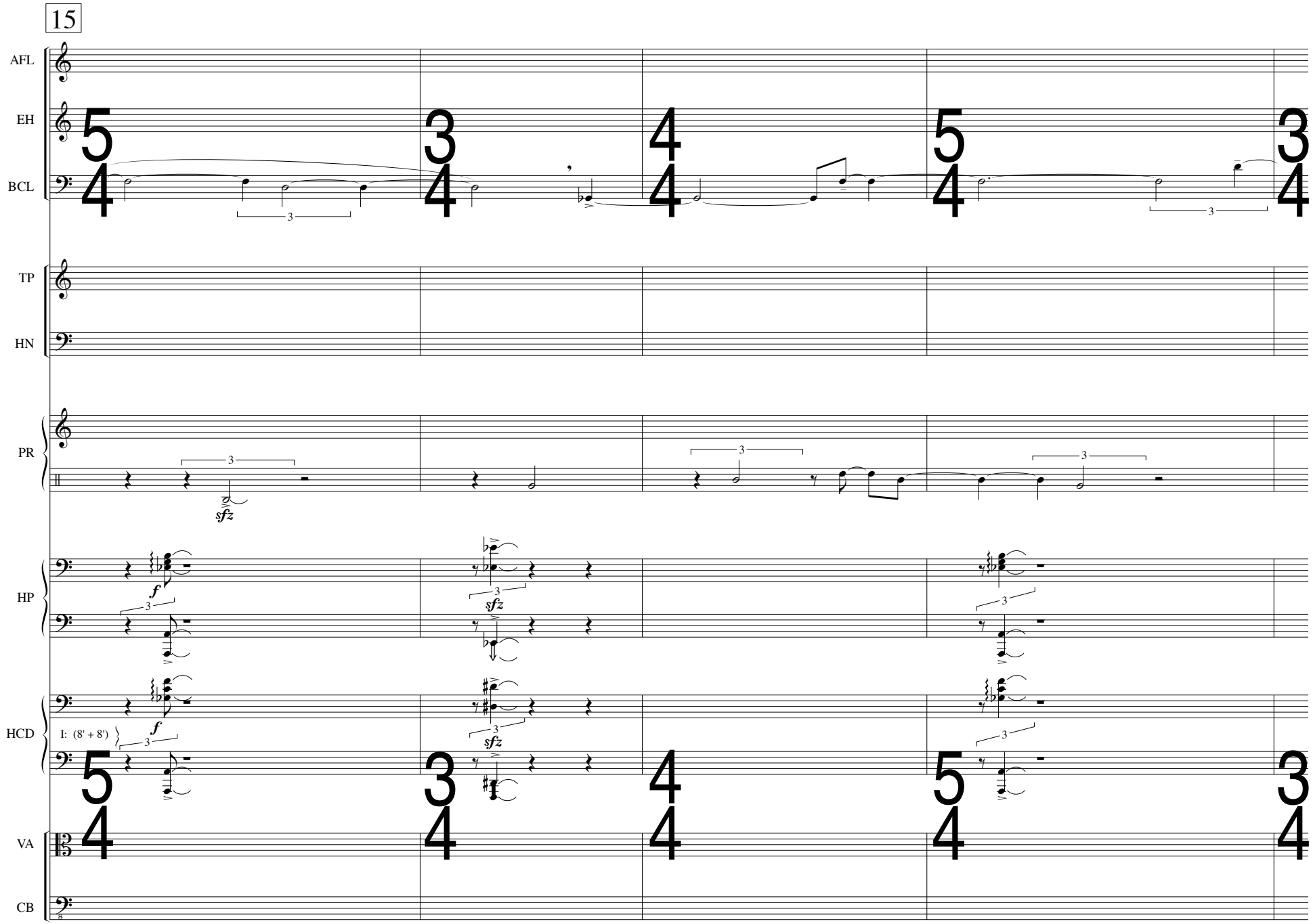


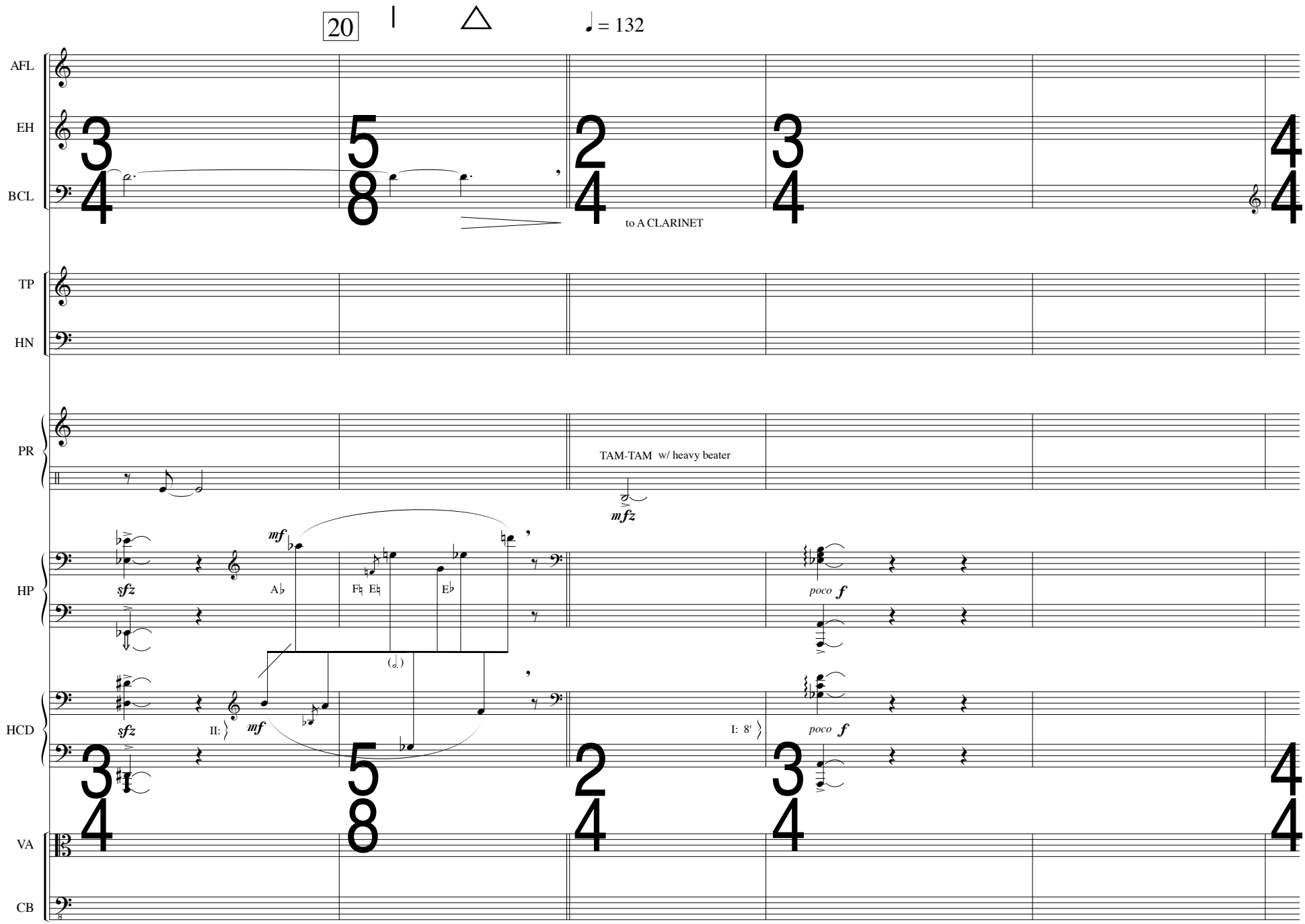

5
FL
EH
BCL
TP
HN
PR
HP
HCD
VA
CB
(bend)
CHIMES w/ hard plastic
Ped.
port.
IV
III

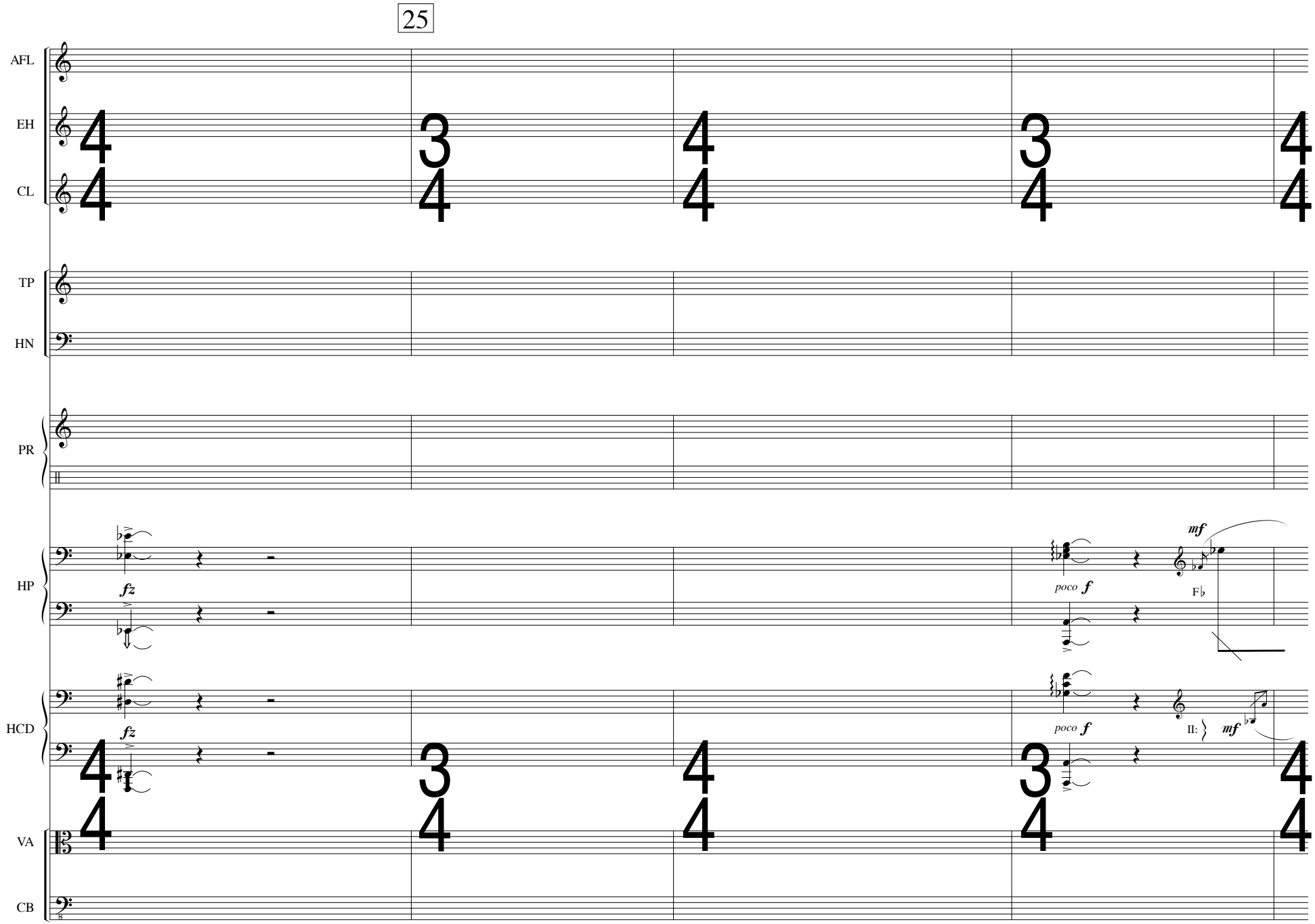


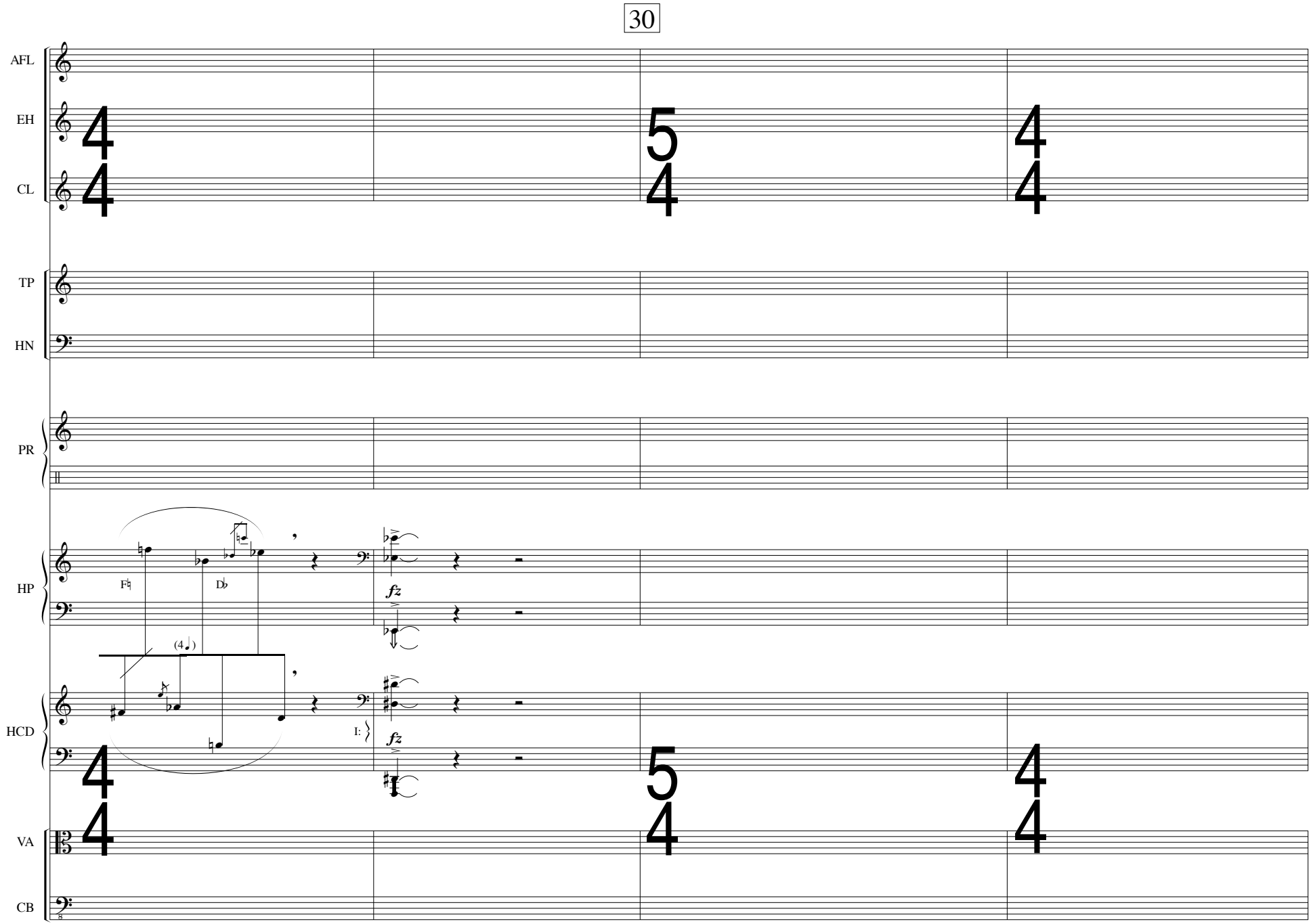
* **HARP & HARPSICHORD:** Beamed note groupings should be executed as rapidly as possible (though not necessarily evenly), and must last no longer than the duration indicated parenthetically.

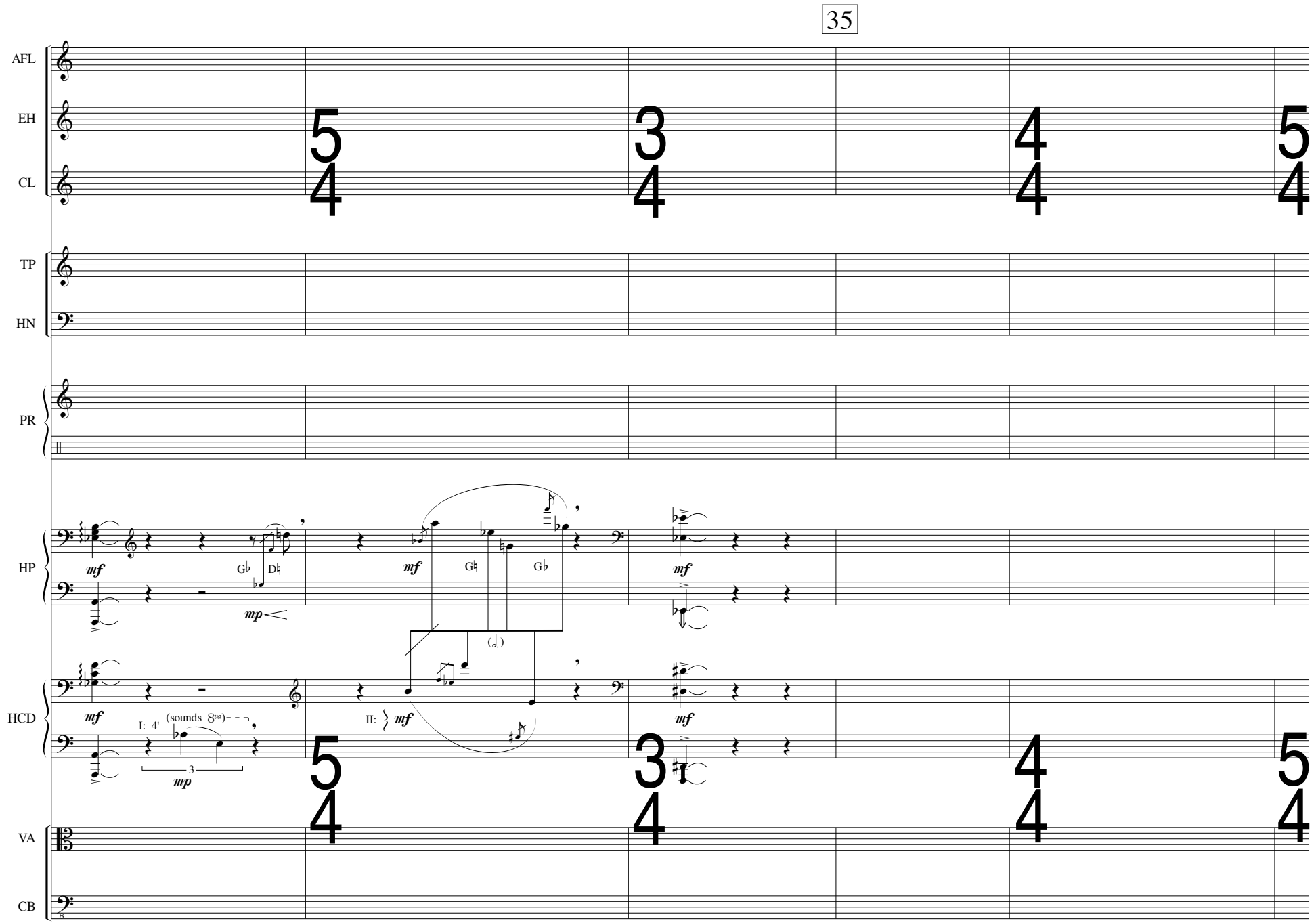

I I △
♩= 118
AFL
EH
BCL
TP
HN
PR
HP
HCD
VA
CB
mf
f
sfz
(sim.)
E♭
D♮
II:
ord.

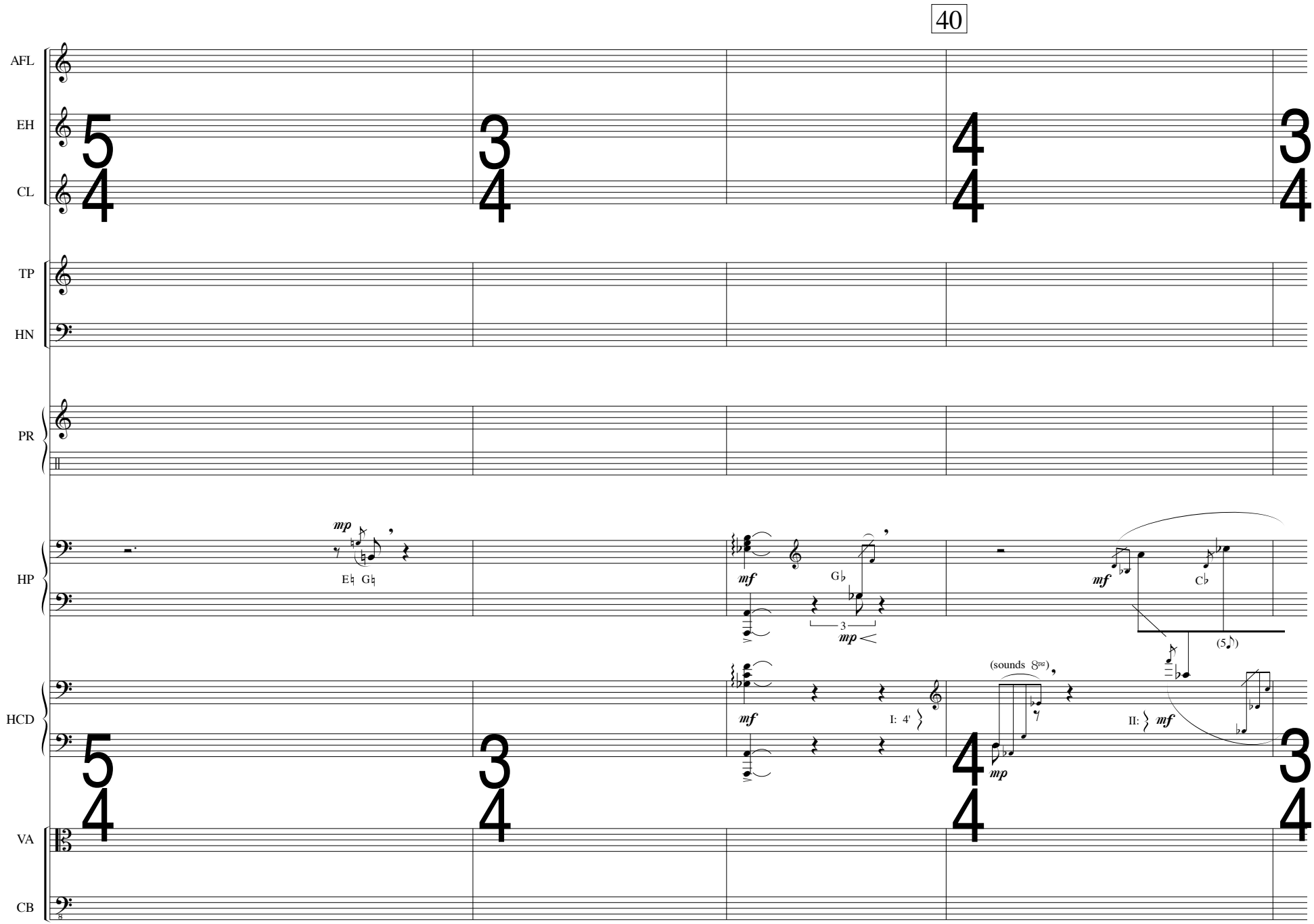

15
AFL
EH
BCL
TP
HN
PR
HP
HCD
I: (8' + 8')
VA
CB
f
sfz

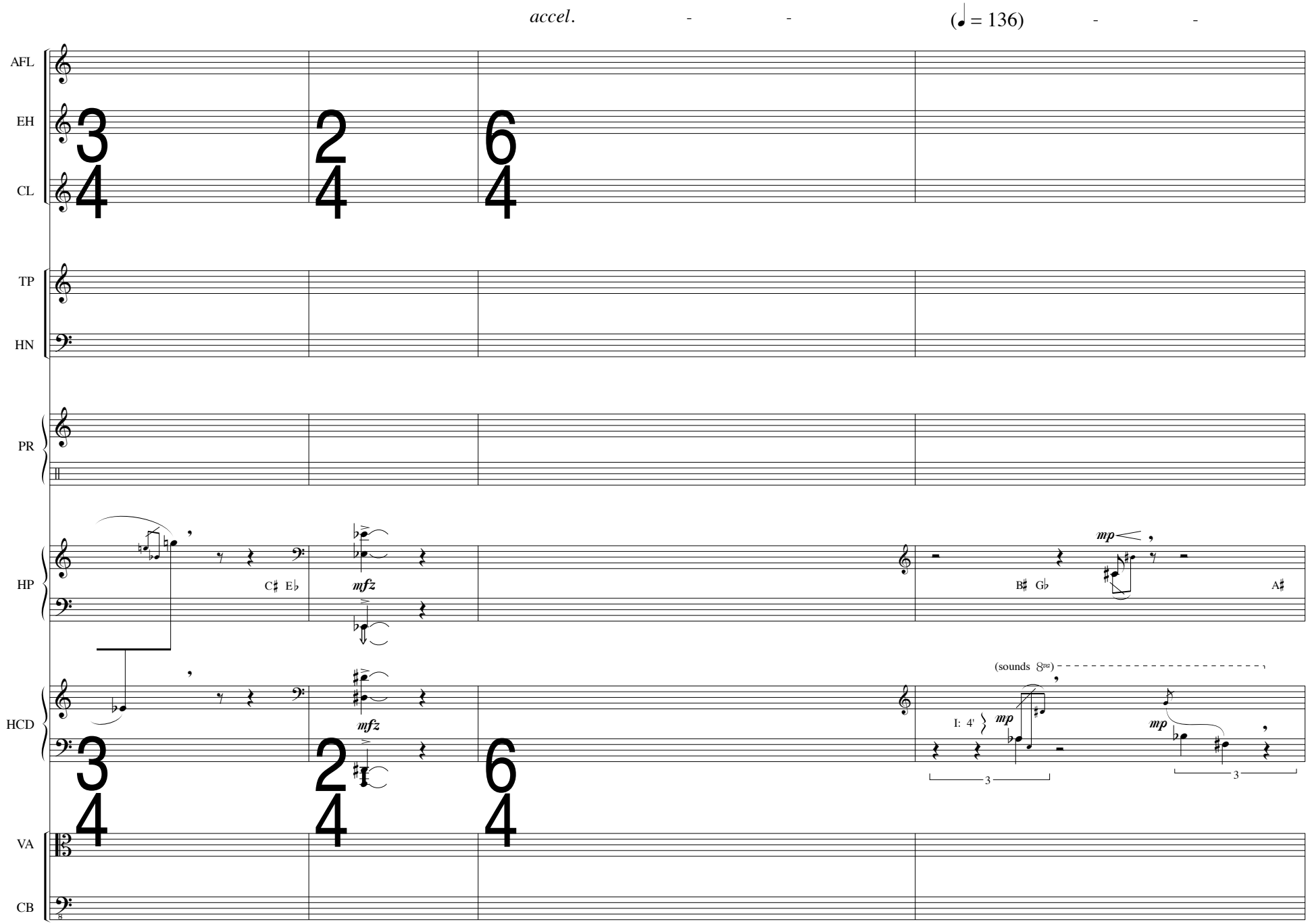

20
♩ = 132
AFL
EH
BCL
TP
HN
PR
HP
HCD
VA
CB
to A CLARINET
TAM-TAM w/ heavy beater
mfz
mf
sfz
poco f
II:
I: 8'

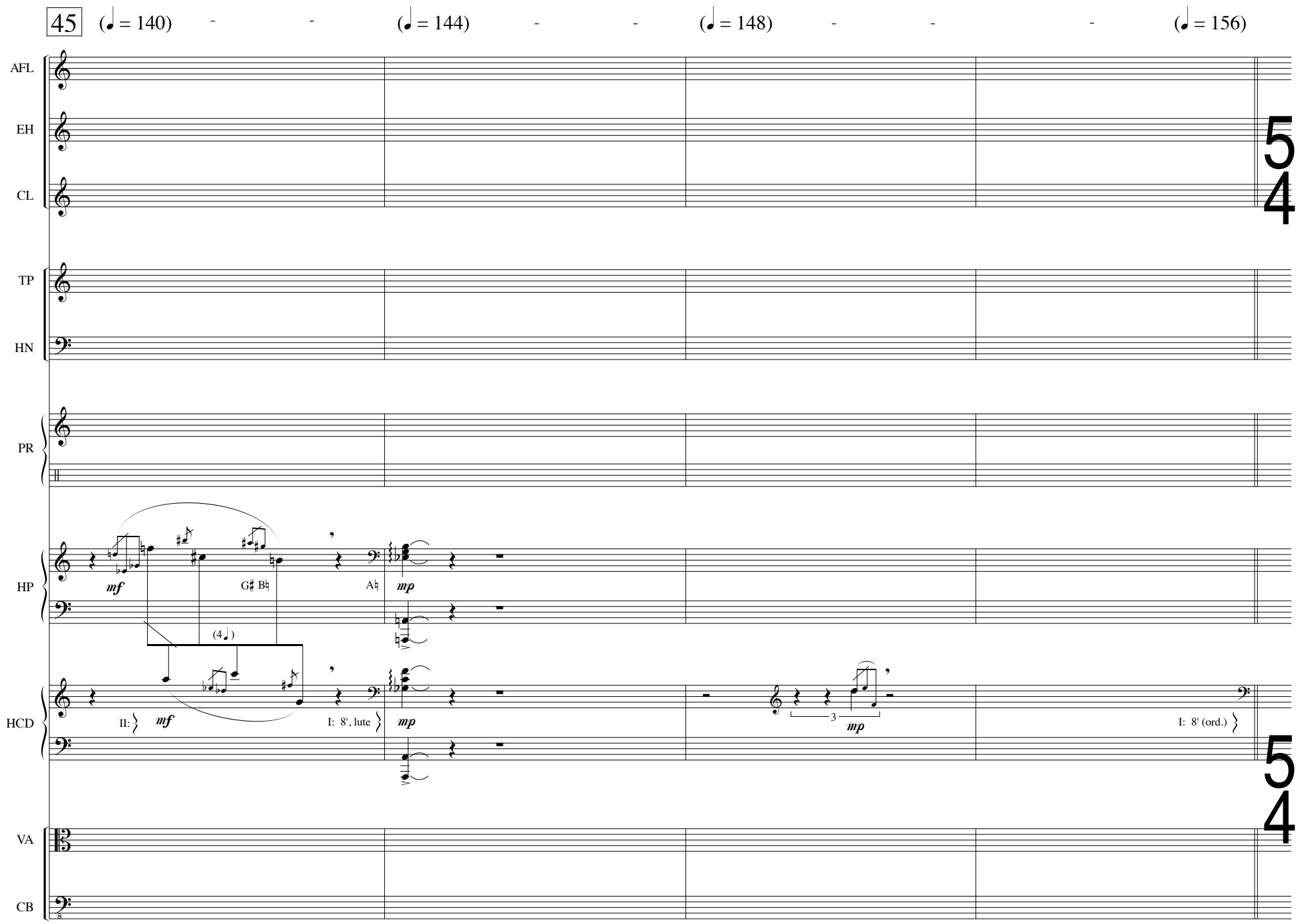

25
AFL
EH
CL
TP
HN
PR
HP
HCD
VA
CB
fz
fz
poco f
poco f
mf
F♭
II:
mf


30
AFL
EH
CL
TP
HN
PR
HP
HCD
VA
CB
F♮
D♭
fz
(4)
I:
fz


35
AFL
EH
CL
TP
HN
PR
HP
HCD
VA
CB
mf
mp
G♭
D♮
G♮
(sounds 8va)
I: 4'
II:
3


40
AFL
EH
CL
TP
HN
PR
HP
HCD
VA
CB
mp
E♮ G♮
mf
G♭
3
mp
mf
C♭
(5)
(sounds 8va)
mf
I: 4'
mp
II:
mf

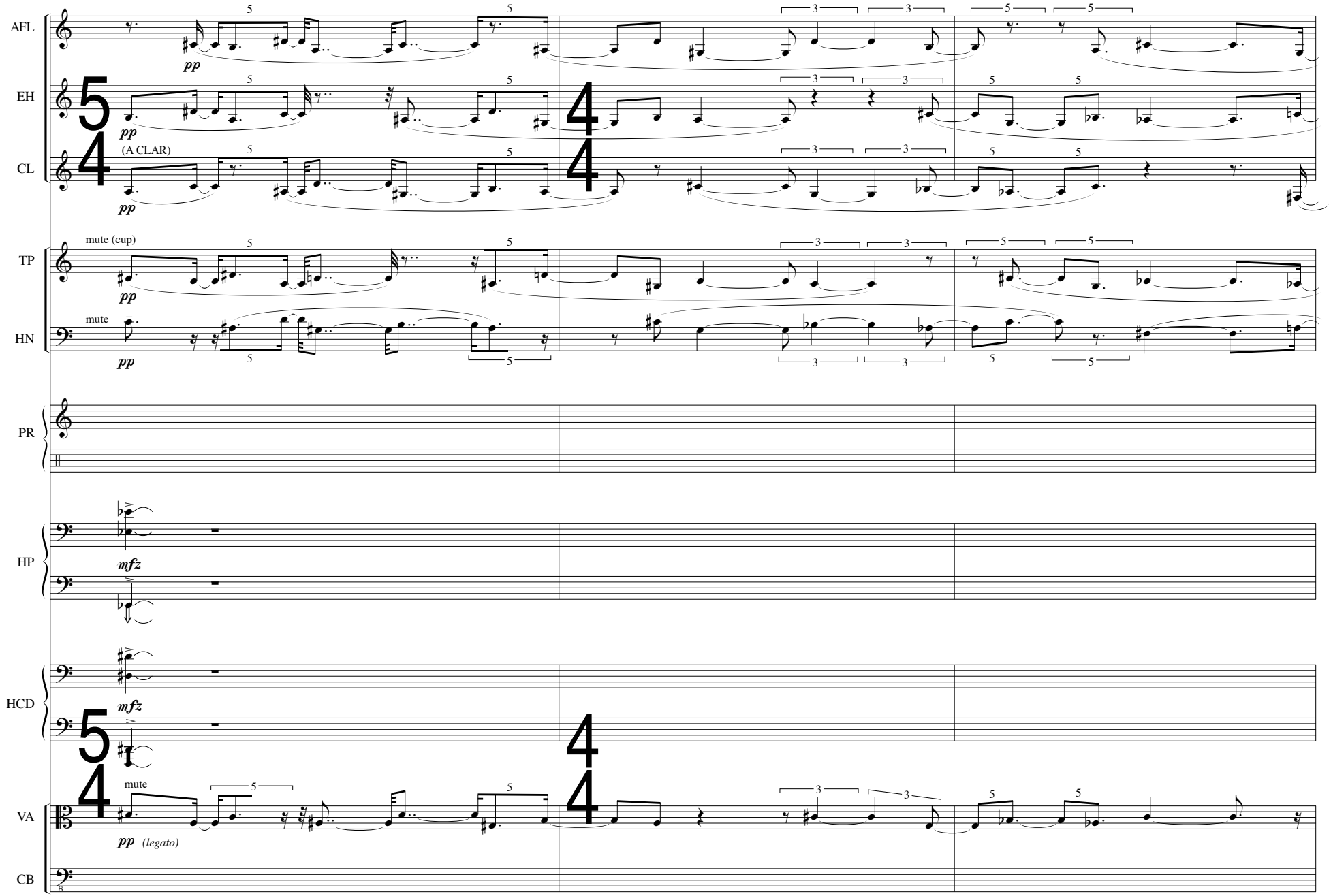

accel.
(♩ = 136)
AFL
EH
CL
TP
HN
PR
HP
HCD
VA
CB
C♯ E♭
mfz
B♯ G♭
mp
A♯
(sounds 8va)
I: 4'
3
3

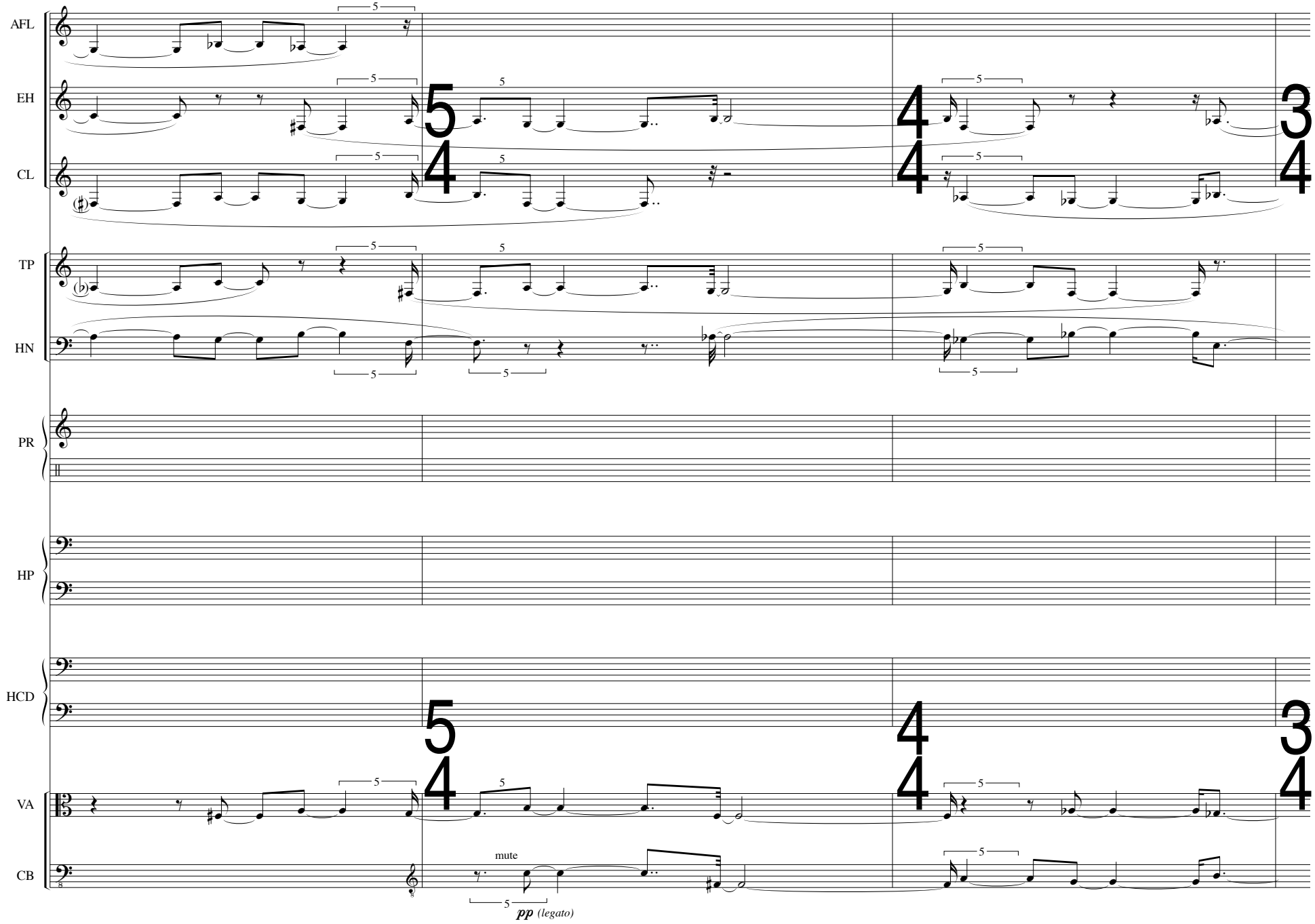

45
(♩ = 140)
(♩ = 144)
(♩ = 148)
(♩ = 156)
AFL
EH
CL
TP
HN
PR
HP
HCD
VA
CB
5
4
mf
G♯ B♮
A♮
mp
(4♩)
II:
I: 8', lute
I: 8' (ord.)
3

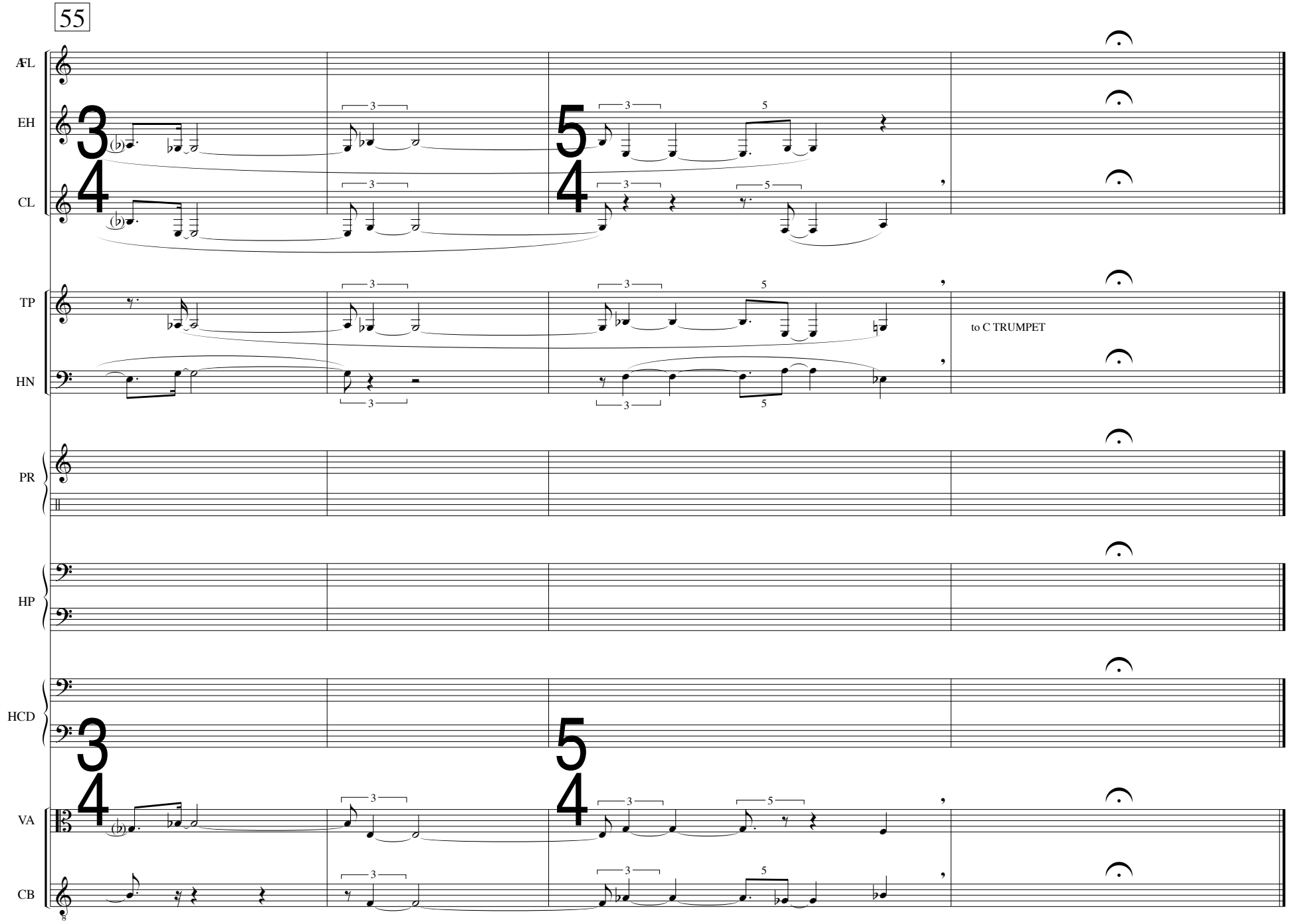
CODA: "microrounds"

Languid ♩ = 52 (← 𝅗𝅥. = ♩→)

50

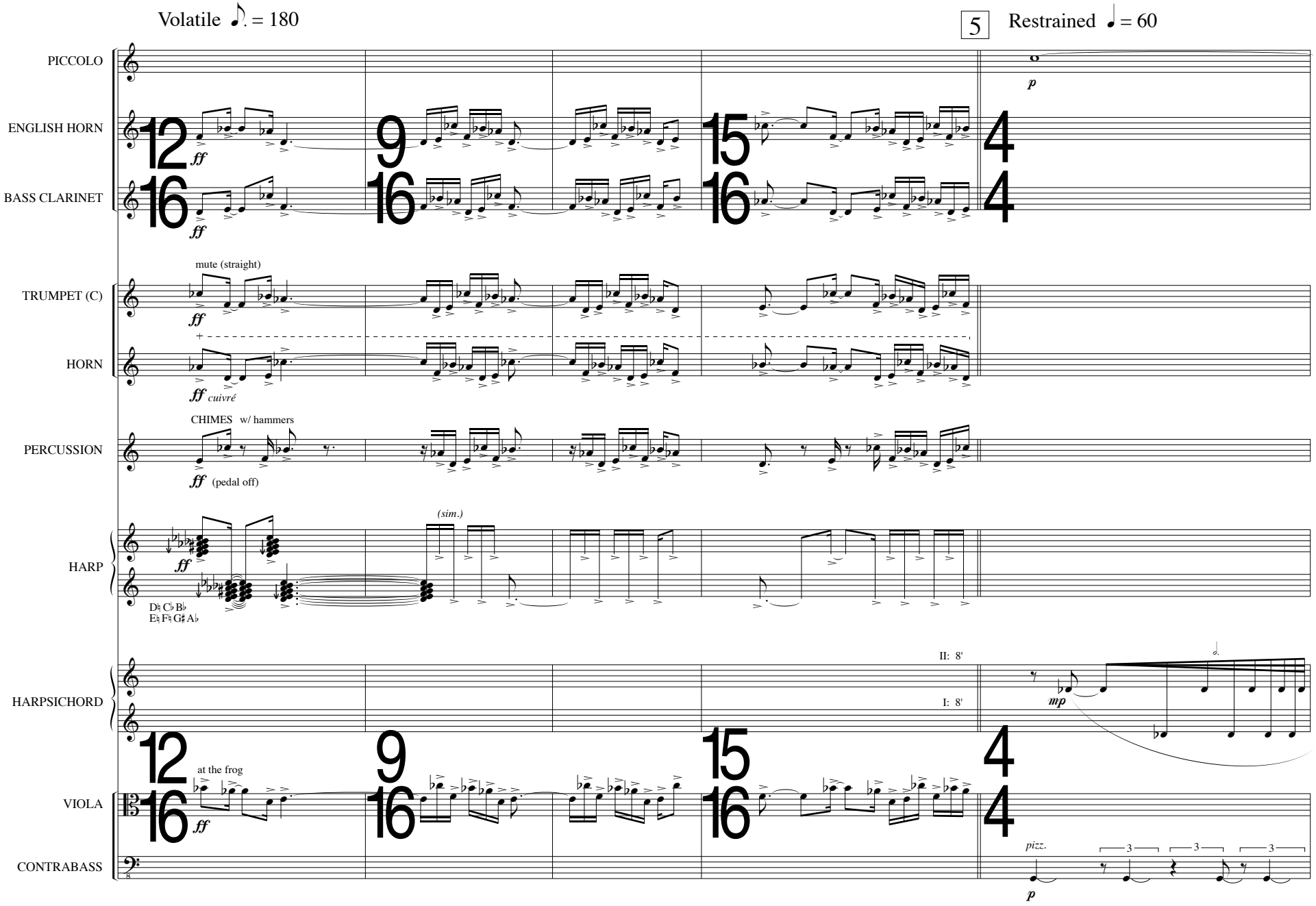


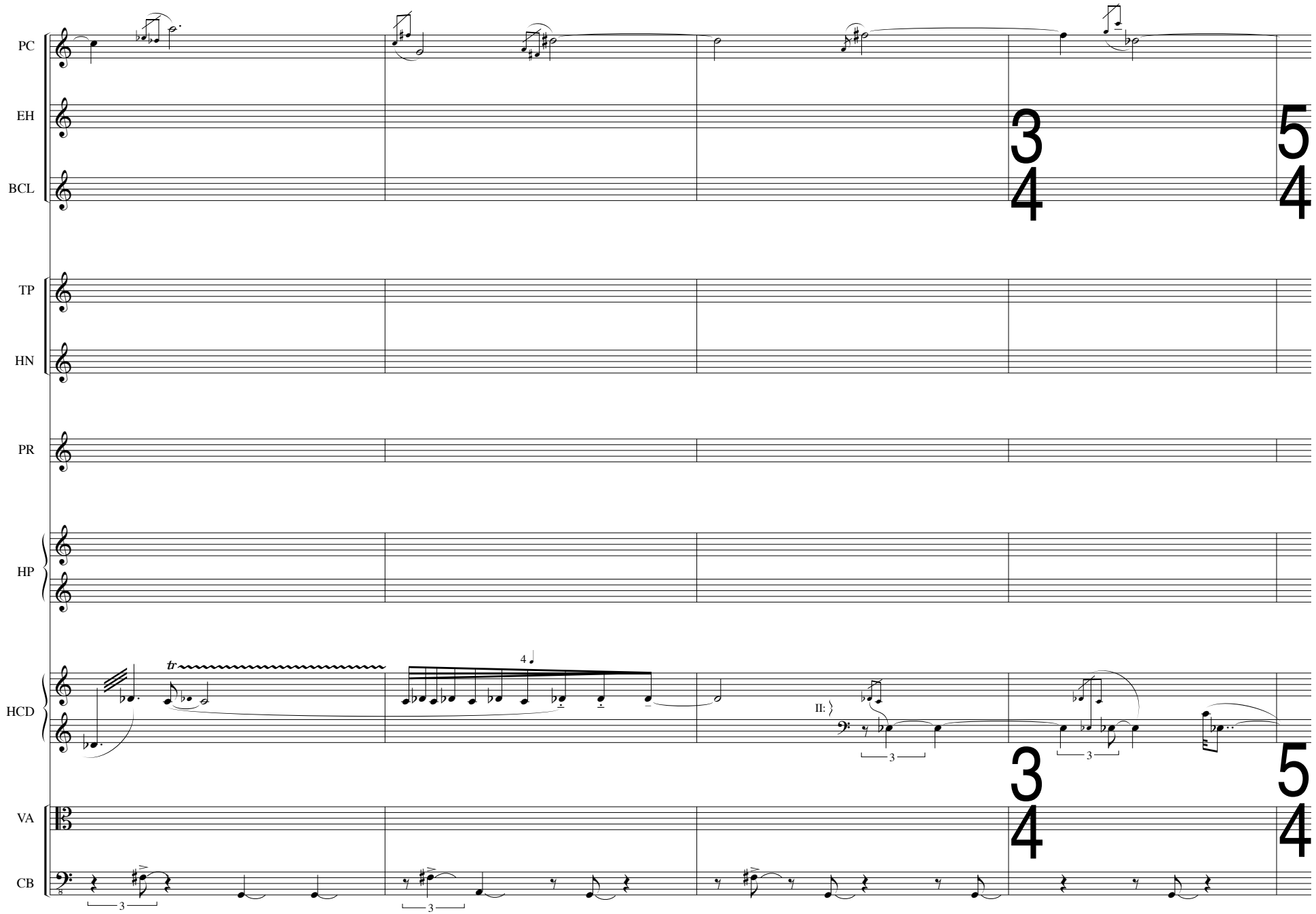

AFL
EH
CL
TP
HN
PR
HP
HCD
VA
CB
mute
pp (legato)

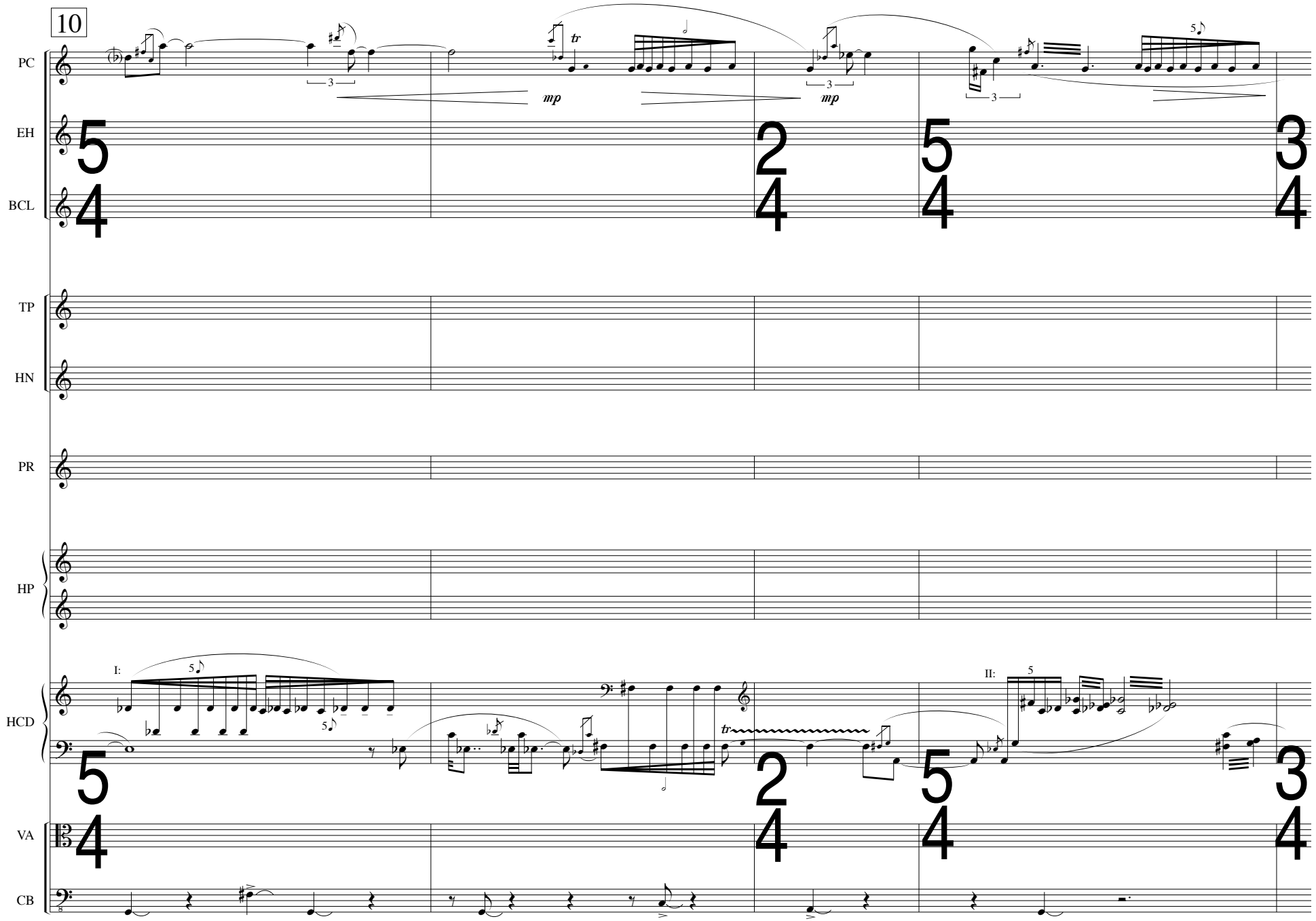

55
AFL
EH
CL
TP
HN
PR
HP
HCD
VA
CB
to C TRUMPET

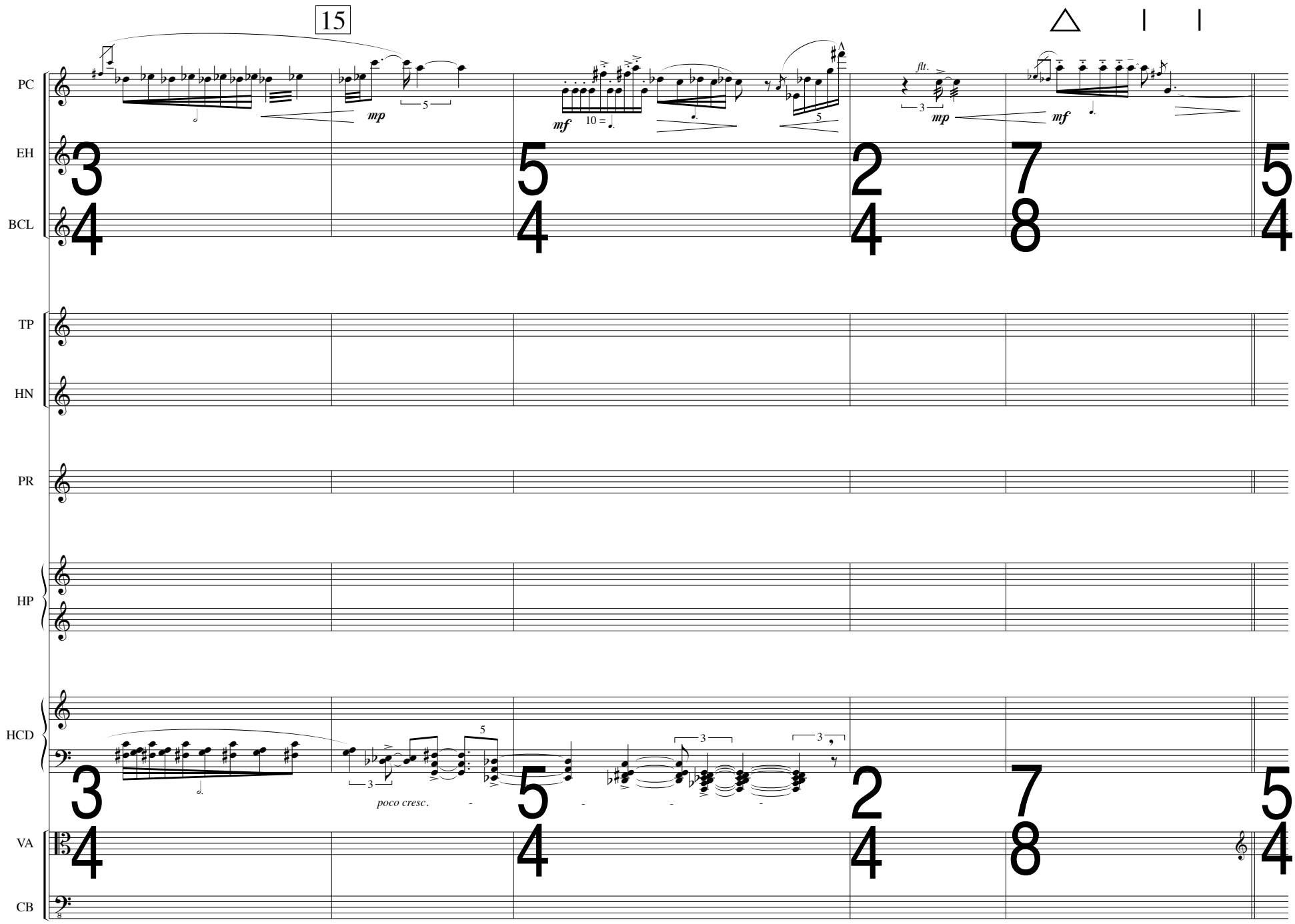
VI. crown knots & cascades

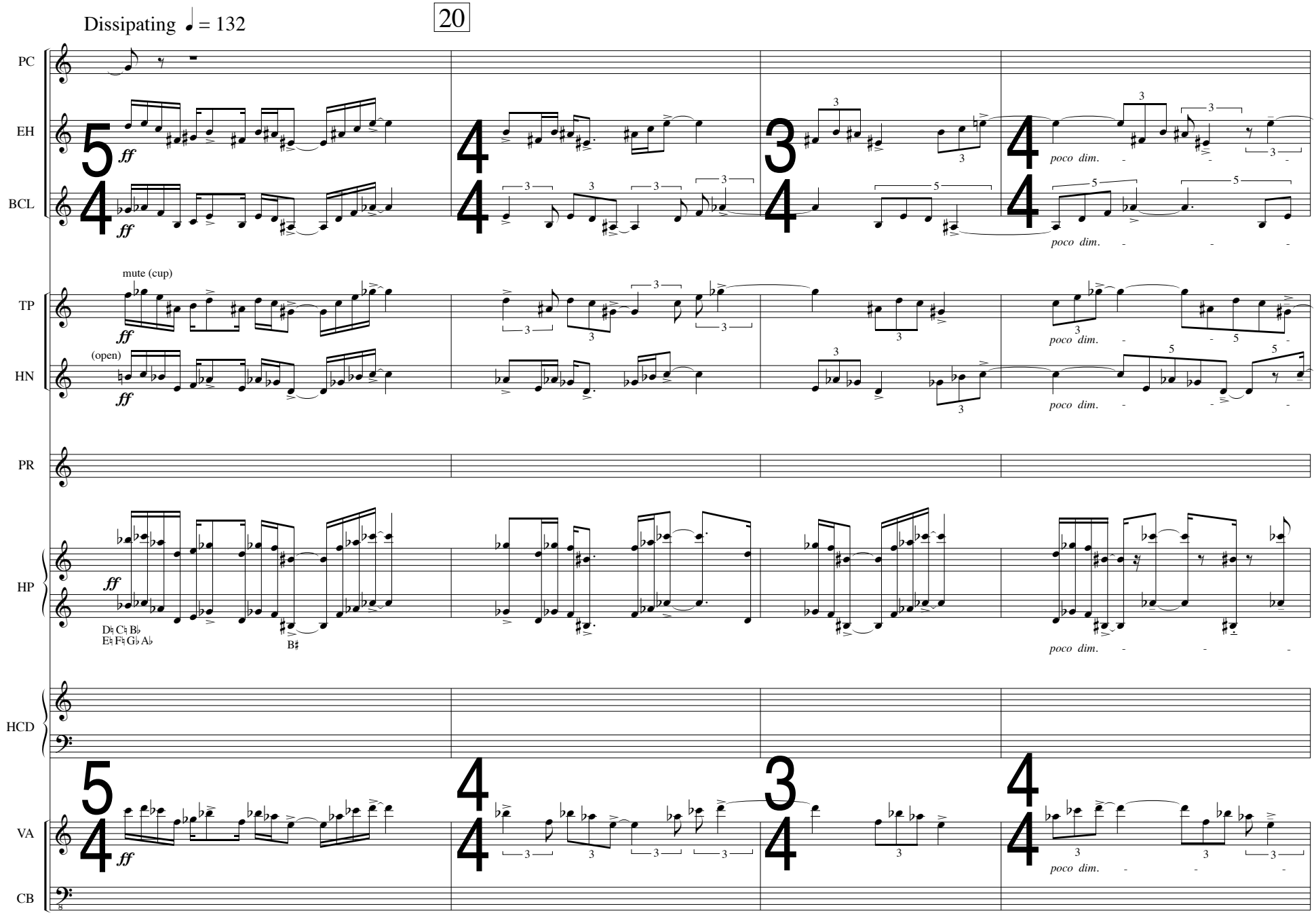
(meta-rondo in chiasmus)

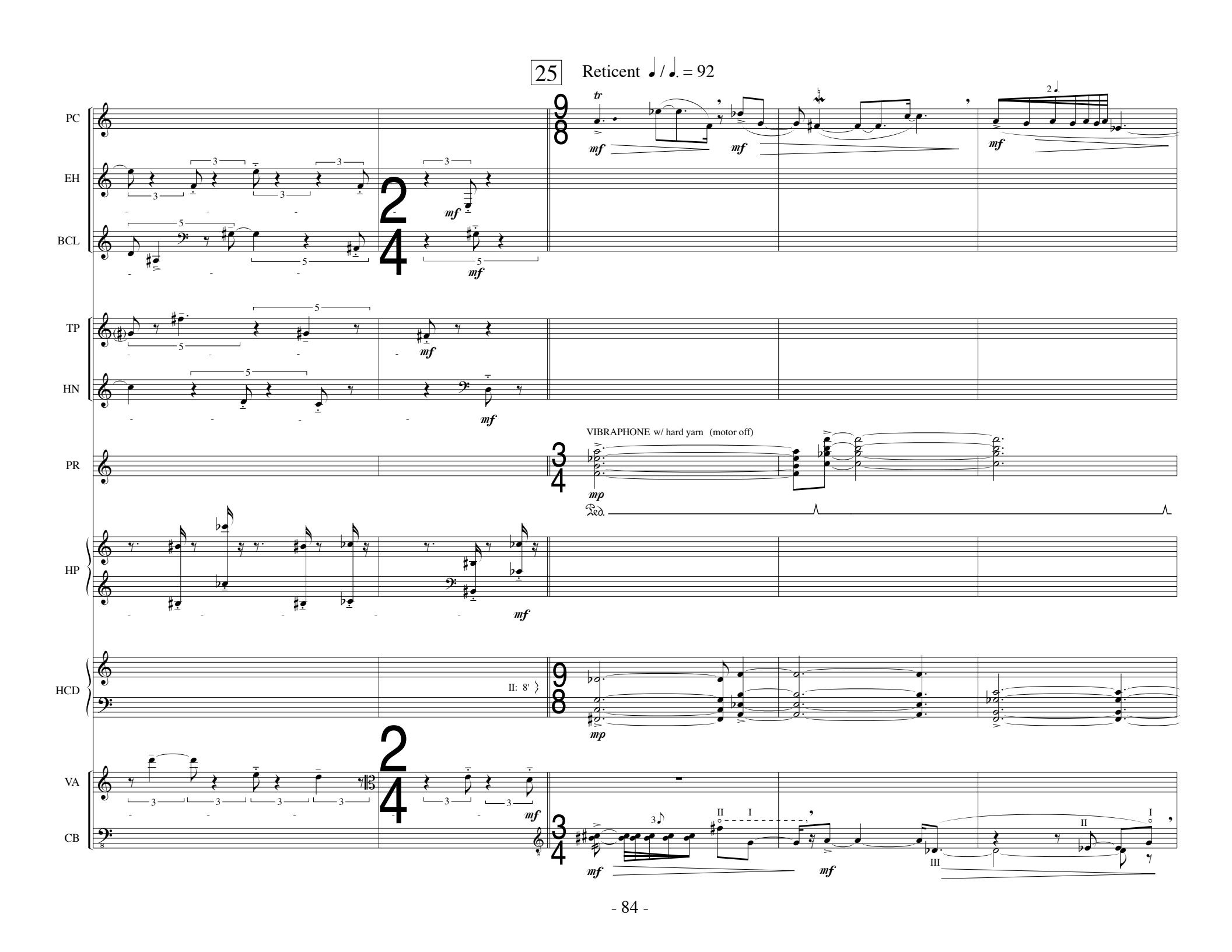


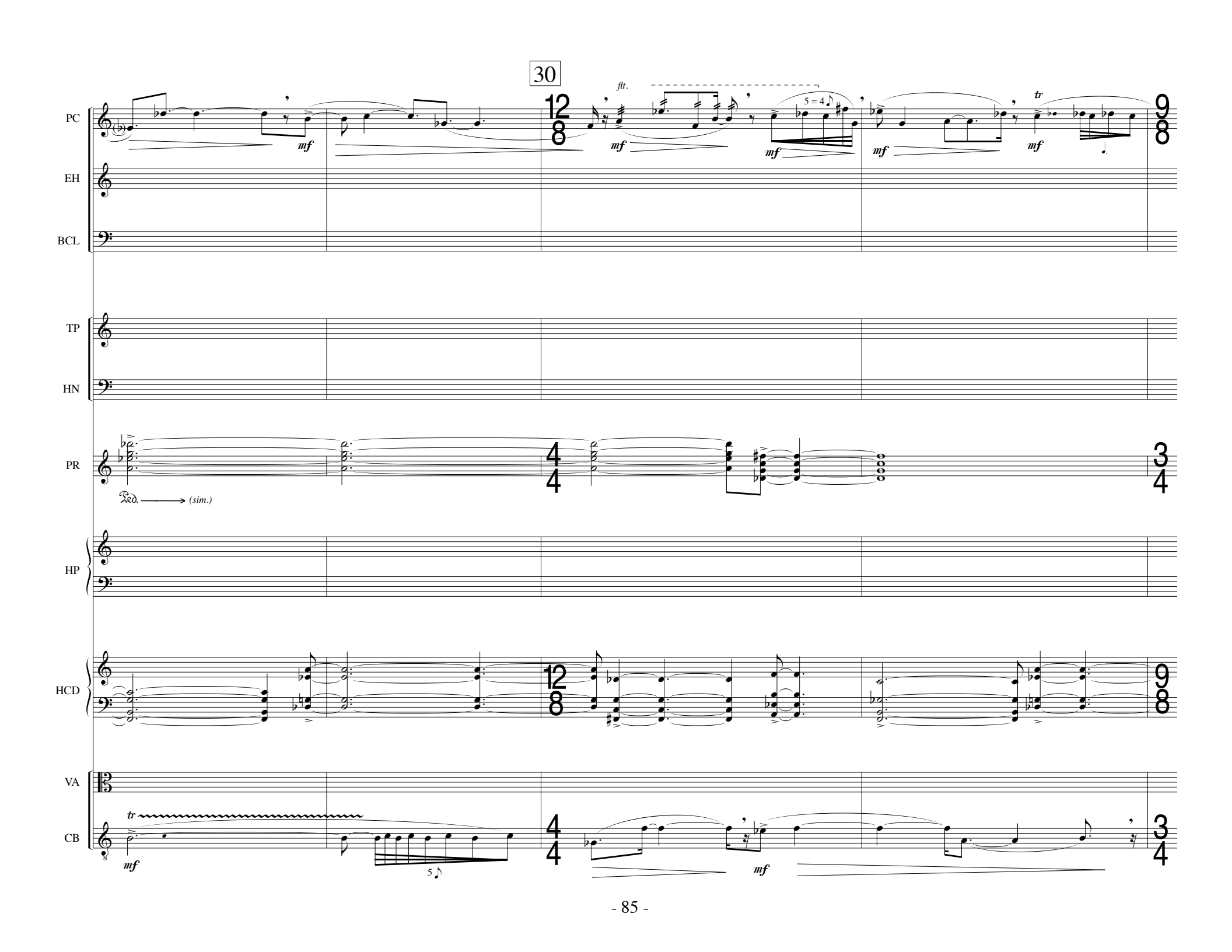

PC
EH
BCL
TP
HN
PR
HP
HCD
VA
CB
3
4
5
4
tr
4
II:
3
3
3
3
3
4
5
4

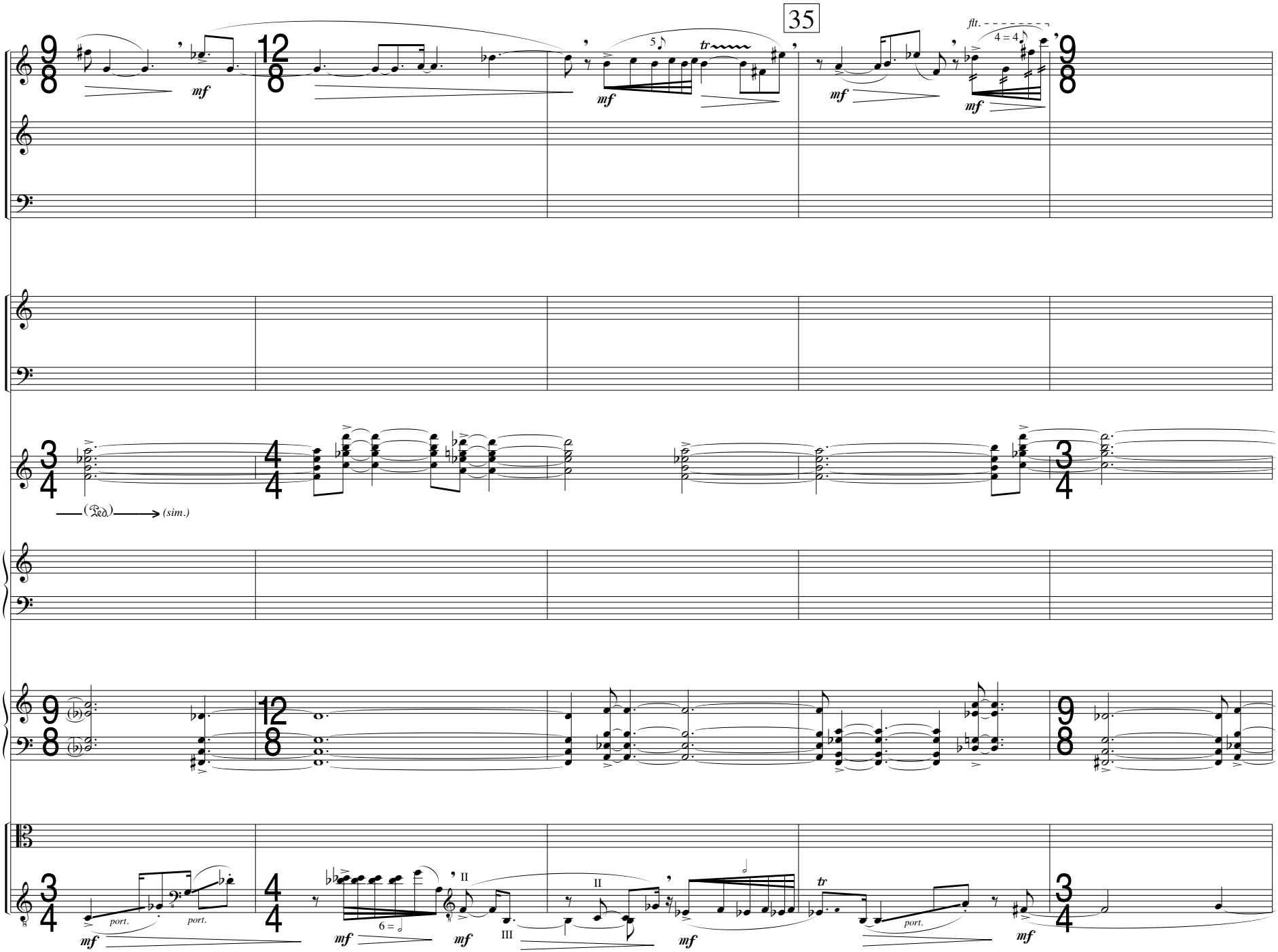

10
PC
EH
BCL
TP
HN
PR
HP
HCD
VA
CB
mp
mp
tr
I:
II:
5/4
2/4
5/4
3/4

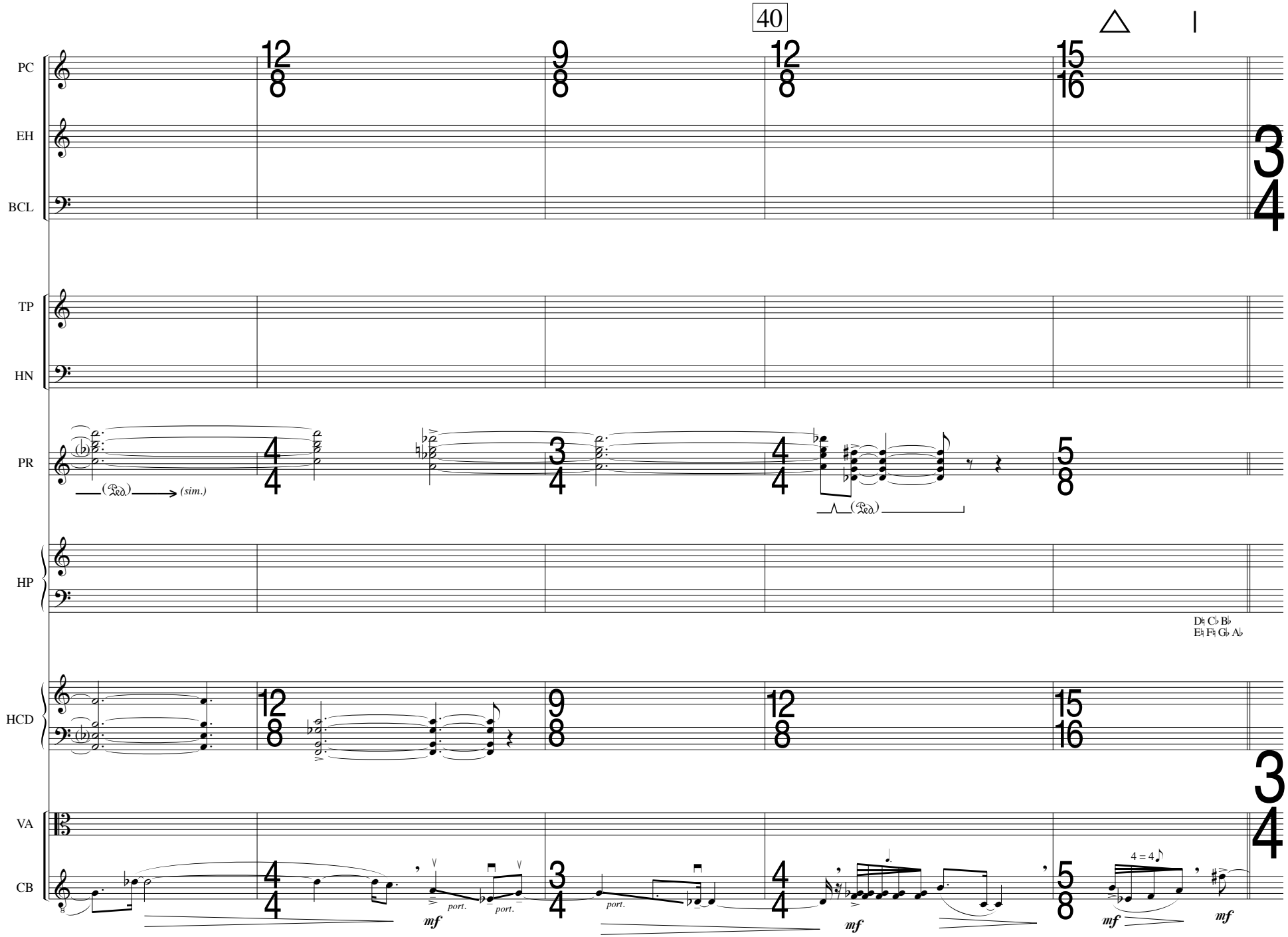

15
PC
EH
BCL
TP
HN
PR
HP
HCD
VA
CB
mp
mf
mf
mp
mf
flt.
poco cresc.

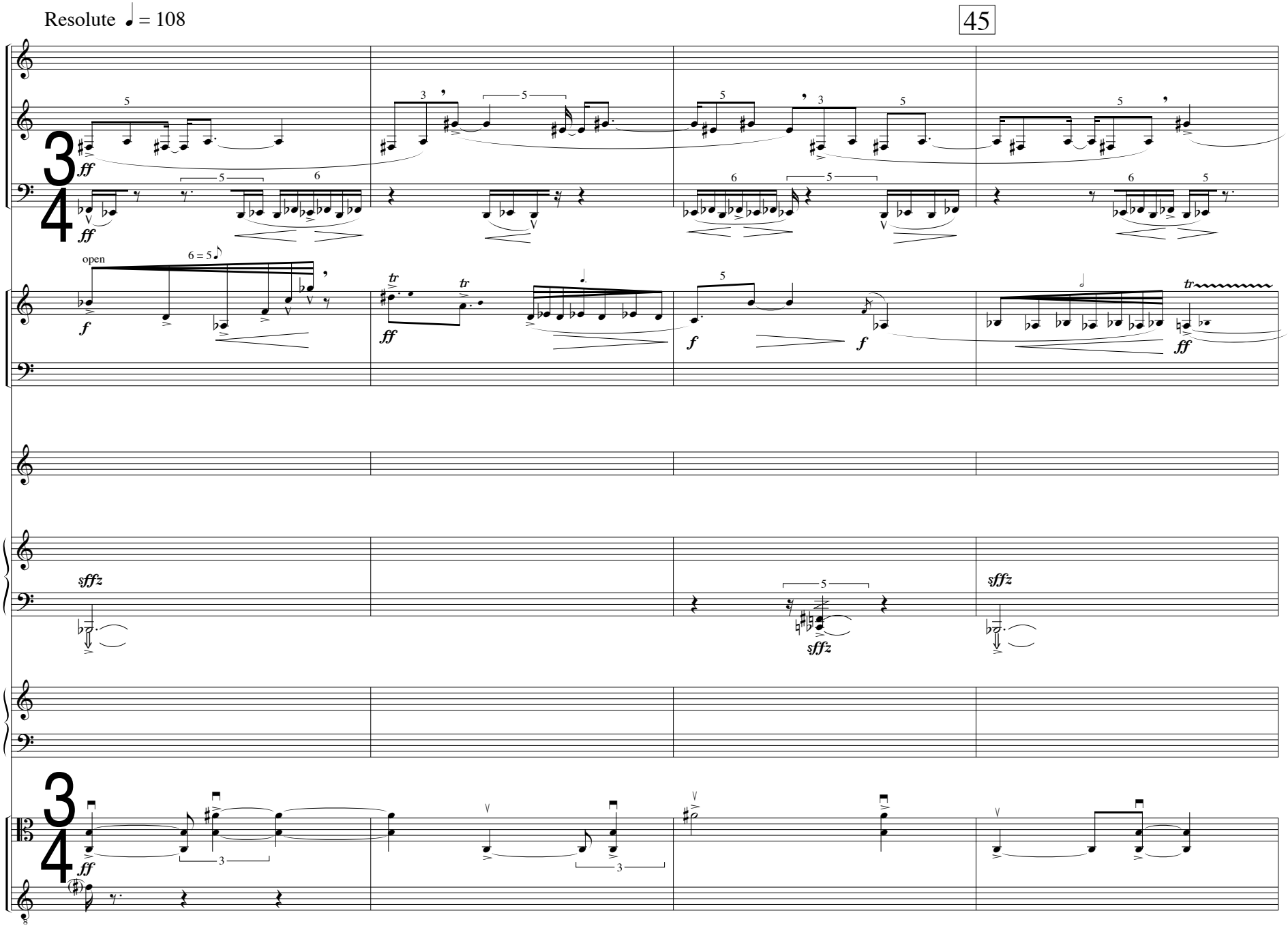

Dissipating ♩ = 132
20
PC
EH
BCL
TP
HN
PR
HP
HCD
VA
CB
ff
mute (cup)
(open)
poco dim.
D♮ C♮ B♭
E♮ F♮ G♭ A♭
B♯

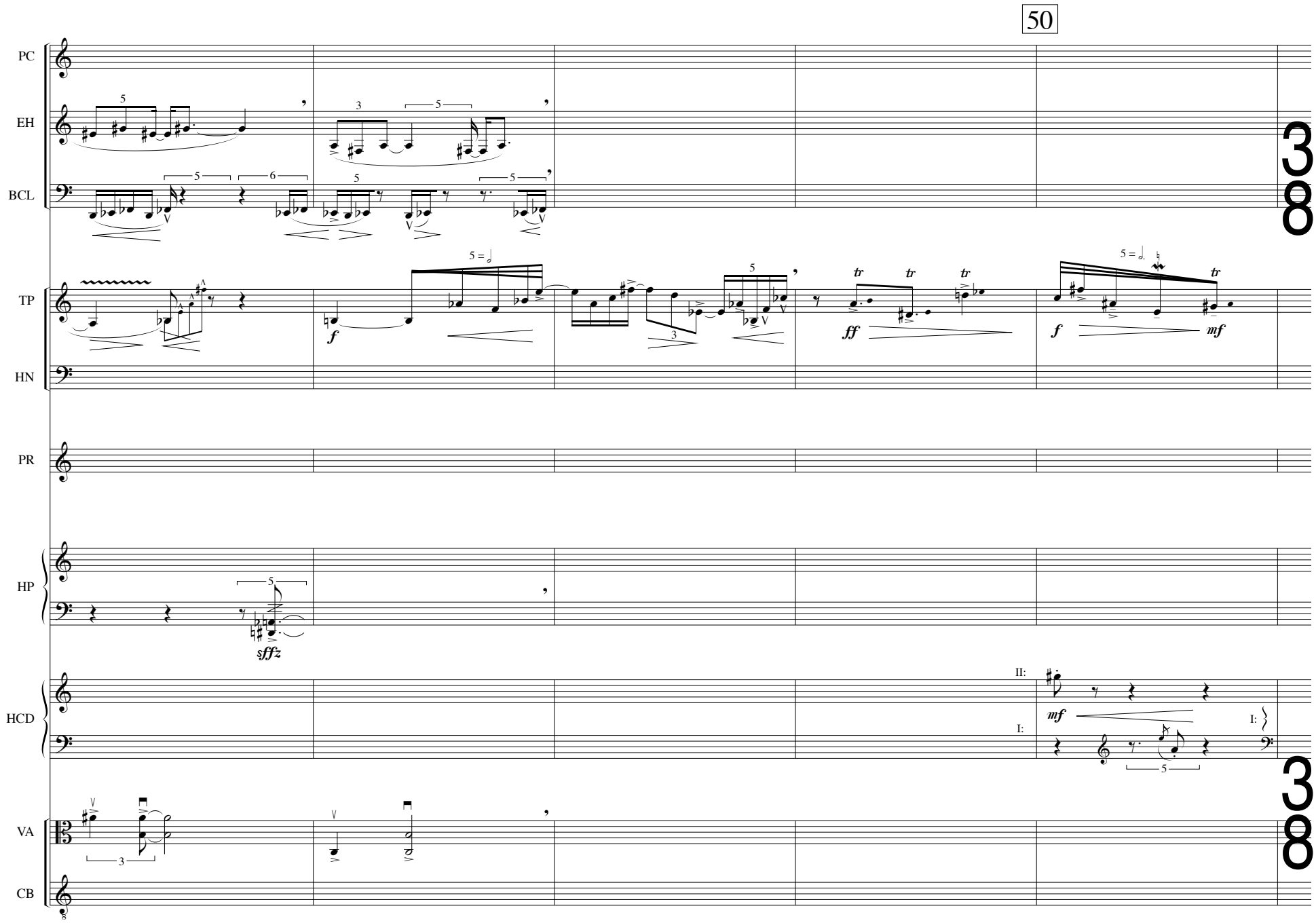

25
Reticent ♩ / ♩. = 92
PC
EH
BCL
TP
HN
PR
VIBRAPHONE w/ hard yarn (motor off)
HP
HCD
II: 8' ⟩
VA
CB

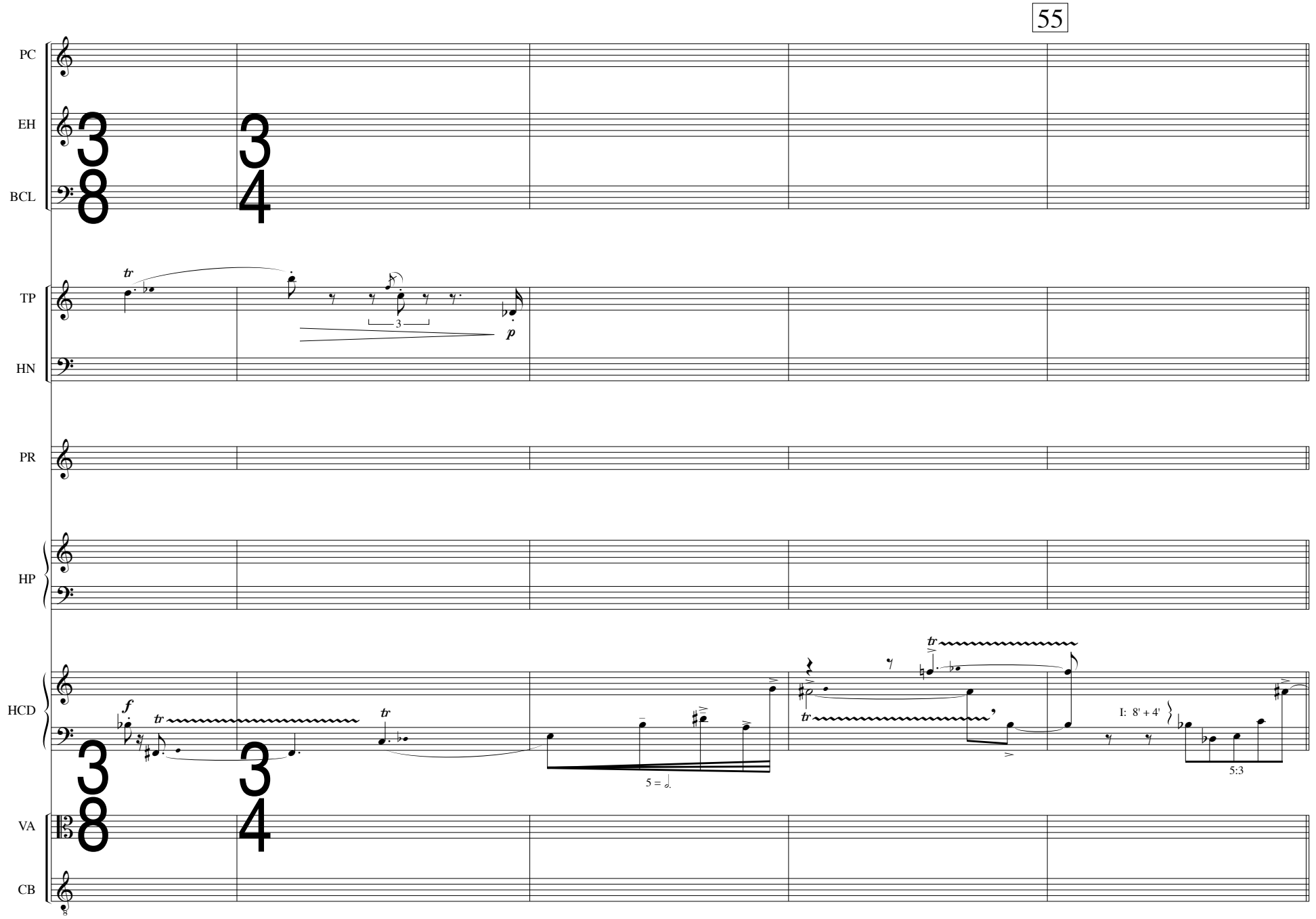

30
PC
EH
BCL
TP
HN
PR
HP
HCD
VA
CB
flt.
mf
tr
5 = 4
Ped.
(sim.)


35
PC
EH
BCL
TP
HN
PR
HP
HCD
VA
CB
mf
flt.
4 = 4
tr
(sim.)
port.
II
III
6 =

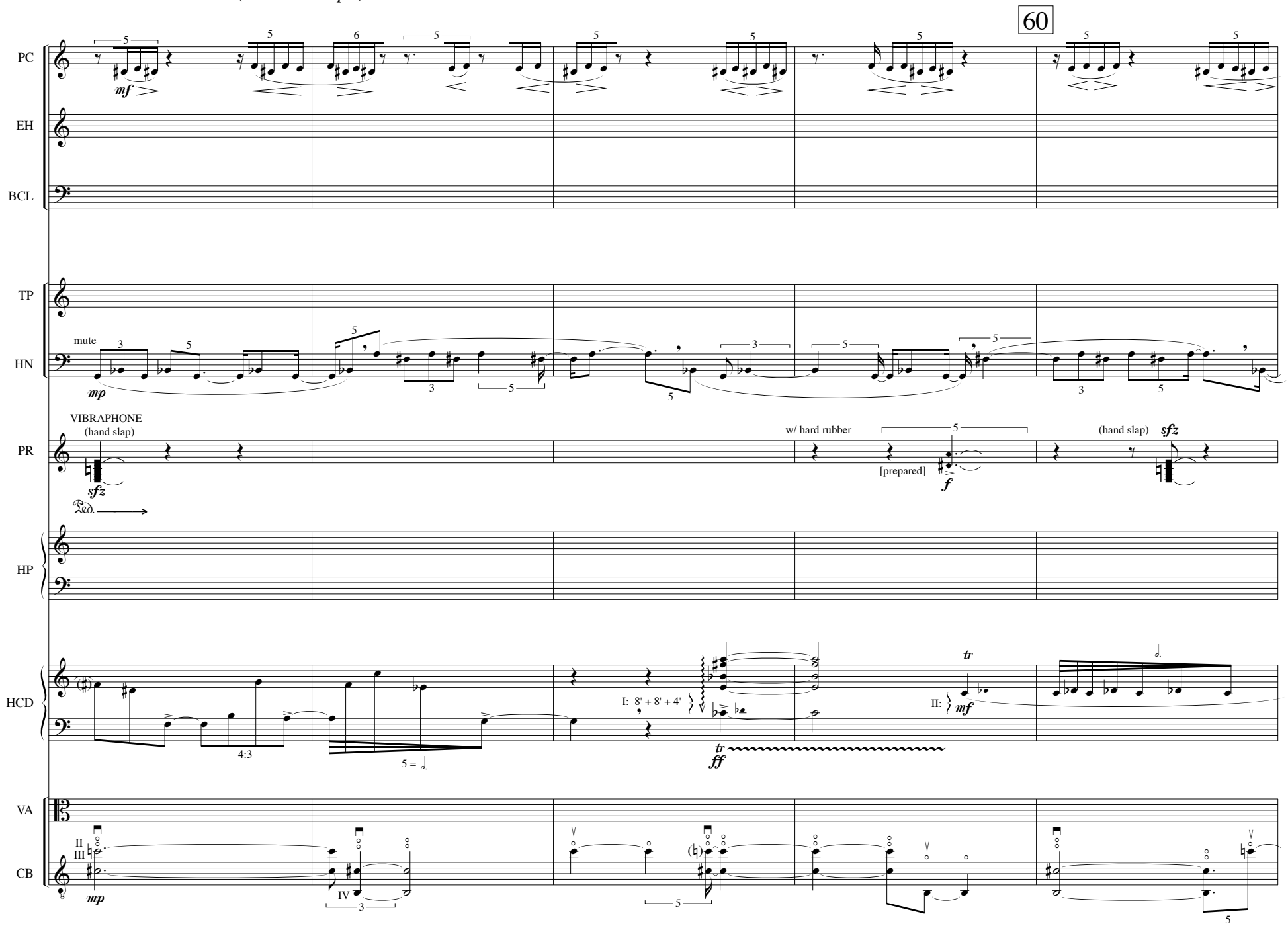

40
PC
EH
BCL
TP
HN
PR
HP
HCD
VA
CB
(Ped.)
(sim.)
(Ped.)
D♮ C♭ B♭
E♮ F♮ G♭ A♭
port.
port.
port.
mf
mf
mf
mf
4 = 4

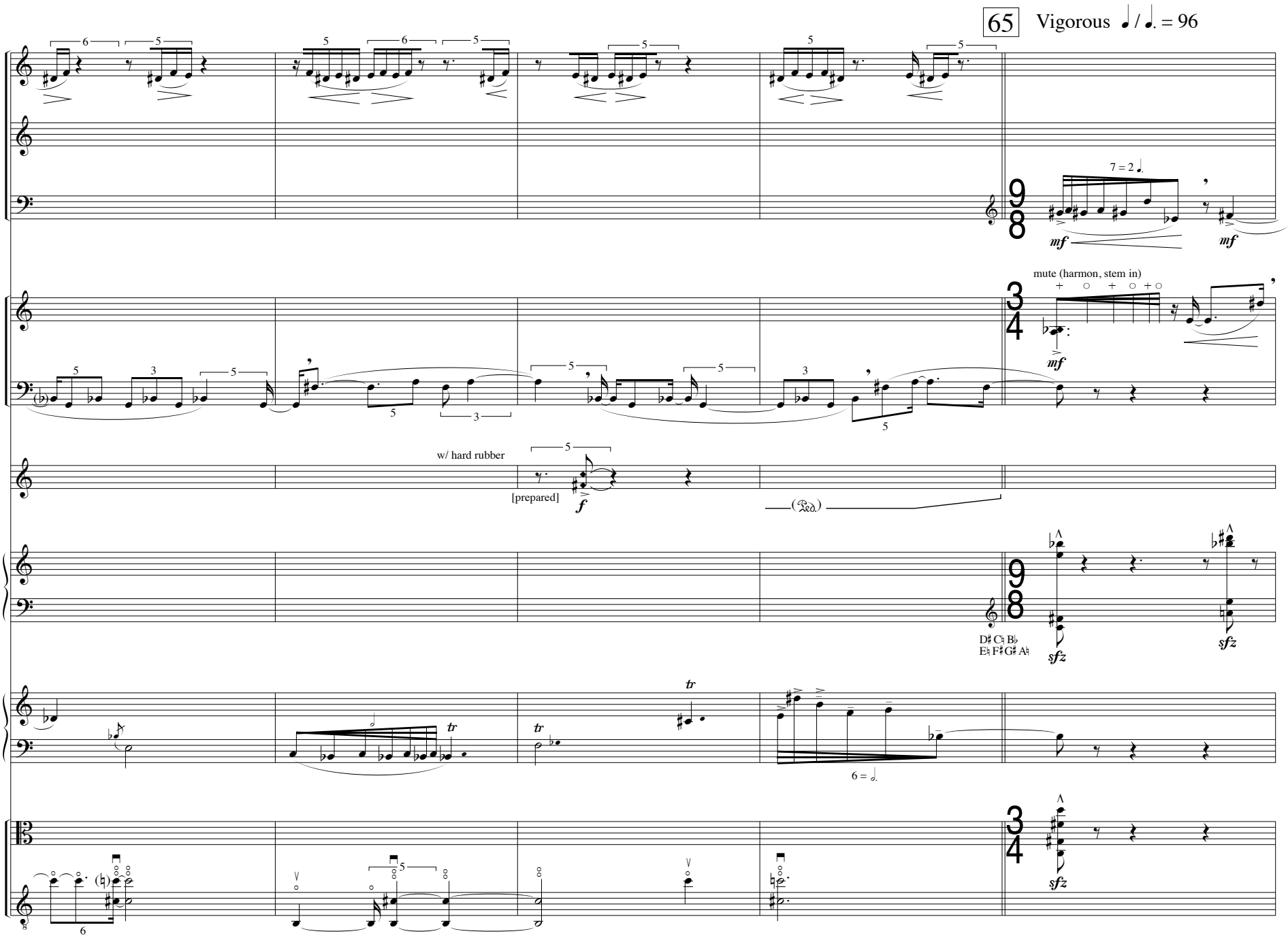

Resolute ♩ = 108
45
PC
EH
BCL
TP
HN
PR
HP
HCD
VA
CB
open
6 = 5
ff
f
sffz

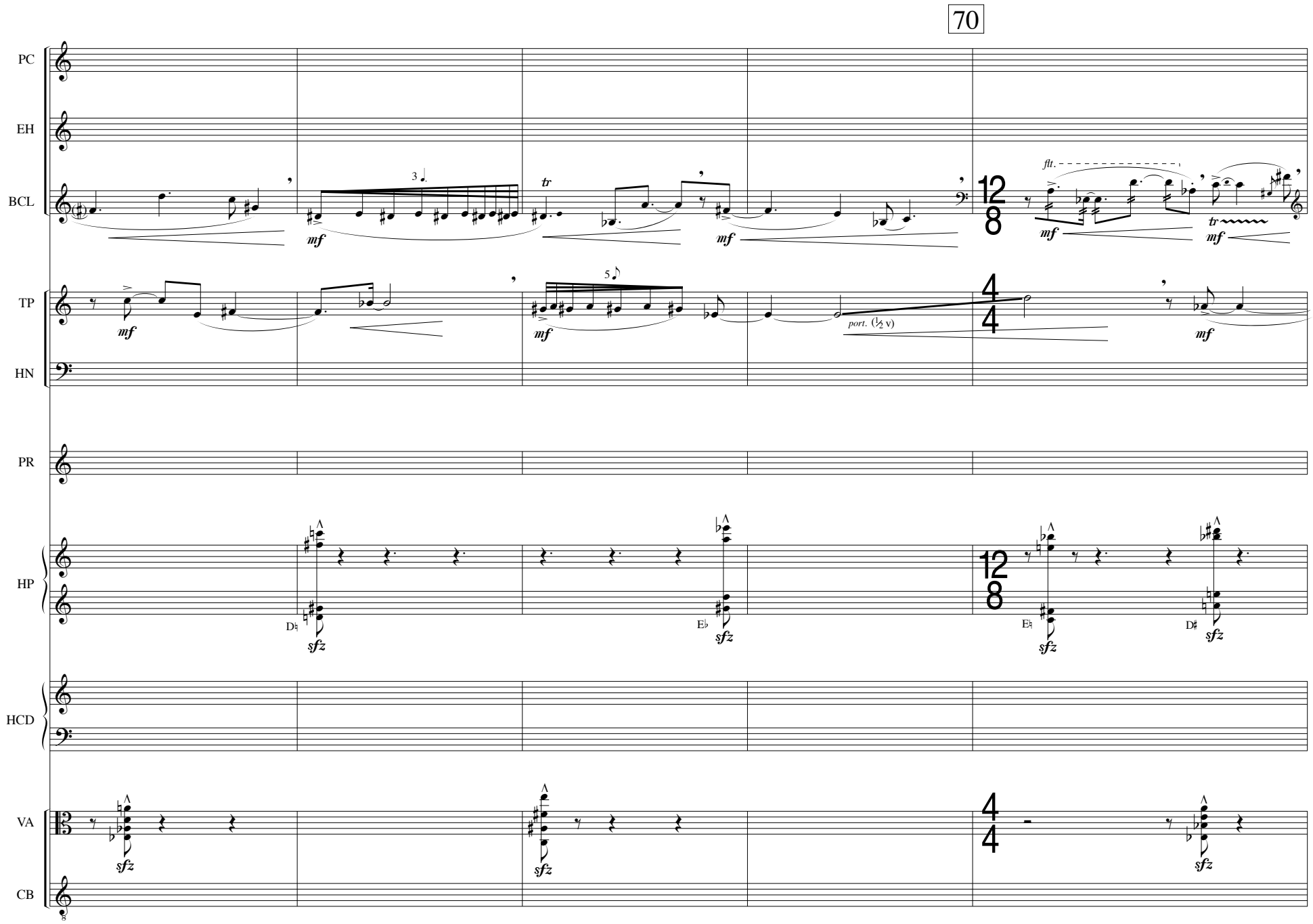

50
PC
EH
BCL
TP
HN
PR
HP
HCD
VA
CB
f
ff
f
mf
sfffz
mf
II:
I:
I:

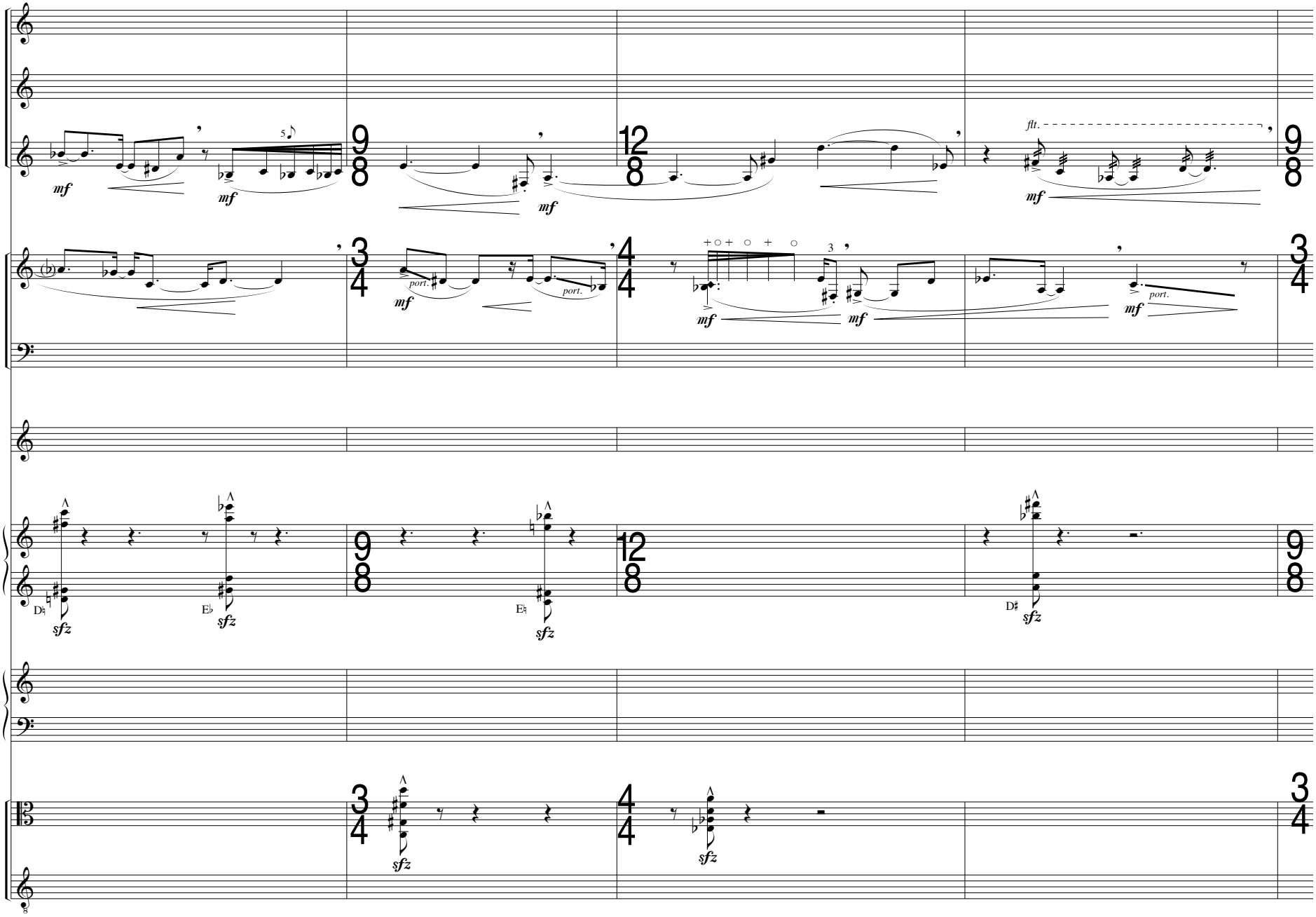

55
PC
EH
BCL
TP
HN
PR
HP
HCD
VA
CB
3
8
3
4
tr
3
p
f
5 = 𝅗𝅥.
I: 8' + 4'
5:3

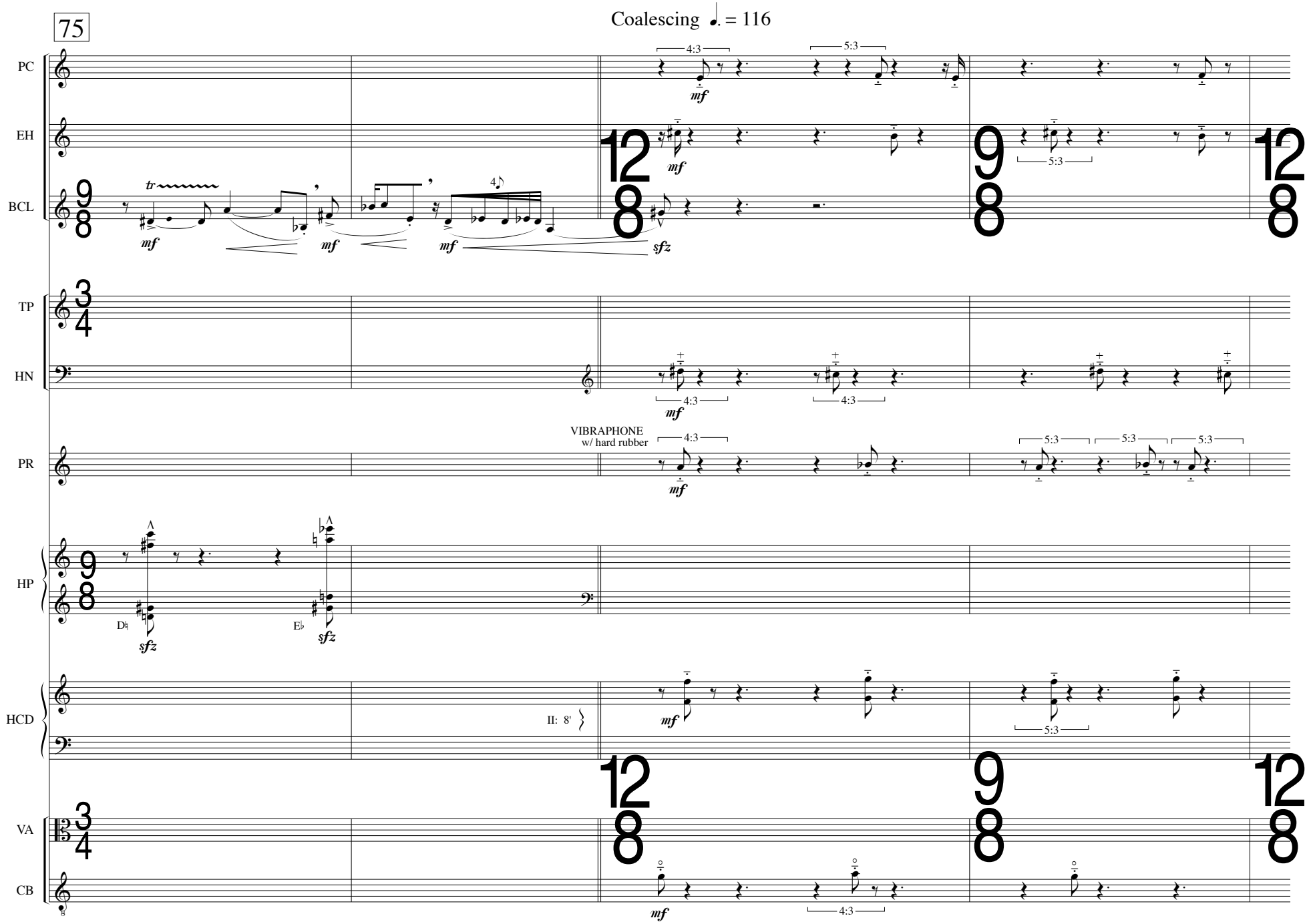
Ironic — «Parodie» (*l'istesso tempo*)

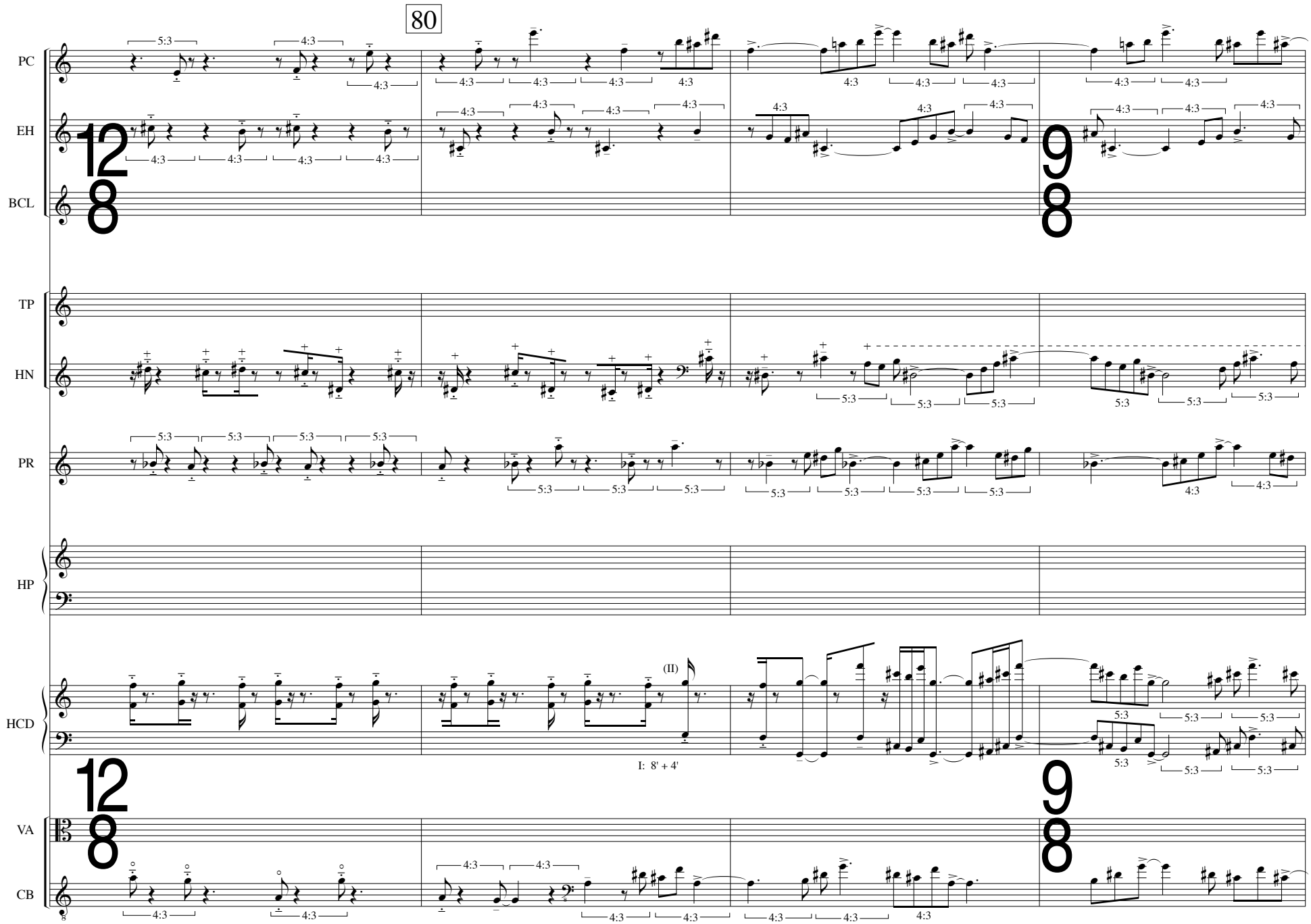


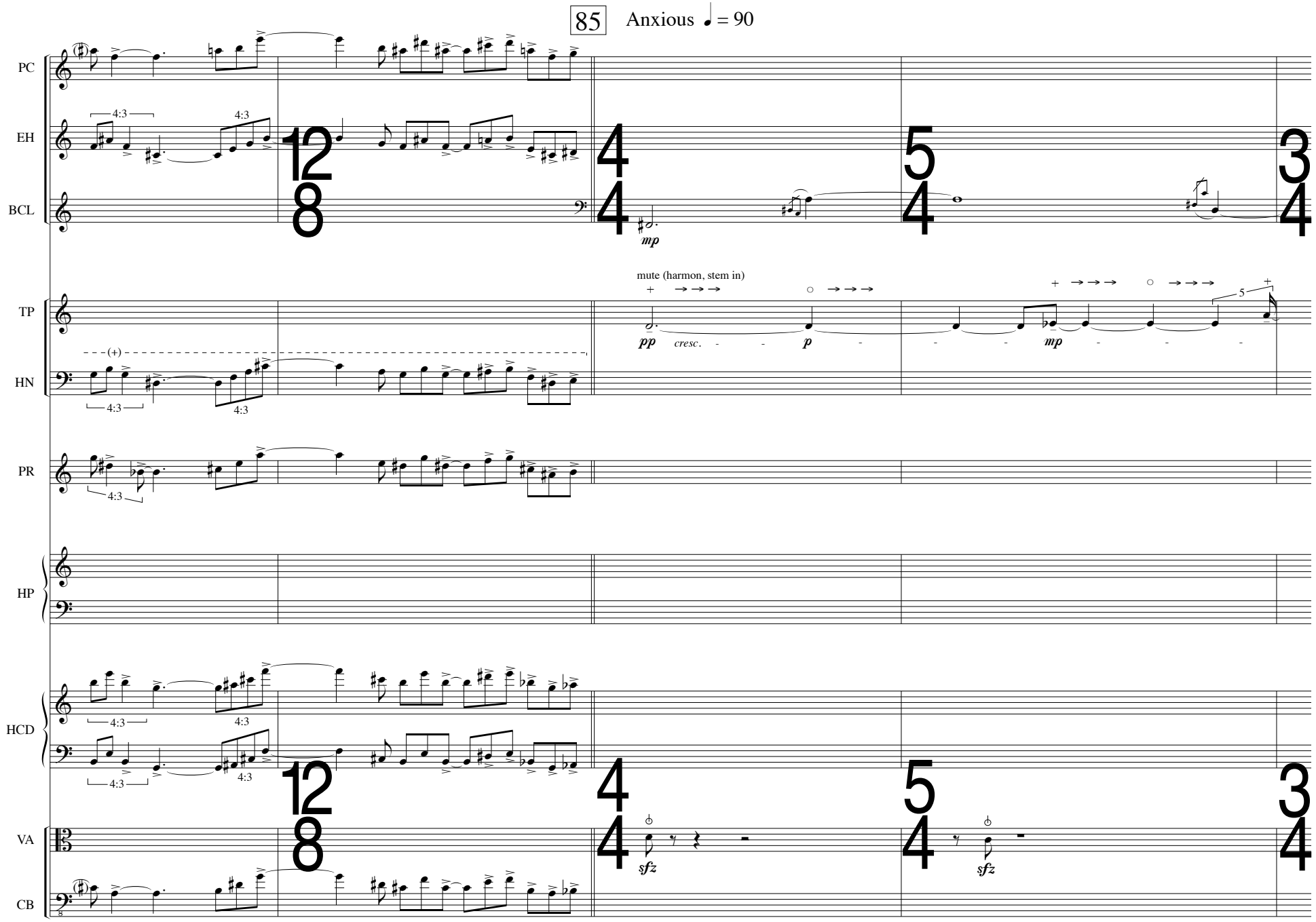

65
Vigorous ♩ / ♩. = 96
PC
EH
BCL
TP
HN
PR
HP
HCD
VA
CB
7 = 2 ♩.
mf
mf
mute (harmon, stem in)
mf
w/ hard rubber
[prepared]
f
(Ped.)
D♯ C♮ B♭
E♮ F♯ G♯ A♮
sfz
sfz
tr
tr
tr
6 = 𝅗𝅥.
sfz

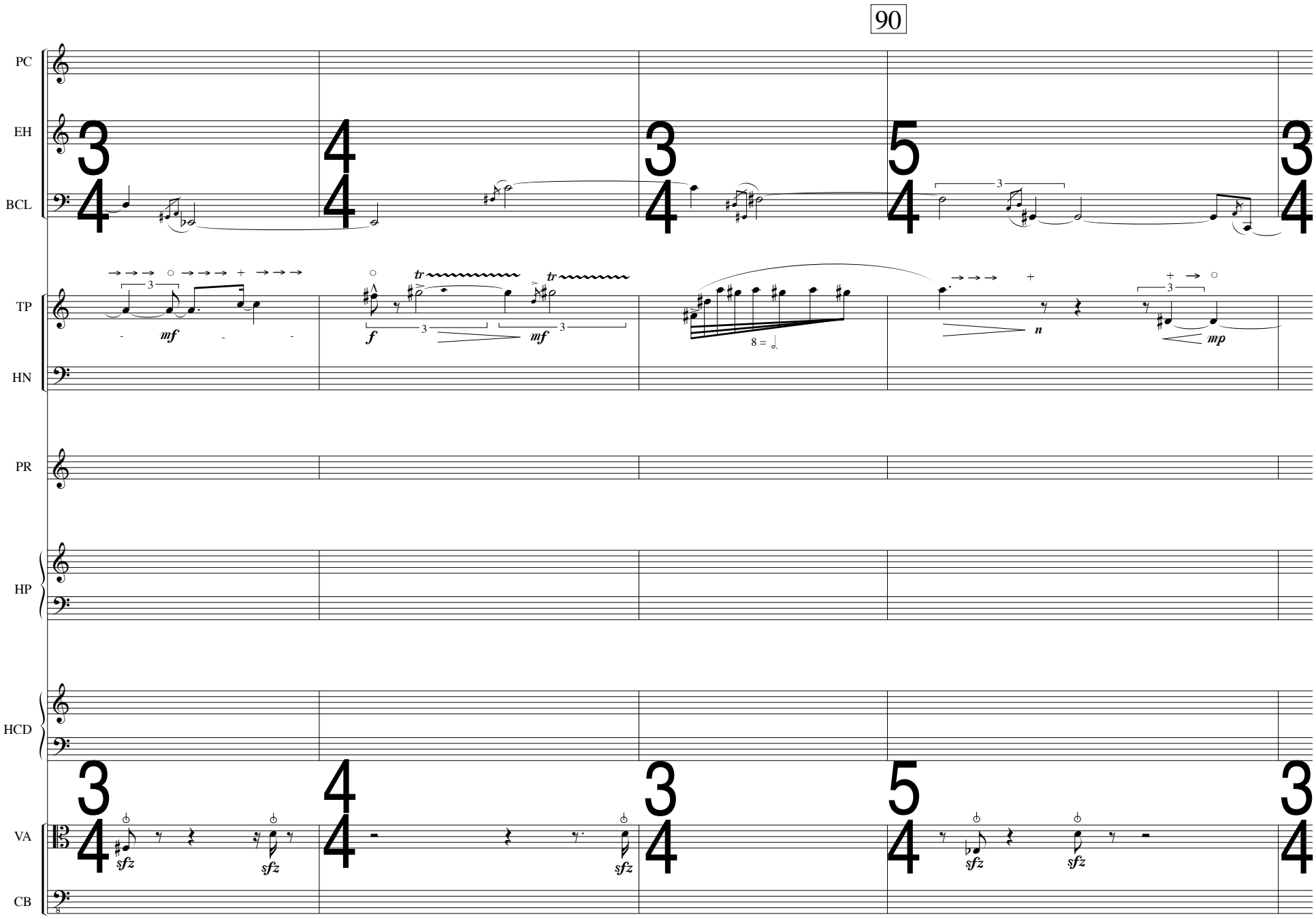

70
PC
EH
BCL
TP
HN
PR
HP
HCD
VA
CB
mf
tr
flt.
port. (½ v)
sfz

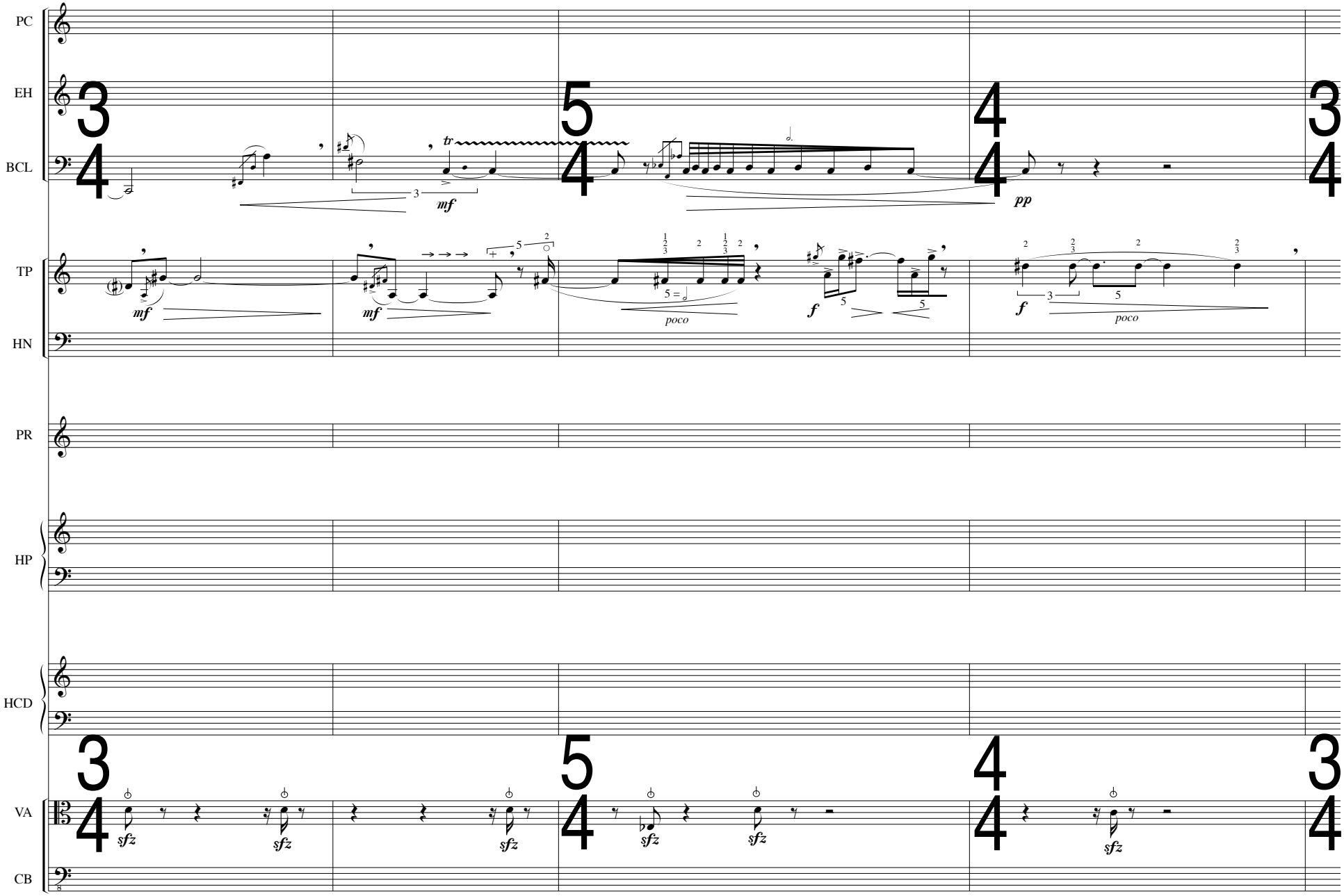

PC
EH
BCL
TP
HN
PR
HP
HCD
VA
CB
mf
sfz
port.
flt.

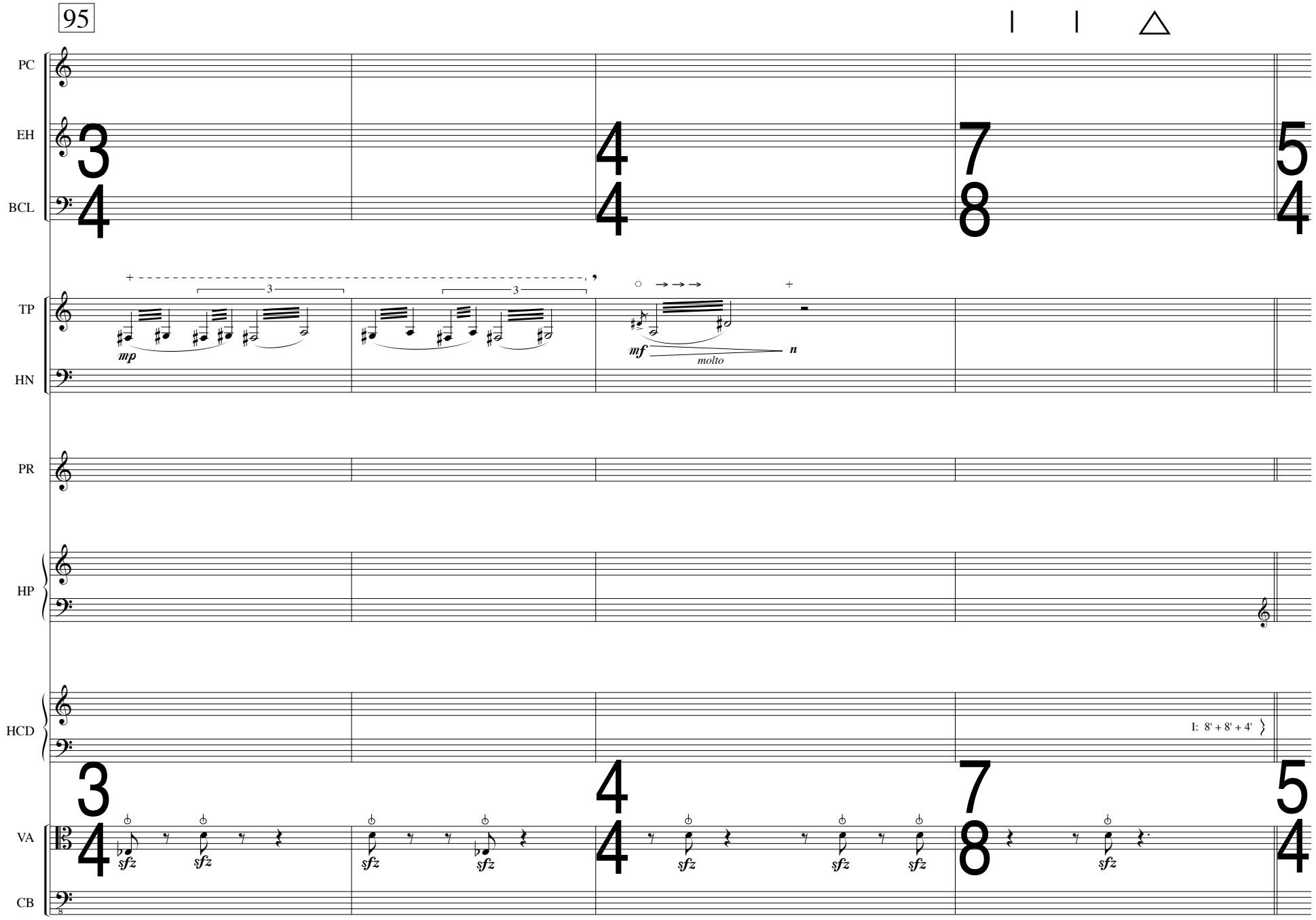

75
Coalescing ♩. = 116
PC
EH
BCL
TP
HN
PR
HP
HCD
VA
CB
VIBRAPHONE
w/ hard rubber
II: 8'
mf
sfz
tr
4:3
5:3

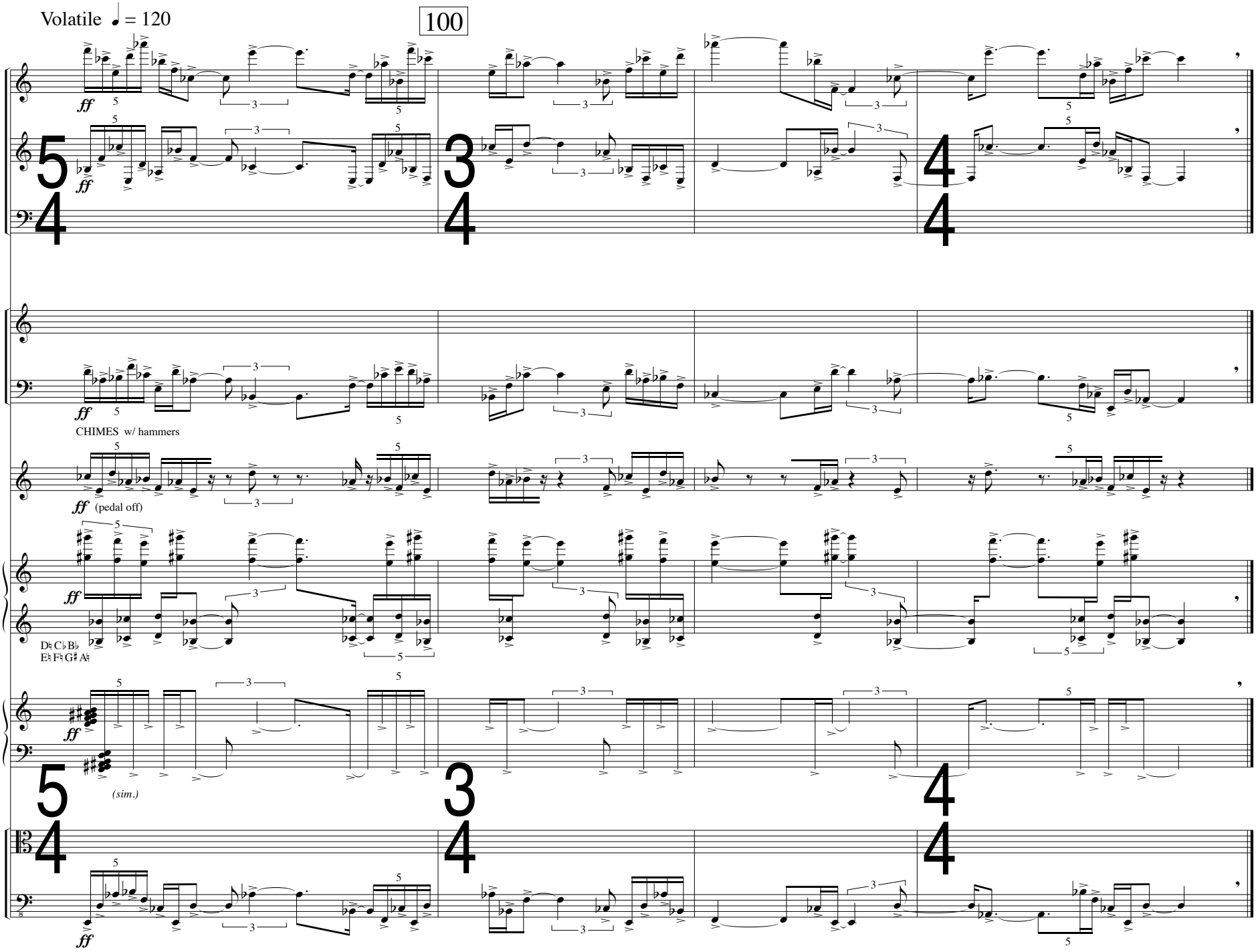

80
PC
EH
BCL
TP
HN
PR
HP
HCD
VA
CB
12/8
9/8
(II)
I: 8' + 4'


85
Anxious ♩ = 90
PC
EH
BCL
TP
HN
PR
HP
HCD
VA
CB
4:3
mp
mute (harmon, stem in)
pp
cresc.
p
mp
(+)
sfz
sfz


90
PC
EH
BCL
TP
HN
PR
HP
HCD
VA
CB
mf
f
mf
n
mp
sfz
sfz
sfz
sfz
sfz

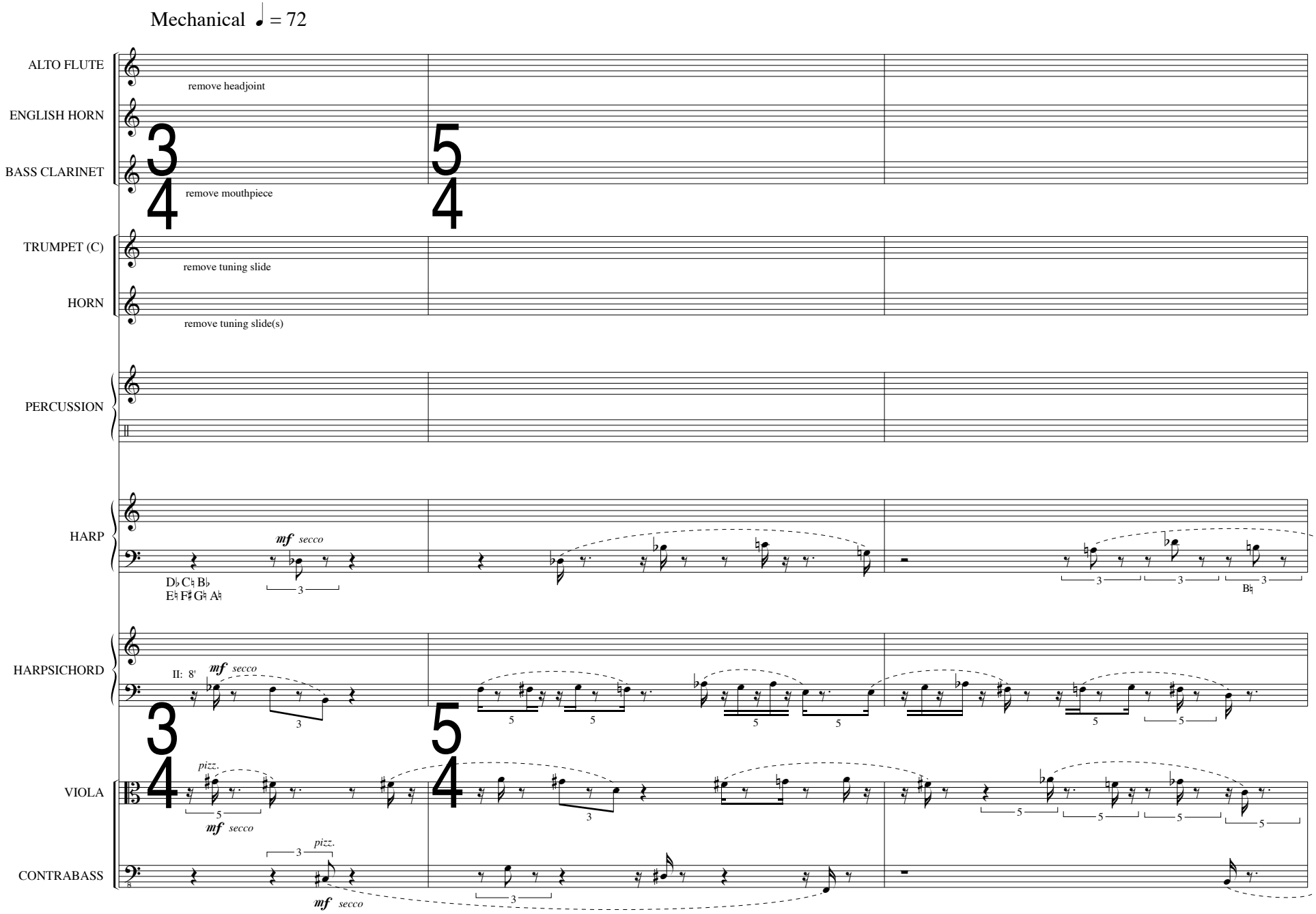

PC
EH
BCL
TP
HN
PR
HP
HCD
VA
CB
mf
tr
pp
poco
f
sfz

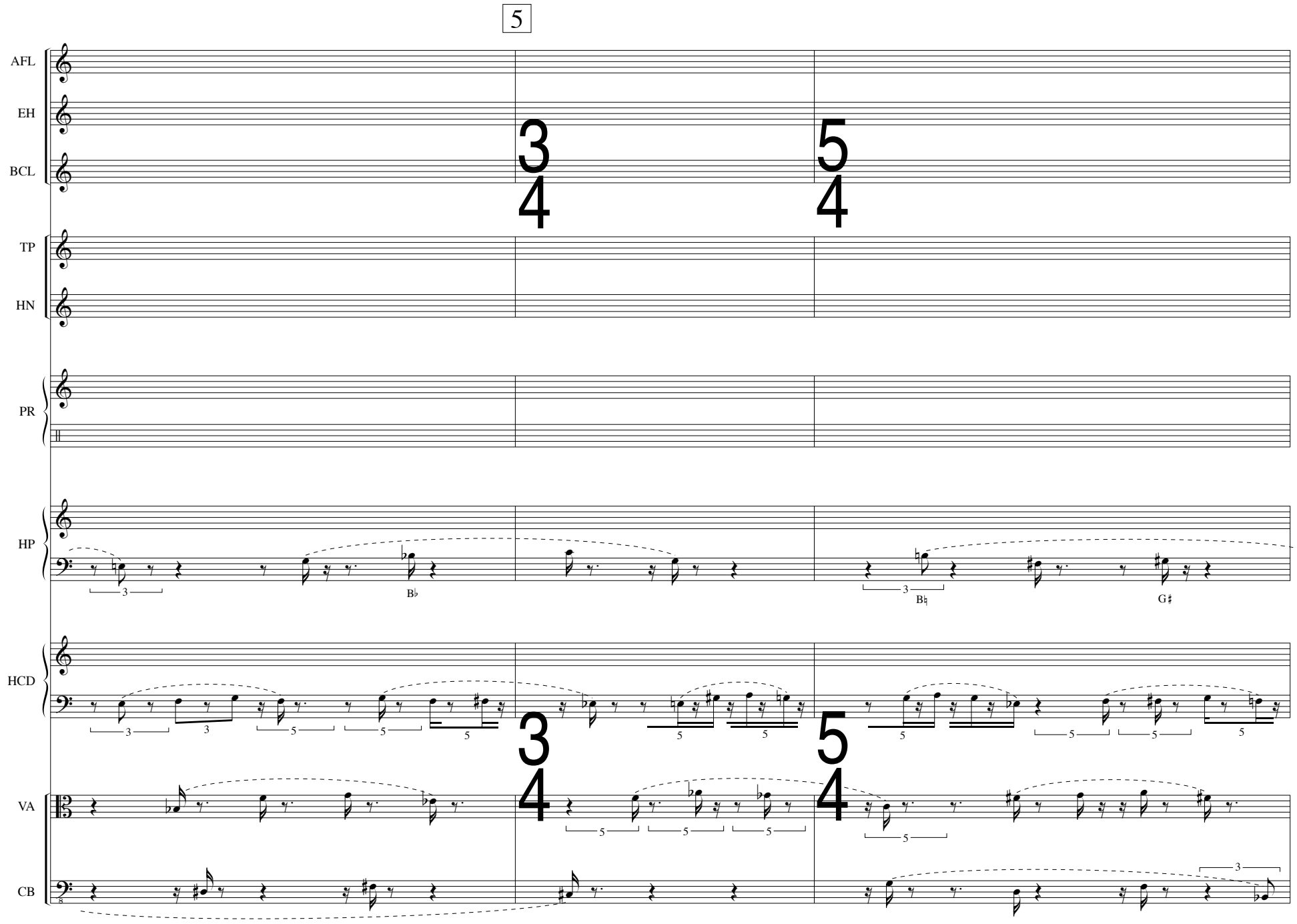

95
PC
EH
BCL
TP
HN
PR
HP
HCD
VA
CB
3/4
4/4
7/8
5/4
mp
mf
molto
I: 8' + 8' + 4'
sfz

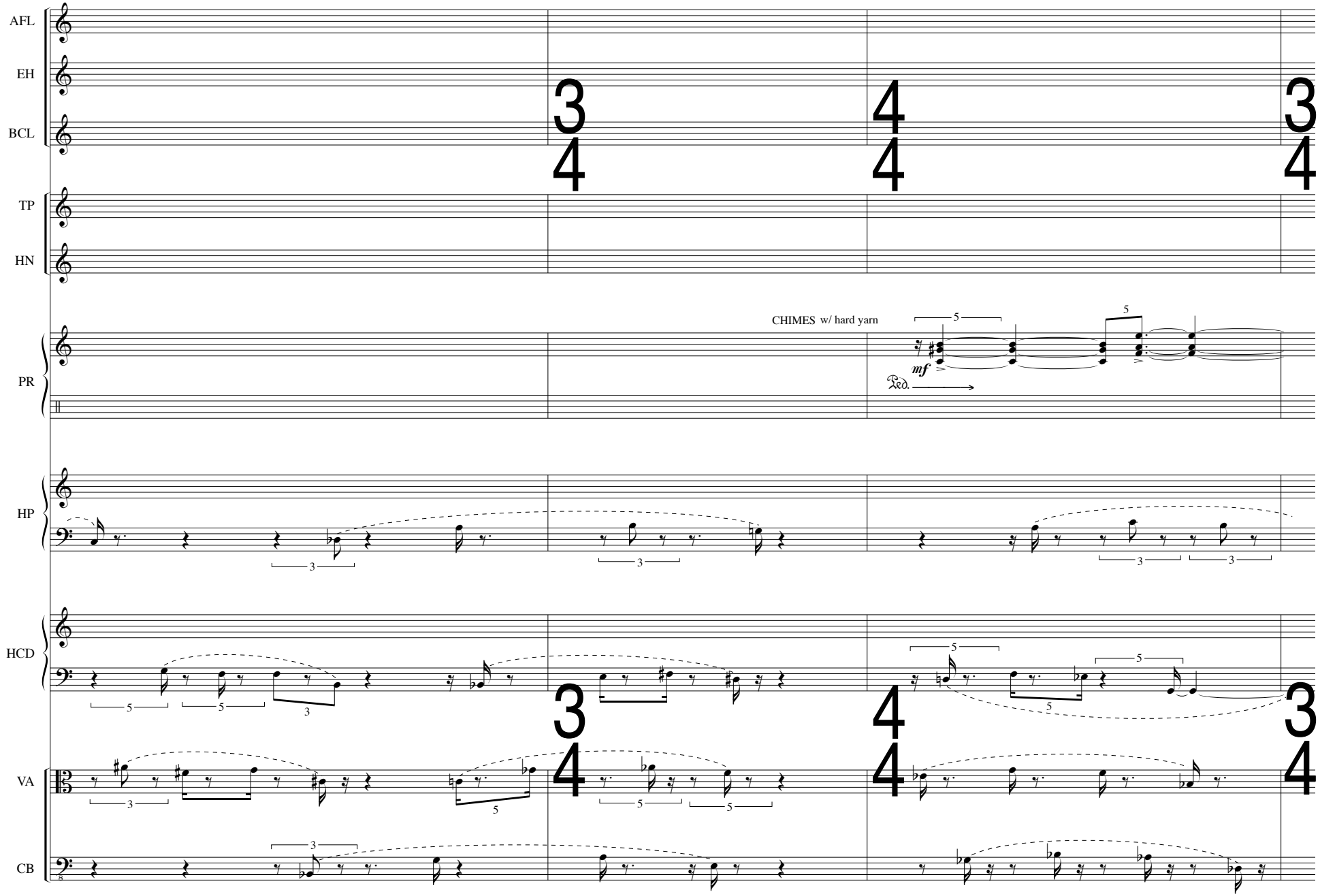

Volatile ♩ = 120
100
PC
EH
BCL
TP
HN
CHIMES w/ hammers
PR
(pedal off)
HP
HCD
(sim.)
VA
CB

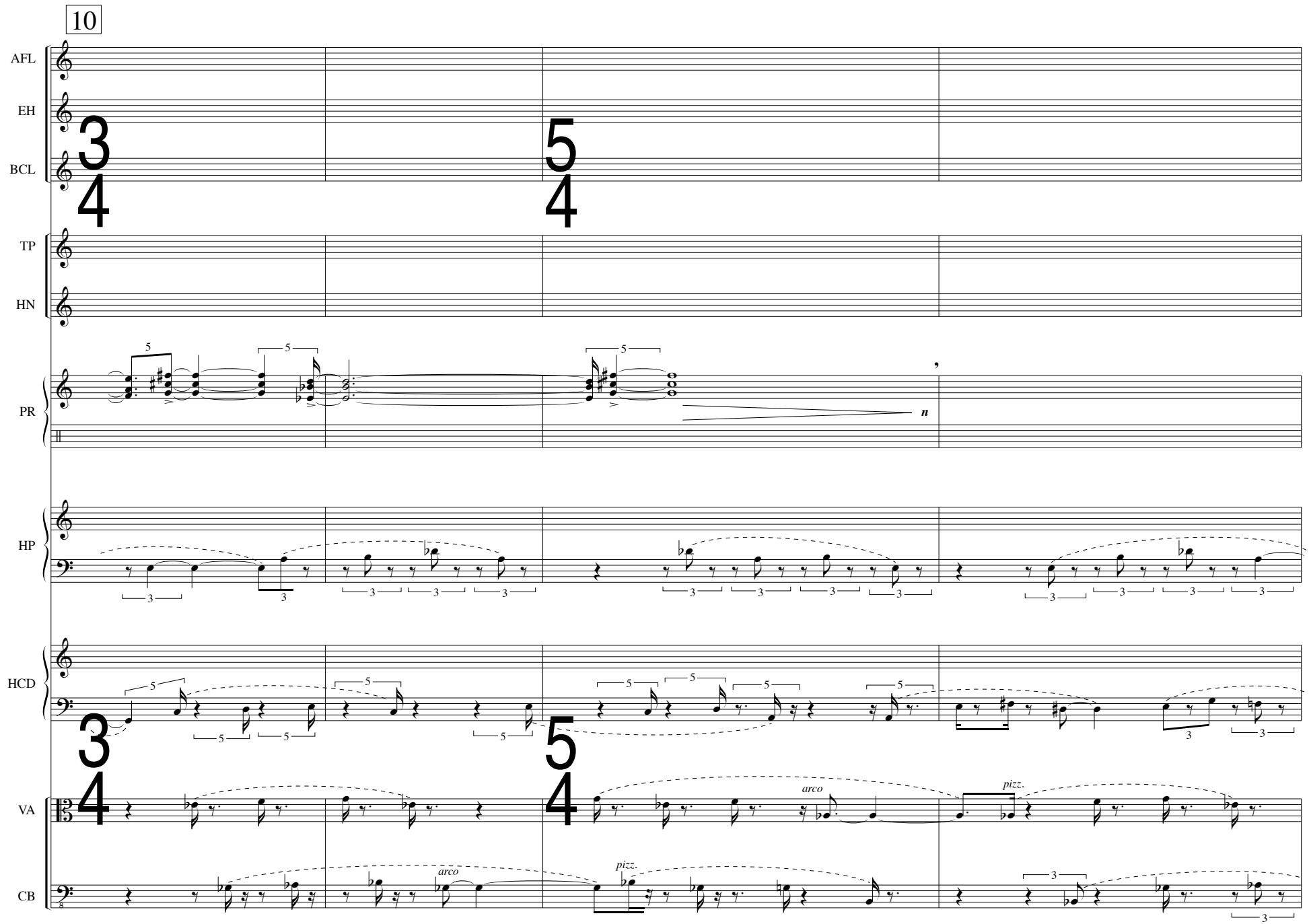
VII. time's maw

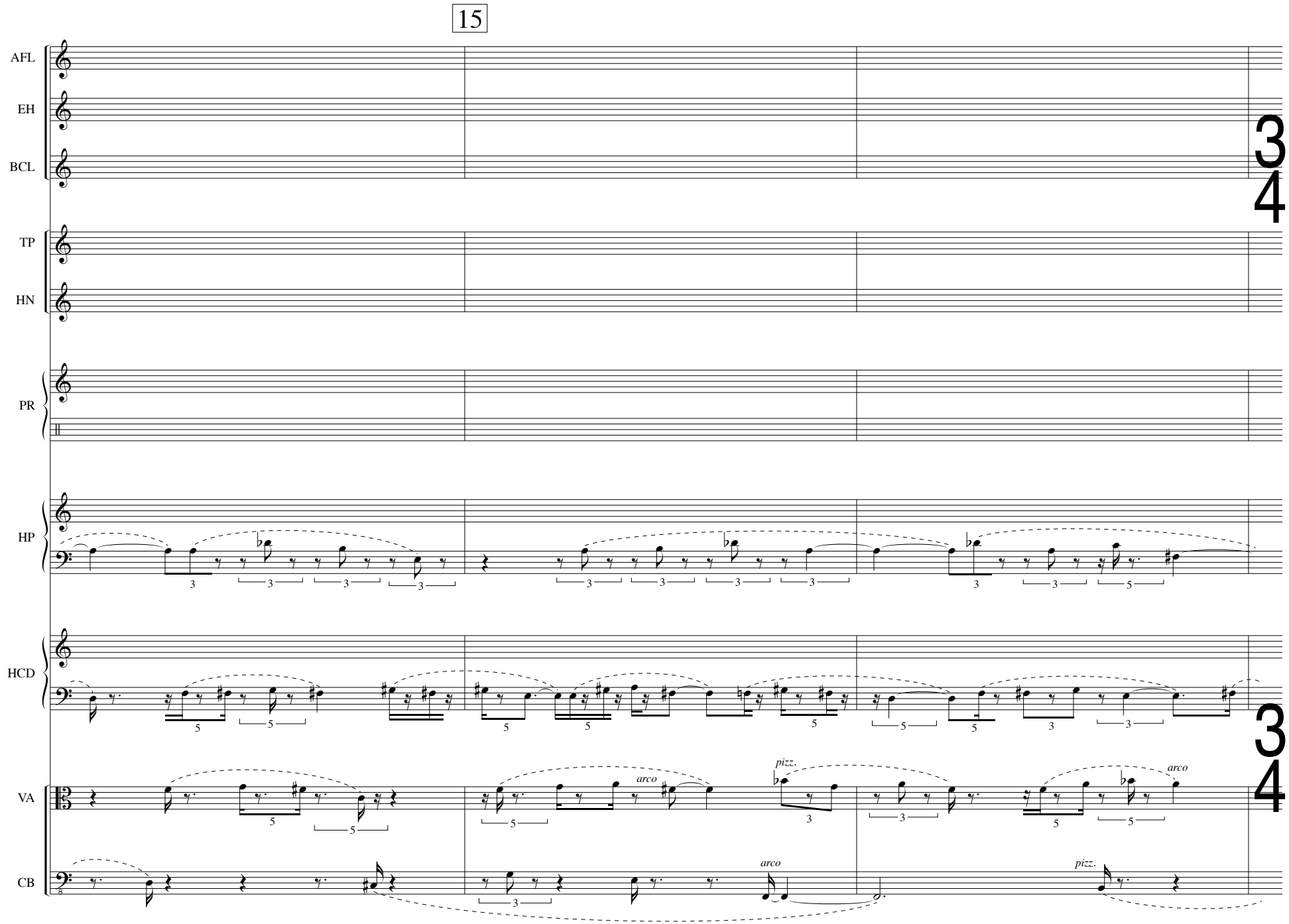
(moto perpetuo)

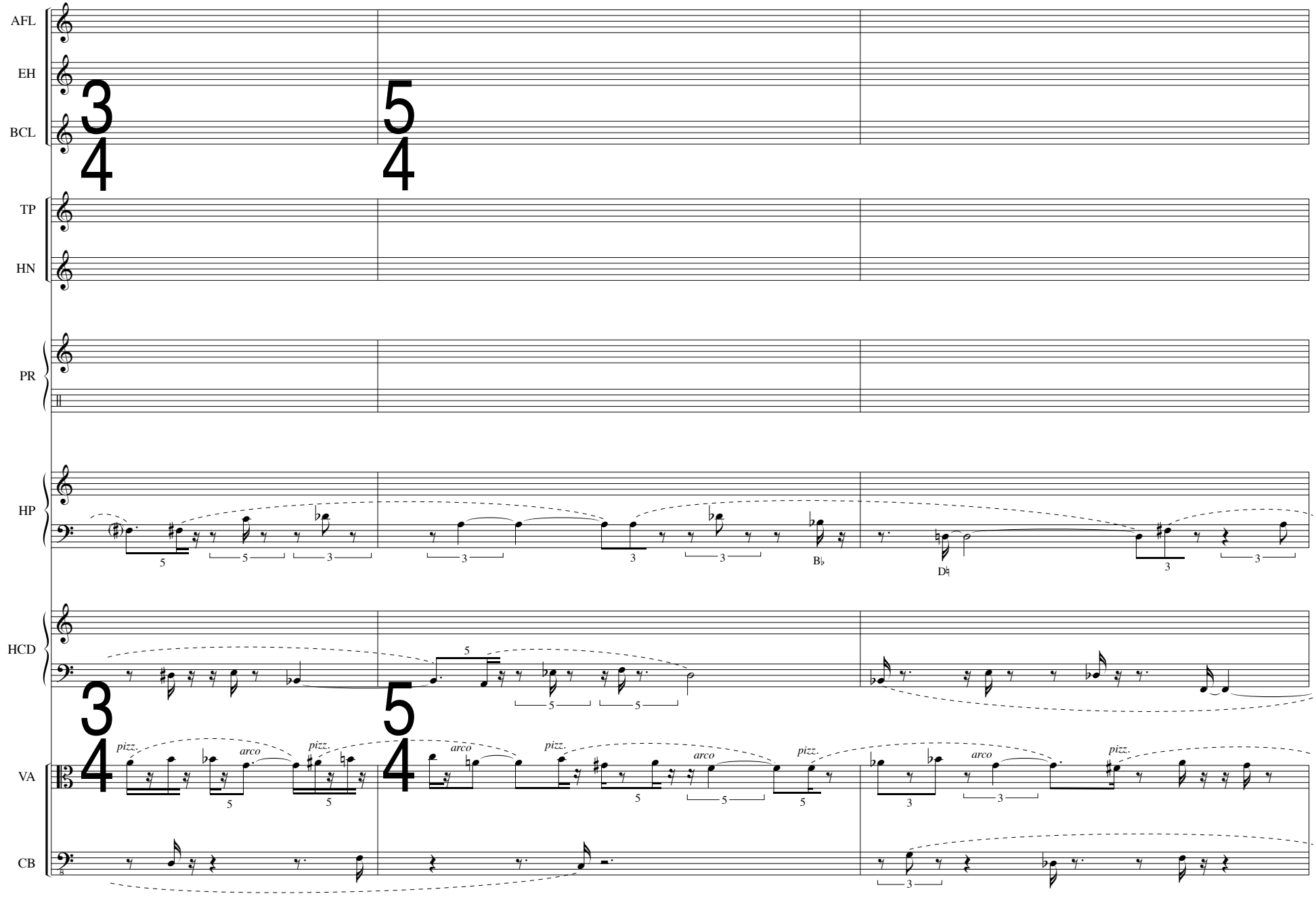


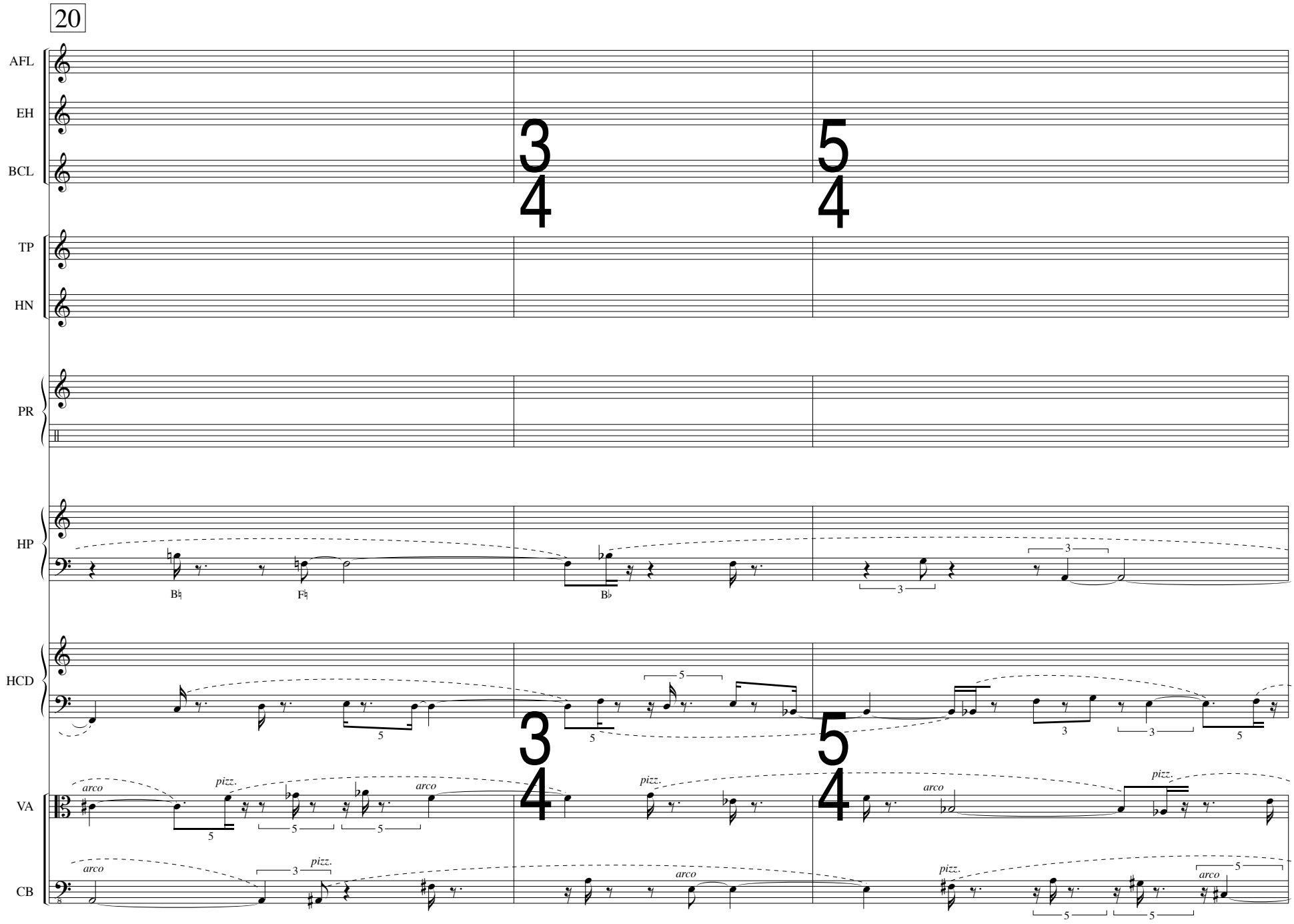

5
AFL
EH
BCL
TP
HN
PR
HP
HCD
VA
CB
3
4
5
4
B♭
B♮
G♯

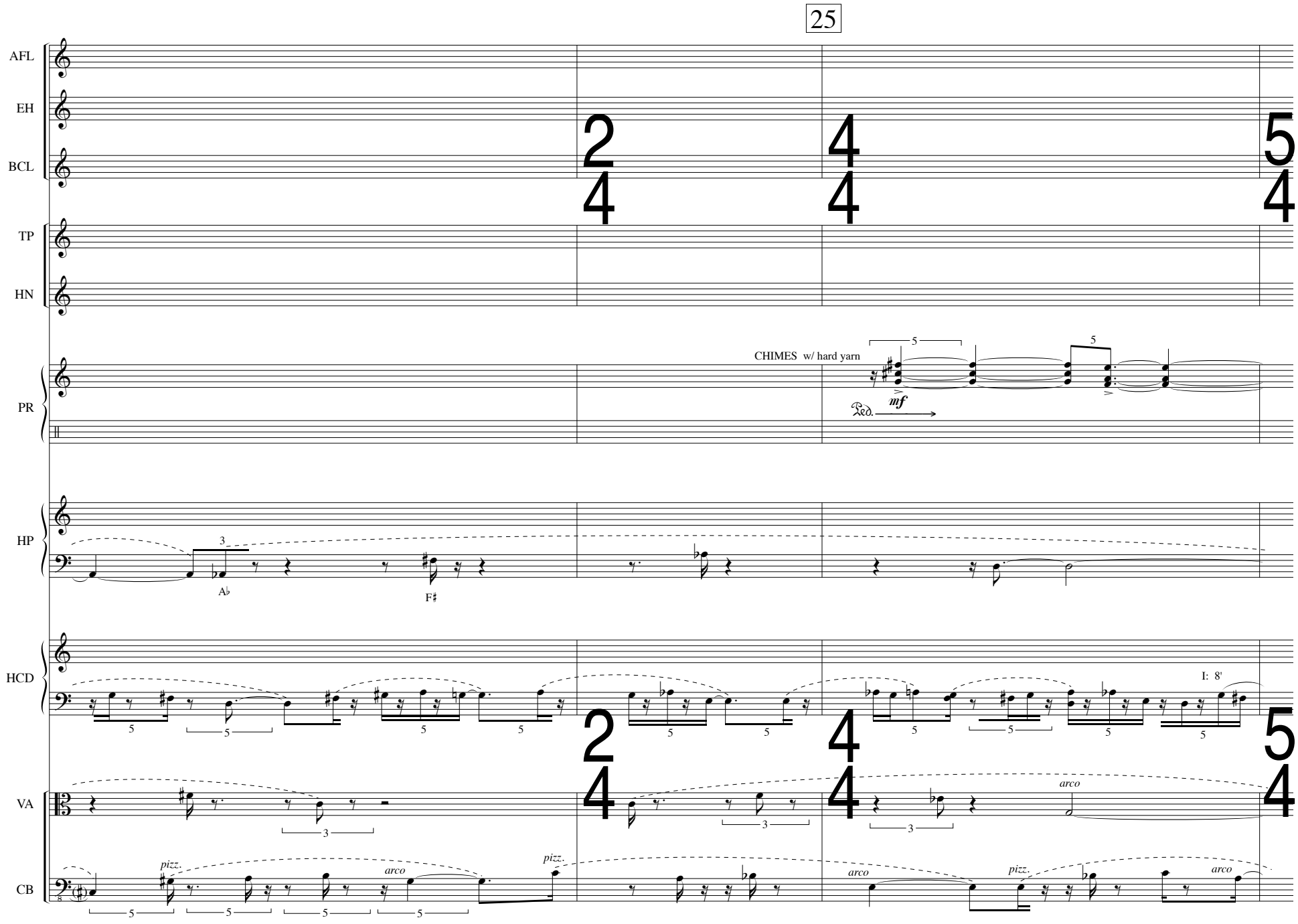

AFL
EH
BCL
TP
HN
PR
HP
HCD
VA
CB
CHIMES w/ hard yarn
mf
Ped.

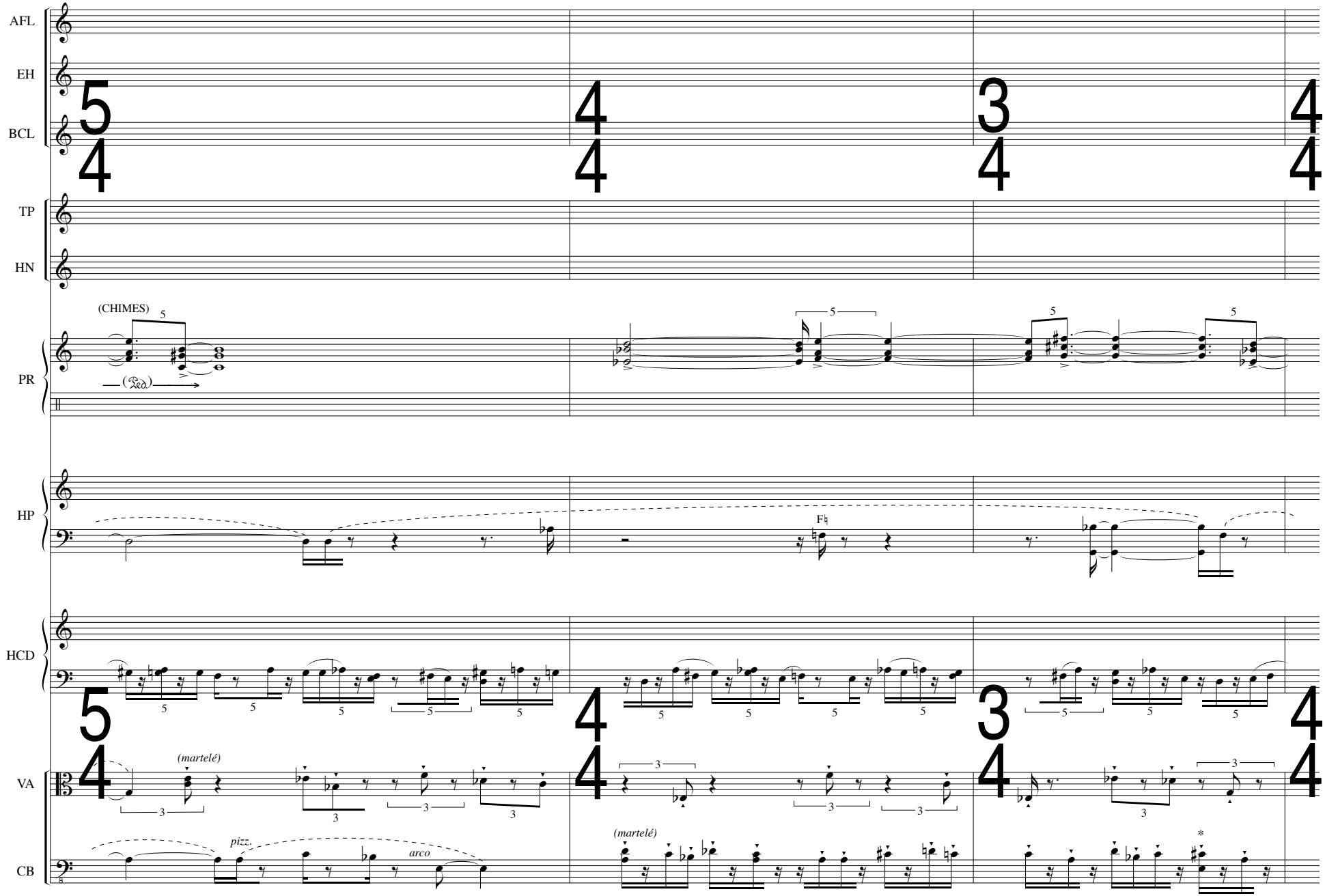

10
AFL
EH
BCL
TP
HN
PR
HP
HCD
VA
CB
arco
pizz.
arco
pizz.

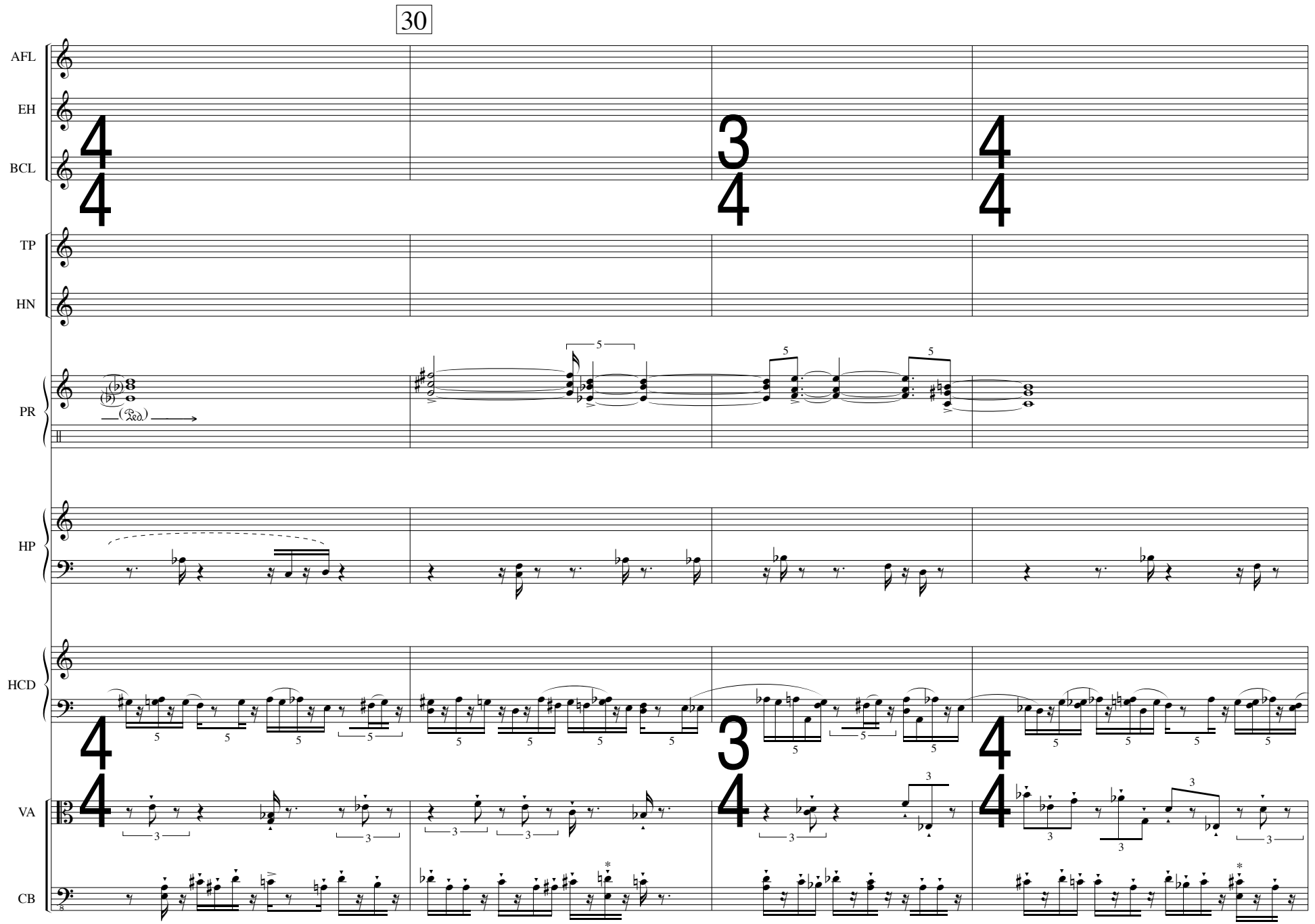

15
AFL
EH
BCL
TP
HN
PR
HP
HCD
VA
CB
arco
pizz.
arco
arco
pizz.

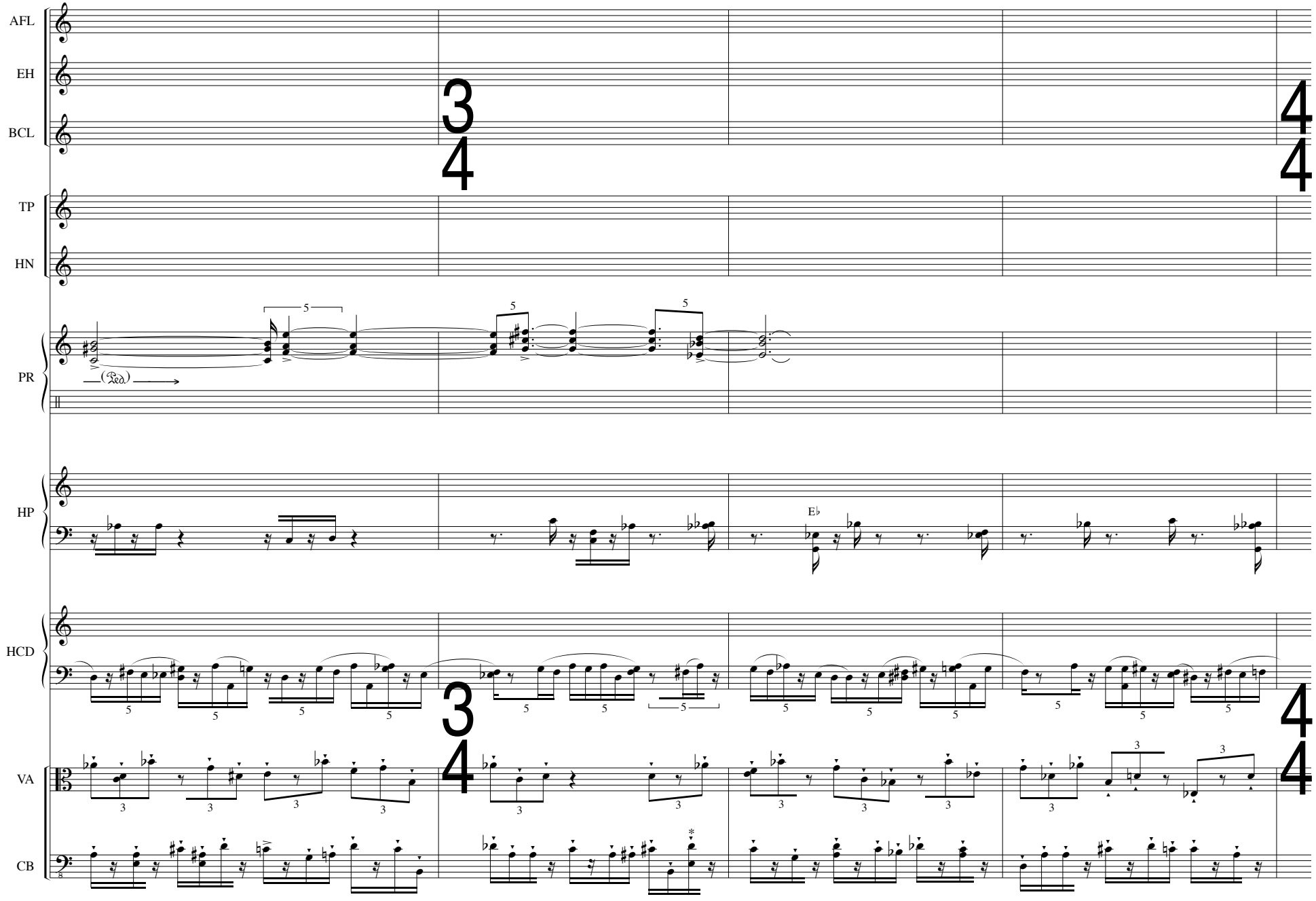

AFL
EH
BCL
TP
HN
PR
HP
HCD
VA
CB
pizz.
arco
B♭
D♮

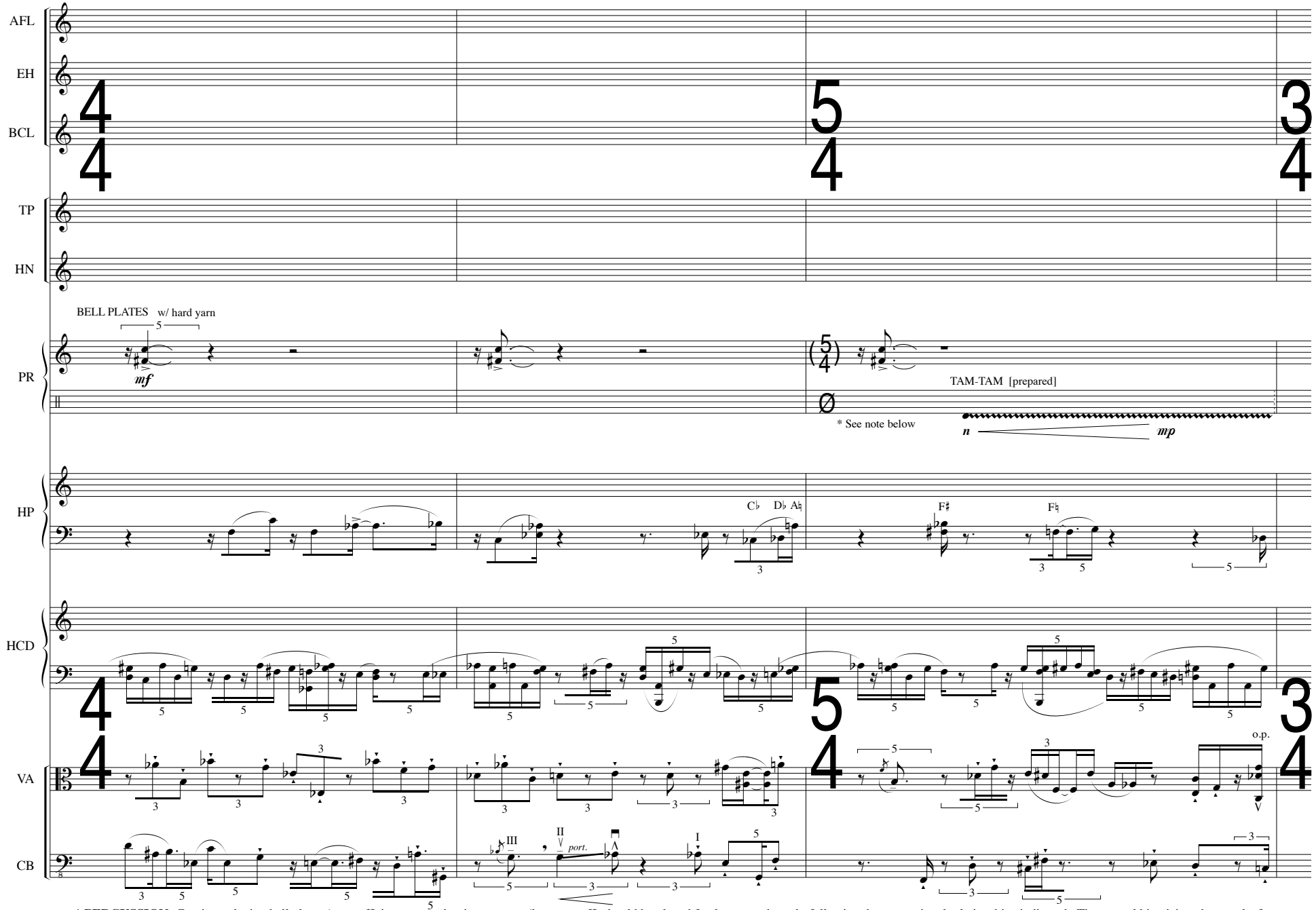

20
AFL
EH
BCL
TP
HN
PR
HP
HCD
VA
CB
3
4
5
4
arco
pizz.
B♮
F♮
B♭


25
AFL
EH
BCL
TP
HN
PR
HP
HCD
VA
CB
CHIMES w/ hard yarn
mf
Ped.
A♭
F♯
I: 8'
arco
pizz.
arco
pizz.
arco
pizz.
arco

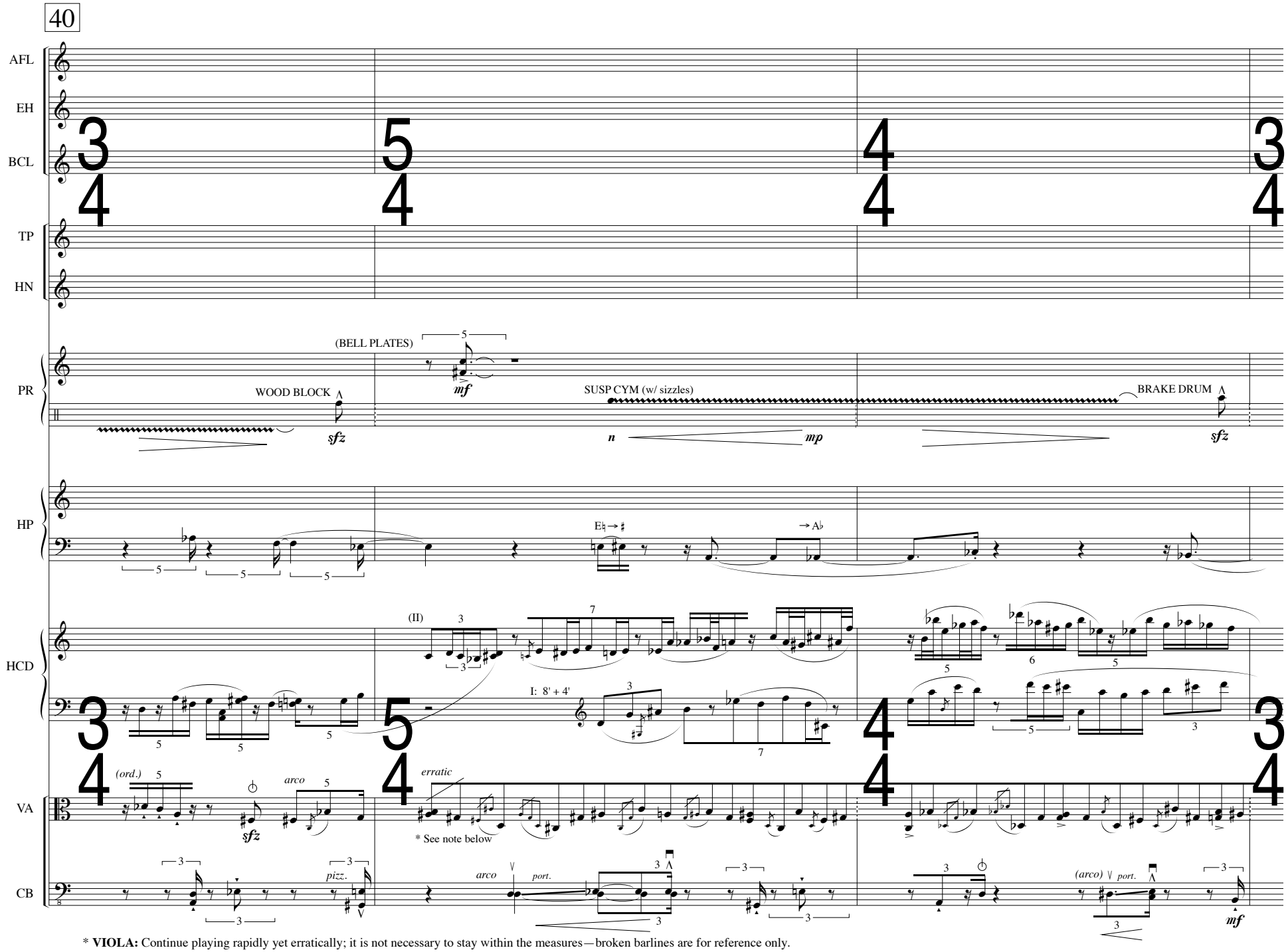

AFL
EH
BCL
TP
HN
PR
HP
HCD
VA
CB
(CHIMES)
(martelé)
pizz.
arco
(martelé)
*ossia: if double-stops are impractical, lower notes may be eliminated


30
AFL
EH
BCL
TP
HN
PR
HP
HCD
VA
CB

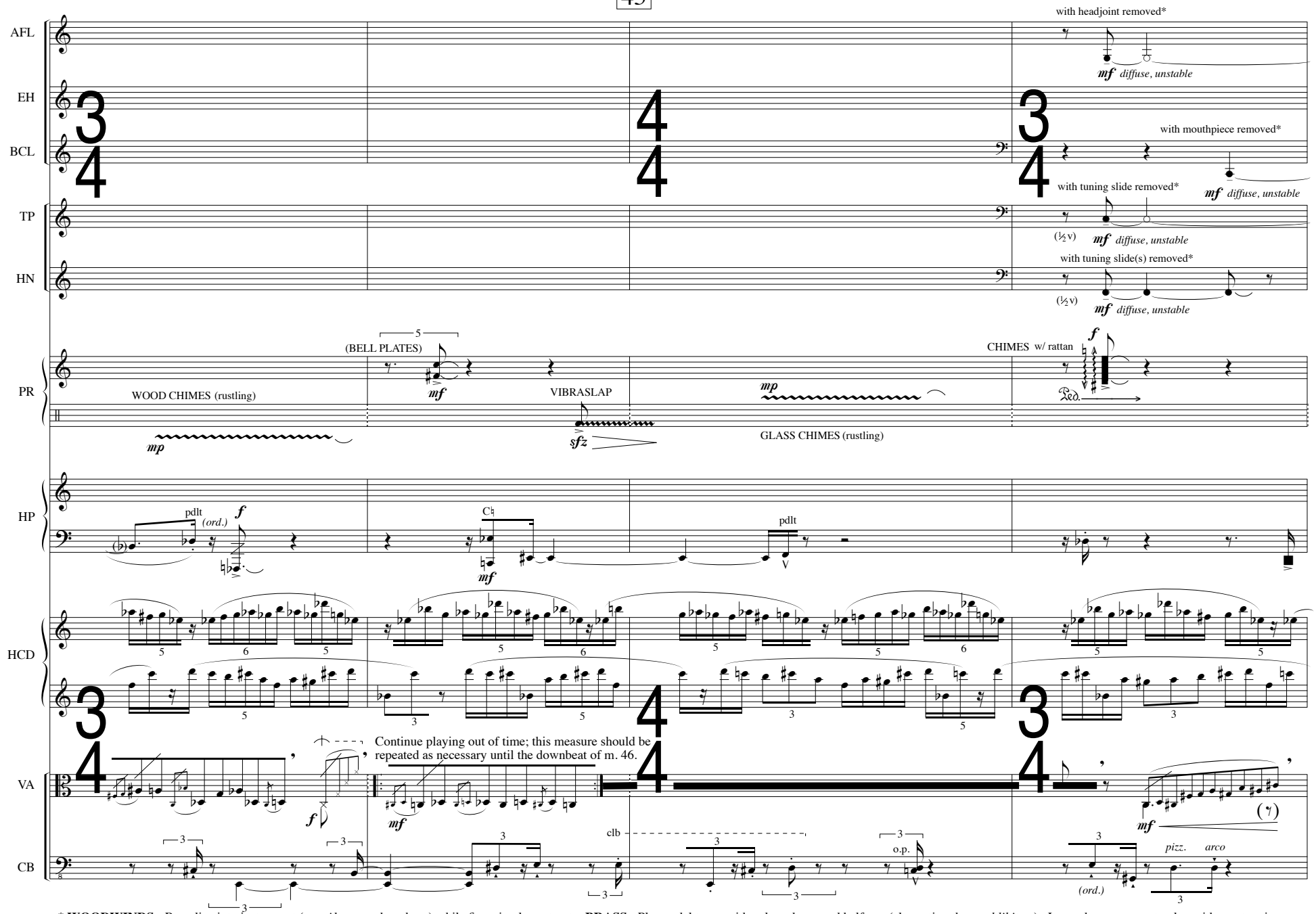

AFL
EH
BCL
TP
HN
PR
HP
HCD
VA
CB
3
4
4
4
3
4
4
4
(Red.)
E♭



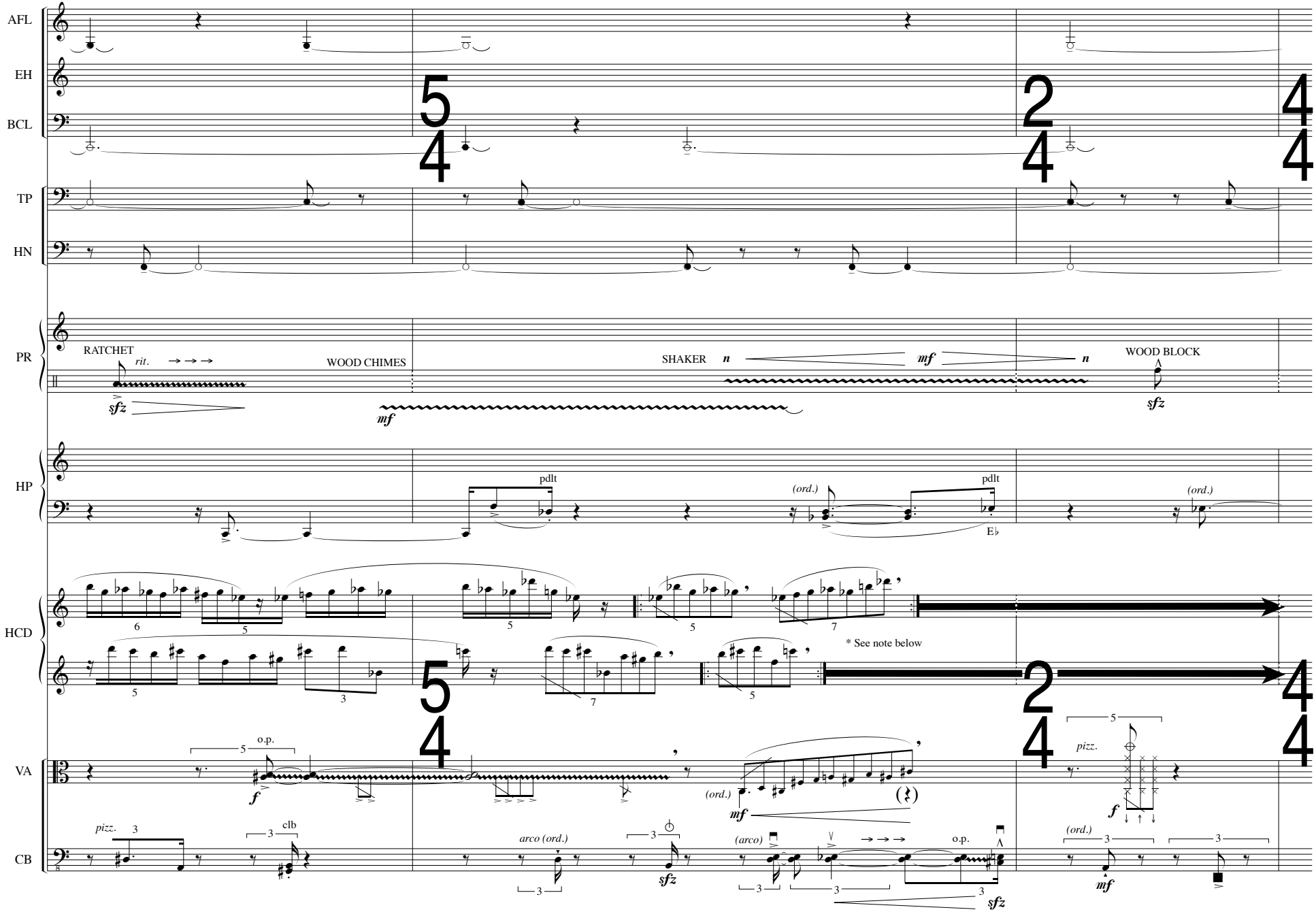
* **PERCUSSION:** Continue playing bell plates (top staff) in tempo; other instruments (bottom staff) should be played freely, approximately following the proportional relationships indicated. The natural kineticism that results from the rapid change of instruments and striking implements should not be suppressed!



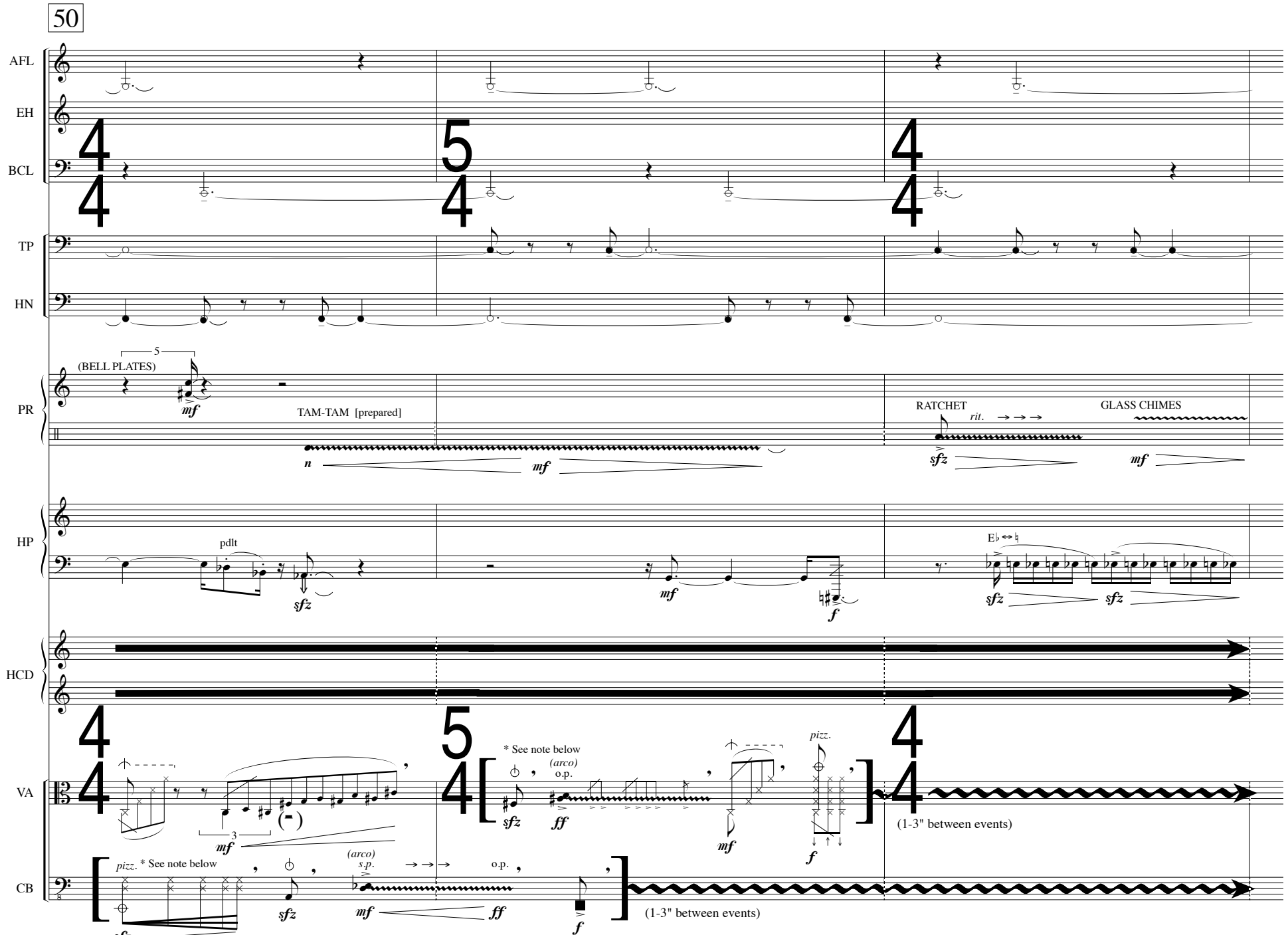
* **VIOLA:** Continue playing rapidly yet erratically; it is not necessary to stay within the measures—broken barlines are for reference only.



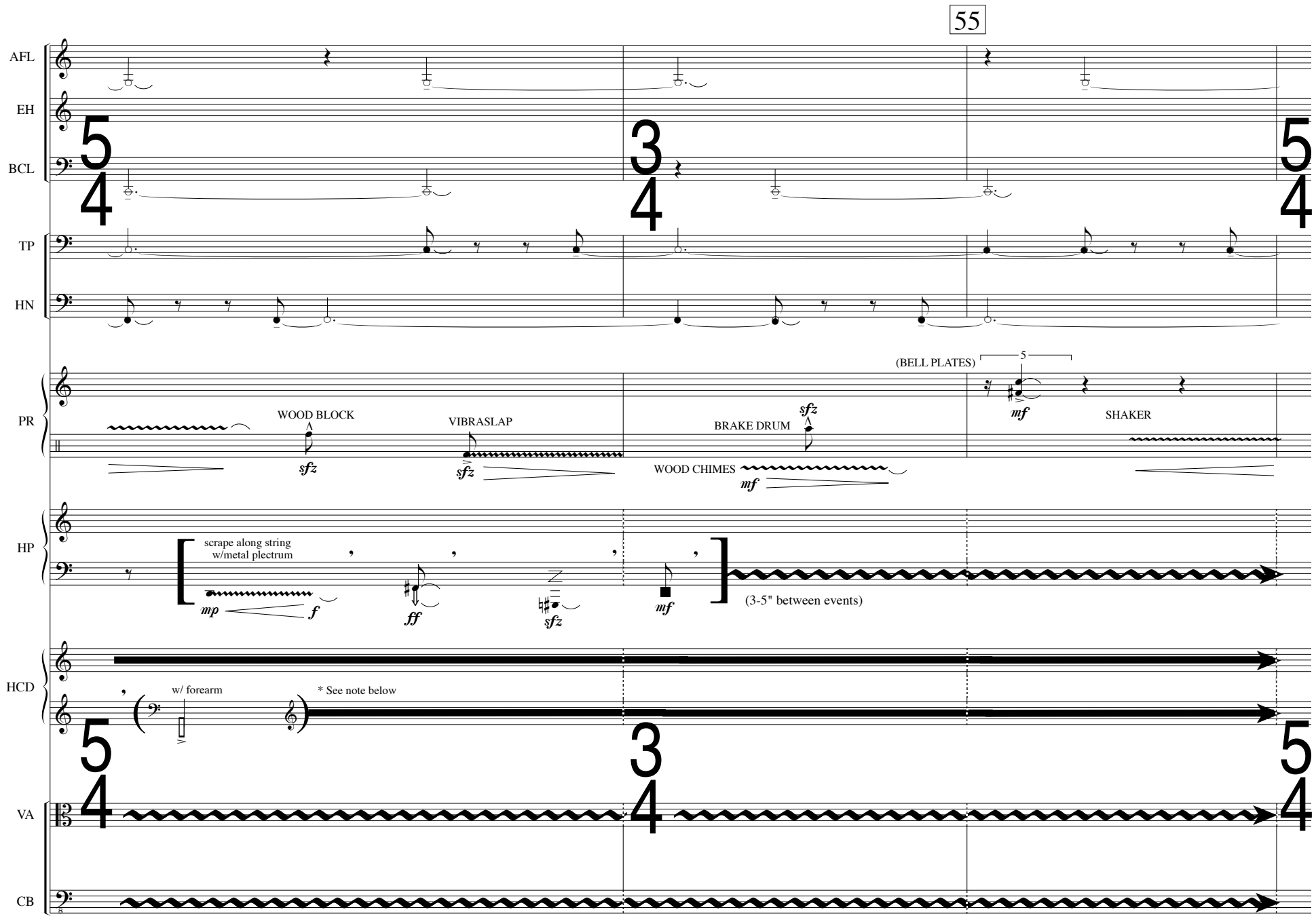
* **WOODWINDS:** Buzz lips into instrument (*quasi* brass embouchure) while fingering lowest note; **BRASS:** Play pedal tones with valves depressed halfway (alternating them *ad libitum*). It may be necessary to play with greater air pressure than usual in order to attain the dynamic level indicated.



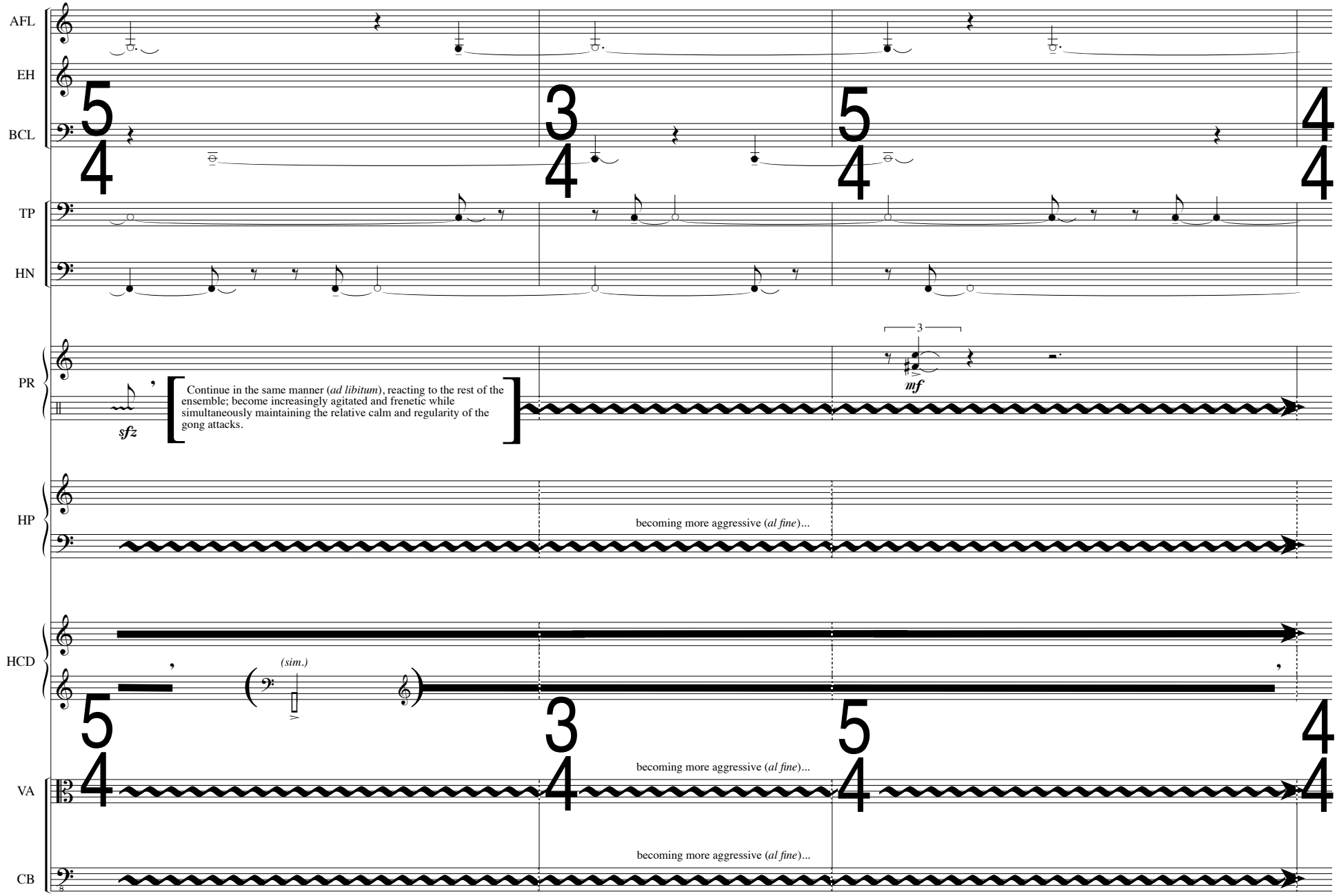
* **HARPSICHORD:** Repeat flourishes rapidly yet erratically; do not attempt to coordinate hands; breaks between note groups must be very brief.

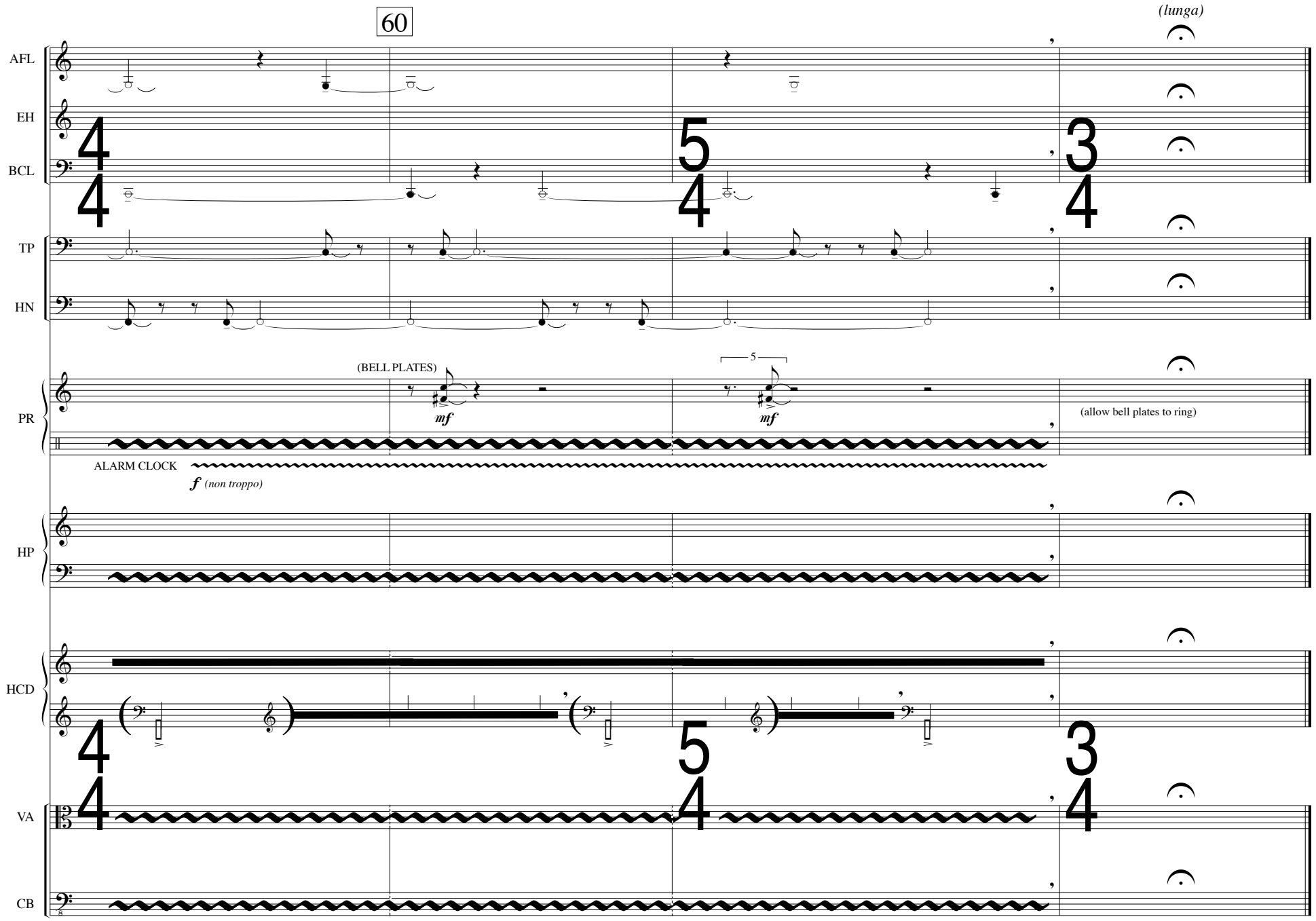


* **VIOLA** & **CONTRABASS:** Play events within the brackets in any order, *ad libitum*, for the duration of the wavy line.



* **HARPSICHORD:** Right hand continues uninterrupted; left hand is occasionally discontinued by aggressive forearm clusters.


AFL
EH
BCL
TP
HN
PR
HP
HCD
VA
CB
5/4
3/4
5/4
4/4
sfz
Continue in the same manner (ad libitum), reacting to the rest of the ensemble; become increasingly agitated and frenetic while simultaneously maintaining the relative calm and regularity of the gong attacks.
3
mf
becoming more aggressive (al fine)...
(sim.)
becoming more aggressive (al fine)...
becoming more aggressive (al fine)...


60
(lunga)
AFL
EH
BCL
TP
HN
PR
HP
HCD
VA
CB
(BELL PLATES)
mf
mf
5
(allow bell plates to ring)
ALARM CLOCK
f (non troppo)